



APPLICATION ACCEPTED: January 14, 2010  
PLANNING COMMISSION: October 20, 2010  
BOARD OF SUPERVISORS: not yet scheduled

# County of Fairfax, Virginia

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October 5, 2010

## STAFF REPORT

APPLICATION SE 2010-DR-002

DRANESVILLE DISTRICT

**APPLICANT:** District of Columbia Water and Sewer Authority (DCWASA)

**PRESENT ZONING:** R-E

**PARCEL(S):** 04-3 ((1)) 2 (portion)

**ACREAGE:** 2.1 acres

**PLAN MAP:** Public Park

**SE CATEGORIES:** Category 1- Light Public Utility  
Category 6- Use in a Floodplain

**PROPOSAL:** Sewage Line Odor Abatement Facility

### STAFF RECOMMENDATIONS:

Staff recommends approval of SE 2010-DR-002. If it is the intention of the Board of Supervisors to approve the application, staff recommends such approval be subject to development conditions consistent with those found in Appendix 1 of this report.

Staff recommends approval of a transitional screening and barrier modification for all property lines in favor of the existing vegetation and topographic features.

It should be noted that it is not the intent of staff to recommend that the Board, in adopting any conditions, relieve the applicant/owner from compliance with the provisions of any applicable ordinances, regulations, or adopted standards.

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Suzie Zottl

It should be further noted that the content of this report reflects the analysis and recommendation of staff; it does not reflect the position of the Board of Supervisors.

The approval of this special exception does not interfere with, abrogate or annul any easement, covenants, or other agreements between parties, as they may apply to the property subject to this application.

For information, contact the Zoning Evaluation Division, Department of Planning and Zoning, 12055 Government Center Parkway, Suite 801, Fairfax, Virginia 22035-5505, (703) 324-1290.

*N:\SE\SE 2010-DR-002 WASA\Staff Report\_Cover.doc*



Americans with Disabilities Act (ADA): Reasonable accommodation is available upon 7 days advance notice. For additional information on ADA call (703) 324-1334 or TTY 711 (Virginia Relay Center).

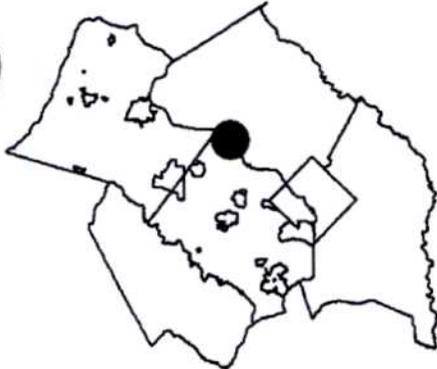
# Special Exception

SE 2010-DR-002

Applicant: DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY (DCWASA)

Accepted: 01/14/2010

Proposed: SEWAGE PUMPING FACILITY AND USES IN A FLOODPLAIN



Area: 2.1 AC OF LAND; DISTRICT - DRANESVILLE

Zoning Dist Sect: 02-0904 03-0E04

Art 9 Group and Use: 6-2 1-04

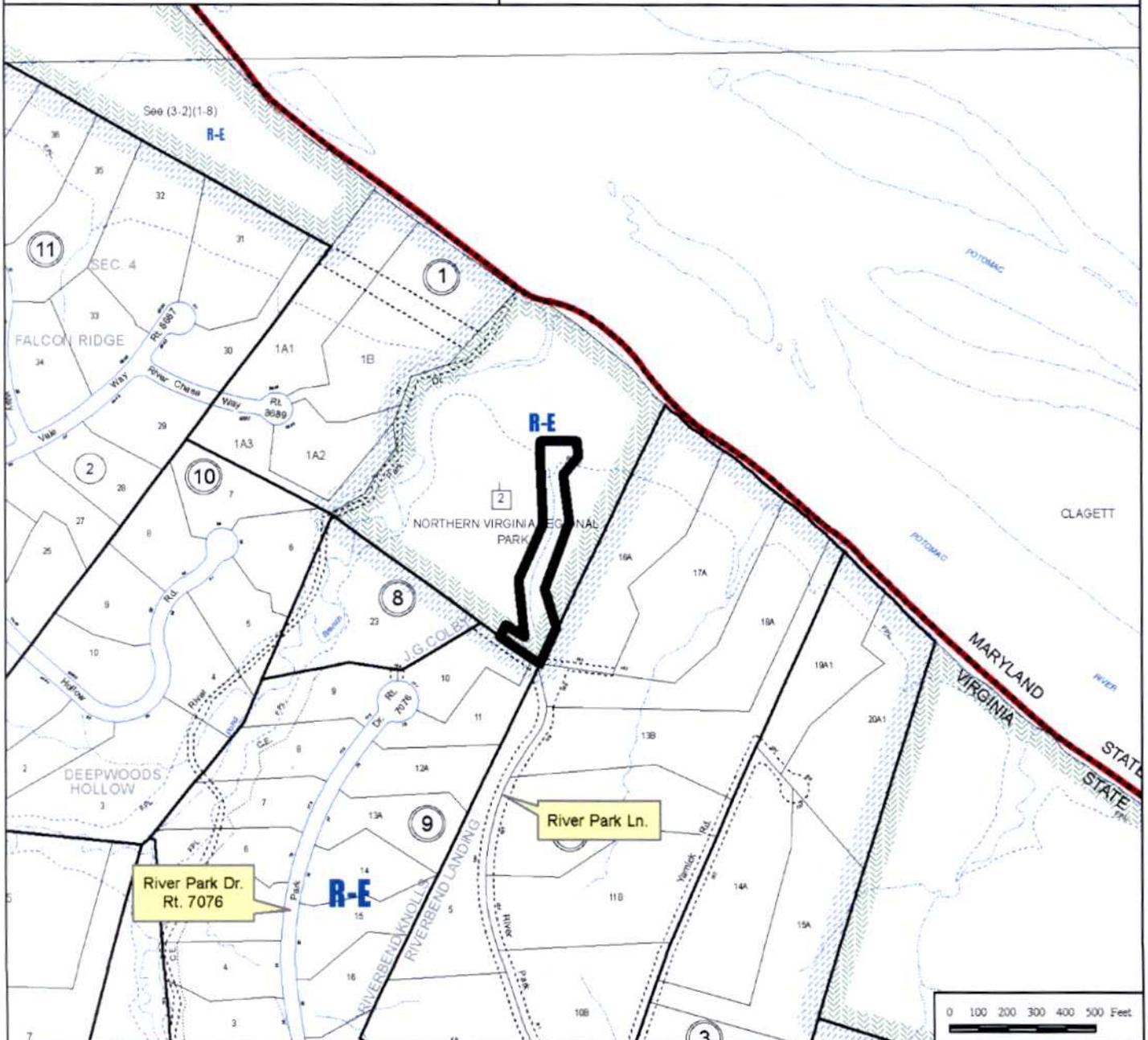
Located: TERMINUS OF RIVER PARK LANE AND WEST SIDE OF RIVER PARK DRIVE

Zoning: R- E

Plan Area: 3,

Overlay Dist:

Map Ref Num: 004-3- /01/ /0002 pt.



# POTOMAC INTERCEPTOR LONG TERM ODOR ABATEMENT PROGRAM SITE 31 SPECIAL EXCEPTION PLAT / 2232 REVIEW

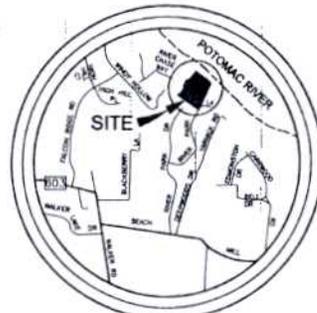
FAIRFAX COUNTY, VIRGINIA  
DRANESVILLE DISTRICT  
JANUARY 2010

## OWNER

NORTHERN VIRGINIA REGIONAL PARK AUTHORITY  
5400 OX ROAD  
FAIRFAX STATION, VIRGINIA 22039  
TELEPHONE: (703) 359-4615  
FAX: (703) 273-0905  
CONTACT PERSON: KATE RUDACILLE

## APPLICANT

DISTRICT OF COLUMBIA  
WATER AND SEWER AUTHORITY  
5000 OVERLOOK AVENUE, SW 5TH FLOOR  
WASHINGTON D.C. 20032  
TELEPHONE: (202) 787-2396  
FAX: (202) 787-2453  
CONTACT PERSON: BARRY LUCAS



VICINITY MAP  
SCALE: 1" = 2,000'

## ENGINEER/ LANDSCAPE ARCHITECTS

A. MORTON THOMAS  
12750 TWNBROOK PARKWAY  
ROCKVILLE, MD 20852  
TELEPHONE: (301) 881-2545  
FAX: (301) 881-0814

## ARCHITECT

VICTOR WILBORN ARCHITECTS, PC  
2805 MCKINLEY PLACE, NW  
WASHINGTON, D.C. 20016  
TELEPHONE: (202) 244-0617  
FAX: (202) 537-1143



## SHEET LIST TABLE

SHEET NUMBER	SHEET TITLE
SE-001	COVER SHEET
SE-002	OVERVIEW PLAN
SE-003	EXISTING VEGETATION MAP & GENERAL NOTES
SE-004	SITE DETAILS
SE-005	PUBLIC ACCESS EXHIBIT
SE-006	ARCHITECTURAL ELEVATIONS
SE-007	ARCHITECTURAL PERSPECTIVE
SE-008	CORRESPONDENCE LETTERS

**BLACK & VEATCH**  
Corporation  
Bethesda, Maryland

**AMT**  
A. Morton Thomas  
Landscape Architect  
12750 Twinbrook Parkway  
Rockville, MD 20852  
Tel: (301) 881-2545  
Fax: (301) 881-0814

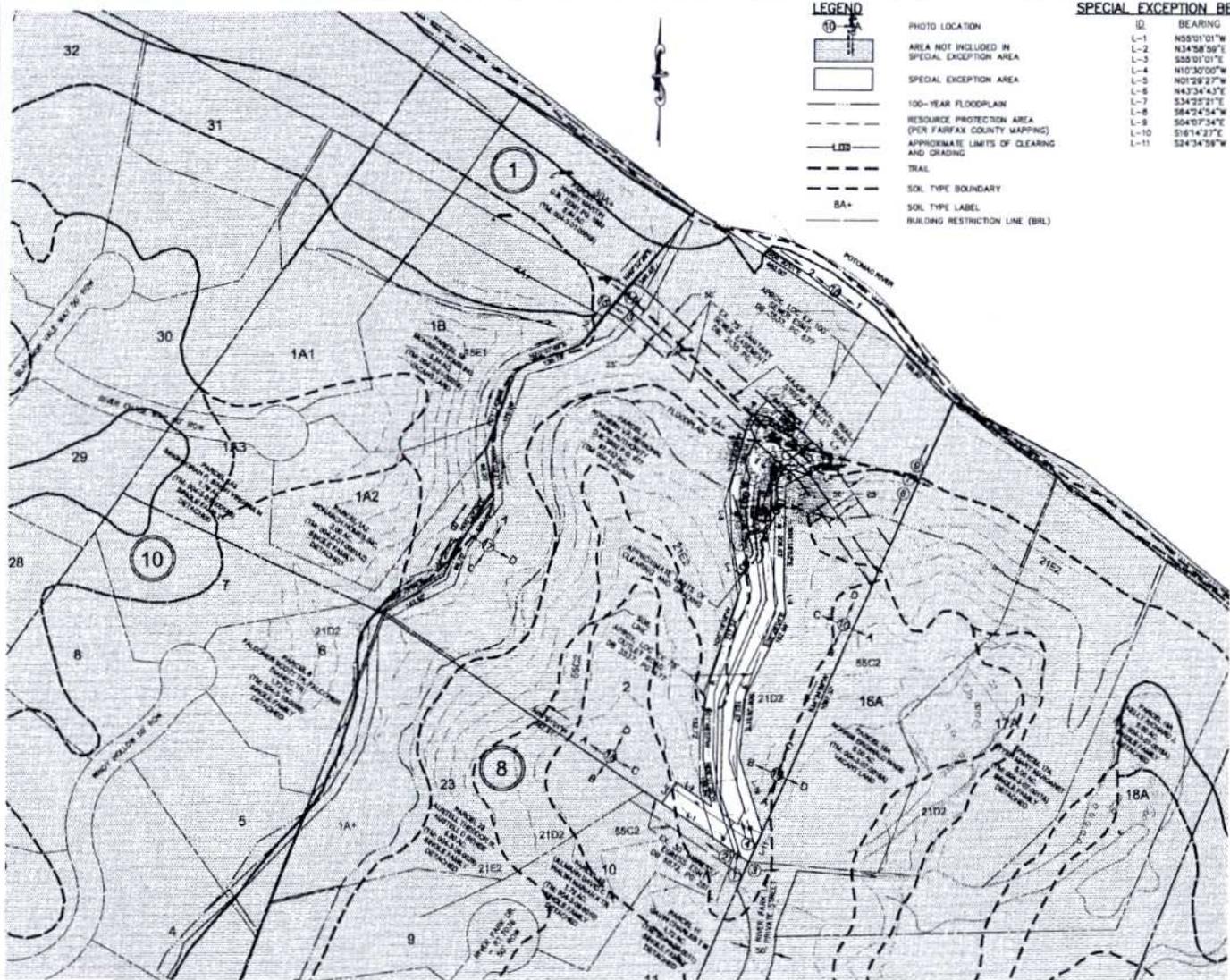
REDUCTION  
REPRODUCTION  
SCALE

10 INCHES

REVISED: AUGUST 25, 2010  
JULY 30, 2010  
JUNE 16, 2010  
APRIL 12, 2010

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY	
POTOMAC INTERCEPTOR LONG-TERM ODOR ABATEMENT PROGRAM FAIRFAX COUNTY, VIRGINIA	
SITE 31 COVER SHEET	
SCALE	DATE
1"=100'	2/25/10
DESIGNED	CHECKED
BY: [Signature]	BY: [Signature]
DRAWN	REVISIONS
BY: [Signature]	NO. DESCRIPTION
DATE	
04/15/10	
DATE FILE	
02-01	

SE-001



**LEGEND**

- PHOTO LOCATION
- AREA NOT INCLUDED IN SPECIAL EXCEPTION AREA
- SPECIAL EXCEPTION AREA
- 100-YEAR FLOODPLAIN
- RESOURCE PROTECTION AREA (PER FAIRFAX COUNTY MAPS)
- APPROXIMATE LIMITS OF CLEARING AND GRADING
- TRAIL
- SOIL TYPE BOUNDARY
- SOIL TYPE LABEL
- BUILDING RESTRICTION LINE (BRL)

**SPECIAL EXCEPTION BEARING/DISTANCES**

ID	BEARING	DISTANCE
L-1	N89°01'01"W	209.17'
L-2	N34°58'59"E	50.00'
L-3	S89°01'01"E	85.26'
L-4	N10°30'00"W	99.97'
L-5	N01°29'27"W	99.97'
L-6	N43°34'43"E	50.00'
L-7	S34°28'21"E	20.72'
L-8	S84°24'54"W	103.06'
L-9	S04°07'34"E	48.79'
L-10	S16°14'27"E	158.82'
L-11	S24°34'58"W	65.84'

**PROPOSED SPECIAL EXCEPTION AREA (SEA) TABLETIONS**

ZONE	R-4 (RESIDENTIAL ESTATE DISTRICT)
SITE AREA FOR SEA	2.103 AC
PARCEL AREA	81,280.1 SF
EXISTING USE	784,344.9 SF
PROPOSED USE	UNDEVELOPED
USE LIMITATIONS	NONE
LOT WIDTH	200 FT (INTERIOR) AND 225 FT (CORNER)
<b>BULK REGULATIONS</b>	<b>REQUIRED</b> <b>PROPOSED</b>
MINIMUM LOT AREA	75,000 SF      81,280.1 SF
BUILDING HEIGHT	80 FT      40 FT (MAX)
FRONT YARD	80 FT      50 FT
ANGLE OF BULK PLANE*	55°      N/A
SIDE YARDS	20 FT      20 FT
ANGLE OF BULK PLANE	45°      83° (WEST) 48° (EAST)
REAR YARD	25 FT      25 FT
ANGLE OF BULK PLANE*	N/A
GROSS FLOOR AREA	13,728 SF (MAX)      1,555 SF
FLOOR AREA RATIO (FAR)	0.15 (MAX)      0.017
MAX DENSITY	N/A      N/A

\* ANGLE OF BULK PLANE NOT SPECIFIED FOR THE FRONT AND REAR YARDS BECAUSE THE DISTANCE FROM THE SEA BOUNDARY LINES IS 80 FT AND 130 FT, RESPECTIVELY AND BULK PLANE ANGLES ARE SIGNIFICANTLY GREATER THAN THE 55° AND 45° REQUIRED.

**OPEN SPACE**

REQUIRED	PROVIDED
NONE - NOT CLUSTER DEVELOPMENT	N/A

**OFF-STREET PARKING**

ODOR ABATEMENT BUILDING FACILITY TO BE REMOTELY MONITORED WITH BIWEEKLY SERVICE INSPECTIONS AND ANNUAL MATERIALS DELIVERY/REMOVAL

NUMBER OF EMPLOYEES - MAJOR SHIFT	0
NUMBER OF COMPANY VEHICLES	1
SPACES PROVIDED	1

SPACES PROVIDED: 1

SIGNS: N/A - NO PROPOSED SIGNS

**TRAILS**

THERE ARE TWO TRAILS SHOWN ON THE COMPREHENSIVE PLAN COUNTY WIDE TRAILS PLAN MAP AS A MAJOR REGIONAL TRAIL AND A STREAM VALLEY TRAIL ON THE PARCEL AND APPARENTLY CONNECT TO THE POTOMAC HERITAGE NATIONAL SCENIC TRAIL THAT IS APPROXIMATELY 1,200 FEET SOUTH EAST OF THE PARCEL BOUNDARY. THROUGH SITE VISIT INSPECTION IT APPEARS THAT THE MAJOR REGIONAL TRAIL AND STREAM VALLEY TRAIL SHARE THE SAME PATH THROUGH THE SPECIAL EXCEPTION AREA (SEA) ON THE NORTHERN PORTION OF THE SEAL. A SECOND TRAIL COULD NOT BE FOUND NORTH OF THE SEA ALONG THE POTOMAC RIVER AS INDICATED ON THE COUNTY WIDE TRAILS PLAN. THE TRAIL CONTINUES TO THE WEST PARALLEL TO THE POTOMAC INTERCEPTOR AND TO THE EAST RUNS PARALLEL TO THE POTOMAC RIVER TO THE POTOMAC HERITAGE NATIONAL SCENIC TRAIL.

**LANDSCAPING AND SCREENING**

ADJACENT USES	SINGLE FAMILY DETACHED DWELLINGS AND REGIONAL PARK AND VACANT LAND
PROPOSED USE	LIGHT PUBLIC UTILITY
SCREENING REQUIREMENTS	2 (50' WIDE UNBROKEN STRIP OF OPEN SPACE) - OR BARBER D, E, OR F SCREENING PROVIDED
	WAIVER REQUESTED*

\* - WAIVER OF 50' TRANSITIONAL SCREENING IS REQUESTED WITH THIS APPLICATION DUE TO THE ODOR CONTROL BUILDING BEING SITED WITHIN A BARRIERS. THE BUILDING LOCATION IS BETWEEN TWO RIDGES WITH ELEVATION CHANGES OF APPROXIMATELY 40 FT AND 50 FT TO THE EAST AND WEST, RESPECTIVELY, WHICH PROVIDE A FORESTED NATURAL TOPOGRAPHIC BARRIER. ALSO NOTED IS THAT THE SPECIAL EXCEPTION AREA AND THE REMAINDER OF THE PARCEL THAT IS NOT PART OF THIS SPECIAL EXCEPTION IS OWNED BY THE NORTHERN VIRGINIA REGIONAL PARK AUTHORITY (NVRPA) AND IS CLASSIFIED AS A RESERVE BASED REGIONAL PARK BY THE COMPREHENSIVE PLAN. SINCE THE NVRPA IS TASKED WITH PRESERVING THE ENVIRONMENTAL FEATURES OF THIS PARCEL THE EXISTING FOREST AND TOPOGRAPHIC ELEVATION CHANGE WILL SCREEN THE ODOR CONTROL BUILDING FROM ADJACENT RESIDENTIAL PROPERTIES.



**BLACK & VEATCH**  
Corporation  
Goldsboro, Maryland

**AMT**  
A Division of Black & Veatch

**OVERVIEW PLAN**  
SCALE: 1"=100'



REVISED: AUGUST 25, 2010  
JULY 30, 2010  
JUNE 16, 2010  
APRIL 12, 2010

DISTRICT OF COLUMBIA  
WATER AND SEWER AUTHORITY

POTOMAC INTERCEPTOR LONG-TERM  
ODOR ABATEMENT PROGRAM  
FAIRFAX COUNTY, VIRGINIA

**SITE 31  
OVERVIEW PLAN**

SCALE	DATE	BY	CHKD
INTERCEPTOR		SHENK	JET
STVEN		SHENK	BRG
SUBMITTED		SHENK	B. DORAN
DATE	04/12/10		
APP'D FILE	12-001		

**GENERAL NOTES**

- THE PROPERTY BROWN HEREON IS IDENTIFIED ON FAIRFAX COUNTY TAX MAP 4-2122 PARCELS 2 AND IS 2.162 ACRES.
- TOTAL PARCEL AREA: 2.162 ACRES  
TOTAL AREA OF SPECIAL EXCEPTION AREA (S.E.A.): 1.867 ACRES  
TOTAL AREA OF SPECIAL EXCEPTION AREA (S.E.A.): 2.162 ACRES
- PROPERTY INFORMATION FOR THIS SPECIAL EXCEPTION IS FROM DESIGN AND INFORMATION OF RECORDS AND SHOULD NOT BE CONSIDERED A WARRANTY SURVEY. NO TITLE REPORTS WERE OBTAINED.
- THE PROPERTY IS NOW IN THE CARE OF NORTHERN VIRGINIA REGIONAL PARK AUTHORITY (NVRPA) UNDER A LEASE AGREEMENT DATED 10/1/98. THE NVRPA IS THE PRIMARY APPLICANT OF THE SPECIAL EXCEPTION AND HAS A CO-APPLICANT.
- THE SUBJECT PROPERTY IS LOCATED WITHIN POND 2 AND POND 3 AS SHOWN ON POND 2 AND POND 3 MAPS. POND 2 AND POND 3 ARE SHOWN ON POND 2 AND POND 3 MAPS. POND 2 AND POND 3 ARE SHOWN ON POND 2 AND POND 3 MAPS.
- NO ZONING CHANGE IS REQUESTED AND ZONING WILL REMAIN AS SPECIAL EXCEPTIONS ARE REQUESTED FOR BUILDING WITHIN THE FLOODPLAIN AND FOR CATEGORY 1 LIGHT PUBLIC UTILITY USE FOR THE PROPOSED BRIDGE PLANNING FACILITY (DOOR CONTROL BUILDING) ON THE S.E.A.
- THE TOPOGRAPHIC INFORMATION SHOWN FOR THIS SPECIAL EXCEPTION IS ANTICIPATED FROM AERIAL PHOTOGRAPHS, INFORMATION TAKEN FROM THE FAIRFAX COUNTY GIS TOPOGRAPHIC MAPS AND INFORMATION OF RECORD. THE CONTOUR INTERVAL IS 2 FEET.
- NO GRADE CHANGES WERE MADE ON THE SPECIAL EXCEPTION APPLICATION AREA.
- NO EXISTING BUILDINGS ARE PRESENT IN THE AREA HOWEVER THERE ARE ART AND GRAVE, HOUSE PROVISIONS ACCESS TO 34' AND 10' BAPTIST BROTHER HOUSE TRAIL AND PART OF THE POTOMAC INTERCEPTOR BARRIER STRIP AND A LARGE 10' DIAMETER MANHOLE (M.H. 811).
- MANHOLE 811 WILL BE LIMITED TO 10 FEET HIGH ONLY.
- THERE ARE TWO TANKS WITHIN THE BOUNDARY OF A TITLE MAPPING EXISTING BAPTIST BROTHERS GARAGE AND 10' AND 10' NORTH WITHIN THE SPECIAL EXCEPTION APPLICATION AREA. THE TANKS ARE 10' IN DIAMETER AND 10' HIGH. THE TANKS ARE 10' IN DIAMETER AND 10' HIGH. THE TANKS ARE 10' IN DIAMETER AND 10' HIGH.
- EXISTING 6" DIAMETER WATER AND 6" DIAMETER POPULAR TREES WERE IDENTIFIED FOR PROTECTION AS PART OF THE PRESERVATION SCHEME ON NATURAL FEATURES.
- 1 FOOT DEPTH AND EXISTING TREES BROWN HEREON WERE IDENTIFIED FROM A FIELD SURVEY PERFORMED BY CONTRACTOR AND ASSOCIATES, P.C. IN JUNE OF 1998.
- THE PROPOSED BRIDGE PLANNING FACILITY WILL BE CONSTRUCTED WITHIN AN EXISTING 10' DIAMETER AND 10' HIGH TANK. THE TANK WILL BE CONSTRUCTED WITHIN AN EXISTING 10' DIAMETER AND 10' HIGH TANK.
- PROPOSED FACILITY BROWN HEREON WILL BE SERVED BY PUBLIC WATER POTOMAC INTERCEPTOR AND WATER SHALL BE PROVIDED BY A WELL BOUND TO BE APPROVED BY THE LOCAL GOVERNMENT.
- THE FACILITY OPERATOR UTILIZES PUMP TO PULL GROUNDWATER FROM THE POTOMAC INTERCEPTOR BARRIER AND PUMP THE AIR THROUGH AN 8" DIAMETER BY 10' TALL TANK CONTAINING ACTIVATED CARBON. WATER FROM THE TANK IS PUMPED TO THE POTOMAC INTERCEPTOR BARRIER AND PUMPED TO THE POTOMAC INTERCEPTOR BARRIER.
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**THREE PRESERVATION TARGET CALCULATIONS AND STATEMENT**

1. TOTAL PARCEL AREA	2.162 ACRES
2. TOTAL AREA OF SPECIAL EXCEPTION AREA (S.E.A.)	1.867 ACRES
3. TOTAL AREA OF SPECIAL EXCEPTION AREA (S.E.A.)	2.162 ACRES

**STORMWATER MANAGEMENT (SWM) NARRATIVE**

TOTAL PARCEL AREA	2.162 ACRES
TOTAL AREA OF SPECIAL EXCEPTION AREA (S.E.A.)	1.867 ACRES
TOTAL EXISTING IMPERVIOUS AREAS (DRAINAGE ROADS)	1.867 ACRES @ 0.30 ACRES
TOTAL PROPOSED IMPERVIOUS AREAS (NEW BLDG & DRIVEWAY)	0.30 ACRES @ 0.30 ACRES
NEW TOTAL IMPERVIOUS AREA	2.167 ACRES
PROPOSED IMPERVIOUS PERCENTAGE OF AREA	100%
NEW IMPERVIOUS PERCENTAGE OF PARCEL	100%

**APPROPRIATE OUTLINE NARRATIVE**

EXISTING CONDITIONS

THE PARCEL BOUNDING THE POTOMAC RIVER TO THE NORTH AND THE POND BRANCH STREAM FLOWING THROUGH THE WEST SIDE OF THE PARCEL, GENERALLY PARALLEL TO THE POTOMAC RIVER, IS A DRAINAGE AREA. THE DRAINAGE AREA IS A DRAINAGE AREA. THE DRAINAGE AREA IS A DRAINAGE AREA.

