County of Fairfax, Virginia

To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

January 9, 2013

Elizabeth D. Baker
Walsh, Colucci, Lubeley, Emrich &
Walsh, P.C.
2200 Clarendon Boulevard
13th Floor
Arlington, VA 22201

RE: Rezoning Application RZ 2012-BR-014

Dear Ms. Baker:

Enclosed you will find a copy of an Ordinance adopted by the Board of Supervisors at a regular meeting held on January 8, 2013, granting Rezoning Application RZ 2012-BR-014 in the name of of Eleven Oaks LLC. The Board's action rezones certain property in the Braddock District from the R-1 District to the PDH-8 District to permit residential development with an overall density of 6.9 dwelling units per acre (du/ac) for the Fairfax County portion and 6.5 du/ac for the overall development (including the City of Fairfax) and approval of the conceptual development plan. The subject property is located N. of University Drive, approximately 350 feet E. of intersection with Ox Road and S. of School Street on approximately 5.36 acres of land, [Tax Map 57-4 ((1)) 6], and is subject to the proffers dated December 18, 2012.

Please note that on November 15, 2012, the Planning Commission approved Final Development Plan Application FDP 2012-BR-014.

The Board also:

- Waived the 600-foot maximum length for a private street.

Office of the Clerk to the Board of Supervisors
12000 Government Center Parkway, Suite 533
Fairfax, Virginia 22035
Phone: 703-324-3151 ♦ Fax: 703-324-3926 ♦ TTY: 703-324-3903
Email: clerktothebos@fairfaxcounty.gov
http://www.fairfaxcounty.gov/bosclerk

- Waived the off-street parking space requirement, Section 11-102 ((1)), which requires off-street parking spaces to be located on the same lot as the structure, to permit extensions of the driveway beyond the lot line as shown on the CDP/FDP.

Sincerely,

Catherine A. Chianese
Clerk to the Board of Supervisors

Cc: Chairman Sharon Bulova
Supervisor John Cook, Braddock District
Tim Shirocky, Acting Director, Real Estate Division, Dept. of Tax Administration
Barbara Berlin, Director, Zoning Evaluation Division, DPZ
Diane Johnson-Quinn, Deputy Zoning Administrator, Dept. of Planning and Zoning
Thomas Conry, Dept. Manager – GIS - Mapping/Overlay
Angela K. Rodeheaver, Section Chief, Transportation Planning Division
Donald Stephens, Transportation Planning Division
Department of Highways-VDOT
Sandy Stallman, Park Planning Branch Manager, FCPA
Charlene Fuhrman-Schulz, Development Officer, DHCD/Design Development Division
Planning Commission
Denise James, Office of Capital Facilities/Fairfax County Public Schools
Karyn Moreland, Chief Capital Projects Sections, Dept. of Transportation

At a regular meeting of the Board of Supervisors of Fairfax County, Virginia, held in the Board Auditorium in the Government Center at Fairfax, Virginia, on the 8th day of January, 2013, the following ordinance was adopted:

AN ORDINANCE AMENDING THE ZONING ORDINANCE
PROPOSAL NUMBER RZ 2012-BR-014

WHEREAS, Eleven Oaks LLC, filed in the proper form an application requesting the zoning of a certain parcel of land herein after described, from the R-1 District to the PDH-8 District, and

WHEREAS, at a duly called public hearing the Planning Commission considered the application and the propriety of amending the Zoning Ordinance in accordance therewith, and thereafter did submit to this Board its recommendation, and

WHEREAS, this Board has today held a duly called public hearing and after due consideration of the reports, recommendation, testimony and facts pertinent to the proposed amendment, the Board is of the opinion that the Ordinance should be amended,

NOW, THEREFORE, BE IT ORDAINED, that that certain parcel of land situated in the Braddock District, and more particularly described as follows (see attached legal description):

Be, and hereby is, zoned to the PDH-8 District, and said property is subject to the use regulations of said PDH-8 District, and further restricted by the conditions proffered and accepted pursuant to Va. Code Ann., 15.2-2303(a), which conditions are in addition to the Zoning Ordinance regulations applicable to said parcel, and

BE IT FURTHER ENACTED, that the boundaries of the Zoning Map heretofore adopted as a part of the Zoning Ordinance be, and they hereby are, amended in accordance with this enactment, and that said zoning map shall annotate and incorporate by reference the additional conditions governing said parcel.

GIVEN under my hand this 8th day of January, 2013.

Catherine A. Chianese
Clerk to the Board of Supervisors

PROFFERS

ELEVEN OAKS LLC
RZ 2012-BR-014

December 18, 2012

Pursuant to Section 15.2-2303(A) of the Code of Virginia (1950, as amended) and Section 18-204 of the Zoning Ordinance of Fairfax County (1978, as amended), the property owner and Applicant, for themselves and their successors and/or assigns (hereinafter collectively referred to as the "Applicant"), hereby proffer that the development of the parcels under consideration and shown on the Fairfax County 2012 tax maps as Tax Map 57-4 ((1)) 6 (the "Property") shall be in accordance with the following conditions if, and only if, Rezoning application 2012-BR-014 (this "Rezoning") is granted. In a separate application, the Applicant has proposed the rezoning and development of land adjacent to the Property located in the City of Fairfax and identified as Tax Map 57-2 ((2)) 3 through 6 (the "City Application Property"). While it is the intent of the Applicant to develop the Property and the City Application Property as a unified development, it shall be understood that these Proffers relate solely to the Property.

1. **Development Plan.**

   A. Development of the Property shall be in substantial conformance with the Conceptual Development Plan/Final Development Plan (CDP/FDP) prepared by Christopher Consultants, dated April 12, 2012, as amended through November 20, 2012. A maximum of 37 dwelling units shall be constructed on the Property.

   B. The proffered portion of the CDP shall be the entire plan shown on Sheet 6 relative to the points of access, the maximum number and type of dwelling units, the amount and general location of open space, and the general location and arrangement of the buildings. The Applicant has the option to request a FDPA for elements other than the CDP elements from the Planning Commission for all or a portion of the CDP/FDP in accordance with the provisions set forth in Section 16-402 of the Zoning Ordinance with respect to the remaining elements.

   C. Pursuant to Paragraph 4 of Section 16-403 of the Zoning Ordinance, minor modifications from the Final Development Plan (FDP) may be permitted as determined by the Zoning Administrator. The Applicant shall have the flexibility to modify the layouts shown on the FDP without requiring approval of an amended FDP provided such changes are in substantial conformance with the FDP as determined by the Zoning Administrator and do not increase the total number of dwelling units; decrease the setback from the peripheries; or reduce open space or landscaping.

   D. Advanced density credit shall be reserved as may be permitted by the provisions of Paragraph 5 of Section 2-308 of the Fairfax County Zoning Ordinance for all

eligible dedications described herein, or as may be required by Fairfax County, the City of Fairfax or VDOT at time of site plan approval.

2. **George Mason Boulevard Improvements**. The Applicant shall reconstruct the median to create a median break into the Property's new access points on George Mason Boulevard as shown on the CDP/FDP. Said improvements shall be in place prior to the issuance of the first Residential Use Permit ("RUP") for the eastern portion of the Property.

3. **Sidewalks and Trails.**

   A. The existing trail and sidewalk along George Mason Boulevard shall remain as constructed. If the existing trail or sidewalk is damaged due to construction activities on the Property, it shall be replaced/repaired. If, in the opinion of the Department of Public Works and Environmental Services ("DPWES"), the damage creates a hazard for pedestrians, the damage shall be repaired immediately. Otherwise needed repair or replacement shall occur prior to issuance of the last RUP on the Property.

   B. The Applicant shall provide a comprehensive sidewalk system within the Property as generally shown on Sheet 6 of the CDP/FDP. Construction of sidewalks shall be concurrent with development activity on the Property.

4. **Private Streets.** Private streets on the Property shall be constructed of materials and depth of pavement consistent with that required by Section 7-502 of the Public Facilities Manual. Purchasers shall be advised in writing prior to entering into a contract of sale that the homeowners association ("HOA") shall be responsible for the maintenance of all private streets in the development. The homeowner association documents shall specify that the homeowner association is responsible for the maintenance of the private streets.

5. **Driveways.** All driveways shall be a minimum of 18 feet in length from the garage door to the sidewalk.

6. **Landscape Plan.** A conceptual landscape plan for the Property illustrating the plantings and other features to be provided is shown on Sheet 8 of the CDP/FDP. As part of the site plan submission, the Applicant shall submit to the Urban Forest Management Division (UFMD) of DPWES for review and approval a detailed landscape and tree cover plan which shall be generally consistent with the quality and quantity of plantings and materials shown on the CDPA/FDPA. The landscape plan shall be designed to ensure adequate planting space for all trees based on the requirements in the Public Facilities Manual. Streetscape treatments, street furniture and street lighting provided on the Property shall be similar to those provided on the City Application Property so as to create a consistent character and quality. Adjustments to the type and location of vegetation and the design of landscaped areas and streetscape improvements/plantings shall be permitted in consultation with DPZ, and as approved by UFMD.

7. **Tree Preservation.**

A. For the purposes of maximizing the preservation of trees in tree save areas shown on the CDP/FDP, the Applicant shall prepare a tree preservation plan. The Applicant shall contract with a certified arborist or landscape architect (the "Project Arborist") to prepare a tree preservation plan to be submitted as part of the first site plan submittal and subsequent site plan submissions. The tree preservation plan shall be reviewed and approved by UFMD. The tree preservation plan shall seek to preserve the large oak tree located west of George Mason Boulevard as well as other trees on the periphery of the Property identified on the CDP/FDP for preservation. The tree preservation plan shall provide a tree inventory which includes the location, species, size, crown spread and condition rating percent of all trees 10 inches or greater in diameter, measured 4½ feet from the ground and located within twenty (20) feet of the limits of clearing and grading of the tree save areas shown on the CDP/FDP. The condition analysis shall be prepared using methods outlined in the latest edition of the *Guide for Plant Appraisal*. Specific tree preservation activities designed to maximize the survivability of trees designated for preservation shall be incorporated into the tree preservation plan. Activities should include, but are not limited to, crown pruning, root pruning, mulching and fertilization.. The tree care maintenance and preservation activities for the large oak shall begin during the pre-construction-start-up phase of the development and shall be specified on the tree preservation plan, at subdivision/site plan submission. Activities such as lightning protection, pruning, mulching and others may be necessary, and will be provided as required by the tree preservation plan.

B. All trees shown to be preserved on the tree preservation plan shall be protected by tree protection fencing. Tree protection fencing, consisting of four foot high, 14 gauge welded wire attached to 6 foot steel posts driven 18 inches into the ground and placed no farther than 10 feet apart, shall be placed at the limits of clearing and grading as shown on the Phase I and Phase II erosion and sedimentary control sheets in all areas. The tree protection fencing shall be made clearly visible to all construction personnel. The tree protection fencing shall be installed prior to the performance of any clearing and grading activities on the site. All tree preservation activities, including installation of tree protection fencing, shall be performed under the supervision of the Project Arborist. Prior to the commencement of any clearing or grading on the site, the Project Arborist shall verify in writing that the tree protection fencing has been properly installed.

C. Clearing, grading and construction shall conform to the limits of clearing and grading as shown on the CDP/FDP, subject to the installation of necessary utility lines and other required site improvements, all of which shall be installed in the least disruptive manner possible, considering cost and engineering, as determined in accordance with the approved plans. The Applicant shall have the limits of clearing and grading marked with a continuous line of flagging prior to the pre-construction meeting. The Applicant and Project Arborist shall walk the limits of clearing and grading with a UFMD representative to determine where adjustments

to the clearing limits can be made, or other measures implemented, such as the addition of mulch beds and/or small retaining walls to increase the survivability of trees at the edge of the limits of clearing and grading. Trees that are not likely to survive construction due to their proximity to disturbance shall also be identified at this time and the Applicant shall remove such trees as part of the clearing operation. Any tree that is designated for removal within a tree preservation area or at the edge of the limits of clearing and grading shall be removed using a chain saw to avoid damage to surrounding trees.

8. **Architectural Design.** The building elevations prepared by Devereaux and Associates shown on Sheets 16 through 19 of the CDP/FDP are provided to illustrate the architectural theme and design intent of the residential dwellings. The architectural design of the proposed dwellings shall generally conform to the character and quality of these illustrative elevations, but the Applicant reserves the right to modify these elevations and add architectural ornamentation based on final architectural design.

   The building materials shall vary and may be a combination of brick, stone, and cementitious siding supplemented with trim and detail features. Dwellings shall incorporate a brick or stone watercourse on all facades visible from public or private streets. In other foundation areas not visible from public or private streets, concrete foundation walls may be utilized. The dwellings on the Property shall be similar to those to be constructed on the City Application Property so as to create a consistent character and quality.

9. **Universal Design.** Dwelling units shall be designed and constructed with a selection of Universal Design features and options as determined by the Applicant which may include, but not be limited to, seat in master bath shower where possible, emphasis on lighting in stairs and entrances, lever door handles, slip resistant flooring, optional hand-held shower heads at tubs and showers, optional front loading washers and dryers and rocker light switches.

10. **Energy Star Qualification**. The dwelling units shall be constructed to achieve qualification in accordance with ENERGY STAR® for Homes. Such qualification will be demonstrated by the submission of documentation to the Environment and Development Review Branch of DPZ from a home energy rater certified through the Residential Energy Services Network (RESNET) program which shows that each dwelling unit has attained the ENERGY STAR® for Homes qualification prior to the issuance of the RUP for each dwelling.

11. **Noise Study**. Prior to site plan submission, the Applicant shall provide a noise study for dwelling units along George Mason Boulevard to determine what, if any, noise attenuation measures may be needed. Such study shall be submitted to the Environment and Development Review Branch of DPZ for review. Based on the findings of that report, the Applicant shall identify units on the site plan that are anticipated to be impacted by noise greater than 65 dBA Ldn and shall provide noise attenuation measures designed to reduce interior noise of those identified noise impacted units to a level of approximately 45 dBA Ldn.

12. **Recreational Facilities.** Pursuant to Paragraph 2 of Section 6-110 and Paragraph 2 of Section 16-404 of the Zoning Ordinance regarding developed recreational facilities, the Applicant shall expend a minimum of $1,700 per dwelling unit on on-site recreational facilities for the future residents of the Property. The specific facilities and amenities to be provided shall be determined at the time of site plan approval. Amenities to be provided may include, but not be limited to, benches/seating, picnic areas, outdoor fireplace, pergola/gazebo, outdoor dining, bike racks, and exercise stations. Prior to final bond release for the Property, the balance of any funds not expended on-site shall be contributed to the Fairfax County Board of Supervisors for use by the Fairfax County Park Authority for the provision of recreation facilities located in proximity to the Property.

13. **Stormwater Management.** Subject to review and approval by DPWES, stormwater management and Best Management Practice ("BMP") measures for the Property will be provided in off-site facilities on the George Mason University campus as generally described on the CDP/FDP pursuant to an agreement between the Applicant and George Mason University. The stormwater management and BMP measures may be provided on the George Mason University campus utilizing either option noted in the "SWM/BMP/Adequate Outfall Overall Narrative" set forth on Sheet 11 of 19 of the CDP/FDP, and as more sully described on Sheets 11, 12 and 13 of the CDP/FDP. In addition, the Applicant has identified the locations for two innovative BMP measures (rain gardens) on the CDP/FDP, which will be considered above and beyond the current PFM requirements. Other innovative BMP measures such as, but not limited to biofiltration swales may be substituted as determined by the Applicant and approved by DPWES. Any innovative BMP measures shall be maintained by the homeowners association in accordance with procedures established for innovative BMPs as determined by DPWES.

    In the event, the off-site facilities on George Mason University are not available for use by the Applicant, the Applicant shall provide for alternative stormwater management and BMP measures to serve the Property. If the alternative stormwater management measures significantly affect the site design, the Applicant shall file a proffered condition amendment.

14. **Housing Trust Fund.** Prior to the issuance of the first building permit, the Applicant shall contribute to the Fairfax County Housing Trust Fund ("HTF") the sum equal to one-half percent (1/2%) of the value of all of the units approved at the time of site plan on the Property. The percentage shall be based on the aggregate sales price of all of the units subject to the contribution, as if all of those units were sold at the time of the issuance of the first building permit, and is estimated through comparable sales of similar type units. The projected sales price shall be proposed by the Applicant in consultation with the Fairfax County Department of Housing and Community Development ("HCD") and shall be approved by HCD.

15. **Public School Contribution.** Per the Residential Development Criteria Implementation Motion adopted by the Board of Supervisors on September 9, 2002, and revised July, 2006, the Applicant shall contribute $9,378 per expected student (based on a ratio of

0.531students per single family detached residential unit and 0.379 students per single family attached unit) to the Fairfax County School Board to be utilized for capital improvements to schools that any students generated by the Property will attend. Such contribution shall be made prior to the issuance of the first RUP for the Property and shall be based on the actual number of dwelling units built.

16. **Recreation Contribution**. At the time of the issuance of the first RUP on the Property, the Applicant shall provide a monetary contribution of $50,000 to the Board of Supervisors for recreational opportunities as determined in consultation with the Braddock District Supervisor.

17. **Cultural and Heritage Resources.** For the purpose of recognizing relevant historic information for the former schools which were located on the Property, the Applicant shall fund the research, fabrication and installation of a Fairfax County historical marker in an appropriate location on the Property in an amount not to exceed $3,000, provided such research is provided by the Historical Marker Committee of the County's History Commission ("HC") and a marker is deemed appropriate by the HC. The text to be included on the marker shall be provided to the Applicant by the HC.

If the HC determines upon evaluation of their completed research that a county historical marker is not warranted for the Property, then the Applicant shall have no other obligation under this Proffer.

18. **Homeowners Association.** The Applicant shall form a homeowners association ("HOA") for the Property. The HOA shall be responsible for maintenance for the common areas and the enforcement of restrictions on the Property. The Applicant shall notify all prospective purchasers in sales literature and purchasers in writing at the time of settlement of the split jurisdictional nature of the residential community, the location of a sewage pumping station on the Property, as well as HOA maintenance responsibilities and restrictions. Maintenance responsibilities shall include, but not be limited to, snow removal, private accessway/parking lot maintenance, on-site stormwater management facilities maintenance, and common area maintenance.

19. **Reciprocal Easements**. At the time of subdivision plan approval, the Applicant shall create reciprocal easements along common residential property lines to provide future homeowners with reasonable rights of access to adjacent lots if needed to perform routine home maintenance functions.

20. **Deck Enclosures.** Decks in rear yards, as conceptual shown on Sheet 15, of the CDP/FDP may be converted to porches (including screened in porches) or sunrooms.

21. **Use of Garages.** A covenant shall be recorded which provides that garages shall only be used for a purpose that will not interfere with the intended purpose of garages (e.g., parking of vehicles). This shall not preclude the use of garages as sales offices in the model homes during marketing of the development, with the understanding the sales offices will be converted back to garages upon sale of the models. The covenant shall be recorded among the land records of Fairfax County in a form approved by the County

Attorney prior to the sale of any lots and shall run to the benefit of the HOA and the Fairfax County Board of Supervisors. Purchasers shall be advised in writing of the use restriction prior to entering into contract of sale.

22. **Parking Covenant.** A covenant shall be recorded which prohibits the parking of motor homes, boats and other recreational vehicles on the Property. This covenant shall be recorded among the land records of Fairfax County in a form approved by the County Attorney prior to the sale of any lots and shall run to the benefit of the HOA and the Fairfax County Board of Supervisors.

23. **Split Jurisdiction Notification.** Purchasers shall be advised in writing prior to entering into a Contract of Sale that the proposed residential community is located partially within Fairfax County and partially within the City of Fairfax, and that the two jurisdictions provide different services to its residents, including, but not limited to, school assignments, trash collection, etc. The HOA documents shall include documentation of these jurisdictional differences.

24. **Adjustments in Contribution Amounts**. For all proffers specifying contribution amounts with the exception of Proffer 14 related to the Housing Trust Fund, the contribution shall adjust on a yearly basis from the base year of 2013 and change effective each January 1 thereafter, based on changes in the Consumer Price Index for all urban consumers (not seasonally adjusted) ("CPI-U"), both as permitted by Virginia State Code Section 15.2-2303.3.

25. **Sewage Pump Station.** The proposed sewage pump station shown on the CDP/FDP will be designed and constructed according to the requirements of the City of Fairfax Public Facilities Manual, which references the Virginia Administrative Code for Sewage Pump Stations (9VAC25-790-380), and in accordance with the Code of Virginia (Sect. 62.1-44.19) as reviewed and approved by the City of Fairfax and the Virginia Department of Environmental Quality in consultation with the DPWES.

26. **Temporary Signs**. No temporary signs (including "Popsicle" style paper or cardboard signs) which are prohibited by Article 12 of the Zoning Ordinance, and no signs which are prohibited by Chapter 7 of Title 33.1 or Chapter 8 of Title 46.2 of the Code of Virginia shall be placed on- or off-site by the Applicant or at the Applicant's direction to assist in the initial sale of homes on the Property. Furthermore, the Applicant shall direct its agents and employees involved in marketing and/or home sales for the Property to adhere to this proffer.

27. **Severability.** Any of these buildings within the Property may be subject to Proffered Condition Amendments and Final Development Plan Amendments without joinder or consent of the property owners of the other buildings.

28. **Successors and Assigns.** These proffers will bind and inure to the benefit of the Applicant and his/her successors and assigns.

29. **Counterparts.** These proffers may be executed in one or more counterparts, each of which when so executed and delivered shall be deemed an original document and all of which taken together shall constitute but one in the same instrument.

