County of Fairfax, Virginia

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

March 21, 2012

David R. Gill
McGuire Woods LLP
1750 Tysons Boulevard, Suite 1800
Tysons Corner, VA 22102

RE: Rezoning Application RZ 2011-BR-014
(Concurrent with Proffered Condition Amendment Application PCA 2005-SP-019)

Dear Mr. Gill:

Enclosed you will find a copy of an Ordinance adopted by the Board of Supervisors at a regular meeting held on March 20, 2012, granting Rezoning Application RZ 2011-BR-014 in the name of Midland Road LLC and Ridgewood Commercial Owners Property Association. The Board's action rezones certain property in the Braddock District from the PRM District to the PDH-12 District with an overall density of 11.3 du/ac and PDC with an overall FAR of 0.99, waiver of the privacy yard for single family attached residential development, waiver of minimum district size and approval of the conceptual development plan The subject property is located in the N.E. and S.E. quadrant of the intersection of Government Center Parkway and Ridge Top Road on approximately 3.83 acres of land [Tax Map 56-2 ((1)) 37B, 37D and 37G], and is subject to the proffers dated February 22, 2012.

Please note that on February 23, 2012, the Planning Commission approved Final Development Plan Application FDP 2011-BR-014.

The Board also:

- Waived the minimum district size for Planned Development Commercial districts.

Office of the Clerk to the Board of Supervisors
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Fairfax, Virginia 22035
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- Waived the 200 square foot privacy yard requirement for all single family attached units.

Sincerely,

Catherine A. Chianese
Clerk to the Board of Supervisors

Cc: Chairman Sharon Bulova
Supervisor John Cook, Braddock District
Janet Coldsmith, 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
Department of Highways-VDOT
Sandy Stallman, Park Planning Branch Manager, FCPA
Charlene Fuhrman-Schulz, Development Officer, DHCD/Design Development Division
District Planning Commissioner
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 20th day of March, 2012, the following ordinance was adopted:

AN ORDINANCE AMENDING THE ZONING ORDINANCE
PROPOSAL NUMBER RZ 2011-BR-014
(Concurrent with Proffered Condition Amendment Application PCA 2005-SP-019)

WHEREAS, Midland Road LLC and Ridgewood Commercial Owners Property Association, filed in the proper form an application requesting the zoning of a certain parcel of land herein after described, from the PRM District to the PDH-12 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-12 District, and said property is subject to the use regulations of said PDH-12 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 20th day of March, 2012.

Catherine A. Chianese
Clerk to the Board of Supervisors

PROFFERS
Ridgewood
Midland Road LLC, Ridgewood Commercial Property Owners Association
RZ/FDP 2011-BR-014 and PCA 2005-SP-019

February 22, 2012

Pursuant to Section 15.2-2303(a) of the Code of Virginia, 1950, as amended, the property owners and Applicant in this rezoning proffer that the development of the parcel under consideration and shown on the Fairfax County Tax Maps as Tax Map Reference No. 56-2-((1))-37B, 37D, and 37G (hereinafter referred to as the "Property") will be in accordance with the following conditions if, and only if, said rezoning request for the PDH-12 and PDC Districts is granted by the Board of Supervisors of Fairfax County, Virginia (the "Board"). Fairfax County Tax Map Reference No. 56-2-((1))-37B and 37D shall be referred to as the "PDH Property" and Fairfax County Tax Map Reference No. 56-2-((1))-37G shall be referred to as the "PDC Property." In the event said application request is denied or the Board's approval is overturned by a court of competent jurisdiction, these proffers shall be null and void. The Owners and the Applicant ("Applicant"), for themselves, their successors and assigns, agree that these proffers shall be binding on the future development of the Property unless modified, waived or rescinded in the future by the Board, in accordance with applicable County and State statutory procedures. The Proffered Conditions are:

I. GENERAL

1. Substantial Conformance. Subject to the proffers and the provisions of Article 16 of the Zoning Ordinance, under which minor modifications to an approved development plan

are permitted, development of the Property shall be in substantial conformance with the Conceptual Development Plan/Final Development Plan ("CDP/FDP"), prepared by Urban Ltd., and dated November, 2010, as revised through December 2, 2011. It shall be understood that the CDP shall be only those elements of the plans that depict the number and the general location of points of access, the amount and location of landscaped open space, peripheral setbacks, limits of clearing and grading, building heights, the total number, type, uses and the general location of buildings and roads (the "CDP Elements"). The Applicant reserves the right to request a Final Development Plan Amendment ("FDPA") for elements other than the CDP elements for all or a portion of the FDP in accordance with Section 16-402 of the Zoning Ordinance, if such an amendment is in accordance with the approved CDP and these proffers.

2. Minor Modifications. In addition to that described above, pursuant to Paragraph 4 of Section 16-403 of the Zoning Ordinance, minor modifications to the CDP/FDP and these proffers may be permitted as determined by the Zoning Administrator.

3. Maximum Density. The maximum floor area ratio ("FAR") permitted on the PDC Property shall be 1.0. Based on this maximum FAR, the maximum gross floor area ("GFA") that may be constructed shall be 35,000 gross square feet. The precise amount of GFA may vary based on final engineering provided that the building and Property remain in substantial conformance with that shown on the CDP/FDP as determined by the Zoning Administrator. Similarly, the number of residential units described on the CDP/FDP for the PDH Property may be adjusted based on the final design, provided the maximum number of dwelling units shall not exceed 39 units.

4. Phasing. Build-out of the PDH Property and PDC Property may proceed in separate phases. The FAR, GFA and/or number of dwelling units per acre constructed within either the PDH Property or PDC Property shall comply with the maximum density limitations set forth in Proffer 3. Except for the Amenity Open Space described in Proffers below (which shall be constructed with the first phase of development), the creation of the landscaped open space areas and associated improvements for each respective Property shall be concurrent with the phasing of development/construction of each respective Property.

5. Density Credit. Density credit shall be reserved for the Property as provided by Section 2-308 of the Zoning Ordinance for all dedications described herein and/or as shown on the CDP/FDP or as may reasonably be required by Fairfax County, VDOT or others at the time of site/subdivision plan approvals.

6. Relationship with Original Rezoning/Common Associations. This rezoning and associated proffers are intended to complete, and be integrated with, the project originally associated RZ 2005-SP-019 (the "Original Rezoning"). However, these proffers shall only apply to the PDC and PDH Properties and not the remainder of the project associated with the Original Rezoning. Further, all the property subject to the Original Rezoning, including the PDH and PDC are subject to a master umbrella common owners association to appropriately administer the on-going maintenance and TDM obligations (the "Master Association"). Prior to issuance of the first RUP for the PDH Property, the Applicant shall establish a common association in accordance with Virginia law for the PDH Property (the "Townhome HOA"). The Master Association may consist of one

or more umbrella owners associations for the entire Property, as well as individual condominium owners' associations ("COAs") formed for specific buildings. At a minimum, the Townhome Association, any COA associated with the Original Rezoning, and the owners of each office and/or hotel building shall be members of the Master Association. The Master Association and the Townhome Association shall be responsible for obligations as specifically identified in these proffers, including maintenance, TDM, and notification obligations.

7. Architecture. The final architectural design shall be in substantial conformance with the general type, quality and proportion of materials depicted in the illustrative perspectives, elevations, and sections shown on the CDP/FDP. Building facades not shown in the CDP/FDP shall be consistent with the general type, quality and proportion of materials depicted in the illustrative perspectives, elevations, and sections shown on the CDP/FDP. The primary materials for the office building shall be glazed glass, metal and/or stucco-style siding. The primary palette of color to be used for the office building shall consist of generally neutral tones/shades consistent with that shown on the CDP/FDP. Rooftop mechanical equipment will be shielded from view from the ground-level of adjacent streets. Vinyl siding shall not be used on the exterior of any building.

In addition, to enhance the streetscape, the townhomes on the PDH Property facing Government Center Parkway and Ridge Top Road shall include a minimum of thirteen (13) units with "urban style" flat roofs (consistent with style shown on the CDP/FDP). All other roof styles on the PDH Property shall incorporate architectural

shingles in black or grey or weathered wood. All townhome units on the PDH Property shall incorporate a minimum of 50% (not including trim, gutter, etc.) stone or brick materials on each unit's front and side (where applicable) façade(s). Horizontal cementitious beaded siding (e.g. HardiePlank) or architecturally equivalent material shall be used for the remainder. All units shall also incorporate brick stoops or stairs for their front entrance. Raised panel shutters shall be used on windows for the front and side facades. The primary palette of color to be used for the townhomes shall consist of generally neutral or muted colors consistent with that shown on the CDP/FDP. Bright primary colors such as neon colors shall not be used.

8. Parking Spaces. At least eight (8) parking spaces within the PDH Property shall be provided for visitors of the residential units of the PDH Property. Such visitor spaces shall be marked as visitor and shall be located so as not to require the permission of any resident to utilize the parking space.

9. Unifying Elements. As this rezoning is the completion of the project associated with the Original Rezoning, all street furniture, including garbage cans, benches and lamp posts, shall be consistent, both in terms of materials and design, throughout this rezoning and that established by the Original Rezoning. Such street furniture shall be consistent in quality and character with the illustrative examples included in the CDP/FDP.

10. Signage. All signage provided on the Property shall comply with Article 12 of the Zoning Ordinance. Pole signs shall not be permitted on the Property. All directional and wayfinding signage shall be consistent, both in terms of materials and design, throughout this rezoning and that established by the Original Rezoning. No illuminated

signs shall be permitted on the office building on the PDC Property on the façade facing Ridge Top Road.

11. Townhome to Amenity Open Space Wayfinding. In addition to the proffer above, appropriate and effective wayfinding signs shall be provided to assist residents of the PDH Property utilize the pedestrian access across Government Center Parkway to access the Amenity Open Space (identified as "Community Park" on the CDP/FDP). Such signage shall be installed prior to the completion of the Amenity Open Space in prominent and easily visible locations, subject to traffic safety requirements such as sight distance. As part of the disclosures at the time of purchase, townhome owners shall be provided a map showing the location of the Amenity Open Space and specific notice in the Townhome HOA documents of the location and right to use the Amenity Open Space.

II. **USES**

12. PDH Uses. Single-family attached shall be the principal use permitted on the PDH Property. Secondary uses permitted in the PDH Zoning District may be permitted with the approval of a FDPA and/or a special exception or special permit as required by the PDH Zoning District.

13. PDC Uses. *Principal Uses.* Office, Personal Service Establishments, Financial Institutions, Business Service and Supply Service Establishments, Establishments for scientific research, development and training where assembly, integration and testing of products in a completely enclosed building is incidental to the principal use of scientific research, development and training uses, Retail, Eating Establishments, and Garment Cleaning

Establishments shall be the Principal uses permitted on the PDC Property. *Secondary Uses.* Fast Food Restaurants (no drive-through), Private Schools of Special Education, Health Clubs, Colleges and Universities, Cultural centers, museums and similar facilities, Child care centers and nursery schools, and dwellings shall be permitted as Secondary Uses on the Property in accordance with the Zoning Ordinance. The principal uses and secondary uses listed herein and not specifically depicted on the FDP shall be permitted without an FDPA as long as the project remains in substantial conformance with the FDP.

III. TRANSPORTATION

14. Ridge Top Road/Government Center Parkway Traffic Signal. Unless already submitted pursuant to the original proffers associated with the Original Rezoning, prior to the issuance of non-RUP for development on the PDC Property, the Applicant shall submit to VDOT a warrant study, based on full build-out of the approved density on the Property, for a traffic and pedestrian signal at the Government Center Parkway Extended/Ridge Top Road Intersection. If such a signal is determined to be warranted by VDOT, then the Applicant shall diligently pursue designing, equipping, and constructing the signal, including, if deemed appropriate by FCDOT and VDOT, pedestrian countdown signals. Such signal shall include a pedestrian cycle at all crossings, as deemed appropriate by VDOT and FCDOT.

15. Fairfax Center Area Road ("FCAR") Fund. The Applicant shall contribute to the FCAR Fund in accordance with the Procedural Guidelines adopted by the Board of Supervisors on November 22, 1982, as amended, subject to credit for all creditable expenses as

determined by FCDOT and/or DPWES. Such creditable expenses shall include the actual construction costs associated with the improvements constructed with the Original Rezoning including the extension Government Center Parkway, less any credit already received for site plans associated with the Original Rezoning. The Applicant shall provide documentation of the actual construction costs and the credit already received by the Original Rezoning as part of its submission under the FCAR Guidelines.

IV. TRANSPORTATION DEMAND MANAGEMENT STRATEGIES (TDM)

16. PDH TDM Plan. The Original Rezoning contained an extensive TDM Plan and the PDH Property shall be integrated into the administration of the original TDM where applicable. Further, the use of mass transit, ride-sharing, non-motorized and other transportation strategies shall be used to encourage achieving the goal of reducing of single-occupant vehicle traffic from the PDH Property during peak hours by 20%. Prior to the issuance of the first RUP for the PDH Property, the Applicant shall appoint a Transportation Coordinator who shall coordinate with the TMC (Transportation Management Coordinator as defined in the Original Rezoning) from the Original Rezoning to implement the transportation demand management (TDM) plan for the PDH Property and integrate the PDH Property into the larger TDM Plan where applicable. The Transportation Coordinator shall provide written notice of their appointment to the TMC within 30 days of such appointment and, thereafter, within 10 days of any change to such appointment. The TDM plan shall include at least the following elements: coordination with Fairfax County Department of Transportation's Community Residential Program, or any similar office or agency subsequently specified

by FCDOT; dissemination of transit, ride-sharing and non-motorized travel information (such as transit schedules and brochures) and Smart Trip Cards (or similar transit fare cards) in the amount of $25.00 to all new owners through "welcome kits" provided to new owners in the PDH Property and regular dissemination of transit, ride-sharing and non-motorized travel information, either physically or through electronic means at least twice a year. Homeowners shall be made aware of this TDM commitment in the Townhome HOA Documents. One year following the issuance of the first RUP on the PDH Property, annual surveys shall be conducted concurrently with those required by the original TDM for the Original Rezoning properties and the results shall be complied into one annual report that represents development on all of the property in the Original Rezoning.

17. PDC TDM Plan/Bike Parking. The Original Rezoning contained an extensive TDM Plan and the PDC Property shall be integrated into the administration of the original TDM where applicable. Further, the use of mass transit, ride-sharing, non-motorized and other transportation strategies shall be used to encourage reduction of single-occupant vehicle traffic from the PDC Property during peak hours by 20%. Prior to the issuance of the first non-RUP for the PDC Property, the Applicant shall appoint a Transportation Coordinator for the office building who shall coordinate with the TMC from the Original Rezoning to implement a TDM plan for the PDC Property and to integrate the building into the larger TDM Plan. The Transportation Coordinator shall provide written notice of their appointment to the TMC within 30 days of such appointment and, thereafter, within 10 days of any change in such appointment. The TDM plan shall include at least

the following elements: participation in the Fairfax County Ride Share Program, or any similar program subsequently specified by FCDOT; dissemination of transit, ride-sharing and non-motorized travel information (such as transit schedules and brochures) in leasing packages and dissemination of transit, ride-sharing and non-motorized travel information, either physically or through electronic means at least twice a year; and dissemination of Smart Trip Cards (or similar transit fare cards) in the amount of $25.00 to all new tenants. Tenants of the PDC Property shall be made aware of this TDM program in their leasing documents. In addition to the TDM Plan, the Applicant shall provide secure, weather-protected, bicycle storage for the PDC Property, and provide bicycle racks for visitors/tenants/employees. At a minimum, the Applicant shall provide bicycle storage sufficient for at least ten (10) bicycles on the PDC Property. One year following the issuance of the first non-RUP on the PDC Property, annual surveys shall be conducted concurrently with those required by the original TDM for the Original Rezoning properties and the results shall be complied into one annual report that represents development on all of the property in the Original Rezoning.

18. Participation in TDM Fund from Original Rezoning. Following issuance of a RUP or non-RUP respectively, the PDH and PDC Properties shall contribute annually to the TDM account established under the Original Rezoning. The TDM account shall be annually funded by pro-rata assessments of residents and commercial owners implemented as provided in the Original Rezoning common association documents.

V. STORMWATER MANAGEMENT

19. Stormwater Management Facilities. The Applicant will fulfill such requirements through the use of the existing regional facility located to the west of the Property in general accordance with the stormwater management narrative on the CDP/FDP, if approved by DPWES, including providing the pro-rata share of Best Management Practices (BMPs) in regional pond, as determined by DWPES. If the Applicant is unable to fulfill such requirement through the use of the regional pond, the Applicant shall file a proffered condition amendment (PCA) to permit an alternative stormwater management facility.

VI. LANDSCAPING

20. Landscaping and Landscaped Open Space. Site plans submitted for the respective phases of development shall include a landscape plan for that phase of development as generally shown on the CDP/FDP. The Applicant shall maintain such landscaping, including the Amenity Open Space, until the Master Association or sub-association assumes responsibility. Prior to issuance of a non-RUP on the PDC Property or the issuance of a RUP on the PDH Property, which ever occurs first, the Applicant shall construct the Amenity Open Space identified on the CDP/FDP. In the event the first phase of development is on the PDH Property, then, concurrent with construction of the Amenity Open Space, in order to maintain the attractiveness of the PDC Property, the PDC Property shall be seeded with grass and shall be maintained by the Applicant until development of the PDC Property proceeds. All new deciduous trees provided as a part of the Government Center Parkway Extended streetscape and along Ridge Top Road, as shown on such landscape plan, shall be a minimum of 3.0 to 3.5 inches in caliper at the time of planting. All new evergreen trees used in peripheral screening and

landscaping areas and public spaces shall be a minimum of six (6') feet in height at the time of planting. Such landscape plan shall be provided in substantial conformance with the landscaping concepts shown on the CDP/FDP. Further, the Applicant shall disclose the future expansion of the Amenity Open Space shown on the CDP/FDP to Parcel 37A and the potential for additional maintenance obligations associated with such expansion in the Master Association and Townhome HOA documents. Such future expansion of the Amenity Open Space shall also be noted on the record plat.

21. Location of Utilities. Along all existing public rights-of-way, utility lines shall be generally located so as to not interfere with the landscaping concepts shown on the CDP/FDP. The Applicant reserves the right to make minor modifications to such landscaping to reasonably accommodate utility lines provided such relocated landscaping shall retain a generally equivalent number of plantings and continues to reflect the concepts illustrated on the CDP/FDP and subject to UFM approval. For all other areas of the Property, in the event that during the process of site plan review any landscaping shown on the CDP/FDP cannot be installed in order to locate utility lines, as determined by DPWES, then an area of additional landscaping consisting of equivalent flora generally consistent with that displaced shall be substituted at an alternate location on the Property, subject to approval by Urban Forest Management.

22. Native Trees. Native trees shall be used within the landscaping, streetscape and landscaped open space areas as determined appropriate by Urban Forest Management.

VII. PEDESTRIAN IMPROVEMENTS

23. Additional Pedestrian Connection to the East. After the County approves the redevelopment on the adjacent parcel identified as Tax Map 56-2-((1))-37A ("Parcel 37A") and the Parcel 37A owner or the County requests that the Applicant grant additional pedestrian interparcel connections, in a form acceptable to the County Attorney, to connect the Property and Parcel 37A with a unified pedestrian network, the Applicant shall grant such easements at no cost provided: 1) such pedestrian connections shall be located along the common boundary between the Property and Parcel 37A; 2) any such potential pedestrian connection shall not conflict or interfere with improvements on the Property or cause improvements on the Property to become non-compliant with any federal, state or local code, ordinance or regulation; and 3) the 37A owner shall bear the responsibility and cost of obtaining the necessary governmental approvals and easements. In addition to the potential interparcel access easements discussed above, the Applicant shall convey to the County, in a form acceptable to the County Attorney, public access easements over the two possible future pedestrian connections shown on the CDP/FDP at the time of site plan approval for the Amenity Open Space. Should such pedestrian connections be constructed, nothing in this Proffer shall prevent the establishment of reasonable maintenance and cost-sharing provisions between the respective landowners. The potential for such interparcel connections and the potential additional maintenance responsibilities shall be disclosed in the Master Association and Townhome HOA documents.

24. Pedestrian Easements. Concurrent with site plan/subdivision plan approval, the Applicant shall place all sidewalks and trails shown on the CDP/FDP in public access

easements, in a form acceptable to the County Attorney. The Applicant shall maintain such sidewalks and/or trails located outside the public right-of-way until such responsibility is turned over to the Master Association, Townhome HOA or other sub-association as appropriate. Additionally, the Applicant shall maintain such sidewalks and/or trails within the public right-of-way that are constructed with specialty paving as identified on the CDP/FDP or any sidewalks and/or trails within the public right-of-way that VDOT will not agree to maintain. The maintenance responsibilities for such sidewalks shall be disclosed in the appropriate association documents.

VIII. RECREATIONAL FACILITIES

25. Recreational Contributions – PDH Property. At time of issuance of a RUP, pursuant to Section 6-409 of the Zoning Ordinance, the Applicant shall contribute $1,600.00 per each residential unit, exclusive of ADUs, approved on the PDH Property to the Fairfax County Park Authority to provide recreational facilities to serve the Property. The Applicant shall receive credit against such contribution for the cost of recreational facilities, as approved by DPWES, which may include, but not be limited to the cost of improvements for outdoor seating areas, pedestrian trails (except those shown on the Comprehensive Plan), and plazas. Only those facilities which are new with this Rezoning and not already provided with the Original Rezoning shall be eligible to be credited. At the time of site plan approval, the Applicant shall demonstrate credits to be taken to the satisfaction of DPWES and DPZ. In addition to the above contribution, the Applicant shall construct recreational facilities open to the public generally and to the residents of the Original Rezoning on the Amenity Open Space worth at least $91,260 ($2340 per

dwelling unit), as determined by DWPES at the time of site plan approval for the Amenity Open Space.