**PROPOSED CONDITIONS**

THE IMPROVEMENTS FOR THE DOOR CONTROL BUILDING AND APPROPRIATE ARE LOCATED WITHIN THE POTOMAC RIVER FLOODPLAIN AND ARE APPROXIMATELY 10' SOUTH EAST FROM THE CORNER OF POND BRANCH STREAM WITHIN THE POTOMAC RIVER. THE PROPOSED BUILDING IS TO BE LOCATED ON THE EAST SIDE OF THE DOOR CONTROL BUILDING AND WILL REQUIRE THE DRAINAGE OF FLOOD FROM THE EAST SIDE DURING THE BUILDING AND WILL DISCHARGE AT THE SAME LOCATION THAT THE EXISTING BASE GRAVEL. RECONSTRUCT EXISTING DRAINAGE CURRENTLY THE DRAINAGE OF THE EAST SIDE FLOOD WILL BE DISCHARGED IN A MANNER THAT MINIMIZE THE EXISTING DRAINAGE INTO THE POTOMAC RIVER AND INTO THE BAPTIST BROTHERS GARAGE. THE POTOMAC RIVER AND THE POTOMAC RIVER WILL BE CONSTRUCTED WITHIN AN EXISTING 10' DIAMETER AND 10' HIGH TANK. THE TANK WILL BE CONSTRUCTED WITHIN AN EXISTING 10' DIAMETER AND 10' HIGH TANK.

**STORMWATER MANAGEMENT NARRATIVE**

**PREDEVELOPMENT**

TOTAL WET AREA	2.162 ACRES
IMPERVIOUS AREA	1.867 ACRES
UNPAVED ROAD	0.30 ACRES
STORMWATER	0.30 ACRES
PERCENT	13.9

**POST DEVELOPMENT**

TOTAL WET AREA	2.162 ACRES
IMPERVIOUS AREA	1.867 ACRES
DRIVEWAY ROAD	0.30 ACRES
STORMWATER BUILDING	0.30 ACRES
PERCENT	13.9

**STORMWATER MANAGEMENT NARRATIVE**

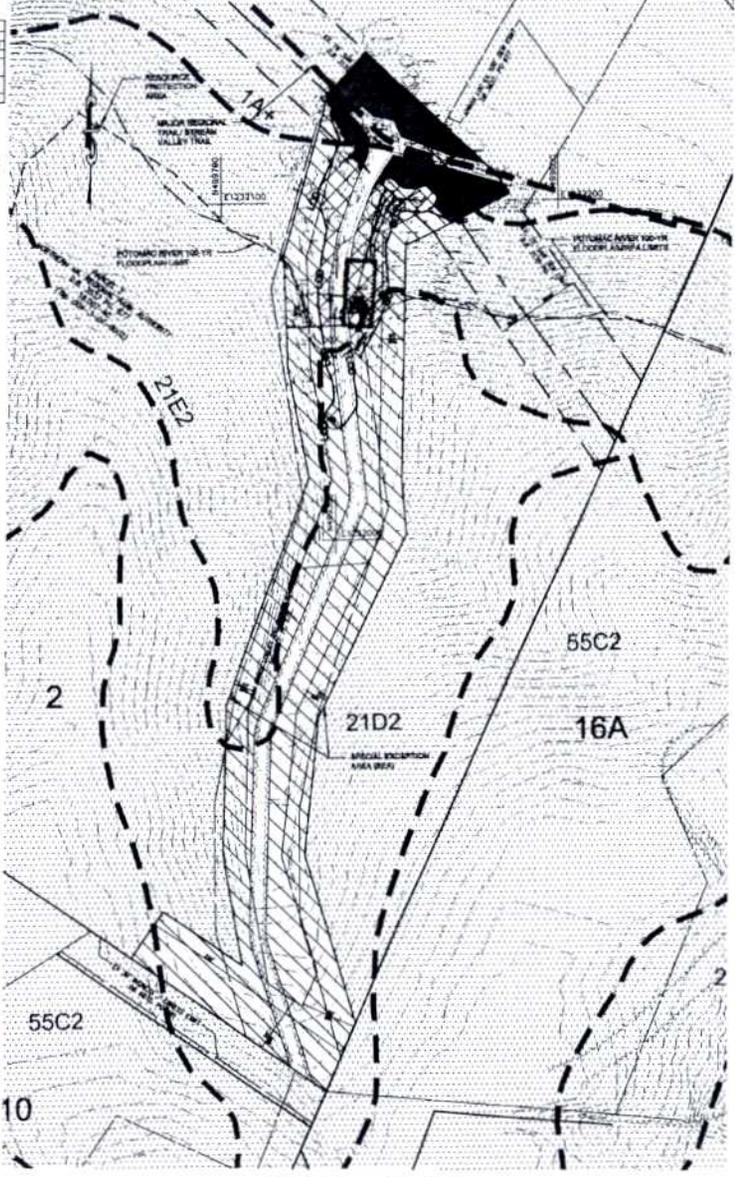
**SOIL RATINGS**

SOIL NO.	SOIL NAME	PROBLEM CLASS	FOUNDATION SUPPORT	DRAINAGE	SEPTIC DRAIN FIELDS	INFILTRATION TRENCHES	EROSION POTENTIAL	OTHER NOTES
1A+	MIXED ALLUVIAL	A	POOR	POOR	POOR	POOR	LOW	HYD
1B1	ROCKYLAND (ACIDIC)	C	GOOD	MARG	POOR	POOR	HIGH	
2102/E2	MANOR	C	GOOD	GOOD	GOOD	GOOD	HIGH	
30A+	HUNTINGTON	A	MARG	MARG	POOR	POOR	LOW	
55C2	GLENELG	C	GOOD	GOOD	GOOD	GOOD	HIGH	

**STORMWATER MANAGEMENT NARRATIVE**

**SLOPE AND EROSION CLASSES**

SLOPE CLASSES	POTENTIAL EROSION SYMBOLS
A 0-2 PERCENT	±SOIL ACCUMULATION (LOW)
B 2-7 PERCENT	0-NO EROSION (LOW)
C 7-14 PERCENT	1-SLIGHT EROSION (LOW)
D 14-25 PERCENT	2-MODERATE EROSION (MOD)
E 25+ PERCENT	3-SEVERE EROSION (HIGH)



**EXISTING VEGETATION MAP SUMMARY**

COVER	AREA (SQ)	AREA (AC)
UPLAND FOREST TREE CANOPY	86.426	1.2111
POTOMAC FOREST TREE CANOPY	8.426	0.1228
OPEN SPACE	13.348	0.1927
TOTAL	107.200	1.5266
TOTAL CANOPY TO BE REMOVED	13.888	0.1988
TOTAL PRESERVED TREE CANOPY	93.312	1.3278

- EXISTING VEGETATION LEGEND**
- EXISTING UPLAND FOREST TREE CANOPY WITH SPECIAL EXCEPTION AREA (S.E.A.) TO BE PRESERVED. UPLAND FOREST CANOPY CHARACTERISTICS: PRIMARY SPECIES: CHESTNUT OAK, RED OAK & AMERICAN BEECH; GENERAL HEALTH & VIGOR: GOOD; QUALITY: GOOD.
  - UPLAND FOREST TREE CANOPY TO BE REMOVED WITH S.E.A. SEE ABOVE FOR UPLAND FOREST STAND CHARACTERISTICS AND CONDITION.
  - EXISTING BOTTOM LAND FOREST TREE CANOPY CHARACTERISTICS: PRIMARY SPECIES: TULIP TREE, NORTHERN RED OAK, BLACK OAK, EASTERN COTTONWOOD, SWEETGUM; GENERAL HEALTH & VIGOR: GOOD; QUALITY: GOOD.
  - EXISTING BOTTOM LAND FOREST TREE CANOPY TO BE REMOVED WITH S.E.A. SEE ABOVE FOR BOTTOM LAND FOREST STAND CHARACTERISTICS AND CONDITION.
  - MAJOR REGIONAL TRAIL/STREAM VALLEY TRAIL
  - SOIL TYPE BOUNDARY
  - AREA NOT INCLUDED AS PART OF THE S.E.A.

**The Applicant shall:**

- Provide a Professional Engineer (P.E.) to prepare a site plan for the proposed development. The site plan shall be prepared by a professional with experience in the preparation of site plans, and shall be certified as to the accuracy of the information shown thereon.
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**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY**

POTOMAC INTERCEPTOR LONG-TERM COOR. ABATEMENT PROJECT

FAIRFAX COUNTY, VIRGINIA

**SITE 31**

**EXISTING VEGETATION MAP & GENERAL NOTES**

DATE: AUGUST 25, 2010

REVISIONS:

NO.	DATE	DESCRIPTION
1	AUGUST 25, 2010	ISSUED FOR PERMIT
2	JULY 30, 2010	REVISED
3	JUNE 16, 2010	REVISED
4	MAY 18, 2010	REVISED
5	APRIL 12, 2010	REVISED

**BLACK & VEATCH Corporation**

Engineers, Architects, Planners, Environmental Scientists

1900 North 17th Street, Suite 200, Arlington, VA 22209

TEL: 703.441.1000 FAX: 703.441.1001

WWW.BV.COM

**AMT**

Architectural, Mechanical, and Electrical Engineers

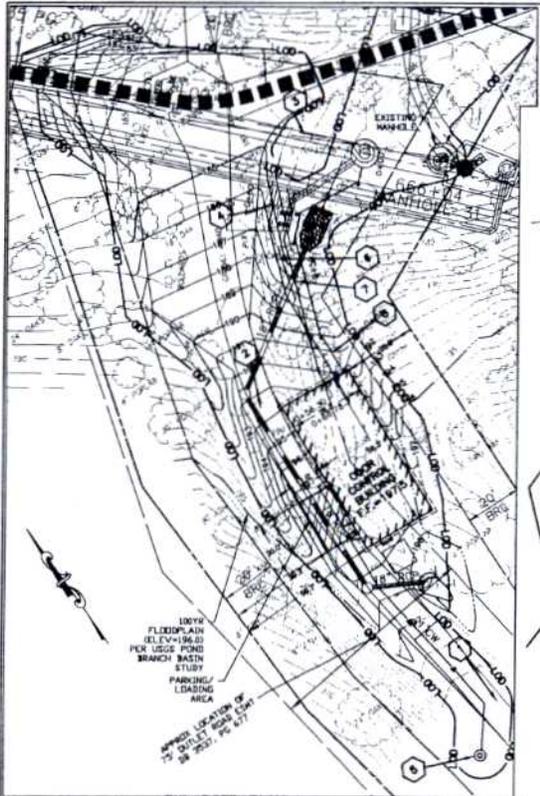
1900 North 17th Street, Suite 200, Arlington, VA 22209

TEL: 703.441.1000 FAX: 703.441.1001

WWW.AMT.COM

REDUCED TO SCALE

10 INCHES



PARCEL #  
NORTH VA. REGIONAL PARK AUTHORITY  
D.B. 13507 PG. 1853  
5.84 AC.  
(TM: 004-3-01-0003-01)

PARCEL #  
NORTH VA. REGIONAL PARK AUTHORITY  
D.B. 13517 PG. 877  
18.007 AC.  
(TM: 004-3-01-0002)

LOT 18A  
RONALD H. NORRIS  
D.B. 4377 PG. 190  
1.00 AC.  
(TM: 004-3-07-0018-A)

PARCEL #  
NORTH VA. REGIONAL PARK AUTHORITY  
D.B. 13517 PG. 877  
18.007 AC.  
(TM: 004-3-01-0002)

**ENLARGED PLAN**  
SCALE: 1"=20'

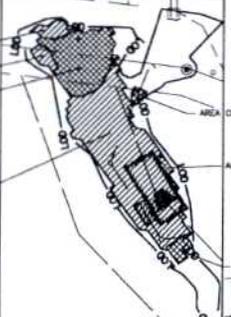
**EARTHWORK TABLE**

	VOL. (CY)
CUT	71.54
FILL	4154.94
BALANCE (FILL)	4083.41

**EARTHWORK LEGEND**



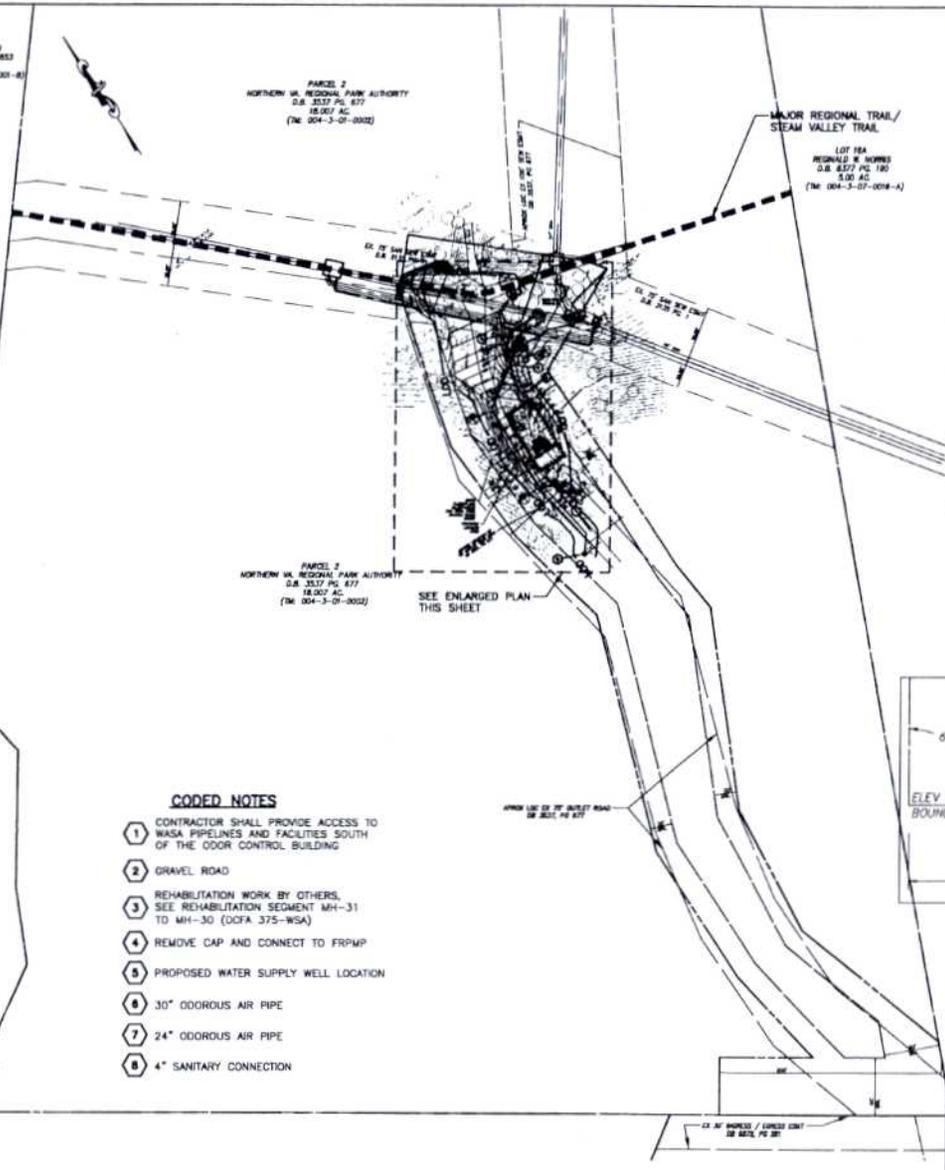
**EARTHWORK PLAN**  
SCALE: 1"=50'



**CODED NOTES**

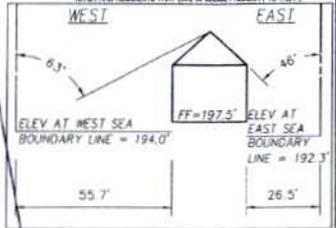
- 1 CONTRACTOR SHALL PROVIDE ACCESS TO WASA PIPELINES AND FACILITIES SOUTH OF THE DOOR CONTROL BUILDING.
- 2 GRAVEL ROAD
- 3 REHABILITATION WORK BY OTHERS. SEE REHABILITATION SEGMENT MH-31 TO MH-30 (DOFA 375-WSA)
- 4 REMOVE CAP AND CONNECT TO FRWP
- 5 PROPOSED WATER SUPPLY WELL LOCATION
- 6 30" ODOROUS AIR PIPE
- 7 24" ODOROUS AIR PIPE
- 8 4" SANITARY CONNECTION

**SPECIAL EXCEPTION PLAN**  
SCALE: 1"=30'



**FLOODPLAIN REGULATION NOTES:**

1. THE PROPOSED STRUCTURES IS CONSIDERED A BRIDGE PLANNING FACILITY USE AND WILL PROVIDE DOOR CONTROL FOR THE ADJACENT POTOMAC INTERCEPTOR (PI) BRANCH MAIN THAT IS LOCATED AT THE NORTHWEST CORNER OF THE SPECIAL EXCEPTION AREA. THE PROPOSED BUILDING IS LOCATED WITHIN THE MAJOR YEAR 100 FLOODPLAIN OF THE POTOMAC RIVER.
2. ACCESS TO THE SITE IS PROVIDED BY A PRIVATE STREET (MAJOR TRAIL) AND AN EXISTING GRAVEL ROAD LOCATED WITHIN A 75 FT DITCH (SEE SHEET 31-001) AND PG. 877.
3. THE SPACING FOR THE CONSTRUCTION OF THE DOOR CONTROL BUILDING IS CONSIDERED MAJOR WITH LIMITED HEADROOM OF CUT AND FILL FOR THE IMPROVEMENTS FOR THE BUILDING, GRAVEL ROAD AND STORM DRAIN PIPE BRIDGE.
4. ALTHOUGH THE SITE IS GOING TO HAVE A NET BENTHOSM VOLUME OF 10.74 OF THE DECREASE IN CROSS SECTION AREA IS GOING TO BE MAINTAINED AND IS NOT TO THE MAJOR LARGER CHANNEL CROSS SECTIONAL AREA OF THE POTOMAC RIVER AT THIS LOCATION. IN ADDITION THE SITE IS LOCATED WITHIN A MAJOR AND FLOODING WILL BE STAGNANT BACKWATER DUE TO THE BELIEVED TOPOGRAPHY AT THIS LOCATION. SINCE THE INCREASE IN CROSS SECTIONAL AREA CAN BE CONSIDERED INADEQUATE AND THE SITE IS LOCATED IN A MAJOR FLOOD PLANE, THE IMPROVEMENTS TO THE UPTOWN OR DOWNSTREAM PROPERTIES DUE TO FILL WITHIN THE FLOODPLAIN LIMITS.
5. THIS PROJECT HAS A MAJOR POTENTIAL TO CAUSE AN INCREASE IN FLOODING, EROSION OR SEDIMENTATION HAZARDS.
6. THE CONSTRUCTION OF THE DOOR CONTROL BUILDING HAS BEEN LIMITED TO AVOID CLASHING IMPACTS TO THE PROPOSED AREA ALONG THE EXISTING GRAVEL ROAD PROVIDED ACCESS TO THE PL. WATER QUALITY IMPACTS ARE ANTICIPATED TO BE MINIMAL SINCE RUNOFF FROM THE PROPOSED DOOR CONTROL BUILDING WILL DRAIN OVERLAND THROUGH GRASSY AND PAVED AREAS THAT WILL FILTER ANY POLLUTANTS BEFORE DISCHARGING INTO THE POTOMAC RIVER.
7. THE SPECIAL FLOODPLAIN INFORMATION BASED ON THIS PLAN IS TAKEN FROM FAIRFAX COUNTY'S USE DETERMINED BY MAPS AND INFORMATION OF RECORD. UPON MEETING WITH FAIRFAX COUNTY INFORMATION MANAGEMENT DEPT. DETERMINED THAT THE LOCATION. NO ENGINEERED FLOODPLAIN INFORMATION IS AVAILABLE FROM FEMA FOR THE YEAR 100 FLOODPLAIN.
8. AS ADVISED UPON WITH COUNTY STAFF THE POTOMAC RIVER USE FLOODPLAIN SHOULD BE BASED ON THE BACKWATER CONCENTRATIONS OF 10.74 FT (SEE SHEET 31-001) ON SHEET 31-001. THE PROPOSED DOOR CONTROL BUILDING IS LOCATED WITHIN THE FLOODPLAIN BRANCH MAIN PREPARED BY USES AT THE COMPLIANCE OF THE POTOMAC RIVER WITH THE POTOMAC RIVER. THE DOOR CONTROL BUILDING WILL BE ALIGNED PARALLEL TO THE YEAR 100 FLOOD PLANE. NO FEDERAL ACTION STATE PERMITS ARE ANTICIPATED TO BE REQUIRED.
9. DUE TO OPERATIONAL CONSTRAINTS THE DOOR CONTROL BUILDING SHOULD BE LOCATED AS CLOSE AS POSSIBLE TO THE POTOMAC RIVER. THE BUILDING LOCATION HAS BEEN DETERMINED ON PROXIMITY TO THE PL AND A LOCATION WHERE THE FLOODPLAIN COULD BE ABOVE THE POTOMAC RIVER FLOODPLAIN WATER SURFACE ELEVATION.
11. THIS PLAN REPRESENTS A COLLABORATIVE EFFORT BETWEEN DORNA AND WAPA TO ENSURE THE HIGH QUALITY DESIGN AND AND REGULATION SYSTEM THAT EXISTS ON THE UNPAVED PORTAL THAT THE SPECIAL EXCEPTION IS A PORTION OF THE DOOR CONTROL BUILDING BEHIND THIS PORTAL. FIRST THE PRESERVE AND PROTECT THE PL THAT IS AN IMPORTANT AND VALUABLE COMMUNITY INFRASTRUCTURE REQUIRED BY REMOVING THE CONCRETE ELEMENTS AND REPAIR TO ADDRESS DOOR ACCESS DUE TO THEIR CONCRETE ELEMENTS ALONG THE EXISTING FLOODPLAIN FROM THE DRAINAGE TO THE BLUE PLANS WATER TREATMENT PLANT. DOOR ACCESS ARE GOING TO BE ADDRESSING THE FLOODPLAIN VENTS AND UNBANK THE FAIR IN THE DOOR CONTROL BUILDING TO FILL THE DOORWAY AND CONCRETE AIR FROM THE FLOODPLAIN WITH AN ACTIVATED CARBON FILTER THAT WILL ADDRESS THE ODOROUS AND CONCRETE COMPONENTS AND RELEASE THE FILTERED GAS TO THE ATMOSPHERE AND IMPROVING THE AIR QUALITY ALONG THE EXISTING LINE OF THE PL BY ADDRESSING THE DOOR ACCESS ALONG THE POTOMAC RIVER THIS PROJECT WILL BE AN IMPROVEMENT TO THE COMMUNITY THAT WILL BENEFIT ALL THE USERS OF THE TRAIL SYSTEM ALONG THE POTOMAC RIVER AND REQUESTS THAT LINE IS CLOSE PROXIMITY TO THE PL.