[SIGNATURES BEGIN ON NEXT PAGE]

APPLICANT/CONTRACT PURCHASER OF
TAX MAP 57-4 ((1)) 6

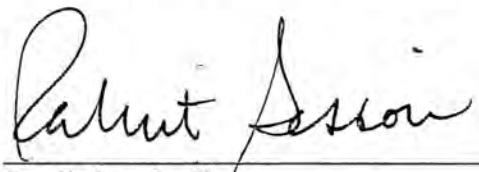
ELEVEN OAKS LLC

By: Russell S. Rosenberger, Jr.
Its: Authorized Agent

[SIGNATURES CONTINUE ON NEXT PAGE]

TITLE OWNER OF TAX MAP 57-4 ((1)) 6

CITY OF FAIRFAX



By: Robert L. Sisson
Its: City Manager

[SIGNATURES END]

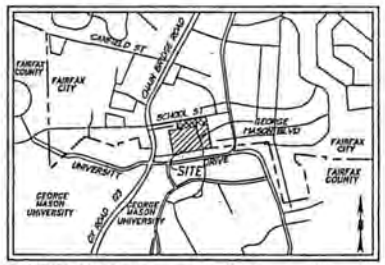
ELEVEN OAKS

FIRST SUBMISSION DATE: APRIL 12, 2012		
#	DATE	REVISION
1	8/20/12	RESPOND TO COUNTY PRE-STAFFING REPORT DATED JULY 16, 2012 AND CITY COMMENTS LETTER DATED JULY 13, 2012
2	9/13/12	COUNTY STAFFING REPORT DATED 8/29/12 AND CITY COMMENTS DATED 9/4/12.
3	10/15/12	CITY AND COUNTY COMMENTS
4	11/20/12	COUNTY COMMENTS

CONCEPTUAL DEVELOPMENT PLAN / FINAL DEVELOPMENT PLAN FAIRFAX COUNTY, VIRGINIA

BRADDOCK DISTRICT

GENERAL DEVELOPMENT PLAN/ PRELIMINARY SITE PLAN CITY OF FAIRFAX, VIRGINIA

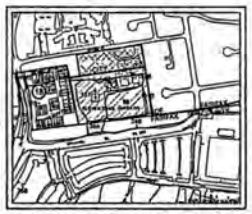


VICINITY MAP
SCALE: 1" = 1000'

1000 500 0 1000 2000
GRAPHIC SCALE
1" = 1000'

SUBJECT PROPERTY WITHIN FAIRFAX COUNTY

SUBJECT PROPERTY WITHIN FAIRFAX CITY



SOILS MAP
SCALE: 1" = 500'

500 250 0 500 1000
GRAPHIC SCALE
1" = 500'

NOTE: SOILS MAP OBTAINED FROM FAIRFAX COUNTY TAX MAP RECORDS. SOIL INFORMATION BELOW OBTAINED FROM NRCS WEB SOIL SURVEY DATA.

SOILS LEGEND

TYPE	NAME	GROUP	SLOPE	K FACT
33A	GODDARD AND MATODEQ SOILS	C	0-2%	0.32
36B	FAIRFAX LOAM	B	2-7%	0.28
95	URBAN LAND (PAVED LAND)	N/A	N/A	N/A
97	URBAN LAND - MEATON COMPLEX (PAVED LAND)	N/A	N/A	N/A
108	MEATON - FAIRFAX COMPLEX	D	2-7%	0.32
108	MEATON - SUPERDUCK COMPLEX	D	2-7%	0.32

SHEET INDEX

SHEET #	SHEET TITLE
01	COVER SHEET
02	NOTES AND TABULATIONS
03	EXISTING CONDITIONS PLAN
04	EXISTING VEGETATION MAP & TREE PRESERVATION PLAN
05	EXISTING VEGETATION & TREE PRESERVATION DETAILS
06	FAIRFAX COUNTY CDP-FDP & CITY OF FAIRFAX GDP-PSP
07	CONCEPTUAL GRADING PLAN
08	PRELIMINARY LANDSCAPING PLAN
09	OPEN SPACE PLAN
10	SIGHT DISTANCE PLAN & PROFILES
11	BMP & SWM COMPUTATIONS - OPTION 1
12	BMP & SWM COMPUTATIONS - OPTION 2
13	ADEQUATE OUTFALL COMPUTATIONS - OPTION 2
14	FIRE TRUCK & PEDESTRIAN MOVEMENTS
15	CONCEPT DESIGN OF IND LOT PRIVACY YARDS & FENCE ENCLOSURES
16	ARCHITECTURAL DETAILS
17	ARCHITECTURAL DETAILS
18	ARCHITECTURAL DETAILS
19	ARCHITECTURAL DETAILS

COMMONWEALTH OF VIRGINIA
C. ERIC L. SPENCER
Lic. No. 037519
11-20-12
PROFESSIONAL ENGINEER

ARCHITECT
DEVEREAUX & ASSOCIATES, PC
1451 CHAIN BRIDGE ROAD #302
MCLEAN, VA 22101
ph: 703-893-0102, fax: 703-893-0106

APPLICANT/DEVELOPER
ELEVEN OAKS LLC
112 PLEASANT STREET NH, SUITE H
VIENNA, VA 22180
ph: 703-506-4292, fax: 703-506-4244

PREPARED BY:
christopher consultants
engineering · surveying · land planning
9500 main street (fourth floor) · fairfax, va 22031-3807
703.273.6820 · fax 703.273.7826

SUBMISSION STATEMENT:
THIS PLAN IS BEING SUBMITTED CONCURRENTLY TO BOTH FAIRFAX COUNTY AND THE CITY OF FAIRFAX.

DEVELOPMENT PLAN NOTES:

FAIRFAX COUNTY

1. THIS PROPERTY IS IDENTIFIED ON THE FAIRFAX COUNTY TAX MAP 57-4 ((1)) PARCEL 6 AND IS ZONED R-1. THE PURPOSE OF THIS APPLICATION IS TO REZONE THE PORTION OF THE PROPERTY WITHIN FAIRFAX COUNTY TO THE PDH-8 DISTRICT AND PROVIDE 37 LOTS FOR BOTH SINGLE-FAMILY ATTACHED AND SINGLE-FAMILY DETACHED DWELLING UNITS AND THE ASSOCIATED INFRASTRUCTURE.

2. CURRENT OWNER: CITY OF FAIRFAX
10455 ARMSTRONG STREET
FAIRFAX, VA 22030

CITY OF FAIRFAX

1. THIS PROPERTY IS IDENTIFIED ON THE CITY OF FAIRFAX TAX MAP 57-4 ((2)) PARCELS 3-6 AND IS ZONED R-1 & R-3. THE PURPOSE OF THIS APPLICATION IS TO REZONE THE PORTION OF THE PROPERTY WITHIN CITY OF FAIRFAX TO THE PD(h) DISTRICT AND CONSTRUCT 12 SINGLE-FAMILY RESIDENTIAL LOTS AND THE ASSOCIATED INFRASTRUCTURE. THE TOTAL SITE AREA WITHIN THE CITY OF FAIRFAX IS 2.23 ACRES.

2. CURRENT OWNER: PARCELS 3H4
CITY OF FAIRFAX
10455 ARMSTRONG STREET
FAIRFAX, VA 22030

PARCELS 5A6
INOVA HEALTH SYSTEM SERVICES
8100 GATEHOUSE ROAD, SUITE 300, EAST TOWER
FALLS CHURCH, VA 22042

GENERAL NOTES

1. THE BOUNDARY SURVEY WAS PERFORMED BY christopher consultants, ltd. IN JANUARY 2012.
2. THE TOPOGRAPHY SHOWN HEREON IS AT A CONTOUR INTERVAL OF TWO (2) FEET FROM A FIELD SURVEY PREPARED BY christopher consultants, ltd. ON 01/23/12, BASED ON NAVD 88 VERTICAL DATUM.
3. THE PROPERTY SHOWN HEREON IS LOCATED ON F.E.M.A. MAP COMMUNITY PANEL NO. 5105C0263E, DATED SEPTEMBER 17, 2010, ZONE X, AN AREA DETERMINED TO BE OUTSIDE OF THE 500-YEAR FLOODPLAIN. THERE ARE NO MAJOR OR MINOR FLOODPLAINS ON THIS SITE.
4. TO THE BEST KNOWLEDGE OF THE ENGINEER AND DEVELOPER, THERE ARE NO WETLANDS ON THE SITE.
5. TO THE BEST KNOWLEDGE OF THE ENGINEER AND DEVELOPER, THERE ARE NO CRITICAL AREAS OR STEEP SLOPES ON THIS SITE.
6. TO THE BEST KNOWLEDGE OF THE ENGINEER AND DEVELOPER, OTHER THAN THE EXISTING TREES THAT ARE BEING PRESERVED ON THE PROPERTY, THERE ARE NO AREAS THAT HAVE SCENIC ASSETS OR NATURAL FEATURES DESERVING OF PROTECTION AND PRESERVATION.
7. THERE ARE NO RESOURCE PROTECTION AREAS (RPAs) ON THE SUBJECT PROPERTY PER FAIRFAX COUNTY TAX MAP INFORMATION.
8. TO THE BEST KNOWLEDGE OF THE ENGINEER AND DEVELOPER, THERE ARE NO GRAVES OR BURIAL SITES LOCATED ON THE SUBJECT PROPERTY.
9. THE SITE IS SERVED BY PUBLIC WATER AND SANITARY SEWER SYSTEMS, MAINTAINED BY THE CITY OF FAIRFAX AND WILL FOLLOW THE CITY'S DESIGN CRITERIA.
10. EXISTING UNDERGROUND UTILITIES ARE BASED ON AVAILABLE INFORMATION. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO ABOVE GROUND EXISTING UTILITY EASEMENTS HAVING A WIDTH OF THIRTY-FIVE (35) FEET OR MORE.
11. THERE ARE NO PLANNED TRAILS ON THIS PROPERTY PER THE COUNTY'S COMPREHENSIVE TRAILS MAP.
12. AN OPEN SPACE AREA FOR RECREATION IS BEING PROPOSED WITH THIS DEVELOPMENT.
13. A PHASE I ENVIRONMENTAL STUDY HAS PERFORMED AND HAZARDOUS MATERIALS WERE FOUND. ON A PORTION OF THE SITE FREON HAS LOCATED. THIS FREON WILL BE REMOVED IF ADDITIONAL TESTS STILL SHOW THAT IT IS ONSITE. A PREVIOUSLY REMOVED UNDERGROUND GAS TANK LEAKED AND CONTAMINATED THE SOIL IN IT'S IMMEDIATE VICINITY. THIS SOIL WILL BE REMOVED IF ENCOUNTERED DURING CONSTRUCTION.
14. TO THE BEST KNOWLEDGE OF THE ENGINEER AND DEVELOPER, THE PROPOSED DEVELOPMENT OF THE SUBJECT PROPERTY CONFORMS TO THE PROVISIONS OF ALL APPLICABLE ORDINANCES, REGULATIONS, AND ADOPTED STANDARDS UNLESS OTHERWISE SPECIFICALLY NOTED.
15. NO ADVERSE EFFECTS ON NEIGHBORING PROPERTIES ARE ANTICIPATED.
16. ONCE THE FINAL SITE PLAN HAS BEEN APPROVED AND ALL APPLICABLE PERMITS ARE IN PLACE THE DEVELOPMENT SCHEDULE WILL BE DETERMINED.
17. THE SITE IMPROVEMENTS SHOWN HEREON ARE PRELIMINARY AND MAY CHANGE WITH FINAL ENGINEERING.
18. THE LIMITS OF CLEARING AND GRADING ARE PRELIMINARY AND MAY CHANGE WITH FINAL ENGINEERING.
19. BUILDING FOOTPRINTS ARE PRELIMINARY AND SUBJECT TO CHANGE WITH FINAL ENGINEERING.
20. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT FAIRFAX COUNTY AND / OR CITY OF FAIRFAX STANDARDS AND SPECIFICATIONS AND WILL BE IN ACCORDANCE WITH FEDERAL, STATE, AND COUNTY REQUIREMENTS INCLUDING THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE.
21. THE APPROVAL OF THIS PLAN SHALL IN NO WAY RELIEVE THE OWNER OF COMPLYING WITH OTHER APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS.
22. THE PROPERTY IS NOT LOCATED IN ANY OF THE OVERLAY DISTRICTS DESCRIBED IN ARTICLE 7 OF THE FAIRFAX COUNTY ZONING ORDINANCE PER FAIRFAX COUNTY TAX MAP INFORMATION.
23. PUBLIC IMPROVEMENTS THAT ARE ANTICIPATED WITH THIS PLAN WILL BE SIDEWALK ADDED ALONG THE FRONTAGE OF THE NORTHERN PROPERTY LINE WITHIN THE CITY OF FAIRFAX. THIS WILL EXTEND THE EXISTING PUBLIC ACCESS ALONG SCHOOL STREET. THERE WILL ALSO BE A STORM DRAINAGE SYSTEM ADDED TO THE SOUTH OF THE PROPERTY THAT WILL TIE IN TO AN EXISTING OUTFALL IN FAIRFAX COUNTY.
24. THERE ARE NO EXISTING STRUCTURES LOCATED ON SITE.
25. CONSTRUCTION OF THE PROPOSED DEVELOPMENT WILL COMMENCE AS SOON AS NECESSARY APPROVALS ARE OBTAINED, SUBJECT TO MARKET CONDITIONS AND DISCRETION OF THE OWNER.
26. IN LIEU OF THE STANDARD FOR TRAFFIC VISIBILITY TRIANGLE IN THE CITY'S R-D DISTRICT (SEC. 110-437 (K)) AND (N)), SIGHT DISTANCE IS SHOWN BASED ON EACH INTERSECTION OPERATING CHARACTERISTICS. SEE SHEET 10.

#	DATE	REVISION
1	8/10/12	RESPOND TO COUNTY
		PRE-STAFFING REPORT
		DATED JULY 16, 2012 AND
		CITY COMMENTS LETTER
		DATED JULY 13, 2012
2	9/13/12	COUNTY STAFFING REPORT
		DATED 8/27/12 AND CITY
		COMMENTS DATED 9/6/12.

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COMMONWEALTH OF VIRGINIA
CHRISTOPHER S. SPENCER
Lic. No. 037518
11-20-12
PROFESSIONAL ENGINEER

PROPOSED WAIVERS, MODIFICATIONS, AND SPECIAL EXCEPTIONS

FAIRFAX COUNTY

MODIFICATIONS TO ZONING ORDINANCE:

1. SECTION 11-102(1) REQUIRING OFF-STREET PARKING SPACES TO BE LOCATED ON THE SAME LOT AS THE STRUCTURE OR USE TO WHICH THEY ARE ACCESSORY.
2. SECTION 11-302 TO PERMIT THE MAXIMUM LENGTH OF PRIVATE STREETS TO EXCEED 800 FEET.

MODIFICATIONS TO PUBLIC FACILITIES MANUAL:

1. SECTION 6-0301.3 REQUIRING STORMWATER MANAGEMENT FACILITIES TO BE PROVIDED IN ALL STORM DRAIN PLANS.
2. SECTION 8-0102 REQUIRING SIDEWALKS ON BOTH SIDES OF ALL STREETS.

CITY OF FAIRFAX

VARIANCES:

1. SECTION 110-434 TO REDUCE THE MINIMUM OPEN SPACE AREA OF 20 FEET AROUND THE EXTERNAL WALLS OF ANY STRUCTURE; TO ALLOW OPEN SPACE IN SECTIONS THAT ARE LESS THAN 10,000 SQUARE FEET IN AREA; AND TO WAIVE THE REQUIREMENT TO PROVIDE A COMMERCIAL COMPONENT IN THE PLANNED DEVELOPMENT DISTRICT.
2. SECTION 94-1 TO PERMIT REDUCTION OF THE REQUIRED 30 FOOT MINIMUM PRIVATE STREET WIDTH AND TO ALLOW PRIVATE STREETS TO TERMINATE WITHOUT A TURNOUT OR CUL-DE-SAC.
3. SECTION 94-6 TO MODIFY THE REQUIREMENT FOR SIDEWALKS ON BOTH SIDES OF ALL THE STREETS TO ONE SIDE OF THE STREET AND NO SIDEWALK IN FRONT OF THREE UNITS.

Zoning Tabulation

	Fairfax County	City of Fairfax	Entire Site
Tax Map #:	57-4 ((1)) Parcel 6	57-4 ((2)) Parcels 3-6	
Existing Zoning	R-1	R-1 & R-3	
Proposed Zoning	PDH-8	PD(h)	
Minimum District Size	2.0 Acres	2.0 Acres	
Minimum Lot Width	None	None	
Maximum Building Height	None	90'	
Provided Building Height	45'	45'	
Minimum Setbacks	None	20' Open Space around any structure*	
Parking Spaces Required	111 (3 spaces/unit)	24 (2 spaces/unit)	135
Parking Spaces Provided	111	48	159
Garage Spaces	74	24	98
Driveway Spaces	74	24	98
Street Spaces	29	0	29

Site Tabulation

	Fairfax County	City of Fairfax	Entire Site
Site Area	223,452 SF (5.36 AC)	87,240 (2.71 AC)	330,948 (7.59 AC)
Proposed Use	Single Family Detached/Attached	Single Family Detached	
Proposed Number of Dwelling Units	37 (19 SFA, 27 SFD)	12	49
Maximum Density	8.0 DU/AC	12.0 DU/AC	
Proposed Density	6.9 DU/AC	5.4 DU/AC	6.5 DU/AC
Gross FAR	N/A	0.64	

Open Space

	Fairfax County	City of Fairfax	Entire Site
Required Open Space (%)	25%	25%	
Required Open Space (SF)	55,813	21,810	76,972
Open Space Provided (%)	58%	127%	
Open Space Provided (SF)	164,500	125,100	190,037

Impervious Area

	Fairfax County	City of Fairfax	Entire Site
Maximum Allowable Impervious Surface	N/A	43,248 (50%)	N/A
Impervious Area Proposed	N/A	43,248 (50%)	N/A

*Variance Requested

THESE PLANS ARE PRELIMINARY IN NATURE AND SUBJECT TO CHANGE WITH FINAL ENGINEERING.

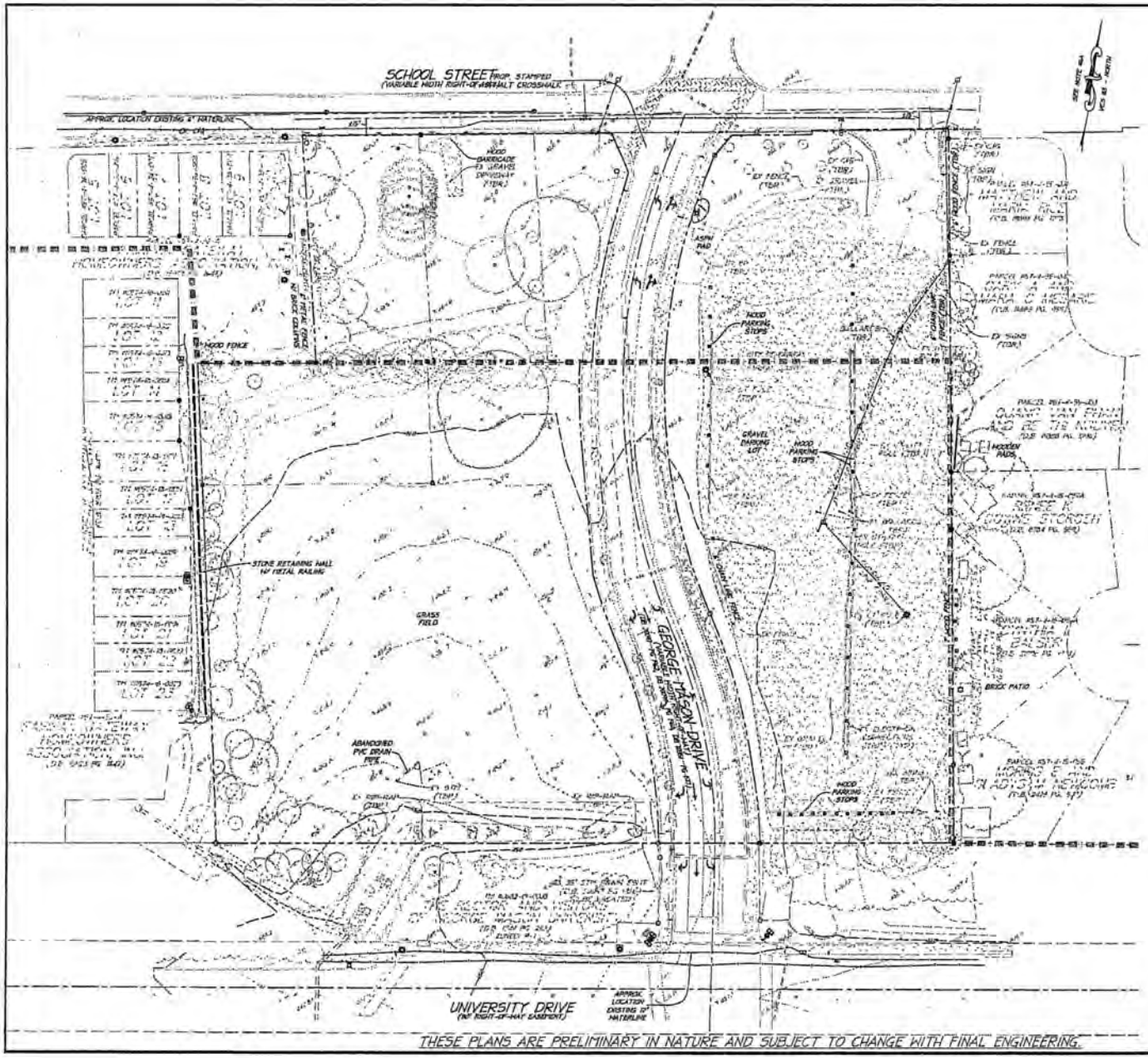
ELEVEN OAKS

CITY OF FAIRFAX & FAIRFAX COUNTY, VA

NOTES AND TABULATIONS

PROJECT NO: 100400001
SCALE: NONE
DATE: APRIL, 2012
DESIGN: CEY
DRAWN: TEE
CHECKED: ESS
SHEET No. 02 of 19

100006



LEGEND

- FIRE HYDRANT
- WATER VALVE
- SANITARY MANHOLE
- STORM DRAIN MANHOLE
- STORM GRATE
- TRANSFORMER
- POWER POLE
- GUY WIRE
- LIGHT POLE
- GROUND LIGHT
- BUS CHARGING STATION
- CABLE TV PEDESTAL
- TELEPHONE PEDESTAL
- UTILITY VAULT
- SIGN
- BOLLARD
- BRICK COLLEPIN
- GROUND SPOT SHOT
- BUSH
- TRAFFIC SIGNAL POLE
- TREE

- UNDERGROUND GAS LINE MARKING
- UNDERGROUND COMMUNICATIONS MARKING
- UNDERGROUND WATER MARKING
- OVERHEAD UTILITY LINE
- FENCE
- STREAM
- PROPERTY LINE
- ADJOINER LINE
- EX. TEN FOOT CONTOUR
- EX. TWO FOOT CONTOUR
- TREE LINE

- ASPHALT AREA
- CONCRETE AREA
- GRAVEL AREA
- BRICK CROSSWALK

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

#	DATE	REVISION
1	8/10/12	RESPOND TO COUNTY PRE-STAFFING REPORT DATED JULY 16, 2012 AND CITY COMMENTS LETTER DATED JULY 13, 2012
2	9/13/12	COUNTY STAFFING REPORT DATED 8/23/12 AND CITY COMMENTS DATED 9/5/12

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COMMONWEALTH OF VIRGINIA
ERIK S. SPENCER
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11-20-12
PROFESSIONAL ENGINEER

ELEVEN OAKS

CITY OF FAIRFAX & FAIRFAX COUNTY, VA

EXISTING CONDITIONS PLAN

PROJECT NO: 10140000
SCALE: 1"=40'
DATE: APRIL, 2013
DESIGN: CEY
DRAWN: TEE
CHECKED: ESS
SHEET No.: 03 of 19

100006

#	DATE	REVISION
1	8/8/12	RESPOND TO COUNTY, PRE-STAFFING REPORT DATED JULY 16, 2012 AND CITY COMMENTS LETTER DATED JULY 13, 2012
2	9/13/12	COUNTY STAFFING REPORT DATED 8/23/12 AND CITY COMMENTS DATED 9/4/12
3	10/18/12	CITY AND COUNTY COMMENTS

CITY OF FAIRFAX
THE TREES SHOWN ARE TREES THAT ARE FIVE INCHES OR GREATER IN CALIPER.

