

INOVA LORTON HEALTHPLEX

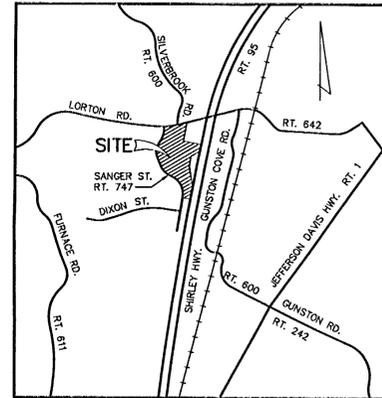
A Service of Inova Mount Vernon Hospital

Mount Vernon District Fairfax County, Virginia

Generalized Development Plan

RZ 2005-MV-029

Application No. 0005-000008 Staff: [Signature]
 APPROVED DEVELOPMENT PLAN
 (DP) (GDP) (GDP) (FDP)
 SEE PROFESSIONAL DATED 04-18-06
 Date of (GOS) (PC) approval 4/18/06
 Sheet 1 of 5



VICINITY MAP
 SCALE : 1" = 2,000'

Applicant:

Inova Health Care Services
 8110 Gatehouse Rd., Suite 200
 Falls Church, VA 22042

Sheet Index

1. COVER SHEET
2. NOTES AND TABULATION / ELEVATIONS
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5. STORMWATER MANAGEMENT

Inova Lorton HealthPlex
 A Service of Inova Mount Vernon Hospital

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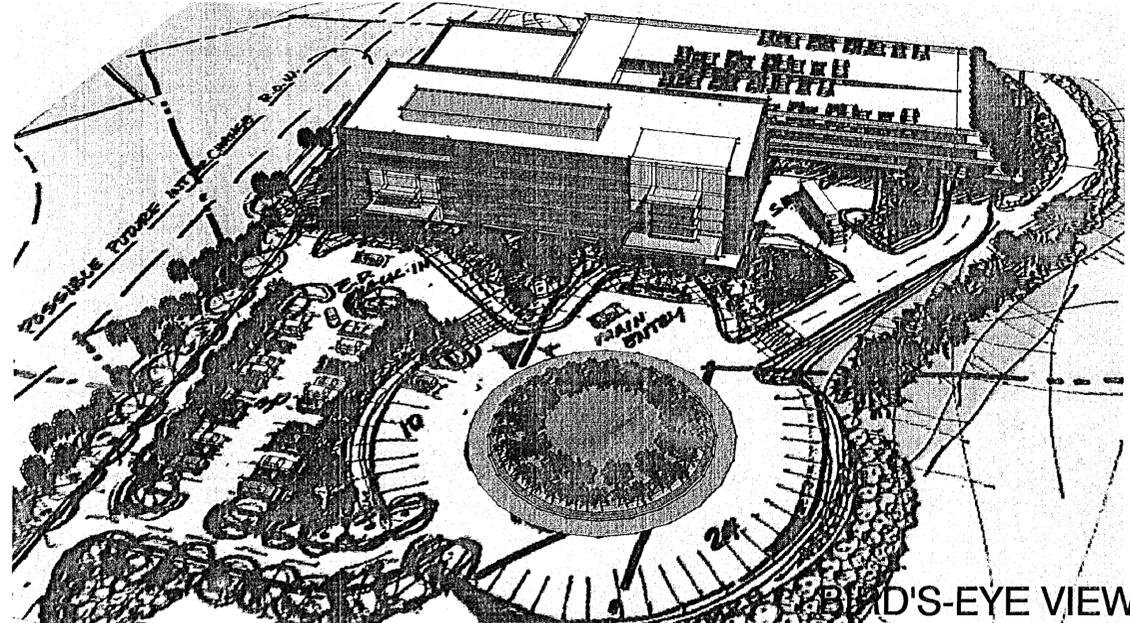
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 Department of Planning & Zoning
 APR 19 2006
 Zoning Evaluation Division

Rev. April 18, 2006
 Rev. April 6, 2006
 Rev. March 31, 2006
 Rev. March 10, 2006
 Rev. January 25, 2006
 Rev. December 7, 2005
SEPTEMBER 28, 2005

M-10564



SOUTH ELEVATION



BIRD'S-EYE VIEW

THE PERSPECTIVE AND ELEVATION PRESENTED ON THIS SHEET ARE PRESENTED TO REPRESENT THE GENERAL CHARACTER AND MASS OF THE PROPOSED DEVELOPMENT PROGRAM. THEY ARE NOT TO BE CONSIDERED FINAL. THEY ARE SUBJECT TO REFINEMENT WITH FINAL ENGINEERING AND ARCHITECTURE. REFER TO THE PROPOSED DEVELOPMENT PROGRAM ON SHEET 3 FOR A MORE ACCURATE REPRESENTATION OF THE CIRCULAR DROP-OFF AND PARKING LOT LAYOUT IN THE FRONT OF THE PROPOSED HEALTHPLEX OFFICE BUILDING.

NOTES:

- THE PROPERTY THAT IS THE SUBJECT OF THIS GENERALIZED DEVELOPMENT PLAN (GDP) IS IDENTIFIED ON THE FAIRFAX COUNTY ZONING MAP AS 107-4 (11) 75A, 77, 78, 79, 80, 81 AND 82. THE PROPERTY IS CURRENTLY ZONED R-1 AND C-8. THE SITE IS VACANT. IT CONTAINS 14.55 ACRES.
 - THE GDP ACCOMPANIES A REZONING APPLICATION THAT HAS BEEN FILED TO ESTABLISH A HEALTHPLEX (OFFICE) USE ON THE SUBJECT PROPERTY IN ACCORDANCE WITH THE REGULATIONS PRESCRIBED FOR THE C-3 DISTRICT.
 - THE BOUNDARY INFORMATION SHOWN ON THE GRAPHIC HAS BEEN PREPARED BY DEWBERRY. IT IS FROM A RECENT FIELD SURVEY.
 - THE TOPOGRAPHY SHOWN ON THE GRAPHIC IS AT A CONTOUR INTERVAL OF TWO (2) FEET. IT IS FROM A PLAT PREPARED BY BOWMAN CONSULTING GROUP IN JULY 2003. IT IS ASSUMED TO BE FROM A FIELD SURVEY. DEWBERRY IS CURRENTLY VALIDATING THE TOPOGRAPHY BY FIELD SURVEY.
 - THE PROPOSED DEVELOPMENT PROGRAM WILL BE SERVED BY PUBLIC WATER AND SEWER THAT WILL BE EXTENDED TO THE SITE.
 - THE MINIMUM YARD REQUIREMENTS SET FORTH IN THE ZONING ORDINANCE FOR THE C-3 DISTRICT ARE AS FOLLOWS:
FRONT YARD: CONTROLLED BY A 45° ANGLE OF BULK PLANE, BUT NOT LESS THAN 40 FEET.
SIDE YARD: NO REQUIREMENT.
REAR YARD: CONTROLLED BY A 20° ANGLE OF BULK PLANE, BUT NOT LESS THAN 25 FEET.
- IN ADDITION TO THE MINIMUM YARD REQUIREMENTS PRESCRIBED FOR THE C-3 DISTRICT, THERE IS A 75 FOOT MINIMUM DISTANCE REQUIREMENT FOR COMMERCIAL BUILDINGS FROM THE RIGHT-OF-WAY OF I-95. THIS REQUIREMENT IS SET FORTH IN SECT. 2-414 OF THE ZONING ORDINANCE.
- LANDSCAPING AND SCREENING WILL BE PROVIDED IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN ARTICLE 13 OF THE ZONING ORDINANCE AND IN ACCORDANCE WITH THE REPRESENTATIONS ON THE GRAPHIC.