**ANGLE OF BULK PLANE**  
SCALE: 1"=20'



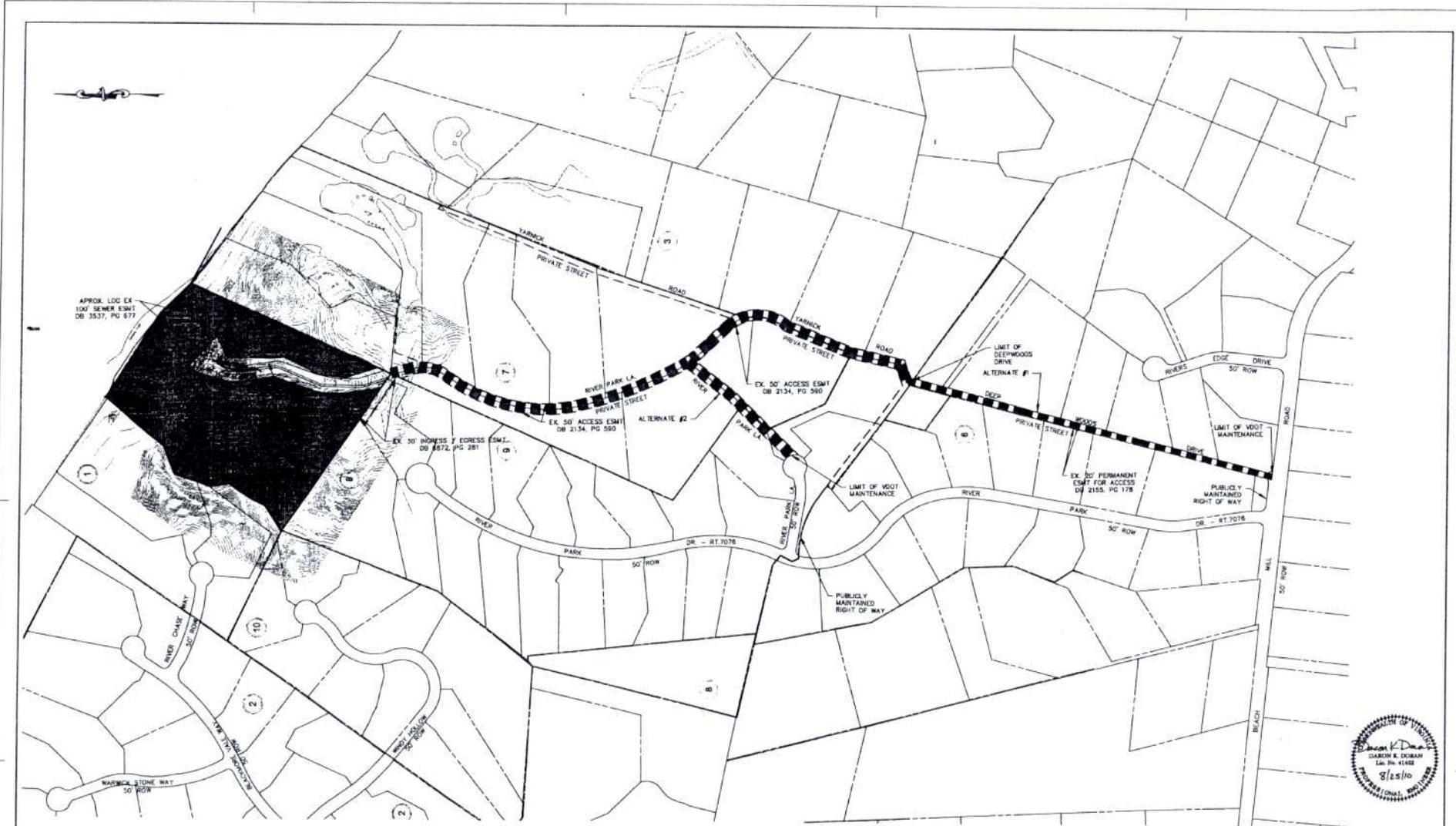
DISTRICT OF COLUMBIA  
WATER AND SEWER AUTHORITY  
POTOMAC INTERCEPTOR LONG-TERM  
DOOR ASSESSMENT PROGRAM  
FAIRFAX COUNTY, VIRGINIA

**SITE 31  
SITE DETAILS**

REVISED: AUGUST 25, 2010  
JULY 30, 2010  
JUNE 18, 2010  
APRIL 12, 2010

SCALE	DATE	BY	CHKD
INTERCEPTOR	1"=30'	DORNA	AT
DESIGNED		CHEN	2ND
SUBMITTED		TRINITY	S. DORNA
DATE FILE	04/13/10	RECOMMENDED	





APPROX. LOC EX  
100' SEWER ESMIT  
DB 3537, PG 577

EX. 30' HURDIS J. EGRESS  
DB 8672, PG 281

EX. 50' ACCESS ESMIT  
DB 2134, PG 590

EX. 50' ACCESS ESMIT  
DB 2134, PG 590

EX. 50' PERMANENT  
ESMIT FOR ACCESS  
DB 2155, PG 178

**BLACK & VEATCH**  
Corporation  
Gotham, Maryland

**AMI**  
A. M. International, Inc.  
10000 Old Dominion Blvd., Suite 200  
Fairfax, VA 22031  
Tel: 703-291-8800  
Fax: 703-291-8801

REDUCTION: 1" = 200'  
REPRODUCTION SCALE: 1" = 200'

**LEGEND**

- ■ ■ PATHS FOR ACCESS TO/FROM SITE TO PUBLICLY MAINTAINED ROADWAY.
- PARCEL AREA OUTSIDE OF SPECIAL EXCEPTION AREA
- PARCEL AREA OF SPECIAL EXCEPTION

REVISED: AUGUST 25, 2010  
JULY 30, 2010  
JUNE 16, 2010  
APRIL 12, 2010

DISTRICT OF COLUMBIA  
WATER AND SEWER AUTHORITY

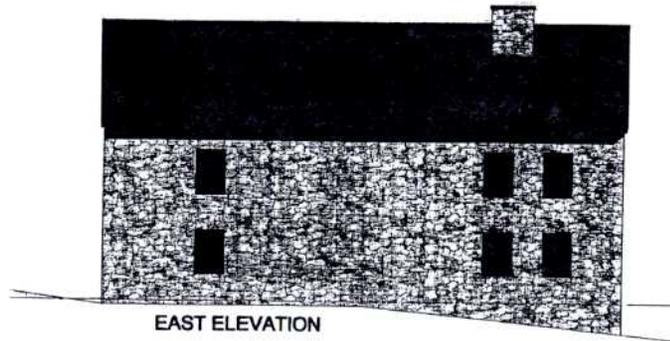
POTOMAC INTERCEPTOR LONG-TERM  
ODDR ABATEMENT PROGRAM  
FAIRFAX COUNTY, VIRGINIA

**SITE 31  
PUBLIC ACCESS EXHIBIT**

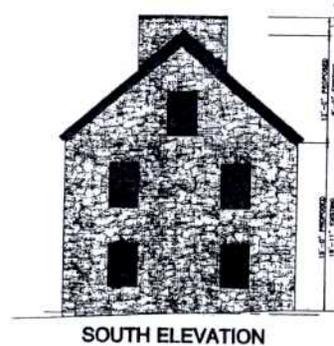
SCALE: 1" = 200'	CAD: DWG
INTERCEPTOR SYSTEM	DRAWN BY: JET
SURVEYED: JUNE 16, 2010	CHECKED BY: JMS
DATE: APRIL 12, 2010	SUBMITTED BY: B. DOWAN
CADD FILE: SE-005	RECOMMENDED BY:



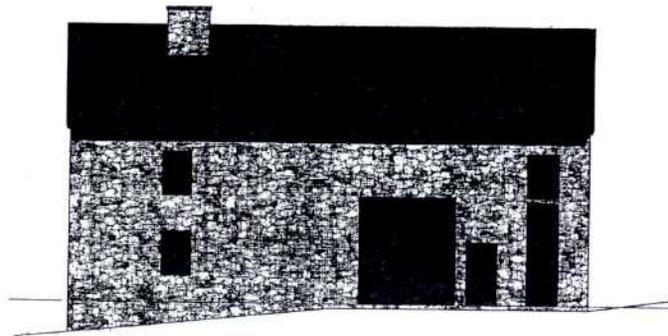
# POTOMAC INTERCEPTOR LONG TERM ODOR ABATEMENT PROGRAM



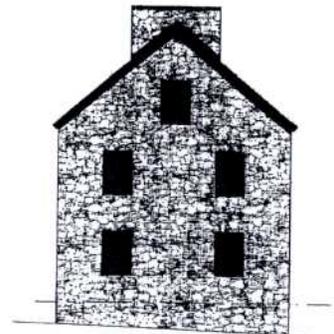
EAST ELEVATION



SOUTH ELEVATION



WEST ELEVATION



NORTH ELEVATION

## SITE 31 PROPOSED ELEVATIONS



1 ARCHITECTURAL ELEVATIONS  
NOT TO SCALE

**BLACK & VEATCH**  
Corporation  
Caiterburg, Maryland

**AMT**  
A. M. T. Corporation  
Washington, D.C.



REVISED: AUGUST 25, 2010  
JULY 30, 2010  
JUNE 16, 2010  
APRIL 12, 2010

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY	
POTOMAC INTERCEPTOR LONG-TERM ODOR ABATEMENT PROGRAM FAIRFAX COUNTY, VIRGINIA	
SITE 31 ARCHITECTURAL ELEVATIONS	
SCALE	NOT TO SCALE
INTERCEPTOR	DESIGN
SYSTEM	CHECKED
SUPERVISOR	SUBMITTED
DATE	04/12/10
DWG FILE	SE-006
DESIGNED	BY
CHECKED	BY
SUBMITTED	BY
RECOMMENDED	BY

REDUCTION  
MULTIPLICATION  
SCALE

10 NOTES

SE-006



SITE 31



**BLACK & VEATCH**  
Corporation  
VICTOR WILBURN ARCHITECTS P.C.  
WASHINGTON D.C.

**POTOMAC INTERCEPTOR LONG TERM ODOR ABATEMENT PROGRAM**

2 ARCHITECTURAL PERSPECTIVE  
NOT TO SCALE



DISTRICT OF COLUMBIA  
WATER AND SEWER AUTHORITY  
POTOMAC INTERCEPTOR LONG-TERM  
ODOR ABATEMENT PROGRAM  
FAIRFAX COUNTY, VIRGINIA  
SITE 31  
ARCHITECTURAL PERSPECTIVE

**BLACK & VEATCH**  
Corporation  
Galltisbury, Maryland

**AMT**  
A. M. Thornton & Associates, Inc.  
Professional Engineer  
10000 Lee Highway, Suite 100  
Falls Church, VA 22044  
(703) 271-1000

REVISED: AUGUST 25, 2010  
JULY 30, 2010  
JUNE 16, 2010  
APRIL 12, 2010

SCALE	NOT TO SCALE	DESIGN	DATE
INTERCEPTOR		CHECKED	SKD
SYSTEM		SUBMITTED	D. DOBRAN
DRAWN	BY/12/10	RECOMMENDED	
DATE	12, 2010		
DRAW FILE	16-007		

REDUCTION 0 TO 100-425 SCALE



**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY**  
5000 OVERLOOK AVENUE, S.W., WASHINGTON, D.C. 20032

January 6, 2010

Fairfax County  
Department of Planning and Zoning  
8200 Evaluation Branch  
Zoning Evaluation Division  
12055 Government Center Parkway  
Suite 801  
Falls Church, Virginia 22033-5309

Subject: Special Exception Application: District of Columbia Water and Sewer Authority (DCWASA) - Potomac Interceptor Long Term Odor Abatement Program - Site 31 Fairfax County Special Exception Tracking Number: SE 2009-0291

To Whom It May Concern:

As part of the Potomac Interceptor Long Term Odor Abatement Program, the District of Columbia Water and Sewer Authority (DCWASA) proposes to construct an odor control building classified as a sanitary sewer pumping facility site that will be located within the 100-yr Floodplain of the Potomac River in the vicinity of the existing Potomac Interceptor sewer at coordinate number 31.

The purpose of this letter is to acknowledge that flood insurance may be required and that the flood insurance rates may increase because of the building location and associated risks in accordance with Fairfax County Zoning Ordinance Floodplain Regulation requirement Part 9 2-904 2.C.3) - (Special Exception Item).

Respectfully,  
  
Barry Laska, P.E.  
Program Manager  
Planning & Design Branch  
Department of Engineering & Technical Services

cc: J. Rowell, DCWASA  
J. Rowell, EPAC III  
D. Brown, Black & Veatch  
D. Green, A. Marlow Thomas



January 11, 2010

Fairfax County  
Department of Planning and Zoning  
8200 Evaluation Branch  
Zoning Evaluation Division  
12055 Government Center Parkway  
Suite 801  
Falls Church, Virginia 22033-5309

Re: Special Exception Application: District of Columbia Water and Sewer Authority (DCWASA) - Potomac Interceptor Long Term Odor Abatement Program - Site 31 - Fairfax County Special Exception Tracking Number: SE 2009-0291

To Whom It May Concern:

On behalf of the applicant and building owner DCWASA (5800 Overlook Avenue, S.W., 17<sup>th</sup> Floor, Washington, DC 20022) we are preparing an odor control building classified as a sanitary sewer pumping facility site to be located about midway within the 100-yr Floodplain of the Potomac River. For the Potomac Interceptor Long Term Odor Abatement Program (POTOMAC Interceptor) 11/23/2009 D dated March 1, 1999 the proposed building location is within an area designated as Zone A. The meeting with Fairfax County staff has been conducted and there is an approved 100-year floodplain information available from FEMA in the vicinity of site 31. However, DCWASA has prepared a floodplain study on the flood branch study being the hydrologic condition elevation at the mouth of the Potomac River with the Potomac River to be at an elevation of 181.8 feet. Since the flood branch elevation is relatively close proximity to the site we have been directed by County staff to use this elevation for the 100-year floodplain elevation.

The purpose of this letter is to inform Fairfax County of our intent to verify the following stated quantities, values from FEMA Page 41-43, that the proposed Odor Control Building, floodproofing will comply with all Fairfax County, State and Federal requirements on the flood engineering site plan review stage. This request letter is applicable site to our zoning special exception request to build within the floodplain provided the flood engineering building design efforts necessary to verify the Non-Residential Floodproofing Construction Certificate based on FEMA's Technical Bulletin 1-11 for construction design plans. It is our intent to design and specify methods of floodproofing at Site 31 that are consistent with acceptable standards however it is premature to verify the following statement at this time.

"I certify that based on development under review of structural design, specifications, and plans for construction that the design and methods of construction are in accordance with accepted standards of practice for building for following conditions:

The structure, together with attached cellars and sanitary facilities, will be watertight to the required floodproofed design elevation, with walls that are structurally impermeable to the passage of water.

All structural components will be capable of resisting hydrostatic and hydrodynamic flood forces, including the effects of buoyancy, and associated debris impact forces.

I certify that the information on this certificate represents my best effort to interpret the data available. I understand that my best statement on the structural certification may be provided by the or implemented under 18 U.S. Code, Section 1001.

Black & Veatch Corporation 1815 Montgomery Village, Ave. No. 802 Gaithersburg, MD 20878 Tel: 301-940-1123 FAX: 301-940-2862

Black & Veatch  
Fairfax County Department of Planning and Zoning

Page 2  
January 11, 2010

Lawrence F. Jovanick 28251  
Certifier's Name Virginia License Number (or Affili. No.)  
Yan Zoukher 28251  
Title State of Virginia  
JELIS Montenegro 28251  
Address City State Zip  
Signature Date  
Dobson, Michael 28251  
City State Zip  
Date

Signature  
Lawrence Jovanick  
Vice President



REDUCED  
REPRODUCTION  
SCALE

10 INCHES



REVISED: AUGUST 25, 2010  
INTERIOR CHECKED (SD)  
JULY 30, 2010  
DESIGN SUBMITTED S. DURAN  
JUNE 16, 2010  
DRAWN DATE/10  
APRIL 12, 2010  
SCALE SET SE-007

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY			
POTOMAC INTERCEPTOR LONG-TERM ODOR ABATEMENT PROGRAM FAIRFAX COUNTY, VIRGINIA			
SITE 31 CORRESPONDENCE LETTERS			
SCALE	MIT TO SCALE	DESIGN	SET
INTERIOR	CHECKED (SD)	SUBMITTED	S. DURAN
DESIGN	DATE/10	RECOMMENDED	
DRAWN	DATE/10	DATE/10	SE-007

SE-008

**A GLOSSARY OF TERMS FREQUENTLY  
USED IN STAFF REPORTS WILL BE  
FOUND AT THE BACK OF THIS REPORT**

## **DESCRIPTION OF THE APPLICATION**

This application is a request for a Category 1 (light public utilities) and Category 6 (use in a floodplain) Special Exception to permit the construction of a sewage line odor abatement facility on a lot zoned R-E, which is also in a floodplain.

The applicant's affidavit and statement of justification can be found in Appendices 2 and 3, respectively.

### **Requested Waivers/Modifications:**

In accordance with Section 13-304 of the Zoning Ordinance, the applicant has requested a modification of the transitional screening and barrier requirements for all property lines in favor of the existing vegetation and topographic features.

## **LOCATION AND CHARACTER**

### **Site Description**

The 2.1 acre subject property is located at the terminus of River Park Lane, northeast of River Park Drive. The site is zoned R-E and is surrounded by single family detached units to the south, east, and west. The Potomac River lies to the north of the site.

The Potomac Interceptor (PI) is a large sewer line that runs from Dulles Airport to the DCWASA Blue Plains Treatment Facility located in Washington, DC. The PI is to the north of the special exception application property. There is also a trail that runs east to west along the application property.

The property is owned and managed by the Northern Virginia Regional Park Authority (NVRPA). The only existing structures on the site are above-ground manholes to access the PI. Access to the property is obtained via an existing gravel access road that connects from River Park Lane. No changes to this access point are proposed with this special exception request.

The site topography is generally highest at the southern end of the property, and then slopes down towards the Potomac River into an area that is very flat. The PI and the trail are located in this flat area. The site is heavily vegetated, and overall the vegetation is in good health.

SURROUNDING AREA DESCRIPTION			
Direction	Use	Zoning	Plan
North	Potomac River	----	----
South	Residential; Single family detached	R-E	Residential; 0.1-.2 du/acre
East	Residential; Single family detached	R-E	Residential; 0.1-.2 du/acre
West	Residential; Single family detached	R-E	Residential; 0.1-.2 du/acre

## BACKGROUND

### Site History:

The property is owned by the NVRPA. The only existing structures on the site are above-ground manholes to access the sewer line. The site is heavily wooded. No previous rezoning or special exception applications are on file for this property.

## COMPREHENSIVE PLAN PROVISIONS (Appendix 4)

**Plan Area:** Area III, Upper Potomac Planning District  
**Planning Sector:** UP1- Riverfront Community Planning Sector  
**Plan Map:** Public Park

The Fairfax County Comprehensive Plan, 2007 Edition, Area III, Upper Potomac Planning District, UP1 Riverfront Community Planning Sector, as amended through March 9, 2010, starting on page 82, states that:

The Riverfront Community Planning Sector is a very low density stable residential area. Infill development in this residential area should be of a compatible use, type and intensity in accordance with the guidance provided by the Policy Plan under Land Use Objectives 8 and 14.

There is no site specific text for the subject property.

## ANALYSIS

### Special Exception / Special Permit Amendment Plat (Copy at front of staff report)

**Title of SE Plat:** Potomac Interceptor Long Term Odor Abatement Program Site 31 Special Exception Plat  
**Prepared By:** A. Morton Thomas

**Original and Revision Dates:** January, 2010 as revised through August 25, 2010

**Description of Plat:**

The combined SE Plat consists of 8 sheets.

<b>SE PLAT: ODOR ABATEMENT PROGRAM</b>	
<b>Sheet #</b>	<b>Description of Sheet</b>
1 of 8	Cover Sheet, Vicinity Map, Sheet Index
2 of 8	Overview Plan
3 of 8	Existing Vegetation Plan and General Notes
4 of 8	Site Details
5 of 8	Public Access Exhibit
6 of 8	Architectural Elevations
7 of 8	Architectural Perspective
8 of 8	Correspondence Letters

**Site Layout:** The SE Plat depicts a 75 ft. wide cleared area containing a gravel access road, which extends north onto the application property from the terminus of River Park Lane. The proposed structure is located approximately 260 ft. down the gravel access road, on the eastern side.

**Proposed Structure:** The proposed structure, an odor abatement facility for the PI, is approximately 1500 sq. ft. and 32 ft. in height. As this facility is on NVRPA property, the proposed structure will meet NVRPA appearance requirements. The building is proposed as block construction and will feature a natural stone façade with louvered windows, a pitched roof, and false chimney.

**Access and Parking:** The SE Plat indicates two alternatives for ingress/egress to the site. Alternative #1 shows access from Deep Woods Drive to Yarnick Road to River Park Lane. Alternative #2 shows access from River Park Drive to River Park Lane. One parking space for a maintenance vehicle is provided on the subject property.

**Stormwater Management/Best Management Practices:** The new impervious area created by this project is exempt from water quality controls, as it is a structure appurtenant to a sanitary sewer line owned by a regional service authority. The applicant will be required to submit a Water Quality Impact Assessment for the associated storm drainage improvements at site plan. The applicant plans to request a waiver of stormwater detention, and this waiver is likely to be approved as long as the concentrated flow from the development is discharged to an adequate receiving channel.

**Land Use Analysis**

The applicant is proposing a small structure which is part of a long term odor abatement project for DCWASA. The proposed structure and associated site

modifications are found to be in harmony with the Comprehensive Plan; there are no outstanding land use issues.

### **Environmental Analysis** (Appendix 5)

This section characterizes the environmental concerns raised by an evaluation of this site and the proposed development. Solutions are suggested to remedy the concerns that have been identified by staff. There may be other acceptable solutions. Particular emphasis is given to opportunities provided by this application to conserve the County's remaining natural amenities.

#### **Issue: EQC Policy**

This application is proposed within NVRPA property located immediately adjacent to the Potomac River and the Pond Branch watershed in northernmost Fairfax County. The Environmental Quality Corridor (EQC) is coterminous with the floodplain, and the mapped Resource Protection Area (RPA) is more extensive than the floodplain and the EQC.

Much of the disturbance for this public utility project will occur within the EQC and the 100 year floodplain, including, but not limited to, the proposed odor abatement structure; the 18" diameter reinforced concrete outfall pipe; and the riprap outfall for this pipe. Comprehensive Plan guidance generally supports preservation and protection of the EQC. However, the Comprehensive Plan policy guidance recognizes that some intrusions in the EQC that serve a public purpose, such as unavoidable public infrastructure easements, are appropriate. The Plan further advises that such intrusions should be minimized and occur perpendicular to the corridor's alignment, if practical.

**Resolution:** In response to staff's request that the proposed odor abatement control structure be considered in a location outside the EQC, the applicant noted that the proposed location was selected due to its close proximity to the PI, which would allow for smaller equipment and smaller building, resulting in the least amount of disturbance to the environment. The proposed location can also provide a finished floor above the floodplain water surface elevation. Given these circumstances, staff finds that the proposal is consistent with the EQC policy. This issue is addressed.

#### **Issue: Tree Preservation/Restoration**

Sheet 3 of the SE Plat incorporates existing vegetation information. The notes provide detailed information regarding tree preservation and protection measures to be implemented prior to and throughout the land disturbance and construction phases of the project. The notes indicate that the applicant is working closely with the Urban Forestry Management Division of DPWES. Staff encourages the applicant to look for opportunities to replace native tree species similar to those specimens which will be lost because of the sewer line project.

**Resolution:** Staff has included development conditions related to tree preservation and protection measures, including working with UFM to replant native tree species lost as a result of this project. This issue is addressed.

**Issue: Countywide Trails Plan**

The Countywide Trails Plan map depicts a major regional trail and a stream valley trail along the Potomac River adjacent to the larger park property; however, neither trail is located within the limits of the Special Exception. Initial staff review noted that a natural surface/stone dust trail is located on the subject parcel perpendicular to the Potomac River near River Park Drive, and that it was difficult to discern whether or not this trail would be affected by the project.

**Resolution:** No changes to the trail are proposed as part of this application. The applicant has included additional clearing and grading limits that extend beyond the trail, should the area be needed for storm drain outfall. It is not anticipated that clearing and grading will be needed in this area. Staff believes this issue is addressed.

**Urban Forest Management Analysis (Appendix 6)****Issue: Existing Vegetation Map Clarification**

An existing vegetation map (EVM) was provided with the initial submission, however, it was unclear. There were no tables identifying the primary species found in each cover type, nor was there a statement regarding the general health and condition of the existing vegetation.

**Resolution:** The applicant has since modified the plan to show provide clarification on the EVM, including tables to identify the primary species and a statement about the health and condition of the existing vegetation. Upon review of these requested items, UFM had no further comment. Therefore, this issue is addressed.

**Issue: Limits of Clearing around the existing access road**

It was unclear if any improvements, including tree removals or pruning, outside the limits of disturbance of the existing access road would be necessary to facilitate the ingress/egress of equipment during construction activities or regular maintenance activities.

**Resolution:** The applicant has consulted with Urban Forest Management staff regarding this issue, and it appears that most of the trees along the gravel access road have been previously limbed to a height sufficient for vehicle access. Most of the limbs that were observed on site are approximately 1-inch or smaller in diameter. UFM Staff agreed that should these limbs need to be pruned, it would be considered a minor disturbance and not significant enough to warrant extending the limits of disturbance for tree pruning that may need to occur. This issue is addressed.

**Issue: Development Conditions for Tree Preservation**

Given the nature of the tree cover on this site, staff recommends that development conditions related to tree preservation be included as part of the approval of this application. These conditions will ensure adequate tree preservation and protection throughout the construction process.

**Resolution:** Staff has included development conditions as recommended by UFM to ensure effective tree preservation. These conditions include the submittal of a tree preservation plan, completion of a tree preservation walk-through, adherence to the limits of clearing and grading, the installation of tree preservation fencing, root pruning as may be necessary, and site monitoring. The applicant does not object to these conditions and has also included them as project notes on Sheet 3 of the SE Plat. Therefore, this issue is addressed.

#### **Transportation Analysis** (Appendix 7)

The applicant is seeking permission for site modifications to improve the long term odor abatement program. Operational visits will occur on a weekly basis along with occasional routine maintenance trips. No significant transportation issues are associated with this application.