26. Additional Recreational Opportunities. In addition to the nearby public parks (Carney and Random Hills Parks), the PDH Property and the Townhome HOA are encouraged to join existing recreational associations in the area (such as the Fairfax Center Recreation Association) to provide additional recreational opportunities for the townhomes. A list of potential recreational associations and nearby publically-available parks shall be provided to the Townhome HOA in the Townhome HOA documents. Further, prior to issuance of the first RUP on the PDH Property, the Applicant shall provide the Townhome HOA with $250 per dwelling unit to allow the Townhome HOA to purchase future recreational memberships from nearby recreational facilities (such as the Fairfax Center Recreation Association or the Oak Marr RECenter) or to provide future on-site recreational facilities.

27. Recreational Contribution – PDC Property. Prior to issuance of a non-RUP for the building on the PDC Property, the Applicant shall contribute $9,450 to the Fairfax County Park Authority to provide capital improvements to recreational facilities serving the Fairfax Center Area in the Braddock Magisterial District.

IX. CONSTRUCTION AND GRADING

28. Projection from Building Facades. Decks (including attached flower boxes, trellises, insect-screening, sun-rooms, and lattice work), bay windows, patios, chimneys, areaways, stairs and stoops, mechanical equipment and other similar appurtenances may encroach into minimum yards as depicted on the "lot typical" for the townhouse

units as shown on the CDP/FDP, as permitted by the Zoning Ordinance. The restrictions and limitations of this proffer shall be disclosed to all initial and subsequent purchasers prior to contract ratification and further disclosed in the Townhome HOA documents. In addition, all prospective purchasers shall be notified of the applicable County requirements as they pertain to matters of permitting and related construction requirements.

29. Asbestos Containing Soils. If based on the soils analysis submitted as part of the site plan approval process, DPWS determines that a potential health risk exists due to the presence and associated disturbance of asbestos-containing rock on the Property, the Applicant shall:

    (A) Take appropriate measures as determined by the Fairfax County Health Department to alert all construction personnel as to the potential health risks; and

    (B) Commit appropriate construction techniques as determined by DPWES in coordination with the Fairfax County Health Department to minimize this risk. Such techniques shall include, but not be limited to, dust suppression during all blasting and drilling activities and covered transportation of removed materials presenting this risk, and appropriate disposal.

30. Blasting. If blasting is required on-site, the Applicant shall ensure that blasting is done pursuant to Fairfax County Fire Marshal requirements and all safety recommendations

of the same, including without limitation, the use of blasting mats. In addition, the Applicant shall:

(A) Retain a professional consultant to perform a pre-blast inspection of each house or residential building, to the extent that any of these structures are located on the properties listed in Paragraph I of this proffer;

(B) Prior to any blasting being done, the Applicant shall provide written confirmation to DPWES that the pre-blast survey has been completed and provide a copy of the survey to Fairfax County upon request;

(C) Require the blasting consultant to request access to any houses, wells, buildings, or swimming pools, by notification to owners in accordance with Paragraph I of this Proffer, to, if permitted by owner, determine the pre-blast conditions of these structures. The Applicant's consultant will be required to give a minimum of fourteen (14) days notice of the scheduling of the pre-blast survey. The Applicant shall provide the residents entitled to pre-blast inspections, the name, address and phone number of the blasting contractor's insurance carrier;

(D) Require his consultant to place seismographic instruments prior to blasting to monitor shock waves. The Applicant shall provide seismographic monitoring records to County agencies upon their request;

(E) Notify owners in accordance with Paragraph I of this Proffer, ten (10) days prior to blasting; no blasting shall occur until such notice has been given;

(F) Upon receipt of a claim of actual damage resulting from said blasting, the Applicant shall cause his consultant to respond within five (5) days of meeting at the site of the alleged damage to confer with the property owner;

(G) The Applicant will require blasting subcontractors to maintain necessary liability insurance to cover the costs of repairing any damages to structures, which are directly attributable to the blasting activity and shall take necessary action to resolve any valid claims in an expeditious matter; and

(H) The consultant shall be required to provide an analysis of the potential for gas migration from the site to the Fire Marshal for review and approval prior to blasting. Appropriate gas migration mitigation and/or notification pursuant to County regulations shall be implemented.

(I) For purposes of this Proffer, the following tax map parcels, as may be amended in the future, shall be notified by certified mail at the address indicated in the tax assessment records of Fairfax County:

Tax Map Parcels 56-2-((1))- 33G1, 33G2, 33H, 36, 37A, 39, 40, 54, 55, 57, 58, 61A; 56-2-((4))-1, 2, 4, 6; 56-2-((15))-(4)-102, 103, 201, 202, 203, 204, 301, 302, 303, 304; 56-2-((15))-(6)-102, 103, 201, 202, 203, 204, 301, 302, 303, 304; 56-2-((15))-(7)-102, 103, 201, 202, 203, 204, 301, 302, 303, 304; 56-2-((15))-(8)-102, 103, 201, 202, 203, 204, 301, 302, 303, 304; 56-2-((12))-A1, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23,

24, 25, 111, 112A; 56-2-((19))-A1, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 94, 95, 96, 97, 98, 99, 100, 101, 102; 56-2-((17))-A, E, N, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51; 56-2-((24))-(1) -1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17; 56-2-((24))-(2)-35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51

31. Historical Marker. The Applicant shall construct a historical marker commemorating the World War II German P.O.W. Camp that existed on the Property, in the Amenity Open Space, as shown on the CDP/FDP, memorializing the historical significance of the Property. The final form of the historical marker shall be subject to the approval of the Cultural Resource Management and Protection Section of the Fairfax County Park Authority. The marker shall be constructed at the same time the Amenity Open Space is completed.

32. Noise Attenuation Measures. Exterior wall construction techniques shall be provided to ensure that a maximum interior noise level of approximately DNL 45 dBA shall be achieved for any townhome that fronts Government Center Parkway and that a noise study shows will be exposed to noise levels in excess of DNL 65 dBA.

X. GREEN BUILDING

33. LEED for PDC Property. As part of any development on the PDC Property, the Applicant shall include a U.S. Green Building Council Leadership in Energy and Environmental Design ("LEED") accredited professional, either a professional engineer or a professional architect, as a member of the design team prior to issuance of a non-RUP for any

building. The LEED accredited professional shall work with the team to incorporate LEED design elements into the project. At time of site plan submission, the Applicant shall provide documentation to the Environment and Development Review Branch of DPZ demonstrating compliance with the commitment to engage such a professional. In addition, prior to site plan approval, the Applicant shall designate the Chief of the Environment and Development Review Branch of the Department of Planning and Zoning (DPZ) as team member in the USGBC's LEED online system. This team member will have privileges to review the project status and monitor progress of all documents submitted by the project team. This team member will not be assigned responsibility for any LEED credits and shall not have any authority to modify any aspect of the documentation or paperwork associated with the certification process described below.

34. LEED Certification. Prior to building plan approval for any building to be constructed on the PDC Property, the Applicant will submit documentation, to the Environment and Development Review Branch of DPZ, regarding the U.S. Green Building Council's preliminary review of design-oriented credits in the LEED program. This documentation will demonstrate that the building is anticipated to attain a sufficient number of design-related credits that, along with the anticipated construction-related credits, will be sufficient to attain LEED Silver certification. Prior to release of the bond for the project, the Applicant shall provide documentation to the Environment and Development Review Branch of DPZ demonstrating the status of attainment of LEED Certification from the U.S. Green Building Council for each building on the property.

35. LEED Escrow. As an alternative to the actions outlined in the above paragraphs, or if the U.S. Green Building Council review of design-oriented credits indicates that the building on the PDC Property is not anticipated to attain a sufficient number of design-related credits to support attainment of LEED Silver certification, the applicant will execute a separate agreement and post, for each building, a "green building escrow," in the form of cash or a letter of credit from a financial institute acceptable to DPWES as defined in the Public Facilities Manual, in the amount of $2.00 per gross square foot. This escrow will be in addition to and separate from other bond requirements and will be released upon demonstration of attainment of certification, by the U.S. Green Building Council, under the most current version of the LEED-NC rating system or other LEED rating system determined, by the U.S. Green Building Council, to be applicable to each building. The provision to the Environment and Development Review Branch of DPZ of documentation from the U.S. Green Building Council that the building on the PDC Property has attained LEED certification will be sufficient to satisfy this commitment. If the applicant fails to provide documentation to the Environment and Development Review Branch of DPZ demonstrating attainment of LEED certification within one year of issuance of the non-RUP for the building, the escrow will be released to Fairfax County and will be posted to a fund within the county budget supporting implementation of county environmental initiatives.

36. Energy Conservation for PDH Property. All dwelling units constructed on the PDH Property shall be designed and constructed as ENERGY STAR® qualified homes. The major features of an ENERGY STAR home include: Effective Insulation, High

Performance Windows, Tight Construction and Ducts, Efficient Heating and Cooling Equipment, Efficient Products (may include but are not limited to: refrigerator, stove and dishwasher) and Third Party Verification (Home Energy Rater). Prior to the issuance of the RUP for each dwelling unit, documentation shall be submitted to the Environment and Development Review Branch of the Department of Planning and Zoning (DPA) from a home energy rater certified through the Residential Energy Services network (RESNET) program that demonstrates that the dwelling unit has attained the ENERGY STAR for homes certification, as described in these conditions.

XI. MISCELLANEOUS

37. School Contribution. At the time of issuance of a RUP on the PDH Property, the Applicant shall contribute $3,607 per unit to the Board of Supervisors, in accordance with the current countywide student yield ratio for capital improvements to schools in Fairfax County serving the PDH Property.

38. ADU Contribution. 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 of one percent (1/2%) of the value of all of the units approved 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 Fairfax County Department of Housing and Community Development (HCD) and shall be approved by HCD and DPWES.

39. Temporary Signage. 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 representative. The Applicant shall direct its agents and employees involved in marketing and/or sale of residential units on the Property to adhere to this proffer.

40. Rooftop Equipment. Telecommunications and other related equipment may be placed on the proposed Buildings' rooftops. Any such facilities must comply with the applicable requirements of the Zoning Ordinance. Other screening measures may be used such as including the facilities as part of the architecture of the buildings, utilizing compatible colors, or employing telecommunication screening material and flush mounted antennas.

41. Garage Conversion on PDH Property. Any conversion of garages or use of garages that precludes the parking of vehicles within the garage is prohibited. A covenant setting forth this restriction 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 Board of Supervisors. This restriction shall also be disclosed in the HOA documents. Prospective purchasers shall be advised of this use restriction, in writing, prior to entering into a contract of sale.

42. Escalation. All monetary contributions required by these proffers shall escalate on a yearly basis from the base year of 2012, and change effective each January 1 thereafter, based on the Consumer Price Index as published by the Bureau of Labor Statistics, the

U.S. Department of Labor for the Washington-Baltimore, MD-VA-DC-WV Consolidated Metropolitan Statistical Area (the "CPI"), as permitted by Virginia State Code Section 15.2-2303.3.

43. Successors and Assigns. These proffers shall bind and in inure to the benefit of the Applicant and its successors and assigns. Each reference to "Applicant" in these proffers shall include and be binding upon Applicant's successor(s) in interest and/or developer(s) of any portion of the Property.

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

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK]

MIDLAND ROAD LLC
(Owner of
Tax Map No. 56-2-((1))-37D and 37G)

By: Kettler Inc., its manager

By: _____

Name: Andrew W. Buchanan

Title: President

RIDGEWOOD COMMERCIAL PROPERTY
OWNERS ASSOCIATION
(Owner of
Tax Map No. 56-2-((1))-37B)

By: _____

Name: Charles J. Kieler

Title: President

REZONING PLAN / FINAL DEVELOPMENT PLAN / PARTIAL PROFFER CONDITION AMENDMENT RZ/FDP 2011-BR-014 and PCA 2005-SP-019

FOR

RIDGEWOOD

BRADDOCK DISTRICT
FAIRFAX COUNTY, VIRGINIA

VICINITY MAP
SCALE: 1" = 2000'

GENERAL NOTES

1. THE PROPERTY IS IDENTIFIED AS FAIRFAX COUNTY TAX ASSESSMENT MAP, NUMBERS 056-2-((1))-37B, 056-2-((1))-37C & 056-2-((1))-37D.
2. THE ABOVE REFERENCED PROPERTY IS CURRENTLY ZONED PRM IN ACCORDANCE WITH RZ/FDP#2005-SP-0019.
3. THE BOUNDARY INFORMATION SHOWN HEREON WAS COMPILED BY URBAN ENGINEERING & ASSOCIATES, INC. (UEA).
4. THE TOPOGRAPHY SHOWN HEREON IS AT A TWO-FOOT CONTOUR INTERVAL, COMPILED BY UEA. ALL TOPOGRAPHY WAS OBTAINED VIA AIR SURVEY.
5. THE PROPERTY SHOWN ON THIS PARTIAL PCA PLAN IS LOCATED IN THE SPRINGFIELD DISTRICT, THE BLUE PLAINS SANITARY SEWER DISTRICT, AND THE DIFFICULT RUN WATERSHED.
6. THIS PROPOSED DEVELOPMENT IS IN CONFORMANCE WITH THE COMPREHENSIVE PLAN AND ALL APPLICABLE ORDINANCES, REGULATIONS AND ADOPTED CONDITIONS WITH THE EXCEPTION OF THE FOLLOWING:
   - THE APPLICANT HEREBY REQUESTS A WAIVER FOR ONSITE STORMWATER MANAGEMENT (SWM) AND BEST MANAGEMENT PRACTICES (BMP). SWM AND BMP WILL BE PROVIDED FOR THE SUBJECT SITE IN A REGIONAL OFFSITE SWM/BMP FACILITY (SEE NOTE 8 BELOW).
   - THE APPLICANT HEREBY REQUESTS A WAIVER OF TRANSITIONAL SCREENING & BARRIER REQUIREMENTS IN FAVOR OF THE LANDSCAPING SHOWN ON THE INCLUDED LANDSCAPE PLAN.
   - THE APPLICANT HEREBY REQUESTS A MODIFICATION OF THE LOADING SPACE REQUIREMENTS OF SECTION 11-203 OF THE FAIRFAX COUNTY ZONING ORDINANCE TO REDUCE THE REQUIRED NUMBER OF LOADING SPACES FOR THE PROPOSED OFFICE BUILDING TO ONE SPACE.
   - THE APPLICANT HEREBY REQUESTS A WAIVER OF THE PRIVACY YARD REQUIREMENT FOR SINGLE FAMILY ATTACHED DWELLING UNIT LOTS.
   - THE APPLICANT HEREBY REQUESTS A WAIVER OF THE MINIMUM DISTRICT SIZE FOR THE PROPOSED PDC DISTRICT.
   - THE APPLICANT HEREBY REQUESTS A DEVIATION FROM THE TREE PRESERVATION TARGET TO REDUCE THE REQUIREMENT TO ZERO.
7. THIS SITE IS SERVED BY PUBLIC SEWER AND WATER.
8. STORM WATER MANAGEMENT (SWM) AND BEST MANAGEMENT PRACTICES (BMP) ARE PROVIDED BY AN OFFSITE DRY POND CONSTRUCTED WITH FAIRFAX COUNTY PLAN #7656-SP-05. SEE STORMWATER MANAGEMENT NARRATIVE AND OUTFALL NARRATIVE, THIS SHEET.
9. UTILITY LOCATIONS SHOWN ARE APPROXIMATE. THERE ARE NO KNOWN EXISTING UTILITY EASEMENTS OF 25' OR MORE IN WIDTH ON THE SITE.
10. INDIVIDUAL UTILITY PLANS AND PROFILES WILL BE SUBMITTED DURING THE SITE PLAN STAGE FOR CONSTRUCTION PURPOSES. ANY UTILITY SHOWN HEREON IS SCHEMATIC AND SUBJECT TO CHANGE WITH FINAL SITE PLAN.
11. THERE ARE NO KNOWN HAZARDOUS OR TOXIC SUBSTANCES ON THIS SITE. IF ANY SUBSTANCES ARE FOUND, THE METHODS FOR DISPOSAL SHALL ADHERE TO COUNTY, STATE, OR FEDERAL LAW.
12. THERE ARE NO KNOWN BURIAL SITES OR EXISTING STRUCTURES FOUND ON THIS SITE.
13. ALL PUBLIC STREETS SHALL CONFORM TO FAIRFAX COUNTY AND/OR VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) STANDARDS AND SPECIFICATIONS. PRIVATE STREETS SHALL CONFORM TO STANDARDS SET BY THE FAIRFAX COUNTY PUBLIC FACILITIES MANUAL SECTION 7 UNLESS MODIFIED AS DESCRIBED IN GENERAL NOTE # ABOVE.
14. IN ACCORDANCE WITH PARAGRAPH 4 OF SECTION 16-403 OF THE ZONING ORDINANCE, MINOR MODIFICATIONS TO THE SIZE, DIMENSIONS, FOOTPRINTS, AND LOCATION OF BUILDINGS, PARKING SPACES, GARAGES AND SIDEWALKS MAY OCCUR WITH FINAL ENGINEERING AND DESIGN, PROVIDED CHANGES ARE IN SUBSTANTIAL CONFORMANCE WITH THE DEVELOPMENT PLAN.
15. THERE ARE NO DESIGNATED FLOOD PLAINS, ENVIRONMENTAL QUALITY CORRIDORS, OR RPAs ON THE SUBJECT SITE PER FAIRFAX COUNTY MAPS.
16. THERE ARE NO SCENIC ASSETS OR NATURAL FEATURES ON THE SUBJECT SITE WHICH WOULD DESERVE PROTECTION OR PRESERVATION.
17. THE ARE NO EXISTING BUILDINGS ON SITE.
18. THE SPECIAL AMENITIES PROPOSED WITH THIS SITE SHALL INCLUDE:
    - WALKING TRAILS
    - HIKER/BIKER TRAILS
    - PEDESTRIAN SIDEWALKS
19. THE DEVELOPMENT SCHEDULE SHALL BE DETERMINED BY THE APPLICANT BASED UPON MARKET CONDITIONS.
20. THE PUBLIC ROAD IMPROVEMENTS REQUIRED BY THE COMPREHENSIVE PLAN FOR THE PROPOSED IMPROVEMENTS HAVE BEEN PROVIDED OR ARE CURRENTLY UNDER CONSTRUCTION PURSUANT TO RZ/FDP#2005-SP-0019. THEREFORE, NO FURTHER PUBLIC ROAD IMPROVEMENTS ARE REQUIRED FOR THIS PARTIAL PCA.
21. SIGNAGE WILL BE PROVIDED IN ACCORDANCE WITH THE FAIRFAX COUNTY ZONING ORDINANCE.
22. AFFORDABLE DWELLING UNITS REQUIRED FOR THE 300 MULTIFAMILY RESIDENTIAL UNITS INITIALLY APPROVED WITH RZ/FDP#2005-SP-0019 ARE PROVIDED WITH THE FIRST SUBJECT RESIDENTIAL PROJECT WITH SITE PLAN #2740-SP-008, APPROVED ON 06/17/2008. THIS PARTIAL PCA REMOVES A 18 UNIT MULTIFAMILY BUILDING AND PROPOSES 39 SFA UNITS. SFA DEVELOPMENTS OF LESS THAN 50 UNITS ARE EXEMPT FROM ADU REQUIREMENTS, PER Z.O. SECTION 2-802.1
23. IT IS UNKNOWN AT THIS TIME IF ANY HAZARDOUS OR TOXIC SUBSTANCES, HAZARDOUS WASTES OR PETROLEUM PRODUCTS ARE TO BE GENERATED, UTILIZED, STORED, TREATED AND/OR DISPOSED OF ON THIS SITE. THERE ARE NO EXISTING STORAGE FACILITIES FOR SUCH PRODUCTS ON THIS SITE.
24. THE APPLICANT RESERVES THE RIGHT TO ADJUST THE RESIDENTIAL AND COMMERCIAL DENSITIES ON THE PROPERTY SUBJECT TO THE SUBSTANTIAL CONFORMANCE WITH THE CDP/FDP AND THE PROFFER CONDITIONS. THE CORRESPONDING PARKING REQUIREMENTS MAY ALSO BE ADJUSTED TO INCLUDE A NUMBER LESS THAN THAT SHOWN PROVIDED THAT ALL THE MINIMUM ZONING REQUIREMENTS SHALL BE MET.
25. TABULATIONS FOR SITE, BUILDING, PARKING AND LOADING DATA ARE PROVIDED ON SHEETS #3 & #4 OF THIS PLAN.
26. SPECIAL PAVING MAY INCLUDE, BUT NOT BE LIMITED TO MATERIALS SUCH AS STAMPED CONCRETE, COLORED CONCRETE, EXPOSED AGGREGATE CONCRETE, STAMPED ASPHALT, AND SIMILAR TEXTURED FINISHES.
27. THERE ARE NO PUBLIC IMPROVEMENTS PROPOSED WITH THIS APPLICATION.
28. LIMITS OF CLEARING AND GRADING DEPICTED IN THIS APPLICATION IS SCHEMATIC AND SUBJECT TO CHANGE WITH FINAL ENGINEERING.

SHEET INDEX

1. COVER SHEET
2. EXISTING CONDITIONS, SOILS MAP, AND EXISTING VEGETATION MAP
3. CONCEPTUAL AND FINAL DEVELOPMENT PARTIAL PCA PLAN
4. RZ/CDPA/FDPA PLAN
5-5A. LANDSCAPE PLAN
6-6D. LANDSCAPE DETAILS
6E. TREE CONSERVATION PLAN
6F. TREE CONSERVATION DETAILS
6G. OPEN SPACE AND PEDESTRIAN CIRCULATION PLAN
7-9. SWM/BMP DETAILS

APPLICANTS

MIDLAND ROAD LLC
1751 PINNACLE DRIVE #700
MCLEAN, VA 22102
PHONE: 703-641-9000

RIDGEWOOD COMMERCIAL PROPERTY OWNERS ASSOCIATION
1751 PINNACLE DRIVE #700
MCLEAN, VA 22102
PHONE: 703-641-9000

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

This 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 7-9.