IT IS TO BE NOTED, THERE IS NO TRANSITIONAL SCREENING YARD OR BARRIER REQUIREMENT ALONG THE NORTHERN OR EASTERN BOUNDARIES.

THERE IS A TRANSITIONAL SCREENING YARD AND BARRIER REQUIREMENT ALONG THE SOUTHERN PROPERTY LINE. REQUEST IS HEREBY MADE FOR A WAIVER OF THIS REQUIREMENT IN FAVOR OF THE EXISTING VEGETATION REPRESENTED ON THE GRAPHIC IN ACCORDANCE WITH THE PROVISION SET FORTH IN PAR. 3 OF SECT. 13-304 OF THE ZONING ORDINANCE.

THERE IS A TRANSITIONAL SCREENING YARD AND BARRIER REQUIREMENT ALONG THE WESTERN PROPERTY LINE ADJACENT TO SANGER STREET. REQUEST IS HEREBY MADE FOR A MODIFICATION OF THE TRANSITIONAL SCREENING YARD AND WAIVER OF THE BARRIER REQUIREMENT IN FAVOR OF THE LANDSCAPING REPRESENTED ON THE GRAPHIC IN ACCORDANCE WITH THE PROVISION SET FORTH IN PAR. 3 OF SECT. 13-304 OF THE ZONING ORDINANCE.
- PARKING AND LOADING SPACES WILL BE PROVIDED FOR THE PROPOSED HEALTHPLEX OFFICE USE IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN ARTICLE 11 OF THE ZONING ORDINANCE AND THE REPRESENTATIONS IN THE TABULATION AND ON THE GRAPHIC.

THE APPLICANT RESERVES THE RIGHT TO NOT CONSTRUCT ALL OF THE PARKING SPACES REPRESENTED IN THE TABULATION OR ON THE GRAPHIC WITH THE UNDERSTANDING THAT THE MINIMUM NUMBER OF SPACES PROVIDED WILL SATISFY THE REQUIREMENTS SET FORTH IN ARTICLE 11.

THE APPLICANT FURTHER RESERVES THE RIGHT TO CONSTRUCT MORE PARKING SPACES THAN ARE REPRESENTED ON THE GRAPHIC OR ON THE TABULATION WITH THE UNDERSTANDING THAT THE TOTAL OPEN SPACE PROPOSED FOR THE SITE AS REPRESENTED IN THE TABULATION WILL NOT BE DIMINISHED. IN KEEPING WITH THIS UNDERSTANDING, THE APPLICANT RESERVES THE RIGHT TO CONSTRUCT ADDITIONAL PARKING SPACES BELOW GRADE WITHIN THE FOOTPRINTS OF THE PROPOSED HEALTHPLEX OFFICE BUILDING, BUILDING ADDITION AND PARKING STRUCTURE.

CURRENT PLANS ARE TO CONSTRUCT FOUR (4) LEVELS IN THE PARKING STRUCTURE WITH THE INITIAL FIRST PHASE CONSTRUCTION OF THE HEALTHPLEX OFFICE; HOWEVER, THE APPLICANT RESERVES THE RIGHT TO CONSTRUCT ALL FIVE (5) LEVELS OF THE PARKING STRUCTURE WITH THE FIRST PHASE CONSTRUCTION.

IN ADDITION, THE APPLICANT RESERVES THE RIGHT TO REDUCE THE TOTAL NUMBER OF PARKING SPACES ON THE SITE WITHOUT A GDPA OR ADMINISTRATIVE INTERPRETATION TO ALLOW FOR MINOR ENGINEERING ISSUES SUCH AS, BUT NOT LIMITED TO, RESTRIPING PARKING LOTS, STORAGE, CONSTRUCTION OF TRAILERS, STORAGE AND TOILET PORTS, ETC. IN NO EVENT, HOWEVER, WILL THE TOTAL NUMBER OF PARKING SPACES ON THE SITE BE REDUCED TO LESS THAN THAT NUMBER THAT IS REQUIRED FOR THE EXISTING USE ON THE SITE AT THAT POINT IN TIME. FURTHERMORE, IT IS UNDERSTOOD THAT THE NUMBER OF PARKING SPACES MAY BE REDUCED TO ACCOMMODATE FUTURE EXPANSION/ADDITIONS TO THE USE(S) ON THE SITE, AS MAY BE APPROVED WITH A FUTURE GDPA APPLICATION, AS LONG AS IT CAN BE DEMONSTRATED THAT ADEQUATE PARKING IS PROVIDED.

GIVEN THE NATURE OF THE USE, THE APPLICANT RESERVES THE RIGHT TO PROVIDE MORE ACCESSIBLE PARKING SPACES THAN THAT NUMBER REQUIRED BY APPLICABLE ORDINANCE.

GIVEN THE NATURE OF THE USE AND ITS DEMAND FOR A HIGH PARKING STANDARD, THE APPLICANT RESERVES THE RIGHT TO MAXIMIZE THE PARKING SPACE EFFICIENCY IN THE PROPOSED PARKING STRUCTURE AND PROVIDE PLANTERS ON THE WESTERN FACE OF THE PARKING STRUCTURE IN LIEU OF THE STEPPED-BACK PLANTERS REPRESENTED ON THE GRAPHIC.

LASTLY, THE APPLICANT HEREBY REQUESTS THE APPROVAL OF A REDUCTION OF THE NUMBER OF LOADING SPACES PROVIDED FOR THE PROPOSED BUILDING. AS REPRESENTED IN THE TABULATION, THE PROVISIONS SET FORTH IN PART 2 OF ARTICLE 11 OF THE ZONING ORDINANCE SUGGEST A REQUIREMENT FOR FIVE (5) LOADING SPACES. EXPERIENCE WITH OTHER SIMILAR-SIZED OFFICE BUILDINGS SUGGEST A DEMAND FOR NO MORE THAN THREE (3) LOADING SPACES.