#### **Stormwater Management Analysis** (Appendix 8)

##### **Issue: Chesapeake Bay Preservation Ordinance**

There is RPA on this site. The new impervious area created by this project is exempt from water quality controls usually required by the Chesapeake Bay Preservation Ordinance (CBPO), since it is a structure appurtenant to a sanitary sewer line owned by a regional service authority. (CBPO 118-5-2(b)). Nonetheless, a Water Quality Impact Assessment will be required for the associated storm drainage improvements; this assessment can be included in the site plan submittal.

**Resolution:** The applicant has been informed of the requirement to submit a Water Quality Impact Assessment, and plans to do so at site plan. This issue is addressed.

##### **Issue: Floodplain**

Clarification on the finished floor elevation (FFE) for the proposed structure was needed. Sheet 4 of the original SE Plat showed two different FFEs. The applicant must provide a FFE above the Potomac River Floodplain water surface elevation, which is 196.0 ft.

##### **Resolution:**

The applicant has since modified the plan to provide clarification on the FFE for the proposed structure. It is 197.5 ft, which is above the floodplain water surface elevation. This issue is addressed.

##### **Issue: Stormwater Detention**

Staff has noted that stormwater detention or an approved waiver will be required before approval of the site plan.

**Resolution:** The applicant intends to request a waiver at site plan. As long as any concentrated flow is discharged to an adequate receiving channel, a waiver is likely to be approved at site plan.

**Issue: Site Outfall**

The storm drain's concentrated discharge must outfall to an adequate natural or man-made receiving channel. The original plan showed the storm drain discharging to an area south of the proposed manhole on the interceptor and the stream valley trail. Staff noted that the limits of clearing and grading in the site plan may have to be extended to meet the PFM's adequate outfall requirements.

**Resolution:** After this comment was received, staff met with the applicant to review the clearing limits and site outfall as proposed. The applicant explained that the outfall is discharging to the location as shown on the plan because it allows a much smaller area to be cleared and produces much less disturbance to the park land versus discharging to the natural channel. In order to address concerns related to achieving adequate outfall, the applicant revised their plans to show a small area of additional clearing that may be needed to achieve this outfall location. This will eliminate the need for an SEA in the future, should the applicant need more land to achieve adequate outfall. Staff does not object to this small extension of the clearing limits. This issue is addressed.

**Parks Analysis (Appendix 9)****Issue: Cultural Resources/ Archeological Survey**

Staff found that the access road has been thoroughly disturbed and no further archeology is warranted there. However, Cultural Resource Management and Protection (CRMP) staff found artifacts along a cut bank adjacent to the stream to the west of the project area. Based on other extensive excavations nearby, staff is fairly certain that this archeological site (an earlier survey identifies this site as 44FX1999) has an extremely high potential for National Register eligibility. Considering the probable relevance of 44FX1999 to the County's continued investigations and interpretation of the Clark's Branch site (44FX3226), CRMP staff should be intimately involved in the scope of work and investigations on 44FX1999. The site area outside the current pipeline trench should be subjected to an intensive Phase II evaluation. The Park Authority has requested that the applicant coordinate directly with CRMP, which has purview over all land disturbances in Fairfax County where it may impact cultural resources.

**Resolution:** Staff has included a development condition to require the applicant's completion of a Phase II study, and potentially a Phase III, subject to a scope of work provided by CRMP. Therefore, this issue is addressed.

**Issue: Unusual Plant Communities/Animal Species**

The project area for the sewer lining project crosses numerous seeps and wetlands with known occurrences of at least three vertebrate animal species listed as having a threatened or greater status by the state of Virginia. In addition, it is likely that the project area includes many unusual plant species and some rare plant communities that may be impacted by the project. DCWASA should coordinate directly with the Virginia Department of Conservation and Recreation, Division of Natural Heritage, and the Virginia Department of Game and Inland Fisheries to determine what impacts

their project may have and what measures should be taken to avoid, minimize and mitigate those impacts.

**Resolution:** Staff has included a development condition to require the applicant to coordinate with these agencies prior to site plan approval. This issue is addressed.

## **ZONING ORDINANCE PROVISIONS** (Appendix 10)

Category 1 Special Exceptions are exempt from bulk standard requirements.

### **Transitional Screening & Barrier Requirements:**

Transitional Screening Type 3 and Barrier type D, E or F.

#### **Requested Waivers:**

The applicant has requested a modification of the transitional screening and barrier requirements for all property lines in favor of the existing vegetation and topographic features. The new building is sited in a ravine between two ridges with elevation changes of approximately 40 and 50 ft. to the east and west, respectively. This will provide a forested and natural topographic barrier between the building and the adjacent residential properties. The closest property line is approximately 240 ft. to the proposed building. In addition, the application property is owned by the NVRPA, and is classified as a Resource Based Regional Park by the Comprehensive Plan. The area outside the SE area is not anticipated to be developed in the future. Finally, as the site contains extensive high quality vegetation, allowing the existing vegetation to remain is preferable to the disturbance that would be caused by the planting of transitional screening as required by the Zoning Ordinance, therefore, staff does not object to this modification.

#### **Other Zoning Ordinance Requirements:**

#### **Special Exception Requirements** (Appendix 10)

General Standards (Sect. 9-006)

Standards for All Category 1 Uses (Sect. 9-104)

Provisions for Uses in a Floodplain (Sect. 9-606)

General Standards (Sect. 9-006)

**Paragraph 1** requires that the proposed use be in harmony with the Comprehensive Plan. Staff believes that the proposed use is in harmony with the Comprehensive Plan and the character of the surrounding neighborhood. In addition, staff believes that the façade of the proposed structure will be compatible in bulk, orientation and scale to the surrounding homes in the vicinity and compatible with NVRPA guidelines. Therefore, this standard has been met.

**Paragraph 2** requires that the proposed use be in harmony with the purpose and intent of the applicable zoning district regulations. The R-E District was established to promote agricultural uses and low density residential uses; to allow other selected uses which are compatible with the low density residential character of the district; and otherwise to implement the stated purpose and intent of this Ordinance.

This application does not affect density of the area and is harmonious with the surrounding low intensity residential developments. Due to the nature of this application (light public utility use in a floodplain), affordable housing units are not applicable to this request. The proposal meets the applicable Zoning Ordinance provisions. Therefore, this standard has been met.

**Paragraph 3** requires that the proposed use be harmonious with and not adversely affect the use or development of neighboring properties in accordance with applicable zoning district regulations and the adopted Comprehensive Plan. It further states that the location, size and height of buildings, structures, walls and fences, and the nature and extent of screening, buffering and landscaping shall be such that the use will not hinder or discourage the appropriate development and use of adjacent or nearby land and/or buildings or impair the value thereof.

The applicant is proposing to construct an odor abatement facility that will have minimal visual impact to the surrounding residentially zoned properties. Staff believes the proposal will not adversely affect the use or development of neighboring properties due to the low building height, use of compatible building materials, tight limits of disturbance, and location away from the immediate view of the existing residential lots. The adjacent properties are zoned R-E; this proposal seeks to maintain the current residential character associated with the existing zoning of the area. The Zoning Ordinance requires both transitional screening and barriers for this proposal, as the abutting properties are residentially zoned and developed with single-family detached dwellings. The applicant has requested a modification of the screening and barrier requirement in order to allow the existing vegetation to remain undisturbed and due to the extensive setback of the building from the adjacent residential lots. As such, staff believes the proposed application will not hinder or discourage the appropriate development and use of adjacent or nearby land and/or buildings or impair the value thereof. Therefore, this standard has been met.

**Paragraph 4** states that the proposed use shall be such that pedestrian and vehicular traffic associated with such use will not be hazardous or conflict with the existing and anticipated traffic in the neighborhood. The Fairfax County Department of Transportation has not found any conflict related to the proposed access point off of River Park Lane. Also, in staff's opinion, the proposed application, to construct an approximately 1500 sq. ft. odor abatement facility, would not create any significant additional impacts on the surrounding public street system. In addition, the existing trail adjacent to the proposed facility will not be impacted. Therefore, staff finds this standard satisfied.

**Paragraph 5** states that, in addition to the standards which may be set forth in this Article for a particular category or use, the Board may require landscaping and screening in accordance with the provisions of Article 13. There are transitional screening and barrier requirements associated with this request. The applicant has requested a modification of those requirements in order to allow the existing vegetation on site and topographical features to remain undisturbed. Due to the proposed building's location and significant setback from the residential lots, staff does not object to this modification. Therefore, staff believes this standard has been met.

**Paragraph 6** states that open space should be provided in an amount equivalent to that specified for the zoning district in which the proposed use is located. This standard is not applicable, as there is no requirement for open space in the R-E District for conventional subdivisions and the site is in a public park.

**Paragraph 7** states that adequate utility, drainage, parking, loading and other necessary facilities to serve the proposed use shall be provided. One parking/loading space along the access road is provided for maintenance workers. This development serves the public sewer system. The grading and outfall as proposed appear to adequately provide drainage for the site. Therefore, this standard has been met.

**Paragraph 8** states that signs shall be regulated by the provisions of Article 12; however, the Board may impose more strict requirements for a given use than those set forth in this Ordinance. This standard is not applicable as there are no signs proposed with this application.

#### Standards for All Category 1 Uses (Sect. 9-104)

1. Category 1 special exception uses shall not have to comply with the lot size requirements or the bulk regulations set forth for the zoning district in which located.
2. No land or building in any district other than the I-5 and I-6 District shall be used for the storage of materials or equipment, or for the repair or servicing of vehicles or equipment, or for the parking of vehicles except those needed by employees connected with the operation of the immediate facility. No storage of materials or equipment is proposed outside the odor abatement facility as part of this application. No equipment repair operations will take place on the site, other than routine maintenance inside the odor abatement facility. This standard is addressed.
3. If the proposed location of a Category 1 use is in an R district, there shall be a finding that there is no alternative site available for such use in a C or I district within 500 feet of the proposed location; except that in the case of electric transformer stations and telecommunication central offices, there shall be a finding that there is no alternative site available in a C or I district within a distance of one (1) mile, unless there is a substantial showing that it is impossible for

satisfactory service to be rendered from an available location in such C or I district. As the odor abatement facility must be located close to the Potomac Interceptor, and the surrounding properties are all residentially zoned, there is no alternative site in a C or I District available within 500 feet of the proposed location. This standard is satisfied.

4. Before establishment, all uses, including modifications or alterations to existing uses, shall be subject to the provisions of Article 17, Site Plans. This project will be subject to a Public Improvement Plan, reviewed and approved by the Department of Public Works and Environmental Services. This standard has been satisfied.

#### Provisions for Uses in a Floodplain (Sect. 9-606)

The Board may approve a special exception for the establishment of a use in a floodplain in accordance with the provisions of Part 9 of Article 2.

Staff has determined that the requested application meets the requirements of Part 9 of Article 2 as follows:

**Standard 1** states that except as may be permitted by Par. 6 and 7 of Sect. 903, any new construction, substantial improvements, or other development, including fill, when combined with all other existing, anticipated and planned development, shall not increase the water surface elevation above the 100-year flood level upstream and downstream, calculated in accordance with the provisions of the Public Facilities Manual.

The applicant has submitted floodplain information which states that the net fill area is anticipated to be 4,083 cubic yards. However, it is believed that the cross section area is insignificant in relation to the larger overall cross section area of the Potomac River at this location. No impacts to upstream or downstream properties are anticipated due to fill within the floodplain limits. As such, this standard is satisfied.

**Standard 2** states that except as may be permitted by Par. 8 of Sect. 903, the lowest elevation of the lowest floor of any proposed dwelling shall be eighteen (18) inches or greater above the water-surface elevation of the 100-year flood level (which is 10 feet) calculated in accordance with the provisions of the Public Facilities Manual. No dwellings are proposed as part of this application; this standard is not applicable.

**Standard 3** states that all uses shall be subject to the provisions of Par. 1 of Sect. 602, which states that notwithstanding the provisions of Sect. 601, no building shall be erected on any land and no change shall be made in the existing contours of any land, including any change in the course, width or elevation of any natural or other drainage channel, in any manner that will obstruct, interfere with, or change the drainage of such land, taking into account land development that may take place in the vicinity under the provisions of this Ordinance, without providing adequate drainage in connection therewith as determined by the Director in accordance with the provisions of the Public Facilities Manual. The grading for the construction of the

odor abatement building is considered minor, with limited amounts of cut and fill needed for the building, gravel road, and storm drain pipe system. The proposal includes a primary and potential additional area of clearing to be utilized, should additional area be needed to achieve adequate drainage/outfall. Staff believes this issue is addressed.

**Standard 4** states that no structure or substantial improvement to any existing structure shall be allowed unless adequate floodproofing as defined in the Public Facilities Manual is provided. The applicant has submitted a letter indicating their intent to certify the engineering design plans for floodproofing requirements with the site plan submission. Staff believes this issue is addressed.

**Standard 5** states that to the extent possible, stable vegetation shall be protected and maintained in the floodplain. The applicant has minimized the area of disturbance to the extent feasible. Staff has included a development condition to require strict adherence to the limits of clearing and grading as shown on the plat. Staff has also included conditions related to tree preservation methods, including: tree preservation fencing, guidelines for root pruning, and site monitoring. Staff believes this issue is addressed.

**Standard 6** states that there shall be no storage of herbicides, pesticides, or toxic or hazardous substances as set forth in Title 40, Code of Federal Regulations, Parts 116.4 and 261.30 et seq., in a floodplain. A development condition to this effect has been proposed to reinforce the federal requirements; therefore, this standard has been satisfied.

**Standard 7** states that for uses other than those enumerated in Par. 2 and 3 of Sect. 903, the applicant shall demonstrate to the satisfaction of the approving authority the extent to which: there are no other feasible options available to achieve the proposed use; the proposal is the least disruptive option to the floodplain; and the proposal meets the environmental goals and objectives of the adopted comprehensive plan for the subject property. The applicant has provided information that the location of the structure as shown is the least disruptive option to the floodplain. The facility must be located as close to the PI as possible in order to operate at optimal performance. The location was selected based on proximity to the PI and a location where the finished floor elevation could be above the Potomac River floodplain water surface elevation. Staff believes this standard is satisfied.

**Standard 8** states that nothing herein shall be deemed to prohibit the refurbishing, refinishing, repair, reconstruction or other such improvements of the structure for an existing use provided such improvements are done in conformance with the Virginia Uniform Statewide Building Code and Article 15 of this Ordinance. The applicant is not proposing to do any of the above; therefore, this standard is not applicable.

**Standard 9** states that nothing herein shall be deemed to preclude public uses and public improvements performed by or at the direction of the County. This standard is noted.

**Standard 10** states that notwithstanding the minimum yard requirements specified by Sect. 415 above, dwellings and additions thereto proposed for location in a floodplain may be permitted subject to the provisions of this Part and Chapter 118 of The Code. As the proposed use does not include dwellings, this standard is not applicable.

**Standard 11** states that all uses and activities shall be subject to the provisions of the Chesapeake Bay Preservation Ordinance, Chapter 118 of The Code. As the odor abatement structure is considered an appurtenant structure to the PI (sanitary sewer line) owned by a regional service authority, it is exempt from certain parts of the Chesapeake Bay Ordinance. Any further required information will be submitted at site plan.

**Standard 12** states that when as-built floor elevations are required by federal regulations or the Virginia Uniform Statewide Building Code for any structure, such elevations shall be submitted to the County on a standard Federal Emergency Management Agency (FEMA) Elevation Certificate prior to approval of the final inspection. If a non-residential building is being floodproofed, then a FEMA Floodproofing Certificate shall be completed. A development condition has been included requiring a FEMA Floodproofing Certificate to be completed. This standard is addressed.

## CONCLUSIONS AND RECOMMENDATIONS

### Staff Conclusions

The application is a request for Special Exception to permit a sewage line odor abatement facility located in a floodplain. Staff believes that the application is in harmony with the land use recommendations of the Comprehensive Plan and is in conformance with the applicable Zoning Ordinance provisions.

### Recommendations

Staff recommends approval of SE 2010-DR-002 subject to the proposed development conditions contained in Appendix 1 of this report.

It should be noted that it is not the intent of staff to recommend that the Board, in adopting any development conditions, relieve the applicant/owner from compliance with the provisions of any applicable ordinances, regulations, or adopted standards.

The approval of this special exception does not interfere with, abrogate or annul any easement, covenants, or other agreements between parties, as they may apply to the property subject to this application.

It should be further noted that the content of this report reflects the analysis and recommendations of staff; it does not reflect the position of the Board of Supervisors.

## **APPENDICES**

1. Proposed Development Conditions
2. Affidavit
3. Statement of Justification
4. Comprehensive Plan Text
5. Environmental Analysis
6. Urban Forest Management Analysis
7. Transportation Analysis
8. Stormwater Management Analysis
9. Parks Analysis
10. Applicable Zoning Ordinance Provisions
11. Glossary

## PROPOSED DEVELOPMENT CONDITIONS

SE 2010-DR-002

October 5, 2010

If it is the intent of the Board of Supervisors to approve SE 2010-DR-002 located at the terminus of River Park Lane, northeast of the terminus of River Park Drive [Tax Map 04-3 ((1)) 2 (portion)] to permit the construction of an odor abatement facility pursuant to Sections 9-104 and 9-606 of the Fairfax County Zoning Ordinance, staff recommends that the Board condition the approval by requiring conformance with the following development conditions:

1. This Special Exception is granted for and runs with the land indicated in this application and is not transferable to other land.
2. This Special Exception is granted only for the purpose(s), structure(s) and/or use(s) indicated on the special exception plat approved with the application, as qualified by these development conditions.
3. This Special Exception is subject to the provisions of Article 17, Site Plans, as may be determined by the Director, Department of Public Works and Environmental Services (DPWES). Any plan submitted pursuant to this special exception shall be in substantial conformance with the approved Special Exception Plat entitled "Potomac Interceptor Long Term Odor Abatement Program Site 31 Special Exception Plat," consisting of eight sheets, prepared by A. Morton Thomas, and dated January, 2010 as revised through August 25, 2010, and these conditions. Minor modifications to the approved special exception may be permitted pursuant to Par. 4 of Sect. 9-004 of the Zoning Ordinance.
4. On-site testing of noise generating equipment outside of the odor abatement building shall not be permitted.
5. If a stormwater management detention waiver is not granted by DPWES, the applicant shall provide stormwater management to the satisfaction of DPWES. If stormwater management facilities are not in substantial conformance with the SE Plat, the applicant may be required to submit a Special Exception Amendment.
6. A. Tree Preservation. The applicant shall submit a Tree Preservation plan as part of the first and all subsequent site plan submissions. The preservation plan shall be prepared by a professional with experience in the preparation of tree preservation plans, such as a certified arborist or registered consulting arborist, and shall be subject to the review and approval of the Urban Forest Management Division (UFMD), DPWES.

The tree preservation plan shall consist of a tree survey that includes the location, species, size, crown spread and condition rating percentage of all trees 10 inches in diameter and greater, and 25 feet to either side of the limits of clearing and grading shown on the SE plat for the area shown as special exception site. The tree preservation plan shall provide for the preservation of those areas shown for tree preservation, those areas outside of the limits of clearing and grading shown on the SE plat and those additional areas in which trees can be preserved as a result of final engineering. The condition analysis ratings shall be prepared

using methods outlined in the latest edition of the Guide for Plant Appraisal published by the International Society of Arboriculture. Specific tree preservation activities that will maximize the survivability of any tree identified to be preserved, such as: crown pruning, root pruning, mulching, fertilization, and others as necessary, shall be included in the plan.

B. Tree Preservation Walk-Through. The Applicant shall retain the services of a certified arborist or registered consulting arborist, and shall have the limits of clearing and grading marked with a continuous line of flagging prior to the walk-through meeting. During the tree-preservation walk-through meeting, the Applicant's certified arborist or registered consulting arborist shall walk the limits of clearing and grading with an UFMD, DPWES, representative to determine where adjustments to the clearing limits can be made to increase the area of tree preservation and/or to increase the survivability of trees at the edge of the limits of clearing and grading, and such adjustment shall be implemented. Trees that are identified as dead or dying may be removed as part of the clearing operation. Any tree that is so designated shall be removed using a chain saw and such removal shall be accomplished in a manner that avoids damage to surrounding trees and associated understory vegetation. If a stump must be removed, this shall be done using a stump-grinding machine in a manner causing as little disturbance as possible to adjacent trees and associated understory vegetation and soil conditions.

C. Limits of Clearing and Grading. The Applicant shall not exceed the limits of clearing and grading as shown on the SE plat, subject to allowances specified in these development conditions and for the installation of utilities and/or trails as determined necessary by the Director of DPWES, as described herein. If it is determined necessary to install utilities and/or trails in areas protected by the limits of clearing and grading as shown on the SE plat, they shall be located in the least disruptive manner necessary as determined by the UFMD, DPWES.

D. Tree Preservation Fencing. "All trees shown to be preserved on the tree preservation plan shall be protected by tree protection fence. Tree protection fencing in the form of four (4) foot high, fourteen (14) gauge welded wire attached to six (6) foot steel posts driven eighteen (18) inches into the ground and placed no further than ten (10) feet apart or, super silt fence to the extent that required trenching for super silt fence does not sever or wound compression roots which can lead to structural failure and/or uprooting of trees shall be erected at the limits of clearing and grading as shown on the phase I & II erosion and sediment control sheets, as may be modified by the "Root Pruning" development condition below.

All tree protection fencing shall be installed after the tree preservation walk-through meeting but prior to any clearing and grading activities, including the demolition of any existing structures. The installation of all tree protection fencing shall be performed under the direct supervision of a certified arborist, and be accomplished in a manner that does not harm existing vegetation that is to be preserved. Three (3) days prior to the commencement of any clearing, grading or demolition activities, but subsequent to the installation of the tree protection devices, the UFMD, DPWES, shall be notified and given the opportunity to inspect the site to ensure that all tree protection devices have been correctly installed. If it is determined that the fencing has not been installed correctly, no grading or construction activities shall occur until the fencing is installed correctly, as determined by the UFMD, DPWES.

E. Root Pruning. The Applicant shall root prune, as needed to comply with the tree preservation requirements of these development conditions. All treatments shall be clearly identified, labeled, and detailed on the erosion and sediment control sheets of the site plan submission. The details for these treatments shall be reviewed and approved by the UFMD, DPWES, accomplished in a manner that protects affected and adjacent vegetation to be preserved, and may include, but not be limited to the following:

- Root pruning shall be done with a trencher or vibratory plow to a depth of 18 inches.
- Root pruning shall take place prior to any clearing and grading, or demolition of structures.
- Root pruning shall be conducted under the direct supervision of a certified arborist.
- A UFMD, DPWES, representative shall be informed when all root pruning and tree protection fence installation is complete.

F. Site Monitoring. During any clearing or tree/vegetation/structure removal on the Application Property, a representative of the Applicant shall be present to monitor the process and ensure that the activities are conducted as per the development conditions and as approved by the UFMD. The Applicant shall retain the services of a certified arborist or registered consulting arborist to monitor all construction and tree preservation efforts in order to ensure conformance with all tree preservation development conditions, and UFMD approvals. The monitoring schedule shall be described and detailed in the Tree Preservation Plan, and reviewed and approved by the UFMD, DPWES.

G. Tree Replacement. The applicant shall coordinate with UFMD to look for opportunities to replace native tree species lost as a result of this project.

7. Prior to site plan approval, an archeological investigation, consisting of shovel test pits, along the alignment of the odorous air pipes and sanitary connections to the odor control building from the Potomac Interceptor in the area between the original trench limit to the base of the hillside shall be completed. Should the test pits reveal any archeological/culturally significant artifacts then a Phase II archeological survey shall be completed within this area only (and not for the entire Special Exception Area). This scope of work shall be in consultation with the Fairfax County Park Authority's Cultural Resource Management and Protection section (CRMPS). One copy of the draft and final archeological reports shall be provided to the Park Authority's Resource Management Division within 30 days of completion of the study or survey. The building architecture shall be in substantial conformance with that shown on the SE Plat and subject to review and approval by the Northern Virginia Regional Park Authority.
8. There shall be no storage of herbicides, pesticides, or toxic or hazardous substances as set forth in Title 40, Code of Federal Regulations, Parts 116.4 and 261.30 et seq., in the floodplain.
9. The applicant shall submit a FEMA Floodproofing Certificate prior to the issuance of a Non-RUP (Non-Residential Use Permit).
10. Prior to site plan approval, the applicant shall coordinate directly with the Virginia Department of Conservation and Recreation, Division of Natural Heritage, and the Virginia Department of Game and Inland Fisheries to determine what impacts the odor abatement facility project construction may have on threatened plant and/or wildlife species within the limits of disturbance as shown on the SE Plat and what measures should be taken to avoid,

minimize and mitigate those impacts and shall fully implement these measures to the satisfaction of UFMD and the appropriate state agencies.

11. A Hold Harmless Agreement shall be executed with the County for all adverse effects which may arise as a result of the location of the site within a floodplain area.

The above proposed conditions are staff recommendations and do not reflect the position of the Board of Supervisors unless and until adopted by that Board.

This approval, contingent on the above noted conditions, shall not relieve the applicant from compliance with the provisions of any applicable ordinances, regulations, or adopted standards. The applicant shall be himself responsible for obtaining the required Non-Residential Use Permit through established procedures, and this Special Exception shall not be valid until this has been accomplished.

Pursuant to Section 9-015 of the Zoning Ordinance, this special exception shall automatically expire, without notice, thirty (30) months after the date of approval unless the use has been established or construction has commenced and been diligently prosecuted. The Board of Supervisors may grant additional time to establish the use or to commence construction if a written request for additional time is filed with the Zoning Administrator prior to the date of expiration of the special exception. The request must specify the amount of additional time requested, the basis for the amount of time requested and an explanation of why additional time is required.

