Development Site Plan #2025-00013
600 President Ford Lane
Residential Swimming Pool Amendment

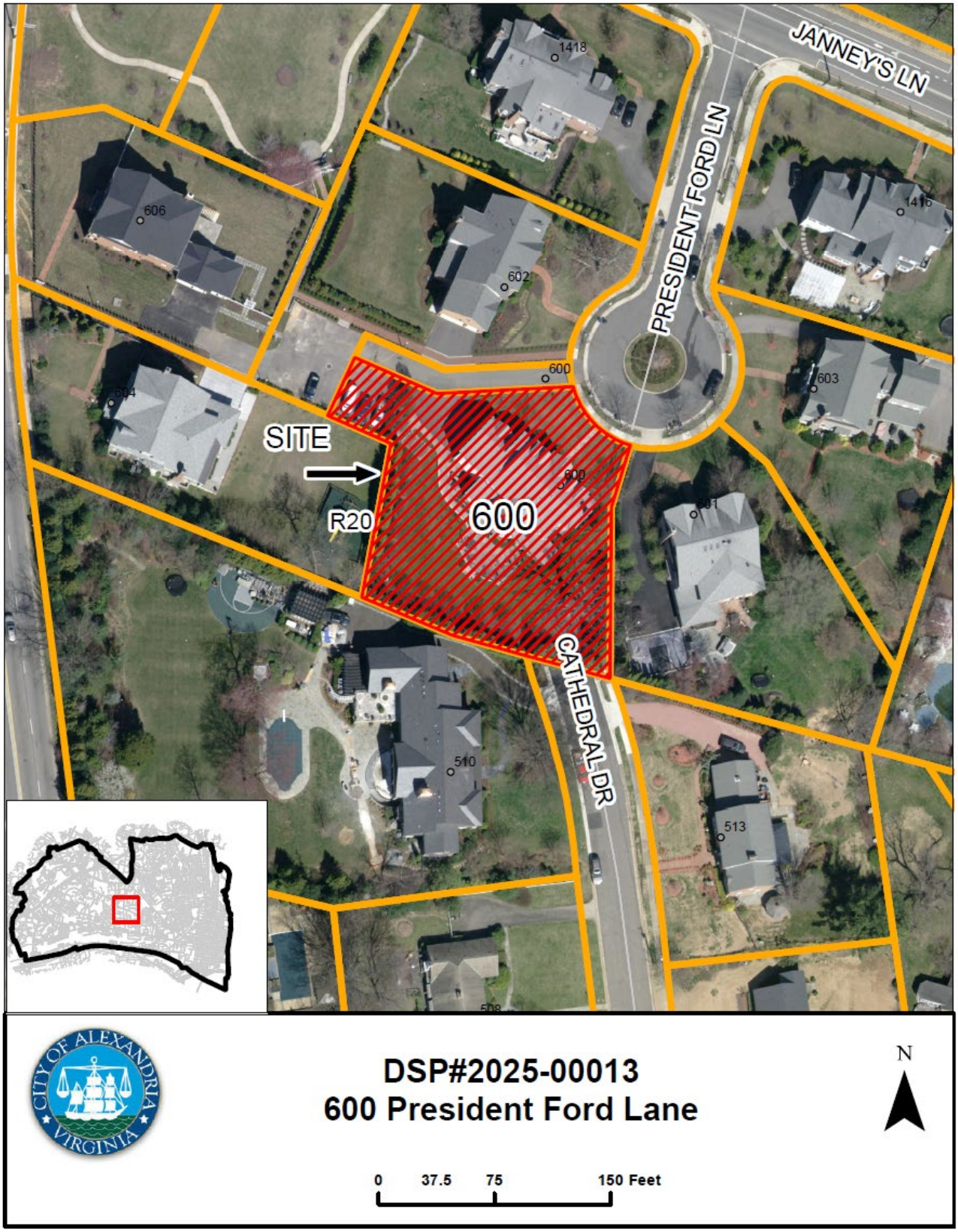
Application	**General Data**	
Project Name: Residential Swimming Pool Amendment	**PC Hearing:**	June 23, 2025
Address: 600 President Ford Lane	**Zone:**	R-20 / Residential
Applicant: Thomas M. Buchanan and Theresa C. Buchanan, represented by Duncan Blair, attorney	**Small Area Plan:**	Taylor Run/Duke Street Small Area Plan

Purpose of Application:
Public Hearing and consideration of a request for an amendment of a previously approved Development Site Plan #2016-00016 with modification to the secondary front yard setback to construct a swimming pool, pergola, and related improvements.
Applications and Modifications Requested:
Development Site Plan Amendment to construct a swimming pool, pergola, and related improvements, with a modification of the required secondary front yard.

Staff Recommendation: APPROVAL subject to compliance with all applicable codes, ordinances and recommended conditions found in Section VIII of this report.

Staff Reviewers: Robert M. Kerns, AICP, Division Chief robert.kerns@alexandriava.gov
Nathan Randall, Principal Planner nathan.randall@alexandriava.gov
Alexa Powell, AICP, Urban Planner alexa.powell@alexandriava.gov

PLANNING COMMISSION ACTION, JUNE 23, 2025: On a motion by Vice Chair Koenig, seconded by Commissioner Manor, the Planning Commission voted unanimously to approve Development Site Plan #2025-00013 on the Consent Calendar.


JANNEY'S LN
PRESIDENT FORD LN
CATHEDRAL DR
1418
606
602
600
603
SITE
R20
600
510
513
508
DSP#2025-00013
600 President Ford Lane
N
0
37.5
75
150 Feet

I. SUMMARY

Staff recommend **approval** of the proposal for an amendment to Development Site Plan #2016-00016 with a modification to the secondary front yard setback to construct a swimming pool, pergola, and related improvements. The request includes modifying the required secondary front yard setback on this "through lot" to permit a pool within 14.3 feet of the southern property line abutting Cathedral Drive. The applicant identified a desire to locate the pool in this area rather than elsewhere on the property outside of a required front yard, causing this request to be reviewed at a public hearing.

The project generally conforms with the relevant City plans, codes and policies. Staff finds that it is reasonable and appropriate for this site and is consistent with the Taylor Run/Duke Street Small Area Plan.

II. BACKGROUND

1. Approval Background

On May 6, 2004, Planning Commission approved Development Site Plan #2004-00005 and a subdivision for a project known as "Oak Grove," with eight single-unit dwellings, including the subject property (referred to as Lot #7), and President Gerald Ford Park. This approval was subsequently appealed to City Council. On June 22, 2004, City Council denied the appeal and accepted the project as approved by the Planning Commission, with the addition of conditions related to stormwater. The most recent approval on the site was an amendment and extension to Development Site Plan #2016-00016, approved in December 2016, to permit the construction of the final remaining lot, Lot 9, near the property that is the subject of the current request. Completion of Lot 9 finalized buildout of the development.

2. Site Context

The subject property consists of a single-unit dwelling situated on a 0.59-acre lot at the end of a cul-de-sac on President Ford Lane, east of the intersection of North Quaker Lane and Seminary Road/Janney's Lane. The existing two and a half story, 6,612 square-foot residence on the subject property was constructed in 2007. The site exhibits a gentle upward slope toward the southwest portion of the property, resulting in an approximately eight-foot grade change from the front to the rear.

The property is considered to be a "through-lot" given that it is located between two public streets: President Ford Lane and Cathedral Drive. The President Ford Lane frontage is located along the northeastern side of the property and is adjacent to the front door and driveway for the dwelling. The Cathedral Drive frontage is located along a portion of the southern side of the property where that street dead-ends. This Cathedral Drive frontage is closest to the rear of the dwelling and what is, practically speaking, the property's rear yard. However, according to the Zoning Ordinance, this area is a secondary front yard requiring a minimum setback.

The property is located within the Taylor Run/Duke Street Small Area Plan, which designates the site for residential development. The property is immediately surrounded by other single-unit residences on President Ford Lane and Cathedral Drive. Outside of the immediate neighborhood, a mix of residential and institutional uses exists, the latter of which includes the Virginia Theological Seminary and Immanuel Church on the Hill.

III. PROJECT DESCRIPTION

The applicant requests a Development Site Plan amendment to construct a 54-foot by 16-foot in-ground swimming pool (864 square feet in total) to the southeast of the existing dwelling, an open pergola, and related improvements (Exhibit 1).

The applicant would like to locate the pool within the required secondary front yard (less than 40 feet from the end of the Cathedral Drive right-of-way), for which they have requested a site plan modification. To secure the pool, the applicant is proposing to install an automated pool cover meeting the Building Code standards.

This proposal increases the amount of impervious surface on this lot by 1,896 square feet.

IV. ZONING

The project site is zoned R-20 / Residential, which allows single-unit dwellings and their accessory uses such as swimming pools and pergolas.

As previously mentioned, the subject property meets the Zoning Ordinance definition for a through lot (Section 2-171) as the subject property is a lot located between two streets, President Ford Lane and Cathedral Drive. Classification of this property as a through lot means the property has a primary front yard facing President Ford Lane and a secondary front facing Cathedral Drive.

The typical front setback requirement for single-unit dwellings is the range established by other buildings on the same blockface or, if any exceed 40 feet, the minimum setback is 40 feet, consistent with Section 7-2503 of the Zoning Ordinance. Although some accessory uses are permitted to be located in required yards as indicated in Section 7-202, swimming pools are not listed in this section and must meet regular setbacks according to Section 7-103(B). The 40-foot front setback listed in the R-20 zone (Section 3-106(A)(1)) has therefore been applied as the primary and secondary front setback requirements in this instance because a property in the contextual block face has a front setback of over 40 feet.

Section 11-416 provides for the potential modification of certain minimum zoning requirements as part of the DSP approval, including the one requested in this application: the 40-foot secondary front yard setback requirement as measured from the public street Cathedral Drive.

Table 1 below summarizes the project's zoning elements.

Table 1: Zoning Elements

Site Area;	25,801 square feet (0.59 acres) in total	
Zone:	R-20/Residential	
Current Use:	Residential	
Proposed Use:	Residential	
	Permitted / Required	*Proposed*
FAR	0.25	0.25
Height	35 feet	32.47 feet
Setbacks	Primary Front: 40 feet Side (east): 16.25 feet Side (west): 16.25 feet Secondary Front: 40 feet	Primary Front: 40 feet Side (north): 16.25 feet Side (south): 16.25 feet Secondary Front: 14.3 feet[1]
Open Space	76%	76%
Parking	3 spaces	3 spaces

[1] Modification requested for required secondary front yard.

V. STAFF ANALYSIS

Staff recommends approval of the applicant's request for a Development Site Plan amendment to construct a swimming pool, pergola, and related improvements noted on submitted plans.

The proposal is reasonable, given the circumstance of the property being a through-lot and given the limited areas available for construction of a similarly sized pool elsewhere. Furthermore, the resulting increase in impervious area is accommodated through excess capacity in existing BMP facilities and the addition of a settling basin.

The proposal is also consistent with the Taylor Run/Duke Street Small Area Plan.

A. Site Plan Amendment Review

Accessory structures and uses, such as those proposed in this amendment application, often quality for minor amendments to the site plan that are approved administratively by City staff. However, Planning Commission must approve site plan modifications, such as those of a required yard or a setback, consistent with Section 11-416 of the Zoning Ordinance. Staff has therefore brought this case forward as a "major" amendment for Planning Commission review given that it includes a modification request.

Consistent with the limited nature of the amendment, staff has concentrated its review on the modification as well as the project's potential impact on stormwater runoff. The conditions of the most recent approval (DSP#2016-00016) have also been carried forward into this approval but remain unchanged.

B. Modification of Secondary Front Setback

As noted, the proposed location of the pool in a secondary front yard requires a modification. Pursuant to Section 11-416, the Planning Commission may approve these modifications if they determine that such modifications meet the following criteria:

- Are necessary or desirable to good site development;
- That specific and identified features of the site design compensate for the impacts otherwise protected by the regulations for which the modification is sought; and
- That such modification will not be detrimental to neighboring property or to the public health, safety and welfare.

Staff supports the modification request for this project, finding that the location of the pool is acceptable given that the yard functions as a backyard, practically speaking, despite the property's secondary frontage where Cathedral Drive dead-ends. The requested modification is reasonable given there are few alternative locations on the lot for a similarly sized pool and its location behind the rear building wall is consistent with good site development.

Within this neighborhood, the subject property is located among other single-unit dwellings on similarly large lots which generally provide a considerable buffer between properties. The requested modification to the secondary front yard setback is reasonable because of the accessory nature of the proposed features and their low height, including the swimming pool being in-ground. The features are also visually screened by vegetation from abutting properties along Cathedral Drive. While the ordinance aims to provide separation between properties by limiting development in secondary front yards, the large open spaces of surrounding properties, accessory nature of the proposal, and screening achieve the same goal alleviating potential impacts to the neighbors.

Staff finds that the proposal would not be detrimental to neighboring property or to the public health, safety or welfare. The scope of the project is limited, and the design also offers visual mitigation. The pool also will be secured when not in use by an auto cover to ensure pool safety as required by the building code.

C. Stormwater

The proposed project is subject to stormwater management requirements for both water quality and water quantity.

To meet water quality requirements, the applicant will utilize an existing Manufactured Treatment Device (MTD) located on-site. Any remaining phosphorus removal requirements that are not met through the MTD will be addressed through the purchase of off-site nutrient credits. To comply with water quantity requirements, a new on-site detention facility is proposed to manage post-development runoff. Stormwater modeling demonstrates that peak runoff rates for the 2-year and 10-year design storms will not exceed pre-development conditions. The detention facility is designed to provide

temporary storage and attenuate flows, ensuring discharge at non-erosive velocities and preventing adverse impacts to downstream properties and infrastructure.

In addition to the excess capacity provided by the existing stormwater quality Best Management Practices (BMPs), the applicant has proposed a new 3-foot by 3-foot settling basin to prevent such an increase in stormwater runoff during these storm events detaining water on site and slowing down the velocity of storm water conveyance to provide non-erosive velocities.

VI. COMMUNITY

Early in the review process, the applicant contacted their immediate neighbor closest to the proposed improvement. In response, the neighbor wrote a letter expressing support for this area being considered a rear yard to allow for the installation of the pool, also citing the visual barrier created by the existing trees. The required written notice was sent to adjacent property owners and signs were posted notice on the site consistent with Zoning Ordinance requirements. As of publication of this staff report, the proposal has elicited no further response from the community.

VII. CONCLUSION

In conclusion, staff recommends **approval** of the revisions to the Development Site Plan, subject to compliance with all applicable codes and the staff recommendations contained in Section VIII of this report.

Staff: Robert M. Kerns, AICP, Chief of Development
Nathan Randall, Principal Planner, Development
Alexa Powell, AICP, Urban Planner, Development

VIII. GRAPHICS / ADDITIONAL MATERIALS

Exhibit 1: Proposed Site Plan Amendment

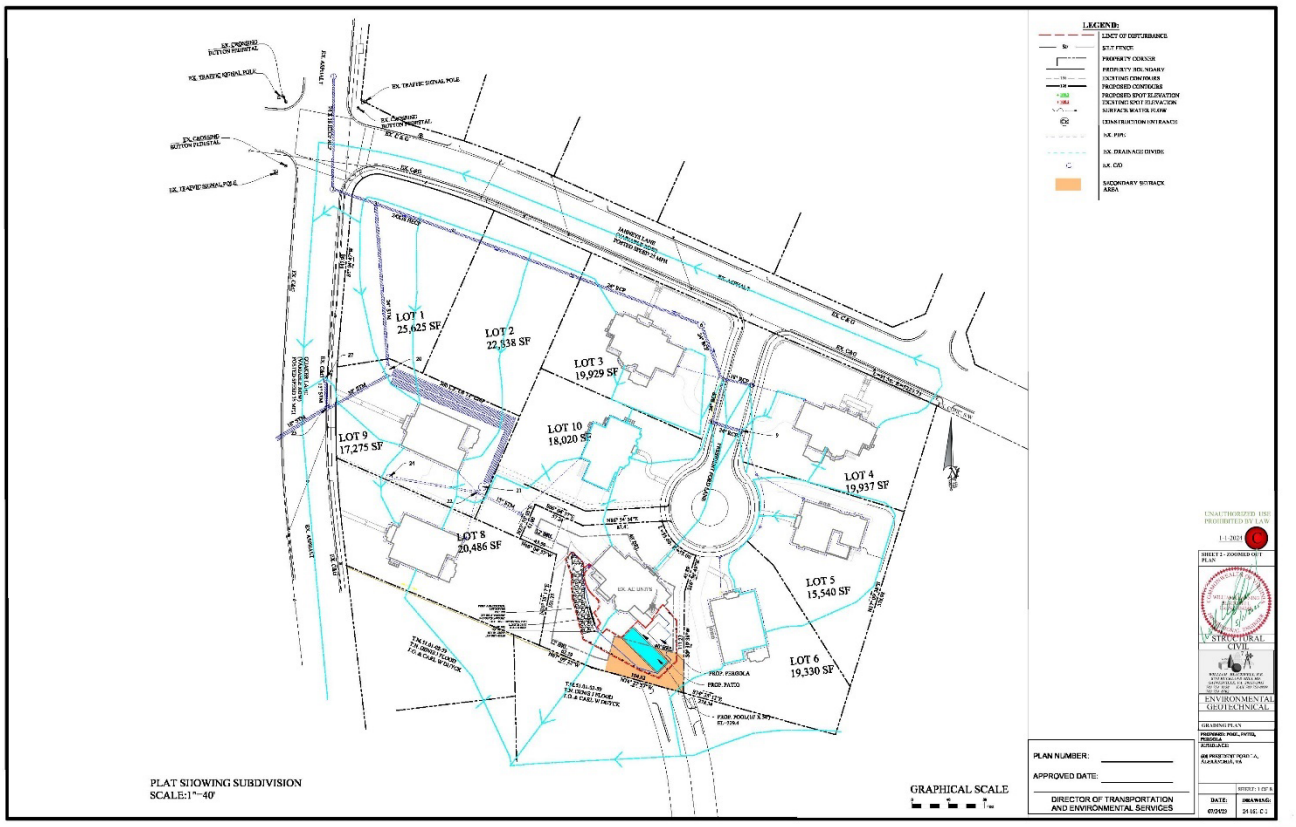
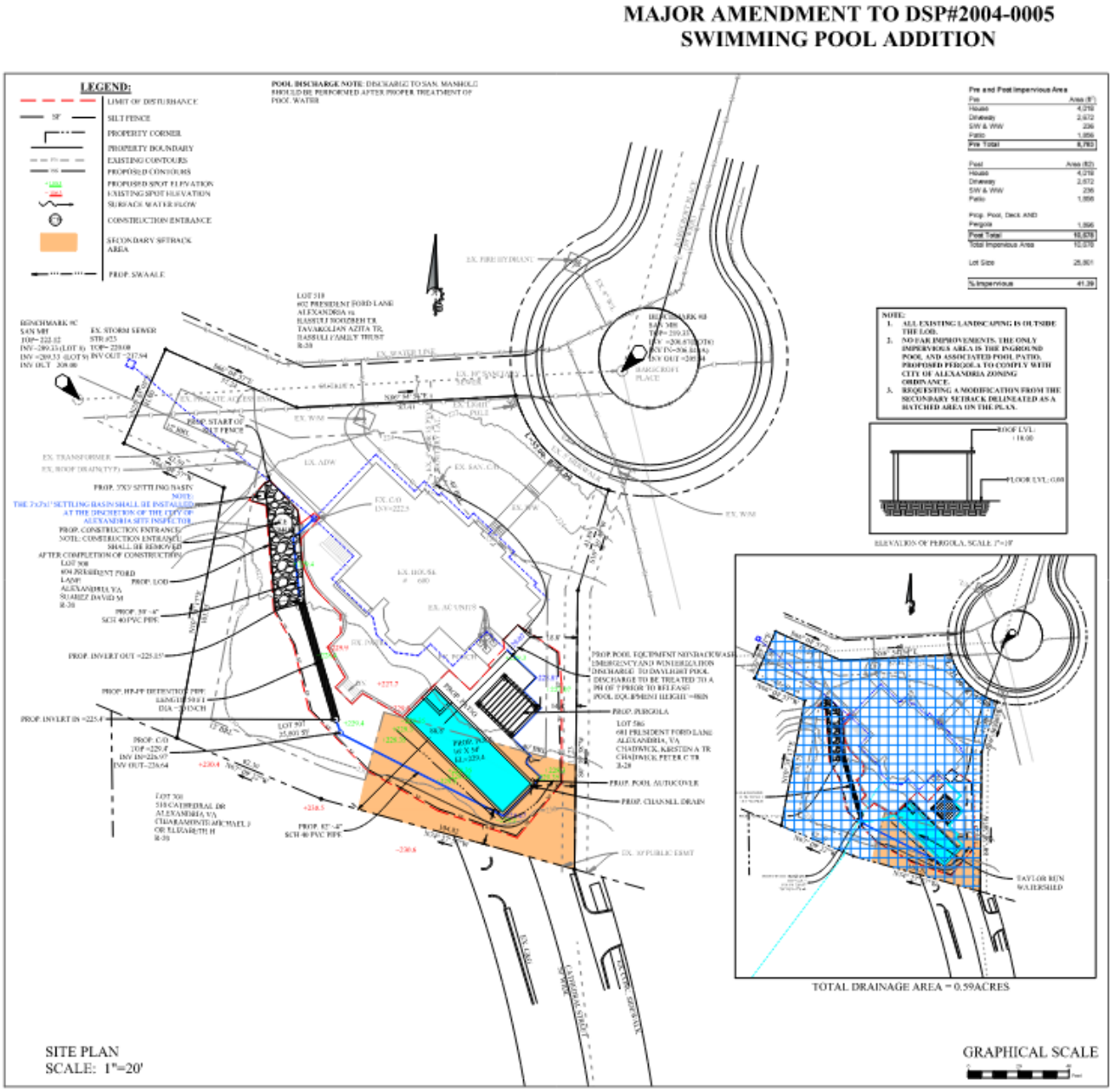