- THERE IS NO FLOODPLAIN DESIGNATED BY THE FEDERAL INSURANCE ADMINISTRATION, UNITED STATES GEOLOGICAL SURVEY OR FAIRFAX COUNTY, NO ENVIRONMENTAL QUALITY CORRIDOR (EQC) OR NO RESOURCE PROTECTION AREA (RPA) LOCATED ON THE SUBJECT PROPERTY.
- THERE IS AN EXISTING 30 FOOT WIDE ALEXANDRIA WATER COMPANY EASEMENT THAT TRAVERSES THE SUBJECT PROPERTY AS REPRESENTED ON THE GRAPHIC. IN ADDITION, THERE IS AN EXISTING VIRGINIA POWER PUBLIC SERVICE COMPANY EASEMENT THAT APPROXIMATES A TWENTY-FIVE (25) FOOT WIDTH THAT IS ALSO REPRESENTED ON THE GRAPHIC. TO THE BEST OF OUR KNOWLEDGE, THESE ARE THE ONLY EXISTING UTILITY EASEMENTS THAT HAVE A WIDTH OF TWENTY-FIVE (25) FEET OR MORE. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO OTHER MAJOR UNDERGROUND UTILITIES LOCATED ON THE PROPERTY.
- A STATEMENT CONFIRMING THE OWNERSHIP OF THE PROPERTY AND THE APPLICANT'S INTEREST IS PROVIDED SEPARATELY.
- THE COMPREHENSIVE PLAN RECOMMENDS A BICYCLE TRAIL ON THE NORTHERN SIDE OF LORTON ROAD IN THE VICINITY OF THE SUBJECT PROPERTY.
- STORMWATER MANAGEMENT (SWM) AND BEST MANAGEMENT PRACTICES (BMPs) WILL BE PROVIDED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS SET FORTH IN THE FACILITIES MANUAL, CHAPTER 118 OF THE CODE OF THE COUNTY OF FAIRFAX AND THE CHESAPEAKE BAY PRESERVATION ORDINANCE. THE PROPOSED SWM AND BMP FACILITIES ARE REPRESENTED ON THE GRAPHIC AND ARE DISCUSSED IN GREATER DETAIL ON SHEET 4. THEY ARE SUBJECT TO REFINEMENT WITH FINAL ENGINEERING AND DESIGN.
- IT IS TO BE UNDERSTOOD THAT THE FLOOR AREA RATIO THAT IS REPRESENTED IN THE TABULATION IS BASED ON THE CURRENT LAND AREA OF THE SUBJECT PROPERTY. IT IS TO BE FURTHER UNDERSTOOD THAT THE FLOOR AREA RATIO RELATED TO ANY FUTURE LAND DEDICATION MAY BE RESERVED FOR THE DEVELOPMENT OF THE SUBJECT PROPERTY IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN PAR. 4 OF SECT. 2-308 OF THE ZONING ORDINANCE. IF THE DENSITY/INTENSITY CREDIT IS RESERVED, ULTIMATE DEVELOPMENT OF THE SUBJECT PROPERTY AS MAY BE APPROVED IN THE FUTURE WILL BE BASED ON A FLOOR AREA RATIO AND THE EXISTING LAND AREA OF 14.55 ACRES.
- THE DEVELOPMENT OF THE PROPOSED HEALTHPLEX OFFICE BUILDING AND RELATED ACCESSORY PARKING MAY OCCUR IN PHASES. THE FIRST PHASE OF THE CONSTRUCTION IS CURRENTLY PLANNED TO COMMENCE AS SOON AS REQUISITE PLANS AND PERMITS ARE APPROVED.
- THE POSSIBLE FUTURE EXPANSION OF THE PROPOSED HEALTHPLEX OFFICE BUILDING WILL BE ACCOMMODATED EITHER IN WHOLE OR IN PART IN THE TWO (2) STORY ADDITION OR IN THE PARTIAL FIFTH STORY AS REPRESENTED ON THE GRAPHIC WITH THE UNDERSTANDING THAT THE TOTAL GROSS FLOOR AREA FOR THE BUILDING WILL NOT EXCEED 128,600 SQUARE FEET.
- THE FLOOR AREA REPRESENTED IN THE TABULATION IS GROSS FLOOR AREA AS DEFINED IN THE ZONING ORDINANCE. IT IS UNDERSTOOD THAT THE PROPOSED BUILDING OR A PORTION THEREOF MAY HAVE CELLAR SPACE WHICH SPACE WILL BE CALCULATED FOR OFF-STREET PARKING REQUIREMENTS IN ACCORDANCE WITH THE PROVISION SET FORTH IN PAR. 25 OF SECT. 11-102 OF THE ZONING ORDINANCE.
- THE FOOTPRINT AND LOCATION OF THE BUILDING REPRESENTED ON THE GRAPHIC ARE PRELIMINARY AND SUBJECT TO MINOR MODIFICATION WITH FINAL ENGINEERING AND ARCHITECTURAL DESIGN IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN PAR. 5 OF SECT. 18-204 OF THE ZONING ORDINANCE.
- THE TOTAL GROSS FLOOR AREA AND MAXIMUM BUILDING HEIGHT PRESENTED IN THE TABULATION ARE TO BE CONSIDERED MAXIMUMS. THE DIMENSIONS TO THE PERIPHERAL LOT LINES PRESENTED ON THE GRAPHIC ARE SUBJECT TO MINOR MODIFICATION IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN PAR. 5 OF SECT. 18-204 OF THE ZONING ORDINANCE.
- IT IS UNDERSTOOD THAT ADDITIONAL SITE FEATURES SUCH AS GAZEBOS, FLAGPOLES, TRELLISES, SIGNS, SIDEWALKS/TRAILS, PASSIVE AND ACTIVE RECREATION FACILITIES, WALLS, FENCES, LIGHT STANDARDS AND/OR UTILITY AND MAINTENANCE STRUCTURES NOT REPRESENTED ON THE GRAPHIC MAY BE PROVIDED.
- ALL SIGNS WILL BE PROVIDED IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN ARTICLE 12 OF THE ZONING ORDINANCE. ALL LIGHT STANDARDS WILL BE SHIELDED AND LOCATED IN SUCH A MANNER AS TO REDUCE GLARE ON ADJACENT PROPERTIES IN ACCORDANCE WITH THE STANDARDS SET FORTH IN ARTICLE 14 OF THE ZONING ORDINANCE. IT IS ALSO UNDERSTOOD THAT MOBILE AND LAND BASED TELECOMMUNICATION FACILITIES MAY BE PROVIDED ON SITE IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN SECT. 2-514 OF THE ZONING ORDINANCE.
- TO THE BEST OF OUR KNOWLEDGE THE PROPOSED DEVELOPMENT OF THE SUBJECT PROPERTY CONFORMS TO ALL CURRENT APPLICABLE LAND DEVELOPMENT ORDINANCES, REGULATIONS AND ADOPTED STANDARDS EXCEPT AS QUALIFIED ABOVE.