**SPECIAL EXCEPTION AFFIDAVIT**

DATE: April 6, 2010  
 (enter date affidavit is notarized)

I, Jefferson K. Sinclair, Jr., do hereby state that I am an  
 (enter name of applicant or authorized agent)

(check one)             applicant  
                               applicant's authorized agent listed in Par. 1(a) below

107187a

in Application No.(s): SE 2010-DR-002  
 (enter County-assigned application number(s), e.g. SE 88-V-001)

and that, to the best of my knowledge and belief, the following information is true:

1(a). The following constitutes a listing of the names and addresses of all **APPLICANTS, TITLE OWNERS, CONTRACT PURCHASERS,** and **LESSEES** of the land described in the application,\* and, if any of the foregoing is a **TRUSTEE,\*\*** each **BENEFICIARY** of such trust, and all **ATTORNEYS** and **REAL ESTATE BROKERS,** and all **AGENTS** who have acted on behalf of any of the foregoing with respect to the application:

**(NOTE:** All relationships to the application listed above in **BOLD** print are to be disclosed. Multiple relationships may be listed together, e.g., **Attorney/Agent, Contract Purchaser/Lessee, Applicant/Title Owner,** etc. For a multiparcel application, list the Tax Map Number(s) of the parcel(s) for each owner(s) in the Relationship column.)

<b>NAME</b> (enter first name, middle initial, and last name)	<b>ADDRESS</b> (enter number, street, city, state, and zip code)	<b>RELATIONSHIP(S)</b> (enter applicable relationships listed in <b>BOLD</b> above)
District of Columbia Water and Sewer Authority Barry C. Lucas	500 Overlook Avenue, SW Washington, DC 20032	Applicant / Agent for Title Owner Applicant's Agent
Northern Virginia Regional Park Authority	5400 Ox Road Fairfax Station, VA 22039	Title Owner
A. Morton Thomas and Associates, Inc. Daron K. Doran Thomas L. Fegley Jefferson K. Sinclair, Jr.	14900 Conference Center Drive, Suite 180 Chantilly, VA 20151	Agent / Engineer for Applicant Agent / Engineer Agent / Engineer Agent / Engineer
Black & Veatch Corporation James D. Benoit Robert G. Tuttle	18310 Montgomery Village Avenue, Suite 500, Gaithersburg, MD 20879	Agent / Engineer for Applicant Agent / Engineer Agent / Engineer

(check if applicable)             There are more relationships to be listed and Par. 1(a) is continued on a "Special Exception Attachment to Par. 1(a)" form.

\* In the case of a condominium, the title owner, contract purchaser, or lessee of 10% or more of the units in the condominium.

\*\* List as follows: Name of trustee, Trustee for (name of trust, if applicable), for the benefit of: (state name of each beneficiary).

SPECIAL EXCEPTION AFFIDAVIT

DATE: April 6, 2010
(enter date affidavit is notarized)

107187a

for Application No. (s): SE 2010-DR-002
(enter County-assigned application number(s))

1(b). The following constitutes a listing\*\*\* of the SHAREHOLDERS of all corporations disclosed in this affidavit who own 10% or more of any class of stock issued by said corporation, and where such corporation has 10 or less shareholders, a listing of all of the shareholders:

(NOTE: Include SOLE PROPRIETORSHIPS, LIMITED LIABILITY COMPANIES, and REAL ESTATE INVESTMENT TRUSTS herein.)

CORPORATION INFORMATION

NAME & ADDRESS OF CORPORATION: (enter complete name and number, street, city, state, and zip code)
Black & Veatch Corporation
18310 Montgomery Village Avenue
Suite 500
Gaithersburg, MD 20879

DESCRIPTION OF CORPORATION: (check one statement)

- [ ] There are 10 or less shareholders, and all of the shareholders are listed below.
[ ] There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.
[✓] There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

NAMES OF SHAREHOLDERS: (enter first name, middle initial and last name)

(check if applicable) [✓] There is more corporation information and Par. 1(b) is continued on a "Special Exception Affidavit Attachment 1(b)" form.

\*\*\* All listings which include partnerships, corporations, or trusts, to include the names of beneficiaries, must be broken down successively until: (a) only individual persons are listed or (b) the listing for a corporation having more than 10 shareholders has no shareholder owning 10% or more of any class of stock. In the case of an APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE\* of the land that is a partnership, corporation, or trust, such successive breakdown must include a listing and further breakdown of all of its partners, of its shareholders as required above, and of beneficiaries of any trusts. Such successive breakdown must also include breakdowns of any partnership, corporation, or trust owning 10% or more of the APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE\* of the land. Limited liability companies and real estate investment trusts and their equivalents are treated as corporations, with members being deemed the equivalent of shareholders; managing members shall also be listed. Use footnote numbers to designate partnerships or corporations, which have further listings on an attachment page, and reference the same footnote numbers on the attachment page.

**Special Exception Attachment to Par. 1(b)**

DATE: April 6, 2010  
(enter date affidavit is notarized)

107187a

for Application No. (s): SE 2010-DR-002  
(enter County-assigned application number (s))

**NAME & ADDRESS OF CORPORATION:** (enter complete name, number, street, city, state, and zip code)

A. Morton Thomas and Associates, Inc.  
14900 Conference Center Drive, Suite 180  
Chantilly, Virginia 20151

**DESCRIPTION OF CORPORATION:** (check one statement)

- There are 10 or less shareholders, and all of the shareholders are listed below.
- There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.
- There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

**NAMES OF THE SHAREHOLDERS:** (enter first name, middle initial, and last name)

Michael J. Wiercinski, P.E., Principal	Stuart J. Robinson, P.E., Principal
Jerry C. Kavadias, P.E., Principal	Daniel R. Schriever, P.L.S., Principal
Murphy E. A. Tuomey, Principal	
Richard S. Khalil, Principal	
Max Kantzer, P.E., Principal	

**NAME & ADDRESS OF CORPORATION:** (enter complete name, number, street, city, state, and zip code)

**DESCRIPTION OF CORPORATION:** (check one statement)

- There are 10 or less shareholders, and all of the shareholders are listed below.
- There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.
- There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

**NAMES OF THE SHAREHOLDERS:** (enter first name, middle initial, and last name)

(check if applicable)  There is more corporation information and Par. 1(b) is continued further on a "Special Exception Attachment to Par. 1(b)" form.

SPECIAL EXCEPTION AFFIDAVIT

DATE: April 6, 2010
(enter date affidavit is notarized)

107187a

for Application No. (s): SE 2010-DR-002
(enter County-assigned application number(s))

1(c). The following constitutes a listing\*\*\* of all of the PARTNERS, both GENERAL and LIMITED, in any partnership disclosed in this affidavit:

PARTNERSHIP INFORMATION

PARTNERSHIP NAME & ADDRESS: (enter complete name, and number, street, city, state, and zip code)

Not Applicable

(check if applicable) [ ] The above-listed partnership has no limited partners:

NAMES AND TITLE OF THE PARTNERS (enter first name, middle initial, last name, and title, e.g. General Partner, Limited Partner, or General and Limited Partner)

(check if applicable) [ ] There is more partnership information and Par. 1(c) is continued on a "Special Exception Affidavit Attachment to Par. 1(c)" form.

\*\*\* All listings which include partnerships, corporations, or trusts, to include the names of beneficiaries, must be broken down successively until: (a) only individual persons are listed or (b) the listing for a corporation having more than 10 shareholders has no shareholder owning 10% or more of any class of stock. In the case of an APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE\* of the land that is a partnership, corporation, or trust, such successive breakdown must include a listing and further breakdown of all of its partners, of its shareholders as required above, and of beneficiaries of any trusts. Such successive breakdown must also include breakdowns of any partnership, corporation, or trust owning 10% or more of the APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE\* of the land. Limited liability companies and real estate investment trusts and their equivalents are treated as corporations, with members being deemed the equivalent of shareholders; managing members shall also be listed. Use footnote numbers to designate partnerships or corporations, which have further listings on an attachment page, and reference the same footnote numbers on the attachment page.

SPECIAL EXCEPTION AFFIDAVIT

DATE: April 6, 2010  
(enter date affidavit is notarized)

107187a

for Application No. (s): SE 2010-DR-002  
(enter County-assigned application number(s))

1(d). One of the following boxes **must** be checked:

In addition to the names listed in Paragraphs 1(a), 1(b), and 1(c) above, the following is a listing of any and all other individuals who own in the aggregate (directly and as a shareholder, partner, and beneficiary of a trust) 10% or more of the **APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE\*** of the land:

Other than the names listed in Paragraphs 1(a), 1(b), and 1(c) above, no individual owns in the aggregate (directly and as a shareholder, partner, and beneficiary of a trust) 10% or more of the **APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE\*** of the land.

2. That no member of the Fairfax County Board of Supervisors, Planning Commission, or any member of his or her immediate household owns or has any financial interest in the subject land either individually, by ownership of stock in a corporation owning such land, or through an interest in a partnership owning such land.

**EXCEPT AS FOLLOWS:** (**NOTE:** If answer is none, enter "NONE" on the line below.)

None

(check if applicable)  There are more interests to be listed and Par. 2 is continued on a "Special Exception Attachment to Par. 2" form.

Application No.(s): SE 2010-DR-002

(county-assigned application number(s), to be entered by County Staff)

**SPECIAL EXCEPTION AFFIDAVIT**

DATE: April 6, 2010

107187a

(enter date affidavit is notarized)

3. That within the twelve-month period prior to the public hearing of this application, no member of the Fairfax County Board of Supervisors, Planning Commission, or any member of his or her immediate household, either directly or by way of partnership in which any of them is a partner, employee, agent, or attorney, or through a partner of any of them, or through a corporation in which any of them is an officer, director, employee, agent, or attorney or holds 10% or more of the outstanding bonds or shares of stock of a particular class, has, or has had any business or financial relationship, other than any ordinary depositor or customer relationship with or by a retail establishment, public utility, or bank, including any gift or donation having a value of more than \$100, singularly or in the aggregate, with any of those listed in Par. 1 above.

**EXCEPT AS FOLLOWS:** (NOTE: If answer is none, enter "NONE" on line below.)

None

**NOTE:** Business or financial relationships of the type described in this paragraph that arise after the filing of this application and before each public hearing must be disclosed prior to the public hearings. See Par. 4 below.)

(check if applicable)  There are more disclosures to be listed and Par. 3 is continued on a "Special Exception Attachment to Par. 3" form.

4. That the information contained in this affidavit is complete, that all partnerships, corporations, and trusts owning 10% or more of the APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE\* of the land have been listed and broken down, and that prior to each and every public hearing on this matter, I will reexamine this affidavit and provide any changed or supplemental information, including business or financial relationships of the type described in Paragraph 3 above, that arise on or after the date of this application.

WITNESS the following signature:

(check one)

Jefferson K. Sinclair, Jr.

Applicant

Applicant's Authorized Agent

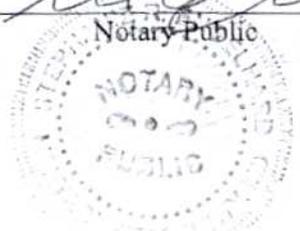
Jefferson K. Sinclair, Jr., Authorized Agent

(type or print first name, middle initial, last name, and & title of signee)

Subscribed and sworn to before me this 6 day of April, 2010, in the State/Comm. of Maryland, County/City of Montgomery

[Signature]  
Notary Public

My commission expires: 2/27/2013



DEC 08 2009

Zoning Evaluation Division

**General Description of the  
Potomac Interceptor  
Special Exception Statement of Justification  
(Section 9-011, Paragraph 7)  
November 20, 2009**

**A. Type of operation(s).**

The facilities utilize fans to pull odorous air from the atmosphere within the Potomac Interceptor sewer and push the air through an 8' diameter X 12' tall tank containing activated carbon which adsorbs the organic contaminants that cause the odor, after which the purified air is discharged into the atmosphere. In the case of Site 31 part of the purified air is returned to the interceptor. Two to three times per year as determined by odor-removal efficiency, the activated carbon is either recharged in place (by flooding the tank with water which dissolves the organic material and then is flushed back into the interceptor in solution) or replacement of the spent carbon.

**B. Hours of Operation.**

These facilities will operate continuously, 24 hours a day 7 days a week 365 days a year. The odor removal performance as well as other operational parameters and safety/security alarm functions are likewise monitored continuously, the data from which is displayed as it is measured (in "real time") at DCWASA Operating Headquarters. Operational visits will be made routinely on a weekly basis. Other routine maintenance procedures will be the on site cleaning and drying of the de-mister filter (estimated to be weekly to monthly depending on operating conditions), in-place fan motor maintenance (quarterly) and activated carbon recharge/replacement (two to three time per year).

**C. Estimated number of patrons/clients/patients/pupils/etc.**

This facility is for a public utility use and no patrons/clients/patients/pupils/etc. are anticipated for this special exception application.

**D. Estimated number of employees/attendants/teachers/etc.**

No full time or shift employees are anticipated at this facility, routine operation maintenance and cleaning that is anticipated twice a week and will be based on actual operating conditions. The facility is to be continuously monitored by the District of Columbia Water and Sewer Authority Operating Headquarters.

**E. Traffic Impact.**

This facility does not anticipate generating additional trips and traffic impacts are not anticipated. This site is anticipated to have 2 maintenance/company vehicle trips per week; two vehicular trips originating from the DCWASA Operating Headquarters to the site in the morning hours and two trips originating from the site in the afternoon hours returning to the DCWASA Operating Headquarters.

#### **F. Area Served.**

The Potomac Interceptor (PI) sanitary sewer system conveys approximately 50 million gallons per day (MGD) of wastewater by gravity from several service areas starting near the Washington Dulles International Airport, along the Potomac River to the Potomac Pumping Station (PS) in Washington, DC. Flows from the PS are sent to the Blue Plains Advanced Wastewater Treatment Plant for state-of-the-art treatment before discharge into the Potomac River. Several jurisdictions discharge into the PI system, including Loudoun and Fairfax Counties in Virginia, Montgomery County in Maryland, and the District of Columbia.

The PI varies in size from 30-inch to 96-inch diameter round, reinforced concrete pipe in the main trunk to 13-foot by 7.75-foot rectangular, reinforced concrete pipe in the lower reaches of the sewer system. The sewer design included provisions for interceptor venting at the manholes and access shafts along most of the sewer system to promote the exhaust of sewer gases or the intake of air as needed. Venting is generally accomplished through ventilated manhole covers or 12-inch cast iron vent pipes that extend from the manholes.

Tributaries within Fairfax County served by the PI at manhole 31 are Sugarland Run and Nichols Run serving Western Fairfax County including the Towns of Herndon and Great Falls. The odor control building should control odorous air emanating from existing manholes at various locations along the Potomac River.

#### **G. Building Facade.**

The proposed odor control building is the only building requested with this application. It will be a block construction with stone veneer, to meet NVRPA appearance requirements, planned to be a natural stone façade utility building with louvered windows and

#### **H. Toxic Substances.**

The following hazardous materials are removed from the odorous air stream and adsorbed onto the activated carbon granules as part of the odor abatement process: hydrogen sulfide, sulfur dioxide, and small concentrations of methane. After adsorption these materials will be disposed of periodically by either being dissolved in water and returned in solution back to the Potomac Interceptor sewer line or removed still adsorbed to the activated carbon granules when the activated carbon is replaced. Granular activated carbon is highly flammable, and if sufficiently finely divided can be considered explosive.

The clean agent fire suppression system uses a mixture of inert atmospheric gases: nitrogen, carbon dioxide, argon and others as well as NOVEC fire protection material which has hazard levels of zero for health and flammability and one (slight hazard) for reactivity.

**I. Conformance Statement**

The proposed odor control building light public utility use conforms to all applicable regulations, except as may be waived or modified.

**Fairfax County Park Authority**  
**Charles Smith, Naturalist III**  
**Natural Resources Management and Protection**  
Comments / Responses  
March 29, 2010

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1. The proposed project location is not on or directly adjacent to Fairfax County parkland, but lies on Northern Virginia Regional Park Authority (NVRPA) property. It is our understanding that NVRPA is working with the applicant to address park impacts.

**RESPONSE: This is correct; the NVRPA has been consulted and included as a party to this Special Exception/2232 Review application.**

2. The Potomac Interceptor Sewer is at least 50 years old and provides sanitary sewer drainage to a large area of Northern Virginia. The proper maintenance and functioning of this sewer system is very important to water quality in the Potomac River. However, construction of the odor treatment building is associated with much larger project to line the entire sewer system in lieu of outright replacement and to prolong its life. There are two aspects of the sewer lining project that are of concern to NRMP:

- a. The sewer lies almost entirely within the floodplain of the Potomac River and, as stated in the application, carries approximately 50 million gallons per day of raw sewage. The Fairfax County Park Authority owns two large downstream properties at Riverbend and Scotts Run that contain globally and state rare resources that would be impacted in the event in the event of a major sewage spill. So NRMP supports the proper maintenance project.

**RESPONSE: This Special Exception/2232 Review application is for the Potomac Interceptor Long Term Odor Abatement Program building only.**

- b. The installation of the pipe liner will require significant clearing and excavation of the Potomac River floodplain. The area of the floodplain between the Loudoun County jurisdictional boundary and River Park Lane on NVRPA property contains numerous known and likely occurrences of significant cultural and natural resources.

**RESPONSE: This Special Exception/2232 Review application is for the Potomac Interceptor Long Term Odor Abatement Program building only. The referenced pipe liner project is separate from this application.**

- i. For potential cultural resources impacts, the DC Water and Sewer Authority should coordinate directly with the Cultural Resource Management and Protection section of the Fairfax County Park Authority which has purview over all land disturbances in Fairfax County where it may impact cultural resources.

**RESPONSE:** This Special Exception/2232 Review application is for the Potomac Interceptor Long Term Odor Abatement Program building only. The referenced pipe liner project is separate from this application.

- ii. The project area for the sewer lining project crosses numerous seeps and wetlands with known occurrences of at least three vertebrate animal species listed as having a threatened or greater status by the state of Virginia. In addition, it is likely that the project area includes many unusual plant species and some rare plant communities that may be impacted by the project. DC Water and Sewer should coordinate directly with the Virginia Department of Conservation and Recreation, Division of Natural Heritage and the Virginian Department of Game and Inland Fisheries to determine what impacts their project may have and what measures should be taken to avoid, minimize and mitigate those impacts.

**RESPONSE:** This Special Exception/2232 Review application is for the Potomac Interceptor Long Term Odor Abatement Program building only. Per a wetland delineation study by Straughan Environmental Services, Inc dated January 2010 indicates that there are no wetlands located within the special exception area.



A. Morton Thomas and Associates, Inc.  
Consulting Engineers



County of Fairfax, Virginia  
Beth Forbes, Stormwater Engineer  
Environmental and Site Review Division  
Department of Public Works and Environmental Services  
Comments / Responses  
March 29, 2010

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Chesapeake Bay Preservation Ordinance (CBPO)

1. There is Resource Protection Area (RPA) on this site. An approved, site-specific RPA delineation will be required before site plan approval (LTI 08-12).

**RESPONSE:** The RPA is not separate from the Chesapeake Bay Preservation Ordinance and as stated in Reviewer Comment #2 the appurtenant structure to the sanitary sewer line owned by a regional service authority (DCWASA) use is exempt from this requirement.

2. The new impervious area created by this project is exempt from water quality controls usually required by the Chesapeake Bay Preservation Ordinance since it is a structure appurtenant to a sanitary sewer line owned by a regional service authority (CBPO 118-5-2 (b)). A Water Quality Impact Assessment will be required for the associated storm drainage improvements; this assessment can be included in the site plan submittal (LTI 06-07).

**RESPONSE:** A water quality impact assessment should not be applicable to the site since the proposed storm drainage system will be for the diversion of runoff along the east side ditch of the gravel road around the exempted use building to the existing discharge point of the existing ditch.

Floodplain

3. There are regulated floodplains on the property.

**RESPONSE:** The following information requirements were already noted, as part of the Floodplain Regulation Notes previously included on sheet SE-003 and subsequently moved to sheet SE-004 as part of our response to Zoning comments.

4. Section 2-904 of the Zoning ordinance requires the following information to be included in application for uses in a floodplain:
  - The source of the floodplain data depicted on the plat (paragraph 2.A(1)).

**RESPONSE:** See Floodplain Regulation notes #7 and 8 on Sheet SE-004.

- A description of the nature and extent of the fill and any proposed compensatory cut areas with quantities (paragraph 2.A(4)).

**RESPONSE: See Floodplain Regulation note #4 on Sheet SE-004.**

- The dimensions of the proposed structure (paragraph 2.A (5)).

**RESPONSE: The dimensions were already provided and labeled on the enlarged plan on sheet SE-003. Dimensions are 58.3' long by 26.3' wide.**

- The elevation of the floodplain at the structure (paragraph 2.A (6)).

**RESPONSE: Note provided on Enlarged plan view on sheet SE-004; Note states: 100-yr Floodplain (Elev =196.0) per USGS Pond Branch Basin Study.**

- Information relative to compliance with Federal and State floodproofing requirements (paragraph 2.A (7)).

**RESPONSE: See correspondence letter from Black & Veatch indicating the intent to certify the engineering design plans with the site plan submission on sheet SE-008.**

- A written statement detailing any existing or anticipated problems of flooding or erosion in the area of the application and upstream and downstream of the site (paragraph 2.B(1)).

**RESPONSE: Note already provided in Floodplain Regulation Note #4 on sheet SE-004.**

- A written statement whether Federal and/or State permits are required (paragraph 2.B(2)).

**RESPONSE: Note already provided in Floodplain Regulation Note #9 on sheet SE-004.**

- A statement certifying all flood proofing proposed and indicating compliance with all County, State and Federal requirements (paragraph 2.C(3)); and

**RESPONSE: See correspondence letter from Black & Veatch indicating the intent to certify the engineering design plans with the site plan submission on sheet SE-008.**

- An acknowledgement signed by the applicant indicating the applicant is aware that flood insurance may be required (paragraph 2.C(3)).

**RESPONSE: See correspondence letter from the District of Columbia Water And Sewer Authority (DCWASA) acknowledging that flood insurance may be required on sheet SE-008.**

5. Section 2-905 of the Zoning Ordinance requires the applicant to provide a Statement to address the following:

- The new construction will not increase the water surface elevation above the 100 year flood level on adjacent properties as calculated in accordance with the Public Facilities Manual (paragraph 1.)

**RESPONSE:** Note already provided in Floodplain Regulation Note #4 on sheet SE-004.

- There are no other feasible options available to achieve the proposed use (paragraph 7A).

**RESPONSE:** Due to operational constraints the odor control building has to be located as close as possible to the Potomac Interceptor (PI) to function properly. The building location was selected based on two criteria, the proximity to the Potomac Interceptor that allows for smaller equipment (and smaller building) and a location that could provide a finished floor above the Potomac River Floodplain water surface elevation.

- The proposal is the least disruptive option to the floodplain (paragraph 7.B).

**RESPONSE:** Note already provided in Floodplain Regulation Note #4 on sheet SE-004. But to further clarify see the above and note that the odor control building is located in a localized depression created by the gravel road within a ravine to the Potomac Interceptor in an area that will not be subject to direct impacts of the river flow and therefore this will be the least disruptive option available to minimize impacts to the floodplain. Moving the building and associated fill to be entirely outside of the Floodplain was determined to be undesirable and unfeasible to the landowner (Northern Virginia Regional Park Authority - NVRPA) and applicant based on the increased distance from the PI the odor control equipment contained inside the building would need to be larger and would require a larger odor control building than what is currently shown. The building location is in our opinion the best balance of placement and building size and minimizes overall impacts to the NVRPA parkland property.

- The proposal meets the environmental goals and objectives of the adopted comprehensive plan (paragraph 7.C).

**RESPONSE:** It is both our and the applicant's opinion that the Odor Control building is designed to minimize impacts to the Northern Virginia Regional Park Authority (NVRPA) property. These plans represent a collaborative effort between DCWASA and NVRPA to maintain the high quality, diverse park and recreation system that exists on the NVRPA owned parcel that the Special Exception is a portion of. The odor control building serves two functions, first to preserve and protect the Potomac Interceptor (PI) and second to address odor issues along the entire PI length from the Dulles Airport to the Blue Plains Wastewater Treatment Plant. Odor issues are going to be addressed by closing the existing vents and using the fans in the odor control building to pull the odorous and corrosive air from the PI into an activated carbon filter that will adsorb the

odorous and corrosive components and release the filtered gas to the atmosphere and improving the air quality along the entire length of the PI. By addressing the odor issues along the Potomac River this project will be an enhancement to the community that will benefit all the users of the trail system along the Potomac River and residents that live in close proximity to the PI. In addition to the odor improvements along the PI the removal of the corrosive elements of the odorous air will protect the PI that is an important and valuable community infrastructure resource.

Downstream Drainage Complaints

6. There are no downstream drainage complaints on file.

**RESPONSE: Noted.**

Stormwater Detention

7. Stormwater detention or an approved waiver will be required (PFM 6-0301.3). The applicant states that a waiver will be requested; a waiver is likely to be approved.

**RESPONSE: Noted, waiver will be submitted concurrently with the special exception process.**

Site Outfall

8. The site plan submission will be required to include a justification for the drainage diversion (PFM 6-0202.2A).

**RESPONSE: The diversion of flow from the east side of the ditch is to redirect runoff around the proposed odor control building to protect the building from any potential runoff erosion and undermining to the building's foundation to protect the building's structural integrity. This diversion does not increase the amount of runoff discharge in the existing ditch and the runoff will outfall from the proposed storm drain pipes to the same location that the existing ditch outfalls to in the existing site condition.**



A. Morton Thomas and Associates, Inc.  
Consulting Engineers



County of Fairfax, Virginia  
Craig Herwig, Urban Forester III  
Forest Conservation Branch, DPWES  
Comments / Responses  
March 29, 2010

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This review is based on the Special Exception Plat, SE 2010-DR-002 stamped as "Received, Department of Planning and Zoning, December 8, 2009". Due to weather conditions, a site visit was not conducted.