Exhibit 2: Secondary front yard diagram in relation to proposed pool



IX. STAFF RECOMMENDATIONS:

Staff **recommends approval** subject to compliance with all applicable codes and ordinances and the following conditions:

I. LANDSCAPING AND TREE PROTECTION

1. The applicant shall implement the following tree protection measures to ensure the retention of the proposed trees to be saved as depicted on the proposed revisions to the preliminary site plan dated October 28, 2016 to the satisfaction of the Directors of P&Z and RP&CA. All proposed tree protection details shall be depicted on the final site plan and be provided throughout the construction process.

    a. No construction materials or equipment shall be stored or staged beyond the limits of disturbance.
    b. A note identifying these restrictions shall be provided on the Site Plan Cover, Erosion Sediment Control and Landscape Plan sheets.
    c. Condition deleted.
    d. Tree protection for any protected tree shall be constructed of 4"x 4" wooden vertical posts installed in the ground 8' on center with 1"x 6" wooden battens mounted between them. Temporary plastic fencing may be used to define other limits of clearing. All tree protection must be shown on the final site plan, and is to be installed prior to any clearing, excavation or construction on the site. Alternative tree protection, providing equivalent or superior protection, may be approved by the City Arborist. The developer shall call the City Arborist for a review of the installed tree protection following its installation and prior to any construction, clearing, grading or site activity.
    e. All underground utilities shall be located so as to avoid disturbance for grading beyond the limits of disturbance.
    f. If the trees are damaged or destroyed by construction activities the applicant shall replace the tree(s) with the largest caliper trees(s) of comparable species that are available or can be transplanted to the satisfaction of the City Arborist and Director of P&Z; the remaining tree caliper shall be planted on-site or adjacent to the site. In addition, a fine will be paid by the applicant in an amount not to exceed $10,000 for each tree that is destroyed if the approved tree protection methods have not been followed. The replacement trees shall be installed and if applicable the fine shall be paid prior to the release of the public improvement bonds.
    g. Provide tree protection for the 33” chestnut oak tree to be saved during construction of the home on Lot 9. (P&Z)(RP&CA)(PC)

2. The Homeowners Association (HOA) shall incorporate language that requires the following elements and other restrictions deemed necessary by the City Attorney to ensure that the trees proposed to be saved are retained including:

a. The two historic trees shall be subject to all restrictions as mandated by the City Code and applicable ordinances. The owners for lot 7 and lot 6 shall be required to sign a disclosure statement acknowledging the presence and required protection of the trees.
b. The trees to be protected as depicted on the approved site plan shall be required to be retained unless otherwise permitted to be removed by the City Arborist due to the health and safety of the tree.
c. Any proposal to remove a tree that is designated to be retained on the approved site plan for reasons other than health or safety shall require unanimous approval by the Homeowners Association and subsequent approval by the Planning Commission. (P&Z)

3. Any limits of disturbance and clearing shall be limited to the areas as generally depicted on the proposed revisions to the preliminary site plan dated October 28, 2016 and reduced if possible to retain existing trees and grades. (P&Z)

4. Depict and label tree save areas on the site plan, erosion control plan, and grading plan sheets in addition to the tree preservation plan sheet. (RP&CA)

5. Condition satisfied. (P&Z)(RP&CA)(PC)

6. A landscape plan shall be provided with the final site plan to the satisfaction of the Directors of P&Z and RP&CA. At a minimum the plan shall provide:

a. Condition deleted.
b. Condition deleted.
c. Condition deleted.
d. Condition deleted.
e. All landscaping shall be maintained in good condition and replaced as needed.
f. All plant materials and specifications shall be in accordance with the current and most up to date edition of the American Standard For Nursery Stock (ANSI Z60.1) as produced by the American Association for Nurserymen; Washington, D.C.
g. Condition deleted.
h. A bond or escrow for all landscaping shall be required in accordance with Section 11-413(A)(6)(b). No release of this bond or escrow shall occur until any existing vegetation damaged by the construction process is replaced in accordance with Section III.D of the City Landscape Guidelines.
i. The applicant shall be permitted to make minor modifications, if the modifications enhance the tree protection measures.
j. All landscaping shall be maintained in good condition and replaced as needed. (P&Z)(RP&CA)(PC)

7. Condition satisfied.

a. Condition deleted.

b. Condition deleted.
c. Condition deleted.
d. Condition deleted.
e. Condition deleted.
f. Condition deleted.
    i. Condition deleted.
    ii. Condition deleted.

8. Condition satisfied.

II. SITE PLAN

9. Condition satisfied.

10. Condition satisfied.
    a. The applicant shall make the following improvements to the eastern portion of Cathedral Drive:

        i. Complete design work for the curb and gutter, pursuant to the "Cathedral Drive Grading Exhibit" by Bowman Consulting, dated 11/29/16.

        ii. Complete all concrete work including curb & gutter, and impacted driveway, apron(s) to provide positive drainage southward in the gutter pan up to the existing high point of the curb at elevation 29.14.

        iii. Install Erosion & Sediment Controls per the requirements of Chapter 4, Title 5 of the Code of Ordinances of the City of Alexandria.

        iv. All the City of Alexandria fees, if required for this scope of work, will be waived. (P&Z)(PC)

11. All retaining walls shall be constructed with a natural stone or brick veneer. Any protective fencing or railing atop retaining walls shall be visually unobtrusive and of a decorative metal material, to the satisfaction of the Directors of P&Z and Code Enforcement. Additional retaining walls other than those shown on the preliminary site plan shall be permitted if they are required to protect existing trees or to prevent any extensive grading, or additional tree loss. Provide a retaining wall detail on the final site plan. (P&Z)

12. Fences shall be limited to a maximum height of 3.5 ft. and shall be limited to a decorative open style metal fence or painted wooden picket to the satisfaction of the Director of P&Z. A detail of all fences shall be provided on the final site plan. Fences within the front yard of lot 3 and lot 9 shall not be permitted. No fences shall be installed within the drip line of any tree shown to be saved on the preliminary site plan unless the City Arborist determines that the proposed installation will not adversely affect the tree. All fence locations shall be

depicted on the final site plan and a detail of all proposed fences shall be provided on the final site plan. (RP&CA)(P&Z)(PC)

13. Show existing and proposed street lights and site lights on the site plan. Provide a lighting plan with the final site plan to the satisfaction of the Director of T&ES in consultation with the Chief of Police. The plan shall show existing and proposed street lights and site lights; indicate the type of fixture, and show mounting height, and strength of fixture in Lumens or Watts; provide manufacturer's specifications for the fixtures; and provide lighting calculations to verify that lighting meets City Standards. (T&ES)(Police)

14. Provide all pedestrian and traffic signage to the satisfaction of the Director of T&ES. (T&ES)

15. All driveway entrances and sidewalks in public ROW or abutting public ROW shall meet City standards. (T&ES)

    a. The driveway access and parking area adjacent to the semi-attached garage on Lot shall utilize permeable surfacing on any areas not currently paved. (PZ)(T&ES)

16. Show all existing and proposed easements, both public and private. (T&ES)

17. Replace existing curb and gutter, sidewalks, and handicap ramps that are in disrepair or broken. (T&ES)

18. Provide structural details for the proposed retaining walls greater than four feet in height. (T&ES)

19. Condition satisfied.

20. Condition satisfied.

21. Condition satisfied.

22. The proposed width of the public roadway is too narrow to allow on-street parking on both sides of the street. Parking will only be allowed on one side of street as determined by the Director of T&ES. (T&ES)

23. Show the revised location of the bus shelters on the plan with associated easements and passenger loading ramps.

24. Show all utility structures, including transformers, on the final development plan. All utility structures (except fire hydrants) shall be clustered where possible and located so as not to be visible from a public right-of-way or private street. When such a location is not feasible,

such structures shall be located and screened to the satisfaction of the Director of P&Z. (P&Z)

III. ENVIRONMENTAL

25. Developer to comply with the peak flow requirements of Article XIII of AZO. All roof drains, foundation drains and the majority of site runoff must be piped to an underground stormwater conveyance system. Provide measures to limit the migration of groundwater to adjacent properties. (T&ES)

26. The applicant is advised that all stormwater designs that require analysis of pressure hydraulic systems and/or inclusion and design of flow control structures must be sealed by a professional engineer, registered in the Commonwealth of Virginia. If applicable, the Director of T&ES may require resubmission of all plans that do not meet this standard. (T&ES)

27. If combined uncontrolled and controlled stormwater outfall is proposed, the peak flow requirements of Article XIII of AZO shall be met. (T&ES)

28. Provide a narrative and demonstrate describing how the project will comply with the stormwater quantity and quality requirements of Article XIII of the Zoning Ordinance. (T&ES)

29. Provide pre and post development, two and ten year stormwater computations for the entire site along with a drainage map. (T&ES)

30. Plan must demonstrate to the satisfaction of the Director of T&ES that adequate stormwater outfalls are available to the site or else developer is to design and build any on or off site improvements to discharge to an adequate outfall. The majority of the runoff from the proposed development outfalls into an existing closed storm drainage system which discharges into an open channel. Due to the proximity of the open channel to the existing homes on Key Drive, discuss the impacts of development to the downstream properties. (T&ES)

31. The proposed grading on the eastern portion of the site is steeper than the existing. Show how the runoff will be handled before it impacts the adjacent property. Show additional spot elevations on the eastern end of the retaining wall.
(T&ES)

32. The applicant is encouraged to involve the stormwater management designer at an early stage of the site plan process in order to ensure future submittals incorporate stormwater design aspects into the site design in accordance with Article XIII of the Zoning Ordinance. (T&ES)

33. All storm sewers maintained by the City must be a minimum size of 15" for catch basin connections and a minimum size of 18" for storm sewer mains. (T&ES) (PC)

34. All Best Management Practices (BMP) stormwater facilities shall be located on private property or on common areas. This may require applicant to install two smaller flow through BMPs instead of one with higher capacity. (T&ES)

35. Provide additional inlets in place of manholes on the existing and proposed storm sewer on lots 1-3 to maximize the collection of surface run-off from the site if required by the Director of T&ES. (T&ES)(PC)

36. Provide proposed elevations (contours and spot shots) in sufficient details on grading plan to clearly show the drainage patterns. (T&ES)

37. Maintain a ten foot horizontal separation between sanitary and waterlines and a six foot horizontal separation between sanitary and storm sewer. (T&ES)

38. A detailed geotechnical report will be required to be submitted with the first final plan submission. The site is bordering the marine clay area as delineated on the City map of marine clay areas. There is evidence of groundwater seepage on the site. The report is to include, at a minimum: groundwater information, identifying the problems and presenting solutions, underdrain systems, waterproofing basements, how to handle surface and ground water on the site and a summary of impacts to adjacent properties. (T&ES)

39. The stormwater collection system is part of the Taylor Run-watershed. All on-site stormwater curb inlets and public curb inlets within 50 feet of the property line shall be duly marked to the satisfaction of the Director of T&ES.(T&ES)

40. Provide a drainage map for the area flowing to the chosen stormwater Best Management Practices (BMPs), including topographic information and storm drains. (T&ES)

41. The stormwater Best Management Practices (BMPs) required for this project shall be constructed and installed under the direct supervision of the design professional or his designated representative. Prior to release of the performance bond, the design professional shall submit a written certification to the Director of T&ES that the BMPs are:

    a. Constructed and installed as designed and in accordance with the approved Final Site Plan.
    b. Clean and free of debris, soil, and litter by either having been installed or brought into service after the site was stabilized.
    c. The surface appurtenances associated with the on-site structural stormwater Best Management Practices (BMPs) shall be marked to the satisfaction of the Director of T&ES to identify them as part of a structural BMP system. (T&ES)

42. For any surface-installed stormwater Best Management Practice (BMP), i.e. Bio-Retention Filters, Vegetated Swales, etc. that may be employed for this site, descriptive signage for the BMPs is required to be installed to the satisfaction of the Director of T&ES. (T&ES)

43. Prior to approval of the final site plan, and as reviewed as part of the second final, the applicant shall execute, submit and appropriately record in the land records, a maintenance agreement with the City for the Stormwater Quality Best Management Practices (BMPs). (T&ES)

44. Prior to release of the performance bond, the applicant is required to submit a certification by a qualified professional to the satisfaction of the Director of T&ES that the existing stormwater management facility adjacent to the project and associated conveyance systems were not adversely affected by the construction and that they are functioning as designed and are in a condition similar to prior to construction began. If maintenance of the facility or systems were required in order to make this certification, provide a description of the maintenance performed. (T&ES)

45. The applicant shall furnish the Home Owners Association, and the owners with an Owner's Operation and Maintenance Manual for all the Best Management Practices (BMPs) used on site. The manual shall include at a minimum: an explanation of the functions and operations of the BMP(s); drawings and diagrams of the BMP(s) and any supporting utilities; catalog cuts on maintenance requirements; manufacturer contact names and phone numbers; a copy of the executed maintenance service contract; and a copy of the maintenance agreement with the City. Prior to release of the performance bond, a copy of the Operation and Maintenance Manual shall be submitted to the City on a digital media. (T&ES)

46. Plan does not indicate whether or not there are any known soil and groundwater contamination as required with all preliminary submissions. Should any unanticipated contamination or underground storage tanks, drums and containers be encountered at the site the applicant must immediately notify the City of Alexandria Department of Transportation and Environmental Services, Division of Environmental Quality. (T&ES)

IV. ARCHITECTURAL

47. The final architectural elevations shall be consistent with the level of quality and detail provided in the preliminary architectural elevations dated March 25, 2003 and as amended for Lot 9 on October 28, 2016. In addition:

    a. The primary materials of the units for each facade shall be limited to brick, stone or cementitious siding.
    b. Where possible, the width of shutters needs to equal half the width of the adjacent window.
    c. Color elevations will be submitted for review and comment with the final site plan.

d. Architectural elevations (front, side and rear) shall be submitted for review and comment with the final site plan. Each elevation shall indicate average finished grade.
e. The facades that are visible from the streets and potential public park shall be designed with a level of architectural detail and with finishes consistent with the front facade treatment. (P&Z)(T&ES)(PC)

48. The applicant shall submit architectural elevations for review and comment by the Director of P&Z. The elevations should generally present a more balanced facade appearance, orderly fenestration pattern and emulate the styles and scale of residential houses typically found in the City of Alexandria. Items to be considered by the applicant include:

a. The size, pitch and design of the roofs to reduce their size and mitigate the scale of the buildings;
b. Establishing a formal order on the elevations, particularly sides and rears, for a symmetrical arrangement of appropriate sizes, proportions, and types of windows;
c. Using window styles that conform with the historic style of the general design of the house;
d. Using special windows, such as Palladian windows, only at focal points of the entire elevation;
e. Incorporating architectural elements typically found on houses in Alexandria such as the presence of covered porticoes and porches on at least the front facade and desirable on other elevations;
f. Making chimneys more massive, reflecting load-bearing masonry construction typical of the historic houses depicted;
g. Using materials that are consistent with the traditional buildings in Alexandria that are predominantly brick or siding or a combination of the two. Stone was not often used as a general cladding material except in some Arts and Crafts style houses. (P&Z)(PC)

49. The building footprints for each unit shall be limited to the building envelope depicted on the preliminary plan unless otherwise necessary to retain additional trees to the satisfaction of the Director of P&Z. (P&Z) \

V. STREET NAME CASE

50. Condition satisfied.

VI. SUBDIVISION/LEGAL

51. Condition satisfied.

52. The developer shall provide a signed disclosure statement from each purchaser prior to the release of a certificate of occupancy permit for that unit. The prospective purchasers shall be informed of the restrictions imposed on the landowners by the elements of this proposed site plan, including:

a. Tree protection requirements;
b. The presence and location of the proposed public park;
c. Public access easements/paths through the development site and to the open space and public streets;
d. The new public street and emergency vehicle easement restrictions;
e. Sanitary sewer easements; and
f. That zoning limits construction of future building additions and/or decks larger than what is shown on the site plan. (P&Z)

53. The applicant shall submit a homeowner's agreement (HOA) for approval by the City Attorney, prior to applying for the first certificate of occupancy permit. Such HOA shall include the conditions listed below, which shall be clearly expressed in a separate section of the HOA. Also, such section within the HOA shall include language which makes clear that the site plan conditions listed shall not be amended without the approval of the Planning Commission:

a. The protected trees/tree protection areas as set forth as part of the site plan approval.
b. Exterior building improvements by future residents, including above ground decks not included on the approved plans or different from the approved plans, shall require the approval of the Director of Planning and Zoning and must be consistent with the site plan conditions.
c. Building additions, including decks are limited to the building envelope depicted on the approved site plan.
d. All required landscaping and screening including trees and landscaping in the common area,) shall be maintained in good condition.
e. No ground disturbing activity shall occur within the "limits of disturbance" areas or drip-line areas of trees preserved as a condition of this site plan approval.
f. The principal use of the individual garages shall be for passenger vehicle storage only.
g. Each homeowner shall maintain the private storm drain lines on their property in good working order in accordance with the approved final site plan. (P&Z)(PC)

54. Freestanding subdivision and/or development signage shall be prohibited. (P&Z)

55. In accordance with the City's Affordable Housing Policy, the applicant shall make a contribution to the City's Housing Trust Fund of $1.00 per gross square foot of new building area (see definition of gross square footage provided in the Developer Checklist). The applicant shall pay the contribution to the City prior to the issuance of the certificate of occupancy. (Housing)

VII. CONSTRUCTION AND PHASING

56. A temporary informational sign shall be installed on the site prior to the approval of the final site plan for the project and shall be displayed until construction is complete or replaced with a marketing sign incorporating the required information; the sign shall notify the public of the nature of the upcoming project and shall provide a phone number for public questions regarding the project. (P&Z)

57. The applicant shall identify a person who will serve as liaison to the community throughout the duration of construction. The name and telephone number of this individual shall be provided in writing to residents, whose property abuts the site, and to the Directors of P&Z and T&ES. (P&Z)

58. Prior to the release of the final site plan, provide a Traffic Control Plan for construction detailing proposed controls to traffic movement, lane closures, construction entrances, haul routes, and storage and staging. (T&ES)

59. During the construction phase of this development, the site developer, its contractor, certified land disturber, or owner's other agents shall implement a waste and refuse control program. This program shall control wastes such as discarded building materials, concrete truck washout, chemicals, litter or trash, trash generated by construction workers or mobile food vendor businesses serving them and sanitary waste at the construction site and prevent its off -site migration that may cause adverse impacts to the neighboring properties or the environment to the satisfaction of Directors of Transportation and Environmental Services and Code Enforcement. All wastes shall be disposed off site properly in accordance with all applicable federal, state and local laws. (T&ES)

VIII. GENERAL

60. Remove gas line from 10' water main easement. No other utilities are allowed within the VAWC easement. (T&ES/VAWC)

61. The General Notes of the Final Site Plans must include the following statements so that on-site contractors are aware of the requirements:

    a. Call Alexandria Archaeology immediately (703-746-4399) if any buried structural remains (wall foundations, wells, privies, cisterns, etc.) or concentrations of artifacts are discovered during development. Work must cease in the area of the discovery until a City archaeologist comes to the site and records the finds.
    b. The applicant shall not allow any metal detection to be conducted on the property, unless authorized by Alexandria Archaeology. (Archaeology)

62. Condition satisfied.

63. Condition satisfied.

64. Condition satisfied.

65. Any inconsistencies between the various drawings shall be reconciled to the satisfaction of the Directors of P&Z and T&ES. (P&Z)

66. All Traffic Control Device design plans, Work Zone Traffic Control plans, and Traffic Studies shall be sealed by a professional engineer, registered in the Commonwealth of Virginia. (T&ES)

67. Solid waste services shall be provided by the City. In order for the City to provide solid waste service, the following conditions must be met. The development must meet all the minimum street standards, including all standard cul-de-sac turnarounds, if applicable. The developer must provide adequate space within each unit to accommodate a City Standard super can and recycling container. The containers must be placed inside the units or within an enclosure that completely screens them from view. The developer must purchase the standard containers from the City or provide containers that are compatible with City collection system and approved by the Director of Transportation and Environmental Services. The houses on the pipestem driveway will have to bring the trash containers down to the public street right of way. (T&ES)

68. If fireplaces are to be included in the development, the applicant is required to install gas fireplaces to reduce air pollution and odors. Animal screens must be installed on chimneys. (T&ES)

69. The final site plan shall include a zoning tabulation that clearly depicts the permitted and proposed net/gross floor areas, height, yard setbacks, and all other applicable zoning requirements for each individual lot. This information sheet shall also be attached to all building permits. (P&Z)

70. Submit a building location survey to Planning staff prior to applying for a certificate of occupancy permit for each unit. The applicant shall submit the final "as-built" site plan for the entire project prior to applying for a certificate of occupancy permit for the last dwelling unit. (P&Z)

71. Temporary construction trailer(s) shall be permitted and be subject to the approval of the Director of P&Z. Temporary structures for sales personnel, as well as sales/marketing signs, shall be permitted, with the size and site design for such temporary structures, including signs, subject to approval by the Director of Planning and Zoning. (P&Z)

72. The applicant is to consult with the Crime Prevention Unit of the Alexandria Police Department at 703-838-4520 regarding locking hardware and alarms for the homes. This is to be completed prior to the commencement of construction. (Police)

73. The applicant is to contact the Crime Prevention Unit of the Alexandria Police Department at 703-838-4520 regarding a security survey for any sales or construction trailers as soon as they are to be placed on site. (Police)

74. The applicant shall attach a copy of the final released site plan to each building permit document application and be responsible for insuring that the building permit drawings are consistent and in compliance with the final released site plan prior to review and approval of the building permit by the Departments of Planning and Zoning and Transportation and Environmental Services. (P&Z)

APPLICATION

DEVELOPMENT SITE PLAN

DSP # _____ **Project Name:** DSP #2016-0016 Amendment/lot 507

PROPERTY LOCATION: 600 President Ford Lane, Alexandria, Virginia

TAX MAP REFERENCE: 051.01 02 78 **ZONE:** R 20

APPLICANT

Name: Thomas M. Buchanan and Theresa C. Buchanan

Address: [redacted]

PROPERTY OWNER

Name: Thomas M. Buchanan and Theresa C. Buchanan

Address: [redacted]

PROPOSED USE: Amendment to DSP 2016-0016 to permit construction of a private swimming pool on the property in a required secondary front yard with a modification of the front yard set back requirement.