MINIMUM STORMWATER INFORMATION FOR REZONING, SPECIAL EXCEPTION, SPECIAL PERMIT AND DEVELOPMENT PLAN APPLICATIONS

The following information is required to be shown or provided in all zoning applications, or a waiver request of the submission requirement with justification shall be attached. Note: Waivers will be acted upon separately. Failure to adequately address the required submission information may result in a delay in processing this application.

This information is required under the following Zoning Ordinance paragraphs:
Special Permits (9-011.23 & 24) Special Exceptions (9-011.23 & 24)
Cluster Subdivision (9-615.1G & 1N) Commercial Revitalization Districts (9-622.2A (12) & 14)
Development Plans PRC District (16-302.3 & 4L) PRC Plan (16-303.1E & 1O)
FDPP Districts (except PRC) (16-502.1F & 1Q) Amendments (18-202.10F & 10J)

- Plat is at a minimum scale of 1" = 50' (unless it is depicted on one sheet with a minimum scale of 1" = 100').
- A graphic depicting the stormwater management facility(ies) and limits of clearing and grading accommodate the stormwater management facility(ies), storm drainage pipe systems and outlet protection, pond spillways, access roads, site outfalls, energy dissipation devices, and stream stabilization measures as shown on Sheet 3.
- Provide:

Facility Name/ Type & No.	On-site area served (acres)	Off-site area served (acres)	Drainage area (sf)	Footprint area (sf)	Storage Volume (cf)	If pond, dam height (ft)
Dry Pond	4.3	0	4.3	11,000	20,000	6
(e.g. dry pond, infiltration trench, underground vault, etc.)						
Bioretention area	2.42	0	2.42	4,200		
Totals						
- Onsite drainage channels, outfalls and pipe systems are shown on Sheet 3. Pond inlet and outlet pipe systems are shown on Sheet 3.
- Maintenance access (road) to stormwater management facility(ies) are shown on Sheet 3. Type of maintenance access road surface noted on the plat is asphalt (e.g. asphalt, geoblock, gravel, etc.).
- Landscaping and tree preservation shown in and near the stormwater management facility is shown on Sheet 3.
- A stormwater management narrative which contains a description of how detention and best management practice requirements will be met is provided on Sheet 5.
- A description of the existing conditions of each numbered site outfall extended downstream from the site to a point which is at least 100 times the site area or which has a drainage area of at least one square mile (640 acres) is provided on Sheet 4.5.
- A description of how the outfall requirements, including contributing drainage areas of the Public Facilities Manual will be satisfied is provided on Sheet 4.5.
- Existing topography with maximum contour intervals of two (2) feet and a note as to whether it is an air survey or field run is provided on Sheets 2,3.
- A submission waiver is requested for N/A.
- Stormwater management is not required because N/A.

Industry Letter 05-03 dated 02/02/05

TABULATION:

EXISTING ZONING	R-1 and C-8
PROPOSED ZONING	C-3
LAND AREA (633,798 SF)	14.55 AC
GROSS FLOOR AREA PERMITTED	633,798± SF
GROSS FLOOR AREA PROPOSED	128,600± SF
INITIAL BUILDING	107,000± SF
POSSIBLE FUTURE EXPANSION	21,600± SF
FLOOR AREA RATIO PERMITTED	1.00
FLOOR AREA RATIO PROPOSED	0.17
INITIAL BUILDING AND POSSIBLE FUTURE EXPANSION	0.20
PROPOSED MAXIMUM BUILDING HEIGHT (5 STORIES)	70 FT ¹
PARKING SPACES REQUIRED (3 SPACES PER 1,000 SF GFA)	
INITIAL BUILDING	321
INITIAL BUILDING AND POSSIBLE FUTURE EXPANSION	386
PARKING SPACES PROPOSED	
INITIAL BUILDING	461 ¹
INITIAL BUILDING AND POSSIBLE FUTURE EXPANSION	557 ¹
(384/480± STRUCTURE PARKING SPACES, 77± SURFACE PARKING SPACES)	
LOADING SPACES REQUIRED	5
LOADING SPACES PROPOSED	3 ²
OPEN SPACE REQUIRED (15%)	2.18 AC
OPEN SPACE PROPOSED (63% OF NET LAND AREA)	8.10 AC ³

¹ SEE NOTE 17.
² SEE NOTE 8.
³ NET LAND AREA IS THAT LAND AREA AFTER DEDICATION OF RIGHT-OF-WAY FOR THE PROPOSED I-95 INTERCHANGE IMPROVEMENT. IF RIGHT-OF-WAY IS NOT DEDICATED FOR THE PROPOSED IMPROVEMENT, THE OPEN SPACE WILL EQUATE TO 9.87 ACRES OR 68%.



Dewberry & Davis LLC
9403 ARLINGTON BLVD.
FAIRFAX, VA 22031
PHONE: 703.849.0100
FAX: 703.849.0519
www.dewberry.com

Inova Lorton HealthPlex
A Service of Inova Mount Vernon Hospital
GENERALIZED DEVELOPMENT PLAN
RZ 2005-MV-029
MOUNT VERNON DISTRICT
FAIRFAX COUNTY, VIRGINIA

Application No. 05-03-0002-01 Staff
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (ODP) (FDP)
SEE PROFESSIONAL'S DATED 5-6-06
Date of (SOS) (PC) approval
Sheet 2 of 5



KEY PLAN

SCALE

No.	DATE	BY	Description
6	04.18.06	JMC	
5	04.06.06	JMC	
4	03.31.06	JMC	
3	03.10.06	JMC	
2	01.25.06	JMC	
1	12.07.05	JMC	

DRAWN BY: JTB
APPROVED BY: PGY
CHECKED BY: PGY
DATE: SEPTEMBER 28, 2005
TITLE:

NOTES & TABULATION / ELEVATIONS

PROJECT NO. M - 10564

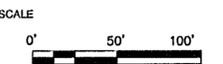
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Inova Lorton HealthPlex
 A Service of Inova Mount Vernon Hospital
GENERALIZED DEVELOPMENT PLAN
 RZ 2005-MV-029