FAIRFAX COUNTY
THE TREES SHOWN ARE PART OF THE EXISTING VEGETATION MAP AS REQUIRED PER FAIRFAX COUNTY P.F.M. 12-0506.

NOTES

1. ALL EXISTING STREET TREES ALONG GEORGE MASON BOULEVARD ARE 3" CALIPER PRUNUS CERASIFERA OR ZELKOVA SERRATA AND ARE IN GOOD CONDITION.
2. SEE SHEET 08 FOR AN EXISTING TREE DATA TABLE, EVM DESIGNATION COVER TYPE SUMMARY TABLE, AND TABLE 12.3 TREE PRESERVATION TARGET CALCULATIONS.
3. AS PER THE FAIRFAX COUNTY PUBLIC FACILITIES MANUAL (PFM) SECTION 12-0507.1, ALL TREES ON THE FAIRFAX COUNTY PROPERTY ARE LOCATED 10' INSIDE AND 25' OUTSIDE THE PROPOSED LIMITS OF DISTURBANCE AS SHOWN ON THE PLAN.

LEGEND

EXISTING TREELINE

LIMITS OF EVM DESIGNATION

EXISTING TREE CANOPY

GRAPHIC SCALE
1 inch = 40 feet

THESE PLANS ARE PRELIMINARY IN NATURE AND SUBJECT TO CHANGE WITH FINAL ENGINEERING.

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COMMONWEALTH OF VIRGINIA
CHRIS S. SPENCER
Lic. No. 037518
11-20-12
PROFESSIONAL ENGINEER

EXISTING VEGETATION MAP & TREE PRESERVATION PLAN

ELEVEN OAKS
CITY OF FAIRFAX & FAIRFAX COUNTY, VA

PROJECT NO: 1101-100100
SCALE: 1"=40'
DATE: APRIL, 2012
DESIGN: CEY
DRAWN: ISEE
CHECKED: ESS
SHEET No.
04 OF 19
100006

EXISTING TREE DATA TABLE

TREE #	BOTANICAL NAME	COMMON NAME	TRUNK DIAMETER (INCHES)	CROWN RADIUS (FEET)	CRITICAL ROOT ZONE RADIUS (FEET)	CONDITION RATING	COMMENTS
61	CORNUS FLORIDA	FLOWERING DOGWOOD	3	10	3	47	TO BE REMOVED
62	FRAXINUS PENNSYLVANICA	GREEN ASH	18	10	18	39	TO BE REMOVED
63	ACER NEGUNDO	BOXELDER	6	3	6	25	TO BE REMOVED
64	ACER NEGUNDO	BOXELDER	12	20	12	41	TO BE REMOVED
65	ACER NEGUNDO	BOXELDER	19	20	19	47	TO BE REMOVED
66	ACER NEGUNDO	BOXELDER	9	10	9	25	TO BE REMOVED
67	ACER NEGUNDO	BOXELDER	9	12	9	34	TO BE REMOVED
68	ACER NEGUNDO	BOXELDER	6	9	6	59	TO BE REMOVED
69	ACER NEGUNDO	BOXELDER	8	11	8	83	TO BE REMOVED
70	ACER RUBRUM	RED MAPLE	11	8	11	86	TO BE REMOVED
71	PRUNUS SEROTINA	BLACK CHERRY	12	10	12	69	TO BE REMOVED
72	ACER RUBRUM	RED MAPLE	20	12	20	85	TO BE REMOVED
73	ACER NEGUNDO	BOXELDER	20	10	20	32	TO BE REMOVED
74	ULMUS AMERICANA	AMERICAN ELM	3	4	3	78	TO BE REMOVED
75	QUERCUS RUBRA	RED OAK	17	14	13	90	TO BE REMOVED
76	ULMUS AMERICANA	AMERICAN ELM	13	20	13	88	TO BE REMOVED
77	ACER NEGUNDO	BOXELDER	8	10	8	30	TO BE REMOVED
78	ACER NEGUNDO	BOXELDER	8	14	8	47	TO BE REMOVED
80	PRUNUS SEROTINA	BLACK CHERRY	14	14	14	78	TO BE REMOVED
81	PRUNUS SEROTINA	BLACK CHERRY	3	8	3	75	TO BE PRESERVED
82	ACER RUBRUM	RED MAPLE	9	5	6	87	TO BE REMOVED
83	PRUNUS SEROTINA	BLACK CHERRY	20	20	21	58	TO BE REMOVED
86	ULMUS AMERICANA	AMERICAN ELM	14	20	14	58	TO BE REMOVED
87	GLEDITSIA TRIACANTHOS	HONEY LOCUST	22	8	22	33	TO BE REMOVED
91	ACER RUBRUM	RED MAPLE	14	12	14	81	TO BE REMOVED
93	GLEDITSIA TRIACANTHOS	HONEY LOCUST	12	21	12	0	DEAD TO BE REMOVED
94	PRUNUS SEROTINA	PRUNUS SEROTINA	13	12	13	39	TO BE REMOVED
97	GLEDITSIA TRIACANTHOS	HONEY LOCUST	8	20	8	65	TO BE REMOVED
101	QUERCUS RUBRA	RED OAK	8	8	8	75	TO BE REMOVED
102	QUERCUS RUBRA	RED OAK	10	10	10	33	TO BE REMOVED
103	QUERCUS ALBA	WHITE OAK	8	8	8	72	TO BE REMOVED
104	QUERCUS ALBA	WHITE OAK	8	6	8	57	TO BE REMOVED
105	LIRIODENDRON TULIPIFERA	TULIP POPLAR	22	11	22	81	TO BE REMOVED
107	ACER RUBRUM	RED MAPLE	8	10	8	84	TO BE PRESERVED
108	ACER RUBRUM	RED MAPLE	10	13	10	87	TO BE PRESERVED
109	ACER RUBRUM	RED MAPLE	14	12	14	84	TO BE PRESERVED
113	CARYA TOMENTOSA	MOCKERNUT HICKORY	15	19	15	75	TO BE PRESERVED
114	ACER RUBRUM	RED MAPLE	14	13	14	78	TO BE PRESERVED
115	ACER RUBRUM	RED MAPLE	45	23	45	72	TO BE PRESERVED
116	PRUNUS SEROTINA	BLACK CHERRY	18	12	18	78	TO BE PRESERVED
117	ACER RUBRUM	RED MAPLE	8	12	8	79	TO BE PRESERVED
118	FRAXINUS PENNSYLVANICA	GREEN ASH	20	10	10	78	TO BE PRESERVED
119	CARYA TOMENTOSA	MOCKERNUT HICKORY	13	19	13	81	TO BE PRESERVED
120	CARYA TOMENTOSA	MOCKERNUT HICKORY	21	20	21	58	TO BE REMOVED
121	FRAXINUS PENNSYLVANICA	GREEN ASH	8	8	8	69	TO BE REMOVED
122	FRAXINUS PENNSYLVANICA	GREEN ASH	12	12	12	68	TO BE REMOVED
123	GLEDITSIA TRIACANTHOS	HONEY LOCUST	6	6	6	78	TO BE REMOVED
130	GLEDITSIA TRIACANTHOS	HONEY LOCUST	8	9	8	81	TO BE REMOVED
131	GLEDITSIA TRIACANTHOS	HONEY LOCUST	15	8	15	69	TO BE REMOVED
132	GLEDITSIA TRIACANTHOS	HONEY LOCUST	12	20	12	89	TO BE REMOVED
133	ACER RUBRUM	RED MAPLE	20	21	20	81	TO BE PRESERVED
134	MORUS RUBRA	RED MULBERRY	7	9	7	75	TO BE PRESERVED
135	QUERCUS RUBRA	RED OAK	28	30	28	71	TO BE PRESERVED
136	MORUS RUBRA	RED MULBERRY	13	7	11	82	DEAD-TO BE REMOVED
137	ACER RUBRUM	RED MAPLE	14	10	14	37	TO BE PRESERVED
138	QUERCUS PHELLOS	WILLOW OAK	9	12	9	63	DEAD-TO BE REMOVED
139	MORUS RUBRA	RED MULBERRY	13	15	13	65	TO BE PRESERVED
140	MORUS RUBRA	RED MULBERRY	13	15	13	72	TO BE PRESERVED
142	QUERCUS RUBRA	RED OAK	9	6	9	38	TO BE PRESERVED
143	QUERCUS ALBA	WHITE OAK	14	5	14	38	TO BE PRESERVED
144	QUERCUS RUBRA	RED OAK	12	8	12	30	TO BE PRESERVED
145	QUERCUS ALBA	WHITE OAK	8	5	8	75	TO BE PRESERVED
146	QUERCUS RUBRA	RED OAK	14	10	14	58	TO BE PRESERVED
147	QUERCUS RUBRA	RED OAK	15	10	15	33	TO BE PRESERVED
148	QUERCUS RUBRA	RED OAK	11	12	11	86	TO BE PRESERVED
149	QUERCUS RUBRA	RED OAK	10	10	10	89	TO BE PRESERVED
150	QUERCUS RUBRA	RED OAK	11	8	11	86	TO BE PRESERVED
151	QUERCUS ALBA	WHITE OAK	7	5	7	77	TO BE PRESERVED
154	QUERCUS ALBA	WHITE OAK	11	8	11	86	TO BE PRESERVED
156	QUERCUS RUBRA	RED OAK	12	12	11	88	TO BE PRESERVED
157	ACER RUBRUM	RED MAPLE	9	7	9	72	TO BE PRESERVED
158	QUERCUS ALBA	WHITE OAK	9	8	9	25	TO BE PRESERVED
159	QUERCUS ALBA	WHITE OAK	14	15	14	75	TO BE PRESERVED
160	QUERCUS ALBA	WHITE OAK	13	15	13	75	TO BE PRESERVED
161	QUERCUS RUBRA	RED OAK	11	10	11	75	TO BE PRESERVED
162	CARYA TOMENTOSA	MOCKERNUT HICKORY	8	12	8	56	TO BE REMOVED
163	CARYA TOMENTOSA	MOCKERNUT HICKORY	23	23	23	47	TO BE REMOVED
164	ACER RUBRUM	RED MAPLE	20	14	20	30	TO BE REMOVED
165	PRUNUS SEROTINA	BLACK CHERRY	21	10	21	72	TO BE REMOVED
166	ULMUS AMERICANA	AMERICAN ELM	18	24	18	41	TO BE REMOVED
167	ULMUS AMERICANA	AMERICAN ELM	19	24	19	41	TO BE REMOVED
168	ACER RUBRUM	RED MAPLE	10	10	10	89	TO BE REMOVED
169	PRUNUS SEROTINA	BLACK CHERRY	8	8	8	66	TO BE REMOVED
170	QUERCUS RUBRA	RED OAK	25	27	25	38	TO BE REMOVED
171	PRUNUS SEROTINA	BLACK CHERRY	13	10	13	28	TO BE REMOVED
172	PRUNUS SEROTINA	BLACK CHERRY	8	10	8	89	TO BE REMOVED
173	ACER NEGUNDO	BOXELDER	5	12	5	34	TO BE REMOVED
174	PRUNUS SEROTINA	BLACK CHERRY	13	13	13	58	TO BE REMOVED
175	PRUNUS SEROTINA	BLACK CHERRY	8	19	8	63	TO BE REMOVED
176	NYSSA SYLVATICA	BLACK GUM	7	10	7	47	TO BE REMOVED
177	PRUNUS SEROTINA	BLACK CHERRY	8	12	8	47	TO BE REMOVED
178	PRUNUS SEROTINA	BLACK CHERRY	15	12	15	50	TO BE REMOVED
179	CARYA TOMENTOSA	MOCKERNUT HICKORY	8	10	8	72	TO BE REMOVED
180	CARYA TOMENTOSA	MOCKERNUT HICKORY	8	18	8	71	TO BE REMOVED
181	PRUNUS SEROTINA	BLACK CHERRY	8	7	8	31	TO BE REMOVED
182	QUERCUS RUBRA	RED OAK	10	10	10	94	TO BE REMOVED
183	PRUNUS SEROTINA	BLACK CHERRY	6	7	6	44	TO BE REMOVED
184	QUERCUS RUBRA	RED OAK	8	10	8	86	TO BE REMOVED
185	PINUS STROBUS	WHITE PINE	21	24	21	87	TO BE REMOVED
186	PINUS STROBUS	WHITE PINE	23	24	23	87	TO BE REMOVED
187	PINUS STROBUS	WHITE PINE	19	24	19	87	TO BE REMOVED
188	PINUS STROBUS	WHITE PINE	20	24	20	87	TO BE REMOVED
189	PINUS STROBUS	WHITE PINE	22	24	22	87	TO BE REMOVED
190	PRUNUS SEROTINA	BLACK CHERRY	3	4	3	33	TO BE REMOVED
191	LIRIODENDRON TULIPIFERA	TULIP POPLAR	30	40	30	97	TO BE PRESERVED
192	CORNUS FLORIDA	FLOWERING DOGWOOD	5	10	5	33	TO BE REMOVED
193	ACER RUBRUM	RED MAPLE	21	11	21	72	TO BE REMOVED
194	CORNUS FLORIDA	FLOWERING DOGWOOD	6	11	6	65	TO BE REMOVED
195	PRUNUS SEROTINA	BLACK CHERRY	14	20	14	39	TO BE REMOVED
196	FRAXINUS PENNSYLVANICA	GREEN ASH	30	25	25	58	TO BE REMOVED
197	ACER RUBRUM	RED MAPLE	45	15	45	44	TO BE REMOVED
198	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	6	4	6	65	TO BE REMOVED
199	ACER RUBRUM	RED MAPLE	27	11	27	71	TO BE REMOVED
200	QUERCUS PALUSTRIS	PIN OAK	9	6	9	84	TO BE REMOVED

378	ZELKOVA SERRATA	JAPANESE ZELKOVA	4	4	4	100	TO BE PRESERVED
379	ZELKOVA SERRATA	JAPANESE ZELKOVA	4	4	4	100	TO BE PRESERVED
380	ACER NEGUNDO	BOXELDER	10	18	10	44	TO BE REMOVED
381	ACER NEGUNDO	BOXELDER	13	20	13	45	TO BE REMOVED
382	ACER NEGUNDO	BOXELDER	3	8	3	38	TO BE REMOVED
398	ZELKOVA SERRATA	JAPANESE ZELKOVA	4	4	4	100	TO BE PRESERVED
399	ZELKOVA SERRATA	JAPANESE ZELKOVA	4	4	4	100	TO BE REMOVED
404	ZELKOVA SERRATA	JAPANESE ZELKOVA	4	4	4	100	TO BE REMOVED
405	ZELKOVA SERRATA	JAPANESE ZELKOVA	4	4	4	100	TO BE REMOVED
406	PRUNUS CERASIFERA	PURPLE LEAF PLUM	4	4	4	100	TO BE REMOVED
407	PRUNUS CERASIFERA	PURPLE LEAF PLUM	4	4	4	100	TO BE REMOVED
408	PRUNUS CERASIFERA	PURPLE LEAF PLUM	4	4	4	100	TO BE REMOVED
409	PRUNUS CERASIFERA	PURPLE LEAF PLUM	4	4	4	100	TO BE REMOVED
410	PRUNUS CERASIFERA	PURPLE LEAF PLUM	4	4	4	100	TO BE REMOVED
411	PRUNUS CERASIFERA	PURPLE LEAF PLUM	4	4	4	100	TO BE PRESERVED
412	PRUNUS CERASIFERA	PURPLE LEAF PLUM	4	4	4	100	TO BE PRESERVED
413	PRUNUS CERASIFERA	PURPLE LEAF PLUM	4	4	4	100	TO BE PRESERVED
414	PRUNUS CERASIFERA	PURPLE LEAF PLUM	4	4	4	100	TO BE PRESERVED
415	PRUNUS CERASIFERA	PURPLE LEAF PLUM	4	4	4	100	TO BE PRESERVED
417	PRUNUS CERASIFERA	PURPLE LEAF PLUM	4	4	4	100	TO BE PRESERVED
418	PRUNUS CERASIFERA	PURPLE LEAF PLUM	4	4	4	100	TO BE PRESERVED
419	PRUNUS CERASIFERA	PURPLE LEAF PLUM	4	4	4	100	TO BE PRESERVED
420	PRUNUS CERASIFERA	PURPLE LEAF PLUM	4	4	4	100	TO BE PRESERVED
421	PRUNUS CERASIFERA	PURPLE LEAF PLUM	4	4	4	100	TO BE PRESERVED
422	PRUNUS CERASIFERA	PURPLE LEAF PLUM	4	4	4	100	TO BE PRESERVED
423	PRUNUS CERASIFERA	PURPLE LEAF PLUM	4	4	4	100	TO BE PRESERVED
430	PRUNUS CERASIFERA	PURPLE LEAF PLUM	4	4	4	81	TO BE REMOVED
431	PRUNUS CERASIFERA	PURPLE LEAF PLUM	4	4	4	81	TO BE REMOVED
432	PRUNUS CERASIFERA	PURPLE LEAF PLUM	4	4	4	81	TO BE REMOVED
433	PRUNUS CERASIFERA	PURPLE LEAF PLUM	4	4	4	81	TO BE REMOVED
2709	PRUNUS SEROTINA	BLACK CHERRY	3	6	3	73	TO BE PRESERVED
2715	CORNUS FLORIDA	FLOWERING DOGWOOD	3	6	3	78	TO BE PRESERVED
2719	ACER RUBRUM	RED MAPLE	13	6	13	41	TO BE PRESERVED
2720	BETULA NIGRA	RIVER BIRCH	3	10	3	78	TO BE PRESERVED
2722	MORUS RUBRA	RED MULBERRY	6	4	6	63	TO BE PRESERVED
2726	MORUS RUBRA	RED MULBERRY	6	15	6	39	TO BE PRESERVED
2736	JUGLANS NIGRA	BLACK WALNUT	8	11	8	58	TO BE PRESERVED
2917	NYSSA SYLVATICA	BLACKGUM	8	7	8	78	TO BE PRESERVED
2947	QUERCUS ALBA	WHITE OAK	9	15	9	75	TO BE PRESERVED
2948	QUERCUS RUBRA	RED OAK	11	8	11	72	TO BE PRESERVED
2949	QUERCUS RUBRA	RED OAK	6	5	6	69	TO BE PRESERVED
2958	PRUNUS SEROTINA	BLACK CHERRY	7	3	8	33	DEAD-TO BE REMOVED
2959	CARYA TOMENTOSA	MOCKERNUT HICKORY	6	8	6	44	TO BE PRESERVED
2960	PRUNUS SEROTINA	BLACK CHERRY	8	7	8	33	TO BE PRESERVED
2961	MORUS RUBRA	RED MULBERRY	5	7	8	34	TO BE PRESERVED
2962	PRUNUS SEROTINA	BLACK CHERRY	8	8	8	38	DEAD-TO BE REMOVED
2963	MORUS RUBRA	RED MULBERRY	5	5	5	44	TO BE PRESERVED
2965	PRUNUS SEROTINA	BLACK CHERRY	6	5	6	28	DEAD-TO BE REMOVED
2966	PRUNUS SEROTINA	BLACK CHERRY	7	8	7	33	DEAD-TO BE REMOVED
2967	ACER RUBRUM	RED MAPLE	13	20	13	40	TO BE PRESERVED
2973	PRUNUS SEROTINA	BLACK CHERRY	3	4	3	38	DEAD-TO BE REMOVED
2974	PRUNUS SEROTINA	BLACK CHERRY	11	5	11	41	TO BE PRESERVED
2980	ACER RUBRUM	RED MAPLE	13	10	13	75	TO BE PRESERVED
2982	NYSSA SYLVATICA	BLACK GUM	5	8	6	75	TO BE PRESERVED
2983	PRUNUS SEROTINA	BLACK CHERRY	3	6	3	33	DEAD-TO BE REMOVED
2984	PRUNUS SEROTINA	BLACK CHERRY	4	6	4	31	DEAD-TO BE REMOVED
2985	ACER RUBRUM	RED MAPLE	5	8	6	63	TO BE PRESERVED
2986	SASSAFRAS ALBIDUM	SASSAFRAS	6	6	6	69	TO BE PRESERVED
2987	SASSAFRAS ALBIDUM	SASSAFRAS	6	7	6	69	TO BE PRESERVED
2988	SASSAFRAS ALBIDUM	SASSAFRAS	8	8	8	58	TO BE PRESERVED
2989	SASSAFRAS ALBIDUM	SASSAFRAS	8	13	6	69	TO BE PRESERVED
2990	SASSAFRAS ALBIDUM	SASSAFRAS	7	6	7	58	TO BE PRESERVED
2991	MORUS RUBRA	RED MULBERRY	13	20	13	81	TO BE PRESERVED
2992	ACER RUBRUM	RED MAPLE	13	20	13	75	TO BE PRESERVED
2993	QUERCUS PALUSTRIS	PIN OAK	24	18	24	60	TO BE PRESERVED
2994	UNIDENTIFIABLE	UNIDENTIFIABLE	6	0	4	0	DEAD
2995	ACER RUBRUM	RED MAPLE	14	17	14	67	TO BE PRESERVED
2996	ACER RUBRUM	RED MAPLE	21	23	21	58	TO BE PRESERVED
2997	QUERCUS RUBRA	RED OAK	24	25	23	62	TO BE PRESERVED
2998	FAGUS GRANDIFOLIA	AMERICAN BEECH	40	35	40	48	TO BE PRESERVED
2999	QUERCUS ALBA	WHITE OAK	50	40	50	75	TO BE PRESERVED

