City of Fairfax, Virginia
City Council Regular Meeting

Agenda Item #_____

City Council Meeting_____

TO: Honorable Mayor and Members of City Council

FROM: Robert A. Stalzer, City Manager

SUBJECT: Request of Northfax JV LLC c/o THE LANN COMPANIES, for a Zoning Map Amendment, Special Use Permit, Special Exception, vacation and dedication of right-of-way for the realignment of Orchard Street and extension of Farr Avenue and issuance of a Certificate of Appropriateness by City Council on the premises known as Northfax West and more particularly described as and identified as 10516 Orchard Street (Tax Map 57-2-02-003), 10517 Orchard Street (Tax Map 57-2-02-005), 3590 Chain Bridge Road (Tax Map 57-2-02-017), 3580 Chain Bridge Road (Tax Map 57-2-02-018), 10505 Orchard Street (Tax Map 57-2-02-019), 3570 Chain Bridge Road (Tax Map 57-2-02-020), Mclean Avenue (Tax Map 57-2-07-015-B), 10508 Orchard Street (Tax Map 57-2-08-005), 10510 Orchard Street (Tax Map 57-2-08-006), 10512 Orchard Street (Tax Map 57-2-08-007), 10514 Orchard Street (Tax Map 57-2-08-008), 10515 Orchard Street (Tax Map 57-2-08-010), 10507 Orchard Street (Tax Map 57-2-08-011), 10509 Orchard Street (Tax Map 57-2-08-012), 10511 Orchard Street (Tax Map 57-2-08-013), 10513 Orchard Street (Tax Map 57-2-08-014), And Mclean Avenue (Tax Map 57-2-47-000-A).

ISSUE(S): The applicant is requesting a Zoning Map Amendment (Rezoning) pursuant to City Code Section 110-6.4 and Section 110-6.6, from RM Residential Medium and CR Commercial Retail to PD-M Planned Development-Mixed Use while retaining the Architectural Control Overlay District (ACOD), and approval of a Master Development Plan with modifications and commitments, pursuant to Section 110-3.8 (Planned Development Districts); to allow the development of townhouses, congregate living facility and assisted living facility, and a future development phase; a Special Use Permit pursuant to City Code Section 110-4.15 (Floodplain Regulations) to allow for disturbance in the 100-year floodplain boundary; a Special Exception pursuant to City Code Section 110-4.18 (Chesapeake Bay Preservation) for disturbance of Resource Protection Area to build culvert and consideration of an amendment to the City of Fairfax Chesapeake Bay preservation area map; a Major Certificate of Appropriateness pursuant to City Code Section 110-6.5 for architecture and landscaping; and, a consideration of an ordinance permanently vacating, discontinuing and closing an approximately 13,433 square foot (0.30838 acre), more or less, portion of a public right-of-way (Orchard Street) within the City of Fairfax, including easements and a dedication of right-of-way for the realignment of Orchard Street and extension of Farr Avenue consistent with improvements shown on the Master Development Plan and the Statement of Commitments. Consideration of the vacation and dedication shall occur at the same meeting as consideration of the development application.

SUMMARY: A four (4) phased development with infrastructure improvements (i.e., constructing a culvert and road realignment), 56 townhouses, 200-unit senior living building and undetermined mix of uses that will be subject to a future MDP amendment.

FISCAL IMPACT: Staff anticipates a range for the fiscal impact of -$29,000 to $215,000 with an average $93,000 annually as a result of the proposed redevelopment.

RECOMMENDATION: Staff recommends approval of the Zoning Map Amendment with modifications and commitments; and staff recommends approval of the Special Use Permit, Special Exception, vacation/dedication of right-of-way and Certificate of Appropriateness with conditions.

ALTERNATIVES: City Council may approve or deny all of the subject applications, or defer the decision on all of the subject applications to a later date.

RESPONSIBLE STAFF/POC: Albert Frederick, Senior Planner
Jason Sutphin, Community Development Division Chief
Brooke Hardin, Director, Community Development & Planning

COORDINATION:

Community Development and Planning	Building and Fire Code	Human Services
Public Works	Fairfax Water	Police
City Attorney	Historic Resources	Real Estate
City Schools		

ATTACHMENTS: Staff Report

CITY OF FAIRFAX

Department of Community Development & Planning

Zoning Map Amendment (Z-20-00006)
Special Use Permit (SU-20-00007)
Special Exception (SE-20-00150)

PUBLIC HEARING DATE

June 23, 2020

APPLICANT

Northfax JV LLC c/o THE LANN COMPANIES

OWNER

Northfax JV LLC c/o THE LANN COMPANIES

AGENT

Walsh Colucci Lubeley & Walsh, P.C.

PARCEL DATA

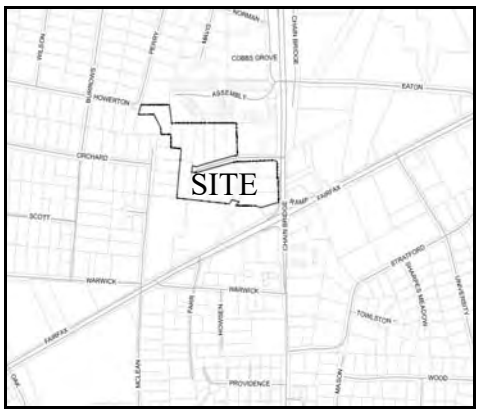
Tax Map ID/Street Address

- ◊ See Attachment 6, Exhibit A

Zoning District

- ◊ RM, Residential Medium/CR, Commercial Retail
- ◊ Architectural Control Overlay District (ACOD)

Location Map



APPLICATION SUMMARY

The applicant is requesting a Zoning Map Amendment (Rezoning) from RM Residential Medium and CR Commercial Retail to PD-M Planned Development-Mixed Use while retaining the Architectural Control Overlay District (ACOD), and approval of a Master Development Plan with modifications and commitments; to allow the development of townhouses, congregate living facility and assisted living facility, and a future development phase; a Special Use Permit (Floodplain Regulations) to allow for disturbance in the 100-year floodplain boundary; a Special Exception (Chesapeake Bay Preservation) for disturbance of Resource Protection Area to build culvert and consideration of an amendment to the City of Fairfax Chesapeake Bay preservation area map; a Major Certificate of Appropriateness for architecture and landscaping; and a consideration of an ordinance permanently vacating, discontinuing and closing an approximately 13,433 square foot (0.30838 acre), more or less, portion of a public right-of-way (Orchard Street) within the City of Fairfax, including easements and a dedication of right-of-way for the realignment of Orchard Street and extension of Farr Avenue consistent with improvements shown on the Master Development Plan and the Statement of Commitments.

STAFF RECOMMENDATION

See Page 18 of this report.

BACKGROUND INFORMATION

The owner and applicant have assembled 17 parcels that total approximately 11.46 acres (including right-of-way for Orchard Street). The site has two existing single-family homes constructed around the mid-1950's-early 1960's, two parking lots for vehicle storage on approximately three (3) acres, a 3,100 square foot sit-down restaurant, a street that dead ends into a cul-de-sac and a wooded area in the northwest corner of the site that is approximately four (4) acres. The subject property is also located in the 100-year floodplain and the Resource Protection Area. A substantial portion of the floodplain and RPA have been developed over time with houses (existing and former), a semi-industrial use, a road and former rail line, utilities, restaurant, and temporary vehicle storage. The subject property lies within the Accotink Creek Watershed and is located in the Middle Potomac River drainage area identified by the Hydrologic Unit Code (HUC) 02070010. There is a perennial stream located near the center of the property and an intermittent stream is located along the southern boundary with an onsite confluence of the perennial stream traversing through the site that flows from the northwest to southeast into an eight (8) foot box culvert completed in 2019 that moves water under Chain Bridge Road (Route 123), near the intersection of Chain Bridge Road (Route 123) and Fairfax Boulevard (Route 50). The site has a history of flooding near the intersection of Chain Bridge Road (Route 123) and Fairfax Boulevard (Route 50). Further information on adjacent properties are provided below:

Table 1: Existing Use and Surrounding Properties

Direction	Existing Land Use/Uses	Zoning	Future Land Use
Site	Auto Dealer/Vehicle Storage; Residential/Two Single-Family Homes Commercial Retail/Restaurant	CR, Commercial Retail RM, Residential Medium in the ACOD	Activity Center Green Network - Private
North	Commercial – Office/Townhomes; Commercial – Office/Insurance Agency; Commercial – Retail/Gas Station Open Space – Recreation and Historic/ Undeveloped Land	CO, Commercial Office RM, Residential Medium RT, Residential Townhouse CR, Commercial Retail in the ACOD	Townhouse/ Single-Family Attached Neighborhood and Green Network - Private
South	Open Space – Undesignated/Vacant; Commercial – Retail/Car Dealership, Auto Body Repair and Restaurant	CR, Commercial Retail in the ACOD	Activity Center
East	Commercial – Retail; Unoccupied Commercial Structures/ Car Dealership	CR, Commercial Retail in the ACOD	Activity Center
West	Residential-Single Detached/ Single-Family Homes	RM, Residential Medium RL, Residential Low in the ACOD	Single-Family Detached Neighborhood

The Future Land Use designation for the subject property is Activity Center and Green Network-Private. The Comprehensive Plan Map does not indicate green network through the majority of the site where the applicant is proposing the culvert. The surrounding land use designations are a combination of Activity Center, Single-Family Detached Neighborhood, Green Space – Private, and Townhouse/Single-Family Attached Neighborhood. The subject property is zoned RM Residential Medium and CR Commercial Retail. The surrounding zoning districts are a combination of RL Residential Low, RM Residential Medium, RT Residential Townhouses, CO Commercial Office, and CR Commercial Retail. The subject property is immediately surrounded by uses that range from single-family homes to townhouses, auto dealers to offices, gas station to a restaurant and City property. Immediately to the west of the site is a single-family neighborhood on McLean Avenue and Orchard Street. To the north of the site is a townhouse community, office building and a Shell gas station. The subject property is located near two major corridors of Fairfax Boulevard and Chain Bridge Road that serve predominately non-residential uses.

The Fairfax Boulevard (Route 50) corridor from McLean Avenue to the west and Eaton Place to the east are commercial uses. On the north side of Fairfax Boulevard and south of the subject property is DARCAR Pre-owned Fairfax at McLean Avenue, Brown's Fairfax Mazda, sit-down restaurant in 29 Diner, a used auto-sales lot and finally, a parcel owned by the City of Fairfax. On the northeast side of Chain Bridge Road to Eaton Place are commercial uses that include Fairfax Exxon, Jim McKay Chevrolet Used Car Sales, and Point 50, a recently approved and under construction shopping center. On the south side of Fairfax Boulevard from Warwick Avenue to Chain Bridge Road are commercial uses that include Fairfax Kia, a meat and grocery store, insurance agency, dental office, an automotive oil change and lubrication shop, medical spa, religious institution and the former Rite Aid site (proposed Wawa convenience store). On the south east side of the Chain Bridge Road along Fairfax Boulevard to Eaton Place are commercial uses that range from convenience stores and gas stations to auto sales, and hotel to sit-down restaurants.

Pre-Application Meetings

In January 2020, City Council and Planning Commission held pre-application development briefings with the applicant to discuss a two-phased redevelopment plan at the subject site. Phase I is 7.8 +/- acres and situated along the northern and western property line. Phase I of the proposed project consists of 56 townhouses, up to 200 unit senior living facility (114 Congregate Living Facility and 86 Assisted Living Units) with 120 structured parking spaces, a joint road construction project by the applicant and the City of Fairfax, construction of a culvert for the stream on-site, and disturbance in floodplain and Resource Protection Area. The proposed townhomes are planned at 40 +/- feet in height and the senior living building is planned at a height of 80 +/- feet. The Farr Avenue extension to Fairfax Boulevard requires coordination with the proposed redevelopment of the Brown's Mazda property. Phase II of the proposal is 3.5 +/- acres with an undetermined mix of future uses along Chain Bridge Road and a future access road from Chain Bridge Road. The applicant had sought and received approvals from the state and federal government on various permits, and these permits were described to the Planning Commission and City Council. During the permitting process, there was a public comment phase and we are not aware of any public comments on the permits that were applied for.

Post-Application Work Sessions

The Planning Commission on May 11, 2020 held a post-submission work session with the applicant to discuss the rezoning, Special Use Permit, Special Exception and proposed master development plan. Likewise, the City Council met on May 13, 2020 met to discuss the project as well. As part of the post-submission packet, the application included the Virginia Department of Environmental Quality (VDEQ) with the issuance of a Virginia Water Protection Permit (Permit No. 18-1003), the US Army Corps of Engineers with the issuance of a State Program General Permit (17-SPGP-01), and a Conditional Letter of Map Revision (CLOMR) from the Federal Emergency Management Agency (FEMA, as well as the Northfax WQIA Report. No direction was given to the applicant to modify the plan in terms of the extent of the floodplain, Resource Protection Area and culvert.

The applicant had a pre-application work session with the Board of Architectural Review on March 4, 2020. The applicant submitted a formal application on April 28, 2020. The BAR hearing for recommendation is scheduled for the June 17, 2020. Staff recommends the following conditions:

1. A minimum of two courses of masonry shall be used as the foundation material on all sides of the senior living building, including parking garage elevations.
2. All canopy trees shall be 3.5-inch caliper consistent with the requirements of the Zoning Ordinance.
3. Additional canopy and understory trees shall be planted in the front and side yards of townhouses in the northern portion of the site where practicable.
4. Additional shrubs shall be planted along the path and near the stream in the open spaces in the northwestern portion of the site. Shrub plantings shall be selected from Appendix III of the Design

Guidelines for shrubs, herbaceous plants, groundcover, ferns, and grasses as listed in the section on Resource Protection Area (RPA) plantings.

5. Lattice screens for roof-mounted townhouse mechanical equipment shall be in a color to match the fourth-floor wall surfaces.
6. All ground-mounted appurtenances shall be screened from view in the right-of-way.
7. The proposed modifications shall be in general conformance with the review materials received by staff and included in the staff report, as modified through the date of this meeting, except as further modified by the Board of Architectural Review, the Director of Community Development and Planning, Zoning, or the Building Official.

Planning Commission Public Hearing

The Planning Commission public hearing is set for June 22, 2020 and as of the writing of this report that recommendation has not been provided.

Master Development Plan

The subject property is composed of seventeen (17) parcels have been assembled for the redevelopment of a four (4) phased Master Development Plan:

- Phase One includes the construction of a storm drainage culvert, utility relocations, realignment of Orchard Street and other improvements (i.e., walking trail, sidewalks and bike lanes) shown on the Master Development Plan. The applicant seeks approval of a Special Use Permit to modify the current 100-year floodplain and approval of a Special Exception to impact the Resource Protection Area by culverting the stream that traverses the site from the northwest to the southeast into an existing box culvert on Chain Bridge Road. The existing floodplain and stream limits the development area to approximately half of the 11.46-acre site. The applicant has submitted a RPA Site Specific Delineation Plan and a Water Quality Impact Assessment. Likewise, the applicant has applied for and has received the approvals from the Virginia Department of Environmental Quality (VDEQ) with the issuance of a Virginia Water Protection Permit (Permit No. 18-1003), the US Army Corps of Engineers with the issuance of a State Program General Permit (17-SPGP-01), and a Conditional Letter of Map Revision (CLOMR) from the Federal Emergency Management Agency (FEMA). As part of Phase One, the applicant plans to improve and realign Orchard Street to connect to the proposed Extension of Farr Avenue. This realignment would require a vacation of approximately 13,433 square foot of public right-of-way for Orchard Street and a dedication of land for a dedication of land for the Extension of Farr Avenue.
- Phase Two includes fifty-six (56) townhouses by Madison Homes with a density of 4.88 units per acres. Townhouses are a mix of front entry units at 24-feet in width and rear entry units at 20-feet in width. Each unit is required to have two (2) parking spaces per unit and the applicant has provided two garaged spaces for each unit with twenty-two additional surface spaces. The applicant has provided 134 parking spaces (112 garage spaces and 22 private surface spaces). The townhouses are proposed at approximately 44 feet in height. One acre of the site in the northwest corner is proposed as open space. As part of this phase, the applicant plans to provide a linear park on Orchard Street to the proposed trail in the northwest corner that connects to Howerton Avenue/Perry Street.
- Phase Three is the senior living building, owned and operated by Brightview Senior Living Development, LLC, with 114 Congregate Living Facility units (Independent Living) and 86 Assisted Living Units with approximately 230,000 square feet of gross floor area that has structured parking in a seven (7) story building measuring at 83-feet on 2.24 +/- acres. The applicant is requesting City Council to modify the parking requirement to allow for a reduction in the required parking spaces from 194 spaces to 126 spaces for the senior living facility referenced in the Parking Assessment

Memo in Attachment A15. Also as a part of Phase Three, the applicant is proposing off-site stream restoration for a portion of Accotink Creek within the boundaries of Van Dyck Park. The restoration effort is approximately 2,190 linear feet that ranges from eight (8) to fifteen (15) feet in width. The applicant received a joint permit to impact 1,646 linear feet of stream channel with authorization to compensate for permanent stream impacts through the purchase 1,675 stream credits or 4,761 Stream Condition Units from a VDEQ approved mitigation bank, as required by the VWP Permit (Permit No. 18-1003).

- Phase Four conceptualizes 25,000 square feet of office, retail, and restaurant uses; 180-units of residential dwelling units, and a 140-room hotel on approximately 3.3-acres. The applicant does not seek approval of the potential uses in Phase Four of this Master Development Plan. The owner would be required to amend this Master Development Plan, if approved, for specific use types, density, open space, and design, prior to the commencement of Phase Four. The applicant is proposing uses and thresholds that are subject to change as the applicant studies Phase Four of the site and prepares development options. Phase Four is subject to a Traffic Impact Study upon a request for an amendment to this plan.

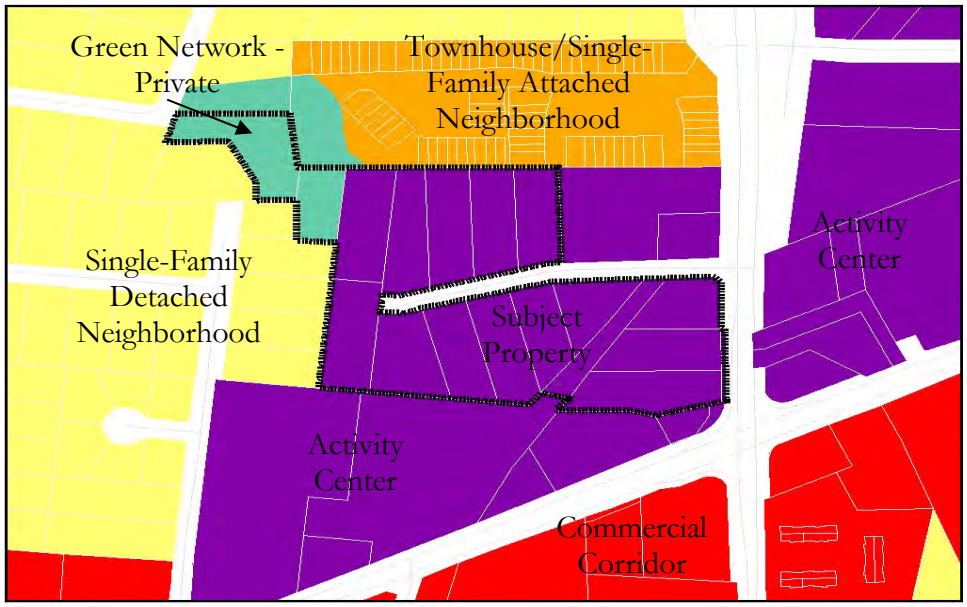
Redevelopment of the subject property requires a rezoning from CR Commercial Retail and RM Residential Medium to PDM Planned Development-Mixed Use in the Architectural Control Overlay District (ACOD), a Special Use Permit to culvert portions of on-site stream and remove portions of the 100 year floodplain, and a Special Exception for disturbance of Resource Protection Area to which would lead to the remapping of the RPA for removal of portions through the site, and a Certificate of Appropriateness. The applicant also is requesting a right-of-way vacation of portions of Orchard Street to enable realignment of the street consistent with the City's road plan and provide land to facilitate the extension of Farr Avenue to the adjacent property line for Brown's Mazda as part of the approval of the Master Development Plan. The applicant will coordinate with Brown's Mazda and the City of Fairfax to facilitate the road connection to Fairfax Boulevard (Route 50).

Comprehensive Plan

Land Use: The Comprehensive Plan provides a general plan and communicates a vision for future land use and development in the City; while, the Zoning Ordinance provides the regulatory mechanism to ensure the new development and changes in land use are consistent with the vision. The Comprehensive Plan states "where any new development is proposed that requires a land use action not consistent with the Comprehensive Plan, the applicant should request a modification to the Comprehensive Plan as well" (Chapter 1: Introduction, City of Fairfax 2035 Comprehensive Plan, page 15).

The Comprehensive Plan and the Zoning Ordinance provide opportunities for flexibility in site design and whether or not a use is appropriate and compatible with the adjacent properties. Some consideration for appropriateness is the ability to mitigate through site design, density and height limitations, setbacks, bufferyards and landscaping. The applicant is seeking to build a mixed use development that is comprised of four phases as stated in the Statement of Justification and detailed in the Master Development Plan. In order to develop this project, the applicant seeks a Rezoning from CR Commercial Retail and RM Residential Medium to PD-M Planned Development-Mixed Use in the ACOD and Activity Center Place Type. The surrounding land use designations are a combination of Single-Family Attached Neighborhood, Green Network – Private, Activity Center, and Single-Family Detached Neighborhood. The subject site is overlaid on the Future Land Use Map from the Comprehensive Plan in Figure 1 shown below.

Figure 1: Comprehensive Plan Future Land Use Map



The Activity Center Place Type applies to locations in the City where pedestrian-oriented, mixed-use development is strongly encouraged. Mixed-use development is pedestrian-oriented development that allows multiple activities to take place by layering compatible land uses, public amenities, active streets accommodating multimodal transportation, and community serving commercial (City of Fairfax 2035 Comprehensive Plan, page 32). New development in Activity Center Place Type should provide integrated uses with structured or below grade parking. The overall project design within an activity center should improve the streetscape, and provide vehicular and pedestrian connections to the existing road network and surrounding uses as recommended by the Multimodal Transportation Chapter of the Comprehensive Plan (City of Fairfax 2035 Comprehensive Plan, page 32).

Although the City is primarily built out, a variety of new housing types can be accommodated through redevelopment on a relatively limited basis to broaden the current offerings and accommodate changing demands (Comprehensive Plan, Pg. 53). Likewise, it is vital that a variety of high-quality, attractive housing choices continue to be available in the City to support differing needs and demands of residents. Housing needs and demands are reflective of the existing housing stock and fluctuating market trends, making them subject to change over time. Specific housing types are identified in the Land Use Strategies Section of the Comprehensive Plan. Current shortages could include multifamily rentals and condominiums, of which the majority of the City's stock was built in the 1960s, and townhomes, of which the City currently has a lower ratio than many surrounding communities in Fairfax County (Comprehensive Plan, pg. 54). The applicant is providing a housing type that is underrepresented in the City's existing stock of housing units (Outcome H1.1). The applicant has indicated that there is not an affordable housing component to this proposal (Outcome H2.1). However, the senior living building addresses Outcome H3.1, Action H3.1.1 and Action H.3.1.2 in the Comprehensive Plan as the applicant seeks to provide housing options for older adults that need the appropriate levels of support and care.

Predicated on the underlying zoning district, the Activity Center supports a density of a minimum FAR of 0.4; at least six (6) townhouses or at least twelve (12) multifamily dwelling units per acre; or any proportional combination of residential and commercial densities with building heights predominantly five stories or less, unless specified in an adopted Small Area Plan. (City of Fairfax 2035 Comprehensive Plan, Pg. 32). Residential townhouses should only be considered to serve as a transitional use to existing development outside of the Activity Center.

Many commercial properties in the city are underutilized with an overabundance of surface parking. The properties are often suitable for redevelopment, whether to achieve greater use of the land or to make the properties more market competitive. New development and redevelopment must enhance commercial activities along the City's major corridors with a mix of retail, office, and service offerings in an attractive and welcoming setting. (City of Fairfax 2035 Comprehensive Plan, Pg. 50). Likewise, the City's Comprehensive Plan encourages redevelopment in the City's Activity Centers. The City will promote redevelopment in Activity Centers to strengthen economic vitality; provide retail, office, and residential opportunities for sustained demand; and reinforce the City's regional appeal (City of Fairfax 2035 Comprehensive Plan, Pg. 51). Activity Centers should be designed to be the most intense, dense areas in the City of Fairfax. The overall densities for other approved projects as compared to the subject application is provided in Table 2:

Table 2: Comparable Projects in the City

Project	Site Area	Number of Units	Density	Height
Northfax West Phases I-III	**11.46**	**56 TH; 200 MF**	**22.3***	**40 +/- feet; 83 +/- feet**
Capstone	6.15	275	44.7*	48 +/- feet
Paul VI	18.51	266	14.4	45 +/- feet
Scout on the Circle	9.81	400	40.7*	85 feet

* Project is located in an Activity Center

The subject property is located in the Activity Center Place Type and is located in Northfax, one of five Activity Centers identified in the 2035 Comprehensive Plan. The Northfax Activity Center is undergoing a Small Area Plan, which "are neighborhood-level plans intended to provide the City with guidance on each of its five Activity Centers defined in the 2035 Comprehensive Plan. While the Comprehensive Plan advises the Activity Center's development at a high level, Small Area Plans provide more specific guidance for each Activity Center, including the desired mix of uses, residential density, building density, design aesthetic, street locations, multimodal connections infrastructure improvements, parking, and open space. As each Small Area Plan is completed and adopted, its recommendations will supersede the pre-existing guidance in the 2035 Comprehensive Plan for its respective Activity Center" (City of Fairfax, https://www.fairfaxva.gov/government/community-development-planning/planning/current-studies-projects-plans/small-area-plans).

The draft Small Area Plan for Northfax is scheduled for a public hearing for City Council on June 23, 2020. This plan was presented to the Planning Commission on June 8, 2020, which recommended approval following the consideration of testimony at a public hearing. The Northfax SAP recommends improved stormwater infrastructure for the entire Activity Center, including increasing stormwater requirements 15% beyond state standards (City of Fairfax, Draft Northfax Small Area Plan, Page 49). The Northfax SAP also recommends the establishment of a connected street grid and improved pedestrian connections as provided by the Orchard Street/Farr Ave project and included in the Northfax West proposal. These recommendations are consistent with the Comprehensive Plan support for transforming the City's Commercial Corridors and Activity Centers. The City would strive to transform these areas into distinctive regional destinations that can compete effectively with other development and mixed-use centers in Northern Virginia (City of Fairfax 2035 Comprehensive Plan, Pg. 120). Redevelopment in Commercial Corridors and Activity Centers should create destinations that attract tenants, customers, and residents (Outcome EV3.1, Pg. 120). Furthermore, the Northfax SAP encourages under-represented housing types, such as senior housing, and townhouses as transitional densities to existing neighborhoods which is also consistent with the Comprehensive Plan and the Activity Center Place Type.

The City recognizes that there is a delicate balance between development and protecting the environment as the City is largely built-out. The City has several types of environmental resources that are easily impaired by urban land uses. Encompassing the headwaters of Accotink Creek, measures taken by the City to protect water quality, riparian and floodplain areas, open space, and the urban forest are critical to support regional

efforts to improve environmental health. Located within the Chesapeake Bay Watershed, the City is committed to reducing stormwater runoff in order to protect the Bay through the adoption of the Chesapeake Bay Preservation Act and enforcement of other federal, state, and local stormwater regulations. (City of Fairfax 2035 Comprehensive Plan, Pg. 99). The proposed application addresses in part Outcome NE1.5 to "restore and preserve natural open spaces and contiguous greenway corridors that provide natural habitats for plants and wildlife" as the northwest corner of the will remain in its natural state with a walking trail. Likewise, Action NE1.5.1 is addressed, in part, by "restoring disturbed areas along streams and in conservation easements with native species" as the applicant has committed to a stream restoration project for a portion of Accotink Creek within the boundaries of Van Dyck Park. This stream restoration project will implement this component of the approved master plan for Van Dyck Park. VA DEQ is also requiring contribution to regional bank for stream restoration improvements outside of the City.

The 100-year floodplain cuts through the site severely limiting development on half (½) of the property. During the VWP permitting process, the applicant had to demonstrate avoidance and minimization efforts. It was deemed that both efforts would require flood control due to the location of the perennial stream and the history of flooding onsite. A complete avoidance would result in an undevelopable area of 4.4 +/- acres. The flood elevations under this scenario would render approximately half of the developable land area in an unstable condition to due to the presence of RPA and flood zones (VWP Individual Permit No. 18-1003, March 5, 2019, page 3). A partial pipe scenario was also considered and deemed infeasible whereby "500 linear feet of stream channel would be piped leaving most of the perennial stream and all the intermittent stream intact" (VWP Individual Permit No. 18-1003, March 5, 2019, page 3). However, the use of Orchard Street to access the western portion of the site "would necessitate significant alteration to the flood zones through the installation of a culverted road crossing, this constricting flood flows and increasing flooding to the northern portion of the property" (VWP Individual Permit No. 18-1003, March 5, 2019, Pg. 3). In order for the subject property to be developed, a special use permit is required to allow disturbance within the 100-year floodplain boundary.

The subject property has a perennial and two intermittent streams that flow through the site from west to east. The perennial stream enters the site at the northwest corner of the project area and flows southeast before entering an 8-foot box culvert that conveys water under Route 123 that was installed by the City of Fairfax to improve drainage and reduce flooding. The two intermittent streams flow into the perennial stream from the west. As a result of having streams on site, a RPA Site-Specific Study in accordance with Section 4.18 (Chesapeake Bay Preservation) of the City's Zoning Ordinance is required by the applicant. In conjunction with an RPA Site-Specific Study, the applicant is required to submit a Water Quality Impact Assessment (WQIA) for land disturbance, development or redevelopment within the RPA including any buffer area modification or reduction. Due to the level of land disturbance proposed by the applicant, a major WQIA is required and Special Exception to impact the RPA with the construction of a culvert. The applicant has submitted a Major Water Quality Impact Assessment and staff has reviewed the WQIA. The applicant will be required to provide additional information during the site plan review stage, if this application is approved. Ultimately, the proposal would allow the new culvert to tie into the system installed by the City of Fairfax.

The City has adopted regulations that implement the requirements of Chesapeake Bay Preservation Act (Code of Virginia, Section 62.1-44.15:75 et seq). The purpose of Section 4.18 (Chesapeake Bay Preservation) is to: a. protect sensitive environmental lands within the city; b. safeguard the quality of state waters; c. prevent further increase in pollution of state waters; d. reduce existing pollution of state waters; and e. promote water resource conservation in order to provide for the health, safety, and welfare of the present and future citizens of the city (Zoning Ordinance, Page 4-99). These regulations also establish criteria for use by the city in approving, disapproving or modifying requests to rezone, subdivide, use, develop and/or redevelop land in Chesapeake Bay preservation areas. The Zoning Ordinance provides for opportunities for land to be

developed or redeveloped through the review process outlined in Section 4.18 and Section 6.13 (Chesapeake Bay Reviews).

Section 4.18.6 (Chesapeake Bay Preservation) of the Zoning Ordinance requires for any property that is depicted on the city's Chesapeake Bay preservation area map as a resource protection area, the applicant shall determine the site-specific boundaries of the Resource Protection Area (RPA) components through the performance of a RPA site-specific study. The Chesapeake Bay preservation area map shall be used only as a guide to the general location of resource protection areas within the city. The applicant has submitted a Resource Protection Area Site Specific Study to evaluate the existing, pre-development conditions of the project area and the anticipated post-development impact on the RPA based on the submitted master development plan. Appendix E of the RPA site-specific study documents the presence of one perennial stream and two intermittent streams. The applicant concludes "that the perennial stream is included in the onsite RPA, as well as the 100-foot buffer adjacent and landward of the perennial stream and the intermittent streams were determined to be non-RPA features due to unnatural channel conditions resulting from adjacent development" (RPA Site-Specific Study conducted by Apex Companies, LLC, Pg. 3). In conjunction with a RPA Site-Specific Study, the applicant is required to submit a Water Quality Impact Assessment (WQIA) for land disturbance, development or redevelopment within the RPA including any buffer area modification or reduction. Due to the level of land disturbance proposed by the applicant, a major WQIA is required. Ultimately, the proposal would allow the new culvert to tie into the system installed by the City of Fairfax. Table 3 shows the change in floodplain and RPA based on the pre-development and post-development plans.

Table 3: Floodplain and RPA

Site Area (11.46 +/- acres)	RPA		Floodplain	
	Acreage	% of Site	Acreage	% of Site
Pre-Development	5.75	50.2%	5.44	47.5%
Post-Development	0.65	5.7%	0.76	6.6%

The applicant has provided a pre-development floodplain and RPA boundary on Sheet 18 and a post-development boundary on Sheet 18A of the Master Development Plan. As part of the project approvals, the applicant intends to commit to a stream restoration project for a portion of Accotink Creek within the boundaries of Van Dyck Park. This stream restoration project will implement this component of the approved master plan for Van Dyck Park. VA DEQ is also requiring contribution to regional bank for stream restoration improvements outside of the City. Irrespective of these, City approval to construct and make these changes are required.

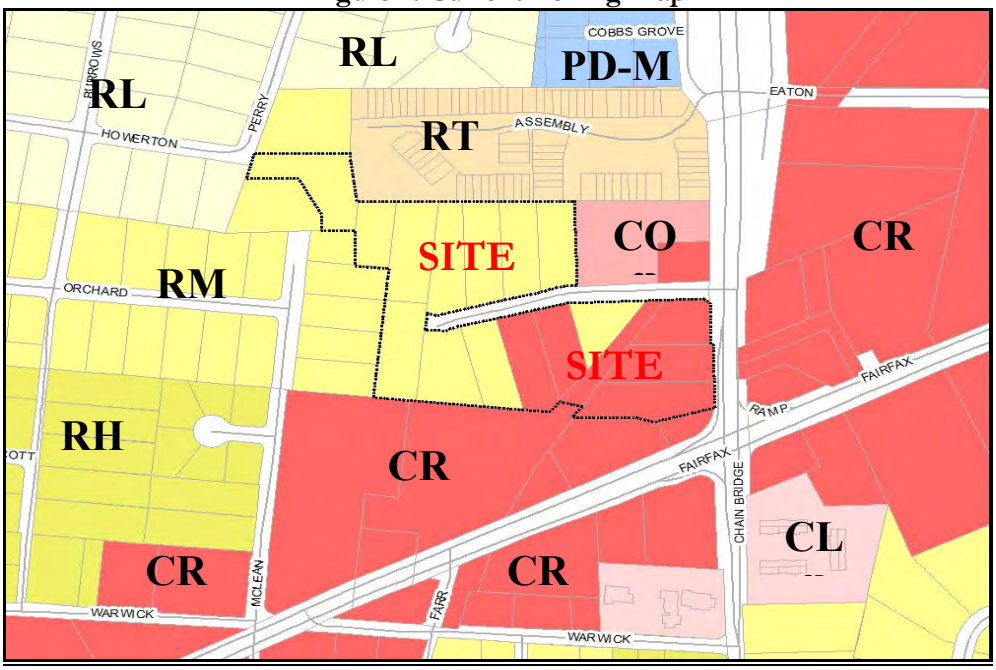
Likewise, Section 4.18.8.D.1 (Chesapeake Bay Preservation) of the Zoning Ordinance requires a Major Water Quality Impact Assessment shall be required for any development that exceeds 5,000 square feet land disturbance or that encroaches onto the seaward 50 feet of the 100-foot buffer area; or is located in the resource management area and is deemed necessary by the zoning administrator. The applicant is proposing to impact 1,749 linear feet of the stream channel on site. Appendix C in the Major Water Quality Impact Assessment provides a visual depiction of the areas impacted. The applicant also received a joint permit to impact 1,646 linear feet of stream channel with authorization to compensate for permanent stream impacts through the purchase 1,675 stream credits or 4,761 Stream Condition Units from a VDEQ approved mitigation bank, as required by the VWP Permit (Permit No. 18-1003).

The applicant received a Conditional Letter of Map Revision (CLOMR) from the Federal Emergency Management Agency (FEMA), dated April 1, 2019 - Case No. 18-03 2239R. A Conditional Letter of Map Revision (CLOMR) is a formal review and comment as to whether a proposed flood protection project or other project complies with the minimum NFIP requirements for such projects with respect to delineation of

special flood hazard areas. A CLOMR does not revise the effective Flood Insurance Rate Map or Flood Insurance Study. The 100-year floodplain cuts through the site severely limiting development on half (½) of the property. During the VWP permitting process, the applicant had to demonstrate avoidance and minimization efforts. It was deemed that both efforts would require flood control due to the location of the perennial stream and the history of flooding onsite. A complete avoidance would result in a developable area of 4.4 +/- acres. The flood elevations under this scenario would render approximately half of the developable land area in an unstable condition to due to the presence of RPA and flood zones (VWP Individual Permit No. 18-1003, March 5, 2019, page 3). A partial streaming piping scenario was also considered and deemed infeasible whereby "500 linear feet of stream channel would be piped leaving most of the perennial stream and all the intermittent stream intact" (VWP Individual Permit No. 18-1003, March 5, 2019, page 3). However, the use of Orchard Street to access the western portion of the site "would necessitate significant alteration to the flood zones through the installation of a culverted road crossing, this constricting flood flows and increasing flooding to the northern portion of the property" (VWP Individual Permit No. 18-1003, March 5, 2019, page 3).

Rezoning: The subject property is currently split-zoned with RM Residential Medium and CR Commercial Retail Districts. Thirteen (13) of the seventeen (17) parcels are zoned RM Residential Medium. The subject property is zoned RM Residential Medium and CR Commercial Retail. The surrounding zoning districts are a combination of RL Residential Low, RM Residential Medium, RT Residential Townhouses, CO Commercial Office, and CR Commercial Retail. The subject property is immediately surrounded by uses that range from single-family homes to townhouses, auto dealers to offices, gas station to a restaurant and City property. Immediately to the west of the site is a single-family neighborhood on McLean Avenue and Orchard Street. To the north of the site is a townhouse community, office building and a Shell gas station. Figure 2 illustrates the current zoning districts and the surrounding area.

Figure 2: Current Zoning Map



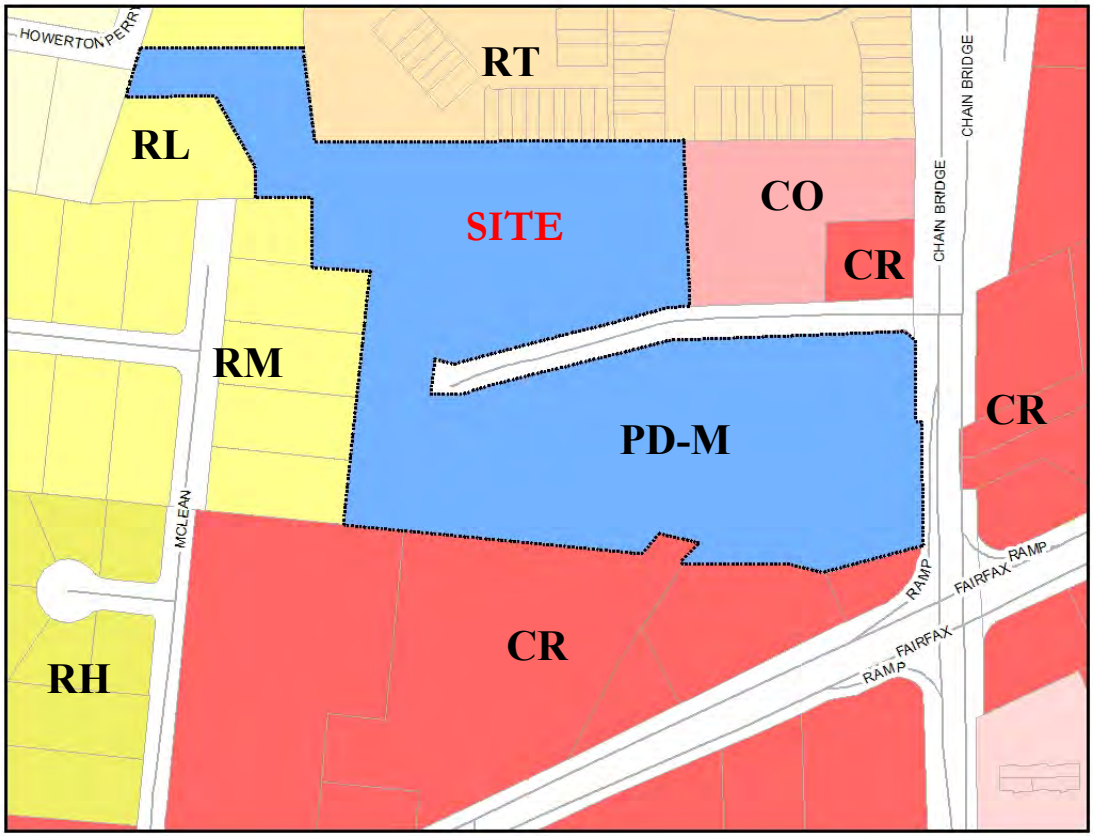
If an existing lot is (currently) split into two or more zoning districts, each such portion of the split-zoned parcel may be used only for purposes allowed within the respective zoning district. No principal or accessory use of land, building or structure, and no use or building or structure authorized by special use permit or special exception is allowed unless the use, building or structure is expressly authorized or permitted within the subject district (Section 2.2.2. Split-zoned lots). Under the current configuration, the proposal could not

be developed and the site would remain largely as a residential site with limited commercial opportunities. Therefore, the applicant is requesting to rezone the property from RM Residential Medium and CR Commercial Retail to PD-M Planned Development-Mixed Use.

> §3.8.2.B.2. Planned development district rezoning may be approved only when the applicant demonstrates to the satisfaction of the city council that a proposed planned development project would result in a greater benefit to the city than would development under general zoning district regulations.

Figure 3 shows the proposed PD-M district and the zoning designations of the surrounding area. The PD-M, Planned Development Mixed Use District, is intended to provide for coordinated mixed use developments which may include general residential and nonresidential uses within a planned development. The variety of land uses available in this district allows greater flexibility to respond to market demands and the needs of tenants, thereby providing for a variety of physically and functionally integrated land uses (Section 3.2.3.B, Pg. 3-3).

Figure 3: Proposed Zoning Map



The proposed rezoning from RM Residential Medium and CR Commercial Retail to PD-M Planned Development-Mixed Use would allow for the "applicant to create special and unique developments by mixing and clustering, where appropriate, land uses and/or dwelling types and providing more usable recreation and open space in a master development plan proposed by the applicant and approved by the city council. Planned developments should create a more livable, affordable and sustainable community. Starting from the baseline, which is current zoning, applicants may be given increased development rights, such as increased density and height, as well as increased flexibility, in return for providing benefits that make the project

"superior" and the community better in accordance with the goals and objectives of the city, including, but not limited to, those set forth in the comprehensive plan" (Zoning Ordinance, Pg. 3-59).

REQUESTS

In addition to the rezoning request from RM, Residential Medium and CR, Commercial Retail to PD-M, Planned Development Mixed Use while retaining the Architectural Control Overlay District (ACOD), and a Master Development Plan with modifications and commitments, the applicant proposes the following land use requests for City Council action; however, formal action and recommendations by the Planning Commission are not required for the following items:

- **Application for Special Use Permit (Floodplain Regulations)** to allow for disturbance in the 100-year floodplain boundary;
- **Application for Special Exception (Chesapeake Bay Preservation) for disturbance of Resource Protection Area** to build culvert and consideration of an amendment to the City of Fairfax Chesapeake Bay preservation area map;
- **Major Certificate of Appropriateness** for architecture and landscaping; and,
- **Vacation of right-of-way** for Orchard Street

Rezoning application

The proposed redevelopment is dependent on City Council approval of Map Amendment (Rezoning) from RM, Residential Medium and CR, Commercial Retail to PD-M, Planned Development Mixed Use. The subject property has two (2) existing one-story houses in the RM District. The site also has two (2) commercial vehicle storage parking lots and a sit-down restaurant in the CR District. In approving a rezoning for a planned development, the city council shall find the proposed district designation and master development plan comply with the general provisions for all planned development in §3.8.2 and the specific standards for the planned development listed in §3.8.3 through §3.8.6. Planned development district rezonings may be approved only when the applicant demonstrates to the satisfaction of the city council that a proposed planned development project would result in a greater benefit to the city than would a development under general zoning district regulations.

The applicant is proposing to develop the site in four phases with a modification to the Development schedule as stated in Section 3.8.2.I of the Zoning Ordinance, which states "No zoning permit shall be issued for a mixed use development to authorize the occupancy of more than 66 percent of the approved residential dwelling units as part of a PD-C or PD-M district development prior to the issuance of a zoning permit to authorize the occupancy of 100 percent of the approved nonresidential floor area for that development. The foregoing shall be binding on the applicant unless the applicant proposes a modification to this requirement in the master development plan and the city council approves such modification when it approves the master development plan." (Pg. 3-63). Phases Two and Three are proposed as townhouses and a senior living building that is comprised of a mixture of independent living units and assisted living units. The Zoning Ordinance considers independent living units as a residential use while the assisted living units are defined as a non-residential use. Phase Four is proposed with a combination of residential and non-residential uses. Strict application of the ordinance would prohibit occupancy of all of the townhouse units prior to the completion of the senior building. Therefore, the applicant is seeking a modification to the development schedule requirement.

The applicant states the proposed development is in substantial conformance with the Comprehensive Plan and Activity Center Place Type. The proposal includes townhouses as a transitional use to existing development outside of the Activity Center. The proposal also includes public, civic and institutional uses in congregate living facilities and assisted living facilities in a stand-alone building. The operator and owner of the Senior Living Building is seeking a reduction in the number of required parking spaces of the Zoning

Ordinance. The Master Development also proposes road improvements to Orchard Street that includes ten (10) foot wide travel lanes, five (5) foot wide bike lane, eight (8) foot wide on-street parking, 4.5-foot wide area for the installation of street lights, pavers and trees, and a six (6) foot sidewalk. In addition to improvements made on Orchard Street, the applicant will collaborate with the City and the adjacent property owner to extend Farr Avenue to Fairfax Boulevard (Route 50). These road improvements will establish the street grid that is envisioned in the Comprehensive Plan and the draft Northfax Small Area Plan. Currently, the subject property is sufficiently served by public transportation facilities, and the existing utility infrastructure is adequate for the proposed uses. Further, the proposed development as stated by the applicant would be compatible with the surrounding area. Finally, the applicant believes the proposed use is consistent with the stated purpose of the PDM District and the Activity Center Place Type.

Open Space: The Planned Development Districts requires at least 20 percent (2.1 +/- acres) of the site to be designated as recreation and open space for use and enjoyment of the residents and occupants of the development. Section 3.8.7.B.3 requires the minimum width for any required recreation and open space shall be 50 feet. The zoning administrator may grant exceptions for items such as trail easements and midblock crossings, when their purpose meets the intent of §3.8.7. The Zoning Ordinance also requires at least 60% of the required open space be contiguous, however it may be bisected by a residential street.

Open space is programmed as an amenity area at the northeast corner of Orchard Street and Farr Avenue, on the north west and east side of the senior living building, and in the northwest corner of the site that includes an amenity center and an eight (8) foot wide walking trail. The applicant is retaining a large area of RPA and Floodplain in the northwest corner of the site, and only half that acreage can be counted towards the open space. The plan currently proposes four areas of open space with a linear park on the north side of Orchard Street that connects to the proposed trail as discussed in the draft Northfax SAP for a total of 1.61 +/- acres (70,132 square feet) or 15% of the property. The applicant has provided approximately 0.80 acres or 8% of the site measuring less than 49-feet. If these areas are included in the amount of open space, the development would have approximately 23% (2.41 acres/104,980 square feet) of the land area provided as open space. Sheet 7 of the Master Development Plan illustrates the Open Space and Circulation Plan. The applicant also states that the areas in front of the townhouses and senior living building will serve as a linear park. In addition to these improvements, the applicant considers streetscape improvements for Orchard Street and the extension of Farr Extensive, as well as, the roof top green space on the senior living building as part of their overall development design and on-site open space improvements. The applicant states that the open space would be provided in Phase One, Phase Two and Phase Three. The applicant is seeking a modification to Section 3.8.7.G of the Zoning Ordinance requiring 20% of the site be developed as open space. Staff acknowledges the importance of streetscapes and other features such as rooftop spaces but those features as presented in this plan do not meet the minimum open space requirements in Section 3.8.7. It is staff's position that at the end of the project, the twenty (20) percent open space requirement would be achieved.

Project boundary transitional yard requirements are established to mitigate the effect of planned developments on adjacent properties. The table below provides the TY3 requirements and what the applicant has submitted in the Master Development Plan. The applicant is seeking a modification to Section 4.5.5.C.2(b)(2) and Section 4.5.5.D of the Zoning Ordinance to provide the minimum tree plantings as well as the minimum fence or wall height of the TY3 transitional yard specifications along the Subject Property's boundaries.

Table 4: Transitional Yards

Required by Zoning Ordinance (Section 4.5.5.D)	Provided by the Applicant				
	Northern property line (585-feet)	Northeastern property line (232-feet)	Southeastern property line (327-feet)	Southwestern property line (75-feet)	Western property line (400-feet)

Minimum Transitional Width – 15 feet (TY3)	15-feet	10-feet	None	15-feet	8.5-feet
Minimum Fence or Wall Height (feet) on lot line – 6-feet	6-foot fence	6-foot fence	None	6-foot fence	6-foot fence 1.0-2.1-foot wall
Minimum Canopy Tree (4 per 100 feet)	23 canopy required; 6 provided	9 canopy required; 4 provided	None	3 canopy required; 3 provided	16 canopy required; 16 provided
Minimum Understory Tree (4 per 100 feet)	23 understory required; 11 provided with 20 existing understory trees	9 understory required; 10 provided	None	3 understory required; 3 provided	16 understory required; 16 provided
Minimum Shrubs (4 per 100 feet)	23 shrubs required; 23 provided	23 shrubs required; 24 provided	None	3 shrubs required; 8 provided	16 shrubs required; 16 provided

A transitional yard buffer of 15 feet (TY3) is required along the site area boundary. The applicant is seeking a modification to the planting requirements along the northern, western, southern and eastern property lines. The northern property line adjacent to The Assembly townhouse community has an existing dense tree line that the applicant intends to preserve and six (6) canopy trees, add eleven (11) understory trees and twenty-three (23) shrubs along the property line. In the northeast corner of the site abutting The Assembly and the office building on Orchard Street, the applicant is requesting a reduction in the width and number of canopy trees due to the proposed private street and sanitary sewer easement.

The applicant is seeks to modify to the transitional yard requirement (from 15-feet to 8.5 feet) along the western property line adjacent to single-family detached homes fronting along McLean Avenue. The applicant intends to maintain the required fencing, quantity and type of plant species along the western property line but would reduce the width of the transitional yard. The applicant states that the constraints for this area are caused by the right-of-way dimensions for the extension of Farr Avenue, as well as the required width for the private alley providing access to the townhomes that front on Farr Avenue.

The southern property line shared with Brown's Mazda is proposed to be developed with two parking structures. The applicant is proposing to construct a parking garage for the senior living building on the southern property line. Brown's Mazda dealership is proposing to develop their parking structure directly adjacent to the applicant's parking structure. The applicant is installing a five (5) foot sidewalk along this property line that connects from Farr Avenue Extension to the east side of the Senior Living Building. On the east side of the senior living building and on the southern property line, the applicant has provided additional surface parking and a turnaround for fire access. Therefore, the applicant is seeking to eliminate the requirement to install a transitional yard including a fence or wall, and the required plantings.

The eastern property line has an existing dense tree line on the office building property with frontage on Orchard Street and Chain Bridge Road. Along this property line, the applicant proposes an alleyway for a row of rear-entry townhouses and the installation of a sanitary sewer line. It should also be noted that the eastern property line abutting the future development parcel will be determined during the review of an amendment to the Master Development Plan. The applicant has provided temporary plantings to screen the future development parcel known as Phase Four. The northwestern corner of the site will have a transitional yard with existing vegetation as the area is located in the floodplain.

The applicant is also seeking two additional modifications that apply to street trees. Section 4.5.6.B states "street trees shall be required along all streets at the rate of one canopy tree for every 40 linear feet and spaced

a maximum of 50 feet part" and Section 4.5.6.B.1 states "all street trees shall be planted no less than three feet or more than 15 feet from the back of the curb or edge of pavement." The applicant is requesting these modifications due to the proposed location of on-street parallel parking spaces and proposed utilities. The proposed street design provided by the City's consultant for the Farr Avenue Extension has been added to the MDP. The design for Orchard Street is consistent with the Farr Avenue Extension. The street design may also need to accommodate underground stormwater utilities, curb cuts and filterras that would potentially space trees beyond the maximum requirement of 50 feet. The street design as presented creates challenges to meeting the requirement of all street trees shall be planted no less than three feet or more than 15 feet from the back of the curb or edge of pavement. The applicant states the design shows a four-foot planting strip in between the curb and six foot wide sidewalk that cannot conform to the required three-foot minimum distance from paved surface.

Likewise, the applicant is seeking a modification to Section 4.5.6.B.1 for Chain Bridge Road due to the existing utilities that would remain during Phases One, Phases Two and Phase Three. The applicant proposes to plant evergreen and deciduous shrubs to the back of the proposed 10-foot multiuse trail on Chain Bridge Road that would be constructed during Phase One. These trees may grow up to fifteen (15) feet and could provide year round screening of Phase Four until developed.
Scale: The applicant is proposing to develop fifty-six (56) townhouses in Phase Two. The townhouses are approximately 44 feet in height. Townhouses would be a mix of front entry units that are 24-feet wide and rear entry units that are 20-feet wide. The applicant is seeking a modification to Section 3.5.1.C.2 which states, "No more than two of any 10 or one of any three to five abutting dwelling units having the same front yard setback. Varied front yard setbacks shall not be less than two feet offset from adjoining units as measured at the principal foundation line of each unit and no setback distance shall be less than the required minimum." (Zoning Ordinance, Pg. 3-14). The applicant states that variation in setbacks would be achieved through architectural variation of the design in units, including façade, color. Townhouses aligned the north side of Orchard Street and the west side of Farr Avenue Extension to minimize the visibility of alleyways, as well as, to create a streetscape along the corridor. Those units have one (1) foot offset.

In addition to the setback variation modification, the applicant is seeking to modify Section 4.5.7.D which states, "An interior landscaped island shall be provided for every ten spaces. Each island shall contain a minimum of 200 square feet with a minimum width of eight feet inside the curb and include a minimum of one canopy tree; provided that, where an island includes a sidewalk, such islands shall contain a minimum of 400 square feet with a minimum of 15 feet inside the curb. Planting islands shall be evenly distributed throughout the parking lot; with no parking space located more than 50 feet from a planting island." This modification request pertains to the proposed townhouse surface parking in the northwest corner of the site, parallel spaces in front of the townhomes on Orchard Street and Farr Avenue Extension, and the surface parking on the east side of the senior living building. The applicant states the proposed box culvert improvements runs through a portion of the surface parking area for the townhouses and the proposed utilities easements and appurtenances would affect the parallel parking spaces for the senior living building.

In the middle of the site in Phase Three, the applicant is proposing 114-units for congregate living facility and 86-units for assisted living in a seven (7) story building measuring at 83-feet on 2.24 +/- acres. The senior living building includes a parking garage with 114 spaces and twelve (12) surface parking spaces on the east side of the building. The applicant is seeking a modification to Section 4.2.3.E to provide 1.5 parking spaces per unit for the independent living (congregate living facility in the Zoning Ordinance) portion of the proposed senior living building; while the assisted living facility has a parking requirement of one (1) space per four (4) beds. Table 5 provides a breakdown of the required and provided parking spaces for the senior living building.

Table 5: Senior Living Parking

Use	Units	Parking Requirements	Required Spaces	Provided Spaces

Independent Living (Congregate Living Facility)	114	1.5 spaces per unit	171	114
Assisted Living Facility	86 (92 Beds)	1 space per 4 beds	23	12
Total			194	126

The applicant has provided a technical memorandum to address the parking requirement for the senior living building. This memorandum is provide in Attachment 15 and provides an explanation for the reduction in spaces from 194 spaces to 120 spaces. The applicant also has provided a statement of operations (Exhibit B to the Statement of Justification) for the senior living building, which identified three user groups (i.e., residents, staff, and visitors) that would be the primary users of the parking spaces. With further evaluation of the site and past practices, the applicant has provided a total of the 126 spaces. The applicant is proposing to park the independent living units at one to one ratio; while the assisted living units would be parked at a rate of one (1) space per seven (7) beds. The contract purchaser and operator of the senior living building, Brightview, states the primary users are employee associates, followed by visiting family friends, with residents as the lightest users. The applicant further states that the average of resident is eighty-two (82) years old, the majority of whom are no longer driving. The applicant will be required to submit a Transportation Demand Management (TDM) program before site plan approval.
Along with parking for the senior living building, the Zoning Ordinance requires the applicant to provide two (2) off-street loading spaces since the building exceeds 50,000 square feet. The Master Development Plan shows one loading space on the east side of the building. This space would accommodate the day-to-day deliveries to the site without impeding traffic circulation. The plan also proposes another loading space on Farr Avenue Extension; however, loading zones in the public right-of-way does not count towards meeting the loading zone requirement.

Circulation/Pedestrian Access: A joint effort between two private property owners (Northfax JV LLC and Brown's Mazda), and the City of Fairfax will create a new north-south roadway connecting Fairfax Boulevard/Farr Avenue and Orchard Street. This will create a grid network within the northwest quadrant of Fairfax Boulevard and Chain Bridge Road that is consistent with the Comprehensive Plan and the draft Northfax Small Area Plan. This design will also provide an expanded street network for non-motorized traffic, and provide local access to existing commercial properties and a future redevelopment area. The street design includes 67-feet of right-of-way with 10-foot travel lanes, 8-foot on-street parking, 5-foot wide bike lanes, 4.5-feet planting strip or lights, pavers and trees, and a 6-foot wide sidewalk. The driveways in the townhouse section are 23-feet with alleyways of 19-feet for rear-loaded townhouses.

In Phase Two, the applicant has proposed fifty-six (56) townhomes with private alleys to serve rear entry townhouse units. The front entry townhouses abutting The Assembly have driveways off the private street. The applicant is seeking a modification of Section 4.4.4.A1 of the Zoning Ordinance and Section 2.3.1A of the Subdivision Ordinance to not provide sidewalks on both sides of all local streets. The Zoning Ordinance requires both sides of the street to have a sidewalk. The applicant has provided sidewalks on both sides of the proposed realigned Orchard Street and extension of Farr Avenue. There are three crosswalks planned for this corridor near the entrance of the parking structure on Farr Avenue Extension, at the three-way stop for Orchard Street and Farr Avenue Extension, and the mid-block of Orchard Street at the entrance of senior living building. The applicant also proposes a five (5) foot wide sidewalk along southern property line that connects from Farr Avenue Extension to the east side of the Senior Living Building. A multi-use trail is proposed along the property frontage on Chain Bridge Road. Table 6 provides a summary of existing trips and proposed trips:

Table 6: Trip Generation

Land Use		ITE Code	Size	AM Peak Hour	PM Peak Hour	Daily
Existing	Single-Family Detached Homes	210	2	1	2	19

Proposed (Phase I)	Multifamily Housing (Low-Rise)	220	56	27	35	383
	Continuing Care	255	200	28	32	480
Total				55	67	863
Proposed (Phase II)	Multifamily Housing (Mid-Rise)	221	180	61	78	979
	Hotel	310	140	65	79	1,170
	Quality Restaurant	931	8 ksf	6	62	671
	High-Turnover Restaurant (Sit-Down)	932	5 ksf	50	49	561
	General Office	710	10 ksf	36	13	114
	Shopping Center	820	2 ksf	2	8	76
Total Phase 2 Development Trips (*without reductions*)				220	289	3,571
Total Phase 1 + Phase 2 Development Trips (*without reductions)*				275	356	4,434
Total Development Trips (*with reductions)*				265	344	4,274
Net New Trips Without Restrictions				274	354	4,415
Net New Trips with Reductions				264	342	4,255

The City's Transportation Division held a scoping meeting with the applicant's engineer to discuss the methodology and ITE data for the Traffic Impact Study (TIS). The applicant has provided a Traffic Impact Study estimating 274 AM peak hour trips, 354 PM peak hour trips and 4,415 daily trips upon buildout of the development before considering an internal capture ratio of 5% for a mixed-use development and a reduction of 5% for TDM/Transit. It should be noted that Phase Four will be subject to a Traffic Impact Study upon a request for an amendment to this plan.

The applicant is seeking a modification to Section 4.3.3.B (Cross access requirement) which requires "vehicular access shall be required between abutting nonresidential lots fronting on arterial and collector streets prior to the erection or establishment of a principal building on one of the lots in order to facilitate traffic flow between lots, except where topography or other physical conditions make such access unreasonable. The zoning administrator shall determine the location and dimensions of such easement based on public safety and convenience, not owner preference." (Zoning Ordinance, Pg. 4-11). The southern property line is shared by two non-residential uses, the Brightview senior living building and the Brown's Mazda dealership. However, the establishment of a connected street grid and improved pedestrian connections as provided by the Orchard Street/Farr Avenue project would provide access to the south.

Utilities: All new on-site utilities serving Phase Two and Phase Three are proposed to be installed underground. However, the applicant is seeking a modification to Section 4.11.B and Section 4.11.C. Section 4.11.B states, "All on-site utilities shall be installed underground at the applicant's expense in accordance with city and applicable utility company standards; provided that temporary overhead facilities required for construction purposes shall be permitted." This request applies to the above ground utilities on Chain Bridge Road and the above ground utilities along the southeastern property line. The applicant is requesting that the undergrounding of utilities on Chain Bridge Road be addressed when the future development parcel comes back to the City Council for an amendment to the Master Development. The applicant states that the utilities along the southeastern property line and eastern property line would require coordination with adjacent property owners. There are four (4) utility poles in this area and only one (1) pole is located on the subject property. The applicant believes these existing utilities should be addressed as the adjacent properties are redeveloped.

The applicant is also seeking a modification to Section 4.11.C, which states "When the proposed development will result in moving or relocating existing overhead utilities located in adjoining rights-of-way, the applicant shall be responsible for placing such utilities underground and dedicating any additional right-of-way or easement that is necessary. Equipment such as electric distribution transformers, switch gear, meter pedestals

and telephone pedestals which is normally installed above ground in accordance with generally accepted utility practice for underground distribution may be so installed." (Zoning Ordinance, Pg.4-54). This request applies to the existing above ground utility pole on the north side of Orchard Street. The applicant states that the pole is being relocated to accommodate the realignment of Orchard Street. A single terminal pole would also be added to off-site to serve the office building at 3554 Chain Bridge Road, to close the loop once the senior building is constructed in Phase Three and the future development parcel is developed in Phase Four. Additionally, the applicant states the terminal pole provides the office building with a more reliable electric power source.

City Schools: The subject property is located in the Providence Elementary School zone. Providence ES (PES) has a capacity of 910 students. This year, the school is at 99% capacity with a membership of 908 students. According to Fairfax County Public Schools (FCPS), PES is projected for a student membership of 951 in SY20-21 and 1012 in SY21-22 placing the school as much as 110% overcapacity. Providence ES currently has two trailers; both are used as resource rooms. Providence's Special Use Permit (SUP) for the trailers was renewed in November 2019 for five years. It is projected that the Northfax student yield ratio will be .230. According to City staff's projections, 13 students are estimated from the Northfax West development based on Phase Two with additional students to be determined in Phase Four.

SPECIAL USE PERMIT/SPECIAL EXCEPTION

The applicant seeks approval of a Special Use Permit to modify the current 100-year floodplain and approval of a Special Exception to impact the Resource Protection Area by culverting the stream that traverses the site from the northwest to the southeast into an existing box culvert on Chain Bridge Road. The existing floodplain and stream has limited development potential to approximately half of the 11.46-acre site. The applicant has submitted a RPA Site Specific Delineation Plan and a Water Quality Impact Assessment. Likewise, the applicant has applied for and has received the approvals from the Virginia Department of Environmental Quality (VDEQ) with the issuance of a Virginia Water Protection Permit (Permit No. 18-1003), the US Army Corps of Engineers with the issuance of a State Program General Permit (17-SPGP-01), and a Conditional Letter of Map Revision (CLOMR) from the Federal Emergency Management Agency (FEMA) on April 1, 2019 for impacts to the floodplain.

RECOMMENDATION

1. Staff recommends that City Council approve of the Zoning Map Amendment (Rezoning) with development in conformance with Master Development Plan with modifications and commitments submitted by Applicant on June 1, 2020.

2. Staff recommends City Council approve with the conditions the request for Special Use Permit (Floodplain Regulations) to allow for disturbance in the 100-year boundary:

1. Development shall be in conformance with general development plan with modifications and commitments submitted by the applicant dated June 1, 2020.
2. The applicant shall maintain all applicable state and federal requirements

3. Staff recommends the City Council approve with the conditions with for a Special Exception (Chesapeake Bay Preservation) for disturbance of Resource Protection Area to build culvert.

1. Development shall be in conformance with general development plan with modifications and commitments submitted by the applicant dated June 1, 2020.
2. The applicant shall maintain all applicable state and federal requirements.

4. Staff recommends that the City Council approve an amendment to the City of Fairfax Chesapeake Bay preservation area map.

5. Staff recommends that the City Council approve with conditions the request for a Major Certificate of Appropriateness for architecture and landscaping. The following conditions are recommended by staff to the BAR:

8. Cantilevered balconies on the north elevation shall be redesigned so that each bay is either fully recessed or joined together within a unified architectural projection. Final design shall be reviewed and approved by the Director of Community Development and Planning.
9. The precast concrete portions of the ground floor of the exterior of the east and west façades of the parking garage shall be clad in gray brick veneer to match the building.
10. Masonry shall be used as the foundation material on all sides of the senior living building, including parking garage elevations.
11. All canopy trees shall be 3.5-inch caliper consistent with the requirements of the Zoning Ordinance.
12. Additional canopy and understory trees shall be planted in the front and side yards of townhouses in the northern portion of the site where practicable.
13. Additional shrubs shall be planted along the path and near the stream in the open spaces in the northwestern portion of the site. Shrub plantings shall be selected from Appendix III of the Design Guidelines for shrubs, herbaceous plants, groundcover, ferns, and grasses as listed in the section on Resource Protection Area (RPA) plantings.
14. Lattice screens for roof-mounted townhouse mechanical equipment shall be in a color to match the fourth-floor wall surfaces.
15. All ground-mounted appurtenances shall be screened from view in the right-of-way.
16. The proposed modifications shall be in general conformance with the review materials received by staff and included in the staff report, as modified through the date of this meeting, except as further modified by the Board of Architectural Review, the Director of Community Development and Planning, Zoning, or the Building Official.

6. Staff recommends that the City Council approve an ordinance permanently vacating, discontinuing and closing an approximately 13,433 square foot (0.30838 acre), more or less, portion of a public right-of-way (Orchard Street) within the City of Fairfax, including easements and a dedication of right-of-way for the realignment of Orchard Street and extension of Farr Avenue consistent with improvements shown on the Master Development Plan and the Statement of Commitments.

ANALYSIS

Staff analysis of the compliance of this proposal with the Comprehensive Plan, Zoning Ordinance and other City goals and policy is provided in Attachment 1.

ATTACHMENTS

1. Analysis

1a. Section 4.15.8.A (Floodplain Approval Criteria)

1b. Section 4.18.8.F.2 (Chesapeake Bay Preservation Evaluation Procedure)

2. Summary of Zoning Districts
3. Planned Development Application
4. Special Use Permit Application
5. Special Exception
6. Statement of Justification
   a. Exhibit A – Parcel List
   b. Exhibit B – Brightview Senior Living Statement of Operations – Anticipated Parking Demand
   c. Exhibit C – Existing Vegetation Narrative
7. Master Development Plan
8. Summary of Commitments
9. Certified Plat
10. Northfax WQIA Report
11. RPA Site Specific Study
12. Virginia Water Protection Individual Permit
13. Conditional Letter of Map Revision (CLOMR)
14. Traffic Impact Study
15. Brightview Parking Assessment Study
16. Fiscal Impact Analysis
17. Postings and Notices
18. Order and Motions – List
19. Sample Motions
20. Ordinance
21. Resolution
22. RPA Map (Post-Development)
23. Board of Architectural Review Staff Report

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ATTACHMENT 1
ANALYSIS
(Z-20-00006/SU-20-00007/SE-20-00150)

This attachment contains staff analysis on the submitted proposal for the redevelopment of the Northfax West site. It is divided into three primary sections:

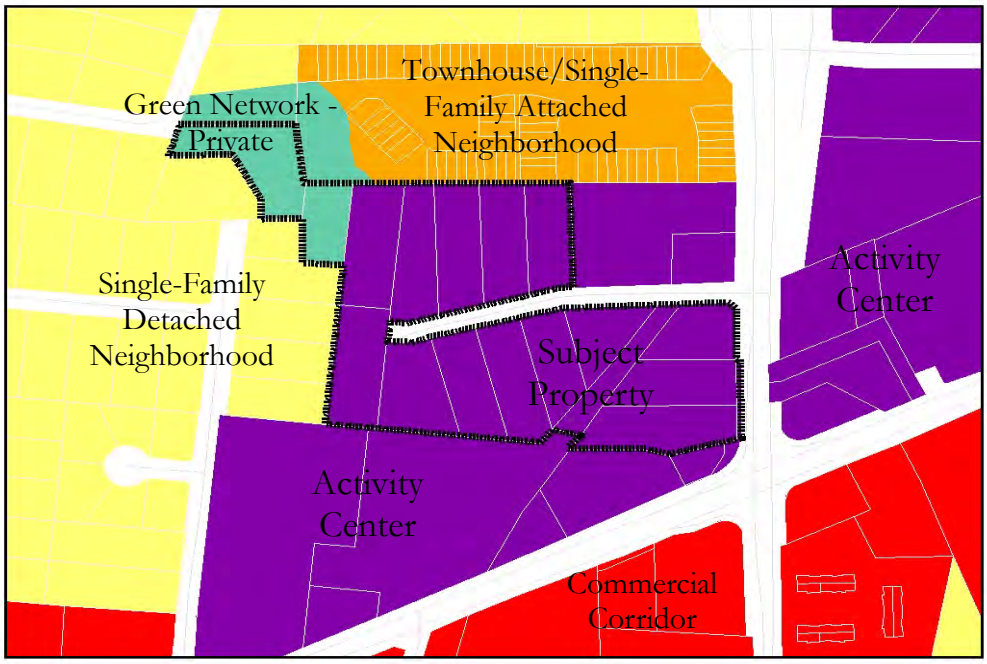
A. Comprehensive Plan: Analysis of the conformance of the application with the Comprehensive Plan and the Future Land Use Map.
B. City Policy: Analysis of the conformance of the application with general requirements of the Zoning Ordinance and other City goals and policy.
C. Procedural Requirements and Review Criteria: Analysis of conformance of the plan with specific citations from the Zoning Ordinance.

PART A: CONSISTENCY WITH COMPREHENSIVE PLAN

The site has two existing single-family homes constructed around the mid-1950's-early 1960's, two parking lots for vehicle storage on approximately three (3) acres, a 3,100 square foot sit-down restaurant, a street that dead ends into a cul-de-sac and a wooded area in the northwest corner of the site that is approximately four (4) acres. The subject property is also located in the 100-year floodplain. The subject property lies within the Accotink Creek Watershed and is located in the Middle Potomac River drainage area identified by the Hydrologic Unit Code (HUC) 02070010. There is a perennial stream located near the center of the property and an intermittent stream is located along the southern boundary with an onsite confluence of the perennial stream traversing through the site that flows from the northwest to southeast into an eight (8) foot box culvert completed in 2019 that moves water under Chain Bridge Road (Route 123), near the intersection of Chain Bridge Road (Route 123) and Fairfax Boulevard (Route 50). The site has a history of flooding near the intersection of Chain Bridge Road (Route 123) and Fairfax Boulevard (Route 50).

The Future Land Use designation for the subject property is Activity Center and Green Network as indicated in Figure 1-1A. The Activity Center Place Type applies to locations in the City where pedestrian-oriented, mixed-use development is strongly encouraged. Mixed-use development is pedestrian-oriented development that allows multiple activities to take place by layering compatible land uses, public amenities, active streets accommodating multimodal transportation, and community serving commercial (City of Fairfax 2035 Comprehensive Plan, page 32). The Green Network Place Type includes public spaces, such as active and passive parks, trails, playing fields, public recreation facilities, cemeteries, open space, and private facilities such as golf courses and private open space (City of Fairfax 2035 Comprehensive Plan, page 38).

Figure 1-1A: Future Land Use



The Comprehensive Plan is a guide for future growth of the City, focusing on community needs through 2035. There are numerous nonresidential properties throughout the City with the potential for redevelopment or to reposition themselves for current market demands. The proposed applications are reviewed based on its consistency with the Comprehensive Plan as a whole. Descriptions of specific Comprehensive Plan strategies and other language that influence the staff recommendations are provided below.

Neighborhoods

Goal 1 – Enhance neighborhood character.

Outcome N1.1: Infill housing that complements the character of surrounding homes in existing neighborhoods.

Action N1.1.1: Maintain regulatory standards to ensure infill housing fits in with the surrounding neighborhood context.

Outcome N1.2: Residents have regular communication and positive interactions with other members of their neighborhood as well as the larger City community.

Action N1.2.1: Encourage and support community engagement through homeowner, condominium, and civic associations.

Action N1.2.2: Establish regular communication with homeowner, condominium, and civic associations and residential property managers as a means to keep individual citizens informed about City business.

Staff Analysis:
In order to develop this project, the applicant seeks a Rezoning from CR Commercial Retail and RM Residential Medium to PD-M Planned Development-Mixed Use in the ACOD and Activity Center Place Type, and approval of a four phased mixed use development as stated in the Statement of Justification and detailed in the Master Development Plan.

- *Phase One includes the construction of a storm drainage culvert, utility relocations, realignment of Orchard Street and other improvements (i.e., walking trail, sidewalks and bike lanes) shown on the Master Development Plan. The applicant seeks approval of a Special Use Permit to modify the current 100-year floodplain and approval of a Special Exception to impact the Resource Protection Area by culverting the stream that traverses the site from the northwest to the southeast into an existing box culvert on Chain Bridge Road. The existing floodplain and stream limits the development area to approximately half of the 11.46-acre site. The applicant has submitted a RPA Site Specific Delineation Plan and a Water Quality Impact Assessment. Likewise, the applicant has applied for and has received the approvals from the Virginia Department of Environmental Quality (VDEQ) with the issuance of a Virginia Water Protection Permit (Permit No. 18-1003), the US Army Corps of Engineers with the issuance of a State Program General Permit (17-SPGP-01), and a Conditional Letter of Map Revision (CLOMR) from the Federal Emergency Management Agency (FEMA). As part of Phase One, the applicant plans to improve and realign Orchard Street to connect to the proposed Extension of Farr Avenue. This realignment would require a vacation of approximately 13,433 square foot of public right-of-way for Orchard Street and a dedication of land for a dedication of land for the Extension of Farr Avenue.*
- *Phase Two includes fifty-six (56) townhouses by Madison Homes with a density of 4.88 units per acres. Townhouses are a mix of front entry units at 24-feet in width and rear entry units at 20-feet in width. Each unit is required to have two parking spaces per unit and the applicant has provided two garaged spaces for each unit. The applicant has provided 134 parking spaces (112 garage spaces and 22 private surface spaces). The townhouses are proposed at approximately 44 feet in height. One acre of the site in the northwest corner is proposed as open space. As part of this phase, the applicant plans to provide a linear park on Orchard Street to the proposed trail in the northwest corner that connects to Howerton Avenue/Perry Street.*
- *Phase Three is the senior living building, owned and operated by Brightview Senior Living Development, LLC, with 114 Congregate Living Facility units and 86 Assisted Living Units with approximately 230,000 square feet of gross floor area that has structured parking in a seven (7) story building measuring at 83-feet on 2.24 +/- acres. The applicant is requesting City Council to modify the parking requirement to allow for a reduction in the required parking spaces from 194 spaces to 126 spaces for the senior living facility referenced in the Parking Assessment Memo in Attachment A15. Also as a part of Phase Three, the applicant is proposing off-site stream restoration for a portion of Accotink Creek within the boundaries of Van Dyck Park. The restoration effort is approximately 2,190 linear feet that ranges from eight (8) to fifteen (15) feet in width. The applicant received a joint permit to impact 1,646 linear feet of stream channel with authorization to compensate for permanent stream impacts through the purchase 1,675 stream credits or 4,761 Stream Condition Units from a VDEQ approved mitigation bank, as required by the VWP Permit (Permit No. 18-1003).*
- *Phase Four conceptualizes 25,000 square feet of office, retail, and restaurant uses; 180-units of residential dwelling units, and a 140-room hotel on approximately 3.3-acres. The applicant does not seek approval of the potential uses in Phase Four of this Master Development Plan. The owner would be required to amend this Master Development Plan, if approved, prior to the commencement of Phase Four. The applicant is proposing uses and thresholds that are subject to change as the applicant studies Phase Four of the site and prepares development options*

Goal 2 – Provide neighborhood pedestrian connections.

Outcome N2.1: Residents of all abilities safely and easily move about the community.

Action N2.1.1 Identify opportunities for future open space and trails in neighborhoods that are currently deficient in offering these amenities.

Action N2.1.2 Expand existing pedestrian network to increase connectivity within neighborhoods and to other destinations.

Staff Analysis:
A joint effort between two private property owners (Northfax JV LLC and Brown's Mazda), and the City of Fairfax will create a new north-south roadway connecting Fairfax Boulevard/Farr Avenue and Orchard Street. This will create a grid network within the northwest quadrant of Fairfax Boulevard and Chain Bridge Road that is consistent with the Comprehensive Plan and the draft Northfax Small Area Plan. This design will also provide an expanded street network for non-motorized traffic, and provide local access to existing commercial properties and a future redevelopment area. The street design includes 67-feet of right-of-way with 10-foot travel lanes, 8-foot on-street parking, 5-foot wide bike lanes, 4.5-feet planting strip or lights, pavers and trees, and a 6-foot wide sidewalk. The driveways in the townhouse section are 23-feet with alleyways of 19-feet for rear-loaded townhouses.

In Phase Two, the applicant has proposed fifty-six (56) townhomes with private alleys to serve rear entry townhouse units. The front entry townhouses abutting The Assembly have driveways off the private street. The applicant is seeking a modification of Section 4.4.4.A1 of the Zoning Ordinance and Section 2.3.1A of the Subdivision Ordinance to not provide sidewalks on both sides of all local streets. The Zoning Ordinance requires both sides of the street to have a sidewalk. The applicant has provided sidewalks on both sides of the proposed realigned Orchard Street and extension of Farr Avenue. There are three crosswalks planned for this corridor near the entrance of the parking structure on Farr Avenue Extension, at the three-way stop for Orchard Street and Farr Avenue Extension, and the mid-block of Orchard Street at the entrance of senior living building. The applicant also proposes a five (5) foot wide sidewalk along southern property line that connects from Farr Avenue Extension to the east side of the Senior Living Building. A multi-use trail is proposed along the property frontage on Chain Bridge Road.

Housing

Goal 1 – Support a wide range of housing types.

Outcome H1.1: Continued development of housing types that are underrepresented in the City's existing stock of housing units.

Action 1.1.1.2 Support development of housing types that are not heavily represented in the City's housing stock, as identified in the housing assessment, where reasonable.

Staff Analysis:
The applicant is providing a housing type that is underrepresented in the City's existing stock of housing units (Outcome H1.1). Phases Two is proposed as townhouses which serves as a transitional use to existing development outside of the Activity Center. Phase III is proposed as a senior living building that is comprised of a mixture of independent living units and assisted living units. The senior living building addresses Outcome H3.1, Action H3.1.1 and Action H.3.1.2 in the Comprehensive Plan as the applicant seeks to provide housing options for older adults that need the appropriate levels of support and care. The Zoning Ordinance considers independent living units as a residential use while the assisted living units are defined as a non-residential use. Phase Four is proposed with a combination of residential and non-residential uses.

Goal 2 - Ensure availability of housing that is affordable.

Outcome H2.1: Affordable housing units have been added to the City's housing stock through redevelopment and strategic investments.

Action H2.1.2 Provide regulatory and financial incentives to increase the supply of affordable housing, including amending the City's Zoning Ordinance to include an Affordable Dwelling Unit ordinance.

Staff Analysis:
The applicant has indicated that there is not an affordable housing component to this proposal.

Goal 2 – Provide viable and attractive mobility choices.

Outcome MM2.1: Pedestrian safety is improved.

Action MM2.1.1 Fill critical gaps in the pedestrian network. Develop and act on a prioritized list of sidewalk improvements in the commercial areas and provide sidewalks on at least one side of every residential street in neighborhoods that are in agreement.