1. **Comment:** An existing vegetation map has been provided however, it is unclear. There are no tables identifying the primary species found in each cover type nor is there a statement regarding the general health and condition of the existing vegetation found in each cover type.

**Recommendation:** Provide an existing vegetation map that includes the primary species and a statement regarding the general health and condition of the existing vegetation found in each cover type as identified in PFM Table 12.2. The EVM submitted with the Special Exception should include the primary species and a statement regarding the general health and condition of existing vegetation found in each cover type and all other required elements of the Zoning Ordinance and Public Facilities Manual.

**RESPONSE:** The existing vegetation map sheet SE-003 has been updated with the primary species and general health and conditions added to the existing vegetation map legend descriptions for each forest tree canopy type.

2. **Comment:** It is unclear if any improvements (including tree removals or tree pruning) to the existing gravel road outside the LOD will be necessary to facilitate the ingress/egress of equipment during construction activities or during regular facility maintenance activity.

**Recommendation:** Any road improvement activities that may impact existing vegetation adjacent to the gravel road outside the LOD should be identified and details regarding the improvements should be provided.

**RESPONSE:** Per phone conversation with Craig Herwig on March 22, 2010 most of the trees along the gravel access road appear to be previously limbed to a height sufficient for vehicle access and most of the limbs that were observed are of approximately 1-inch or smaller in diameter. This was agreed upon by Craig to be minor disturbance and therefore not significant enough to warrant extending the LOD for any tree pruning that may need to occur for construction vehicle access. The LOD has been modified for the ingress/egress of construction vehicles and provides area for construction storage and vehicular turn-around areas. EVM Summary and calculations on sheet SE-003 have been updated as appropriate.

3. **Comment:** : Given the nature of the tree cover on this site, and depending upon the ultimate configuration provided, several development conditions will be instrumental in assuring adequate tree preservation and protection throughout the construction process.

**Recommendation:** Recommend the following development conditions to ensure effective tree preservation:

Tree Preservation: "The applicant shall submit a Tree Preservation plan as part of the first and all subsequent site plan submissions. The preservation plan shall be prepared by a professional with experience in the preparation of tree preservation plans, such as a certified arborist or registered consulting arborist, and shall be subject to the review and approval of the Urban Forest Management Division, DPWES.

The tree preservation plan shall consist of a tree survey that includes the location, species, size, crown spread and condition rating percentage of all trees 10 inches in diameter and greater, and 25 feet to either side of the limits of clearing and grading shown on the SE plat for the area shown as special exception site. The tree preservation plan shall provide for the preservation of those areas shown for tree preservation, those areas outside of the limits of clearing and grading shown on the SE plat and those additional areas in which trees can be preserved as a result of final engineering. The condition analysis ratings shall be prepared using methods outlined in the latest edition of the Guide for Plant Appraisal published by the International Society of Arboriculture. Specific tree preservation activities that will maximize the survivability of any tree identified to be preserved, such as: crown pruning, root pruning, mulching, fertilization, and others as necessary, shall be included in the plan."

Tree Preservation Walk-Through. "The Applicant shall retain the services of a certified arborist or registered consulting arborist, and shall have the limits of clearing and grading marked with a continuous line of flagging prior to the walk-through meeting. During the tree-preservation walk-through meeting, the Applicant's certified arborist or registered consulting shall walk the limits of clearing and grading with an UFMD, DPWES, representative to determine where adjustments to the clearing limits can be made to increase the area of tree preservation and/or to increase the survivability of trees at the edge of the limits of clearing and grading, and such adjustment shall be implemented. Trees that are identified as dead or dying may be removed as part of the clearing operation. Any tree that is so designated shall be removed using a chain saw and such removal shall be accomplished in a manner that avoids damage to surrounding trees and associated understory vegetation. If a stump must be removed, this shall be done using a stump-grinding machine in a manner causing as little disturbance as possible to adjacent trees and associated understory vegetation and soil conditions."

Limits of Clearing and Grading. "The Applicant shall conform strictly to the limits of clearing and grading as shown on the SE plat, subject to allowances specified in these development conditions and for the installation of utilities and/or trails as determined necessary by the Director of DPWES, as described herein. If it is determined necessary to install utilities and/or trails in areas protected by the limits of clearing and grading as shown on the SE plat, they shall be located in the least disruptive manner necessary as determined by the UFMD, DPWES.

Tree Preservation Fencing: "All trees shown to be preserved on the tree preservation plan shall be protected by tree protection fence. Tree protection fencing in the form of four (4) foot high, fourteen (14) gauge welded wire attached to six (6) foot steel posts

driven eighteen (18) inches into the ground and placed no further than ten (10) feet apart or, super silt fence to the extent that required trenching for super silt fence does not sever or wound compression roots which can lead to structural failure and/or uprooting of trees shall be erected at the limits of clearing and grading as shown on the phase I & II erosion and sediment control sheets, as may be modified by the "Root Pruning" development condition below.

All tree protection fencing shall be installed after the tree preservation walk-through meeting but prior to any clearing and grading activities, including the demolition of any existing structures. The installation of all tree protection fencing shall be performed under the direct supervision of a certified arborist, and accomplished in a manner that does not harm existing vegetation that is to be preserved. Three (3) days prior to the commencement of any clearing, grading or demolition activities, but subsequent to the installation of the tree protection devices, the UFMD, DPWES, shall be notified and given the opportunity to inspect the site to ensure that all tree protection devices have been correctly installed. If it is determined that the fencing has not been installed correctly, no grading or construction activities shall occur until the fencing is installed correctly, as determined by the UFMD, DPWES."

Root Pruning. "The Applicant shall root prune, as needed to comply with the tree preservation requirements of these development conditions. All treatments shall be clearly identified, labeled, and detailed on the erosion and sediment control sheets of the site plan submission. The details for these treatments shall be reviewed and approved by the UFMD, DPWES, accomplished in a manner that protects affected and adjacent vegetation to be preserved, and may include, but not be limited to the following:

- Root pruning shall be done with a trencher or vibratory plow to a depth of 18 inches.
- Root pruning shall take place prior to any clearing and grading, or demolition of structures.
- Root pruning shall be conducted under the direct supervision of a certified arborist.
- An UFMD, DPWES, representative shall be informed when all root pruning and tree protection fence installation is complete."

Site Monitoring. "During any clearing or tree/vegetation/structure removal on the Applicant Property, a representative of the Applicant shall be present to monitor the process and ensure that the activities are conducted as per the development conditions and as approved by the UFMD. The Applicant shall retain the services of a certified arborist or registered consulting arborist to monitor all construction and tree preservation efforts in order to ensure conformance with all tree preservation development conditions, and UFMD approvals. The monitoring schedule shall be described and detailed in the Tree Preservation Plan, and reviewed and approved by the UFMD, DPWES."

**RESPONSE: The above notes have been added to the Special Exception/2232 Review plan, see sheet SE-003.**

April 9, 2010

## **Potomac Interceptor Long Term Odor Abatement Program Site 31 – Transitional Screening Modification Justification**

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Mrs. Regina Coyle, Director  
Fairfax County Department of Planning and Zoning  
Zoning Evaluation Division  
12055 Government Center Parkway  
Suite 801  
Fairfax, VA 22035

Re: Potomac Interceptor-Odor  
Abatement Project - Site 31  
Special Exception Case Number:  
SE 2010-DR-002

Dear Mrs. Coyle:

The following is a request for the modification of the transitional screening requirements per Zoning Ordinance Article 13-305-7, 13-305-12, and 13-305-14 as part of the Potomac Interceptor Long Term Odor Abatement Program – Site 31 Special Exception Plat/ 2232 Review.

We feel that the modification/waiver of the transitional screening and barrier requirements are justified based on the proposed location of the new odor control building and the existing forest stand surrounding the Special Exception Plat Area (SEPA). The new building is sited in a ravine between two ridges with elevation changes of approximately 40 ft. and 50 ft to the east and west, respectively, which will provide a forested and natural topographic barrier between the building and the adjacent residential properties. The closest property line to the building is located approximately 240 ft from the new building. And since the building is going to be approximately 32 ft tall from the finished floor to the roof peak the building is going to be below both the east and west ridges and mostly hidden from the view at the adjacent adjacent residential property lines. Also note that the parcel that the SEA is within is owned by the Northern Virginia Regional Park Authority and is classified as a Resource Based Regional Park by the Comprehensive Plan and the parcel area outside of the SEA is not anticipated to be developed in the future.

The Potential Impacts from the odor control building are as follows:

1. Noise from the operational blower fans. The closest adjacent property is approximately 240 ft. from the proposed odor control building and due to the distance and the existing forest and topography no significant noise impacts are anticipated for this project.
2. Reduction of Odorous Air discharges from existing Potomac Interceptor vents and manhole #31. This impact is not considered adverse and improvements in air quality are generally considered beneficial and desirable.

Based on the above justifications we respectfully request that the transitional screening and barrier requirements be waived as part of the Potomac Interceptor Long Term Odor Abatement Program – Site 31 Special Exception Plat/ 2232 Review application.

Sincerely,

A handwritten signature in cursive script that reads "Daron K Doran".

Daron K. Doran, P.E.  
Project Manager  
A. Morton Thomas and Associates, Inc.



A. Morton Thomas and Associates, Inc.  
Consulting Engineers

RECEIVED  
Department of Planning & Zoning

APR 13 2010

Zoning Evaluation Division



County of Fairfax, Virginia  
Beth Forbes, Stormwater Engineer  
Department of Public Works and Environmental Services  
Comments / Responses  
April 12, 2010

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We have reviewed the subject application and offer the following stormwater management comments.

1. **Chesapeake Bay Preservation Ordinance**

**Comment:** There is Resource Protection Area (RPA) on this site. The new impervious area created by this project is exempt from water quality controls usually required by the Chesapeake Bay Preservation Ordinance since it is a structure appurtenant to a sanitary sewer line owned by a regional service authority (CBPO 118-5-2(b)). Nonetheless, a Water Quality Impact Assessment will be required for the associated storm drainage improvements; this assessment can be included in the site plan submittal (LTI 06-07).

**RESPONSE:** Noted, WQIA will be prepared for submittal as part of the site plan process.

2. **Floodplain**

**Comment:** There are regulated floodplains on the property.

**RESPONSE:** Comment noted.

3. **Comment:** Section 2-905 of Zoning Ordinance requires the applicant to state why there are no other feasible options available to achieve the proposed use (paragraph 7A). The applicant's statement for this requirement has been provided in a memo; statement should appear in the plat. In the memo the applicant states a location was chosen that would be close enough to the interceptor to allow smaller equipment yet "... provide a finished floor above the Potomac River Floodplain water surface elevation." The floodplain elevation is 196.0 feet at this location. Sheet SE-004 shows two different finished floor elevations. The enlarged plan shows a finished floor elevation of 197.5 feet which is above the floodplain elevation. The Angle of Bulk Plane diagram, however, shows a finished floor elevation of 195.5 feet which is below the floodplain elevation.

**RESPONSE:** The angle of bulk plane diagram has been revised for the appropriate finished floor elevation and the memo response has been added as Floodplain Regulation Note #10 on Sheet SE-004.

4. **Comment:** ZO 2-905 also requires the proposal to meet the environmental goals and objectives of the adopted comprehensive plan (paragraph 7C). The applicant's statement for this requirement has been provided in a memo; the statement should appear in the plat.

**RESPONSE:** Memo statement added as Floodplain Regulation Note #11 on sheet SE-004.

5. **Comment:** Section 2-904 requires the extent of the proposed fill to be included in the application. An earthwork plan is now included on sheet SE-004. The rip-rap to be placed at the downstream end of the storm drain diversion is not included as part of the fill area.

**RESPONSE:** The rip-rap is actually in an area of cut and not fill, the area has been revised and appropriately labeled on the earthwork plan on sheet SE-004.

6. **Downstream Drainage Complaints:**

**Comment:** There are no downstream drainage complaints on file.

**RESPONSE:** Comment noted.

7. **Stormwater Detention**

**Comment:** Stormwater detention, or an approved waiver, will be required before approval of the site plan (PFM 6-0301.3). The applicant states that a waiver will be requested. As long as any concentrated flow is discharged to an adequate receiving channel, a waiver is likely to be approved.

**RESPONSE:** Per meeting with Beth Forbes on April 8, 2010 additional LOD is shown on the SEP for optional improvements of the downstream areas from the Storm drain outfall to a point crossing the existing trail to address adequate outfall.

8. **Site Outfall**

**Comment:** The storm drains concentrated discharge must outfall to an adequate natural or man-made receiving channel (PFM 6-0202.3). The current plan shows the storm drain discharging to an area just upgrade of the proposed manhole on the interceptor and the stream valley trail. The limits of clearing and grading in the site plan may have to be extended to meet the PFM's adequate outfall requirements.

**RESPONSE:** Per meeting with Beth Forbes on April 8, 2010 additional LOD is shown on the SEP for optional improvements of the downstream areas from the Storm drain outfall to a point crossing the existing trail to address adequate outfall.

9. **Comment:** The CBPO considers compacted gravel an impervious surface (CBPO 118-1-6 (k)).

**RESPONSE:** Note already provided under the Stormwater Management BMP Narrative, the existing and proposed gravel road areas were included in proposed impervious percentage calculations on sheet SE-003.

## UP1 RIVERFRONT COMMUNITY PLANNING SECTOR

### CHARACTER

This sector is located along the Potomac River shoreline as it extends from the National Park Service's Great Falls Park to the Loudoun County line and Seneca Road (Route 602). The southern border of this sector is Route 193, River Bend Road and Beach Mill Road. The Riverfront Community Planning Sector is in the Difficult Run watershed.

This sector is made up of parkland, large sections of undeveloped land, estates, farms and large-lot subdivisions. Sector UP1 is essentially an area of large lot development with a rural character. Local-serving commercial uses are located at Route 193 and Walker Road in Sector UP2. This area is planned to maintain the present five-acre and two-acre residential density, as a way of preserving the rural character of this area.

This sector has produced significant prehistoric heritage resources, including the County's only known Native American burial site. Because of the very low density development in the sector, there is a very high potential for both prehistoric and historic heritage resources to still remain. The Potomac floodplain and adjacent uplands are particularly sensitive. The Potomac Canal Lock ruins and the ruins of the Town of Matildaville are significant existing resources in this sector which are listed in the National Register of Historic Places under the Patowmack Canal Historic District/Lock Ruins at Great Falls. This National Register Historic District is a National Historic Landmark, and is also listed in the County Inventory of Historic Sites and the Virginia Landmarks Register. A list and map of heritage resources are included in the Upper Potomac Planning District Overview section, Figures 4, 5 and 6. Additional historic sites in this sector are also included in the inventory.

### CONCEPT FOR FUTURE DEVELOPMENT

The Riverfront Community Planning Sector is designated as a Low Density Residential Area in the Concept for Future Development.

### RECOMMENDATIONS

#### Land Use

The Riverfront Community Planning Sector is a very low density stable residential area. Infill development in this residential area should be of a compatible use, type and intensity in accordance with the guidance provided by the Policy Plan under Land Use Objectives 8 and 14.

Where substantial parcel consolidation is specified, it is intended that such consolidations will provide for projects that function in a well-defined, efficient manner and provide for the development of unconsolidated parcels in conformance with the Area Plan.

Figure 15 indicates the geographic location of this sector. Due to the general nature of the land use recommendations for this sector, they were not shown on the General Locator Map.

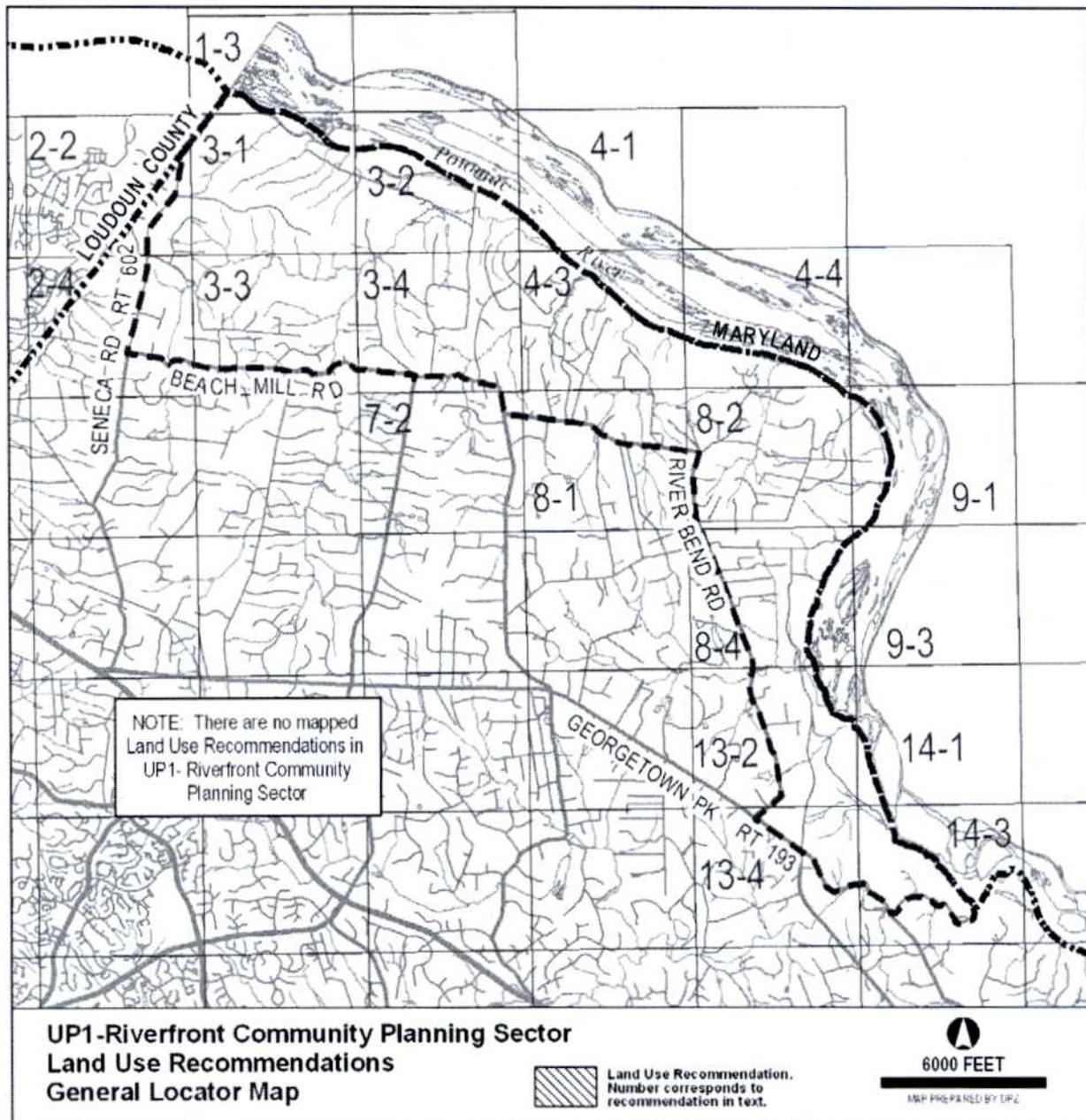


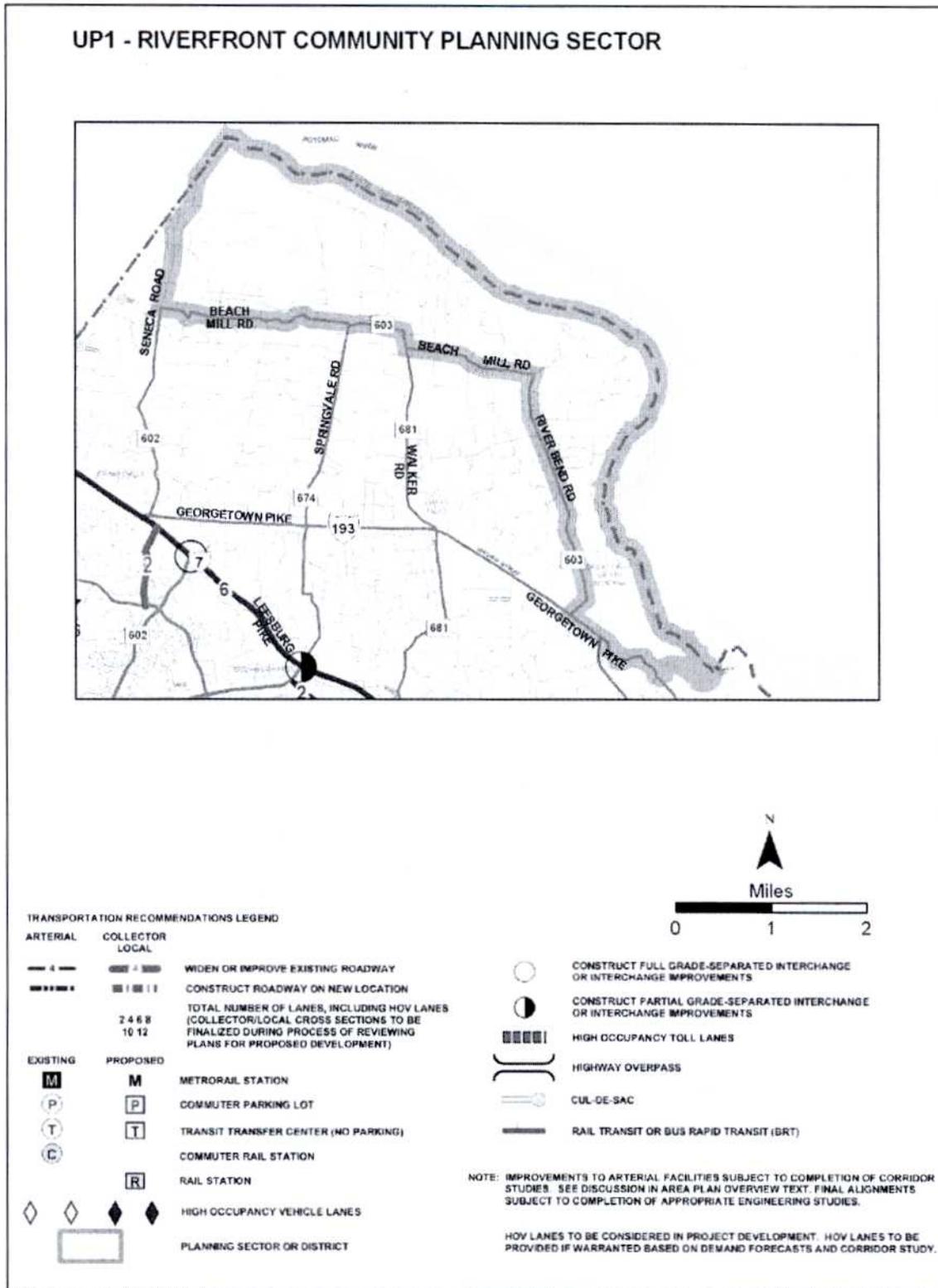
FIGURE 15

1. Limit land uses to parkland, open space, and large-lot residential development. Residential density of no greater than one dwelling unit per five acres is planned for this sector to protect the Potomac River Environmental Quality Corridor and Wildlife Preserve. [Not shown]
2. This sector is planned for low density, single family residential use mostly .1-.2 du/ac as shown on the Comprehensive Land Use Plan map. Cluster subdivisions may be appropriate in this sector if the following criteria are met and rigorously applied: 1) Wherever possible the proposed open space should provide connections with existing or planned trails; 2) Individual lots, buildings, streets, utilities and parking areas are designed and situated to minimize the disruption of the site's natural drainage and topography, and to promote the preservation of important view sheds, historic resources, steep slopes, stream valleys and desirable vegetation; 3) Site design and building location are done in a manner that is compatible with surrounding development; 4) Modifications to minimum district size, lot area, lot width or open space requirements of a cluster subdivision in the R-E and R-1 Districts are not appropriate, unless significant benefits can be achieved in the preservation of the natural environment, scenic view shed(s) or historic resources by permitting such modifications; and 5) Lot yield shall be limited to that which could reasonably result under conventional development. In addition, measures such as agricultural and forestal districts, conservation, open space and scenic easements should be encouraged to preserve the rural character of this environmentally sensitive area, provided that their use provides a public benefit and furthers the intent of the Plan. [Not Shown]
3. No commercial or retail uses are planned for this sector due to its very low density. Uses requiring special permits and special exception approval should be rigorously reviewed and permitted only when the use is of a size and scale that will not adversely impact adjacent land uses and the overall low density residential character of the area. [Not shown]
4. Encourage the use of pervious and semi-pervious materials for paved areas (e.g. parking lots, driveways, walkways and patios). [Not shown]

### Transportation

Transportation recommendations for this sector are shown on Figure 16. In some instances, site-specific transportation recommendations are included in the land use recommendations section. The figures show access orientation, circulation plans, interchange impact areas and generalized locations of proposed transit facilities. The recommendations contained in the Area Plan text and maps, the Policy Plan and Transportation Plan map, policies and requirements in the Public Facilities Manual, the Zoning Ordinance, and other standards will be utilized in the evaluation of development proposals.

Georgetown Pike, which has been designated a Virginia Byway and determined eligible for listing on the Virginia Landmarks Register and the National Register of Historic Places, should be maintained within its existing right-of-way. Center turn lanes and deceleration and acceleration lanes should be discouraged and curb cuts should not be allowed unless no other alternative exists. Georgetown Pike is commonly acknowledged to contain some traffic hazards. However, it is generally acceptable in its present condition to local residents. Major changes in alignment or widening the road would damage the scenic and historic character and the historic integrity of the Byway and have been strongly opposed by residents of adjacent areas. Planning efforts should focus on other means of dealing with traffic volume in order to maintain this Byway. Scenic and conservation easements should be sought along Georgetown Pike wherever practical for the preservation of the historic and scenic significance and beauty of the corridor.