MOUNT VERNON DISTRICT
 FAIRFAX COUNTY, VIRGINIA



KEY PLAN



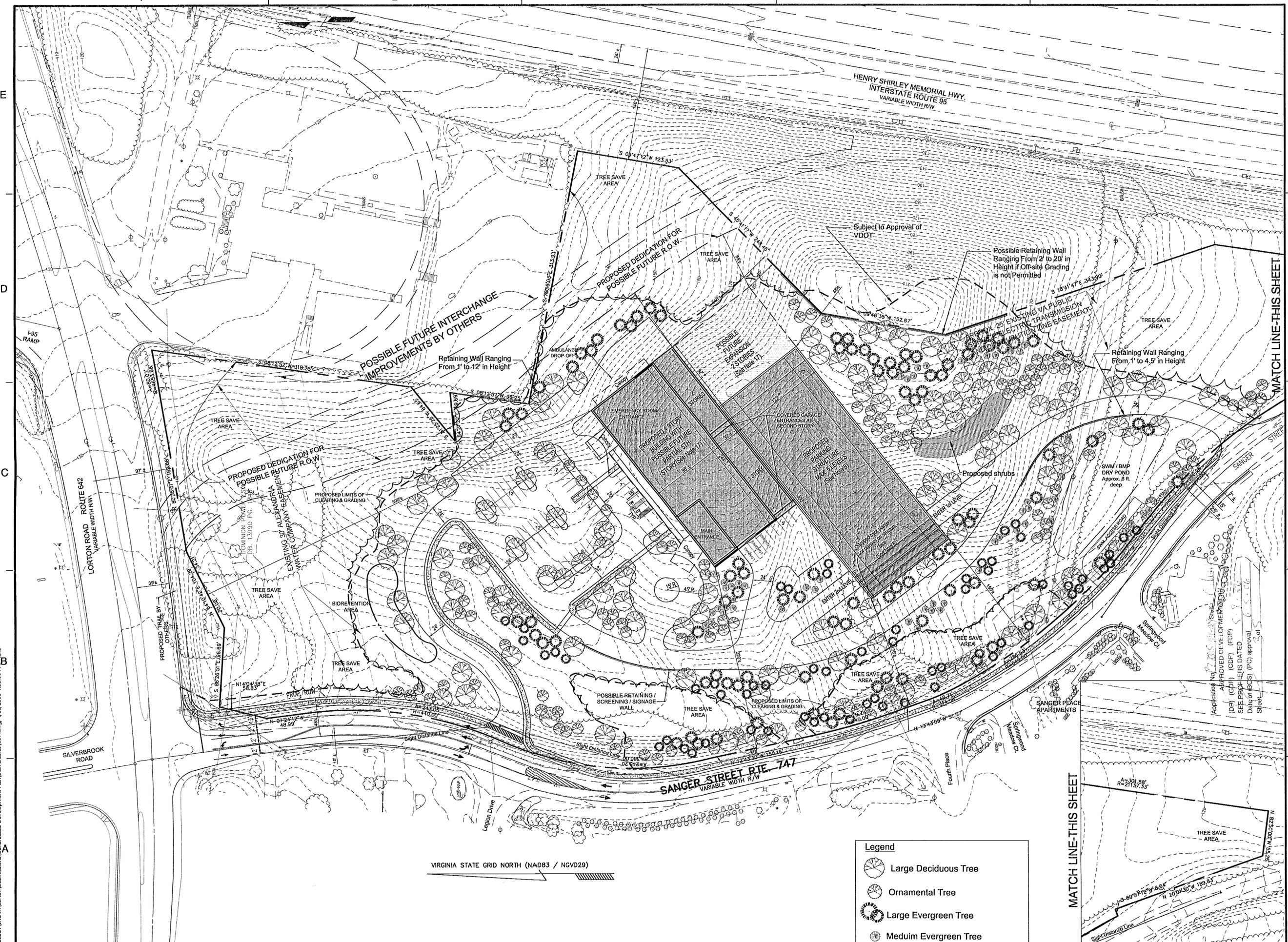
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1	12.07.05	JMC	

REVISIONS

DRAWN BY: JTB
 APPROVED BY: PGY
 CHECKED BY: PGY
 DATE: SEPTEMBER 28, 2005

INOVA LORTON HEALTHPLEX
 GENERALIZED DEVELOPMENT PLAN
 RZ 2005-MV-029

PROJECT NO. M - 10564



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SWM NARRATIVE

EXISTING CONDITIONS:

THE 13.95 ACRE SITE IS HEAVILY WOODED WITH MATURE TREES AND NO STANDING STRUCTURES. THE HIGH POINT OF THE SITE IS LOCATED ON THE EASTERN PROPERTY LINE AND SLOPES STEEPLY IN ALL DIRECTIONS FROM THAT POINT. IN EXISTING CONDITIONS, THE MAJORITY OF THE SITE DRAINS TO SANGER STREET WHERE THE WATER IS PICKED UP IN THREE DIFFERENT EXISTING STORM SEWER SYSTEMS AND DITCHES THAT EVENTUALLY EMPTY INTO THE GILES RUN 100 YEAR MAJOR FLOODPLAIN. THE REMAINDER OF THE SITE, EG, SHEET FLOWS TO THE NORTH OF THE SITE.

PROPOSED CONDITIONS:

THE SITE IS BROKEN DOWN INTO 5 DIFFERENT OUTFALLS FOR THE PURPOSES OF THIS SWM ANALYSIS:

OUTFALL #1: FOR THIS OUTFALL, THE RUNOFF FROM THE SITE WILL SHEET FLOW TO THE NORTHWEST CORNER OF THE SITE AT A RATE BELOW THAT OF THE 2 YEAR AND 10 YEAR PEAK PRE-DEVELOPMENT LEVELS. THE AREA DRAINING TO THIS OUTFALL WILL BE FOR THE MOST PART, UNDISTURBED BY THE PROPOSED DEVELOPMENT.

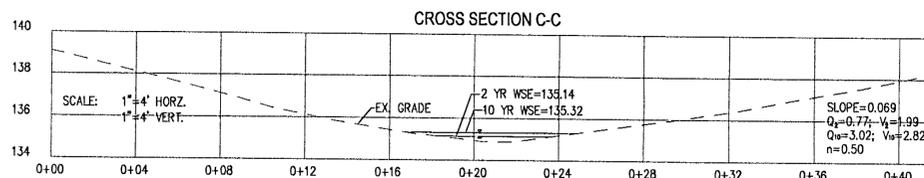
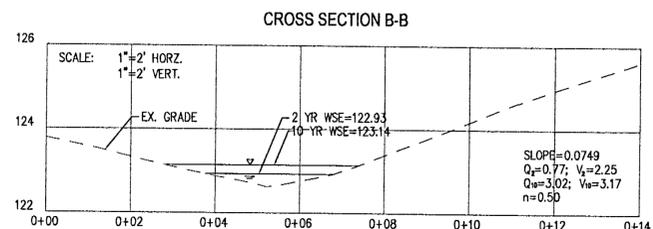
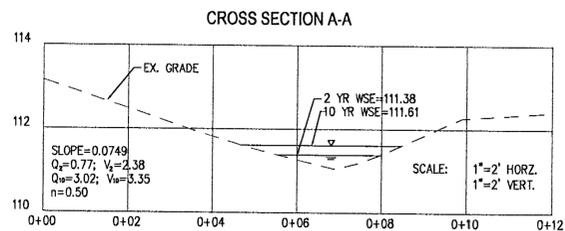
OUTFALL #2: OUTFALL #2 CONSISTS OF THE SMALL AMOUNT OF RUNOFF DRAINING TO LORTON ROAD. THIS AREA WILL BE COMPLETELY UNDISTURBED WITH THE PROPOSED DEVELOPMENT AND THERE WILL BE NO INCREASE IN THE RUNOFF AS SHOWN IN THE COMPUTATIONS ON THIS SHEET.