Action MM2.1.2 Ensure the pedestrian network is accessible to all and meets the requirements of the Americans with Disabilities Act (ADA).

Action MM2.1.5 Expand the sidewalk network. Sidewalks should be provided with any significant street maintenance, rehabilitation, or reconstruction project and may be constructed independent of a street project.

Action MM2.2.1 Identify and fill gaps in the trail network. Find opportunities for future trails, complete connections to existing segments, implement projects proposed by the Parks and Recreation Master Plan, and pursue new trail connections to create a more functional trail network.

Staff Analysis:
A joint effort between two private property owners (Northfax JV LLC and Brown's Mazda), and the City of Fairfax will create a new north-south roadway connecting Fairfax Boulevard/Farr Avenue and Orchard Street. This will create a grid network within the northwest quadrant of Fairfax Boulevard and Chain Bridge Road that is consistent with the Comprehensive Plan and the draft Northfax Small Area Plan. This design will also provide an expanded street network for non-motorized traffic, and provide local access to existing commercial properties and a future redevelopment area. The street design includes 67-feet of right-of-way with 10-foot travel lanes, 8-foot on-street parking, 5-foot wide bike lanes, 4.5-feet planting strip or lights, pavers and trees, and a 6-foot wide sidewalk. In the northwest corner of the site an amenity center and an eight (8) foot wide walking trail is planned.

In Phase Two, the applicant has proposed fifty-six (56) townhomes with private alleys to serve rear entry townhouse units. The front entry townhouses abutting The Assembly have driveways off the private street. The applicant is seeking a modification of Section 4.4.4.A1 of the Zoning Ordinance and Section 2.3.1A of the Subdivision Ordinance to not provide sidewalks on both sides of all local streets. The Zoning Ordinance requires both sides of the street to have a sidewalk. The applicant has provided sidewalks on both sides of the proposed realigned Orchard Street and extension of Farr Avenue. There are three crosswalks planned for this corridor near the entrance of the parking structure on Farr Avenue Extension, at the three-way stop for Orchard Street and Farr Avenue Extension, and the mid-block of Orchard Street at the entrance of senior living building. The applicant also proposes a five (5) foot wide sidewalk along southern property line that connects from Farr Avenue Extension to the east side of the Senior Living Building. In Phase One, a multi-use trail is proposed along the property frontage on Chain Bridge Road.

Goal 3 – Integrate transportation with land use.

Outcome MM3.2 – Walkability to and within activity centers and between neighborhoods is increased.

Action MM3.2.4 – Improve the overall pedestrian environment, including pedestrian crossings, street trees, furnishing zones; buffering sidewalk from vehicle travel lanes; improved pedestrian scale lighting; and active ground floor uses along street edges.

Staff Analysis:
A joint effort between two private property owners (Northfax JV LLC and Brown's Mazda), and the City of Fairfax will create a new north-south roadway connecting Fairfax Boulevard/Farr Avenue and Orchard Street. This will create a grid network within the northwest quadrant of Fairfax Boulevard and Chain Bridge Road that is consistent with the Comprehensive

Plan and the draft Northfax Small Area Plan. This design will also provide an expanded street network for non-motorized traffic, and provide local access to existing commercial properties and a future redevelopment area. The street design includes 67-feet of right-of-way with 10-foot travel lanes, 8-foot on-street parking, 5-foot wide bike lanes, 4.5-feet planting strip or lights, pavers and trees, and a 6-foot wide sidewalk. In the northwest corner of the site an amenity center and an eight (8) foot wide walking trail is planned that connects to the areas *in front of the townhouses and senior living building will serve as a linear park. In addition to these improvements, the applicant considers streetscape improvements for Orchard Street and the extension of Farr Extensive, as well as, the roof top green space on the senior living building as part of their overall development design and on-site open space improvements. The applicant has proposed LED street lights on Orchard Street.*

Environmental Policies

The City has several types of environmental resources that are easily impaired by urban land uses. Encompassing the headwaters of Accotink Creek, measures taken by the City to protect water quality, riparian and floodplain areas, open space, and the urban forest are critical to support regional efforts to improve environmental health. Located within the Chesapeake Bay Watershed, the City is committed to reducing stormwater runoff in order to protect the Bay through the adoption of the Chesapeake Bay Preservation Act and enforcement of other federal, state, and local stormwater regulations. (City of Fairfax 2035 Comprehensive Plan, Pg. 99).

Outcome NE1.5: Restored and preserved natural open spaces and contiguous greenway corridors that provide natural habitats for plants and wildlife.

Action NE1.5.1 Restore disturbed areas along streams and in conservation easements with native species.

Action NE1.5.3 Encourage new development that protects and preserves environmentally-sensitive areas and natural features, such as tree cover (especially significant stands of trees and healthy, mature trees), native vegetation, streams, wildlife habitat, and natural topography.

Staff Analysis:

A portion of the site in the northwest corner would remain in the floodplain and would retain RPA on site. The applicant states that the improvements depicted on the MDP will remove hazardous trees and significantly reduce the impact of invasive vegetation on threes identified for preservation allowing those trees to thrive. The proposed application addresses in part Outcome NE1.5 to "restore and preserve natural open spaces and contiguous greenway corridors that provide natural habitats for plants and wildlife" as the northwest corner of the will remain in its natural state with a walking trail. Likewise, Action NE1.5.1 is addressed, in part, by "restoring disturbed areas along streams and in conservation easements with native species" as the applicant has committed to a stream restoration project for a portion of Accotink Creek within the boundaries of Van Dyck Park. This stream restoration project will implement this component of the approved master plan for Van Dyck Park. VA DEQ is also requiring contribution to regional bank for stream restoration improvements outside of the City.

Section 4.18.8.D.1 (Chesapeake Bay Preservation) of the Zoning Ordinance requires a Major Water Quality Impact Assessment shall be required for any development that exceeds 5,000 square feet land disturbance or that encroaches onto the seaward 50 feet of the 100-foot buffer area; or is located in the resource management area and is deemed necessary by the zoning administrator. The applicant is proposing to impact 1,749 linear feet of the stream channel on site. Appendix C in the Major Water Quality Impact Assessment provides a visual depiction of the areas impacted. The applicant also received a joint permit to impact 1,646 linear feet of stream channel with authorization to compensate for permanent stream impacts through the purchase 1,675 stream credits or 4,761 Stream Condition Units from a VDEQ approved mitigation bank, as required by the VWP Permit (Permit No. 18-1003).

The applicant received a Conditional Letter of Map Revision (CLOMR) from the Federal Emergency Management Agency (FEMA), dated April 1, 2019 - Case No. 18-03 2239R. A Conditional Letter of Map Revision (CLOMR) is a formal review and comment as to whether a proposed flood protection project or other project complies with the minimum NFIP

requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective Flood Insurance Rate Map or Flood Insurance Study. The 100-year floodplain cuts through the site and causes half (½) of the property to be undevelopable. During the VWP permitting process, the applicant had to demonstrate avoidance and minimization efforts. It was deemed that both efforts would require flood control due to the location of the perennial stream and the history of flooding onsite. A complete avoidance would result in a developable area of 4.4 +/- acres. The flood elevations under this scenario would render approximately half of the developable land area in an unstable condition to due to the presence of RPA and flood zones (VWP Individual Permit No. 18-1003, March 5, 2019, page 3). A partial streaming piping scenario was also considered and deemed infeasible whereby "500 linear feet of stream channel would be piped leaving most of the perennial stream and all the intermittent stream intact" (VWP Individual Permit No. 18-1003, March 5, 2019, page 3). However, the use of Orchard Street to access the western portion of the site "would necessitate significant alteration to the flood zones through the installation of a culverted road crossing, this constricting flood flows and increasing flooding to the northern portion of the property" (VWP Individual Permit No. 18-1003, March 5, 2019, page 3).

PART B: CITY POLICY

This section is divided into the following subjects:

1. Land Use
2. Scale
3. Circulation (including vehicular circulation, pedestrian circulation and parking)
4. Architecture and Landscaping
5. Historic Resources
6. Stormwater Management
7. Dry Utilities
8. Open Space
9. Tree Coverage
10. Fiscal Impact

Land Use

The current land use designation for the site is Activity Center and Green Network. Guidance from the Comprehensive Plan for this land use is provided below followed by a physical characteristic of the conformance of the development proposal with that guidance.

Activity Center Place Type

The Activity Center Place Type, identified in purple on the Future Land Use Map, applies to locations in the City where pedestrian-oriented, mixed-use development is strongly encouraged. (Mixed-use development is pedestrian-oriented development that allows multiple activities to take place by layering compatible land uses, public amenities, and active streets accommodating multimodal transportation, and community-serving commercial.) Uses should be integrated as a mix of commercial uses, multifamily housing, and townhouses, either in the same building (i.e., vertical mixed-use) or as a combination of single-use buildings featuring a range of complementary uses within the Activity Center (i.e., horizontal mixed-use).

Activity Centers can accommodate a variety of building types based on the different uses permitted and varying characteristics among individual Activity Centers. Recommended physical characteristics for specific uses are provided under Use Characteristics (p. 33) and more specific recommendations are provided for the Old Town Fairfax and Northfax Activity Centers on the following pages. The Comprehensive Plan also recommends Small Area Plans be developed for each of the City's five Activity Centers. As each of these plans is completed and adopted, the recommendations will supersede the pre-existing guidance of this Comprehensive Plan. In general, new development in Activity Centers should support a connected street network as recommended in the Multimodal Transportation Chapter of the Comprehensive Plan; provide

an improved streetscape and pedestrian connections to surrounding uses, including links to the existing pedestrian network; and include inviting public and/or private open spaces. Parking should be provided in structured or below-grade facilities where reasonable. Development in Activity Centers must meet the Code of Virginia definition for an Urban Development Area (Virginia Code § 15.2-2223.1) and follow the recommendations for Private Site Design and Elements in the applicable district of the City of Fairfax Design Guidelines.

Predicated on the underlying zoning district, the Activity Center Place Type supports a density of a minimum FAR of 0.4; at least six townhouses or at least 12 multifamily dwelling units per acre; or any proportional combination of residential and commercial densities with building heights predominantly five stories or less, unless otherwise specified in an adopted Small Area Plan. (Comprehensive Plan, Page 32).

The Green Network Place Type includes public spaces, such as active and passive parks, trails, playing fields, public recreation facilities, cemeteries, open space, and private facilities such as golf courses and private open space. There are currently no zoning districts specifically related to this Place Type. Green Network uses are permitted in the CR, Commercial Retail; CU, Commercial Urban; and CG, Commercial General zoning districts and constitute a special use in all of the residential zoning districts. Outdoor recreational uses, such as tennis courts and golf courses, are permitted as a special use in all of the nonresidential zoning districts except for CL, Commercial Limited.

New recreational facilities shall provide connections to the pedestrian and street network as recommended in the Multimodal Transportation Chapter of the Comprehensive Plan. Proposed connections to other green spaces to complete the network should be prioritized for recreation and transportation purposes as well as ecological benefits. Properties in the network also include natural areas for conservation and protection. Parking facilities for specific recreational uses shall be integrated into the site so as not to prioritize vehicular access over pedestrian connections.

Staff Analysis:

Staff believes the uses shown on the GDP is generally in conformance with the Future Land Use Map category and the guidance of the Comprehensive Plan. Phase One includes the construction of a storm drainage culvert, utility relocations, realignment of Orchard Street and other improvements (i.e., walking trail, sidewalks and bike lanes) shown on the Master Development Plan. The applicant seeks approval of a Special Use Permit to modify the current 100-year floodplain and approval of a Special Exception to impact the Resource Protection Area by culverting the stream that traverses the site from the northwest to the southeast into an existing box culvert on Chain Bridge Road. The existing floodplain and stream limits the development area to approximately half of the 11.46-acre site. Phases Two and Three are proposed as townhouses and a senior living building that is comprised of a mixture of independent living units and assisted living units. The Zoning Ordinance considers independent living units as a residential use while the assisted living units are defined as a non-residential use. Phase Four is proposed with a combination of residential and non-residential uses.

A joint effort between two private property owners (Northfax JV LLC and Brown's Mazda), and the City of Fairfax will create a new north-south roadway connecting Fairfax Boulevard/Farr Avenue and Orchard Street. This will create a grid network within the northwest quadrant of Fairfax Boulevard and Chain Bridge Road that is consistent with the Comprehensive Plan and the draft Northfax Small Area Plan. This design will also provide an expanded street network for non-motorized traffic, and provide local access to existing commercial properties and a future redevelopment area. The street design includes 67-feet of right-of-way with 10-foot travel lanes, 8-foot on-street parking, 5-foot wide bike lanes, 4.5-feet planting strip or lights, pavers and trees, and a 6-foot wide sidewalk. In the northwest corner of the site an amenity center and an eight (8) foot wide walking trail is planned that connects to the areas *in front of the townhouses and senior living building will serve as a linear park. In addition to these improvements, the applicant considers streetscape improvements for Orchard Street and the extension of*

Farr Extensive, as well as, the roof top green space on the senior living building as part of their overall development design and on-site open space improvements. The applicant has proposed LED street lights on Orchard Street

Scale

Density:

Predicated on the underlying zoning district, the Activity Center supports a density of a minimum FAR of 0.4; at least six (6) townhouses or at least twelve (12) multifamily dwelling units per acre; or any proportional combination of residential and commercial densities with building heights predominantly five stories or less, unless specified in an adopted Small Area Plan. (City of Fairfax 2035 Comprehensive Plan, Pg. 32). Residential townhouses should only be considered to serve as a transitional use to existing development outside of the Activity Center.

Staff Analysis:

Staff believes the use shown on the GDP is generally in conformance with the Future Land Use Map category and the guidance of the Comprehensive Plan. The applicant is proposing to develop fifty-six (56) townhouses in Phase Two. The townhouses are approximately 44 feet in height. Townhouses would be a mix of front entry units that are 24-feet wide and rear entry units that are 20-feet wide. In the middle of the site in Phase Three, the applicant is proposing 114-units for congregate living facility and 86-units for assisted living in a seven (7) story building measuring at 83-feet on 2.24 +/- acres. The senior living building includes a parking garage with 114 spaces and twelve (12) surface parking spaces on the east side of the building. The overall densities for other approved projects as compared to the subject application is provided in Table 1:

Table 1: Comparable Projects in the City

Project	Site Area	Number of Units	Density	Height
Northfax West Phases I-III	**11.46**	**56 TH; 200 MF**	**22.3***	**40 +/- feet; 83 +/- feet**
Capstone	*6.15*	*275*	*44.7**	*48 +/- feet*
Paul VI	*18.51*	*266*	*14.4*	*45 +/- feet*
Scout on the Circle	*9.81*	*400*	*40.7**	*85 feet*

** Project is located in an Activity Center*

The subject property is located in the Activity Center Place Type and is located in Northfax, one of five Activity Centers identified in the 2035 Comprehensive Plan. The Northfax Activity Center is undergoing a Small Area Plan, which "are neighborhood-level plans intended to provide the City with guidance on each of its five Activity Centers defined in the 2035 Comprehensive Plan. While the Comprehensive Plan advises the Activity Center's development at a high level, Small Area Plans provide more specific guidance for each Activity Center, including the desired mix of uses, residential density, building density, design aesthetic, street locations, multimodal connections infrastructure improvements, parking, and open space. As each Small Area Plan is completed and adopted, its recommendations will supersede the pre-existing guidance in the 2035 Comprehensive Plan for its respective Activity Center" (City of Fairfax, https://www.fairfaxva.gov/government/community-development-planning/planning/current-studies-projects-plans/small-area-plans).

The draft Small Area Plan for Northfax is scheduled for a public hearing for City Council on June 23, 2020. This plan was presented to the Planning Commission on June 8, 2020, which recommended approval following the consideration of testimony at a public hearing. The Northfax SAP recommends improved stormwater infrastructure for the entire Activity Center, including increasing stormwater requirements 15% beyond state standards (City of Fairfax, Draft Northfax Small Area Plan, Page 49). The Northfax SAP also recommends the establishment of a connected street grid and improved pedestrian connections as provided by the Orchard Street/Farr Ave project and included in the Northfax West proposal. These recommendations are consistent with the Comprehensive Plan support for transforming the City's Commercial Corridors and Activity Centers. The City will strive to transform these areas into distinctive regional destinations that can compete effectively with other development and mixed-use centers in Northern Virginia (City of Fairfax 2035 Comprehensive Plan, Pg. 120). Redevelopment in Commercial Corridors and Activity Centers should create destinations that attract tenants, customers, and residents (Outcome EV3.1, Pg. 120). Furthermore, the Northfax SAP encourages under-represented housing types, such as senior housing, and townhouses as

transitional densities to existing neighborhoods which is also consistent with the Comprehensive Plan and the Activity Center Place Type.

Height: Predicated on the underlying zoning district, the Activity Center Place Type supports a density of a minimum FAR of 0.4; at least six townhouses or at least 12 multifamily dwelling units per acre; or any proportional combination of residential and commercial densities with building heights predominantly five stories or less, unless otherwise specified in an adopted Small Area Plan. (Comprehensive Plan, Page 32).

Staff Analysis:
Staff believes the townhouses shown at a maximum height of forty-four (44) feet and the senior living building shown at a maximum height of eighty-three (83) feet on the GDP is generally in conformance with the Activity Place Type and guidance of the Comprehensive Plan. Height in the Planned Development Residential District is not restricted.

Circulation

Vehicular Network: A joint effort between two private property owners (Northfax JV LLC and Brown's Mazda), and the City of Fairfax will create a new north-south roadway connecting Fairfax Boulevard/Farr Avenue and Orchard Street. This will create a grid network within the northwest quadrant of Fairfax Boulevard and Chain Bridge Road that is consistent with the Comprehensive Plan and the draft Northfax Small Area Plan. The applicant is not proposing a vehicular connection to Perry Street and Howerton Avenue.

Staff Analysis:
Staff believes the street design provides an expanded street network for non-motorized traffic, and provide local access to existing commercial properties and a future redevelopment area. The street design includes 67-feet of right-of-way with 10-foot travel lanes, 8-foot on-street parking, 5-foot wide bike lanes, 4.5-feet planting strip or lights, pavers and trees, and a 6-foot wide sidewalk. The driveways in the townhouse section are 23-feet with alleyways of 19-feet for rear-loaded townhouses. The applicant is seeking a waiver to Section 401-01 of the Public Facilities Manual to less than 30-feet from face of curb to face of curb or edge of pavement. The request to reduce street widths have been reviewed by staff for emergency access. The applicant is seeking a waiver to Section 2.4.5.3 of the Public Facilities Manual to design private streets less than 300-feet in length. The applicant has designed streets with a minimum of 100-feet in length to serve the townhouse section of the master development plan. Finally, the applicant is seeking a waiver to Section 2.10.1 of the Subdivision Ordinance that would require street improvements to Perry Street and Howerton Avenue. The applicant is proposing to provide a pedestrian trail connection with signage to reduce the potential conflicts with vehicular traffic and pedestrian activity at Perry Street and Howerton Avenue.

In Phase Two, the applicant has proposed fifty-six (56) townhomes with private alleys to serve rear entry townhouse units. The front entry townhouses abutting The Assembly have driveways off the private street. The applicant is seeking a modification of Section 4.4.4.A1 of the Zoning Ordinance and Section 2.3.1A of the Subdivision Ordinance to not provide sidewalks on both sides of all local streets. The Zoning Ordinance requires both sides of the street to have a sidewalk. The applicant has provided sidewalks on both sides of the proposed realigned Orchard Street and extension of Farr Avenue. There are three crosswalks planned for this corridor near the entrance of the parking structure on Farr Avenue Extension, at the three-way stop for Orchard Street and Farr Avenue Extension, and the mid-block of Orchard Street at the entrance of senior living building. The applicant also proposes a five (5) foot wide sidewalk along southern property line that connects from Farr Avenue Extension to the east side of the Senior Living Building. A multi-use trail is proposed along the property frontage on Chain Bridge Road.

The applicant is seeking a modification to Section 4.3.3.B (Cross access requirement) which requires "vehicular access shall be required between abutting nonresidential lots fronting on arterial and collector streets prior to the erection or establishment of a principal building on one of the lots in order to facilitate traffic flow between lots, except where topography or other physical conditions make such access unreasonable. The Zoning Administrator shall determine the location and dimensions of such

easement based on public safety and convenience, not owner preference." (Zoning Ordinance, Pg. 4-11). The southern property line is shared by two non-residential uses, the Brightview senior living building and the Brown's Mazda dealership. However, the establishment of a connected street grid and improved pedestrian connections as provided by the Orchard Street/Farr Avenue project would provide access to the south.

The City's Transportation Division held a scoping meeting with the applicant's engineer to discuss the methodology and ITE data for the Traffic Impact Study (TIS). The applicant has provided a Traffic Impact Study estimating 274 AM peak hour trips, 354 PM peak hour trips and 4,415 daily trips upon buildout of the development before considering an internal capture ratio of 5% for a mixed-use development and a reduction of 5% for TDM/Transit. Table 2 provides a summary of existing trips and proposed trips:

Table 2: Trip Generation

Land Use		***ITE Code***	***Size***	***AM Peak Hour***	***PM Peak Hour***	***Daily***
Existing	*Single-Family Detached Homes*	*210*	*2*	*1*	*2*	*19*
Proposed (Phase I)	*Multifamily Housing (Low-Rise)*	*220*	*56*	*27*	*35*	*383*
	Continuing Care	*255*	*200*	*28*	*32*	*480*
Total				*55*	*67*	*863*
Proposed (Phase II)	*Multifamily Housing (Mid-Rise)*	*221*	*180*	*61*	*78*	*979*
	Hotel	*310*	*140*	*65*	*79*	*1,170*
	Quality Restaurant	*931*	*8 ksf*	*6*	*62*	*671*
	High-Turnover Restaurant (Sit-Down)	*932*	*5 ksf*	*50*	*49*	*561*
	General Office	*710*	*10 ksf*	*36*	*13*	*114*
	Shopping Center	*820*	*2 ksf*	*2*	*8*	*76*
Total Phase 2 Development Trips (without reductions)				*220*	*289*	*3,571*
Total Phase 1 + Phase 2 Development Trips (without reductions)				*275*	*356*	*4,434*
Total Development Trips (with reductions)				*265*	*344*	*4,274*
Net New Trips Without Restrictions				*274*	*354*	*4,415*
Net New Trips with Reductions				*264*	*342*	*4,255*

The proposed use would increase the number of daily vehicular trips; however, the level of service for Pickett Road would not be degraded. It should be noted that Phase Four will be subject to a Traffic Impact Study upon a request for an amendment to this plan.

Pedestrian Network: The street design includes 67-feet of right-of-way with 10-foot travel lanes, 8-foot on-street parking, 5-foot wide bike lanes, 4.5-feet planting strip or lights, pavers and trees, and a 6-foot wide sidewalk. The driveways in the townhouse section are 23-feet with alleyways of 19-feet for rear-loaded townhouses. The applicant is seeking a modification to provide sidewalks on both sides of a street in the townhouse section of the development. The Master Development Plan provides for a multi-use path of ten (10) feet along the property frontage on Chain Bridge Road as referenced in the Comprehensive Plan Multimodal Transportation Plan.

Staff Analysis:
Staff believes the pedestrian network provided in the master development plan is consistent with the Comprehensive Plan and the Zoning Ordinance. In Phase Two, the applicant has proposed fifty-six (56) townhomes with private alleys to serve rear entry townhouse units. The front entry townhouses abutting The Assembly have driveways off the private street. The applicant is seeking a modification of Section 4.4.4.A1 of the Zoning Ordinance and Section 2.3.1A of the Subdivision Ordinance to not provide sidewalks on both sides of all local streets. The Zoning Ordinance requires both sides of the street to have a sidewalk. The modification request is reasonable as internal sidewalks align with the fronts of every unit across the front loaded units and the rear loaded units have front sidewalks. All units have sidewalks in front except for the row of townhouses adjacent to The

Assembly. Sidewalks are not provided in private alleyway. The applicant has provided sidewalks on both sides of the proposed realigned Orchard Street and extension of Farr Avenue. There are three crosswalks planned for this corridor near the entrance of the parking structure on Farr Avenue Extension, at the three-way stop for Orchard Street and Farr Avenue Extension, and the mid-block of Orchard Street at the entrance of senior living building. The applicant also proposes a five (5) foot wide sidewalk along southern property line that connects from Farr Avenue Extension to the east side of the Senior Living Building. A ten (10) foot wide multi-use trail is proposed along the property frontage on Chain Bridge Road.

Parking:

The applicant is proposing fifty-six (56) townhouses and the Zoning Ordinance requires two spaces per unit for a total of 112 parking spaces. The applicant has provide twenty-two additional parking spaces for visitors. The applicant is proposing 114-units for congregate living facility and 86-units for assisted living in a seven (7) story building measuring at 83-feet on 2.24 +/- acres. The senior living building includes a parking garage with 114 spaces and twelve (12) surface parking spaces on the east side of the building. The applicant is seeking a modification to Section 4.2.3.E to provide 1.5 parking spaces per unit for the independent living (congregate living facility in the Zoning Ordinance) portion of the proposed senior living building; while the assisted living facility has a parking requirement of one (1) space per four (4) beds. Table 3 provides a breakdown of the required and provided parking spaces for the senior living building.

Table 3: Senior Living Parking

Use	Units	Parking Requirements	Required Spaces	Provided Spaces
Independent Living (Congregate Living Facility)	114	1.5 spaces per unit	171	114
Assisted Living Facility	86 (92 Beds)	1 space per 4 beds	23	12
Total			194	126

Staff Analysis:

Staff believes that the applicant has sufficient demonstrated that the site would be adequately parked in PhaseTwo and Phase Three. The applicant has provided a technical memorandum to address the parking requirement for the senior living building. This memorandum is provide in Attachment 15 and provides an explanation for the reduction in spaces from 194 spaces to 126 spaces. The applicant also has provided a statement of operations (Exhibit B to the Statement of Justification) for the senior living building, which identified three user groups (i.e., residents, staff, and visitors) that would be the primary users of the parking spaces. With further evaluation of the site and past practices, the applicant has provided a total of the 126 spaces. The applicant is proposing to park the independent living units at one to one ratio; while the assisted living units would be parked at a rate of one (1) space per seven (7) beds. The contract purchaser and operator of the senior living building, Brightview, states the primary users are employee associates, followed by visiting family friends, with residents as the lightest users. The applicant further states that the average of resident is eighty-two (82) years old, the majority of whom are no longer driving. The applicant will be required to submit a Transportation Demand Management (TDM) program before site plan approval.

Along with parking for the senior living building, the Zoning Ordinance requires the applicant to provide two (2) off-street loading spaces since the building exceeds 50,000 square feet. The Master Development Plan shows one loading space on the east side of the building. This space would accommodate the day-to-day deliveries to the site without impeding traffic circulation. The plan also proposes another loading space on Farr Avenue Extension; however, loading zones in the public right-of-way does not count towards meeting the loading zone requirement.

Architecture and Landscaping:

The Architectural Control Overlay District (ACOD) is established to encourage the construction of attractive buildings, to protect and promote the general welfare and to prevent deterioration of the appearance of the city, to make the city more attractive for the development of business and industry, and to protect land values (Zoning Ordinance, Section 3.2.2.B.2, Pg. 3-3). The ACOD shall apply city-wide to all development outside of the historic and transition districts. The requirements of the ACOD include review and recommendation

by the Board of Architectural Review (BAR) and issuance of a Certificate of Appropriateness for architecture and landscaping for City Council. Guidance on architecture and landscaping for new development in the ACOD is provided in the Design Guidelines.

Staff Analysis:
The applicant had a pre-application work session with the Board of Architectural Review on March 4, 2020. The applicant submitted a formal application on April 28, 2020. The BAR hearing for recommendation is scheduled for June 17, 2020. Staff recommends the following conditions:

1. *A minimum of two courses of masonry shall be used as the foundation material on all sides of the senior living building, including parking garage elevations.*
2. *All canopy trees shall be 3.5-inch caliper consistent with the requirements of the Zoning Ordinance.*
3. *Additional canopy and understory trees shall be planted in the front and side yards of townhouses in the northern portion of the site where practicable.*
4. *Additional shrubs shall be planted along the path and near the stream in the open spaces in the northwestern portion of the site. Shrub plantings shall be selected from Appendix III of the Design Guidelines for shrubs, herbaceous plants, groundcover, ferns, and grasses as listed in the section on Resource Protection Area (RPA) plantings.*
5. *Lattice screens for roof-mounted townhouse mechanical equipment shall be in a color to match the fourth-floor wall surfaces.*
6. *All ground-mounted appurtenances shall be screened from view in the right-of-way.*
7. *The proposed modifications shall be in general conformance with the review materials received by staff and included in the staff report, as modified through the date of this meeting, except as further modified by the Board of Architectural Review, the Director of Community Development and Planning, Zoning, or the Building Official.*

Stormwater Management:

Even though stormwater management typically is not fully designed until administrative site plan review, the General Development Plan will be subject to the requirements of the state code and the City's stormwater management regulations.

Staff Analysis:

The applicant must demonstrate during site plan review that the stormwater management system is sufficient to handle a 1-year and 10-year 24-hour storm event. Likewise, the design and construction of stormwater management facilities shall comply with Virginia Stormwater Management Program (VSMP) Permit Regulations.

Utilities:

Section 4.11 of the Zoning Ordinance requires all on-site above-ground utilities to be relocated underground for any development that will require site plan approval. All new on-site utilities serving Phase Two and Phase Three are proposed to be installed underground. However, the applicant is seeking a modification to Section 4.11.B and Section 4.11.C. There are utilities on Chain Bridge Road, Orchard Street and on the southeastern property line.

Staff Analysis:
Section 4.11.B states, "All on-site utilities shall be installed underground at the applicant's expense in accordance with city and applicable utility company standards; provided that temporary overhead facilities required for construction purposes shall be permitted." This request applies to the above ground utilities on Chain Bridge Road and the above ground utilities along the southeastern property line. The applicant is requesting that the undergrounding of utilities on Chain Bridge Road be addressed when the future development parcel comes back to the City Council for an amendment to the Master Development. The applicant

states that the utilities along the southeastern property line and eastern property line would require coordination with adjacent property owners. There are four (4) utility poles in this area and only one (1) pole is located on the subject property. The applicant believes these existing utilities should be addressed as the adjacent properties are redeveloped.

The applicant is also seeking a modification to Section 4.11.C, which states "When the proposed development will result in moving or relocating existing overhead utilities located in adjoining rights-of-way, the applicant shall be responsible for placing such utilities underground and dedicating any additional right-of-way or easement that is necessary. Equipment such as electric distribution transformers, switch gear, meter pedestals and telephone pedestals which is normally installed above ground in accordance with generally accepted utility practice for underground distribution may be so installed." (Zoning Ordinance, Pg.4-54). This request applies to the existing above ground utility pole on the north side of Orchard Street. The applicant states that the pole is being relocated to accommodate the realignment of Orchard Street. A single terminal pole would also be added to off-site to serve the office building at 3554 Chain Bridge Road, to close the loop once the senior building is constructed in Phase Three and the future development parcel is developed in Phase Four. Additionally, the applicant states the terminal pole provides the office building with a more reliable electric power source.

Parks and Open Space:

Section 3.8.2.G of the Zoning Ordinance requires that a master development plan provide recreation and open space. At least twenty (20) percent of each of each planned development site shall be designated and provided as recreation and open space.

Staff Analysis:
Open space is programmed as an amenity area at the northeast corner of Orchard Street and Farr Avenue, on the north west and east side of the senior living building, and in the northwest corner of the site that includes an amenity center and a 6-foot wide walking trail. The applicant is retaining a large area of RPA and Floodplain in the northwest corner of the site, and only half that acreage can be counted towards the open space. The plan currently proposes four areas of open space with a linear park on the north side of Orchard Street that connects to the proposed trail as discussed in the draft Northfax SAP for a total of 1.61 +/- acres (70,132 square feet) or 15% of the property. The applicant has provided approximately 0.80 acres or 8% of the site measuring less than 49-feet. If these areas are included in the amount of open space, the development would have approximately 23% (2.41 acres/104,980 square feet) of the land area provided as open space. Sheet 7 of the Master Development Plan illustrates the Open Space and Circulation Plan. The applicant also states that the areas in front of the townhouses and senior living building will serve as a linear park. In addition to these improvements, the applicant considers streetscape improvements for Orchard Street and the extension of Farr Extensive, as well as, the roof top green space on the senior living building as part of their overall development design and on-site open space improvements. The applicant states that the open space would be provided in Phase One, Phase Two and Phase Three. The applicant is seeking a modification to Section 3.8.7.G of the Zoning Ordinance requiring 20% of the site be developed as open space. Staff acknowledges the importance of streetscapes and other features such as rooftop spaces but those features as presented in this plan do not meet the minimum open space requirements in Section 3.8.7. It is staff's position that at the end of the project, the twenty (20) percent open space requirement would be achieved.

Tree Coverage:

The applicant has provided a landscape plan as part of the master development plan. The applicant is seeking a modification to Section 4.5.5.C.2(b)(2) and Section 4.5.5.D of the Zoning Ordinance to provide the minimum tree plantings as well as the minimum fence or wall height of the TY3 transitional yard specifications along the Subject Property's boundaries. The applicant is also seeking two additional modifications to Section 4.5.6.B and Section 4.5.6.B.1that apply to the location and spacing of street trees. The applicant has provided the required 10% tree coverage for the site.

Staff Analysis:

Staff believes that the landscape plan as presented with modifications to Section 4.5.5.C.2(b)(2) and Section 4.5.5.D is consistent with the Comprehensive Plan and Zoning Ordinance. A transitional yard buffer of 15 feet (TY3) is required along the site area boundary. The applicant is seeking a modification to the planting requirements along the northern, western, southern and eastern property lines. The northern property line adjacent to The Assembly townhouse community has an existing dense tree line that the applicant intends to preserve and six (6) canopy trees, add eleven (11) understory trees and twenty-three (23) shrubs along the property line. In the northeast corner of the site abutting The Assembly and the office building on Orchard Street, the applicant is requesting a reduction in the width and number of canopy trees due to the proposed alley and sanitary sewer easement.

The applicant is seeks to modify to the transitional yard requirement (from 15-feet to 8.5 feet) along the western property line adjacent to single-family detached homes fronting along McLean Avenue. The applicant intends to maintain the required fencing, quantity and type of plant species along the western property line but would reduce the width of the transitional yard. The applicant states that the constraints for this area are caused by the right-of-way dimensions for the extension of Farr Avenue, as well as the required width for the private alley providing access to the townhomes that front on Farr Avenue.

The southern property line shared with Brown's Mazda is proposed to be developed with two parking structures. The applicant is proposing to construct a parking garage for the senior living building on the southern property line. Brown's Mazda dealership is proposing to develop their parking structure directly adjacent to the applicant's parking structure. The applicant is installing a five (5) foot wide sidewalk along this property line that connects from Farr Avenue Extension to the east side of the Senior Living Building. On the east side of the senior living building and on the southern property line, the applicant has provided additional surface parking and a turnaround for fire access. Therefore, the applicant is seeking to eliminate the requirement to install a transitional yard including a fence or wall, and the required plantings.

The eastern property line has an existing dense tree line on the office building property with frontage on Orchard Street and Chain Bridge Road. Along this property line, the applicant proposes an alleyway for a row of rear-entry townhouses and the installation of a sanitary sewer line. It should also be noted that the eastern property line abutting the future development parcel will be determined during the review of an amendment to the Master Development Plan. The applicant has provided temporary plantings to screen the future development parcel known as Phase Four. The northwestern corner of the site will have a transitional yard with existing vegetation as the area is located in the floodplain.

The applicant is also seeking two additional modifications that apply to street trees. Section 4.5.6.B states "street trees shall be required along all streets at the rate of one canopy tree for every 40 linear feet and spaced a maximum of 50 feet part" and Section 4.5.6.B.1 states "all street trees shall be planted no less than three feet or more than 15 feet from the back of the curb or edge of pavement." The applicant is requesting these modifications due to the proposed location of on-street parallel parking spaces and proposed utilities. The proposed street design provided by the City's consultant for the Farr Avenue Extension has been added to the MDP. The design for Orchard Street is consistent with the Farr Avenue Extension. The street design may also need to accommodate underground stormwater utilities, curb cuts and filterras that would potentially space trees beyond the maximum requirement of 50 feet. The street design as presented creates challenges to meeting the requirement of all street trees shall be planted no less than three feet or more than 15 feet from the back of the curb or edge of pavement. The applicant states the design shows a four-foot planting strip in between the curb and six foot wide sidewalk that cannot conform to the required three-foot minimum distance from paved surface.

Likewise, the applicant is seeking a modification to Section 4.5.6.B.1 for Chain Bridge Road due to the existing utilities that would remain during Phases One, Phases Two and Phase Three. The applicant proposes to plant evergreen and deciduous shrubs to the back of the proposed 10-foot multiuse trail on Chain Bridge Road that would be constructed during Phase One. These trees may grow up to fifteen (15) feet and could provide year round screening of Phase Four until developed.

Fiscal Impact:

The anticipated fiscal impact estimate for the proposed redevelopment of Northfax West Phases I-III ranges from -$29,000 to $215,000 with an average net gain annually of $93,000.

PART C: PROCEDURAL REQUIREMENTS AND REVIEW CRITERIA

Following is an analysis of citations from the Zoning Ordinance related to procedural requirements and review criteria from Section 6.6.8 of the Zoning Ordinance:

A. Substantial conformance with the comprehensive plan;

Staff believes the uses shown on the GDP is generally in conformance with the Future Land Use Map category and the guidance of the Comprehensive Plan. Phase One includes the construction of a storm drainage culvert, utility relocations, realignment of Orchard Street and other improvements (i.e., walking trail, sidewalks and bike lanes) shown on the Master Development Plan. The applicant seeks approval of a Special Use Permit to modify the current 100-year floodplain and approval of a Special Exception to impact the Resource Protection Area by culverting the stream that traverses the site from the northwest to the southeast into an existing box culvert on Chain Bridge Road. The existing floodplain and stream limits the development area to approximately half of the 11.46-acre site. Phases Two and Three are proposed as townhouses and a senior living building that is comprised of a mixture of independent living units and assisted living units. The height of the buildings are consistent with the Comprehensive Plan. A joint effort between two private property owners (Northfax JV LLC and Brown's Mazda), and the City of Fairfax will create a new north-south roadway connecting Fairfax Boulevard/Farr Avenue and Orchard Street. This will create a grid network within the northwest quadrant of Fairfax Boulevard and Chain Bridge Road that is consistent with the Comprehensive Plan and the draft Northfax Small Area Plan. This design will also provide an expanded street network for non-motorized traffic, and provide local access to existing commercial properties and a future redevelopment area.

B. Any greater benefits the proposed planned development provides to the city than would a development carried out in accordance with the general zoning district regulations;

The subject property is currently split-zoned with RM Residential Medium and CR Commercial Retail Districts. Thirteen (13) of the seventeen (17) parcels are zoned RM Residential Medium. The subject property is zoned RM Residential Medium and CR Commercial Retail. Under the current configuration, the proposal could not be developed and the site would remain largely as a residential site with limited commercial opportunities. Therefore, the applicant is requesting to rezone the property from RM Residential Medium and CR Commercial Retail to PD-M Planned Development-Mixed Use. The PD-M, Planned Development Mixed Use District, is intended to provide for coordinated mixed use developments which may include general residential and nonresidential uses within a planned development. The variety of land uses available in this district allows greater flexibility to respond to market demands and the needs of tenants, thereby providing for a variety of physically and functionally integrated land uses (Section 3.2.3.B, Pg. 3-3).

C. Suitability of the subject property for the development and uses permitted by the general zoning district regulations versus the proposed district;

The current uses are limited due to the property having two zoning districts. Staff believes that the proposed uses are consistent with the Comprehensive Plan and Zoning Ordinance. Residential townhouses should only be considered to serve as a transitional use to existing development outside of the Activity Center. The applicant is proposing to develop fifty-six (56) townhouses in Phase Two. The townhouses are approximately 44 feet in height. Townhouses would be a mix of front entry units that are 24-feet wide and rear entry units that are 20-feet wide. In the middle of the site in Phase Three, the applicant is proposing 114-units for congregate living facility and 86-units for assisted living in a seven (7) story building measuring at 83-feet on 2.24 +/- acres. The senior living building includes a parking garage with 114 spaces and twelve (12) surface parking spaces on the east side of the building. Phase Four will require an amendment to this MDP if approved.

D. Adequacy of existing or proposed public facilities such as public transportation facilities, public safety facilities, public school facilities, and public parks;

The site has adequate public facilities to support an approval of a rezoning from RM Residential Medium and CR Commercial Retail to PD-M Planned Development-Mixed Use. The subject property is located on a mass transit route and the adjoining road has capacity to support the proposed use. There are adequate public safety facilities in the area.

The subject property is located in the Providence Elementary School zone. Providence ES (PES) has a capacity of 910 students. This year, the school is at 99% capacity with a membership of 908 students. According to Fairfax County Public Schools (FCPS), PES is projected for a student membership of 951 in SY20-21 and 1012 in SY21-22 placing the school as much as 110% overcapacity. Providence ES currently has two trailers; both are used as resource rooms. Providence's Special Use Permit (SUP) for the trailers was renewed in November 2019 for five years. It is projected that the Northfax student yield ratio will be .230. According to City staff's projections, 13 students are estimated from the Northfax development based on Phase Two with additional students to be determined in Phase Four. Prior to the issuance of the final occupancy permit for Phase Two, the applicant has proposed a contribution of $108,000 to the City of Fairfax to be used for capital improvements to Providence Elementary School.

E. Adequacy of existing and proposed public utility infrastructure;

The public utility infrastructure is adequate and proposed on-site stormwater facilities would reduce impact on infrastructure. Fairfax Water has reviewed the project and there are no noted issues for the project.

F. Consistency with the applicable requirements of this chapter, including the general provisions of §3.8.2;

The proposed planned development is consistent with the general requirements set forth in Section 3.8.2 and Section 6.6 of the Zoning Ordinance.

G. Compatibility of the proposed planned development with the adjacent community;

The proposed rezoning is consistent with the surrounding area. The surrounding zoning districts are a combination of RL Residential Low, RM Residential Medium, RT Residential Townhouses, CO Commercial Office, and CR Commercial Retail. The subject property is immediately surrounded by uses that range from single-family homes to townhouses, auto dealers to offices, gas station to a restaurant and City property. Immediately to the west of the site is a single-family neighborhood on McLean Avenue and Orchard Street. To the north of the site is a townhouse community, office building and a Shell gas station. The subject property is located near two major corridors of Fairfax Boulevard and Chain Bridge Road that serve predominately non-residential uses.

H. Consistency with the general purpose of the planned development districts in §3.8.1 and the stated purposes of §3.2.3;

The PD-M, Planned Development Mixed Use District, is intended to provide for coordinated mixed use developments which may include general residential and nonresidential uses within a planned development. The variety of land uses available in this district allows greater flexibility to respond to market demands and the needs of tenants, thereby providing for a variety of physically and functionally integrated land uses (Section 3.2.3.B, Pg. 3-3). The applicant is proposing to develop fifty-six (56) townhouses in Phase Two. The townhouses are approximately 44 feet in height. Townhouses would be a mix of front entry units that are 24-feet wide and rear entry units that are 20-feet wide. In the middle of the site in Phase Three, the applicant is proposing 114-units for congregate living facility and 86-units for assisted living in a seven (7) story building measuring at 83-feet on 2.24 +/- acres. The senior living building includes a parking garage with 114 spaces and twelve (12) surface parking spaces on the east side of the building. Phase Four will require an amendment to this MDP if approved.

I. Compatibility of each component of the overall development with all other components of the proposed planned development;

The proposed planned development is compatible with the surrounding uses. The applicant is proposing to develop fifty-six (56) townhouses in Phase Two. The townhouses are approximately 44 feet in height. Townhouses would be a mix of front entry units that are 24-feet wide and rear entry units that are 20-feet wide. In the middle of the site in Phase Three, the applicant is proposing 114-units for congregate living facility and 86-units for assisted living in a seven (7) story building measuring at 83-feet on 2.24 +/- acres. The senior living building includes a parking garage with 114 spaces and twelve (12) surface parking spaces on the east side of the building. Phase Four will require an amendment to this MDP if approved.

J. The quality of design intended for each component of the project and the ability of the overall master development plan to ensure a unified, cohesive environment at full build-out;

The work that is required in Phase One establishes the developable area for Phase Two and Phase Three by constructing storm drainage culvert, relocating utilities and realigning Orchard Street. In Phase One, the applicant would preserves the northwest corner for the site to be used as open space with a pedestrian trail. The applicant has submitted a cohesive project with multiple phases that provide a variety of housing types in Phase Two and Phase Three. Phase Four will require an amendment to this MDP if approved. It is anticipated the Phase Four would have mixture of residential and non-residential uses.

K. Self-sufficiency requirements for each phase of the overall project of §3.8.2.H;

The applicant is proposing to develop the site in four phases with a modification to the Development schedule as stated in Section 3.8.2.I of the Zoning Ordinance, which states "No zoning permit shall be issued for a mixed use development to authorize the occupancy of more than 66 percent of the approved residential dwelling units as part of a PD-C or PD-M district development prior to the issuance of a zoning permit to authorize the occupancy of 100 percent of the approved nonresidential floor area for that development. The foregoing shall be binding on the applicant unless the applicant proposes a modification to this requirement in the master development plan and the city council approves such modification when it approves the master development plan." (Pg. 3-63). Phases Two and Three are proposed as townhouses and a senior living building that is comprised of a mixture of independent living units and assisted living units. The Zoning Ordinance considers independent living units as a residential use while the assisted living units are defined as a non-residential use. Phase Four is proposed with a combination of residential and non-residential uses. Strict application of the ordinance would prohibit occupancy of all of the townhouse units prior to the completion of the senior building. Therefore, the applicant is seeking a modification to the development schedule requirement.

L. The effectiveness with which the proposed planned development protects and preserves the ecologically sensitive areas within the development; and

The City recognizes that there is a delicate balance between development and protecting the environment as the City is largely built-out. The City has several types of environmental resources that are easily impaired by urban land uses. Encompassing the headwaters of Accotink Creek, measures taken by the City to protect water quality, riparian and floodplain areas, open space, and the urban forest are critical to support regional efforts to improve environmental health. Located within the Chesapeake Bay Watershed, the City is committed to reducing stormwater runoff in order to protect the Bay through the adoption of the Chesapeake Bay Preservation Act and enforcement of other federal, state, and local stormwater regulations. (City of Fairfax 2035 Comprehensive Plan, Pg. 99). The proposed application addresses in part Outcome NE1.5 to "restore and preserve natural open spaces and contiguous greenway corridors that provide natural habitats for plants and wildlife" as the northwest corner of the will remain in its natural state with a walking trail. Likewise, Action NE1.5.1 is addressed, in part, by "restoring disturbed areas along streams and in conservation easements with native species" as the applicant has committed to a stream restoration project for a portion of Accotink Creek within the boundaries of Van Dyck Park. This stream restoration project will implement this component of the approved master plan for Van Dyck Park. VA DEQ is also requiring contribution to regional bank for stream restoration improvements outside of the City. The applicant had sought and received approvals from the

state and federal government on various permits. During the permitting process, there was a public comment phase and we are not aware of any public comments on the permits that were applied for.

The 100-year floodplain cuts through the site severely limiting development on half (½) of the property. During the VWP permitting process, the applicant had to demonstrate avoidance and minimization efforts. It was deemed that both efforts would require flood control due to the location of the perennial stream and the history of flooding onsite. A complete avoidance would result in an undevelopable area of 4.4 +/- acres. The flood elevations under this scenario would render approximately half of the developable land area in an unstable condition to due to the presence of RPA and flood zones (VWP Individual Permit No. 18-1003, March 5, 2019, page 3). A partial streaming piping scenario was also considered and deemed infeasible whereby "500 linear feet of stream channel would be piped leaving most of the perennial stream and all the intermittent stream intact" (VWP Individual Permit No. 18-1003, March 5, 2019, page 3). However, the use of Orchard Street to access the western portion of the site "would necessitate significant alteration to the flood zones through the installation of a culverted road crossing, this constricting flood flows and increasing flooding to the northern portion of the property" (VWP Individual Permit No. 18-1003, March 5, 2019, Pg. 3). In order for the subject property to be developed, a special use permit is required to allow disturbance in within the 100-year floodplain boundary.

The subject property has a perennial and two intermittent streams that flow through the site from west to east. The perennial stream enters the site at the northwest corner of the project area and flows southeast before entering an 8-foot box culvert that conveys water under Route 123 that was installed by the City of Fairfax to improve drainage and reduce flooding. The two intermittent streams flow into the perennial stream from the west. As a result of having streams on site, a RPA Site-Specific Study in accordance with Section 4.18 (Chesapeake Bay Preservation) of the City's Zoning Ordinance is required by the applicant. In conjunction with an RPA Site-Specific Study, the applicant is required to submit a Water Quality Impact Assessment (WQIA) for land disturbance, development or redevelopment within the RPA including any buffer area modification or reduction. Due to the level of land disturbance proposed by the applicant, a major WQIA is required and Special Exception to impact the RPA with the construction of a culvert. Ultimately, the proposal would allow the new culvert to tie into the system installed by the City of Fairfax.

The City has adopted regulations that implement the requirements of Chesapeake Bay Preservation Act (Code of Virginia, Section 62.1-44.15:75 et seq). The purpose of Section 4.18 (Chesapeake Bay Preservation) is to: a. protect sensitive environmental lands within the city; b. safeguard the quality of state waters; c. prevent further increase in pollution of state waters; d. reduce existing pollution of state waters; and e. promote water resource conservation in order to provide for the health, safety, and welfare of the present and future citizens of the city (Zoning Ordinance, Page 4-99). These regulations also establish criteria for use by the city in approving, disapproving or modifying requests to rezone, subdivide, use, develop and/or redevelop land in Chesapeake Bay preservation areas. The Zoning Ordinance provides for opportunities for land to be developed or redeveloped through the review process outlined in Section 4.18 and Section 6.13 (Chesapeake Bay Reviews).

Section 4.18.6 (Chesapeake Bay Preservation) of the Zoning Ordinance requires for any property that is depicted on the city's Chesapeake Bay preservation area map as a resource protection area, the applicant shall determine the site-specific boundaries of the Resource Protection Area (RPA) components through the performance of a RPA site-specific study. The Chesapeake Bay preservation area map shall be used only as a guide to the general location of resource protection areas within the city. The applicant has submitted a Resource Protection Area Site Specific Study to evaluate the existing, pre-development conditions of the project area and the anticipated post-development impact on the RPA based on the submitted master development plan. Appendix E of the RPA site-specific study documents the presence of one perennial stream and two intermittent streams. The applicant concludes "that the perennial stream is include in the onsite RPA, as well as the 100-foot buffer adjacent and landward of the perennial stream and the intermittent streams were determined to be non-RPA features due to unnatural channel conditions resulting from adjacent development" (RPA Site-Specific Study conducted by Apex Companies, LLC, Pg. 3). In conjunction with a RPA Site-Specific Study, the applicant is required to submit a Water Quality Impact Assessment (WQIA) for land disturbance, development or redevelopment within the RPA including any buffer area modification or reduction. Due to the level of land disturbance proposed by the applicant, a major WQIA is required. Ultimately, the proposal would allow the new culvert to tie into the system installed by the City of Fairfax.

The applicant has provided a pre-development floodplain and RPA boundary on Sheet 18 and a post-development boundary on Sheet 18A of the Master Development Plan. As part of the project approvals, the applicant intends to commit to a stream restoration project for a portion of Accotink Creek within the boundaries of Van Dyck Park. This stream restoration project will implement this component of the approved master plan for Van Dyck Park. VA DEQ is also requiring contribution to regional bank for stream restoration improvements outside of the City. Irrespective of these, City approval to construct and make these changes are required.

Likewise, Section 4.18.8.D.1 (Chesapeake Bay Preservation) of the Zoning Ordinance requires a Major Water Quality Impact Assessment shall be required for any development that exceeds 5,000 square feet land disturbance or that encroaches onto the seaward 50 feet of the 100-foot buffer area; or is located in the resource management area and is deemed necessary by the zoning administrator. The applicant is proposing to impact 1,749 linear feet of the stream channel on site. Appendix C in the Major Water Quality Impact Assessment provides a visual depiction of the areas impacted. The applicant also received a joint permit to impact 1,646 linear feet of stream channel with authorization to compensate for permanent stream impacts through the purchase 1,675 stream credits or 4,761 Stream Condition Units from a VDEQ approved mitigation bank, as required by the VWP Permit (Permit No. 18-1003).

The applicant received a Conditional Letter of Map Revision (CLOMR) from the Federal Emergency Management Agency (FEMA), dated April 1, 2019 - Case No. 18-03 2239R. A Conditional Letter of Map Revision (CLOMR) is a formal review and comment as to whether a proposed flood protection project or other project complies with the minimum NFIP requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective Flood Insurance Rate Map or Flood Insurance Study. The 100-year floodplain cuts through the site and causes half (½) of the property to be undevelopable. During the VWP permitting process, the applicant had to demonstrate avoidance and minimization efforts. It was deemed that both efforts would require flood control due to the location of the perennial stream and the history of flooding onsite. A complete avoidance would result in a developable area of 4.4 +/- acres. The flood elevations under this scenario would render approximately half of the developable land area in an unstable condition to due to the presence of RPA and flood zones (VWP Individual Permit No. 18-1003, March 5, 2019, page 3). A partial streaming piping scenario was also considered and deemed infeasible whereby "500 linear feet of stream channel would be piped leaving most of the perennial stream and all the intermittent stream intact" (VWP Individual Permit No. 18-1003, March 5, 2019, page 3). However, the use of Orchard Street to access the western portion of the site "would necessitate significant alteration to the flood zones through the installation of a culverted road crossing, this constricting flood flows and increasing flooding to the northern portion of the property" (VWP Individual Permit No. 18-1003, March 5, 2019, page 3).

M. The extent to which the residential component of the proposed planned development promotes the creation and preservation of affordable housing suitable for supporting the current and future needs of the city.

This MDP does not have any affordable dwelling units proposed.

Section 4.15.8.A

A. Permitted uses, activities or developments (including redevelopments) within the floodplain shall be permitted only when all available alternative locations not within the floodplain have been properly considered and it is not possible to accommodate reasonable development outside the floodplain boundaries. Each application for a floodplain permit, together with required supporting documentation, shall clearly demonstrate that the proposed use, activity or development:

1. Shall minimize grading to the maximum possible extent.

The applicant has provided cross sections for the proposed development that illustrates the grading of the site and its relationship to adjoin properties.

2. Shall minimize the amount of impervious surface to the maximum possible extent through site design, the use of porous construction materials, grid or modular pavement, and other reasonable methods.

3. Shall minimize the loss of natural vegetation and natural stormwater characteristics.

The project proposes the total on-site preservation of approximately 37,000 square feet of existing tree canopy. The applicant estimates that 60% of the existing trees on the site are rated in poor condition are invasive species. The poor condition of the trees is primarily due to invasive plant and insect species.

4. Shall minimize the susceptibility of structures and their contents to flood damage.

The applicant is proposing to remove 5.44 acres of the site out of the floodplain which constrains development opportunities on the site. The floodplain area based on the post-development plans show approximately 0.76 acres that would remain the floodplain. A Conditional Letter of Map Revision (CLOMR) was issued by the US Federal Emergency Management Agency (FEMA) on April 1, 2019. A CLOMR is FEMA's comment on a proposed project that would affect a floodplain.

5. Shall not negatively affect water quality.

The proposed project is subject to the standard of post-development nutrient loading cannot exceed its pre-development nutrient loading. Findings by the Virginia Department of Environmental Quality state that the project, in compliance with its permit, "will protect instream beneficial uses, will not violate applicable water quality standards, and will not cause or contribute to a significant impairment of state waters or fish and wildlife resources."

6. Shall not increase the intensity or extent of flooding of lands above or below the property or jeopardize property or human life.

The construction the culvert would improve the hydrology of this site as the property has a history of flooding due to undersized culverts and impervious area from off-site development. FEMA has evaluated hydrology and hydraulics through review of the floodplain study and model for the proposed project submitted as part of CLOMR request. Upon completion of the project in accordance with the criteria from FEMA, a revision to the Flood Insurance Rate map to reflect the project is requested and FEMA issues a Letter of Map Revision (LOMR).

7. Shall not adversely affect the capacity of the floodplain channel or increase erosion within or adjacent to the floodplain. Prior to any proposed alteration or relocation of any channels or of any watercourse, stream, etc., within the city all applicable permits shall be obtained from the USACE, the VADEQ, and the Virginia Marine Resources Commission. Furthermore, notification of the proposal shall be given by the applicant to all affected adjacent jurisdictions, the DCR, and the Federal Insurance Administration.

The applicant has applied for and has received the approvals from the Virginia Department of Environmental Quality (VDEQ) with the issuance of a Virginia Water Protection Permit (Permit No. 18-1003), a State Program General Permit (17-SPGP-01) from the US Army Corps of Engineers through VDEQ, and a Conditional Letter of Map Revision (CLOMR) from the Federal Emergency Management Agency (FEMA).

8. Shall minimize negative impacts upon wildlife habitat.

Findings by the Virginia Department of Environmental Quality state the project, in compliance with its permit, "will protect instream beneficial uses, will not violate applicable water quality standards, and will not cause or contribute to a significant impairment of state waters or fish and wildlife resources." The findings were supported by a review of the project by various state and federal agencies, including the US Environmental Protection Agency, US Fish & Wildlife Service, Virginia Department of game and Inland Fisheries, Virginia Department of Conservation and Recreation, and Virginia Department of Health.

9. Shall have its design incorporate base (100-year) flood elevation data for any proposed new activity or development greater than 50 lots or five acres, whichever is the lesser, if located within Zone A. In addition, the best available floodway information from federal, state, or other sources acceptable to the zoning administrator shall be used.

The applicant will create more than fifty (50) in the proposed Master Development Plan and the Finish Floor Elevation is provided on the preliminary grading plan (Sheet 5 and Sheet 5A).

10. Shall not result in more than a one-foot increase in the base (100-year) flood elevation. This shall include the cumulative effect of the proposed use, activity, or development when combined with all other existing and anticipated uses, activities, or development.

The applicant is proposing to remove 5.44 acres of the site out of the floodplain which constrains development opportunities on the site. The floodplain area based on the post-development plans show approximately 0.76 acres that would remain the floodplain. A Conditional Letter of Map Revision (CLOMR) was issued by the US Federal Emergency Management Agency (FEMA) on April 1, 2019. A CLOMR is FEMA's comment on a proposed project that would affect a floodplain.

11. Shall not negatively affect drainage.

The proposed development would improve the on-site drainage for the subject property. The pipe system will also help control flooding and reduce the adverse effects on uncontrolled stormwater discharge. The Virginia Water Protection permit requires that the culvert structure is constructed and maintained to prevent downstream sediment deposition, erosion, scour that may be associated with normal flow and any expected storm flows.

Section 4.18.8.F.2

2. Upon the completed review of a major water quality impact assessment, the zoning administrator shall determine if the proposed development is consistent with the purpose and intent of §4.16 and make a finding based upon the following criteria:

(a) The disturbance of any wetlands is minimized;

A wetland delineation was performed on the site and Preliminary Jurisdictional Determination was approve the US Army Corps of Engineers on February 5, 2018. The Preliminary Jurisdictional Determination identified the limits of the on-site streams and confirmed that no wetlands were identified within the project area. Permitting requirements for the project by the Virginia Department of Environmental Quality condition "no net loss of wetland acreage and no net loss of functions in all surface waters, through the avoidance and minimization of wetland impacts to the maximum extent practicable; compensatory mitigation; and compensation monitoring and reporting."

(b) The development will not result in significant disruption of the hydrology of the site;

The construction the culvert would support the hydrology of this site as the property has a history of flooding due to undersized culverts and impervious area from off-site development.

(c) The development will not result in significant degradation to aquatic life;

Findings by the Virginia Department of Environmental Quality state that the project, in compliance with its permit, "will protect instream beneficial uses, will not violate applicable water quality standards, and will not cause or contribute to a significant impairment of state waters or fish and wildlife resources." These findings were supported by a review of the project by various state and federal agencies, including the US Environmental Protection Agency, US Fish & Wildlife Service, Virginia Department of Game and Inland Fisheries, Virginia Department of Conservation and Recreation, and Virginia Department of Health.

(d) The development will not result in unnecessary destruction of plant materials on site;

The project proposes the removal of trees and other vegetation. Compensatory mitigation for this impact would be provided through the purchase of stream credits. Credited streams would include a 100-foot vegetated buffer, supporting the purpose and functions of the Resource Protection Area. The project proposes the on-site preservation of approximately 37,000 square feet of existing tree canopy. The applicant estimates that 60% of the existing trees on the site are rated in poor condition are invasive species. The poor condition of the trees is primarily due to invasive plant and insect species.

(e) Proposed erosion and sediment control concepts are adequate to achieve the reductions in runoff and prevent off site sedimentation;

The proposed project is subject to an erosion and sediment control permit, and best management to protect water quality during and after construction.

(f) Proposed stormwater-management measures are adequate to control the stormwater runoff to achieve the required performance standard for pollutant control;

The application shall be subject to stormwater permit review since the redevelopment activity exceeds 2,500 square feet of disturbed land. Subsequent applications are subject to Section 4.16 (Stormwater Drainage Facilities) of the Zoning Ordinance. A Bank Erosion Hazard Index (BEHI) study and a Near Bank Stress (NBS) study were conducted

as part of the WQIA. The BEHI identified a high erosion hazard in the current condition. The NBS predicts potential sediment and nutrient loading, which identified future sediment loss through erosion. The proposed improvement would provide for reductions in sediment, nitrogen, and phosphorous transported from the project area to downstream waters within the Chesapeake Bay watershed.

(g) Proposed revegetation of disturbed areas will provide optimum erosion and sediment control benefits;

No revegetation within the onsite CBPA features is being proposed, because compensatory mitigation will be provided for stream and riparian buffer impacts via the purchase of 1,675 stream credits or 4,761 Stream Condition Units from a DEQ approved mitigation bank and/or in-lieu fee fund. The stream credits include a 100-foot riparian buffer that extends from the banks of the stream being credited as compensation for this project.

(h) The design and location of any proposed drainfield will be in accordance with the general performance standards outlined in §4.18.7;

The final design will be determined during site plan review. The requirement will be met by discharging stormwater into a manmade system that does not cause erosion to the system for the two-year storm (channel protection) and confines the stormwater runoff during the 10-year (flood protection). The extent of the review will be the twin box culvert, prior to its outfall at Accotink Creek, if it is determined during the site plan that detention is required, then stormwater vaults or arched pipes will be used to manage the stormwater runoff.

(i) The development, as proposed, is consistent with the purpose and intent of §4.16;

The Northfax West project proposes to impact perennial and intermittent streams by piping them under the proposed mixed-use development to tie into the existing twin box culverts near Route 123 (installed by the City and VDOT). Based on Apex's onsite assessments to determine erosion potential, the Northfax West project pipe system will eliminate potential sources of stream bank erosion to include the extreme and very high erosion along existing stream channels. The pipe system will also help to control flooding and reduce the adverse effects of uncontrolled stormwater discharge. The Virginia Water Protection permit requires that the culvert structure is constructed and maintained to prevent downstream sediment deposition, erosion, or scour that may be associated with normal flow and any expected storm flows.

(j) The cumulative impact of the proposed development, when considered in relation to other development in the vicinity, both existing and proposed, will not result in a significant degradation of water quality.

The proposed project is subject to the standard of post-development nutrient loading and cannot exceed its pre-development nutrient loading.

Section 4.18.11.D

D. Required findings

In granting an administrative waiver or a special exception, the zoning administrator or the city council shall make a written finding that:

1.The request is the minimum necessary to afford relief;

A wetland delineation was performed on the site and Preliminary Jurisdictional Determination was approve the US Army Corps of Engineers on February 5, 2018. The Preliminary Jurisdictional Determination identified the limits of the on-site streams and confirmed that no wetlands were identified within the project area. Permitting requirements for the project by the Virginia Department of Environmental Quality condition "no net loss of wetland acreage and no net loss of functions in all surface waters, through the avoidance and minimization of wetland impacts to the maximum extent practicable; compensatory mitigation; and compensation monitoring and reporting." A large portion of the site is impacted by floodplain and RPA boundary. The 100-year floodplain cuts through the site severely limiting development on half (½) of the property. During the VWP permitting process, the applicant had to demonstrate avoidance and minimization efforts. It was deemed that both efforts would require flood control due to the location of the perennial stream and the history of flooding onsite. A complete avoidance would result in an undevelopable area of 4.4 +/- acres. The flood elevations under this scenario would render approximately half of the developable land area in an unstable condition to due to the presence of RPA and flood zones (VWP Individual Permit No. 18-1003, March 5, 2019, page 3). A partial pipe scenario was also considered and deemed infeasible whereby "500 linear feet of stream channel would be piped leaving most of the perennial stream and all the intermittent stream intact" (VWP Individual Permit No. 18-1003, March 5, 2019, page 3). However, the use of Orchard Street to access the western portion of the site "would necessitate significant alteration to the flood zones through the installation of a culverted road crossing, this constricting flood flows and increasing flooding to the northern portion of the property" (VWP Individual Permit No. 18-1003, March 5, 2019, Pg. 3). In order for the subject property to be developed, a special use permit is required to allow disturbance within the 100-year floodplain boundary.

2. Granting the request will not confer upon the applicant any special privileges that are denied by §4.18 to other property owners who are subject to its provisions and who are similarly situated;

No special privileges will be conferred upon the applicant as other property owners can apply for a special exception.

3. The request is in harmony with the purpose and intent of this §4.18 and is not of substantial detriment to water quality;

The Northfax West project proposes to impact perennial and intermittent streams by piping them under the proposed mixed-use development to tie into the existing twin box culverts near Route 123 (installed by the City and VDOT). Based on Apex's onsite assessments to determine erosion potential, the Northfax West project pipe system will eliminate potential sources of stream bank erosion to include the extreme and very high erosion along existing stream channels. The pipe system will also help to control flooding and reduce the adverse effects of uncontrolled stormwater discharge. The Virginia Water Protection permit requires that the culvert structure is constructed and maintained to prevent downstream sediment deposition, erosion, or scour that may be associated with normal flow and any expected storm flows.

4. The request is not based upon conditions or circumstances that are self-created or self-imposed; and

The applicant did not create the existing conditions or circumstances on the subject property.

5. Reasonable and appropriate conditions shall be imposed, as warranted, that will prevent the allowed activity from causing a degradation of water quality.

The proposed project is subject to the standard of post-development nutrient loading and cannot exceed its pre-development nutrient loading. The Northfax West project proposes to impact perennial and intermittent streams by piping them under the proposed mixed-use development to tie into the existing twin box culverts near Route 123 (installed by the City and VDOT). Based on Apex's onsite assessments to determine erosion potential, the Northfax

West project pipe system will eliminate potential sources of stream bank erosion to include the extreme and very high erosion along existing stream channels. The pipe system will also help to control flooding and reduce the adverse effects of uncontrolled stormwater discharge. The Virginia Water Protection permit requires that the culvert structure is constructed and maintained to prevent downstream sediment deposition, erosion, or scour that may be associated with normal flow and any expected storm flows.

SUMMARY OF ZONING DISTRICTS AND OVERLAYS

GENERAL ZONING DISTRICTS: Unless within a planned development district, each property in the City belongs to one of the following zoning districts, which spells out permitted uses and types of development for all parcels within each district, as summarized below:

RL, RM & RH RESIDENTIAL DISTRICTS: Permits single-family detached housing and select types of supportive, complementary uses that create quiet and comfortable neighborhoods. Development must be consistent with the character of a residential neighborhood and fit within certain parameters, including:

- **RL RESIDENTIAL LOW**: 20,000 minimum lot size and 40' front setback from the street;
- **RM RESIDENTIAL MEDIUM**: 7,500 minimum lot size and 25' front setback from the street;
- **RH RESIDENTIAL HIGH**: 6,000 minimum lot size and 20' front setback from the street.

RT & RT-6 TOWNHOUSE DISTRICTS: Provides townhouses in both districts, as well as duplexes, single-family attached, and single-family detached housing in the RT district.

- **RT-6:** Limited to 6 units per acre;
- **RT:** Limited to 12 units per acre.

RMF MULTIFAMILY DISTRICT: Provides for multifamily housing as well as townhouses, duplexes, single-family attached, and single-family detached housing. Buildings may be no taller than 3 stories and 35' or 4 stories and 45' (where not adjacent to a single-family detached district) with a density limited to 20 units per acre. Permitted uses also include nursing homes, assisted living facilities, congregate living facilities and select directly related, complementary uses.

CL COMMERCIAL LIMITED DISTRICT: Provides for limited, low intensity office development as a transitional use between residential and commercial areas with buildings limited to 3 stories and 35' in height that may not exceed 17,500 sq. ft. in floor area.

CO COMMERCIAL OFFICE DISTRICT: Provides for offices for business, governmental and professional uses, and uses accessory or complementary thereto. Buildings may be up to 5 stories and 60'.

CR COMMERCIAL RETAIL DISTRICT: Provides for office and general business and retail establishments, and uses accessory or complementary thereto. Buildings may be up to 5 stories and 60'.

CU COMMERCIAL URBAN DISTRICT: Provides an urban, mixed use development option for appropriate parts of the downtown area and sites in the general vicinity of the three key Fairfax Boulevard intersections: Main Street, Chain Bridge Road, and Old Lee Highway, or as may be more precisely specified by a current or future adopted plan. Buildings may be up to 5 stories and 60'.

CG COMMERCIAL GENERAL DISTRICT: Provides areas for office, general retail, automobile-related uses, and uses accessory or complementary thereto. Buildings may be up to 5 stories and 60'.

IL INDUSTRIAL LIGHT DISTRICT: Provides areas for light industrial uses. Buildings may be up to 3 stories and 35'.

IH INDUSTRIAL HEAVY DISTRICT: Provides areas for general industrial uses. Building may be up to 6 stories and 60'.

PLANNED DEVELOPMENT DISTRICTS AND ZONING OVERLAYS: Some properties are included in planned development districts and/or are governed by regulations that exceed that of the underlying general zoning district through overlays and other development standards. These are summarized below:

PD-R, PD-M, PD-C & PD-I PLANNED DEVELOPMENT DISTRICTS: Provides for coordinated developments and communities with appropriate boundary transitional yards and recreation and open space. The districts provide additional flexibility not available in general zoning districts and allows for innovations and special features in site development that make the community better.

- **PD-R PLANNED DEVELOPMENT RESIDENTIAL:** Allows for permitted/special uses in the R districts;
- **PD-M PLANNED DEVELOPMENT MIXED USE:** Allows for permitted/special uses in the R and C districts;
- **PD-C PLANNED DEVELOPMENT COMMERCIAL:** Allows for permitted/special uses in the C districts;
- **PD-I PLANNED DEVELOPMENT INDUSTRIAL:** Allows for permitted/special uses in the CG, IL, and IH districts.

HISTORIC OVERLAY DISTRICTS: Provide additional protection to areas of historic interest in the City in order to ensure that development or building modifications do not alter or diminish the historic quality of the district:

- **OLD TOWN FAIRFAX HISTORIC DISTRICT**: Encourages a compatible mixture of residential, retail and office uses within the district.
- **FAIRFAX PUBLIC SCHOOL HISTORIC DISTRICT**: Includes the property containing the Fairfax Museum & Visitor Center; the district controls uses and structures built on the property.
- **BLENHEIM HISTORIC DISTRICT**: Includes the property at Historic Blenheim; the district preserves Blenheim mansion and controls uses and structures built on the property.

OLD TOWN FAIRFAX TRANSITION OVERLAY DISTRICT: Established to encourage a compatible mixture of residential, retail and office uses in areas close to the Old Town Fairfax Historic District. New development must complement the scale, siting and design of the Historic District.

ARCHITECTURAL CONTROL OVERLAY DISTRICT: Includes all land in the city which is located outside of an historic district and zoned and used for anything other than a single-family detached residence. This district seeks to encourage the construction of attractive buildings, to protect and promote the general welfare and to prevent deterioration of the appearance of the city, to make the city more attractive for the development of business and industry, and to protect land values.

RESOURCE PROTECTION AREA (RPA): Includes land within 100 feet of water bodies that have perennial flow, as well as other natural features such as wetlands and intermittent streams. The RPA seeks to protect these waters from significant degradation due to land disturbances.

RESOURCE MANAGEMENT AREA (RMA): Includes all land in the City that is not part of an RPA. Land disturbances in the RMA can have cause water quality degradation and diminish the functionality of RPA lands. Together, the RMA and RPA form the Chesapeake Bay Preservation Area, which encompasses all of the City.

100-YEAR FLOODPLAIN: Includes land subject to inundation by the "100-year flood" as on FEMA flood maps (a flood that has a 1% chance of occurring each year).

RECEIVED
04 / 15 / 2020
Community Dev & Planning

Application No. _____

REVISED

CITY OF FAIRFAX

PLANNED DEVELOPMENT APPLICATION

I/We Northfax JV LLC (Name of applicant) by Lynne J. Strobel, Attorney-in-Fact/Agent (Authorized agent's name and relationship to applicant)

a *corporation / general partnership / limited partnership / sole proprietorship/individual* (circle one) which is the

property owner / contract purchaser / lessee (circle one)

of Lots See Attachment 1, Block _____, Section _____ of the See Attachment 1 Subdivision containing Approx. 492,228 (Sq. Ft.) on the premises known as See Attachment 1 (Name and address of subject property) requests that the property currently zoned CR and RM be rezoned to PD-M. This property is recorded in the land records of Fairfax County in the name of See Attachment 1 in Deed Book See Attachment 1, Page See Attachment 1

I certify that I have read and understand my application to comply with Zoning Ordinance Section 6.2.3.C Application Requirements, which states:

1. An application shall be sufficient for processing when it contains all of the information necessary to decide whether or not the development as proposed will comply with the applicable requirements of this chapter.
2. The burden of demonstrating that an application complies with applicable review and approval criteria is on the applicant. The burden is not on the city or other parties to show that the standards or criteria have not been met.
3. Each application is unique and, therefore, more or less information may be required according to the needs of the particular case. Information needs tend to vary substantially from application to application and to change over time as result of code amendments and review procedure changes. Staff has the flexibility to specify submission requirements for each application and to waive requirements that are irrelevant to specific situations. The applicant shall rely on the review official as to whether more or less information should be submitted."

Lynne J. Strobel — Attorney-in-Fact/Agent

(Signature of applicant or authorized agent) Lynne J. Strobel (Title or relationship)

Address Walsh, Colucci, Lubeley & Walsh, P.C. 2200 Clarendon Boulevard, Suite 1300, Arlington, Virginia 22201 Phone (703) 528-4700

Email lstrobel@thelandlawyers.com

STATE OF VIRGINIA to-wit:

I, the undersigned, a Notary Public in and for the State aforesaid, whose commission as such will expire on the 28th day of February, 2022, do hereby certify that this day personally appeared before me in the State aforesaid Lynne J Strobel (Name) Attorney in Fact / Agent (Title) whose name(s) is (are) signed to the foregoing and hereunto annexed agreement bearing date of the 10th day of April, 2020, and acknowledged the same before me.

GIVEN under my hand and seal this 10th day of April 2020

Notary Public Registration #

MARJORIE NADINE MORENO NOTARY PUBLIC REG. # 7370570 COMMISSION EXPIRES 2/28/2022 COMMONWEALTH OF VIRGINIA

THE FOLLOWING MUST BE COMPLETED BY THE PROPERTY OWNER

I/We Northfax JV LLC by Lynne J. Strobel, Attorney-in-Fact/Agent hereby certify that the applicant named above has the authority vested by me to make this application.

Lynne J. Strobel — Attorney-in-Fact/Agent

(Signature of owner or authorized agent) (Title or relationship)

Address Walsh, Colucci, Lubeley& Walsh, P.C. 2200 Clarendon Boulevard, Suite 1300, Arlington, Virginia 22201 Phone: (703) 528-4700

STATE OF VIRGINIA to-wit:

I, the undersigned, a Notary Public in and for the State aforesaid, whose commission as such will expire on the 28th day of February, 2022, do hereby certify that this day personally appeared before me in the State aforesaid Lynne J. Strobel (Name) Attorney in Fact / Agent (Title) whose name(s) is (are) signed to the foregoing and hereunto annexed agreement bearing date of the 10th day of April, 2020, and acknowledged the same before me.

GIVEN under my hand and seal this 10th day of April, 2020.

Marjorie Moreno — Notary Public — Registration # 7370570

MARJORIE NADIME MORENO NOTARY PUBLIC REG # 7370570 COMMISSION EXPIRES 2/28/2022 COMMONWEALTH OF VIRGINIA

FOR OFFICE USE ONLY

Proposal filed: _____ Received by: _____

Fee Paid: _____ Receipt No: _____

Previous Cases: _____

Current status of business license and fees:

Treasurer: _____

Commissioner of Revenue: _____

RECEIVED
04 / 15 / 2020
Community Dev & Planning

AFFIDAVIT
CITY OF FAIRFAX

I, Northfax JV LLC, by Lynne J. Strobel, Attorney/Agent do hereby make oath or affirmation that
(Name of applicant or agent)
I am an applicant in Application Number _____ and that to the best of my knowledge and belief, the following information is true:

1. (a) That the following is a list of names and addresses of all applicants, title owners, contract purchasers, and lessees of the property described in the application, and if any of the foregoing is a trustee, each beneficiary having an interest in such land, and all attorneys, real estate brokers, architects, engineers, planners, surveyors, and all other agents who have acted on behalf of any of the foregoing with respect to the application (attach additional pages if necessary):

See Attachment A

Name	Address	Relationship

(b) That the following is a list of the stockholders of all corporations of the foregoing who own ten (10) percent or more of any class of stock issued by said corporation, and where such corporation has ten (10) or less stockholders, a listing of all the stockholders (attach additional pages if necessary):

See Attachment B

Corporation Name: _____

Name	Address	Relationship

(c) That the following is a list of all partners, both general and limited, in any partnership of the foregoing (attach additional pages if necessary):

None

Partnership Name: _____

Name	Address	Relationship

2. That neither the Mayor nor any member of the City Council, Planning Commission, BZA, or BAR has any interest in the outcome of the decision. EXCEPT AS FOLLOWS: (If none, so state).

None

3. That within five (5) years prior to the filing of this application, neither the Mayor nor any member of the City Council, Mayor, Planning Commission, BZA, or BAR or any member of his or her immediate household and family, either directly or by way of a corporation or a partnership in which anyone of them is an officer, director, employee, agent, attorney, or investor has received any gift or political contribution in excess of $100 from any person or entity listed in paragraph one. EXCEPT AS FOLLOWS: (If none, so state).

None

Northfax JV LLC by Lynne J. Strobel, Attorney/Agent

WITNESS the following signature: Lynne J. Strobel
Applicant or Agent

ALL APPLICANTS MUST SIGN AND HAVE THEIR SIGNATURES NOTARIZED.