**TRANSPORTATION RECOMMENDATIONS** **FIGURE 16**

### Heritage Resources

Georgetown Pike (Route 193) is designated as a Virginia Byway pursuant to Section 33.1-63 of the Code of Virginia, as amended. The protection of Georgetown Pike is discussed in the Transportation section above.

Any development or ground disturbance in this sector, both on private and public land, should be preceded by heritage resource studies, and alternatives should be explored for the avoidance, preservation or recovery of significant heritage resources that are found. In those areas where significant heritage resources have been recorded, an effort should be made to preserve them. If preservation is not feasible, then, in accordance with countywide objectives and policies as cited in the Heritage Resources section of the Policy Plan, the threatened resource should be thoroughly recorded and in the case of archaeological resources, the artifacts recovered.

### Parks and Recreation

Park and recreation recommendations for this sector are shown on Figure 17. The column "Park Classification" includes existing park facilities. The "Recommendations" column includes entries for both existing and proposed facilities. Prior to developing parkland, the Fairfax County Park Authority initiates a master planning process to determine the appropriate facilities and design for that park. This process involves extensive citizen review and participation. If an existing park is listed but no recommendation appears on that line, it means the park has been developed in accordance with its master plan.

### Trails

Trails planned for this sector are delineated on Figure 18 and on the 1":4,000' Countywide Trails Plan Map which is referenced as Figure 2 in the Transportation element of the Policy Plan and is available at the Maps and Publications Sales Desk. Trails in this sector are an integral part of the overall County system. While some of the segments have already been constructed, the Countywide Trails Plan Map portrays the ultimate system for the sector and the County at large. In addition, the map specifies a classification for each segment, which represents the desired ultimate function and surface type of the trail. Specific construction requirements are detailed in the Public Facilities Manual.



# County of Fairfax, Virginia

## MEMORANDUM

**DATE:** April 9, 2010

**TO:** Regina Coyle, Director  
Zoning Evaluation Division, DPZ

David B. Marshall, Chief  
Facilities Planning Branch, DPZ

**FROM:** Pamela G. Nee, Chief *PAN*  
Environment and Development Review Branch, DPZ

**SUBJECT:** Environmental Assessment: 2232 D09-37 and SE 2010-DR- 002  
District of Columbia Water and Sewer Authority

This memorandum, prepared by Mary Ann Welton, includes citations from the Comprehensive Plan that list and explain environmental policies for this property. Plan citations are followed by a discussion of concerns including a description of potential impacts that may result from the proposed revised Special Exception (SE) Plat and 2232 Review, dated March 29, 2010. Possible solutions to remedy identified issues are suggested. Other solutions may be acceptable, provided that they achieve the desired degree of mitigation and are in harmony with Plan policies.

### COMPREHENSIVE PLAN CITATIONS:

The Comprehensive Plan is the basis for the evaluation of this application. The assessment of the proposal for conformity with the environmental recommendations of the Comprehensive Plan is guided by the following citations from the Plan:

Fairfax County Comprehensive Plan, 2007 Edition, Policy Plan, Environment, as amended through February 25, 2008, on pages 7-9, the Plan states:

**“Objective 2: Prevent and reduce pollution of surface and groundwater resources. Protect and restore the ecological integrity of streams in Fairfax County.**

Policy j. Regulate land use activities to protect surface and groundwater resources. . . .

Fairfax County Comprehensive Plan, 2007 Edition, Policy Plan, Environment, as amended through February 25, 2008, on page 10, the Plan states:

**“Objective 3: Protect the Potomac Estuary and the Chesapeake Bay from the avoidable impacts of land use activities in Fairfax County.**

Policy a. Ensure that new development and redevelopment complies with the County's Chesapeake Bay Preservation Ordinance. . . .”

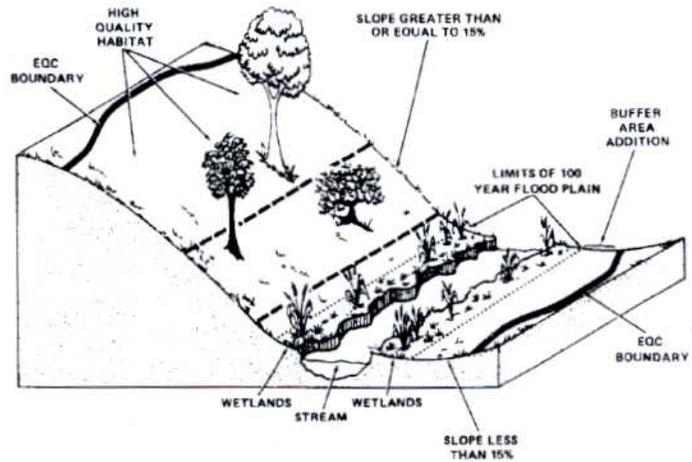
Fairfax County Comprehensive Plan, 2007 Edition, Policy Plan, Environment, as amended through February 25, 2008, on pages 14-15, the Plan states:

**“Objective 9: Identify, protect and enhance an integrated network of ecologically valuable land and surface waters for present and future residents of Fairfax County.**

Policy a: For ecological resource conservation, identify, protect and restore an Environmental Quality Corridor system (EQC). (See Figure 4.) Lands may be included within the EQC system if they can achieve any of the following purposes:

- Habitat Quality: The land has a desirable or scarce habitat type, or one could be readily restored, or the land hosts a species of special interest.
- "Connectedness": This segment of open space could become a part of a corridor to facilitate the movement of wildlife.
- Aesthetics: This land could become part of a green belt separating land uses, providing passive recreational opportunities to people.
- Pollution Reduction Capabilities: Preservation of this land would result in significant reductions to nonpoint source water pollution, and/or, micro climate control, and/or reductions in noise.

The core of the EQC system will be the County's stream valleys. Additions to the stream valleys should be selected to augment the habitats and buffers provided by the stream valleys, and to add representative elements of the landscapes that are not represented within stream valleys. The stream valley component of the EQC system shall include the following elements (See Figure 4):



A TYPICAL ENVIRONMENTAL QUALITY CORRIDOR

Source: Fairfax County Office of Comprehensive Planning

FIGURE 4

- All 100 year flood plains as defined by the Zoning Ordinance;
- All areas of 15% or greater slopes adjacent to the flood plain, or if no flood plain is present, 15% or greater slopes that begin within 50 feet of the stream channel;
- All wetlands connected to the stream valleys; and
- All the land within a corridor defined by a boundary line which is 50 feet plus 4 additional feet for each % slope measured perpendicular to the stream bank. The % slope used in the calculation will be the average slope measured within 110 feet of a stream channel or, if a flood plain is present, between the flood plain boundary and a point fifty feet up slope from the flood plain. This measurement should be taken at fifty foot intervals beginning at the downstream boundary of any stream valley on or adjacent to a property under evaluation.

Modifications to the boundaries so delineated may be appropriate if the area designated does not benefit habitat quality, connectedness, aesthetics, or pollution reduction as described above. In addition, some intrusions that serve a public purpose such as unavoidable public infrastructure easements and rights of way are appropriate. Such intrusions should be minimized and occur perpendicular to the corridor's alignment, if practical.

Preservation should be achieved through dedication to the Fairfax County Park Authority, if such dedication is in the public interest. Otherwise, EQC land should remain in private ownership in

separate undeveloped lots with appropriate commitments for preservation. The use of protective easements as a means of preservation should be considered. . . ”

Fairfax County Comprehensive Plan, 2007 Edition, Policy Plan, Environment, as amended through February 25, 2008, on page 16, the Plan states:

**“Objective 10: Conserve and restore tree cover on developed and developing sites. Provide tree cover on sites where it is absent prior to development.**

Policy a: Protect or restore the maximum amount of tree cover on developed and developing sites consistent with planned land use and good silvicultural practices.

Policy b: Require new tree plantings on developing sites which were not forested prior to development and on public rights of way.”

## **ENVIRONMENTAL ANALYSIS**

This section characterizes the environmental concerns raised by an evaluation of this site and the proposed development. Solutions are suggested to remedy the concerns that have been identified by staff. There may be other acceptable solutions. Particular emphasis is given to opportunities provided by this application to conserve the county’s remaining natural amenities.

This application seeks approval to encase a segment of the existing Potomac Interceptor (PI) Sewer main line with an exterior liner and to construct an odor abatement control structure measuring up to 40 feet high by approximately 58 feet long by 26 feet wide resulting in a footprint of approximately 1,535 square feet. A swath of land measuring approximately 870 feet long and between 70’– 180 ’wide will be disturbed for this project.

### **Environmental Quality Corridor (EQC), Resource Protection Area (RPA) and Floodplain:**

This application is proposed within Northern Virginia Regional Park Authority property located immediately adjacent to the Potomac River and the Pond Branch watershed in northernmost Fairfax County. The Environmental Quality Corridor (EQC) is coterminous with the floodplain, and the mapped Resource Protection Area (RPA) is more extensive than the floodplain and the EQC.

Much of the disturbance for this public utility project will occur within the EQC and the 100 year floodplain, including but not limited to the proposed odor abatement structure, the 18” diameter reinforced concrete outfall pipe and the riprap outfall for this pipe. Comprehensive Plan guidance generally supports preservation and protection of the EQC. However, the Comprehensive Plan policy guidance recognizes that some intrusion in the EQC that serve a public purpose such as unavoidable public infrastructure easements are appropriate. The Plan further advises that such intrusions should be minimized and occur perpendicular to the corridor’s alignment, if practical. In response to staff’s request that the proposed odor abatement control structure be considered in a location outside the EQC, the applicant noted that the proposed location was selected

due to its close proximity to the PI that would allow for smaller equipment and smaller building, resulting in least disturbance to the environment. The proposed location could also provide a finished floor above the floodplain water surface elevation. Given these circumstances, staff finds that the proposal is consistent with the EQC policy.

**Stormwater Management:** No stormwater management quality controls are identified on the plan. The stormwater narrative on sheet SE-03 states that the application is exempt from the requirements of the County's Chesapeake Bay Preservation Ordinance under Section 118-5-2, Public Utilities, Railroads, Public Roads, and Facilities Exemptions. The applicant will be required to submit a Water Quality Impact Assessment which is subject to review and approval by the Department of Public Works and Environmental Services (DPWES).

**Tree Preservation/Restoration:** Sheet SE- 003 of the Special Exception Plat incorporates existing vegetation information. The notes provide detailed information regarding tree preservation and protection measures to be implemented prior to and throughout the land disturbance and construction phases of the project. The notes indicate that the applicant is working closely with the Urban Forestry Management Division of DPWES. Staff encourages the applicant to look for opportunities to replace native tree species similar to those specimens which will be lost because of the sewer line project.

#### **COUNTYWIDE TRAILS MAP:**

The Countywide Trails Plan map depicts a major regional trail and a stream valley trail along the Potomac River adjacent to the larger park property; however, neither trail is located within the limits of the Special Exception. A natural surface/stone dust is located on the subject property perpendicular to the Potomac River near River Park Drive. It is difficult to discern whether or not this trail will be affected by the project.

PGN: MAW



# County of Fairfax, Virginia

## MEMORANDUM

March 31, 2010

**TO:** Suzie Zottl, Staff Coordinator  
Zoning Evaluation Division, DPZ

**FROM:** Craig Herwig, Urban Forester III  
Forest Conservation Branch, DPWES

**SUBJECT:** Potomac Interceptor Long-Term Odor Abatement Program, SE 2010-DR-002

**RE:** Request for assistance dated March 30, 2010

This review is based on the Special Exception Plat, SE 2010-DR-002 stamped "Received Department of Planning and Zoning March 30, 2010." A site visit was conducted on March 31, 2010.

The Urban Forest Management Division has no further tree preservation or landscape related comments or recommendations on this Special Exception Plat submission.

Please feel free to contact me at 703-324-1770 if you have any further questions or concerns.

CSH/  
UFMID #: 148581

cc: RA File  
DPZ File





# County of Fairfax, Virginia

## MEMORANDUM

February 16, 2010

**TO:** Suzie Zottl, Staff Coordinator  
Zoning Evaluation Division, DPZ

**FROM:** Craig Herwig, Urban Forester II *CSW*  
Forest Conservation Branch, DPWES

**SUBJECT:** Potomac Interceptor Long-Term Odor Abatement Program, SE 2010-DR-002

**RE:** Request for assistance dated January 27, 2010

This review is based on the Special Exception Plat, SE 2010-DR-002 stamped as "Received, Department of Planning and Zoning, December 8, 2009". Due to weather conditions, a site visit was not conducted.

1. **Comment:** An existing vegetation map has been provided however, it is unclear. There are no tables identifying the primary species found in each cover type nor is there a statement regarding the general health and condition of the existing vegetation found in each cover type.

**Recommendation:** Provide an existing vegetation map that includes the primary species and a statement regarding the general health and condition of the existing vegetation found in each cover type as identified in PFM Table 12.2. The EVM submitted with the Special Exception should include the primary species and a statement regarding the general health and condition of existing vegetation found in each cover type and all other required elements of the Zoning Ordinance and Public Facilities Manual.

2. **Comment:** It is unclear if any improvements (including tree removals or tree pruning) to the existing gravel road outside the LOD will be necessary to facilitate the ingress egress of equipment during construction activities or during regular facility maintenance activity.

**Recommendation:** Any road improvement activities that may impact existing vegetation adjacent to the gravel road outside the LOD should be identified and details regarding the improvements should be provided.



3. **Comment:** : Given the nature of the tree cover on this site, and depending upon the ultimate configuration provided, several development conditions will be instrumental in assuring adequate tree preservation and protection throughout the construction process.

**Recommendation:** Recommend the following development conditions to ensure effective tree preservation:

Tree Preservation: “The applicant shall submit a Tree Preservation plan as part of the first and all subsequent site plan submissions. The preservation plan shall be prepared by a professional with experience in the preparation of tree preservation plans, such as a certified arborist or registered consulting arborist, and shall be subject to the review and approval of the Urban Forest Management Division, DPWES.

The tree preservation plan shall consist of a tree survey that includes the location, species, size, crown spread and condition rating percentage of all trees 10 inches in diameter and greater, and 25 feet to either side of the limits of clearing and grading shown on the SE plat for the area shown as special exception site. The tree preservation plan shall provide for the preservation of those areas shown for tree preservation, those areas outside of the limits of clearing and grading shown on the SE plat and those additional areas in which trees can be preserved as a result of final engineering. The condition analysis ratings shall be prepared using methods outlined in the latest edition of the Guide for Plant Appraisal published by the International Society of Arboriculture. Specific tree preservation activities that will maximize the survivability of any tree identified to be preserved, such as: crown pruning, root pruning, mulching, fertilization, and others as necessary, shall be included in the plan.”

Tree Preservation Walk-Through. “The Applicant shall retain the services of a certified arborist or registered consulting arborist, and shall have the limits of clearing and grading marked with a continuous line of flagging prior to the walk-through meeting. During the tree-preservation walk-through meeting, the Applicant’s certified arborist or registered consulting shall walk the limits of clearing and grading with an UFMD, DPWES, representative to determine where adjustments to the clearing limits can be made to increase the area of tree preservation and/or to increase the survivability of trees at the edge of the limits of clearing and grading, and such adjustment shall be implemented. Trees that are identified as dead or dying may be removed as part of the clearing operation. Any tree that is so designated shall be removed using a chain saw and such removal shall be accomplished in a manner that avoids damage to surrounding trees and associated understory vegetation. If a stump must be removed, this shall be done using a stump-grinding machine in a manner causing as little disturbance as possible to adjacent trees and associated understory vegetation and soil conditions.”



Limits of Clearing and Grading. “The Applicant shall conform strictly to the limits of clearing and grading as shown on the SE plat, subject to allowances specified in these development conditions and for the installation of utilities and/or trails as determined necessary by the Director of DPWES, as described herein. If it is determined necessary to install utilities and/or trails in areas protected by the limits of clearing and grading as shown on the SE plat, they shall be located in the least disruptive manner necessary as determined by the UFMD, DPWES.

Tree Preservation Fencing: “All trees shown to be preserved on the tree preservation plan shall be protected by tree protection fence. Tree protection fencing in the form of four (4) foot high, fourteen (14) gauge welded wire attached to six (6) foot steel posts driven eighteen (18) inches into the ground and placed no further than ten (10) feet apart or, super silt fence to the extent that required trenching for super silt fence does not sever or wound compression roots which can lead to structural failure and/or uprooting of trees shall be erected at the limits of clearing and grading as shown on the phase I & II erosion and sediment control sheets, as may be modified by the “Root Pruning” development condition below.

All tree protection fencing shall be installed after the tree preservation walk-through meeting but prior to any clearing and grading activities, including the demolition of any existing structures. The installation of all tree protection fencing shall be performed under the direct supervision of a certified arborist, and accomplished in a manner that does not harm existing vegetation that is to be preserved. Three (3) days prior to the commencement of any clearing, grading or demolition activities, but subsequent to the installation of the tree protection devices, the UFMD, DPWES, shall be notified and given the opportunity to inspect the site to ensure that all tree protection devices have been correctly installed. If it is determined that the fencing has not been installed correctly, no grading or construction activities shall occur until the fencing is installed correctly, as determined by the UFMD, DPWES.”

Root Pruning. “The Applicant shall root prune, as needed to comply with the tree preservation requirements of these development conditions. All treatments shall be clearly identified, labeled, and detailed on the erosion and sediment control sheets of the site plan submission. The details for these treatments shall be reviewed and approved by the UFMD, DPWES, accomplished in a manner that protects affected and adjacent vegetation to be preserved, and may include, but not be limited to the following:

- Root pruning shall be done with a trencher or vibratory plow to a depth of 18 inches.
- Root pruning shall take place prior to any clearing and grading, or demolition of structures.
- Root pruning shall be conducted under the direct supervision of a certified arborist.
- An UFMD, DPWES, representative shall be informed when all root pruning and tree protection fence installation is complete.”

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**Department of Public Works and Environmental Services  
Land Development Services, Urban Forest Management Division**

12055 Government Center Parkway, Suite 518

Fairfax, Virginia 22035-5503

Phone 703-324-1770, TTY: 703-324-1877, Fax: 703-803-7769

[www.fairfaxcounty.gov/dpwes](http://www.fairfaxcounty.gov/dpwes)



Potomac Interceptor Long-Term Odor Abatement Program

SE 2010-DR-002

February 16, 2010

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Site Monitoring. “During any clearing or tree/vegetation/structure removal on the Applicant Property, a representative of the Applicant shall be present to monitor the process and ensure that the activities are conducted as per the development conditions and as approved by the UFMD. The Applicant shall retain the services of a certified arborist or registered consulting arborist to monitor all construction and tree preservation efforts in order to ensure conformance with all tree preservation development conditions, and UFMD approvals. The monitoring schedule shall be described and detailed in the Tree Preservation Plan, and reviewed and approved by the UFMD, DPWES.”

CSH/

UFMID #: 148581

cc: RA File  
DPZ File

---

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# County of Fairfax, Virginia

## MEMORANDUM

**DATE:** March 11, 2010

**TO:** Regina Coyle, Director  
Zoning Evaluation Division

**FROM:** Angela Kadar Rodeheaver, Chief  
Site Analysis Section  
Department of Transportation 

**SUBJECT:** Transportation Impact

**FILE:** 3-5 (SE 2010-DR-002)

**REFERENCE:** SE 2010-DR-002; District of Columbia Water and Sewer Authority  
Land Identification: 4-3 ((1)) part of 2

The following comments reflect the position of the Department of Transportation, and are based on the applicant's statement of justification and special exception plat both dated November 20, 2009. Because this review is based in part on the information submitted, use of the site in accordance with this information should be a condition of approval.

The applicant is seeking permission for site modifications to improve the long term odor abatement program. Operational visits will occur on a weekly basis along with occasional routine maintenance trips. There are no significant transportation issues associated with the application.

AKR/CAA

Michelle Brickner, Director, Office of Site Development Services, Department of Public Works and Environmental Services.



# County of Fairfax, Virginia

## MEMORANDUM

**DATE:** June 14, 2010

**TO:** Suzianne Zottl, Staff Coordinator  
Zoning Evaluation Division  
Department of Planning and Zoning

**FROM:** Beth Forbes, Stormwater Engineer *BF*  
Environmental and Site Review Division  
Department of Public Works and Environmental Services

**SUBJECT:** Special Exception Application #SE 2010-DR-002, DC Water & Sewer Authority, Special Exception Plat dated April 12, 2010, LDS Project #736-ZONA-001-3, Tax Map #4-3-01-0002, Dranesville District

We have reviewed the subject application and offer the following stormwater management comments.

### Chesapeake Bay Preservation Ordinance (CBPO)

There is Resource Protection Area (RPA) on this site. The new impervious area created by this project is exempt from water quality controls usually required by the Chesapeake Bay Preservation Ordinance since it is a structure appurtenant to a sanitary sewer line owned by a regional service authority (CBPO 118-5-2(b)). Nonetheless, a Water Quality Impact Assessment will be required for the associated storm drainage improvements; this assessment can be included in the site plan submittal (LTI 06-07).

### Floodplain

There are regulated floodplains on the property. Most of the information required for an application for a use in a floodplain are included in the plat.

Section 2-905 of the Zoning Ordinance requires the applicant to state why there are no other feasible options available to achieve the proposed use (paragraph 7A). The applicant's statement for this requirement has been provided in a memo; the statement should appear in the plat.

ZO 2-905 also requires the proposal to meet the environmental goals and objectives of the adopted comprehensive plan (paragraph 7C). The applicant's statement for this requirement has been provided in a memo; the statement should appear in the plat.



Suzianne Zottl, Staff Coordinator  
Special Exception Application #SE 2010-DR-002, DC Water & Sewer Authority  
June 14, 2010  
Page 2 of 2

ZO 2-904 requires the extent of the proposed fill to be included in the application. The fill area cited in Note #4 does not seem to be up-to-date. The 4083-cubic-yard volume cited in the Earthwork Table on Sheet SE-004 seems to reflect the current design.

Downstream Drainage Complaints

There are no downstream drainage complaints on file.

Stormwater Detention

Stormwater detention, or an approved waiver, will be required before approval of the site plan (PFM 6-0301.3). The applicant states that a waiver will be requested. Since the impervious surface being created is minimal, a waiver is likely to be approved as long as adequate outfall can be demonstrated.

The CBPO considers compacted gravel an impervious surface (CBPO 118-1-6(k)). The C value used for this surface should be modified in the site plan's calculations.

Site Outfall

An outfall narrative has been provided.

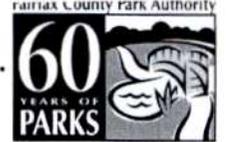
Please contact me at 703-324-1720 if you require additional information.

BF/

cc: Craig Carinci, Director, Stormwater Planning Division  
Jeremiah Stonefield, Chief, Stormwater & Geotechnical Section, ESRD, DPWES  
Zoning Application File



# FAIRFAX COUNTY PARK AUTHORITY



## M E M O R A N D U M

**TO:** Regina M. Coyle, Director  
Zoning Evaluation Division  
Department of Planning and Zoning

**FROM:** Sandy Stallman, Manager  
Park Planning Branch, PDD *SS*

**DATE:** March 29, 2010

**SUBJECT:** SE 2010-DR-002, Potomac Interceptor Sewer  
Tax Map Number: 4-3((1)) 2

### BACKGROUND

The Park Authority staff has reviewed the proposed Development Plan dated November 20, 2009, for the above referenced application. The Development Plan shows one new 1,500 square foot public utility building (sewer odor abatement) with associated facilities to be constructed within the flood plain and Resource Protection Area on an 18-acre parcel. The subject parcel is owned and operated by Northern Virginia Regional Park Authority as Upper Potomac Park in the Upper Potomac Planning District, within the Dranesville Supervisory District.

Construction of the odor treatment building is associated with a much larger project to line the entire sewer system to prolong its life in lieu of outright replacement. The proposed project location is directly on Northern Virginia Regional Park Authority (NVRPA) property. It is our understanding that NVRPA is working with the applicant to address park impacts.

### COMPREHENSIVE PLAN CITATIONS

**1. Heritage Resources (The Policy Plan, Heritage Resources, Objective 1, p. 3)**

**“Objective 1: Identify heritage resources representing all time periods and in all areas of the County.”**

“Policy a: Identify heritage resources well in advance of potential damage or destruction.”

**2. Heritage Resources (Comprehensive Policy Plan, Heritage Resources Objective 3, page 4)**

**“Objective 3: Protect significant historical resources from degradation or damage and destruction by public or private action.”**

**3. Character (Comprehensive Plan, Area III, Riverfront Community Planning Sector, , pp. 78)**

“This sector has produced significant prehistoric heritage resources, including the County's only known Native American burial site. Because of the very low-density development in the sector, there is a very high potential for both prehistoric and historic heritage resources to still remain. The Potomac floodplain and adjacent uplands are particularly sensitive.”

**4. Heritage Resources (Comprehensive Plan, Area III, Riverfront Community Planning Sector, pp. 82)**

“Any development or ground disturbance in this sector, both on private and public land, should be preceded by heritage resource studies, and alternatives should be explored for the avoidance, preservation, or recovery of significant heritage resources that are found. In those areas where significant heritage resources have been recorded, an effort should be made to preserve them. If preservation is not feasible, then, in accordance with countywide objectives and policies as cited in the Heritage Resources section of the Policy Plan, the threatened resource should be thoroughly recorded and in the case of archaeological resources, the artifacts recovered.”