FOR FAIRFAX COUNTY EXISTING VEGETATION MAP PURPOSES

EVM DESIGNATION COVER TYPE SUMMARY TABLE

AREA	COVER TYPE	PRIMARY SPECIES	SUCCESSIONAL STAGE	ACREAGE	DESCRIPTION
A	EARLY SUCCESSIONAL FOREST COMMUNITY	BOXELDER, BLACK CHERRY, HONEY LOCUST, GREEN ASH, RED OAK, WHITE OAK	EARLY SUCCESSIONAL	0.90	FOREST AREAS LOCATED AT PROPERTY EDGES. AVERAGE TO POOR HEALTH. SOME DEAD TREES & SOME TREES TOPPED DUE TO OVERHEAD UTILITIES.
B	MAINTAINED GRASSLAND	NONE	N/A	2.43	MOWED GRASS LAWN AREA EXTENDING FROM GEORGE MASON BLVD. TO THE PERIMETER FOREST EDGES. AVERAGE HEALTH.
C	DEVELOPED LAND	NONE	N/A	1.83	GRAVEL PARKING LOT WITH PORTIONS OF OLD ASPHALT ESPECIALLY AT THE ENTRY TO SCHOOL STREET, SURROUNDED BY CHAIN LINK FENCING.
TOTAL SITE ACREAGE: 5.34 AC					

TABLE 12.3 TREE PRESERVATION TARGET CALCULATIONS AND STATEMENT (FAIRFAX COUNTY)	
A Pre-development area of existing tree canopy (from existing vegetation map) =	39,280 SF
B Percentage of gross site area covered by existing tree canopy =	17 %
C Percentage of 10-year tree canopy required for site (see Table 12.4) =	25 %
D Percentage of the 10-year tree canopy requirement that should be met through tree preservation =	3,332 SF
E Proposed percentage of canopy requirement that will be met through tree preservation =	10,315 SF
F Has the Tree Preservation Target minimum been met?	YES

#	DATE	REVISION
1	8/10/12	RESPOND TO COUNTY
		PRE-STAFFING REPORT
		DATED JULY 16, 2012 AND
		CITY COMMENTS LETTER
		DATED JULY 13, 2012
2	9/13/12	COUNTY STAFFING REPORT
		DATED 8/23/12 AND CITY
		COMMENTS DATED 9/6/12.
3	10/15/12	CITY AND COUNTY COMMENTS

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COMMONWEALTH OF VIRGINIA
ERIC S. SPENCER
Lic. No. 037519
11-20-12
PROFESSIONAL ENGINEER

EXISTING VEGETATION & TREE PRESERVATION DETAILS

ELEVEN OAKS

CITY OF FAIRFAX & FAIRFAX COUNTY, VA

PROJECT NO: 00400000
SCALE: NONE
DATE: APRIL, 2012
DESIGN: CEY
DRAWN: MEE
CHECKED: ESS
SHEET No. 05 of 19

THESE PLANS ARE PRELIMINARY IN NATURE AND SUBJECT TO CHANGE WITH FINAL ENGINEERING.

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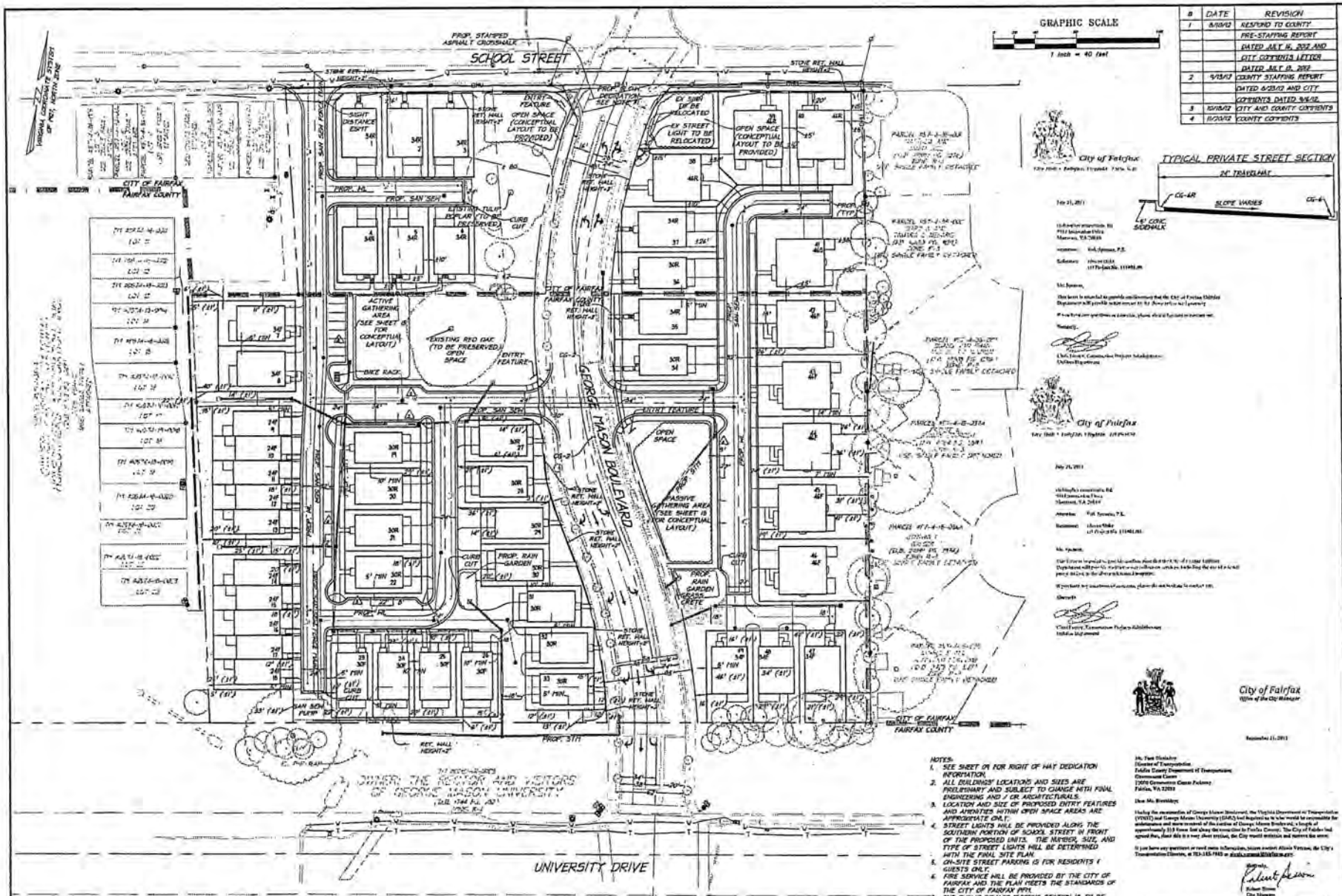

#	DATE	REVISION
1	8/10/12	RESPOND TO COUNTY PRE-STAFFING REPORT DATED JULY 16, 2012 AND CITY COMMENTS LETTER DATED JULY 13, 2012
2	9/13/12	COUNTY STAFFING REPORT DATED 6/28/12 AND CITY COMMENTS DATED 9/6/12
3	10/18/12	CITY AND COUNTY COMMENTS
4	11/20/12	COUNTY COMMENTS

City of Fairfax

July 31, 2012

Mr. Spencer,

This letter is intended to provide confirmation that the City of Fairfax Utilities Department will provide water service to the above referenced property.

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

Chief, Water Construction Project Administration
Utilities Department

City of Fairfax

July 31, 2012

Mr. Spencer,

This letter is intended to provide confirmation that the City of Fairfax Utilities Department will provide sanitary sewer service to the above referenced property.

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

Chief, Water Construction Project Administration
Utilities Department

City of Fairfax
Office of the City Manager

September 21, 2012

Ms. Fran Hinkelman
Director of Transportation
Fairfax County Department of Transportation
Government Center
12000 Government Center Parkway
Fairfax, VA 22035

Dear Ms. Hinkelman:

During the reconstruction of George Mason Boulevard, the Virginia Department of Transportation (VDOT) and George Mason University (GMU) had inquired as to who would be responsible for maintenance and snow removal of the section of George Mason Boulevard, a length of approximately 515 linear feet along the boundary in Fairfax County. The City of Fairfax had agreed that, since this is a very short section, the City would maintain and remove the snow.

If you have any questions or need more information, please contact Alexis Verzosa, the City's Transportation Director, at 703-385-7885 or averzosa@fairfaxva.gov.

Sincerely,

Robert Sisson
City Manager

cc: David Hudson, City of Fairfax Community Development and Planning Director
Russell Brandvold, Jr., Stallion Homes, Inc.
Erik Spencer, Christopher Consultants
David Summers, City of Fairfax Public Works Director
Alexis Verzosa, Transportation Director

NOTES:
1. SEE SHEET 04 FOR RIGHT OF WAY DEDICATION INFORMATION.
2. ALL BUILDINGS' LOCATIONS AND SIZES ARE PRELIMINARY AND SUBJECT TO CHANGE WITH FINAL ENGINEERING AND / OR ARCHITECTURALS.
3. LOCATION AND SIZE OF PROPOSED ENTRY FEATURES AND AMENITIES WITHIN OPEN SPACE AREAS ARE APPROXIMATE ONLY.
4. STREET LIGHTS WILL BE PROVIDED ALONG THE SOUTHERN PORTION OF SCHOOL STREET IN FRONT OF THE PROPOSED UNITS. THE MANNER, SIZE, AND TYPE OF STREET LIGHTS WILL BE DETERMINED WITH THE FINAL SITE PLAN.
5. ON-SITE STREET PARKING IS FOR RESIDENTS & GUESTS ONLY.
6. FIRE SERVICE WILL BE PROVIDED BY THE CITY OF FAIRFAX AND THE PLAN MEETS THE STANDARDS OF THE CITY OF FAIRFAX FPM.
7. THE PUBLIC SEWAGE PUMPING STATION IS TO BE MAINTAINED BY THE CITY OF FAIRFAX AS STATED IN THE LETTER OF INTENT ON THIS SHEET.
8. GEORGE MASON BOULEVARD IS TO BE MAINTAINED BY THE CITY OF FAIRFAX. SEE LETTER THIS SHEET.

THESE PLANS ARE PRELIMINARY IN NATURE AND SUBJECT TO CHANGE WITH FINAL ENGINEERING.

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COMMONWEALTH OF VIRGINIA
ERIK S. SPENCER
Lic. No. 037519
11-20-12
PROFESSIONAL ENGINEER

FAIRFAX COUNTY CDP-FDP
& CITY OF FAIRFAX
GDP-PSP

ELEVEN OAKS

CITY OF FAIRFAX & FAIRFAX COUNTY, VA

PROJECT NO: 10-03000
SCALE: 1"=40'
DATE: APRIL, 2012
DESIGN: LET
DRAWN: MEE
CHECKED: ESS
SHEET No.
06 of 19

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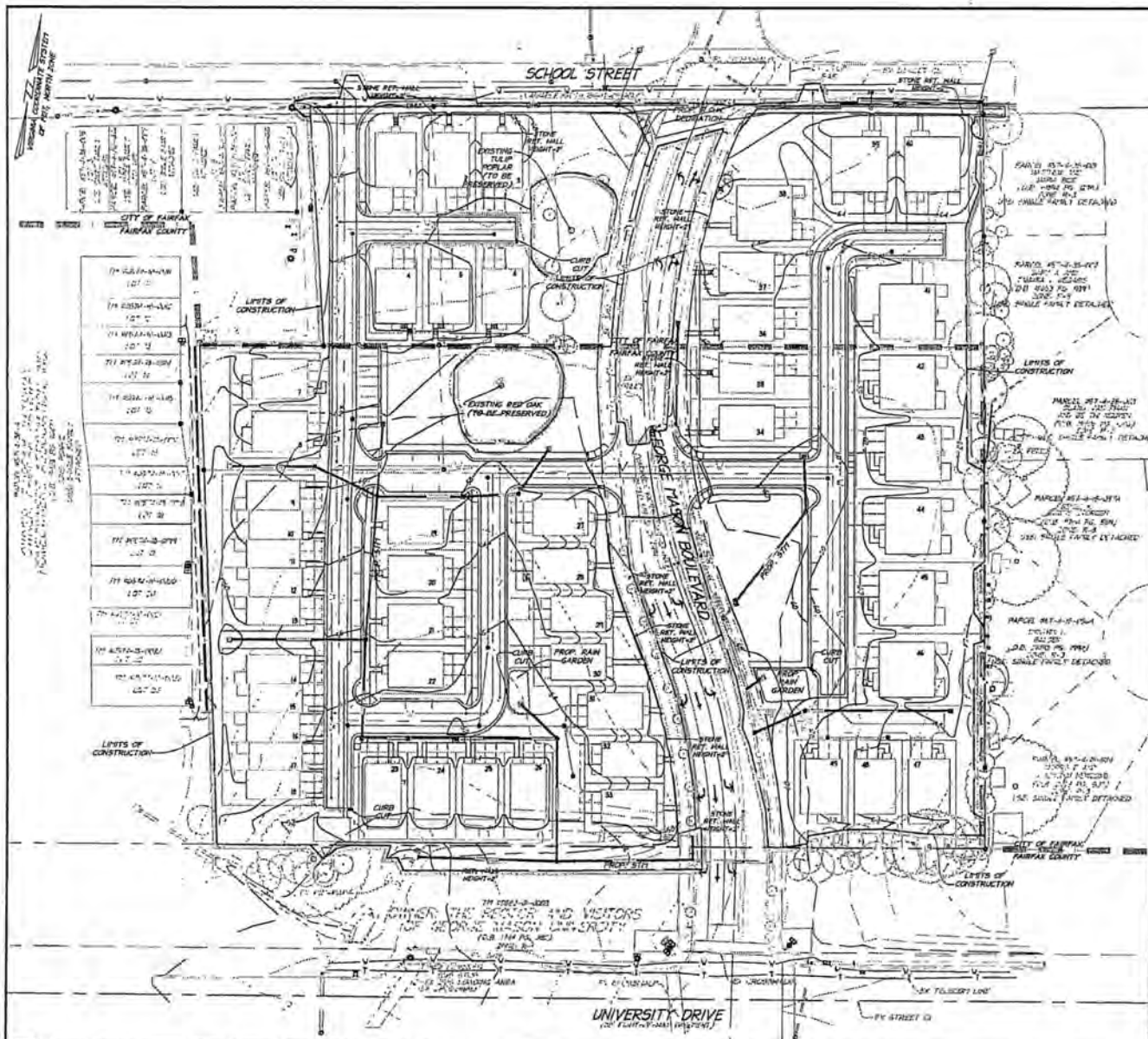


THESE PLANS ARE PRELIMINARY IN NATURE AND SUBJECT TO CHANGE WITH FINAL ENGINEERING.

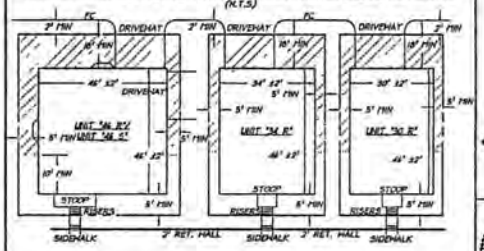
NOTE:
SMALL RETAINING WALLS (±2') MAY BE REQUIRED AT THE LIMITS OF CLEARING AND GRADING ALONG THE EASTERN PROPERTY BOUNDARY, BUT THIS WILL BE DETERMINED DURING FINAL ENGINEERING AT THE TIME OF SITE PLAN.

GRAPHIC SCALE

1 inch = 40 feet

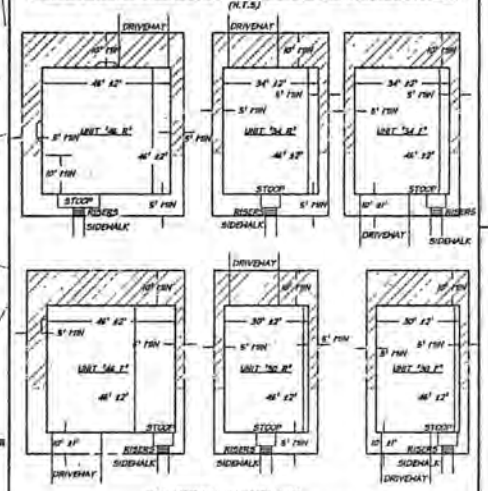
#	DATE	REVISION
1	6/10/12	RESPOND TO COUNTY PRE-STAFFING REPORT DATED JULY 16, 2012 AND CITY COMMENTS LETTER DATED JULY 13, 2012
2	9/13/12	COUNTY STAFFING REPORT DATED 8/23/12 AND CITY COMMENTS DATED 9/6/12.
3	10/18/12	CITY AND COUNTY COMMENTS
4	11/20/12	COUNTY COMMENTS

MINIMUM YARD LAYOUTS BY BUILDING TYPE IN CITY OF FAIRFAX (N.T.S.)

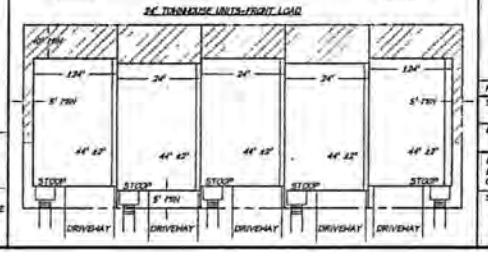


YARD TO INCLUDE DECKS, PATIOS, FENCES, FIREPLACE OVERHANGS, ETC. BAY WINDOWS ALLOWED IF THE REQUIRED BUILDING SEPARATION IS PROVIDED.

MINIMUM YARD LAYOUTS BY BUILDING TYPE IN FAIRFAX COUNTY (N.T.S.)



24' TOWNHOUSE UNITS-FRONT LOAD



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ERIK S. SPENCER
Lic. No. 037519
11-20-12
PROFESSIONAL ENGINEER

CONCEPTUAL GRADING PLAN

ELEVEN OAKS
CITY OF FAIRFAX & FAIRFAX COUNTY, VA

PROJECT NO. 40143000
SCALE: 1"=40'
DATE: APRIL, 2012
DESIGN BY: DRAWN: MEE CHECKED: ESS
SHEET No. 07 OF 19

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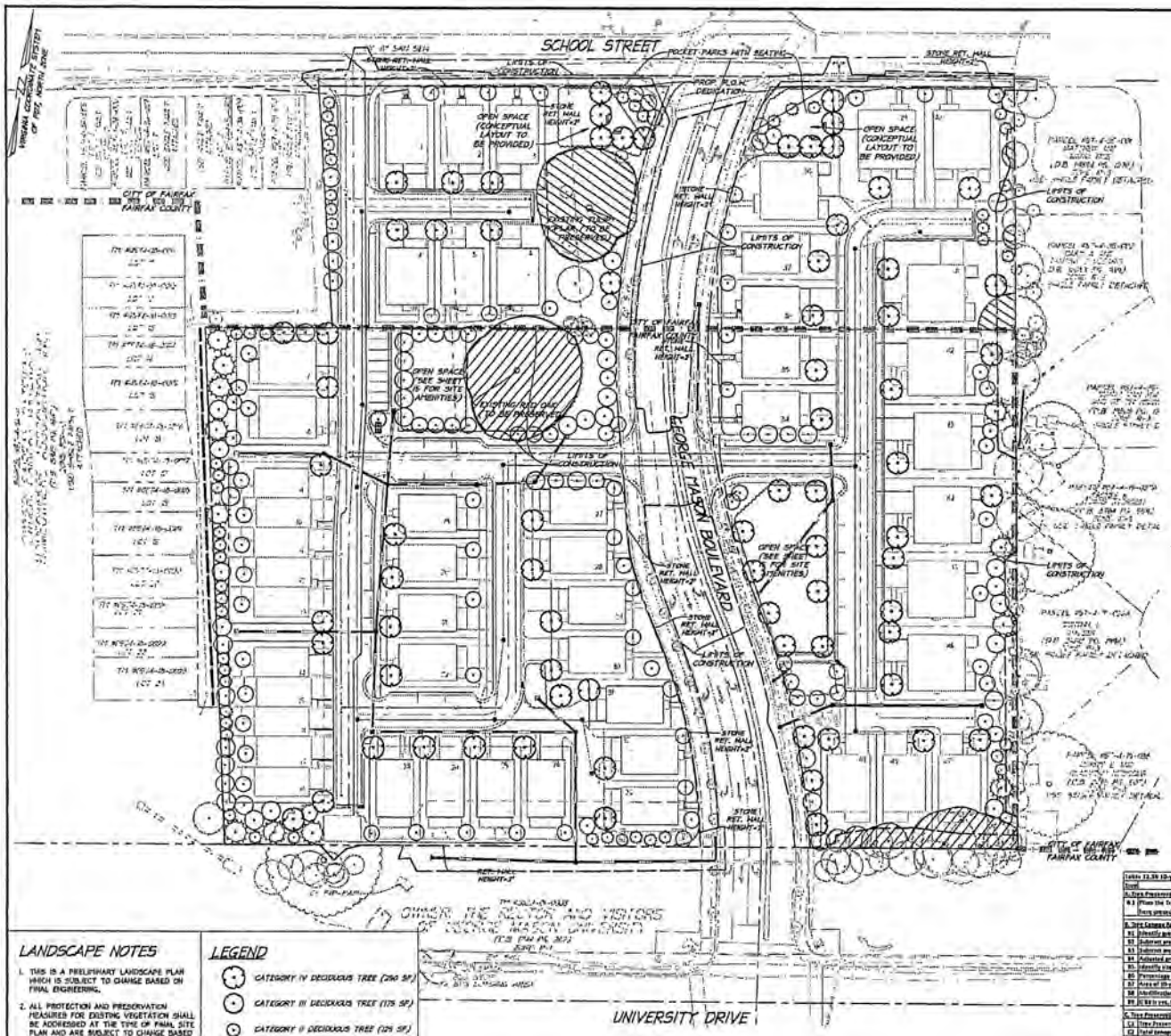

GRAPHIC SCALE

1 inch = 40 feet

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF FAIRFAX AND VIRGINIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.