The above affidavit was subscribed and confirmed by oath or affirmation before me on this 10th day of April, 2020, in the State of Virginia, County of Arlington

My commission expires: 2/28/2022

Marjorie Moreno 7370570
Notary Public Registration #

MARJORIE NADIME MORENO NOTARY PUBLIC REG # 7370570 COMMISSION EXPIRES 2/28/2022 COMMONWEALTH OF VIRGINIA

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Community Dev & Planning

ATTACHMENT A

Northfax JV LLC 3900 Jermantown Road, Suite 300 Fairfax, VA 22030 Agent: John E. Napolitano	Applicant/Title Owner of Tax Map 52-2-02-020
Orchard RE Investments, LLC 3900 Jermantown Road, Suite 300 Fairfax, VA 22030 Agent: John E. Napolitano	Title Owner of Tax Map 57-2-08-010, 57-2-02-005, 57-2-08-005, 57-2-08-006, 57-2-08-007, 57-2-08-008, 57-2-02-003, 57-2-07-015-B, 57-2-47-000-A
A.R.G. II, L.L.C. 3900 Jermantown Road, Suite 300 Fairfax, VA 22030 Agent: John E. Napolitano	Title Owner of Tax Map 57-2-02-017, 57-2-02-018, 57-2-02-019, 57-2-08-011, 57-2-08-012, 57-2-08-013, 57-2-08-014
City of Fairfax 10455 Armstrong Street, Fairfax, VA 22030	Title Owner of Orchard Street right-of-way
MHI-Northfax, LLC 1950 Old Gallows Road, #200 Tysons, VA 22182 Agents: Andrew S. Rosenberger Russell S. Rosenberger, Jr. Milton (nmi) Schneiderman Mark E. Westmoreland	Contract Purchaser
Brightview Senior Living Development LLC 218 N. Charles Street Baltimore, MD 21201 Agents: David D. Carliner Steven M. Marker Alan D. Siegfried	Contract Purchaser
Walsh, Colucci, Lubeley & Walsh, P.C. 2200 Clarendon Boulevard, Suite 1300 Arlington, Virginia 22201 Agents: Lynne J. Strobel Robert D. Brant Elizabeth D. Baker Anna B. Smith M. Catharine Puskar Kathryn R. Taylor Bernard S. Suchicital	Attorneys/Planners/Agent

Christopher Consultants, Ltd. 9900 Main Street, Suite 400 Fairfax, Virginia 22031 Agents: Eli Goldman Kevin M. Washington Giovanni (John) B. Rinaldi Laurie Beth Donnachie	Civil Engineers/Planners/Agent
Devereaux & Associates, P.C. 1481 Chain Bridge Road, Suite 302 McLean, Virginia 22101 Agent: William J. Devereaux, Jr.	Architect/Agent for MHI-Northfax, LLC
Gorove/Slade Associates, Inc. 1140 Connecticut Avenue, NW, Suite 600 Washington, DC 20036 Agents: Chad A. Baird Kevin D. Sitzman Niraja Chandrapu	Transportation Consultant/Agent
Apex Companies, LLC 203 Wylderose Court Midlothian, VA 23113 Agent: John H. Brooks III	Environmental Consultant/Agent for MHI-Northfax, LLC
SK&I Architectural Design Group LLC 7735 Old Georgetown Road, #1000 Bethesda, Maryland 20814 Agent: Toygun Mar	Architect/Agent for Brightview Senior Living Development LLC
Hills-Carnes Engineering Consultants, Inc. 14155 Sullyfield Circle, Suite A Chantilly, VA 20151 Agent: Steve Marker	Environmental Consultant/Agent

RECEIVED
04 / 15 / 2020
Community Dev & Planning

ATTACHMENT B

Northfax JV LLC
Members: Orchard RE Investments, LLC
A.R.G. II, L.L.C.
Managers: John E. Napolitano
Andrea Sylos-Labini

Orchard RE Investments, LLC
Members: John E. Napolitano
ELENA, LLC
Members: Andrea Sylos-Labini
Elena Sylos-Labini
Victoria Sylos-Labini
Maura Archetti
Chiara Archetti
Paola Archetti
ELEVIAN, LLC
Members: Andrea Sylos-Labini
Elena Sylos-Labini
Victoria Sylos-Labini

A.R.G. II, L.L.C.
Members: John E. Napolitano
Roberto Beolchini
ELEVIAN, LLC
Members: Andrea Sylos-Labini
Elena Sylos-Labini
Victoria Sylos-Labini
John E. Napolitano, Operating Manager
Andrea Sylos-Labini, Vice Operating Manager

Brightview Senior Living Development LLC
Sole Member: Brightview Group, LP

General Partner: Brightview Group GP, LLC
Members: Arnold I. Richman
Marilynn K. Duker
Jeffrey K. Hettleman
David D. Carliner

Limited Partners: The Arnold I. Richman Revocable Trust
Richman Family Limited Partnership, L.L.L.P.
General Partner: Arnold I. Richman, Trustee
Limited Partners: Katherine R. Voglmayr & Jonathan D. Eisner, Co-Trustees
Lauri G. Richman Hidalgo & Jonathan D. Eisner, Co-Trustees
Daniel Geary & Jonathan D. Eisner, Co-Trustees
Allison L. Richman & Jonathan D. Eisner, Co-Trustees

Arnold I. Richman, Trustee
The Marilynn K. Duker Revocable Trust
Jeffrey K. Hettleman
David D. Carliner

MHI-Northfax, LLC
Manager: Madison Homes, Inc.
Member: Madison Communities II, LLC

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Manager: Madison Homes, Inc.
Members: Russell S. Rosenberger, Jr., Milton Schneiderman, Andrew S. Rosenberger, Mark E. Westmoreland

Walsh, Colucci, Lubeley & Walsh, P.C.
Shareholders:

Wendy A. Alexander	John H. Foote	Charles E. McWilliams	Kathleen H. Smith
David J. Bomgardner	H. Mark Goetzman	Antonia E. Miller	Lynne J. Strobel
E. Andrew Burcher	Bryan H. Guidash	J. Randall Minchew	Erin M. Thiebert
Thomas J. Colucci	Michael J. Kalish	Andrew A. Painter	Garth M. Wainman
Michael J. Coughlin	Michael R. Kieffer	M. Catharine Puskar	Matthew A. Westover
Peter M. Dolan, Jr.		John E. Rinaldi	

Christopher Consultants, Ltd.
Shareholders: William R. Zink, William R. Goldsmith, Jr., Michael S. Kitchen, Jeffrey S. Smith, Ruth R. Fields, Kevin M. Washington, Brent E. Evans, Christopher C. Filmore, Giovanni (John) B. Rinaldi

Devereaux & Associates, P.C.
Shareholder: William J. Devereaux, Jr.

Gorove/Slade Associates, Inc.
Shareholders: Christopher M. Tacinelli, Chad A. Baird, Daniel B. VanPelt, Erwin N. Andres, Tushar A. Awar

Apex Companies, LLC
Sole Shareholder: Apex Intermediate, LLC

SK&I Architectural Design Group LLC
Members: Meral Iskir, Sami M. Kirkdil

Hills-Carnes Engineering Consultants, Inc.

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EQUITABLE OWNERSHIP DISCLOSURE STATEMENT

I. GENERAL DISCLOSURE REQUIREMENTS

In accordance with § 6.2.3.B of the Zoning Ordinance, any application for a change in zoning shall include as part of the application a statement on a form provided by the zoning administrator providing complete disclosure of the legal and equitable ownership in any real estate to be affected by the requested change in zoning.

In the case of corporate ownership of real estate, the disclosure shall include the names of stockholders, officers and directors and in any case the names and addresses of all the real parties in interest; provided, however, that the requirement of listing the names of stockholders, officers and directors shall not apply to a corporation whose stock is traded on a national or local stock exchange and having more than 500 shareholders. Such disclosure shall be sworn to under oath before a notary public or other official before whom oaths may be taken.

II. IDENTIFICATION OF REAL PROPERTY AFFECTED

Map Number Parcel Number Street Address Current Owner of Record

See Attachment 1

III. DESCRIPTION OF CHANGE IN ZONING REQUESTED

Completely describe the action being requested, attach narrative if desired.

Proposed rezoning from CR and RM to PD-M to allow for the development of seventeen (17) parcels and a portion of Orchard Street right-of-way to be vacated/abandoned with a mix of uses, including residential, institutional, retail, and restaurant.

IV. SPECIFIC EQUITABLE OWNERSHIP DISCLOSURE

The following individuals have legal and equitable ownership in the real estate to be affected by the requested change in zoning. (Include name, address and telephone number)

See Attachment 1

THE DISCLOSURE MADE ON THIS FORM IS IN ACCORDANCE WITH § 110-5 (D) OF THE CODE OF THE CITY OF FAIRFAX MUST BE SWORN UNDER OATH BEFORE A NOTARY PUBLIC OR OTHER OFFICER BEFORE WHOM OATHS MAY BE TAKEN. ALL APPLICANTS MUST SIGN AND HAVE THEIR SIGNATURE NOTARIZED. ATTACH A SEPARATE SHEET IF NECESSARY.

I hereby swear to the best of my knowledge that the information provided in this statement is true and complete.

Lynne J. Strobel, Attorney-in-Fact/Agent

Lynne J. Strobel

Signature

Subscribed and sworn before me this 10th day of April, 2020.

My commission expires: 2/28/2022

Marjorie Madime Moreno 7370570

Notary Public Registration

MARJORIE MADIME MORENO
NOTARY PUBLIC
REG # 7370570
COMMISSION EXPIRES 2/28/2022
COMMONWEALTH OF VIRGINIA

RECEIVED
04 / 15 / 2020
Community Dev & Planning

REVISED
ATTACHMENT 1
Planned Development Application
Equitable Ownership Disclosure Statement
Land Use Application – Special Use Permit

Northfax West Property, City of Fairfax, Virginia

Tax Map No.	Parcel No.	Subdivision	Property Address	Current Owner of Record	Deed Book	Page
57-2-02	003	Fairfax Acres	10516 Orchard Street	Orchard RE Investments, LLC	20080	1218
57-2-02	005	Fairfax	10517 Orchard Street	Orchard RE Investments, LLC	19218	1148
57-2-02	017	Fairfax	3590 Chain Bridge Road	A.R.G. II, L.L.C.	15230	1182
57-2-02	018	Fairfax	3580 Chain Bridge Road	A.R.G. II, L.L.C.	15230	1182
57-2-02	019	Fairfax	10505 Orchard Street	A.R.G. II, L.L.C.	15230	1182
57-2-02	020	Fairfax	3570 Chain Bridge Road	Northfax JV LLC	25751	1696
57-2-07	015-B	Resub FFX AC	McLean Avenue	Orchard RE Investments, LLC	23812	0494
57-2-08	005	Fairfax Acres	10508 Orchard Street	Orchard RE Investments, LLC	17602	0631
57-2-08	006	Fairfax Acres	10510 Orchard Street	Orchard RE Investments, LLC	19837	1921
57-2-08	007	Fairfax Acres	10512 Orchard Street	Orchard RE Investments, LLC	17434	444
57-2-08	008	Fairfax Acres	10514 Orchard Street	Orchard RE Investments, LLC	18388	265
57-2-08	010	Fairfax Acres	10515 Orchard Street	Orchard RE Investments, LLC	18823	1535
57-2-08	011	Fairfax Acres	10507 Orchard Street	A.R.G. II, L.L.C.	15230	1182
57-2-08	012	Fairfax Acres	10509 Orchard Street	A.R.G. II, L.L.C.	15339	102
57-2-08	013	Fairfax Acres	10511 Orchard Street	A.R.G. II, L.L.C.	15339	102
57-2-08	014	Fairfax Acres	10513 Orchard Street	A.R.G. II, L.L.C.	16739	1026
57-2-47	000-A	Bajaj	McLean Avenue	Orchard RE Investments, LLC	23812	0479
			Orchard Street Right-of-Way	City of Fairfax	407	115

IV. SPECIFIC EQUITABLE OWNERSHIP DISCLOSURE

Northfax JV LLC, 3900 Jermantown Road, Ste. 300, Fairfax, VA 22030, Agent: John Napolitano, The Lann Companies, (703) 934-4600
A.R.G. II, L.L.C., 3900 Jermantown Road, Ste. 300, Fairfax, VA 22030, Agent: John Napolitano, The Lann Companies, (703) 934-4600
Orchard RE Investments, LLC, 3900 Jermantown Road, Ste. 300, Fairfax, VA 22030, Agent: John Napolitano, The Lann Companies, (703) 934-4600

City of Fairfax – Community Development and Planning
10455 Armstrong Street #207A Fairfax, VA 22030
Phone: 703-385-7820

Application #:_____
Receipt #:_____

LAND USE APPLICATION

- NON REFUNDABLE FEE –

☒ **Special Use** ☐ **Special Exception** ☐ **Variance** ☐ **Amendment** ☐ **Renewal**

1. PROPERTY LOCATION INFORMATION

Property Address See Attachment 1 Tax Map # See Attachment 1

Project Name Northfax West Project Description The Applicant is requesting a special use permit to allow the modification of the 100-year floodplain boundary. See attached Statement of Justification, dated January 3, 2020, for more details.

2. ☐ APPLICANT or ☒ AUTHORIZED AGENT INFORMATION (check as appropriate)

Applicant Name Northfax JV LLC (circle one): Corporation / Gen Partnership / Ltd Partnership / Sole Proprietorship / Individual

Applicant Address c/o Walsh, Colucci, Lubeley & Walsh, P.C., 2200 Clarendon Boulevard, Suite 1300, Arlington, Virginia 22201

Phone (o) (703) 528-4700 (c) _____ Email lstrobel@thelandlawyers.com

Applicant or Authorized Agent Signature Lynne J. Strobel
Lynne J. Strobel, Attorney-In-Fact/Agent

Relationship to project (circle one): Property owner / Contract purchaser / Lessee / Agent

3. APPLICANT CERTIFICATION STATEMENT Section 110-6.2.3

I certify that I have read and understand my application to comply with Zoning Ordinance Section 6.2.3 which states that an application shall be sufficient for processing when it contains all of the information necessary to decide whether or not the development as proposed will comply with the applicable requirements of this chapter; that the burden of demonstrating that an application complies with applicable review and approval criteria is on the applicant; that each application is unique and, therefore, more or less information may be required according to the needs of the particular case; that staff has the flexibility to specify submission requirements for each application and to waive requirements as appropriate; and that the applicant shall rely on the review official as to whether more or less information should be submitted.

Applicant or Authorized Agent Signature **(REQUIRED)** Lynne J. Strobel Date 1/3/20
Lynne J. Strobel, Attorney-In-Fact/Agent

4. ENGINEER, ARCHITECT, SURVEYOR or LANDSCAPE ARCHITECT (Same as Applicant ☐)

Licensed Professional's Name John Rinaldi, Christopher Consultants, Ltd.

Licensed Professional's Address 9900 Main Street, Suite 400, Fairfax, Virginia 22031

Phone (o) (703) 237-6820 (c) _____ Email johnrinaldi@ccl-eng.com

OFFICE USE ONLY

Current status of business license and fees
Treasurer: _____

Commissioner of Revenue: _____

AFFIDAVIT
CITY OF FAIRFAX

I, Northfax JV LLC, by Lynne J. Strobel, Attorney/Agent do hereby make oath or affirmation that
(Name of applicant or agent)
I am an applicant in Application Number _____ and that to the best of my knowledge and belief, the following information is true:

1. (a) That the following is a list of names and addresses of all applicants, title owners, contract purchasers, and lessees of the property described in the application, and if any of the foregoing is a trustee, each beneficiary having an interest in such land, and all attorneys, real estate brokers, architects, engineers, planners, surveyors, and all other agents who have acted on behalf of any of the foregoing with respect to the application (attach additional pages if necessary):

See Attachment A

Name	Address	Relationship

(b) That the following is a list of the stockholders of all corporations of the foregoing who own ten (10) percent or more of any class of stock issued by said corporation, and where such corporation has ten (10) or less stockholders, a listing of all the stockholders (attach additional pages if necessary):

See Attachment B

Corporation Name: _____

Name	Address	Relationship

(c) That the following is a list of all partners, both general and limited, in any partnership of the foregoing (attach additional pages if necessary):

None

Partnership Name: _____

Name	Address	Relationship

2. That neither the Mayor nor any member of the City Council, Planning Commission, BZA, or BAR has any interest in the outcome of the decision. EXCEPT AS FOLLOWS: (If none, so state).

None

3. That within five (5) years prior to the filing of this application, neither the Mayor nor any member of the City Council, Mayor, Planning Commission, BZA, or BAR or any member of his or her immediate household and family, either directly or by way of a corporation or a partnership in which anyone of them is an officer, director, employee, agent, attorney, or investor has received any gift or political contribution in excess of $100 from any person or entity listed in paragraph one. EXCEPT AS FOLLOWS: (If none, so state).

None

Northfax JV LLC by Lynne J. Strobel, Attorney/Agent

WITNESS the following signature: Lynne J. Strobel

Applicant or Agent

ALL APPLICANTS MUST SIGN AND HAVE THEIR SIGNATURES NOTARIZED.

The above affidavit was subscribed and confirmed by oath or affirmation before me on this 3 day of January, 2020, in the State of Virginia, County of Arlington

My commission expires:

Kimberly K. Follin 283945

Notary Public Registration #

KIMBERLY K. FOLLIN
COMMONWEALTH
ID #283945
OF VIRGINIA
NOTARY PUBLIC

ATTACHMENT A

Northfax JV LLC
3900 Jermantown Road, Suite 300
Fairfax, VA 22030
Agent: John Napolitano

Applicant/Title Owner of
Tax Map 52-2-02-020

Orchard RE Investments, LLC
3900 Jermantown Road, Suite 300
Fairfax, VA 22030
Agent: John Napolitano

Title Owner of Tax Map
57-2-08-010, 57-2-02-005, 57-2-08-005,
57-2-08-006, 57-2-08-007, 57-2-08-008,
57-2-02-003, 57-2-07-015-B, 57-2-47-000-A

A.R.G. II, L.L.C.
3900 Jermantown Road, Suite 300
Fairfax, VA 22030
Agent: John Napolitano

Title Owner of Tax Map
Tax Map 57-2-02-017, 57-2-02-018, 57-2-02-019,
57-2-08-011, 57-2-08-012, 57-2-08-013, 57-2-08-014

MHI-Northfax, LLC
1950 Old Gallows Road, #200
Tysons, VA 22182
Agents: Andrew S. Rosenberger
Russell S. Rosenberger, Jr.
Milton (nmi) Schneiderman
Mark E. Westmoreland

Contract Purchaser

Brightview Senior Living Development LLC
218 N. Charles Street
Baltimore, MD 21201
Agents: David D. Carliner
Steven M. Marker
Alan D. Siegfried

Contract Purchaser

Walsh, Colucci, Lubeley & Walsh, P.C.
2200 Clarendon Boulevard, Suite 1300
Arlington, Virginia 22201
Agents: Lynne J. Strobel
Robert D. Brant
Elizabeth D. Baker
Anna B. Smith
M. Catharine Puskar
Kathryn R. Taylor
Bernard S. Suchicital

Attorneys/Planners/Agent

Christopher Consultants, Ltd.
9900 Main Street, Suite 400
Fairfax, Virginia 22031
Agents: Eli Goldman
Kevin M. Washington
Giovanni (John) B. Rinaldi
Laurie Beth Donnachie

Civil Engineers/Planners/Agent

Devereaux & Associates, P.C. 1481 Chain Bridge Road, Suite 302 McLean, Virginia 22101 Agent: William J. Devereaux, Jr.	Architect/Agent for MHI-Northfax, LLC
Gorove/Slade Associates, Inc. 1140 Connecticut Avenue, NW, Suite 600 Washington, DC 20036 Agents: Chad A. Baird Kevin D. Sitzman Niraja Chandrapu	Transportation Consultant/Agent
Apex Companies, LLC 203 Wylderose Court Midlothian, VA 23113 Agent: John H. Brooks III	Environmental Consultant/Agent for MHI-Northfax, LLC
SK&I Architectural Design Group LLC 7735 Old Georgetown Road, #1000 Bethesda, Maryland 20814 Agent: Toygun Mar	Architect/Agent for Brightview Senior Living Development LLC

ATTACHMENT B

Northfax JV LLC
Members: Orchard RE Investments, LLC
A.R.G. II, L.L.C.

Orchard RE Investments, LLC
Members: John E. Napolitano
ELENA, LLC
Members: Andrea Sylos-Labini
Elena Sylos-Labini
Victoria Sylos-Labini
Maura Archetti
Chiara Archetti
Paola Archetti
ELEVIAN, LLC
Members: Andrea Sylos-Labini
Elena Sylos-Labini
Victoria Sylos-Labini

A.R.G. II, L.L.C.
Members: John E. Napolitano
Roberto Beolchini
ELEVIAN, LLC
Members: Andrea Sylos-Labini
Elena Sylos-Labini
Victoria Sylos-Labini

Brightview Senior Living Development LLC
Sole Member: Brightview Group, LP

General Partner: Brightview Group GP, LLC
Members: Arnold I. Richman
Marilynn K. Duker
Jeffrey K. Hettleman
David D. Carliner

Limited Partners: The Arnold I. Richman Revocable Trust
Richman Family Limited Partnership, L.L.L.P.
General Partner: Arnold I. Richman, Trustee
Limited Partners: Katherine R. Voglmayr & Jonathan D. Eisner, Co-Trustees
Lauri G. Richman Hidalgo & Jonathan D. Eisner, Co-Trustees
Daniel Geary & Jonathan D. Eisner, Co-Trustees
Allison L. Richman & Jonathan D. Eisner, Co-Trustees
Arnold I. Richman, Trustee
The Marilynn K. Duker Revocable Trust
Jeffrey K. Hettleman
David D. Carliner

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Walsh, Colucci, Lubeley & Walsh, P.C.
Shareholders:

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David J. Bomgardner	John H. Foote	Antonia E. Miller	Lynne J. Strobel
E. Andrew Burcher	H. Mark Goetzman	J. Randall Minchew	Erin M. Thiebert
Thomas J. Colucci	Bryan H. Guidash	Andrew A. Painter	Garth M. Wainman
Michael J. Coughlin	Michael J. Kalish	M. Catharine Puskar	Nan E. Walsh
Peter M. Dolan, Jr.	Michael R. Kieffer	John E. Rinaldi	Matthew A. Westover

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Shareholders: William R. Zink, William R. Goldsmith, Jr., Michael S. Kitchen, Jeffrey S. Smith, Ruth R. Fields, Kevin M. Washington, Brent E. Evans, Christopher C. Filmore, Giovanni (John) B. Rinaldi

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Apex Companies, LLC
Sole Shareholder: Apex Intermediate, LLC

SK&I Architectural Design Group LLC
Members: Meral Iskir, Sami M. Kirkdil

ATTACHMENT 1

Planned Development Application
Equitable Ownership Disclosure Statement
Land Use Application – Special Use Permit

Northfax West Property, City of Fairfax, Virginia

Tax Map No.	Parcel No.	Subdivision	Property Address	Current Owner of Record	Deed Book	Page
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57-2-47	000-A	Bajaj	McLean Avenue	Orchard RE Investments, LLC	23812	0479

IV. SPECIFIC EQUITABLE OWNERSHIP DISCLOSURE

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Orchard RE Investments, LLC, 3900 Jermantown Road, Ste. 300, Fairfax, VA 22030, Agent: John Napolitano, The Lann Companies, (703) 934-4600

City of Fairfax – Community Development and Planning
10455 Armstrong Street #207A Fairfax, VA 22030
Phone: 703-385-7820 Fax: 703-385-7824

Application #:_____

RESOURCE PROTECTION AREA (RPA)
SITE-SPECIFIC STUDY
- $290.00 NON REFUNDABLE FEE -

1. JOB LOCATION INFORMATION:

Job Location Address 10510 Orchard St. Fairfax, Virginia 22030

Project Name Northfax West

Tax Map # See Attached List

2. APPLICANT INFORMATION:

Name Northfax JV LLC c/o The Lann Companies

Address 3900 Jermantown Rd., Suite 300, Fairfax VA, 22030

Phone (703) 934-4600 Email john@lann.com

3. PROPERTY OWNER INFORMATION: (Same as Applicant ☑)

Name _____

Address _____

Phone _____ Email _____

4. ENGINEER, SURVEYOR or LANDSCAPE ARCHITECT: (Same as Applicant ☐)

Name Christopher Consultants; Attn: Christopher Fillmore, LS; License No. 2607

Address 9900 Main St., Suite 400, Fairfax, VA, 22031

Phone (703) 273-6820 Email chrisfillmore@ccl-eng.com

5. WETLANDS EXPERT: (Same as Applicant ☐)

Name Apex Companies, LLC; Attn: John Brooks, III, PWD; Certification No. 3402000003

Address 203 Wylderose Ct., Midlothian, VA 23113

Phone (804) 897-2718 Email john.brooks@apexcos.com

OFFICE USE ONLY

Receipt # _____ **Fee Paid** _____

ZONING OFFICE APPROVAL SIGNATURE

This Application is Approved By _____ Date _____
Zoning Official

The City of Fairfax is committed to the letter and spirit of the Americans with Disabilities Act. To request a reasonable accommodation for any type of disability, please call 703-385-7930, (TTY 711)

I. **RPA Delineation Elements** – The RPA site-specific study shall be drawn to the same scale as the site plan or subdivision plan and shall be certified as complete and accurate by a class IIIB certified land surveyor and a professional wetlands expert. The study should clearly delineate the RPA components. Wetland delineations shall be performed consistent with the procedures specified in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands.

Mark below which features are included in your RPA Site-Specific Study:

Present (Y/N)	Resource Protection Area Elements §110-4.18.2
N	a) Tidal Wetlands
N	b) Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow
N	c) Tidal shores
N	d) Intermittent streams that remain largely in a natural condition and that have not been significantly impacted by adjacent development
Y	e) Water bodies with perennial flow
Y	f) A 100-foot vegetated buffer area located adjacent to and landward of the above components and expanded to include noncontiguous wetlands within the floodplain that are partially located within the buffer, along both sides of any water body with perennial flow. The full buffer area shall be designated as the landward component of the resource protection area notwithstanding the presence of permitted uses, encroachments or permitted vegetation clearing in compliance with the performance criteria of this division.

II. Site Information

Total Parcel(s) Area: 493,099.2 sf

Total Delineated RPA: 250,966.5 sf

Will you be developing in an RPA? (Circle one) (Yes) No

If Yes, check the type of development:

✓ Redevelopment (see §110-4.18.7.C) and §110-4.18.7.D
____ Roadway or driveway meeting the requirements of §110-4.18.4.B.2
____ Flood control or stormwater management facility meeting the requirements of §110-4.18.4.B.3
✓ New Development (see §110-4.18.4.B.4)

RPA Study Summary

✓ I hereby certify that the RPA Site-Specific Study does not conflict with the City of Fairfax Chesapeake Bay Area Preservation Map (adopted November 25, 2003).

___ I hereby certify that the RPA Site-Specific Study does conflict with the City of Fairfax Chesapeake Bay Area Preservation map. The Zoning Administrator will review and consider the inconsistencies in order to determine whether or not the City's map should be adjusted.

Describe conflicting features:

_____

_____

_____

_____

Co-Operating Mgr. 3-2-2020

Signature of Applicant or Authorized Agent | *Title or Relationship* | *Date*

NORTHFAX JV LLC

Statement of Justification
Revised: June 23, 2020

Please accept this Statement of Justification in support of a rezoning application to allow the redevelopment of an assemblage of seventeen (17) parcels and a portion of Orchard Street right-of-way to be vacated/abandoned. A complete list of all 17 parcels, the right-of-way, and each associated property address is attached to this Statement of Justification as **Exhibit A**. This Statement is submitted in conjunction with a Master Development Plan, prepared by Christopher Consultants, Ltd., dated January 3, 2020 and revised through June 1, 2020, consisting of thirty-five (35) sheets (the "MDP"), and other submitted supporting materials. The contents of this Statement of Justification address the requirements set forth in Section 3.8.2.C.1 of the City of Fairfax Zoning Ordinance, as amended by City Council through June 25, 2019 (the "Zoning Ordinance").

Northfax JV LLC, an affiliate of The Lann Companies, is the Applicant in the proposed rezoning of that area referred to as Northfax West. The 17 properties and the portion of Orchard Street right-of-way to be vacated/abandoned, which are identified on Exhibit A, comprise approximately 11.46 acres and are identified as Tax Map 57-2-02-003, 57-2-02-005, 57-2-02-017, 57-2-02-018, 57-2-02-019, 57-2-02-020, 57-2-07-015-B, 57-2-08-005, 57-2-08-006, 57-2-08-007, 57-2-08-008, 57-2-08-010, 57-2-08-011, 57-2-08-012, 57-2-08-013, 57-2-08-014, and 57-2-47-000-A (collectively, the "Subject Property"). Exhibit A includes the Title Owner of each parcel. The Subject Property is located along the western frontage of Chain Bridge Road (Route 123) and north of Fairfax Boulevard (Route 50). The uses surrounding the Subject Property are varied. The northern boundary is adjacent to The Assembly townhouses, a service station and an office building; the eastern boundary is Chain Bridge Road; the southern boundary is adjacent to City property, a used car lot, the 29 Diner, Brown's Fairfax Mazda, and the DarCar's Used Car Center; and the western boundary is adjacent to the rear property line of single-family detached dwellings fronting on McLean Avenue. The Subject Property is currently zoned CR (Commercial Retail) and RM (Residential Medium) and located within the Architectural Control Overlay District ("ACOD"). Existing improvements on the Subject Property include two (2) one-story houses located on the RM portion of the Subject Property. Commercial uses on the Subject Property include vehicle storage and an existing restaurant that fronts Chain Bridge Road. Approximately 4.0 acres on the western portion of the Subject Property is undeveloped, with approximately 5.5 acres located within a 100-year floodplain. The extent of the 100-year floodplain boundary is depicted on the Existing Conditions Plan on Sheets 2 and 2A of the MDP.

PROPOSED DEVELOPMENT

The Applicant proposes to rezone the Subject Property from the CR and RM Districts to the Planned Development Mixed Use ("PD-M") District to permit its redevelopment with a mix of residential and commercial uses that would be completed in four phases as generally depicted on the MDP. Phase One includes construction of a storm drainage culvert, utility relocations, the realignment of Orchard Street, and various improvements on the area generally designated on the MDP as the "Future Development Parcel." Phase Two is the development of fifty-six (56)

townhouses and associated infrastructure, including an eight-foot wide trail in the northwest portion of the Subject Property, and a linear park on the north side of Orchard Street Realigned. Phase Three is a senior living building with up to two hundred (200) units and associated infrastructure. Phases Two and Three are anticipated to be completed by 2023. Phase Four contemplates development of the Future Development Parcel that is anticipated to be completed by 2027. The Applicant will submit an amended MDP for approval once the uses for Phase Four have been determined.

Phase One

Preliminarily, before construction of the proposed residential community and senior living building, the Applicant will submit the necessary materials to modify the 100-year floodplain on a portion of the Subject Property. The current 100-year floodplain cuts through the Subject Property and causes approximately one-half of the site to be undevelopable. A stream generally flows from the northwest to the southeast into a box culvert, which is located at the Chain Bridge Road frontage of the Subject Property and recently installed by the City of Fairfax and the Virginia Department of Transportation as part of their road and drainage improvement project (the "City/VDOT Northfax Project"). Despite the installation of this culvert, the existing floodplain still includes a substantial portion of existing Orchard Street. The Applicant intends to complement and continue the City's storm drainage improvements by enclosing the on-site stream in a box culvert, thereby modifying the area of the floodplain. The result will be the removal of Orchard Street and the area proposed for dedication of the planned Farr Avenue Extension from the floodplain, and an increase in the developable portion of the Subject Property. To accomplish the on-site stream channel improvements, the Applicant has applied for and has been issued the required approvals from governmental agencies, including a Virginia Water Protection ("VWP") Permit, Permit No. 18-1003, on March 5, 2019 issued by the Virginia Department of Environmental Quality ("VDEQ") and a Conditional Letter of Map Revision ("CLOMR") from the Federal Emergency Management Agency ("FEMA"), Case No. 18-03 2239R, on April 1, 2019. These approvals have been coordinated with the City of Fairfax and are included as part of the MDP. As a result of the on-site stream channel improvements, the Applicant will effectively reduce the Resource Protection Area ("RPA") on the Subject Property from 5.99 acres to 1.15 acres. Prior to the approval of the proposed rezoning, the Applicant will submit an RPA Delineation Plan and a Water Quality Impact Assessment.

In connection with the floodplain modification, the Applicant proposes to grade within the redefined RPA area to install the box culvert. Pursuant to Section 4.18.10 of the Zoning Ordinance, this improvement will be located outside the RPA to the degree possible, and no more land will be disturbed than is necessary to construct the proposed improvement. Moreover, the installation and maintenance of this improvement will be in compliance with all applicable state and federal permits and will be designed and conducted in a manner that protects water quality. In addition, the Applicant proposes to construct an eight-foot wide trail in the redefined RPA area. Prior to any land disturbance related to the trail construction, the Applicant will obtain any required permits. The Applicant will also submit sufficient and reasonable proof that this intended use will not deteriorate water quality and will not conflict with any nearby planned or approved uses. Finally, the Applicant will comply with all erosion and sediment control requirements if any land

disturbance in association with the construction of these improvements in the redefined RPA exceeds an area of 2,500 square feet.

Additionally, as part of Phase One, the Applicant proposes to improve and realign Orchard Street to connect to the proposed extension of Farr Avenue (the "Farr Avenue Extension"). The Farr Avenue Extension will be completed by the City and will provide vehicular access between Chain Bridge Road and Fairfax Boulevard, through the Subject Property and the adjoining Brown's Mazda property. The Farr Avenue Extension will include a five-foot wide bike lane and a six-foot wide sidewalk to promote pedestrian connectivity. Similarly, the Orchard Street improvements will also include five-foot wide bike lanes as well as six-foot wide sidewalks. In conjunction with the proposed Orchard Street and Farr Avenue Extension improvements, approximately 0.31 acre of Orchard Street right-of-way will be vacated and approximately 0.97 acre of right-of-way will be dedicated to the City, the majority of which will facilitate the City's completion of the Farr Avenue Extension project. The Applicant is not proposing any vehicular access connections to adjoining residential neighborhoods nor proposing interparcel access to non-residential uses in Phases One, Two, or Three. Given the proposed adjacent development, a vehicular connection is not warranted. The request for an interparcel access will be reevaluated in Phase Four during the redevelopment of the Future Development Parcel.

Phase Two

To oversee and facilitate the townhouse development of Phase Two, the Applicant has contracted with MHI-Northfax, LLC, an affiliate of Madison Homes, Inc. ("Madison Homes"). The proposed townhouse development will include 56 units. This results in a proposed density of approximately 11.34 dwelling units per acre, when the proposed density is associated with only the townhouse portion of the development. The townhouses will be a mix of front entry units that are 24 feet wide, and rear entry units that are 20 feet wide. Each of the proposed townhouses will have an integrated two-car garage on the ground level, which will provide one hundred and twelve (112) total garage parking spaces. Twenty-two (22) additional guest parking spaces will be located on-site, including one handicap van-accessible space. The one hundred and thirty-four (134) parking spaces for the townhouse development will result in a parking ratio of 2.39 spaces per unit, which exceeds the required parking ratio of two (2) spaces per unit for townhouses. The townhouse layout includes rear entry units that will front on Orchard Street to activate the streetscape. Open space has been integrated into the layout. The proposed townhouses will be designed with architecture that will be compatible with the surrounding neighborhoods and will provide the appropriate transition between the surrounding residential neighborhoods and the higher density senior living facility planned with Phase Three, as well as the future uses of Phase Four. Building materials may include, but are not limited to, masonry, cementitious siding, and other quality materials. Additional residential amenities include a proposed pocket park within the townhouse development and a proposed amenity area in the northwest portion of the Subject Property, as generally shown on the MDP. These amenity areas will be programmed open spaces that may include a tot lot and seating areas. In addition, because the amenity area in the northwest portion is proximate to the beginning of the box culvert, the Applicant proposes to install culvert safety signage, four-foot high fencing, and a guardrail on the headwall. The Applicant will also heavily landscape the area around the culvert. Lastly, the Applicant has designed an eight to nine

foot wide linear park between the townhouses and the dedicated Orchard Street right-of-way, that will include plantings and benches to create a sense of place.

Approximately one (1) acre in the northwest corner of the Subject Property will remain as preserved open space, as generally shown on the MDP. As a part of Phase Two, the Applicant proposes to construct an eight-foot wide trail in this portion of the site, which will create connectivity to the adjacent neighborhoods. Specifically, the Applicant will connect the proposed linear park to the proposed trail, which will provide connectivity of the green spaces through the site to surrounding communities. The preserved open space will be owned by the umbrella association established for the development. The Applicant will grant a public ingress/egress easement to the City to allow access by surrounding communities. The trail will provide a connection to Perry Street. The Applicant will remove invasive vines and dead trees from this area. Supplemental plantings will be selectively added to ensure a natural wooded environment. This area is part of approximately 20% of total area of the Subject Property that will remain in open space. However, the Zoning Ordinance permits only 50% of the land area located in a floodplain to qualify as open space; thereby the open space calculation on the Subject Property in accordance with the Zoning Ordinance is 15%. Combining this land area with the permitted open space options and uses outlined in Zoning Ordinance Section 3.8.7, the Applicant is effectively providing 23% open space. In addition, at least 60 percent of the required recreation and open space is contiguous, as the Applicant proposes pavers in the private street between the pocket park and the preserved open space. This designated walkway will link the linear park to the preserved open space. The Applicant also proposes crosswalks on realigned Orchard Street and Farr Avenue Extension in order to provide safe and adequate pedestrian access from both sides of the streets to the various recreation and open spaces throughout the Subject Property. Thus, Phases One, Two, and Three will meet the intent of the 20% open space requirement for the Subject Property. In addition, the remaining 5% of open space will be provided in Phase Four when an amendment to the MDP is requested for the Future Development Parcel.

Phase Three

To develop and operate the proposed senior living facility on the Subject Property, the Applicant has contracted with Brightview Senior Living Development, LLC ("Brightview"). The proposed senior living facility will contain approximately 230,000 square feet of gross floor area in a seven-story building that incorporates a structured parking garage containing one hundred and fourteen (114) parking spaces with twelve (12) surface parking spaces, resulting in a total of one hundred and twenty (126) parking spaces. Based on the extensive industry experience of Brightview and market trends, the proposed number of parking spaces will meet the parking demand of a fully occupied community. A statement of operations to support the anticipated parking demand by the residents, staff, and visitors has been provided as **Exhibit B**. The proposed facility will have up to 200 units comprised of approximately one hundred and fourteen (114) independent living units, each with a full kitchen, sixty (60) assisted living units and twenty-six (26) memory care units. Resident amenities will include multiple dining venues, an area for fitness/wellness/yoga, physical therapy and occupational therapy services, an art studio, a multi-purpose space, a movie theater, and a hair and nail salon. In addition to the indoor amenities, the community will include outdoor courtyards and garden spaces for the enjoyment of the residents, residents' visitors, and the neighboring community. The outdoor courtyards will include features

such as landscaping, hardscape, fountains, fire pits, lighting, and/or seating areas, as generally depicted on the MDP. These courtyards will be designed to encourage community use and will activate the streetscape. The design of the proposed building will include contemporary architecture that will be residential in style and scaled to be consistent with the proposed townhouse development on the north and west sides of the facility. The proposed residential community developed in Phases Two and Three will be served by public water and public sewer, as generally shown on the MDP.

The Subject Property will be served by a primary vehicular access point at realigned Orchard Street to Chain Bridge Road at an existing signalized intersection. The Applicant's traffic consultant, Gorove/Slade Associates, Inc., has prepared a Traffic Impact Study for the Subject Property, dated January 2, 2020 and revised on April 15, 2020 (the "TIS"). The TIS takes into account the redevelopment of the Subject Property and considers a number of external factors, such as the Farr Avenue Extension, the University Boulevard Extension, and redevelopment of other approved but incomplete proximate development projects. For Phases One, Two, and Three, the TIS concludes that the redevelopment of the Subject Property will have a negligible impact on the surrounding transportation and roadway network. Fairfax Boulevard shows an increase of less than 1.0% in peak hour traffic, and Chain Bridge Road shows an increase of less than 1.1% in peak hour traffic attributable to the proposed redevelopment of the Subject Property.

A series of on-site stormwater management devices, such as hydrodynamic separators, stormfilters, and filterras, will be utilized to meet stormwater management quality and quantity requirements. In addition to the stormwater management devices, the Applicant proposes to provide best management practices ("BMP") planter boxes in the linear park along Orchard Street within the townhouse portion of the development. The proposed senior living building will also incorporate two (2) green roofs. Any proposed on-site stormwater management and BMP facilities will comply with all applicable stormwater regulations. As the site design progresses, the design team will incorporate sustainable design features into the development to the extent possible.

Finally, the Applicant will commit to the completion of an off-site stream restoration project for that portion of Accotink Creek within the boundaries of Van Dyck Park, where the stream has a width ranging from 8 to 15 feet and extends for a distance of approximately 2,190 linear feet. This stream restoration project has received preliminary funding from the City and has been designated by the City as an important public improvement project that is part of the approved master plan for Van Dyck Park. The Applicant intends to complete the stream restoration project at no additional cost to the City. Recognized as a nutrient offset trading bank project, the Applicant will ensure that the off-site improvements will comply with the regulations of VDEQ. In addition, the Applicant will purchase 1,675 stream credits or 4,761 Stream Condition Units from a VDEQ approved mitigation bank, as required by the VWP Permit (Permit No. 18-1003), approved by VDEQ. By completing this stream restoration project, the Applicant will make a significant contribution to the implementation of the approved master plan for Van Dyck Park. Additional City benefits from this stream restoration project include improving the water quality of the stream through Van Dyck Park, reducing erosion in this stretch of the Accotink Creek, decreasing the effects of flooding, and enhancing and beautifying the natural habitat for native species in this area. The City may select an alternative stream restoration project on property under City ownership and equal in length, accessibility, and stream condition to that portion of Accotink

Creek within the boundaries of Van Dyck Park for the Applicant's consideration. Upon selection of the alternative by the Applicant, the Applicant will diligently pursue the required approvals and implement the alternative stream restoration project.

Phase Four

Phase Four anticipates the redevelopment of approximately 3.3 acres of the Subject Property, which is identified as the "Future Development Parcel" on the MDP. Specific uses on this area remain to be determined, which allows the Applicant to preserve maximum flexibility for optimal development that will benefit the City in the future. Possible uses will be those permitted in the PD-M District under the Zoning Ordinance, to include permitted temporary uses. These uses may include, but are not limited to, approximately 25,000 square feet of office, retail, and restaurant uses; an additional 180 residential dwelling units; and a 140-room hotel. The Applicant is not seeking approval of these possible uses with the development of Phases One, Two, and Three. The Applicant may also consider opportunities to coordinate development of this parcel with adjoining properties, including the City-owned property at the corner of Chain Bridge Road and Fairfax Boulevard. Specific uses that will be excluded are cemeteries, detention facilities or jails, adult uses, building supplies and lumber sales, fuel stations, vehicle repair facilities, vehicle sales and leasing establishments, and vehicle service establishments.

An additional one-way, right-in only access from Chain Bridge Road will be constructed and completed in Phase Four of the development. The proposed access will ultimately connect to the realigned Orchard Street. In addition, the Applicant will provide an additional proposed location for ingress/egress at Orchard Street. The Applicant reserves the right to construct these future access points into the Future Development Parcel, as generally depicted on the MDP. The traffic impacts of Phase Four were considered as part of the TIS. Although the Applicant is not seeking approval of the possible uses listed above that are contemplated for Phase Four, the TIS takes into account the redevelopment of the Subject Property with such possible uses to ensure that all potential traffic impacts are considered. The TIS also considers a number of external factors, such as the Farr Avenue Extension; signalization of the Fairfax Boulevard and Farr Avenue intersection; the realignment of Warwick Avenue, Fairfax Boulevard, and McLean Avenue; the University Boulevard Extension; and redevelopment of other approved but incomplete proximate development projects. For Phase Four, the TIS concludes that the ultimate redevelopment of the Subject Property will have negligible impact on the surrounding transportation and roadway network. Fairfax Boulevard shows an increase of less than 3.3% in peak hour traffic and Chain Bridge Road shows an increase of less than 3.2% in peak hour traffic attributable to the proposed redevelopment of the Subject Property. At such time when the uses for Phase Four are selected and an amendment to the MDP is requested for the redevelopment of the Future Development Parcel, the Applicant will prepare and submit an amended TIS for review and approval.

With regard to stormwater management, similar devices to those provided in Phases One, Two and Three will be utilized in Phase Four to meet stormwater management quality and quantity requirements. The proposed development on the Future Development Parcel will include on-site stormwater management and BMP facilities that will comply will all applicable stormwater regulations. These measures will be evaluated by City staff when an amendment to the MDP is submitted.

In the interim, the Applicant proposes temporary improvements on the Future Development Parcel. These improvements include, but are not limited to, removing existing gravel areas to be replaced with sodding/seeding/ground cover; installing landscaping along the Chain Bridge Road frontage; and incorporating a six-foot sidewalk as well as providing a temporary linear park and landscaping along the south side of the realigned Orchard Street, as shown on the MDP. In addition, a multi-use trail will be installed along the Chain Bridge Road frontage, as shown on the MDP. While a majority of the trail will be ten (10) feet wide, the existing sidewalk at the corner of Orchard Street and Chain Bridge Road will be retained and transition to a six foot wide sidewalk being installed along the south side of Orchard Street. Likewise, at the southern end, the ten-foot trail will narrow to six feet to connect with the existing off-site sidewalk near the intersection of Chain Bridge Road and Fairfax Boulevard. In addition, the Applicant may seek permitted temporary uses on the Future Development Parcel in accordance with the Zoning Ordinance Section 3.5.6.B and C, including, but not limited to, temporary uses and temporary special events. Specifically, the Applicant seeks to retain the existing restaurant building on the Future Development Parcel. In accordance with the Zoning Ordinance, the Applicant may choose to convert the building to permitted temporary uses, including, but not limited to, temporary residential sales and/or leasing offices and temporary construction offices.

REZONING APPLICATION/COMPREHENSIVE PLAN

The Applicant proposes a rezoning of the Subject Property from the CR and RM Districts to the PD-M District in order to permit the proposed development. The proposed rezoning fulfills each of the approval considerations set forth in Section 6.4.9 of the Zoning Ordinance, as discussed below:

A. *Substantial conformance with the Comprehensive Plan.*

The proposed development is in substantial conformance with the recommendations of the Comprehensive Plan (the "Plan") and the Future Land Use Map for the City of Fairfax. The Comprehensive Plan and Future Land Use Map, which were adopted by City Council in February of 2019, designate the Subject Property as an Activity Center. Specifically, the Subject Property is located in the Northfax Activity Center, which the Plan considers the most appropriate location in the City to accommodate a regional mixed-use destination. Consolidating 17 parcels, the Applicant is proposing to integrate a mix of residential, retail, restaurant, and hotel uses on the Subject Property in a development that will be implemented in four phases. With Phase One, in addition to the improved vehicular access along realigned Orchard Street and the Farr Avenue Extension, the proposed development will create a pedestrian friendly streetscape that includes a five-foot wide bike lane and a six-foot wide sidewalk, providing a convenient, safe pedestrian access from Chain Bridge Road to Fairfax Boulevard.

In Phases Two and Three, urban-style townhouses and a modern senior living facility will activate an urban streetscape along realigned Orchard Street and the Farr Avenue Extension, and have been designed to implement the "active street" concept contemplated in the Plan. The townhouses front on Orchard Street and Farr Avenue Extension, with front stoops that lead to the sidewalk. Similarly, the senior living building includes first

floor units on Orchard Street with front stoops. Additional uses, such as a hair and nail salon and fitness room, will be located on the first floor of the senior living building to activate the street level. Lastly, courtyards on the east and west sides of the senior living building will connect to the adjacent sidewalks creating an active and inviting environment. Moreover, the proposed townhouse residential use, combined with the incorporation of a senior living community, will diversify housing types in the City as well as address a growing need in the City for senior housing that allows City residents an opportunity to age in the City of Fairfax. The introduction of additional multifamily residential, hotel, restaurant, and retail uses in Phase Four will complete the Northfax Activity Center's objective to provide a well-designed, desirable place to live, work, shop, and dine, as envisioned by the Plan.

While the proposed development is in substantial conformance with the recommendations of the Plan and the Future Land Use Map, the Plan recommends Small Area Plans be developed for each of the City's five Activity Centers, including Northfax. Currently, the City is undergoing a process to develop Small Area Plans for Northfax and Old Town Fairfax that will provide more specific guidance for these Activity Centers, including the desired mix of uses, residential density, building intensity, design aesthetic, street locations, multimodal connections, infrastructure improvements, parking, and open space. As each Small Area Plan is completed, its adopted recommendations will supersede the pre-existing guidance in the 2035 Comprehensive Plan for its respective Activity Center. Based on meetings coordinated by Cunningham/Quill Architects, the proposed development will be designed to be consistent with the overall vision for the Northfax Small Area Plan. Specifically, a significant feature of the envisioned Northfax Small Area Plan includes a linear park concept. Taking this into consideration, the Applicant has designed an eight to nine foot wide linear park between the dedicated Orchard Street right-of-way and the townhomes. The linear park will include plantings and benches to create a sense of place. Stormwater management planter boxes will create opportunities for on-site infiltration. Additionally, connecting the linear park to the proposed trail through the northwest portion of the site provides connectivity through the site itself, but also to surrounding neighborhoods.

B. *Any greater benefits the proposed rezoning provides to the City than would a development carried out in accordance with the current zoning district, and otherwise applicable requirements of this chapter.*

The proposed development will provide greater benefits to the City than a development in accordance with current zoning district regulations. The proposed rezoning to the PD-M District will consolidate 17 parcels to create a single zoning classification on the Subject Property. The rezoning will allow for the development of a mixed-use destination in Northfax that more properly aligns with and advances the goals of the City's vision in this Activity Center. Moreover, because the development will be completed in four Phases, with the development of the fourth Phase being subject to future evaluation and approval by the City Council, the proposed rezoning affords the Applicant flexibility to respond to market demands and the needs of City residents. As currently envisioned, it is planned that the contemplated mix of uses in Phase Four will create a critical mass of residential density

that will support retail and restaurant uses in the Northfax Activity Center. In addition, the proposed development will provide road improvements to existing Orchard Street that will, in conjunction with the City's Farr Avenue Extension project, complete the connection between Fairfax Boulevard and Chain Bridge Road. This connection facilitates establishment of the Northfax street grid. The Farr Avenue Extension is a new roadway link that will improve the area's traffic circulation. Associated with these road improvements is the installation of a five-foot wide bike lane and a six-foot wide sidewalk along the realigned Orchard Street that will extend off-site to Chain Bridge Road, resulting in enhanced pedestrian connectivity. The pedestrian connectivity will also extend to the west with the installation of an eight-foot wide trail from the Subject Property to Perry Street. In addition, the proposed development will include the installation of a box culvert as part of a public improvement project on the Subject Property.

C. Suitability of the Subject Property for the development and uses permitted by the current versus the proposed district.

The Subject Property is highly suitable for the proposed development given its location proximate to a mix of existing residential and commercial uses. Under the existing zoning designations, the Subject Property is zoned to two different zoning classifications. While most of the proposed uses are permitted either by right or with a special use permit approval in the respective zoning districts, a townhouse residential use specifically is not permitted in either the RM or CR zoning districts. A townhouse component creates an appropriate transition use adjacent the existing townhouses of The Assembly. The consolidation and rezoning of the 17 parcels that comprise the Subject Property to the proposed PD-M District allows for a development of uses in a manner that will be compatible with nearby communities and consistent with the Plan's recommendations for the Northfax Activity Center. The proposed rezoning results in a more suitable development than could be achieved by the existing zoning.

D. Adequacy of existing or proposed public facilities such as public transportation facilities, public safety facilities, public school facilities, and public parks.

The proposed development will not have an adverse impact on public facilities such as public transportation facilities, public safety facilities, public school facilities, and public parks. Part of the proposal incorporates a separate Public Improvement Plan (the "PI Plan") that includes the construction of a storm drainage culvert, utility relocations, the realignment of Orchard Street, a multi-use trail on Chain Bridge Road, and temporary landscaping and linear park on the south side of Orchard Street. The PI Plan will be reviewed and approved by the City in coordination with the City's plans for the construction of the Farr Avenue Extension. The completion of Orchard Street and the Farr Avenue Extension creates a street grid that connects Chain Bridge Road to Fairfax Boulevard and improves transportation use. In addition, the Applicant proposes to construct an eight-foot wide trail within a public access easement in the northwest corner of the Subject Property, creating additional usable public open space. The Applicant will also extend a sidewalk to Chain Bridge Road and construct a multi-use trail on Chain Bridge Road. These improvements provide pedestrian connectivity on and off-site.

Finally, the Applicant's commitment to stream restoration in Van Dyck Park will improve the health of Accotink Creek and benefit, not just Van Dyck Park, but the entire City.

E. Adequacy of existing and proposed public utility infrastructure.

The existing public utility infrastructure is adequate to serve the proposed development. All new utilities serving the proposed townhouse development and the senior living community development constructed in Phases Two and Three will be installed underground. Offsite overhead utilities along the north side of Orchard Street in an existing easement or the existing right-of-way of Orchard Street will be maintained above ground and will be modified by the Applicant to relocate the pole at the southwestern corner of the adjacent office building property and add a new terminal pole to serve the Application Property and the office building. In addition, existing above ground utilities along the Chain Bridge Road frontage and the southeastern corner of the Subject Property will remain and will be addressed during the redevelopment of the Future Development Parcel in Phase Four.

F. Compatibility of the proposed development with adjacent and nearby communities.

The proposed development has been designed to ensure compatibility with the surrounding residential uses to the north and west of the Subject Property as well as the retail uses to the south. The construction of townhomes on the north and west portions of the Subject Property creates an appropriate transition to the existing Assembly townhomes and the single-family homes on McLean Avenue. The senior living building was designed to place the senior living parking garage adjacent to the parking facility being proposed as part of the redevelopment of the Brown's Mazda dealership to the south. The Applicant intends to utilize the open space in the northwest corner of the Subject Property to foster connectivity to the adjacent neighborhoods. Furthermore, the Farr Avenue Extension that extends through the Applicant's site and will connect to an improved Orchard Street will provide a connected street network for motorists, bicyclists, and pedestrians. This will effectively unify the proposed projects on both sites and contribute to the creation of a pedestrian-oriented, mixed-use destination at Northfax.

G. Consistency with the stated purpose of the proposed district.

The stated purpose of the PD-M District is to provide for coordinated mixed-use developments, which may include general residential and nonresidential uses within a planned development. The variety of land uses available in this district allows greater flexibility to respond to market demands and the needs of tenants, thereby providing for a variety of physically and functionally integrated land uses. The proposed mixed-use development planned for Phases Two and Three is consistent with the purpose of the PD-M District. In addition, while the uses for Phase Four have not yet been specified, the uses ultimately selected will be in response to market demands and will fully integrate with, not only the uses of Phases Two and Three, but with the broader mixed-use development of the Northfax Activity Center.

The additional considerations of Section 6.6.8 of the Zoning Ordinance are met as follows:

- In order to ensure compatibility of each component within the overall development, the design of the proposed townhouses incorporates an aesthetic transition between the traditional style townhouses of The Assembly and the contemporary style of the proposed senior living building. In addition, the senior living community integrates a contemporary design that complements both the transitional architecture and massing of the adjacent townhouses to its north and west as well as the adjacent Brown's Mazda dealership to its south.

- The development will be completed in four Phases, with Phase Four being subject to future evaluation and approval by City Council. This ensures that the proposed rezoning will create a unified, cohesive environment at full build-out that will be responsive to market demands and the needs of the City to ultimately develop a mixed-use destination in the Northfax Activity Center.

- The overall development of the Subject Property will occur in phases that are connected but are independent projects, in accordance with the MDP. Development will occur in the following Phases:

    - Phase One: Construction of storm drainage culvert, utility relocations, the realignment of Orchard Street, and various improvements on the Future Development Parcel, as depicted on the MDP. Phase One will be subject to the PI Plan to be prepared by the Applicant and reviewed and approved by the City of Fairfax in coordination with the City's plans for the construction of the Farr Avenue Extension. The PI Plan was submitted to the City in May 2020. It is anticipated that construction of this Phase could begin in early 2021, subject to obtaining all necessary approvals, with completion in late 2021. The culmination of Phase One will be the submission and approval of a Letter of Map Revision ("LOMR") by FEMA, consistent with the approved CLOMR.

    - Phase Two: Development and construction of the townhouse component, including an eight-foot wide trail in the northwest portion of the Application Property and a linear park on the north side of Orchard Street, as shown on the MDP. Subject to final site plan approval and coordination with the LOMR resulting from the Phase One work, this work could begin in mid to late 2021. Timing for the completion of this Phase Two will be dependent upon market conditions for the sale of the proposed townhouses, but it is anticipated that this Phase will be developed, constructed, and sold over a 2-3 year period from commencement.

    - Phase Three: Development and construction of the senior living building, as shown on the MDP. Subject to final site plan approval and coordination with the LOMR resulting from the Phase One work, this work could begin in mid to late 2021. Construction of the improvements included in Phase Three should be completed in approximately 18 months from commencement. Occupancy of the senior living building will commence upon completion of construction.

- Phase Four: Development and construction of the Future Development Parcel will occur after approval by the City Council of an amendment to the MDP, specifying the improvements and uses to be constructed on this Phase Four of the project. Details with regard to the timing of this development and construction will be provided as part of a future application for amendment to the MDP.

- To protect and preserve the ecologically sensitive areas within the Subject Property, the Applicant intends to complement and continue the City's storm drainage improvements that will ultimately reduce the impact of the floodplain on the Subject Property and on adjacent properties, including The Assembly. The Applicant is also proposing to maintain approximately one acre in the northwest corner of the Subject Property primarily in its current condition. The existing trees in the northwest corner of the site have been evaluated for health, structure, and impact from invasive species. The focus of this area will be on tree preservation with minimal development. The invasive species and dangerous trees will be removed so the higher quality trees can thrive. In addition, the trail and proposed amenity area will be designed to maximize the preservation of good quality trees. Supplemental trees will be planted in this area to ensure a natural wooded environment. A narrative describing the condition of existing trees on-site and the Applicant's proposal to improve the current condition of the tree canopy is attached as **Exhibit C**. Finally, by completing the Van Dyck Stream restoration project, the Applicant will improve the water quality and reduce erosion in this portion of the Accotink Creek, decrease the effects of flooding, and enhance and beautify the natural habitat for native species in the area.

- The Applicant is not displacing any existing affordable housing on the Subject Property. The Applicant is providing a diverse mix of housing that includes single-family attached units as well as a senior living building that will include independent living, assisted living, and memory care units. The proposed development meets the housing goals of the City's Comprehensive Plan, as it is comprised of housing types that are underrepresented in the City's stock of housing units. The Applicant will provide a variety of housing types at various price points that will meet the needs of the City's residents, including its senior citizens.

MODIFICATIONS, WAIVERS, AND SPECIAL USE PERMIT REQUESTS

In conjunction with the proposed rezoning, the Applicant requests approval of the following modifications and special use permits:

1. Pursuant to Section 4.15.7.C.2.b.1 of the Zoning Ordinance, a special use permit is hereby requested to allow for disturbance within the 100-year floodplain boundary.

   The proposed floodplain boundary modification meets the approval considerations for a special use permit as set forth in Section 6.7.7 of the Zoning Ordinance. The modification of the floodplain boundary is consistent with the Comprehensive Plan and the Future Land Use Map, which designates the Subject Property as an Activity Center. The modification will relocate the on-site stream into a box culvert and remove the 100-year floodplain from the developable area of the site, which will

allow a mixed-use development consistent with the Comprehensive Plan. The modification is compliant with all applicable Zoning Ordinance requirements related to floodplain regulations, Chesapeake Bay preservation, and open space. In addition, the modification of the floodplain will not adversely affect the health or safety of persons residing or working in the neighborhood of the proposed use nor will it have a negative, adverse effect on public welfare, property, and improvements in the neighborhood. Rather, the modification will have a positive and beneficial impact on the proposed development as well as the surrounding neighborhood by permitting the Applicant to properly redevelop this site in accordance with the mixed-use development planned for this area. Furthermore, the proposed floodplain boundary modification has already been identified by the City as a necessary public improvement project in order for the City to complete its Farr Avenue Extension project.

2. Pursuant to Section 3.8.2.I of the Zoning Ordinance, a modification is hereby requested of the development schedule requirement, as set forth in this provision.

   The development of the project is proposed to occur in phases. Phases Two and Three will include the development and construction of townhouses and a senior living facility. As previously discussed, the senior living community will be comprised of a mix of independent living units, assisted living units, and memory care units. While the independent living component is considered a residential use, the assisted living and memory care components are considered non-residential uses. Additional non-residential uses are anticipated in Phase Four. As such, strict compliance with this provision precludes occupancy of the townhouses prior to the completion of the senior living facility. Therefore, a modification of this requirement is appropriate.

3. Pursuant to Section 3.8.7.G of the Zoning Ordinance, a modification is hereby requested of the requirement of a 20% minimum recreation and open space, as set forth in Section 3.8.2.G.

   Pursuant to Section 3.8.7.B.3 of the Zoning Ordinance, the minimum required width for recreation and open space is fifty (50) feet. As shown on Sheet 7 of the MDP, a total of 11% of the site is provided as open space that meets this dimensional requirement. In addition, by accounting for only 50% of the northwest corner of the site, which contains floodplain and/or steep slopes, this results in an additional 4% open space. Accordingly, the Applicant is providing 15% open space in Phases One, Two, and Three that meets the Zoning Ordinance requirements, which includes the area in the northwestern portion of the site, the open space within the townhouse development, and the courtyards to the east and west of the senior living community. The remaining 5% of open space will be provided in Phase Four when an amendment to the MDP is requested for the Future Development Parcel.

However, approximately 0.8 acres of recreation and open space is provided that does not fall within a strict reading of the Zoning Ordinance requirements. These areas include 0.8 acre of sidewalks and planted areas within the townhouse and senior living building parcels that are not fifty (50) feet in both directions. An eight to nine foot wide linear park will be located between the townhomes and the Orchard Street right-of-way. Adding these components increases the green space by 8%, effectively resulting in a total recreation and open space of 23%. At least 60 percent of the required recreation and open space is contiguous as the Applicant is connecting open space with crosswalks and a pedestrian connection delineated by pavers in a private street between the pocket park and the open space in the northwest portion of the site.

In addition, there is 0.55 acre that includes streetscape improvements along Farr Avenue Extension and Orchard Street, which provide 6-foot wide sidewalks, street trees, and lighting. The senior living building will also provide a six-foot wide planting strip along the main entrance area on the eastern side of the senior living building, several rooftop amenitized green spaces that includes landscaping and seating areas for assisted living and memory care residents, as well as a number of green roofs. Therefore, by including these additional recreational amenities and exceptionally designed green spaces, this modification request is appropriate.

4. Pursuant to Section 3.8.2.D of the Zoning Ordinance, a modification is hereby requested of the requirement that no more than two of any ten or one of any three to five abutting dwelling units have the same front yard setback, as set forth in Section 3.5.1.C.2

   The proposed townhouse development consists of a total of 56 townhouse units. As shown on the MDP, the townhouse sticks include a mix of four, five, and six units. Within the townhouse sticks, some varying setbacks have been incorporated. The Applicant also proposes an architectural variation of the design of the units, including façade, color, among other features, that will provide a visual appearance of various depths, despite several units having the same setback. For example, for the proposed rear entry townhouses units fronting Realigned Orchard Street and Farr Avenue Extension, the Applicant is providing twelve (12) inch offsets. This allows for a better overall design that creates an aesthetically-pleasing community.

5. Pursuant to Section 3.8.2.E.3 of the Zoning Ordinance, a modification is hereby requested of the requirement to provide 1.5 parking spaces per unit for the independent living portion of the proposed senior living facility, as set forth in Section 4.2.3.E.

   The Applicant proposes a seven-story senior living facility of up to 200 units that includes a combination of independent living units, assisted living units, and memory care units. Included in the building will be a structured parking garage that provides 114 parking spaces. There will be an additional twelve (12) surface parking spaces provided, resulting in a total of 126 parking spaces. Based on the

Zoning Ordinance, the parking ratio for an assisted living facility is one (1) parking space per four (4) beds. There are 92 proposed assisted living and memory care beds, resulting in a parking requirement of 23 spaces. Currently, parking for an independent living use is not specified in the Zoning Ordinance. The most similar use may be a congregate living facility, which yields a parking ratio requirement of 1.5 spaces per unit. Therefore, the Applicant would be required to provide 171 parking spaces for the proposed 114 independent living units. Combined with the requisite spaces for the assisted living and memory care units, the requirement is 194 parking spaces, which exceeds what is practically needed given that many residents will not be driving or even have a vehicle. Based on the extensive experience of Brightview, and its research of optimal operating conditions, its industry knowledge dictates a much lower parking demand, which is also consistent with the Institute of Transportation Engineers' Parking Generation Manual and surrounding jurisdictions. Brightview has determined that the requisite number of parking spaces for its proposed senior living facility to efficiently operate is 126 spaces. The Applicant has submitted a parking analysis that supports the proposed parking reduction. In addition, a statement of operations prepared by Brightview to support anticipated parking demand is attached as Exhibit B.

6. Pursuant to Section 3.8.2.E.3 of the Zoning Ordinance, a modification is hereby requested of the requirement to provide two (2) loading spaces for the independent living portion of the proposed senior living building, as set forth in Section 4.2.9.B.

   The Applicant is providing one loading space located in front of the senior living building. A 78-foot drop off bay, inclusive of the proposed loading space, at the main entrance on the eastern side of the senior living building will serve as the drop-off area for most day-to-day deliveries from Amazon, FedEx, UPS, and other delivery services. The loading space is located on the end of the bay closest to the parking garage entrance. Utilizing this loading space at the main delivery area of the senior living facility will help to facilitate efficient traffic flow and will not impede the circulation of vehicles traversing the site, as regular deliveries to the senior living facility would be made off the public right-of-way. In addition, though located in the public-right-of-way, the Applicant anticipates use of a loading zone on-street along the western side of the senior building facility on Farr Avenue Extension, as depicted on the MDP. Located closer to the back-of-house areas of the senior living building, this space will accommodate larger, less frequent deliveries. Thus, the Applicant meets the intent of the loading space requirement, and this modification request is appropriate.

7. Pursuant to Section 3.8.2.E.3 of the Zoning Ordinance, a modification is hereby requested of the requirement to provide vehicular access between abutting nonresidential lots fronting on arterial and collection streets prior to the erection or establishment of a principal building, as set forth in Section 4.3.3.B.

   The southern property line of the Subject Property is the only location of abutting nonresidential lots. Along this property line, the Applicant proposes the parking

garage of the senior living building, which is adjacent to the Brown's Mazda dealership, a commercial use. Specifically, the dealership proposes a parking garage adjacent to the Applicant's southern property line. Given the characteristics of the two uses, a vehicle access is not warranted or reasonable.

8. Pursuant to Section 3.8.2.E.3 of the Zoning Ordinance, a modification is hereby requested of the requirement to provide sidewalks on both sides of a collector and local street, as set forth in Section 4.4.4.A.1.

   The rear entry townhouse units are served by alleyways, as depicted on the MDP. In addition, the front entry townhouse units will be primarily comprised of driveway entryways that limit the ability to install and effectively use a sidewalk in front of these units. Thus, given the driveway access to each unit type, the installation of a sidewalk on such side of the internal street is not practical.

9. Pursuant to Section 3.8.2.E.3 of the Zoning Ordinance, a modification is hereby requested of the requirement to provide the minimum tree plantings as well as the minimum fence or wall height of the TY3 transitional yard specifications along the Subject Property's boundaries, as set forth in Sections 4.5.5.C.2(b)(2) and 4.5.5.D.

   The Applicant seeks to modify the minimum tree plantings requirements along the northern, western, southern and eastern property lines. Along the northern property line, the Applicant's proposed townhouse development is located immediately to the south of The Assembly townhouses. There is existing vegetation as well as existing privacy fences between the townhouse development and The Assembly townhouses that provide the requisite transitional yard. In the northeastern portion of this property line, the width and number of canopy trees must be reduced due to a proposed alley and sanitary easements. However, the Applicant intends to provide an increased number of understory trees.

   Along the western property line, the required transitional yard width must be reduced due to constraints created by the right-of-way dimensions that have been determined by the City as part of the Farr Avenue Extension project. Such constraints necessitate a modified transitional yard width in order for the Applicant to provide the proper site design for the proposed townhouses and alleyways. Furthermore, although single-family detached dwellings are located on the adjacent properties, these homes remain a significant distance from the property line. The Applicant anticipates that reducing the transitional yard width between the proposed townhouse development and the adjacent single-family detached dwellings will have minimal effect on these neighboring properties as the full amount of required landscaping and fencing will be provided.

   Along the southern property line, the Applicant proposes to locate the parking garage of the senior living facility on the southeast portion of the boundary. The Brown's Mazda dealership is directly adjacent to the parking structure. Because a commercial use will be abutting a proposed parking garage, extensive TY3

transitional yard along this portion of the property line, including a fence or wall between the adjacent properties, is not needed. In addition, the proposed installation of a concrete sidewalk, the extension of the fire turnaround, and incorporation of surface parking spaces also warrants a modification of the TY3 transitional yard along the southeastern portion of the border.

Finally, along the eastern property line, transitional yard modifications are needed for proper site design of the townhouses and alleyways. Specifically, rear entry units are proposed for the easternmost townhouse stick, and this precludes the Applicant's ability to provide the full transitional yard width. The Applicant is also proposing to provide a reduced number of trees along this border due to existing vegetation between the townhouse development and the adjacent office building as well as because of proposed sanitary sewer utilities and easements in the northeastern corner of the Subject Property.

In light of all of these conditions along the various property lines of the Subject Property, the Applicant will provide the appropriate transitional yard width and a modified number of canopy and understory tree plantings sufficient to mitigate any possible effects of the proposed development on the surrounding uses.

10. Pursuant to Section 3.8.2.E.3 of the Zoning Ordinance, a modification is hereby requested of the requirement to provide street trees along all streets at a rate of one canopy tree for every 40 linear feet and spaced a maximum of 50 feet apart and the requirement to plant trees no less than three feet from the back of the curb or edge of pavement, as set forth in Section 4.5.6.B.

Street trees have been provided along Orchard Street and the Farr Avenue Extension to the extent possible. There are select areas where the requirements of Section 4.5.6 cannot be met due to proposed on-street parallel parking and various proposed utilities. The most current active street design provided by the City's consultant for the Farr Avenue Extension and labeled 60% complete has been added to the MDP. In coordination with the City, this is also the desired design for Orchard Street. The proposed active street design may also need to accommodate curb cuts, underground stormwater pipes, and filterras that will result in spacing greater than the required 50 feet maximum. In addition, the provided design shows a four-foot planting strip in between the curb and six foot wide sidewalk that cannot conform to the required three-foot minimum distance from paved surfaces.

Along the Chain Bridge Road frontage, the Applicant cannot provide the requisite street trees due to the presence of existing overhead utilities that will remain during Phases One, Two, and Three. Given the width of the three-foot grass strip, the proposed 10-foot multi-use trail, and the three-foot wide buffer requirement from paved surfaces, it is not possible to provide street trees within 15-feet of the edge of pavement. However, the Applicant has proposed a row of large evergreen and deciduous shrubs of varying size to be planted as close as possible to the back of the sidewalk, within 15-feet from the edge of pavement. These shrubs will be

layered and may achieve a mature height of approximately 15 feet, thereby providing year round screening and meeting the intent of the street tree requirement.

Notwithstanding, at such time when an amendment to the MDP is submitted to redevelop the Future Development Parcel, the Applicant will install street trees along the Subject Property's Chain Bridge Road frontage. The final number and location of street trees will be determined in accordance with the amendment to the MDP as required for Phase Four.

11. Pursuant to Section 3.8.2.E.3 of the Zoning Ordinance, a modification is hereby requested of the requirements to provide both interior islands with a minimum of 200 square feet per island and a minimum of 400 square feet per island that include sidewalks, where no parking space located more than 50 feet from a planting island, as well as curbed terminal islands at the end of a row of parking spaces, as set forth in Section 4.5.7.D.

    The Applicant requests this modification to permit head-in parking spaces in the northwest corner of the townhouse area. As generally shown on the MDP, this area is constrained by the proposed box culvert improvement that will run underneath a portion of the parking spaces. Since this parking area will function within an urban development project, these conditions prevent the Applicant from installing terminal landscaped islands with the square footage specified in the Zoning Ordinance. The modification request also applies to the parallel parking spaces within the townhouse parcel due to utility easements, urban conditions, and the incorporation of visitor parking spaces. In addition, this modification is needed to the surface parking space areas of the senior living building, where various utilities easements and appurtenances preclude terminal landscaped islands, as depicted on the MDP.

12. Pursuant to Section 3.8.2.E.3 of the Zoning Ordinance, a modification is hereby requested of the requirement that all on-site utilities be installed underground, as set forth in Sections 4.11.B and C.

    As part of Phases Two and Three, all new utilities serving the proposed townhouse and senior living developments will be located underground. This modification is requested to allow the existing overhead utility lines along the southeastern property line and the Chain Bridge Road frontage to remain, and the relocation of an existing utility on the north side of Orchard Street that will be maintained above ground.

    Along the southern property line of the Future Development Parcel, the existing overhead utility lines primarily serve the Glascock property and the Brown's Mazda site and do not provide service to the Subject Property. Of the four (4) existing utility poles in this area, only one utility pole is located on the Subject Property. The remaining poles are located either on City property, the Glascock property, or the Brown's Mazda property. As such, undergrounding the overhead utility lines

on the Subject Property would require coordination with adjacent property owners. The undergrounding of the existing utilities would be better addressed at the time that the adjacent properties are redeveloped. Additional utility poles are located on Chain Bridge Road adjacent to the Future Development Parcel. These utilities will be addressed when an amendment to the MDP is submitted to develop the Future Development Parcel.

An overhead utility pole along the north side of Orchard Street, primarily within an existing right-of-way or an existing easement, will be relocated approximately 20 feet east by the Applicant to the southwestern corner of the adjacent office building property (3554 Chain Bridge Road) and maintained above ground. The pole is being relocated to accommodate the proposed design of Realigned Orchard Street and Farr Avenue Extension. The design of this street section by the City includes on-street parallel parking, a proposed sidewalk, and a proposed storm pipe. To accommodate this road section, the existing pole must be relocated. A single terminal pole is added off-site to serve both the Subject Property and the existing office building at 3554 Chain Bridge Road. Specifically, this pole is needed to close the loop once the Senior Living Building is developed in Phase Three and the Future Development Parcel is redeveloped in Phase Four. Additionally, the proposed terminal pole will be a benefit to the office building to the north because it is currently on a dead-end circuit. By adding this pole, it will provide the existing office building with a more reliable and redundant electric power source.

13. Pursuant to Section 2.10.1 of the Subdivision Ordinance, a modification is hereby requested of the requirement to provide street improvements to Perry Street and Howerton Avenue.

    The Applicant is not proposing vehicular access to Perry Street/Howerton Avenue. The only improvement shown in this area is the pedestrian trail connection. Given the minimal frontage and lack of vehicular connection or impact to these streets, street improvements at this location are not warranted. The trail will connect to Perry Street with a small refuge area for pedestrians and cyclists. The refuge will reduce conflicts with vehicular traffic. A sign will be installed within the Perry Street right-of-way to identify the trail location.

14. Pursuant to Section 401-01 of the Public Facilities Manual ("PFM"), support for a waiver is hereby requested of the requirement to provide a typical curb and gutter street on private accessways that is less than 30 feet from face of curb to face of curb or edge of pavement.

    The proposed development is designed to be an urban community that is more compact and integrated with reduced roadway widths. The reduced road widths, in conjunction with other design features, will assist to discourage cut through traffic. Therefore, support of this waiver is appropriate in consideration of the intended urban design of the proposed development.

15. Pursuant to Section 2.4.5.3 of the PFM,[1] support for a waiver is hereby requested of the requirement that blocks shall not exceed 1,200 feet in length nor shall they be less than 300 feet in length.

    Because the proposed development is designed to be an urban community, private alleys are proposed to improve circulation within the development. As such, some alleys are approximately 100 feet. Therefore, the Applicant requests support for a waiver to allow for blocks that will be less than 300 feet in length.

The Applicant's proposal presents an opportunity to redevelop currently underutilized parcels and activate them with a mix of complementary uses that is consistent with the recommendations of the City's Comprehensive Plan and Future Land Use Map. The Applicant has designed a high-quality community that will advance the City's vision to make Northfax a regional mixed-use destination that will strengthen economic vitality, provide diverse residential and retail opportunities for sustained demand, and reinforce the City's regional appeal. The Applicant is committed to working with the City and the surrounding community to ensure that the proposed development fits into the fabric of the City of Fairfax.

[1]Section 2.4.2.B of the Subdivision Ordinance also provides a block length requirement, stating that "[b]lock length shall not be less than 250 feet or more than 800 feet." This requirement provides a lesser standard than the similar PFM requirement. As such, Section 1.1 of the PFM states that "[w]henver any provision of this [PFM] imposes a greater requirement or a higher standard than is required in any State or Federal statue or City Ordinance or regulation, the provision of this PFM shall govern." Thus, the Applicant only seeks a modification of the block length requirement of the PFM requirement.

EXHIBIT A

Northfax West Property, City of Fairfax, Virginia

Tax Map No.	Parcel No.	Property Address	Current Owner of Record
57-2-02	003	10516 Orchard Street	Orchard RE Investments, LLC
57-2-02	005	10517 Orchard Street	Orchard RE Investments, LLC
57-2-02	017	3590 Chain Bridge Road	A.R.G. II, L.L.C.
57-2-02	018	3580 Chain Bridge Road	A.R.G. II, L.L.C.
57-2-02	019	10505 Orchard Street	A.R.G. II, L.L.C.
57-2-02	020	3570 Chain Bridge Road	Northfax JV LLC
57-2-07	015-B	McLean Avenue	Orchard RE Investments, LLC
57-2-08	005	10508 Orchard Street	Orchard RE Investments, LLC
57-2-08	006	10510 Orchard Street	Orchard RE Investments, LLC
57-2-08	007	10512 Orchard Street	Orchard RE Investments, LLC
57-2-08	008	10514 Orchard Street	Orchard RE Investments, LLC
57-2-08	010	10515 Orchard Street	Orchard RE Investments, LLC
57-2-08	011	10507 Orchard Street	A.R.G. II, L.L.C.
57-2-08	012	10509 Orchard Street	A.R.G. II, L.L.C.
57-2-08	013	10511 Orchard Street	A.R.G. II, L.L.C.
57-2-08	014	10513 Orchard Street	A.R.G. II, L.L.C.
57-2-47	000-A	McLean Avenue	Orchard RE Investments, LLC
		Orchard Street right-of-way	City of Fairfax

EXHIBIT B

BRIGHTVIEW SENIOR LIVING

218 N. Charles Street, Suite 220 Baltimore, MD 21201
410.962.0595 BrightviewSeniorLiving.com

June 1, 2020

Brooke Hardin, AICP
Director of Community Development and Planning
City of Fairfax
10455 Armstrong Street
Fairfax, VA 20030

Re: REVISED Northfax West Senior Living Statement of Operations – Anticipated Parking Demand

Dear Brooke:

Following our Planning Commission and City Council work sessions last week, we want to follow up with a statement of operations as it relates to parking requirements of the senior living portion of the Northfax West application. As a developer, owner, and operator of senior living communities for over 20 years with 41 active communities located along the East Coast, we are confident in the proposed amount of parking that will be needed to adequately serve the proposed community at the City of Fairfax.

Senior Living communities differ greatly in their operations as compared to traditional multi-family, or even age-restricted multi-family buildings. The average age of our residents is 82 years old, the majority of whom are no longer driving. In addition, as we noted at the most recent Planning Commission work session, we do not offer nursing care, which typically generates higher staffing demands. We also provide transportation demand management tools to reduce the need for on-site parking. Due to the combination of these factors, the primary users of parking in our communities are employee associates, followed by visiting family and friends, with residents as the lightest users.

We operate three (3) 8-hour shifts: 7am-3pm (day), 3pm-11pm (evening), and 11pm-7am (night). For a 200-unit community, there will be 35 associates for the day shift, 25 for the evening shift, and 5 for the night shift. Each shift transition is staggered over a 1-hour period, 30-minutes before and 30-minutes after a shift begins. In addition, for those communities with bus/metro access, similar to the CUE/metrorail bus lines that will be accessible at Northfax West, approximately 10% of our associates utilize public transportation options. We expect similar usage rates at the proposed Brightview City of Fairfax location. Taking all of this into consideration, we anticipate that employee associates will account for the use of no more than 45 parking spaces in the garage at any point in time. This peak period will occur during the staff transition of the day shift to the evening shift, as some associates are arriving while others are leaving.

Next, family and friends visiting our residents comprise the second largest group of parking users in our communities. Family and friends visit throughout the day, but the most popular time for visiting is after work, in the evening hours. As such, for a community of 200 units, we expect that visitors coming to see our residents during the evening shift will utilize approximately 40 parking spaces. While there may be more visitors during this time, there are also fewer associates on site.

EXHIBIT B

BRIGHTVIEW SENIOR LIVING

218 N. Charles Street, Suite 220 Baltimore, MD 21201
410.962.0595 BrightviewSeniorLiving.com

While most residents are car-free by the time they move into our community, we do have residents who may desire to drive their own vehicles. The need to drive, however, is mitigated by two community vehicles, a van and a sedan that are operated by Brightview staff and will provide transportation to group events, to/from metro, and can be scheduled for individual trips, like doctor's visits. Thus, due to the provision of community vehicles combined with the availability of public transportation, we anticipate that, of the 114 independent living units, less than 1/4 of these residents will bring cars to the community, resulting in the utilization of approximately 29 parking spaces.

In the end, by conservatively accounting for all three user groups during particular peak time hours (45+40+29), we expect that 114 spaces would be the maximum number of occupied spaces at any given time. Based on our decades of experience operating similar facilities, we remain confident that the proposed 126 parking spaces will be adequate to serve our community at the City of Fairfax and will not burden the surrounding neighborhoods or City streets with additional parking needs.

Sincerely,

Steve Marker
Brightview Senior Living
Director of Development

EXHIBIT C

EXISTING VEGETATION NARRATIVE

The existing tree canopy covers approximately 5.6 acres of the site. An ISA certified arborist (the "Arborist") conducted a number of site visits to evaluate and record the health and structure of the existing trees on-site. Utilizing the condition rating system based on the ISA Guide for Plant Appraisal and the invasive species list of the Virginia Department of Conservation and Recreation Invasive Plant Species List, the Arborist determined that approximately 60% of the existing trees on the site are rated in poor condition or are invasive species. The poor condition of the trees is primarily due to invasive plant and insect species.