## **ANALYSIS AND RECOMMENDATIONS**

### Cultural Resources Impact:

Staff found that the access road has been thoroughly disturbed and no further archaeology is warranted there. However, Cultural Resource Management and Protection (CRMP) staff found artifacts along a cut bank adjacent to the stream to the west of the project area. Artifacts from the earlier survey as reported on the 44FX1999 DHR site survey form indicated surface quartz and quartzite flakes in the trail leading to the river on site. Staff archaeologists excavated a 1x2-foot rectangle shovel test pit (STP), which encountered the top of the original land surface at 19 inches deep. Within the buried A soil horizon, staff found one stone cutting tool made of quartzite, two flakes made of quartz, one flake made of metagraywacke and several possible fire cracked pieces of quartz. No artifacts were found in the sub-soil beneath the A horizon. Since this was only a reconnaissance, the soil was not sifted, so it is likely that some artifacts were missed.

Based on other extensive excavations nearby, staff is fairly certain that this archaeological site (44FX1999) has a high potential for both vertical and horizontal integrity, with relatively deep antiquity, giving it an extremely high potential for National Register eligibility. Considering the probable relevance of 44FX1999 to our continued investigations and interpretation of the Clark's Branch site (44FX3226), CRMP staff should be intimately involved in the scope of work and investigations on 44FX1999.

The site area outside the current pipeline trench should be subjected to an intensive Phase II evaluation based on a scope of work designed to test for deep stratigraphy. If mechanical excavation is used, it should be employed only within the current pipe trench for the purpose of exposing the pipe trench wall profile. That profile should be examined by a certified geoarchaeologist. The entire area outside the current trench and within the impact area should be deep tested to determine the depth of spoil across the surface of the site. Any construction

activities that will expose or penetrate into or below the buried A horizon should be subjected to Phase II testing involving hand excavation and water screening of the soil matrix.

The Park Authority requests that the applicant coordinate directly with CRMP which has purview over all land disturbances in Fairfax County where it may impact cultural resources. One copy of the Archaeology Report should be provided to the Park Authority's Resource Management Division (Attention: Liz Crowell) within 30 days of completion of the study or survey. Should significant archaeological resources be discovered, the Park Authority requests that further archaeological studies be conducted and copies of the reports provided to CRMP. At the completion of any cultural resource studies, field notes, photographs, and artifacts should be submitted to CRMP within 30 days.

The applicant should also be made aware that there are specific archaeological requirements under Section 106 of the National Historic Preservation Act, which are associated with federally licensed or funded development. If Section 106 applies then any archaeological work under this recommendation should also be coordinated in advance with the Virginia State Historic Preservation Officer (SHPO).

FCPA Reviewer: Andy Galusha  
DPZ Coordinator: Suzanne Zottl

Copy: Cindy Walsh, Director, Resource Management Division  
Liz Crowell, Manager, Cultural Resource Management & Protection Section  
Chron Binder  
File Copy



# FAIRFAX COUNTY PARK AUTHORITY



## M E M O R A N D U M

**TO:** Andi Dorlester, Planner III  
Park Planning Branch  
Planning and Development Division

**FROM:** Charles Smith, Naturalist III  
Natural Resources Management and Protection

**DATE:** February 1, 2010

**SUBJECT:** SE 2010-DR-002  
Potomac Interceptor Sewer

Natural Resource Management and Protection (NRMP) has reviewed the above referenced application and has the following comments:

1. The proposed project location is not on or directly adjacent to Fairfax County parkland, but lies on Northern Virginia Regional Park Authority (NVRPA) property. It is our understanding that NVRPA is working with the applicant to address park impacts.
2. The Potomac Interceptor Sewer is at least 50 years old and provides sanitary sewer drainage to a large area of Northern Virginia. The proper maintenance and functioning of this sewer system is very important to water quality in the Potomac River. However, construction of the odor treatment building is associated with much larger project to line the entire sewer system in lieu of outright replacement and to prolong its life. There are two aspects of the sewer lining project that are of concern to NRMP:
  - a. The sewer lies almost entirely within the floodplain of the Potomac River and, as stated in the application, carries approximately 50 million gallons per day of raw sewage. The Fairfax County Park Authority owns two large downstream properties at Riverbend and Scotts Run that contain globally and state rare resources that would be impacted in the event of a major sewage spill. So NRMP supports the proper maintenance of the Potomac Interceptor Sewer, but has concerns about potential spills during this major maintenance project.
  - b. The installation of the pipe liner will require significant clearing and excavation of the Potomac River floodplain. The area of the floodplain between the Loudoun County jurisdictional boundary and River Park Lane on NVRPA property contains numerous known and likely occurrences of significant cultural and natural resources.
    - i. For potential cultural resource impacts, the DC Water and Sewer Authority should coordinate directly with the Cultural Resource Management and Protection section of the Fairfax County Park Authority which has purview over all land disturbance in Fairfax County where it may impact cultural resources.

- ii. The project area for the sewer lining project crosses numerous seeps and wetlands with known occurrences of at least three vertebrate animal species listed as having a threatened or greater status by the state of Virginia. In addition, it is likely that the project area includes many unusual plant species and some rare plant communities that may be impacted by the project. DC Water and Sewer Authority should coordinate directly with the Virginia Department of Conservation and Recreation, Division of Natural Heritage and the Virginia Department of Game and Inland Fisheries to determine what impacts their project may have and what measures should be taken to avoid, minimize and mitigate those impacts.

cc:

Heather Schinkel, FCPA NRMP

Liz Crowell, FCPA CRMP

Kate Rudacille, NVRPA

Noel Kaplan, Fairfax County Department of Planning and Zoning

## APPENDIX 10

### 9-006 General Standards

In addition to the specific standards set forth hereinafter with regard to particular special exception uses, all such uses shall satisfy the following general standards:

1. The proposed use at the specified location shall be in harmony with the adopted comprehensive plan.
2. The proposed use shall be in harmony with the general purpose and intent of the applicable zoning district regulations.
3. The proposed use shall be such that it will be harmonious with and will not adversely affect the use or development of neighboring properties in accordance with the applicable zoning district regulations and the adopted comprehensive plan. The location, size and height of buildings, structures, walls and fences, and the nature and extent of screening, buffering and landscaping shall be such that the use will not hinder or discourage the appropriate development and use of adjacent or nearby land and/or buildings or impair the value thereof.
4. The proposed use shall be such that pedestrian and vehicular traffic associated with such use will not be hazardous or conflict with the existing and anticipated traffic in the neighborhood.
5. In addition to the standards which may be set forth in this Article for a particular category or use, the Board shall require landscaping and screening in accordance with the provisions of Article 13.
6. Open space shall be provided in an amount equivalent to that specified for the zoning district in which the proposed use is located.
7. Adequate utility, drainage, parking, loading and other necessary facilities to serve the proposed use shall be provided. Parking and loading requirements shall be in accordance with the provisions of Article 11.
8. Signs shall be regulated by the provisions of Article 12; however, the Board may impose more strict requirements for a given use than those set forth in this Ordinance.

### 9-104 Standards for all Category 1 Uses

In addition to the general standards set forth in Sect. 006 above, all Category 1 special exception uses shall satisfy the following standards:

1. Category 1 special exception uses shall not have to comply with the lot size requirements or the bulk regulations set forth for the zoning district in which located.
2. No land or building in any district other than the I-5 and I-6 District shall be used for the storage of materials or equipment, or for the repair or servicing of vehicles or equipment, or for the parking of vehicles except those needed by employees connected with the operation of the immediate facility.
3. If the proposed location of a Category 1 use is in an R district, there shall be a finding that there is no alternative site available for such use in a C or I district within 500 feet of the proposed location; except that in the case of electric transformer stations and telecommunication central offices, there shall be a finding that there is no alternative site available in a C or I district within a distance of one (1) mile, unless there is a substantial showing that it is impossible for satisfactory service to be rendered from an available location in such C or I district.
4. Before establishment, all uses, including modifications or alterations to existing uses, shall be subject to the provisions of Article 17, Site Plans.

### 9-606 Provisions for Uses in a Floodplain

The Board may approve a special exception for the establishment of a use in a floodplain in accordance with the provisions of Part 9 of Article 2.

## GLOSSARY

This Glossary is provided to assist the public in understanding the staff evaluation and analysis of development proposals. It should not be construed as representing legal definitions. Refer to the Fairfax County Zoning Ordinance, Comprehensive Plan or Public Facilities Manual for additional information.

**ABANDONMENT:** Refers to road or street abandonment, an action taken by the Board of Supervisors, usually through the public hearing process, to abolish the public's right-of-passage over a road or road right-of way. Upon abandonment, the right-of-way automatically reverts to the underlying fee owners. If the fee to the owner is unknown, Virginia law presumes that fee to the roadbed rests with the adjacent property owners if there is no evidence to the contrary.

**ACCESSORY DWELLING UNIT (OR APARTMENT):** A secondary dwelling unit established in conjunction with and clearly subordinate to a single family detached dwelling unit. An accessory dwelling unit may be allowed if a special permit is granted by the Board of Zoning Appeals (BZA). Refer to Sect. 8-918 of the Zoning Ordinance.

**AFFORDABLE DWELLING UNIT (ADU) DEVELOPMENT:** Residential development to assist in the provision of affordable housing for persons of low and moderate income in accordance with the affordable dwelling unit program and in accordance with Zoning Ordinance regulations. Residential development which provides affordable dwelling units may result in a density bonus (see below) permitting the construction of additional housing units. See Part 8 of Article 2 of the Zoning Ordinance.

**AGRICULTURAL AND FORESTAL DISTRICTS:** A land use classification created under Chapter 114 or 115 of the Fairfax County Code for the purpose of qualifying landowners who wish to retain their property for agricultural or forestal use for use/value taxation pursuant to Chapter 58 of the Fairfax County Code.

**BARRIER:** A wall, fence, earthen berm, or plant materials which may be used to provide a physical separation between land uses. Refer to Article 13 of the Zoning Ordinance for specific barrier requirements.

**BEST MANAGEMENT PRACTICES (BMPs):** Stormwater management techniques or land use practices that are determined to be the most effective, practicable means of preventing and/or reducing the amount of pollution generated by nonpoint sources in order to improve water quality.

**BUFFER:** Graduated mix of land uses, building heights or intensities designed to mitigate potential conflicts between different types or intensities of land uses; may also provide for a transition between uses. A landscaped buffer may be an area of open, undeveloped land and may include a combination of fences, walls, berms, open space and/or landscape plantings. A buffer is not necessarily coincident with transitional screening.

**CHESAPEAKE BAY PRESERVATION ORDINANCE:** Regulations which the State has mandated must be adopted to protect the Chesapeake Bay and its tributaries. These regulations must be incorporated into the comprehensive plans, zoning ordinances and subdivision ordinances of the affected localities. Refer to Chesapeake Bay Preservation Act, Va. Code Section 10.1-2100 et seq and VR 173-02-01, Chesapeake Bay Preservation Area Designation and Management Regulations.

**CLUSTER DEVELOPMENT:** Residential development in which the lots are clustered on a portion of a site so that significant environmental/historical/cultural resources may be preserved or recreational amenities provided. While smaller lot sizes are permitted in a cluster subdivision to preserve open space, the overall density cannot exceed that permitted by the applicable zoning district. See Sect. 2-421 and Sect. 9-615 of the Zoning Ordinance.

**COUNTY 2232 REVIEW PROCESS:** A public hearing process pursuant to Sect. 15.2-2232 (Formerly Sect. 15.1-456) of the Virginia Code which is used to determine if a proposed public facility not shown on the adopted Comprehensive Plan is in substantial accord with the plan. Specifically, this process is used to determine if the general or approximate location, character and extent of a proposed facility is in substantial accord with the Plan.

**dBA:** The momentary magnitude of sound weighted to approximate the sensitivity of the human ear to certain frequencies; the dBA value describes a sound at a given instant, a maximum sound level or a steady state value. See also Ldn.

**DENSITY:** Number of dwelling units (du) divided by the gross acreage (ac) of a site being developed in residential use; or, the number of dwelling units per acre (du/ac) except in the PRC District when density refers to the number of persons per acre.

**DENSITY BONUS:** An increase in the density otherwise allowed in a given zoning district which may be granted under specific provisions of the Zoning Ordinance when a developer provides excess open space, recreation facilities, or affordable dwelling units (ADUs), etc.

**DEVELOPMENT CONDITIONS:** Terms or conditions imposed on a development by the Board of Supervisors (BOS) or the Board of Zoning Appeals (BZA) in connection with approval of a special exception, special permit or variance application or rezoning application in a "P" district. Conditions may be imposed to mitigate adverse impacts associated with a development as well as secure compliance with the Zoning Ordinance and/or conformance with the Comprehensive Plan. For example, development conditions may regulate hours of operation, number of employees, height of buildings, and intensity of development.

**DEVELOPMENT PLAN:** A graphic representation which depicts the nature and character of the development proposed for a specific land area; information such as topography, location and size of proposed structures, location of streets trails, utilities, and storm drainage are generally included on a development plan. A development plan is a submission requirement for rezoning to the PRC District. A **GENERALIZED DEVELOPMENT PLAN (GDP)** is a submission requirement for a rezoning application for all conventional zoning districts other than a P District. A development plan submitted in connection with a special exception (SE) or special permit (SP) is generally referred to as an SE or SP plat. A **CONCEPTUAL DEVELOPMENT PLAN (CDP)** is a submission requirement when filing a rezoning application for a P District other than the PRC District; a CDP characterizes in a general way the planned development of the site. A **FINAL DEVELOPMENT PLAN (FDP)** is a submission requirement following the approval of a conceptual development plan and rezoning application for a P District other than the PRC District; an FDP further details the planned development of the site. See Article 16 of the Zoning Ordinance.

**EASEMENT:** A right to or interest in property owned by another for a specific and limited purpose. Examples: access easement, utility easement, construction easement, etc. Easements may be for public or private purposes.

**ENVIRONMENTAL QUALITY CORRIDORS (EQCs):** An open space system designed to link and preserve natural resource areas, provide passive recreation and protect wildlife habitat. The system includes stream valleys, steep slopes and wetlands. For a complete definition of EQCs, refer to the Environmental section of the Policy Plan for Fairfax County contained in Vol. 1 of the Comprehensive Plan.

**ERODIBLE SOILS:** Soils that wash away easily, especially under conditions where stormwater runoff is inadequately controlled. Silt and sediment are washed into nearby streams, thereby degrading water quality.

**FLOODPLAIN:** Those land areas in and adjacent to streams and watercourses subject to periodic flooding; usually associated with environmental quality corridors. The 100 year floodplain drains 70 acres or more of land and has a one percent chance of flood occurrence in any given year.

**FLOOR AREA RATIO (FAR):** An expression of the amount of development intensity (typically, non-residential uses) on a specific parcel of land. FAR is determined by dividing the total square footage of gross floor area of buildings on a site by the total square footage of the site itself.

**FUNCTIONAL CLASSIFICATION:** A system for classifying roads in terms of the character of service that individual facilities are providing or are intended to provide, ranging from travel mobility to land access. Roadway system functional classification elements include Freeways or Expressways which are limited access highways, Other Principal (or Major) Arterials, Minor Arterials, Collector Streets, and Local Streets. Principal arterials are designed to accommodate travel; access to adjacent properties is discouraged. Minor arterials are designed to serve both through traffic and local trips. Collector roads and streets link local streets and properties with the arterial network. Local streets provide access to adjacent properties.

**GEOTECHNICAL REVIEW:** An engineering study of the geology and soils of a site which is submitted to determine the suitability of a site for development and recommends construction techniques designed to overcome development on problem soils, e.g., marine clay soils.

**HYDROCARBON RUNOFF:** Petroleum products, such as motor oil, gasoline or transmission fluid deposited by motor vehicles which are carried into the local storm sewer system with the stormwater runoff, and ultimately, into receiving streams; a major source of non-point source pollution. An oil-grit separator is a common hydrocarbon runoff reduction method.

**IMPERVIOUS SURFACE:** Any land area covered by buildings or paved with a hard surface such that water cannot seep through the surface into the ground.

**INFILL:** Development on vacant or underutilized sites within an area which is already mostly developed in an established development pattern or neighborhood.

**INTENSITY:** The magnitude of development usually measured in such terms as density, floor area ratio, building height, percentage of impervious surface, traffic generation, etc. Intensity is also based on a comparison of the development proposal against environmental constraints or other conditions which determine the carrying capacity of a specific land area to accommodate development without adverse impacts.

**Ldn:** Day night average sound level. It is the twenty-four hour average sound level expressed in A-weighted decibels; the measurement assigns a "penalty" to night time noise to account for night time sensitivity. Ldn represents the total noise environment which varies over time and correlates with the effects of noise on the public health, safety and welfare.

**LEVEL OF SERVICE (LOS):** An estimate of the effectiveness of a roadway to carry traffic, usually under anticipated peak traffic conditions. Level of Service efficiency is generally characterized by the letters A through F, with LOS-A describing free flow traffic conditions and LOS-F describing jammed or grid-lock conditions.

**MARINE CLAY SOILS:** Soils that occur in widespread areas of the County generally east of Interstate 95. Because of the abundance of shrink-swell clays in these soils, they tend to be highly unstable. Many areas of slope failure are evident on natural slopes. Construction on these soils may initiate or accelerate slope movement or slope failure. The shrink-swell soils can cause movement in structures, even in areas of flat topography, from dry to wet seasons resulting in cracked foundations, etc. Also known as slippage soils.

**OPEN SPACE:** That portion of a site which generally is not covered by buildings, streets, or parking areas. Open space is intended to provide light and air; open space may function as a buffer between land uses or for scenic, environmental, or recreational purposes.

**OPEN SPACE EASEMENT:** An easement usually granted to the Board of Supervisors which preserves a tract of land in open space for some public benefit in perpetuity or for a specified period of time. Open space easements may be accepted by the Board of Supervisors, upon request of the land owner, after evaluation under criteria established by the Board. See Open Space Land Act, Code of Virginia, Sections 10.1-1700, et seq.

**P DISTRICT:** A "P" district refers to land that is planned and/or developed as a Planned Development Housing (PDH) District, a Planned Development Commercial (PDC) District or a Planned Residential Community (PRC) District. The PDH, PDC and PRC Zoning Districts are established to encourage innovative and creative design for land development; to provide ample and efficient use of open space; to promote a balance in the mix of land uses, housing types, and intensity of development; and to allow maximum flexibility in order to achieve excellence in physical, social and economic planning and development of a site. Refer to Articles 6 and 16 of the Zoning Ordinance.

**PROFFER:** A written condition, which, when offered voluntarily by a property owner and accepted by the Board of Supervisors in a rezoning action, becomes a legally binding condition which is in addition to the zoning district regulations applicable to a specific property. Proffers are submitted and signed by an owner prior to the Board of Supervisors public hearing on a rezoning application and run with the land. Once accepted by the Board, proffers may be modified only by a proffered condition amendment (PCA) application or other zoning action of the Board and the hearing process required for a rezoning application applies. See Sect. 15.2-2303 (formerly 15.1-491) of the Code of Virginia.

**PUBLIC FACILITIES MANUAL (PFM):** A technical text approved by the Board of Supervisors containing guidelines and standards which govern the design and construction of site improvements incorporating applicable Federal, State and County Codes, specific standards of the Virginia Department of Transportation and the County's Department of Public Works and Environmental Services.

**RESOURCE MANAGEMENT AREA (RMA):** That component of the Chesapeake Bay Preservation Area comprised of lands that, if improperly used or developed, have a potential for causing significant water quality degradation or for diminishing the functional value of the Resource Protection Area. See Fairfax County Code, Ch. 118, Chesapeake Bay Preservation Ordinance.

**RESOURCE PROTECTION AREA (RPA):** That component of the Chesapeake Bay Preservation Area comprised of lands at or near the shoreline or water's edge that have an intrinsic water quality value due to the ecological and biological processes they perform or are sensitive to impacts which may result in significant degradation of the quality of state waters. In their natural condition, these lands provide for the removal, reduction or assimilation of sediments from runoff entering the Bay and its tributaries, and minimize the adverse effects of human activities on state waters and aquatic resources. New development is generally discouraged in an RPA. See Fairfax County Code, Ch. 118, Chesapeake Bay Preservation Ordinance.

**SITE PLAN:** A detailed engineering plan, to scale, depicting the development of a parcel of land and containing all information required by Article 17 of the Zoning Ordinance. Generally, submission of a site plan to DPWES for review and approval is required for all residential, commercial and industrial development except for development of single family detached dwellings. The site plan is required to assure that development complies with the Zoning Ordinance.

**SPECIAL EXCEPTION (SE) / SPECIAL PERMIT (SP):** Uses, which by their nature, can have an undue impact upon or can be incompatible with other land uses and therefore need a site specific review. After review, such uses may be allowed to locate within given designated zoning districts if appropriate and only under special controls, limitations, and regulations. A special exception is subject to public hearings by the Planning Commission and Board of Supervisors with approval by the Board of Supervisors; a special permit requires a public hearing and approval by the Board of Zoning Appeals. Unlike proffers which are voluntary, the Board of Supervisors or BZA may impose reasonable conditions to assure, for example, compatibility and safety. See Article 8, Special Permits and Article 9, Special Exceptions, of the Zoning Ordinance.

**STORMWATER MANAGEMENT:** Engineering practices that are incorporated into the design of a development in order to mitigate or abate adverse water quantity and water quality impacts resulting from development. Stormwater management systems are designed to slow down or retain runoff to re-create, as nearly as possible, the pre-development flow conditions.

**SUBDIVISION PLAT:** The engineering plan for a subdivision of land submitted to DPWES for review and approved pursuant to Chapter 101 of the County Code.

**TRANSPORTATION DEMAND MANAGEMENT (TDM):** Actions taken to reduce single occupant vehicle automobile trips or actions taken to manage or reduce overall transportation demand in a particular area.

**TRANSPORTATION SYSTEM MANAGEMENT (TSM) PROGRAMS:** This term is used to describe a full spectrum of actions that may be applied to improve the overall efficiency of the transportation network. TSM programs usually consist of low-cost alternatives to major capital expenditures, and may include parking management measures, ridesharing programs, flexible or staggered work hours, transit promotion or operational improvements to the existing roadway system. TSM includes Transportation Demand Management (TDM) measures as well as H.O.V. use and other strategies associated with the operation of the street and transit systems.

**URBAN DESIGN:** An aspect of urban or suburban planning that focuses on creating a desirable environment in which to live, work and play. A well-designed urban or suburban environment demonstrates the four generally accepted principles of design: clearly identifiable function for the area; easily understood order; distinctive identity; and visual appeal.

**VACATION:** Refers to vacation of street or road as an action taken by the Board of Supervisors in order to abolish the public's right-of-passage over a road or road right-of-way dedicated by a plat of subdivision. Upon vacation, title to the road right-of-way transfers by operation of law to the owner(s) of the adjacent properties within the subdivision from whence the road/road right-of-way originated.

**VARIANCE:** An application to the Board of Zoning Appeals which seeks relief from a specific zoning regulation such as lot width, building height, or minimum yard requirements, among others. A variance may only be granted by the Board of Zoning Appeals through the public hearing process and upon a finding by the BZA that the variance application meets the required Standards for a Variance set forth in Sect. 18-404 of the Zoning Ordinance.

**WETLANDS:** Land characterized by wetness for a portion of the growing season. Wetlands are generally delineated on the basis of physical characteristics such as soil properties indicative of wetness, the presence of vegetation with an affinity for water, and the presence or evidence of surface wetness or soil saturation. Wetland environments provide water quality improvement benefits and are ecologically valuable. Development activity in wetlands is subject to permitting processes administered by the U.S. Army Corps of Engineers

**TIDAL WETLANDS:** Vegetated and nonvegetated wetlands as defined in Chapter 116 Wetlands Ordinance of the Fairfax County Code: includes tidal shores and tidally influenced embayments, creeks, and tributaries to the Occoquan and Potomac Rivers. Development activity in tidal wetlands may require approval from the Fairfax County Wetlands Board.

#### Abbreviations Commonly Used in Staff Reports

A&F	Agricultural & Forestal District	PDH	Planned Development Housing
ADU	Affordable Dwelling Unit	PFM	Public Facilities Manual
ARB	Architectural Review Board	PRC	Planned Residential Community
BMP	Best Management Practices	RC	Residential-Conservation
BOS	Board of Supervisors	RE	Residential Estate
BZA	Board of Zoning Appeals	RMA	Resource Management Area
COG	Council of Governments	RPA	Resource Protection Area
CBC	Community Business Center	RUP	Residential Use Permit
CDP	Conceptual Development Plan	RZ	Rezoning
CRD	Commercial Revitalization District	SE	Special Exception
DOT	Department of Transportation	SEA	Special Exception Amendment
DP	Development Plan	SP	Special Permit
DPWES	Department of Public Works and Environmental Services	TDM	Transportation Demand Management
DPZ	Department of Planning and Zoning	TMA	Transportation Management Association
DU/AC	Dwelling Units Per Acre	TSA	Transit Station Area
EQC	Environmental Quality Corridor	TSM	Transportation System Management
FAR	Floor Area Ratio	UP & DD	Utilities Planning and Design Division, DPWES
FDP	Final Development Plan	VC	Variance
GDP	Generalized Development Plan	VDOT	Virginia Dept. of Transportation
GFA	Gross Floor Area	VPD	Vehicles Per Day
HC	Highway Corridor Overlay District	VPH	Vehicles per Hour
HCD	Housing and Community Development	WMATA	Washington Metropolitan Area Transit Authority
LOS	Level of Service	WS	Water Supply Protection Overlay District
Non-RUP	Non-Residential Use Permit	ZAD	Zoning Administration Division, DPZ
OSDS	Office of Site Development Services, DPWES	ZED	Zoning Evaluation Division, DPZ
PCA	Proffered Condition Amendment	ZPRB	Zoning Permit Review Branch
PD	Planning Division		
PDC	Planned Development Commercial		