○ **THE UNDERSIGNED** hereby applies for Development Site Plan approval in accordance with the provisions of Section 11-400 of the Zoning Ordinance of the City of Alexandria, Virginia.

○ **THE UNDERSIGNED**, having obtained permission from the property owner, hereby grants permission to the City of Alexandria to post placard notice on the property for which this application is requested, pursuant to Article XI, Section 11-301 (B) of the 1992 Zoning Ordinance of the City of Alexandria, Virginia.

○ **THE UNDERSIGNED** also attests that all of the information herein provided and specifically including all surveys, drawings, etc., required of the applicant are true, correct and accurate to the best of his/her knowledge and belief.

Duncan W. Blair, Attorney/Agent

Print Name of Applicant or Agent

Duncan W. Blair

Signature

[redacted]

Mailing/Street Address

N/A

Telephone # Fax #

[redacted]

City and State Zip Code

Email address

6/10/2025

Date

DO NOT WRITE IN THIS SPACE - OFFICE USE ONLY

Application Received: _____ Received Plans for Completeness: _____

Fee Paid and Date: _____ Received Plans for Preliminary: _____

ACTION - PLANNING COMMISSION: _____

Development Site Plan (DSP) # _____

ALL APPLICANTS MUST COMPLETE THIS FORM.

The applicant is: (check one)

◉ The Owner ○ Contract Purchaser ○ Lessee or ○ Other: _____ of the subject property.

State the name, address and percent of ownership of any person or entity owning an interest in the applicant, unless the entity is a corporation or partnership in which case identify each owner of more than three percent.

The Buchanans own 100% of the Property as Tenants by the Entirety with CLRS.

If property owner or applicant is being represented by an authorized agent, such as an attorney, realtor, or other person for which there is some form of compensation, does this agent or the business in which the agent is employed have a business license to operate in the City of Alexandria, Virginia?

Yes. Provide proof of current City business license. To be provided on request.

No. The agent shall obtain a business license prior to filing application, if required by the City Code.

OWNERSHIP AND DISCLOSURE STATEMENT

Use additional sheets if necessary

1. Applicant. State the name, address and percent of ownership of any person or entity owning an interest in the applicant, unless the entity is a corporation or partnership, in which case identify each owner of more than three percent. The term ownership interest shall include any legal or equitable interest held at the time of the application in the real property which is the subject of the application.

Name	Address	Percent of Ownership
1. Thomas M. Buchanan	[redacted]	100%
2. Theresa C. Buchanan	[redacted]	100%
3.		

2. Property. State the name, address and percent of ownership of any person or entity owning an interest in the property located at 600 President Ford Ln. (address), unless the entity is a corporation or partnership, in which case identify each owner of more than three percent. The term ownership interest shall include any legal or equitable interest held at the time of the application in the real property which is the subject of the application.

Name	Address	Percent of Ownership
1. Thomas M. Buchanan	[redacted]	100%
2. Theresa C. Buchanan	[redacted]	100%
3.		

3. BusinessorFinancialRelationships. Each person or entity listed above (1 and 2), with an ownership interest in the applicant or in the subject property is required to disclose any business or financial relationship, as defined by Section 11-350 of the Zoning Ordinance, existing at the time of this application, or within the12-month period prior to the submission of this application with any member of the Alexandria City Council, Planning Commission, Board of Zoning Appeals or either Boards of Architectural Review.

Name of person or entity	Relationship as defined by Section 11-350 of the Zoning Ordinance	Member of the Approving Body (i.e. City Council, Planning Commission, etc.)
1. Thomas M. Buchanan	NONE	
2. Theresa C. Buchanan	NONE	
3.		

NOTE: Business or financial relationships of the type described in Sec. 11-350 that arise after the filing of this application and before each public hearing must be disclosed prior to the public hearings.

As the applicant or the applicant's authorized agent, I hereby attest to the best of my ability that the information provided above is true and correct.

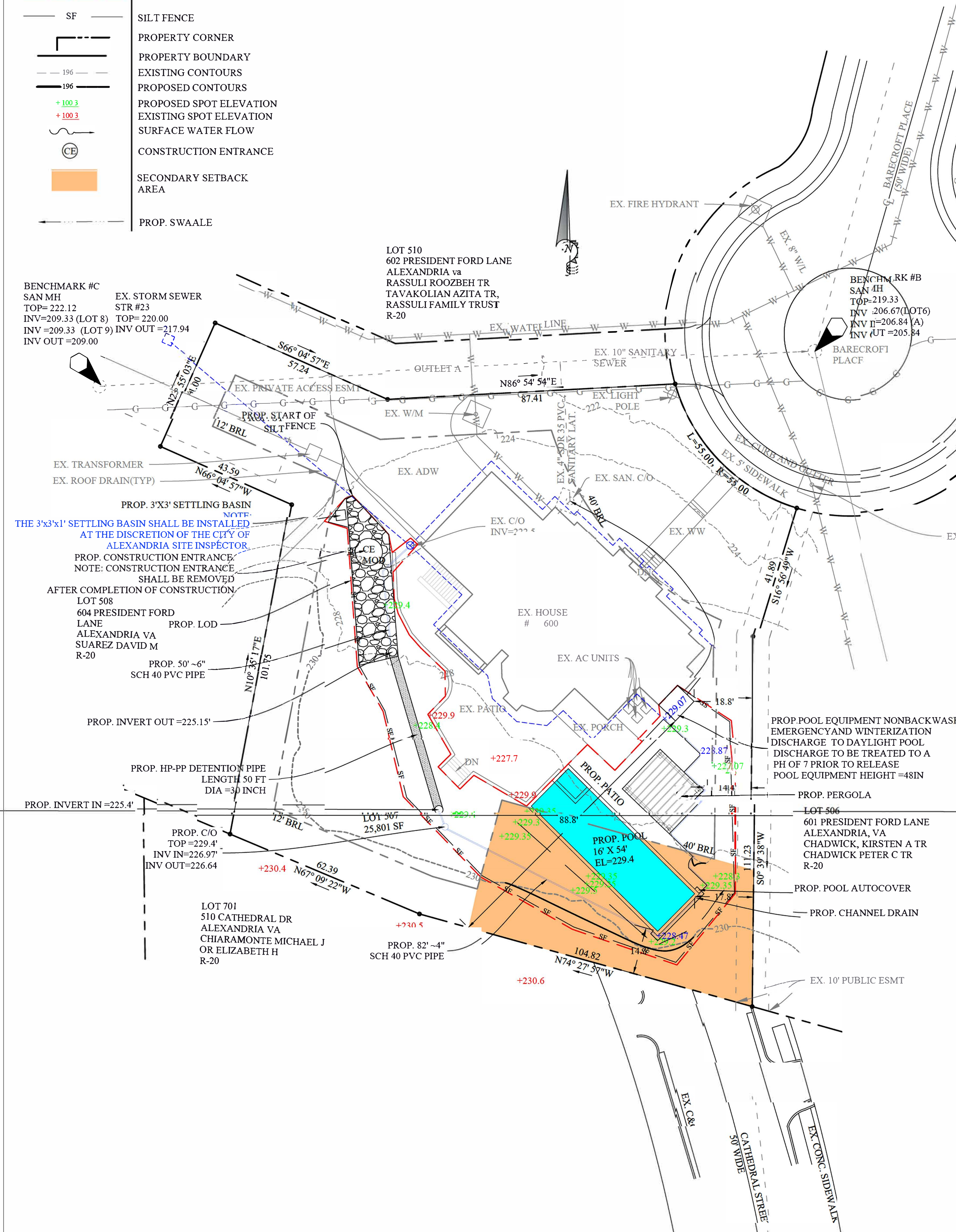
6 25 2025	Duncan W. Blair, Attorney Agent	Duncan W. Blair
Date	Printed Name	Signature

MAJOR AMENDMENT TO DSP#2004-0005
SWIMMING POOL ADDITION

LEGEND:

- LIMIT OF DISTURBANCE
- SILT FENCE
- PROPERTY CORNER
- PROPERTY BOUNDARY
- EXISTING CONTOURS
- PROPOSED CONTOURS
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- SURFACE WATER FLOW
- CONSTRUCTION ENTRANCE
- SECONDARY SETBACK AREA
- PROP. SWAALE

POOL DISCHARGE NOTE: DISCHARGE TO SAN. MANHOLE SHOULD BE PERFORMED AFTER PROPER TREATMENT OF POOL WATER



SITE PLAN
SCALE: 1"=20'

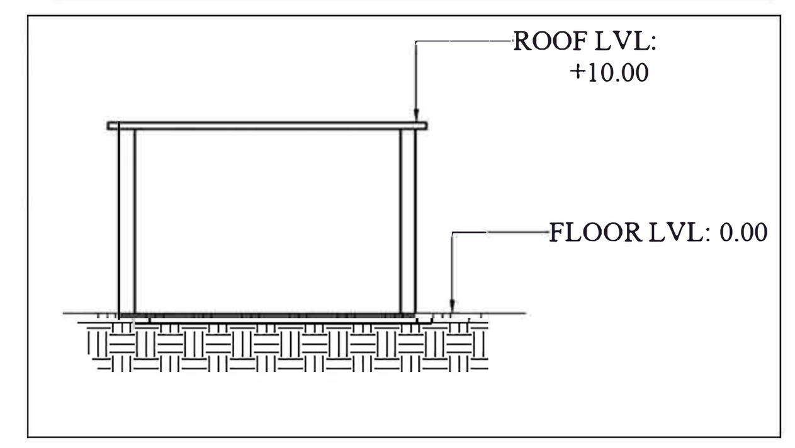
Pre and Post Impervious Area

Pre	Area (ft^2)
House	4,018
Driveway	2,672
SW & WW	236
Patio	1,856
Pre Total	**8,783**

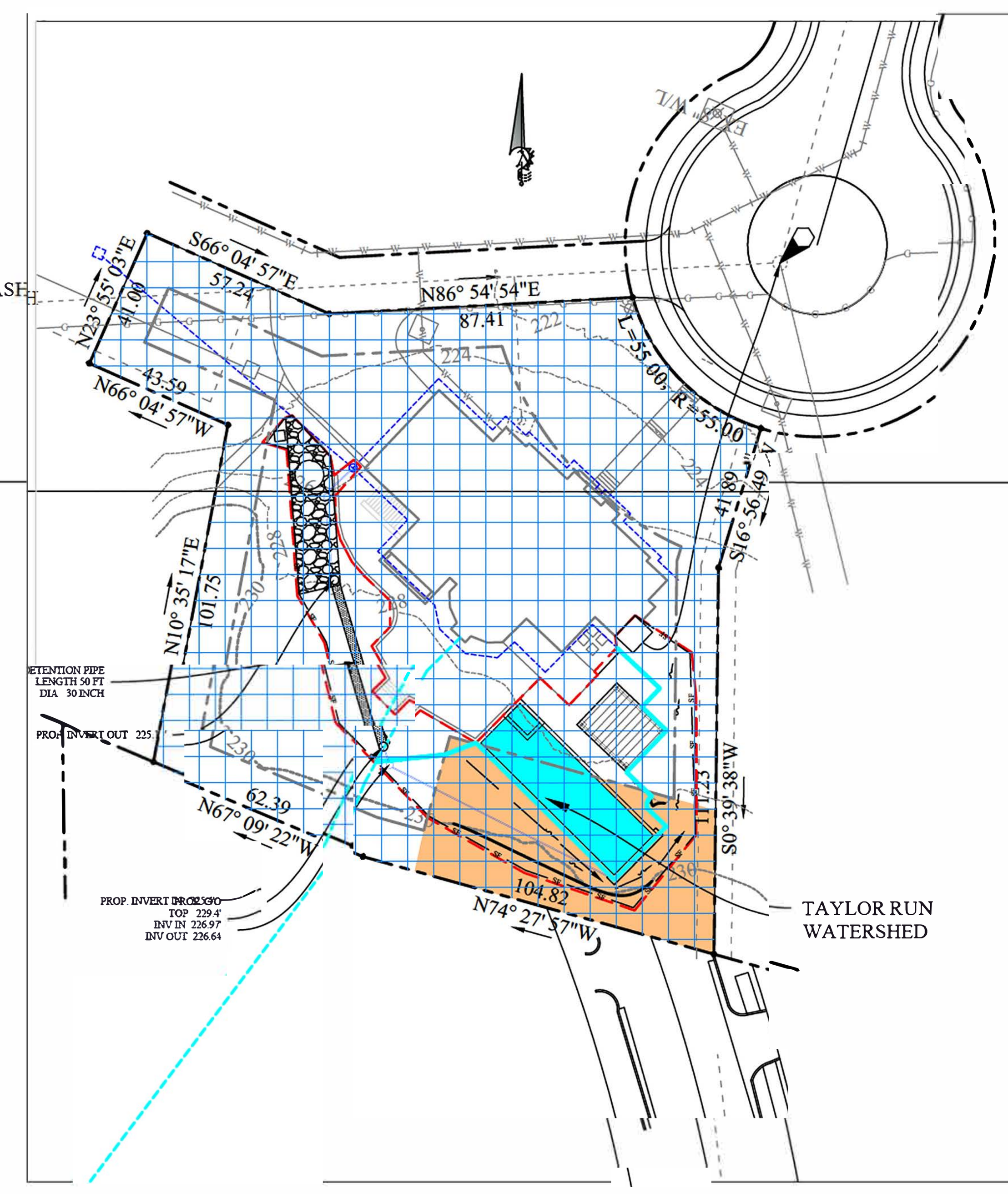
Post	Area (ft2)
House	4,018
Driveway	2,672
SW & WW	236
Patio	1,856
Prop. Pool, Deck AND Pergola	1,896
Post Total	**10,678**
Total Impervious Area	10,678
Lot Size	25,801
% Impervious	**41.39**

NOTE:

1. **ALL EXISTING LANDSCAPING IS OUTSIDE THE LOD.**
2. **NO FAR IMPROVEMENTS. THE ONLY IMPERVIOUS AREA IS THE INGROUND POOL AND ASSOCIATED POOL PATIO. PROPOSED PERGOLA TO COMPLY WITH CITY OF ALEXANDRIA ZONING ORDINANCE.**
3. **REQUESTING A MODIFICATION FROM THE SECONDARY SETBACK DELINEATED AS A HATCHED AREA ON THE PLAN.**



ELEVATION OF PERGOLA, SCALE 1"=10'



TOTAL DRAINAGE AREA = 0.59ACRES

GRAPHICAL SCALE

VICINITY MAP: SCALE 1"=300'±

SITE

PROJECT NARRATIVE

THE PROJECT PROPOSES THE CONSTRUCTION OF POOL, SPA, PATIO AND PAVILION ON LOT 507 . THE SITE IS LOCATED WITHIN THE TAYLOR RUN WATERSHED. LOT 507 PROPOSES 0.1029 AC OF DISTURBANCE. THERE IS NO

DISTURBANCE IN THE RPA PROPOSED.

ARCHAEOLOGY NOTES

1. *The applicant/developer shall call Alexandria Archaeology immediately (703-746-4399) if any buried structural remains (wall foundations, wells, privies, cisterns, etc.) or concentrations of artifacts are discovered during development. Work must cease in the area of the discovery until a City archaeologist comes to the site and records the finds.
2. Please contact Deputy City Archaeologist Garrett Fesler (703-746-4399 or garrett.fesler@alexandriava.gov) two weeks before the starting date of any ground disturbance.
3. The applicant shall not allow any metal detection and/or artifact collection to be conducted on the property, unless authorized by Alexandria Archaeology. Failure to comply shall result in project delays.

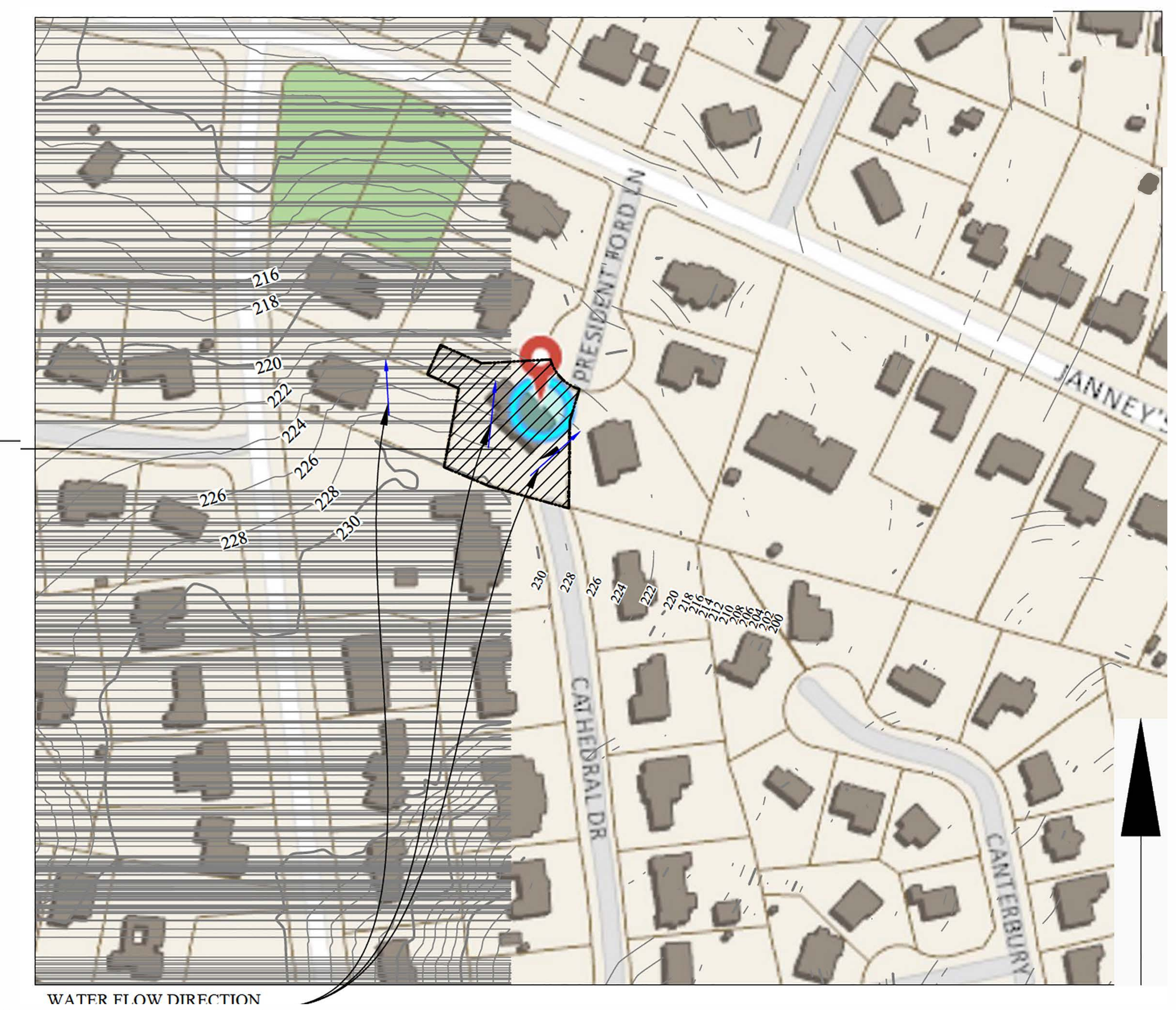
Code

All required archaeological preservation measures shall be completed in compliance with Section 11-411 of the Zoning Ordinance.