Approximately 4 acres of existing tree canopy is significantly impacted by invasive species. The following list covers many of the invasive species that the Arborist observed on-site: white mulberry, bush honeysuckle, wisteria, greenbrier, Japanese honeysuckle, bamboo, English ivy, mimosa, vinca, Tatarian honeysuckle, multiflora rose, Chinese privet, Oriental bittersweet, and poison ivy (native but undesirable). In some areas, the invasive vines have completely covered trees making them unidentifiable, have wrapped around the trunks, have strangled the trees, and have pulled tree canopies down to the ground until the limbs snapped. See the attached pictures below that illustrate several these conditions.

The proposed improvements depicted on the MDP will remove the hazardous trees and significantly reduce the impact of the invasive vegetation on those trees identified for preservation. Removing the invasive vegetation and dangerous trees will effectively allow the higher quality trees that are being preserved to thrive. In addition, the area surrounding the proposed 8-foot wide trail between Orchard Street and Perry Street/Howerton Avenue has been carefully surveyed to identify the existing hazardous trees to be removed, while protecting existing healthy trees that are likely to survive for years to come. A combination of techniques will be implemented over time to ultimately control the various invasive species on-site including:

- manual control through digging, hand-pulling, and smothering with impenetrable barriers;
- mechanical control through cutting, girdling, and chopping vines at the tree base;
- cultural control by planting desirable species to shade out certain shade intolerant species; and
- chemical control with herbicides that will be considered carefully due to the tree canopy's location within a floodplain.

Furthermore, the Applicant will selectively plant supplemental trees that will be native, to the greatest extent feasible, and non-invasive species throughout the northwest corner of the site to ensure a natural, wooded environment, as generally shown on the MDP.

Photo 1: Existing conditions on-site looking north towards The Assembly townhouses. The groundcover and shrub layer consist mainly of invasives.

Photo 2: Existing conditions on-site looking south towards the McLean Avenue homes. The groundcover and shrub layer consist mainly of invasives. Many of the fallen trees on-site, such as those in this photo, are ash trees that have been destroyed by the invasive Emerald Ash Borer (EAB).

Photo 3: Existing conditions on-site looking northeast towards the existing single-family homes. In the foreground, invasive shrubs cover the ground, while harmful vines are covering the tree on the left. In the background, there is a large stand of invasive bamboo.

Photo 4: Existing conditions on-site looking south along an existing channel. There is extensive bank erosion in this area, which has caused the existing trees to lean towards and eventaully fall into the channel. In addition, numerous invasive vine species are strangling the trees, making the area difficult to walk through.

Photo 5: Existing conditions on-site showing the large size of invasive wisteria vines.

Photo 6: An example of what the trail may look like once it is completed. The 8-foot wide trail will have all vegetation cleared a few feet off the trail edge to improve safety. In addition, where new trees are planted proximate to the proposed trail, they will be native species to the greatest extent possible and non-invasive.

SUMMARY OF COMMITMENTS

NORTHFAX JV LLC

ZONING MAP AMENDMENT
Z-20-00006

June 23, 2020

Pursuant to Section 15.2-2303(a) of the *Code of Virginia*, 1950, as amended, and Section 6.4.10 of the Zoning Ordinance of the City of Fairfax, Virginia (the "Zoning Ordinance"), Northfax JV LLC, for itself, the owners, and successors and/or assigns (collectively, "the Applicant") in Z-20-00006 filed on property identified on the City of Fairfax tax map as 57-2-02-003, 57-2-02-005, 57-2-02-017, 57-2-02-018, 57-2-02-019, 57-2-02-020, 57-2-07-015-B, 57-2-08-005, 57-2-08-006, 57-2-08-007, 57-2-08-008, 57-2-08-010, 57-2-08-011, 57-2-08-012, 57-2-08-013, 57-2-08-014, 57-2-47-000-A, and portions of right-of-way to be vacated and/or abandoned (hereinafter collectively referred to as the "Application Property") hereby commits to the following, provided that the City Council approves a rezoning of the Application Property from the CR and RM Districts to the PD-M District in conjunction with a Master Development Plan for the development of up to fifty-six (56) townhouses as well as a senior living facility with up to two hundred (200) age-restricted units (the "Senior Living Building"). The Master Development Plan also includes an area designated as the "Future Development Parcel." In the event this rezoning is denied by the City Council, these commitments shall immediately become null and void. At such time as the uses for the Future Development Parcel have been determined, the Applicant will request an amendment to the approved Master Development Plan for review and approval by the City Council.

1. MASTER DEVELOPMENT PLAN. Development of the Application Property shall be in substantial conformance with the Master Development Plan, prepared by Christopher Consultants, Ltd., consisting of thirty-five (35) sheets, dated January 3, 2020, as amended through June 1, 2020 (the "MDP"). Minor modifications to site design and improvements shown on the MDP based on final engineering and design may be permitted, subject to the approval of the Zoning Administrator.

2. PHASING. The Application Property will be developed in four phases as follows:

   A. Phase One – Construction of a storm drainage culvert, utility relocations, the realignment of Orchard Street, and the following improvements on the Future Development Parcel as shown on the MDP: (i) a multi-use trail and temporary landscaping along Chain Bridge Road, including the replacement of light fixtures within the existing streetlight poles on the Application Property's Chain Bridge Road frontage with LED lights, if not already replaced by others, and (ii) temporary landscaping to extend the linear park on the south side of Orchard Street across the frontage of the Future Development Parcel.

B. Phase Two – Construction of 56 townhouses and associated infrastructure, including an eight-foot wide trail in the northwest portion of the Application Property, and a linear park on the north side of Orchard Street as shown on the MDP.

C. Phase Three – Construction of a senior living building, as defined below, and associated infrastructure, as shown on the MDP. Phase Three may precede, be concurrent with, or follow Phase Two.

D. Phase Four – Construction of the Future Development Parcel, which will require approval of an amendment to the MDP by the City Council. Said amendment to be submitted solely on the Future Development Parcel without any requirement for the consent or joinder of the owners of any portions of Phases One, Two and Three of the Application Property, unless the amendment to the MDP for Phase Four requires a modification to Phase Two and/or Phase Three, in which event the consent of the applicable property owner(s) will be required.

3. PHASE TWO AND PHASE THREE USES. The use of the Application Property shall be limited in Phase Two to townhouses, and in Phase Three to a Senior Living Building comprised of age-restricted independent living units, each with a full kitchen, assisted living units, and memory care units. The City of Fairfax Zoning Ordinance does not include independent living or memory care as defined uses, so these uses, as referenced in these Commitments, are classified as congregant living facility and assisted living, respectively.

4. RIGHT OF WAY VACATION AND DEDICATION. At time of final site plan approval and pursuant to an exhibit, titled “Parcel Consolidation, Proposed Right of Way Vacation, Right of Way Dedication, Easements Vacated, Created and to be Quitclaimed, and Subdivision,” prepared by Christopher Consultants, Ltd., the Applicant, with the consent of the City of Fairfax, shall vacate and/or abandon portions of existing right-of-way known as Orchard Street and the Applicant shall dedicate right-of-way for Orchard Street Realigned and the portion of Farr Avenue Extension located on the Application Property, consistent with the improvements shown on Sheets 4 and 4A of the MDP, subject to review and approval of the Director of the City of Fairfax Department of Public Works (the "DPW"). The Applicant reserves the right to make modifications to Orchard Street Realigned from what is shown on the MDP based upon and coordinated with the final design of the Northfax West Roadway Project/Farr Avenue Extension by the City of Fairfax. The dedication of the right-of-way for that portion of Farr Avenue Extension located on the Application Property will be coordinated with the City of Fairfax and the right-of-way requirements of the Northfax West Road Project.

5. FARR AVENUE EXTENSION. Farr Avenue Extension is shown on the MDP to be constructed by others. It is anticipated that the construction of the Farr Avenue Extension will be performed by the City of Fairfax as part of the Northfax West Roadway Project. In the event the proposed Farr Avenue Extension is not completed by the City of Fairfax or others, the Applicant reserves the right to construct the Farr Avenue Extension located on the Application Property at its own cost and expense, as generally depicted on the MDP.

6. PUBLIC IMPROVEMENT PLAN. To implement Phase One of development as defined in Commitment 2.A., the Applicant will submit and receive approval of a Public Improvement Plan (the "PI Plan") by DPW. The PI Plan will include easements and improvements as specified for Phase One as defined in Commitment 2.A. The Applicant will construct the improvements shown on the PI Plan prior to commencement of construction of any other improvements on the Application Property.

7. ORCHARD STREET REALIGNED IMPROVEMENTS. In coordination with DPW, the Applicant will design and construct Orchard Street Realigned to connect to the proposed Farr Avenue Extension that will be constructed by others, as shown on the MDP, and in accordance with the following:

   A. The street design on the north side of Orchard Street Realigned will include a 6-foot wide concrete sidewalk, a 4-foot wide planting strip (including curb), an 8-foot wide strip for parallel parking with curb and gutter, a 5-foot wide bicycle lane, a 10-foot drive aisle, and LED streetlights as depicted on the MDP.

   B. The street design on the south side of Orchard Street Realigned will include a 6-foot wide concrete sidewalk, a 4-foot wide planting strip (including curb), an 8-foot wide strip for parallel parking with curb and gutter, a 5-foot wide bicycle lane, a 10-foot drive aisle, and LED streetlights as depicted on the MDP.

   C. Three (3) painted crosswalks mid-block on Orchard Street Realigned will be installed as shown on the MDP, including ADA curb ramps on all sides, as may be necessary.

   D. Two (2) painted crosswalks on Orchard Street Realigned at the Farr Avenue Extension will be installed on the north and east sides of the intersection, as shown on the MDP, including ADA curb ramps on all sides, as may be necessary.

8. LINEAR PARK. Concurrent with Phase Two, as defined in Commitment 2.B., the Applicant will install an eight to nine foot wide linear park between the north side of Orchard Street Realigned right-of-way and the townhouses as shown on the MDP. Said linear park shall include plantings, benches, and stormwater management planter boxes, as shown on the MDP.

9. CHAIN BRIDGE ROAD FRONTAGE IMPROVEMENTS. Consistent with Commitment 2.A., the Applicant will install a multi-use trail along the Application Property's Chain Bridge Road frontage, as shown on the MDP. As shown on the MDP, the multi-use trail shall generally be ten (10) feet in width that transitions to an existing six (6) foot wide sidewalk toward the southern end of the Application Property's Chain Bridge Road frontage and terminates at an existing curb cut toward the northern end of the Application Property's Chain Bridge Road frontage just south of Orchard Street.

10. UTILITIES. The Applicant will install all new on-site utilities underground that serve Phase Two and Phase Three. An overhead utility pole along the north side of Orchard Street in an existing easement or existing right-of-way of Orchard Street will be relocated by the

Applicant to the southwestern corner of the adjacent office building property (3554 Chain Bridge Road) and maintained above ground, and a new terminal pole added off-site to serve the Application Property and the office building at 3554 Chain Bridge Road. Existing above ground utilities located on and/or serving existing structures on the Future Development Parcel will be maintained above ground until such time as the development of this parcel and the undergrounding of these utilities is addressed as part of the amendment to the MDP for Phase Four as defined in Commitment 2.D.

11. UMBRELLA OWNERS ASSOCIATION. In addition to a homeowners association (HOA) established for the townhouse community, the Applicant shall form an umbrella owners association (UOA) for the Application Property. The UOA shall be organized and governed in accordance with Virginia law. The members of the UOA shall be the HOA established for the townhouse community, the owner of the Senior Living Building, and the owner(s) of the Future Development Parcel, including any owners associations created in conjunction with future improvements built on the Future Development Parcel. Maintenance obligations shall be assigned to the HOA, the owner of the Senior Living Building, the owner(s) of the Future Development Parcel, associations created on the Future Development Parcel, or the UOA in accordance with applicable shared maintenance/cross easement agreements. Maintenance obligations include, but are not limited to, private streets, sidewalks, fencing, open space, landscaping, snow removal, and on-site stormwater management facilities. The Applicant shall notify all prospective purchasers of a townhouse, in writing, and prior to entry into a contract of sale, of the maintenance responsibilities and restrictions of the HOA and the UOA.

12. PRIVATE STREETS. The Applicant shall record among the land records a public ingress/egress easement, in a form as approved by the City attorney, over all private streets and adjacent sidewalks. The UOA established for the development shall be responsible for the maintenance of the private streets, sidewalks, and associated streetscape elements.

13. LANDSCAPING AND SCREENING.

    A. Landscaping on the Application Property shall be in general conformance with the landscaping shown on the MDP, and consistent with the Certificate of Appropriateness. Final selection of landscape materials and layout shall be made at the time of site plan as approved by the Director of Community Development and Planning.

    B. The Applicant shall install landscaping along Orchard Street Realigned, as generally shown on the MDP. The Applicant reserves the right to modify the landscape design at the time of site plan based on final engineering, and as approved by the Director of Community Development and Planning.

    C. The Applicant will install temporary landscaping along the Application Property's Chain Bridge Road frontage with Phase One, as defined in Commitment 2.A., and as shown on the MDP. The Applicant will install street trees along the Application Property's Chain Bridge Road frontage with Phase Four, as defined in Commitment

2.D. The final number and location of street trees will be determined in accordance with the amendment to the MDP as required for Phase Four.

D. The Applicant shall screen any mechanical equipment at grade or located on the roof that is visible from the public right-of-way, except for at grade mechanical equipment in the rear privacy yards of any of the townhouses, which are not visible from a public right-of-way.

E. The UOA will be responsible for the maintenance of existing landscaping along the northern property line adjacent to The Assembly townhouses.

F. The two courtyards associated with the Senior Living Building will include a combination of landscaping and hardscape, as generally shown on the MDP, and as further described in the Certificate of Appropriateness. Final selection of materials and design shall be made at the time of site plan.

G. The Applicant shall use native species and native cultivars (as approved by the Director of Community Development and Planning) to the greatest extent feasible and non-invasive species for landscaping on the Application Property, including perennials and seed mixes. Plant lists identifying selected species will be submitted at the time of site plan and be consistent with the Certificate of Appropriateness.

14. TREE PRESERVATION. Tree preservation measures will be utilized for the trees outside the clearing limits that are identified on the MDP as being preserved. These measures may include, but are not limited to, the following: root pruning, crown pruning, mulching, and watering. Said measures shall be consistent with those shown on the MDP that detail how preservation measures will be implemented. In addition, the Applicant shall install the appropriate tree protection devices, such as tree protection fencing, based on site conditions and proposed construction activities.

15. OPEN SPACE. At time of site plan, the Applicant will convey to the UOA the open space areas as identified on the MDP. The conveyance shall ensure permanent protection of the open space and the deed shall be in a form as approved by the City Attorney, and recorded among the land records. Approximately 1.0 acre of the open space located on the northwestern portion of the Application Property, as generally shown on the MDP, shall remain undisturbed except as qualified:

A. Grading Improvements. The Applicant will grade an area to install a box culvert in connection with approved floodplain modifications. These improvements will be consistent with the MDP and in compliance with all applicable state and federal permits.

B. Trail. The Applicant will construct an eight-foot wide trail, including a small refuge area for pedestrians and cyclists, to connect adjacent communities to Orchard Street Realigned, as shown on the MDP. Improvements will include a sign to identify the trail location. Prior to land disturbance related to the trail construction, the Applicant

will obtain any required permits. The Applicant will record a public access easement, in a form approved by the City Attorney, over the trail and record the easement among the land records. The trail will be privately maintained by the UOA.

C. Vegetation. The Applicant shall remove dangerous and/or invasive trees and plants to improve the health and safety of existing vegetation. Any trees or invasive plants that need to be removed outside of the clearing limits will be done with minimal ground disturbance and under the supervision of a Virginia Certified Pesticide Applicator, where required. Any vegetation planted as a part of the Landscape Plan will be done with minimal ground disturbance. The Applicant will supplement existing vegetation with plantings to enhance the wooded environment.

16. SUSTAINABLE DESIGN.

A. Townhouse Development. The proposed townhouses shall be constructed to achieve qualification in accordance with ENERGY STAR® for Homes. Such qualification will be demonstrated by the submission of documentation to the Department of Community Development and Planning from a home energy rater certified through the Residential Energy Services Network (RESNET) program which shows that the townhouses have attained the ENERGY STAR® for Homes qualification.

B. Senior Living Building. The following sustainable building measures will be taken in conjunction with the construction of the proposed Senior Living Building, as depicted on the MDP:

(1) Green roofs on all areas visible to residents and adjacent building users, as generally depicted on the MDP. Design details of said green roofs will be determined at time of site plan;

(2) Low-flow plumbing fixtures;

(3) LED lighting throughout the community;

(4) Low VOC building materials and furniture; and

(5) Energy Star rated or equivalent appliances and equipment.

17. UNIVERSAL DESIGN. Townhouse dwelling units shall be designed and constructed with a selection of universal design features and options as determined by the Applicant and at the sole cost of the purchaser. Said features may include, but are not be limited to, elevators, seat in master bath shower where possible, emphasis on lighting in stairs and entrances, lever door handles, slip resistant flooring, hand-held shower heads at tubs and showers, front loading washers and dryers, and rocker light switches.

18. SENIOR LIVING BUILDING TRASH COLLECTION. Trash and recycling receptacles shall be located in the structured parking garage and will not be visible from the public right-of-

way. Such receptacles will be moved onto the Farr Avenue Extension for collection on scheduled trash or recycling days.

19. STORMWATER MANAGEMENT. Design and construction of stormwater management facilities shall comply with 4VAC50-60 Virginia Stormwater Management Program (VSMP) Permit Regulations, as may be amended, or other relevant standard in place at the time of the applicable site plan submission. At time of site plan, the Applicant shall consider low impact development techniques to the extent feasible which may include, but not be limited to, permeable pavers, infiltration, tree box filters, bio-retention and/or stormwater reuse (i.e. landscape irrigation, air conditioning unit makeup water, etc.).

20. CONSTRUCTION MANAGEMENT PLAN.

A. Subsequent to rezoning approval, but prior to site plan approval, the Applicant will submit a management plan for approval by the City Manager or designee for phasing and construction which will include the following information:

(1) Hours of operation;

(2) Truck routes to and from entrances;

(3) Location of parking areas for construction employees;

(4) Truck staging and cleaning areas;

(5) Storage areas;

(6) Temporary fencing as needed to screen on-site staging areas;

(7) Trailer and sanitary facility locations;

(8) Traffic control measures; and

(9) Maintenance of entrances.

B. Prior to commencement of construction, the Applicant shall provide the Department of Community Development and Planning with the name and telephone number of a community liaison who will be available throughout the duration of construction on the Application Property.

C. Prior to site plan approval, the Applicant shall provide a plan to DPW for temporary pedestrian and vehicular circulation during construction. This plan shall identify temporary sidewalks and any other features necessary to ensure safe pedestrian and vehicular travel around the Application Property during construction.

D. Outdoor construction activity shall be limited to the hours of 7:00 A.M. to 6:00 P.M., weekdays and 8:30 A.M. to 5:00 P.M., Saturdays. No construction activity shall take place on Sundays.

21. PARKING.

A. As shown on the MDP, the Applicant shall provide parking spaces on the Application Property as follows.

(1) Each townhouse shall include a two-car garage. Contract purchasers of townhouses shall be notified in writing prior to, or as a part of, entering a contract of sale of the restrictions in Commitment 28.

(2) In addition to the townhouse garage parking spaces, a minimum of 22 surface parking spaces shall be constructed in conjunction with the townhouse portion of the development.

(3) A minimum of 126 parking spaces shall be constructed in conjunction with Phase Three of the development. Parking shall consist of a minimum of 114 parking spaces in the garage that is part of the Senior Living Building, and twelve surface parking spaces, all as shown on the MDP. The Applicant reserves the right to evaluate the need for the surface parking spaces. The Applicant may request the removal of up to six surface parking spaces with the submission of a parking study to the Zoning Administrator that demonstrates that peak parking demand is met with the provision of 120 parking spaces. The Applicant may remove up to six surface parking spaces subject to the approval of the parking study by the Zoning Administrator.

(4) The Applicant shall provide a minimum of twenty-eight on-street parallel public parking spaces along Orchard Street Realigned within the public right-of-way. The number of public parking spaces to be constructed within Orchard Street Realigned is subject to change based upon the approved construction plans for the right-of-way by the City of Fairfax and/or the Virginia Department of Transportation.

B. The operator of the Senior Living Building, within its sole discretion, may establish rules, regulations, and procedures for the structured parking garage, as shown on the MDP. The parking garage shall be available to future residents, residents' guests, employees, and other visitors to the Senior Living Building. The final number of garage parking spaces shall be determined at final site plan based on final design.

22. BICYCLE RACKS. The Applicant shall install a minimum of two inverted-U or similar style bicycle racks within the townhouse development, as generally depicted on the MDP. The Applicant will also install a minimum of eleven inverted-U or similar style bicycle racks in the structure parking garage of the Senior Living Building. Notwithstanding the locations indicated on the MDP, the final locations of the bicycle racks may be adjusted at the time of site plan.

23. ELECTRIC VEHICLE CHARGING STATIONS.

A. Each townhouse dwelling unit shall have a pull-string ready conduit leading from the electric panel to a code compliant outlet (or access point to a future outlet) within the garage that will support future wiring for Level 2 electric vehicle charging.

B. The operator of the Senior Living Building may, within its sole discretion, partner with a third-party to install electric vehicle charging stations within the parking garage, as identified on the MDP.

24. TRANSPORTATION DEMAND MANAGEMENT. In an effort to reduce the number of vehicle trips generated by the proposed development, the Applicant shall implement a Transportation Demand Management ("TDM") program. The TDM Program will include, but shall not be limited to, the following measures:

A. Townhouse community.

(1) Appointment of a representatives of the townhouse community to serve as a property transportation coordinator (PTC).

(2) At the time of the initial settlement of each townhouse, the distribution of an information package to initial townhouse purchasers that includes, but is not limited to, a description of bus routes and nearby bus stop locations, metro transit schedules, and ride share initiatives.

(3) Distribution to townhouse residents of any transit advertising information provided by the City and community information at set intervals agreed to by the City and the HOA, which will include links to websites for local transit opportunities.

(4) At the time of the initial settlement of each townhouse, the distribution to initial townhouse purchasers of one of the following items of their choice:

a. SmarTrip card with $50.00 fare loaded limited to two persons per townhouse, or

b. A one-year bike share membership, or

c. A one-year car share membership.

(5) Identification by signs or pavement markings of a total of 22 visitor parking spaces.

(6) Resident transportation surveys conducted on an annual basis by the PTC to determine the success of the transportation program and submission of the surveys to the City. Said surveys to commence the year after the issuance of the final occupancy permit in Phase Two.

B. Senior Living Building.

(1) Designation of an employee as a Transportation Management Plan (TMP) coordinator.

(2) Installation of a transit information display in the lobby area of the Senior Living Building. Said display shall include information regarding Metrorail, Metro bus, CUE bus, ridesharing, and other relevant transit options available to employees and residents.

(3) Display of the TMP coordinator's name and contact information in designated common areas, employee break areas, and on-line.

(4) Annual events established by the TMP coordinator to provide communication regarding transit, target transit marketing, and support bicycling efforts.

(5) Use of regular web-based resident and employee communication tools by the TMP coordinator to provide commuting information with links to external transit websites.

(6) Distribution of a SmarTrip card with $20.00 pre-loaded fare value and information regarding enrollment in a Smart Benefits pre-tax benefits program to employees upon initial hire. In addition, ride sharing marketing materials provided by the City and/or Commuter Connections will be included in employee welcome packages and displayed in employee break rooms.

(7) Operation of a transportation service for residents of the Senior Living Building to formal activities/events and individual destinations, such as doctor's offices, community centers, places of worship, and shopping centers. This service will be provided with a company-owned van and sedan that will be operated by employees of the senior living community.

(8) Bi-annual surveys conducted by the TMP coordinator to determine the success of the transportation program. In addition to surveys, the TMD coordinator shall collect car counts and evaluate bicycle parking usage. The surveys and other information shall be submitted to the City. Said surveys to commence one year after the issuance of the final occupancy permit for Phase Three.

C. The final TDM Program for Phases Two and Three, consistent with this Commitment, will be reviewed and approved by City staff prior to site plan approval for each of those Phases of the development. The final TDM Program for Phases Two and Three will be consistent with the Northfax Development Phase 1 (Townhouses and Senior Living) TDM Program Guidelines dated April 15, 2020 prepared by Gorove/Slade, and submitted to City staff. The TDM Program is intended to result in a robust plan with incentives to reduce the number of vehicle trips generated by the development, as periodically reported to the City.

25. TEMPORARY SPECIAL USE PERMIT. On March 24, 2015, City Council approved Special Use Permits SU-14120068 and -69 to permit the temporary use of a vehicle storage lot on portions of the Application Property. The Applicant shall terminate the temporary use for vehicle storage and remove all vehicles prior to the commencement of construction associated with the PI Plan, or within twelve months of the approval of this application by City Council, whichever shall first occur, unless a separate Special Use Permit application for temporary vehicle storage is submitted by the Applicant and approved by the City Council prior to the occurrence of either of these events.

26. VAN DYCK PARK STREAM RESTORATION IMPROVEMENTS. The Applicant will complete stream restoration improvements on approximately 2,190 linear feet of the stream located within or adjacent to the boundaries of Van Dyck Park, as more particularly shown on Figure 1 (Bank Erosion Hazard Index Map) prepared by Apex Companies, LLC, dated April 10, 2019, and attached hereto as Exhibit A. (the "Stream Restoration Project") unless an alternative stream restoration project on property under City ownership and equal in length, accessibility and stream condition to the referenced Van Dyck Park stream is selected by the City and agreed upon by the Applicant within three months of the approval of this application by City Council (the "Alternative Stream Restoration Project"). The Stream Restoration Project or the Alternative Stream Restoration Project will be completed as a Nutrient Offset Trading Bank ("NOTB") project to be approved and permitted by the Virginia Department of Environmental Quality. The Applicant will be solely responsible for the preparation, submission, and processing of the permit applications, design drawings, and construction documents required to implement the Stream Restoration Project or the Alternative Stream Restoration Project. All such applications, drawings, and documents required to obtain approval of the Stream Restoration Project as an NOTB project will be prepared and processed in accordance with an Agreement to be entered into between the Applicant and the City of Fairfax. The Agreement will provide for all permissions, authorizations, agreements, easements and/or covenants from the City of Fairfax as required for the approval, construction, and maintenance of the Stream Restoration Project or the Alternative Stream Restoration Project as an NOTB project, and in accordance with a schedule as mutually agreed to by the Applicant and the City. The Applicant shall diligently pursue the required approvals and shall commence construction of the Stream Restoration Project or the Alternative Stream Restoration Project no later than two years from the later to occur of the following: (i) approval of this application by City Council, or (ii) the selection and agreement upon the Alternative Stream Restoration Project by the City and the Applicant in accordance with the terms of this Commitment. Additional time to commence construction may be administratively approved by the Zoning Administrator should the required approvals be delayed through no fault of the Applicant.

27. FUTURE DEVELOPMENT PARCEL INTERIM IMPROVEMENTS AND USES.

A. Improvements. Prior to the issuance of the first occupancy permit for either Phase Two or Phase Three as defined in Commitments 2.B. and 2.C., the Applicant shall install interim improvements on the Future Development Parcel to include, but not be limited to, seeding of all open areas and a temporary linear park and landscaping along the south side of Orchard Street across the frontage, as generally depicted on

the MDP. Said interim improvements to be maintained by the Applicant and/or the UOA.

B. Interim Uses. Prior to the development of improvements in accordance with the approval of an amendment to the MDP by the City Council, interim uses on the Future Development Parcel shall be subject to the following provisions:

(1) Continued use of the existing building located on Parcel 20 of the Application Property (also known as 3570 Chain Bridge Road) as a restaurant/food service facility, with associated parking, or as a sales, rental and/or management office related to the construction in Phases One, Two and/or Three, as defined in Commitments 2.A., 2.B., and 2.C.

(2) Special events, subject to the provisions of Section 3.5.6.J of the City of Fairfax Zoning Ordinance (the "Zoning Ordinance").

(3) Temporary uses identified in Section 3.5.6.B.2, .4, .6 and 9. of the Zoning Ordinance, subject to the receipt of required approvals.

(4) Minor events and seasonal sales as more specifically described in Section 3.5.6.C.1(a) and (c) of the Zoning Ordinance.

(5) Temporary vehicle storage, but only subject to the provisions of Commitment 25.

28. RESTRICTIVE COVENANTS. Restrictive covenants for the Application Property shall be included in the HOA documents and shall include, but not be limited to, the following:

A. Conversion of townhouse garages that will preclude the parking of vehicles and the storage of trash and recycling containers within the garage will be prohibited. This shall not preclude the use of said garages as sales offices in model homes during marketing of the development, with the understanding the sales offices will be converted back to garages upon sale of the models.

B. Prohibition of the outside storage or parking of recreational vehicles on the Application Property.

29. SCHOOL CONTRIBUTION. Prior to the issuance of the final occupancy permit for Phase Two, the Applicant will contribute the sum of $108,000.00 to the City of Fairfax to be utilized for capital improvements to Providence Elementary School.

30. HISTORICAL MARKER. For purposes of recognizing the former Electric Trolley Line that operated in the City, the Applicant shall fund the research, fabrication and installation of an interpretative marker on the Application Property in an amount not to exceed $3,000.00. Said payment will be made no later than the issuance of the final occupancy permit for Phase Three, as defined in Commitment 2.C., to the City Office of Historic Resources ("Historic Resources"). The location of the interpretative marker shall be selected in coordination with

Historic Resources. Future maintenance of the marker shall be performed by the UOA with input from Historic Resources. Should Historic Resources elect not to place a marker on the Application Property, this commitment shall become null and void, and of no further force and effect.

31. RECIPROCAL EASEMENTS. At the time of site plan approval, the Applicant shall create reciprocal easements along common residential property lines to provide future homeowners with reasonable rights of access to adjacent lots if needed to perform routine home maintenance functions.

32. SUCCESSORS AND ASSIGNS. These commitments shall bind and inure to the benefit of the Applicant and its successors and assigns.

LEGEND

- Medium (209-linear feet)
- High (72-linear feet)
- Very High (3,902-linear feet)
- Extreme (196-linear feet)
- Subject Property Boundary

Drawn by: Robert LaPosa
Reviewed by: John H Brooks III

ESRI Geodatabase, 2015 Aerial

Apex Companies, LLC
203 Wylderose Court
Midlothian, VA 23113
Phone: 804-897-2718
www.apexcos.com

Van Dyck Park
Fairfax, Virginia

Approximately 2,190-linear feet total
Latitude: 38.853881° North
Longitude: 77.301023° West

Apex PN: 2500679-010 April 10, 2019

Figure 1

Bank Erosion Hazard Index Map

Scale 1:2,021

EXHIBIT A

109719

GENERAL NOTES

1. THE PROPERTIES SHOWN HEREON ARE IDENTIFIED ON THE CITY OF FAIRFAX, VIRGINIA GEOGRAPHIC INFORMATION SYSTEM AS 57-02-02-017, 57-02-02-018, 57-02-02-019, 57-02-02-020, 57-02-08-011, 57-02-08-012, 57-02-08-013, 57-02-08-014, 57-02-08-010, 57-02-02-005, 57-02-08-005, 57-02-08-006, 57-02-02-007, 57-02-02-008, 57-02-02-003, 57-02-07-015B, 57-02-01-015B AND 57-02-47-000-A AND ARE ALL CURRENTLY ZONED COMMERCIAL RETAIL (CR) AND RESIDENTIAL MEDIUM (RM).

2. THE PROPERTIES SHOWN HEREON ARE NOW IN THE NAME OF ARG II, LLC AND ORCHARD RE INVESTMENTS, LLC, DEED BOOK 13408, PAGE 1070 AS CORRECTED IN DEED BOOK 15230, PAGE 1182 (PARCELS A, B, C & D), DEED BOOK 15339, PAGE 102 (PARCEL E & F), DEED BOOK 16739, PAGE 1026 (PARCEL G), DEED BOOK 18823, PAGE 1535 (PARCEL H), DEED BOOK 19218, PAGE 1148 (PARCEL I), DEED BOOK 17602, PAGE 631 (PARCEL J), DEED BOOK 19837, PAGE 1920 (PARCEL K), DEED BOOK 17434, PAGE 444 (PARCEL L), DEED BOOK 18388, PAGE 265 (PARCEL M), DEED BOOK 20080, PAGE 1218 (PARCEL N), DEED BOOK 23812, PAGE 493 (PARCEL O), DEED BOOK 23812, PAGE 479 (PARCEL P) AND NORTHFAX JV LLC DEED BOOK 25751, PAGE 1696 (PARCEL Q), ALL AMONG THE LAND RECORDS OF FAIRFAX COUNTY, VIRGINIA.

3. THE PHYSICAL IMPROVEMENTS AND TOPOGRAPHY SHOWN HEREON ARE BASED UPON AN ARIEAL TOPOGRAPHIC SURVEY PERFORMED BY McKENZIE SNYDER, INC, FLOWN APRIL 6th, 2015 AND COMPILED NOVEMBER 14th, 2017. THIS DATA HAS BEEN SUPPLEMENTED BY CONVENTIONAL METHODS BY THIS FIRM BETWEEN THE DATES OF NOVEMBER 16th AND DECEMBER 5th, 2017 AND JANUARY 2nd AND JANUARY 3rd, 2018 AND FURTHER SUPPLEMENTED BETWEEN THE DATES OF APRIL 9th AND APRIL 17th, 2019 AND BETWEEN THE DATES OF OCTOBER 30th AND OCTOBER 31st, 2019.

4. HORIZONTAL DATUM SHOWN HEREON IS REFERENCED TO THE VIRGINIA COORDINATE SYSTEM (VCS) 1983 - NORTH AS ESTABLISHED FROM A GPS SURVEY.

5. NO GEOTECHNICAL, SUBSURFACE, FIELD REVIEWS, RESEARCH, AGENCY OR GOVERNMENTAL RECORD REVIEWS, OR OTHER INVESTIGATIONS HAVE BEEN MADE FOR THE PURPOSE OF LOCATING, OR DETERMINING THE EXISTENCE OF WETLANDS, HAZARDOUS MATERIALS, OR OTHER ENVIRONMENTAL CONCERNS ON SITE IN THE PERFORMANCE OF CHRISTOPHER CONSULTANTS, LTD SERVICES FOR THE PROJECT AS SHOWN HEREON.

6. THE PORTION OF ORCHARD STREET TO BE VACATED WAS ORIGINALLY DEDICATED AT DEED BOOK 407 AT PAGE 115.

FLOOD ZONE NOTE

THE AREA SHOWN HEREON IS LOCATED ON THE FLOOD INSURANCE RATE MAPS (FIRM), COMMUNITY PANEL NO. 5155240002 D, WITH AN EFFECTIVE DATE OF JUNE 2nd, 2006.

BY GRAPHICAL DEPICTION ONLY, THE PROPERTY SHOWN HEREON IS SHOWN IN:

- FLOOD ZONE "AE" (SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT OT INUNDATION BY THE 1% ANNUAL CHANCE FLOOD - SHADED), BASE FLOOD ELEVATIONS DETERMINED.
- FLOOD ZONE "X" (OTHER FLOOD AREAS - SHADED), AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.
- FLOOD ZONE "X" (OTHER AREAS), AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

A FIELD SURVEY WAS NOT PERFORMED TO DETERMINE THE FLOOD ZONES LISTED HEREON. AN ELEVATION CERTIFICATE MAY BE NEEDED TO VERIFY THIS DETERMINATION OR APPLY FOR A VARIANCE FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

REZONING AREA

EXISTING ZONE: RESIDENTIAL MEDIUM	386,183 SQ. FT. OR 8.86554 ACRES
EXISTING ZONE: COMMERCIAL RETAIL	99,629 SQ. FT. OR 2.28717 ACRES
PORTION OF ORCHARD STREET TO BE VACATED	13,433 SQ. FT. OR 0.30838 ACRES
TOTAL AREA TO BE REZONED TO PD-M	499,245 SQ. FT. OR 11.46109 ACRES

OWNERSHIP TABLE

(A) MAP #57-2-02-017, #3590 CHAIN BRIDGE ROAD — ARG II, LLC — D.B. 13408 PG. 1070, D.B. 15230 PG. 1182 — ZONED: COMMERCIAL RETAIL

(B) MAP #57-2-02-018, #3580 CHAIN BRIDGE ROAD — ARG II, LLC — D.B. 13408 PG. 1070, D.B. 15230 PG. 1182 — ZONED: COMMERCIAL RETAIL

(C) MAP #57-2-02-019, #10505 ORCHARD STREET — ARG II, LLC — D.B. 13408 PG. 1070, D.B. 15230 PG. 1182 — ZONED: COMMERCIAL RETAIL

(D) MAP #57-2-08-011, #10507 ORCHARD STREET — ARG II, LLC — D.B. 13408 PG. 1070, D.B. 15230 PG. 1182 — ZONED: RESIDENTIAL MEDIUM

(E) MAP #57-2-08-012, #10509 ORCHARD STREET — ARG II, LLC — D.B. 15339 PG. 102 — ZONED: RESIDENTIAL MEDIUM

(F) MAP #57-2-08-013, #10511 ORCHARD STREET — ARG II, LLC — D.B. 15339 PG. 102 — ZONED: RESIDENTIAL MEDIUM

(G) MAP #57-2-08-014, #10513 ORCHARD STREET — ARG II, LLC — D.B. 16739 PG. 1026 — ZONED: RESIDENTIAL MEDIUM

(H) MAP #57-2-08-010, #10515 ORCHARD STREET — ORCHARD RE INVESTMENTS — D.B. 18823 PG. 1535 — ZONED: RESIDENTIAL MEDIUM

(I) MAP #57-2-02-005, #10517 ORCHARD STREET — ORCHARD RE INVESTMENTS — D.B. 19218 PG. 1148 — ZONED: RESIDENTIAL MEDIUM

(J) MAP #57-2-08-005, #10508 ORCHARD STREET — ORCHARD RE INVESTMENTS — D.B. 17602 PG. 631 — ZONED: RESIDENTIAL MEDIUM

(K) MAP #57-2-08-006, #10510 ORCHARD STREET — ORCHARD RE INVESTMENTS — D.B. 19837 PG. 1921 — ZONED: RESIDENTIAL MEDIUM

(L) MAP #57-2-08-007, #10512 ORCHARD STREET — ORCHARD RE INVESTMENTS — D.B. 17434 PG. 444 — ZONED: RESIDENTIAL MEDIUM

(M) MAP #57-2-08-008, #10514 ORCHARD STREET — ORCHARD RE INVESTMENTS — D.B. 18388 PG. 265 — ZONED: RESIDENTIAL MEDIUM

(N) MAP #57-2-02-003, #10516 ORCHARD STREET — ORCHARD RE INVESTMENTS — D.B. 20080 PG. 1218 — ZONED: RESIDENTIAL MEDIUM

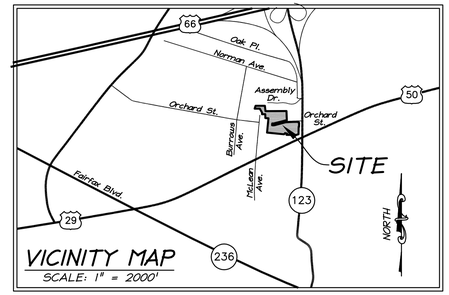
(O) MAP #57-2-07-015B, NO ADDRESS — ORCHARD RE INVESTMENTS — D.B. 23812 PG. 493 — ZONED: RESIDENTIAL MEDIUM

(P) MAP #57-2-47-000A, NO ADDRESS — ORCHARD RE INVESTMENTS — D.B. 23812 PG. 479 — ZONED: RESIDENTIAL MEDIUM

(Q) MAP #57-2-02-020, #3570 CHAIN BRIDGE ROAD — NORTHFAX JV, LLC — D.B. 25751 PG. 1696 — ZONED: COMMERCIAL RETAIL

(R) PORTION OF ORCHARD STREET TO BE VACATED — CITY OF FAIRFAX — D.B. 407 AT PAGE 115

1. MAP #57-2-18-001A — THE ASSEMBLY — D.B. 3161 PG. 508, D.B. 3319 PG. 738 — ZONED: RESIDENTIAL TOWNHOUSE
2. MAP #57-2-08-004A — ELE NIA, LLC — D.B. 24268 PG. 1935 — ZONED: COMMERCIAL OFFICE
3. MAP #57-2-02-016 — CITY OF FAIRFAX — D.B. 18684 PG. 857 — ZONED: COMMERCIAL RETAIL
4. MAP #57-2-02-015 — GLASCOCK & SONS, LP — D.B. 9172 PG. 571 — ZONED: COMMERCIAL RETAIL
5. MAP #57-2-02-010 — SCHWING T. SCHWLING T. ALPINE, INC. — D.B. 8871 PG. 1815 — ZONED: COMMERCIAL RETAIL
6. MAP #57-2-02-006 — BRANCH AVENUE ASSOCIATES, LLC — D.B. 14796 PG. 1326 — ZONED: COMMERCIAL RETAIL
7. MAP #57-2-07-015A — LOT 15R FAIRFAX ACRES — D.B. 23803 PG. 185 — ZONED: RESIDENTIAL MEDIUM
8. MAP #57-2-47-001 — SANJAY BAJAJ — D.B. 23803 PG. 185 — ZONED: RESIDENTIAL MEDIUM
9. MAP #57-1-05-22 — PETER & KATHLEEN TYSON — D.B. 25960 PG. 1210 — ZONED: RESIDENTIAL LOW
10. MAP #57-2-02-001A — RONALD & BARBARA FOWLER — D.B. 5923 PG. 1416 — ZONED: RESIDENTIAL MEDIUM



VICINITY MAP
SCALE: 1" = 2000'

christopher consultants
9301 innovation drive (suite 150) · manassas, va 20110
phone 703.393.9887 · fax 703.273.6820

"NORTHFAX ASSEMBLAGE"

CERTIFIED PLAT
ON THE PROPERTIES KNOWN AS

CITY OF FAIRFAX, VIRGINIA

RECEIVED
04 / 13 / 2020
Community Dev & Planning

COMMONWEALTH OF VIRGINIA
LONNY D. STURGEON
Lic. No. 1594
04/08/20
LAND SURVEYOR

Rev#	DATE	REVISION
1	04/08/20	ORCHARD ST VAC.

PROJECT: 13139.005.00
SCALE: N/A
DATE: 01/02/2020
DRAWN: PGS
CHECKED: WEB
SHEET No. 1 OF 2

109719

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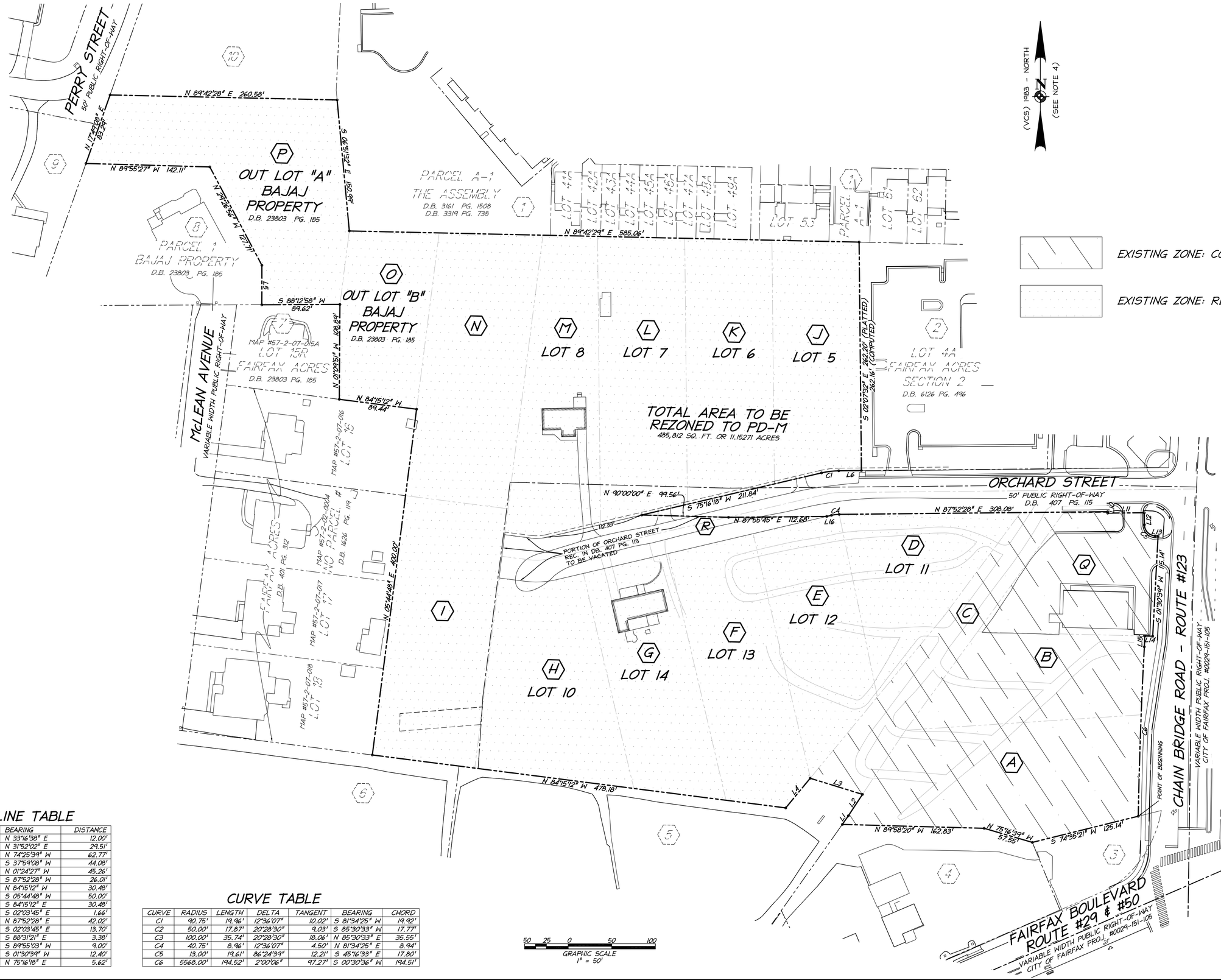

LINE TABLE

LINE	BEARING	DISTANCE
L1	N 33°16'38" E	12.00'
L2	N 31°52'02" E	29.51'
L3	N 74°25'39" W	62.77'
L4	S 37°59'08" W	44.08'
L5	N 01°24'27" W	45.26'
L6	S 87°52'28" W	26.01'
L7	N 84°15'12" W	30.48'
L8	S 05°44'48" W	50.00'
L9	S 84°15'12" E	30.48'
L10	S 02°03'45" E	1.66'
L11	N 87°52'28" E	42.02'
L12	S 02°03'45" E	13.70'
L13	S 88°31'21" E	3.38'
L14	S 89°55'03" W	9.00'
L15	S 01°30'39" W	12.40'
L16	N 75°16'18" E	5.62'

CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	TANGENT	BEARING	CHORD
C1	90.75'	19.96'	12°36'07"	10.02'	S 81°34'25" W	19.92'
C2	50.00'	17.87'	20°28'30"	9.03'	S 85°30'33" W	17.77'
C3	100.00'	35.74'	20°28'30"	18.06'	N 85°30'33" E	35.55'
C4	40.75'	8.96'	12°36'07"	4.50'	N 81°34'25" E	8.94'
C5	13.00'	19.61'	86°24'39"	12.21'	S 45°16'33" E	17.80'
C6	5568.00'	194.52'	2°00'06"	97.27'	S 00°30'36" W	194.51'

COMMONWEALTH OF VIRGINIA
Lonny D. Sturgeon
LONNY D. STURGEON
Lic. No. 1594
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LAND SURVEYOR

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CERTIFIED PLAT
ON THE PROPERTIES KNOWN AS

"NORTHFAX ASSEMBLAGE"

CITY OF FAIRFAX, VIRGINIA

PROJECT: 13139.005.00
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DRAWN: PGS
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SHEET No.
2 OF 2

109719

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APEX COMPANIES, LLC

Major Water Quality Impact Assessment

Northfax West
10510 Orchard Street
Fairfax, Virginia 22030

PREPARED FOR:

Northfax JV LLC c/o The Lann Companies
3900 Jermantown Route, Suite 300
Fairfax, Virginia 22030

January 28, 2020

Apex Companies, LLC
203 Wylderose Court
Midlothian, Virginia 23113

Table of Contents

1.0 Introduction 1

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6.0 Conclusions and Recommendations 8

FIGURES

Figure 1 – Project Location Map

Figure 2 – Project Vicinity Map

Figure 3 – City of Fairfax RPA Map

Figure 4 - Northfax West RPA Map

APPENDICES

Appendix A – WQIA Application Form

Appendix B – Agency Documentation

Appendix C – JPA Exhibits

Appendix D – Master Development Plan

Appendix E – BEHI and NBS Investigation

1.0 Introduction

The City of Fairfax (the City) 2019 Zoning Ordinance documents Chesapeake Bay Preservation Area (CBPA) ordinances designed to protect local waterways in the Chesapeake Bay watershed from nonpoint source pollution generated from urban development. As with other municipalities in the watershed, the City's CBPA ordinance has been approved by the Virginia Department of Environmental Quality (DEQ) to implement the requirements of the Code of Virginia needed to comply with the federal Chesapeake Bay Preservation Act. Examples of CBPA features in the City include the Resource Protection Area (RPA) and the Resource Management Area (RMA). To better define the extent and location of these features, the City adopted a CBPA Map in November 25, 2003. The City ordinance codifies the regulations that apply to the CBPA in order to prevent development projects from compromising water quality.

Section 4.18 of the Zoning Ordinance mandates that a Water Quality Impact Assessment (WQIA) must be submitted for any proposed land disturbance, development or redevelopment within the RPA including any buffer area modification or reduction. The ordinance provides criteria for approving, denying or modifying requests to rezone, subdivide, use, develop and /or redevelop land in a CBPA. The City provides for two levels of water quality impact assessment: a minor assessment and a major assessment. Typically, a Major WQIA is required for developments that exceeds 5,000 square feet land disturbance or propose encroachment onto the waterward 50 feet of the 100-foot RPA buffer.

Based on the proposed development activities for the Northfax West project, Apex Companies LLC (Apex) performed a Major WQIA based on a request by and in accordance with the City's ordinance. The WQIA Application form is provided in Appendix A of this report. Information in the application is consistent with the Preliminary Jurisdiction Determination (PJD) issued by the U.S. Army Corps of Engineers (USACE) in 2018 and Section 401/404 Clean Water Act (CWA) permits authorized by the DEQ and USACE in 2019 (Appendix B). The report herein presents the purpose of the WQIA, the methods used by Apex to investigate hydrogeological and landscape elements of the assessment, and data documenting the results of the Major WQIA. The report meets the standards set forth in the City's Chesapeake Bay Preservation ordinance (Section 4.18) for a Major WQIA and is intended to supplement the project's site plan and be reviewed with the site plan during the application review process.

2.0 Purpose

The City's Chesapeake Bay Preservation ordinance states that the purpose of a WQIA is to identify the impacts of proposed development on water quality and lands within the City's approved RPA boundary. Moreover, in areas where redevelopment does take place within the RPA, a WQIA is needed to ensure project activities are located and implemented to be the least disruptive of the RPA's natural water quality functions. When the functions of the RPA must be disrupted, the WQIA is used to determine mitigation measures that address water quality protection and compensate for impacts approved by the City.

The Northfax West project as proposed will impact water quality and lands within the City's approved RPA. Therefore, the purpose of this Major WQIA is to identify the extent of those impacts, minimize disruptions to the natural water quality functions of the RPA, and outline compensatory mitigation for unavoidable impacts to the RPA and potential impacts to water quality.

3.0 Project Description

The Northfax West project is part of a comprehensive strategy for the growth and redevelopment of the Fairfax

Boulevard corridor through the City, as demonstrated by the City of Fairfax 2035 Comprehensive Plan. In accordance with this plan the project will create a mix of residential and commercial uses in a highly urbanized setting, serving the needs of the community, while attracting those who would otherwise just pass through the area. The project will occur in an area which has not seen significant improvement in many years and will allow residents to work near where they live, reducing traffic congestion on area roads. The project envisions the revitalization of the area through the construction of residential homes, potentially a mix of townhouses, condominiums and a senior living facility, to maximize living space, while also providing commercial space for businesses.

3.1 Location

The Northfax West project is located in the northwest quadrant at the intersection of Fairfax Boulevard (Route 50) and Chain Bridge Road (Route 123) (Figure 1). The project site consists of an assemblage of 17 parcels with an aggregate area of approximately 11.32 acres, which has historically been used for residential and commercial purposes. The project area is part of the Accotink Creek watershed and located within the Middle Potomac River drainage area identified by Hydrologic Unit Code (HUC) 02070010.

3.2 Existing Conditions

The existing conditions for the Northfax West project are presented on the project plans in Appendix C and Appendix D. The project area currently consists of two single family homes with mowed grass yards, two parking lots (approx. 3 acres) constructed of rolled stone over fabric, and approximately 4 acres of woods. Orchard Street is located within the project limits and dead ends in a cul-de-sac. The 4-acre wooded area is composed of a mixed hardwood vegetation community surrounding perennial and intermittent streams that flow through the site.

The perennial stream enters the site at the northwest corner and flows southeast before entering a culvert that conveys water under Route 123, near the intersection of Route 123 and Route 50. The intermittent stream begins at a culvert outlet near the southwest corner of the project site and flows easterly to its confluence with the perennial stream. The perennial stream is a culvert to culvert system with little connection to upstream or downstream components of a typical stream system (e.g. floodplain, buffers, or other stream corridor features).

A wetland delineation was performed in 2017 and a Preliminary Jurisdictional Determination (PJD) was issued by the USACE on February 5, 2018 (Appendix B). The PJD documented the limits of perennial and intermittent stream channels and the absence of non-tidal wetlands within the project boundaries. The flow regime of each stream was verified in 2017 in a site-specific RPA determination, the results of which concurred with the City's RPA map (Figure 3). Under USACE permit NAO-2014-1871(Appendix B), the eastern extent of the perennial stream was later redirected to the north, into new 8-foot box culverts installed under Chain Bridge Road to improve drainage and reduce flooding. As a result, the RPA buffer associated with the stream also shifted to the north of its previous location, as shown in Figure 4.

4.0 Methods

Apex conducted a Major WQIA in accordance with Section 4.18 titled "Chesapeake Bay Preservation" of the City's ordinance for Site Development Standards (Chapter 110, Article 4). The City's Chesapeake Bay Preservation ordinance states that a Major WQIA is required for any development that exceeds 5,000 square feet land disturbance or that encroaches onto the seaward 50 feet of the 100-foot RPA buffer area; or is located in the RMA and is deemed necessary by the Zoning Administrator. The City's requirements for a Major WQIA application are provided as follows:

- Location of the components of any RPA, including the 100-foot buffer area;
- Location and nature of proposed improvements, including:
    - Type of paving material;
    - Areas of clearing or grading;
    - Location of any structures, drives, or other impervious cover; and
    - Sewage disposal systems or reserve drain field sites;
- Type and location of proposed best management practices to meet the required general performance standards specified in §110-4.18.7;
- Location of existing vegetation on site, including the number and type of trees and other vegetation to be removed to accommodate the encroachment or modification; and
- A revegetation plan that supplements the existing buffer vegetation in a manner that provides for pollutant removal, erosion and runoff control.
- Certification of all required information as complete and accurate by a Class IIIB certified land surveyor and professional wetlands delineator.
- Hydrogeological element that describes
    - Existing topography;
    - Estimates of soil characteristics and potential for erosion;
    - Hydrology of the area;
    - Impacts on wetlands and streams;
    - Proposed mitigation measures; and
    - A listing of requisite permits with permit or application status.
- Landscape element that fully describes:
    - Existing trees required to be identified as part of a Tree Management Plan in accordance with subsection §110-4.5.9.D.1;
    - Limits of clearing and grading;
    - Trees and indigenous vegetation that are to be preserved within the disturbed area;
    - Measures to be taken to protect vegetation, proposed plantings and other vegetative measures used to enhance water quality; and
    - A proposed construction schedule that includes all activities related to clearing, grading and proposed plantings.
- Such other measures as deemed necessary by the Zoning Administrator to ensure the impact to water quality can be accurately predicted.

Information in the WQIA relies on previous investigations performed by Apex including a Waters of the U.S. (WOTUS) delineation and a site-specific RPA determination from 2017. These investigations were conducted using standard methods required by the USACE, DEQ, and the City. Results were provided as supporting documentation in the Joint Permit Application (JPA) submitted to regulatory agencies on June 22, 2018, which satisfied the terms and conditions contained in the USACE Norfolk District State Program General Permit (17-SPGP-01) and remains effective until May 31, 2022. DEQ found the JPA compliant with the Virginia Water Protection (VWP) Program and issued VWP Individual Permit Number 18-1003 on March 5, 2019, which remains effective until March 5, 2034. Other measures used to assess water quality included Bank Erosion Hazard Index (BEHI) and Near Bank Stress (NBS) investigations performed by Apex on December 16, 2019. The methods for these investigations are provided in Apex's BEHI and NBS report found in Appendix E.

5.0 Results

Location of the components of any RPA: The PJD issued by the USACE in 2018 (Appendix B) documented the limits of perennial and intermittent stream channels within the project area. The flow regime of each stream was verified in 2017 in a site-specific RPA determination that concurred with the City's CBPA map (Figure 3). Under USACE permit NAO-2014-1871(Appendix B), the eastern extent of the perennial stream was later redirected to the north into new 8-foot box culverts installed under Chain Bridge Road. As a result, the RPA buffer associated with the perennial stream also shifted to the north of its previous location (Figure 4).

Proposed improvements: Construction of the Northfax West project will include the piping and redirection of stream channel flow using twin box culverts to reduce the risk of flooding and tie into the 8-foot box culverts previously installed by the City and the Virginia Department of Transportation (VDOT). In addition to reducing the risk of flooding and controlling stream flow, the Northfax West project will create a mix of residential and commercial uses that serves the needs of the community and the City of Fairfax 2035 Comprehensive Plan, providing revitalization of the area. The project is in an area that has lacked significant economic improvement and will create opportunities for residents to work near where they live and reduce traffic congestion on area roads. The Northfax West project proposes the development of residential homes with a mix of townhouses, condominiums, and a senior living facility, as well as commercial space for businesses and visitors.

The Master Development Plan filed with the City on January 6, 2020 as part of the project's rezoning application is provided in Appendix D.

Best management practices: USACE and DEQ permit conditions require best management practices that protect water quality during and after construction. Permit conditions are included in the agency documentation provided in Appendix B.

Location and type of existing vegetation on site: The project area currently consists of two single family homes with mowed grass yards, two parking lots (approx. 3 acres) constructed of rolled stone over fabric, and approximately 4 acres of woodlands along the western project boundary (Figure 2). The 4-acre wooded area is composed of a mixed hardwood vegetation community located on upland landforms along existing stream channels. Native vegetation in the forest overstory includes tulip tree (*Liriodendron tulipifera*), red maple (*Acer rubrum*), eastern red cedar (*Juniperus virginiana*), and American sycamore (*Platanus occidentalis*). Understory species include American elm (*Ulmus americana*), American holly (*Ilex opaca*), spice bush (*Lindera benzoin*), and immature trees from the canopy. The understory is also infested with populations of non-native invasive species including Tatarian honeysuckle (*Lonicera tatarica*), multiflora rose (*Rosa multiflora*), Chinese privet (*Ligustrum sinense*), Oriental bittersweet (*Celastrus orbiculatus*), Japanese honeysuckle (*Lonicera japonica*), and English ivy (*Hedera helix*), among others.

The specific location and type of existing trees on the site was documented in the Tree Management Plan submitted as part of the project's Master Development Plan (Appendix D), which was officially filed with the City on January 6, 2020 as part of the owner's rezoning application.

Revegetation plan: Project improvements require that woodlands in the western portion of the project area be removed in order to support the purpose and need of the project. No revegetation within the onsite CBPA features is being proposed, because compensatory mitigation will be provided for stream and riparian buffer impacts via the purchase of 1,675 stream credits or 4,761 Stream Condition Units from a DEQ approved mitigation bank and/or in-lieu fee fund. The stream credits include a 100-foot riparian buffer that extends from the banks of the stream being credited as compensation for this project. Therefore, no net loss of RPA functions, values or area will occur. In

addition, the plans will adhere to the Total Maximum Daily Load (TMDL) requirements, where a development project's post-development nutrient loading cannot exceed its pre-development nutrient loading.

Certifications: Information has been determined complete and accurate by a Class IIIB certified land surveyor and professional wetlands delineator. Certification information for the project is provided below.

- Certified Land Surveyor: Christopher Consultants; Christopher Fillmore, LS; License Number # 2607
- Professional Wetland Delineator: Apex Companies, LLC; John H. Brooks, III, PWD; Certification # 3402000003

5.1 Hydrogeologic Elements

Existing Topography: As shown on Figure 1, the topography within the project area generally slopes to the southeast and along an unnamed tributary of Accotink Creek. Undeveloped portions of the project area that surround the tributary slope gradually toward the tributary. Developed areas are mostly flat due to asphalt pavement in parking lots. Existing topographic contours and elevations are also shown on project plans in Appendix C and Appendix D.

Soil Characteristics and Potential for Erosion: As stated in the *Description and Interpretive Guide to Soils in Fairfax County* (2013), erosion potential is a metric that applies to soils under construction site conditions and includes ratings of low, moderate, and high. Soil characteristics related to erosion potential are summarized below:

- Low: Soils are not highly erodible except on steep unprotected cuts. Erosion of less than 0.05 inches from sheet-flow runoff can be expected on unprotected soils during a severe storm.
- Moderate: Soils are moderately erodible on B slopes and highly erodible on C slopes or greater. Erosion of 0.05 to 0.25 inches from sheet-flow runoff plus rill and shallow gully erosion can be expected on unprotected soils during a severe storm.
- High: Soils which are highly erodible even on B slopes. Soil loss in excess of 0.25 inches from sheet-flow runoff erosion and the formation of numerous gullies can be expected on unprotected soils in a severe storm.

The Soil Survey of the City of Fairfax, accessed through the Web Soil Survey on the Natural Resources Conservation Service (NRCS) website, shows five soil maps units within the project area. Each soil map unit and its corresponding erosion potential are depicted in Table 1.

Table 1: Northfax West Project Soil Erosion Potential Summary

Map Unit	Map Unit Name	Erosion Potential
95	Urban Land	NA
101	Urban land – Wheaton complex	High
103A	Wheaton-Cordorus complex, 0-2% slopes	Low
105B	Wheaton-Glenelg complex, 2-7% slopes	High
107B	Wheaton-Meadow complex, 2-7% slopes	Medium

Source: Description and Interpretive Guide to Soils in Fairfax County (2013)

The results of site-specific assessments for stream bank erosion potential conducted by Apex using the BEHI protocol are presented in Section 5.3.

Hydrology of the Area: Evidence of hydrologic activity is confined primarily to the banks of the stream channels on site. The primary drainage through the site is to the southeast in an unnamed tributary of Accotink Creek. One other

channel along the south side of the site carries flow from a storm drain system to the primary channel. Overland runoff and groundwater discharge provide a minimal amount of input. Two streams were identified as containing potentially jurisdictional waters. Stream "A" (perennial) is centrally located on the property and carries flow in a southeasterly direction. Stream "B" (intermittent) is located along the southern property boundary and has an onsite confluence with Stream "A".

The site has a history of flooding near the intersection of Fairfax Boulevard (Route 50) and Chain Bridge Road (Route 123) caused by undersized culverts and increased impervious area from offsite development. The drainage area reported in the JPA for the Northfax West project was 260.2 acres. Maps depicting stream locations and watershed hydrology are provided in Appendix C.

Impacts on Wetlands and Streams: No wetlands were identified within the project area, and stream impacts permitted by the USACE and DEQ are listed in Table 2.

Table 2: Permitted Impacts to Surface Waters for the Northfax West Project

Impact #	Impact Type	Stream Type	Impact Amount
A1	Permanent – Fill	R3 (Perennial)	797 LF (11,096 SF/0.25 Ac)
A2	Permanent – Fill	R3 (Perennial)	312 LF (3,780 SF/0.09 Ac)
A3	Permanent – Fill	R3 (Perennial)	295 LF (2,989 SF/0.07 Ac)
B1	Permanent – Fill	R4 (Intermittent)	345 LF (4,488 SF/0.10 Ac)
		Total:	**1,749 LF (22,353 SF/0.51 Ac)**

Each impact area is visually depicted on project plans found in Appendix C and summarized below:

- Impact A1, from the upstream end down to the confluence with Segment B1, will result in redirection of the perennial stream from its current location into twin 8-foot box culverts. The culverts will traverse the site as shown on the attached grading plan and join with existing twin 8-foot box culverts on the west side of Route 123. Fill material will be placed in the abandoned stream channel.
- Impact A2, from the confluence with Segments A1/B1, will result in redirection of the perennial stream from its current location into twin 8-foot box culverts. The culverts will traverse the site as shown on the attached grading plan and join with existing twin 8-foot box culverts on the west side of Route 123. Fill material will be placed in the abandoned stream channel.
- Impact A3, will result in removal of the newly constructed riprap inlet structure prior to joining the proposed twin 8-foot box culverts to the existing culverts. Fill material will be placed in the abandoned channel.
- Impact B1 will result in connecting the existing 42-inch RCP with a proposed 72-inch RCP that will discharge into the proposed box culverts. Fill material will be placed in the abandoned stream channel.

Proposed Mitigation Measures. According to the JPA and agency permits (Appendix B), lack of suitable buffer area for preservation prevents the reduction of required mitigation through onsite preservation. As such, the DEQ permit states that the permittee will "compensate for permanent stream impacts through the purchase of 1,675 stream credits or 4,761 Stream Condition Units from a DEQ approved mitigation bank, in-lieu fee fund, or a combination thereof that is authorized and approved by DEQ to sell credits in the area in which the impacts will occur and has credits available (as released by DEQ)." The purchase of stream credits provides mitigation for the impacts to the stream, as well as impacts to the riparian buffer (including the RPA buffer).

Existing Permits: A Joint Permit Application was submitted on June 22, 2018. The Northfax West project was permitted via VWP Individual Permit Number 18-1003 from the DEQ on March 5, 2019, and satisfied the terms and

conditions contained in the USACE's, Norfolk District State Program General Permit (17-SPGP-01), which remains effective until May 31, 2022. The Site Plan Application, Virginia Stormwater Management Program (VSMP) application, and Tree Removal Permit Application are in the process of being submitted. Agency documentation for state and federal permits is provided in Appendix B.

5.2 Landscape Elements

Existing Trees and Tree Management: The woodlands onsite can be characterized as an early successional tulip tree forest association with a mixed overstory composition of tulip tree, red maple, and American elm. Understory species include tulip tree, American elm, eastern red cedar, spice bush, Tatarian honeysuckle, multiflora rose, and Chinese privet. Tree and shrubs are also commonly found with woody vine populations composed of dense infestations of invasive species such as oriental bittersweet, Japanese honeysuckle, and English ivy.

Per the JPA submitted in June 2018 and the resulting USACE and DEQ permits, the preservation of existing trees was considered infeasible to meet the purpose and need of the project. However, compensatory mitigation will be provided for all stream and riparian buffer impacts via the purchase of stream and buffer credits from an approved mitigation bank. The stream credits include a 100-foot riparian buffer that extends from the banks of the stream being credited as compensation for this project. Therefore, no net loss of RPA functions, values, or area will occur.

The Tree Management Plan from the project's Master Development Plan is included in Appendix D. The plan shows trees proposed for preservation and removal throughout the project area. Invasive species management will be achieved through the removal of non-native invasive shrub and vine species found in existing woodlands onsite.

Limits of Clearing and Grading: Project plans (Appendix C and Appendix D) depict the limits of clearing and grading for the proposed project.

Trees and indigenous Vegetation Preservation: The Tree Management Plan for the Northfax West project is provided on Sheet 3 through Sheet 3D of the Master Development Plan (Appendix D). The plan identifies all trees proposed for preservation and removal, a tree management schedule, and details for standard tree protection. Invasive species management will be achieved through the removal of non-native invasive shrub and vine species found throughout the existing woodlands onsite.

Vegetative Measures Used to Enhance Water Quality: New plantings will occur as part of the proposed development in accordance with City landscaping requirements.

Construction Schedule: A proposed construction schedule that includes all activities related to clearing, grading and proposed plantings will accompany the site plan application for the Northfax West project. Additional details of project construction are shown on the project plans (Appendix C and Appendix D).

5.3 Other Measures

Apex performed a BEHI and NBS study on December 16, 2019 for the streams in the project area. The full results of the study, including maps of stream locations and assessment points, is provided in Appendix E. For BEHI assessment each stream bank was evaluated for the degree of erosion potential (e.g., extreme, very high, high, moderate, or low). Table 3 provides a summary of the BEHI results for Stream A1 and Stream A2.

Table 3: Summary of BEHI Results for the Northfax West Project

Stream ID	Erosion Hazard Potential			
	Extreme	Very High	High	Low
Stream A1	321 LF	1,192 LF	434 LF	735 LF
Stream A2	217 LF	311 LF	290 LF	0 LF
Total	538 LF	1,503 LF	724 LF	735 LF

The NBS data collected for each stream was assessed to predict potential sediment and nutrient loading caused by near bank stress associated with the BEHI assessed bank conditions. Apex estimated the potential for approximately 3,036 tons/year (or 6,072,860 lbs/year) of Total Suspended Sediment (TSS), 0.13 tons/year (or 260 lbs/year) of Total Nitrogen (TN), and 0.12 tons/year (or 240 lbs/year) of Total Phosphorus (TP) caused by stream erosion. Apex anticipates that the sediment and nutrient loads resulting from the stream bank erosion will continue to occur until action is taken to reduce the flow and the associated NBS. The redirection of flow and piping of the base flow and stormwater associated with the stream will eliminate the stream bank erosion and thus the associated sediment and nutrient inputs.

6.0 Conclusions and Recommendations

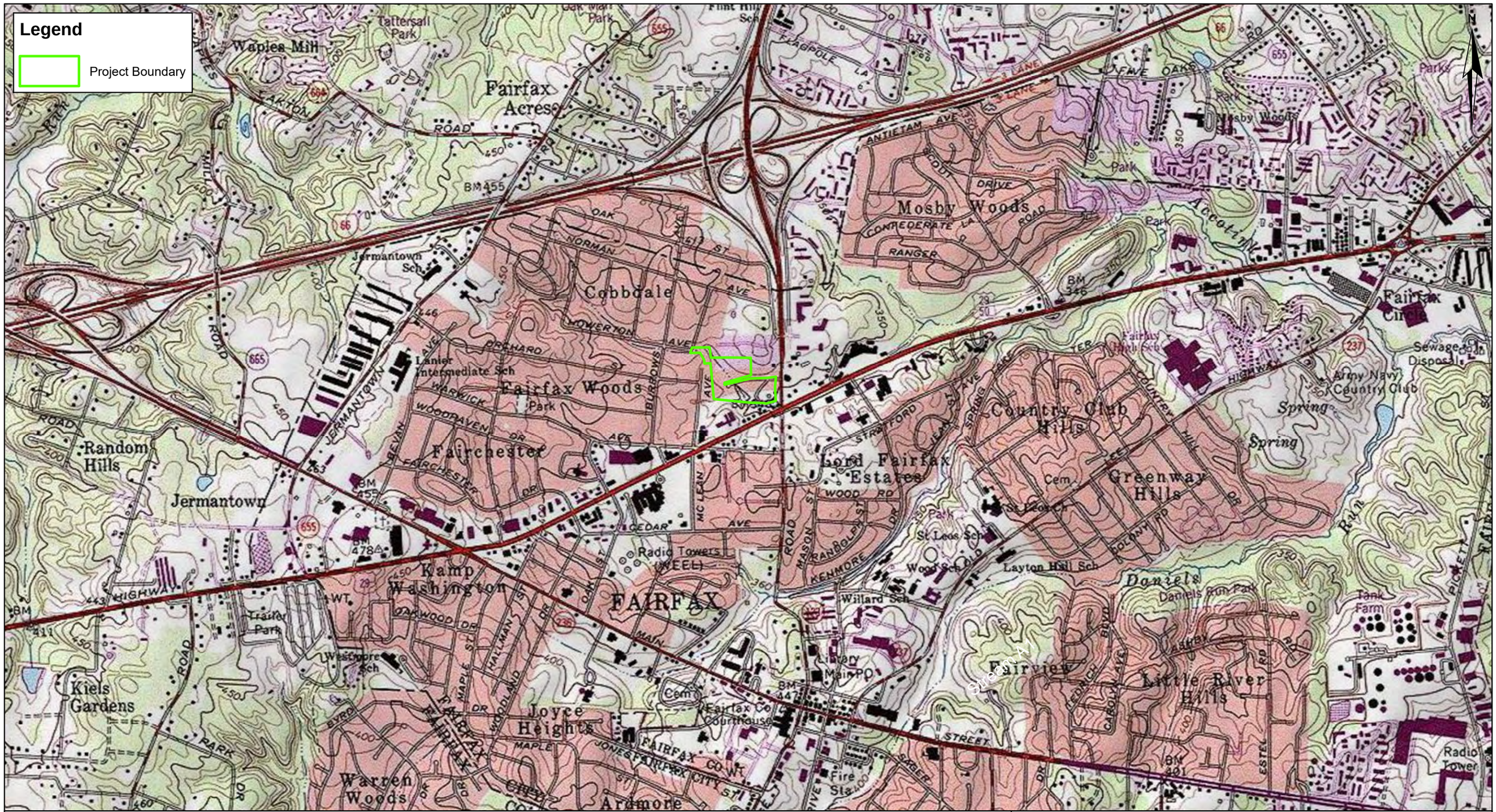
Based on the City's Chesapeake Bay Preservation ordinance, this report satisfies the City's review and evaluation requirements in Section 4.18 of the Zoning Ordinance for a Major WQIA. Upon the completed review of a WQIA application, the City's Zoning Administrator will determine if the Northfax West development is consistent with the purpose and intent of Section 4.16 of the Zoning Ordinance based upon the following criteria:

- The disturbance of any wetlands is minimized;
- The development will not result in significant disruption of the hydrology of the site;
- The development will not result in significant degradation to aquatic life;
- The development will not result in unnecessary destruction of plant materials on site;
- Proposed erosion and sediment control concepts are adequate to achieve the reductions in runoff and prevent off site sedimentation;
- Proposed stormwater-management measures are adequate to control the stormwater runoff to achieve the required performance standard for pollutant control;
- Proposed revegetation of disturbed areas will provide optimum erosion and sediment control benefits;
- The development, as proposed, is consistent with the purpose and intent of §4.16;
- The cumulative impact of the proposed development, when considered in relation to other development in the vicinity, both existing and proposed, will not result in a significant degradation of water quality.

In summary, the Northfax West project proposes to impact perennial and intermittent streams by piping them under the proposed mixed-use development to tie into the existing twin box culverts near Route 123 (installed by the City and VDOT). Based on Apex's onsite assessments to determine erosion potential, the Northfax West project pipe system will eliminate potential sources of stream bank erosion to include the extreme and very high erosion along existing stream channels. The pipe system will also help to control flooding and reduce the adverse effects of uncontrolled stormwater discharge including a reduction of TSS, TN, and TP transported from the project area to downstream waters within the Chesapeake Bay watershed. Due to the compensatory mitigation provided under USACE and DEQ permits, no net loss of RPA functions, values, or area will occur. In addition, the plans will adhere to the Total Maximum Daily Load (TMDL) requirements, where a development project's post-development nutrient loading cannot exceed its pre-development nutrient loading.

The completed WQIA Application provided in Appendix A documents that each of the City's criteria for a Major WQIA have been satisfied. Considering the water quality investigations conducted by Apex for the Northfax West project, the Section 404/401 water quality permits authorized by the USACE and DEQ, and the results presented in this WQIA report, it is Apex's opinion that the Northfax West project will improve water quality in the Chesapeake Bay.

Figures



Apex Companies, LLC
203 Wylderose Ct, Midlothian, VA 23113
Phone: 804-897-2718
www.apexcos.com

Northfax West
City of Fairfax, Virginia

Figure 1
Project Location Map

0 0.25 0.5 1 Miles

Drawn By: Rob LaPosa
01/16/2020

Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed

38°5'33.44"N
77°18'36.93"W

Apex Companies, LLC
203 Wylderose Ct, Midlothian, VA 23113
Phone: 804-897-2718
www.apexcos.com

Northfax West
City of Fairfax, Virginia

Figure 2
Project Vicinity Map

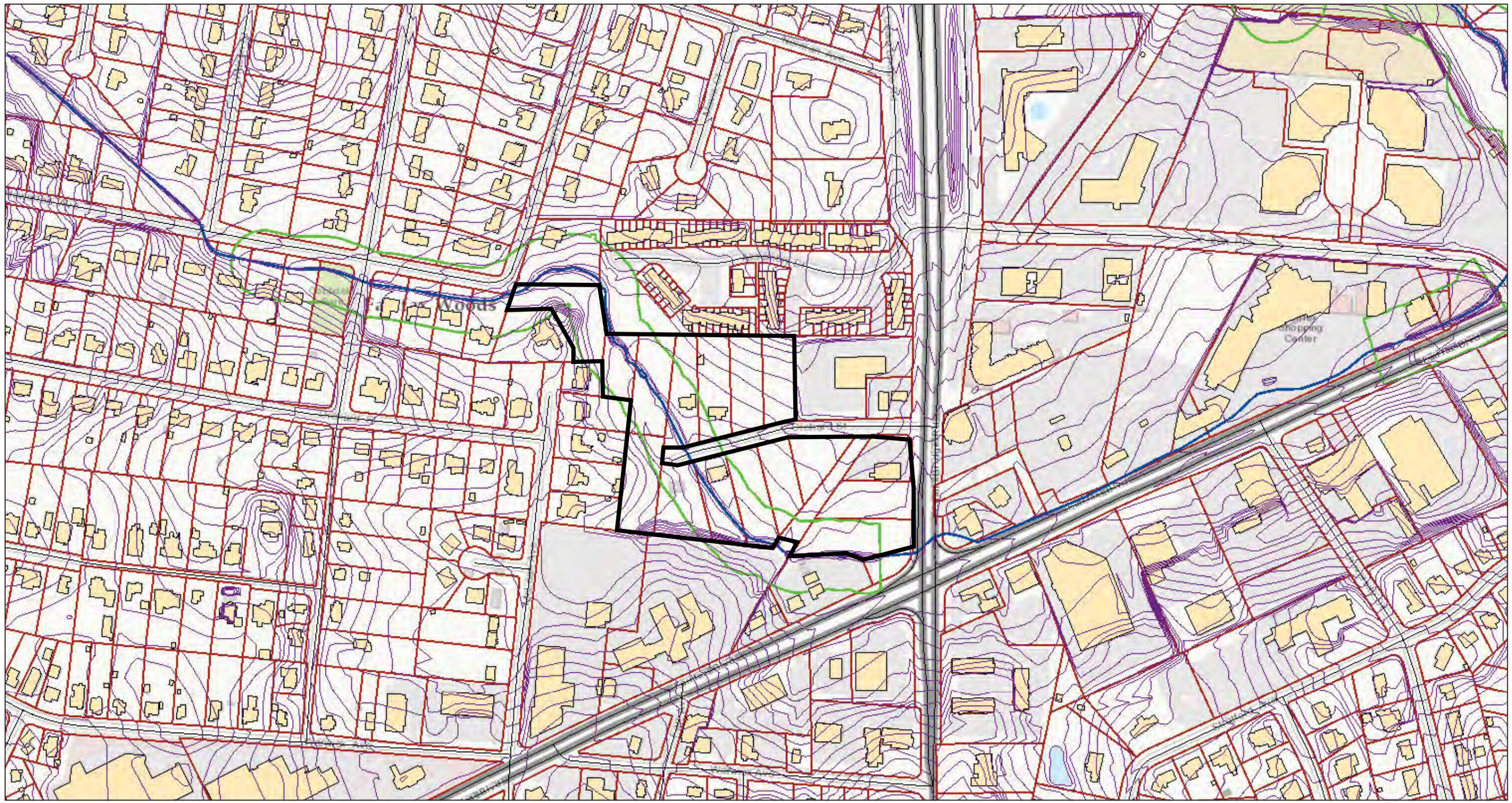
0 0.025 0.05 0.1 Miles

Drawn By: Rob LaPosa
01/16/2020

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

38°5'33.44"N
77°18'36.93"W

Figure 3: City of Fairfax RPA Map



October 25, 2016

1:4,514

Contour Lines (2 foot intervals)
Parcels
Streets
Streams
Buildings
Resource Protection Areas
City Limits

0 0.05 0.1 0.2 mi
0 0.075 0.15 0.3 km

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

City of Fairfax
County of Fairfax, County of Prince William, VITA, Esri, HERE, DeLorme, INCREMENT P, Intermap, USGS, EPA, USDA |

Apex Companies, LLC
203 Wylderose Ct, Midlothian, VA 23113
Phone: 804-897-2718
www.apexcos.com

Northfax West
City of Fairfax, Virginia

Figure 4
Resource Protection Area Map

0 175 350 700 Feet

Drawn By: Rob LaPosa (01/17/2020)
Reviewed By: John Brooks (1/28/2020)

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

38°5'33.44"N
77°18'36.93"W

Appendices

Appendix A – WQIA Application

City of Fairfax – Community Development and Planning
10455 Armstrong Street #207A Fairfax, VA 22030
Phone: 703-385-7820 Fax: 703-385-7824

Application #:_____

WATER QUALITY IMPACT ASSESSMENT (WQIA) APPLICATION

☐ Single Family Residential $ 115.00 / ☐ Other: $ 350.00

- NON REFUNDABLE FEE -

1. JOB LOCATION INFORMATION:

Job Location Address __10510 Orchard St. Fairfax, Virginia 22030_____

Project Name _ Northfax Project_____

Tax Map #__See attached document for list of tax map #'s_____

2. APPLICANT INFORMATION:

Name _Northfax JV LLC c/o The Lann Companies_____

Address _3900 Jermantown Rd., Suite 300, Fairfax VA, 22030 _____

Phone _(703) 934-4600_____Email__john@lann.com

3. PROPERTY OWNER INFORMATION: (Same as Applicant ☐)

Name __Northfax JV, LLC c/o The Lann Companies_____

Address _ 3900 Jermantown Rd., Suite 300, Fairfax VA, 22030_____

Phone___(703) 934-4600_____Email____john@lann.com_____

4. LAND SURVEYOR: (Same as Applicant ☐)

Name ___Christopher Consultants; Attn: Christopher Fillmore, LS; License No. 2607

Address___9900 Main St., Suite 400, Fairfax, VA, 22031_____

Phone ____(703) 273-6820_____Email___chrisfillmore@ccl-eng.com_____

5. WETLANDS EXPERT: (Same as Applicant ☐)

Name ___Apex Companies, LLC; Attn: John Brooks, III, PWD; Certification No. 3402000003

Address__203 Wylderose Ct., Midlothian, VA 23113_____

Phone ___(804) 897-2718_____Email__John.Brooks@apexcos.com_____

-Continued on Next Page-

The City of Fairfax is committed to the letter and spirit of the Americans with Disabilities Act. To request a reasonable accommodation for any type of disability, please call 703-385-7930, (TTY 711)

The Water Quality Impact Assessment is conducted to identify the impacts of proposed development on water quality and lands within resource protection and resource management areas; to ensure that where development does take place it is located on those portions of a site and in a manner that is least disruptive to the natural functions of the land and to specify mitigation measures to address water quality protection.