#	DATE	REVISION
1	8/10/12	RESPOND TO COUNTY STAFFING REPORT DATED JULY 16, 2012 AND CITY COMMENTS LETTER DATED JULY 13, 2012
2	9/13/12	COUNTY STAFFING REPORT DATED 8/23/12 AND CITY COMMENTS DATED 9/4/12.
3	10/15/12	CITY AND COUNTY COMMENTS
4	11/20/12	COUNTY COMMENTS

CITY OF FAIRFAX

10-YEAR TREE COVER TABULATIONS

GROSS SITE AREA (GSA): 10,495 SF
TREE COVER REQUIRED (PDH-20A): 18,499 SF

TREE PRESERVATION (±8%): 7,040 SF

PROPOSED TREE PLANTING:
24 - 3" CALIPER DECIDUOUS CATEGORY IV (250 SF): 6,000 SF
4 - 3" CALIPER DECIDUOUS CATEGORY III (175 SF): 700 SF
18 - 3" CALIPER DECIDUOUS CATEGORY II (125 SF): 2,250 SF
21 - 6-8' HEIGHT EVERGREEN CATEGORY II (125 SF): 2,625 SF
TOTAL PROPOSED TREE PLANTING: 11,575 SF

TOTAL TREE COVERAGE PROVIDED (120%): 18,515 SF

PARKING AREA LANDSCAPE REQUIREMENTS

THERE IS NO SURFACE PARKING IN THE CITY OF FAIRFAX SUBJECT AREA. THEREFORE PERIPHERAL LANDSCAPING AND INTERIOR LANDSCAPING REQUIREMENTS DOES NOT APPLY.

LANDSCAPE BUFFER REQUIREMENTS:

NORTHERN PROPERTY LINE- PD VS. R-3 / PD NONE REQUIRED
EASTERN PROPERTY LINE- PD VS. R-3 NONE REQUIRED
SOUTHERN PROPERTY LINE- PD VS. PDH-8 NONE REQUIRED
WESTERN PROPERTY LINE- PD VS. P-DAP(H-1) NONE REQUIRED

NO SCREENING IS REQ'D AS PER CITY OF FFX. ZONING ORDINANCE SECTION 110-258

FAIRFAX COUNTY

10-YEAR TREE COVER TABULATIONS

GROSS SITE AREA (GSA): 253,482 SF
TREE COVER REQUIRED (PDH-8-301): 46,758 SF

TREE PRESERVATION (±4%): 10,316 SF

PROPOSED TREE PLANTING:
30 - 3" CALIPER DECIDUOUS CATEGORY IV (250 SF): 12,500 SF
49 - 3" CALIPER DECIDUOUS CATEGORY III (175 SF): 7,000 SF
81 - 3" CALIPER DECIDUOUS CATEGORY II (125 SF): 10,125 SF
13 - 6-8' HEIGHT EVERGREEN CATEGORY IV (250 SF): 3,000 SF
39 - 6-8' HEIGHT EVERGREEN CATEGORY II (125 SF): 5,875 SF
TOTAL PROPOSED TREE PLANTING: 38,500 SF

TOTAL TREE COVERAGE PROVIDED (120%): 46,816 SF

PERIPHERAL PARKING LOT TABULATIONS

THERE IS NO PERIPHERAL PARKING LOT REQUIREMENT FOR THIS SITE AS THIS SITE DOES NOT CONTAIN A PARKING LOT WITH MORE THAN 20 PARKING SPACES.

INTERIOR PARKING LOT TABULATIONS

THERE IS NO INTERIOR PARKING LOT REQUIREMENT FOR THIS SITE AS THIS SITE DOES NOT CONTAIN A PARKING LOT WITH MORE THAN 20 PARKING SPACES.

LANDSCAPE BUFFER REQUIREMENTS:

NORTHERN PROPERTY LINE- DETACHED DWELLING VS. DETACHED DWELLING- NONE REQUIRED
EASTERN PROPERTY LINE- DETACHED DWELLING VS. DETACHED DWELLING- NONE REQUIRED
SOUTHERN PROPERTY LINE- DETACHED DWELLING VS. OPEN SPACE- NONE REQUIRED
WESTERN PROPERTY LINE- DETACHED DWELLING VS. ATTACHED DWELLINGS- NONE REQUIRED

NO SCREENING IS REQ'D AS PER THE FFX. COUNTY ZONING ORDINANCE ARTICLE 13, PART 3, SECTION 13-300, TRANSITIONAL SCREENING I BARRIER

PROPOSED TREE SPECIES

PROPOSED TREE SPECIES SHALL INCLUDE BUT NOT BE LIMITED TO: RED MAPLE, RED OAK, CHINESE ELM, AMERICAN HOLLY, VIRGINIA PINE, ZELKOVA, WILLOW OAK, CHERRY AND RED BUD. THESE SPECIES ARE SUBJECT TO CHANGE BASED ON AVAILABILITY AT THE TIME OF THE SITE PLAN PROCESS AND FINAL ENGINEERING.

LANDSCAPE NOTES

1. THIS IS A PRELIMINARY LANDSCAPE PLAN WHICH IS SUBJECT TO CHANGE BASED ON FINAL ENGINEERING.
2. ALL PROTECTION AND PRESERVATION MEASURES FOR EXISTING VEGETATION SHALL BE ADDRESSED AT THE TIME OF FINAL SITE PLAN AND ARE SUBJECT TO CHANGE BASED ON FINAL ENGINEERING.
3. ALL UTILITIES SHALL BE LOCATED PRIOR TO CONSTRUCTION AND PLANTING.
4. PROPOSED EASEMENTS SHOWN ARE SUBJECT TO CHANGE BASED ON FINAL ENGINEERING.
5. CATEGORY IV DECIDUOUS STREET TREES SHOULD HAVE A MINIMUM OF 3.5" CALIPER (AT 6" ABOVE GRADE).

LEGEND

- CATEGORY IV DECIDUOUS TREE (250 SF)
- CATEGORY III DECIDUOUS TREE (175 SF)
- CATEGORY II DECIDUOUS TREE (125 SF)
- CATEGORY IV EVERGREEN TREE (250 SF)
- CATEGORY II EVERGREEN TREE (125 SF)
- TREE TO BE PRESERVED
- LIMITS OF CLEARING AND GRADING

THESE PLANS ARE PRELIMINARY IN NATURE AND SUBJECT TO CHANGE WITH FINAL ENGINEERING.

Table 12.39 10-year Tree Canopy Calculation Worksheet

Item	Totals
A. Tree Preservation Target and Assessment	
A.1 Plan the Tree Preservation Target calculations and statement: Trees providing the 10-year tree canopy calculations	893
B. Tree Canopy Development	
B1 Developable gross site area =	253,482
B2 Subtract area dedicated to ponds, road frontage, and	0
B3 Subtract area of encumbrances =	0
B4 Adjusted gross site area (B1 - B2) =	253,482
B5 Identify site's landing and/or use	PDH-8
B6 Percentage of 10-year tree canopy required =	20
B7 Area of 10-year tree canopy required (B4 x B6) =	46,730
B8 Identification of 10-year Tree Canopy Requirements requested?	no
B9 If B8 is yes, what % plan phase/ allow modifications requested by Section 4	n/a
C. Tree Preservation	
C1 Tree Preservation Target Area =	3,332
C2 Total canopy area meeting standards of § 12-0409 =	10,313
C3 C2 x 1.25 =	12,891
C4 Total canopy area provided by unique or valuable forest or woodland communities =	0
C5 C4 x 1.5 =	0
C6 Total of canopy area provided by "heritage," "memorial," "specimen," or "historic" trees =	0
C7 (C4 x 1.5) + (C5 x 2) =	0
C8 Canopy area of trees within Resource Protection Areas and 100-year floodplains =	0
C9 C8 x 1.5 =	0
C10 Total of C3, C5, C7 and C9 =	12,891

D. Tree Planting	
D1 Area of canopy to be met through tree planting (B7-C10) =	33,887
D2 Area of canopy planted for air quality benefits =	0
D3 x 1.5 =	0
D4 Area of canopy planted for energy conservation =	0
D5 x 1.5 =	0
D6 Area of canopy planted for water quality benefits =	0
D7 x 1.25 =	0
D8 Area of canopy planted for wildlife benefits =	0
D9 x 1.5 =	0
D10 Area of canopy provided by native trees =	0
D11 x 1.5 =	0
D12 Area of canopy provided by improved cultivars and hybrids =	0
D13 x 1.25	0
D14 Area of canopy provided through tree seedlings =	0
x 1.0	0
D15 Area of canopy provided through native shrubs =	0
x 1.0	0
D16 Percentage of D14 represented by D15=	0
D17 Total of canopy area provided through tree planting =	38,500
D18 Is an off-site planting option requested?	no
D19 Tree Bank or Tree Fund?	n/a
D20 Canopy area requested to be provided through off-site banking or tree fund	no
D21 Amount to be deposited into the Tree Preservation and Planting Fund	no

E. Total of 10-year Tree Canopy Provided	
E1 Total of canopy area provided through tree preservation (C10) =	12,891
E2 Total of canopy area provided through tree planting (D17) =	38,500
E3 Proof of canopy area provided through off-site mechanism (D19) =	no
E4 Total of 10-year Tree Canopy Provided = (E1+E2+E3)	46,391

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COMMONWEALTH OF VIRGINIA
ERIC S. SPENCER
Lic. No. 037519
11-20-12
PROFESSIONAL ENGINEER

PRELIMINARY LANDSCAPING PLAN

ELEVEN OAKS
CITY OF FAIRFAX & FAIRFAX COUNTY, VA

PROJECT NO. 10A00100
SCALE: 1"=40'
DATE: APRIL, 2012
DESIGN: CET
DRAWN: PEE
CHECKED: ESS
SHEET No. 08 OF 19

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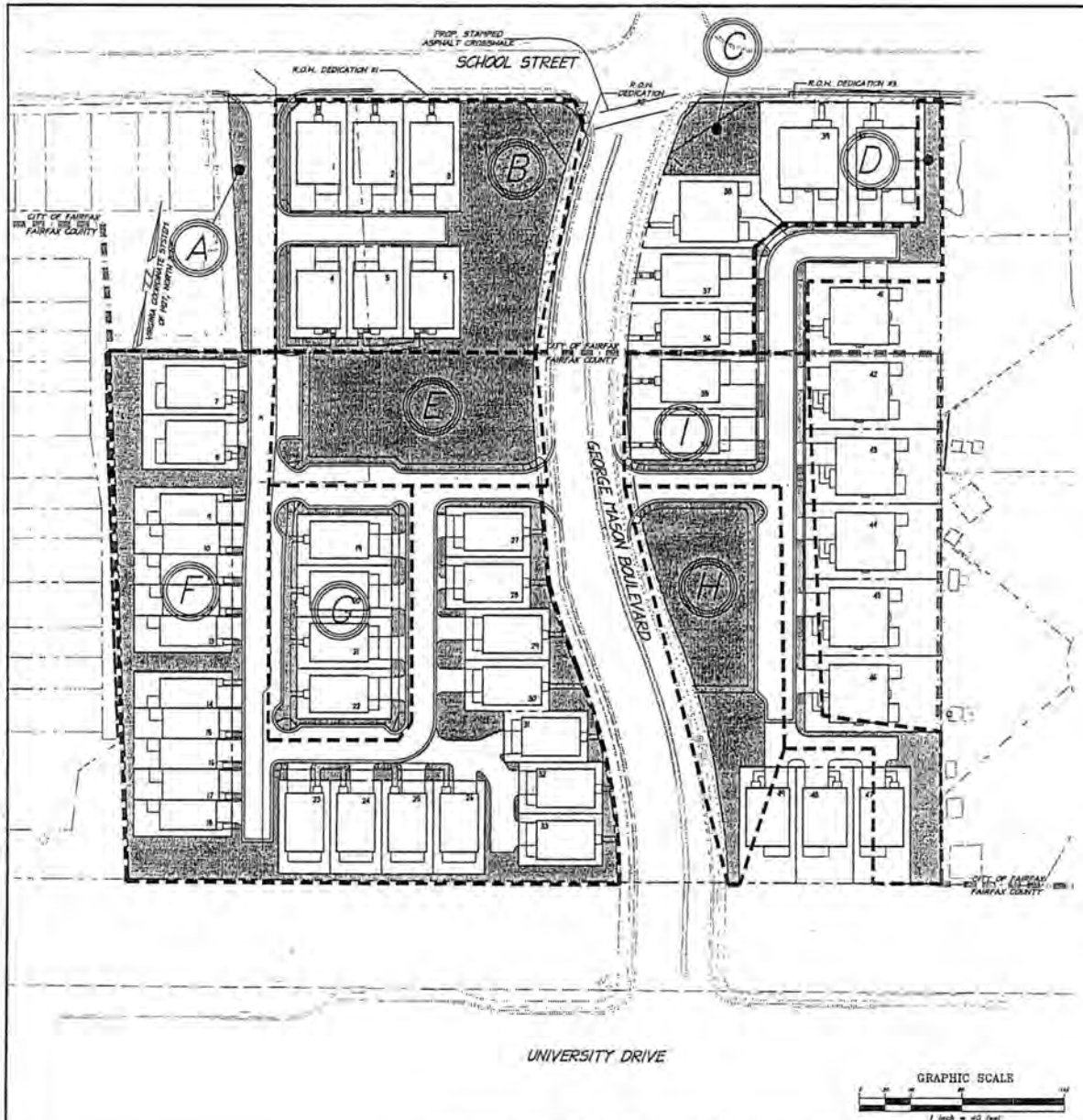


GRAPHIC SCALE

1 inch = 40 feet

#	DATE	REVISION
1	8/10/12	RESPOND TO COUNTY PRE-STAFFING REPORT DATED JULY 16, 2012 AND CITY COMMENTS LETTER DATED JULY 13, 2012
2	9/13/12	COUNTY STAFFING REPORT DATED 8/23/12 AND CITY COMMENTS DATED 9/6/12

Open Space Computations

Fairfax City		Fairfax County	
Zone	= PD (p)	Zone	= PDH-8
Fairfax City Property Area	= 97,250 sf	Fairfax County Property Area	= 233,052 sf
Open Space required (20%)	= 19,458 sf	Open Space required (25%)	= 58,438 sf
Total open space provided	= 126,100 sf	Total open space provided	= 164,500 sf
	= 127%		= 128%
Maximum Impervious Area Coverage	= 50.00%		
Impervious Area	= 48,845 sf		
Impervious Area Coverage Provided	= 50%		

Total Open Space Provided in the Eleven Oaks Development

Total Property Area	= 330,042 sf
Total Open Space Provided	= 90,600 sf
	= 127%

Notes: Fairfax City
1. In continuous open space sections of at least 10,000 square feet each.
2. The maximum permitted coverage by all impervious surfaces shall be 50% of the gross tract area.
3. Within the development, a contiguous common or public open space area shall be provided consisting of at least 20% of the gross tract area.

R.O.W. DEDICATION #1 = 1,603 SF
R.O.W. DEDICATION #2 = 1,894 SF
R.O.W. DEDICATION #3 = 1,290 SF

Open Space Area (City of Fairfax)	Area Provided (sf)
A	1,800
B	27,400
C	3,500
D	3,400
Total:	26,100

Open Space Area (Fairfax County)	Area Provided (sf)
E	16,900
F	23,700
G	3,700
H	14,400
I	6,100
Total:	64,500

LEGEND

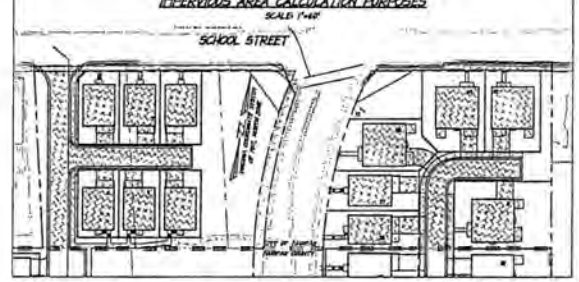
: PROP. R.O.W.

: OPEN SPACE

: R.O.W. DEDICATION

: CITY OF FAIRFAX IMPERVIOUS AREA

FOR CITY OF FAIRFAX
IMPERVIOUS AREA CALCULATION PURPOSES
SCALE: 1"=60'



SCALE: 1" = 60'
60 30 0 60 120
GRAPHIC SCALE

THESE PLANS ARE PRELIMINARY IN NATURE AND SUBJECT TO CHANGE WITH FINAL ENGINEERING.

christopher consultants
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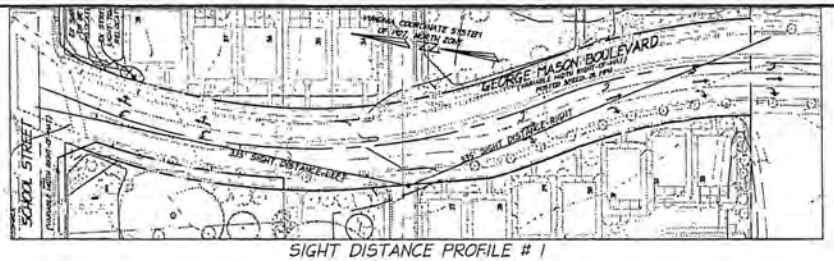
COMMONWEALTH OF VIRGINIA
C. LINK S. SPENCER
Lic. No. 037519
11-20-12
PROFESSIONAL ENGINEER

OPEN SPACE PLAN

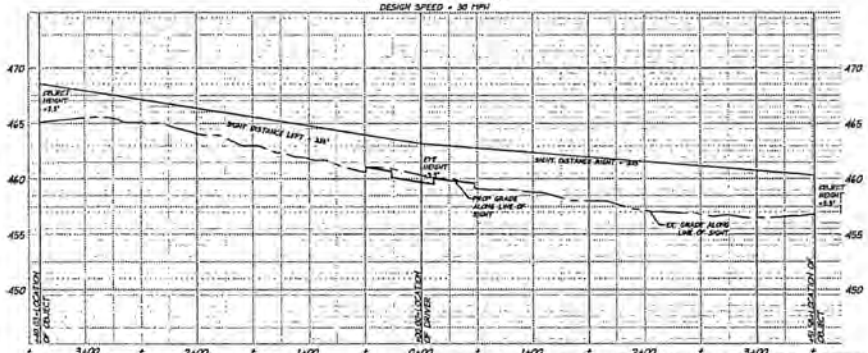
ELEVEN OAKS
CITY OF FAIRFAX & FAIRFAX COUNTY, VA

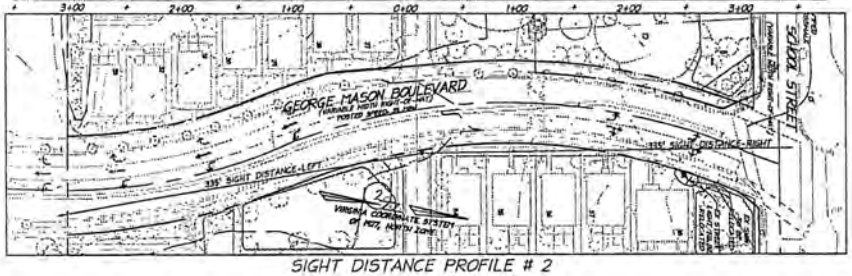
PROJECT NO. 100400100
SCALE: AS SHOWN
DATE: APRIL, 2012
DESIGN: CET
DRAWN: MEE
CHECKED: ESS
SHEET No.
09 of 19

100006

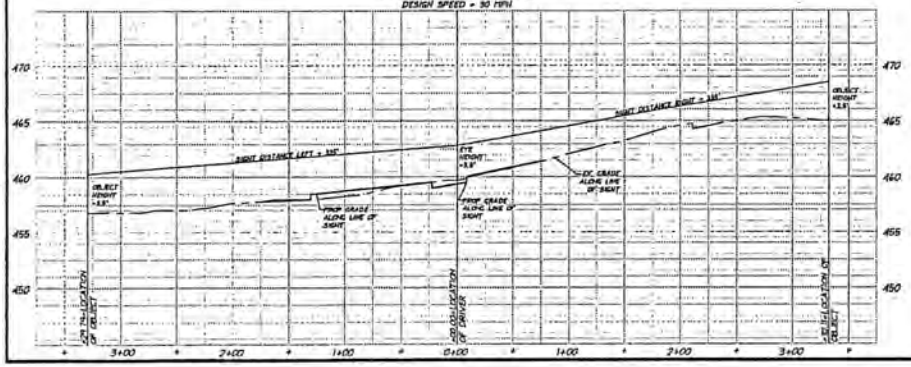


SIGHT DISTANCE PROFILE # 1
GEORGE MASON BLVD
DESIGN SPEED = 30 MPH





SIGHT DISTANCE PROFILE # 2
GEORGE MASON BLVD
DESIGN SPEED = 30 MPH

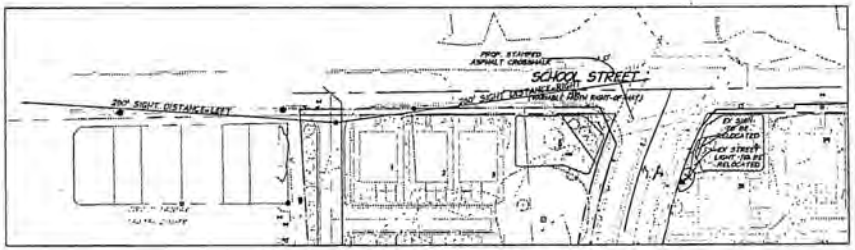


#	DATE	REVISION
1	8/10/12	RESPOND TO COUNTY PRE-STAFFING REPORT DATED JULY 16, 2012 AND CITY COMMENTS LETTER DATED JULY 18, 2012
2	9/13/12	COUNTY STAFFING REPORT DATED 8/23/12 AND CITY COMMENTS DATED 9/6/12.