[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)
FAIRFAX CENTER	3.82	282.32	286.14	±360,115	±1,629,616	±8
Totals						

[X] 4. Onsite drainage channels, outfalls and pipe systems are shown on Sheet 4. Pond inlet and outlet pipe systems are shown on Sheet 7-9.

[X] 5. Maintenance access (road) to stormwater management facility(ies) are shown on Sheet 7-9.
- Type of maintenance access road surface noted on the plat is ASPHALT (asphalt, geoblock, gravel, etc.).

N/A [ ] 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 1.

[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 1.

[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 1.

[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 7-9.

[X] 11. A submission waiver is requested for USE OF OFFSITE SWM/BMP FACILITIES.

N/A [ ] 12. Stormwater management is not required because N/A.

STORMWATER MANAGEMENT NARRATIVE

FOR ALL OF RZ/FDP#2005-SP-0019, INCLUDING THIS PARTIAL PCA

STORM WATER MANAGEMENT (SWM) AND BEST MANAGEMENT PRACTICES (BMP) ARE PROVIDED FOR THIS DEVELOPMENT BY THE OFFSITE DRY POND CONSTRUCTED WITH FAIRFAX COUNTY PLAN #7656-SP-005-2, ENTITLED "FAIRFAX CENTER REGIONAL STORMWATER MANAGEMENT POND #D-77," PREPARED BY BC CONSULTANTS, APPROVED ON APRIL 10, 2000. FOR INFORMATION PURPOSES, SHEETS #7-9 OF THIS APPLICATION ARE REFERENCED FROM APPROVED PLAN #7656-SP-005-2 TO DEMONSTRATE THAT THE EXISTING FACILITY SERVES THIS DEVELOPMENT. SHEET #7 IS PROVIDED TO SHOW THE POND PLAN. SHEET #8 IS INCLUDED TO SHOW THAT THE EXISTING FACILITY WAS DESIGNED TO ACCOMMODATE SWM FOR USES CONSISTENT WITH THIS APPLICATION. SHEET #9 IS INCLUDED TO SHOW THAT THE EXISTING FACILITY WAS DESIGNED TO ACCOMMODATE BMP FOR USES CONSISTENT WITH THIS APPLICATION, AS SHOWN ON SHEETS 8-9. THE CURRENT APPLICATION'S DEVELOPMENT AREA IS LOCATED WITHIN THE AREA DESIGNATED AS "Z3". A CURVE NUMBER OF 92 WAS USED FOR THE "Z3" AREA, WHICH IS CONSISTENT WITH THE PROPOSED USES PER THIS APPLICATION.

OUTFALL NARRATIVE

FOR ALL OF RZ/FDP#2005-SP-0019, INCLUDING THIS PARTIAL PCA

THIS SITE DRAINS EAST TO WEST TO EXISTING CLOSED CONDUIT PIPES THAT CROSS RIDGE TOP ROAD. RUNOFF IS THEN CONVEYED UNDER RIDGE TOP ROAD AND THROUGH EXISTING CLOSED CONDUIT PIPES ALONG GOVERNMENT CENTER PARKWAY WHICH ULTIMATELY OUTFALL TO THE EXISTING SWM/BMP FACILITY DESCRIBED IN THE "STORMWATER MANAGEMENT NARRATIVE" ON THIS SHEET. THE EXISTING SWM/BMP FACILITY THEN OUTFALLS TO AN EXISTING CHANNEL. AS SHOWN ON SHEET #9, CROSS-SECTION A-A ANALYZES THE EXISTING CHANNEL IMMEDIATELY DOWNSTREAM OF THE EXISTING FACILITY. FURTHER, AS SHOWN, THE DRAINAGE AREA TO CROSS-SECTION A-A IS 1.7 SQUARE MILES. THUS, AS REQUIRED, AN ADEQUATE OUTFALL IS PROVIDED FROM THIS SITE TO A POINT WITH A DRAINAGE AREA OF AT LEAST 1 SQUARE MILE. THE ON-SITE CONTRIBUTING DRAINAGE AREA TO THIS OUTFALL IS 3.82 ACRES. THE OUTFALL REQUIREMENTS IN ACCORDANCE WITH THE PFM WILL BE SATISFIED AT THE TIME OF FINAL SITE PLAN.

No.	DATE	DESCRIPTION	REV.BY	APPROVED	DATE

REVISION APPROVED BY DIVISION OF DESIGN REVIEW

PLAN DATE: 02-04-11, 04-08-11, 05-13-11, 08-05-11, 09-29-11, 10-31-11, 12-02-11

urban

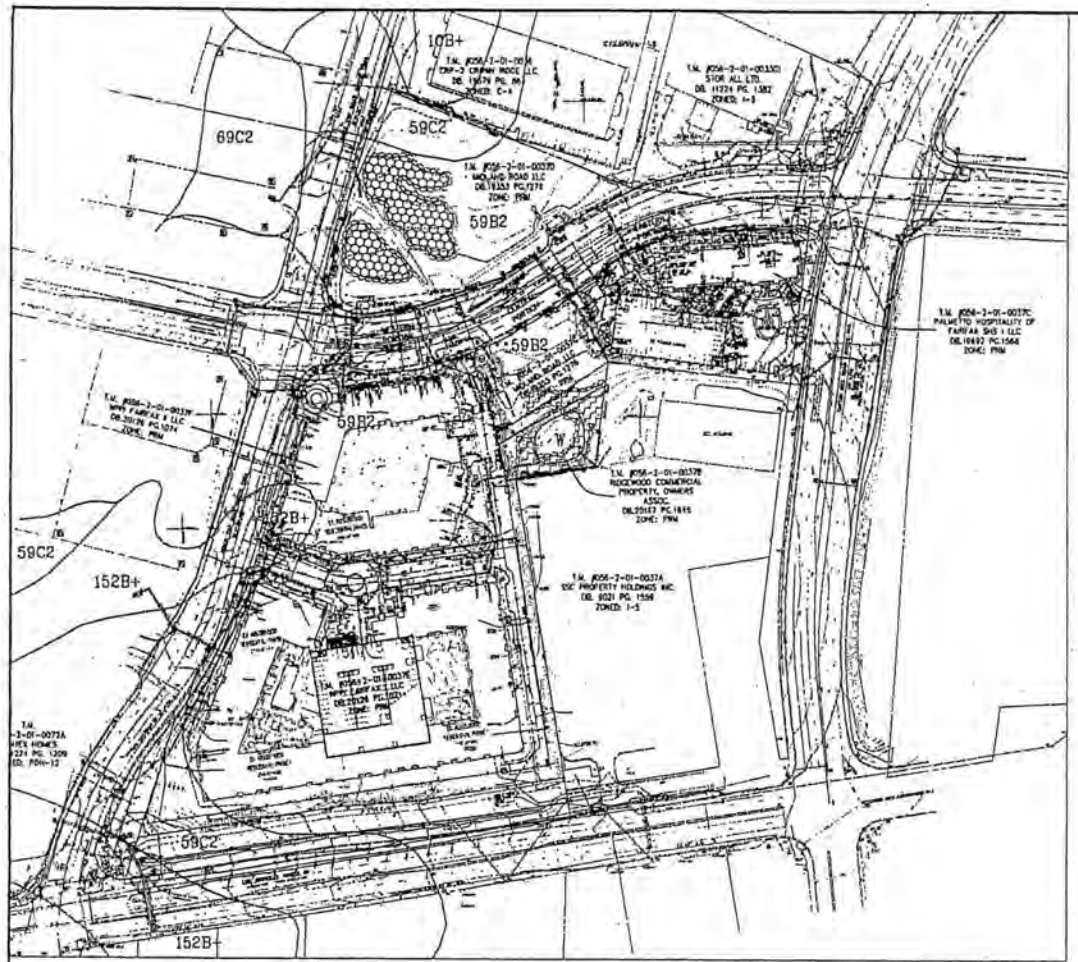
COVER SHEET

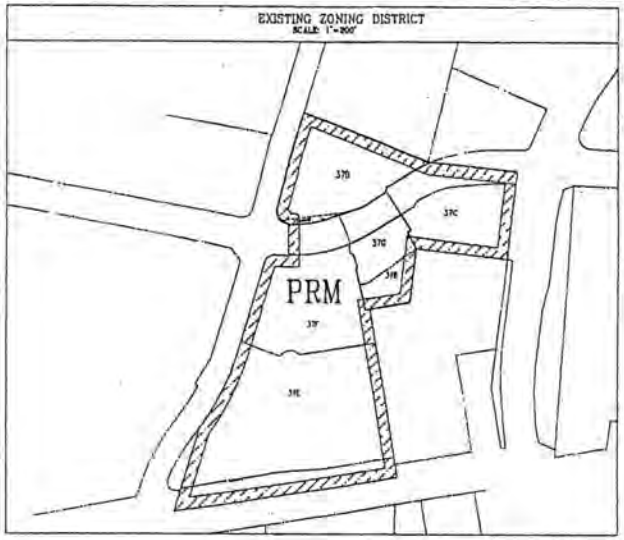
RIDGEWOOD
BRADDOCK DISTRICT
FAIRFAX COUNTY, VIRGINIA

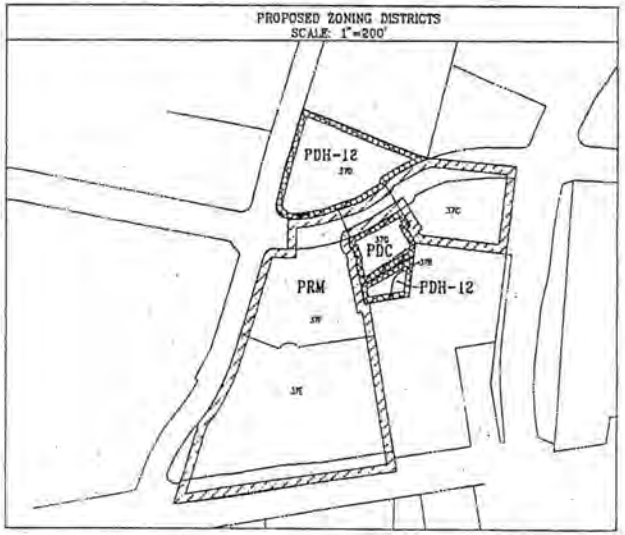
DATE: NOV. 2010
CI = N/A
SCALE: AS NOTED

SHEET 1 OF 9

FILE No. ZP-1813-2







CURVE TABLE

CURVE	RADIUS	ARC	DELTA	TANGENT	CHORD	BEARING
1	42.00	76.92	104°56'12"	54.68	66.62	S27°16'30"W
2	1675.43	11.27	0°23'06"	5.64	11.27	S11°58'48"E
3	1805.42	99.27	3°09'34"	49.65	99.25	S10°32'03"E
4	828.06	122.61	8°29'03"	61.48	122.49	S83°39'18"W
5	53.50	28.49	30°30'43"	14.57	28.15	S32°24'28"W
5A	53.50	53.98	34°02'11"	7.19	53.78	S80°53'38"W
5B	53.50	14.50	38°21'24"	7.48	14.37	N48°08'12"E
6	665.41	171.94	29°39'12"	86.85	170.98	S78°13'18"W
7	575.00	103.77	10°20'28"	52.03	103.63	N83°53'31"E
8	500.00	60.81	6°58'26"	30.44	59.87	N12°26'58"W
9	5.00	3.93	45°00'00"	2.07	3.83	N67°53'01"E
10	5.00	3.83	43°52'33"	2.07	3.93	S44°36'47"E
11	30.00	25.58	48°51'17"	13.63	24.81	N04°58'37"E
12	575.00	299.55	29°50'55"	153.28	296.17	S73°58'25"E
13	33.50	23.08	61°08'38"	12.88	22.81	S29°54'09"W
14	329.77	114.51	12°23'11"	57.49	114.30	S85°40'04"W

EXISTING VEGETATION SUMMARY

	Cover Type	Primary Species	Successional Stage	Condition	Average	Comments
A	Mixed Forest	Virginia Pine (Pinus virginiana), Red Maple (Acer rubrum), Tulip Tree (Liriodendron tulipifera)	Sub-climax	Poor	30 in	This cover type is mostly second growth as of mature Virginia Pine (Pinus virginiana) up to 24" dbh). The understory is composed of a mixture of deciduous trees 36"-8" D.B.H.), including Red Maple (Acer rubrum), Tulip Poplar (Liriodendron tulipifera), White Oak (Quercus alba), Pin Oak (Quercus palustris), and Red Oak (Quercus rubra). Other mid-seedlings of the aforementioned trees, the most notable species is the shrub layer is Dewdrop (Clerodendrum trichotomum), and Purpleleaf Wintercreeper (Euonymus fortunei cv. Coloratus).
B	Early Successional Forest Community	White Willow (Salix alba), Callery Pear (Pyrus calleryana)	Early Successional	Poor	20 in	White Ash (Fraxinus americana), Red Maple (Acer rubrum) (2"-6" dbh), Tulip Poplar (Liriodendron tulipifera) (2"-6" dbh), and Eastern Redcedar (Juniperus virginiana) up to 18" D.B.H. have been noted in the understory. The dominant understory species however is Autumn Olive (Elaeagnus umbellata) (up to 6" D.B.H.). Also, a mixture of invasive/exotic shrubs including Honeysuckle (Lonicera morrowii), Smooth Sumac (Rhus glabra), and Callery (Pyrus calleryana) are present along with Common Privet (Ligustrum vulgare) and Poison Ivy (Toxicodendron radicans).
C	Open Field	Weeds	Early Successional	Full Cover	3.00 in	Cover type "C" is primarily an unmaintained grassland, with less shrubs and little woody. Species other than the famous include Queen Anne's Lace (Daucus carota), Common Yarrow (Achillea millefolium), Common Plantain (Plantago major), and Old Field Goldenrod (Solidago nemoralis).

* DBH = Diameter of stream height, ground, measured 1.5 ft. above the ground.
Note: Field data collected during late mid to May 12, 2010.

OVERALL ZONING AREA TABULATION

EXISTING ZONING DISTRICT:
PRM 791,355 SF

PROPOSED ZONING DISTRICT:
PDH-12 130,275 SF
PDC 31,434 SF

REMAINING 617,586 SF TO REMAIN PRM

SOILS LEGEND

NUMBER	NAME	CLASS
10B+	GLENVILLE	B
59B2	ORANGE	A
59C2	ORANGE	A

NOTE: SOILS DATA SOURCE IS THE COUNTY OF FAIRFAX SOILS IDENTIFICATION MAPS.

No.	DATE	DESCRIPTION	REVISION APPROVED
		REVISION APPROVED BY DIVISION OF DESIGN REVIEW	DATE

PLAN DATES
08-13-2010
12-07-2010
03-08-2011

urban

EXISTING CONDITIONS, SOILS MAP, AND EXISTING VEGETATION MAP

RIDGEWOOD
BRADDOCK DISTRICT
FAIRFAX COUNTY, VIRGINIA

SCALE: 1"=100' / AS NOTED | C1 = 2' | DATE: NOV., 2010

SHEET 2 OF 9

RZ/FDP Nos.
ZP-1813-2

OVERALL RIDGEWOOD ANALYSIS:

THE RIDGEWOOD RZ/FDP #2005-SP-0019 WAS APPROVED ON JUNE 26, 2006. SINCE THAT APPROVAL, THREE OF THE PROPOSED STRUCTURES AND THE REQUIRED PUBLIC ROAD IMPROVEMENTS HAVE BEEN PROPOSED AND/OR BUILT IN ACCORDANCE WITH THE FOLLOWING:

PROJECT	SITE PLAN	STATUS
GOVERNMENT CENTER PARKWAY EXTENDED	#438-SP-009	APPROVED ON 01/07/2008
LEE HIGHWAY TURNLANE	#438-SP-010	APPROVED ON 05/15/2008
RIDGEWOOD HOTEL	#438-SP-011	APPROVED ON 01/04/2008
RIDGEWOOD RESIDENTIAL PHASE I	#740-SP-008	APPROVED ON 06/17/2008
RIDGEWOOD RESIDENTIAL PHASE II	#740-SP-007	DISTRIBUTED TO BONDS BRANCH FOR PERMITTING 10/22/2010

EXISTING DEVELOPMENT AREA ANALYSIS:

THE TWO RESIDENTIAL PHASES, THE HOTEL AND THE PUBLIC IMPROVEMENTS WERE APPROVED IN ACCORDANCE WITH RZ/FDP #2005-SP-0019. THE ANALYSIS BELOW SHOWS THAT THE EXISTING DEVELOPMENT PROVIDES A MINIMUM OF 20% OPEN SPACE AND DOES NOT EXCEED THE MAXIMUM 1.20 FAR PROPOSED ON RZ/FDP #2005-SP-0019.

OPEN SPACE

PROJECT	TAX MAP	PARCEL AREA SF	PARCEL AREA AC	OPEN SPACE (AC)
RIDGEWOOD HOTEL	56-2-01-0037C	82,319	1.89	0.70
RIDGEWOOD RESIDENTIAL PHASE I	56-2-01-0037E	266,564	6.12	1.99
RIDGEWOOD RESIDENTIAL PHASE II	56-2-01-0037F	130,647	3.00	0.75
	TOTALS	479,530	11.01	3.44

OPEN SPACE PROVIDED = 3.44 AC / 11.01 AC = 31%
OPEN SPACE PROVIDED EXCEEDS 30% PROPOSED ON RZ/FDP #2005-SP-0019

FAR

PROJECT	TAX MAP	PARCEL AREA SF	PARCEL AREA AC	BUILDING AREA (GSF)
RIDGEWOOD HOTEL	56-2-01-0037C	82,319	1.89	88,879
RIDGEWOOD RESIDENTIAL PHASE I	56-2-01-0037E	266,564	6.12	351,708
RIDGEWOOD RESIDENTIAL PHASE II	56-2-01-0037F	130,647	3.00	240,516
GOVERNMENT CENTER PARKWAY DEDICATION (WESTERN)	PUBLIC R.O.W.**	21,528	0.49	N/A
GOVERNMENT CENTER PARKWAY DEDICATION (EASTERN)	PUBLIC R.O.W.**	34,800	0.80	N/A
LEE HIGHWAY DEDICATION:	PUBLIC R.O.W.**	59,295	1.36	N/A
	TOTALS	595,661	13.67	685,903

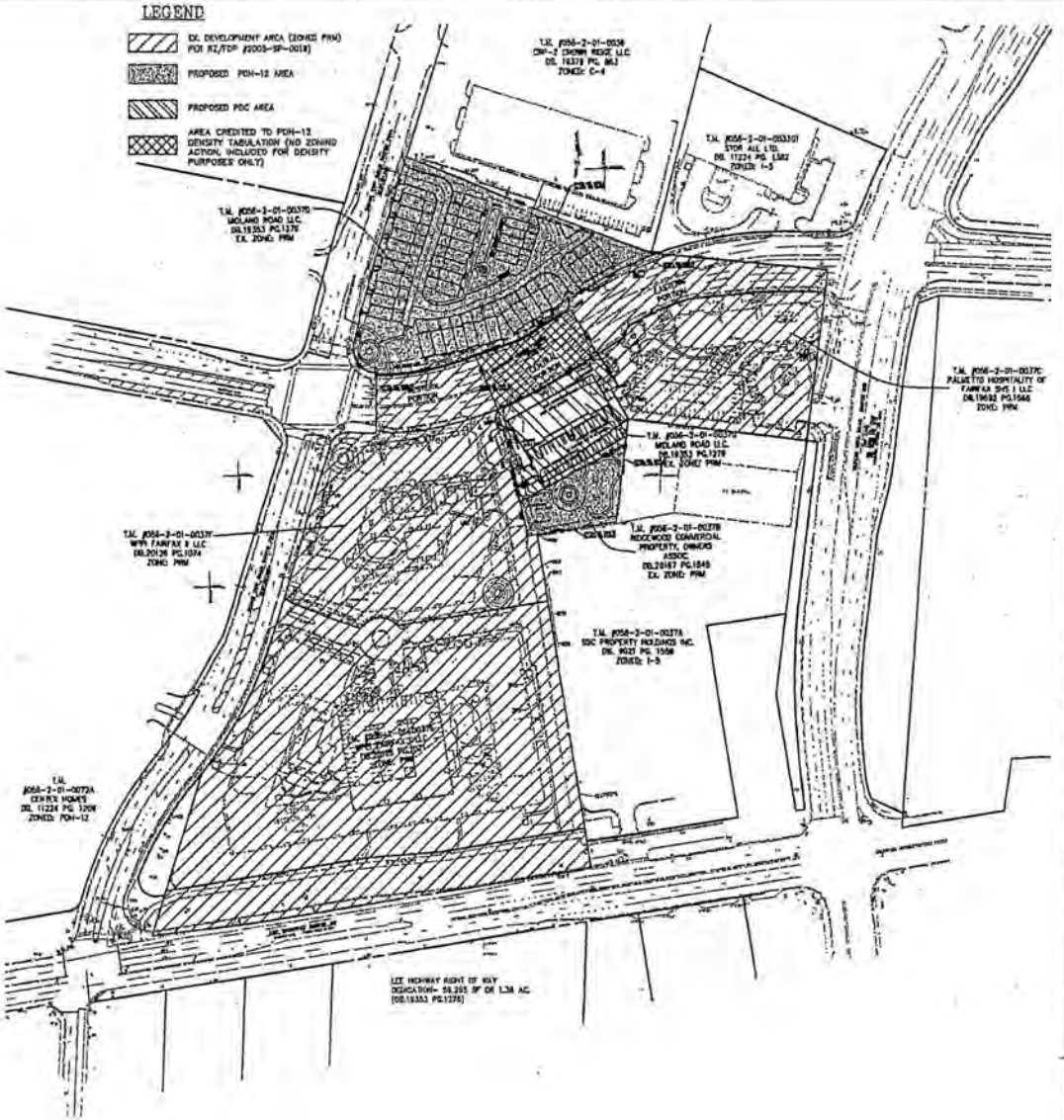
FAR PROVIDED = 685,903 GSF / 595,661 SF = 1.15
FAR PROVIDED DOES NOT EXCEED MAXIMUM OF 1.20 PROPOSED ON RZ/FDP #2005-SP-0019