GENERAL NOTES

1. **ALL WORK PER APPLICABLE STATE & LOCAL CODE.**
2. **PROPERTY: TAX MAP: 051.01-02-78**
3. **ZONING :R-20**
   OWNER : *BUCHANAN THERESA C OR THOMAS M*
   600 PRESIDENT FORD LA, ALEXANDRIA, VA
   PHONE NUMBER: 703-915-3300
   EMAIL ADDRESS: buchananttj@gmail.com, tmxbuchanan@gmail.com

   THE BOUNDARY AND EXISTING FEATURES SHOWN ARE BASED ON LOCATION SURVEY BY: *BOWMAN CNSULTING GROUP LTD*
   DATE: 05-05-2007
4. **THE CONTRACTOR TO LOCATE ALL UTILITIES PRIOR TO EXCAVATION IN VICINITY OF WORK AREA.**
5. **ALL SILT CONTROLS ARE TO BE LOCATED AT LIMITS OF GRADING, AS SHOWN.**
6. **ALL EROSION SILTATION CONTROLS SHALL CONFORM TO THE LATEST EDITION OF STATE AND LOCAL MODIFIED MANUALS.**
7. **ZONING REQUIREMENTS: MIN. LOT SIZE:20,000 SQ FT**
   MIN. LOT WIDTH:120 L.F. MAX. BLDG. HT.:30 L.F.
   SETBACKS: FRONT: 40 FT SIDE:1:2 RATIO, MIN 12 FT REAR:1:1 RATIO, MIN. 12 FT
   LOT SIZE: 25,801 SF, LOT 507 OAK GROVE (D-426)
8. **ALL VEHICULAR TRAFFIC LEAVING SITE TO BE CHECKED TO ENSURE THAT SOIL IS NOT TRANSFERRED ONTO PUBLIC STREETS.**
9. **IMPERVIOUS AREA: *10,678* S.F./0.245 AC**
   TOTAL SITE AREA: *25,801* S.F./0.592 AC
   PROPOSED IMPERVIOUS AREA PERCENT:41.39% (TOTAL INCLUDING EX. AND PROP. IMPERVIOUS.
10. **DO NOT REMOVE TREES BETWEEN SILT FENCE (SF) AND LIMIT OF CONSTRUCTION (LC).**
11. **REMOVE ONLY THOSE TREES INSIDE THE LIMIT OF CONSTRUCTION TO ALLOW FOR CONSTRUCTION ITEMS AND PROPER GRADING.**
12. **DISTURBED AREA, (PROP. WORK): *5,943* S.F.**
13. **CONTRACTOR TO VERIFY ANY ADJACENT STRUCTURE FOOTINGS PRIOR TO CONSTRUCTION, TO INSURE NO UNDERMINING CONDITION, AND FROST PROTECTION.**
14. **THE PRESENCE OF WETLANDS ON THE PROPERTY PROJECT AREA: *NO***
15. **PROPOSED POOL FENCE SHALL CONFORM TO BOCA PROVISION BEING A MINIMUM OF 48" IN HEIGHT WITH A LOCKABLE GATE SURROUNDING THE POOL, VERIFY WITH LATEST LOCAL CODE. FENCE TO BE PROVIDED FOR THE BUILDING INSPECTOR'S DISCRETION.**
16. **UTILITIES: WATER: *PUBLIC***
    SEWER: *PUBLIC*



SITE

OUTFALL ANALYSIS MAP
SCALE: 1"=150'

SHEET INDEX:

1. SITE PLAN
2. ZOOMED OUT PLAN

C10.20. STORMSEWER AND INLET COMPUTATIONS
C11. BMP COMPUTATIONS DETAILS
C11-A. DETENTION DETAIL
C11-B. VRRM AND WQVD FORM
7. EXISTING AND PROPOSED CONDITION PLAN
C10. EXISTING DRAINAGE PLAN
C10-A. PROPOSED DRAINAGE PLAN

PLAN NUMBER: ____________

APPROVED DATE: ____________

DIRECTOR OF TRANSPORTATION

UNAUTHORIZED USE PROHIBITED BY LAW

1-1-2024

SHEET 1 - SITE PLAN

STRUCTURAL
CIVIL

WILLIAM BLACKWELL, P.E.
8751 BUCKLAND MILL RD.
GAINESVILLE, VA. 20155-2015
703 754 9358 FAX 703 753 0939
703 754 8702

ENVIRONMENTAL
GEOTECHNICAL

PROPOSED: POOL, PATIO, PERGOLA

RESIDENCE:

600 PRESIDENT FORD LA, ALEXANDRIA, VA

SHEET: 1 OF 9

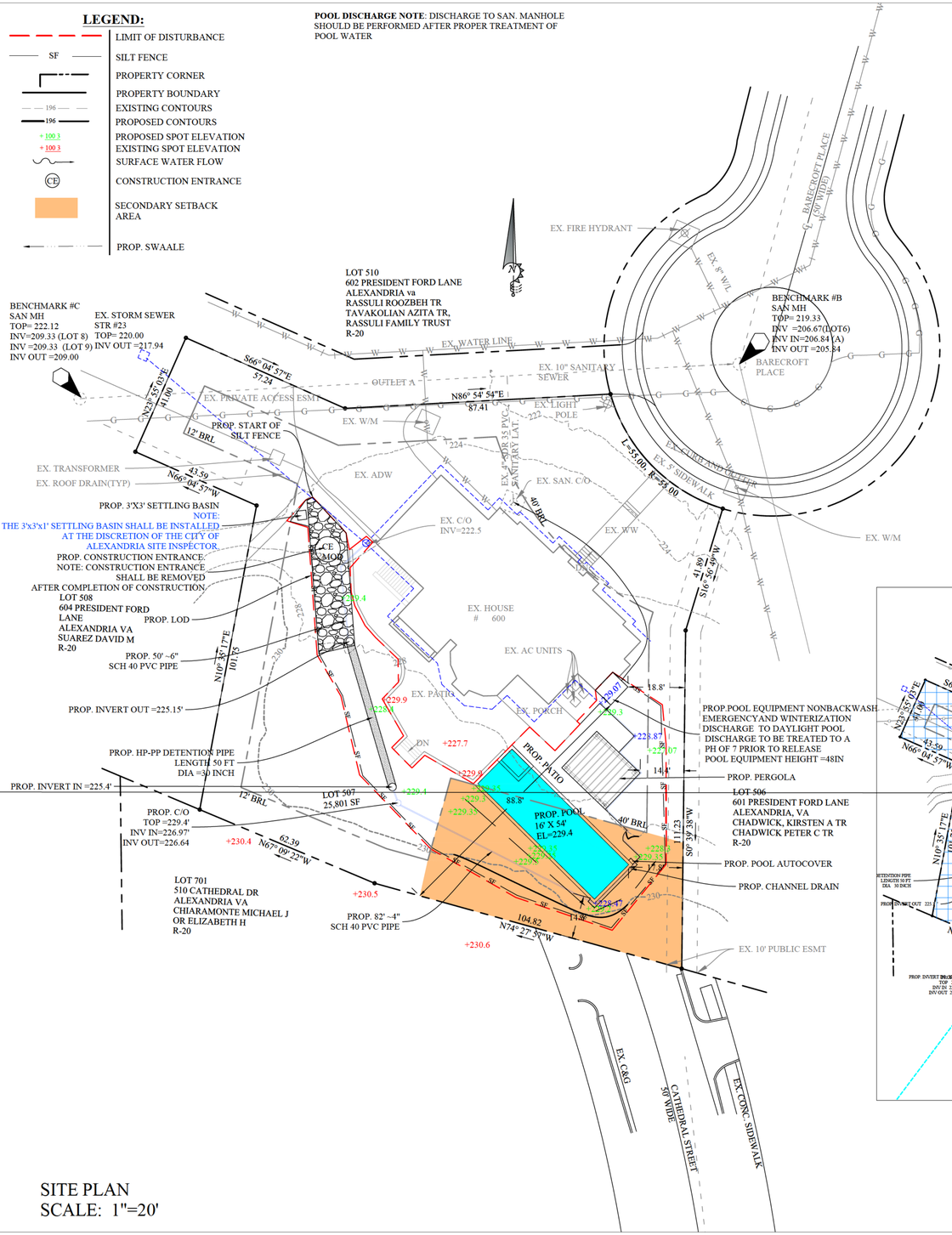
DATE:	DRAWING:
05/23/2025	24-161-C-1

MAJOR AMENDMENT TO DSP#2004-0005
SWIMMING POOL ADDITION

LEGEND:

- LIMIT OF DISTURBANCE
- SF — SILT FENCE
- PROPERTY CORNER
- PROPERTY BOUNDARY
- 196 — EXISTING CONTOURS
- 196 — PROPOSED CONTOURS
- + 100.3 — PROPOSED SPOT ELEVATION
- + 100.3 — EXISTING SPOT ELEVATION
- SURFACE WATER FLOW
- CE — CONSTRUCTION ENTRANCE
- SECONDARY SETBACK AREA
- PROP. SWAALE

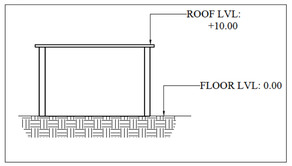
POOL DISCHARGE NOTE: DISCHARGE TO SAN. MANHOLE SHOULD BE PERFORMED AFTER PROPER TREATMENT OF POOL WATER



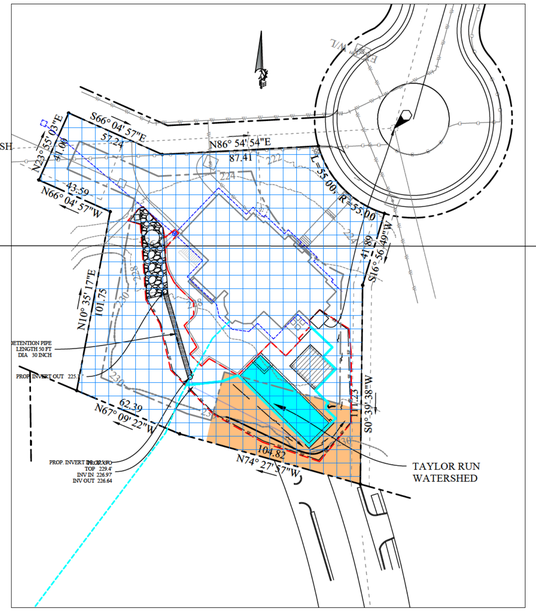
SITE PLAN
SCALE: 1"=20'

Pre and Post Impervious Area	
Pre	Area (ft²)
House	4,018
Driveway	2,672
SW & WW	236
Patio	1,856
Pre Total	**8,783**
Post	Area (ft2)
House	4,018
Driveway	2,672
SW & WW	236
Patio	1,856
Prop. Pool. Deck AND Pergola	1,896
Post Total	**10,678**
Total Impervious Area	10,678
Lot Size	25,801
% Impervious	**41.39**

NOTE:
1. **ALL EXISTING LANDSCAPING IS OUTSIDE THE LOD.**
2. **NO FAR IMPROVEMENTS. THE ONLY IMPERVIOUS AREA IS THE INGROUND POOL AND ASSOCIATED POOL PATIO. PROPOSED PERGOLA TO COMPLY WITH CITY OF ALEXANDRIA ZONING ORDINANCE.**
3. **REQUESTING A MODIFICATION FROM THE SECONDARY SETBACK DELINEATED AS A HATCHED AREA ON THE PLAN.**

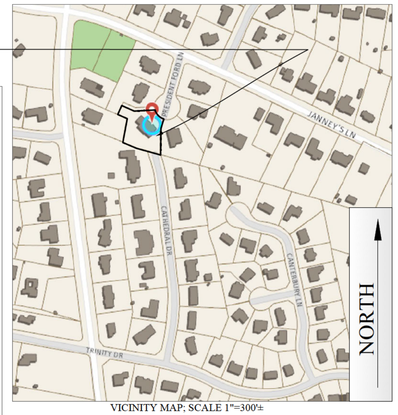


ELEVATION OF PERGOLA, SCALE 1"=10'



TOTAL DRAINAGE AREA = 0.59ACRES

GRAPHICAL SCALE
0 20 40 Feet



VICINITY MAP; SCALE 1"=300'±

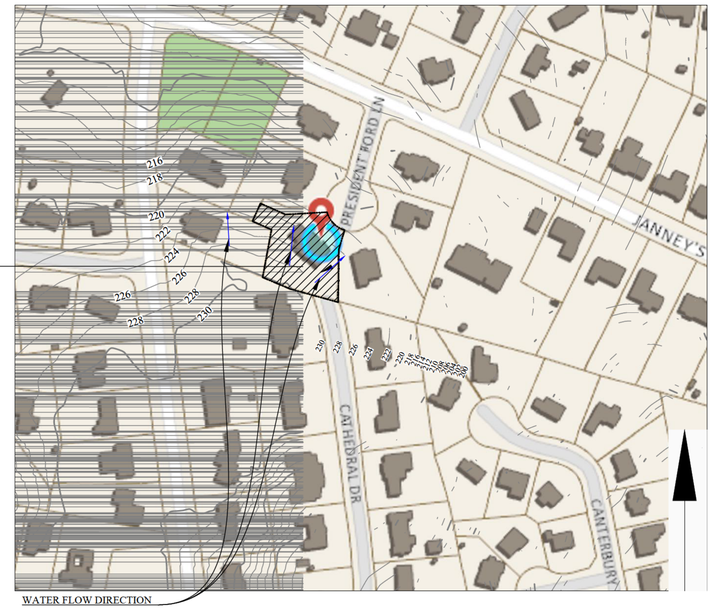
PROJECT NARRATIVE
THE PROJECT PROPOSES THE CONSTRUCTION OF POOL, SPA, PATIO AND PAVILION ON LOT 507 . THE SITE IS LOCATED WITHIN THE TAYLOR RUN WATERSHED. LOT 507 PROPOSES 0.1029 AC OF DISTURBANCE. THERE IS NO

DISTURBANCE IN THE RPA PROPOSED.

ARCHAEOLOGY NOTES

1. The applicant/developer shall call Alexandria Archaeology immediately (703-746-4399) if any buried structural remains (wall foundations, wells, privies, cisterns, etc.) or concentrations of artifacts are discovered during development. Work must cease in the area of the discovery until a City archaeologist comes to the site and records the finds.
2. Please contact Deputy City Archaeologist Garrett Fesler (703-746-4399 or garrett.fesler@alexandriava.gov) two weeks before the starting date of any ground disturbance.
3. The applicant shall not allow any metal detection and/or artifact collection to be conducted on the property, unless authorized by Alexandria Archaeology. Failure to comply shall result in project delays.

Code
All required archaeological preservation measures shall be completed in compliance with Section 11-411 of the Zoning Ordinance.



OUTFALL ANALYSIS MAP
SCALE: 1"=150'

SHEET INDEX:

SITE

GENERAL NOTES

1. **ALL WORK PER APPLICABLE STATE & LOCAL CODE.**
2. **PROPERTY: TAX MAP: 051.01-02-78**
3. **ZONING : R-20**
   OWNER : *BUCHANAN THERESA C OR THOMAS M*
   600 PRESIDENT FORD LA, ALEXANDRIA, VA
   PHONE NUMBER: 703-915-3300
   EMAIL ADDRESS: buchanantttj@gmail.com, tmxbuchanan@gmail.com

   THE BOUNDARY AND EXISTING FEATURES SHOWN ARE BASED ON LOCATION SURVEY BY: *BOWMAN CNSULTING GROUP LTD*
   DATE: 05-05-2007
4. **THE CONTRACTOR TO LOCATE ALL UTILITIES PRIOR TO EXCAVATION IN VICINITY OF WORK AREA.**
5. **ALL SILT CONTROLS ARE TO BE LOCATED AT LIMITS OF GRADING, AS SHOWN.**
6. **ALL EROSION SILTATION CONTROLS SHALL CONFORM TO THE LATEST EDITION OF STATE AND LOCAL MODIFIED MANUALS.**
7. **ZONING REQUIREMENTS: MIN. LOT SIZE:20,*000* SQ FT**
   MIN. LOT WIDTH:*120* L.F. MAX. BLDG. HT.:*30* L.F.
   SETBACKS: FRONT: *40* FT SIDE:1:2 RATIO, MIN 12 FT REAR:1:1 RATIO, MIN. 12 FT
   LOT SIZE: 25,801 SF, LOT 507 OAK GROVE (D-426)
8. **ALL VEHICULAR TRAFFIC LEAVING SITE TO BE CHECKED TO ENSURE THAT SOIL IS NOT TRANSFERRED ONTO PUBLIC STREETS.**
9. **IMPERVIOUS AREA: *10,678* S.F./0.245 AC**
   TOTAL SITE AREA: *25,801* S.F./0.592 AC
   PROPOSED IMPERVIOUS AREA PERCENT:41.39% (TOTAL INCLUDING EX. AND PROP. IMPERVIOUS.
10. **DO NOT REMOVE TREES BETWEEN SILT FENCE (SF) AND LIMIT OF CONSTRUCTION (LC).**
11. **REMOVE ONLY THOSE TREES INSIDE THE LIMIT OF CONSTRUCTION TO ALLOW FOR CONSTRUCTION ITEMS AND PROPER GRADING.**
12. **DISTURBED AREA, (PROP. WORK): *5,943* S.F.**
13. **CONTRACTOR TO VERIFY ANY ADJACENT STRUCTURE FOOTINGS PRIOR TO CONSTRUCTION, TO INSURE NO UNDERMINING CONDITION, AND FROST PROTECTION.**
14. **THE PRESENCE OF WETLANDS ON THE PROPERTY PROJECT AREA: *NO***
15. **PROPOSED POOL FENCE SHALL CONFORM TO BOCA PROVISION BEING A MINIMUM OF 48" IN HEIGHT WITH A LOCKABLE GATE SURROUNDING THE POOL, VERIFY WITH LATEST LOCAL CODE. FENCE TO BE PROVIDED FOR THE BUILDING INSPECTOR'S DISCRETION.**
16. **UTILITIES: WATER: *PUBLIC***
    SEWER: *PUBLIC*