OUTFALL #3: THE RUNOFF FROM AREA P3 WILL SHEET FLOW TO THE SOUTH OF THE SITE AT A RATE BELOW THAT OF THE 2 YEAR AND 10 YEAR PEAK PRE-DEVELOPMENT LEVELS. THIS SHEET FLOW DRAINS TO AN EXISTING 18" CULVERT WHICH RUNS UNDER SANGER STREET THEN TRAVELS ABOUT 20' TO AN EXISTING 21" CULVERT, AND EXITS TO A DEFINED DITCH WHICH CARRIES THE FLOW APPROXIMATELY 750 FEET TO THE GILES RUN 100 YEAR MAJOR FLOODPLAIN.

OUTFALL #4: DUE TO CONSTRUCTION IN AREA P4, THE FLOW IS REROUTED THROUGH STORM SEWERS TO A PROPOSED BIORETENTION/INFILTRATION AREA WHERE IT WILL BE NATURALLY FILTERED INTO THE GROUND. LARGER STORMS WHICH MAY CAUSE OVERFLOW FROM THE TRENCH WILL BE PIPED TO OUTFALL #4. AREA P7 WILL SHEET FLOW DIRECTLY TO OUTFALL #4. THE TOTAL RUNOFF WILL FLOW SOUTH TO AN EXISTING 18" CULVERT THAT RUNS UNDER SANGER STREET AND EMPTIES INTO A WELL DEFINED CHANNEL AND TRAVELS APPROXIMATELY 650 FEET IN THE OUTFALL DITCH TO THE GILES RUN 100 YEAR MAJOR FLOODPLAIN. WE ARE REDUCING THE 2-YEAR FLOW IN THIS DITCH CONSIDERABLY TO ENSURE THE ADEQUACY OF THE DOWNSTREAM CHANNEL.

OUTFALL #5: BECAUSE A LARGER AREA WILL BE DRAINING TO OUTFALL #5, A SWM DRY POND DETENTION FACILITY IS PROPOSED TO REDUCE THE 10 YEAR PEAK FLOW TO A LEVEL AT OR BELOW THE 10 YEAR PEAK PRE-DEVELOPMENT LEVEL. THE REDUCED FLOW (FROM AREA P5) DUE TO THE POND AS WELL AS THE 1.15 ACRES OF SHEET FLOW (AREA P8) IS ROUTED TO AN EXISTING STORM SEWER SYSTEM. PER APPROVED FAIRFAX COUNTY PLAN #9101-SP-01 THE EXISTING STORM SEWER SYSTEM WAS SIZED TO CARRY 5.2 ACRES YIELDING A FLOW OF 13.2 CFS. ALONG WITH THE POND'S REDUCTION IN RUNOFF, THE 10 YR POST DEVELOPMENT FLOW TO THE EXISTING STORM SEWER SYSTEM IS 5.61 CFS WHICH IS BELOW THE 13.2 CFS THE SYSTEM WAS DESIGNED TO CARRY. THE EXISTING STORM SEWER SYSTEM CARRIES THE FLOW APPROXIMATELY 650 FEET TO THE GILES RUN 100 YEAR MAJOR FLOODPLAIN.

THE REMAINING 0.55 ONSITE ACRES, P8, REMAINS AS SHEET FLOW OFF OF THE SITE. THUS, THIS SHEET FLOW IS DECREASED IN QUANTITY AND UNCHANGED IN DIRECTION.



Application No. 2005-01-005
 APPROVED DEVELOPMENT PLAN
 (DP) (GUP) (CDF) (FDP)
 SEE PROFESSIONAL DATED 08-18-06
 Date of (BOS) (PC) approval 8/18/06
 Sheet 4 of 5

See Related Stormwater Information
 Form on Sheet 2

**** NOTE **** Get cross section and outfall location on Sheet 5

Pre and Post-Outfall Calculations

OUTFALL #1					
PRE-DEVELOPMENT					
2 YEAR EVENT					
AREA DESIGNATION	AREA (AC)	C FACTOR	INTENSITY	Q (CFS)	
X1	3.42	0.2	5.45	3.73	
TOTAL				3.73	
10 YEAR EVENT					
AREA DESIGNATION	AREA (AC)	C FACTOR	INTENSITY	Q (CFS)	
X1	3.42	0.2	7.27	4.97	
TOTAL				4.97	
POST-DEVELOPMENT					
2 YEAR EVENT					
AREA DESIGNATION	AREA (AC)	C FACTOR	INTENSITY	Q (CFS)	
P1	2.49	0.20	5.45	2.71	
TOTAL				2.487117	
10 YEAR EVENT					
AREA DESIGNATION	AREA (AC)	C FACTOR	INTENSITY	Q (CFS)	
P1	2.49	0.2	7.27	3.62	
TOTAL				2.487117	

OUTFALL #2					
PRE-DEVELOPMENT					
2 YEAR EVENT					
AREA DESIGNATION	AREA (AC)	C FACTOR	INTENSITY	Q (CFS)	
X2	0.29	0.2	5.45	0.32	
TOTAL				0.32	
10 YEAR EVENT					
AREA DESIGNATION	AREA (AC)	C FACTOR	INTENSITY	Q (CFS)	
X2	0.29	0.2	7.27	0.42	
TOTAL				0.42	
POST-DEVELOPMENT					
2 YEAR EVENT					
AREA DESIGNATION	AREA (AC)	C FACTOR	INTENSITY	Q (CFS)	
P2	0.29	0.20	5.45	0.32	
TOTAL				0.29	
10 YEAR EVENT					
AREA DESIGNATION	AREA (AC)	C FACTOR	INTENSITY	Q (CFS)	
P2	0.29	0.2	7.27	0.42	
TOTAL				0.29	