**GOVERNMENT CENTER PARKWAY RIGHT OF WAY DEDICATION (DB.19353 PG.1275)
TOTAL GOVERNMENT CENTER PARKWAY RIGHT OF WAY DEDICATION= 75,642 SF OR 1.74 AC.
THREE PORTIONS ARE CALCULATED FOR IMPLEMENTATION WITH THIS PARTIAL PCA/RZ/CDPA/FDPA:
WESTERN PORTION= 21,528 SF OR 0.49 AC. – CREDITED TO THE EXISTING DEVELOPMENT DENSITY TABULATION
CENTRAL PORTION=18,334 SF, OR 0.44 AC. – CREDITED TO THE PROPOSED PDH-12 DENSITY TABULATION
EASTERN PORTION=34,800 SF, OR 0.80 AC. – CREDITED TO THE EXISTING DEVELOPMENT DENSITY TABULATION
TOTAL =75,642 SF, OR 1.73 AC

PROPERTY AREA TABULATION

PROJECT	TAX MAP	PARCEL AREA SF	PARCEL AREA AC
MIDLAND ROAD LLC	56-2-01-0037D	114,042	2.62
MIDLAND ROAD LLC	56-2-01-0037G	29,718	0.68
RIDGEWOOD COMMERCIAL PROPERTY OWNERS ASSOC.	56-2-01-0037B	23,948	0.55
	TOTALS	168,707	3.83
GOVERNMENT CENTER PARKWAY DEDICATION (CENTRAL)	PUBLIC R.O.W.**	18,227	0.44

**GOVERNMENT CENTER PARKWAY RIGHT OF WAY DEDICATION (DB.19353 PG.1275) IS INCLUDED FOR PDH-12 DENSITY CREDIT ONLY AND IS NOT INCLUDED IN THE APPLICATION



NOTE: THIS PLAN IS FOR SCHEMATIC PURPOSES ONLY AND IS SUBJECT TO CHANGE WITH FINAL ENGINEERING

No.	DATE	DESCRIPTION	REVISION APPROVED	DATE
		REVISION APPROVED BY DIVISION OF DESIGN REVIEW		

PLAN DATE
05-04-11
06-06-11
07-13-11
09-22-11
11-02-11
12-02-11

Urban LLC
Planners & Landscape Architects
Fairfax, Virginia

CONCEPTUAL AND FINAL DEVELOPMENT PARTIAL PCA PLAN

RIDGEWOOD
BRADDOCK DISTRICT
FAIRFAX COUNTY, VIRGINIA

SCALE: 1"=100' C.I. = N/A DATE: NOV. 2010

SHEET 3 OF 9

FILE No. ZP-1813-2

PROPOSED PDH-12 AREA ANALYSIS

EXISTING ZONE	PRM
PROPOSED ZONE	PDH-12
EXISTING USE	VACANT
PROPOSED USE	SINGLE FAMILY ATTACHED
MINIMUM DISTRICT SIZE	2 ACRES
PROPOSED PDH-12 DISTRICT SIZE	114,042 SF – T.M. 56-2-01-00370 + 17,256 SF – T.M. 56-2-01-00378 (PART) 131,373 SF (3.01 ACRES)
MINIMUM LOT SIZE	NO REQUIREMENT; 208 SF PRIVACY YARD FOR SFA UNITS REQUIRED
LOT SIZE PROPOSED	TO BE DETERMINED WITH FINAL SITE PLAN ; WAIVER OF PRIVACY YARD REQUESTED
MINIMUM LOT WIDTH	NO REQUIREMENT
PROPOSED LOT WIDTH	TO BE DETERMINED WITH FINAL SITE PLAN
MAXIMUM BUILDING HEIGHT	NO REQUIREMENT
PROPOSED MAXIMUM BUILDING HEIGHT	45 FEET
MINIMUM YARD REQUIREMENTS:	
FRONT	NO REQUIREMENT
SIDE	NO REQUIREMENT
REAR	NO REQUIREMENT
PROPOSED YARDS:	
FRONT	10 FOOT MIN
SIDE	10 FOOT MIN
REAR	20 FOOT MIN

NOTE: PROPOSED YARDS ARE APPLICABLE TO PDH-12 DISTRICT LINE ONLY. IF POINT OF USE IS DEDICATED WITH THE FINAL SITE PLAN AS A RESULT OF FINAL DEDICATION, THE YARD SHALL BE MEASURED FROM THE EXISTING RIGHT OF WAY SHOWN ON THIS APPLICATION.

MAXIMUM DENSITY (RESIDENTIAL)	12 UNITS / ACRE
PROPOSED DENSITY (RESIDENTIAL)	39 UNITS / (3.01 ACRES + 0.44 ACRES*) = 11.2 UNITS / ACRE *0.44 ACRES OF GOVERNMENT CENTER PARKWAY DEDICATION (CENTRAL) RESERVED FOR PDH-12 DENSITY CREDIT
OPEN SPACE REQUIRED	30% (39,371.1 SF)
OPEN SPACE PROVIDED	31% (40,800 SF, INCLUDING 813,000 SF OF DEVELOPED RECREATIONAL OPEN SPACE)
LANDSCAPE REQUIREMENT	REFER TO SHEET 9
REQUIRED PARKING:	
SFA RESIDENTIAL, 39 UNITS (2.2 SP/UNIT) = 106 SPACES	
PROVIDED PARKING = 125 PROVIDED SPACES **	
REQUIRED LOADING:	
SFA RESIDENTIAL = 0 SPACES	
PROVIDED LOADING = 0 SPACES	

PROPERTY AREA TABULATION

PROJECT	TAX MAP	PARCEL AREA SF	PARCEL AREA AC
MIDLAND ROAD LLC	56-2-01-00370	114,042	3.82
MIDLAND ROAD LLC	56-2-01-00370	29,716	0.86
RIDGEWOOD COMMERCIAL PROPERTY OWNERS ASSOC.	56-2-01-00378	22,949	0.53
	TOTALS	166,707	3.83
GOVERNMENT CENTER PARKWAY DEDICATION (CENTRAL)	PUBLIC R.O.W.**	19,227	0.44

**GOVERNMENT CENTER PARKWAY RIGHT OF WAY DEDICATION (DB.19353 PG.1278) IS INCLUDED FOR PDH-12 DENSITY CREDIT ONLY AND IS NOT INCLUDED IN THE APPLICATION

PROPOSED PDC AREA ANALYSIS

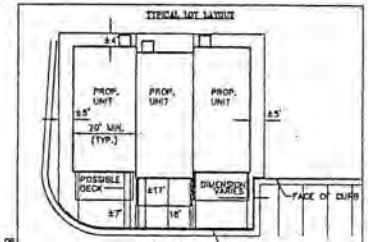
EXISTING ZONE	PRM
PROPOSED ZONE	PDC
EXISTING USE	VACANT
PROPOSED USE	OFFICE
MINIMUM DISTRICT SIZE*	NO MINIMUM PROVIDED THAT A. PROP. DEVELOPMENT WILL YIELD A MIN. 100,000 SF OF GFA, OR B. LOGISTICAL EXTENSION OF EX. P DISTRICT & YIELD 40,000 SF OF GFA, OR C. LOCATED W/IN COMMUNITY BUS. CENTER OR COMMERCIAL REVITALIZATION DISTRICT
PROPOSED PDC DISTRICT SIZE	28,718 SF – T.M. 56-2-01-00370 + 5,718 SF – T.M. 56-2-01-00378 (PART) 35,434 SF (0.81 ACRES)

WAIVER REQUESTED FOR MINIMUM DISTRICT SIZE REQUIREMENTS

MINIMUM LOT SIZE	NO REQUIREMENT
LOT SIZE PROPOSED	35,434 SF (0.81 ACRES)
PROPOSED PDH-12 DISTRICT SIZE:	
MINIMUM LOT WIDTH	NO REQUIREMENT
PROPOSED LOT WIDTH	200 FEET
MAXIMUM BUILDING HEIGHT:	NO REQUIREMENT
PROPOSED MAXIMUM BUILDING HEIGHT:	90'
MINIMUM YARD REQUIREMENTS:	
FRONT	NO REQUIREMENT
SIDE	NO REQUIREMENT
REAR	NO REQUIREMENT
PROPOSED YARDS:	
FRONT	20 FOOT MIN
SIDE	N/A
REAR	25 FOOT MIN
MAXIMUM F.A.R.	1.5
PROPOSED F.A.R.	35,000 GSF / 35,434 SF = 0.89
OPEN SPACE REQUIRED	15% (5,315 SF)
OPEN SPACE PROVIDED	23% (10,000 SF, INCLUDING 0 SF OF DEVELOPED RECREATIONAL OPEN SPACE)
LANDSCAPE REQUIREMENT	REFER TO SHEET 9
REQUIRED PARKING:	
BUILDING 2.1 OFFICE, 35,000 GSF (3.6 SP/1000 GSF) = 126 SPACES	
PROVIDED PARKING = 126 PROVIDED SPACES **	
REQUIRED LOADING:	
35,000 GSF (1/10,000 + 1/20,000) = 2 SPACES	
PROVIDED LOADING = 1 SPACE (WAIVER REQUESTED)	

**PARKING NOTE: PARKING AND LOADING SPACES WILL BE PROVIDED GENERALLY AS SHOWN. APPLICANT RESERVES THE RIGHT TO ADJUST THE NUMBER AND/OR LOCATION OF THE PARKING AND/OR LOADING SPACES AT TIME OF FINAL SITE PLAN, SO LONG AS THE MINIMUM NUMBERS OF SPACES ARE PROVIDED IN ACCORDANCE WITH ARTICLE 11 OF THE FAIRFAX COUNTY ZONING ORDINANCE.

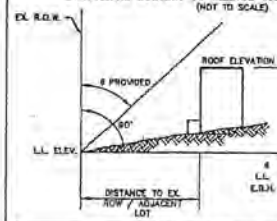
TYPICAL LOT LAYOUT



NOTE: TYPICAL LOT LAYOUT IS PRELIMINARY AND SUBJECT TO CHANGE WITH FINAL ENGINEERING. TYPICAL LOT LAYOUT IS A SAMPLE REPRESENTATION OF THE ACTUAL LAYOUT AND THERE MAY BE A-TYPICAL LOTS BASED ON FINAL ENGINEERING. EASEMENTS WILL BE PROVIDED WITH FINAL ENGINEERING. FRONT ENTRANCE STOOP LOCATION MAY VARY WITH FINAL DESIGN.

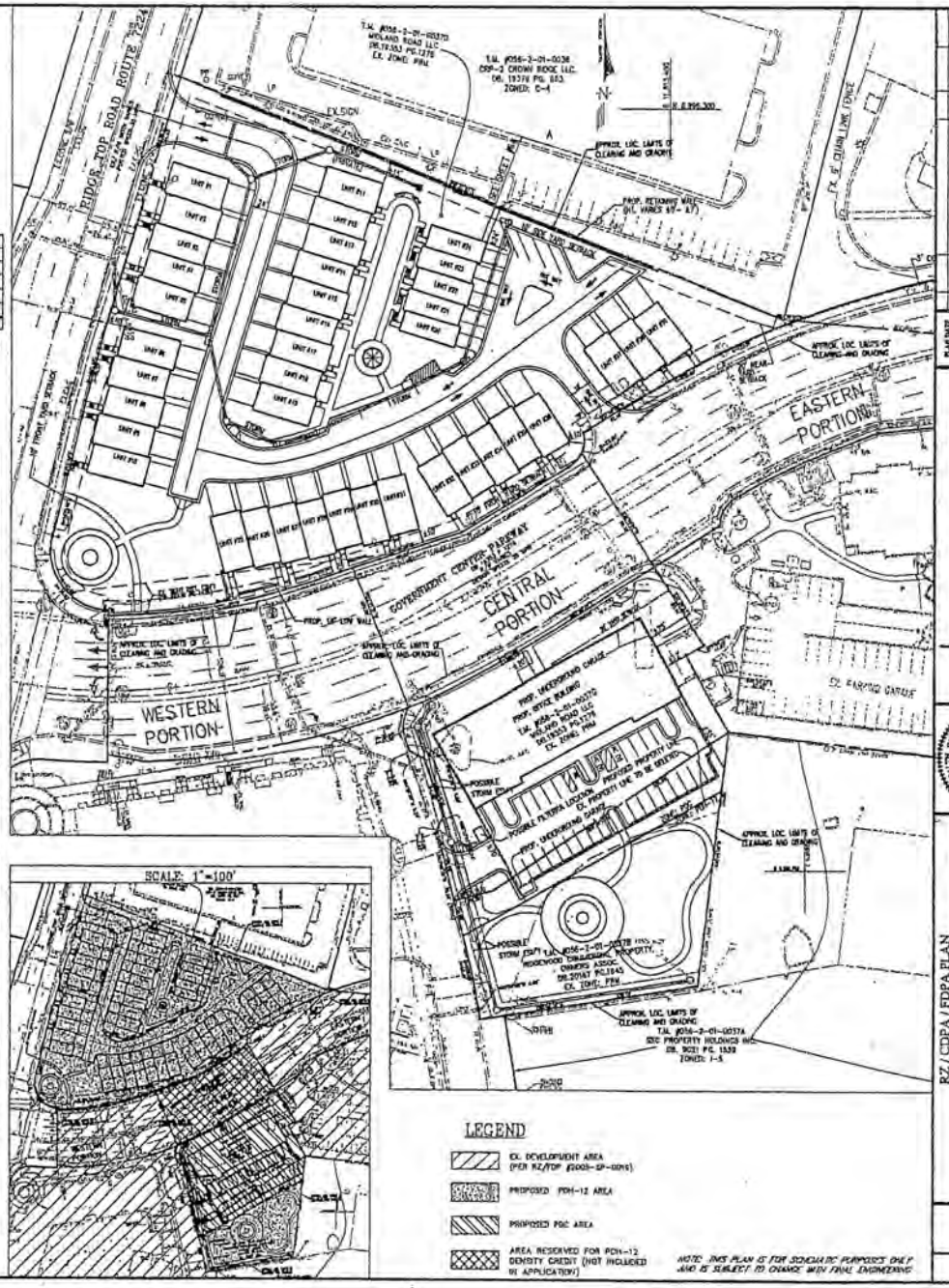
DETAIL ANGLE OF BULK PLANE

ELEVATIONS SUBJECT TO CHANGE WITH FINAL ENGINEERING
(NOT TO SCALE)



Bulk Plane Detail Data Table

BLDG / UNIT	YARD	Lot Line Elev. (FT)	Roof Elevation (ft)	Effective Bldg Height (ft)	Distance to EX. ROW / Adjacent Lot	Angle of Bulk Plane Proposed θ
#1	FRONT	±445'	±500'	±55'	±10'	10°
#31	FRONT	±463'	±510'	±47'	±10'	10°
#36	REAR	±480'	±515'	±55'	±35'	30°
#11	SIDE	±450'	±505'	±55'	±15'	14°
OFFICE	FRONT	±464'	±570'	±105'	±20'	10°
	REAR	±465'	±570'	±105'	±55'	25°



SCALE: 1"=100'

LEGEND

- EX. DEVELOPMENT AREA (PER RZ/FDP #2005-SP-009)
- PROPOSED PDH-12 AREA
- PROPOSED PDC AREA
- AREA RESERVED FOR PDH-12 DENSITY CREDIT (NOT INCLUDED IN APPLICATION)

NOTE: THIS PLAN IS FOR SCHEMATIC PURPOSES ONLY AND IS SUBJECT TO CHANGE WITH FINAL ENGINEERING

NO.	DATE	DESCRIPTION	REVISION APPROVED BY DIVISION OF DESIGN REVIEW DATE
PLAN DATE			
1	03-01-11		
2	05-02-11		
3	08-01-11		
4	10-03-11		
5	12-05-11		

Urban

RZ / CDPA / FDPA PLAN

RIDGEWOOD

BRADDOCK DISTRICT

FAIRFAX COUNTY, VIRGINIA

SCALE: 1"=40' | C.S. = N/A | DATE: NOV. 2010

SHEET 4 OF 9

FILE No. ZP-1813-2

LANDSCAPE PLAN

RIDGEWOOD

SPRINGFIELD DISTRICT
FAIRFAX COUNTY, VIRGINIA

DATE: DEC. 2, 2011

SCALE: 1" = 30'-0"

SHEET 5 OF 9

FILE No. ZP-1813-2

Studio39

RIDGE TOP ROAD ROUTE 7224

RIDGE TOP ROAD ROUTE 7224

GOVERNMENT CENTER PARKWAY ROUTE 7126

LEE HIGHWAY ROUTE 29

NORTH

urban

No.	DATE	DESCRIPTION	REVISION APPROVED	DATE

REVISION APPROVED BY DIVISION OF DESIGN REVIEW

PLANT LIST

SHADE TREES

KEY	GENUS	SPECIES	VARIETY	COMMON NAME	HEIGHT	CALIPER	REMARKS	MULTIPLIER		CANOPY CALC.	ADJUSTED CALC.
ANO	Acer	nigrum	'October Glory'	October Glory Red Maple	14 - 16'	3 - 3 1/2"	B&B, full uniform crown, symmetrical branching, full specimen	WILDLIFE	LS	330	379 -
AAC	Acer	saccharum		Sugar Maple	14 - 16'	3 - 3 1/2"	B&B, full uniform crown, symmetrical branching, full specimen	WILDLIFE	LS	330	379
FGA	Fagus	grandifolia		American Beech	14 - 16'	3 - 3 1/2"	B&B, full uniform crown, symmetrical branching, full specimen	WILDLIFE	LS	330	379
LT	Liriodendron	tulipifera		Tuliptree, Tulip Poplar	14 - 16'	3 - 3 1/2"	B&B, full uniform crown, symmetrical branching, full specimen	WILDLIFE	LS	330	379
LS	Liquidambar	styraciflua		American Sweetgum	14 - 16'	3 - 3 1/2"	B&B, full uniform crown, symmetrical branching, full specimen	WILDLIFE	LS	33	379
NS	Nyssa	sylvatica		Black Tupelo, Black Gum, Sour Gum	14 - 16'	3 - 3 1/2"	B&B, full uniform crown, symmetrical branching, full specimen	WILDLIFE	LS	115	379
QVC	Quercus	coccinea		Scarlet Oak	14 - 16'	3 - 3 1/2"	B&B, full uniform crown, symmetrical branching, full specimen	WILDLIFE	LS	330	379
QAL	Quercus	phellos		Willow Oak	14 - 16'	3 - 3 1/2"	B&B, full uniform crown, symmetrical branching, full specimen	WILDLIFE	LS	330	379
ULC	Ulmus	parvifolia		Chinese Elm	14 - 16'	3 - 3 1/2"	B&B, full uniform crown, symmetrical branching, full specimen	ENERGY	LS	330	379

APPROXIMATE PROPOSED SHADE TREES NEEDED:
PDH-12: 41-18; PDC: 416

ORNAMENTAL TREES

KEY	GENUS	SPECIES	VARIETY	COMMON NAME	HEIGHT	CALIPER	REMARKS	MULTIPLIER		CANOPY CALC.	ADJUSTED CALC.
ALX	Amelanchier	laevis		Allegheny Serviceberry	8' - 10'	1" min.	B&B, multi-trunk, 3 trunk minimum, full symmetrical branching	WILDLIFE	LS	100	842
CEC	Cercis	canadensis		Eastern Redbud	8' - 10'	1" min.	B&B, multi-trunk, 3 trunk minimum, full symmetrical branching			100	100
COF	Cornus	canadensis	'Forest Pony'	Forest Pony Eastern Redbud	8' - 10'	1" min.	B&B, single stem, uniform branching, full symmetrical branching			100	100
CV	Chionanthus	virginicus		White Fringetree	8' - 10'	1" min.	B&B, uniform branching, full specimen			100	100
COP	Cornus	florida	'Cherokee Princess'	Cherokee Princess Dogwood	8' - 10'	1" min.	B&B, single stem, uniform branching, full symmetrical branching	WILDLIFE	LS	100	842
CKK	Cornus	x rutgersensis	'Constellation'	Constellation Dogwood	8' - 10'	1" min.	B&B, single stem, uniform branching, full symmetrical branching	APPROVED	LS	100	842
LIC	Lagerstroemia	indica	'Catawba'	Catawba Crapemyrtle	8' - 10'	1 1/2"Min.	B&B, multi-trunk, 3 trunk minimum, full symmetrical branching			15	15
MST	Magnolia	stellata		Star Magnolia	8' - 10'	3"Min.	B&B, multi-trunk, 3 trunk minimum, full symmetrical branching			100	100
SYT	Styrax	japonica		Japanese Snowbell	8' - 10'	3" Min.	B&B, single stem, uniform branching, full symmetrical branching			100	100

APPROXIMATE PROPOSED ORNAMENTAL TREES NEEDED:
PDH-12: 41-42; PDC: 8

EVERGREEN TREES

KEY	GENUS	SPECIES	VARIETY	COMMON NAME	HEIGHT	CALIPER	REMARKS	MULTIPLIER		CANOPY CALC.	ADJUSTED CALC.
CLL	xCupressocyparis	leylandii		Leyland Cypress		1" min.	B&B, full to ground with good seasonal flush	-		80	80
ILO	Ilex	opaca		American Holly		1" min.	B&B, full to ground with good seasonal flush	WILDLIFE	LS	100	842
IKH	Ilex	x	'Nellie R. Stevens'	Nellie R. Stevens Holly		1" min.	B&B, full to ground with good seasonal flush			80	80
IOP	Ilex	x attenuata	'Fosteri'	Foster's Holly		1" min.	B&B, full to ground with good seasonal flush			80	80
PMB	Magnolia	grandiflora	'Bracken's Brown Beauty'	Brackens Brown Beauty Magnolia		1" min.	B&B, full to ground with good seasonal flush			200	200
PCP	Picea	pungens		Colorado Spruce		1" min.	B&B, full to ground with good seasonal flush			100	100
PHV	Pinus	virginiana		Virginia (Scrub) Pine, Jersey Pine		1" min.	B&B, full to ground with good seasonal flush	WILDLIFE	LS	200	200
TNE	Tsuga	canadensis		Eastern Hemlock		1" min.	B&B, full to ground with good seasonal flush			80	80

APPROXIMATE PROPOSED EVERGREEN TREES NEEDED:
PDH-12: 41-40; PDC: 2

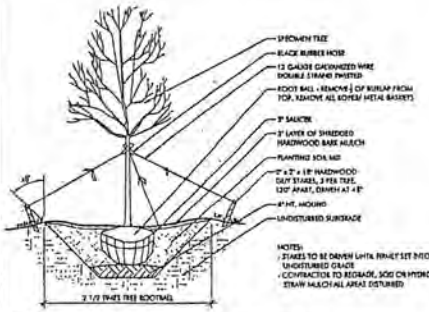
NOTES:
1. LANDSCAPING SHOWN IS PRESENTED ONLY TO ILLUSTRATE CHARACTER AND QUALITY OF DESIGN. LOCATIONS, SPECIES, QUANTITIES, HEIGHT AND CALIPER MAY BE ADJUSTED WITH FINAL DESIGN AND ENGINEERING.
2. UTILITIES WILL BE DESIGNED WITH THE FINAL SITE PLAN IN ACCORDANCE WITH ZOR PROFFERS.
3. ALL PROPOSED TREES TO BE PLANTED 4 MIN. OF 2' FROM RESTRICTIVE BARRIERS.