1-1-2024

SHEET 1 - SITE PLAN

WILLIAM CHANNING BLACKWELL
LICENSE NO. 034348
COMMONWEALTH OF VIRGINIA
PROFESSIONAL ENGINEER
5/23/2025

STRUCTURAL
CIVIL

WILLIAM BLACKWELL, P.E.
8751 BUCKLAND MILL RD
GAINESVILLE, VA. 20155-2805
703 754 9358 FAX 703 753 9939
703 754 8702

ENVIRONMENTAL
GEOTECHNICAL

PROPOSED: POOL, PATIO, PERGOLA
RESIDENCE:
600 PRESIDENT FORD LA, ALEXANDRIA, VA

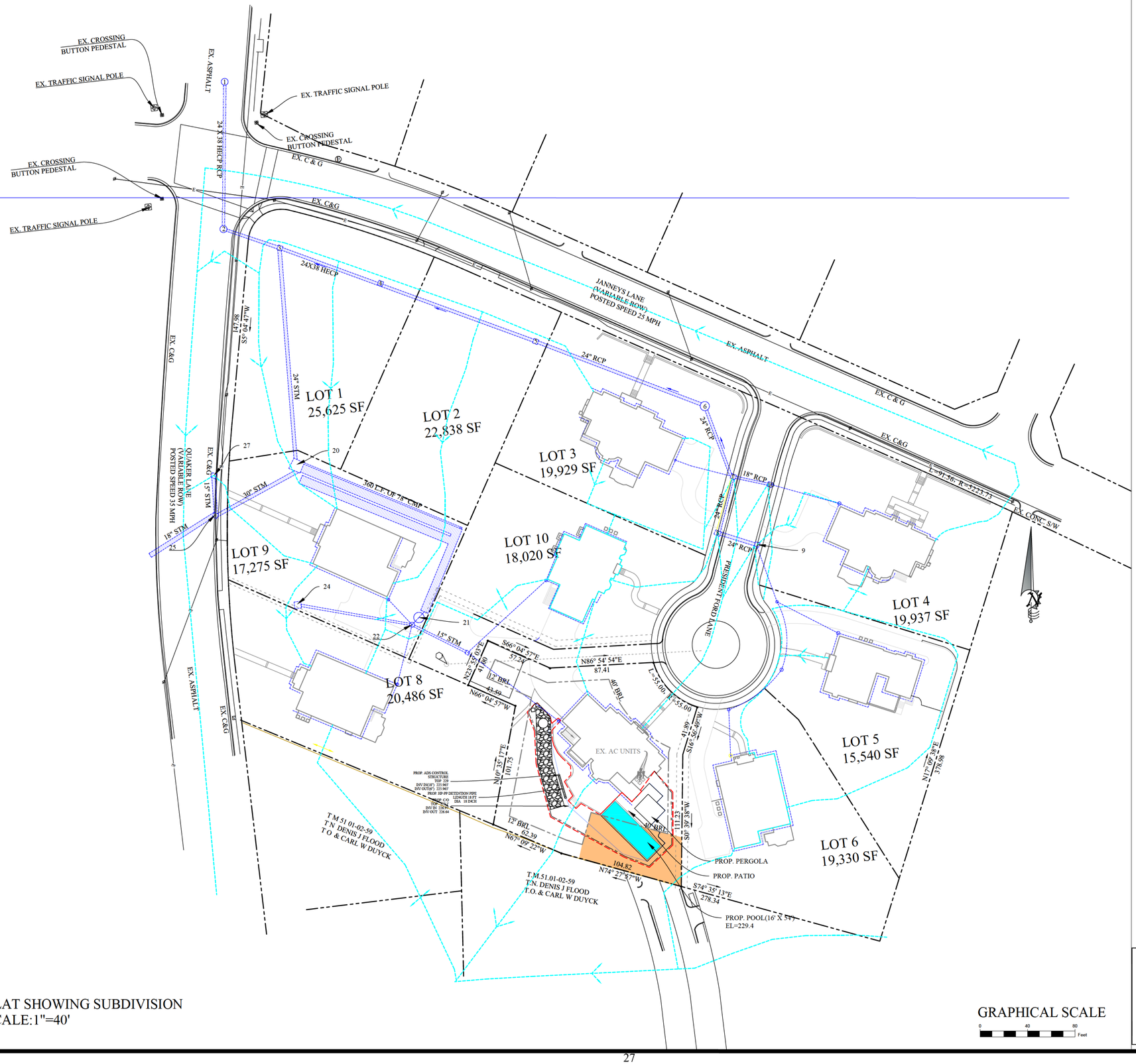
SHEET: 1 OF 9

DATE:	DRAWING:
05/23/2025	24-161-C-1

PLAN NUMBER: _____

APPROVED DATE: _____

DIRECTOR OF TRANSPORTATION


EX. CROSSING BUTTON PEDESTAL
EX. TRAFFIC SIGNAL POLE
EX. ASPHALT
24X38 HECP RCP
EX. C & G
EX. C&G
JANNEYS LANE (VARIABLE ROW) POSTED SPEED 25 MPH
24X38 HECP
24" RCP
24" STM
LOT 1 25,625 SF
LOT 2 22,838 SF
LOT 3 19,929 SF
LOT 4 19,937 SF
LOT 5 15,540 SF
LOT 6 19,330 SF
LOT 8 20,486 SF
LOT 9 17,275 SF
LOT 10 18,020 SF
QUAKER LANE (VARIABLE ROW) POSTED SPEED 35 MPH
30" STM
18" STM
15" STM
360 L.F. OF 78" CMP
18" RCP
PRESIDENT FORD LANE
EX. CONC. S/W
L=91.36' R=5223.73'
L=55.00' R=53.00'
N86° 54' 54"E 87.41
S66° 04' 57"E 57.24'
N23° 55' 03"E 41.00'
N66° 04' 57"W 43.39'
12' BRL
40' BRL
EX. AC UNITS
PROP. ADS CONTROL STRUCTURE
PROP. 109-PF DETENTION PIPE
PROP. CO
PROP. INLET
PROP. PERGOLA
PROP. PATIO
PROP. POOL(16' X 54')
EL=229.4
S74° 35' 13"E 278.34
N74° 27' 57"W 104.82
N67° 09' 22"W 62.39
N16° 35' 17"E 101.75
S0° 39' 38"W 111.23
S16° 46' 49"W 41.89
N17° 09' 38"E 378.68
T.M.51.01-02-59 T.N. DENIS J FLOOD T.O. & CARL W DUYCK
EX. CROSSING BUTTON PEDESTAL
EX. TRAFFIC SIGNAL POLE
EX. CROSSING BUTTON PEDESTAL
EX. TRAFFIC SIGNAL POLE
EX. C&G
EX. ASPHALT
EX. C&G
EX. C&G
EX. C&G
EX. C&G
EX. C&G
EX. ASPHALT
EX. C&G
EX. C&G
EX. C&G
EX. C&G
EX. C&G

STORM SEWER COMPUTATIONS

STORM SEWER COMPUTATIONS																		
STRUCTURE		DRAINAGE AREA	RUN-OFF COEF	"CA"		INLET TIME	RAIN FALL	RUNOFF "Q"	LENGTH	SLOPE	MANNING'S "n" VALUE	DIAMETER	CAPACITY	Q_{runoff} / $Q_{capacity}$	VELOCITY	FLOW TIME	MIN SLOPE	REMARKS
From	To	(ACRES) "A"	"C"	Increment	Accumulated	Min.	In./Hr.	C.F.S.	Feet	Feet/Feet	RCP / HECP	Inches	C.F.S.	%	F.P.S.	Seconds	Feet/Feet	
27	25	0.50	0.54	0.27	0.27	5	9	2.43	33	0.0050	0.015	15	3.95	61.46	3.22	10	0.0019	RCP
Ex 12	25	1.66	0.58	0.96	0.96	5	9	8.67	62.74	0.0100	0.015	18	9.10	95.24	5.15	12	0.0090	RCP
25	20	1.18	0.54	0.64	1.87	5	9	16.83	78.47	0.0061	0.015	30	27.80	60.55	5.66	14	0.0022	RCP
23	22	1.12	0.53	0.59	0.59	5	9	5.34	52.22	0.0400	0.015	12	6.16	86.68	7.85	6.65	0.0298	RCP
24	22	0.12	0.52	0.06	0.06	5	9	0.56	98.96	0.0200	0.015	12	4.36	12.89	5.55	18	0.0003	RCP
22	21	–	–	0.00	0.66	5	9	5.90	65.86	0.0400	0.015	12	6.16	95.79	7.85	8	0.0364	RCP
20	3	–	–	0.00	0.14 *	5	n/a	10.35 **	177.77	0.0068	0.015	24	16.17	63.99	5.15	35	0.0028	RCP; ** Value from Hydrograph Addition (See this sheet)
10	7	0.24	0.65	0.16	0.16	5	9	1.40	34	0.0100	0.015	18	9.10	15.43	5.15	7	0.0002	RCP
9	8	1.30	0.70	0.91	0.91	5	9	8.19	34.1	0.0050	0.015	24	13.87	59.05	4.41	8	0.0017	RCP
8	7	0.22	0.58	0.13	1.04	5	9	9.34	48.98	0.0029	0.015	24	10.56	88.41	3.36	15	0.0023	RCP
7	6	0.31	0.59	0.18	1.38	5	9	12.39	62.51	0.0030	0.015	24	10.74	115.32	3.42	18	0.0040	RCP
6	5	–	–	0.00	1.38	5	9	12.39	153.05	0.0030	0.015	24	10.74	115.32	3.42	45	0.0040	RCP
5	4	0.59	0.36	0.21	1.59	5	9	14.30	141	0.0030	0.015	30	19.49	73.36	3.97	36	0.0016	24" x 38" HECP
4	3	0.51	0.38	0.19	1.78	5	9	16.04	90	0.0030	0.015	30	19.49	82.31	3.97	23	0.0020	24" x 38" HECP
3	2	0.23	0.41	0.09	1.88	5	9	16.89	50.01	0.0030	0.015	30	19.49	86.66	3.97	13	0.0022	24" x 38" HECP
2	1	0.39	0.60	0.23	2.11	5	9	19.00	121.95	0.0098	0.015	30	35.23	53.93	7.18	17	0.0028	24" x 38" HECP
1	Ex 1	–	–	0.00	2.11	5	9	19.00	31.47	0.0092	0.015	24	18.81	100.99	5.99	5	0.0094	RCP

10-YR YEAR HYDRAULIC GRADELINE COMPUTATIONS

LOSS IN PIPE (FRICTION)									STRUCTURE LOSS																
INLET NO.	OUTLET WS	Do	Qo	Lo	Sf %	Hf	FRICTION W.S.E.	Invert of pipe out	MINIMUM W.S.E.	Vo	Ho	Qi	Vi	QiVi	Vi^2 / 2g	Hi	ANGLE	K	Hd	Ht	1.3 Ht	0.5 Ht	SURFACE ELEV.	RIM ELEV.	DIFF
EX 1	195.93	30	71.42	115.80	4.09	4.7362	200.67	198.26	200.26	5.83	0.13	19.00	6.05	114.90	0.57	0.20	18	0.14	0.08	0.41	—	0.20	200.87	204.46	3.59
1	201.79	24	19.00	31.47	0.94	0.2943	202.08	200.48	202.08	6.05	0.14	19.00	6.05	114.90	0.57	0.20	35	0.33	0.19	0.53	—	0.26	202.35	204.29	1.94
2	202.35	24	19.00	121.95	0.28	0.3469	202.70	201.67	203.27	6.05	0.14	16.89	5.38	90.84	0.45	0.16	72	0.62	0.28	0.58	—	0.29	203.56	205.60	2.04
3	203.56	24	16.89	50.01	0.22	0.1125	203.67	202.12	203.72	5.38	0.11	16.04	5.11	81.94	0.41	0.14	67	0.59	0.24	0.49	—	0.25	203.97	205.80	1.83
4	203.97	24	16.04	90.00	0.20	0.1826	204.15	202.44	204.04	5.11	0.10	14.30	4.55	65.09	0.32	0.11	0	0.00	0.00	0.21	—	0.11	204.26	206.00	1.74
5	204.26	24	14.30	141.00	0.16	0.2273	204.48	202.92	204.52	4.55	0.08	12.39	3.94	48.85	0.24	0.08	0	0.00	0.00	0.16	—	0.08	204.60	207.50	2.90
6	204.60	24	12.39	153.05	0.40	0.6086	205.21	203.43	205.03	3.94	0.06	12.39	3.94	48.85	0.24	0.08	48	0.45	0.11	0.25	—	0.13	205.34	208.50	3.16
7	205.34	24	12.39	62.51	0.40	0.2486	205.59	203.66	205.26	3.94	0.06	9.34	2.97	27.76	0.14	0.05	55	0.51	0.07	0.16	—	0.09	205.68	208.00	2.32
8	205.68	24	9.34	48.98	0.23	0.1107	205.79	203.85	205.45	2.97	0.03	8.19	2.61	21.35	0.11	0.04	86	0.68	0.07	0.14	—	0.07	205.86	212.90	7.04
9	205.86	24	8.19	34.10	0.17	0.0593	205.92	204.07	205.67	2.61	0.03	8.19	6.67	54.66	0.69	0.24	52	0.49	0.34	0.60	—	0.30	206.22	213.17	6.95
CO 1	206.22	15	8.19	50.83	0.17	0.0883	206.31	204.42	205.42	6.67	0.07	8.19	6.67	54.66	0.69	0.12	53	0.49	0.34	0.53	—	0.27	206.57	218.10	11.53
CO 2	206.57	15	8.19	57.02	0.17	0.0991	206.67	204.71	205.71	6.67	0.07	8.19	6.67	54.66	0.69	0.12	0	0.00	0.00	0.19	—	0.10	206.77	214.45	7.68
CO 3	206.77	15	8.19	75.35	0.17	0.1310	206.90	205.08	206.08	6.67	0.07	8.19	6.67	54.66	0.69	0.12	0	0.00	0.00	0.19	—	0.10	206.99	208.00	1.01
AD	206.99	15	8.19	17.07	0.17	0.0297	207.02	205.17	206.17	6.67	0.07						0	0.00	0.00	0.07	0.09	0.04	207.11	208.20	1.09
10	205.68	18	1.40	34.00	0.02	0.0081	205.68	204.09	205.29	0.79	0.00	0.00					0	0.00	0.00	0.00	0.00	0.00	205.69	208.00	2.31
20	203.97	24	10.35	177.77	0.28	0.4934	204.46	203.38	204.98	3.29	0.04	16.83	3.43	57.70	0.18	0.06	67	0.59	0.11	0.21	—	0.11	205.09	216.00	10.91
25	209.40	30	16.83	78.47	0.22	0.1752	209.58	204.50	206.50	3.43	0.05	8.67	4.90	42.49	0.37	0.13	119	0.70	0.26	0.44	0.57	0.28	210.14	213.89	3.75
EX 12	210.14	18	8.67	62.74	0.90	0.5661	210.71	207.37	208.57	4.90	0.09						63	0.57	0.00	0.09	0.12	0.06	210.83	215.60	4.77

Hi = 0.35 * Vi^2 / 2g — Ht = Ho + Hi + Hd — 90 K=0.70, 50 K=0.47, 20 K=0.16

Ho = 0.25 * Vo^2 / 2g — FINAL H = Hf + Ht — 80 K=0.66, 40 K=0.38, 15 K=0.10

Hd = K * Vi^2 / 2g — 70 K=0.61, 30 K=0.28

60 K=0.55, 25 K=0.22

** Initial Water Surface Elevation taken from pipe below EX. 5 flowing at 80% full.

HYDROGRAPH ADDITION FOR RUNS 20 – 3

Uncontrolled CA thru 3-2 = 1.95

	Time (min)	Unit Hydrograph (for Tc=5min)	Uncontrolled Hydrograph (thru 3-2)	SWM ROUTING	Hydrograph (thru 3-2)	
	0	0.00	0.00	0.00	0.00	
	5	9.00	17.52	1.30	18.82	<= Peak thru system
	10	5.79	11.27	1.96	13.23	
	15	4.28	8.33	8.41	16.74	
**	17	3.94	7.67	10.35	18.02	
*	20	3.43	6.68	10.35	17.03	
	25	2.83	5.51	7.72	13.23	
	30	2.40	4.67	6.70	11.37	
	35	2.08	4.05	5.78	9.83	
	40	1.82	3.54	5.06	8.60	
	45	1.62	3.15	4.50	7.65	
	50	1.46	2.84	3.99	6.83	
	55	1.34	2.61	3.56	6.17	
	60	1.23	2.39	3.29	5.68	
	65	1.13	2.20	3.01	5.21	
	70	1.03	2.01	2.76	4.77	
	75	0.92	1.79	2.48	4.27	
	80	0.82	1.60	2.21	3.81	
	85	0.72	1.40	2.13	3.53	
	90	0.62	1.21	2.12	3.33	
	95	0.51	0.99	2.10	3.09	
	100	0.41	0.80	2.07	2.87	
	105	0.31	0.60	2.03	2.63	
	110	0.21	0.41	1.99	2.40	
	115	0.10	0.19	1.94	2.13	
	120	0.00	0.00	1.88	1.88	

Equivalent CA for Controlled portion thru pipe 3-2 = 1.3 cfs/9in.hr = 0.14*

** MAX FLOW OUT OF STRUCTURE 20 = 10.35 AT 17 MINUTES. 0.14 CA IS USED FOR COMPUTATIONS OF PIPES DOWNSTREAM OF STRUCTURE 3.

From Sta.	To Sta.	Source of Drainage	Drainage Area A (acre)	Runoff Coeff. C	CA (acre)	Sum CA (acre)	T_c Across Area (minutes)	Total Tc = Col. 8a + Tc across pipe length (minutes)	Rainfall Intensity (in/hr)	Runoff (cfs)
2	3	4	5	6	7	8	8a	9	10	11
23	22	Drainage 1	1.16	0.54	0.63	0.63	5.0	5.0	9.00	5.64

Total Flow (cfs)	Pipe Dia. (in)	Manning roughness coefficient "n"	Pipe Slope (ft/ft)	Velocity Of Flow (ft/s)	Pipe Capacity (cfs)	Pipe Velocity Check (Desirable Minimum 3 ft/sec; Desirable Maximum 10 ft/sec for Column 16)	Pipe Capacity Check (Column 13 vs. Column 17)	Pipe Length*** (ft)
13	14	14a	15	16	17	17a	17b	18
5.64	12	0.015	0.0467	8.50	6.67	VELOCITY OK	ADEQUATE PIPE CAPACITY	52.22

STORM DRAIN NOTE: BASED ON THE CALCULATIONS, THE 15" STORM SEWER CONNECTING INLET 23 TO INLET 22 IS CAPABLE OF ACCOMMODATING THE ADDITIONAL IMPERVIOUS AREA

CURB INLET COMPUTATIONS

Label	Discharge (cfs)	Slope (ft/ft)	Spread (ft)	Gutter Width (ft)	Gutter Cross Slope (ft/ft)	Road Cross Slope (ft/ft)	Mannings Coefficient	Local Depression (in)	Local Depression Width (ft)	Efficiency	Curb Opening Length (ft)	Intercepted Flow (cfs)	Bypass Flow (cfs)	Depth (ft)	Flow Area (ft²)	Gutter Depression (in)	Total Depression (in)	Velocity (ft/s)	Equivalent Cross Slope (ft/ft)	Length Factor	Total Interception Length (ft)
Existing #03	2.19	0.0207	7.16	2.00	0.0625	0.0208	0.015	2	2.00	0.85	8	1.86	0.33	0.23	0.60	1	3	3.55	0.1077	0.65	12.33
Existing #12	5.26	0.0200	10.63	2.00	0.0625	0.0208	0.015	2	2.00	0.59	8	3.11	2.15	0.30	1.30	1	3	4.18	0.0842	0.39	20.44
Proposed #07	0.58	0.1000	1.83	2.00	0.0625	0.0208	0.015	2	2.00	1.00	12	0.58	0.00	0.11	0.10	1	3	5.53	0.1458	1.27	9.44
Proposed #08	1.27	0.1000	3.32	2.00	0.0625	0.0208	0.015	2	2.00	0.98	12	1.25	0.02	0.15	0.20	1	3	6.42	0.1420	0.90	13.32
Proposed #09	3.64	0.1000	6.25	2.00	0.0625	0.0208	0.015	2	2.00	0.72	12	2.64	1.00	0.21	0.50	1	3	7.43	0.1157	0.51	23.45
Proposed #10	1.24	0.1000	3.26	2.00	0.0625	0.0208	0.015	2	2.00	0.99	12	1.22	0.02	0.15	0.20	1	3	6.40	0.1424	0.91	13.17
Proposed #25	8.07	0.0300	11.71	2.00	0.0625	0.0208	0.015	2	2.00	0.62	12	5.05	3.08	0.33	1.50	1	3	5.38	0.0790	0.42	28.80
Proposed #27	3.24	0.0300	7.70	2.00	0.0625	0.0208	0.015	2	2.00	0.91	12	2.80	0.28	0.24	0.70	1	3	4.40	0.1033	0.74	16.31

YARD INLET AND AREA DRAIN COMPUTATIONS

Structure	Runoff Computation				Weir Computation				Orifice Computation				Grate	10-Year	Comments
	C	I	A	Q	C	L (total)	L (50%)	Hw	C	A (total)	A (50%)	Ho	Elev.	WSE	
3	0.42	9.00	0.25	0.95	3.00	8.00	4.00	0.18	0.60	4.00	2.00	0.01	205.80	205.98	4 THROATS
4	0.39	9.00	0.53	1.86	3.00	8.00	4.00	0.29	0.60	4.00	2.00	0.04	206.06	206.35	4 THROATS
5	0.37	9.00	0.61	2.03	3.00	8.00	4.00	0.31	0.60	4.00	2.00	0.04	207.50	207.81	4 THROATS
AD 1 (Lot 5)	0.70	9.00	0.11	0.69	3.00	5.40	2.70	0.19	0.60	0.64	0.32	0.20	208.20	208.40	Nyloplast 15" Grate
AD 2 (Lot 5)	0.39	9.00	0.31	1.09	3.00	6.48	3.24	0.23	0.60	1.35	0.68	0.11	208.70	208.93	Nyloplast 24" Grate

Bowman CONSULTING

STORM SEWER AND INLET COMPUTATIONS

OAK GROVE

CITY OF ALEXANDRIA — VIRGINIA

ESI Peer Review

APPROVED

CITY PLAN NO. DSP # 2004-0005

DEPARTMENT OF PLANNING & ZONING — DIRECTOR 10/31/05 DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES — SITE PLAN NO. — DIRECTOR 10/14/05 DATE

CHAIRMAN, PLANNING COMMISION — 11/10/05 DATE

DATE RECORDED — INSTRUMENT NO. — DEED BOOK NO. — PAGE NO.