The applicant shall submit a WQIA in accordance with §110-4.18.8.B for:

1. Any proposed land disturbance , development or redevelopment within a resource protection area including any buffer area modification or reduction as provided for in §110-4.18.7; or
2. Any proposed development or redevelopment in the resource management area that may significantly impact water quality due to the unique characteristics of the site or intensity of the proposed use or development, as determined by the zoning administrator in accordance with §110-4.18 and §110-4.18.4.D

I. Development Characteristics

You must submit either a minor or major WQIA for your project unless you receive a waiver. The below conditions will determine whether you submit a major or minor WQIA.

Submit a **Minor WQIA** if you answer "Yes" to either of these development characteristics (§110-4.18.8.C)

_____ 5,000 square feet of disturbance or less

_____ Encroachment onto the landward 50 feet of the 100-foot buffer area **(Skip to Section III, Minor WQIA Requirements)**

Submit a **Major WQIA** if you answer "Yes" to any of these development characteristics (§110-4.18.8.D)

YES Over 5,000 square feet of disturbance

YES Encroachment onto the seaward 50 feet of the 100-foot RPA buffer area

_____ Location in the resource management area and is deemed necessary by the Zoning Administrator.

(Skip to Section IV, Major WQIA Requirements)

II. WQIA Waivers

_____ Check here if you plan to submit a WQIA waiver request.

To submit a WQIA waiver request, attach a report detailing how the proposed development or redevelopment does not significantly impact water quality.

III. Minor WQIA Requirements (§110-4.18.8.C)

The minor WQIA calculations will demonstrate that the remaining buffer area and best management practices will result in removal of no less than 75 percent of sediments and 40 percent of nutrients from post development stormwater runoff.

Requirements for a minor WQIA scaled site drawing include:

1) Location of the components of any RPA, including the 100 foot buffer area;
2) Location and nature of proposed improvements, including:
    a. Type of paving material;
    b. Areas of clearing or grading;
    c. Location of any structures, drives, or other impervious cover; and
    d. Sewage disposal systems or reserve drain field sites;
3) Type and location of proposed best management practices to meet the required general performance standards specified in §110-4.18.7;
4) Location of existing vegetation on site, including the number and type of trees and other vegetation to be removed to accommodate the encroachment or modification; and
5) A revegetation plan that supplements the existing buffer vegetation in a manner that provides for pollutant removal, erosion and runoff control.
6) Certification of all required information as complete and accurate by a Class IIIB certified land surveyor and professional wetlands delineator.

IV. Major WQIA Requirements (§110-4.18.8.D)

Requirements for a major WQIA include:

1) All of the information required in a minor WQIA (Section III above);
2) Hydrological element that describes:
    a. Existing topography;
    b. Estimates of soil characteristics and potential for erosion;
    c. Hydrology of the area;
    d. Impacts on wetlands and streams;
    e. Proposed mitigation measures; and
    f. A listing of requisite permits with permit or application status.

3) Landscape element that fully describes:
    a. Existing trees required to be identified as part of a Tree Management Plan in accordance with subsection §110-4.5.9.D.1;
    b. Limits of clearing and grading;
    c. Trees and indigenous vegetation that are to be preserved within the disturbed area;
    d. Measures to be taken to protect vegetation, proposed plantings and other vegetative measures used to enhance water quality; and
    e. A proposed construction schedule that includes all activities related to clearing, grading and proposed plantings.

4) Such other measures as deemed necessary by the Zoning Administrator to ensure the impact to water quality can be accurately predicted; and
5) Certification of all required information as complete and accurate by a Class IIIB certified land surveyor and professional wetlands delineator.

V. Evaluation Procedure (§110-4.18.8.F)

Minor WQIA

The Zoning Administrator shall determine if any proposed modification or reduction to the buffer area is consistent with the provisions of this division and make a finding based upon the following criteria:

4.18.8.F.1	Minor WQIA Criteria	Satisfied (Y/N)
a.	The proposed encroachment is necessary and there is no other location on site to place improvements without disturbing the buffer area.	
b.	The impervious surface is minimized.	
c.	The proposed best management practices, where required, achieve the requisite reductions in pollutant loadings.	
d.	The development, as proposed, meets the purpose and intent of §110-4.18	
e.	The cumulative impact of the proposed development, when considered in relation to other development in the vicinity, both existing and proposed, will not result in a significant degradation of water quality.	
f.	Any other information deemed necessary by the Zoning Administrator.	

Major WQIA

The Zoning Administrator shall determine if the proposed development is consistent with the purpose and intent of this division and make a finding based upon the following criteria:

4.18.8.F.2	Major Water Quality Criteria	Satisfied (Y/N)
a.	The disturbance of any wetlands is minimized.	Y
b.	The development will not result in significant disruption of the hydrology of the site.	Y
c.	The development will not result in significant degradation to aquatic life.	Y
d.	The development will not result in unnecessary destruction of plant materials on site.	Y
e.	Proposed erosion and sediment control concepts are adequate to achieve the reductions in runoff and prevent off site sedimentation.	Y
f.	Proposed stormwater-management measures are adequate to control the stormwater runoff to achieve the required performance standard for pollutant control.	Y
g.	Proposed revegetation of disturbed areas will provide optimum erosion and sediment control benefits.	Y
h.	The design and location of any proposed drain field will be in accordance with the general performance standards outlined in §110-4.18.7.	N/A
i.	The development, as proposed, is consistent with the purpose and intent of §110-4.16.	Y
j.	The cumulative impact of the proposed development, when considered in relation to other development in the vicinity, both existing and proposed, will not result in a significant degradation of water quality.	Y

OFFICE USE ONLY

Receipt # _____ ☐ $115.00 ☐ $350.00

*** OFFICE APPROVAL SIGNATURE***

This Application is Approved By_____Date_____

Special Projects Engineer

Tax Map #'s

57 2 08 005
57 2 08 006
57 2 08 007
57 2 08 008
57 2 08 010
57 2 08 011
57 2 08 012
57 2 08 013
57 2 08 014
57 2 07 015 B
57 2 47 000 A
57 2 02 003
57 2 02 005
57 2 02 017
57 2 02 018
57 2 02 019
57 2 02 020

Appendix B – Agency Documentation

DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NORFOLK DISTRICT
FORT NORFOLK
803 FRONT STREET
NORFOLK VA 23510-1011

February 5, 2018

PRELIMINARY JURISDICTIONAL DETERMINATION

Northern Virginia Regulatory Section
NAO-2017-02192 (Northfax Project)

Northfax JV LLC
c/o The Lann Companies
Attn: Mr. John Napolitano
3900 Jermantown Road, Suite 300
Fairfax, Virginia 22030

Dear Mr. Napolitano:

This letter is in regard to your request for a verification of a preliminary jurisdictional determination for waters of the U.S. (including wetlands) on property known as the Northfax Project, located on 16 parcels on approximately 10.3 acres, northwest quadrant at the intersection of Chain Bridge Road (Route 123) and Fairfax Boulevard (U.S. Routes 29/50) in the City of Fairfax, Virginia.

The map entitled "Northfax Project", by Christopher Consultants and submitted by Apex Companies, LLC dated December 4, 2017 and revised January 19, 2018 (*copy enclosed)* provides the location of waters and/or wetlands on the property listed above. The basis for this delineation includes the presence of an ordinary high water mark. This letter is not confirming the Cowardin classifications of these aquatic resources.

Discharges of dredged or fill material, including those associated with mechanized landclearing, into waters and/or wetlands on this site may require a Department of the Army permit and authorization by state and local authorities including a Virginia Water Protection Permit from the Virginia Department of Environmental Quality (DEQ), a permit from the Virginia Marine Resources Commission (VMRC) and/or a permit from your local wetlands board. This letter is a confirmation of the Corps preliminary jurisdiction for the waters and/or wetlands on the subject property and does not authorize any work in these areas. Please obtain all required permits before starting work in the delineated waters/wetland areas.

This is a preliminary jurisdictional determination and is therefore not a legally binding determination regarding whether Corps jurisdiction applies to the waters or wetlands in question. Accordingly, you may either consent to jurisdiction as set out in this preliminary jurisdictional determination and the attachments hereto if you agree with the determination, or you may request and obtain an approved jurisdictional determination.

"This preliminary jurisdictional determination and associated wetland delineation map may be submitted with a permit application."

Enclosed is a copy of the "Preliminary Jurisdictional Determination Form". Please review the document, sign, and return one copy to Ms. Theresita Crockett-Augustine either via email (**theresita.m.crockett-augustine@usace.army.mil**) or via standard mail to US Army Corps of Engineers, Northern Virginia Field Office at 18139 Triangle Plaza, Suite 213, Dumfries, Virginia 22026 within 30 days of receipt and keep one for your records. This delineation of waters and/or wetlands is valid for a period of five years from the date of this letter unless new information warrants revision prior to the expiration date.

If you have any questions, please contact Ms. Theresita Crockett-Augustine at (703) 221-9736 or **theresita.m.crockett-augustine@usace.army.mil**.

Sincerely,

Theresita Crockett-Augustine
Environmental Scientist
Northern Virginia Regulatory Section

Enclosures

AUGUSTINE.THERESITA.CROCKETT.1230827040

Digitally signed by AUGUSTINE.THERESITA.CROCKETT.1230827040
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=AUGUSTINE.THERESITA.CROCKETT.1230827040
Date: 2018.02.05 16:42:10 -05'00'

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION:

A. REPORT COMPLETION DATE FOR PJD: February 5, 2018

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:
Northfax JV LLC
c/o The Lann Companies
Attn: Mr. John Napolitano
3900 Jermantown Road, Suite 300
Fairfax, Virginia 22030

DISTRICT OFFICE, FILE NAME, AND NUMBER: NAO, **Northfax Project**, 2017-02192

C. PROJECT LOCATION(S) AND BACKGROUND INFORMATION: (USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT DIFFERENT SITES)

State: **VIRGINIA** County/parish/borough: Fairfax City: Fairfax

Center coordinates of site (lat/long in degree decimal format):

Latitude: 38.859 ° N Longitude: - 77.309 ° W

Universal Transverse Mercator:

Name of nearest waterbody: UT to Accotink Creek

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☐ Office (Desk) Determination. Date:
☒ Field Determination. Date(s): 01/19/18

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

Site Number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
1			2,064 LF	RPW	Section 404
2					
3					

1. The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre- construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there "may be" waters of the U.S. and/or that there "may be" navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA: Data reviewed for preliminary JD (check all that apply)

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items.

☒ Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
Map:

☒ Data sheets prepared/submitted by or on behalf of the PJD requestor.

☒ Office concurs with data sheets/delineation report.

☐ Office does not concur with data sheets/delineation report. Rationale:

☐ Data sheets prepared by the Corps:

☐ Corps navigable waters' study:

☐ U.S. Geological Survey Hydrologic Atlas: USGS

☐ NHD data.

☐ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name:

☒ Natural Resources Conservation Service Soil Survey. Citation:

☒ National wetlands inventory map(s). Cite name:

☒ State/Local wetland inventory map(s):

☐ FEMA/FIRM maps:

☐ 100-year Floodplain Elevation: (National Geodetic Vertical Datum of 1929)

☒ Photographs ☒ Aerial (Name & Date):

or ☒ Other (Name & Date):

☐ Previous determination(s):

File no. and date of response letter:

☐ Other information (please specify):

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

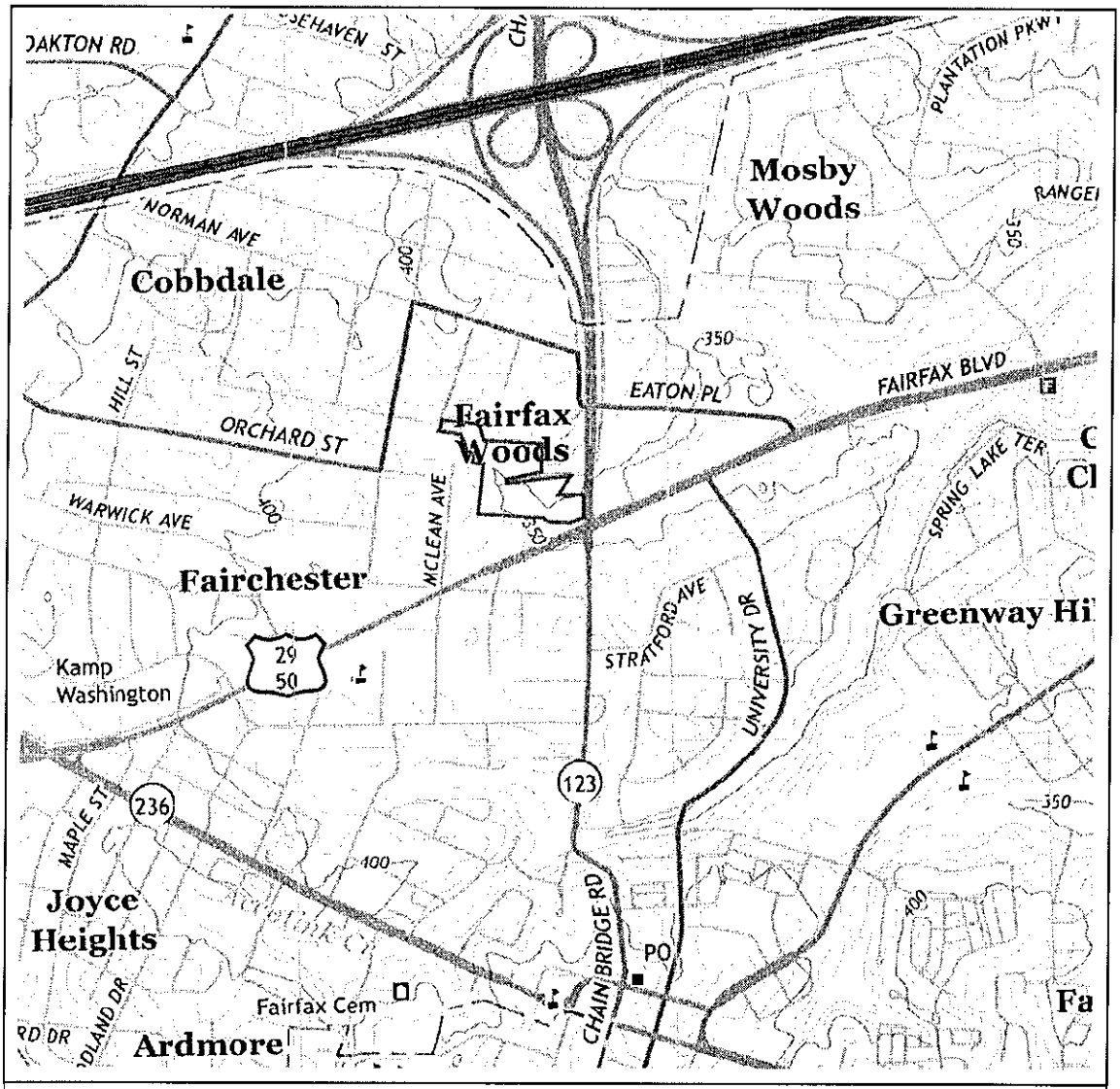
AUGUSTINE.THERESITA.CROCKETT.1230827040

Digitally signed by AUGUSTINE.THERESITA.CROCKETT.1230827040
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=AUGUSTINE.THERESITA.CROCKETT.1230827040
Date: 2018.02.05 16:41:37 -05'00'

Signature and date of Regulatory staff member completing PJD

Signature and date of person requesting PJD (REQUIRED, unless obtaining the signature is impracticable)[1]

1 Districts may establish timeframes for requester to return signed PJD forms. If the requester does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.



Scale: Not to Scale

Date: USGS Quadrangle 2013

Apex Companies LLC.
8854 Rixlew Lane
Manassas, VA 20109

APEX

© Apex Companies LLC

USGS Quadrangle Map
Northfax
38.859309 N/ -77.310054 W
Fairfax USGS Quadrangle
Fairfax County, VA

Prepared for:
Northfax JV LLC c/o The Lann Companies
3900 Jermantown Road – Suite 300
Fairfax, VA 22030

Scale: Metric Scale

Date: USGS Quadrangle 2013

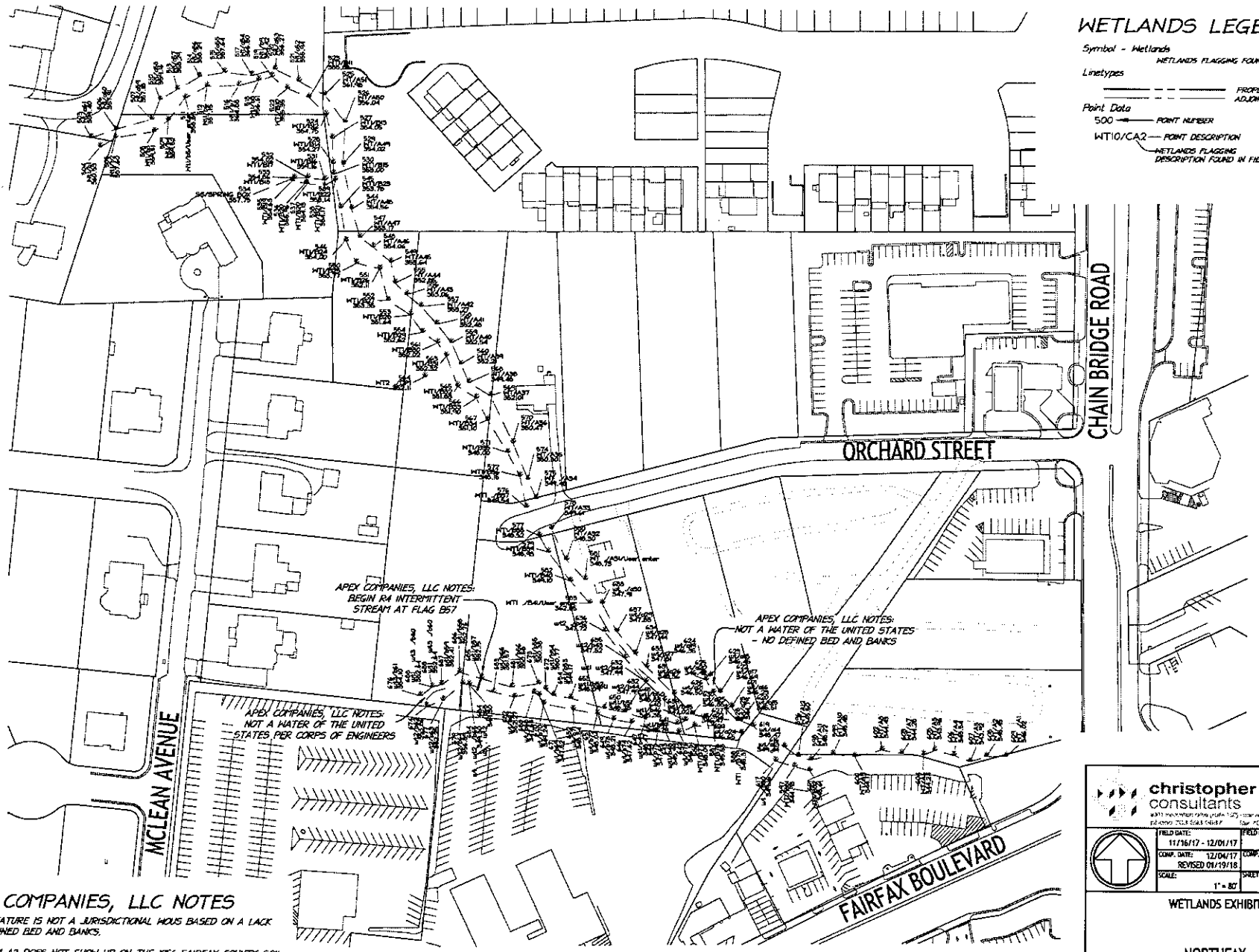
Apex Companies LLC
8884 Rixlew Lane
Manassas, VA 20109

APEX

© Apex Companies LLC

USGS Aerial Map
Northfax
[illegible]
[illegible] Quadrangle
Fairfax County, VA

Prepared for:
[illegible]
[illegible]
[illegible]



APEX COMPANIES, LLC NOTES

1. THIS FEATURE IS NOT A JURISDICTIONAL HOUS BASED ON A LACK OF DEFINED BED AND BANKS.
2. STREAM A2 DOES NOT SHOW UP ON THE 1856 FAIRFAX COUNTY SOIL SURVEY AND IT IS SUSPECTED THAT THE CHANNEL WAS CUT BY STORMWATER RUNOFF DISCHARGED BY THE CITY STORMWATER SYSTEM.

LEGEND:
- STAKED POINT LOCATION (SEE STAKED POINT LEGEND BELOW)
- 6000 — STAKED POINT NUMBER (DESCRIPTION)
- 300.00 — STAKED POINT ELEVATION (STAKE ELEV.)
- BLD — STAKED POINT DESCRIPTION

THIS EXHIBIT IS FOR GRAPHICALLY DEPICTING THE STAKEOUT LOCATIONS ONLY.
THIS EXHIBIT MAY NOT SHOW ALL DESIGN INFORMATION.
PLEASE REFERENCE THE FOLLOWING CONSTRUCTION PLAN FOR ALL PERTINENT DESIGN INFORMATION:
DESIGN PLAN: WETLANDS EXHIBIT
PLAN DATE: 11/15/17
DESIGNED BY: APEX COMPANIES, LLC
COUNTY #: N/A
APPROVED ON: N/A

christopher consultants

EX-01

FIELD DATE: 11/16/17 - 12/01/17	FIELD CREW: W. OSBURN
COMP. DATE: 12/04/17 REVISED 01/19/18	COMP. BY: M. SMITH R. CEBRICK
SCALE: 1" = 80'	SHEET: 1 OF 1

WETLANDS EXHIBIT

NORTHFAX

CITY OF FAIRFAX, VIRGINIA

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Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193
(703)583-3800
www.deq.virginia.gov

Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director
(804) 698-4000

Thomas A. Faha
Regional Director

March 5, 2019

Mr. John E. Napolitano, Manager
Northfax JV LLC
3900 Jermantown Road, Suite 300
Fairfax, Virginia 22030

SENT VIA E-MAIL: john@lann.com
RECEIPT CONFIRMATION REQUESTED

RE: State Program General Permit (17-SPGP-01) Authorization
Permit Number: 18-1003
Northfax, City of Fairfax, Virginia

Dear Mr. Napolitano:

The Virginia Department of Environmental Quality (DEQ) has received and completed technical review of your application request dated June 22, 2018, and received June 25, 2018. Based on DEQ's technical review, DEQ has determined the proposed project satisfies the terms and conditions contained in the USACE's, Norfolk District State Program General Permit (17-SPGP-01). You are required to adhere to all terms and conditions contained within the attached 17-SPGP-01 and any Special Conditions listed below. Your 17-SPGP-01 verification is effective as of the date on this letter and remains effective until **May 31, 2022**.

The impacts are associated with the construction of a mixed-use development and associated infrastructure on an approximately 10.6 acre development site.

The applicant is hereby authorized to permanently impact 0.50 acre (1,646 linear feet) of stream channel.

The conceptual mitigation plan submitted with your application indicated that mitigation will include the purchase of 1,675 stream credits or 4,761 Stream Condition Units. This mitigation shall be completed and documentation shall be submitted to DEQ prior to commencement of project impacts.

This letter shall serve as verification to proceed with the project as proposed. The permittee shall be responsible for contacting DEQ to revise this verification, including provisions for compensatory mitigation, if the location or amount of the impacts changes.

Please contact Wynn Prusaczyk by phone at (703) 583-3871 or email at Wynn.Prusaczyk@deq.virginia.gov if you have any questions or concerns regarding the information contained herein.

Respectfully,

Trisha M. Beasley

Trisha M. Beasley, Regional VWPP Program Manager

Attachments: 17-SPGP-01

Cc (via E-mail):

Mr. Jason Franti, Apex Companies, LLC
Mr. Jim Irre, Apex Companies, LLC
Ms. Theresita Crockett-Augustine, USACE, Northern VA Field Office

DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NORFOLK DISTRICT
FORT NORFOLK
803 FRONT STREET
NORFOLK VA 23510-1011

CENAO-WRR STATE PROGRAMMATIC GENERAL PERMIT 17-SPGP-01

Effective Date: June 29, 2017 Expiration Date: May 31, 2022

I. AUTHORITIES:

A. 17-SPGP-01 authorizes the discharge of dredged or fill material in non-tidal waters, of the United States, including wetlands, associated with certain residential, commercial, and institutional developments and linear transportation projects within the geographical limits of the Commonwealth of Virginia and under the regulatory jurisdiction of the U.S. Army Corps of Engineers, Norfolk District (Corps or Norfolk District). These projects must have no more than minimal individual and cumulative impacts and must meet all the terms and conditions outlined herein. The use of 17-SPGP-01 is restricted to those projects that have avoided and minimized impacts to waters of the U.S., including wetlands, to the maximum extent practicable.

B. The people of the Commonwealth of Virginia (Virginia or "the Commonwealth") are hereby authorized by the Secretary of the Army and the Chief of Engineers, under Section 404 of the Clean Water Act (CWA) (33 U.S.C. § 1344), to perform the aforementioned work in non-tidal waters and wetlands of the Commonwealth as described herein. The Corps' authority and guidance to develop general permits is contained in 33 U.S.C. § 1344(e), 33 C.F.R. § 325.2(e)(2), 33 C.F.R. § 325.3(b), and Corps Regulatory Guidance Letter (RGL) 83-7.

II. PROCEDURES:

A. Delineation Confirmations: Prior to the submission of an application for any Residential, Commercial, or Institutional Development Activity or Linear Transportation Activity covered by 17-SPGP-01, a proponent must first obtain a Corps confirmed delineation that is approved for use with a permit application (Preliminary JD) or a confirmed jurisdictional determination that includes the limits of all waters of the U.S., including wetlands that are located within the project boundaries (Approved JD). The applicant will contact the Corps to obtain a delineation confirmation/jurisdictional determination. When appropriate, a separate delineation confirmation may also be required from the Environmental Protection Agency (EPA).

B. Application: The application must be submitted to the Virginia Marine Resource Commission (VMRC) and clearly marked 17-SPGP-01. The following information must be submitted as part of the complete application package:
   1) A completed and signed Standard Joint Permit Application (JPA). The applicant must utilize the most recent version.

http://www.nao.usace.army.mil/Missions/Regulatory/

2) A completed SPGP Complete Application Checklist. The applicant must utilize the most recent version.
3) A Corps confirmed delineation that is approved for use with a permit application OR a confirmed jurisdictional determination that includes the limits of all waters of the U.S., including wetlands that are located within the project boundaries.

This information listed above will be required to render an application complete for 17-SPGP-01 purposes. The application package must be submitted to the Virginia Marine Resource Commission (VMRC) and clearly marked 17-SPGP-01. The VMRC will forward a copy of the application to the applicable VDEQ office. Once the VDEQ has deemed the application complete the VDEQ will forward the complete application to the appropriate federal agency when coordination is required.

For purposes of 17-SPGP-01, the VDEQ is the agency responsible for ensuring permit applications meet the informational and technical requirements of 17-SPGP-01 and for issuance of 17-SPGP-01 verification letters for qualifying Residential, Commercial, and Institutional and Linear Transportation projects.

C. State Approvals: In order for 17-SPGP-01 to be valid, permittees must obtain the following state approvals prior to commencement of work in waters of the U.S.:

1) Virginia Department of Environmental Quality (VDEQ) Virginia Water Protection (VWP) permit
2) VMRC permit, when required
3) VDEQ informal resolution, letter of agreement, executive compliance agreement or consent order when the 17-SPGP-01 is utilized for resolution of non-compliance and/or enforcement (at Corps discretion).

The 17-SPGP-01 may also be used for activities excluded from State VWP permitting when those activities are associated with a larger residential, commercial, institutional development and/or linear transportation project that requires state approval..

III. **DEFINITIONS**:

A. Loss of waters of the United States: Waters of the United States (WOUS), including wetlands that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage/linear footage of the loss of WOUS is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for 17-SPGP-01; it is not a net threshold that is

calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services.

1) The loss of stream bed includes the linear feet of stream bed that is filled or excavated. WOUS temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of WOUS. Impacts resulting from activities eligible for exemptions under Section 404(f) of the Clean Water Act are not considered when calculating the loss of WOUS.
2) Per Norfolk District Pipe Repair Guidelines: pipe repair and replacement is considered a permanent impact
3) The length of any box culvert, pipe, or bridge that is being removed and replaced, whether in the same location or not, is considered a permanent impact. However, if a pipe/culvert/bridge is left in place and is extended or rip-rapped, then only the length and area of the extension or rip-rap is considered a permanent impact. [Based on Norfolk District letter guidance May 5, 2009 to VDOT]

B. Natural stream design: a stream channel design that mimics the dimension, pattern, and profile of a representative reference stream reach.

C. Permittee: the responsible party in receipt of the 17-SPGP-01 verification from the VDEQ. The permittee will be the responsible party for complying with all 17-SPGP-01 general conditions as well as any additional special conditions required of each project.

D. Residential developments: construction or expansion of a multiple unit residential development or a residential subdivision including the construction of building foundations, building pads and attendant features that are necessary for the use of the residence or residential development. Attendant features may include but are not limited to roads, parking lots, garages, yards, utility lines, storm water management facilities, septic fields, and recreation facilities such as playgrounds, playing fields, and golf courses (provided the golf course is an integral part of the residential development).

E. Commercial and Institutional Developments: construction or expansion of commercial and institutional building foundations, building pads, and attendant features that are necessary for the use and maintenance of the structures. Attendant features may include, but are not limited to, roads, parking lots, garages, yards, utility lines, storm water management facilities, and recreation facilities such as playgrounds and playing fields. Examples of commercial developments include retail stores, industrial facilities, restaurants, business parks, and shopping centers. Examples of institutional developments include schools, fire stations, government office buildings, judicial buildings, public works buildings, libraries, hospitals, and places of worship.

F. Linear transportation: the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxi ways).

IV. AUTHORIZED ACTIVITIES

A. Residential, Commercial, and Institutional Development Activities Eligibility Criteria:

1) Activities are subject to Corps regulations;

2) Activities involve the discharge of dredged/fill material associated with residential, commercial, and institutional projects and propose:
   a. the TOTAL permanent loss of not more than 1 acre of non-tidal waters of the US, to include stream channel, wetlands and open waters.
   AND
   b. the permanent loss of not more than 2,000 linear feet of stream channel;

3) Activities meet the general and special conditions of 17-SPGP-01 listed in this document and any special conditions required of each project-specific verification;

4) Compensatory mitigation is provided in accordance with the mitigation standards and general conditions listed in this document.

5) Activities have received and completed all applicable federal review as listed in the general conditions of this document.

****The following activities are NOT authorized under the 17-SPGP-01:**

- The Construction of one stand-alone single family home and/or its attendant features.
- Golf courses that are not an integral part of a residential development.
- The construction of new ski areas.

B. Linear Transportation Activities Eligibility Criteria:

1) Activities are subject to Corps regulations;

2) Activities involve the discharge of dredged/ fill material associated with the construction, expansion, modification, or improvement of linear transportation projects that are single and complete with independent utility and propose:

a. the TOTAL permanent loss of not more than ½ acre of non-tidal waters of the US, to include stream channel, wetlands and open waters
AND
b. the permanent loss of not more than 1,000 linear feet of stream channel at any single impact site with independent utility.

3) Activities meet all general conditions of 17-SPGP-01 listed in this document and any special conditions required of each project-specific verification;

4) Compensatory mitigation is provided in accordance with the mitigation standards and general conditions listed in this document.

5) Activities have received and completed all applicable federal review as listed in the general conditions of this document.

6) Construction and/or relocation of utility lines by the applicant and within the right-of- way/easements of the project and performed in direct relation with the project are included in the project impact totals.

V. GENERAL CONDITIONS:

The following conditions apply to all activities authorized under 17-SPGP-01. Work that does not meet one or more of the terms or general conditions of 17-SPGP-01, including work that has been determined to be more than minimal in nature (at any impact level), will require consideration under a different type of Corps permit.

1) Other permits: Authorization does not obviate the need to obtain other Federal, state, or local authorizations required by law or to comply with all Federal, state, or local laws.

2) Minimal effects: Projects authorized shall have no more than minimal individual or cumulative adverse environmental impacts.

3) Discretionary authority: The Corps District Commander retains discretionary authority to require processing of an individual permit based on concerns for the aquatic environment or for any other factor of the public interest (33 C.F.R. § 320.4(a)). This authority is exercised on a case-by-case basis.

4) Single and complete projects: The activity must be a single and complete project.
   a. For non-linear projects: the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other

association of owners/developers. A single and complete non-linear project must have independent utility (see "independent utility" as defined in these general conditions). Single and complete non-linear projects may not be "piecemealed" to avoid the limits in a17-SPGP-01 authorization.

b. For linear transportation: For projects with multiple crossings or encroachments a determination of "single and complete" will typically apply to each crossing or encroachment of waters that occurs (i.e., single waterbody and/or wetlands) at separate and distinct locations and with independent utility. However, in cases where there are many crossings in close proximity, numerous crossings of the same waterbody, multiple crossings, or multiple encroachments that otherwise may have more than minimal individual or cumulative impacts; the Corps has the discretion to consider all the crossings cumulatively as one single and complete project.

5) Independent utility: A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. A phase of a project that would be constructed even if the other phases were not built can be considered as a separate, single and complete project with independent utility. For a linear transportation project, separate impact areas on a new location roadway are not considered to have independent utility and thus impacts would be considered cumulatively and eligible for a single 17-SPGP-01 verification. However, separate impact areas on a roadway that is being widened or where pipes are being replaced at multiple crossings are considered to have independent utility, and each crossing would be considered eligible for a separate 17-SPGP-01 verification. Although such impacts are not considered cumulatively for permitting purposes, they are considered cumulatively when assessing the need for federal review.

6) Multiple general permit authorizations.: The 17-SPGP-01 may be combined with other Corps general permits (including Nationwide, Regional or Letters of Permission) as long as the impacts are considered cumulatively and do not exceed the acreage limit or linear footage limits of the 17-SPGP-01. Two separate activities (e.g. Residential and Linear, within 17-SPGP-01, may be combined as long as they do not exceed the acreage or linear footage threshold of the activity with the highest specified acreage or linear footage threshold).

7) Permit on-site: The permittee shall ensure that a copy of 17-SPGP-01 and the accompanying authorization letter are at the work site at all times. These copies must be made available to any regulatory representative upon request. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be expected to comply with all conditions of any 17-SPGP-01 verification.

8) Historic Properties: In cases where the Corps determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the District Engineer with the appropriate documentation to demonstrate compliance with those requirements. The District Engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the 17-SPGP-01 activity or whether additional section 106 consultation is necessary.

Non-federal permittees shall not begin work on the activity until Section 106 review and/or coordination has been completed AND they have received their 17-SPGP verification letter from the VDEQ.

Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such permit or assistance despite the adverse effect created or allowed by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

Discovery of Previously Unknown Remains and Artifacts: If a permittee discovers any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, the permittee must immediately notify the District Engineer of what has been found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The District Engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

Tribal Rights: No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

9) Federal Lands: Authorized activities shall not impinge upon the value of any National Wildlife Refuge, National Forest, National Park, or any other area administered by the United States Fish and Wildlife Service (USFWS), U.S. Forest Service, or National Park Service unless approval from the applicable land management agency is provided with the permit application.

10) Endangered Species: No activity is authorized under any 17-SPGP-01 which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any 17-SPGP-01 which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the District Engineer with the appropriate documentation to demonstrate compliance with those requirements. The District Engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the 17-SPGP-01 activity, or whether additional ESA consultation is necessary.

Non-federal permittees shall not begin work on the activity until Section 7 review and/or consultation has been completed AND they have received their 17-SPGP verification letter from the VDEQ.

Authorization of an activity by a 17-SPGP-01 does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the National Marine Fisheries Service (NMFS), The Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS or their World Wide Web

pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.noaa.gov/fisheries.html respectively.

11) Migratory Birds and Bald and Golden Eagles: The permittee is responsible for obtaining any "take" permits required under the USFWS regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the USFWS to determine if such "take" permits are required for a particular activity. As of the issuance date of the 17-SPGP the current contact, concerning this matter, is at the U.S. Fish and Wildlife Service, Thomas Wittig at 413-253-8577 or Thomas_wittig@fws.gov. Information on active bald eagle nests in the project area can be obtained via The Center for Conservation Biology (CCB) Virginia Eagles Nest Locator: http://www.ccb-wm.org/virginiaeagles/index.htm.

12) Wild and Scenic Rivers: Currently, there are no designated Wild and Scenic Rivers in Virginia. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river has determined, in writing, that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service (NPS), U.S. Forest Service (USFS), Bureau of Land Management (BLM), USFWS). Impacts that occur in these resource areas will require coordination with the appropriate Federal agency.

13) Department of Defense (DOD) Siting Clearinghouse Coordination: For all commercial and institutional development projects that include the construction of wind energy generating structures, solar towers, or overhead powerlines the VDEQ must notify the DOD Clearinghouse of the permitted project. The VDEQ will send a copy of the joint permit application and SPGP verification letter to the following address: DoD Clearinghouse, Attn: David Blalock, 101 Marietta St. NW, Suite 3120, Atlanta, Georgia 30303 or david.c.blalock2.civ@mail.mil

14) Navigation: No authorized activity may cause more than a minimal adverse effect on navigation.

The permittee understands and agrees that if future operations by the United States require the removal, relocation, or other alteration of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his/her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United

States. No claim shall be made against the United States on account of any such removal or alteration.

15) Floodplains: The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

16) 408 Certification: Under 33 USC 408, no activity may temporarily or permanently alter or make use of a U.S. Army Corps of Engineers civil works project unless reviewed and permitted by the Secretary of the Army. The Corps may grant this permission if the work does not impair the usefulness of the project and is not injurious to the public interest.

17) Environmental justice: Activities authorized under 17-SPGP-01 must comply with Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations".

18) Federal liability: In issuing 17-SPGP-01, the Federal government does not assume any liability for the following: (a) damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes; (b) damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest; (c) damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by 17-SPGP-01; (d) design or construction deficiencies associated with the permitted work; (e) damage claims associated with any future modification, suspension, or revocation of this permit.

19) Avoidance and minimization: Except as provided under section 404(b)(2), no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.(40 CFR 230.l0(a)-(d) Section 404 (b)(l) Guidelines).

20) Compensatory Mitigation: Mitigation will be required for all permanent impacts, on a project site, once the compensatory mitigation threshold has been exceeded for waters OR wetland impacts.

    a. Wetland mitigation: will generally be required for all residential, commercial, and institutional development projects where the total permanent impacts exceed 1/10 acre AND for all wetland impacts on linear transportation projects that are funded in part or in total by local, state or federal funds.

Generally, the minimum required wetland mitigation ratios will be as follows:

- 2:1 for forested wetlands
- 1.5:1 for scrub-shrub wetlands
- 1:1 for herbaceous emergent wetlands
- 0.5:1 for permanent loss of open waters
- 1:1 for conversion of forested wetlands to herbaceous emergent wetlands.

Compensatory mitigation may be required on a case-by-case basis to ensure impacts are minimal for:

- permanent or temporary conversion of one wetland type to another
- wetland impacts totaling less than 1/10 acre
- at mitigation ratios beyond the generally recommend ratios

All wetland mitigation will comply with the Mitigation Rule [Corps-EPA Compensatory Mitigation for Losses of Aquatic Resources, dated April 10, 2008, 33 CFR 325 and 332/40 CFR 230].

b. Stream mitigation: will generally be required for all residential, commercial, institutional developments AND linear transportation projects where the total permanent stream channel impacts exceed 300 linear feet.

Minimum stream mitigation requirements will be determined using the current Corps and VDEQ endorsed assessment methodology.

Stream mitigation that exceeds the assessment methodology recommendation and mitigation for impacts totaling less the 300 linear feet may be required on a case-by-case basis to ensure impacts are minimal.

All stream mitigation will comply with Mitigation Rule [Corps-EPA Compensatory Mitigation for Losses of Aquatic Resources dated April 10, 2008 33 CFR 325 and 332; 40 CFR 230].

Where local zoning ordinances provide for riparian and floodplain protection pursuant to the Chesapeake Bay Preservation Act (Virginia Code 10.1-2100 et seq.) and the Chesapeake Bay Preservation Area Designation and Management Regulations (9 VAC 1-20 et seq.), the use of buffers as a form of compensatory mitigation shall be allowed only:

- where the extent of the buffer exceeds the lateral extent already required by local ordinances pursuant to the Act and the regulations
- where the quality of the existing protected buffer area is enhanced to provide greater water quality protection benefits
- where the proposed compensatory mitigation is undertaken in

compliance with the Mitigation Rule [Corps-EPA Compensatory Mitigation for Losses of Aquatic Resources: Final Rule dated April 10, 2008 33 CFR 332.4(c)(2)-(14) and 33 CFR 332.3(h)]

21) Heavy Equipment: Heavy equipment working in wetlands must be placed on mats, or other measures must be taken to minimize soil disturbance.

22) Temporary fills: All temporarily disturbed waters and wetlands must be restored to their pre-construction contours within 12 months of commencing the temporary impact's construction. Impacts that will not be restored within 12 months (calculated from the start of the temporary impacts construction) will be considered permanent unless otherwise approved by the Corps, and compensatory mitigation may be required. Once restored to their natural contours, soil in these temporarily disturbed areas must be mechanically loosened to a depth of 12 inches and wetland areas must be seeded or sprigged with appropriate native vegetation.

23) Sedimentation and erosion control: Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

24) Countersinking of Pipes and Culverts: Following consultation with the Virginia Department of Game and Inland Fisheries (VDGIF), the Norfolk District assumes there are fish and other aquatic organisms present in any stream being crossed, in the absence of site-specific evidence to the contrary. Although prospective permittees have the option of providing such evidence, extensive efforts to collect such information is not encouraged, since countersinking will in most cases be required except as outlined in the conditions below:

   a. All pipes and culverts placed in streams will be countersunk at both the inlet and outlet ends, unless indicated otherwise by the VDEQ on a case-by-case basis (see below). Pipes that are 24" or less in diameter shall be countersunk 3" below the natural stream bottom. Pipes that are greater than 24" in diameter shall be countersunk at least 6" below the natural stream bottom. The countersinking requirement does not apply to bottomless pipes/culverts or pipe arches. All single pipes or culverts (with bottoms) shall be depressed (countersunk) below the natural streambed at both the inlet and outlet of the structure. In sets of multiple pipes or culverts (with bottoms) at least one pipe or culvert shall be depressed (countersunk) at both the inlet and outlet to convey low flows.
   b. When countersinking culverts, permittees must ensure reestablishment of a surface water channel (within 15 days post

construction) that allows for the movement of aquatic organisms and maintains the same hydrologic regime that was present pre-construction (i.e. the depth of surface water through the permit area should match the upstream and downstream depths). This may require the addition of finer materials to choke the larger stone and/or placement of riprap to allow for a low flow channel.

c. Exemption for extensions and certain maintenance: The requirement to countersink does not apply to extensions of existing pipes or culverts that are not countersunk, or to maintenance to pipes/culverts that does not involve replacing the pipe/culvert (such as repairing cracks, adding material to prevent/correct scour, etc.).

d. Floodplain pipes: The placement of pipes/culverts above ordinary high water, such as those placed to allow for flood plain flows, is not jurisdictional (provided no fill is discharged into wetlands).

e. Hydraulic opening: Pipes should be adequately sized to allow for the passage of ordinary high water with the countersinking and invert restrictions taken into account.

f. Pipes on bedrock or above existing utility lines: Different procedures will be followed for pipes or culverts to be placed on bedrock or above existing buried utility lines where it is not practicable to relocate the lines, depending on whether the work is for replacement of an existing pipe/culvert or a new pipe/culvert:

    i. Replacement of an existing pipe/culvert: Countersinking is not required provided the elevations of the inlet and outlet ends of the replacement pipe/culvert are no higher above the stream bottom than those of the existing pipe/culvert. Documentation (photographic or other evidence) must be maintained in the permittee's records showing the bedrock condition and the existing inlet and outlet elevations. That documentation will be available to the Norfolk District upon request, but notification or coordination with the Norfolk District is not otherwise required.

    ii. A pipe/culvert is being placed in a new location: If the prospective permittee determines that bedrock or an existing buried utility line that is not practicable to relocate prevents countersinking, they should evaluate the use of a bottomless pipe/culvert, bottomless utility vault, span (bridge) or other bottomless structure to cross the waterway, and also evaluate alternative locations for the new pipe/culvert that will allow for countersinking. If the prospective permittee determines that neither a bottomless structure nor an alternative location is practicable, then they must submit supporting documentation in the JPA. The prospective permittee must provide documentation of measures evaluated to minimize disruption of the movement of aquatic

life as well as documentation of the cost, engineering factors, and site conditions that prohibit countersinking the pipe/culvert. Options that must be considered include partial countersinking (such as less than 3" of countersinking, or countersinking of one end of the pipe), and constructing stone step pools, low rock weirs downstream, or other measures to provide for the movement of aquatic organisms. The permit application must also include photographs documenting site conditions. The prospective permittee may find it helpful to contact his/her regional fishery biologist for the VDGIF, for recommendations about the measures to be taken to allow for fish movements. When seeking advice from VDGIF, the prospective permittee should provide the VDGIF biologist with all available information such as location, flow rates, stream bottom features, description of proposed pipe(s), slopes, etc. Any recommendations from VDGIF should be included in the JPA. The VDEQ will notify the prospective permittee whether the proposed work qualifies for the 17-SPGP-01. NOTE: Blasting of stream bottoms through the use of explosives is not acceptable as a means of providing for countersinking of pipes on bedrock.

g. Pipes on steep terrain: Pipes being placed on steep terrain (slope of 5% or greater) must be countersunk in accordance with the conditions above. It is recommended that on slopes greater than 5%, a larger pipe than required be installed to allow for the passage of ordinary high water in order to increase the likelihood that natural velocities can be maintained. There may be situations where countersinking both the inlet and outlet may result in a slope in the pipe that results in flow velocities that cause excessive scour at the outlet and/or prohibit some fish movement. This type of situation could occur on the side of a mountain where falls and drop pools occur along a stream. Should this be the case, or should the prospective permittee not want to countersink the pipe/culvert for other reasons, they must provide documentation of measures evaluated to minimize disruption of the movement of aquatic life as well as documentation of the cost, engineering factors, and site conditions that prohibit countersinking the pipe/culvert. The prospective permittee should design the pipe to be placed at a slope as steep as stream characteristics allow, countersink the inlet 3-6", and implement measures to minimize any disruption of fish movement. These measures can include constructing a stone step/pool structure, preferably using river rock/native stone rather than riprap, constructing low rock weirs to create a pool or pools, or other structures to allow for fish movements in both directions. Stone structures should be designed with sufficient-sized stone to prevent

erosion or washout and should include keying-in as appropriate. These structures should be designed both to allow for fish passage and to minimize scour at the outlet. The quantities of fill discharged below ordinary high water necessary to comply with these requirements (i.e., the cubic yards of stone, riprap or other fill placed below the plane of ordinary high water) must be included in project totals. The prospective permittee may find it helpful to contact the regional fishery biologist for the VDGIF, for recommendations about the measures to be taken to allow for fish movements. When seeking advice from VDGIF, the applicant should provide the VDGIF biologist with all available information such as location, flow rates, stream bottom features, description of proposed pipe(s), slopes, etc. Any recommendations from DGIF should be included in the permit application. The VDEQ will notify the prospective permittee whether the proposed work qualifies for the 17-SPGP-01.

h. Problems encountered during construction: When a pipe/culvert is being replaced, and the design calls for countersinking at both ends of the pipe/culvert, and during construction it is found that the streambed/banks are on bedrock, a utility line, or other documentable obstacle, then the permittee must stop work and contact the VDEQ (contact by telephone and/or email is acceptable). The permittee must provide the VDEQ with specific information concerning site conditions and limitations on countersinking. The VDEQ will work with the permittee to determine an acceptable plan, taking into consideration the information provided by the permittee, but the permittee should recognize that the VDEQ and/or Corps could determine that the work will not qualify for a 17-SPGP-01 authorization.

i. Emergency pipe replacements: In the case of an emergency situation, such as when a pipe/culvert washes out during a flood, a permittee is encouraged to countersink the replacement pipe at the time of replacement, in accordance with the conditions above. However, if conditions or timeframes do not allow for countersinking, then the pipe can be replaced as it was before the washout, but the permittee will have to come back and replace the pipe/culvert and countersink it in accordance with the guidance above. In other words, the replacement of the washed out pipe is viewed as a temporary repair, and a countersunk replacement should be made at the earliest possible date. The VDEQ must be notified of all pipes/culverts that are replaced without countersinking at the time that it occurs, and must provide the permittee's planned schedule for installing a countersunk replacement (it is acceptable to submit such notification by email). The permittee should anticipate whether bedrock or steep terrain will limit countersinking and, if so, should follow the procedures outlined in (g) and/or (h) above.

25) Discharge of pollutants: All authorized activities involving any discharge of pollutants into waters of the United States shall be consistent with applicable water quality standards, effluent limitations, standards of performance, prohibitions, and pretreatment standards and management practices established pursuant to the CWA (33 U.S.C. § 1251 et seq.) and applicable state and local laws.

26) Suitable Material: No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

27) Obstruction of high flows: Discharges of dredged or fill material must not permanently restrict or impede the passage of normal or expected high flows.

28) Aquatic Life Movements: No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.

29) Spawning Areas: Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

30) Migratory Bird Breeding Areas: Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

31) Native trout and anadromous fishes: Authorizations for discharges of dredged or fill material into native trout waters or anadromous fish spawning areas are conditioned to limit in-stream work within the timeframes recommended by the DGIF. http://206.16.194.16/environmental-programs/files/VDGIF-Time-of-Year-Restrictions-Table.pdf

32) Water supply intakes: No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization

33) Invasive Species: Plant species on the most current Virginia Department of Conservation and Recreation's Invasive Plant Species List shall not be used for replanting activities authorized by the SPGP. The list of invasive plants in Virginia

may be found at: http://www.dcr.virginia.gov/natural-heritage/document/nh-invasive-plant-list-2014.pdf

34) Inspections: The permittee understands and agrees that the Corps and/or the VDEQ are permitted and allowed to make periodic inspections at any time the Corps or VDEQ deems necessary in order to assure that the activities being performed under authority of this permit are in accordance with the terms and conditions prescribed herein. The Corps reserves the right to require post-construction engineering drawings and/or surveys of any work authorized under 17- SPGP-01, as deemed necessary on a case-by-case basis.

35) Maintenance: The permittee shall maintain the work authorized herein in good condition and in conformance with all terms and conditions of this permit. All fills shall be properly maintained to ensure public safety.

36) Property rights: 17-SPGP-01 does not convey any property rights, either in real estate or material, or convey any exclusive privileges, nor does it authorize any injury to property or invasion of rights or any infringement of Federal, state, or local laws or regulations. If real estate rights are needed from the Corps, you must contact the Corps Real Estate Office at (757) 201-7735 or at the address listed on the front page of this permit.

37) Suspension and revocation: 17-SPGP-01 and individual verifications under 17-SPGP-01 maybe either suspended or revoked in whole or in part pursuant to the policies and procedures of 33 C.F.R. § 325.7. Any such action shall not be the basis for any claim for damages against the United States.

38) Restoration directive: The permittee, upon receipt of a restoration directive, shall restore the waters of the United States to their former conditions without expense to the United States and as directed by the Secretary of the Army or his/her authorized representative. If the permittee fails to comply with such a directive, the Secretary or his/her designee, may restore the waters of the United States to their former conditions, by contract or otherwise, and recover the cost from the permittee.

39) Special conditions: The Corps may impose other special conditions on a project verified pursuant to 17-SPGP-01 that are determined necessary to minimize adverse navigational and/or environmental effects or based on any other factor of the public interest. Failure to comply with all conditions of the authorization/verification, including special conditions, constitutes a permit violation and may subject the permittee, or his/her contractor, to criminal, civil, or administrative penalties and/or restoration.

40) False or incomplete information: In granting authorization pursuant to this permit, the Corps has relied upon information and data provided by the permittee. If,

subsequent to notification by the Corps or the VDEQ that a project qualifies for this permit, such information and data prove to be materially false or materially incomplete, the Corps may suspend or revoke authorization, in whole or in part, and/or the United States or Corps may institute appropriate legal proceedings.

41) Abandonment: If the permittee decides to abandon the activity authorized under I7-SPGP-01, unless such abandonment is merely the transfer of property to a third party, they may be required to restore the area to the satisfaction of the Corps.

42) Transfer of verification: In order to transfer verification under 17-SPGP-01, the transferee and permittee must supply the Corps and the VDEQ with a written and signed, by all appropriate parties, request to make such a transfer. Such transfer is not effective until written approval has been granted by the Corps or the VDEQ.

43) Binding effect. The provisions of the permit authorization shall be binding on any assignee or successor in interest of the original permittee.

44) Expiration of 17-SPGP-01: Unless further suspended or revoked the 17-SPGP-01 will be in effect until May 31, 2022. Activities which have commenced (i.e., are under construction) or are under contract to commence construction in reliance upon 17-SPGP-01 will remain authorized provided the activity is completed within twelve months of the date of this 17-SPGP-01's expiration of May 31, 2022, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization in accordance with 33 CFR 325.7(a-e).

Jason E. Kelly, PMP
Colonel, U.S. Army
Commanding

March 5, 2019

FACT SHEET
Virginia Water Protection Individual Permit No. 18-1003
Northfax, City of Fairfax

DEQ has reviewed the application for the Virginia Water Protection (VWP) Individual Permit Number 18-1003 and has determined that the project qualifies for an individual permit.

The following details the application review process and summarizes relevant information for developing the Part I - Special Conditions for permit issuance.

1. Contact Information:

Permittee Legal Name and Address:

Northfax JV LLC
3900 Jermantown Road, Suite 300
Fairfax, Virginia 22030
Mr. John E. Napolitano, Manager
703-934-4600

Agent Legal Name and Address:

Apex Companies, LLC c/o
9700 Capital Court, Suite 100
Manassas, Virginia 20110
Mr. Jason Franti
703-396-6730

2. Processing Dates:

Received Application:	June 25, 2018
Received VMRC Number:	June 25, 2018
Application Complete:	September 12, 2018
Permit Fee Deposited by Accounting:	August 27, 2018
Application Suspended:	September 26, 2018
Application Reinstated:	December 11, 2018
Processing Deadline (120 days from Complete Application):	March 27, 2019
1st Request for Additional Information Sent:	July 3, 2018
Final Request for Additional Information Received:	September 12, 2018
Section 106 SPGP Coordination Initiated:	August 13, 2018
Section 7 SPGP Coordination Initiated:	August 13, 2018
Request for comments sent to USACE, USEPA and USFWS:	August 13, 2018
Completion of SPGP coordination:	October 31, 2018
Notification of JPA sent to Local Government(s):	June 28, 2018
Commissioner of Revenue Contacted:	*N/A*
Request for comments sent to VDH, VDGIF, VDCR, VMRC:	June 28, 2018
Letters sent to Riparian Land Owners:	July 11, 2018
Draft Permit Package Issued:	January 2, 2019
Copy of Public Notice sent to DEQ Central Office:	January 2, 2019
Copy of Public Notice sent to Local Gov't and Planning District:	January 2, 2019
Application Suspended Pending Public Notice:	January 17, 2019
Public Notice Published:	January 18, 2019
Application Reinstated:	January 18, 2019
End of 30-Day Public Comment Period:	February 18, 2019
Received Verification of Publication:	January 22, 2019
Permit Issued:	March 5, 2019

3. Project Location:

The project site is located northeast of the intersection of Chain Bridge Road (VA-123) and Fairfax Boulevard (US-50) in the City of Fairfax, Virginia.

City/County:	City of Fairfax
Waterbody:	Accotink Creek, UT
Basin:	Potomac
Subbasin:	Middle Potomac
Section:	7
Class:	III
Special Standards:	b
HUC:	02070010
Latitude & Longitude:	38.859417, -77.309689
U.S.G.S. Quadrangle:	Fairfax
State Watershed No.:	VAN-A15R

4. Project Description:

The permittee proposes to construct a mixed-use development with associated infrastructure, on an approximately 10.6 acre development site, known as "Northfax."

5. Avoidance and Minimization Efforts:

Avoidance and minimization efforts have been documented by the applicant in the JPA as well as subsequent submittals. The purpose and need of the project is a mixed-use development. However, the purpose and need cannot be met without flood control. A perennial stream channel bisects the property and the development site has been known historically to flood. Complete and partial avoidance was considered by the applicant, however due to the flood conditions and the location of surface waters onsite, completely avoiding or partially piping the channel would result in minimizing the developable area to around fifty-percent of the original design with flooding concerns further minimizing the developable area.

Complete avoidance was considered and deemed infeasible to meet the projects purpose and need as it would reduce the developable land to 4.40 acres thus reducing the Annualized Cost on Return (IRR) to well below the target. In addition, the flood elevations would still render approximately fifty-percent of the developable land area in an unusable condition due to the presence of RPA and flood zones. A historic trolley bridge is located just off-site over the intermittent channel, downstream of the confluence of the two channels, which causes back watering due to its limiting size. Discharge at the confluence of the stream channels during the 100-year storm creates a significant back-water situation thus further limiting developable area due to flood concerns.

A partial stream piping scenario was also considered, in which approximately 500 linear feet of stream channel would be piped leaving most of the perennial stream and all the intermittent stream intact. In this scenario Orchard Road would be still constructed in order to access the western portion of the property. As the stream channel bisects the 10.6 acre development site, the use of Orchard Road would necessitate significant alteration to the flood zones through the installation of a culverted road crossing, thus constricting flood flows and increasing flooding to the northern portion of the property. The back-water flooding associated with the historic trolley bridge would still be a limiting factor for developable land. Flood elevations will allow development of approximately fifty-percent of the total developable area rendering the IRR for the alternative well below the target, thus this alternative was deemed infeasible to meet the projects purpose and need.

For additional information, see page 4-5 of the JPA dated June 22, 2018, the additional information response dated August 10, 2018, and the response to EPA comments dated October 16, 2018.

Based upon staff review, the applicant has demonstrated that the proposed plan represents the least environmentally damaging and practicable alternative and all unavoidable permanent impacts will be adequately mitigated through the proposed compensation plan.

6. Project Impacts:

This permit authorizes the total permanent impact to 0.50 acre (1,646 linear feet) of stream channel. Authorized surface water impacts shall be as depicted on the impacts map entitled Stream Impact Exhibit dated August 9, 2018, with latest revision date of August 21, 2018, and received September 12, 2018.

7. Compensation for Unavoidable Impacts:

The permittee shall compensate for permanent stream impacts through the purchase of 1,675 stream credits or 4,761 Stream Condition Units from a DEQ approved mitigation bank, in-lieu fee fund, or a combination thereof that is authorized and approved by DEQ to sell credits in the area in which the impacts will occur and has credits available (as released by DEQ). The credit sale shall be in accordance with the approved Mitigation Banking Instrument for the mitigation bank. Purchase of required mitigation credits shall occur first through the purchase of available released credits followed by the purchase of advance credits.

The compensation package conforms with the preference hierarchy of the 2008 Compensatory Mitigation Rule issued by the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers (USACE) and DEQ's Guidance Memorandum No. 09-2004 (Applying Compensatory Mitigation Preferences Provided in the EPA Mitigation Rule to Virginia Water Protection Permitting).

8. Site Inspection:

A site visit was conducted on July 23, 2018. The site visit confirmed the site description provided in the applications materials accurately characterized the surface waters on the site. A summary of the site inspection is located in VWP Permit File No. 18-1003.

9. Relevant Regulatory Agency Comments:

As part of the application review process, DEQ contacted the appropriate state regulatory agencies and coordinated with various federal regulatory agencies, including the U.S. Army Corps of Engineers (USACE). No comments received required a change to VWP individual permit Part I - Special Conditions. Therefore, the staff anticipates no adverse effect on water quality and fish and wildlife resources provided the applicant adheres to the permit conditions.

a. Summary of State Agency Comments and Actions

By email/letter dated June 28, 2018, comments were requested from the following state agencies: Virginia Department of Game and Inland Fisheries (DGIF), Virginia Department of Conservation and Recreation (DCR), Virginia Marine Resources Commission (VMRC), and

Virginia Department of Health (VDH). Failure to provide comments within 45 calendar days of the DEQ request for comments infers that the agency has no comments on the project activities.

DCR
DCR provided the following comments in a memorandum dated and transmitted by email on August 10, 2018:

- Recommends the implementation of the following USFWS voluntary measures for the conservation of the Rusty patched bumble bee (*Bombus affinis*): avoid pesticide use, avoid herbicide use, and plant native flowers that bloom throughout the spring and summer to support pollinator habitat.

The measures will not be included in the permit as they are listed as voluntary.

DGIF
DGIF provided comments to DEQ by email dated August 10, 2018.

- Recommended conducting any in-stream activities during low or no-flow conditions, using non-erodible cofferdams or turbidity curtains to isolate the construction area, blocking no more than 50% of the streamflow at any given time, stockpiling excavated material in a manner that prevents reentry into the stream, restoring original streambed and streambank contours, revegetating barren areas with native vegetation, and implementing strict erosion and sediment control measures.

  The special conditions of the permit address these activities.

- Recommend coordination with DCR's Department of Natural Heritage as the project is located within 2 miles of a documented occurrence of a state or federal threatened or endangered plant or insect species and/or other Natural Heritage coordination species.

Staff requested comments from DCR on the proposed project on June 28, 2018.

- Recommend that the permittee avoid and minimize impacts to undisturbed forest, wetlands, and streams to the fullest extent practicable to minimize overall impacts to wildlife and our natural resources. DGIF also recommended maintaining undisturbed naturally vegetated buffers of at least 100 feet in width around all on-site wetlands and on both sides of all perennial and intermittent streams.

  Staff reviewed the proposed impacts to surface waters and determined those proposed have been minimized to the maximum extent practicable.

- Recommended that the stormwater controls for this project be designed to replicate and maintain the hydrographic condition of the site prior to the change in landscape.

  Oversight of stormwater management and erosion and sediment control measures is the responsibility of DEQ-Stormwater Management or the locality, if such responsibility has

been delegated. Any such requirements will be implemented under the oversight of that program.

- Recommended that all tree removal and ground clearing adhere to a time of year restriction protective of resident and migratory songbird nesting from March 15 through August 15 of any year.

  This time of year restriction was not included in the permit as it's not associated with a threatened or endangered species. The recommendation was forwarded to the permittee for their consideration.

- Recommended adherence to erosion and sediment controls during ground disturbance.

  Oversight of stormwater management and erosion and sediment control measures is the responsibility of DEQ-Stormwater Management or the locality, if such responsibility has been delegated. Any such requirements will be implemented under the oversight of that program.

VDH
VDH provided comments in a memorandum dated July 12, 2018, and received on July 16, 2018, that no public raw water intakes were found, in the commonwealth, downstream from the proposed construction site.

VMRC
VMRC provided comments in a letter dated and transmitted by email on August 7, 2018, stating that the project is not within the purview of the agency and the Commission has no objection to DEQ's issuance of a VWP individual permit. A "No Permit Necessary" letter was issued on June 6, 2018.

b. Summary of Federal Agency Comments and Actions

The project is being reviewed by DEQ for a State Programmatic General Permit (SPGP). By letter dated July 13, 2018, comments were requested from the following federal agencies: Environmental Protection Agency (EPA), U.S. Army Corps of Engineers (USACE), and U.S. Fish and Wildlife (FWS).

Section 106
USACE provided comments to DEQ by email transmitted October 30, 2018 stating the Department of Historic Resources concurs with the Corps' determination that there will be "No Historic Properties Affected" by the proposed project.

Section 7
FWS responded to the request for Section 7 comments by email transmitted on August 14, 2018 requesting a Self-Certification Letter. DEQ responded on August 24, 2018, with the Self-Certification Letter. No response was received within 30 days of the latest transmittal.

Federal Review
EPA responded to the request for Federal Review by email transmitted on August 28, 2018, requesting more information on avoidance and minimization. The applicant responded to the comments, and the response was forwarded to EPA on October 16, 2018. No response was received within 15 days of the latest transmittal. No project comments were received from FWS or USACE.

10. Riparian Landowner Notification:

Staff notified riparian landowners located adjacent to the impact area by letter dated July 11, 2018. The impacted stream channel is piped starting at the edge of the property continuing offsite, therefore downstream landowners were not notified.

Notifications of riparian and adjacent landowners were conducted in accordance with DEQ's Guidance Memorandum No. 11-2005 (Revised Local Government, Riparian Property Owner, Adjacent Property Owner or Resident, and General Public Notification Procedures for VPDES, VPSA and VWP Permit Applications and Draft Permits).

No significant responses were received.

11. Changes in Permit Part I - Special Conditions Due to Public Comments:

The public notice was published in Fairfax County Times Friday-Sunday, January 18-20, 2019, on January 18, 2019. The public comment period ran from January 19, 2019, to February 18, 2019.

One public comment letter was received. However, no substantial or disputed issues were presented that warranted revisions to the draft conditions of the permit.

12. Special Conditions:

The following conditions were developed to protect instream beneficial uses, to ensure compliance with applicable water quality standards, to prevent significant impairment of state waters or fish and wildlife resources, to provide for no net loss of wetland acreage, and to provide no net loss of functions in all surface waters through compensatory mitigation and monitoring and reporting.

Section A Authorized Activities

Nos. 1-3 addresses the activities authorized by this permit, including impact types and limits.

Section B Permit Term

Nos. 1-2 addresses the permit term and re-issuance process to ensure that all permit conditions are completed.

Section C Standard Project Conditions

No. 1 addresses the requirement for the minimization of adverse impacts to instream beneficial uses.
No. 2 ensures that the project will be executed in a manner that limits the disruption of the movement of aquatic life.
No. 3 ensures that downstream flows will be maintained to protect both instream and off-stream beneficial uses
No. 4 ensures the minimization of adverse effects on navigation.
No. 5 ensures the passage of high flows.
No. 6 requires maintenance of continuous flow of perennial springs for the protection of instream beneficial use.
No. 7 ensures that dredging and filling operations will minimizes stream bottom disturbances and turbidity.
No. 8 requires instream activities to be conducted during low-flow conditions to protect instream beneficial uses.
Nos. 9 through 11 provide requirements and limitations on the entry of various materials (including concrete, fill, construction and waste material, fuels, lubricants, and untreated stormwater runoff) into state waters.
Nos. 12 and 13 limit the use of machinery and equipment in surface waters to protect beneficial uses
Nos. 14 through 18 require temporary disturbances to surface waters during construction to be avoided and minimized to the maximum extent practicable and the restoration of such temporary disturbances.
No. 19 prohibits the violation of Water Quality Standards in surface waters as a result of project activities
No. 20 requires the identification of all non-impacted surface waters in the vicinity of the proposed activity to prevent unpermitted impacts
Nos. 21 through 25 set forth all reporting requirements concerning construction, monitoring, compensation, and restoration as required by current law and regulations.

Section D Stream Modifications, Including Intake/Outfall Structures

No. 1 prohibits the use of stream substrate for erosion control to avoid additional impacts to state waters.
No. 2 requires upland disposal of material removed from stream substrate to avoid unpermitted impacts to surface waters.
No. 3 ensures riprap placement conforms to current law and regulation.
Nos. 4 and 5 direct the placement and contents of materials for the construction of submerged structures, and on-bank storage and staging of materials, to protect water quality and fish and wildlife resources.

Section E Installation of Utilities

No. 1 requires the minimization of disturbance to surface waters and restoration to preconstruction conditions following utility line installation.

No. 2 sets a 90-day time limit for temporary sidecasting during trench excavation to minimize impacts to surface waters.
No. 3 provides the requirements for trench construction to avoid the drainage of surface waters.

Section F Road Crossings

No. 1 provides specifications for access road construction to minimize adverse effects to surface waters.
No. 2 ensures pipes and culvert construction is conducted in the dry to protect water quality and wildlife habitat.
No. 3 requires that temporary impacts be restored immediately following construction to minimize impacts to water quality and fish and wildlife resources.
No. 4 summarizes requirements for pipe and culvert placement and countersinking to provide for the re-establishment of a natural stream bottom and low flow channel to maintain instream beneficial uses
No. 5 requires measurement of stream bottom elevations at road crossings to ensure for the re-establishment of a natural stream bottom and low flow channel to maintain instream beneficial uses. The intent of this condition is to maintain a hydrologic connection and enable the stream bottom to reestablish in the culvert. The stream crossing(s) to which this condition pertains is identified in the condition.

Section G Stormwater Management Facilities

No. 1 defines the general requirements for stormwater management facility construction to minimize adverse effects to aquatic resources and provide for long-term aquatic resources protection and enhancement.
No. 2 provides limits and guidance for maintenance excavation to avoid unpermitted impacts to surface waters.

Section H Project Construction Monitoring and Submittals (Impact Site)

Nos. 1 through 6 address monitoring and submittals required for pre-construction, during construction and post-construction for the impact areas on site.

Section I Compensatory Mitigation

No. 1 describe the compensatory mitigation required to mitigate for the permitted impacts.
No. 2 describes the documentation requirement for the purchase of the required amount of credits.

13. General Conditions:

The general conditions specified in the effective VWP Permit Program Regulation 9VAC25-210 apply to all VWP individual permits.

14. General Criteria (9VAC25-260-20 A):

State waters, including wetlands, shall be free from substances attributable to sewage, industrial waste, or other waste in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such water or which are inimical or harmful to human, animal, plant, or aquatic life.

Specific substances to be controlled include, but are not limited to: floating debris, oil, scum, and other floating materials; toxic substances (including those which bioaccumulate); substances that produce color, tastes, turbidity, odors, or settle to form sludge deposits; and substances which nourish undesirable or nuisance aquatic plant life. Effluents which tend to raise the temperature of the receiving water will also be controlled. Conditions within mixing zones established according to 9VAC25-260-20 B do not violate the provisions of this subsection.

15. Staff Findings and Recommendations:

- In compliance with § 401 of the Clean Water Act, as amended (33 USC § 1341) and the State Water Control Law and regulations adopted pursuant thereto, the board has determined that there is a reasonable assurance that this VWP permit, if complied with, will protect instream beneficial uses, will not violate applicable water quality standards, and will not cause or contribute to a significant impairment of state waters or fish and wildlife resources. In issuing this VWP permit, the board has not taken into consideration the structural stability of any proposed activities.

- The proposed permit conditions address no net loss of wetland acreage and no net loss of functions in all surface waters, through the avoidance and minimization of wetland impacts to the maximum extent practicable; compensatory mitigation; and compensation monitoring and reporting. Permitted wetland impacts have been inventoried in evaluating this proposed permit.

- The draft permit reflects the required consultation with and full consideration of the written recommendations of VMRC, VDH, DCR and DGIF.

Staff recommends VWP Individual Permit Number 18-1003 be issued as proposed.

Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193
(703)583-3800
www.deq.virginia.gov

Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director
(804) 698-4000

Thomas A. Faha
Regional Director

March 5, 2019

By e-mail: john@lann.com
Receipt Confirmation Requested

Mr. John E. Napolitano, Manager
Northfax JV LLC
3900 Jermantown Road, Suite 300
Fairfax, Virginia 22030

Re: Virginia Water Protection (VWP) Individual Permit Number 18-1003
Northfax, City of Fairfax, Virginia
Final VWP Individual Permit

Dear Mr. Napolitano:

Pursuant to the VWP Permit Program Regulation 9 VAC 25-210 and § 401 of the Clean Water Act Amendments of 1977, Public Law 95-217, the Department of Environmental Quality has enclosed the VWP Individual Permit for the "Northfax" project.

This permit is valid for 15 years from the date of issuance. An extension of the permit may not occur as the permit term cannot exceed the maximum of 15 years. A new permit may be necessary if any portion of the authorized activities or any permit requirement (including compensatory mitigation provisions) is not complete at the end of the 15 year permit term.

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have **30 calendar days** from the date of service (the date you actually received this decision or the date it was e-mailed to you, whichever occurred first) within which to appeal this decision by filing a notice of appeal in accordance with the Rules of the Supreme Court of Virginia with the Director, Department of Environmental Quality. In the event that this decision is served on you by mail, three days are added to that period. Refer to Part 2A of the Rules of the Supreme Court of Virginia for additional requirements governing appeals from administrative agencies.

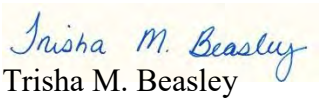
Alternatively, an owner may request a formal hearing for the formal taking of evidence upon relevant fact issues under Section 2.2-4020 of the Administrative Process Act. A petition for a formal hearing must meet the requirements set forth in 9VAC25-230 of the Virginia Administrative Code. In cases involving

actions of the board, such petition must be filed within 30 calendar days after notice of such action is sent to such owner by certified mail.

The work authorized by this permit also satisfies the terms and conditions contained in the Norfolk District, Corps of Engineers' State Program General Permit (17- SPGP-01) and the special conditions, if any, attached to 17-SPGP-01. No additional authorization from the Corps is required. Your 17-SPGP-01 authorization is effective as of the date on this letter and remains effective until May 31, 2022.

If you have any questions, please contact Wynn Prusaczyk by phone at (703) 583-3871 or by email at Wynn.Prusaczyk@deq.virginia.gov.

Respectfully,



Trisha M. Beasley
Regional VWPP Program Manager

Enclosures: Permit Cover Page, Part I - Special Conditions, Part II - General Conditions, Monthly VWP Permit Inspection Checklist, VWP Permit Construction Status Update Form, 17-SPGP-01 Verification Letter, and 17-SPGP-01

Cc (by e-mail):
Mr. Jason Franti, Apex Companies, LLC
Mr. Jim Irre, Apex Companies, LLC
Ms. Theresita Crockett-Augustine, U.S. Army Corps of Engineers, Northern VA Field Office

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

VWP Individual Permit Number 18-1003
Effective Date: March 5, 2019
Expiration Date: March 4, 2034

VIRGINIA WATER PROTECTION PERMIT ISSUED PURSUANT TO THE STATE WATER CONTROL LAW AND SECTION 401 OF THE CLEAN WATER ACT

In compliance with § 401 of the Clean Water Act, as amended (33 USC § 1341) and the State Water Control Law and regulations adopted pursuant thereto, the board has determined that there is a reasonable assurance that this VWP permit, if complied with, will protect instream beneficial uses, will not violate applicable water quality standards, and will not cause or contribute to a significant impairment of state waters or fish and wildlife resources. In issuing this VWP permit, the board has not taken into consideration the structural stability of any proposed activities.

Permittee: Northfax JV LLC

Address: 3900 Jermantown Road, Suite 300, Fairfax, Virginia 22030

Activity Location: The project is located northeast of the intersection of Chain Bridge Road (VA-123) and Fairfax Boulevard (US-50) in the City of Fairfax, Virginia.

Activity Description: The permittee proposes to construct a mixed-use development and associated infrastructure on an approximately 10.6 acre development area known as "Northfax." Permitted activities shall be conducted as described in the Joint Permit Application dated June 22, 2018, received on June 25, 2018, and supplemental materials, revisions and clarifications received through December 11, 2018.

Authorized Surface Water Impacts:

This permit authorizes the total permanent impact of 0.50 acre (1,646 linear feet) of stream channel. Authorized surface water impacts shall be as depicted on the impacts map entitled *Stream Impact Exhibit* dated August 9, 2018, with latest revision date of August 21, 2018, and received September 12, 2018.

Approved Compensation:

The permittee shall compensate for the authorized surface water impacts through the following:

1. Compensation for permanent stream impacts shall be provided through the purchase of 1,675 stream credits or 4,761 Stream Condition Units from a DEQ approved mitigation bank, in-lieu fee

fund, or a combination thereof that is authorized and approved by DEQ to sell credits in the area in which the impacts will occur and has credits available (as released by DEQ).

2. Mitigation bank credits shall be purchased prior to the purchase of in-lieu fee program credits in accordance with 9VAC25-210-116.C.2.

3. The credit sale shall be in accordance with the approved Mitigation Banking Instrument for the mitigation bank.

The permitted activity shall be in accordance with this Permit Cover Page, Part I - Special Conditions, and Part II - General Conditions.

Thomas A. Faha

Thomas A. Faha, Regional Director

March 5, 2019

Date

Part I – Special Conditions

A. Authorized Activities

1. This permit authorizes the total impact permanent impact of 0.50 acre (1,646 linear feet) of stream channel. Authorized surface water impacts described under this condition shall be as depicted on the impacts map entitled *Stream Impact Exhibit* dated August 9, 2018, with latest revision date of August 21, 2018, and received September 12, 2018.

2. The permittee shall conduct authorized activities as described in the Joint Permit Application dated June 22, 2018, and received June 25, 2018, and supplemental materials, revisions and clarifications received through December 11, 2018. Any changes to the authorized activities or impacts map that affect permitted areas shall be submitted to DEQ immediately upon determination that changes are necessary, and DEQ approval shall be required prior to implementing the changes.

3. The permittee shall notify the DEQ of any changes in authorized impacts to surface waters or any changes to the design or type of construction activities in surface waters authorized by this permit. DEQ approval shall be required prior to implementing the changes. Any additional impacts, modifications, or changes shall be subject to individual permit review and/or modification of this permit.

B. Permit Term

1. This permit is valid for **fifteen (15) years** from the date of issuance. A new permit may be necessary for the continuance of the authorized activities, or any permit requirement that has not been completed, including compensation provisions.

2. The permittee shall notify DEQ in writing at least 120 calendar days prior to the expiration of this permit if reissuance will be requested.

C. Standard Project Conditions

1. The activities authorized by this permit shall be executed in such a manner that any impacts to beneficial uses are minimized. As defined in § 62.1-10(b) of the Code, "beneficial use" means both instream and offstream uses. Instream beneficial uses include, but are not limited to, the protection of fish and wildlife habitat, maintenance of waste assimilation, recreation, navigation, and cultural and aesthetic values. The preservation of instream flows for purposes of the protection of navigation, maintenance of waste assimilation capacity, the protection of fish and wildlife resources and habitat, recreation, cultural and aesthetic values is an instream beneficial use of Virginia's waters. Offstream beneficial uses include, but are not limited to, domestic uses (including public water supply), agricultural uses, electric power generation, commercial uses, and industrial uses. Public water supply uses for human consumption shall be considered the highest priority.