PARTIAL PCA/RZ/CDPA/FDPA LANDSCAPING SUMMARY

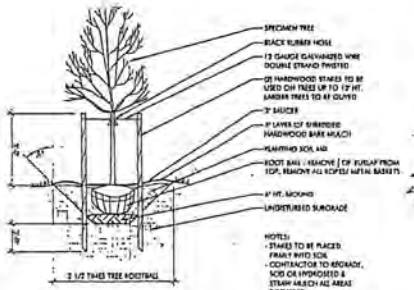
	PDH-12	PDC
REQUIRED TREE COVER:	15%	10%
SITE AREA:	131,237 SF	35,434 SF
TREE COVER REQUIRED:	19,936 SF	3,543 SF

PROVIDED TREE COVER:
A MINIMUM OF 19,936 SF OF TREE COVER SHALL BE PROVIDED IN THE PDH-12 AREA AT TIME OF FINAL SITE PLAN.
A MINIMUM OF 3,543 SF OF TREE COVER SHALL BE PROVIDED IN THE PDC AREA AT TIME OF FINAL SITE PLAN

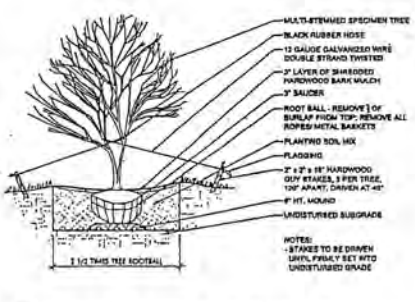
NOTES:
1. A TRANSITIONAL SCREENING AND BARRIER WAIVER WAS APPROVED WITH RZ/FDP 2005-SP-001B. WE ARE REQUESTING A RECONFIRMATION OF THIS WAIVER WITH THIS APPLICATION PER NOTE #4 OF SHEET #1.
2. ALL PLANTINGS WITHIN ROW ARE SUBJECT TO VDOT REVIEW AND APPROVAL.
3. THE OTHER PARCELS INCLUDED IN APPROVED RZ/FDP 2005-SP-001B HAVE MET THEIR TREE COVERAGE REQUIREMENTS WITH THEIR RESPECTIVE APPROVED SITE PLANS. REFER TO OVERALL RIDGEWOOD ANALYSIS ON SHEET 3 FOR EACH PARCEL AND THEIR SITE PLAN REFERENCES.



1 Sht TREE GUYING PLANTING - SPECIMEN TREE
Scale: NTS



2 Sht TREE PLANTING
Scale: NTS



3 Sht TREE GUYING PLANTING - MULTI-STEMMED
Scale: NTS

Studio39
Landscape Architecture, P.C.
4115 Chesterfield Drive, Suite 109-A
Chesterfield, Virginia 23832
Fax: 703.714.6360 Fax: 703.714.6382
Email: lkornfeld@studio39.com

NO.	DATE	DESCRIPTION	DATE
		REVISED APPROVED BY DIVISION OF DESIGN REVIEW	

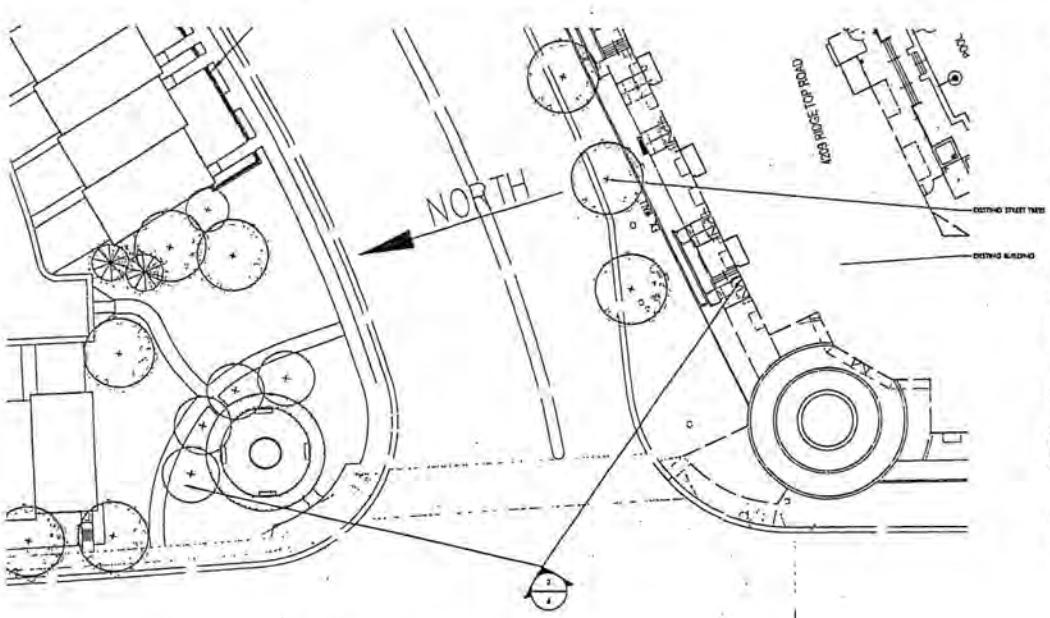
SUBMITTED
12-04-11
04-05-11
05-03-11
08-29-11
09-26-11

Urban Ltd.
Town Engineers & Landscape Architects & Land Planners
urban

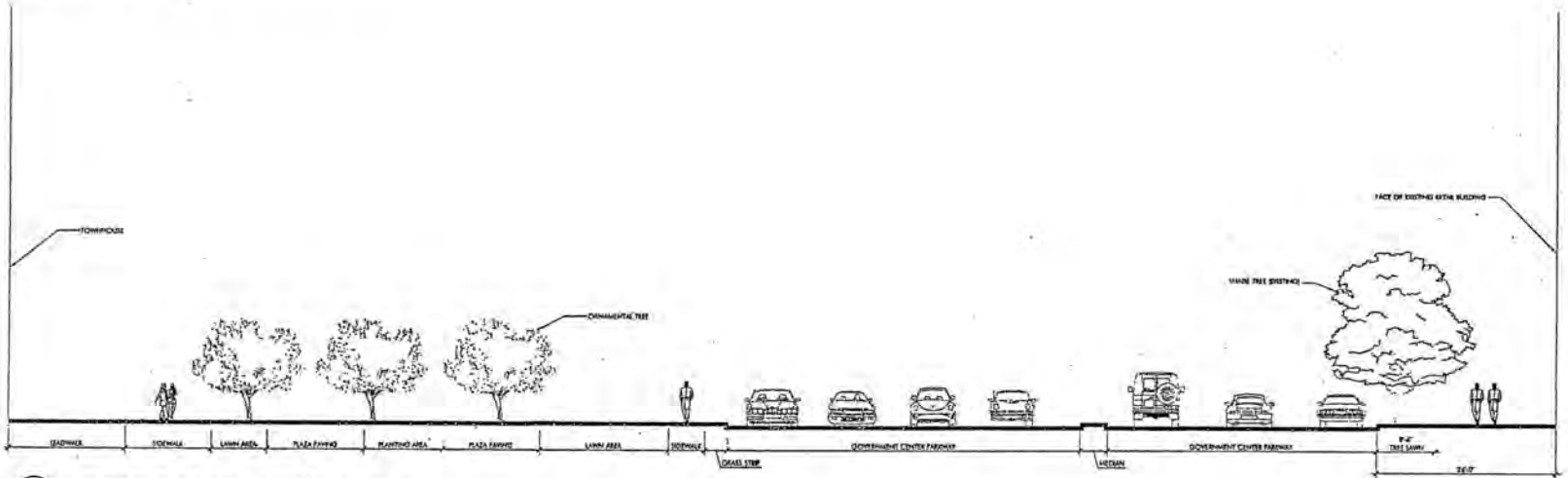
LANDSCAPE PLAN
RIDGEWOOD
SPRINGFIELD DISTRICT
FAIRFAX COUNTY, VIRGINIA
SCALE: 1" = 30'-0" | C1 | DATE: DEC. 2, 2011

SHEET 5a OF 9

FILE No. ZP-1813-2



1/6 RIDGE TOP ROAD AND GOV. CENTER PKWY. PLAZAS
Scale: 1" = 20'-0"



2/6 RIDGE TOP ROAD AND GOV. CENTER PKWY. PLAZAS
Scale: 1/8" = 1'-0"

BENCH
MODEL: PLAINWELL (OR APPROVED EQUAL)
MANUFACTURER: LANDSCAPEFORMS
QUANTITY: PER PLAN
NOTE: CONTRACTOR TO VERIFY QUANTITIES. INSTALL PER MANUFACTURER'S RECOMMENDATION.

2/6 PARK BENCH
Scale: NTS

TRASH RECEPTACLE
MODEL: PLAINWELL (OR APPROVED EQUAL)
MANUFACTURER: LANDSCAPEFORMS
QUANTITY: PER PLAN
NOTE: CONTRACTOR TO VERIFY QUANTITIES. INSTALL PER MANUFACTURER'S RECOMMENDATION

4/6 TRASH RECEPTACLE
Scale: NTS

TABLE AND CHAIRS
TABLE MODEL: TABLES (OR APPROVED EQUAL)
CHAIR MODEL: CATENA (OR APPROVED EQUAL)
MANUFACTURER: LANDSCAPEFORMS
QUANTITY: PER PLAN
NOTE: CONTRACTOR TO VERIFY QUANTITIES. INSTALL PER MANUFACTURER'S RECOMMENDATION

5/6 TABLE AND CHAIRS
Scale: NTS

POST TOP LUMINAIRE
MODEL: CONTEMPORARY LANTERN (OR APPROVED EQUAL)
MANUFACTURER: LUMEC LIGHTING CO.
QUANTITY: PER PLAN
NOTE: CONTRACTOR TO VERIFY QUANTITIES. INSTALL PER MANUFACTURER'S RECOMMENDATION

6/6 POST TOP LUMINAIRE
Scale: NTS

BANNER
MODEL: CUSTOM
MANUFACTURER: TBD
QUANTITY: PER PLAN
NOTE: CONTRACTOR TO VERIFY QUANTITIES. INSTALL PER MANUFACTURER'S RECOMMENDATION

7/6 BANNER
Scale: NTS

No.	DATE	DESCRIPTION	REV. BY	APPROVED	DATE

REVISION APPROVED BY DIVISION OF DESIGN REVIEW

PLAN DATE
02-04-11
04-06-11
05-13-11
06-03-11
09-29-11

urban

LANDSCAPE DETAILS
RIDGEWOOD
SPRINGFIELD DISTRICT
FAIRFAX COUNTY, VIRGINIA

SCALE: AS SHOWN
C1
DATE: DEC. 2, 2011

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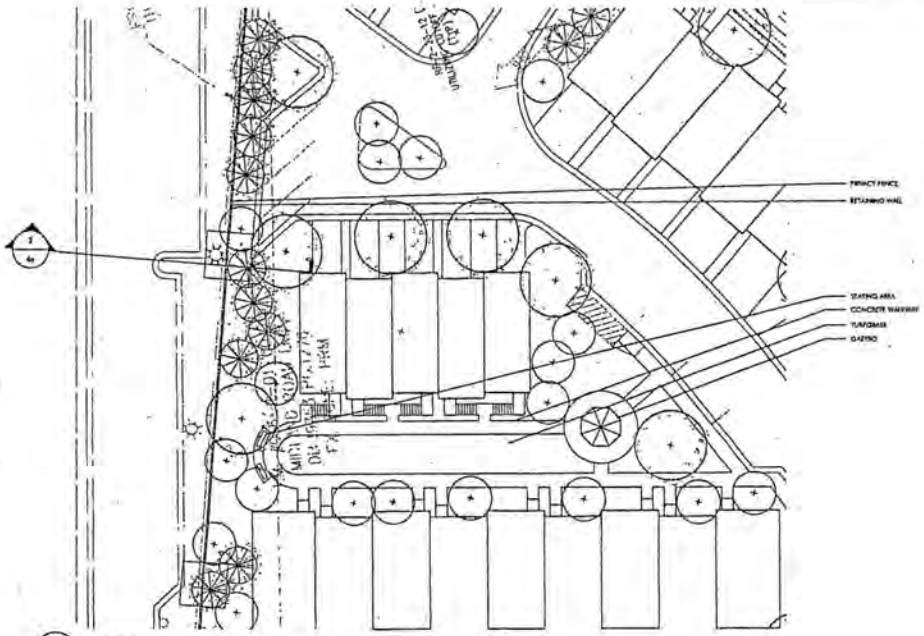
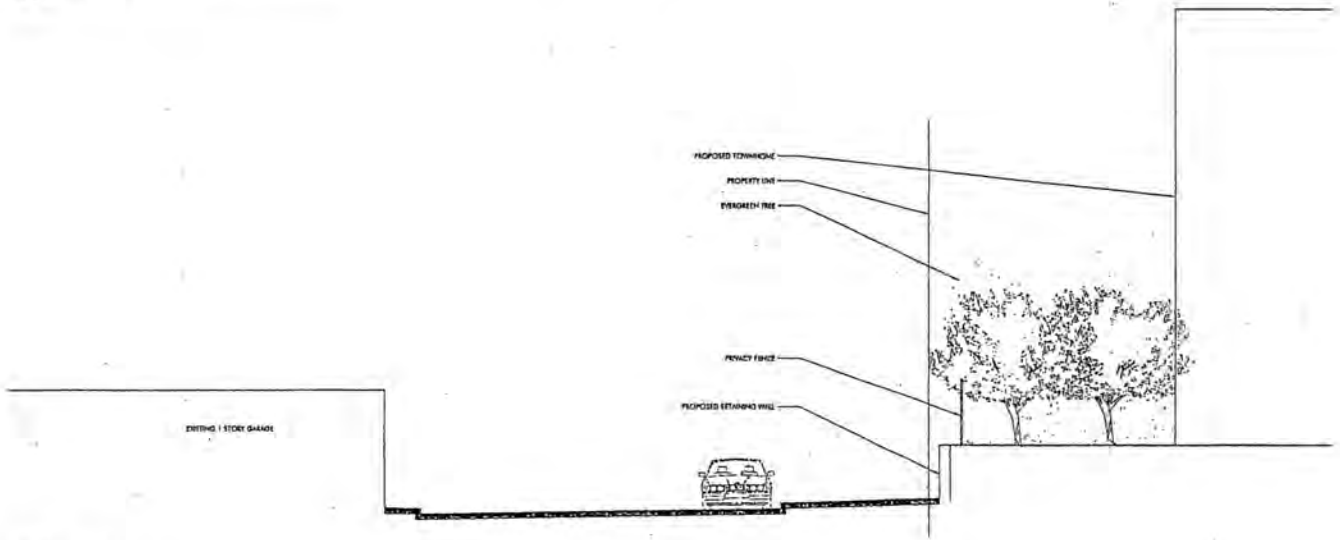
SHEET 6 OF 9

FILE No. ZP-1813-2



1 / 6a CENTRAL COURTYARD
Scale: 1" = 20'-0"



2 / 6a ADJACENT PROPERTY WITH BUFFER SECTION
Scale: 3/16" = 1'-0"

No.	DATE	DESCRIPTION	REV BY	APPROVED	DATE

REVISION APPROVED BY DIVISION OF DESIGN REVIEW

PLAN DATE
02-04-11
04-05-11
05-13-11
08-05-11
09-29-11

urban

LANDSCAPE DETAILS

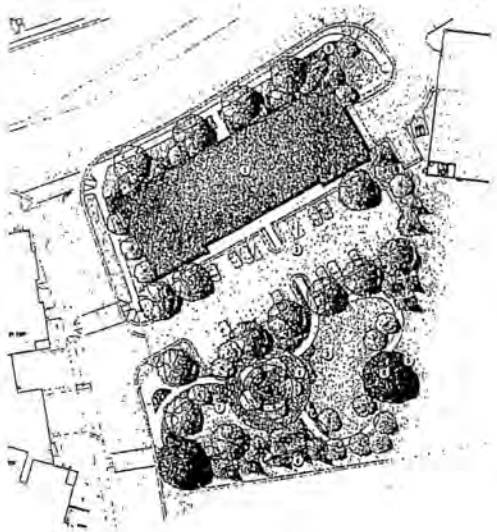
RIDGEWOOD
SPRINGFIELD DISTRICT
FAIRFAX COUNTY, VIRGINIA

SCALE: AS SHOWN
CL
DATE: DEC. 2, 2011

STUDIO39
Landscape Architecture, P.C.

SHEET
6a
OF
9

FILE No.
ZP-1813-2

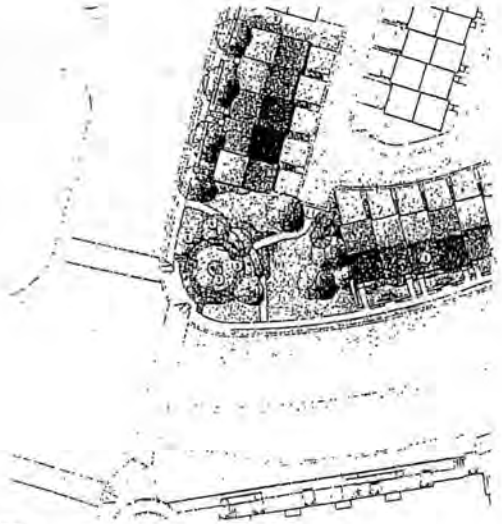


LEGEND

1. PROPOSED OFFICE BUILDING
2. PARKING
3. LAWN
4. CENTRAL PLAZA WITH SEATING AND FLOWERING TREES
5. SPECIMEN SHADE TREE
6. EVERGREEN BUFFER
7. PERENNIALS
8. HISTORICAL MARKER
9. SEATING AREA

1 / 6b COMMUNITY PARK
Scale: NTS

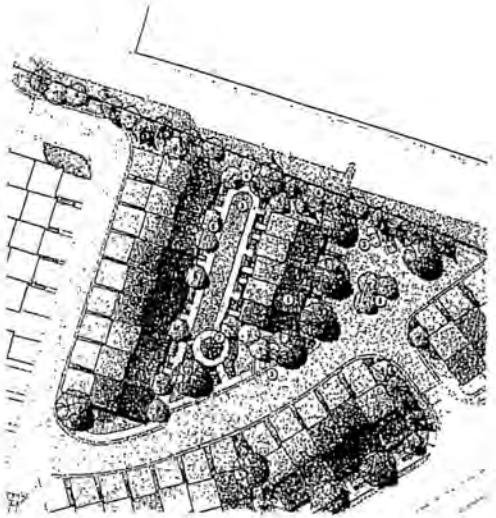
ILLUSTRATIVE PURPOSE ONLY INTENDED TO CONVEY CHARACTER AND QUALITY OF DESIGN. NOT TO BE RELIED UPON AS THE FINAL DESIGN.



LEGEND

1. PROPOSED TOWNHOMES
2. ART FEATURE
3. SEATING AREA
4. FLOWERING TREES
5. ORNAMENTAL BEDS

2 / 6b CORNER GATEWAY PARK
Scale: NTS



LEGEND

1. PROPOSED TOWNHOMES
2. GUEST PARKING
3. LAWN
4. SEATING AREA
5. FLOWERING TREE
6. EVERGREEN BUFFER
7. GAZEBO
8. ISLAND WITH PLANTING

3 / 6b CENTRAL COURTYARD
Scale: NTS

STUDIO39

Landscape Architecture, P.C.