PLAN STATUS	
01/27/05	MSR SUBMITTAL
02/03/05	FIRST SUBMISSION
04/14/05	SECOND SUBMISSION
06/09/05	THIRD SUBMISSION
07/26/05	FOURTH SUBMISSION
09/14/05	MYLAR SUBMISSION
DATE	DESCRIPTION

SCP DESIGN — DAW DRAWN — DAW CHKD

SCALE H: V:

JOB No. 2267-01-001

DATE : JANUARY, 2005

FILE No. 2267-D-CP-001

SHEET C10.20

UNAUTHORIZED USE PROHIBITED BY LAW

1-1-2024

SHEET C10.20- STORMSEWER AND INLET COMPUTATIONS

STRUCTURAL

CIVIL

WILLIAM BLACKWELL, P.E.
8751 BUCKLAND MILL RD
GAINESVILLE, VA. 20155-2015
703 754 9358 FAX 703 753 0939
703 754 8702

ENVIRONMENTAL

GEOTECHNICAL

AMENDMENT PLAN

PROPOSED: POOL, PATIO, PERGOLA

RESIDENCE:

600 PRESIDENT FORD LA, ALEXANDRIA, VA

SHEET: C10.2 OF 9

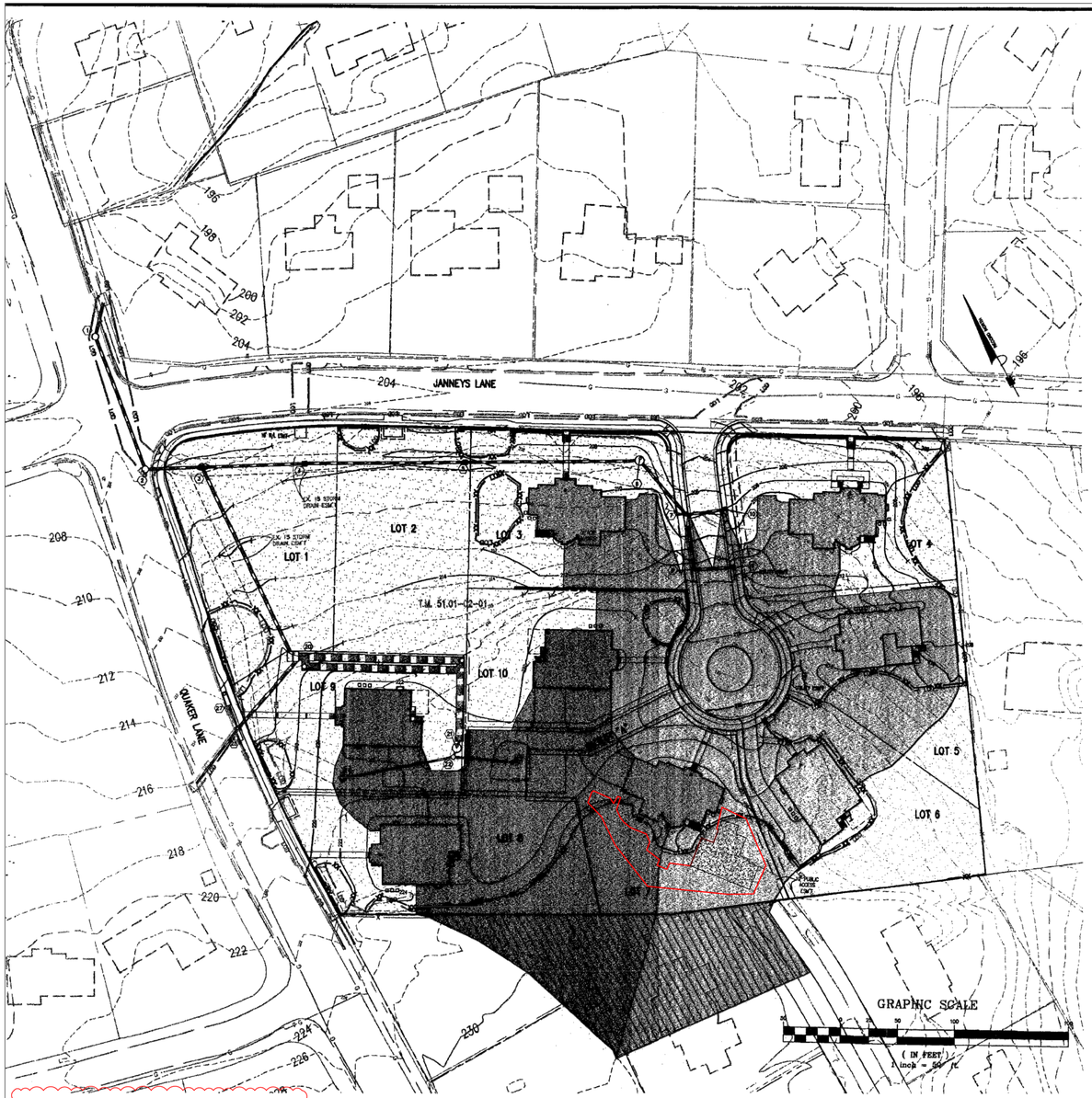
DATE: 05/23/2025

DRAWING: 24-161-C10.2

PLAN NUMBER ______

APPROVED DATE ______

DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES



TREATED ON-SITE AREA BY AQUASWIRL AT STORM DRAIN STRUCTURE #21 (1.15 AC., 0.55 IMP AC.) +0.04 =0.59 IMP AC

TREATED OFF-SITE AREA BY AQUASWIRL AT STORM DRAIN STRUCTURE #21 (0.25 AC., 0.01 IMP AC.)

TREATED ON-SITE AREA BY AQUASWIRL AT STORM DRAIN STRUCTURE #6 (1.85 AC., 0.88 IMP. AC.)

TREATED OFF-SITE AREA BY AQUASWIRL AT STORM DRAIN STRUCTURE #6 (0.28 AC., 0.02 IMP. AC.)

UNTREATED ON-SITE AREAS (3.08 AC., 0.08 IMP. AC.)

AQUASWIRL COMPUTATIONS

STRUCTURE # 21:
USING 1.75 IN/HR, Tc = 5min PER MEMO TO INDUSTRY NO. 99-01, DATED 7/30/99)
TOTAL CA = 0.80 (FROM STORM COMPS. ON SHEET C10.20)
TREATED FLOW = 0.80 * 1.75 IN/HR = 1.40 cfs
PEAK FLOW = 0.80 * 9 IN/HR = 7.20 cfs
PER AQUASHIELD SIZING CHART, USE MODEL AS-4

STRUCTURE # 6:
USING 1.75 IN/HR, Tc = 5min PER MEMO TO INDUSTRY NO. 99-01, DATED 7/30/99)
TOTAL CA = 1.30 (FROM STORM COMPS. ON SHEET C10.20)
TREATED FLOW = 1.30 * 1.75 IN/HR = 2.28 cfs
PEAK FLOW = 1.30 * 9 IN/HR = 11.70 cfs
PER AQUASHIELD SIZING CHART, USE MODEL AS-9

BMP NARATIVE

WITH THE PROPOSED IMPROVEMENTS RESULTING IN LESS THAN 42% IMPERVIOUS AREA ON THIS 6.07 AC. SITE, THIS SITE IS CONSIDERED AS NEW DEVELOPMENT FOR THE PURPOSES OF WATER QUALITY TREATMENT. THEREFORE, WORKSHEET 'A' OF THE ALEXANDRIA SUPPLEMENT TO THE CBPO HANDBOOK IS BEING UTILIZED. WITH A PHOSPHORUS REMOVAL EFFICIENCY OF 15%, THE TREATMENT FOR THIS SITE IS BEING PROVIDED WITH TWO SEPARATE AQUASWIRLS LOCATED ON LOTS 3 AND 9 (PROPOSED STRUCTURES #6 AND #21). AS NOTED ON WORKSHEET 'A' ON THIS SHEET, THE PROPOSED BMP SYSTEM IS DESIGNED TO ACCOMMODATE FOR AN ADDITIONAL 600 S.F./LOT OF IMPERVIOUS ACRES. BY TREATING THE WQV, AS SHOWN IN THE AQUASWIRL COMPUTATIONS, THIS SITE SATISFIES AND CONFORMS TO ARTICLE XIII OF THE AZO AND CONDITION #28 IMPOSED ON THIS SITE.

PROPOSED DRAINAGE MAP
NTS

In addition to BMP worksheets found in the BMP handbook that are required to be included for the project, the following tables must also be included and submitted in the final plans.

Project Description

Development or Redevelopment

Drainage Area	Impervious	Pervious	Total
Site Area	1.48	4.58	6.07
On-Site Treated	1.43	1.57	3.00
Off-Site Treated	0.03	0.50	0.53
Total Treated	1.46	2.07	3.53
On-Site Impervious Areas Disconnected by a Vegetated Buffer			
Total Treated or Disconnected			3.53

Water Treatment on site

BMP Type	Area Treated by BMP (acres)	Impervious area treated by BMP (acres)	Treated efficiency %
AQUASWIRL (SD #21)	1.40	0.55	15.00%
AQUASWIRL (SD #6)	2.13	0.90	15.00%

Miscellaneous

Total WQV Treated: yes no
Detention on site: yes no

Project is within which watershed: TAYLOR RUN
Project discharges to which body of water? CAMERON RUN

NOTES

1. THE STORMWATER BEST MANAGEMENT PRACTICES (BMPS) REQUIRED FOR THIS PROJECT SHALL BE CONSTRUCTED AND INSTALLED UNDER THE DIRECT SUPERVISION OF THE DESIGN PROFESSIONAL OR HIS DESIGNATED REPRESENTATIVE. PRIOR TO RELEASE OF THE PERFORMANCE BOND, THE DESIGN PROFESSIONAL SHALL SUBMIT A WRITTEN CERTIFICATION TO THE DIRECTOR OF T&ES THAT THE BMPS ARE:
   A) CONSTRUCTED AND INSTALLED AS DESIGNED AND IN ACCORDANCE WITH THE APPROVED FINAL SITE PLAN. CLEAN AND FREE OF DEBRIS, SOIL, AND LITTER BY EITHER HAVING BEEN INSTALLED OR BROUGHT INTO SERVICE AFTER THE SITE WAS STABILIZED.
   B) CLEAN AND FREE OF DEBRIS, SOIL AND LITTER BY EITHER HAVING BEEN INSTALLED OR BROUGHT INTO SERVICE AFTER THE SITE WAS STABILIZED. (T&ES)
   C) THE SURFACE APPARATUSES ASSOCIATED WITH THE ON-SITE STRUCTURAL STORMWATER BEST MANAGEMENT PRACTICES (BMPS) SHALL BE MARKED TO THE SATISFACTION OF THE DIRECTOR OF T&ES TO IDENTIFY THEM AS PART OF A STRUCTURAL BMP SYSTEM. (T&ES)
2. ALL DRAINAGE AREAS TO STORM FILTERS SHOULD BE STABILIZED PRIOR TO INSTALLING CARTRIDGES. THE STORMWATER BEST MANAGEMENT PRACTICES (BMPs) REQUIRED FOR THIS PROJECT SHALL BE CONSTRUCTED AND INSTALLED UNDER THE DIRECT SUPERVISION OF THE DESIGN ENGINEER OR HIS DESIGNATED REPRESENTATIVE. THE DESIGN ENGINEER SHALL MAKE A WRITTEN CERTIFICATION TO THE CITY THAT THE BMP's ARE CONSTRUCTED AND INSTALLED AS DESIGNED AND IN ACCORDANCE WITH THE APPROVED FINAL SITE PLAN.
3. THE SURFACE APPARATUSES ASSOCIATED WITH THE ON-SITE STRUCTURAL BMP's SHALL BE MARKED TO THE SATISFACTION OF THE DIRECTOR OF T&ES TO IDENTIFY THEM AS PART OF THE STRUCTURAL BMP SYSTEM.
4. THE DEVELOPER SHALL FURNISH THE OWNERS WITH AN OPERATION AND MAINTENANCE MANUAL FOR ALL BEST MANAGEMENT PRACTICES (BMP's) ON THE PROJECT. THE MANUAL SHALL INCLUDE AN EXPLANATION OF THE FUNCTIONS AND OPERATIONS OF EACH BMP AND ANY SUPPORTING UTILITIES, CATALOG CUTS ON ANY MECHANICAL OR ELECTRICAL EQUIPMENT, A SCHEDULE OF ROUTINE MAINTENANCE FOR THE BMP(s) AND SUPPORTING EQUIPMENT, AND A COPY OF THE MAINTENANCE AGREEMENT WITH THE CITY.
5. PRIOR TO RELEASE OF THE PERFORMANCE BOND, THE APPLICANT IS REQUIRED TO SUBMIT A CERTIFICATION BY A QUALIFIED PROFESSIONAL TO THE SATISFACTION OF THE DIRECTOR OF T&ES THAT THE EXISTING STORMWATER MANAGEMENT FACILITY ADJACENT TO THE PROJECT AND ASSOCIATED CONVEYANCE SYSTEMS WERE NOT ADVERSELY AFFECTED BY THE CONSTRUCTION AND THAT THEY ARE FUNCTIONING AS DESIGNED AND ARE IN A CONDITION SIMILAR TO PRIOR TO CONSTRUCTION BEGAN. IF MAINTENANCE OF THE FACILITY OR SYSTEMS WERE REQUIRED PERFORMED.

BASIC MAINTENANCE GUIDELINES:
A. A MAINTENANCE CONTRACT IS REQUIRED AS A CONDITION OF APPROVAL BY AGENCY.
B. MINIMUM ANNUAL MAINTENANCE INCLUDES:
   1. REMOVAL OF SEDIMENTS.
   2. CLEANING OR RECHARGING OF CARTRIDGES.
C. INSPECT SYSTEM CONDITION IN THE EVENT OF A 5 YEAR STORM OR GREATER.
D. REFER TO O&M GUIDELINES FOR COMPLETE DETAILS.

NOTE: FOLLOW ALL LOCAL, STATE, & FEDERAL SAFETY GUIDELINES.

Aqua-Swirl™ Sizing Chart

Aqua-Swirl™ Model	Swirl Chamber Diameter (ft)	Peak Treatment Design (on-line) (cfs)	Peak Flow / Treated Flow* (off-line) (cfs)	Inlet Pipe Diameter (can vary) (in)	Oil/Debris Storage Capacity (gal)	Sediment Storage Capacity (ft^3)
AS-3	3.25	1.8	5.5 / 1.8	8- 10	110	20
AS-4	4.25	3.0	9.0 / 3.0	10 - 12	190	32
AS-5	5.0	4.25	13.0 / 4.25	12 Max.	270	45
AS-6	6.0	6.25	18.0 / 6.25	14 - 16	390	65
AS-7	7.0	8.5	25.0 / 8.5	16 - 18	540	90
AS-8	8.0	11.0	33.0 / 11.0	18 - 20	710	115
AS-9	9.0	14.0	42.0 / 14.0	20 Max.	910	145
AS-10	10.0	17.5	51.0 / 17.5	22 Max.	1130	180

ALEXANDRIA, VIRGINIA
PHOPHOROUS
LOADING COMPUTATIONS

WORKSHEET A: NEW DEVELOPMENT

1. Compile Site-specific data and determine site impervious (Isite).

POST-DEVELOPMENT

A* = 6.07 ac.
I_A** stuctures = 0.13 ac. Rv-post = 0.05 + (0.009 * I)
parking lot = 1.22 ac. = 0.05 + 0.009 (24.5)
roadway = ac. = 0.271 unitless
other = 0.14 ac.
= ac. Rwatershed is embedded in the formula
= ac. in step 4.

Total I_A = 1.48 ac.

I site = (total I_A/A) * 100
= 25 percent expressed in whole numbers

*A is the total area of the site
** I_A is the toal amount of impervious cover.

2. Determine the need to continue.

I site = 25 %
I watershed = 41 %

If I site < I watershed STOP and submit analysis to this point. WQV Default prevails. See p. 1-8 of the Alexandria Supplement.

BMP SUPPLEMENT **2/1/1992** **PAGE 1 OF 2** **PAGE 1-A2-2**

***PER CONDITION #28, AN ADDITIONAL 600 S.F. OF IMPERVIOUS ACRE PER LOT IS INCLUDED.

PER APPROVAL LETTER FROM ALEXANDRIA DEPARTMENT OF ENVIRONMENTAL QUALITY DATED 9/6/05, A MONETARY CONTRIBUTION SHALL BE MADE TO THE ALEXANDRIA WATER QUALITY IMPROVEMENT FUND PRIOR TO RELEASE OF THE FINAL SITE PLAN. SEE SHEET C11.10 FOR A COPY OF LETTER REFERENCED ABOVE.

ESI Peer Review

APPROVED
CITY PLAN NO. DSP # 2004-0005
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE 10/31/05
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO.
DIRECTOR DATE 10/14/05
CHAIRMAN, PLANNING COMMISSION DATE 11/10/05
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

Bowman Consulting Group, Ltd.
2300 Edmund Halley Drive
Suite 302
Alexandria, Virginia 22314
Phone: (703) 548-2188
Fax: (703) 683-5781
www.bowmanconsulting.com

BMP COMPUTATIONS & DETAILS
OAK GROVE
CITY OF ALEXANDRIA VIRGINIA

COMMONWEALTH OF VIRGINIA
WILLIAM BLACKWELL
No. 038104
4/04/05
PROFESSIONAL ENGINEER

PLAN STATUS	
01/27/05	MSR SUBMITTAL
02/03/05	FIRST SUBMISSION
04/14/05	SECOND SUBMISSION
06/09/05	THIRD SUBMISSION
07/28/05	FOURTH SUBMISSION
09/14/05	MYLAR SUBMISSION
DATE	DESCRIPTION

SCP DESIGN | LEN DRAWN | DAW CHKD
SCALE H: AS NOTED V:
JOB No. 2267-01-001
DATE : JANUARY, 2005
FILE No. 2267-D-CP-001
SHEET C 11.00

SHEET C11 - BMP COMPUTATIONS DETAILS

COMMONWEALTH OF VIRGINIA
C. WILLIAM BLACKWELL
LICENSED
PROFESSIONAL ENGINEER
5/23/2025

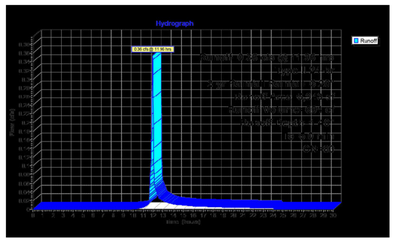
STRUCTURAL
CIVIL
WILLIAM BLACKWELL, P.E.
8751 BUCKLAND MILL RD
GAINESVILLE, VA. 20155-2905
703 754 9858 FAX: 703 753 9939
703 754 8702
ENVIRONMENTAL
GEOTECHNICAL

PROPOSED: POOL, PATIO, PERGOLA
RESIDENCE:
600 PRESIDENT FORD LA.
ALEXANDRIA, VA

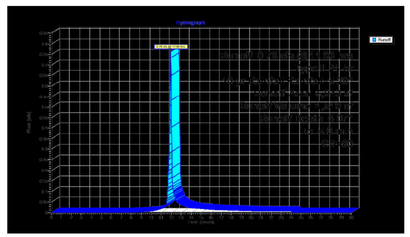
SHEET: C11 OF 9
DATE: 05/23/2025
DRAWING: 24-161-C11

PLAN NUMBER _____
APPROVED DATE _____
DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES

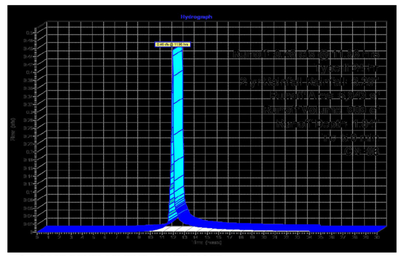
2-yr PRE-DEVELOPMENT



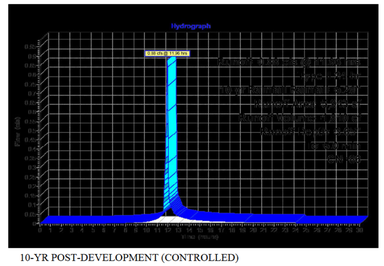
10-yr PRE-DEVELOPMENT



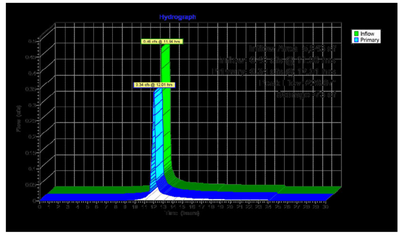
2-yr POST-DEVELOPMENT (UNCONTROLLED)