2. No activity shall substantially disrupt the movement of aquatic life indigenous to the water body, including those species which normally migrate through the area, unless the primary purpose of the activity is to impound water.

3. Flows downstream of the project area shall be maintained to protect all uses.

4. No activity shall cause more than minimal adverse effect on navigation, and no activity shall block more than half of the width of the stream at any given time.

5. The activity shall not impede the passage of normal or expected high flows, and any associated structure shall withstand expected high flows.

6. Continuous flow of perennial springs shall be maintained by the installation of spring boxes, French drains, or other similar structures.

7. All excavation, dredging, or filling in surface waters shall be accomplished in a manner that minimizes bottom disturbance and turbidity.

8. All in-stream activities shall be conducted during low-flow conditions whenever practicable.

9. All construction, construction access, and demolition activities associated with this project shall be accomplished in a manner that minimizes construction materials or waste materials from entering surface waters, unless authorized by this permit. Wet, excess, or waste concrete shall be prohibited from entering surface waters.

10. All fill material placed in surface waters shall be clean and free of contaminants in toxic concentrations or amounts in accordance with all applicable laws and regulations.

11. Measures shall be employed at all times to prevent and contain spills of fuels, lubricants, or other pollutants into surface waters.

12. Machinery or heavy equipment in temporarily impacted wetlands shall be placed on mats or geotextile fabric, or other suitable means shall be implemented, to minimize soil disturbance to the maximum extent practical. Mats, fabrics, or other measures shall be removed as soon as the work is complete in the temporarily impacted wetland.

13. Stream channel restoration activities shall be conducted in the dry or during low flow conditions. When site conditions prohibit access from the streambank or upon prior authorization from the Department of Environmental Quality, heavy equipment may be authorized for use within the stream channel. The equipment shall be stationed on cobble bars.

14. Temporary disturbances to wetlands, stream channels, and/or stream banks during project construction activities shall be avoided and minimized to the maximum extent practicable.

15. All temporarily disturbed wetland areas shall be restored to preconstruction conditions within 30 calendar days of completing work in the areas, which shall include re-establishing pre-

construction contours, and planting or seeding with appropriate wetland vegetation according to cover type (emergent, scrub/shrub, or forested), except for invasive species identified on DCR's Virginia Invasive Plant Species List. The permittee shall take all appropriate measures to promote and maintain the revegetation of temporarily disturbed surface waters through the second year post-disturbance.

16. All temporarily impacted streams and stream banks shall be restored to their original elevations and contours within 30 calendar days following the construction at that stream segment, and the banks shall be seeded or planted with the same vegetative cover type originally present along the banks, including supplemental erosion control grasses if necessary but not including invasive species identified on DCR's Virginia Invasive Plant Species List.

17. All materials (including fill, construction debris, excavated materials, and woody materials, that are temporarily placed in wetlands, in stream channels, or on stream banks) shall be placed on mats or geotextile fabric, shall be immediately stabilized to prevent the material or leachate from entering surface waters, and shall be entirely removed within 30 calendar days following completion of that construction activity. After removal, disturbed areas shall be returned to original contours, shall be stabilized, and shall be restored to the original vegetated state within 30 calendar days.

18. Temporary in-stream construction features such as cofferdams shall be made of non-erodible materials.

19. Virginia Water Quality Standards shall not be violated in any surface waters as a result of the project activities.

20. All non-impacted surface waters that are within the project or right-of-way limits, and that are within fifty feet of any project activities, shall be clearly flagged or demarcated for the life of the construction activity within that area. The permittee shall notify all contractors and subcontractors that *no activities are to occur in these marked areas*.

21. All required notifications and submittals shall include project name and permit number and be submitted electronically to vwp.nro@deq.virginia.gov or mailed to the DEQ office stated below, to the attention of the VWP permit manager, unless directed in writing by DEQ subsequent to the issuance of this permit: Department of Environmental Quality- Northern Regional Office, 13901 Crown Court, Woodbridge, Virginia 22193.

22. All reports required by this permit and other information requested by DEQ shall be signed by the permittee or a person acting in the permittee's behalf, with the authority to bind the permittee. A person is a duly authorized representative only if *both* criteria below are met. If a representative authorization is no longer valid because of a change in responsibility for the overall operation of the facility, a new authorization shall be immediately submitted to DEQ.

    a. The authorization is made in writing by the permittee.

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, superintendent, or position of equivalent responsibility. A duly authorized representative may thus be either a named individual or any individual occupying a named position.

23. All submittals shall contain the following signed certification statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

24. Any fish kills or spills of fuels or oils shall be reported to DEQ immediately upon discovery at (703) 583-3800. If DEQ cannot be reached, the spill shall be reported to the Virginia Department of Emergency Management (DEM) at 1-800-468-8892 or the National Response Center (NRC) at 1-800-424-8802.

25. DEQ shall be notified in writing within 24 hours or as soon as possible on the next business day when potential environmentally threatening conditions are encountered which require debris removal or involve potentially toxic substances. Measures to remove the obstruction, material, or toxic substance or to change the location of any structure are prohibited until approved by DEQ.

D. Stream Modifications, Including Intake/Outfall Structures

1. Redistribution of existing stream substrate for erosion control purposes is prohibited.

2. Material removed from the stream bottom shall not be deposited into surface waters unless otherwise authorized in this permit.

3. Riprap apron for all outfalls shall be designed in accordance with Virginia Erosion and Sediment Control Handbook, Third Edition, 1992, or the most recent version in effect at the time of construction.

4. For streambank protection activities, structures and backfill shall be placed as close to the streambank as practical, while still avoiding and minimizing impacts to surface waters to the maximum extent practical. No material shall be placed in excess of the minimum necessary for erosion protection.

5. Asphalt and materials containing asphalt or other toxic substances shall not be used in the construction of submerged sills, breakwaters, dams, or weirs.

E. Installation of Utilities

1. All utility line work in surface waters shall be performed in a manner that minimizes disturbance in each area. Temporarily disturbed surface waters shall be restored in accordance with Part I.C.15, C.16, and C.17, unless otherwise authorized by this permit.

2. Material resulting from trench excavation may be temporarily sidecast into wetlands not to exceed a total of 90 calendar days, provided the material is not placed in a manner such that it is dispersed by currents or other forces.

3. The trench for a utility line cannot be constructed in a manner that drains wetlands (e.g., backfilling with extensive gravel layers creating a French drain effect).

F. Road Crossings

1. Access roads authorized by this permit shall be constructed to minimize the adverse effects on surface waters to the maximum extent practicable and to follow as near as possible pre-construction contours and elevations.

2. Installation of pipes and road crossings shall occur in the dry via the implementation of cofferdams, sheetpiling, stream diversions or other similar structures.

3. All surface waters temporarily affected by a road crossing shall be restored to their original elevations immediately following the removal of that particular temporary crossing. Temporary access roads shall be removed entirely following activity completion.

4. At crossings of streams, pipes and culverts must be installed to maintain low flow conditions and shall be countersunk at both inlet and outlet ends of the pipe or culvert, unless otherwise specifically approved by the Department of Environmental Quality on a case-by-case basis, and as follows: The requirement to countersink does not apply to extensions or maintenance of existing pipes and culverts that are not countersunk, floodplain pipes and culverts being placed above ordinary high water, pipes and culverts being placed on bedrock, or pipes and culverts required to be placed on slopes 5.0% or greater. Bedrock encountered during construction must be identified and approved in advance of a design change where the countersunk condition cannot be met. Pipes and culverts 24 inches or less in diameter shall be countersunk three inches below the natural stream bed elevations, and pipes and culverts greater than 24 inches shall be countersunk at least six inches below the natural stream bed elevations. Hydraulic capacity shall be determined based on the reduced capacity due to the countersunk position. In all stream crossings appropriate measures shall be implemented to minimize any disruption of aquatic life movement.

5. Stream bottom elevations at road crossings shall be measured at the inlet and outlet of the proposed structure and recorded prior to construction and within one week after the completion of construction to ensure that the design elevations were met. This information shall be recorded on the *Monthly VWP Permit Inspection Checklist (Attachment 2)* completed after the crossing is installed.

G. Stormwater Management Structures

1. The outfall and overflow structure shall be constructed and maintained to prevent downstream sediment deposition, erosion, or scour that may be associated with normal flow and any expected storm flows. Construction shall include the use of an appropriately sized riprap outlet protection apron at the outfall site.

2. Draining of a stormwater management facility shall be performed by a method that prevents downstream sediment deposition, erosion, or scour.

H. Project Construction Monitoring and Submittals (Impact Sites)

1. The permittee shall submit written notification at least **ten (10) calendar days** prior to the initiation of land disturbance or construction activities in permitted areas. The notification shall include a projected schedule for initiating and completing work at each permitted impact area.

2. Site inspections shall be conducted **once every calendar month** and recorded on the *Monthly VWP Permit Inspection Checklist* (*Attachment 2)* by the permittee or the permittee's qualified designee during active construction within authorized surface water impact areas. Monthly inspections shall be conducted in the following areas: all authorized permanent and temporary impact areas; all avoided surface waters, including wetlands, stream channels, and open water; surface water areas within 50 feet of any land disturbing activity; and all on-site areas designated for permanent preservation. The *Monthly VWP Permit Inspection Checklist* (*Attachment 2)* shall be completed in its entirety for each monthly inspection and shall be kept on-site and made available for review by DEQ staff upon request during normal business hours.

3. The *VWP Permit Construction Status Update Form* (*Attachment 1)* enclosed with this permit shall be completed in June and December of every year for the duration of this permit. The *VWP Permit Construction Status Update Form* (*Attachment 1)* shall include reference to the VWP permit authorization number and one of the following statements for each authorized surface water impact location:

   a. Construction activities not yet started;

   b. Construction activities started;

   c. Construction activities started but are currently inactive, or;

   d. Construction activities complete.

4. The *VWP Permit Construction Status Update Form* (*Attachment 2)* shall be submitted and must be received by DEQ no later than January 10 and July 10 of every year.

5. The permittee shall notify DEQ within 24 hours of discovering impacts to surface waters including wetlands, stream channels, and open water that are not authorized by this permit. The

notification shall include photographs, estimated acreage and/or linear footage of impacts, and a description of the impacts.

6. The permittee shall submit written notification of completion within 30 calendar days after the completion of all activities in all permitted impact areas authorized under this permit.

I. Compensatory Mitigation

1. The permittee shall compensate for permanent stream impacts through the purchase of 1,675 stream credits or 4,761 Stream Condition Units (SCUs) from a DEQ approved mitigation bank, in-lieu fee fund, or a combination thereof that is authorized and approved by DEQ to sell credits in the area in which the impacts will occur and has credits available (as released by DEQ). Mitigation bank credits shall be purchased prior to the purchase of in-lieu fee program credits in accordance with 9VAC25-210-116.C.2. The credit sale shall be in accordance with the approved Mitigation Banking Instrument for the mitigation bank.

2. The permittee shall submit documentation to DEQ prior to initiating work in permitted impact areas that 1,675 stream credits or 4,761 SCUs were acquired and debited from the ledger of a DEQ approved mitigation bank, in-lieu fee fund, or a combination thereof to satisfy the requirement of Part I.I.1.

Part II – General Conditions

A. Duty to Comply

The permittee shall comply with all conditions and limitations of the VWP permit. Nothing in this chapter shall be construed to relieve the permittee of the duty to comply with all applicable federal and state statutes, regulations, toxic standards, and prohibitions. Any VWP permit violation or noncompliance is a violation of the Clean Water Act and State Water Control Law and is grounds for enforcement action, VWP permit termination, VWP permit revocation, VWP permit modification, or denial of an application for a VWP permit extension or reissuance.

Nothing in this VWP permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

B. Duty to Cease or Confine Activity

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the activity for which a VWP permit has been granted in order to maintain compliance with the conditions of the VWP permit.

C. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any impacts in violation of the VWP permit that may have a reasonable likelihood of adversely affecting human health or the environment.

D. VWP Permit Actions

A VWP permit may be modified in whole or in part, revoked and reissued, extended, transferred, or terminated in accordance with 9 VAC 25-210-180.

1. During the drafting and authorization of a permit modification, only those conditions to be modified shall be addressed with preparing a draft modified permit. VWP permit terms and conditions of the existing permit shall remain in full force and effect during the modification of the permit.

2. This VWP permit may be modified upon the request of the permittee or upon board initiative when any of the following developments occur:

    a. When new information becomes available about the project or activity covered by the VWP permit, including project additions or alterations, that was not available at VWP permit issuance and would have justified the application of different VWP permit conditions at the time of VWP permit issuance;

b. When a change is made in the promulgated standards or regulations on which the VWP permit was based;

c. When changes occur that are subject to "reopener clauses" in the VWP permit; or

d. When developments applicable to surface water withdrawals as specified in 9VAC25-210-380 occur.

3. When this VWP permit authorizes surface water withdrawals, it may be modified when any of the following developments occur:

a. When the board determines that minimum instream flow levels resulting directly from the permittee's withdrawal of surface water are detrimental to the instream beneficial use, existing at the time of permit issuance, and the withdrawal of surface water should be subject to further net limitations or when an area is declared a surface water management area pursuant to §§ 62.1-242 through 62.1-253 of the Code of Virginia, during the term of the VWP permit.

b. Significant changes to the location of the surface water withdrawal system are proposed such that the Department of Environmental Quality determines a new review is warranted due to the potential effect of the surface water withdrawal to existing beneficial uses of the new location.

c. Changes to the permitted project or the surface water withdrawal, including increasing the storage capacity for the surface water withdrawal, that propose an increase in the maximum permitted withdrawal volumes or rate of withdrawal or that cause more than a minimal change to the instream flow requirements with potential to result in a detrimental effect to existing beneficial uses.

d. A revision to the purpose of the surface water withdrawal that proposes to include a new use or uses that were not identified in the permit application or a modification of the existing authorized use or uses such that the use description in the permit application and permit is no longer applicable. Examples of uses include, but are not limited to agricultural irrigation, golf course irrigation, public water supply, manufacturing, and electricity generation.

4. When the permittee has submitted a timely and complete application for reissuance of an existing VWP individual permit, but through no fault of the permittee, the board does not reissue or reissue with conditions a VWP individual permit or the board does not provide notice of its tentative decision to deny the application before an existing VWP individual permit expires, the conditions of the expiring VWP individual permit shall be administratively continued in full force and effect until the effective date of a reissued permit or the date on which the board denies the application. Timely application shall be a minimum of 180 days for an individual permit or a minimum of 270 days for an individual permit for a surface water withdrawal, unless otherwise specified in the existing permit.

5. Any permittee desiring to continue a previously permitted activity after the expiration date of this VWP permit shall apply for and obtain a new permit or, if applicable, shall request an extension in

accordance with 9VAC25-210-180. Any permittee with an effective VWP permit for an activity that is expected to continue after the expiration date of the VWP permit, without any change in the activity authorized by the VWP permit other than as may be allowed under 9VAC25-210-180, shall submit written notification requesting an extension. The permittee must file the request 90 days prior to the expiration date of the VWP permit. VWP permit modifications shall not be used to extend the term of a VWP permit beyond 15 years from the date of original issuance. When a permit term, other than that of an Emergency Virginia Water Protection Permit, is less than 15 years, an extension of the permit terms and conditions may be granted in accordance with 9VAC25-210-180. Emergency Virginia Water Protection Permits shall not exceed a duration of one year or shall expire upon the issuance of a regular Virginia Water Protection Permit, whichever comes first.

6. This VWP permit may be transferred to a new permittee only by modification to reflect the transfer, by revoking and reissuing the permit, or by automatic transfer. Automatic transfer to a new permittee shall occur if the current permittee: a) Notifies the board of the proposed transfer of the permit and provides a written agreement between the current and proposed permittees containing the date of transfer of VWP permit responsibility, authorization, and liability to the new permittee; and b) the board does not within 15 days notify the existing permittee of its intent to modify the VWP permit.

7. After notice and opportunity for a formal hearing pursuant to § 62.1-44.15:02 of the Code of Virginia, a VWP permit can be terminated for cause. Reasons for termination for cause are as follows:

   a. Noncompliance by the permittee with any condition of the VWP permit;

   b. The permittee's failure in the application or during the VWP permit process to disclose fully all relevant facts or the permittee's misrepresentation of any relevant facts at any time;

   c. The permittee's violation of a special or judicial order;

   d. A determination by the board that the permitted activity endangers human health or the environment and can be regulated to acceptable levels by VWP permit modification or termination;

   e. A change in any condition that requires either a temporary or permanent reduction or elimination of any activity controlled by the VWP permit; and

   f. A determination that the permitted activity has ceased and that the compensation for unavoidable adverse impacts has been successfully completed.

8. The board may terminate this permit without cause when the permittee is no longer a legal entity due to death, dissolution, or when a company is no longer authorized to conduct business in the Commonwealth. The termination shall be effective 30 days after notice of the proposed

termination is sent to the last known address of the permittee or registered agent, unless the permittee objects within that time. If the permittee does object during that period, the board shall follow the applicable procedures for termination under § 62.1-44.15:25 of the Code of Virginia and 9VAC25-230.

9. This VWP permit may be terminated by consent, as initiated by the permittee. The permittee shall submit a request for termination by consent within 30 days of completing or canceling all permitted activities and all required compensatory mitigation requirements. When submitted for project completion, the request for termination by consent shall constitute a notice of project completion. The director may accept this termination on behalf of the board. The permittee shall submit the following information:

   a. Name, mailing address, and telephone number;

   b. Name and location of the activity;

   c. The VWP permit number; and

   d. One of the following certifications:

      i. For project completion: "I certify under penalty of law that all activities and any required compensatory mitigation authorized by a VWP permit have been completed. I understand that by submitting this notice of termination that I am no longer authorized to perform activities in surface waters in accordance with the VWP permit, and that performing activities in surface waters is unlawful where the activity is not authorized by a VWP permit, unless otherwise excluded from obtaining a permit. I also understand that the submittal of this notice does not release me from liability for any violations of this VWP permit."

      ii. For project cancellation: "I certify under penalty of law that the activities and any required compensatory mitigation authorized by this VWP permit will not occur. I understand that by submitting this notice of termination that I am no longer authorized to perform activities in surface waters in accordance with the VWP permit, and that performing activities in surface waters is unlawful where the activity is not authorized by a VWP permit, unless otherwise excluded from obtaining a permit. I also understand that the submittal of this notice does not release me from liability for any violations of this VWP permit, nor does it allow me to resume the permitted activities without reapplication and issuance of another permit."

      iii. For events beyond permittee control, the permittee shall provide a detailed explanation of the events, to be approved by DEQ, and the following certification statement: "I certify under penalty of law that the activities or the required compensatory mitigation authorized by this VWP permit have changed as the result of events beyond my control (see attached). I understand that by submitting this notice of termination that I am no longer authorized to perform activities in surface waters in accordance with the VWP permit, and that

performing activities in surface waters is unlawful where the activity is not authorized by a VWP permit, unless otherwise excluded from obtaining a permit. I also understand that the submittal of this notice does not release me from liability for any violations of this VWP permit, nor does it allow me to resume the permitted activities without reapplication and issuance of another permit.

E. Inspection and Entry

Upon presentation of credentials, the permittee shall allow the board or any duly authorized agent of the board, at reasonable times and under reasonable circumstances, to conduct the actions listed in this section. For the purpose of this section, the time for inspection shall be deemed reasonable during regular business hours. Nothing contained herein shall make an inspection time unreasonable during an emergency.

1. Enter upon any permittee's property, public or private, and have access to, inspect and copy any records that must be kept as part of the VWP permit conditions;

2. Inspect any facilities, operations or practices (including monitoring and control equipment) regulated or required under the VWP permit; and

3. Sample or monitor any substance, parameter, or activity for the purpose of ensuring compliance with the conditions of the VWP permit or as otherwise authorized by law.

F. Duty to Provide Information

The board may request (i) such plans, specifications, and other pertinent information as may be necessary to determine the effect of an applicant's discharge on the quality of state waters or (ii) such other information as may be necessary to accomplish the purposes of this chapter. Any owner, permittee, or person applying for a VWP permit or general permit coverage shall provide the information requested by the board.

G. Monitoring and Records Requirements

1. Monitoring of parameters, other than pollutants, shall be conducted according to approved analytical methods as specified in the VWP permit. Analysis of pollutants will be conducted according to 40 CFR Part 136 (2000), Guidelines Establishing Test Procedures for the Analysis of Pollutants.

2. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

3. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart or electronic recordings for continuous monitoring instrumentation, copies of all reports required by the VWP permit, and records of all data used to

complete the application for the VWP permit, for a period of at least three years from the date of permit expiration. This period may be extended by request of the board at any time.

4. Records of monitoring information shall include:

   a. The date, exact place and time of sampling or measurements;

   b. The name of the individuals who performed the sampling or measurements;

   c. The date and time the analyses were performed;

   d. The name of the individuals who performed the analyses;

   e. The analytical techniques or methods supporting the information such as observations, readings, calculations and bench data used;

   f. The results of such analyses; and

   g. Chain of custody documentation.

H. Property rights

The issuance of a VWP permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize injury to private property or any invasion of personal rights or any infringement of federal, state or local laws or regulations.

I. Reopener

This VWP permit may be reopened for the purpose of modifying the conditions of the VWP permit to meet new regulatory standards duly adopted by the board. Cause for reopening VWP permits includes, but is not limited to when the circumstances on which the previous VWP permit was based have materially and substantially changed, or special studies conducted by the board or the permittee show material and substantial change, since the time the VWP permit was issued and thereby constitute cause for VWP permit modification or revocation and reissuance.

J. Compliance with State and Federal Law

As to the permitted activity(ies), compliance with a VWP permit constitutes compliance with the VWP permit requirements of the Law and regulations. .

K. Severability

The provisions of this VWP permit are severable.

L. Oil and Hazardous Substance Liability

Nothing in this VWP permit shall be construed to preclude the institution of legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under § 311 of the Clean Water Act or §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

M. Unauthorized Discharge of Pollutants

Except in compliance with a VWP permit, unless the activity is otherwise exempted or excluded, no person shall dredge, fill, or discharge any pollutant into, or adjacent to surface waters; withdraw surface water; otherwise alter the physical, chemical, or biological properties of state waters regulated under this chapter and make them detrimental to the public health, to animal or aquatic life, or to the uses of such waters for domestic or industrial consumption, for recreation, or for other uses; excavate in wetlands; or on or after October 1, 2001, conduct the following activities in a wetland:

1. New activities to cause draining that significantly alters or degrades existing wetland acreage or functions;

2. Filling or dumping;

3. Permanent flooding or impounding; or

4. New activities that cause significant alteration or degradation of existing wetland acreage or functions.

Attachment 1: VWP PERMIT CONSTRUCTION STATUS UPDATE FORM

Attached to VWP Individual Permit Number 18-1003

Permit Issuance March 5, 2019

Date (check one):

☐ June____, _____

☐ December _____, _____

VWP Individual Permit Number: 18-1003

Project Name and Location: Northfax, City of Fairfax

Status within each authorized surface water impact location, as identified on *Stream Impact Exhibit*, dated August 9, 2018, with latest revision date of August 21, 2018, and received September 12, 2018: (check one of the following status options for each impact number/location. Attach additional sheet(s) if needed.)

Authorized impact number	Construction activities not started	Construction activities started	Construction activities started but currently not active	Does this impact involve culvert(s)[1]?	Construction activities complete[2]
A1					
B1					
A2					
C1					

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation.

Authorized Signature: _____

Print Name: _____

Title: _____ Phone: _____

Date: _____ Email: _____

[1] Provide spot elevations of the stream bottom within the thalweg at the beginning and end of the pipe or culvert, extending to a minimum of 10 feet beyond the limits of the impact, with completion of all culvert installations.

[2] If all construction activities and compensatory mitigation requirements are complete, the permittee completes and signs the Termination Agreement section below within 30 days of last authorized activity and/or compensation completion. A completed and signed Agreement serves as Notice of Project Completion (9VAC25-210-130 F).

TERMINATION AGREEMENT BY CONSENT – PROJECT COMPLETION

Permittee Name: _____

Permittee Mailing Address: _____

Permittee Phone: _____

I hereby consent to the termination of coverage for VWP Individual Permit Number 18-1003.

"I certify under penalty of law that all activities and any required compensatory mitigation authorized by a VWP permit have been completed. I understand that by submitting this notice of termination that I am no longer authorized to perform activities in surface waters in accordance with the VWP permit, and that performing activities in surface waters is unlawful where the activity is not authorized by a VWP permit, unless otherwise excluded from obtaining a permit. I also understand that the submittal of this notice does not release me from liability for any violations of this VWP permit."

Permittee Signature: _____

Attachment 2: MONTHLY VWP PERMIT INSPECTION CHECKLIST

An inspection of all permitted impact areas, avoided waters and wetlands, and permanently preserved waters, wetlands and upland areas must be conducted at least once every month during active construction activities. Maintain this record on-site and available for inspection by DEQ staff.

Project Name	Northfax	**VWP Permit #**	18-1003	**Inspection Date**	
Inspector Name & Affiliation		**Phone # & Email Address**			

Based on reading of VWP permit No. 18-1003 including authorized impacts map entitled "Stream Impact Exhibit" dated August 9, 2018, with latest revision date of August 21, 2018, and received September 12, 2018, and my inspection on the date referenced above, to the best of my knowledge this project (____is in compliance / ____ is not in compliance) with the VWP Permit.

I certify that the information contained in this report is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____ Signature of Inspector

_____ Date

REVIEWED DURING SITE INSPECTION	**Yes**	**No**	**N/A**	**Notes & Corrective Action Taken / Date Completed (use back of page if necessary)**
Unauthorized impacts to surface waters, including wetlands, or upland preservation areas **have occurred**.* *(This includes sedimentation impacts due to inadequate or failed erosion controls.)*	☐	☐		
Non-impacted wetlands, streams and preservations areas within 50 feet of construction are clearly marked to prevent unpermitted impacts.	☐	☐	☐	
Temporary impacts are being restored to original contours, stabilized, and allowed to re-establish with wetland vegetation.	☐	☐	☐	
Construction activities are **not** substantially disrupting aquatic life movement.	☐	☐	☐	
E&S controls are present, properly maintained, and functioning.	☐	☐	☐	
In-stream work is being performed in the dry with the appropriate use of cofferdams, sheetpiling, etc., to minimize stream bottom disturbance and turbidity.	☐	☐	☐	
Pipes and/or culverts for road crossings are countersunk to provide for the re-establishment of low flow fish passage and/or a natural stream bottom, unless otherwise authorized.	☐	☐	☐	
Time-of-year restrictions regarding impacts to surface waters are being adhered to.	☐	☐	☐	
Water quality monitoring is being conducted during stream impacts.	☐	☐	☐	
Streams and wetlands are free from any sheen or discoloration that may indicate a spill of oil, lubricants, concrete or other pollutants. **	☐	☐	☐	
Heavy equipment is placed on mats or geotextile fabric when working in wetlands.	☐	☐	☐	
Exposed slopes/stream banks are stabilized immediately upon completion of work in each impact area.	☐	☐	☐	

* If unauthorized impacts have occurred, you **must** email or fax a copy of this report to DEQ within 24 hours of discovery. Email: vwp.nro@deq.virginia.gov Fax: 703-583-3821

** Any fish kills, or spills of fuels or oils must be reported to DEQ **immediately upon discovery** at 703-583-3864. If DEQ cannot be reached, the spill or fish kill shall be reported to the Virginia Department of Emergency Management (VDEM) at 1-800-468-8892 or the National Response Center (NRC) at 1-800-424-8802. Any spill of oil as defined in § 62.1-44.34:14 of the Code of Virginia that is less than 25 gallons and that reaches, or that is expected to reach, land only is not reportable, if recorded per § 62.1-44.34:19.2 of the Code of Virginia and if properly cleaned up.

Notes

DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NORFOLK DISTRICT
FORT NORFOLK
803 FRONT STREET
NORFOLK VA 23510-1096

NOVEMBER 24, 2014

Reply to
Attention of

Special Projects Regulatory Section
NAO-2014-1871 (N. Fk. Accotink Creek)

City of Fairfax
ATTN: Ms. Wendy Block-Sandford
Transportation Department
10455 Armstrong Street, Room 200A
Fairfax, VA 22030

Dear Ms. Block-Sandford:

This is in regard to your Department of the Army permit application number NAO-2014-1871 to impact approximately 2147 linear feet of stream. You propose to make improvements to the Route 123/50/29 intersection, including widening of portions of Route 123 and Route 29/50 and improving the drainage system, along with some realignment of Route 123. As part of the work, you will construct a new 2,101 linear foot, twin 8 foot by 8 foot box culvert to convey the North Fork Accotink Creek; approximately 1,564 linear feet of the stream is already contained within an existing culvert which will be replaced with the new culvert. You will also install riprap in an additional 46 linear feet of channel. The work will occur at the City of Fairfax, Virginia. These impacts are detailed on the enclosed drawings entitled "Nationwide Permit PCN, Route 29.50/123 Intersection, Proposed Roadway & Drainage Improvements," dated June 2012 and date stamped as received by this office on October 3, 2014, prepared and submitted on behalf of the applicant by Rinker Design Associates, P.C. (attached).

Your proposed work as outlined above satisfies the criteria contained in the Corps Nationwide Permits 23, attached. The Corps Nationwide Permits were published in the February 21, 2012 Federal Register notice (77 FR 10184) and the regulations governing their use can be found in 33 CFR 330 published in Volume 56, Number 226 of the Federal Register dated November 22, 1991.

This nationwide permit verification is contingent upon the following project specific condition:

You have indicated that mitigation for the proposed impacts would be accomplished by purchasing credits from an approved mitigation bank that includes the impact area in its geographic service area. As compensation for impacting 583 linear feet of stream, a total of 343 credits (based on the application of the Unified Stream Methodology) will be debited from an approved bank. Prior to purchasing the credits, you must submit to the Corps of Engineers (USACE) your proposed mitigation bank for acceptance. Once USACE has agreed to your proposed bank, you may proceed to acquire the

required credits. Evidence that you have purchased these credits must be provided to USACE prior to commencing the authorized activities in jurisdictional waters.

Provided the project specific condition (above) and the Nationwide Permit General Conditions (enclosed) are met, an individual Department of the Army Permit will not be required. *You should note Regional Condition 9 which requires countersinking of culverts and insure compliance with this condition.*

In addition, the Virginia Department of Environmental Quality has provided an unconditional §401 Water Quality Certification for Nationwide Permit Number 23. A permit may be required from the Virginia Marine Resources Commission and/or your local wetlands board, and this verification is not valid until you obtain their approval, if necessary. This authorization does not relieve your responsibility to comply with local requirements pursuant to the Chesapeake Bay Preservation Act (CBPA), nor does it supersede local government authority and responsibilities pursuant to the Act. Before you begin work, you should find out how the CBPA applies to your project.

Enclosed is a "compliance certification" form, which must be signed and returned within 30 days of completion of the project, including any required mitigation. Your signature on this form certifies that you have completed the work in accordance with the nationwide permit terms and conditions.

This verification is valid until the NWP is modified, reissued, or revoked. All of the existing NWPs are scheduled to be modified, reissued, or revoked prior to March 18, 2017. It is incumbent upon you to remain informed of changes to the NWPs. We will issue a public notice when the NWPs are reissued. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant nationwide permit is modified or revoked, you will have twelve (12) months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this nationwide permit unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization in accordance with 33 CFR 330.4(e) and 33 CFR 330.5 (c) or (d). Project specific conditions listed in this letter continue to remain in effect after the NWP verification expires, unless the district engineer removes those conditions. Activities completed under the authorization of an NWP which was in effect at the time the activity was completed continue to be authorized by that NWP.

If you have any questions, please contact Alice Allen-Grimes at (757) 201-7219 or alice.w.allen-grimes@usace.army.mil.

Sincerely,

Kimberly A Prisco Baggett

Kimberly A. Prisco-Baggett, MBA
Chief, Special Projects Section

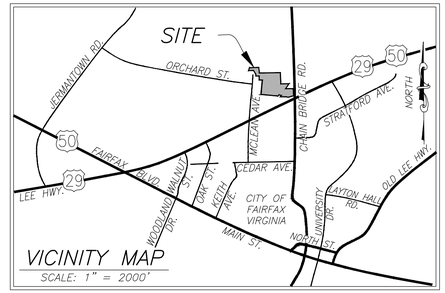
Enclosures

Copies furnished (w/o encl.):

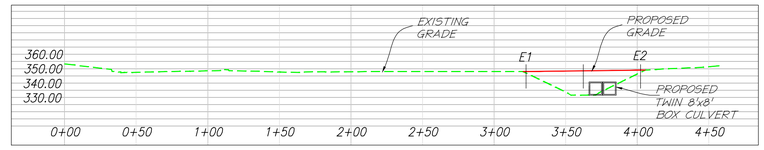
Virginia Marine Resources Commission, Newport News
Rinker Design Associates, PC, Manassas

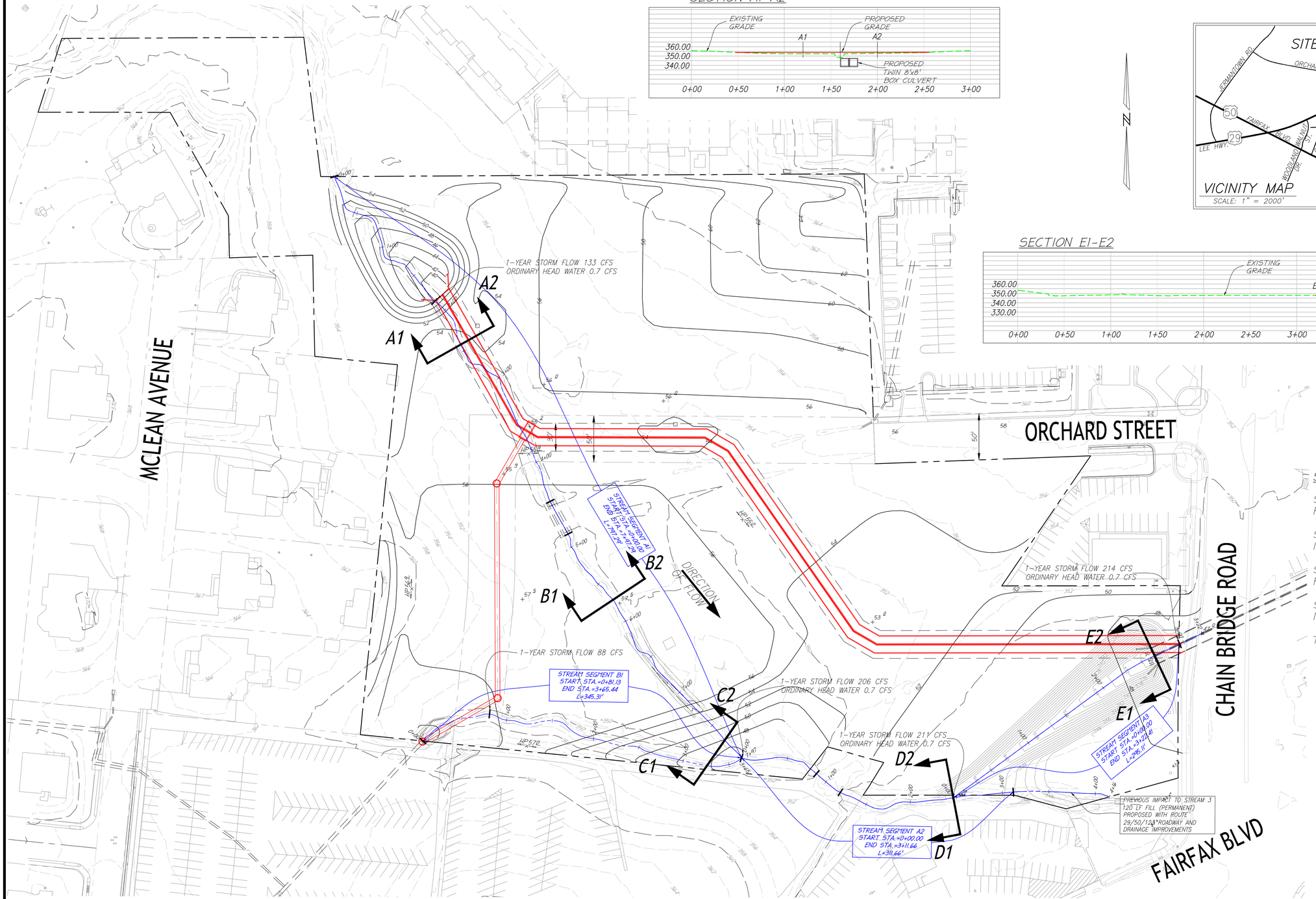
Appendix C – JPA Exhibits

SECTION A1-A2



SECTION E1-E2





STREAM DATA:

STREAM SEGMENT A1= 797.29'
PERENNIAL STREAM

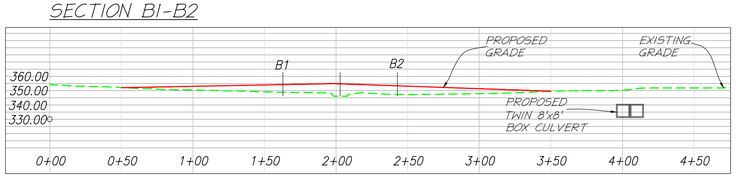
STREAM SEGMENT B1= 345.31'
INTERMITTENT STREAM

STREAM SEGMENT A2= 311.66'
PERENNIAL STREAM

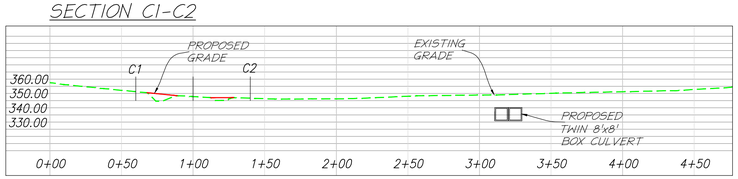
STREAM SEGMENT A3= 295.11'
MANMADE ARMORED CHANNEL

TOTAL LENGTH = 1749.37'

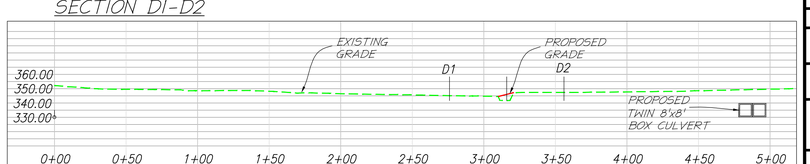
SECTION B1-B2



SECTION C1-C2



SECTION D1-D2



christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

STREAM IMPACT EXHIBIT

NORTHFAX AREA
CITY OF FAIRFAX

PROJECT NO: 13139.004.00
SCALE: 1"=50'
DATE: 06/15/2018
DESIGN: EJ
DRAWN: JS
CHECKED: KMW
SHEET No. 1 OF 5

108133

P:\Projects\13139\004\EXHIBITS\108133 Wetland Concept Exhibit\C2.0 Stream Impact Exhibit.dwg, 6/15/2018 9:13:59 AM, 1:1

APEX COMPANIES, LLC NOTES

1. THIS FEATURE IS NOT A JURISDICTIONAL WOUS BASED ON A LACK OF DEFINED BED AND BANKS.
2. STREAM A2 DOES NOT SHOW UP ON THE 1956 FAIRFAX COUNTY SOIL SURVEY AND IT IS SUSPECTED THAT THE CHANNEL WAS CUT BY STORMWATER RUNOFF DISCHARGED BY THE CITY STORMWATER SYSTEM.

N

LEGEND:

- FLAGGED POINT LOCATION (SEE FLAGGED POINT LEGEND BELOW)
- 6000 — FLAGGED POINT NUMBER (DESCRIPTION)
- 300.00 — FLAGGED POINT ELEVATION (STAKE ELEV.)
- BLD — FLAGGED POINT DESCRIPTION

APEX COMPANIES, LLC NOTES: BEGIN R4 INTERMITTENT STREAM AT FLAG B57

APEX COMPANIES, LLC NOTES: NOT A WATER OF THE UNITED STATES PER CORPS OF ENGINEERS

APEX COMPANIES, LLC NOTES: NOT A WATER OF THE UNITED STATES - NO DEFINED BED AND BANKS

CHAIN BRIDGE ROAD

ORCHARD STREET

MCLEAN AVENUE

FAIRFAX BOULEVARD

christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

WETLAND EXHIBIT

NORTHFAX AREA
CITY OF FAIRFAX

PROJECT NO: 13139.004.00

SCALE: 1"=50'

DATE: 06/08/2018

DESIGN: EJ
DRAWN: JS
CHECKED: KMW

SHEET No. 2 OF 5

108133

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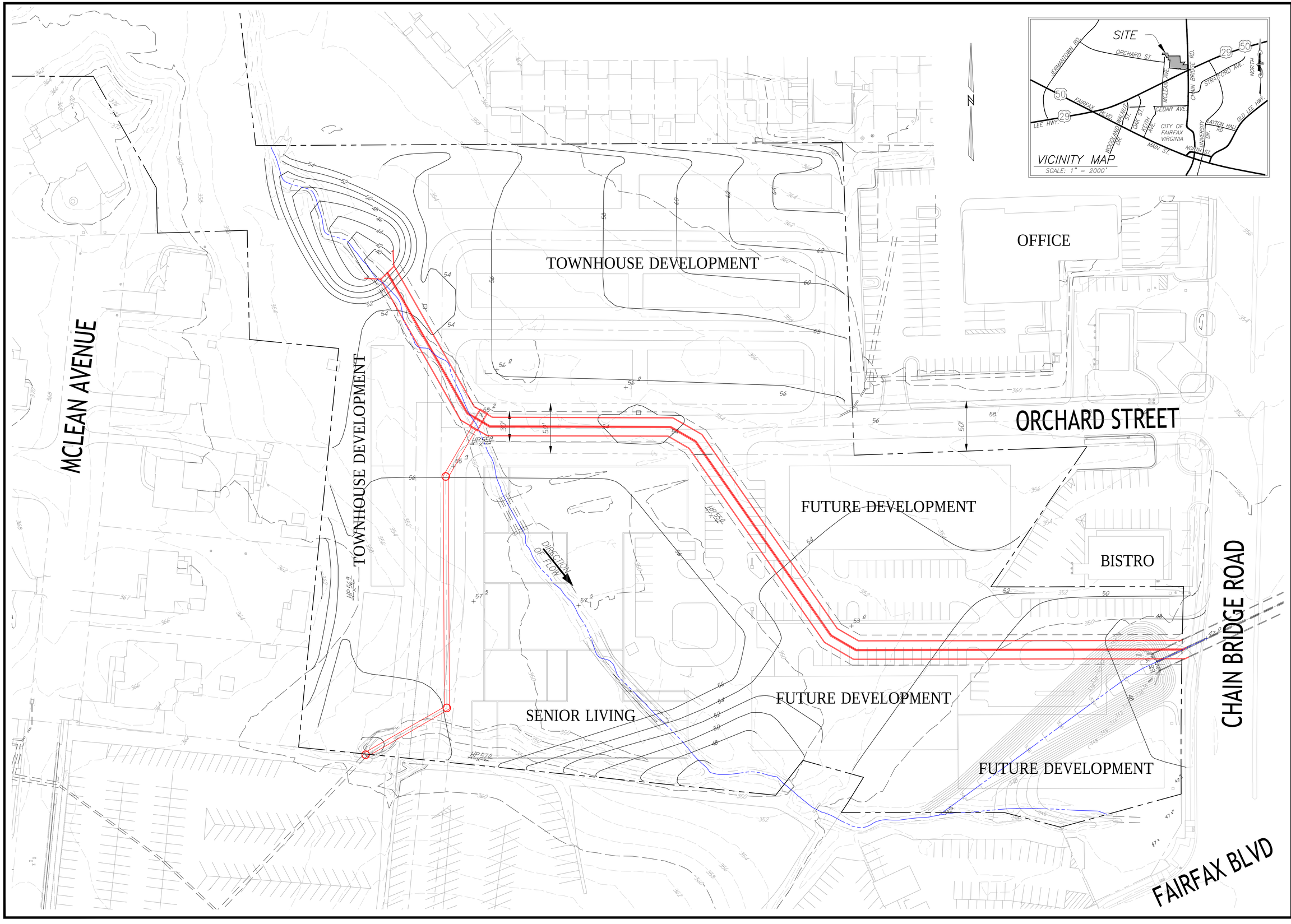

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9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

GRADING EXHIBIT

NORTHFAX AREA
CITY OF FAIRFAX

PROJECT NO: 13139.004.00
SCALE: 1"=40'
DATE: 06/15/2018
DESIGN: EJ
DRAWN: JS
CHECKED: KMW
SHEET No. 3 OF 5

108133

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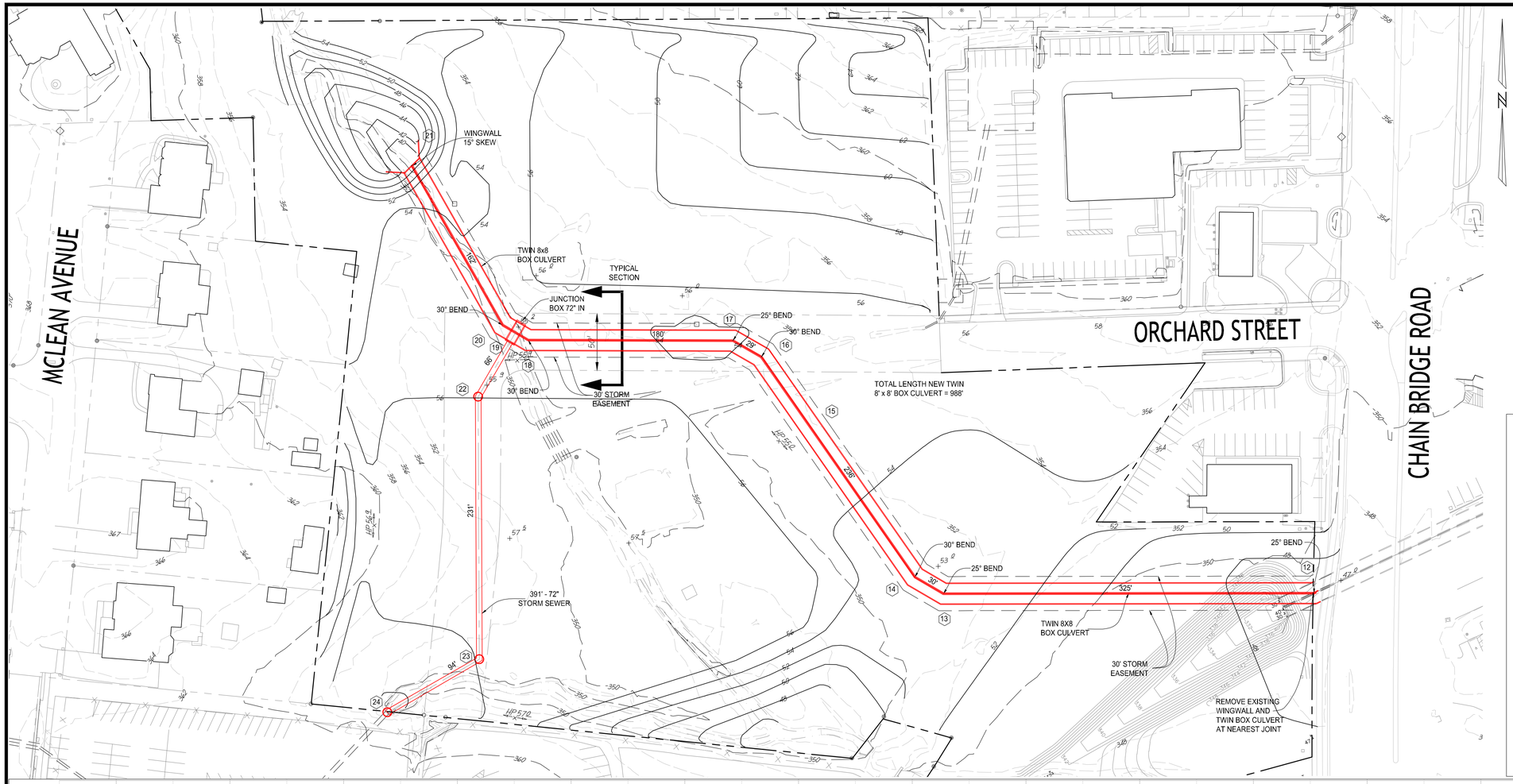
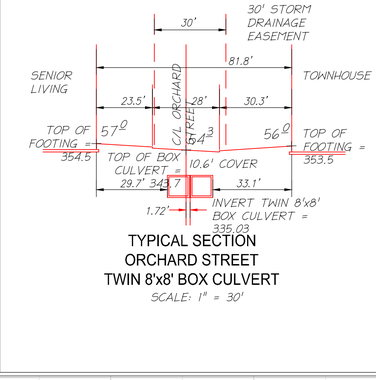
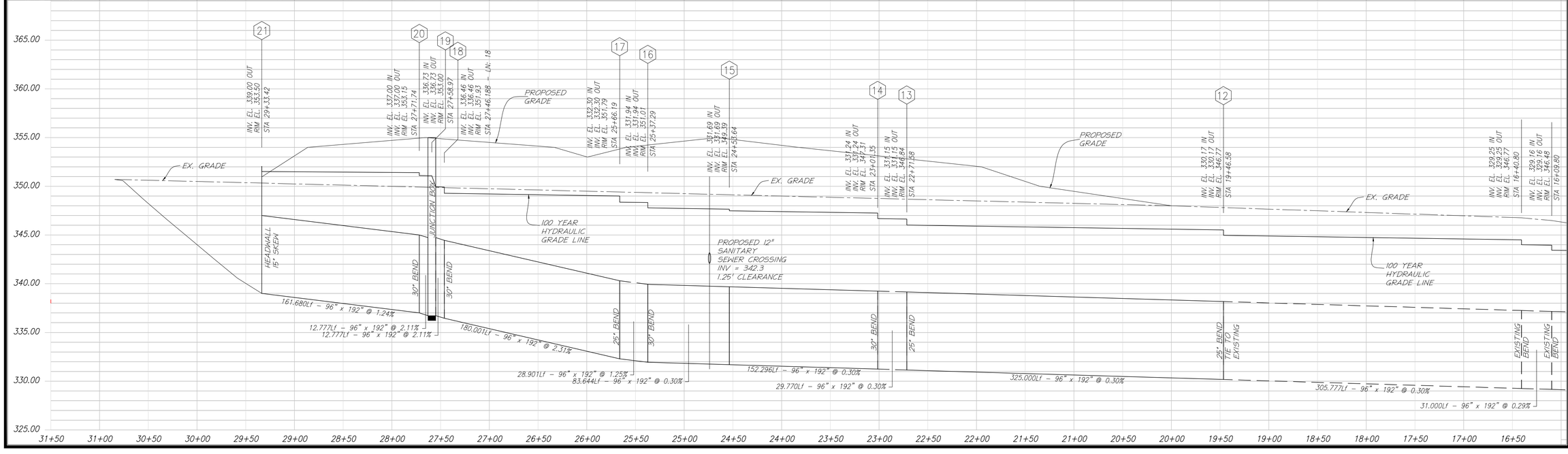




TYPICAL SECTION
ORCHARD STREET
TWIN 8'x8' BOX CULVERT
SCALE: 1" = 30'



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phone 703.273.6820 · fax 703.273.6820

PLAN & PROFILE
STORM SEWER

NORTHFAX AREA
CITY OF FAIRFAX

PROJECT NO: 13139.004.00
SCALE:
1"=50' HORZ 1" =5' VERT
DATE:
06/15/2018
DESIGN: EJ
DRAWN: JS
CHECKED: KMW
SHEET No.
4 OF 5

108133

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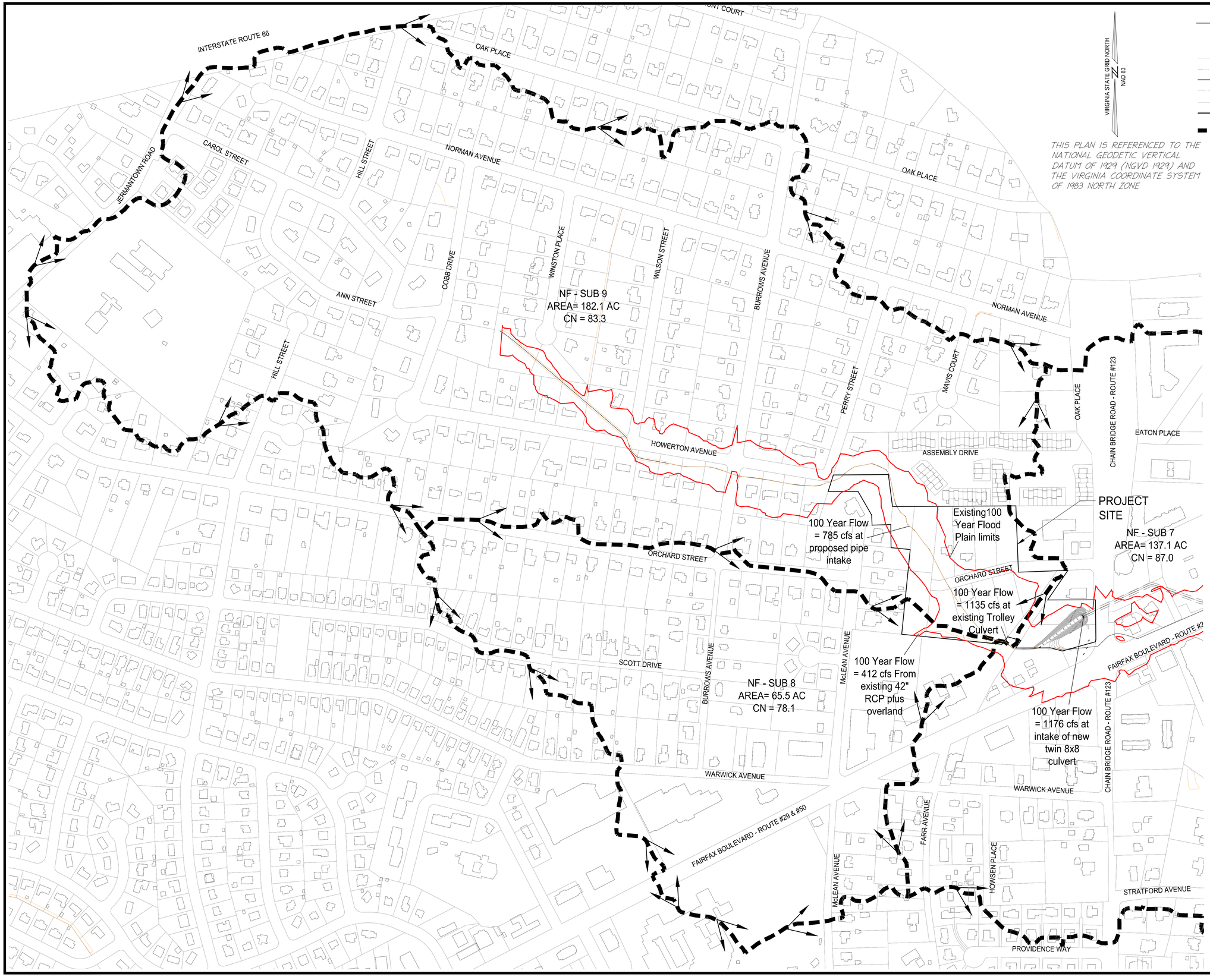

PLAN LEGEND

- 20 : EX. MAJOR CONTOUR
- 22 : EX. MINOR CONTOUR
- : EX. ROAD CENTERLINE
- : EX. ROW
- : PROPERTY LINE
- : EX. EDGE OF PAVEMENT
- : EX. FENCE (ALL TYPES)
- : APPROX. FLOW PATHS
- : DRAINAGE DIVIDS

THIS PLAN IS REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 1929) AND THE VIRGINIA COORDINATE SYSTEM OF 1983 NORTH ZONE

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DRAINAGE EXHIBIT

NORTHFAX AREA
CITY OF FAIRFAX

PROJECT NO: 13139.004.00
SCALE: 1"=200'
DATE: 06/15/2018
DESIGN: EJ
DRAWN: JS
CHECKED: KMW
SHEET No. 5 OF 5

108133

P:\Projects\13139\004\00\EXHIBITS\108133 Wetland Concept Exhibit\C-4.0 Drainage Exhibit.dwg, 6/15/2018 9:20:45 AM, 1:1

STORM SEWER DESIGN COMPUTATIONS

NORTHFAX
PROPOSED STORM COMPUTATIONS

06/12/2018 EJ

FROM POINT	TO POINT	DRAIN. AREA	RUNOFF COEFF.	CA		INLET TIME	RAINFALL INTENSITY	RUNOFF Q100yr	INVERT ELEVATIONS (ft)		LENGTH	SLOPE	DIA.	n	CAPACITY	VELOCITY	FLOW TIME				NOTES
				INCREM.	ACCUM.													Q/Qfull	V/Vfull	Vfull	
		ACRES	C			MIN.	IN./HR.	C.F.S.	UPPER	LOWER	ft	ft/ft	IN.		C.F.S.	FPS	SEC.				
24	23	100 YEAR RUNOFF PER FEMA EFFECTIVE HYDROLOGIC MODEL						411.69	346.50	344.72	93.40	0.0191	72	0.013	584.66	22.2	4.2	0.70	1.07	20.68	PROP. 72" RCP STORM
23	22							411.69	344.47	340.04	231.01	0.0192	72	0.013	586.47	22.2	10.4	0.70	1.07	20.74	PROP. 72" RCP STORM
22	21							411.69	339.79	338.54	65.43	0.0191	72	0.013	585.36	22.2	2.9	0.70	1.07	20.70	PROP. 72" RCP STORM
21	20	100 YEAR RUNOFF PER FEMA EFFECTIVE HYDROLOGIC MODEL						785.80	339.00	337.00	161.68	0.0124	146.5	0.013	3131.33	22.2	7.3	0.25	0.83	26.75	PROP. TWIN 8"x 8" BOX CULVERT
20	19							785.80	337.00	336.73	12.78	0.0211	146.5	0.013	4092.70	26.1	0.5	0.19	0.75	34.96	PROP. TWIN 8"x 8" BOX CULVERT
19	18							1135.30	336.73	336.46	12.78	0.0211	146.5	0.013	4092.70	29.9	0.4	0.28	0.86	34.96	PROP. TWIN 8"x 8" BOX CULVERT
18	17							1135.30	336.46	332.30	180.00	0.0231	146.5	0.013	4280.08	30.4	5.9	0.27	0.83	36.56	PROP. TWIN 8"x 8" BOX CULVERT
17	16							1163.96	332.30	331.97	28.90	0.0114	146.5	0.013	3008.45	23.7	1.2	0.39	0.92	25.70	PROP. TWIN 8"x 8" BOX CULVERT
16	15							1163.96	331.97	331.71	83.64	0.0031	146.5	0.013	1569.68	14.7	5.7	0.74	1.09	13.41	PROP. TWIN 8"x 8" BOX CULVERT
15	14							1167.48	331.71	331.24	152.30	0.0031	146.5	0.013	1564.04	14.6	10.4	0.75	1.09	13.36	PROP. TWIN 8"x 8" BOX CULVERT
14	13							1167.78	331.24	331.15	29.77	0.0030	146.5	0.013	1548.01	14.5	2.1	0.75	1.09	13.22	PROP. TWIN 8"x 8" BOX CULVERT
13	12							1175.85	331.15	330.17	325.00	0.0030	146.5	0.013	1546.02	14.5	22.5	0.76	1.09	13.21	PROP. TWIN 8"x 8" BOX CULVERT

THE PIPE CAPACITIES SHOWN ARE BASED ON GRAVITY FLOW. THIS SYSTEM WILL OPERATE UNDER PRESSURE FLOW BASED ON DOWNSTREAM HYDRAULIC CONDITIONS.

Appendix D – Master Development Plan

MASTER DEVELOPMENT PLAN/ PRELIMINARY PLAT
NORTHFAX WEST
CITY OF FAIRFAX, VIRGINIA

GENERAL NOTES:

1. THE SUBJECT PROPERTY SHOWN HEREON IS RECORDED IN THE LAND RECORDS OF FAIRFAX CITY, VIRGINIA AS FOLLOWS:

PARCEL ID	OWNER	ADDRESS	ACREAGE	EXISTING ZONING
57-02-02-017	ARG II, LLC	3590 CHAIN BRIDGE ROAD	0.92	CR (COMMERCIAL RETAIL)
57-02-02-018	ARG II, LLC	3580 CHAIN BRIDGE ROAD	0.59	CR (COMMERCIAL RETAIL)
57-02-02-019	ARG II, LLC	10505 ORCHARD STREET	0.41	CR (COMMERCIAL RETAIL)
57-02-02-020	NORTHFAX JV LLC	3570 CHAIN BRIDGE ROAD	0.54	CR (COMMERCIAL RETAIL)
57-02-08-011	ARG II, LLC	10507 ORCHARD STREET	0.51	RM (RESIDENTIAL MEDIUM)
57-02-08-012	ARG II, LLC	10509 ORCHARD STREET	0.57	RM (RESIDENTIAL MEDIUM)
57-02-08-013	ARG II, LLC	10511 ORCHARD STREET	0.69	RM (RESIDENTIAL MEDIUM)
57-02-08-014	ARG II, LLC	10513 ORCHARD STREET	0.82	RM (RESIDENTIAL MEDIUM)
57-02-08-010	ORCHARD RE INVESTMENTS, LLC	10515 ORCHARD STREET	0.73	RM (RESIDENTIAL MEDIUM)
57-02-02-005	ORCHARD RE INVESTMENTS, LLC	10517 ORCHARD STREET	0.82	RM (RESIDENTIAL MEDIUM)
57-02-08-005	ORCHARD RE INVESTMENTS, LLC	10508 ORCHARD STREET	0.62	RM (RESIDENTIAL MEDIUM)
57-02-08-006	ORCHARD RE INVESTMENTS, LLC	10510 ORCHARD STREET	0.67	RM (RESIDENTIAL MEDIUM)
57-02-08-007	ORCHARD RE INVESTMENTS, LLC	10512 ORCHARD STREET	0.73	RM (RESIDENTIAL MEDIUM)
57-02-08-008	ORCHARD RE INVESTMENTS, LLC	10514 ORCHARD STREET	0.68	RM (RESIDENTIAL MEDIUM)
57-02-02-003	ORCHARD RE INVESTMENTS, LLC	10516 ORCHARD STREET	0.84	RM (RESIDENTIAL MEDIUM)
57-02-07-015B	ORCHARD RE INVESTMENTS, LLC	NONE	0.45	RM (RESIDENTIAL MEDIUM)
57-02-47-000-A	ORCHARD RE INVESTMENTS, LLC	NONE	0.93	RM (RESIDENTIAL MEDIUM)
		TOTAL = 11.32		

2. THIS MDP SUBMISSION IS AN APPLICATION TO REZONE THE SUBJECT PROPERTIES FROM CR (COMMERCIAL RETAIL) AND RM (RESIDENTIAL MEDIUM) TO PD-M (PLANNED DEVELOPMENT MIXED USE) DISTRICT. THE CURRENT SITE CONSISTS OF 17 PARCELS THAT WILL BE CONSOLIDATED AND THEN SUBDIVIDED INTO THREE PARCELS FOR DEVELOPMENT. THE THREE PARCELS WILL CONSISTS OF A PARCEL FOR TOWNHOUSES, A PARCEL FOR A SENIOR LIVING BUILDING AND A FUTURE DEVELOPMENT PARCEL WITH USES THAT HAVE YET TO BE DETERMINED. THIS MDP SUBMISSION SERVES AS A PRELIMINARY PLAT AND IS IN CONFORMANCE WITH ZONING ORDINANCE SECTION 6.6.9.B. AND THE SUBDIVISION ORDINANCE.

3. THE BOUNDARY AND PHYSICAL IMPROVEMENTS SHOWN HEREON ARE BASED UPON AN ARIEAL TOPOGRAPHIC SURVEY PERFORMED BY McKENZIE SNYDER, INC. FLOWN APRIL 6, 2015 AND COMPILED NOVEMBER 14, 2017. THIS DATA HAS BEEN SUPPLEMENTED BY CONVENTIONAL METHODS BY THIS FIRM BETWEEN THE DATES OF NOVEMBER 16 AND DECEMBER 5, 2017 AND JANUARY 2 AND JANUARY 3, 2018 AND FURTHER SUPPLEMENTED BETWEEN THE DATES OF APRIL 9 AND APRIL 17, 2019. CONTOUR INTERVAL FOR TOPOGRAPHIC SURVEY IS 2 FEET.

4. THE FOLLOWING DATUM WERE USED:
   A. HORIZONTAL DATUM SHOWN HEREON IS REFERENCED TO THE VIRGINIA COORDINATE SYSTEM (VCS) 1983 - NORTH AS ESTABLISHED FROM A GPS SURVEY.
   B. THE VERTICAL DATUM SHOWN HEREON IS REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) AS ESTABLISHED FROM A CURRENT GPS SURVEY.

5. THE AREA SHOWN HEREON IS LOCATED ON THE FLOOD INSURANCE RATE MAPS (FIRM), COMMUNITY PANEL NO. 5155240002 D, WITH AN EFFECTIVE DATE OF JUNE 2, 2006.

   BY GRAPHICAL DEPICTION ONLY, THE PROPERTY IS SHOWN IN:

   - FLOOD ZONE "AE" (SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD.) BASE FLOOD ELEVATIONS DETERMINED.

   A FIELD SURVEY HAS BEEN PERFORMED TO DETERMINE THE FLOOD ZONES LISTED HEREON. A CLOMR (PLAN # 18-03-2238R) HAS BEEN SUBMITTED AND APPROVED BY THE CITY OF FAIRFAX AND FEMA TO ADJUST THE FLOODPLAIN BOUNDARIES AROUND THE PROPERTY BASED ON THE PROPOSED SITE IMPROVEMENTS. REFER TO SHEET 18 FOR THE PRE-DEVELOPED FLOODPLAIN BOUNDARY AND SHEET 18A FOR THE POST-DEVELOPED FLOOD PLAIN BOUNDARY.

6. A TITLE REPORT WAS PROVIDED BY FIRST AMERICAN TITLE INSURANCE COMPANY, COMMITMENT NO. A1401113-TD WITH AN EFFECTIVE DATE OF NOVEMBER 18, 2014 AND REVISED JANUARY 6, 2015. ALL EASEMENTS, SERVITUDES AND OTHER MATTERS OF TITLE REFERENCED THEREIN ARE SHOWN ON THIS PLAN.

7. THE SUBJECT PROPERTY IS CURRENTLY SERVED BY PUBLIC WATER AND PUBLIC SEWER PROVIDED BY CITY OF FAIRFAX AND FAIRFAX WATER.

8. DURING THE PROCESS OF THE PHYSICAL SURVEY CONDUCTED BY CHRISTOPHER CONSULTATNS, LTD. NO INDICATIONS OF A CEMETERY WERE FOUND. NO FURTHER INSPECTION OF THESE PROPERTIES HAVE BEEN MADE FOR POSSIBLE CEMETERIES. THE SUBJECT PROPERTY IS NOT LISTED UNDER THE NATIONAL REGISTER OF HISTORIC PLACES.

9. NO GEOTECHNICAL FIELD REVIEWS, RESEARCH, GOVERNMENTAL RECORD REVIEWS, OR OTHER INVESTIGATIONS HAVE BEEN MADE FOR THE PURPOSE OF LOCATING, OR DETERMINING THE EXISTENCE OF HAZARDOUS MATERIALS, OR OTHER ENVIRONMENTAL CONCERNS ON THIS SITE. A PRELIMINARY JURISDICTIONAL DETERMINATION HAS BEEN SUBMITTED TO THE ARMY CORPS OF ENGINEERS TO DELINEATE THE RPA.

10. THIS DEVELOPMENT PROPOSAL IS COMPATIBLE WITH THE EXISTING DEVELOPMENT IN THE VICINITY OF THIS SITE. NO ADVERSE EFFECTS TO NEIGHBORING PROPERTIES ARE ANTICIPATED WITH THIS PROJECT.

11. NOTWITHSTANDING THE IMPROVEMENTS AND TABULATIONS SHOWN ON THIS PLAN, THE APPLICANT RESERVES THE RIGHT TO MAKE MODIFICATIONS TO THE FINAL DESIGN TO COMPLY WITH FINAL ENGINEERING AND NEW CRITERIA AND REGULATIONS WHICH MAY BE ADOPTED BY THE CITY OF FAIRFAX SUBSEQUENT TO THE SUBMISSION OF THIS APPLICATION, PROVIDED THAT SUCH MODIFICATIONS ARE SUBSTANTIALLY CONSISTENT WITH THE APPROVED DEVELOPMENT PLAN.

12. THE PROPOSED BUILDING FOOTPRINTS AND SITE IMPROVEMENTS SHOWN HEREIN ARE PRELIMINARY. THE PROPOSED SQUARE FOOTAGE FOR THE PROPOSED BUILDINGS IS APPROXIMATE ONLY AND MAY BE SUBJECT TO REVISIONS AT THE TIME OF SITE PLAN, SUBJECT TO MARKET CONDITIONS, BUT SUBSTANTIALLY CONSISTENT WITH THE APPROVED DEVELOPMENT PLAN.

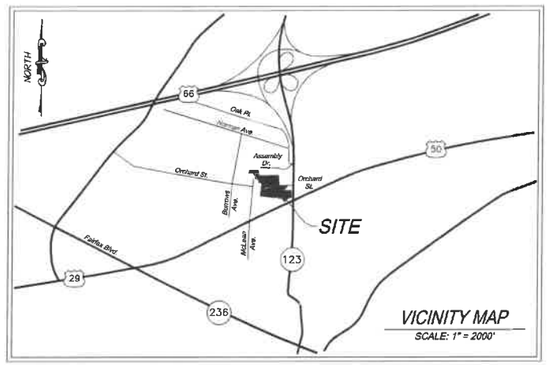
13. ALL EXISTING UTILITY EASEMENTS HAVING A WIDTH GREATER THAN 25 FEET ARE SHOWN ON THE EXISTING CONDITIONS PLAN.

14. SITE LIGHTING WITHIN THE PROJECT SITE AREA (I.E. ALONG SIDEWALKS AND PATHWAYS) WILL BE DETERMINED DURING FINAL SITE PLAN REVIEW AND SHALL BE IN GENERAL CONFORMANCE WITH SECTION 4.8 OF THE ZONING ORDINANCE AND SECTION 2.10 OF THE PUBLIC FACILITIES MANUAL.

15. ONSITE STORMWATER MANAGEMENT AND BEST MANAGEMENT PRACTICES SHALL BE PROVIDED AS REQUIRED BY CITY REGULATIONS AT THE TIME OF FINAL SITE PLAN. DETENTION TO PROVIDE THE REQUIRED STORMWATER QUANTITY CONTROLS AND ONSITE BEST MANAGEMENT PRACTICES (BMPs) TO MEET THE STORMWATER QUALITY REQUIREMENTS ARE SHOWN ON SHEETS 4 AND 4A.

16. ALL SIGNAGE WILL BE IN CONFORMANCE WITH SECTION 4.6 OF THE ZONING ORDINANCE.

17. TO THE BEST KNOWLEDGE OF THE ENGINEER AND APPLICANT, THIS DEVELOPMENT PLAN CONFORMS TO ALL APPLICABLE ORDINANCES, REGULATIONS AND ADOPTED STANDARDS, WITH THE FOLLOWING MODIFICATIONS, WAIVERS, AND SPECIAL USE PERMIT:
   A. A MODIFICATION HAS BEEN REQUESTED OF SECTION 4.5.5.C.2.b.2. OF THE ZONING ORDINANCE FOR THE PERIMETER BUFFER TRANSITIONAL YARD (TY3).
   B. A MODIFICATION HAS BEEN REQUESTED OF SECTION 4.5.6.B. OF THE ZONING ORDINANCE FOR THE STREET TREE SPACING. THE APPLICANT PROPOSES NO STREET TREES ALONG ALL PRIVATE ALLEYWAYS.
   C. SUPPORT FOR A WAIVER HAS BEEN REQUESTED OF SECTION 401-01 OF THE FAIRFAX PFM FOR THE TYPICAL CURB AND GUTTER STREET SECTION ON PRIVATE ACCESSWAYS THAT ARE LESS THAN 30 FEET FROM FACE OF CURB TO FACE OF CURB OR EDGE OF PAVEMENT.
   D. SUPPORT FOR A WAIVER HAS BEEN REQUESTED OF SECTION 2.4.5.3 THAT BLOCKS SHALL NOT BE LESS THAN 300 FEET IN LENGTH.
   E. A MODIFICATION HAS BEEN REQUESTED OF SECTION 4.5.7.D. OF THE ZONING ORDINANCE FOR INTERIOR PARKING LANDSCAPE ISLANDS.
   F. A MODIFICATION HAS BEEN REQUESTED OF SECTION 4.4.4.A.1. OF THE ZONING ORDINANCE. THE APPLICANT PROPOSES NO SIDEWALKS ALONG ALL PRIVATE ALLEYWAYS.
   G. A MODIFICATION HAS BEEN REQUESTED OF SECTION 3.5.1.C.2. OF THE ZONING ORDINANCE THAT REQUIRES NO MORE THAN ONE OF ANY THREE TO FIVE ABUTTING DWELLING UNITS HAVE THE SAME FRONT YARD SETBACKS.
   H. A MODIFICATION HAS BEEN REQUESTED OF SECTION 4.2.3.E. OF THE ZONING ORDINANCE FOR THE PARKING RATIO REQUIREMENTS.
   I. A SPECIAL USE PERMIT HAS BEEN REQUESTED OF SECTION 4.15.7.C. OF THE ZONING ORDINANCE FOR DISTURBANCE IN THE FLOODPLAIN.



PROJECT TEAM:

OWNER / APPLICANT
NORTHFAX JV LLC c/o THE LANN COMPANIES
3900 JERMANTOWN ROAD, SUITE 300
FAIRFAX, VA 22030

CONTRACT PURCHASERS
MHI-NORTHFAX, LLC c/o MADISON HOMES, INC.
1950 OLD GALLOWS ROAD, SUITE 200
TYSONS CORNER, VA 22181

BRIGHTVIEW SENIOR LIVING DEVELOPMENT, LLC
218 N. CHARLES STREET, SUITE 220
BALTIMORE, MD 21201

ATTORNEY
WALSH COLUCCI LUBELEY & WALSH, P.C.
2200 CLARENDON BOULEVARD, SUITE 1300
ARLINGTON, VA 22201

ARCHITECTS
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1477 CHAIN BRIDGE ROAD
MCLEAN, VA 22101

SK&I ARCHITECTURAL DESIGN GROUP, LLC (for BVSL)
4800 EAST WEST HIGHWAY, SUITE 700
BETHESDA, MD 20814

ENGINEER
christopher consultants
9900 MAIN STREET, SUITE 400
FAIRFAX, VA 22031

TRANSPORTATION ENGINEER
GOROVE / SLADE
1140 CONNECTICUT AVE. NW, SUITE 600
WASHINGTON, DC 20036

ENVIRONMENTAL AND GEOTECH CONSULTANTS
APEX COMPANIES, LLC
9700 CAPITAL COURT, SUITE 100
MANASSAS, VA 20110

HILLIS-CARNES ENGINEERING ASSOCIATES, INC.
14155 SULLYFIELD CIRCLE, SUITE A
CHANTILLY, VA 20151

SHEET INDEX

1	COVER SHEET
2	EXISTING CONDITIONS PLAN
2A	EXISTING CONDITIONS PLAN
3	TREE MANAGEMENT PLAN
3A	TREE MANAGEMENT PLAN
3B	TREE MANAGEMENT SCHEDULE
3C	TREE MANAGEMENT SCHEDULE
3D	TREE MANAGEMENT NOTES & DETAILS
4	MASTER DEVELOPMENT PLAN
4A	MASTER DEVELOPMENT PLAN
4B	STREET SECTIONS AND TYPICAL TOWNHOUSE YARDS
5	PRELIMINARY GRADING PLAN
5A	PRELIMINARY GRADING PLAN
6	CONCEPTUAL LANDSCAPE PLAN
6A	CONCEPTUAL LANDSCAPE PLAN
7	OPEN SPACE PLAN
8	SANITARY SEWER OFF-SITE MAP
9	SANITARY SEWER ANALYSIS
10-15	SIGHT DISTANCE
16	TURNING MOVEMENTS
17	FIRE SERVICE PLAN
18	FLOODPLAIN AND RPA PRE-DEVELOPED
18A	FLOODPLAIN AND RPA POST-DEVELOPED

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COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
01/03/2020
PROFESSIONAL ENGINEER

NORTHFAX WEST
MASTER DEVELOPMENT PLAN
CITY OF FAIRFAX, VIRGINIA

MARK	DATE	DESCRIPTION

PROJECT No.: 13139.005.00
DRAWING No.: 109632
DATE: 11-21-2019
DESIGN: EG
DRAWN: JS
CHECKED: KMW

SHEET TITLE:

COVER SHEET

SHEET No.
1

SCALE: 1"=30'

MATCH LINE "A" - SEE SHEET 2A

MATCH LINE "B" - SEE SHEET 2A

OUT LOT "B" BAJAJ PROPERTY D.B. 23803 PG. 185

OUT LOT "A" BAJAJ PROPERTY D.B. 23803 PG. 185

LOT 15R

LOT 15

LOT 16

LOT 17

LOT 7

LOT 8

LOT 6

LOT 5

LOT 12

LOT 13

LOT 14

FAIRFAX ACRES D.B. 401 PG. 312

NO PARCEL # D.B. 1626 PG. 119

McLEAN AVENUE VARIABLE WIDTH PUBLIC RIGHT-OF-WAY

ORCHARD STREET 50' PUBLIC RIGHT-OF-WAY D.B. 407 PG. 115

BENCHMARK #3 SANITARY MANHOLE N: 6,998,425.38 E: 11,821,330.31 ELEVATION: 366.41

BENCHMARK #5 SANITARY MANHOLE N: 6,998,568.19 E: 11,821,962.15 ELEVATION: 363.76

POSSIBLE APPROX. LOCATION OF SANITARY MANHOLE, BURIED AND NOT FIELD LOCATED

EX. 100-YR. FLOODPLAIN

EX. STREAM

EX. RPA LINE

EX. RIPRAP

EX. BUILDING

1-STORY BRICK & FRAME BUILDING

EX. GRAVEL PARKING LOT

EX. GRAVEL PARKING AREA

EX. CONCRETE

EX. ASPHALT DRIVEWAY

EX. ASPHALT ROAD

EX. GRAVEL ROAD

EX. CONCRETE PARKING LOT

EX. 6' WOOD FENCE

EX. FENCE

FENCE 0.4' ON PROPERTY

5' PLASTIC FENCE 1.2' OFF PROPERTY

5' PLASTIC FENCE 5.7' ON PROPERTY

SHED 2.9' ON PROPERTY

FENCE 1.1' OFF PROPERTY

FENCE 0.2' OFF PROPERTY

EX. 6' CHAIN LINK FENCE

VIRGINIA STATE GRID NORTH NAD 83

LEGEND

- Utilities - Storm: STORM MANHOLE; STORM CULVERT
- Utilities - Sanitary: SANITARY MANHOLE
- Utilities - Water: WATER VALVE; WATER METER; FIRE HYDRANT; WATER MANHOLE
- Utilities - Electric: LIGHT POLE; UTILITY POLE; LAMP POST; GUY WIRE
- Utilities - Communication: TELEPHONE PEDESTAL/POST
- Misc. Structures: SPOT SHOT; SIGN; TREE; BUSH; FLAG POLE; UNIDENTIFIED UTILITY

Abbreviations

EX.	EXISTING
CONC.	CONCRETE
C&G	CURB AND GUTTER
EP	EDGE OF PAVEMENT
IPF	IRON PIPE FOUND
IPS	IRON PIPE SET
RBF	REBAR FOUND
PPF	PINCH PIPE FOUND
CMF	CONCRETE MONUMENT FOUND
NS	NOT SET

Linetypes: INDEX CONTOUR (5') · INT. CONTOUR (1') · FENCE · OVERHEAD UTILITY WIRE · VEGETATION LINE

NOTES:
1. SEE SHEET 2A FOR OWNERSHIP TABLE.
2. SEE SHEET 2A FOR STORM AND THIS SHEET FOR SANITARY AS-BUILT INFORMATION.