OUTFALL #3					
PRE-DEVELOPMENT					
2 YEAR EVENT					
AREA DESIGNATION	AREA (AC)	C FACTOR	INTENSITY	Q (CFS)	
X3	3.19	0.2	5.45	3.48	
TOTAL				3.48	
10 YEAR EVENT					
AREA DESIGNATION	AREA (AC)	C FACTOR	INTENSITY	Q (CFS)	
X3	3.19	0.2	7.27	4.64	
TOTAL				4.64	
POST-DEVELOPMENT					
2 YEAR EVENT					
AREA DESIGNATION	AREA (AC)	C FACTOR	INTENSITY	Q (CFS)	
P3	2.15	0.29	5.45	3.40	
TOTAL				2.147609	
10 YEAR EVENT					
AREA DESIGNATION	AREA (AC)	C FACTOR	INTENSITY	Q (CFS)	
P3	2.15	0.290175	7.27	4.53	
TOTAL				2.147609	

OUTFALL #4					
PRE-DEVELOPMENT					
2 YEAR EVENT					
AREA DESIGNATION	AREA (AC)	C FACTOR	INTENSITY	Q (CFS)	
X4	2.88	0.2	5.45	3.12	
TOTAL				3.12	
10 YEAR EVENT					
AREA DESIGNATION	AREA (AC)	C FACTOR	INTENSITY	Q (CFS)	
X4	2.88	0.2	7.27	4.16	
TOTAL				4.16	
POST-DEVELOPMENT					
2 YEAR EVENT					
AREA DESIGNATION	AREA (AC)	C FACTOR	INTENSITY	Q (CFS)	
P4	2.42	0.62	5.45	—	
P7	0.58	0.25	5.45	0.77	
TOTAL				2.98507	
10 YEAR EVENT					
AREA DESIGNATION	AREA (AC)	C FACTOR	INTENSITY	Q (CFS)	
P4	2.42	0.62	7.27	2.09*	
P7	0.58	0.25	7.27	1.02	
TOTAL				2.98507	

* INFILTRATION TRENCH/ BIORETENTION AREA SIZED FOR 2-YEAR 2-HOUR STORM

OUTFALL #5					
PRE-DEVELOPMENT					
2 YEAR EVENT					
AREA DESIGNATION	AREA (AC)	C FACTOR	INTENSITY	Q (CFS)	
X5	3.74	0.2	5.45	4.08	
TOTAL				4.08	
10 YEAR EVENT					
AREA DESIGNATION	AREA (AC)	C FACTOR	INTENSITY	Q (CFS)	
X5	3.74	0.2	7.27	5.44	
TOTAL				5.44	
POST-DEVELOPMENT					
2 YEAR EVENT					
AREA DESIGNATION	AREA (AC)	C FACTOR	INTENSITY	Q (CFS)	
P5	4.30	0.57	5.45	1	
P8	1.27	0.31	5.45	2.18	
TOTAL				5.569158	
10 YEAR EVENT					
AREA DESIGNATION	AREA (AC)	C FACTOR	INTENSITY	Q (CFS)	
P5	4.30	0.57	5.45	2.00	
P8	1.27	0.31	7.27	2.88	
TOTAL				5.569158	



Dewberry & Davis LLC
 8403 ARLINGTON BLVD.
 FAIRFAX, VA 22031
 PHONE: 703.849.0100
 FAX: 703.849.0519
 www.dewberry.com

Inova Lorton HealthPlex
 A Service of Inova Mount Vernon Hospital
 GENERALIZED DEVELOPMENT PLAN
 RZ 2005-MV-029
 MOUNT VERNON DISTRICT
 FAIRFAX COUNTY, VIRGINIA



KEY PLAN

SCALE

AS NOTED

No.	DATE	BY	Description
6	04.18.06	JMC	
5	04.06.06	JMC	
4	03.31.06	JMC	
2	01.16.06	JMC	
1	12.07.05	JMC	

DRAWN BY: JTB
 APPROVED BY: PGY
 CHECKED BY: PGY
 DATE: SEPTEMBER 28, 2005

TITLE
INOVA LORTON HEALTHPLEX
STORM WATER MANAGEMENT

PROJECT NO. M - 10564

4

SHEET NO. 4 OF 5

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Application No. 04-016 (lead) site preliminary eng (DEL) bmp.dwg, 4/19/2006 3:30:37 PM, j_cena
 APPROVED DEVELOPMENT PLAN
 (DP) (GDP) (CDF) (FDP)
 SEE PROFFERS DATED 3/28/06
 Date of (BOS) (PC) approval 4/18/06
 Sheet 5 of 5

Inova Lorton HealthPlex
 A service of Inova Mount Vernon Hospital
GENERALIZED DEVELOPMENT PLAN
 RZ 2005-MV-029
 MOUNT VERNON DISTRICT
 FAIRFAX COUNTY, VIRGINIA