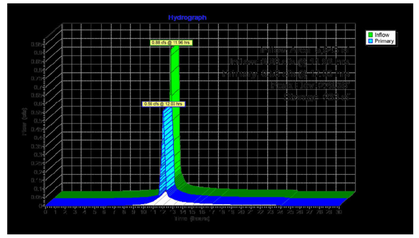
2-yr POST-DEVELOPMENT (UNCONTROLLED)



2-yr POST-DEVELOPMENT (CONTROLLED)



10-YR POST-DEVELOPMENT (CONTROLLED)



24-161-1(post development) *Type II 24-hr 2-yr Rainfall Rainfall=3.20"*
Prepared by Blackwell Engineering Printed 22/05/2025
HydroCAD® 10.20-4c s/n 05195 © 2024 HydroCAD Software Solutions LLC

Summary for Pond 2P: DETENTION PIPE

Inflow Area = 5,943 sf, 31.90% Impervious, Inflow Depth = 1.84" for 2-yr Rainfall event
Inflow = 0.46 cfs @ 11.96 hrs, Volume= 909 cf
Outflow = 0.34 cfs @ 12.01 hrs, Volume= 909 cf, Atten= 25%, Lag= 3.2 min
Primary = 0.34 cfs @ 12.01 hrs, Volume= 909 cf

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs
Peak Elev= 226.97' @ 12.01 hrs Surf.Area= 118 sf Storage= 73 cf

Plug-Flow detention time= 1.1 min calculated for 908 cf (100% of inflow)
Center-of-Mass det. time= 1.1 min (819.6 - 818.5)

Volume	Invert	Avail.Storage	Storage Description
#1	226.00'	245 cf	**30.0" Round CMP_Round 30"** L= 50.0' S= 0.0050 '/'

Device	Routing	Invert	Outlet Devices
#1	Primary	226.00'	**3.0" Vert. Orifice/Grate** C= 0.950 Limited to weir flow at low heads

Primary OutFlow Max=0.34 cfs @ 12.01 hrs HW=226.96' (Free Discharge)
1=Orifice/Grate (Orifice Controls 0.34 cfs @ 6.97 fps)

24-161-1(post development) *Type II 24-hr 10-yr Rainfall Rainfall=5.20"*
Prepared by Blackwell Engineering Printed 22/05/2025
HydroCAD® 10.20-4c s/n 05195 © 2024 HydroCAD Software Solutions LLC

Summary for Pond 2P: DETENTION PIPE

Inflow Area = 5,943 sf, 31.90% Impervious, Inflow Depth = 3.65" for 10-yr Rainfall event
Inflow = 0.88 cfs @ 11.96 hrs, Volume= 1,810 cf
Outflow = 0.56 cfs @ 12.03 hrs, Volume= 1,810 cf, Atten= 36%, Lag= 4.1 min
Primary = 0.56 cfs @ 12.03 hrs, Volume= 1,810 cf

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.02 hrs
Peak Elev= 228.38' @ 12.03 hrs Surf.Area= 73 sf Storage= 233 cf

Plug-Flow detention time= 2.3 min calculated for 1,808 cf (100% of inflow)
Center-of-Mass det. time= 2.3 min (801.2 - 798.9)

Volume	Invert	Avail.Storage	Storage Description
#1	226.00'	245 cf	**30.0" Round CMP_Round 30"** L= 50.0' S= 0.0050 '/'

Device	Routing	Invert	Outlet Devices
#1	Primary	226.00'	**3.0" Vert. Orifice/Grate** C= 0.950 Limited to weir flow at low heads

Primary OutFlow Max=0.56 cfs @ 12.03 hrs HW=228.36' (Free Discharge)
1=Orifice/Grate (Orifice Controls 0.56 cfs @ 11.41 fps)

STORMWATER DETENTION SUMMARY
2-YEAR, 24-HR STORM
(NRCS METHODOLOGY USED TO CALCULATE THE 24-HOUR STORM)
PRE-DEVELOPMENT Q_2 = 0.36 CFS
POST DEVELOPMENT, Q2, UNCONTROLLED =0.12 CFS
POST DEVELOPMENT, Q2, CONTROLLED =0.34 CFS
POST DEVELOPMENT, Q2, TOTAL =0.46 CFS @11.96 HRS
Q2 DECREASE=0.36-0.34 =0.02 CFS
THE PROPOSED DETENTION SYSTEM DECREASES THE 2-YEAR, 24-HOUR POST DEVELOPMENT PEAK FLOW RATE BY 0.02 CFS COMPARED TO THE PRE DEVELOPMENT CONDITION

STORMWATER DETENTION SUMMARY
10-YEAR, 24-HR STORM
(NRCS METHODOLOGY USED TO CALCULATE THE 24-HOUR STORM)
PRE-DEVELOPMENT Q_2 = 0.76 CFS
POST DEVELOPMENT, Q2, UNCONTROLLED =0.32 CFS
POST DEVELOPMENT, Q2, CONTROLLED =0.56 CFS
POST DEVELOPMENT, Q2, TOTAL =0.88 CFS @11.96 HRS
Q2 DECREASE=0.36-0.34 =0.2 CFS
THE PROPOSED DETENTION SYSTEM DECREASES THE 10-YEAR, 24-HOUR POST DEVELOPMENT PEAK FLOW RATE BY 0.2 CFS COMPARED TO THE PRE DEVELOPMENT CONDITION

SITE AREA= 25801

WEIGHED CN COMPUTATION

IMPERVIOUS AREA CN= 98
PERVIOUS AREA CN= 74
DISTURBED AREA= 5,943

PRE- DEVELOPMENT CN

IMPERVIOUS AREA= 0 SF
PERVIOUS AREA= 5,943 SF

WEIGHED CN~PRE- DEVELOPMENT

CN~PRE= (IMPERVIOUS AREA X IMPERVIOUS AREA CN)+(PERVIOUS AREA X PERVIOUS AREA CN) / SITE AREA

CN~PRE= (0 SF X 98)+(5943.49 SF X 74) / 5943.49SF

CN~PRE= 74

WEIGHED CN~POST - DEVELOPMENT WITHOUT DETENTION PIPE

TOTAL DISTURBED AREA= 5943 SF
IMPERVIOUS AREA= 1896 SF
PERVIOUS AREA= 4,047 SF
CN~POST W/O DETENTION= (IMPERVIOUS AREA X IMPERVIOUS AREA CN)+(PERVIOUS AREA X PERVIOUS AREA CN) / DISTURBED AREA

CN~POST W/O DETENTION= (1896 SF X 98)+(4047.49 SF X 74) / 5943.49SF

CN~POST W/O DETENTION= 82

WEIGHED CN~POST - DEVELOPMENT WITH DETENTION PIPE

TOTAL DISTURBED AREA= 5943
IMPERVIOUS AREA= 0 SF
PERVIOUS AREA= 4,047 SF
CN~POST WITH DETENTION= (IMPERVIOUS AREA X IMPERVIOUS AREA CN)+(PERVIOUS AREA X PERVIOUS AREA CN) / DISTURBED AREA

CN~POST WITH DETENTION= (0 SF X 98)+(4047 SF X 74) / 5943.49SF

CN~POST WITH DETENTION= 50

MODEL SUMMARY: DRAINING TO HOOFS RUN WATERSHED
- PRE-DEVELOPMENT:
  - TOTAL AREA OF STUDY =5,943 SF
  - RAINFALL DEPTH CONSIDERED
  a. 2 YEAR IS 3.2 INCH
  b. 10 YEAR IS 5.2 INCH
  - OUTFALL GRAPHS ARE SHOWN.
- POST-DEVELOPMENT:
  - TOTAL AREA OF STUDY = 5,943 SF
  a. PERVIOUS AREA = 3,934 SF
  b. PROP. IMPERVIOUS = 1,896 SF (RUNOFF FROM PROP. IMPERVIOUS IS DIVERTED INTO DETENTION PIPE)
  - RAINFALL DEPTH CONSIDERED
  a. 2 YEAR IS 3.2 INCH
  b. 10 YEAR IS 5.2 INCH
  - OUTFALL GRAPHS ARE SHOWN.

SUMMARY:
- THE TOTAL 2-YEAR AND 10 YEAR PRE-DEVELOPMENT RAINFALL RUNOFF FOR THE CONSIDERED AREA IS 0.26 CFS, AND 0.63 CFS RESPECTIVELY.
- IN POST DEVELOPMENT CONDITION THE RUNOFF FROM ADDITIONAL IMPERVIOUS AREA IS DIVERTED INTO THE 50 FT LONG AND 0 INCH DIA. PIPE WITH 3.0 INCH ORIFICE AS PRIMARY OUTLET STRUCTURE WHICH DETAINED RUNOFF WATER. THE NET RUNOFF FROM THE SITE IN 2-YEAR AND 10-YEAR POST DEVELOPMENT IS 0.34 CFS, AND 0.56 CFS RESPECTIVELY.
- BASED ON THE PROVIDED STORMWATER STUDY DATA, IT CAN BE CONCLUDED THAT THE RUNOFF IN 2-YEAR, AND 10-YEAR POST DEVELOPMENT IS LESS THAN 2-YEAR AND 10-YEAR PRE-DEVELOPMENT AND THERE WILL BE NO ANY ADVERSE IMPACT DUE TO THIS PROP. SWIMMING POOL, PATIO, PERGOLA AND POOL DECK.

a. The applicant/contractor shall call Alexandria Archaeology immediately (703-746-4399) if any buried structural remains (wall foundations, wells, privies, cisterns, etc.) or concentrations of historic or prehistoric artifacts are discovered during development. Work must cease in the area of the discovery until a City archaeologist comes to the site and records the finds.
b. The applicant/developer shall not allow any metal detection or artifact collection to be conducted on the property, unless authorized by Alexandria Archaeology. (Archaeology)

PLAN NUMBER: _____

APPROVED DATE: _____

DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES

1-1-2024

SHEET C11-A - DETENTION DETAIL

COMMONWEALTH OF VIRGINIA
WILLIAM CHANNING BLACKWELL
LICENSE NO. 043481
5/23/2025
PROFESSIONAL ENGINEER

STRUCTURAL
CIVIL

WILLIAM BLACKWELL, P.E.
8751 BUCKLAND MILL RD
GAINESVILLE, VA. 20155-2045
703 754 9358 FAX: 703 753 9939
703 754 8702

ENVIRONMENTAL
GEOTECHNICAL

TBD

AMENDMENT PLAN

PROPOSED: POOL, PATIO, PERGOLA

RESIDENCE:

600 PRESIDENT FORD LA,
ALEXANDRIA, VA
LOT 507 OAK GROVE (D-426)

SHEET: C11-A
OF 9

DATE:	DRAWING:
05/23/2025	23-118-C11-A

22/05/2025	
Linear Development Project?	No

(Ctrl+Shift+R)

constant values
calculation cells
final results

ct (Treatment Volume and Loads)

Enter Total Disturbed Area *(acres)* → 0.14

Maximum reduction required:	*10%*
The site's net increase in impervious cover (acres) is:	*0.043526171*
Post-Development TP Load Reduction for Site (lb/yr):	*0.08*

Check:
BMP Design Specifications List: 2011 Stds & Specs
Linear project? No
Land cover areas entered correctly? ✔
Total disturbed area entered? ✔

cres)

A Soils	B Soils	C Soils	D Soils	Totals
				0.00
			0.14	0.14
			0.00	0.00
				0.14

es)

A Soils	B Soils	C Soils	D Soils	Totals
				0.00
			0.09	0.09
			0.04	0.04
OK.	OK.	OK.	OK.	0.14

43
1.00
0.26
1.86
0.41
0.90

Runoff Coefficients (Rv)

	A Soils	B Soils	C Soils	D Soils
Forest/Open Space	0.02	0.03	0.04	0.05
Managed Turf	0.15	0.20	0.22	0.25
Impervious Cover	0.95	0.95	0.95	0.95

RE-REDEVELOPMENT

nary-Pre

Listed	Adjusted[1]
0.00	0.00
0.00	0.00
0%	0%
0.14	0.09
0.25	0.25

LAND COVER SUMMARY -- POST DEVELOPMENT

Land Cover Summary-Post (Final)	
Post ReDev. & New Impervious	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.09
Weighted Rv (turf)	0.25

Land Cover Summary-Post	
Post-ReDevelopment	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.09
Weighted Rv (turf)	0.25

Land Cover Sumr
Post-Development N

Drainage Area A Summary

Land Cover Summary

	A Soils	B Soils	C Soils	D Soils	Total	% of Total
Forest/Open (acres)	0.00	0.00	0.00	0.00	0.00	0
Managed Turf (acres)	0.00	0.00	0.00	0.09	0.09	68
Impervious Cover (acres)	0.00	0.00	0.00	0.04	0.04	32
					0.14	

res

Date: May 21, 2025

To: Angela Helton
Blackwell Group

From: Amy Staley
Credit Sales Manager
Resource Environmental Solutions

Subject: Potomac Watershed – Nutrient Credit Availability

Project Reference: 600 President Ford Lane, 0.08 Credits Requested; HUC 02070010

This letter is to confirm the availability of 0.08 authorized nutrient credits ("Nutrient Credits") from one or more of Resource Environmental Solutions' ("RES") Potomac nutrient bank facilities for use by permit applicants within the Potomac watershed, including HUC 02070010, to compensate for nutrient loadings in excess of state or local regulations, as per Virginia Code § 62.1-44.15:35 and § 62.1-44.19:14 and Virginia Administrative Code 9 VAC 25-820-10 et seq. These Nutrient Credits are generated and managed under the terms of the Banking Instruments known as the Whispering Hills Nutrient Reduction Implementation Plan ("NRIP").

Please feel free to contact me if you have any questions.

Sincerely,

Amy Staley
Credit Sales Manager
astaley@res.us | 919.209.1055

res.us

a. The applicant/developer shall call Alexandria Archaeology immediately (703-746-4399) if any buried structural remains (wall foundations, wells, privies, cisterns, etc.) or concentrations of historic or prehistoric artifacts are discovered during development. Work must cease in the area of the discovery until a City archaeologist comes to the site and records the finds.
b. The applicant/developer shall not allow any metal detection to be conducted on the property, unless authorized by Alexandria Archaeology.
c. All required archaeological preservation measures shall be completed in compliance with Section 11-411 of the Zoning Ordinance.