SANITARY STRUCTURE DATA

- 376: RIM EL. = 370.31; INV IN (8" DIP FROM SOUTH) = 361.58; INV OUT (8" DIP TO 379) = 361.54
- 377: RIM EL. = 365.73; INV IN (8" DIP FROM 376) = 357.00; INV OUT (8" DIP TO 381) = 356.96
- 380: RIM EL. = 387.08; INV OUT (8" PVC TO 381) = 358.53
- 381: RIM EL. = 363.64; INV IN (8" PVC FROM 369) = 355.24; INV IN (8" DIP FROM 379) = 354.92; INV OUT (8" DIP TO 384) = 354.83
- 371: RIM EL. = 364.95; INV IN (8" DIP FROM NW) = 357.15; INV OUT (8" DIP TO 384) = 357.13
- 386: RIM EL. = 362.55; INV IN (8" PVC FROM WEST) = 357.68; INV IN (8" DIP FROM NORTHEAST) = 358.00; INV OUT (8" DIP TO 387) = 357.63
- 387: RIM EL. = 366.42; INV IN (8" DIP FROM 1019) = 356.10; INV OUT (8" DIP TO 386) = 356.07
- 384: RIM EL. = 367.74; INV IN (8" DIP FROM 387) = 355.17; INV OUT (8" DIP TO 384) = 355.11
- 385: RIM EL. = 363.37; INV IN (8" DIP FROM 381) = 354.04; INV IN (8" DIP FROM 371) = 354.06; INV IN (8" DIP FROM 386) = 353.92; INV OUT (10" DIP TO 385) = 353.88
- 428: RIM EL. = 360.45; INV IN (10" DIP FROM 384) = 352.05; INV OUT (10" DIP TO 428) = 351.91
- 615: RIM EL. = 354.14; INV IN (10" DIP FROM 385) = 344.80; INV OUT (12" DIP TO 615) = 344.66
- 1013: RIM EL. = 369.99; INV OUT (8" DIP TO 1013) = 363.86
- 541: RIM EL. = 360.71; INV IN (8" DIP FROM 541) = 355.01; INV OUT (8" DIP TO 1012) = 354.79
- 469: RIM EL. = 358.29; INV IN (8" DIP FROM 465) = 344.68; INV OUT (8" DIP TO 469) = 344.34
- 472: RIM EL. = 355.00; INV IN (8" DIP FROM 469) = 343.18; INV OUT (8" DIP TO 472) = 343.12
- 473: RIM EL. = 353.21; INV IN (8" DIP FROM NORTH) = 343.04; INV IN (8" DIP FROM 469) = 342.73; INV OUT (8" DIP TO 473) = 342.71
- 475: RIM EL. = 350.55; INV OUT (8" DIP TO 473) = 343.05
- 615: RIM EL. = 352.65; INV IN (8" DIP FROM 472) = 342.43; INV IN (8" DIP FROM 479) = 342.31; INV OUT (8" DIP TO 615) = 342.20
- 1008: RIM EL. = 350.94; INV IN (8" DIP FROM 473) = 337.11; INV IN (12" DIP FROM 428) = 337.15; INV OUT (12" DIP TO 1008) = 336.89
- 1033: RIM EL. = 356.99; INV IN (8" DIP FROM NORTHWEST) = 350.34; INV OUT (8" DIP TO 1033) = 350.29
- 1035: RIM EL. = 353.76; INV IN (8" DIP FROM NORTH) = 348.95; INV IN (8" DIP FROM 1080) = 348.99; INV OUT (8" DIP TO EAST) = 348.92

HORIZONTAL GRAPHIC SCALE 1" = 30' (30 15 0 30 60)

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF FAIRFAX STANDARDS AND SPECIFICATIONS

SCALE: 1"=30'

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engineering surveying land planning

COMMONWEALTH OF VIRGINIA — ELI GOLDMAN Lic. No.55868 01/03/2020 — PROFESSIONAL ENGINEER

NORTHFAX WEST
MASTER DEVELOPMENT PLAN

CITY OF FAIRFAX, VIRGINIA

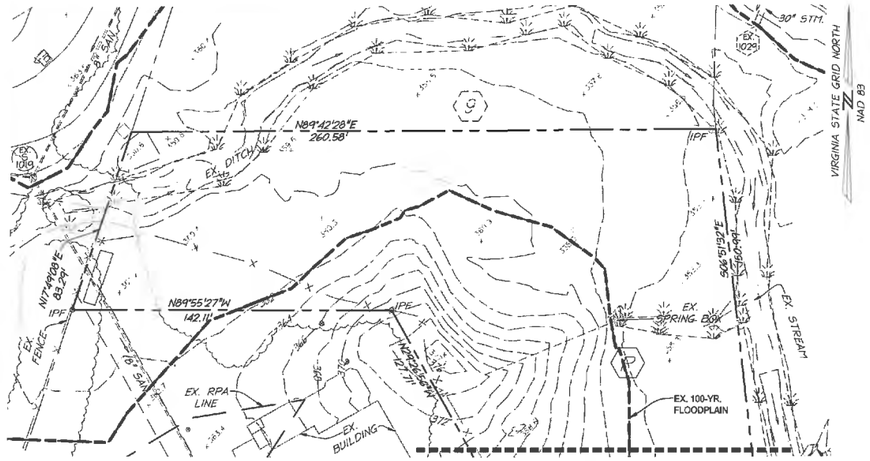
MARK	DATE	DESCRIPTION

PROJECT No.: 13139.005.00
DRAWING No.: 109632
DATE: 11-21-2019
DESIGN: EG
DRAWN: JS
CHECKED: KMW

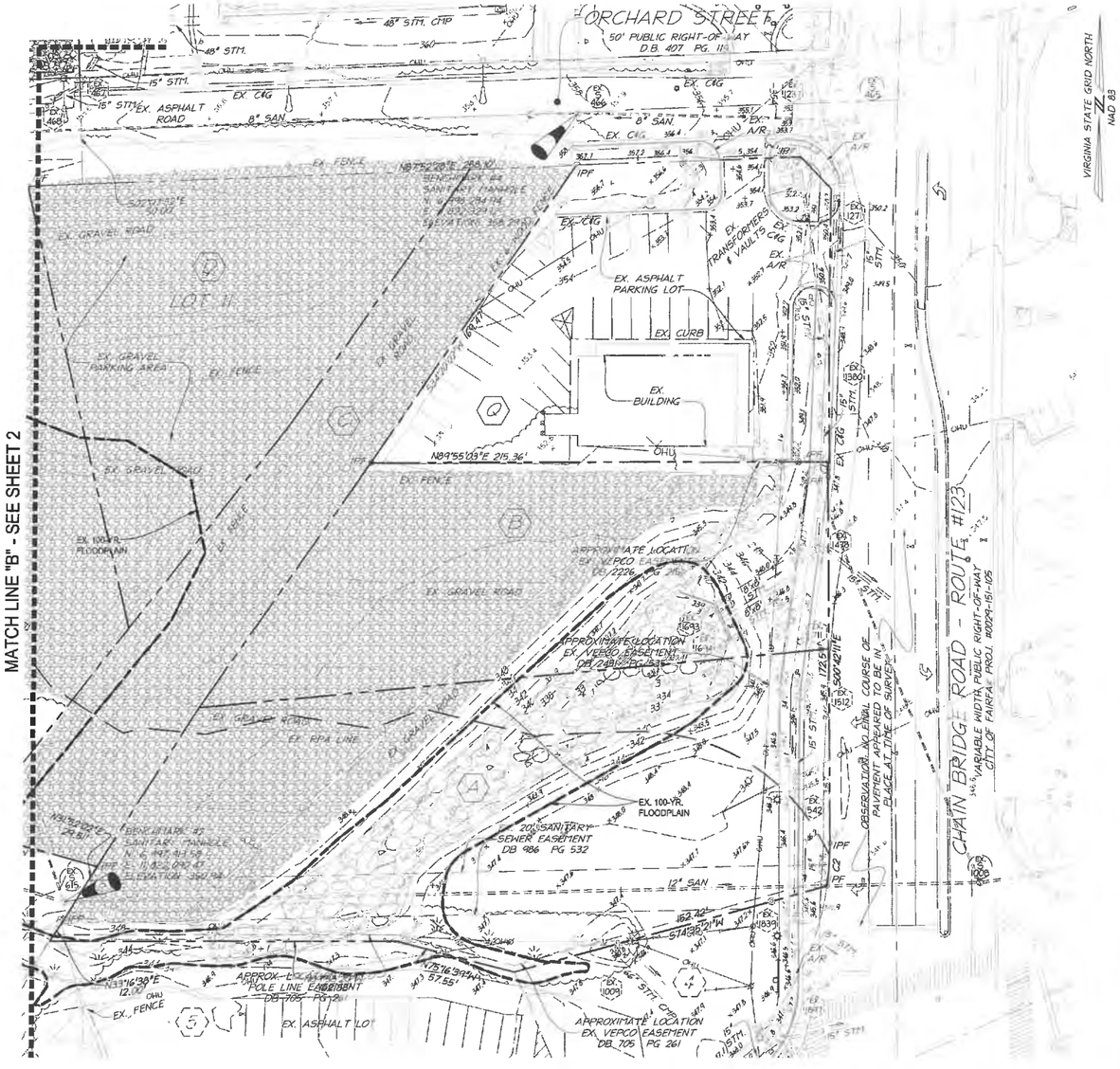
SHEET TITLE:

EXISTING CONDITIONS PLAN

SHEET No. 2



MATCH LINE "A" - SEE SHEET 2



MATCH LINE "B" - SEE SHEET 2

OWNERSHIP TABLE

- (A) MAP #57-2-02-017, #3590 CHAIN BRIDGE ROAD — ARG II, LLC — D.B. 13408 PG. 1070; D.B. 15230 PG. 1182 — ZONED: COMMERCIAL RETAIL
- (B) MAP #57-2-02-016, #3580 CHAIN BRIDGE ROAD — ARG II, LLC — D.B. 13408 PG. 1070; D.B. 15230 PG. 1182 — ZONED: COMMERCIAL RETAIL
- (C) MAP #57-2-02-019, #10505 ORCHARD STREET — ARG II, LLC — D.B. 13408 PG. 1070; D.B. 15230 PG. 1182 — ZONED: COMMERCIAL RETAIL
- (D) MAP #57-2-08-011, #10507 ORCHARD STREET — ARG II, LLC — D.B. 13408 PG. 1070; D.B. 15230 PG. 1182 — ZONED: RESIDENTIAL MEDIUM
- (E) MAP #57-2-08-012, #10509 ORCHARD STREET — ARG II, LLC — D.B. 15339 PG. 102 — ZONED: RESIDENTIAL MEDIUM
- (F) MAP #57-2-08-013, #10511 ORCHARD STREET — ARG II, LLC — D.B. 15339 PG. 102 — ZONED: RESIDENTIAL MEDIUM
- (G) MAP #57-2-08-014, #10513 ORCHARD STREET — ARG II, LLC — D.B. 16739 PG. 1026 — ZONED: RESIDENTIAL MEDIUM
- (H) MAP #57-2-08-010, #10515 ORCHARD STREET — ORCHARD RE INVESTMENTS — D.B. 18823 PG. 1535 — ZONED: RESIDENTIAL MEDIUM
- (I) MAP #57-2-02-005, #10517 ORCHARD STREET — ORCHARD RE INVESTMENTS — D.B. 19218 PG. 1148 — ZONED: RESIDENTIAL MEDIUM
- (J) MAP #57-2-08-005, #10508 ORCHARD STREET — ORCHARD RE INVESTMENTS — D.B. 17602 PG. 631 — ZONED: RESIDENTIAL MEDIUM
- (K) MAP #57-2-08-006, #10510 ORCHARD STREET — ORCHARD RE INVESTMENTS — D.B. 19837 PG. 1921 — ZONED: RESIDENTIAL MEDIUM
- (L) MAP #57-2-08-007, #10512 ORCHARD STREET — ORCHARD RE INVESTMENTS — D.B. 17434 PG. 444 — ZONED: RESIDENTIAL MEDIUM
- (M) MAP #57-2-08-008, #10514 ORCHARD STREET — ORCHARD RE INVESTMENTS — D.B. 18388 PG. 265 — ZONED: RESIDENTIAL MEDIUM
- (N) MAP #57-2-02-003, #10516 ORCHARD STREET — ORCHARD RE INVESTMENTS — D.B. 20080 PG. 1216 — ZONED: RESIDENTIAL MEDIUM
- (O) MAP #57-2-07-015B, NO ADDRESS — ORCHARD RE INVESTMENTS — D.B. 23612 PG. 493 — ZONED: RESIDENTIAL MEDIUM
- (P) MAP #57-2-47-000A, NO ADDRESS — ORCHARD RE INVESTMENTS — D.B. 23812 PG. 479 — ZONED: RESIDENTIAL MEDIUM
- (Q) MAP #57-2-02-020, #3570 CHAIN BRIDGE ROAD — NORTHFAX JV LLC — D.B. 8904 PG. 1517 — ZONED: COMMERCIAL RETAIL
- (1) MAP #57-2-18-001A — THE ASSEMBLY — D.B. 3161 PG. 508 — ZONED: RESIDENTIAL TOWNHOUSE
- (2) MAP #57-2-08-004A — ELE N.A., LLC — D.B. 24268 PG. 1935 — ZONED: COMMERCIAL OFFICE
- (3) MAP #57-2-08-003A — PMG NORTHERN VIRGINIA, LLC — D.B. 20764 PG. 1728 — ZONED: COMMERCIAL RETAIL
- (4) MAP #57-2-02-018 — CITY OF FAIRFAX — D.B. 18684 PG. 857 — ZONED: COMMERCIAL RETAIL
- (5) MAP #57-2-02-015 — GLASCOCK & SONS, LP — D.B. 9172 PG. 571 — ZONED: COMMERCIAL RETAIL
- (6) MAP #57-2-02-010 — SCHILLING T. ALPINE, INC. — D.B. 6871 PG. 1815 — ZONED: COMMERCIAL RETAIL
- (7) MAP #57-2-02-006 — BRANCH AVENUE ASSOCIATES, LLC — D.B. 14796 PG. 1326 — ZONED: COMMERCIAL RETAIL
- (8) MAP #57-2-47-001 — SANJAY BAJAJ — D.B. 23803 PG. 185 — ZONED: RESIDENTIAL MEDIUM
- (9) MAP #57-2-02-001A — RONALD & BARBARA FOWLER — D.B. 5923 PG. 1416 — ZONED: RESIDENTIAL MEDIUM

LINE TABLE

LINE	BEARING	DISTANCE
L1	S 87°52'28" W	26.01'

CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	TANGENT	BEARING	CHORD
C1	5761.58'	7.14'	0°04'15"	3.57'	S 00°40'03" E	7.14'
C2	133.14'	20.03'	8°37'11"	10.03'	S 03°36'25" W	20.01'
C3	90.75'	19.96'	12°36'07"	10.02'	S 81°34'25" W	19.92'
C4	50.00'	17.87'	20°28'30"	9.03'	S 85°30'33" W	17.77'
C5	100.00'	35.74'	20°28'30"	18.05'	N 85°30'33" E	35.55'
C6	40.75'	8.96'	12°36'07"	4.50'	N 81°34'25" E	8.94'

STORM STRUCTURE DATA

- (373) RIM EL. = 370.32; INV IN (15" RCP FROM 376) = 367.56; INV OUT (15" RCP TO 374) = 365.31
- (374) RIM EL. = 370.40; INV IN (30" RCP FROM 373) = 365.43; INV IN (15" RCP FROM WEST) = 353.28; INV OUT (30" RCP TO 356) = 363.26
- (356) INV OUT (21" RCP TO 355) = 362.44
- (355) RIM EL. = 365.40; INV IN (30" RCP FROM 374) = 361.65; INV IN (21" RCP FROM 355) = 361.82; INV OUT (30" RCP TO 357) = 361.60
- (380) RIM EL. = 366.13; INV OUT (15" RCP TO 361) = 359.51
- (382) RIM EL. = 364.62; INV OUT (15" RCP TO 361) = 359.72
- (361) RIM EL. = 365.77; INV IN (15" RCP FROM 360) = 359.31; INV IN (15" RCP FROM 362) = 359.37; INV OUT (18" RCP TO 357) = 359.23
- (357) RIM EL. = 365.55; INV IN (30" RCP FROM 356) = 360.88; INV IN (18" RCP FROM 361) = 358.97; INV OUT (42" RCP TO 358) = 358.94
- (383) RIM EL. = 362.61; INV OUT (12" RCP TO 382) = 360.26
- (362) RIM EL. = 362.68; INV IN (12" RCP FROM 383) = 359.81; INV OUT (12" RCP TO 364) = 359.78
- (370) RIM EL. = 366.82; INV OUT (29"x45" ERCP TO 364) = 362.34
- (364) RIM EL. = 362.16; INV IN (29"x45" ERCP FROM 370) = 358.26; INV IN (12" RCP FROM 362) = 359.11; INV OUT (19"x30" ERCP TO 363A) = 358.08; INV OUT (19"x30" ERCP TO 363B) = 358.06
- (363) RIM EL. = 361.88; INV IN (19"x30" ERCP FROM 364A) = 357.64; INV IN (19"x30" ERCP FROM 364B) = 357.71; INV OUT (19"x30" ERCP TO 365A) = 357.58; INV OUT (19"x30" ERCP TO 365B) = 357.60
- (365) RIM EL. = 361.96; INV IN (19"x30" RCP FROM 363A) = 357.54; INV IN (19"x30" RCP FROM 363B) = 357.80; INV OUT (24" RCP TO 359) = 357.32
- (359) RIM EL. = 360.24; INV IN (24" RCP FROM 365) = 354.69; INV OUT (24" RCP TO DOGHOUSE) = 354.55
- (358) RIM EL. = 360.07; INV IN (42" RCP FROM 357) = 354.43; INV OUT (42" RCP TO 789) = 354.40
- (789) INV IN (42" RCP FROM 358) = 348.74
- (1009) INV OUT (66" CMP TO SOUTHEAST) = 340.78
- (1036) INV IN (40"x31" CMPA FROM NORTH) = 357.03
- (424) INV OUT (36" CMP TO 423) = 346.12
- (423) * INV IN (36" CMP FROM 424)
- (425) ** INV OUT (36" CMP TO 422) = 346.17
- (422) ** INV IN (36" CMP FROM 425) = 346.19
- (426) INV OUT (36" CMP TO 421) = 346.18
- (421) INV IN (36" CMP FROM 426) = 346.12
- (419) INV OUT (15" CPP TO 420) = 348.33
- (420) INV IN (15" CPP FROM 419) = 347.48
- (476) INV OUT (12" CMP TO 477) = 348.81
- (477) INV IN (12" CMP FROM 476) = 348.87
- (474) INV OUT (12" CMP TO 475) = 349.80
- (475) INV IN (12" CMP FROM 474) = 349.70
- (417) INV OUT (12" CMP TO 418) = 348.69
- (418) INV IN (12" CMP FROM 417) = 348.63
- (470) INV OUT (12" RCP TO 471) = 352.72
- (471) INV IN (12" RCP FROM 470) = 352.24
- (446) RIM EL. = 360.36; INV OUT (48" CMP TO 447) = 353.31
- (447) RIM EL. = 360.07; INV IN (48" CMP FROM 446) = 353.06; INV OUT (48" RCP TO 448) = 353.04
- (448) RIM EL. = 360.00; INV IN (48" RCP FROM 447) = 353.11; INV IN (48" CMP FROM SWM) = 353.12; OUT - UNDERGROUND SWM STRUCTURE WITH WEIR WALL; INV OUT (15" RCP TO 467) = 353.08
- (467) RIM EL. = 355.85; INV IN (15" RCP FROM 449) = 352.98; INV OUT (15" RCP TO 468) = 352.95
- (468) INV IN (15" RCP FROM 467) = 352.82
- (1014) RIM EL. = 364.55; INV OUT (15" RCP TO EAST) = 359.98
- (2574) RIM EL. = 357.80; INV IN (15" RCP FROM NORTH) = 354.16; INV OUT (15" RCP TO 2538) = 354.12
- (2538) RIM EL. = 359.17; INV IN (15" RCP TO 2574) = 354.26
- (2537) RIM EL. = 359.14; INV OUT (30" RCP TO 488) = 354.14
- (488) RIM EL. = 360.97; INV IN (30" RCP FROM 2537) = 356.52; INV OUT (42"x29" CMPA FROM 489 VIA NORTH) = 356.49; INV OUT (42"x29" CMPA TO 489 VIA WEST) = 356.53
- (489) RIM EL. = 360.24; INV IN (42"x29" CMPA FROM 488) = 354.61; INV IN (42"x29" CMPA FROM 488) = 354.70; INV OUT (42"x29" CMPA TO SWM) = 354.60
- (1893) TOP OF WALL = 340.05; INV OUT (8'x8' BOX CULVERT TO EAST) = 330.35
- (1894) TOP OF WALL = 339.98; INV OUT (8'x8' BOX CULVERT TO EAST) = 330.27
- (1237) RIM EL. = 353.15; INV OUT (15" RCP TO 1380) = 347.85
- (1271) RIM EL. = 350.70; INV OUT (15" RCP TO 1380) = 344.50
- (1380) RIM EL. = 349.05; INV IN (15" RCP FROM 1271) = 343.25; INV OUT (15" RCP FROM 1237) = 343.15; INV OUT (15" RCP TO 1478) = 343.05
- (1478) RIM EL. = 347.12; INV IN (15" RCP FROM 1380) = 340.12; INV OUT (15" RCP TO SE) = 335.32
- (1512) RIM EL. = 346.18; INV OUT (15" RCP TO 1542) = 341.88
- (1542) RIM EL. = 346.10; INV IN (15" RCP FROM 1512) = 341.50; INV OUT (15" RCP TO 1839) = 341.40
- (1839) RIM EL. = 345.21; INV IN (15" RCP FROM 1542) = 340.81; INV OUT (15" RCP TO STRUCTURE IN ROAD) = 340.61
- (1940) RIM EL. = 348.09; INV OUT (15" RCP TO 1897) = 342.89
- (1897) RIM EL. = 342.62; INV IN (15" RCP FROM 1940) = 342.22; INV OUT (15" RCP TO STRUCTURE IN ROAD) = 336.92

* UNABLE TO OBTAIN INVERTS - STRUCTURE FULL OF DEBRIS

** REVERSE FLOW

30 15 0 30 60
HORIZONTAL GRAPHIC SCALE
1" = 30'

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF FAIRFAX STANDARDS AND SPECIFICATIONS

christopher consultants
9900 main st
suite 400
fairfax, va 22031
p 703.273.6620
engineering surveying land planning

COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
01/03/2020
PROFESSIONAL ENGINEER

NORTHFAX WEST
MASTER DEVELOPMENT PLAN
CITY OF FAIRFAX, VIRGINIA

MARK	DATE	DESCRIPTION

PROJECT No.: 13139.005.00
DRAWING No.: 109632
DATE: 11-21-2019
DESIGN: EG
DRAWN: JS
CHECKED: KMW

SHEET TITLE:

EXISTING CONDITIONS PLAN

SHEET No.
2A

SCALE: 1"=30'

MATCH LINE "A" - SEE SHEET 3A

MATCH LINE "B" - SEE SHEET 3A

McLEAN AVENUE

ORCHARD STREET
50' PUBLIC RIGHT-OF-WAY
D.B. 407 PG. 115

FAIRFAX ACRES
D.B. 401 PG. 312

APPROXIMATE LOCATION EX. VEPCO EASEMENT DB 1374 PG 386

APPROXIMATE LOCATION EX. VEPCO EASEMENT DB 1374

APPROXIMATE LOCATION EX. VEPCO EASEMENT DB 1151 PG 133

APPROXIMATE LOCATION EX. VEPCO EASEMENT DB 647 PG 267

EX. 20' SANITARY SEWER EASEMENT DB 986 PG 542

EX. 20' SANITARY SEWER EASEMENT DB 1358 PG 354

EX. 20' SANITARY SEWER EASEMENT DB 986 PG 542

EX. 20' SANITARY SEWER EASEMENT DB 1358 PG 539

NOTES
1. SEE SHEETS 3B AND 3C - TREE MANAGEMENT SCHEDULE.
2. SEE SHEET 3D - TREE MANAGEMENT NOTES & DETAILS .

LEGEND

- EXISTING VEGETATION LINE
- #6608 / #6859 — EXISTING TREE TO BE PRESERVED
- #6608 / #6859 — EXISTING TREE TO BE REMOVED
- LOD — LIMITS OF DISTURBANCE
- RP — TREE PROTECTION FENCE AND ROOT PRUNING

VIRGINIA STATE GRID NORTH NAD 83

30 15 0 30 60
HORIZONTAL GRAPHIC SCALE
1" = 30'

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF FAIRFAX STANDARDS AND SPECIFICATIONS

PLAN PREPARED BY LAURIE BETH DONNACHIE
ISA CERTIFIED ARBORIST NO. MA-5723A
SIGNATURE: Laurie B Donnachie DATE: 2020-01-03

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p 703.273.6620
engineering surveying land planning

COMMONWEALTH OF VIRGINIA
LAURIE B. DONNACHIE
Lic. No. 0406001880
2020-01-03
LANDSCAPE ARCHITECT

MARK	DATE	DESCRIPTION

PROJECT No.: 13139.005.00
DRAWING No.: 109632
DATE: 11-21-2019
DESIGN: LBD
DRAWN: LBD
CHECKED: LBD

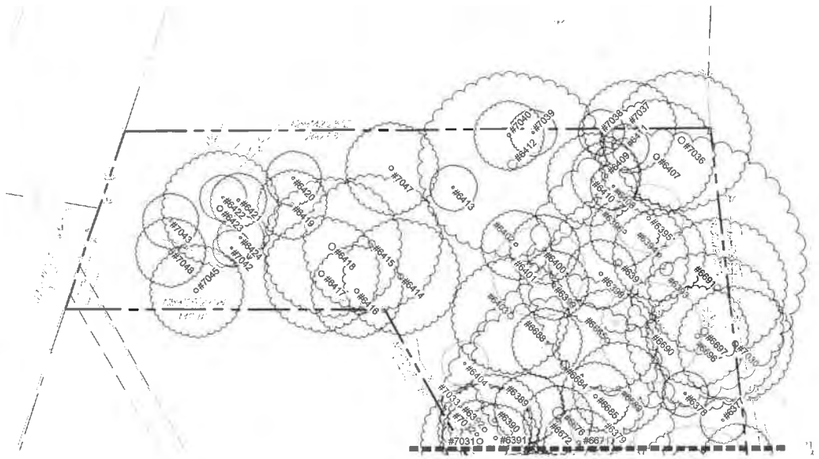
SHEET TITLE:

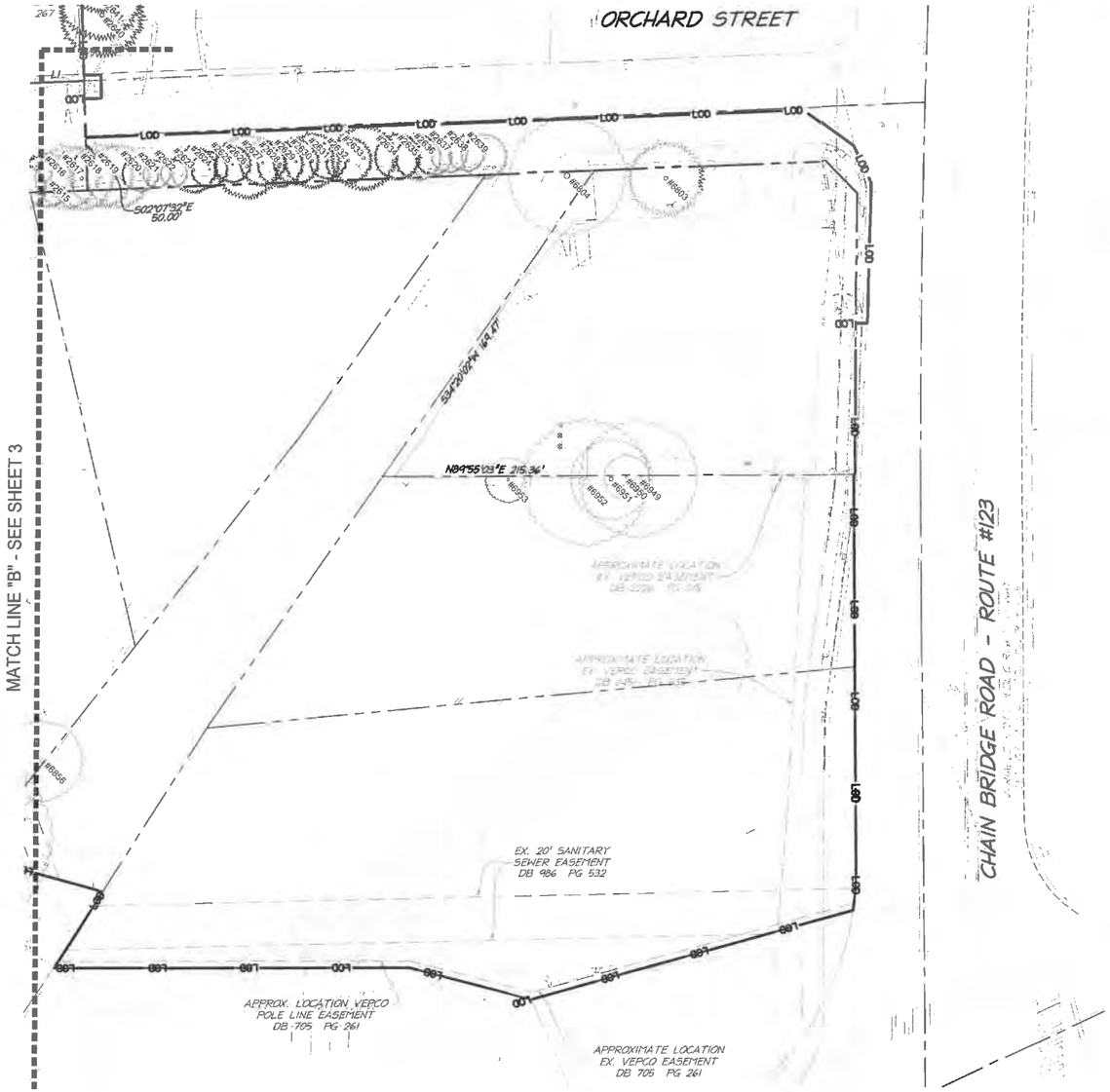
TREE MANAGEMENT PLAN

SHEET No.
3

SCALE: 1"=30'

NORTHFAX WEST
MASTER DEVELOPMENT PLAN
CITY OF FAIRFAX, VIRGINIA





NOTES
1. SEE SHEETS 3B AND 3C - TREE MANAGEMENT SCHEDULE.
2. SEE SHEET 3D - TREE MANAGEMENT NOTES & DETAILS .

LEGEND

- EXISTING VEGETATION LINE
- #6808 / #6859 — EXISTING TREE TO BE PRESERVED
- #6808 / #6859 — EXISTING TREE TO BE REMOVED
- LOD — LIMITS OF DISTURBANCE
- RP — TREE PROTECTION FENCE AND ROOT PRUNING

VIRGINIA STATE GRID NORTH NAD 83

30 15 0 30 60
HORIZONTAL GRAPHIC SCALE
1" = 30'

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF FAIRFAX STANDARDS AND SPECIFICATIONS

PLAN PREPARED BY LAURIE BETH DONNACHIE
ISA CERTIFIED ARBORIST NO. MA-5723A
SIGNATURE: Laurie B Donnachie DATE: 2020-01-03

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engineering surveying land planning

COMMONWEALTH OF VIRGINIA
LAURIE B. DONNACHIE
Lic. No. 0406001880
2020-01-03
LANDSCAPE ARCHITECT

NORTHFAX WEST
MASTER DEVELOPMENT PLAN
CITY OF FAIRFAX, VIRGINIA

MARK	DATE	DESCRIPTION

PROJECT No.: 13139.005.00
DRAWING No.: 109532
DATE: 11-21-2019
DESIGN: LBD
DRAWN: LBD
CHECKED: LBD

SHEET TITLE:
TREE MANAGEMENT PLAN

SHEET No.
3A

SCALE: 1"=30'

TREE MANAGEMENT SCHEDULE

TREE #	BOTANICAL NAME	COMMON NAME	CRITICAL ROOT ZONE RADIUS (FEET)	TRUNK DIAMETER (INCHES)	CONDITION RATING	PROCEDURE
1974	*THUJA SPP.*	ARBORVITAE	10	8	78	PRESERVE
1975	*THUJA SPP.*	ARBORVITAE	10	8	75	REMOVE
1976	*THUJA SPP.*	ARBORVITAE	12	10	74	REMOVE
1977	*THUJA SPP.*	ARBORVITAE	10	8	78	REMOVE
1978	*THUJA SPP.*	ARBORVITAE	10	8	78	REMOVE
1979	*THUJA SPP.*	ARBORVITAE	10	8	78	REMOVE
1980	*THUJA SPP.*	ARBORVITAE	10	8	74	REMOVE
1981	*THUJA SPP.*	ARBORVITAE	10	8	72	REMOVE
1982	*THUJA SPP.*	ARBORVITAE	10	8	72	REMOVE
1984	*THUJA SPP.*	ARBORVITAE	12	10	74	REMOVE
1985	*THUJA SPP.*	ARBORVITAE	10	8	74	REMOVE
1986	*THUJA SPP.*	ARBORVITAE	12	10	72	REMOVE
1987	*THUJA SPP.*	ARBORVITAE	12	10	72	REMOVE
1988	*THUJA SPP.*	ARBORVITAE	12	10	72	REMOVE
1989	*THUJA SPP.*	ARBORVITAE	12	10	73	REMOVE
1990	*THUJA SPP.*	ARBORVITAE	12	10	74	REMOVE
1991	*THUJA SPP.*	ARBORVITAE	12	10	74	REMOVE
1992	*THUJA SPP.*	ARBORVITAE	12	10	78	REMOVE
1993	*THUJA SPP.*	ARBORVITAE	12	10	78	REMOVE
1994	*THUJA SPP.*	ARBORVITAE	12	10	75	REMOVE
1995	*THUJA SPP.*	ARBORVITAE	12	10	73	REMOVE
1996	*THUJA SPP.*	ARBORVITAE	12	10	73	REMOVE
1997	*THUJA SPP.*	ARBORVITAE	12	10	73	REMOVE
1998	*THUJA SPP.*	ARBORVITAE	12	10	73	REMOVE
1999	*THUJA SPP.*	ARBORVITAE	12	10	73	REMOVE
2000	*THUJA SPP.*	ARBORVITAE	12	10	78	REMOVE
2001	*THUJA SPP.*	ARBORVITAE	12	10	78	REMOVE
2002	*THUJA SPP.*	ARBORVITAE	12	10	78	REMOVE
2003	*THUJA SPP.*	ARBORVITAE	12	10	78	REMOVE
2005	*ACER RUBRUM*	RED MAPLE	40	36	65	REMOVE
2006	*ACER RUBRUM*	RED MAPLE	8	6	72	REMOVE
2007	*FRAXINUS PENNSYLVANICA*	GREEN ASH	20	16	0	REMOVE
2008	*ACER RUBRUM*	RED MAPLE	20	16	72	REMOVE
2009	*ACER RUBRUM*	RED MAPLE	18	14	67	REMOVE
2010	*ACER RUBRUM*	RED MAPLE	10	8	56	REMOVE
2011	*UNIDENTIFIED*	DEAD TREE	8	6	0	REMOVE
2012	*FRAXINUS PENNSYLVANICA*	GREEN ASH	22	18	0	REMOVE
2014	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	14	10	72	REMOVE
2015	*CATALPA SPECIOSA*	NORTHERN CATALPA	16	12	50	REMOVE
2016	*ACER RUBRUM*	RED MAPLE	8	6	56	REMOVE
2018	*MORUS ALBA*	WHITE MULBERRY	8	6	70	REMOVE
2019	*MORUS ALBA*	WHITE MULBERRY	20	16	50	REMOVE
2020	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	8	6	50	REMOVE
2612	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	10	8	70	REMOVE
2615	*THUJA SPP.*	ARBORVITAE	12	10	72	REMOVE
2616	*THUJA SPP.*	ARBORVITAE	14	10	75	REMOVE
2617	*THUJA SPP.*	ARBORVITAE	14	10	72	REMOVE
2618	*THUJA SPP.*	ARBORVITAE	14	10	75	REMOVE
2619	*THUJA SPP.*	ARBORVITAE	14	10	72	REMOVE
2620	*THUJA SPP.*	ARBORVITAE	8	6	72	REMOVE
2621	*THUJA SPP.*	ARBORVITAE	6	4	68	REMOVE
2622	*THUJA SPP.*	ARBORVITAE	6	4	75	REMOVE
2623	*THUJA SPP.*	ARBORVITAE	10	8	68	REMOVE
2624	*THUJA SPP.*	ARBORVITAE	8	6	72	REMOVE
2625	*THUJA SPP.*	ARBORVITAE	8	6	67	REMOVE
2626	*THUJA SPP.*	ARBORVITAE	14	10	72	REMOVE
2627	*THUJA SPP.*	ARBORVITAE	10	8	68	REMOVE
2628	*THUJA SPP.*	ARBORVITAE	10	8	72	REMOVE
2629	*THUJA SPP.*	ARBORVITAE	10	8	68	REMOVE
2630	*THUJA SPP.*	ARBORVITAE	12	10	72	REMOVE
2631	*THUJA SPP.*	ARBORVITAE	8	6	67	REMOVE
2632	*THUJA SPP.*	ARBORVITAE	10	8	72	REMOVE
2633	*THUJA SPP.*	ARBORVITAE	14	10	68	REMOVE
2634	*THUJA SPP.*	ARBORVITAE	10	8	69	REMOVE
2635	*THUJA SPP.*	ARBORVITAE	10	8	67	REMOVE
2636	*THUJA SPP.*	ARBORVITAE	8	6	69	REMOVE
2637	*THUJA SPP.*	ARBORVITAE	8	6	68	REMOVE
2638	*THUJA SPP.*	ARBORVITAE	8	6	72	REMOVE
2639	*THUJA SPP.*	ARBORVITAE	10	8	68	REMOVE
2640	*THUJA SPP.*	ARBORVITAE	18	14	72	PRESERVE
2641	*THUJA SPP.*	ARBORVITAE	18	14	73	PRESERVE
2642	*THUJA SPP.*	ARBORVITAE	14	12	72	PRESERVE
2643	*THUJA SPP.*	ARBORVITAE	14	12	68	PRESERVE
2644	*THUJA SPP.*	ARBORVITAE	14	12	69	PRESERVE
2645	*THUJA SPP.*	ARBORVITAE	14	12	70	PRESERVE
2646	*THUJA SPP.*	ARBORVITAE	14	12	69	PRESERVE
2647	*THUJA SPP.*	ARBORVITAE	14	12	70	PRESERVE
2648	*THUJA SPP.*	ARBORVITAE	12	10	69	PRESERVE
2649	*THUJA SPP.*	ARBORVITAE	14	10	68	PRESERVE
2650	*THUJA SPP.*	ARBORVITAE	8	6	66	PRESERVE
2651	*THUJA SPP.*	ARBORVITAE	14	10	69	PRESERVE
2652	*THUJA SPP.*	ARBORVITAE	12	10	68	PRESERVE
2653	*THUJA SPP.*	ARBORVITAE	14	10	70	PRESERVE
2654	*THUJA SPP.*	ARBORVITAE	14	10	66	PRESERVE
2655	*THUJA SPP.*	ARBORVITAE	14	10	65	PRESERVE
2656	*THUJA SPP.*	ARBORVITAE	14	10	66	PRESERVE
2657	*THUJA SPP.*	ARBORVITAE	14	10	70	PRESERVE
2658	*THUJA SPP.*	ARBORVITAE	14	10	53	PRESERVE
2659	*THUJA SPP.*	ARBORVITAE	14	10	71	PRESERVE
2660	*THUJA SPP.*	ARBORVITAE	14	10	69	PRESERVE
2661	*THUJA SPP.*	ARBORVITAE	14	10	68	PRESERVE
2662	*THUJA SPP.*	ARBORVITAE	14	10	75	PRESERVE
2663	*THUJA SPP.*	ARBORVITAE	14	10	73	PRESERVE
2664	*THUJA SPP.*	ARBORVITAE	14	10	75	PRESERVE
2665	*THUJA SPP.*	ARBORVITAE	10	8	69	PRESERVE
6056	*ACER RUBRUM*	RED MAPLE	15	10	53	REMOVE
6301	*PRUNUS SEROTINA*	BLACK CHERRY	10	12	69	REMOVE
6302	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	20	20	66	REMOVE
6303	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	10	12	72	REMOVE
6304	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	15	15	72	REMOVE
6305	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	10	20	70	REMOVE
6306	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	15	15	72	REMOVE
6307	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	15	20	75	REMOVE
6308	*ACER RUBRUM*	RED MAPLE	15	15	73	REMOVE
6309	*FRAXINUS PENNSYLVANICA*	GREEN ASH	10	14	0	REMOVE
6310	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	5	6	72	REMOVE
6311	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	10	20	71	REMOVE
6312	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	10	26	75	REMOVE
6313	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	20	26	72	REMOVE
6314	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	20	18	69	REMOVE
6315	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	10	15	70	REMOVE
6316	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	10	24	72	REMOVE
6317	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	10	15	72	REMOVE
6318	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	10	15	69	REMOVE
6319	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	20	36	70	REMOVE
6320	*ACER RUBRUM*	RED MAPLE	25	12	50	REMOVE
6321	*ACER RUBRUM*	RED MAPLE	15	10	60	REMOVE

TREE MANAGEMENT SCHEDULE

TREE #	BOTANICAL NAME	COMMON NAME	CRITICAL ROOT ZONE RADIUS (FEET)	TRUNK DIAMETER (INCHES)	CONDITION RATING	PROCEDURE
6322	*ACER RUBRUM*	RED MAPLE	35	24	63	REMOVE
6323	*ACER RUBRUM*	RED MAPLE	10	12	0	REMOVE
6324	*ACER RUBRUM*	RED MAPLE	25	24	47	REMOVE
6325	*PRUNUS SEROTINA*	BLACK CHERRY	10	12	68	REMOVE
6326	*PRUNUS SEROTINA*	BLACK CHERRY	10	6	44	REMOVE
6327	*ACER RUBRUM*	RED MAPLE	10	8	85	REMOVE
6328	*ACER RUBRUM*	RED MAPLE	20	24	75	REMOVE
6329	*ACER RUBRUM*	RED MAPLE	15	15	67	REMOVE
6330	*ACER RUBRUM*	RED MAPLE	15	24	66	REMOVE
6331	*ACER RUBRUM*	RED MAPLE	20	14	67	REMOVE
6332	*ACER RUBRUM*	RED MAPLE	30	24	68	REMOVE
6333	*ACER RUBRUM*	RED MAPLE	10	8	72	REMOVE
6334	*QUERCUS RUBRA*	NORTHERN RED OAK	25	24	89	REMOVE
6335	*ACER RUBRUM*	RED MAPLE	15	10	89	REMOVE
6336	*ACER RUBRUM*	RED MAPLE	20	24	63	REMOVE
6337	*ACER RUBRUM*	RED MAPLE	15	12	70	REMOVE
6338	*PRUNUS SEROTINA*	BLACK CHERRY	10	10	60	REMOVE
6339	*ACER RUBRUM*	RED MAPLE	25	24	65	REMOVE
6340	*FRAXINUS PENNSYLVANICA*	GREEN ASH	25	24	0	REMOVE
6341	*FRAXINUS PENNSYLVANICA*	GREEN ASH	15	15	0	REMOVE
6342	*MORUS ALBA*	WHITE MULBERRY	50	24	44	REMOVE
6343	*ACER RUBRUM*	RED MAPLE	15	6	68	REMOVE
6344	*ACER RUBRUM*	RED MAPLE	15	6	72	REMOVE
6345	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	10	10	68	REMOVE
6346	*FRAXINUS PENNSYLVANICA*	GREEN ASH	15	15	0	REMOVE
6347	*PRUNUS SEROTINA*	BLACK CHERRY	15	10	71	REMOVE
6348	*FRAXINUS PENNSYLVANICA*	GREEN ASH	25	18	0	REMOVE
6349	*PRUNUS SEROTINA*	BLACK CHERRY	20	12	68	REMOVE
6350	*FRAXINUS PENNSYLVANICA*	GREEN ASH	25	36	40	REMOVE
6351	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	20	15	67	REMOVE
6352	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	30	28	69	REMOVE
6353	*ACER RUBRUM*	RED MAPLE	30	36	65	REMOVE
6354	*ACER RUBRUM*	RED MAPLE	25	24	72	REMOVE
6355	*ACER RUBRUM*	RED MAPLE	10	12	50	REMOVE
6356	*ACER RUBRUM*	RED MAPLE	35	26	53	REMOVE
6357	*ACER RUBRUM*	RED MAPLE	20	24	55	REMOVE
6359	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	10	10	70	REMOVE
6360	*ULMUS AMERICANA*	AMERICAN ELM	20	24	41	REMOVE
6361	*ULMUS AMERICANA*	AMERICAN ELM	10	8	50	REMOVE
6362	*ULMUS AMERICANA*	AMERICAN ELM	10	12	50	REMOVE
6363	*ACER RUBRUM*	RED MAPLE	15	24	60	REMOVE
6364	*JUGLANS NIGRA*	BLACK WALNUT	25	28	69	PRESERVE
6366	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	15	12	66	REMOVE
6367	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	10	8	67	REMOVE
6368	*JUGLANS NIGRA*	BLACK WALNUT	10	6	66	REMOVE
6369	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	10	8	69	PRESERVE
6370	*ACER RUBRUM*	RED MAPLE	30	30	72	PRESERVE
6372	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	5	8	75	PRESERVE
6373	*CARYA CORDIFORMIS*	BITTERNUT HICKORY	10	10	70	PRESERVE
6374	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	10	10	72	PRESERVE
6375	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	25	18	66	PRESERVE
6376	*CARYA CORDIFORMIS*	BITTERNUT HICKORY	15	15	25	PRESERVE
6377	*ULMUS AMERICANA*	AMERICAN ELM	10	8	40	PRESERVE
6378	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	10	10	53	PRESERVE
6379	*MORUS ALBA*	WHITE MULBERRY	15	5	45	REMOVE
6381	*MORUS ALBA*	WHITE MULBERRY	10	6	50	REMOVE
6382	*PRUNUS SEROTINA*	BLACK CHERRY	20	10	58	PRESERVE
6383	*PRUNUS SEROTINA*	BLACK CHERRY	10	10	65	PRESERVE
6384	*PRUNUS SEROTINA*	BLACK CHERRY	15	5	75	PRESERVE
6385	*ALBIZIA JULIBRISSIN*	MIMOSA	10	7	50	PRESERVE
6386	*CATALPA SPECIOSA*	NORTHERN CATALPA	20	12	69	PRESERVE
6387	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	20	18	45	PRESERVE
6388	*ACER RUBRUM*	RED MAPLE	15	12	66	PRESERVE
6389	*NYSSA SYLVATICA*	BLACK GUM	15	8	65	PRESERVE
6390	*QUERCUS RUBRA*	NORTHERN RED OAK	20	15	56	PRESERVE
6391	*QUERCUS RUBRA*	NORTHERN RED OAK	15	10	56	PRESERVE
6392	*ULMUS AMERICANA*	AMERICAN ELM	20	6	63	PRESERVE
6393	*ACER RUBRUM*	RED MAPLE	60	40	56	PRESERVE
6394	*PRUNUS SEROTINA*	BLACK CHERRY	20	10	25	PRESERVE
6395	*ACER PLATANOIDES*	NORWAY MAPLE	15	6	70	REMOVE
6396	*QUERCUS ALBA*	WHITE OAK	15	15	56	PRESERVE
6397	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	30	38	68	PRESERVE
6398	*PRUNUS SEROTINA*	BLACK CHERRY	15	6	66	PRESERVE
6399	*ULMUS AMERICANA*	AMERICAN ELM	15	6	72	PRESERVE
6400	*FAGUS GRANDFOLIA*	AMERICAN BEECH	15	8	59	PRESERVE
6401	*MORUS ALBA*	WHITE MULBERRY	20	15	67	REMOVE
6402	*ACER RUBRUM*	RED MAPLE	15	6	63	PRESERVE
6403	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	25	24	70	PRESERVE
6404	*MORUS ALBA*	WHITE MULBERRY	10	8	66	REMOVE
6407	*ACER RUBRUM*	RED MAPLE	25	24	72	PRESERVE
6408	*ACER RUBRUM*	RED MAPLE	10	16	63	PRESERVE
6409	*ACER RUBRUM*	RED MAPLE	15	8	65	PRESERVE
6410	*ULMUS AMERICANA*	AMERICAN ELM	20	10	69	PRESERVE
6411	*ACER RUBRUM*	RED MAPLE	10	8	70	PRESERVE
6412	*QUERCUS RUBRA*	NORTHERN RED OAK	40	48	53	PRESERVE
6413	*QUERCUS RUBRA*	NORTHERN RED OAK	10	10	66	PRESERVE
6414	*QUERCUS RUBRA*	NORTHERN RED OAK	25	38	69	PRESERVE
6415	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	30	50	72	PRESERVE
6416	*FAGUS GRANDFOLIA*	AMERICAN BEECH	20	24	66	PRESERVE
6417	*QUERCUS RUBRA*	NORTHERN RED OAK	25	40	50	PRESERVE
6418	*QUERCUS RUBRA*	NORTHERN RED OAK	30	40	56	PRESERVE
6419	*ACER RUBRUM*	RED MAPLE	15	12	70	PRESERVE
6420	*PRUNUS SEROTINA*	BLACK CHERRY	12	8	72	PRESERVE
6421	*QUERCUS RUBRA*	NORTHERN RED OAK	12	10	74	PRESERVE
6422	*ACER RUBRUM*	RED MAPLE	10	12	75	PRESERVE
6423	*QUERCUS RUBRA*	NORTHERN RED OAK	25	24	73	PRESERVE
6424	*QUERCUS RUBRA*	NORTHERN RED OAK	10	6	72	PRESERVE
6504	*ACER SACCHARUM*	SUGAR MAPLE	10	6	75	PRESERVE
6505	*FRAXINUS PENNSYLVANICA*	GREEN ASH	12	8	25	REMOVE
6509	*MORUS ALBA*	WHITE MULBERRY	22	18	68	PRESERVE
6511	*ACER RUBRUM*	RED MAPLE	15	14	25	REMOVE
6512	*FRAXINUS PENNSYLVANICA*	GREEN ASH	18	14	40	REMOVE
6513	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	44	40	40	REMOVE
6514	*ACER SACCHARUM*	SUGAR MAPLE	7	5	53	REMOVE
6515	*FRAXINUS PENNSYLVANICA*	GREEN ASH	20	16	30	REMOVE
6516	*CARYA TOMENTOSA*	MOCKERNUT HICKORY	12	8	69	REMOVE
6517	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	18	14	60	REMOVE
6518	*CATALPA SPECIOSA*	NORTHERN CATALPA	28	24	54	REMOVE
6519	*CATALPA SPECIOSA*	NORTHERN CATALPA	16	12	60	REMOVE
6520	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	24	20	66	REMOVE
6521	*MORUS ALBA*	WHITE MULBERRY	40	36	55	REMOVE
6522	*PRUNUS SEROTINA*	BLACK CHERRY	8	6	65	REMOVE
6523	*JUGLANS NIGRA*	BLACK WALNUT	12	8	65	REMOVE
6524	*ACER RUBRUM*	RED MAPLE	8	6	59	REMOVE
6525	*ACER RUBRUM*	RED MAPLE	18	12	65	REMOVE
6526	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	18	14	55	REMOVE
6527	*ACER RUBRUM*	RED MAPLE	20	16	67	REMOVE

TREE MANAGEMENT SCHEDULE

TREE #	BOTANICAL NAME	COMMON NAME	CRITICAL ROOT ZONE RADIUS (FEET)	TRUNK DIAMETER (INCHES)	CONDITION RATING	PROCEDURE
6528	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	16	12	53	REMOVE
6529	*FRAXINUS PENNSYLVANICA*	GREEN ASH	12	8	0	REMOVE
6530	*ILEX OPACA*	AMERICAN HOLLY	16	12	72	REMOVE
6531	*QUERCUS PALUSTRIS*	PIN OAK	40	36	60	REMOVE
6533	*PLATANUS OCCIDENTALIS*	SYCAMORE	44	40	75	REMOVE
6534	*ACER RUBRUM*	RED MAPLE	24	20	69	REMOVE
6535	*NYSSA SYLVATICA*	BLACK GUM	12	8	67	REMOVE
6536	*ACER RUBRUM*	RED MAPLE	7	5	69	REMOVE
6537	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	14	10	68	REMOVE
6538	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	16	12	75	REMOVE
6539	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	18	14	73	REMOVE
6540	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	20	16	72	REMOVE
6541	*ACER RUBRUM*	RED MAPLE	14	10	70	REMOVE
6542	*ACER RUBRUM*	RED MAPLE	16	12	69	REMOVE
6543	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	22	16	67	REMOVE
6544	*ACER RUBRUM*	RED MAPLE	16	12	69	REMOVE
6546	*ACER RUBRUM*	RED MAPLE	7	5	75	REMOVE
6547	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	14	10	70	REMOVE
6548	*ACER RUBRUM*	RED MAPLE	14	10	72	REMOVE
6549	*UNIDENTIFIED*	DEAD TREE	12	8	0	REMOVE
6551	*ACER RUBRUM*	RED MAPLE	14	10	73	REMOVE
6552	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	16	12	69	REMOVE
6553	*CARYA TOMENTOSA*	MOCKERNUT HICKORY	7	5	65	REMOVE
6554	*ACER RUBRUM*	RED MAPLE	8	6	72	REMOVE
6555	*ACER RUBRUM*	RED MAPLE	18	14	68	REMOVE
6556	*ACER RUBRUM*	RED MAPLE	16	12	75	REMOVE
6557	*UNIDENTIFIED*	DEAD TREE	12	8	0	REMOVE
6558	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	22	18	72	REMOVE
6559	*ACER RUBRUM*	RED MAPLE	7	5	60	REMOVE
6560	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	28	22	75	REMOVE
6561	*ACER RUBRUM*	RED MAPLE	16	14	69	REMOVE
6562	*ACER RUBRUM*	RED MAPLE	14	10	72	REMOVE
6564	*ACER RUBRUM*	RED MAPLE	8	6	75	REMOVE
6565	*UNIDENTIFIED*	DEAD TREE	12	8	0	REMOVE
6566	*ACER RUBRUM*	RED MAPLE	8	6	66	REMOVE
6567	*ACER RUBRUM*	RED MAPLE	18	14	70	REMOVE
6568	*ACER RUBRUM*	RED MAPLE	12	8	53	REMOVE
6569	*ACER SACCHARINUM*	SILVER MAPLE	8	6	45	REMOVE
6570	*ACER RUBRUM*	RED MAPLE	16	12	69	REMOVE
6571	*CARYA TOMENTOSA*	MOCKERNUT HICKORY	16	12	60	REMOVE
6572	*ACER RUBRUM*	RED MAPLE	12	8	75	REMOVE
6573	*ACER RUBRUM*	RED MAPLE	10	8	71	REMOVE
6574	*ACER RUBRUM*	RED MAPLE	14	10	69	REMOVE
6575	*UNIDENTIFIED*	DEAD TREE	22	18	0	REMOVE
6576	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	14	10	75	REMOVE
6577	*ACER RUBRUM*	RED MAPLE	8	6	73	REMOVE
6578	*ACER RUBRUM*	RED MAPLE	7	5	75	REMOVE
6579	*ACER RUBRUM*	RED MAPLE	24	20	70	REMOVE
6580	*ACER RUBRUM*	RED MAPLE	12	8	69	REMOVE
6581	*UNIDENTIFIED*	DEAD TREE	20	16	0	REMOVE
6582	*ACER RUBRUM*	RED MAPLE	8	6	63	REMOVE
6583	*ACER RUBRUM*	RED MAPLE	7	5	71	REMOVE
6584	*ACER RUBRUM*	RED MAPLE	12	8	60	REMOVE
6585	*UNIDENTIFIED*	DEAD TREE	8	6	0	REMOVE
6586	*ACER RUBRUM*	RED MAPLE	12	8	0	REMOVE
6587	*UNIDENTIFIED*	DEAD TREE	32	28	0	REMOVE
6588	*ACER RUBRUM*	RED MAPLE	16	12	75	REMOVE
6589	*UNIDENTIFIED*	DEAD TREE	14	10	0	REMOVE
6590	*QUERCUS RUBRA*	NORTHERN RED OAK	28	24	38	REMOVE
6591	*ACER RUBRUM*	RED MAPLE	14	10	65	REMOVE
6592	*ACER SACCHARINUM*	SILVER MAPLE	14	10	63	REMOVE
6593	*CARYA TOMENTOSA*	MOCKERNUT HICKORY	8	6	70	REMOVE
6594	*FRAXINUS PENNSYLVANICA*	GREEN ASH	22	18	40	REMOVE
6595	*ACER RUBRUM*	RED MAPLE	14	10	55	REMOVE
6596	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	16	12	56	REMOVE
6597	*ACER RUBRUM*	RED MAPLE	16	12	72	REMOVE
6598	*ACER RUBRUM*	RED MAPLE	14	10	69	REMOVE
6599	*ACER RUBRUM*	RED MAPLE	16	12	70	REMOVE
6600	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	16	12	72	REMOVE
6601	*LIQUIDAMBAR STYRACIFLUA*	SWEETGUM	11	7	69	REMOVE
6602	*ACER RUBRUM*	RED MAPLE	8	6	0	REMOVE
6603	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	18	14	70	REMOVE
6604	*FRAXINUS PENNSYLVANICA*	GREEN ASH	8	6	0	REMOVE
6605	*ACER RUBRUM*	RED MAPLE	10	8	50	REMOVE
6606	*FRAXINUS PENNSYLVANICA*	GREEN ASH	14	10	0	REMOVE
6607	*CARYA TOMENTOSA*	MOCKERNUT HICKORY	16	12	68	REMOVE
6608	*FRAXINUS PENNSYLVANICA*	GREEN ASH	16	12	0	REMOVE
6609	*CARYA TOMENTOSA*	MOCKERNUT HICKORY	16	12	70	REMOVE
6610	*FRAXINUS PENNSYLVANICA*	GREEN ASH	12	8	0	REMOVE
6611	*ACER RUBRUM*	RED MAPLE	14	10	65	REMOVE
6612	*ACER RUBRUM*	RED MAPLE	8	8	69	REMOVE
6614	*ULMUS AMERICANA*	AMERICAN ELM	7	5	72	REMOVE
6615	*ACER RUBRUM*	RED MAPLE	18	14	50	REMOVE
6616	*ACER RUBRUM*	RED MAPLE	8	6	56	REMOVE
6617	*ACER RUBRUM*	RED MAPLE	8	6	71	REMOVE
6618	*FRAXINUS PENNSYLVANICA*	GREEN ASH	8	6	0	REMOVE
6619	*CARYA TOMENTOSA*	MOCKERNUT HICKORY	14	10	65	REMOVE
6620	*ACER RUBRUM*	RED MAPLE	14	10	69	REMOVE
6621	*CARYA TOM

TREE MANAGEMENT SCHEDULE

TREE #	BOTANICAL NAME	COMMON NAME	CRITICAL ROOT ZONE RADIUS (FEET)	TRUNK DIAMETER (INCHES)	CONDITION RATING	PROCEDURE
6645	ACER RUBRUM	RED MAPLE	11	7	72	REMOVE
6646	ACER RUBRUM	RED MAPLE	16	12	72	REMOVE
6647	ACER RUBRUM	RED MAPLE	12	8	69	REMOVE
6648	ULMUS AMERICANA	AMERICAN ELM	12	8	41	REMOVE
6649	FRAXINUS PENNSYLVANICA	GREEN ASH	16	12	30	REMOVE
6650	ACER RUBRUM	RED MAPLE	20	16	72	REMOVE
6651	ACER RUBRUM	RED MAPLE	12	8	50	REMOVE
6652	ULMUS AMERICANA	AMERICAN ELM	12	8	66	REMOVE
6653	LIRIODENDRON TULIPIFERA	TULIP POPLAR	7	5	72	REMOVE
6654	ACER RUBRUM	RED MAPLE	16	12	69	REMOVE
6655	ACER SACCHARINUM	SILVER MAPLE	30	26	71	REMOVE
6657	ACER RUBRUM	RED MAPLE	34	30	71	REMOVE
6658	ACER RUBRUM	RED MAPLE	20	16	72	REMOVE
6659	ACER RUBRUM	RED MAPLE	16	12	75	REMOVE
6661	UNIDENTIFIED	DEAD TREE	8	8	0	REMOVE
6662	ACER RUBRUM	RED MAPLE	20	16	72	REMOVE
6663	UNIDENTIFIED	DEAD TREE	18	14	0	REMOVE
6664	PRUNUS SEROTINA	BLACK CHERRY	10	8	68	PRESERVE
6665	LIRIODENDRON TULIPIFERA	TULIP POPLAR	22	18	68	PRESERVE
6666	LIRIODENDRON TULIPIFERA	TULIP POPLAR	8	6	75	REMOVE
6667	FRAXINUS PENNSYLVANICA	GREEN ASH	14	10	0	REMOVE
6668	FRAXINUS PENNSYLVANICA	GREEN ASH	14	10	0	REMOVE
6669	LIRIODENDRON TULIPIFERA	TULIP POPLAR	5	5	70	REMOVE
6670	QUERCUS RUBRA	NORTHERN RED OAK	34	30	72	REMOVE
6671	LIRIODENDRON TULIPIFERA	TULIP POPLAR	15	10	66	PRESERVE
6672	LIRIODENDRON TULIPIFERA	TULIP POPLAR	15	8	68	PRESERVE
6673	LIRIODENDRON TULIPIFERA	TULIP POPLAR	10	12	50	PRESERVE
6674	ACER SACCHARINUM	SILVER MAPLE	40	36	72	REMOVE
6675	UNIDENTIFIED	DEAD TREE	16	12	0	REMOVE
6676	QUERCUS ALBA	WHITE OAK	50	40	66	PRESERVE
6677	ACER RUBRUM	RED MAPLE	38	32	63	PRESERVE
6678	ULMUS AMERICANA	AMERICAN ELM	7	5	72	REMOVE
6679	ACER RUBRUM	RED MAPLE	24	20	70	REMOVE
6680	FRAXINUS PENNSYLVANICA	GREEN ASH	28	24	0	REMOVE
6681	ULMUS AMERICANA	AMERICAN ELM	8	6	55	PRESERVE
6682	LIRIODENDRON TULIPIFERA	TULIP POPLAR	8	6	69	REMOVE
6683	LIRIODENDRON TULIPIFERA	TULIP POPLAR	6	6	68	REMOVE
6684	QUERCUS ALBA	WHITE OAK	40	36	56	PRESERVE
6685	LIRIODENDRON TULIPIFERA	TULIP POPLAR	15	12	69	PRESERVE
6686	FRAXINUS PENNSYLVANICA	GREEN ASH	24	20	40	REMOVE
6687	LIRIODENDRON TULIPIFERA	TULIP POPLAR	5	5	66	REMOVE
6688	QUERCUS RUBRA	NORTHERN RED OAK	15	6	75	PRESERVE
6689	LIRIODENDRON TULIPIFERA	TULIP POPLAR	20	20	69	PRESERVE
6690	FRAXINUS PENNSYLVANICA	GREEN ASH	22	18	0	REMOVE
6691	ACER RUBRUM	RED MAPLE	30	30	65	PRESERVE
6692	FRAXINUS PENNSYLVANICA	GREEN ASH	26	22	0	REMOVE
6693	LIRIODENDRON TULIPIFERA	TULIP POPLAR	10	8	72	REMOVE
6695	ACER RUBRUM	RED MAPLE	8	6	55	REMOVE
6696	LIRIODENDRON TULIPIFERA	TULIP POPLAR	22	18	69	PRESERVE
6697	LIRIODENDRON TULIPIFERA	TULIP POPLAR	34	30	68	PRESERVE
6698	MORUS ALBA	WHITE MULBERRY	20	15	34	REMOVE
6699	ACER RUBRUM	RED MAPLE	12	8	71	REMOVE
6700	LIRIODENDRON TULIPIFERA	TULIP POPLAR	15	10	75	REMOVE
6803	CEDRUS ATLANTICA	ATLAS CEDAR	16	14	70	REMOVE
6804	QUERCUS PALUSTRIS	PIN OAK	26	22	74	REMOVE
6807	THUJA SPP.	ARBORVITAE	10	8	76	REMOVE
6808	THUJA SPP.	ARBORVITAE	10	8	72	REMOVE
6809	THUJA SPP.	ARBORVITAE	10	8	74	REMOVE
6810	THUJA SPP.	ARBORVITAE	12	10	75	REMOVE
6811	THUJA SPP.	ARBORVITAE	12	10	75	REMOVE
6812	THUJA SPP.	ARBORVITAE	12	10	75	REMOVE
6813	THUJA SPP.	ARBORVITAE	10	8	75	REMOVE
6814	THUJA SPP.	ARBORVITAE	10	8	75	REMOVE
6815	THUJA SPP.	ARBORVITAE	12	10	75	REMOVE
6816	THUJA SPP.	ARBORVITAE	10	8	75	REMOVE
6817	THUJA SPP.	ARBORVITAE	10	8	70	REMOVE
6818	THUJA SPP.	ARBORVITAE	10	8	69	REMOVE
6819	THUJA SPP.	ARBORVITAE	10	8	76	REMOVE
6820	THUJA SPP.	ARBORVITAE	10	8	75	REMOVE
6821	THUJA SPP.	ARBORVITAE	10	8	77	REMOVE
6822	THUJA SPP.	ARBORVITAE	10	8	72	REMOVE
6823	THUJA SPP.	ARBORVITAE	10	8	74	REMOVE
6824	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	16	12	69	REMOVE
6825	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	16	12	74	REMOVE
6826	FRAXINUS PENNSYLVANICA	GREEN ASH	20	16	65	REMOVE
6827	PICEA ABIES	NORWAY SPRUCE	26	22	72	REMOVE
6828	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	8	6	72	REMOVE
6829	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	7	5	74	REMOVE
6830	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	12	10	76	REMOVE
6831	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	12	10	71	REMOVE
6832	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	10	6	75	REMOVE
6833	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	12	10	76	REMOVE
6834	CARYA CORDIFORMIS	BITTERNUT HICKORY	26	22	71	REMOVE
6835	ACER RUBRUM	RED MAPLE	26	22	68	REMOVE
6836	FRAXINUS PENNSYLVANICA	GREEN ASH	8	6	68	REMOVE
6837	ACER RUBRUM	RED MAPLE	20	16	72	REMOVE
6838	ACER RUBRUM	RED MAPLE	14	10	63	REMOVE
6839	ACER RUBRUM	RED MAPLE	12	8	70	REMOVE
6840	LIRIODENDRON TULIPIFERA	TULIP POPLAR	20	18	72	REMOVE
6841	ACER RUBRUM	RED MAPLE	22	18	70	REMOVE
6842	ACER RUBRUM	RED MAPLE	20	16	75	REMOVE
6843	ACER RUBRUM	RED MAPLE	18	14	72	REMOVE
6844	ACER RUBRUM	RED MAPLE	20	18	41	REMOVE
6845	ACER RUBRUM	RED MAPLE	24	20	71	REMOVE
6846	ACER RUBRUM	RED MAPLE	28	24	59	REMOVE
6847	LIRIODENDRON TULIPIFERA	TULIP POPLAR	28	24	68	REMOVE
6848	ACER RUBRUM	RED MAPLE	30	26	53	REMOVE
6849	ACER RUBRUM	RED MAPLE	18	14	71	REMOVE
6850	LIRIODENDRON TULIPIFERA	TULIP POPLAR	2	16	53	REMOVE
6851	ACER RUBRUM	RED MAPLE	26	22	70	REMOVE
6852	ACER RUBRUM	RED MAPLE	32	28	56	REMOVE
6853	ACER RUBRUM	RED MAPLE	32	28	70	REMOVE
6854	CATALPA SPECIOSA	NORTHERN CATALPA	8	6	53	REMOVE
6855	CATALPA SPECIOSA	NORTHERN CATALPA	14	10	72	REMOVE
6856	ACER RUBRUM	RED MAPLE	18	14	38	REMOVE
6859	SASSAFRAS ALBIDUM	SASSAFRAS	16	12	50	REMOVE
6861	FRAXINUS PENNSYLVANICA	GREEN ASH	40	36	0	REMOVE
6865	MORUS ALBA	WHITE MULBERRY	14	12	50	REMOVE
6866	ACER RUBRUM	RED MAPLE	16	12	50	REMOVE
6867	PINUS STROBUS	WHITE PINE	28	24	70	REMOVE
6868	ILEX OPACA	AMERICAN HOLLY	20	16	71	REMOVE
6870	ROBINIA PSEUDOACACIA	BLACK LOCUST	18	14	38	REMOVE
6871	SASSAFRAS ALBIDUM	SASSAFRAS	16	12	70	REMOVE
6872	QUERCUS RUBRA	NORTHERN RED OAK	24	20	72	REMOVE
6873	QUERCUS PALUSTRIS	PIN OAK	24	20	70	REMOVE
6874	ACER RUBRUM	RED MAPLE	18	14	72	REMOVE
6876	ACER RUBRUM	RED MAPLE	14	10	72	REMOVE

TREE MANAGEMENT SCHEDULE

TREE #	BOTANICAL NAME	COMMON NAME	CRITICAL ROOT ZONE RADIUS (FEET)	TRUNK DIAMETER (INCHES)	CONDITION RATING	PROCEDURE
6877	ACER RUBRUM	RED MAPLE	20	16	68	REMOVE
6878	ACER RUBRUM	RED MAPLE	26	22	69	REMOVE
6880	ACER RUBRUM	RED MAPLE	28	22	72	REMOVE
6881	LIRIODENDRON TULIPIFERA	TULIP POPLAR	28	24	72	REMOVE
6882	LIRIODENDRON TULIPIFERA	TULIP POPLAR	40	36	72	REMOVE
6883	PRUNUS SEROTINA	BLACK CHERRY	24	20	65	REMOVE
6884	LIRIODENDRON TULIPIFERA	TULIP POPLAR	28	24	69	REMOVE
6886	ACER RUBRUM	RED MAPLE	28	24	68	REMOVE
6887	QUERCUS PALUSTRIS	PIN OAK	18	14	50	REMOVE
6888	ACER RUBRUM	RED MAPLE	7	5	66	REMOVE
6889	LIRIODENDRON TULIPIFERA	TULIP POPLAR	46	40	55	REMOVE
6890	ACER RUBRUM	RED MAPLE	16	12	63	REMOVE
6891	ACER RUBRUM	RED MAPLE	20	16	68	REMOVE
6892	PRUNUS SEROTINA	BLACK CHERRY	20	16	63	REMOVE
6893	ACER RUBRUM	RED MAPLE	12	8	60	REMOVE
6894	LIRIODENDRON TULIPIFERA	TULIP POPLAR	26	22	75	REMOVE
6895	LIRIODENDRON TULIPIFERA	TULIP POPLAR	20	18	70	REMOVE
6896	ACER RUBRUM	RED MAPLE	14	10	63	REMOVE
6897	ACER RUBRUM	RED MAPLE	14	10	70	REMOVE
6898	ACER RUBRUM	RED MAPLE	20	16	63	REMOVE
6899	PICEA ABIES	NORWAY SPRUCE	18	14	70	REMOVE
6900	LIRIODENDRON TULIPIFERA	TULIP POPLAR	28	24	68	REMOVE
6901	LIRIODENDRON TULIPIFERA	TULIP POPLAR	18	14	67	REMOVE
6902	UNIDENTIFIED	DEAD TREE	14	10	31	REMOVE
6903	ACER RUBRUM	RED MAPLE	18	14	40	REMOVE
6904	LIRIODENDRON TULIPIFERA	TULIP POPLAR	40	36	75	REMOVE
6905	LIRIODENDRON TULIPIFERA	TULIP POPLAR	34	30	69	REMOVE
6907	ACER RUBRUM	RED MAPLE	24	20	45	REMOVE
6908	QUERCUS RUBRA	NORTHERN RED OAK	40	36	66	REMOVE
6909	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	16	12	60	REMOVE
6910	ILEX OPACA	AMERICAN HOLLY	12	10	31	REMOVE
6911	PICEA ABIES	NORWAY SPRUCE	12	8	65	REMOVE
6912	ACER RUBRUM	RED MAPLE	22	18	28	REMOVE
6913	PINUS STROBUS	WHITE PINE	12	8	50	REMOVE
6914	ACER RUBRUM	RED MAPLE	34	30	66	REMOVE
6915	ACER RUBRUM	RED MAPLE	26	22	65	REMOVE
6916	ACER RUBRUM	RED MAPLE	20	16	59	REMOVE
6917	ACER RUBRUM	RED MAPLE	26	22	30	REMOVE
6918	JUGLANS NIGRA	BLACK WALNUT	20	16	50	REMOVE
6919	LIRIODENDRON TULIPIFERA	TULIP POPLAR	34	30	69	REMOVE
6921	JUGLANS NIGRA	BLACK WALNUT	22	18	67	REMOVE
6925	ACER RUBRUM	RED MAPLE	5	5	30	REMOVE
6926	ACER RUBRUM	RED MAPLE	10	8	59	REMOVE
6927	UNIDENTIFIED	DEAD TREE	15	12	0	REMOVE
6928	ACER RUBRUM	RED MAPLE	16	8	69	REMOVE
6929	LIRIODENDRON TULIPIFERA	TULIP POPLAR	20	24	72	REMOVE
6932	LIRIODENDRON TULIPIFERA	TULIP POPLAR	15	15	60	REMOVE
6933	PINUS VIRGINIANA	VIRGINIA PINE	18	14	60	REMOVE
6934	ACER RUBRUM	RED MAPLE	10	5	63	REMOVE
6935	PRUNUS SEROTINA	BLACK CHERRY	30	30	60	REMOVE
6936	CATALPA SPECIOSA	NORTHERN CATALPA	10	5	69	REMOVE
6937	LIRIODENDRON TULIPIFERA	TULIP POPLAR	25	30	71	REMOVE
6939	LIRIODENDRON TULIPIFERA	TULIP POPLAR	20	18	72	REMOVE
6940	LIRIODENDRON TULIPIFERA	TULIP POPLAR	15	18	71	REMOVE
6941	ACER RUBRUM	RED MAPLE	10	12	70	REMOVE
6942	LIRIODENDRON TULIPIFERA	TULIP POPLAR	20	24	74	REMOVE
6943	LIRIODENDRON TULIPIFERA	TULIP POPLAR	20	24	73	REMOVE
6944	LIRIODENDRON TULIPIFERA	TULIP POPLAR	10	12	75	REMOVE
6945	UNIDENTIFIED	DEAD TREE	1	8	0	REMOVE
6946	LIRIODENDRON TULIPIFERA	TULIP POPLAR	20	15	63	REMOVE
6947	ACER RUBRUM	RED MAPLE	15	8	65	REMOVE
6948	LIRIODENDRON TULIPIFERA	TULIP POPLAR	30	27	59	REMOVE
6949	ACER RUBRUM	RED MAPLE	26	24	68	REMOVE
6950	ACER RUBRUM	RED MAPLE	10	12	30	REMOVE
6951	ACER RUBRUM	RED MAPLE	18	14	70	REMOVE
6952	ULMUS AMERICANA	AMERICAN ELM	28	24	60	REMOVE
6953	ACER RUBRUM	RED MAPLE	10	6	60	REMOVE
6954	LIRIODENDRON TULIPIFERA	TULIP POPLAR	20	18	69	REMOVE
6955	LIRIODENDRON TULIPIFERA	TULIP POPLAR	15	15	70	REMOVE
6956	LIRIODENDRON TULIPIFERA	TULIP POPLAR	20	21	69	REMOVE
6957	ACER RUBRUM	RED MAPLE	10	5	45	REMOVE
6958	LIRIODENDRON TULIPIFERA	TULIP POPLAR	5	8	68	REMOVE
6959	LIRIODENDRON TULIPIFERA	TULIP POPLAR	5	8	68	REMOVE
6960	ACER RUBRUM	RED MAPLE	15	12	28	REMOVE
6964	LIRIODENDRON TULIPIFERA	TULIP POPLAR	10	8	75	REMOVE
6965	LIRIODENDRON TULIPIFERA	TULIP POPLAR	10	12	70	REMOVE
6966	LIRIODENDRON TULIPIFERA	TULIP POPLAR	10	10	72	REMOVE
6967	LIRIODENDRON TULIPIFERA	TULIP POPLAR	20	27	72	REMOVE
6968	LIRIODENDRON TULIPIFERA	TULIP POPLAR	15	24	53	REMOVE
6969	LIRIODENDRON TULIPIFERA	TULIP POPLAR	15	15	72	REMOVE
6970	FRAXINUS PENNSYLVANICA	GREEN ASH	22	18	0	REMOVE
6971	ACER RUBRUM	RED MAPLE	14	10	65	REMOVE
6972	FRAXINUS PENNSYLVANICA	GREEN ASH	14	10	0	REMOVE
6973	FRAXINUS PENNSYLVANICA	GREEN ASH	7	5	30	REMOVE
6974	LIRIODENDRON TULIPIFERA	TULIP POPLAR	34	30	66	REMOVE
6975	LIRIODENDRON TULIPIFERA	TULIP POPLAR	3	12	73	REMOVE
6976	LIRIODENDRON TULIPIFERA	TULIP POPLAR	12	8	72	REMOVE
6977	LIRIODENDRON TULIPIFERA	TULIP POPLAR	48	44	72	REMOVE
6978	JUGLANS NIGRA	BLACK WALNUT	16	12	66	REMOVE
6979	CATALPA SPECIOSA	NORTHERN CATALPA	14	10	40	REMOVE
6980	MORUS ALBA	WHITE MULBERRY	18	14	50	REMOVE
6982	LIRIODENDRON TULIPIFERA	TULIP POPLAR	15	24	69	REMOVE
6983	PINUS VIRGINIANA	VIRGINIA PINE	26	24	70	REMOVE
6984	CATALPA SPECIOSA	NORTHERN CATALPA	8	6	72	REMOVE
6985	ACER RUBRUM	RED MAPLE	40	36	66	REMOVE
6986	PRUNUS SEROTINA	BLACK CHERRY	12	8	63	REMOVE
6987	QUERCUS PALUSTRIS	PIN OAK	38	32	71	REMOVE
6988	PRUNUS SEROTINA	BLACK CHERRY	14	10	59	REMOVE
6989	ACER RUBRUM	RED MAPLE	12	8	67	REMOVE
6990	ACER RUBRUM	RED MAPLE	25	12	59	REMOVE
6991	LAGERSTROEMIA SPP.	CREPE MYRTLE	24	20	70	REMOVE
6992	QUERCUS PALUSTRIS	PIN OAK	12	8	72	REMOVE
6993	ACER RUBRUM	RED MAPLE	12	10	70	REMOVE
6994	ILEX OPACA	AMERICAN HOLLY	28	24	70	REMOVE
6996	ULMUS AMERICANA	AMERICAN ELM	8	6	53	REMOVE
6997	FRAXINUS PENNSYLVANICA	GREEN ASH	24	20	50	REMOVE
6998	ACER RUBRUM	RED MAPLE	30	26	63	REMOVE
7000	LIRIODENDRON TULIPIFERA	TULIP POPLAR	26	20	38	REMOVE
7002	LIRIODENDRON TULIPIFERA	TULIP POPLAR	15	15	75	REMOVE
7003	LIRIODENDRON TULIPIFERA	TULIP POPLAR	20	27	73	REMOVE
7004	LIRIODENDRON TULIPIFERA	TULIP POPLAR	20	24	72	REMOVE
7005	LIRIODENDRON TULIPIFERA	TULIP POPLAR	15	24	69	REMOVE
7006	LIRIODENDRON TULIPIFERA	TULIP POPLAR	10	8	69	REMOVE
7007	LIRIODENDRON TULIPIFERA	TULIP POPLAR	15	30	67	REMOVE
7008	LIRIODENDRON TULIPIFERA	TULIP POPLAR	20	24	75	REMOVE
7009	LIRIODENDRON TULIPIFERA	TULIP POPLAR	10	15	72	REMOVE
7010	LIRIODENDRON TULIPIFERA	TULIP POPLAR	10	10	66	REMOVE

TREE MANAGEMENT SCHEDULE

TREE #	BOTANICAL NAME	COMMON NAME	CRITICAL ROOT ZONE RADIUS (FEET)	TRUNK DIAMETER (INCHES)	CONDITION RATING	PROCEDURE
7011	LIRIODENDRON TULIPIFERA	TULIP POPLAR	25	40	69	REMOVE
7012	LIRIODENDRON TULIPIFERA	TULIP POPLAR	15	12	56	REMOVE
7014	LIRIODENDRON TULIPIFERA	TULIP POPLAR	20	30	69	REMOVE
7015	LIRIODENDRON TULIPIFERA	TULIP POPLAR	15	24	72	REMOVE
7016	LIRIODENDRON TULIPIFERA	TULIP POPLAR	15	30	66	REMOVE
7019	LIRIODENDRON TULIPIFERA	TULIP POPLAR	30	40	69	REMOVE
7020	LIRIODENDRON TULIPIFERA	TULIP POPLAR	25	35	69	REMOVE
7023	ACER RUBRUM	RED MAPLE	35	35	55	REMOVE
7027	LIRIODENDRON TULIPIFERA	TULIP POPLAR	15	20	70	PRESERVE
7030	LIRIODENDRON TULIPIFERA	TULIP POPLAR	25	15	68	PRESERVE
7031	ULMUS AMERICANA	AMERICAN ELM	25	15	67	PRESERVE
7032	ULMUS AMERICANA	AMERICAN ELM	15	12	66	PRESERVE
7033	MORUS ALBA	WHITE MULBERRY	10	8	50	REMOVE
7036	ACER RUBRUM	RED MAPLE	30	36	41	REMOVE
7037	QUERCUS RUBRA	NORTHERN RED OAK	20	12	68	PRESERVE
7038	PRUNUS SEROTINA	BLACK CHERRY	10	8	59	PRESERVE
7039	PRUNUS SEROTINA	BLACK CHERRY	10	5	90	PRESERVE
7040	CARYA TOMENTOSA	MOCKERNUT HICKORY	15	5	44	PRESERVE
7042	ACER RUBRUM	RED MAPLE	8	8	59	PRESERVE
7043	QUERCUS RUBRA	NORTHERN RED OAK	12	10	70	PRESERVE
7045	QUERCUS RUBRA	NORTHERN RED OAK	20	20	73	PRESERVE
7047	FAGUS GRANDIFOLIA	AMERICAN BEECH	20	24	73	PRESERVE
7048	QUERCUS RUBRA	NORTHERN RED OAK	15	12	66	PRESERVE
7201	LIRIODENDRON TULIPIFERA	TULIP POPLAR	15	15	59	REMOVE
7202	LIRIODENDRON TULIPIFERA	TULIP POPLAR	27	20	70	REMOVE
7203	LIRIODENDRON TULIPIFERA	TULIP POPLAR	40	25	68	REMOVE
7204	LIRIODENDRON TULIPIFERA	TULIP POPLAR	15	12	40	REMOVE
7205	LIRIODENDRON TULIPIFERA	TULIP POPLAR	10	10	69	REMOVE
7206	LIRIODENDRON TULIPIFERA	TULIP POPLAR	15	10	70	REMOVE
7207	LIRIODENDRON TULIPIFERA	TULIP POPLAR	24	20	68	REMOVE
7208	LIRIODENDRON TULIPIFERA	TULIP POPLAR	24	15	70	REMOVE
7209	LIRIODENDRON TULIPIFERA	TULIP POPLAR	24	15	67	REMOVE
7210	LIRIODENDRON TULIPIFERA	TULIP POPLAR	10	8	68	REMOVE
7211	LIRIODENDRON TULIPIFERA	TULIP POPLAR	22	16	67	REMOVE
7212	LIRIODENDRON TULIPIFERA	TULIP POPLAR	30	26	65	REMOVE
7213	LIRIODENDRON TULIPIFERA	TULIP POPLAR	30	22	60	REMOVE
7214	LIRIODENDRON TULIPIFERA	TULIP POPLAR	30	26	70	REMOVE
7215	LIRIODENDRON TULIPIFERA	TULIP POPLAR	32	26	67	REMOVE
7216	LIRIODENDRON TULIPIFERA	TULIP POPLAR	40	30	69	REMOVE
7217	ACER RUBRUM	RED MAPLE	12	10	67	REMOVE
7218	LIRIODENDRON TULIPIFERA	TULIP POPLAR	20	18	63	REMOVE

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COMMONWEALTH OF VIRGINIA
LAURIE B. DONNACHIE
Lic. No. 0406001880
2020-01-03
LANDSCAPE ARCHITECT

NORTHFAX WEST
MASTER DEVELOPMENT PLAN

CITY OF FAIRFAX, VIRGINIA

MARK	DATE	DESCRIPTION

PROJECT No.: 13139.005.00
DRAWING No.: 109632
DATE: 11-21-2019
DESIGN: LBD
DRAWN: LBD
CHECKED: LBD

SHEET TITLE:

TREE MANAGEMENT SCHEDULE

SHEET No.