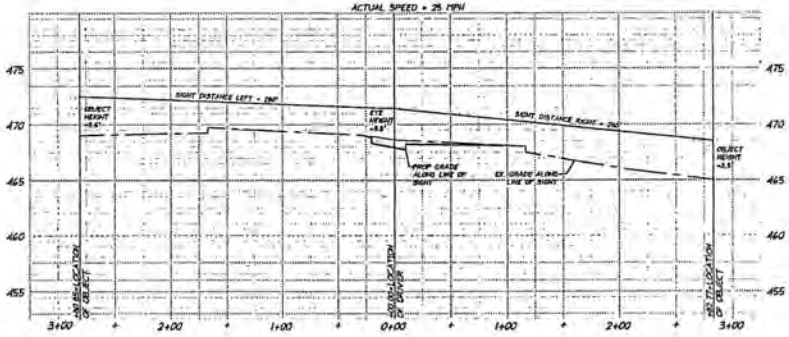
HORIZONTAL GRAPHIC SCALE
1 inch = 50 feet

VERTICAL GRAPHIC SCALE
1 inch = 5 feet

THESE PLANS ARE PRELIMINARY IN NATURE AND SUBJECT TO CHANGE WITH FINAL ENGINEERING.



SIGHT DISTANCE PROFILE # 3
SCHOOL STREET
ACTUAL SPEED = 25 MPH



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COMMONWEALTH OF VIRGINIA
LINK S. SPENCER
Lic. No. 037519
11-20-12
PROFESSIONAL ENGINEER

SIGHT DISTANCE PLAN & PROFILES

ELEVEN OAKS
CITY OF FAIRFAX & FAIRFAX COUNTY, VA

PROJECT NO. 00100100
SCALE: HORIZ. 1"=50' VERT. 1"=5'
DATE: APRIL, 2012
DESIGN: CEY
DRAWN: MEE
CHECKED: ESS
SHEET No.
10 of 19

100006

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 (8-011 2J & 2L)	Special Exceptions (9-011 2J & 2L)
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)
FDP P Districts (except PRC) (16-502 1F & 1Q)	Amendments (18-202 10F & 10I)

- [X] 1. Plat is at a minimum scale of 1"=50' (unless it is depicted on one sheet with a minimum scale of 1"=100').
- [X] 2. 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 *1 (3/10)*
- [X] 3. Provide:

Facility Name/ Type & No.	On-site area served (acres)	Off-site area served (acres)	Drainage area (acres)	Footprint area (sf)	Storage Volume (cf)	If pond, dam height (ft)
ACADEMIC VIII RETENTION BASIN	*8.25 AC*	*	*	*	*	*
Totals						

(TO BE DESIGNED/ CONSTRUCTED WITH GMU'S PROPOSED "ACADEMIC VIII" BUILDING

- [X] 4. Onsite drainage channels, outfalls and pipe systems are shown on Sheet *06*. Pond inlet and outlet pipe systems are shown on Sheet *N/A*.
- [X] 5. Maintenance access (road) to stormwater management facility(ies) are shown on Sheet *N/A*. Type of maintenance access road surface noted on the plat is *N/A* (asphalt, geoblock, gravel, etc.).
- [X] 6. Landscaping and tree preservation shown in and near the stormwater management facility is shown on Sheet *N/A*.
- [X] 7. A "stormwater management narrative" which contains a description of how detention and best management practices requirements will be met is provided on Sheet *11*.
- [X] 8. 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 *11*.
- [X] 9. A description of how the outfall requirements, including contributing drainage areas of the Public Facilities Manual will be satisfied is provided on Sheet *11*.
- [X] 10. 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 *03/07*.
- [X] 11. A submission waiver is requested for *PROVIDING STORMWATER MANAGEMENT OFFSITE ON GMU'S PROPERTY.*
- [X] 12. Stormwater management is not required because *GMU HAS AGREED TO AND HAS THE CAPACITY WITH THE PROPOSED POND BEING CONSTRUCTED WITH "ACADEMIC VII" ON THEIR PROPERTY TO ACCEPT ELEVEN OAKS STORMWATER RUNOFF.*

SWM/BMP/ADEQUATE OUTFALL OVERALL NARRATIVE:

BASED UPON THE ATTACHED LETTER OF UNDERSTANDING WITH GEORGE MASON UNIVERSITY (GMU), BMP AND SWM REQUIREMENTS FOR THIS SITE WILL BE PROVIDED BY GMU. IT IS INTENDED THAT THESE REQUIREMENTS WILL BE SATISFIED BY THE NEW POND BEING CONSTRUCTED BY GMU AS PART OF THE GMU ACADEMIC VII PROJECT (OPTION 1-SHEET 11). IN THE EVENT, FOR ANY REASON, THE GMU ACADEMIC VII PROJECT DOES NOT PROCEED AS CURRENTLY PLANNED AND FUNDED, THE BMP AND SWM REQUIREMENTS FOR THIS SITE WILL BE PROVIDED THROUGH THE USE AND IMPROVEMENT, AS REQUIRED, OF EXISTING FACILITIES ON THE GMU PROPERTY (OPTION 2- SHEETS 12/13).

BEST MANAGEMENT PRACTICE (BMP) NARRATIVE

THE BMP REQUIREMENTS FOR THE ELEVEN OAKS DEVELOPMENT WILL BE SATISFIED BY UTILIZING A PROPOSED RETENTION BASIN ON GEORGE MASON UNIVERSITY'S PROPERTY TO PROVIDE WATER QUALITY MEASURES. THE RETENTION FACILITY IS CURRENTLY BEING DESIGNED AS PART OF THE GEORGE MASON UNIVERSITY ACADEMIC VII PROJECT. THE LETTER OF INTENT FROM GEORGE MASON STATED THAT THEY WILL WORK TO PROVIDE THE BMP FOR THIS SITE. (mi) WILL WORK WITH GEORGE MASON UNIVERSITY DURING THE DESIGN OF THE FACILITY TO ENSURE THAT THE ADDITIONAL BMP VOLUME WILL BE PROVIDED. IN ADDITION, TWO ONSITE BIO-RETENTION FACILITIES ARE SHOWN TO PROVIDE ADDITIONAL ONSITE WATER QUALITY MEASURES.

STORMWATER MANAGEMENT (SWM) NARRATIVE

NO STORMWATER MANAGEMENT FACILITIES ARE BEING PROPOSED WITH THIS SITE. BASED ON THE LETTER OF UNDERSTANDING, GMU HAS AGREED TO ACCEPT THE INCREASE IN RUNOFF GENERATED FROM THIS PROJECT. GMU IS PROPOSING A NEW STORMWATER MANAGEMENT FACILITY TO BE CONSTRUCTED WITH THEIR ACADEMIC VII PROJECT. THIS FACILITY WILL BE DESIGNED TO INCORPORATE THE INCREASE IN RUNOFF FROM THIS SITE. THEREFORE, GMU WILL BE PROVIDING THE SWM FOR THIS SITE.

ADEQUATE OUTFALL NARRATIVE

DEVELOPED CONDITIONS

CURRENTLY TWO SEPARATE OUTFALL EXIST FOR THIS SITE.

THE FIRST SYSTEM IS LOCATED ON THE NORTHERN PORTION OF THE SITE ALONG SCHOOL STREET WITHIN THE CITY OF FAIRFAX. APPROXIMATELY 0.5 ACRES DRAIN TO THIS EXISTING ADEQUATE SYSTEM.

THE SECOND SYSTEM IS LOCATED ON THE SOUTHWEST PORTION OF THE SITE, ADJACENT TO UNIVERSITY DRIVE, AND IT COLLECTS THE REMAINDER OF THE STORMWATER RUNOFF FROM THIS SITE. THIS RUNOFF FLOWS THROUGH A STORM SYSTEM ONTO GEORGE MASON UNIVERSITY PROPERTY INTO THE PROPOSED POND. THE PIPE RUN UNDER UNIVERSITY DRIVE WILL BE UPGRADED TO MAKE IT ADEQUATE.

THE POND BEING BUILT WITH ACADEMIC VII WILL BE DESIGNED TO HANDLE THE PROPOSED INCREASE OF FLOW FOR THIS SITE. THE LETTER OF INTENT STATES GMU WILL WORK WITH THE ELEVEN OAKS PROJECT TO MAKE SURE GMU'S POND IS ADEQUATELY SIZED.

EXTENT OF REVIEW

SINCE THE POND PROPOSED WITH GEORGE MASON UNIVERSITY'S "ACADEMIC VII" WILL BE DESIGNED TO FACILITATE THE PROPOSED RUNOFF, THE POND SHALL BE DEEMED ADEQUATE TO HANDLE THE 10 YEAR FLOWS. THEREFORE, THE ELEVEN OAKS SITE HAS AN ADEQUATE OUTFALL.

CONCLUSION

SINCE THERE WILL BE NO ADVERSE IMPACTS ON ANY OF THE DOWNSTREAM PROPERTIES, THIS DEVELOPMENT MEETS THE CRITERIA ESTABLISHED BY FAIRFAX COUNTY'S GUIDELINES FOR AN ADEQUATE OUTFALL. IT IS THE OPINION OF THE ENGINEER THAT AN ADEQUATE OUTFALL EXISTS FOR THIS DEVELOPMENT.

ELEVEN OAKS OUTFALL

SCALE: 1"=100'

SWM CALCULATIONS

Pre-Development Eleven Oaks Site Conditions

Total Site Area	± 359,331 sf	± 8.25 Ac
Total Existing Impervious Area	± 157,804 sf	± 3.62 Ac
Site Runoff Coefficient	C=	0.56
Time Of Concentration (T_c)	Tc=	5 min
Rainfall Intensity	I_2=	5.45
	I_{10}=	7.27
Total Site Runoff	Q_2=	25.31 cfs
	Q_{10}=	33.77 cfs

Post-Development Eleven Oaks Site Conditions

Total Site Area	± 359,331 sf	± 8.25 Ac
Total Impervious Area	± 235,000 sf	± 5.39 Ac (includes GMU Dr. (±1.3Ac))
Site Runoff Coefficient	C=	0.69
Time Of Concentration	Tc=	5 min
Rainfall Intensity	I_2=	5.45
	I_{10}=	7.27
Total Site Runoff	Q_2=	31.13 cfs
	Q_{10}=	41.52 cfs

Net Increase from Pre to Post Development for the Eleven Oaks School Site

Total Site Increase in Flow	Q_2=	5.81 cfs
	Q_{10}=	7.75 cfs

THE NET INCREASE TO BE CONTROLLED BY THE PROPOSED POND WITH GEORGE MASON'S ACADEMIC VII PLAN.

STORM SEWER DESIGN COMPUTATIONS: Proposed Conditions — DESIGN STORM: 10 YR

FROM	TO	MANNING'S "N" FACTOR	LENGTH FT.	AREA AC.	INLET TIME T_c	RUN-OFF COEFF. (C)*	CA INC.	CA CUM.	RAINFALL IN./HR.	RUNOFF Q(CUM) CFS	SLOPE FT./FT.	DIA. IN.	CAPACITY CFS	VELOCITY FULL FPS	INVERT EL'S UPPER	INVERT EL'S LOWER	TOP
3301	3302	0.013	38	9.45	10.00	0.68	6.22	6.22	5.83	36.81	0.0083	33	51.0	8.8	443.35	443.00	447.20
3302	3303	0.013	49	1.43	10.00	0.58	0.82	7.04	5.93	41.88	0.0093	30	38.6	8.1	442.80	442.34	448.25
3303	3304	0.013	28	1.80	10.00	0.64	1.16	8.20	5.93	48.52	0.0198	30	53.2	10.8	442.24	441.68	447.75

NOTES: C factor of 3301 modified to match routing Runoff; Inlet Time modified to Match Routing
* Pipe under capacity

STORM SEWER DESIGN COMPUTATIONS: Proposed Conditions - Upgraded — DESIGN STORM: 10 YR

FROM	TO	MANNING'S "N" FACTOR	LENGTH FT.	AREA AC.	INLET TIME T_c	RUN-OFF COEFF. (C)*	CA INC.	CA CUM.	RAINFALL IN./HR.	RUNOFF Q(CUM) CFS	SLOPE FT./FT.	DIA. IN.	CAPACITY CFS	VELOCITY FULL FPS	INVERT EL'S UPPER	INVERT EL'S LOWER	TOP
3301	3302	0.013	38	9.45	10.00	0.66	6.22	6.22	5.92	36.81	0.0092	33	61.0	8.6	443.35	443.00	447.05
** 3302	3303	0.013	49	1.43	10.00	0.58	0.82	7.04	5.93	41.88	0.0093	33	51.0	8.6	442.85	442.34	448.05
3303	3304	0.013	28	1.80	10.00	0.64	1.16	8.20	5.92	48.52	0.0198	30	53.2	10.8	442.24	441.68	447.78

NOTES: C factor of 3301 modified to match routing Runoff; Inlet Time modified to Match Routing
** Upgraded Pipe

BMP Facility Design Calculations
Occoquan Method

Plan Name: Eleven Oaks
Date: [illegible]
Project Number: [illegible]

Compute the Weighted Average "C" Factor for the Site
Area of the Site: 7.50

Subarea Designation & Description	"C"	Acres	Product
BMP	0.75	2.400	1.80
Uncontrolled	0.45	[illegible]	[illegible]
		Total	3.314

Weighted average "C" Factor: 0.442

Compute the Total Phosphorus Removal for the Site

Subarea	BMP Type	Removal Eff.	Area Ratio Subarea/Area	"C" Factor Ratio Subarea/Weighted	Product
BMP	[illegible]	45.00%	[illegible]	1.028	42.06%
Uncontrolled	N/A	0.00%	[illegible]	0.580	0.00%
				Total	42.45%

Impervious Area (pre) = 3.62 ac
Impervious Area (post) = 5.40 ac

Determine Compliance with Phosphorus Removal Requirement
P removal Requirement = [illegible]
I_{pre} = 46.06%
I_{post} = 68.39%
P removal Requirement = 39.67%

If P removal for the site >= P removal Requirement, then Phosphorus removal requirement is satisfied.

P removal Requirement = 39.67%
P removal for the Site = 42.46%
Phosphorus removal requirement satisfied: YES

Madison Homes

September 7, 2011

Mr. Thomas G. Calhoun
Vice President, Facilities
George Mason University
4400 University Drive
Fairfax, Virginia 22030

Via Email to: tcalhoun@gmu.edu

Re: Letter of Understanding ("LOU")
George Mason University ("GMU") and MHI – Eleven Oaks, L.L.C. ("MHI")
Storm Water Management

Dear Tom:

The purpose of this letter is to document our discussions and understandings with regard to the future provision of storm water management detention capacity and BMP capacity (the "GMU SWM/BMP Capacity") by GMU to serve the Eleven Oaks Project, as hereinafter defined, which is being planned for development by MHI.

For purposes of this LOU, it is understood and agreed that:

[illegible]

GEORGE MASON UNIVERSITY

Date: 9/6/2011 By: Thomas G. Calhoun, Title: VP, Facilities

MHI – ELEVEN OAKS, LLC
BY: Madison Homes, Inc., Manager

Date: 9/7/2011 By: [signature] Title: President

CC: [illegible]

THESE PLANS ARE PRELIMINARY IN NATURE AND SUBJECT TO CHANGE WITH FINAL ENGINEERING.

#	DATE	REVISION
1	8/10/12	RESPOND TO COUNTY PRE-STAFFING REPORT DATED JULY 16, 2012 AND CITY COMMENTS LETTER DATED JULY 13, 2012
2	9/13/12	COUNTY STAFFING REPORT DATED 8/23/12 AND CITY COMMENTS DATED 9/6/12.
3	10/18/12	CITY AND COUNTY COMMENTS

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ERIK S. SPENCER
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BMP & SWM COMPUTATIONS - OPTION 1

ELEVEN OAKS

CITY OF FAIRFAX & FAIRFAX COUNTY, VA

PROJECT NO: [illegible]
SCALE: 1"=100'
DATE: APRIL, 2012
DESIGN: CEY
DRAWN: MEE
CHECKED: ESS
SHEET No. 11 of 19

100006

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

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This information is required under the following Zoning Ordinance paragraphs:

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Cluster Subdivision (9-615 1G & 7H)	Commercial Revitalization Districts (9-622 2A (12) & (14))
Development Plans PRC Districts (15-302.2 & 4L)	PRC Plan (15-303 1G & 1O)
FDP P Districts (except PRC) (16-002 1P & 1Q)	Amendments (15-202 10F & 1S)

☒ 1. Plat is at a minimum scale of 1"=50' (unless it is depicted on one sheet with a minimum scale of 1"=100').

☒ 2. 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 # 06/13

☒ 3. Provide:

Facility Name/ Type & No.	On-site area served (acres)	Off-site area served (acres)	Drainage area (acres)	Footprint area (sf)	Storage Volume (cf)	If pond, dam height (ft)
EXISTING PATRIOT LAKE	6.28 ACRES	N/A	1.05	151,200	235,000	13
Totals						

☒ 4. Onsite drainage channels, outfalls and pipe systems are shown on Sheet 05 ; Pond inlet and outlet pipe systems are shown on Sheet N/A .

☒ 5. Maintenance access (road) to stormwater management facility(ies) are shown on Sheet N/A . Type of maintenance access road surface noted on the plat is N/A (asphalt, gravel, grass, etc.).

☒ 6. Landscaping and tree preservation shown in and near the stormwater management facility is shown on Sheet N/A .

☒ 7. A "stormwater management narrative" which contains a description of how detention and best management practices requirements will be met is provided on Sheet 12 .

☒ 8. A description of the existing conditions of each nonstream site outfall extended downstream from 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 12 .

☒ 9. A description of how the outfall requirements, including contributing drainage areas of the Public Facilities Manual will be satisfied is provided on Sheet 12 .

☒ 10. 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 02/03 .

☒ 11. A submission waiver is requested for PROVIDING STORMWATER MANAGEMENT OFFSITE ON GMU'S PROPERTY.

☒ 12. Stormwater management is not required because GMU HAS AGREED TO AND HAS THE CAPACITY WITH EXISTING PONDS ON THEIR PROPERTY TO ACCEPT ELEVEN OAKS STORMWATER RUNOFF.

BMP Calculations

Patriot Lake Area	3,876,119	434.90
Impervious Area	2,311,103	53.05
Total GMU Impervious (10%)	1,695,174	38.92
WqV required for GMU	0.78 Ac-ft	(Current - 1YR)
GMU BMP Volume (1 x WqV)	1.11 Ac-ft	
Available Patriot Lake Wet Storage Volume	6.95 Ac-ft	
Volume Used by GMU	3.11 Ac-ft	
Volume Used by Eleven Oaks Site	0.76 Ac-ft	
Patriot Lake Remaining BMP Capacity	3.09 Ac-ft	

BMP Facility Design Calculations
Overpass Method

Plan Name: Eleven Oaks
Date: 03/09/2012
Project Number: 11024-SWM-001

Compute the Weighted Average "C" Factor for the Site
Area of the Site: 7.06

Surface Designation & Description	"C"	Acres	Product
BMP	0.75	2.62	1.96
Impervious(C=1)	0.90	0.000	0.000
		Total	3.263

Weighted average "C" Factor: 0.462

Compute the Total Phosphorous Removal for the Site

Subbasin	BMP Type	Removal Eff.	Area Draining to BMP (Subbasin)/Area	"C" Factor Value (Subbasin/Watershed)	Product
BMP	(WATER)	65.00%	0.371	1.000	65.00%
Unmanaged	N/A	0.00%	0.629	0.250	0.00%
				Total	65.00%

Impervious Area (post) = 3.02 ac
Impervious Area (post) = 5.40 ac

Stormwater Compliance with Phosphorous Removal Requirement
Removal Requirement = 40.00% (Phase 1 EIP)
Less = 40.00%
Uncontrolled = 65.00%
Removal Requirement = 25.00%

If removal by the site >= Removal Requirement, then (Phosphorous removal requirement is satisfied)

Removal Requirement = 25.00%
Removal for the Site = 65.00%
(Phosphorous removal requirement satisfied) YES

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SWM/BMP NARRATIVE

BASED UPON THE ATTACHED LETTER OF UNDERSTANDING WITH GEORGE MASON UNIVERSITY (GMU), BMP AND SWM REQUIREMENTS FOR THIS SITE WILL BE PROVIDED BY GMU. IT IS INTENDED THAT THESE REQUIREMENTS WILL BE SATISFIED BY THE WSH POND BEING CONSTRUCTED BY GMU AS PART OF THE GMU ACADEMIC VII PROJECT (OPTION 1-SHEET 9.), IN THE EVENT, FOR ANY REASON, THE GMU ACADEMIC VII PROJECT DOES NOT PROCEED AS CURRENTLY PLANNED AND FUNDED, THE BMP AND SWM REQUIREMENTS FOR THIS SITE WILL BE PROVIDED THROUGH THE USE AND IMPROVEMENT, AS REQUIRED, OF EXISTING FACILITIES ON THE GMU PROPERTY (OPTION 2- SHEETS 10/13).

BEST MANAGEMENT PRACTICE (BMP) NARRATIVE

THE BMP REQUIREMENTS FOR THE ELEVEN OAKS DEVELOPMENT WILL BE SATISFIED BY UTILIZING AN EXISTING RETENTION BASIN (EXISTING PATRIOT LAKE) ON GEORGE MASON UNIVERSITY'S PROPERTY. BASED ON A BATHYMETRIC SURVEY OF PATRIOT LAKE, THE WET STORAGE PROVIDED BY PATRIOT LAKE WILL PROVIDE AMPLE VOLUME FOR THE INCREASE IN IMPERVIOUS AREA FROM THE SITE, THEREFORE THE BMP REQUIREMENTS ARE BEING MET. IN ADDITION, TWO ONSITE BIO-RETENTION FACILITIES ARE SHOWN TO PROVIDE ADDITIONAL ONSITE WATER QUALITY MEASURES.

STORMWATER MANAGEMENT (SWM) NARRATIVE

NO STORMWATER MANAGEMENT FACILITIES ARE BEING PROPOSED WITH THIS SITE, BASED ON THE LETTER OF UNDERSTANDING, GMU HAS AGREED TO ACCEPT THE INCREASE IN RUNOFF GENERATED BY THIS PROJECT, BASED ON AN ANALYSIS DONE BY GMU, THE EXISTING GMU STORMWATER MANAGEMENT PROGRAM (THAT INCLUDES PATRIOT LAKE) HAS ENOUGH CAPACITY IN THE SYSTEM TO HANDLE THE INCREASE IN RUNOFF FROM THIS SITE WITHOUT INCREASING THE RUNOFF FROM GMU INTO THE POHICK WATERSHED. SEE CALCULATIONS THIS SHEET. THEREFORE, GMU WILL BE PROVIDING THE SWM FOR THIS SITE.