PLAN NUMBER: _____

APPROVED DATE: _____

DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES

SHEET C11-B - VRRM AND WQVD FORM

COMMONWEALTH OF VIRGINIA
WILLIAM BLACKWELL
LICENSE NO. 040518
PROFESSIONAL ENGINEER
5/23/2025

STRUCTURAL
CIVIL

WILLIAM BLACKWELL P.E.
8751 HUCKLAND MILL RD.
GAINESVILLE, VA. 20155-2045
703 754 9158 FAX 703 753 9939
703 754 8702

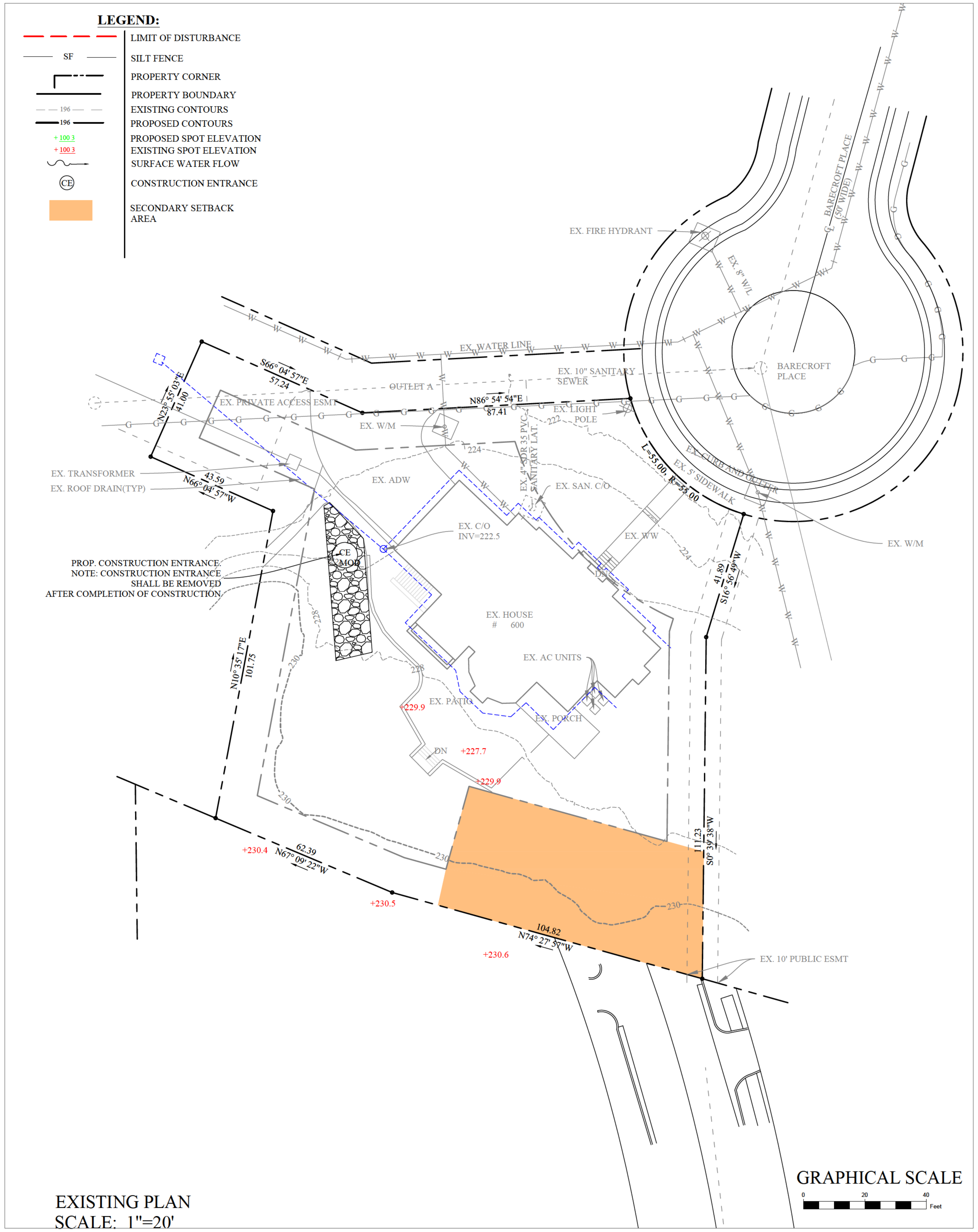
ENVIRONMENTAL
GEOTECHNICAL

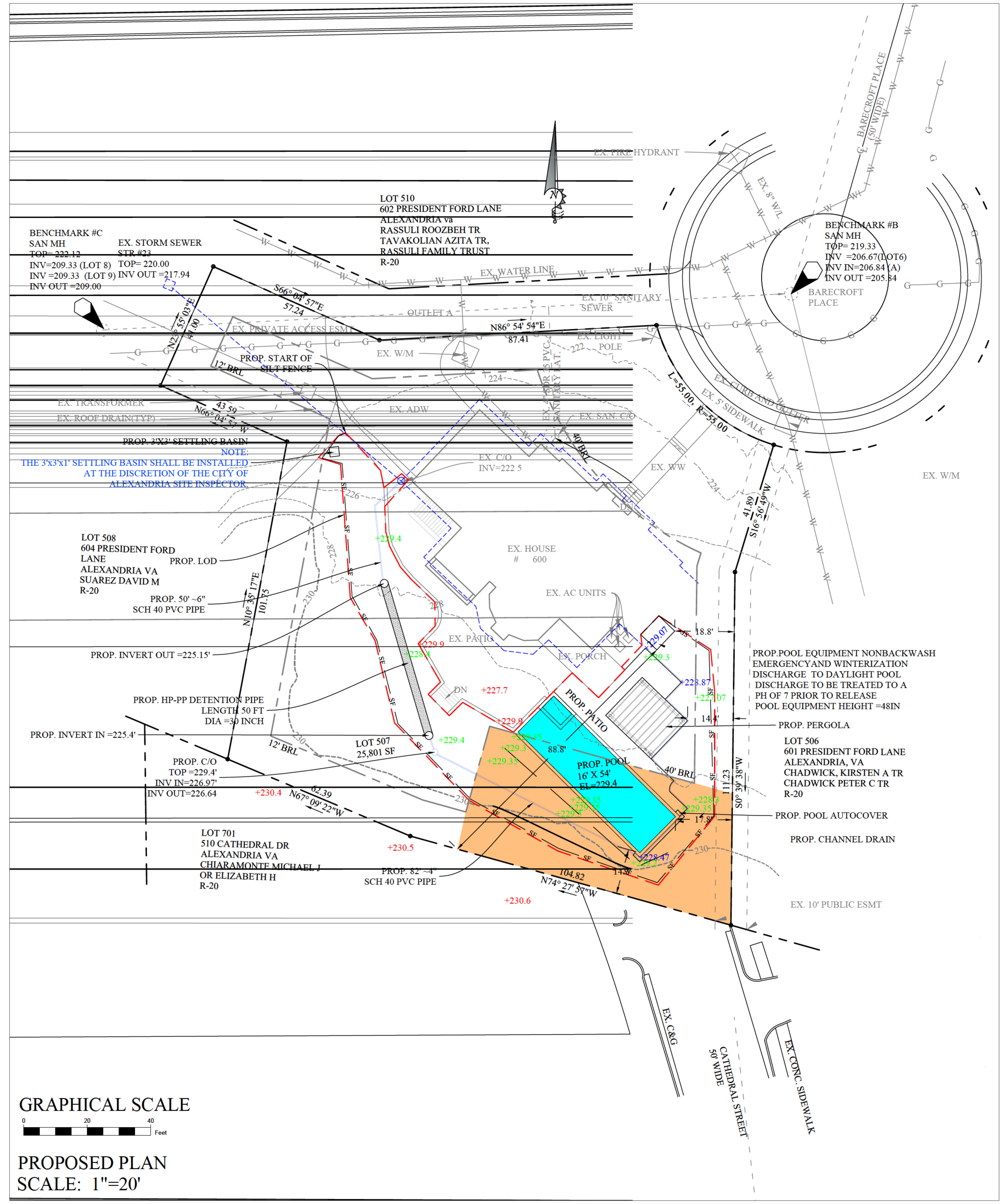
AMENDMENT PLAN

PROPOSED: POOL, PATIO, PERGOLA
RESIDENCE:
600 PRESIDENT FORD LA,
ALEXANDRIA, VA

SHEET: C11-B
OF 9

DATE: 05/23/2025
DRAWING 21-491-C11-B


LEGEND:
LIMIT OF DISTURBANCE
SILT FENCE
PROPERTY CORNER
PROPERTY BOUNDARY
EXISTING CONTOURS
PROPOSED CONTOURS
PROPOSED SPOT ELEVATION
EXISTING SPOT ELEVATION
SURFACE WATER FLOW
CONSTRUCTION ENTRANCE
SECONDARY SETBACK AREA
EX. FIRE HYDRANT
BARECROFT PLACE (50' WIDE)
EX. WATER LINE
EX. 10" SANITARY SEWER
OUTLET A
EX. PRIVATE ACCESS ESMT
EX. W/M
EX. LIGHT POLE
EX. TRANSFORMER
EX. ROOF DRAIN(TYP)
EX. ADW
EX. SAN. C/O
EX. C/O INV=222.5
EX. WW
EX. 5' SIDEWALK
EX. CURB AND GUTTER
PROP. CONSTRUCTION ENTRANCE
NOTE: CONSTRUCTION ENTRANCE SHALL BE REMOVED AFTER COMPLETION OF CONSTRUCTION
EX. HOUSE # 600
EX. AC UNITS
EX. PATIO
EX. PORCH
EX. 10' PUBLIC ESMT
EXISTING PLAN
SCALE: 1"=20'
GRAPHICAL SCALE


LOT 510
602 PRESIDENT FORD LANE
ALEXANDRIA va
RASSULI ROOZBEH TR
TAVAKOLIAN AZITA TR.
RASSULI FAMILY TRUST
R-20
BENCHMARK #C
SAN MH
TOP= 222.12
INV=209.33 (LOT 8)
INV =209.33 (LOT 9)
INV OUT =209.00
EX. STORM SEWER
STR #23
TOP= 220.00
INV OUT =217.94
BENCHMARK #B
SAN MH
TOP= 219.33
INV =206.67(LOT6)
INV IN=206.84 (A)
INV OUT =205.84
EX. FIRE HYDRANT
BARECROFT PLACE
PROP. START OF SILT FENCE
PROP. 3'X3' SETTLING BASIN
NOTE:
THE 3'x3'x1' SETTLING BASIN SHALL BE INSTALLED AT THE DISCRETION OF THE CITY OF ALEXANDRIA SITE INSPECTOR
LOT 508
604 PRESIDENT FORD LANE
ALEXANDRIA VA
SUAREZ DAVID M
R-20
PROP. LOD
PROP. 50' ~6" SCH 40 PVC PIPE
PROP. INVERT OUT =225.15'
PROP. HP-PP DETENTION PIPE
LENGTH 50 FT
DIA =30 INCH
PROP. INVERT IN =225.4'
PROP. C/O
TOP =229.4'
INV IN=226.97'
INV OUT=226.64
LOT 507
25,801 SF
LOT 701
510 CATHEDRAL DR
ALEXANDRIA VA
CHIARAMONTE MICHAEL J
OR ELIZABETH H
R-20
PROP. 82' ~4" SCH 40 PVC PIPE
PROP. POOL 16' X 54' EL=229.4
PROP. PATIO
PROP.POOL EQUIPMENT NONBACKWASH EMERGENCYAND WINTERIZATION DISCHARGE TO DAYLIGHT POOL DISCHARGE TO BE TREATED TO A PH OF 7 PRIOR TO RELEASE
POOL EQUIPMENT HEIGHT =48IN
PROP. PERGOLA
LOT 506
601 PRESIDENT FORD LANE
ALEXANDRIA, VA
CHADWICK, KIRSTEN A TR
CHADWICK PETER C TR
R-20
PROP. POOL AUTOCOVER
PROP. CHANNEL DRAIN
EX. 10' PUBLIC ESMT
EX. C&G
CATHEDRAL STREET 50 WIDE
EX. CONC. SIDEWALK
GRAPHICAL SCALE
PROPOSED PLAN
SCALE: 1"=20'

PLAN NUMBER: ____________

APPROVED DATE: ____________

DIRECTOR OF TRANSPORTATION

UNAUTHORIZED USE PROHIBITED BY LAW

1-1-2024

SHEET 7 - EXISTING AND PROPOSED CONDITION PLAN

COMMONWEALTH OF VIRGINIA
WILLIAM CHANNING BLACKWELL
Lic. No. 033348
5/23/2025
PROFESSIONAL ENGINEER

STRUCTURAL
CIVIL

WILLIAM BLACKWELL, P.E.
8751 BUCKLAND MILL RD
GAINESVILLE, VA. 20155-2015
703 754 9358 FAX 703 753 0939
703 754 8702

ENVIRONMENTAL
GEOTECHNICAL

AMENDMENT PLAN

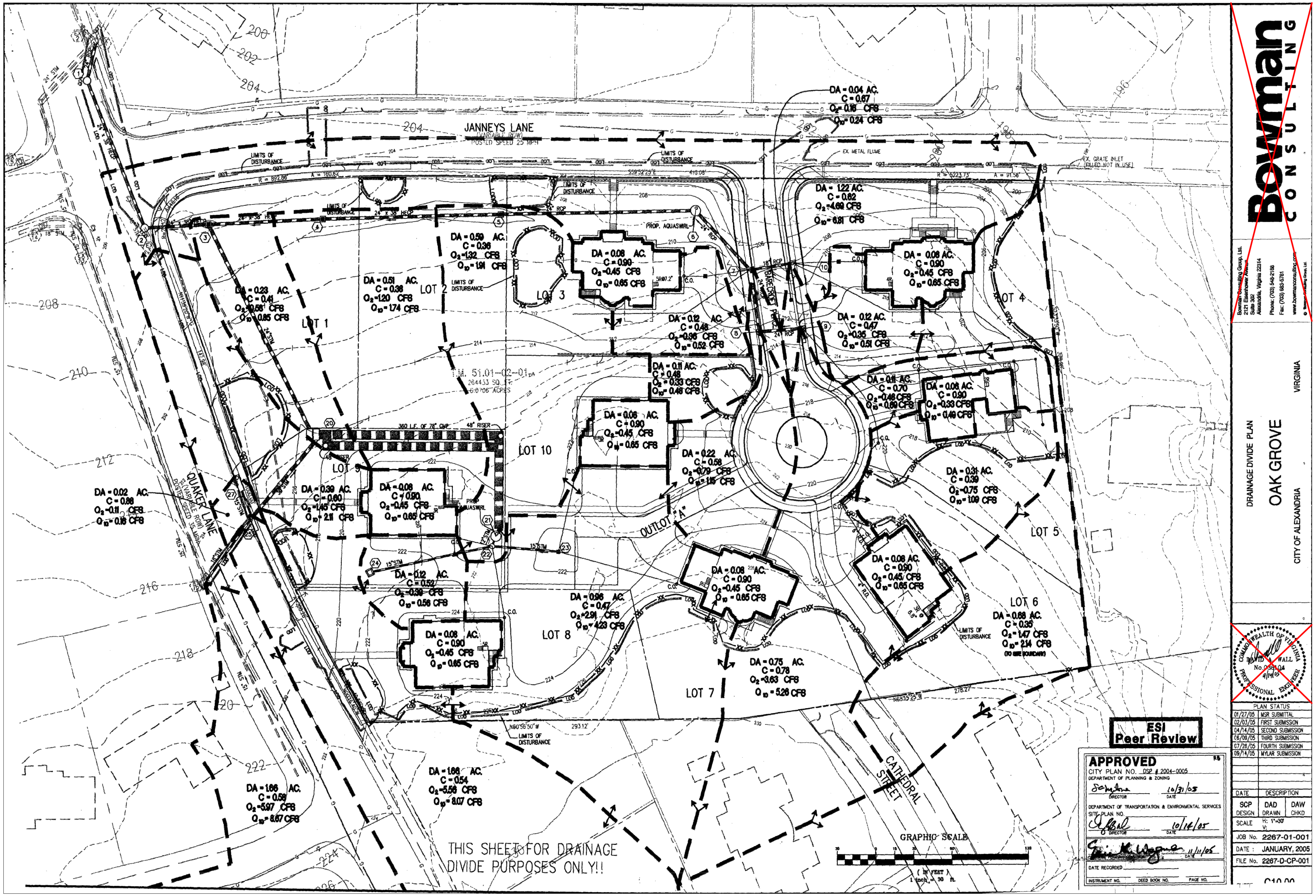
PROPOSED: POOL, PATIO, PERGOLA

RESIDENCE:

600 PRESIDENT FORD LA.
ALEXANDRIA, VA

SHEET: 7 OF 9

DATE:	DRAWING:
05/23/2025	24-161-C-7



EX. DRAINAGE PLAN
N.T.S.

PLAN NUMBER: ______________

APPROVED DATE: ______________

DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES

UNAUTHORIZED USE PROHIBITED BY LAW

1-1-2024

SHEET C10 - EXISTING DRAINAGE PLAN

STRUCTURAL
CIVIL

WILLIAM BLACKWELL, P.E.
8751 BUCKLAND MILL RD
GAINESVILLE, VA. 20155-2035

ENVIRONMENTAL
GEOTECHNICAL

AMENDMENT PLAN

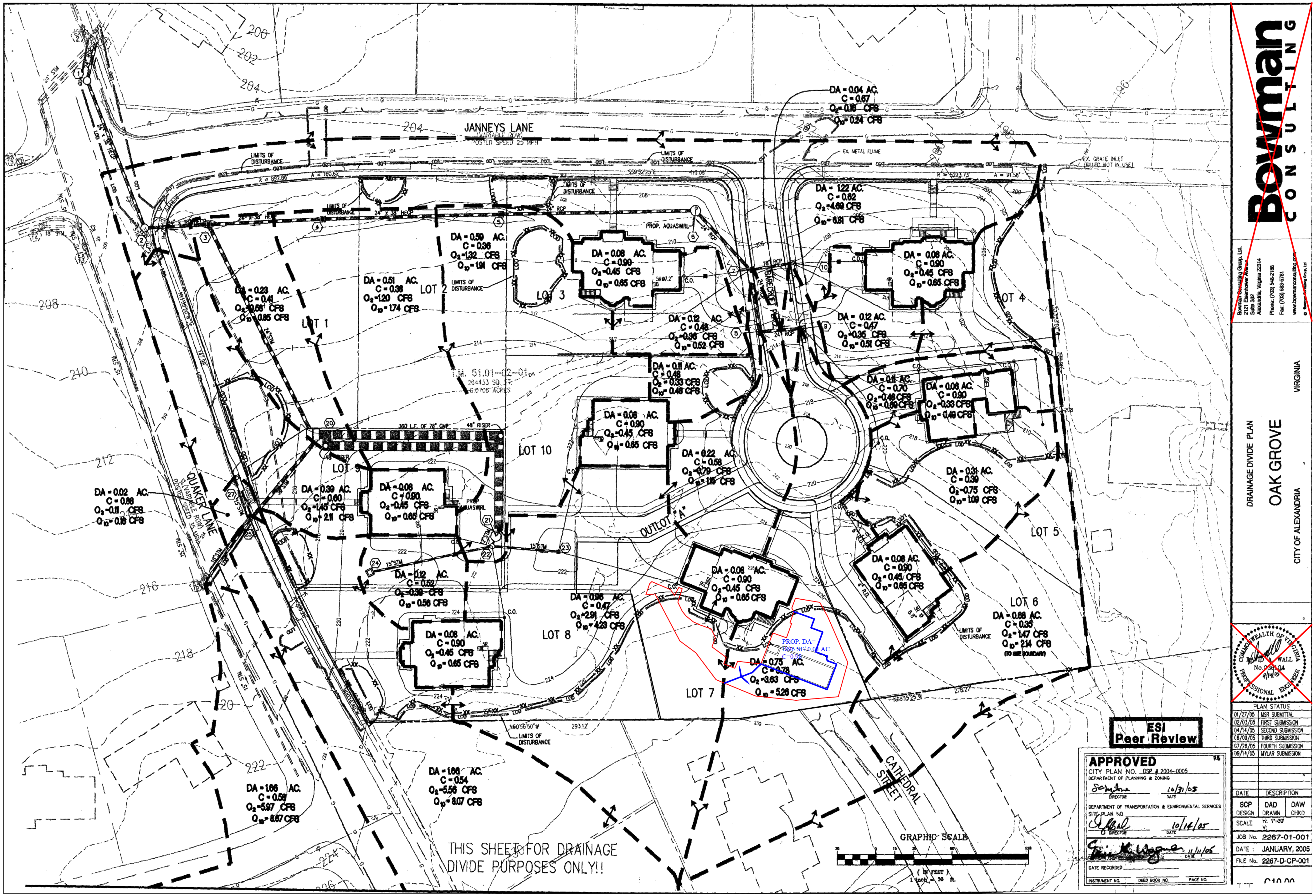
PROPOSED: POOL, PATIO, PERGOLA

RESIDENCE:

600 PRESIDENT FORD LA.
ALEXANDRIA, VA

SHEET: C10 OF 9

DATE:	DRAWING:
05/23/2025	24-161-C10


JANNEYS LANE
QUAKER LANE
CATHEDRAL STREET
OUTLOT "A"
LOT 1
LOT 2
LOT 3
LOT 4
LOT 5
LOT 6
LOT 7
LOT 8
LOT 9
LOT 10
LIMITS OF DISTURBANCE
PROP. AQUASWRL
EX. METAL FLUME
EX. GRATE INLET (FILLED-NOT IN USE)
DA = 0.75 AC.
C = 0.78
Q2 =3.63 CFS
Q10 = 5.26 CFS
DA = 1.66 AC.
C = 0.54
Q2 =5.56 CFS
Q10 = 8.07 CFS
THIS SHEET FOR DRAINAGE DIVIDE PURPOSES ONLY!!
GRAPHIC SCALE
ESI Peer Review
APPROVED
CITY PLAN NO. DSP # 2004-0005
DEPARTMENT OF PLANNING & ZONING
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
DRAINAGE DIVIDE PLAN
OAK GROVE
CITY OF ALEXANDRIA
VIRGINIA
Bowman CONSULTING
JOB No. 2267-01-001
DATE: JANUARY, 2005
FILE No. 2267-D-CP-001

PROP. DRAINAGE PLAN
N.T.S

GRAPHICAL SCALE

PLAN NUMBER: ____________

APPROVED DATE: ____________

DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES

SHEET C10-A - PROPOSED DRAINAGE PLAN

STRUCTURAL
CIVIL

WILLIAM BLACKWELL, P.E.
8751 BUCKLAND MILL RD
GAINESVILLE, VA. 20155-2035
703 754 9358 FAX 703 753 9939
703 754 8702

ENVIRONMENTAL
GEOTECHNICAL

AMENDMENT PLAN

PROPOSED: POOL, PATIO, PERGOLA

RESIDENCE:

600 PRESIDENT FORD LA.
ALEXANDRIA, VA

SHEET: C10-A OF 9

DATE: 05/23/2025

DRAWING: 24-161-C10-A

Michael and Elizabeth Chiaramonte
510 Cathedral Dr.
Alexandria, Va. 22314

April 16, 2025

Mr. Karl Moritz
Director of Planning & Zoning
City of Alexandria
301 King St.
Room 2100
Alexandria, Va. 22314
Karl.moritz@alexandriava.gov

Re: Pool at 600 President Ford Lane

Dear Mr. Moritz:

We live at the dead end of Cathedral Drive directly behind the Buchanan's home at 600 President Ford Lane. Our property is the only property that abuts their backyard.

We understand that the Buchanans would like to construct a pool in their backyard on the side that adjoins our property and a portion of Cathedral Drive. We also understand that the City may be concerned that we could see people in the pool from our front yard. That concern is not valid.

When we moved into our home in 2014, we added to the many Green Giant Arborvitae that the Buchanans had already installed all along the back and corner of their backyard. They are now in excess of 20 feet high and are dense, forming a complete visual barrier to the Buchanans' backyard from both Cathedral Drive and our front and side yards. We cannot see into their backyard nor could anyone standing at the end of Cathedral Drive.

Therefore, we do not object to the Buchanans installing a pool in their backyard and do not believe their backyard should be considered a front yard merely because part of it adjoins the dead end of Cathedral Drive. Please let us know if you need any additional information from us in support of the Buchanans' project.

Sincerely,

Elizabeth Chiaramonte

PC Docket Item #4
DSP#2025-00013
June 23, 2025

From: Daniel Muino
To: PlanComm
Cc: Mary T Hernandez; Daniel Muino
Subject: [EXTERNAL]Development Site Plan #2025-00013
Date: Thursday, June 19, 2025 10:24:42 AM

Dear Sir or Madam,

We are writing to support the request of Thomas and Theresa Buchanan for a Development Site Plan with a modification to the secondary front yard setback. We are the owners of 603 President Ford Lane, which is two houses away from the Buchanan residence at 600 President Ford Lane. We believe the proposed construction of a swimming pool and related improvements on the Buchanan property is entirely reasonable and would not adversely impact any of the neighboring properties. Thank you for your consideration.

Best regards,

Daniel and Mary Muino
Owners of 603 President Ford Ln, Alexandria, VA 22302
dmuino@post.harvard.edu

From: theresa buchanan
To: K B
Cc: PlanComm; Thomas Buchanan
Subject: Re: Subject: Support for Variance Request – 600 President Ford Lane (Thomas and Theresa Buchanan)
Date: Thursday, June 19, 2025 12:58:56 PM

Thank you so much!

Theresa Buchanan
703-915-3300

On Jun 19, 2025, at 11:10 AM, K B <kdbphd@outlook.com> wrote:

Kyle and Amy Boyles

606 President Ford LN

Alexandria, VA 22302

Mobile: 703-216-8197

Alexandria Planning and Zoning Board
City Hall
301 King Street
Alexandria, VA 22314

Subject: Support for Swimming Pool Project and Variance Request

We are writing to express our strong support for the proposed swimming pool project and associated variance request submitted by Thomas and Theresa Buchanan for their property at 600 President Ford Lane, Alexandria, VA 22302.

The Buchanans are thoughtful residents who have demonstrated a sincere commitment to enhancing their property in a way that is respectful of the surrounding neighborhood. Their proposed plans for a swimming pool are both tasteful and appropriate, and they have made every effort to ensure the design is in harmony with the character of the community.

We understand that the unique layout and constraints of the lot require a variance to move forward with the project. In my opinion, the request is

entirely reasonable and does not negatively impact neighboring properties, public safety, or the overall integrity of the neighborhood. On the contrary, improvements like these contribute to the vitality and appeal of our community.

We respectfully urge the Planning and Zoning Board to approve the Buchanans' variance request and allow them to proceed with their swimming pool project at 600 President Ford Lane.

Thank you for your time and thoughtful consideration.

Sincerely,

Kyle and Amy Boyles