No.	DATE	DESCRIPTION	REV BY	APPROVED	DATE

REVISION APPROVED BY DIVISION OF DESIGN REVIEW

PLAN DATE
02-04-11
04-08-11
05-13-11
06-05-11
09-23-11

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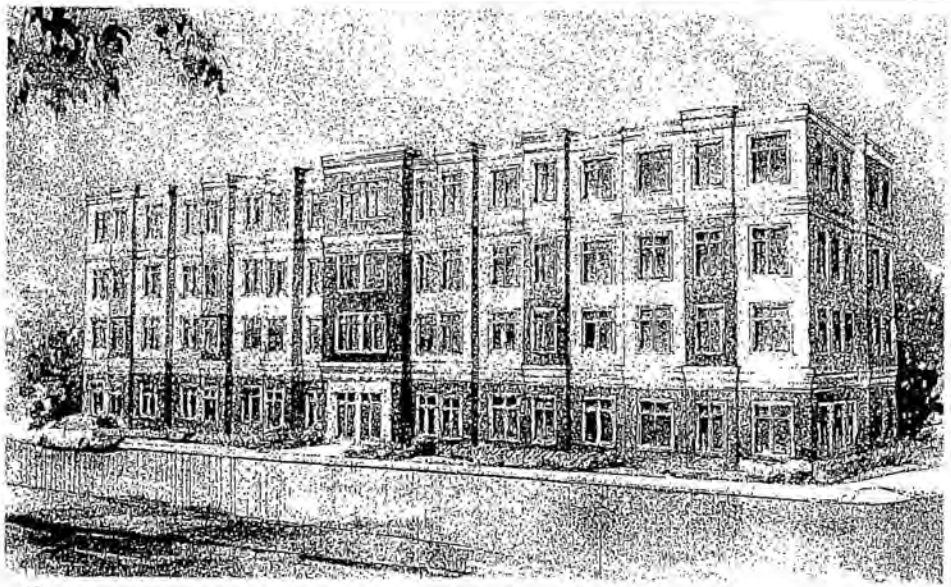
LANDSCAPE DETAILS

RIDGEWOOD
SPRINGFIELD DISTRICT
FAIRFAX COUNTY, VIRGINIA

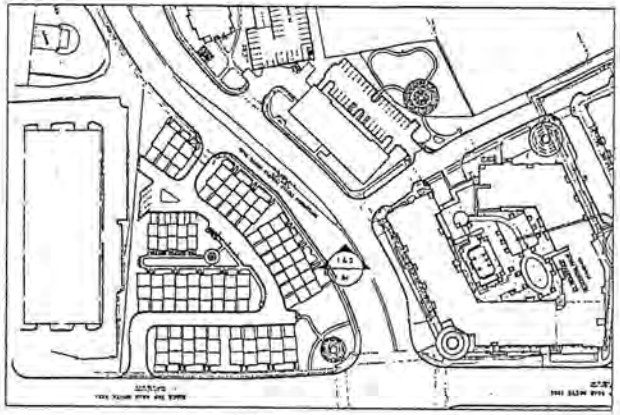
SCALE: AS SHOWN
C.I.
DATE: DEC. 2, 2011

SHEET
6b
OF
9

FILE No.
ZP-1813-2

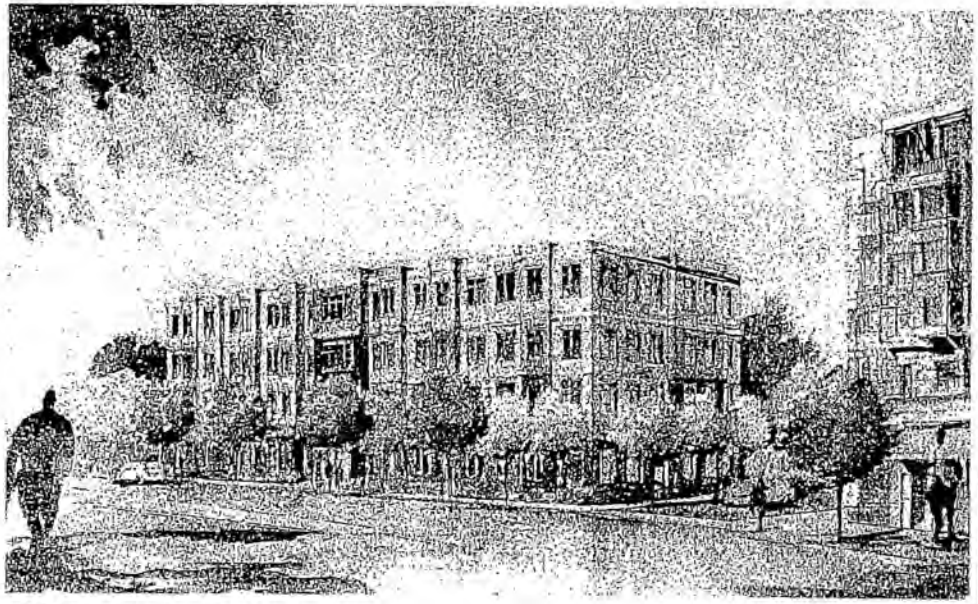


1 / 6c OFFICE BUILDING PERSPECTIVE 1
Scale: NTS



VICINITY MAP
NOT TO SCALE

ILLUSTRATIVE PURPOSE ONLY INTENDED TO CONVEY CHARACTER AND QUALITY OF DESIGN. NOT TO BE RELIED UPON AS THE FINAL DESIGN.



2 / 6c OFFICE BUILDING PERSPECTIVE 2
Scale: NTS

STUDIO39

Landscape Architecture, P.C.

No.	DATE	DESCRIPTION	REV BY	APPROVED	DATE

REVISION APPROVED BY DIVISION OF DESIGN REVIEW

PLAN DATE
02-24-11
04-06-11
05-13-11
06-02-11
06-29-11

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LANDSCAPE DETAILS

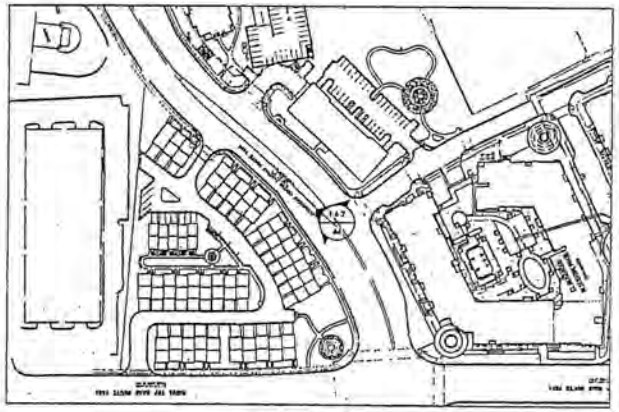
RIDGEWOOD
SPRINGFIELD DISTRICT
FAIRFAX COUNTY, VIRGINIA

SCALE: AS SHOWN C.L. DATE: DEC. 2, 2011

SHEET 6c OF 9

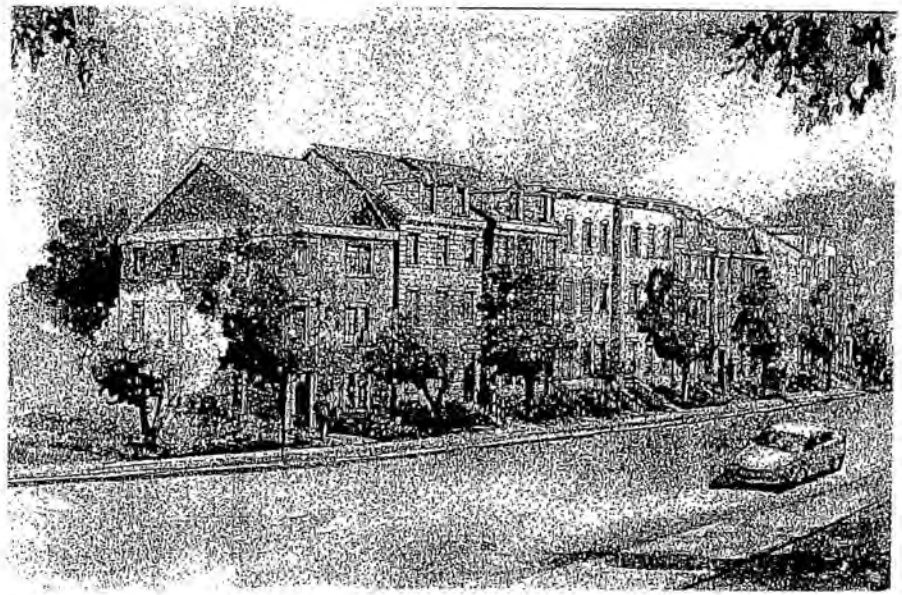
FILE No. ZP-1813-2

1 / 6d TOWNHOME PERSPECTIVE 1
Scale: NTS



VICINITY MAP
NOT TO SCALE

ILLUSTRATIVE PURPOSE ONLY INTENDED TO CONVEY CHARACTER AND QUALITY OF DESIGN. NOT TO BE RELIED UPON AS THE FINAL DESIGN.



2 / 6d TOWNHOME PERSPECTIVE 2
Scale: NTS

STUDIO39
Landscape Architecture, P.C.

No.	DATE	DESCRIPTION	REV BY	APPROVED	DATE

REVISION APPROVED BY DIVISION OF DESIGN REVIEW

FLAN DATE
02-04-11
04-08-11
05-15-11
08-25-11
09-29-11

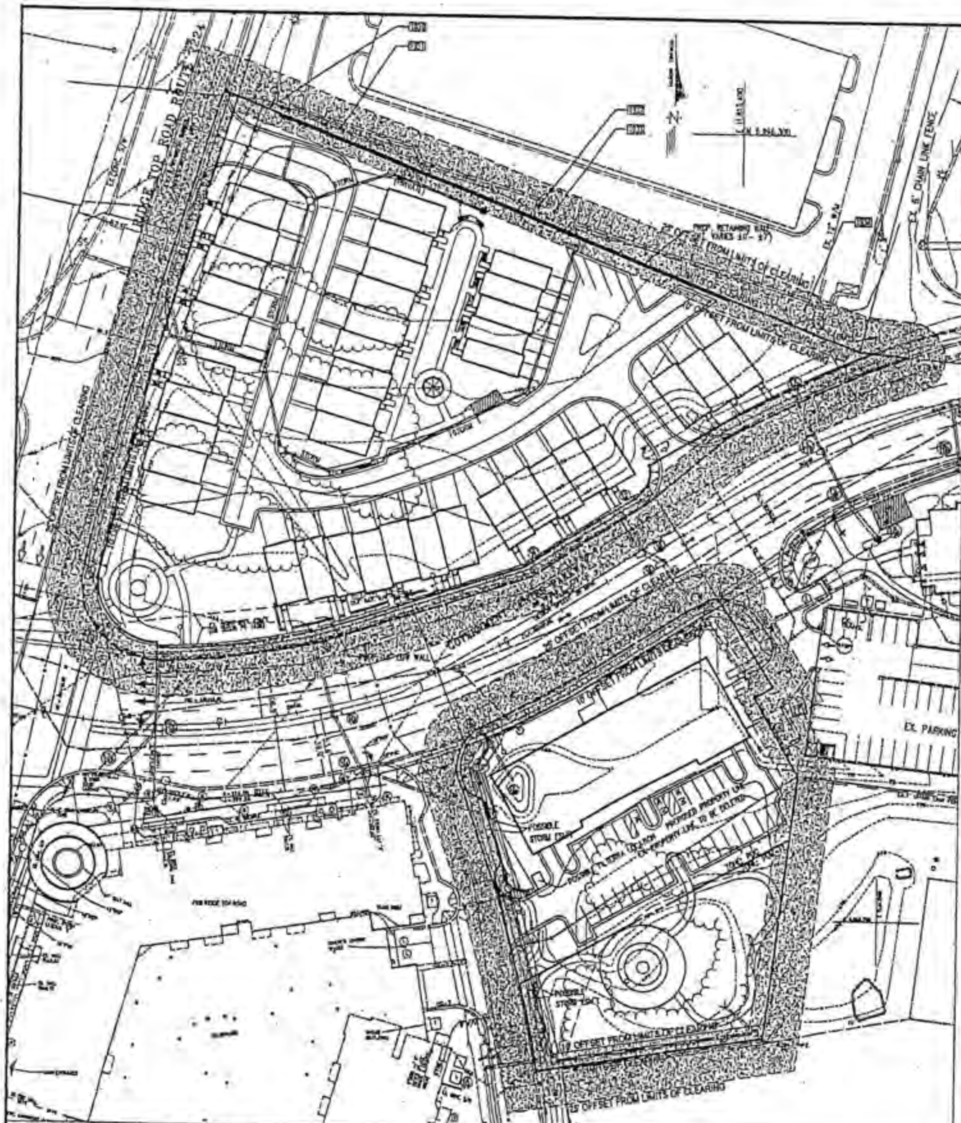
urban

LANDSCAPE DETAILS
RIDGEWOOD
SPRINGFIELD DISTRICT
FAIRFAX COUNTY, VIRGINIA

SCALE: AS SHOWN C1 DATE: DEC 2, 2011

SHEET
6d
OF
9

FILE No.
ZP-1813-2



LEGEND:

AREA OF CRITICAL ROOT ZONE

EXISTING TREE ID. NUMBER

Notes: Tree Inventory & Condition Analysis data collected during field survey conducted by Urban, Ltd.'s Project Arborist, John Lightle, on Sept. 21, 2011.

TREE INVENTORY & CONDITION ANALYSIS

Tree No.	Botanical Name	Common Name	Size	[illegible]	[illegible] Condition	Cond. Rating	Status	Comments	Tree Protection Measures
			DBH (in)	[illegible]		%			
1930	Pinus strobus	White Pine	13	13	No	61	Remove		
1931	Pinus strobus	White Pine	14	14	No	45	Preserve		
1932	Pinus strobus	White Pine	14	14	No	58	Preserve		Root Prune, Tree Pres. Fence
1933	Pinus strobus	White Pine	14	14	No	58	Preserve	Lawn mower root damage beyond mulch ring	Root Prune, Tree Pres. Fence
1934	Pinus strobus	White Pine	13	13	No	52	Preserve	Lawn mower root damage beyond mulch ring	Root Prune, Tree Pres. Fence

PDH-12 (NORTH PARCEL) TREE PRESERVATION TARGET CALCULATIONS

Gross Site Area (s.f.)		114,942
Pre-Development Area of Existing Tree Canopy (s.f.)		21,940
Percentage of Gross Site Area Covered by Existing Tree Canopy		19%
Tree Preservation Target		
10-Year Tree Canopy Requirement Percentage		15%
10-Year Tree Canopy Required (s.f.) (See "10-Year Tree Canopy Calculations")		17,108
Percentage of the 10-Year Tree Canopy Requirement that Should be Met Through Tree Preservation (This is the "Tree Preservation Target")		19%
Area of the 10-Year Tree Canopy Requirement that Should be Met Through Tree Preservation (s.f.)		3,251
Area of the 10-Year Tree Canopy Requirement that Will be Met Through Tree Preservation (s.f.) (See "Tree Preservation Calculations" Table)		0
Proposed Percentage of 10-Year Tree Canopy Requirement that Will be Met Through Tree Preservation		0%
* Tree Preservation Target not met (%)...	0% is not greater than...	19%
Tree Preservation Target not met (s.f.)...	0 is not greater than...	3,251

* Note: See Tree Preservation Target Deviation Request Letter, this sheet.

PDH-12 (NORTH PARCEL) 10-YEAR TREE CANOPY REQUIREMENT CALCULATIONS

Gross Site Area (s.f.)		114,942
Zone: PDH-12	Use: Attached Residential Dwellings	
Tree Canopy Required	15%	17,108

Note: Required 10-year tree canopy coverage to be proposed by others.

PDH-12 (SOUTH PARCEL) TREE PRESERVATION TARGET CALCULATIONS

Gross Site Area (s.f.)		17,231
Pre-Development Area of Existing Tree Canopy (s.f.)		8,114
Percentage of Gross Site Area Covered by Existing Tree Canopy		47%
Tree Preservation Target		
10-Year Tree Canopy Requirement Percentage		15%
10-Year Tree Canopy Required (s.f.) (See "10-Year Tree Canopy Calculations")		2,585
Percentage of the 10-Year Tree Canopy Requirement that Should be Met Through Tree Preservation (This is the "Tree Preservation Target")		47%
Area of the 10-Year Tree Canopy Requirement that Should be Met Through Tree Preservation (s.f.)		1,218
Area of the 10-Year Tree Canopy Requirement that Will be Met Through Tree Preservation (s.f.) (See "Tree Preservation Calculations" Table)		0
Proposed Percentage of 10-Year Tree Canopy Requirement that Will be Met Through Tree Preservation		0%
* Tree Preservation Target not met (%)...	0% is not greater than...	47%
Tree Preservation Target not met (s.f.)...	0 is not greater than...	1,218

* Note: See Tree Preservation Target Deviation Request Letter, this sheet.

PDH-12 (SOUTH PARCEL) 10-YEAR TREE CANOPY REQUIREMENT CALCULATION

Gross Site Area (s.f.)		17,231
Zone: PDH-12	Use: Open Space/Park	
Tree Canopy Required	15%	2,584

Note: Required 10-year tree canopy coverage to be proposed by others.

PDC (SOUTH PARCEL) TREE PRESERVATION TARGET CALCULATIONS

Gross Site Area (s.f.)		38,434
Pre-Development Area of Existing Tree Canopy (s.f.)		3,700
Percentage of Gross Site Area Covered by Existing Tree Canopy		8%
Tree Preservation Target		
10-Year Tree Canopy Requirement Percentage		10%
10-Year Tree Canopy Required (s.f.) (See "10-Year Tree Canopy Calculations")		3,843
Percentage of the 10-Year Tree Canopy Requirement that Should be Met Through Tree Preservation (This is the "Tree Preservation Target")		8%
Area of the 10-Year Tree Canopy Requirement that Should be Met Through Tree Preservation (s.f.)		304
Area of the 10-Year Tree Canopy Requirement that Will be Met Through Tree Preservation (s.f.) (See "Tree Preservation Calculations" Table)		0
Proposed Percentage of 10-Year Tree Canopy Requirement that Will be Met Through Tree Preservation		0%
* Tree Preservation Target not met (%)...	0% is not greater than...	8%
Tree Preservation Target not met (s.f.)...	0 is not greater than...	304

* Note: See Tree Preservation Target Deviation Request Letter, this sheet.

PDC (SOUTH PARCEL) 10-YEAR TREE CANOPY REQUIREMENT CALCULATIONS

Gross Site Area (s.f.)		38,434
Zone: PDC	Use: Commercial / Office	
Tree Canopy Required	10%	3,843

Note: Required 10-year tree canopy coverage to be proposed by others.

urban.

September 23, 2011

Mr. Michael Knapp, Director
Urban Forestry Management Division
Fairfax County Department of Public Works and Environmental Services
12055 Government Center Parkway
Fairfax, Virginia 22035

RE: Ridgewood (RZ/FDP 2011-BR-014 and PCA [illegible])

Dear Mr. Knapp,

Per Fairfax County PFM 12-0304.4 we are writing to you in regards to the Tree Preservation Target for this site. The applicant's site is composed of a northern parcel (proposed zoning of PDH-12) and a southern parcel (proposed zoning of PDC and PDH-12) divided by the Government Center Parkway. The northern parcel's existing canopy coverage (19%) is dominated by Virginia Pine (Pinus virginiana), a species prone to windthrow and structural instability as outlined in PFM Table 12.8 and not eligible for 10-year canopy coverage credit per PFM 12-0510.3D(2). Additionally, the southern parcel's existing canopy coverage (21%) is mostly comprised of Callery Pear (Pyrus calleryana), a highly invasive species with poor branch attachment as outlined in PFM Table 12.8, and Autumn Olive (Elaeagnus umbellata), another invasive species as listed on PFM Table 12.7 – both not eligible for 10-year canopy coverage credit per PFM 12-0510.3D(2) and PFM 12-0510.3D(3), respectively.

According to the "Allowable Deviations to Tree Preservation Target", meeting the Tree Preservation Target would require the preservation of trees that do not meet standards for health and structural condition and other vegetation and risk management requirements of § 12-0403 et seq. (PFM 12-0508.3A(2)).

Therefore, we hereby formally request a Tree Preservation Target Deviation for this plan. The entire 10-year canopy requirement will be met through means of on-site tree planting with appropriate species suitable for this region and/or identified within PFM Table 12-17.

If any further information is needed that will assist in the deviation decision-making process, please do not hesitate to contact me. Thank you for your time and consideration in this matter.

Sincerely,
Urban, Ltd.

John Lightle, ASLA, ISA Certified Arborist

Urban, Ltd. 7712 Little River Turnpike Annandale, Virginia [illegible]
Annandale, VA Chantilly, VA Winchester, VA Washington, DC

This Plan Prepared or Approved by:
John Lightle, ISA Certified Arborist
MA-5174A

TREE CONSERVATION PLAN & COMPUTATIONS

RIDGEWOOD
BRADDOCK DISTRICT
FAIRFAX COUNTY, VIRGINIA

SCALE: 1"=40'
C.I. = 2'
DATE: NOV., 2010

SHEET 6B OF 9

FILE No. ZP-1813-2

TREE PROTECTION DURING CONSTRUCTION

A. Critical Root Zone
Tree preservation areas shall be identified on the site plan or construction plans and profiles. A "critical root zone" (CRZ) shall be delineated on the plans and clearly marked and protected in the field prior to any land disturbance. The CRZ shall be determined as follows:

1. For individual trees, the CRZ shall be represented by a concentric circle centered on the tree trunk that represents the tree's dripline.

B. Protection of Retained Trees

1. Contractor's Responsibility: The contractor shall be responsible for the protection of the tops, trunks and roots of all existing trees that are to be retained on-site. Prior to any land disturbance, suitable protective barriers such as safety fencing shall be erected as soon as possible outside of the CRZ of any tree or stand of trees to be preserved. Protective barriers shall remain so erected throughout all phases of construction and can not be removed without written approval of the Contracting Officer. If DPW-ENRD finds that the protective devices are insufficient to protect the trees retained on-site, additional protective devices shall be installed to ensure adequate protection.

2. Stockpiling and Storage: No storage of equipment, materials, debris, or fill shall be allowed within the area protected by the barrier. No construction traffic, parking of vehicles, or disposal of liquids is permitted within the CRZ. No toxic materials shall be stored within 100 (one hundred) feet of the drip line of trees to be retained.

3. Tree Defacing: No protective devices, signs, utility boxes or other objects shall be nailed to trees to be retained on the site.

4. Grade changes and excavations shall not encroach upon the tree CRZ, unless absolutely necessary. If disturbance must occur within CRZ, see "Special Protection Measures" below.

5. Sediment, retention, and detention basins shall not be located within the CRZ. The basins shall not discharge directly into the CRZ unless the discharge is transitioned back to sheet flow prior to entering the CRZ or is discharged into an adequate natural channel.

C. Confined Areas
Except in areas marked on the plans to be cleared, the Contractor shall not deface, injure or destroy trees or shrubs, nor remove or cut them without special authority. No ropes, cables or guys shall be fastened to or attached to any existing nearby trees for anchorage unless specifically authorized by DPW-ENRD. Where such special emergency use is permitted, the Contractor shall first adequately wrap the trunk with a sufficient thickness of burlap or rugs over which softwood cleats shall be tied before any rope, cable or wire is placed."