NOTE

SEE SHEET 13 FOR ADEQUATE OUTFALL COMPUTATIONS.

#	DATE	REVISION
3	10/10/12	CITY AND COUNTY COMMENTS

SWM CALCULATIONS

Pre-Development Eleven Oaks Site Conditions

Total Site Area	± 339,231 sf	± 7.23 Ac
Total Existing Impervious Area	± 157,604 sf	± 3.62 Ac
Site Runoff Coefficient	C =	0.56
Time Of Concentration (Tc)	Tc=	5 min
Rainfall Intensity	I=	5.43
	I=	7.27
Total Site Runoff	Q=	22.31 cfs
	Q=	32.77 cfs

Post-Development Eleven Oaks Site Conditions

Total Site Area	± 253,231 sf	± 5.23 Ac
Total Impervious Area	± 233,000 sf	± 5.35 Ac (includes GMU Dr. (± 1.2Ac)
Site Runoff Coefficient	C =	0.69
Time Of Concentration	Tc=	5 min
Rainfall Intensity	I=	5.43
	I=	7.27
Total Site Runoff	Q=	31.12 cfs
	Q=	41.22 cfs

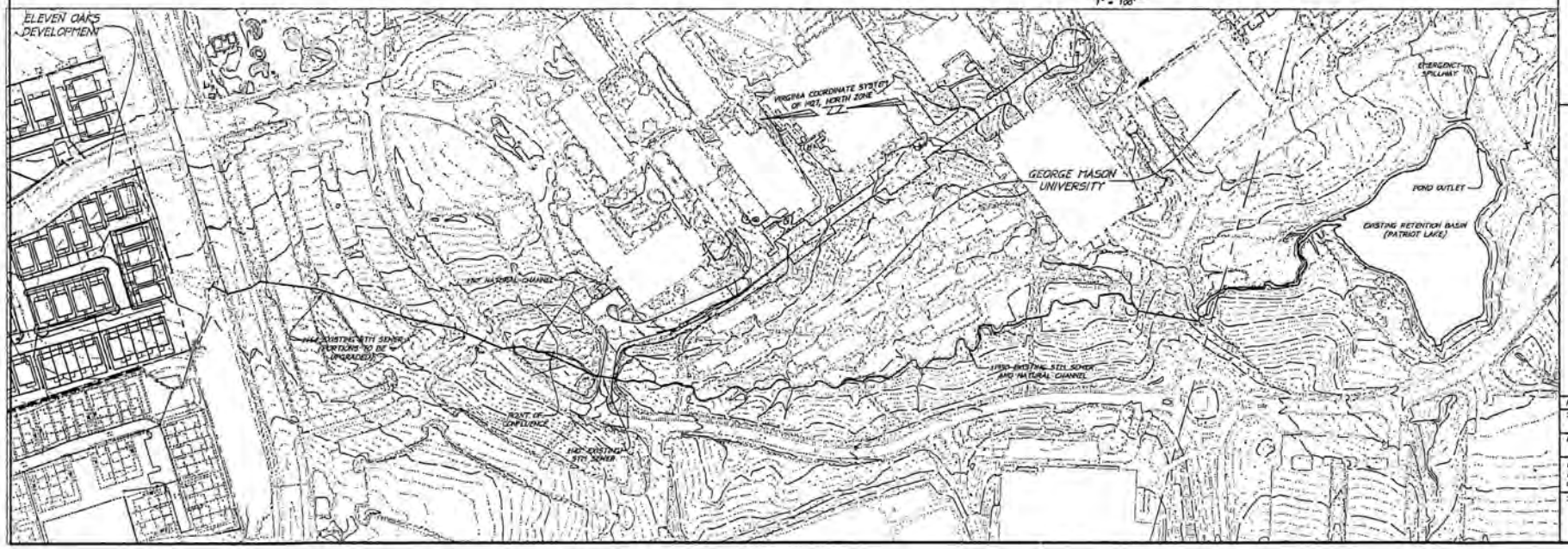
Net Increase from Pre to Post Development for the Eleven Oaks School Site

Total Site Increase in Flow	Q=	8.81 cfs
	Q=	7.73 cfs

George Mason University Development Release Rate

GMU 1978 Release Rate (Based on 1978 Land Cover)	Q=	± 266 cfs
	Q=	± 373 cfs
GMU Ultimate Release Rate (Based on GMU 2009 Master Development Plan 2-10 Yr Projection)	Q=	± 187 cfs
	Q=	± 482 cfs

ELEVEN OAKS OUTFALL
SCALE: 1"=100'



GRAPHIC SCALE
1" = 100'

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9900 main street (fourth floor) · fairfax, va 22031-3607
703.273.6820 · fax 703.273.7536

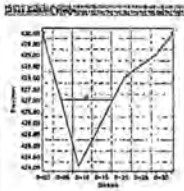
COMMONWEALTH OF VIRGINIA
C. ERIK S. SPENCER
Lic. No. 037519
11-20-12
PROFESSIONAL ENGINEER

BMP & SWM COMPUTATIONS - OPTION 2

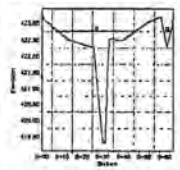
ELEVEN OAKS
CITY OF FAIRFAX & FAIRFAX COUNTY, VA

PROJECT NO. 11024-SWM-001
SCALE: 1"=100'
DATE: APRIL, 2012
DESIGN: CES
DRAWN: MRE
CHECKED: ESS
SHEET No.
12 OF 19
100006

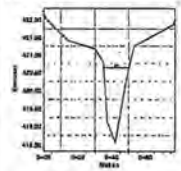
Cross Section for Cross Section A-A (2yr)



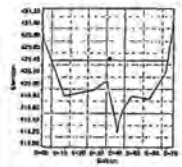
Cross Section for Cross Section B-B (2yr)



Cross Section for Cross Section C-C (2yr)



Cross Section for Cross Section D-D (2yr)



EXISTING STORM SEWER SYSTEM (TO POINT OF CONFLUENCE)

STORM SEWER DESIGN COMPUTATIONS: Proposed Conditions — DESIGN STORM: 10 YR

FROM	TO	MANNING'S "n" FACTOR	LENGTH FT.	AREA AC.	INLET T_c	TIME T_c	RUN-OFF COEFF. C/C*	CA INC.	CA CUM.	RAINFALL I/I (in/hr)	RUNOFF Q (CUM) CFS	SLOPE FT/FT.	DIA. IN.	CAPACITY CFS	VELOCITY FULL FPS	INVERT EL'S UPPER	INVERT EL'S LOWER	INVERT EL'S TOP
3301	3302	0.013	39	9.45	10.00	0.86	0.22	8.22	5.82	26.31	0.0082	33	51.0	8.6	443.35	443.00	447.85	
3302	3303	0.013	48	1.43	10.00	0.56	0.82	7.54	5.82	41.85	0.0083	35	38.0	9.1	442.95	442.54	446.65	
3303	3304	0.013	25	1.80	10.00	0.64	1.16	6.20	5.82	48.52	0.0168	25	53.2	10.8	442.24	441.80	447.79	
3304	3305	0.013	120	0.00	10.00	0.86	0.00	6.20	5.82	48.52	0.0098	27	41.8	13.5	438.45	433.89	440.95	
3305	3306	0.013	121	1.23	10.00	0.83	0.80	5.98	5.82	55.25	0.0112	27	45.9	15.6	433.49	431.13	438.39	
3306	3307	0.013	88	1.64	10.00	0.89	1.13	16.13	5.82	59.95	0.0020	27	95.4	12.2	430.88	430.07	437.28	
3307	3308	0.013	80	1.46	10.00	0.89	0.97	11.09	5.82	55.56	0.0124	26	47.3	8.7	427.87	426.88	433.87	
3308	5	0.013	108	0.78	10.00	0.70	0.55	11.64	5.82	68.91	0.0114	33	96.4	9.8	426.58	425.33	432.16	
5	35	0.013	24	3.01	10.00	0.59	1.77	13.41	5.82	78.41	0.0220	33	60.1	13.3	424.88	424.42	433.25	
20	21	0.013	66	8.52	20.00	0.69	5.11	16.53	9.55	84.48	0.0049	48	100.9	8.0	424.05	423.69		
21	22	0.013	46	1.42	20.03	0.60	0.93	19.39	4.66	98.26	0.0230	29	101.2	14.3	423.49	422.43	429.58	

NOTES: C factor of 2301 modified to match routing Runoff; Inlet Time modified to Match Routing
* Pipe under capacity

UPGRADED STORM SEWER SYSTEM (TO POINT OF CONFLUENCE)

STORM SEWER DESIGN COMPUTATIONS: Proposed Conditions - Upgraded — DESIGN STORM: 10 YR

FROM	TO	MANNING'S "n" FACTOR	LENGTH FT.	AREA AC.	INLET T_c	TIME T_c	RUN-OFF COEFF. C/C*	CA INC.	CA CUM.	RAINFALL I/I (in/hr)	RUNOFF Q (CUM) CFS	SLOPE FT/FT.	DIA. IN.	CAPACITY CFS	VELOCITY FULL FPS	INVERT EL'S UPPER	INVERT EL'S LOWER	INVERT EL'S TOP
3301	3303	0.013	39	9.45	10.00	0.86	0.22	8.22	5.82	26.31	0.0082	33	51.0	8.6	443.35	443.00	447.85	
3303	3303	0.013	48	1.43	10.00	0.56	0.82	7.54	5.82	41.85	0.0083	35	61.0	8.6	442.95	442.54	446.65	
3303	3304	0.013	25	1.80	10.00	0.64	1.16	6.20	5.82	48.52	0.0168	25	53.2	10.8	442.24	441.80	447.79	
3304	3305	0.013	120	0.00	10.00	0.86	0.00	6.20	5.82	48.52	0.0098	27	41.8	13.5	438.45	433.89	440.95	
3305	3306	0.013	121	1.23	10.00	0.83	0.80	5.98	5.82	55.25	0.0112	27	45.9	15.6	433.49	431.13	438.39	
3306	3307	0.013	88	1.64	10.00	0.89	1.13	16.13	5.82	59.95	0.0020	30	73.4	14.9	430.88	430.07	437.28	
3307	3308	0.013	80	1.46	10.00	0.89	0.97	11.09	5.82	55.56	0.0124	26	77.2	10.8	427.87	426.88	433.87	
3308	5	0.013	108	0.78	10.00	0.70	0.55	11.64	5.82	68.91	0.0114	36	77.1	10.1	426.58	425.33	432.16	
5	35	0.013	24	3.01	10.00	0.59	1.77	13.41	5.82	78.41	0.0220	33	60.1	13.3	424.88	424.42	433.25	
20	21	0.013	66	8.52	20.00	0.70	5.96	16.39	4.66	88.30	0.0048	48	100.9	8.0	424.05	423.69		
21	22	0.013	46	1.42	20.03	0.70	0.99	20.37	4.66	93.90	0.0230	36	101.2	14.3	423.49	422.43	429.58	

NOTES: C factor of 2301 modified to match routing Runoff; Inlet Time modified to Match Routing
** Upgraded Pipe

SEE SHEET 12 FOR SWM/BMP NARRATIVE, SW1 NARRATIVE, AND SOP NARRATIVE.

ADEQUATE OUTFALL NARRATIVE

DEVELOPED CONDITION

CURRENTLY TWO SEPARATE OUTFALLS EXIST FOR THE SITE.

THE FIRST SYSTEM IS LOCATED ON THE NORTHERN PORTION OF THE SITE ALONG SCHOOL STREET WITHIN THE CITY OF FAIRFAX. APPROXIMATELY 0.5 ACRES WILL DRAIN TO THIS EXISTING ADEQUATE SYSTEM.

THE SECOND SYSTEM IS LOCATED ON THE SOUTHWEST PORTION OF THE SITE, ADJACENT TO UNIVERSITY DRIVE AND IT COLLECTS THE REMAINDER OF THE STORMWATER RUNOFF FROM THIS SITE. THIS RUNOFF FLOWS THROUGH A STORM SYSTEM ONTO GEORGE MASON UNIVERSITY PROPERTY BEFORE OUTFALLING INTO A CHANNEL FOR APPROXIMATELY 80', INTO ANOTHER STORM SYSTEM FOR 14', THEN INTO A NATURAL CHANNEL THAT ULTIMATELY FLOWS TO PATRIOT LAKE ON THE GEORGE MASON UNIVERSITY CAMPUS.

CROSS SECTION A-A HAS BEEN ADDED TO SHOW THE ADEQUACY OF THE 80' CHANNEL. STORM COMPUTATIONS HAVE BEEN PROVIDED FOR THE STORM PIPE SYSTEM DOWNSTREAM OF THIS 80' CHANNEL TO SHOW ADEQUACY OF THIS STORM SEWER, AND 3 CROSS SECTIONS (B-B THROUGH D-D) HAVE BEEN PROVIDED TO SHOW THE TYPICAL CHANNEL SECTION FROM THE STORM SEWER PIPE RUN 20-22 TO PATRIOT LAKE.

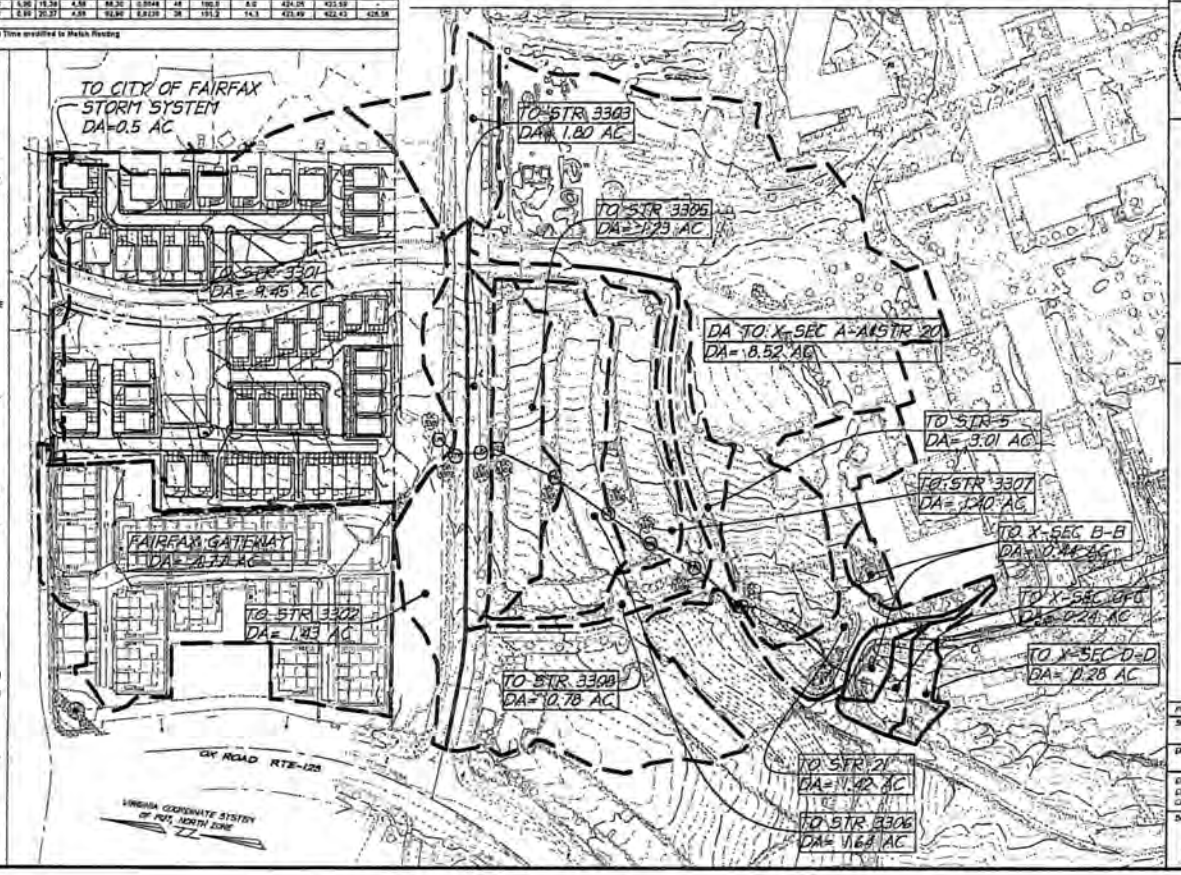
BASED ON THE STORM SEWER CALCULATIONS AND THE CROSS-SECTIONS B-B TO D-D, IT IS ANTICIPATED THAT SEVERAL SECTIONS OF STORM SEWER SYSTEM AND SECTIONS OF THE DOWNSTREAM CHANNEL WILL NEED TO BE IMPROVED/UPSIZED TO HANDLE THE INCREASE IN RUNOFF GENERATED BY THIS PROJECT. BASED ON THE LETTER OF CONCURRENCE, NO WORK WITH GFU IN ORDER TO IMPROVE/UPSIZE THE REQUIRED STORM SEWER SYSTEM AND/OR CHANNEL SECTIONS.

EXTENT OF REVIEW

ACCORDING TO PFM 6-0203.3A, THE EXTENT OF REVIEW OF THE DOWNSTREAM DRAINAGE SYSTEM SHALL BE TO A POINT THAT IS AT LEAST 150' DOWNSTREAM OF A POINT WHERE THE RECEIVING PIPE OR CHANNEL IS JOINED BY ANOTHER THAT HAS A DRAINAGE AREA THAT IS AT LEAST 10% OF THE SIZE OF THE FIRST DRAINAGE AREA. THE DRAINAGE AREA ENTERING EXISTING STRUCTURE 3301 IS APPROXIMATELY 9.45 ACRES. AT THE POINT OF CONFLUENCE A SECOND CHANNEL JOINS THIS SYSTEM THAT HAS A DRAINAGE AREA OF APPROXIMATELY 0.82 ACRES. THIS DRAINAGE AREA IS APPROXIMATELY 9% OF THE FIRST DRAINAGE AREA AND, THEREFORE THE EXTENT OF REVIEW HAS BEEN MET.

CONCLUSION

BASED ON THE PROPOSED ENVIRONMENTAL TO THE EXISTING STORM SEWER SYSTEM, INTERMEDIATE CHANNEL IMPROVEMENTS, AND THE WILLINGNESS OF GMU TO ACCEPT THE INCREASE IN RUNOFF FROM THIS PROPERTY, THERE WILL BE NO ADVERSE EFFECTS OR FLOODING ON ANY DOWNSTREAM PROPERTIES. THIS DEVELOPMENT MEETS THE CRITERIA ESTABLISHED BY FAIRFAX COUNTY'S GUIDELINES FOR AN ADEQUATE OUTFALL. IT IS THE OPINION OF THE ENGINEER THAT WITH THE IMPROVEMENTS MENTIONED ABOVE, AN ADEQUATE OUTFALL EXISTS FOR THIS DEVELOPMENT.



#	DATE	REVISION
1	5-8-12	QUALITY DEFICIENT, REVIEW COMMENTS, 1ST SUBMISSION

THESE PLANS ARE PRELIMINARY IN NATURE AND SUBJECT TO CHANGE WITH FINAL ENGINEERING.