KEY PLAN

SCALE

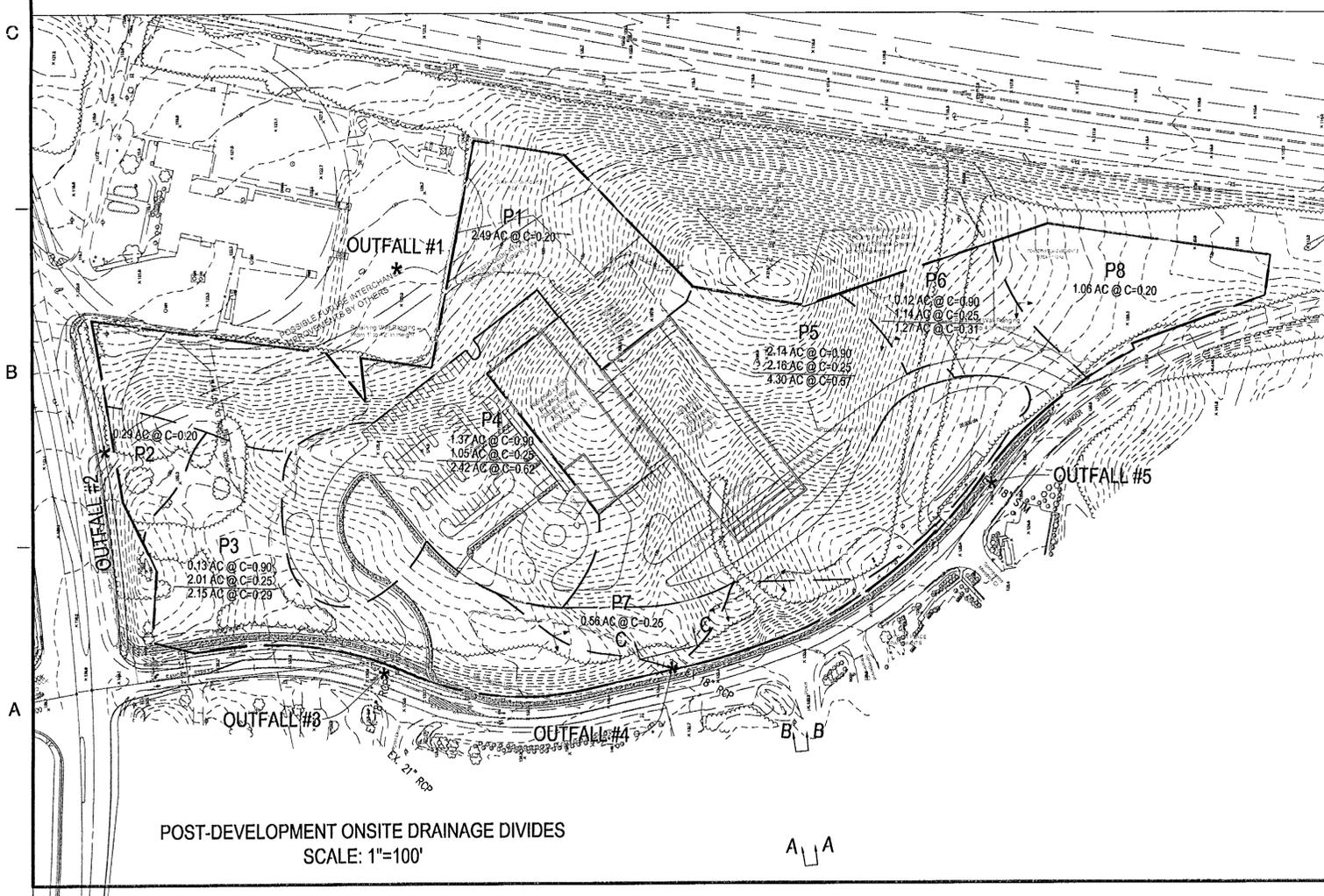
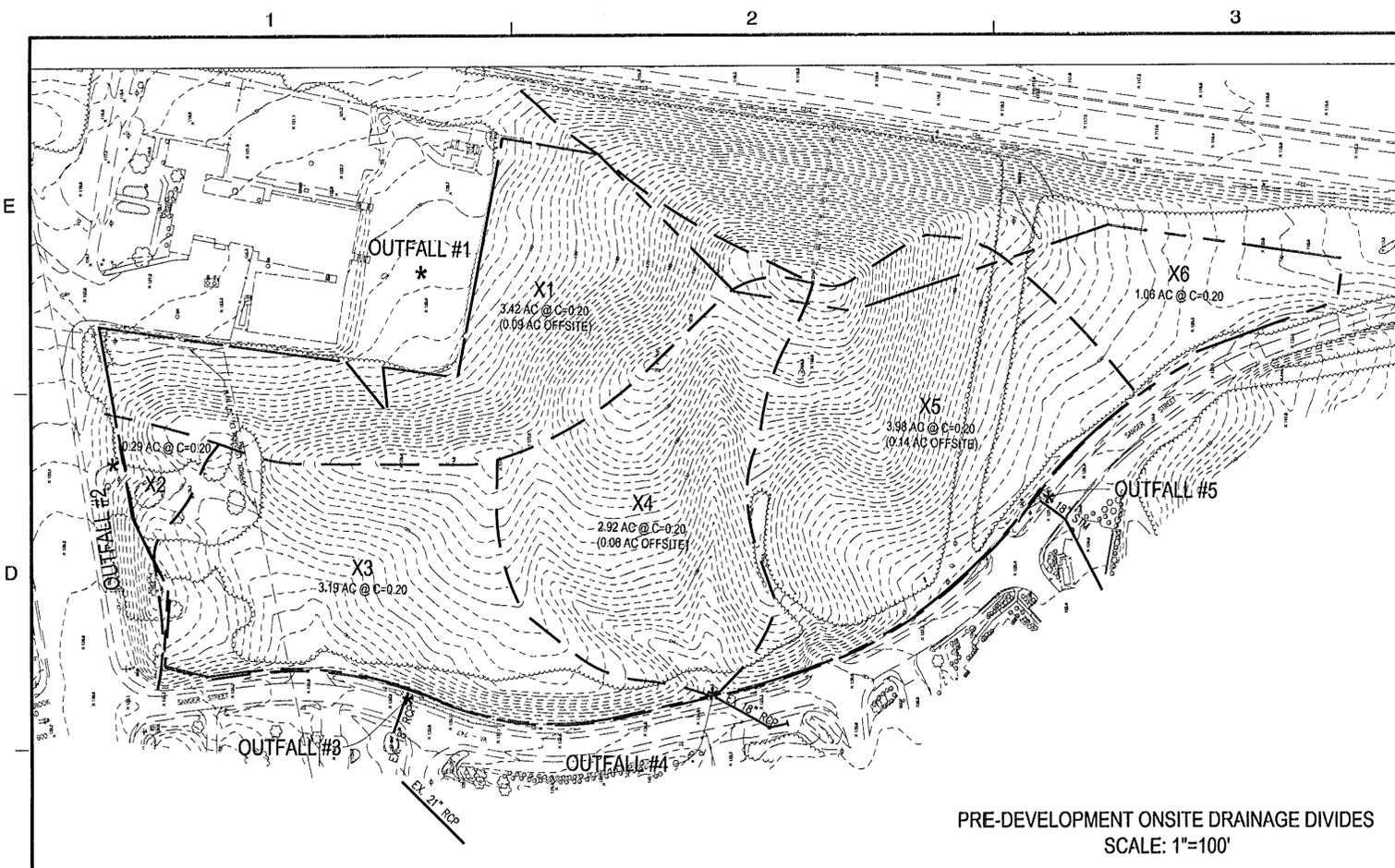
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REVISIONS
 DRAWN BY JTB
 APPROVED BY
 CHECKED BY PGY
 DATE SEPTEMBER 28, 2005

TITLE
INOVA LORTON HEALTHPLEX
STORM WATER MANAGEMENT AND BMP CALCS

PROJECT NO. M - 10564



BMP Calculations

Watershed Information			
Subarea Designation	C value	Acres	CA
P1	0.20	2.49	0.50
P2	0.20	0.29	0.06
P3	0.29	2.15	0.62
P4	0.62	2.42	1.50
P5	0.57	4.30	2.47
P6	0.31	1.27	0.40
P7	0.25	0.56	0.14
P8	0.25	1.06	0.27
Total Acreage		14.55	
Total CA			5.95
weighted C factor		0.41	

Total Phosphorous Removal For the site						
Subarea Designation	BMP type	Removal Eff. (%)	Total Area (Acres)	Area Ratio	C ratio	Product
P4	Bio-Retention Area	50%	2.42	0.17	1.51	12.59%
P5	BMP pond	40%	4.30	0.30	1.40	16.60%
Conservation Easement 1 & 2	Consent'n Esm't	100%	1.66	0.11	1.00	11.41%
Total						40.60%

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