1. Tree Replacements. Two new trees are to be planted for each tree removed through new construction on Fort Belvoir. Requirements for size, species, and location of new plantings will depend on the individual situation. Replacements may include landscape plantings for improved grounds as well as tree seedlings for reforestation. DPW-ENRD will make this assessment and new recommendations. New planting plans must be approved in writing by DPW-ENRD prior to removal of any trees.

2. Restoration of Landscape Damage: Any trees or other landscape feature scarred or damaged by the Contractor's equipment or operations shall be restored as nearly as possible to its original condition at the contractor's expense. DPW-ENRD will decide what method of restoration shall be used and whether damaged trees shall be treated and healed or removed and disposed of under requirements for clearing and grubbing. Trees that are to remain, either within or outside established clearing limits, that are subsequently damaged by the Contractor and are beyond saving in the opinion of DPW-ENRD, shall be immediately removed and replaced with a nursery grown tree of the same species. Replacement trees shall measure no less than 2.5 (two-and-one-half) inches in diameter at 6 (six) inches above the ground level.

a. Root Pruning Methods: Within four hours of any severance of roots, all tree roots that have been exposed and/or damaged shall be trimmed cleanly and covered temporarily with moist peat moss, moist burlap, or other moist biodegradable material to keep them from drying out until permanent cover can be installed. Tree roots which must be severed shall be cut by a trencher or similar equipment aligned radially to the tree. This method reduces the lateral movement of the roots during excavation, which if done by other methods could damage the intertwined roots of adjacent trees. This effort shall take place and be complete prior to any land disturbance activities.

b. Limb Pruning Methods: All trimming or pruning shall be performed in an approved manner by experienced workmen with saws or pruning shears. Tree trimming with axes will not be permitted. Where tree climbing is necessary ropes shall be required by the Contracting Officer for safety. All final cuts shall be made sufficiently close to the trunk or parent limb but without cutting into the branch collar or leaving a protruding stub, according to the American National Standards Institute. All necessary pruning cuts must be made to prevent bark from being torn from the tree and to facilitate rapid healing. Flush cuts are unacceptable.

c. Trees likely to die as a result of site disturbance activities within 25 feet of the safety fence, as identified in the tree protection plan, shall be removed promptly.

d. Contractor shall use discretion as to where to use applicable tree protection details and assumes full responsibility for replacing damaged specimen trees.

3. Storage and Service Facilities: The location on Government property of the Contractor's storage and service facilities, required temporarily in the performance of the work, shall be located in portions of the job site or areas to be cleared, and shall require written approval of the Contracting Officer. Where buildings or platforms are constructed on sidehills, the Contracting Officer may require cribbing to be used to obtain level foundations. Benching or leveling of earth may not be allowed depending on the location of the proposed facility.

4. Post-construction Cleanup or Obliteration: The Contractor shall obliterate all signs of temporary construction facilities such as haul roads, work areas, structures, foundations of temporary structures, stockpiles of excess or waste materials, and any other vestiges of construction operations as directed by the Contracting Officer. It is anticipated that excavation, filling and plowing of roadways will be required to restore the area to near natural conditions which will permit the growth of vegetation thereon. The disturbed areas shall be graded and filled as required, and forest litter, humus or topsoil or combination thereof shall be spread to a depth of approximately 6 (six) inches over the entire area and seeded. Restoration to original contours is required unless otherwise directed by the Contracting Officer.

GUIDELINES FOR TREE PROTECTION AREAS (TPA'S)

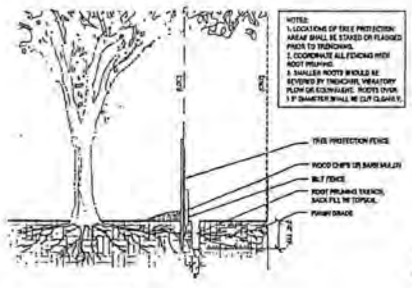
The following general guidelines should be implemented for all cover types throughout the development process and as part of the future maintenance of the TPA. These guidelines provide for the maintenance and overall health and sustainability of the TPA's.

1. Trees along the proposed limits of disturbance that pose potential hazard have been identified on the Tree Protection Plan and shall be removed during the development process.
2. Invasive species should be identified and treated during the development process and as part of the long-term management program. Control techniques may include mechanical removal, herbicide, or cultural control methods based on the species, severity of invasion, and location relative to sensitive plants or areas.
3. The site should be monitored throughout development and as part of the long-term management for outbreaks of potentially serious insects and disease including gypsy moth, canker worm, wood boring insects, and other potentially devastating outbreaks. Frequent monitoring that identifies populations at low levels can prevent the need for large scale treatments.
4. Any hazardous trees will be identified for removal by the Project Arborist prior to site development.
5. Disturbed edges should be mulched to reduce the potential for invasion by undesirable species.
6. Thinning and removal of poor quality trees may be necessary to improve overall health. This item should be apart of the long-term management for any Cover Type.
7. Pest monitoring and control is important to prevent secondary and tertiary stress factors.

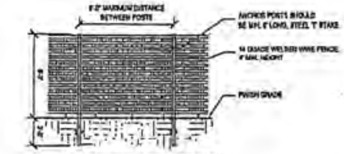
TREE PRESERVATION NARRATIVE

If more than 40% of the critical root zone (CRZ) is damaged or disturbed the contractor shall remove the tree. However, if less than 40% of the CRZ is disturbed, the contractor shall utilize the following methods in an attempt to preserve the tree.

1. Root Pruning: Shall take place where utility trenching or other disturbance necessitates the cutting of roots within the critical root zone. Contractor shall setup a tree protection fence at the limit of clearing and grading before initiating pruning and subsequent trenching. Care must be taken as to which roots are cut as this affects the health and stability of the tree. See Detail 1 this sheet.
2. Tree Protection Fence: Before work begins contractor shall install tree protection fencing or super silt fence adjacent to or around existing tree to discourage unnecessary compaction. No staging of materials or equipment is allowed beyond these fences. See Detail 2 this sheet.
3. Tree Preservation Sign: Signs, in both English and Spanish, delineating the Tree Protection Area shall be mounted directly on the Tree Protection Fence at spacing intervals no farther than 30 feet. See Detail 3 this sheet.



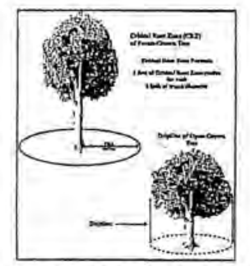
(1) ROOT PRUNING
Scale: NTS.



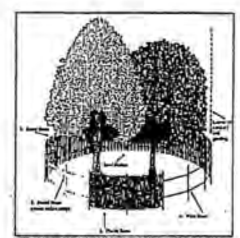
TREE PROTECTION FENCE - ELEVATION

(2) TREE PROTECTION FENCE
Scale: NTS.

(3) TREE PRESERVATION SIGN
Scale: NTS.



(4) CRITICAL ROOT ZONES & DRIPLINES
Scale: NTS.



NOTE: ADAPTED FROM VIRGINIA EROSION & SEDIMENTATION HANDBOOK, VIRGINIA DEPT. OF SOIL & WATER CONSERVATION

(5) TREE PROTECTION DEVICES
Scale: NTS.

This Plan Prepared or Approved by:
John Lightle, ISA Certified Arborist
MA-5174A

REVISION APPROVED BY DIVISION OF DESIGN REVIEW

No.	DATE	DESCRIPTION	REV. BY	APPROVED	DATE

PLAN DATE
02-04-11
04-08-11
05-13-11
08-05-11
09-28-11
10-31-11
12-02-11

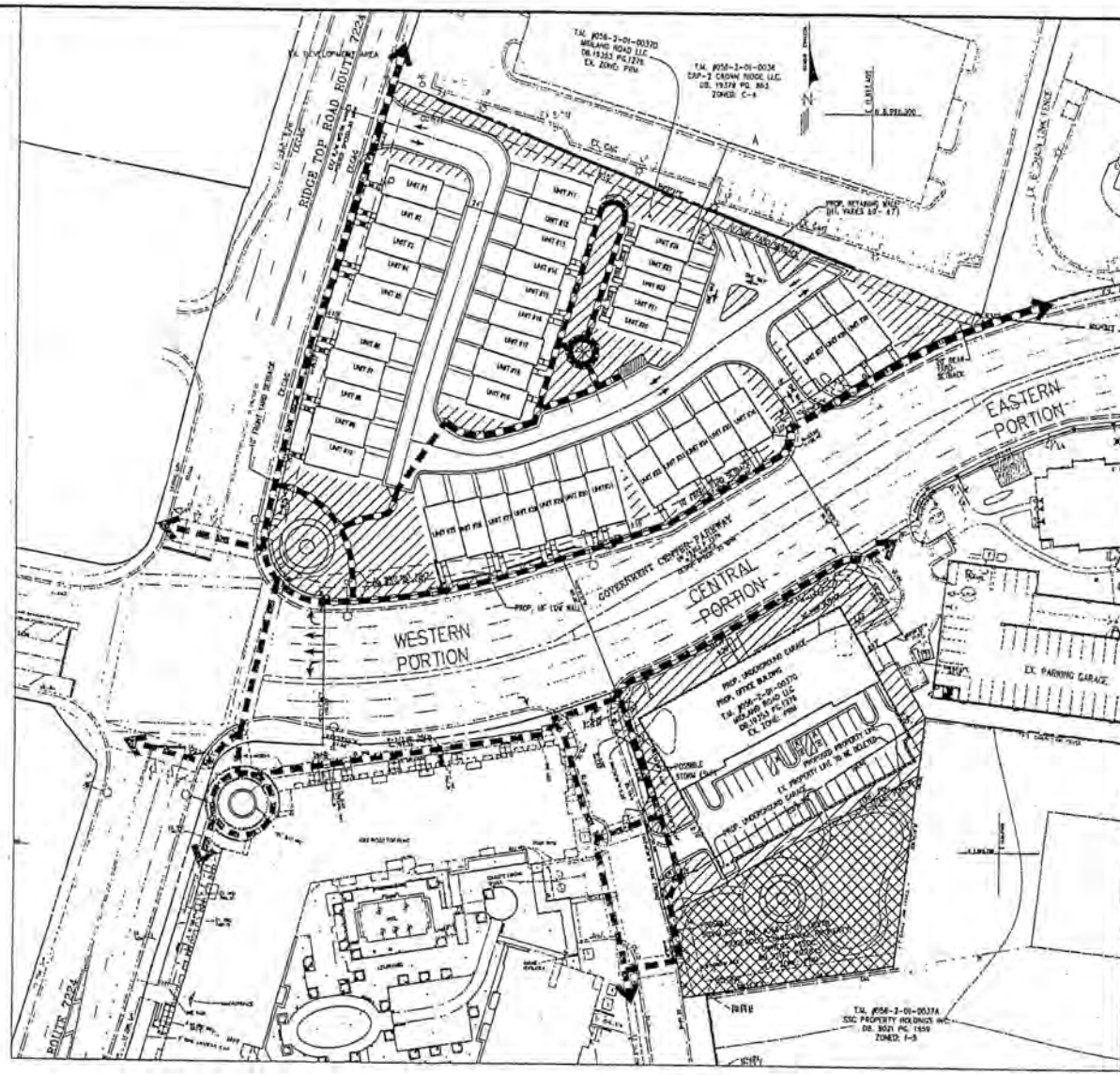
urban

TREE CONSERVATION DETAILS
RIDGEWOOD
BRADDOCK DISTRICT
FAIRFAX COUNTY, VIRGINIA

DATE: NOV., 2010
SCALE: 1"=40'
CI = 2'

SHEET 6F OF 9

FILE No. ZP-1813-2



LEGEND

OPEN SPACE

OPEN SPACE – DEVELOPED RECREATIONAL AREA (PROPOSED PARK)

PEDESTRIAN PATHWAYS

NOTE: THIS PLAN IS FOR SCHEMATIC PURPOSES ONLY AND IS SUBJECT TO CHANGE WITH FINAL ENGINEERING

No.	DATE	DESCRIPTION	REVISIT APPROVED	DATE

REVISION APPROVED BY DIVISION OF DESIGN REVIEW

PLAN DATE
02-04-11
04-05-11
05-13-11
06-05-11
08-29-11
10-31-11
12-02-11

urban

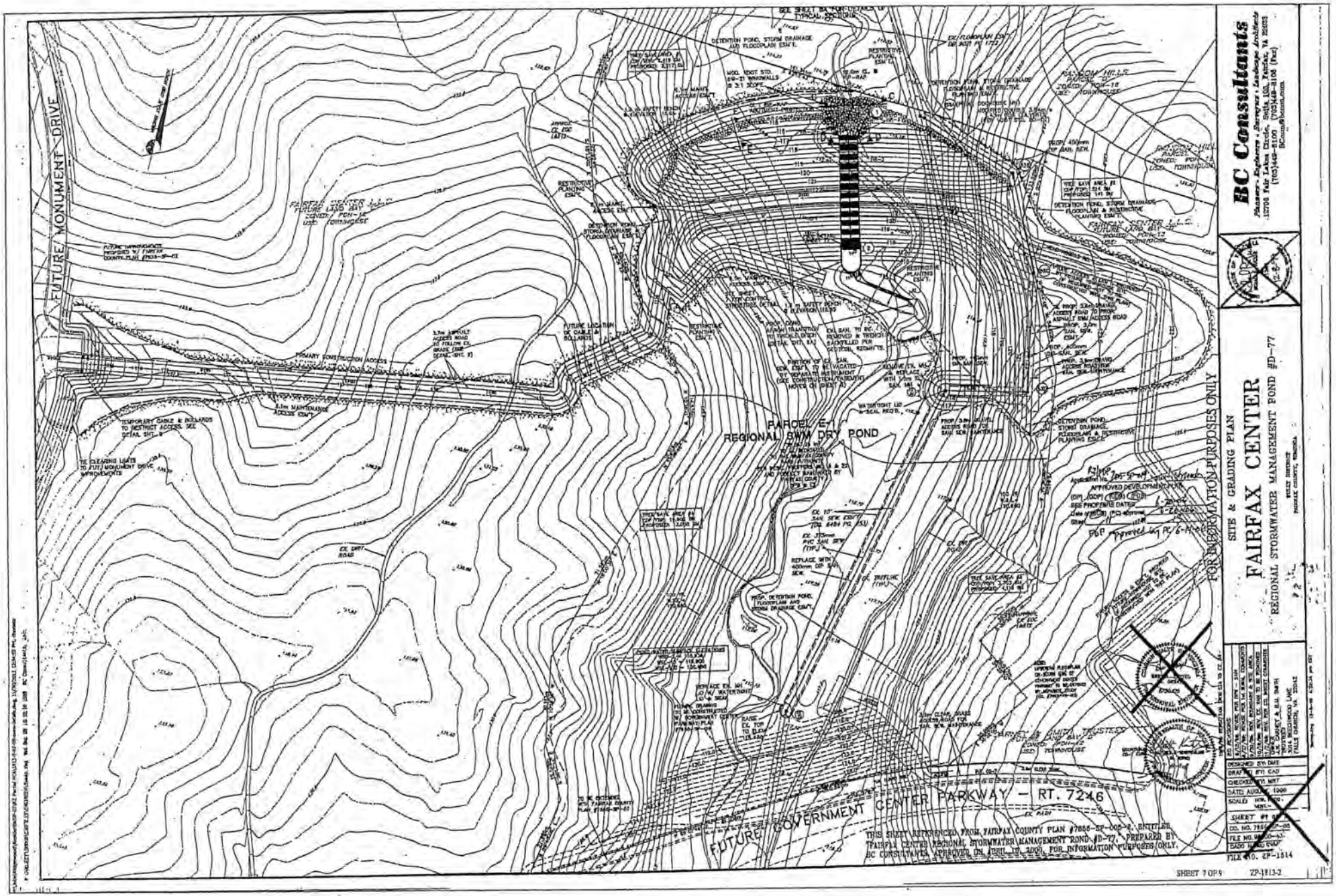
OPEN SPACE AND PEDESTRIAN CIRCULATION PLAN

RIDGEWOOD
BRADDOCK DISTRICT
FAIRFAX COUNTY, VIRGINIA

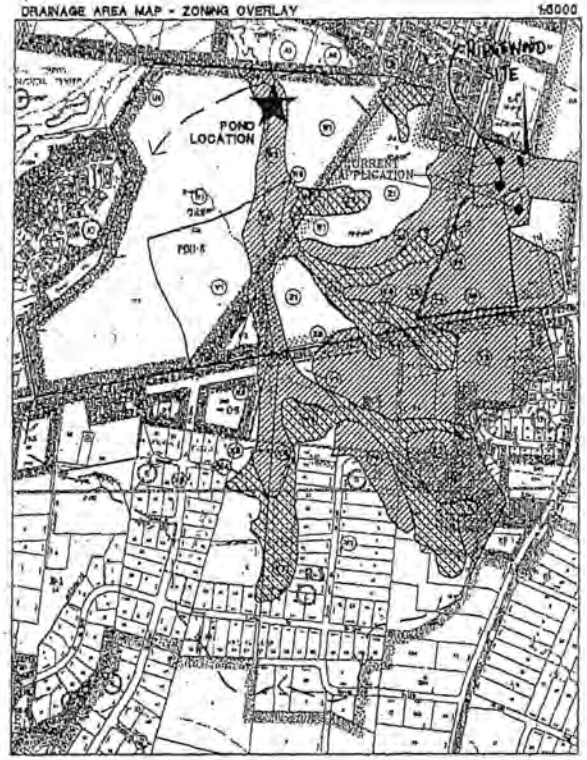
SCALE: 1"=40' CL = N/A DATE: NOV. 2010

SHEET 6G OF 9

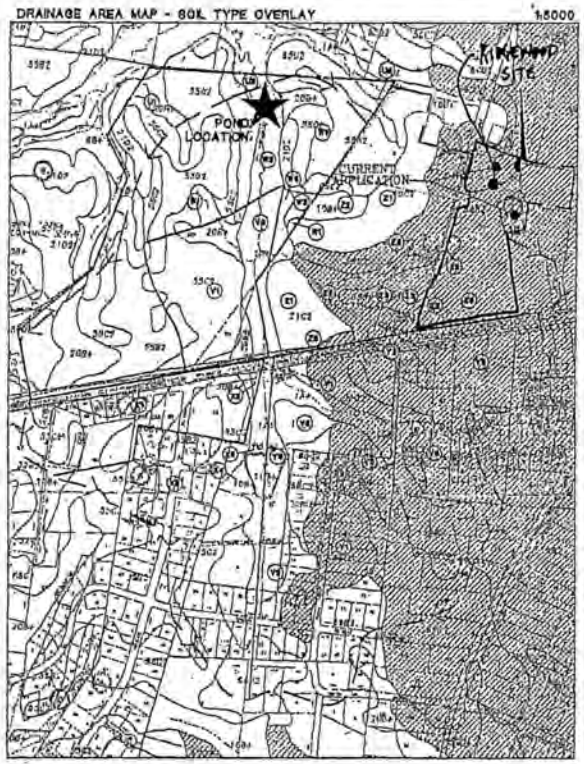
FILE No. ZP-1813-2


FUTURE MONUMENT DRIVE
PARCEL E-1
REGIONAL SWM DRY POND
FUTURE GOVERNMENT CENTER PARKWAY - RT. 7246
FOR INFORMATION PURPOSES ONLY
THIS SHEET REFERENCED FROM FAIRFAX COUNTY PLAN #7655-SP-005-2, ENTITLED "FAIRFAX CENTER REGIONAL STORMWATER MANAGEMENT POND #D-77", PREPARED BY BC CONSULTANTS, APPROVED ON APRIL 10, 2000, FOR INFORMATION PURPOSES ONLY.
BC Consultants
SITE & GRADING PLAN
FAIRFAX CENTER
REGIONAL STORMWATER MANAGEMENT POND #D-77
FILE NO. ZP-1514
SHEET 7 OF 9
ZP-1813-2

DRAINAGE AREA MAP - ZONING OVERLAY 1:6000



DRAINAGE AREA MAP - SOIL TYPE OVERLAY 1:6000



DRAINAGE AREA MAP - TOPO OVERLAY 1:6000

FAIRFAX CENTER - CN VALUES

CONTROLLED SUBAREA	DESCRIPTION	AREA	AREA	AREA	PRE-DEVELOPMENT CN	POST-DEVELOPMENT CN
V1	ONSITE – SHOPPING CENTER – B SOILS	353,308 SF	18.01 AC	6.87 HA	98	98
V2	ONSITE – SHOPPING CENTER – D SOILS	201,384 SF	4.62 AC	1.87 HA	93	93
W1	ONSITE – SF/A, MF – B SOILS	1,135,576 SF	45.34 AC	18.31 HA	65	85
W2	ONSITE – SF/A, MF – C SOILS	28,395 SF	0.65 AC	0.26 HA	73	90
W3	ONSITE – SF/A, MF – D SOILS	196,431 SF	4.51 AC	1.82 HA	78	93
X1	OFFSITE – COMMERCIAL & OFFICE – B SOILS	903,803 SF	20.75 AC	8.40 HA	98	98
X2	OFFSITE – COMMERCIAL & OFFICE – D SOILS	14,843 SF	0.33 AC	0.14 HA	79	93
X3	OFFSITE – 2 DU PER ACRE – B SOILS	1,344,507 SF	30.87 AC	12.49 HA	65	78
Y4	OFFSITE – 2 DU PER ACRE – C SOILS	84,651 SF	1.95 AC	0.79 HA	73	85
Y5	OFFSITE – 2 DU PER ACRE – D SOILS	107,648 SF	2.49 AC	1.00 HA	79	88
Y1	OFFSITE – 3 DU PER ACRE – B SOILS	1,864,098 SF	42.80 AC	17.48 HA	65	72
Y3	OFFSITE – 3 DU PER ACRE – C SOILS	744,797 SF	16.58 AC	7.40 HA	73	81
Y2	OFFSITE – 3 DU PER ACRE – D SOILS	1,703,810 SF	36.11 AC	15.83 HA	79	85
Z1	OFFSITE – SF/A, MF & COMMERCIAL & OFFICE – B SOILS	814,182 SF	15.69 AC	7.26 HA	58	85
Z2	OFFSITE – SF/A, MF & COMMERCIAL & OFFICE – C SOILS	451,312 SF	10.36 AC	4.18 HA	73	90
Z3	OFFSITE – SF/A, MF & COMMERCIAL & OFFICE – D SOILS	1,027,872 SF	23.07 AC	14.19 HA	79	93
	TOTAL – WEIGHTED AVERAGE		286.12 AC	115.80 HA	76	87

UNCONTROLLED SUBAREA	DESCRIPTION	AREA	AREA	AREA		
U1	ONSITE – SF/A, MF – B SOILS	313,373 SF	13.39 AC	5.30 HA	61	86
U2	ONSITE – SF/A, MF – C SOILS	4,564 SF	0.11 AC	0.04 HA	73	90
U3	ONSITE – SF/A, MF – D SOILS	23,646 SF	0.50 AC	0.20 HA	79	93
	TOTAL – WEIGHTED AVERAGE		13.51 AC	5.53 HA	62	87

ALLOWABLE RELEASE COMPUTATIONS

STORM EVENT	ALLOWABLE RELEASE CRITERIA	PRE-DEV. CONTROLLED	–	POST-DEV. UNCONTROLLED	=	ALLOWABLE RELEASE	ACTUAL RELEASE
2-YEAR	(PREDEVELOPMENT CONTROLLED) – (POSTDEVELOPMENT UNCONTROLLED)	184 CFS	–	30 CFS	=	154 CFS	88 CFS
10-YEAR	(PREDEVELOPMENT CONTROLLED) – (POSTDEVELOPMENT UNCONTROLLED)	280 CFS	–	80 CFS	=	200 CFS	488 CFS
100-YEAR	(NONE)					N/A	1132 CFS

NOTE
SITE AREA SHOWN ON RAINFALL COMPUTATION SHEETS INCLUDES ALL OFFSITE PARCELS ASSOCIATED WITH REZONING APPLICATION #Z-1988-SU-041/042. (TAX MAP NUMBERS 66-3-01-48A,70A71)

Application No. #Z 1988-SP-041 Sheet 1 of 1 Sheets
APPROVED DEVELOPMENT PLAN
(DP) (PODP) (CDP) (FDP)
Date of RZ/SE Approval 6/26/06
Date of (RZ/SE) (PCA) Approval 9/18/06
Sheet 12 of 15
FDP 2005-SP-019 approved by PC 6/26/06

FOR INFORMATION PURPOSES ONLY

THIS SHEET REFERENCED FROM FAIRFAX COUNTY PLAN #1988-SP-041-2, ENTITLED "FAIRFAX CENTER REGIONAL STORMWATER MANAGEMENT POND #D-77," PREPARED BY BC CONSULTANTS, APPROVED ON APRIL 10, 2000, FOR INFORMATION PURPOSES ONLY.