GRAPHIC SCALE 1" = 100'

CHANNEL COMPUTATIONS

AREA #	Area (ac)	C	CA INCR.	CA ACCU.	Tc	I2	I2	SLOPE (ft/ft)	Allow. V2 (fps)	Existing n = 0.070 Vel.	2 year Depth (ft)	REMARKS Ditch type & Lining Required
A-A	29.29	0.70	20.452	20.452	20.00	3.43	70.05	0.025	5.00	3.83	2.94	Existing Rip-Rap Channel

AREA #	Area (ac)	C	CA INCR.	CA ACCU.	Tc	I2	I2	SLOPE (ft/ft)	Allow. V2 (fps)	Existing n = 0.040 Vel.	2 year Depth (ft)	REMARKS Ditch type & Lining Required
(Cross Section B-B adds area from Structures 20, 21 and also overland area)												
B-B	1.88	0.70	1.302	21.754	20.00	3.43	74.90	0.022	5.00	3.90	3.48	Existing Channel
C-C	0.24	0.60	0.126	21.880	20.00	3.42	74.81	0.016	5.00	4.14	3.50	Existing Channel
D-D	0.28	0.50	0.140	22.044	20.00	3.42	75.39	0.013	5.00	3.93	1.16	Existing Channel

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COMMONWEALTH OF VIRGINIA
C. ERIC E. SPENCER
Lic. No. 037519
11-20-12
PROFESSIONAL ENGINEER

ADEQUATE OUTFALL COMPUTATIONS - OPTION 2

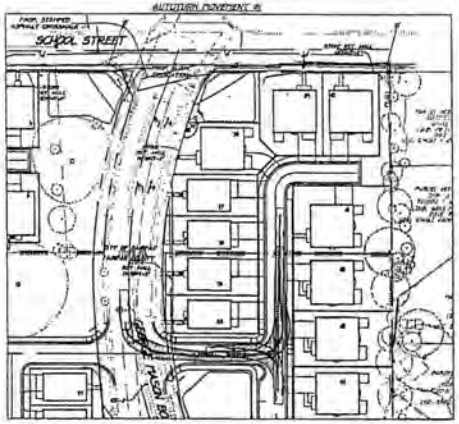
ELEVEN OAKS

CITY OF FAIRFAX \ FAIRFAX COUNTY, VA

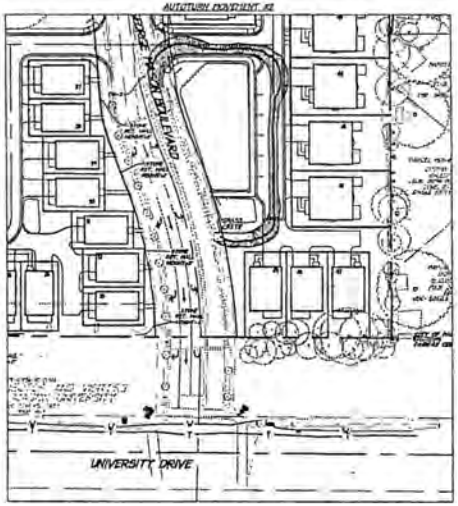
PROJECT NO. 040-00100
SCALE: 1"=20'
DATE: APRIL, 2012
DESIGN: CET
DRAWN: TEE
CHECKED: ESS
SHEET No. 13 OF 19

100006

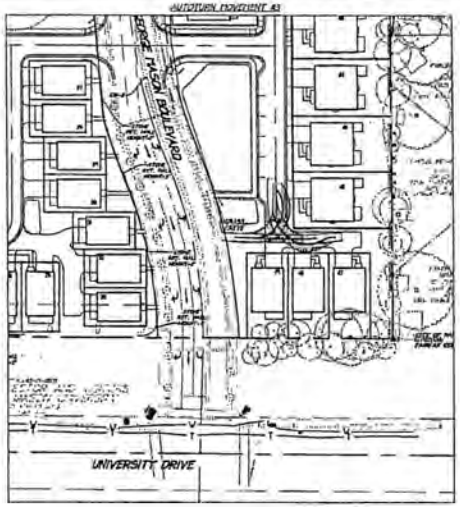
AUTOTURN MOVEMENT #1



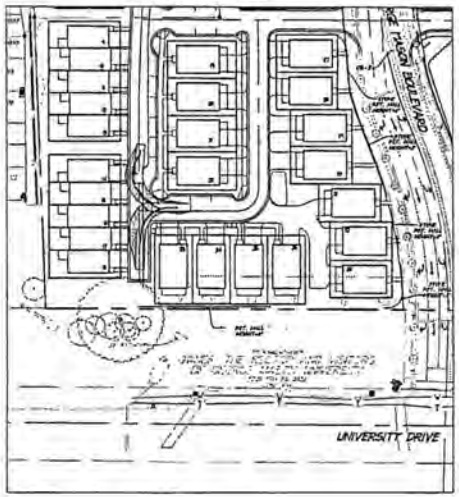
AUTOTURN MOVEMENT #2



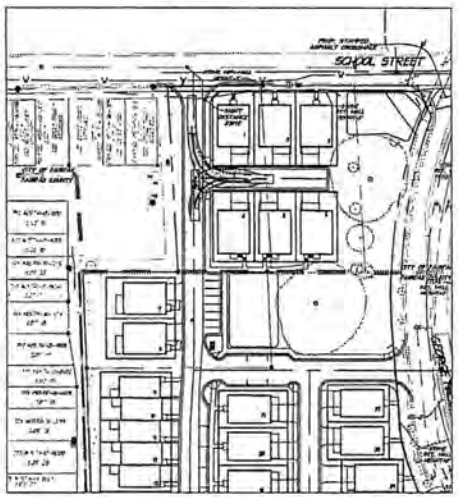
AUTOTURN MOVEMENT #3



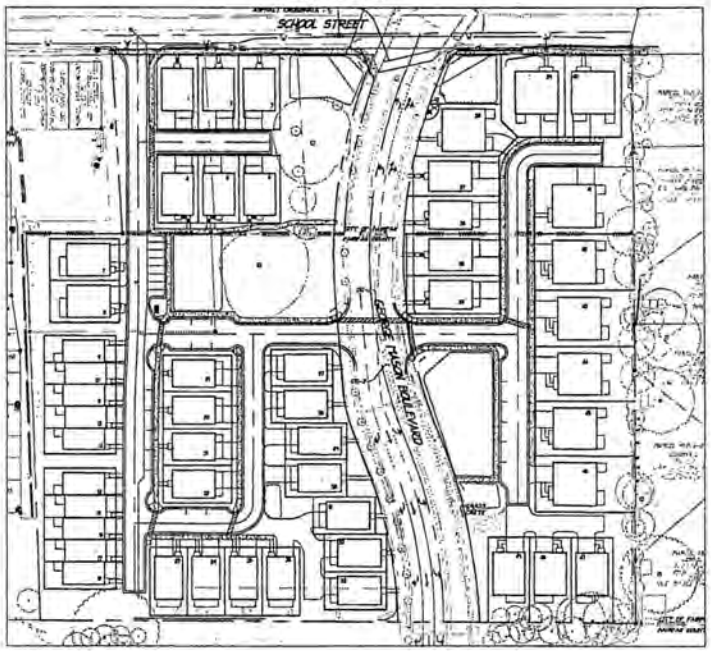
AUTOTURN MOVEMENT #4



AUTOTURN MOVEMENT #5



PEDESTRIAN MOVEMENT



#	DATE	REVISION
1	8/10/12	RESPOND TO COUNTY PRE-STAFFING REPORT DATED JULY 16, 2012 AND CITY COMMENTS LETTER DATED JULY 18, 2012

GRAPHIC SCALE

1 inch = 60 feet

THESE PLANS ARE PRELIMINARY IN NATURE AND SUBJECT TO CHANGE WITH FINAL ENGINEERING.

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LEIK S. SPENCER
Lic. No. 037519
11-20-12
PROFESSIONAL ENGINEER

FIRE TRUCK & PEDESTRIAN MOVEMENTS

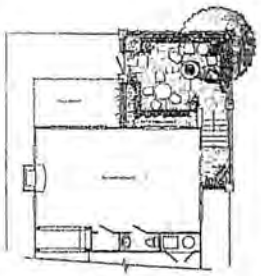
ELEVEN OAKS

CITY OF FAIRFAX & FAIRFAX COUNTY, VA

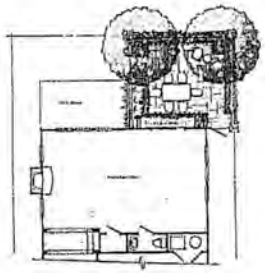
PROJECT NO: 110400100
SCALE: 1"=60'
DATE: APRIL, 2012
DESIGN: CEY
DRAWN: TEE
CHECKED: ESS
SHEET No.

100006

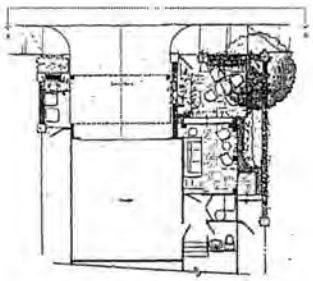
#	DATE	REVISION
1	8/10/12	RESPOND TO COUNTY
		PRE-STAFFING REPORT
		DATED JULY 16, 2012 AND
		CITY COMMENTS LETTER
		DATED JULY 13, 2012
2	9/13/12	COUNTY STAFFING REPORT
		DATED 8/23/12 AND CITY
		COMMENTS DATED 9/4/12
3	10/18/12	CITY AND COUNTY COMMENTS



30 F - Standard Daylight Basement Condition
Lower Level Floor Plan
Outdoor Courtyard

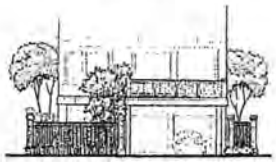


30 F - Standard Slab on Grade Condition
Lower Level Floor Plan
Outdoor Courtyard

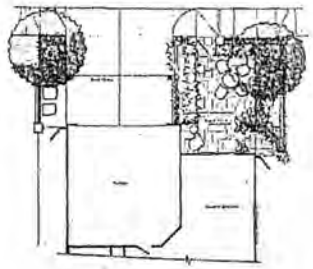


30 F - Standard Slab on Grade Condition
Lower Level Plan
Outdoor Court Yard

30 F - Courtyard Fence Elevation, Alternative 1, A-A
Lower Level Plan
Outdoor Court Yard - Wood/Composite/Vinyl Fence and Columns

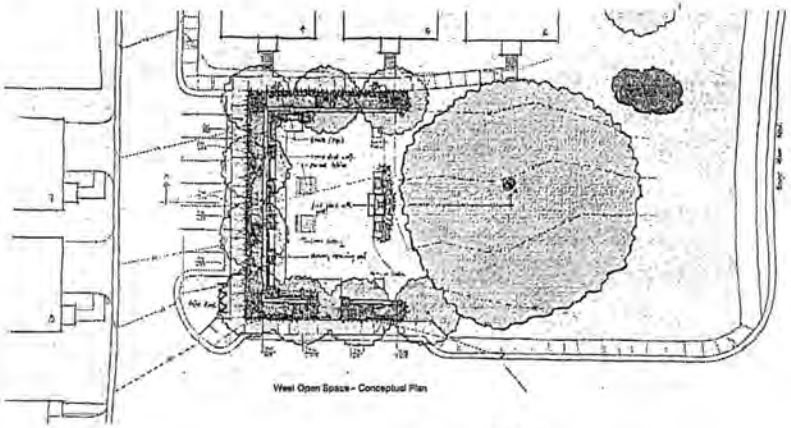


30 F - Courtyard Fence Elevation, Alternative 2, A-A
Lower Level Plan
Outdoor Court Yard - Wood/Composite/Vinyl Fence with Masonry Columns



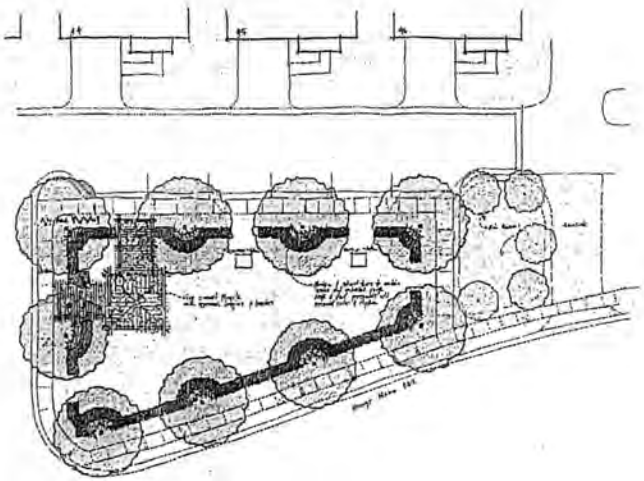
34 F - Standard Slab on Grade Condition
Lower Level Floor Plan
Outdoor Courtyard

NOTE: ALL LAYOUTS ARE CONCEPTUAL AND SUBJECT TO MODIFICATION WITH FINAL ARCHITECTURAL DESIGN AND SITE PLAN.



West Open Space - Conceptual Plan

West Open Space - Cross Section AA



East Open Space - Conceptual Plan

THESE PLANS ARE PRELIMINARY IN NATURE AND SUBJECT TO CHANGE WITH FINAL ENGINEERING.

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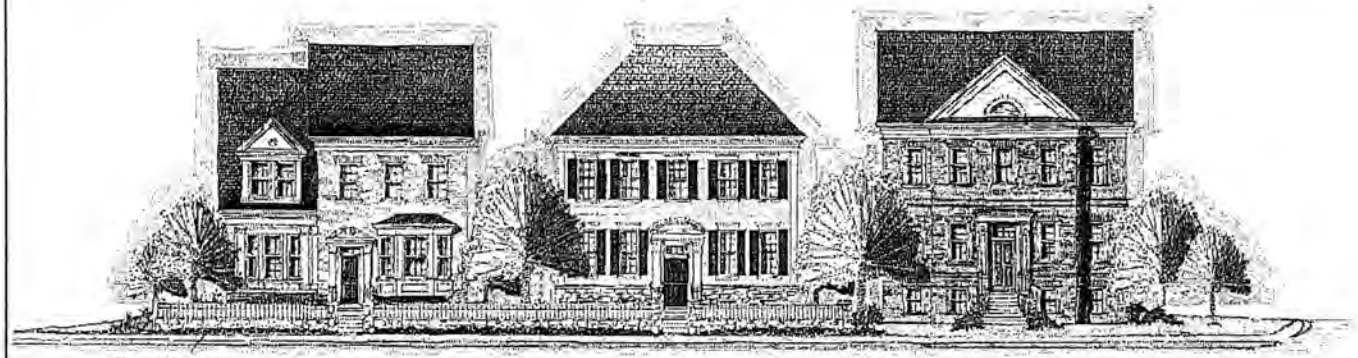
CONCEPT DESIGN OF IND LOT PRIVACY YARDS & FENCE ENCLOSURES

ELEVEN OAKS
CITY OF FAIRFAX & FAIRFAX COUNTY, VA

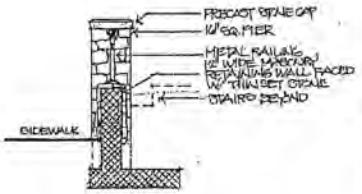
PROJECT NO. 101430002
SCALE: NONE
DATE: APRIL, 2012
DESIGN: CEY
DRAWN: MEE
CHECKED: ESS
SHEET No.
15 of 19

100006

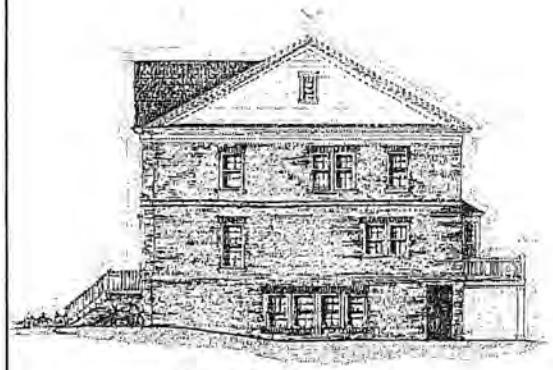
#	DATE	REVISION
1	8/30/12	RESPOND TO COUNTY PRE-STAFFING REPORT DATED JULY 16, 2012 AND CITY COMMENTS LETTER DATED JULY 19, 2012
3	10/19/12	CITY AND COUNTY COMMENTS



34' WIDE SINGLE FAMILY HOMES
School Street Elevations



Retaining Wall Section



Lot #1 Right Side Elevation

34' WIDE SINGLE FAMILY HOMES
Rear Elevations

Devereaux & Associates, PC
ARCHITECTS AND PLANNERS

ELEVEN OAKS

Madison Homes

THESE PLANS ARE PRELIMINARY IN NATURE AND SUBJECT TO CHANGE WITH FINAL ENGINEERING.

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ARCHITECTURAL DETAILS

ELEVEN OAKS
CITY OF FAIRFAX & FAIRFAX COUNTY, VA

PROJECT NO. 10-00010
SCALE: NONE
DATE: APRIL, 2012
DESIGN: CET
DRAWN: TEE
CHECKED: ERS
SHEET No.
16 OF 19
100006

#	DATE	REVISION
1	8/10/12	RESPOND TO COUNTY PRE-STAFFING REPORT DATED JULY 16, 2012 AND CITY COMMENTS LETTER DATED JULY 18, 2012
3	10/18/12	CITY AND COUNTY COMMENTS

Lot #40
46R Front Elevation

Lot #39
46R Front Elevation

Lot #38
46R Side Elevation

46' WIDE SINGLE FAMILY HOMES
School Street Elevations

Lot #3
34R Side Elevation

Lot #39
46R Side Elevation

34' & 46' WIDE SINGLE FAMILY HOMES

ELEVEN OAKS

THESE PLANS ARE PRELIMINARY IN NATURE AND SUBJECT TO CHANGE WITH FINAL ENGINEERING.

Devereaux & Associates, P.C.

Madison Homes

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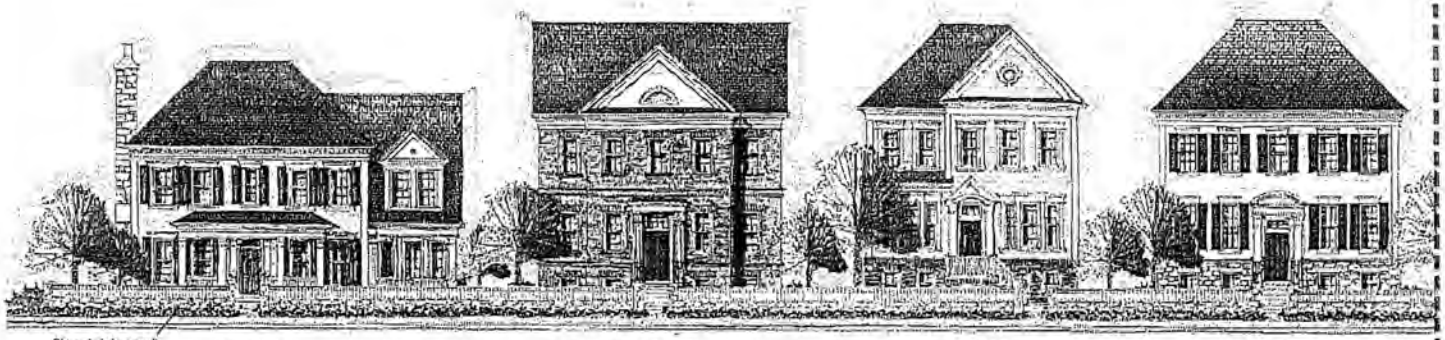
ARCHITECTURAL DETAILS

ELEVEN OAKS
CITY OF FAIRFAX & FAIRFAX COUNTY, VA

PROJECT NO. 10M0500
SCALE: NONE
DATE: APRIL, 2012
DESIGN: CEY
DRAWN: MEE
CHECKED: ESS
SHEET No. 17 of 19

100006

#	DATE	REVISION
1	8/30/12	RESPOND TO COUNTY
		PRE-STAFFING REPORT
		DATED JULY 16, 2012 AND
		CITY COMMENTS LETTER
		DATED JULY 18, 2012
3	10/15/12	CITY AND COUNTY COMMENTS



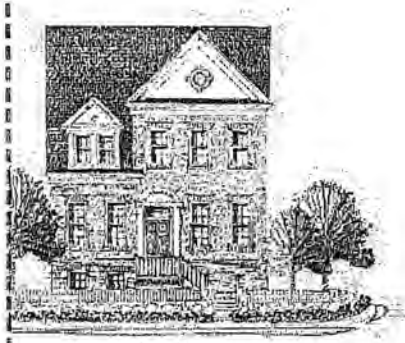
Lot #38
46R Front Elevation

Lot #37
34R Front Elevation

Lot #36
30R Front Elevation

Lot #35
34R Front Elevation

46', 34' & 30' WIDE SINGLE FAMILY HOMES



Lot #34
30R Front Elevation

Lot #13 Lot #12 Lot #11 Lot #10 Lot #9

24' WIDE TOWNHOMES
Front Elevations

ELEVEN OAKS

Madison Homes

Devereaux & Associates, P.C.
ARCHITECT-MAINTENANCE

THESE PLANS ARE PRELIMINARY IN NATURE AND SUBJECT TO CHANGE WITH FINAL ENGINEERING.

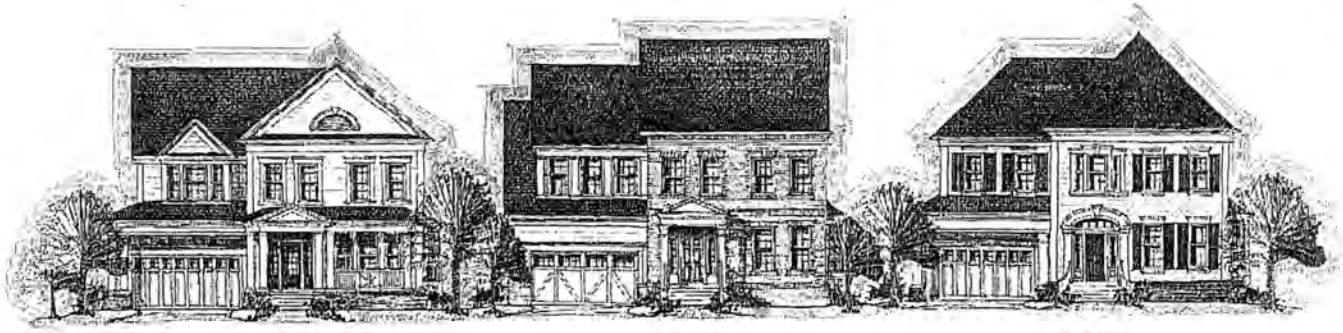
christopher consultants
engineering · surveying · land planning

ARCHITECTURAL DETAILS

ELEVEN OAKS
CITY OF FAIRFAX & FAIRFAX COUNTY, VA

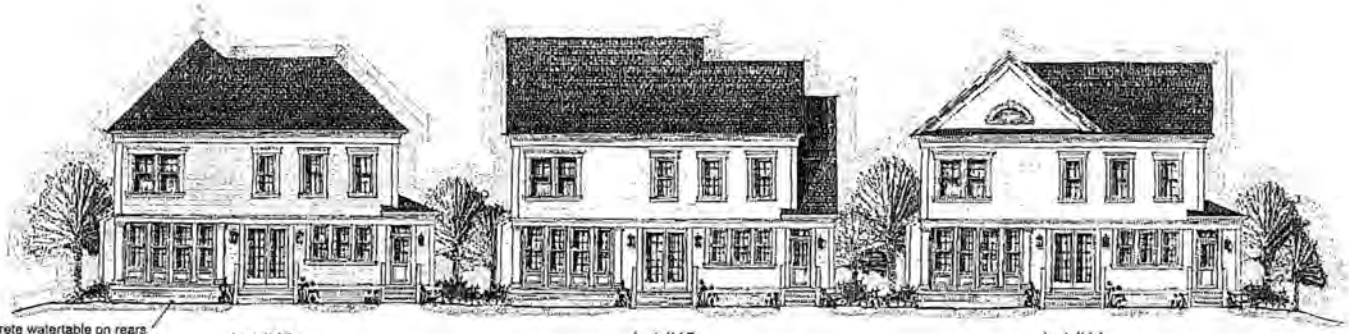
PROJECT NO. 10-40300
SCALE: NONE
DATE: APRIL, 2012
DESIGN: CET
DRAWN: TEE
CHECKED: ESS
SHEET No.
18 of 19
100006

#	DATE	REVISION
1	8/16/12	RESPOND TO COUNTY PRE-STAFFING REPORT DATED JULY 16, 2012 AND CITY COMMENTS LETTER DATED JULY 18, 2012
3	10/19/12	CITY AND COUNTY COMMENTS



Lot #44 Lot #45 Lot #46

46' WIDE SINGLE FAMILY HOMES



I concrete watertable on rears
s (except on high visibility lots)

Lot #46 Lot #45 Lot #44

46' WIDE SINGLE FAMILY HOMES

ELEVEN OAKS

Devereaux & Associates, PC
ARCHITECTS AND PLANNERS

Madison Homes

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ELEVEN OAKS
CITY OF FAIRFAX & FAIRFAX COUNTY, VA

ARCHITECTURAL DETAILS

PROJECT NO. 10040700
SCALE: NONE
DATE: APRIL, 2012
DESIGN BY:
DRAWN BY:
CHECKED BY:
SHEET No.
19 OF 19
100006