BC Consultants
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RCN COMPUTATIONS

FAIRFAX CENTER

REGIONAL STORMWATER MANAGEMENT POND #D-77

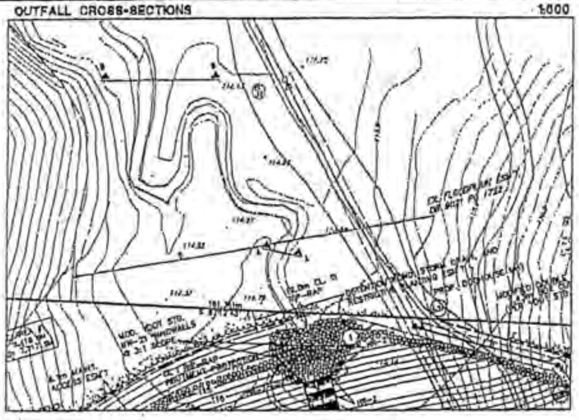
PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

BC REVISIONS	DESIGNED BY: DAS
	DRAWN BY: DAS
	CHECKED BY: MRT
	DATE: AUGUST 2006
	SCALE: AS NOTED
	SHEET 10 OF 11
	DP NO. 7968-SP-041
	BCC NO. 6060000-43
	CADD NAME: RCNWATER.DWG

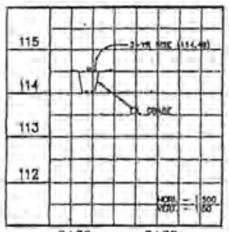
SHEET 8 OF 9 ZP-1813-2 FILE NO. 70-1614

OUTFALL CROSS-SECTIONS

1:500

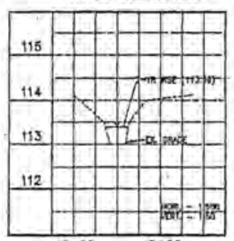


CROSS SECTION A-A



MANNINGS COEFFICIENT	0.035
FLOW AREA	1.7 SQ. M
WETTED PERIMETER	4.89 M
TOP WIDTH	4.67 M
ACTUAL DEPTH	0.44 M
CRITICAL ELEVATION	114.41 M
CRITICAL SLOPE	0.021720 M/M
VELOCITY	1.32 M/S
VELOCITY HEAD	0.08 M
SPECIFIC ENERGY	114.58 M
FROUDE NUMBER	0.70
FLOW TYPE	SUBCRITICAL
SLOPE	0.010 M/M
DISCHARGE (2-YEAR RELEASE)	78.0 CFS

CROSS SECTION B-B



MANNINGS COEFFICIENT	0.035
FLOW AREA	1.7 SQ. M
WETTED PERIMETER	5.47 M
TOP WIDTH	5.30 M
ACTUAL DEPTH	0.39 M
CRITICAL ELEVATION	113.33 M
CRITICAL SLOPE	0.018316 M/M
VELOCITY	1.31 M/S
VELOCITY HEAD	0.08 M
SPECIFIC ENERGY	113.48 M
FROUDE NUMBER	0.74
FLOW TYPE	SUBCRITICAL
SLOPE	0.010 M/M
DISCHARGE (2-YEAR RELEASE)	78.0 CFS

OUTFALL NARRATIVE

THIS REGIONAL STORMWATER MANAGEMENT POND ACCEPTS RUNOFF FROM SOME 271 ACRES AT THE TOP OF THE DIFFICULT RUN WATERSHED. THE DRAINAGE AREA TO THE POND IS MASTER PLANNED FOR SINGLE FAMILY ATTACHED, MULTIFAMILY, COMMERCIAL OFFICE AND RETAIL USES. ON THE SOUTH SIDE OF ROUTE 29, THE AREA IS MASTER PLANNED FOR SINGLE FAMILY DWELLINGS AT A DENSITY OF 2-3 UNITS PER ACRE. THE PEAK RELEASE FROM THIS DRAINAGE AREA WILL BE REDUCED TO BELOW PRE-DEVELOPMENT CONDITIONS FOR THE 2-YEAR AND 10-YEAR STORM. A SIDE-EFFECT OF THIS REGIONAL STORMWATER MANAGEMENT POND IS THE DETENTION OF THE 1-YEAR STORM TO BELOW PRE-DEVELOPMENT LEVELS. THE DETENTION EFFECT OF THIS STORMWATER MANAGEMENT POND WILL MAINTAIN THE QUALITY OF THE DOWNSTREAM WATERSHED.

THE OUTLET CONDUIT FROM THE STORMWATER MANAGEMENT POND CONSISTS OF TWIN BOX CULVERTS, WHICH DISCHARGE NEAR THE NORTHERN BOUNDARY LINE OF THE FAIRFAX CENTER SITE. THIS OUTFALL LOCATION SHALL BE PROVIDED WITH PERMANENT OUTLET PROTECTION IN CONFORMANCE WITH THE PUBLIC FACILITIES MANUAL. THE CROSS-SECTIONS ON THIS SHEET SHOW THAT THE EXISTING NATURAL STREAM IS ADEQUATE TO HANDLE THE 2-YEAR STORM WITHIN BED AND BANKS.

PEAK RUNOFF FROM THIS SITE HAS BEEN CONSIDERABLY REDUCED, AND THE EXISTING NATURAL CHANNEL DOWNSTREAM IS SUFFICIENT TO HANDLE THE PROPOSED FLOW. THEREFORE, IT IS THE OPINION OF THE ENGINEER THAT ADEQUATE OUTFALL EXISTS AND THAT THIS DEVELOPMENT WILL NOT DEGRADATE THE QUALITY OF THE ADJACENT WATERSHED.

BMP FACILITY DESIGN CALCULATIONS

PLAN NAME: FAIRFAX CENTER
PLAN NUMBER: 7658-SP-05

DATE: 8/8/98
ENGINEER: DMS

BMP – I. WATER QUALITY NARRATIVE

REGIONAL STORMWATER MANAGEMENT POND D77 IS BEING CONSTRUCTED IN CONJUNCTION WITH THE FAIRFAX CENTER DEVELOPMENT. DUE TO THE REGIONAL NATURE OF THIS FACILITY, A CONSIDERABLE AMOUNT OF OFFSITE AREA IS BEING CONTROLLED BY THIS REGIONAL STORMWATER MANAGEMENT POND. BMP'S ARE PROVIDED FOR ALL PROPERTIES WITHIN THE DRAINAGE SHED & THE FAIRFAX CENTER SITE AREA.

THIS EXTENDED DETENTION DRY POND WILL UTILIZE A 10" DIAMETER ORIFICE TO PROVIDE 48 HOUR DRAWDOWN. THE DRAWDOWN ORIFICE SHALL BE FITTED WITH A TRASH RACK IN ACCORDANCE WITH PFM PLATE 61-6. THE FACILITY WILL BE MAINTAINED BY FAIRFAX COUNTY.

BMP – II. WATERSHED INFORMATION

PART 1. LIST ALL OF THE SUBAREAS AND "C" FACTORS USED IN THE BMP COMPUTATIONS

		SUBAREA DESIGNATION (1)	"C" (2)	ACRES (3)	(Ha)
V1	Onsite	Shopping Center – B Soils	0.80	16.01	6.0743
V2	Onsite	Shopping Center – D Soils	0.85	4.62	1.8698
W1	Onsite	SFA, MF – B Soils	0.70	45.24	18.3080
W2	Onsite	SFA, MF – C Soils	0.75	0.65	0.2630
W3	Onsite	SFA, MF – D Soils	0.80	4.51	1.8251
X1	Offsite	Commercial & Office – B Soils	0.70	20.75	8.3972
X2	Offsite	Commercial & Office – D Soils	0.80	0.33	0.1336
X3	Offsite	2 DU per Acre – B Soils	0.45	30.87	12.4926
X4	Offsite	2 DU per Acre – C Soils	0.45	1.96	0.7931
X5	Offsite	2 DU per Acre – D Soils	0.50	2.48	1.0036
Y1	Offsite	3 DU per Acre – B Soils	0.50	38.20	15.4590
Y2	Offsite	3 DU per Acre – C Soils	0.50	18.29	7.4017
Y3	Offsite	3 DU per Acre – D Soils	0.55	39.11	15.8273
Z1	Offsite	SFA, MF & Commercial & Office – B Soils	0.70	18.69	7.5636
Z2	Offsite	SFA, MF & Commercial & Office – C Soils	0.75	10.36	4.1925
Z3	Offsite	SFA, MF & Commercial & Office – D Soils	0.80	35.07	14.1923
U1	Onsite	SFA, MF – B Soils	0.70	12.86	5.2043
U2	Onsite	SFA, MF – C Soils	0.75	0.11	0.0445
U3	Onsite	SFA, MF – D Soils	0.80	0.55	0.2226
		TOTAL DRAINAGE & ONSITE AREA =		299.65	Ac. (A)

PART 2. COMPUTE THE WEIGHTED AVERAGE "C" FACTOR FOR THE SITE

		SUBAREA DESIGNATION (1)	"C" (2)		ACRES (3)		PRODUCT (4)
V1	Onsite	Shopping Center – B Soils	0.80	x	16.01	=	12.81
V2	Onsite	Shopping Center – D Soils	0.85	x	4.62	=	3.93
W1	Onsite	SFA, MF – B Soils	0.70	x	45.24	=	31.67
W2	Onsite	SFA, MF – C Soils	0.75	x	0.65	=	0.49
W3	Onsite	SFA, MF – D Soils	0.80	x	4.51	=	3.61
X1	Offsite	Commercial & Office – B Soils	0.70	x	20.75	=	14.53
X2	Offsite	Commercial & Office – D Soils	0.80	x	0.33	=	0.26
X3	Offsite	2 DU per Acre – B Soils	0.45	x	30.87	=	13.89
X4	Offsite	2 DU per Acre – C Soils	0.45	x	1.96	=	0.88
X5	Offsite	2 DU per Acre – D Soils	0.50	x	2.48	=	1.24
Y1	Offsite	3 DU per Acre – B Soils	0.50	x	38.20	=	19.10
Y2	Offsite	3 DU per Acre – C Soils	0.50	x	18.29	=	9.15
Y3	Offsite	3 DU per Acre – D Soils	0.55	x	39.11	=	21.51
Z1	Offsite	SFA, MF & Commercial & Office – B Soils	0.70	x	18.69	=	13.08
Z2	Offsite	SFA, MF & Commercial & Office – C Soils	0.75	x	10.36	=	7.77
Z3	Offsite	SFA, MF & Commercial & Office – D Soils	0.80	x	35.07	=	28.06
U1	Onsite	SFA, MF – B Soils	0.70	x	12.86	=	9.00
U2	Onsite	SFA, MF – C Soils	0.75	x	0.11	=	0.08
U3	Onsite	SFA, MF – D Soils	0.80	x	0.55	=	0.44

(B) TOTAL = 190.70

WEIGHTED AVERAGE "C" FACTOR (B) / (A) = (C) = 0.64

PART 3. COMPUTE THE TOTAL PHOSPHOROUS REMOVAL FOR THE SITE

SUBAREA DESIG. (1)	BMP TYPE (2)	REMOVAL EFF. (%) (3)		AREA RATIO (4)		"C" RATIO (5)		PRODUCT (6)
V1	REGIONAL DRY POND	50%	x	0.0501	x	1.28	=	3.16%
V2	REGIONAL DRY POND	30%	x	0.0154	x	1.34	=	1.03%
W1	REGIONAL DRY POND	50%	x	0.1510	x	1.10	=	8.31%
W2	REGIONAL DRY POND	50%	x	0.0022	x	1.18	=	0.13%
W3	REGIONAL DRY POND	50%	x	0.0151	x	1.26	=	0.95%
X1	REGIONAL DRY POND	50%	x	0.0692	x	1.10	=	3.81%
X2	REGIONAL DRY POND	50%	x	0.0011	x	1.26	=	0.07%
X3	REGIONAL DRY POND	50%	x	0.1030	x	0.71	=	3.66%
X4	REGIONAL DRY POND	50%	x	0.0065	x	0.71	=	0.23%
X5	REGIONAL DRY POND	50%	x	0.0083	x	0.79	=	0.33%
Y1	REGIONAL DRY POND	50%	x	0.1275	x	0.79	=	5.04%
Y2	REGIONAL DRY POND	50%	x	0.0610	x	0.79	=	2.41%
Y3	REGIONAL DRY POND	50%	x	0.1305	x	0.86	=	5.61%
Z1	REGIONAL DRY POND	50%	x	0.0624	x	1.10	=	3.43%
Z2	REGIONAL DRY POND	50%	x	0.0346	x	1.18	=	2.04%
Z3	REGIONAL DRY POND	50%	x	0.1170	x	1.26	=	7.37%
U1	NONE	0%	x	0.0429	x	1.10	=	0.00%
U2	NONE	0%	x	0.0004	x	1.18	=	0.00%
U3	NONE	0%	x	0.0018	x	1.26	=	0.00%

(A) TOTAL = 47.6%

PART 4. DETERMINE COMPLIANCE WITH PHOSPHORUS REMOVAL REQUIREMENT

NECESSARY REQUIREMENT: 40% (A)
CHESAPEAKE BAY PRESERVATION AREA – NEW DEVELOPMENT
(SEE BMP MANUAL FOR GUIDE TO REQUIREMENTS)

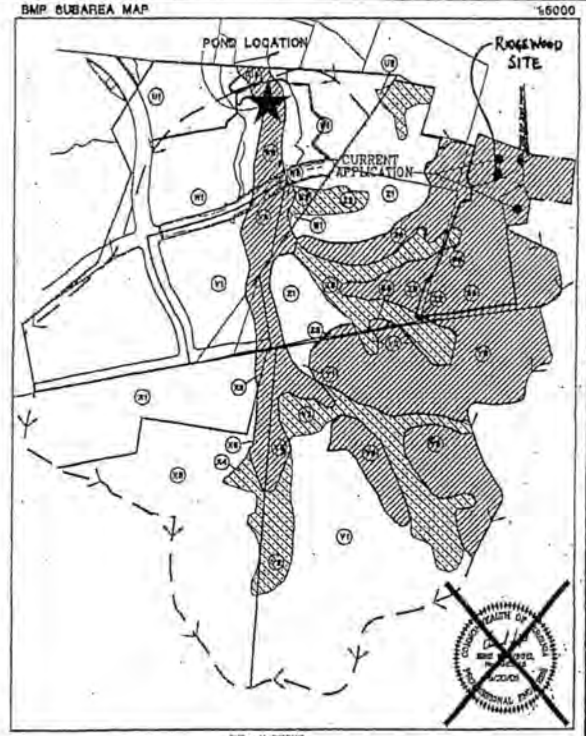
IF 3(A) = 47.6% IS > = 4(A) 40%

THEN PHOSPHORUS REMOVAL REQUIREMENT IS SATISFIED

Application No. RZ 2005-SP-019 Staff J. Strunk
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)
SEE PROFFERS DATED 6-20-06
Date of (BOS) (PC) approval 6-26-06
Sheet 13 of 13
PCP 2005-SP-019 approved by PC on 6/14/06

BMP SUBAREA MAP

1:5000



BMP – V. STORAGE

PART 7. COMPUTE THE WEIGHTED AVERAGE "C" FACTOR FOR EACH PROPOSED BMP FACILITY

DRY POND

	SUBAREA DESIGNATION (1)	"C" (2)		ACRES (3)		PRODUCT (4)
V1	Shopping Center – B Soils	0.80	x	16.01	=	12.81
V2	Shopping Center – D Soils	0.85	x	4.62	=	3.93
W1	SFA, MF – B Soils	0.70	x	45.24	=	31.67
W2	SFA, MF – C Soils	0.75	x	0.65	=	0.49
W3	SFA, MF – D Soils	0.80	x	4.51	=	3.61
X1	Commercial & Office – B Soils	0.70	x	20.75	=	14.53
X2	Commercial & Office – D Soils	0.80	x	0.33	=	0.26
X3	2 DU per Acre – B Soils	0.45	x	30.87	=	13.89
X4	2 DU per Acre – C Soils	0.45	x	1.96	=	0.88
X5	2 DU per Acre – D Soils	0.50	x	2.48	=	1.24
Y1	3 DU per Acre – B Soils	0.50	x	38.20	=	19.10
Y2	3 DU per Acre – C Soils	0.50	x	18.29	=	9.15
Y3	3 DU per Acre – D Soils	0.55	x	39.11	=	21.51
Z1	SFA, MF & Commercial & Office – B Soils	0.70	x	18.69	=	13.08
Z2	SFA, MF & Commercial & Office – C Soils	0.75	x	10.36	=	7.77
Z3	SFA, MF & Commercial & Office – D Soils	0.80	x	35.07	=	28.06

(A) = 286.13
(B) = 181.38
(B) / (A) = (C) = 0.63

PART 8. DETERMINE THE STORAGE REQUIRED FOR EACH PROPOSED FACILITY

EXTENDED DETENTION DRY POND

CHART A6-40 VALUE FOR BMP STORAGE PER AC [4278 x 7(C)] – 875 = 1865 CF / AC (A)
DESIGN 1 (48 HOUR DRAWDOWN) [7(A) x 8(A)] = 542,300 CF

PART 9. DETERMINE THE REQUIRED ORIFICE SIZE FOR EACH EXTENDED DETENTION FACILITY

BMP STORAGE REQUIREMENT (S) (FROM PART 8)	=	542,300	CF
MAXIMUM HEAD (h) AT THE REQUIRED BMP STORAGE (FROM ELEVATION-STORAGE CURVE)	=	7.00	FT
PEAK OUTFLOW RATE (Qo) AT THE MAX. HEAD FOR 48 HR. DRAWDOWN (Qo = S / (0.5 x 3600 x 48))	=	5.28	CFS
REQUIRED ORIFICE AREA (A) (A = Qo / (0.6 x (64.4 x h)^0.5))	=	0.40	FT
DIAMETER OF A CIRCULAR ORIFICE (D) (D = 2.0 x (A / PI) ^ 0.5)	=	0.72	FT
RADIUS OF CIRCULAR ORIFICE IN INCHES (R) (R = D * 6)	=	4.76 " USE 5 "	(125 mm)

FOR INFORMATION PURPOSES ONLY

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BC Consultants

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BConsultants.com

BMP COMPUTATIONS & OUTFALL NARRATIVE

FAIRFAX CENTER

REGIONAL STORMWATER MANAGEMENT POND #D-77

SULLY DISTRICT
FAIRFAX COUNTY, VIRGINIA

BC REVISIONS
8/27/98 REV. PER 3rd SUBM. COMMENTS
11/2/98 REV. PER CO. REVIEW COMMENTS

OWNER: FAIRFAX CENTER LLC

DESIGNED BY: DMS
DRAFTED BY: CAD
CHECKED BY: MRT
DATE: AUGUST, 1998
SCALE: HOR. 1:5000
SHEET 11 OF 11
CO. NO. 7656-SP-05
FILE NO. 96000-13
CADD NAME: SWMBMP.DWG

SHEET 9 OF 9 ZP-1813-0 FILE NO. ZP-1814