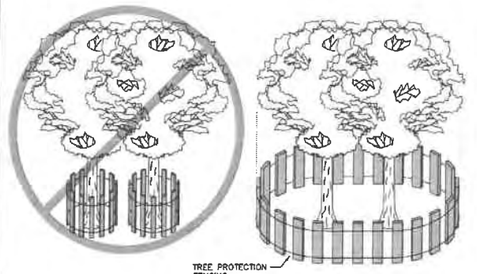
3C

PLAN PREPARED BY LAURIE BETH DONNACHIE
ISA CERTIFIED ARBORIST NO. MA-5723A
SIGNATURE: Laurie B Donnachie DATE: 2020-01-03

SCALE: N/A

TREE PRESERVATION NOTES

1. PROJECT NOTES
   - 1.1. THE REQUIREMENTS OF THE CITY OF FAIRFAX ZONING ORDINANCE AND PUBLIC FACILITIES MANUAL SHALL BE FOLLOWED.
   - 1.2. ALL TREE PRESERVATION ACTIVITIES SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF AN ISA CERTIFIED ARBORIST.
   - 1.3. ALL TREE WORK PERFORMED SHALL MEET OR EXCEED THE MOST RECENT INDUSTRY STANDARDS, AS PUBLISHED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA).
2. PRE-CONSTRUCTION
   - 2.1. PRIOR TO THE PRE-CONSTRUCTION MEETING, THE CONTRACTOR SHALL HAVE THE LIMITS OF CLEARING AND GRADING CLEARLY MARKED IN THE FIELD WITH FLAGGING. THESE LIMITS SHALL NOT EXCEED THOSE SHOWN ON THE APPROVED PLANS.
   - 2.2. AFTER LIMITS HAVE BEEN STAKED, THE CONTRACTOR SHALL REQUEST A PRE-CONSTRUCTION MEETING WITH CITY OF FAIRFAX AND PROJECT ARBORIST.
   - 2.3. DURING THE PRE-CONSTRUCTION MEETING, THE LIMITS MAY BE ADJUSTED TO BETTER PRESERVE OR REMOVE TREES IMPACTED BY CONSTRUCTION ACTIVITIES.
3. INSTALLATION OF TREE PROTECTION MEASURES
   - 3.1. ROOT PRUNING: PRIOR TO CONSTRUCTION, ROOT PRUNING SHALL BE COMPLETED AT THE LIMITS. ROOT PRUNING SHALL BE TO THE DEPTH OF EIGHTEEN (18) TO TWENTY-FOUR (24) INCHES AND SHALL BE ACCOMPLISHED BY USING A TRENCHER, VIBRATING PLOW OR BY HAND. TRENCH SHOULD BE IMMEDIATELY BACKFILLED WITH REMOVED SOIL. WHEN EXCAVATING ALL TREE ROOTS GREATER THAN 1 INCH IN DIAMETER THAT ARE EXPOSED AND/OR DAMAGED SHALL BE TRIMMED CLEANLY, AND COVERED WITH ORGANIC MULCH, TOPSOIL, OR OTHER SUITABLE MATERIAL TO PREVENT THE EXPOSED ROOTS FROM DRYING OUT.
   - 3.2. TREE PROTECTION FENCING: IMMEDIATELY FOLLOWING ROOT PRUNING, TREE PROTECTION FENCING SHALL BE COMPLETED AT THE LIMITS. TREE PROTECTION FENCING SHALL BE INSTALLED PER TREE PRESERVATION PLAN AND SHALL CONSIST OF EITHER OF THE FOLLOWING MATERIALS:
     - 3.2.1. FOURTEEN (14) GAUGE WELDED WIRE MESH THAT IS A MINIMUM OF FOUR (4) FOOT TALL. THE MESH SHALL BE ATTACHED TO SIX (6) FOOT TALL, TWO-INCH (2") STEEL U-CHANNEL ANCHOR POSTS DRIVEN EIGHTEEN (18) INCHES INTO THE GROUND. THE POSTS SHALL BE PLACED NO FURTHER THAN TEN (10) FEET APART.
     - 3.2.2. SUPER SILT FENCE
   - 3.3. TREE PROTECTION SIGNAGE: BILINGUAL SIGNS STATING "TREE PRESERVATION AREA - KEEP OUT" SHALL BE AFFIXED TO THE TREE PRESERVATION FENCE AT LEAST EVERY 50 FEET IMMEDIATELY FOLLOWING TREE PROTECTION FENCING INSTALLATION.
   - 3.4. CITY OF FAIRFAX SHALL BE NOTIFIED AND GIVEN THE OPPORTUNITY TO INSPECT THE SITE TO ASSURE THAT ALL TREE PROTECTION DEVICES HAVE BEEN CORRECTLY INSTALLED. IF IT IS DETERMINED THAT THE FENCING HAS NOT BEEN INSTALLED CORRECTLY, NO CONSTRUCTION ACTIVITIES SHALL OCCUR UNTIL THE FENCING IS INSTALLED CORRECTLY, AS DETERMINED BY CITY OF FAIRFAX .
   - 3.5. TREES BEING REMOVED SHALL NOT BE FELLED, PUSHED OR PULLED INTO TREE PRESERVATION AREAS. EQUIPMENT OPERATORS SHALL NOT CLEAN ANY PART OF THEIR EQUIPMENT BY SLAMMING AGAINST THE TRUNKS OF TREES TO BE RETAINED.
   - 3.6. TREES ON THE EDGE OF THE LIMITS OF CLEARING AND GRADING SHALL BE CUT DOWN BY HAND WITH A CHAIN SAW. REMAINING STUMPS SHALL EITHER BE LEFT IN PLACE OR GROUND DOWN WITH A STUMP GRINDER.
   - 3.7. TREES INDICATED WILL BE MULCHED WITH WOOD CHIPS GENERATED FROM ON SITE CLEARING OR TREE REMOVAL AND PRUNING OPERATIONS WHEN POSSIBLE. SHREDDED HARDWOOD MULCH FROM OFFSITE MAY BE UTILIZED IF APPROVED BY PROJECT ARBORIST. MULCH SHALL BE SPREAD IN A UNIFORM DEPTH OF THREE (3") INCHES BY HAND. MULCH SHALL BE PLACED IN AREAS AS INDICATED ON APPROVED PLANS.
4. CONSTRUCTION
   - 4.1. DURING CLEARING AND GRADING OPERATIONS AND THROUGHOUT CONSTRUCTION, NO ACTIVITY SHALL BE PERMITTED IN TREE SAVE AREAS WITHOUT AUTHORIZATION FROM OWNER, ARBORIST, OR CITY OF FAIRFAX . PRECLUDED ACTIVITIES INCLUDE:
     - 4.1.1. FELLING OF TREES INTO PRESERVATION AREAS OR OPERATION OF HEAVY MACHINERY IN SAVE AREAS TO FELL TREES ON THE PERIMETER OF PRESERVATION AREAS.
     - 4.1.2. OPERATION OF HEAVY EQUIPMENT OR MACHINERY OF ANY KIND IN PRESERVATION AREAS FOR ANY PURPOSE.
     - 4.1.3. PLACEMENT OF EXCESS SOIL, FILL, OR MATERIALS OF ANY KIND IN PRESERVATION AREAS.
     - 4.1.4. PLACEMENT OF ANY CONSTRUCTION MATERIALS OF ANY KIND IN PRESERVATION AREAS.
     - 4.1.5. PARKING OR STORING EQUIPMENT OR VEHICLES IN PRESERVATION AREAS.
     - 4.1.6. DUMPING CHEMICALS OR CONCRETE WASHOUT IN PRESERVATION AREAS.
     - 4.1.7. BURNING OF ANY MATERIAL OR DEBRIS IN PRESERVATION AREAS OR WITHIN 200 FEET OF PRESERVATION AREAS.
     - 4.1.8. TRENCHING, GRADING, EXCAVATING FOR ANY PURPOSE IN PRESERVATION AREAS.
   - 4.2. ALL EXISTING TRASH AND/OR DEBRIS ON SITE SHALL BE REMOVED AT THE TIME OF DISTURBANCE. INDIVIDUAL TREES AND FORESTED AREAS DESIGNATED TO BE PRESERVED SHALL BE PROTECTED AND MANAGED TO ENSURE TREE SURVIVAL DURING ALL PHASES OF DEMOLITION, CLEARING AND GRADING, AND CONSTRUCTION. IN ADDITION TO PROTECTING TREES, ALL UNDERSTORY PLANTS, LEAF LITTER AND SOIL CONDITIONS FOUND IN FORESTED AREAS DESIGNATED TO BE LEFT PRESERVED SHALL BE PROTECTED.
   - 4.3. TREES TO REMAIN LOCATED ALONG THE LIMITS OF CLEARING AND GRADING SHALL BE PRUNED DURING CLEARING OPERATIONS TO AVOID MECHANICAL DAMAGE. THIS SHALL BE ADMINISTRATED UNDER THE SUPERVISION OF AN ISA CERTIFIED ARBORIST.
   - 4.4. ANY DAMAGE INFLICTED TO THE ABOVE OR BELOW-GROUND PORTIONS OF THE TREES SHOWED TO BE PRESERVED SHALL BE REPAIRED IMMEDIATELY PER ISA STANDARDS.
   - 4.5. ALL PRUNING SHALL CONFORM TO THE LATEST EDITION OF ANSI A300 (PART 1) PRUNING STANDARDS. DISEASED LIMBS SHALL BE REMOVED OR TREATED AT THE DISCRETION OF THE ARBORIST. WHILE PRUNING, THE ARBORIST SHALL MAKE NOTE OF ANY CONDITIONS WHICH AFFECT THE HEALTH OR CONDITION OF THE TREE AND RECOMMEND CORRECTIVE TREATMENT FOR THESE CONDITIONS. VINE REMOVAL SHALL BE INCLUDED IN ALL PRUNING ACTIVITIES. UNDER NO CIRCUMSTANCES SHALL THE INTERIOR OF TREES BE STRIPPED OF FOLIAGE, SUCKERS, EPICORMIC BRANCHING, OR OTHER LIVE GROWTH. INTERIOR GROWTH MAY BE THINNED AS NECESSARY TO REMOVE BRANCHES DAMAGED DURING OPERATIONS. DEBRIS FROM PRUNING SHALL BE CHIPPED AND DEPOSITED INTO THE TREE SAVE AREA AND SPREAD BY HAND TO A UNIFORM THICKNESS OR BE REMOVED FROM SITE.



BARRIER INSTALLED AT THE DRIP LINE OF TREE BRANCHES

NOTES:

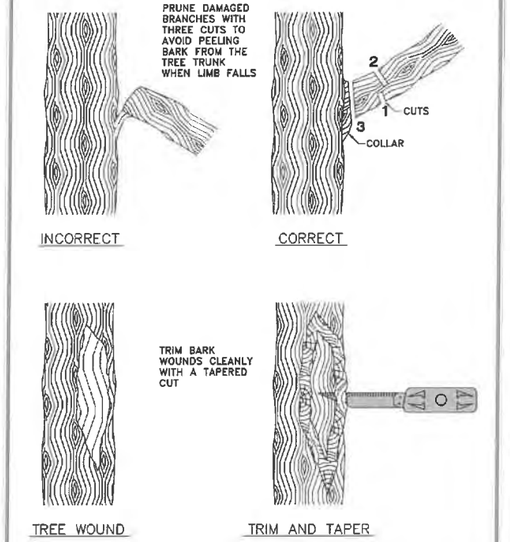
1. Precautions shall be taken to prevent and minimize damage to trees. In such cases repair any damage to crown, trunk or root system immediately.
   - A. Repair roots by cleanly cutting off the damaged areas. Spread ~~peat moss~~ or moist topsoil over exposed roots.
   - B. Repair damage to bark by trimming around the damaged area as shown in Detail 8.10. Taper the cut to provide drainage.
   - C. Cut off damaged tree limbs above the tree collar at the trunk or main branch. Use three separate cuts as shown in Detail 8.10 to avoid peeling bark from healthy areas of tree.

Department of Public Works, 10455 Armstrong Street, Fairfax, VA 22030-3630 — Voice (703) 385-7810, FAX (703) 591-3727, www.fairfaxva.gov

CITY of FAIRFAX
USE WITH THE FAIRFAX STANDARD SPECIFICATIONS ONLY

STANDARD TREE PROTECTION DETAIL

SCALE: Not To Scale | DETAIL # 8.09 | REVISION DATE: December 2016 | SHEET # 1 of 2



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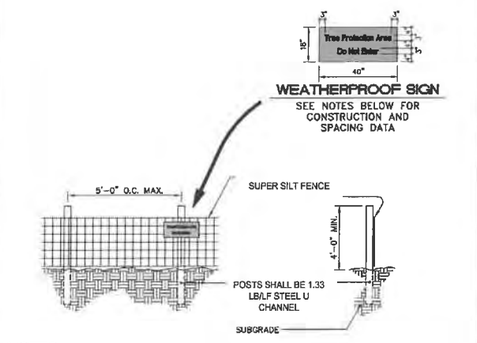
CITY of FAIRFAX
USE WITH THE FAIRFAX STANDARD SPECIFICATIONS ONLY

TREE SURGERY DETAIL

SCALE: Not To Scale | DETAIL # 8.10 | REVISION DATE: December 2016 | SHEET # 1 of 1



NOTES:

1. Install tree protection fence and signage prior to calling for the initial on site inspection by the City of Fairfax inspector.
2. Warning signs shall be made of durable, weatherproof material.
3. Letters shall be 3" high minimum, clearly legible and spaced as detailed.
4. Signs shall be placed no greater than 50' on center or as approved.
5. For tree protection areas less than 200' in perimeter, provide no less than three signs per protected area.
6. Attach signs securely to fence posts and fabric.
7. Maintain tree protection fence throughout duration of project.
8. Additional signs may be required by City of Fairfax inspections based on actual field conditions.
9. No activity shall occur within the protected area including material storage, stockpiling, parking or any activity that may compact the ground or damage the trees.
10. The City reserves the right to require a 4' to 6' height chain link fencing for identified trees, such as specimen or champion trees, to maximize the protection of the tree and its critical root zone.

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CITY of FAIRFAX
USE WITH THE FAIRFAX STANDARD SPECIFICATIONS ONLY

STANDARD TREE PROTECTION DETAIL

SCALE: Not To Scale | DETAIL # 8.09 | REVISION DATE: December 2016 | SHEET # 2 of 2

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF FAIRFAX STANDARDS AND SPECIFICATIONS

PLAN PREPARED BY LAURIE BETH DONNACHIE
ISA CERTIFIED ARBORIST NO. MA-5723A
SIGNATURE: Laurie B Donnachie DATE: 2020-01-03

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engineering surveying land planning

COMMONWEALTH OF VIRGINIA
Laurie B Donnachie
LAURIE B. DONNACHIE
Lic. No. 0406001880
2020-01-03
LANDSCAPE ARCHITECT

NORTHFAX WEST
MASTER DEVELOPMENT PLAN
CITY OF FAIRFAX, VIRGINIA

MARK	DATE	DESCRIPTION

PROJECT No.: 13139.005.00
DRAWING No.: 109632
DATE: 11-21-2019
DESIGN: LBD
DRAWN: LBD
CHECKED: LBD

SHEET TITLE:

TREE MANAGEMENT NOTES & DETAILS

SHEET No.
3D

SCALE: N/A

MATCH LINE "A" - SEE SHEET 4A

PROP. RETAINING WALL

N84°22'24"E 595.06'

SWALE CENTERLINE

PROP TOWNHOUSES

PROP. TOWNHOUSES

24' TYP.

VIRGINIA STATE GRID NORTH ZONE NAD 83

TOTALLY PLATTED 962.27' (DEEDED)

S19 S18 S22 S24 S25 S26

HYDRODYNAMIC SEPARATOR (BMP 8)

TOWNHOUSE PARCEL ±1.9 ACRES

6' SIDEWALK

STORMFILTER (BMP 9)

89.62' S88°12'58"W

100-YR FLOODPLAIN

RPA (POST-REVELOPED)

APPROXIMATE LOCATION OF AMENITY AREA

PROP. TOWNHOUSES

PROP. TOWNHOUSES

PROP. TOWNHOUSES

PROP. TOWNHOUSES

PROP. TOWNHOUSES

S20 S21 S23

PROP. 30' STM. ESMT.

N84°15'12"W 89.44'

PROP. RETAINING WALL

FILTERRA (BMP 10)

6' SIDEWALK

5' BIKE LANE

S13 S12 S11

ORCHARD STREET

5' BIKE LANE

6' SIDEWALK

FILTERRA (BMP 11)

HYDRODYNAMIC SEPARATOR

PROP. TOWNHOUSES

PROP. TOWNHOUSES

S14

5' BIKE LANE

PROP. 30' STM. ESMT.

GREENROOF

HYDRODYNAMIC SEPARATOR (BMP 1)

PROPOSED BUILDING

ISOLATOR ROW (BMP 5)

S16

STORMFILTER (BMP 2)

ISOLATOR ROW (BMP 6)

FARR AVENUE TO BE DESIGNED AND CONSTRUCTED BY OTHERS

SENIOR LIVING PARCEL ±2.2 ACRES

STORMFILTER (BMP 4)

HYDRODYNAMIC SEPARATOR (BMP 3)

PARKING GARAGE ENTRANCE

HYDRODYNAMIC SEPARATOR (BMP 7)

S17

PROP. RETAINING WALL

PARKING GARAGE ENTRANCE

S15 S10

N74°25'59"W 62.77'

S37°59'08"W 44.06'

N84°15'12"W 478.18'

BROWN'S FAIRFAX MAZDA PROPOSED DEVELOPMENT (SUP SUB 01-20191105)

MATCH LINE "B" - SEE SHEET 4A

30 15 0 30 60

HORIZONTAL GRAPHIC SCALE 1" = 30'

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT FAIRFAX CITY STANDARDS AND SPECIFICATIONS

SCALE: 1"=30'

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COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
01/03/2020
PROFESSIONAL ENGINEER

NORTHFAX WEST
MASTER DEVELOPMENT PLAN
CITY OF FAIRFAX, VIRGINIA

MARK	DATE	DESCRIPTION

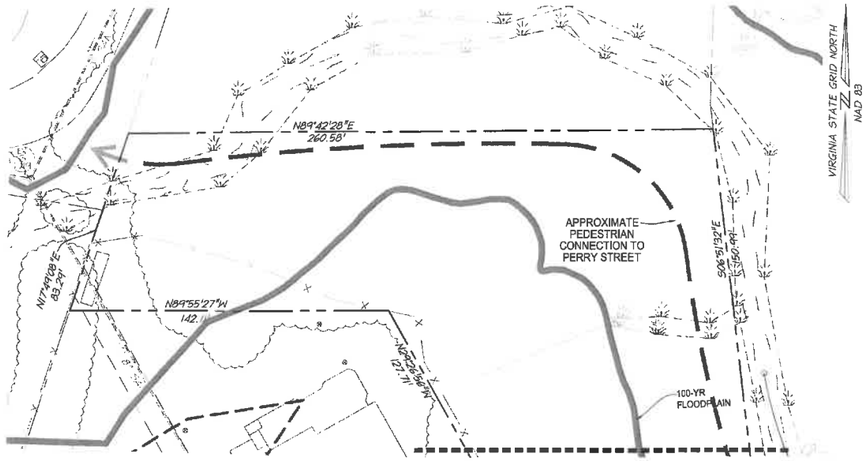
PROJECT No.: 13139.005.00
DRAWING No.: 109632
DATE: 11-21-2019
DESIGN: EG
DRAWN: JS
CHECKED: KMW

SHEET TITLE:

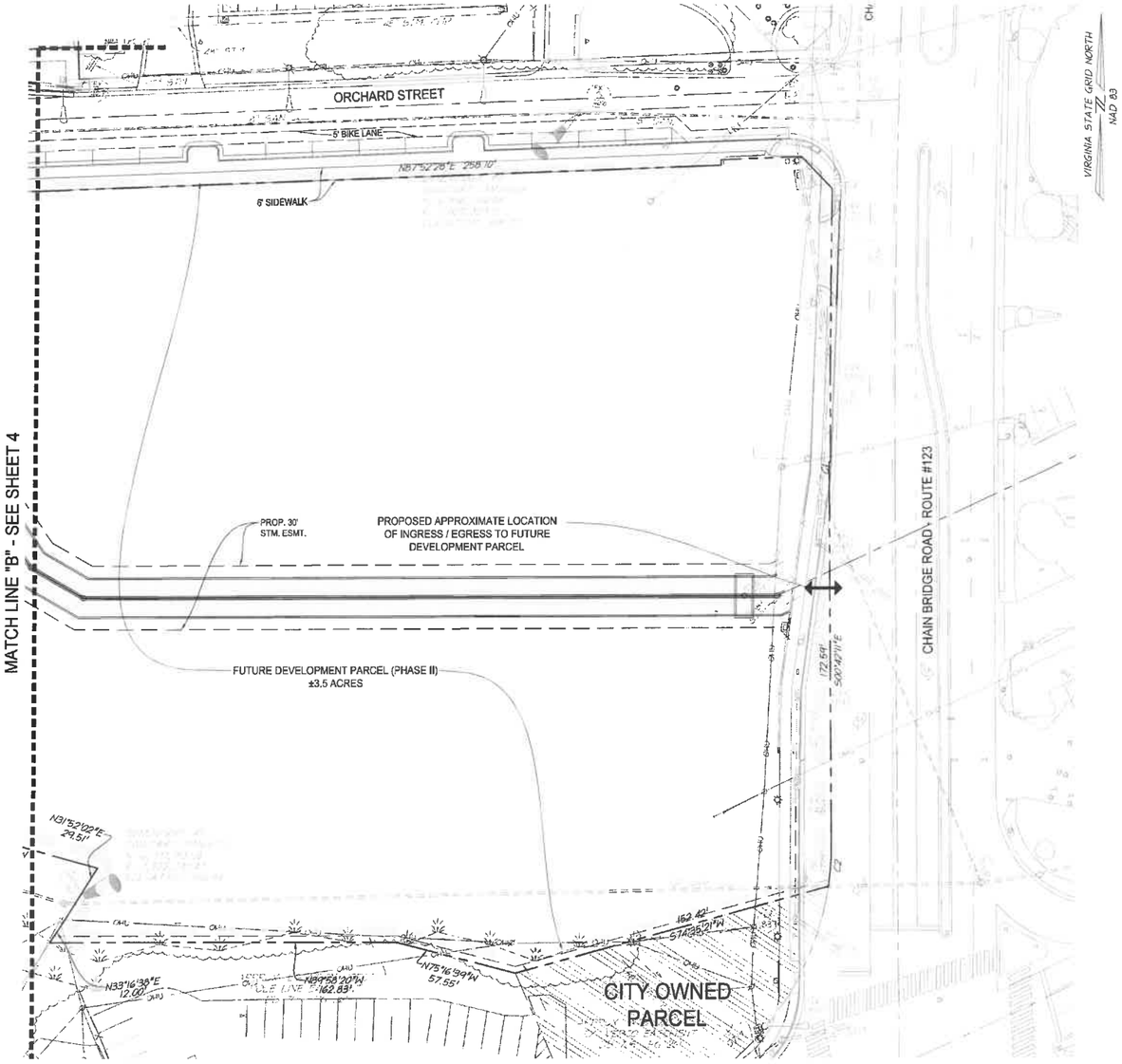
MASTER DEVELOPMENT PLAN

SHEET No.

4



MATCH LINE "A" - SEE SHEET 4



PROPOSED TABULATIONS FOR DEVELOPMENT PROGRAM

SITE AREA
REQUIRED: 2 ACRES (PD-M)
PROVIDED: 10.85 AC (464,080 SF)
TOWNHOUSE PARCEL = 4.93 AC (214,890 SF)
SENIOR LIVING PARCEL = 2.23 AC (97,316 SF)
FUTURE DEVELOPMENT PARCEL = 3.49 AC (151,884 SF)

NOTES:
(1) RIGHT-OF-WAY OF ORCHARD STREET TO BE RE-ALIGNED.
(2) RIGHT-OF-WAY TO BE DEDICATED FOR FARR AVENUE EXTENSION.
(3) EXISTING SITE AREA IS 11.32 ACRES.

DENSITY
PERMITTED: NO REQUIREMENT
PROVIDED: TOWNHOUSE PARCEL = 56 TOWNHOUSES
SENIOR LIVING PARCEL = 200 UNITS (284 BEDS)
FUTURE DEVELOPMENT PARCEL = TO BE DETERMINED

BUILDING HEIGHT
PERMITTED: NO REQUIREMENT
PROVIDED: TOWNHOUSE PARCEL = 40' HIGH TO MID POINT OF ROOF
SENIOR LIVING PARCEL = 60' HIGH TO MID POINT OF ROOF
FUTURE PARCEL = TO BE DETERMINED

BUILDING COVERAGE
PERMITTED: 80% MAXIMUM
PROVIDED: TOWNHOUSE PARCEL = 25%
SENIOR LIVING PARCEL = 60%
FUTURE PARCEL = TO BE DETERMINED

SIDEWALK
REQUIRED: 5'
PROVIDED: 6' ALONG ORCHARD STREET & FARR AVENUE

OPEN SPACE
REQUIRED: 20% (PD-M)
PROVIDED: SEE SHEET 7 FOR CALCULATIONS

TREE CANOPY
REQUIRED: 10% (PD-M)
PROVIDED: SEE SHEET 8A FOR CALCULATIONS

OFF-STREET PARKING
REQUIRED: NONE
PROVIDED: SEE CHART BELOW

NOTE: 2 LOADING SPACES REQUIRED AND PROVIDED FOR THE SENIOR LIVING BUILDING.

FUTURE DEVELOPMENT PARCEL PERMITTED USES:
SUBJECT TO APPROVAL OF AN AMENDED MASTER DEVELOPMENT PLAN, USES PERMITTED ON THE FUTURE DEVELOPMENT PARCEL SHALL INCLUDE ALL USES PERMITTED IN THE PD-M (PLANNED DEVELOPMENT MIXED USE) DISTRICT, AS MORE SPECIFICALLY DEFINED IN SECTION 3.8.4 OF THE ZONING ORDINANCE OF THE CITY OF FAIRFAX, EXCEPT FOR THE FOLLOWING PERMITTED USES, WHICH ARE SPECIFICALLY EXCLUDED:

- CEMETERIES
- DETENTION FACILITIES OR JAILS
- ADULT USES
- BUILDING SUPPLIES AND LUMBER SALES
- FUEL STATIONS
- VEHICLE REPAIRS
- VEHICLE SALES AND LEASING
- VEHICLE SERVICE

ADDITIONALLY, PERMITTED USES ON THE FUTURE DEVELOPMENT PARCEL SHALL INCLUDE ANY PERMITTED TEMPORARY USES, INCLUDING TEMPORARY VEHICLE STORAGE.

ADJACENT PROJECT NARRATIVE:
AT THE TIME OF THIS REZONING APPLICATION THERE ARE TWO PROJECTS IN THE IMMEDIATE VICINITY THAT IMPACT THIS DEVELOPMENT AND REQUIRE COORDINATION. BROWNS MAZDA, LOCATED SOUTH OF THE SUBJECT SITE HAS SUBMITTED A SPECIAL USE PERMIT TO ALLOW FOR A NEW DEALERSHIP WITH AN ABOVE GROUND PARKING DECK. THE CITY IS IN THE PROCESS OF DESIGNING A NEW PUBLIC ROAD (FARR AVENUE) THAT WILL CONNECT FAIRFAX BOULEVARD TO ORCHARD STREET. IN ORDER FOR BOTH OF THE PROJECTS TO MOVE FORWARD TO CONSTRUCTION, THE SUBJECT SITE WILL NEED TO BE REZONED AND RE-DEVELOPED.

PROPOSED PARKING TABULATION

PROPOSED USE			REQUIRED PARKING SPACES	PARKING SPACES PROVIDED	
TOWNHOUSES	56	UNITS	2.0 SPACES PER UNIT - 112 SPACES	112	GARAGE SPACES
				20	SURFACE SPACES
SENIOR LIVING – INDEPENDENT LIVING	114	UNITS	1.5 SPACES PER UNIT - 171 SPACES	120	GARAGE SPACES
SENIOR LIVING – ASSISTED LIVING / MEMORY CARE	96	BEDS	1 SPACE PER 4 BEDS - 24 SPACES		
TOTAL PARKING			283 SPACES	252	SPACES

NOTES
(1) PARKING REQUIRED AND PROVIDED FOR THE FUTURE DEVELOPMENT PARCEL TO BE DETERMINED.
(2) AN ADDITIONAL 40 STREET SPACES ARE PROVIDED IN THE PUBLIC ROW ALONG ORCHARD STREET AND FARR AVENUE.

STORMWATER MANAGEMENT & BEST MANAGEMENT PRACTICE (SWM/BMP) NARRATIVE

SWM
WATER QUANTITY FOR THIS PROJECT WILL BE PROVIDED IN ACCORDANCE WITH STATE CODE 9VAC25-870-66-WATER QUANTITY AND THE CITY OF FAIRFAX STORMWATER ORDINANCE.

THE WATER QUANTITY REQUIREMENTS WILL BE MET BY DISCHARGING STORMWATER LESS THAN 1% OF THE TOTAL DRAINAGE AREA TO A MANMADE SYSTEM. IF IT IS DETERMINED DURING THE FINAL SITE PLAN THAT DETENTION IS REQUIRED, THEN STORMWATER VAULTS OR ARCHED PIPES WILL BE USED TO MANAGE THE STORMWATER RUNOFF.

ADEQUATE OUTFALL
THE EXISTING SITE MAINLY DISCHARGES RUNOFF TO A STREAM THAT BISECTS THE PROPERTY.

THE MAJORITY OF THE SITE WILL DRAIN TO THE PROPOSED TWIN BOX CULVERT THAT IS BEING INSTALLED TO CONTAIN THE STREAM AND PASS IT THROUGH THE SITE TO THE EAST AT THE SITE'S MAJOR OUTFALL.

BMP
THIS PROJECT WILL USE THE VIRGINIA RUNOFF REDUCTION METHOD (VRRM) REDEVELOPMENT TO MEET THE STATE. PART IIB CRITERIA (9VAC25-870-65) AND CITY WATER QUALITY DESIGN CRITERIA. THE PROJECT SITE AREA FOR WATER QUALITY CALCULATIONS WILL INCLUDE ALL AREA WITHIN THE LIMITS OF CLEARING AND GRADING (EXCLUDING THE RIGHT-OF-WAY OF FARR AVENUE TO BE DEVELOPED BY OTHERS). TO MEET WATER QUALITY DESIGN CRITERIA AND PHOSPHORUS REMOVAL, A COMBINATION OF PROPRIETARY BMP FACILITIES WILL BE USED. THESE FACILITIES MAY INCLUDE; HYDRODYNAMIC SEPARATORS, FILTERRAS AND/OR STORMFILTERS. ADDITIONAL PROPRIETARY AND NON-PROPRIETARY BMP FACILITIES MAY BE USED AS THE DESIGN OF THE SITE DEVELOPS FURTHER. PRELIMINARY LOCATIONS ARE SHOWN ON THE DEVELOPMENT PLAN.

NOTE:
LOCATIONS AND SIZING OF SWM/BMP FACILITIES SHOWN ARE BASED ON A PRELIMINARY STUDY TO ENSURE COMPLIANCE WITH STATE AND CITY REQUIREMENTS; THE LOCATION AND TYPE OF FACILITY IS SUBJECT TO CHANGE WITH FINAL DESIGN.

30 15 0 30 60
HORIZONTAL GRAPHIC SCALE
1" = 30'

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF FAIRFAX STANDARDS AND SPECIFICATIONS

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COMMONWEALTH OF VIRGINIA
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01/03/2020
PROFESSIONAL ENGINEER

NORTHFAX WEST
MASTER DEVELOPMENT PLAN
CITY OF FAIRFAX, VIRGINIA

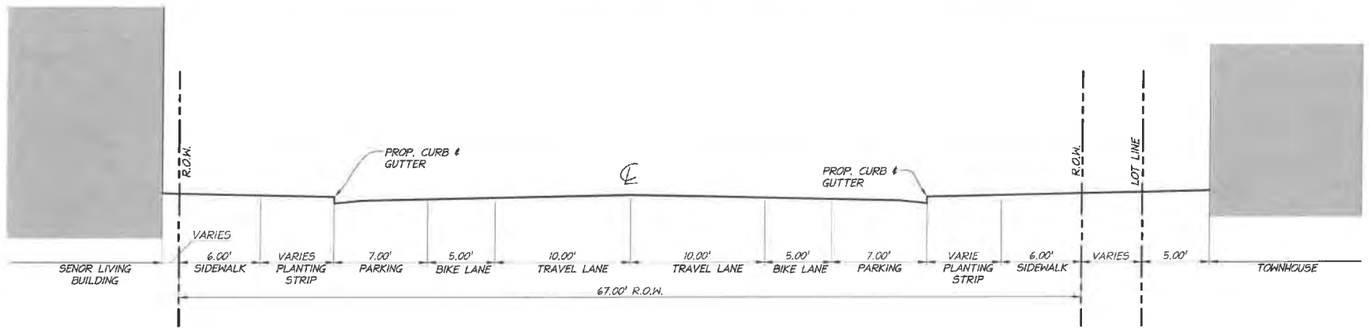
MARK	DATE	DESCRIPTION

PROJECT No.: 13139.005.00
DRAWING No.: 109832
DATE: 11-21-2019
DESIGN: EG
DRAWN: JS
CHECKED: KMW

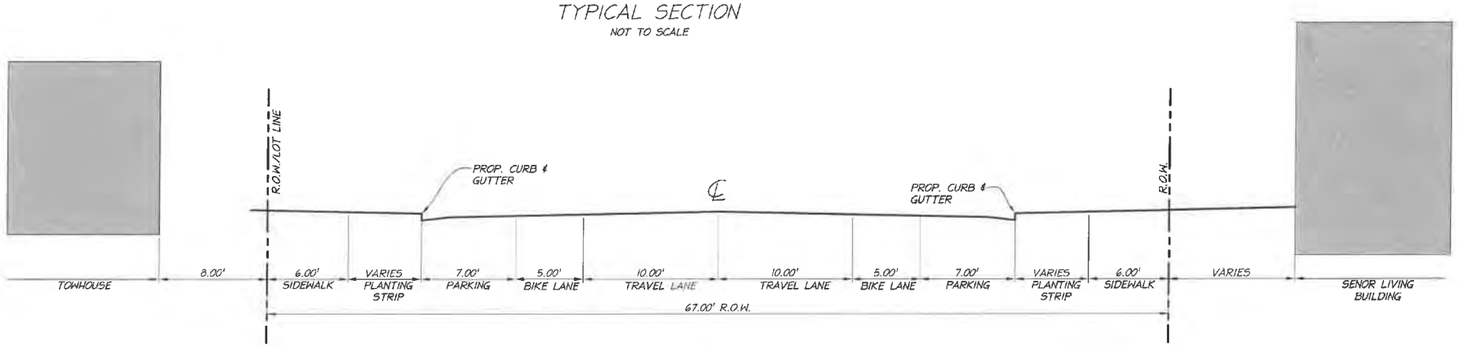
SHEET TITLE:
MASTER DEVELOPMENT PLAN

SHEET No.
4A

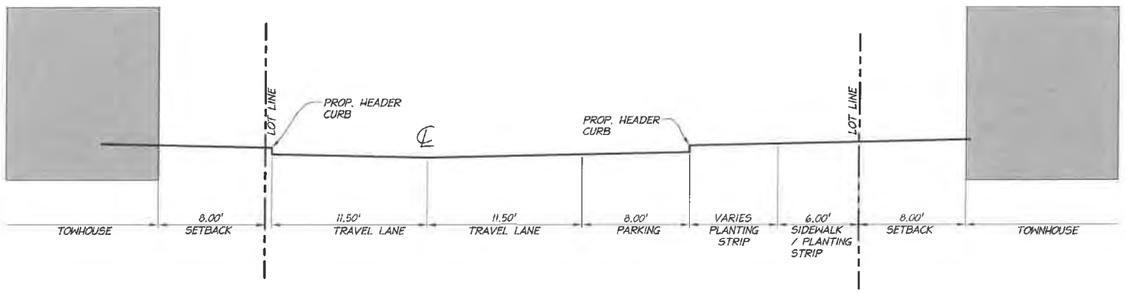
SCALE: 1"=30'



ORCHARD STREET
TYPICAL SECTION
NOT TO SCALE



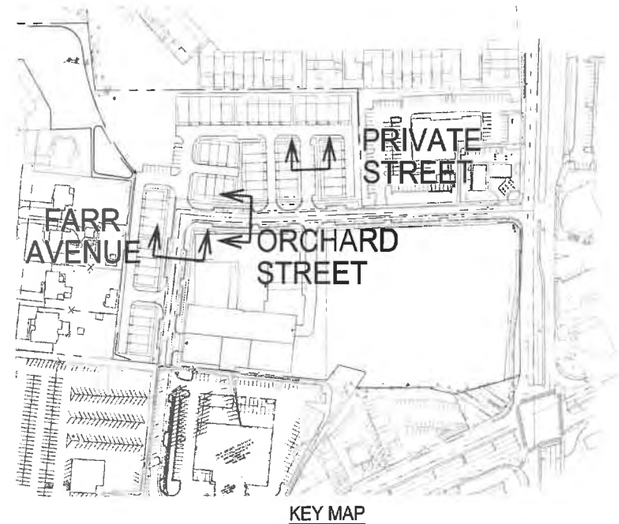
FARR AVENUE
TYPICAL SECTION
NOT TO SCALE



PRIVATE STREET
TYPICAL SECTION
NOT TO SCALE

TYPICAL TOWNHOUSE LOT DETAILS
SCALE: 1" =20'

20 10 0 20 40
HORIZONTAL GRAPHIC SCALE
1" = 20'



KEY MAP
NOT TO SCALE

christopher consultants
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MASTER DEVELOPMENT PLAN
CITY OF FAIRFAX, VIRGINIA

MARK	DATE	DESCRIPTION

PROJECT No.: 13139.005.00
DRAWING No.: 109632
DATE: 11-21-2019
DESIGN: EG
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CHECKED: KMW

SHEET TITLE:
STREET SECTIONS AND TYPICAL TOWNHOUSE YARDS

SHEET No.
4B

SCALE: SEE DWGS.

MATCH LINE "A" - SEE SHEET 5A

MATCH LINE "B" - SEE SHEET 5A

APPROXIMATE LOCATION OF AMENITY AREA

RPA
POST-DEVELOPED

100 YR FLOODPLAIN

SWALE CENTERLINE

PROP. RETAINING WALL

PROP. 30' STM. ESMT.

PROP. TOWNHOUSES

TOWNHOUSE PARCEL
±1.1 ACRES

HYDRODYNAMIC SEPARATOR (BMP 8)

STORMFILTER (BMP 6)

6' SIDEWALK

5' BIKE LANE

ORCHARD STREET

FARR AVENUE

FARR AVENUE TO BE DESIGNED AND CONSTRUCTED BY OTHERS

HYDRODYNAMIC SEPARATOR (BMP 1)

GREENROOF

PROPOSED BUILDING
FF=359.00

SENIOR LIVING PARCEL
±2.2 ACRES

STORMFILTER (BMP 4)

HYDRODYNAMIC SEPARATOR (BMP 3)

PARKING GARAGE ENTRANCE

ISOLATOR ROW (BMP 5)

ISOLATOR ROW (BMP 6)

HYDRODYNAMIC SEPARATOR (BMP 7)

PROP. RETAINING WALL
TW=60.0
BW=57.5

BROWN'S FAIRFAX MAZDA
PROPOSED DEVELOPMENT
(SUP-SUB 01-20191105)

VIRGINIA STATE GRID NORTH
ZONE
NAD 83

LEGEND

- EX. SPOT SHOT
- EX. INDEX CONTOUR (5')
- EX. INT. CONTOUR (1')
- 150.0 PROP. SPOT SHOT
- PROP. INDEX CONTOUR (5')
- PROP. INT. CONTOUR (1')
- LOD LIMITS OF DISTURBANCE

NOTE: THE GRADING FOR THE CONSTRUCTION OF THE TWIN BOX CULVERT EXTENDS INTO THE REDEFINED RPA AREA AND FOR THE CONSTRUCTION OF THE PEDESTRIAN TRAIL ARE EXEMPT PER SECTION 4.18.10 OF THE ZONING ORDINANCE.

30 15 0 30 60
HORIZONTAL GRAPHIC SCALE
1" = 30'

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF FAIRFAX STANDARDS AND SPECIFICATIONS

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COMMONWEALTH OF VIRGINIA
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Lic. No.55868
01/03/2020
PROFESSIONAL ENGINEER

NORTHFAX WEST
MASTER DEVELOPMENT PLAN
CITY OF FAIRFAX, VIRGINIA

MARK	DATE	DESCRIPTION

PROJECT No.: 13139.005.00
DRAWING No.: 109532
DATE: 11-21-2019
DESIGN: EG
DRAWN: JS
CHECKED: KMW

SHEET TITLE:

PRELIMINARY GRADING PLAN

SHEET No.
5

SCALE: 1"=30'

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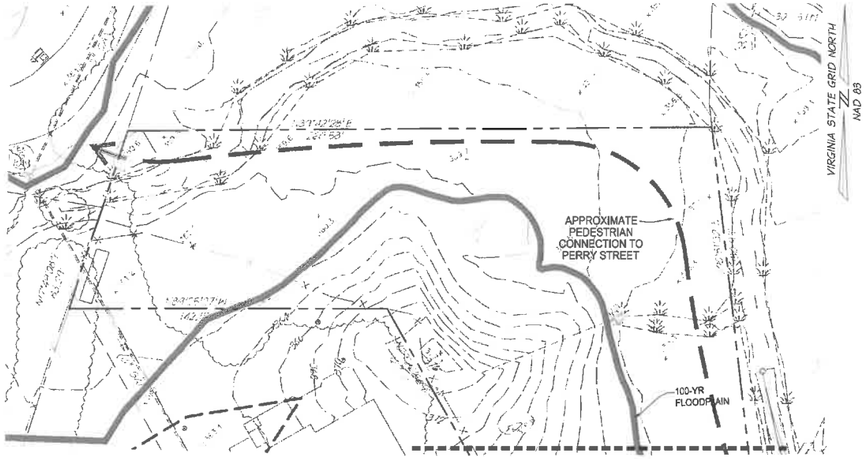

MATCH LINE "A" - SEE SHEET 5

MATCH LINE "B" - SEE SHEET 5

INTERIM GRADING NARRATIVE:
THE GRADING SHOWN ON THIS PLAN IS FINAL GRADING THAT WILL BE SET AT THE COMPLETION OF THE DEVELOPMENT , PENDING THE COMPLETION OF CONSTRUCTION OF BOTH THE BROWN'S MAZDA SITE LOCATED TO THE SOUTH AND THE CITY'S FARR AVENUE PROJECT. IF THE CONSTRUCTION OF EITHER OF THOSE PROJECTS ARE DELAYED, THE GRADING FOR THIS SITE WILL BE IMPACTED AND THUS REQUIRE INTERIM GRADING. AT THE TIME OF FINAL SITE PLAN FOR THE TOWNHOUSE PARCEL OR SENIOR LIVING PARCEL, OR FOR THE PUBLIC IMPROVEMENT PLAN (STORM CULVERT, UTILITIES AND ORCHARD STREET), THE GRADING MAY BE MODIFIED BASED ON FIELD CONDITIONS AND STILL MEET THE OVERALL INTENT OF THE GRADING THAT IS GENERALLY SHOWN ON THIS MDP.

NOTE: THE GRADING FOR THE CONSTRUCTION OF THE TWIN BOX CULVERT EXTENDS INTO THE REDEFINED RPA AREA AND FOR THE CONSTRUCTION OF THE PEDESTRIAN TRAIL ARE EXEMPT PER SECTION 4.18.10 OF THE ZONING ORDINANCE.

LEGEND

- EX. SPOT SHOT
- EX. INDEX CONTOUR (5')
- EX. INT. CONTOUR (1')
- +150.0 PROP. SPOT SHOT
- PROP. INDEX CONTOUR (5')
- PROP. INT. CONTOUR (1')
- LOD LIMITS OF DISTURBANCE

30 15 0 30 60
HORIZONTAL GRAPHIC SCALE
1" = 30'

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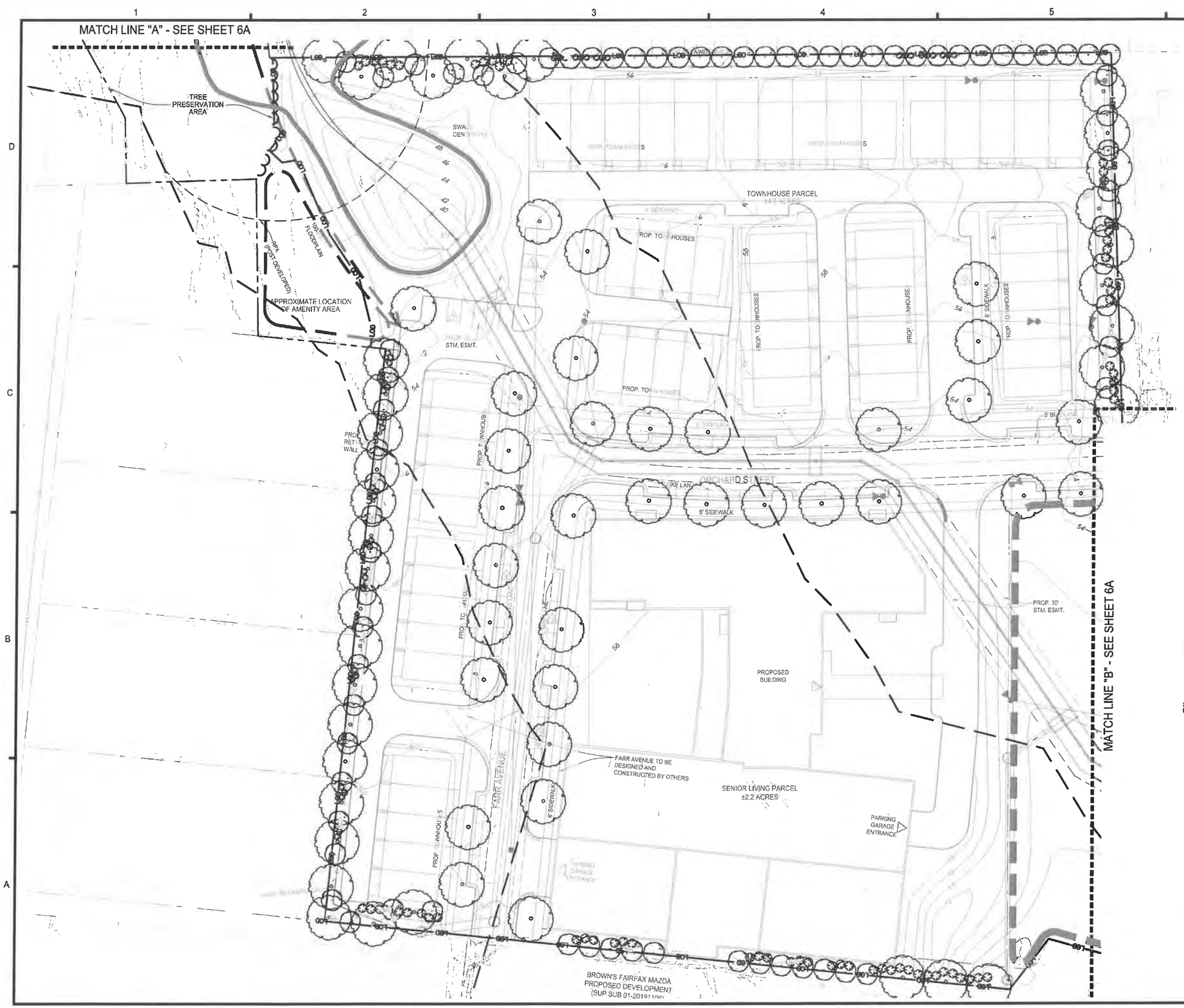
SHEET TITLE:

PRELIMINARY GRADING PLAN

SHEET No.
5A

SCALE: 1"=30'

P:\PDX\Projects\13139\005\00\109532 Northfax MDP\SA PRELIMINARY GRADING PLAN.dwg, 1/3/2020 3:15:57 PM, DWG To PDF Merge.pc3



NOTES
1. PROPOSED VEGETATION TO BE A MIXTURE OF DECIDUOUS AND EVERGREEN.

LEGEND

LOD — LIMITS OF DISTURBANCE

PROPOSED VEGETATION LINE

CANOPY TREE

UNDERSTORY TREE

SHRUB

VIRGINIA STATE GRID NORTH NAD 83

30 15 0 30 60
HORIZONTAL GRAPHIC SCALE
1" = 30'

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COMMONWEALTH OF VIRGINIA
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2020-01-03
LANDSCAPE ARCHITECT

NORTHFAX WEST
MASTER DEVELOPMENT PLAN
CITY OF FAIRFAX, VIRGINIA

MARK	DATE	DESCRIPTION

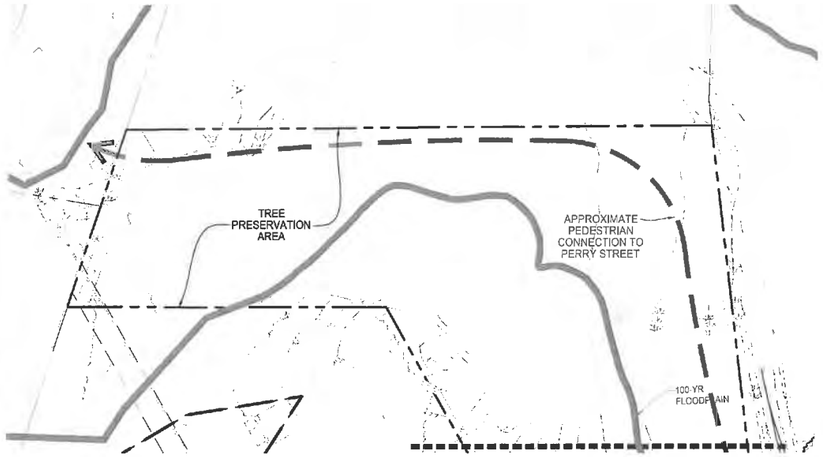
PROJECT No.: 13139.005.00
DRAWING No.: 109632
DATE: 11-21-2019
DESIGN: LBD
DRAWN: LBD
CHECKED: LBD

SHEET TITLE:

CONCEPTUAL LANDSCAPE PLAN

SHEET No.
6

SCALE: 1"=30'



MATCH LINE "A" - SEE SHEET 6

TRANSITIONAL YARDS

TRANSITIONAL YARD 3 - NORTH

LINEAR FEET		585'	
REQUIRED			PROVIDED
WIDTH OF LANDSCAPE STRIP		15'	15'
FENCE OR WALL HEIGHT		6'	6' FENCE 1.5 - 7.9' WALL
CANOPY TREE	(4 per 100 feet)	23	7
UNDERSTORY TREE	(4 per 100 feet)	23	33
SHRUB	(4 per 100 feet)	23	29
SEE SHEET 1 FOR MODIFICATION REQUEST			

TRANSITIONAL YARD 3 - NORTHEAST

LINEAR FEET		232'	
REQUIRED			PROVIDED
WIDTH OF LANDSCAPE STRIP		15'	15'
FENCE OR WALL HEIGHT		6'	6' FENCE 1.5 - 7.9' WALL
CANOPY TREE	(4 per 100 feet)	9	9
UNDERSTORY TREE	(4 per 100 feet)	9	9
SHRUB	(4 per 100 feet)	9	16
NO MODIFICATION REQUESTED			

TRANSITIONAL YARD 3 - SOUTHEAST

LINEAR FEET		327'	
REQUIRED			PROVIDED
WIDTH OF LANDSCAPE STRIP		15'	0 - 15'
FENCE OR WALL HEIGHT		6'	NONE FENCE WALL
CANOPY TREE	(4 per 100 feet)	13	3
UNDERSTORY TREE	(4 per 100 feet)	13	12
SHRUB	(4 per 100 feet)	13	29
SEE SHEET 1 FOR MODIFICATION REQUEST			

TRANSITIONAL YARD 3 - SOUTHWEST

LINEAR FEET		75'	
REQUIRED			PROVIDED
WIDTH OF LANDSCAPE STRIP		15'	15'
FENCE OR WALL HEIGHT		6'	6' FENCE 1.5 - 7.9' WALL
CANOPY TREE	(4 per 100 feet)	3	2
UNDERSTORY TREE	(4 per 100 feet)	3	3
SHRUB	(4 per 100 feet)	3	8
SEE SHEET 1 FOR MODIFICATION REQUEST			

TRANSITIONAL YARD 3 - WEST

LINEAR FEET		400'	
REQUIRED			PROVIDED
WIDTH OF LANDSCAPE STRIP		15'	8.5'
FENCE OR WALL HEIGHT		6'	6' FENCE 1.5 - 7.9' WALL
CANOPY TREE	(4 per 100 feet)	16	16
UNDERSTORY TREE	(4 per 100 feet)	16	16
SHRUB	(4 per 100 feet)	16	28
SEE SHEET 1 FOR MODIFICATION REQUEST			

NOTES:
1. EASTERN AND NORTHWESTERN TRANSITIONAL YARD PROVIDED BY EXISTING VEGETATION AND/OR FUTURE DEVELOPMENT PARCEL.
2. WHERE WALLS ARE LOCATED INSIDE THE TRANSITIONAL YARD A FENCE WILL BE ADDED IN ORDER TO MEET THE 6' HEIGHT REQUIREMENT.

10-YEAR TREE CANOPY CALCULATIONS

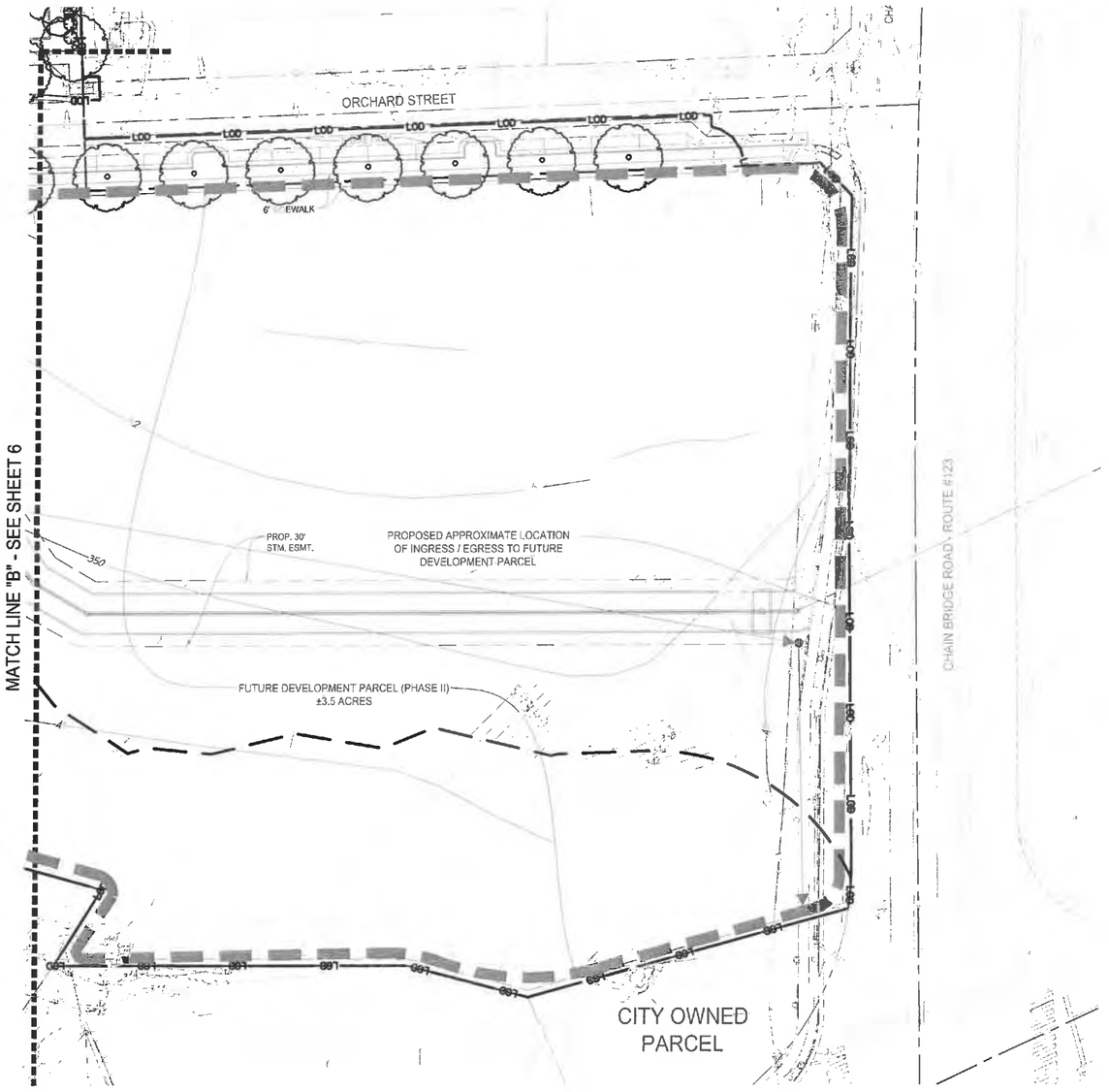
TREE CANOPY REQUIRED				
SITE AREA (DOES NOT INCLUDE ROW)				484,090 SF
TREE CANOPY COVERAGE REQUIRED PER ZO 4.5.6.A.				**10 %**
TOTAL CANOPY AREA REQUIRED				46,409 SF
TREE CANOPY PROVIDED				
PLANT TYPE	**STOCK SIZE**	**QUANTITY**	**CANOPY PER TREE**	**CANOPY PER TYPE**
CANOPY TREE	2" CALIPER	44	200 SF	8,800 SF
UNDERSTORY TREE	2" CALIPER	74	100 SF	7,400 SF
SUBTOTAL CANOPY AREA PROVIDED THROUGH TREE PLANTING				16,200 SF
SUBTOTAL CANOPY AREA PROVIDED THROUGH TREE PRESERVATION				40,000 SF
TOTAL CANOPY AREA PROVIDED				56,200 SF
TOTAL CANOPY COVERAGE PROVIDED				**12.1 %**
NOTE: THE FOLLOWING TREES ARE PROPOSED WITHIN THE ROW AND THEREFORE NOT INCLUDED IN THE ABOVE TREE CANOPY CALCULATIONS				
CANOPY TREE	2" CALIPER	34	--	--

STREET TREES REQUIRED:
MINIMUM 10' WIDE LANDSCAPE STRIP ALONG ALL STREETS
1 CANOPY TREE PER 40 LINEAR FEET ALONG ALL STREETS

STREET TREES PROVIDED:
5 -13' WIDE LANDSCAPE STRIP ALONG ALL PUBLIC AND PRIVATE STREETS
1 CANOPY TREE PER 40 LINEAR FEET ALONG ALL PUBLIC AND PRIVATE STREETS, IF NO CONFLICTS WITH UTILITIES.
SEE SHEET 1 FOR MODIFICATION REQUEST.

INTERIOR PARKING LOT LANDSCAPING REQUIRED:
1 CANOPY TREE FOR EVERY 10 SPACES

INTERIOR PARKING LOT LANDSCAPING PROVIDED:
2 CANOPY TREES FOR 13 SPACES
SEE SHEET 1 FOR MODIFICATION REQUEST.



NOTES
1. PROPOSED VEGETATION TO BE A MIXTURE OF DECIDUOUS AND EVERGREEN.

LEGEND
- LOD — LIMITS OF DISTURBANCE
- PROPOSED VEGETATION LINE
- CANOPY TREE
- UNDERSTORY TREE
- SHRUB

VIRGINIA STATE GRID NORTH
NAD 83

30 15 0 30 60
HORIZONTAL GRAPHIC SCALE
1" = 30'

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF FAIRFAX STANDARDS AND SPECIFICATIONS

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2020-01-03
LANDSCAPE ARCHITECT

NORTHFAX WEST
MASTER DEVELOPMENT PLAN
CITY OF FAIRFAX, VIRGINIA

MARK	DATE	DESCRIPTION

PROJECT No.: 13139.005.00
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DRAWN: LBD
CHECKED: LBD

SHEET TITLE:

CONCEPTUAL LANDSCAPE PLAN

SHEET No.
6A

SCALE: 1"=30'

LEGEND & TABULATIONS

TOTAL PROPERTY AREA: 464,090 SF

OPEN SPACE REQUIRED: 20% (± 92,818 SF)

OPEN SPACE PROVIDED: ± 28% (± 134,400 SF)
± 20% (± 92,900 SF) PER ZONING ORDINANCE DEFINITION

PHASE 1

50' WIDE OPEN SPACE AND GREATER
± 20% (± 92,900 SF)

0'-49' WIDE OPEN SPACE
± 5% (± 24,000 SF)

PEDESTRIAN ZONE OF ROW
± 3% (± 17,500 SF)

PHASE 2

FUTURE DEVELOPMENT PARCEL

WHEN THIS PARCEL IS DEVELOPED, THE 20% OPEN SPACE REQUIREMENT WILL BE BASED ON THE TOTAL PROPERTY AREA SHOWN ABOVE

CONTIGUOUS OPEN SPACE REQUIRED: 60%

CONTIGUOUS OPEN SPACE PROVIDED: ± 60%

HORIZONTAL GRAPHIC SCALE
1" = 40'

VIRGINIA STATE GRID NORTH
NAD 83

APPROXIMATE PEDESTRIAN CONNECTION TO PERRY STREET

THE ASSEMBLY TOWNHOMES

PROP. TOWNHOUSES

TOWNHOUSE PARCEL
±4.9 AC±

APPROXIMATE LOCATION OF AMENITY AREA

ORCHARD STREET
50' PUBLIC RIGHT-OF-WAY
D.B. 401 PG. 312

ORCHARD STREET

McLEAN AVENUE
VARIABLE WIDTH PUBLIC RIGHT-OF-WAY

ACRES
D.B. 401 PG. 312

LOT 13

LOT 17
FAIRFAX FARM ACRES
D.B. 401 PG. 312

LOT 18

LOT 19

LOT 6

PROPOSED BUILDING

SENIOR LIVING PARCEL
±2.2 ACRES

PARKING GARAGE ENTRANCE

FARR AVENUE

PROP. TOWNHOUSES

PROPOSED APPROXIMATE LOCATION OF INGRESS / EGRESS TO FUTURE DEVELOPMENT PARCEL

FUTURE DEVELOPMENT PARCEL (PHASE II)
±3.5 ACRES

BROWN'S FAIRFAX MAZDA
PROPOSED DEVELOPMENT
(SUP SUB 01-20191106)

CITY OWNED PARCEL

McLEAN AVENUE

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CITY OF FAIRFAX, VIRGINIA

MARK	DATE	DESCRIPTION

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DATE: 11-21-2019
DESIGN: LBD
DRAWN: AK
CHECKED: LBD

SHEET TITLE:

OPEN SPACE PLAN

SHEET No.
7

SCALE: 1"=40'

OFFSITE SANITARY FLOW ESTIMATES:

AREA #1
EXISTING DEVELOPMENT ESTIMATES:
RESIDENTIAL= 162 DWELLING UNITS

FLOW ESTIMATES:
162 UNITS x 350 GPD/UNIT = 56,700 GPD

TOTAL FLOW = 56,700 GPD

TOTAL PEAK FLOW = 226,800 GPD = 0.23 MGD

AREA #2
EXISTING DEVELOPMENT ESTIMATES:
HOTEL= 152 ROOMS

FLOW ESTIMATES:
152 UNITS x 130 GPD/UNIT = 19,760 GPD

TOTAL FLOW = 19,760 GPD

TOTAL PEAK FLOW = 79,040 GPD = 0.08 MGD

AREA #3
EXISTING DEVELOPMENT ESTIMATES:
RESIDENTIAL= 53 DWELLING UNITS

FLOW ESTIMATES:
53 UNITS x 350 GPD/UNIT = 18,550 GPD

TOTAL FLOW = 18,550 GPD

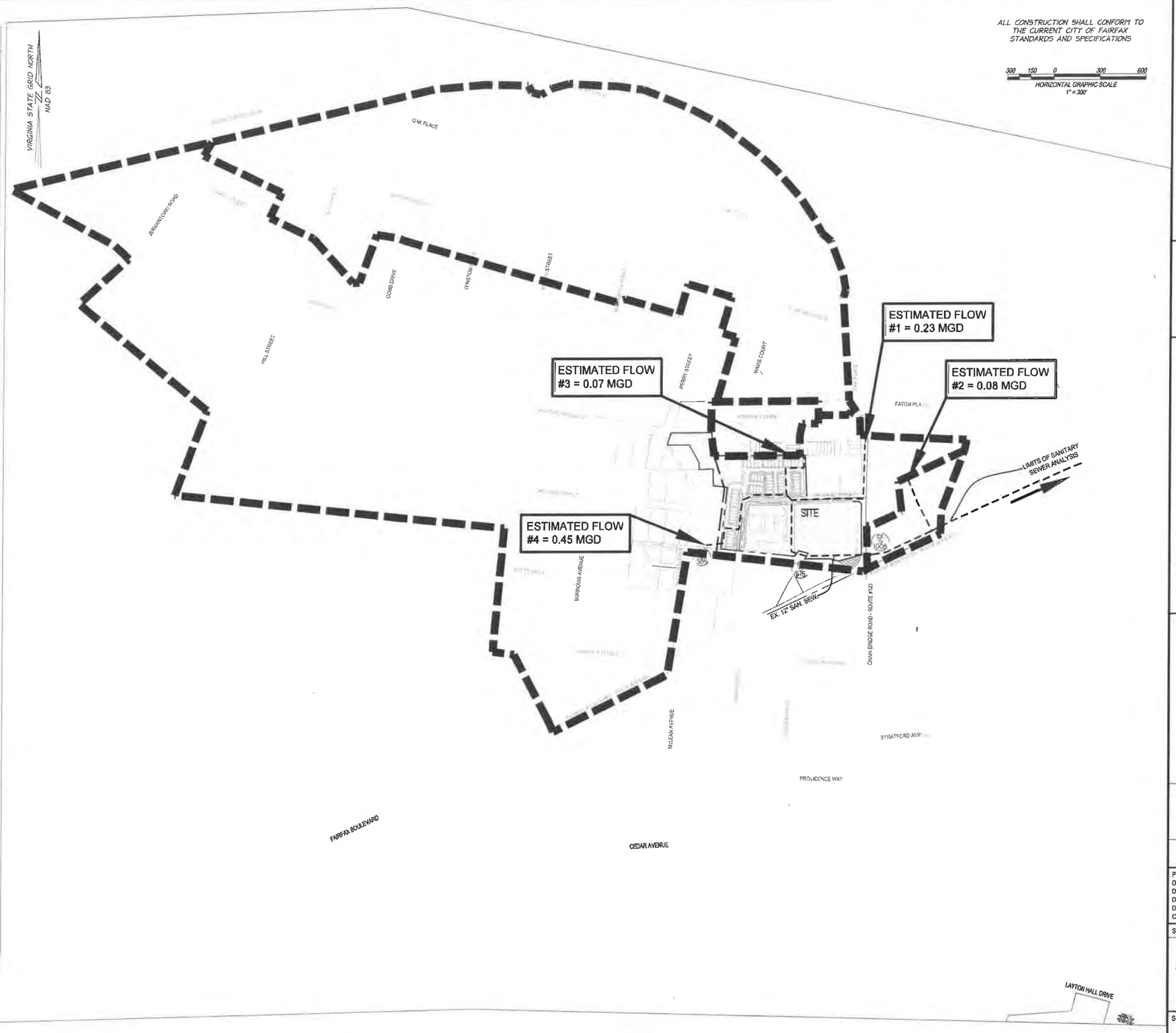
TOTAL PEAK FLOW = 74,200 GPD = 0.07 MGD

AREA #4
EXISTING DEVELOPMENT ESTIMATES:
RESIDENTIAL= 256 DWELLING UNITS
OFFICE/RETAIL = 113,830 SF

FLOW ESTIMATES:
256 UNITS x 350 GPD/UNIT = 89,600 GPD
113,830 SF OFFICE/RETAIL x 200 GPD/1000 SF = 22,766 GPD

TOTAL FLOW = 112,366 GPD

TOTAL PEAK FLOW = 449,464 GPD = 0.45 MGD



NOTES:
1. SEE SHEET 9 FOR SANITARY SEWER ANALYSIS.
2. SEE THE NARRATIVE TITLED "ANALYSIS OF EXISTING 12" SEWER" NARRATIVE ON SHEET 9 FOR FLOW ASSUMPTIONS.
3. A PEAK FACTOR OF 4.0 WAS USED FOR ALL OFFSITE SANITARY FLOWS.

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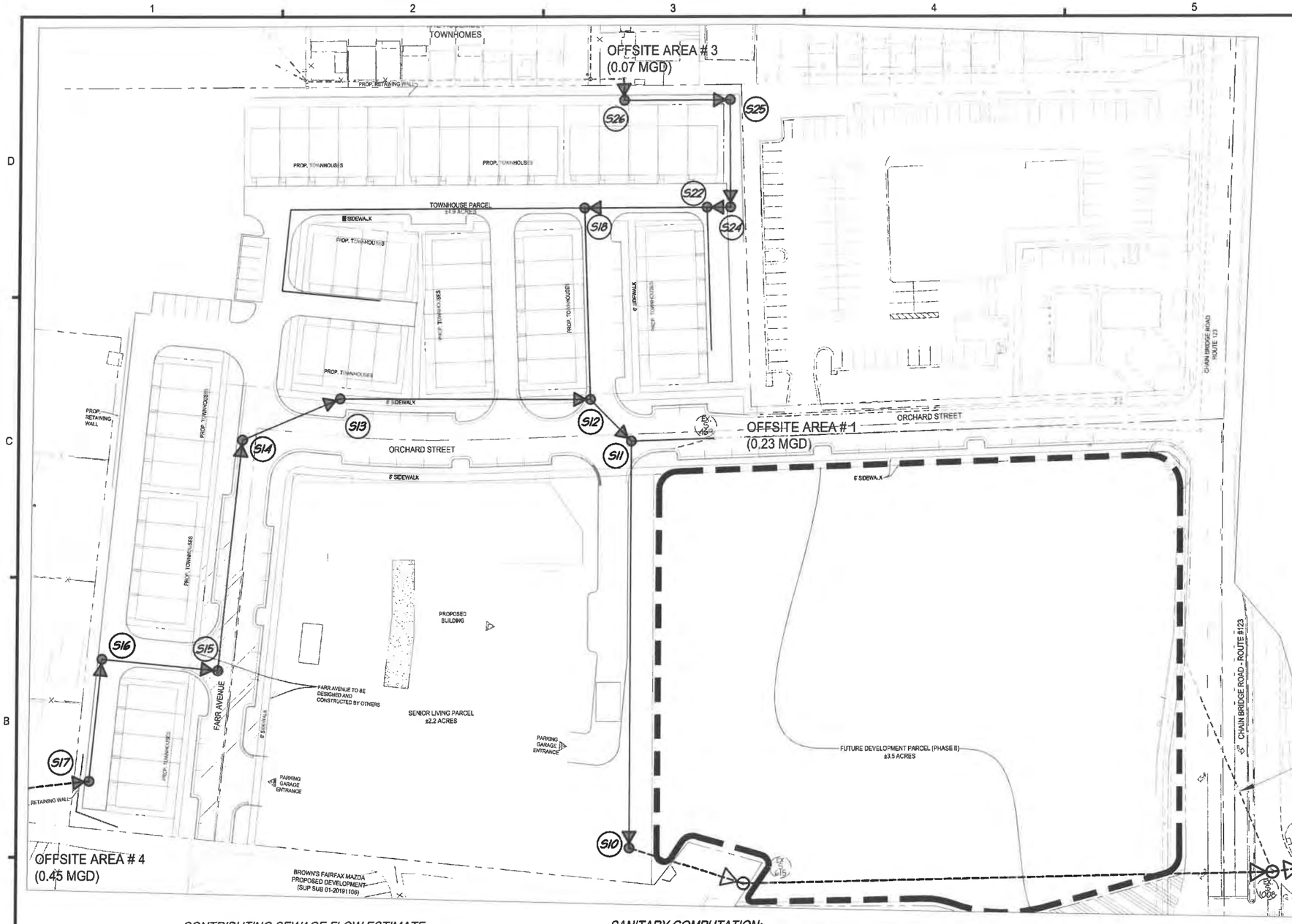
SHEET TITLE:

SANITARY SEWER OFF-SITE MAP

SHEET No.
8

SCALE: 1"=300'



ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF FAIRFAX STANDARDS AND SPECIFICATIONS

40 20 0 40 80
HORIZONTAL GRAPHIC SCALE
1" = 40'

SANITARY SEWER ANALYSIS

THE PURPOSE OF THIS ANALYSIS IS TO DEMONSTRATE THE CAPACITY AND HYDRAULIC ADEQUACY OF THE DOWN STREAM SANITARY SEWER MAIN.

EXISTING CONDITIONS:
CURRENTLY, THE EXISTING SITE CONSISTS OF TWO (2) 1-STORY BRICK & FRAME BUILDINGS, ONE (1) 4-STORY OFFICE BUILDING, AND ONE GASOLINE STATION WITH CONVENIENCE STORE. THE TWO (2) 1-STORY BRICK & FRAME BUILDINGS CONNECT TO EXISTING SANITARY LINE AT ORCHARD STREET. WHILE THE OFFICE BUILDING AND GASOLINE STORE CONNECT TO EXISTING SANITARY MAIN AT CHAIN BRIDGE ROAD AND ENTER INTO ORCHARD STREET (INTO THE PROJECT SITE). THE EXISTING SANITARY SEWER CONTINUE TOWARDS THE SOUTH INTO EXISTING MANHOLE S615 AND RUNS ACROSS THE CHAIN BRIDGE ROAD TO A 12-INCH SEWER MAIN INTO EXISTING MANHOLE S1008.

THE UPSTREAM FOR THIS SEWER-SHED IS SHOWN ON SHEET 8, DESIGNATED AS ESTIMATED FLOW #1, #3 AND #4.

PROPOSED CONDITIONS:
THE ON-SITE LATERALS WILL BE DEMOLISHED TO MAKE ROOM FOR THE NEW BUILDING. NEW LATERALS AND SANITARY MAIN WILL BE CONSTRUCTED. EXISTING SANITARY MAIN FROM THE WEST WILL BE REROUTED TO EX. S469. ALSO THE EXISTING SANITARY LINE FROM THE NORTH SIDE WILL BE REROUTED TO CONNECT TO THE PROPOSED MANHOLE S22.

CAPACITY AND HYDRAULIC ANALYSIS:
THE SANITARY SEWER WAS ANALYZED FROM THE ON-SITE 10-INCH AND 12-INCH SEWER TO EXISTING MANHOLE S469 AND THEN TO THE OUTFALL TO EXISTING MANHOLE S-S1.

THE VOLUME OF FLOW USED IN THIS ANALYSIS HAS BEEN COMPUTED IN ACCORDANCE WITH STATE CODE 9VAC25-790-460 AND 9VAC25-790-310. SEE COMPUTATIONS ON THIS SHEET.

CONCLUSION:
IT IS OUR CONCLUSION THAT THE PROPOSED ON-SITE 10-INCH AND 12-INCH SEWER AND EXISTING DOWNSTREAM 12-INCH SEWER HAS CAPACITY AND HYDRAULIC ADEQUACY WITH THE ADDED REDEVELOPMENT FLOWS.

A SEPARATE SANITARY SEWER ANALYSIS WILL BE COMPLETED FOR THE FUTURE DEVELOPMENT PARCEL ONCE THE PROGRAM IS KNOWN.

LEGEND

- : PROPOSED SANITARY MANHOLE AND FLOW DIRECTION
- : PROPOSED SANITARY SEWER
- S10 : PROPOSED SANITARY STRUCTURE NUMBER
- : EXISTING SANITARY MANHOLE AND FLOW DIRECTION
- : EX. SANITARY SEWER
- EX. 7885 : EX. SANITARY STRUCTURE NUMBER

CONTRIBUTING SEWAGE FLOW ESTIMATE:

Contributing Sewage Flow Estimate

Discharge Facility	No. of Units	No. of People	No. of Dwellings	Average Flow for Dwellings (100 gpd/person)	No. of Beds	Average Flow per Bed (200 gpd/Bed)	Ultimate Floor Space	Average Flow per 1000 sf (250 gpd/1,000sf)	Total Incremental Flow (gpd)	Total Cummulative Flow (gpd	Sanitary From	Sanitary To
Townhouses	5	5	25	2500					2,500	2,500	S17	S16
Townhouses	8	5	40	4000					4,000	6,500	S15	S14
Townhouses	3	5	15	1500					1,500	8,000	S14	S13
Townhouses	3	5	15	1500					1,500	1,500	S13	S12
Townhouses	37	5	185	18500					18,500	18,500	S12	S11
Senior Living					200	40,000			40,200	40,200	S11	S10
Future Development							114,000	28500	114,000	114,000	EX.S615	EX.S1008

SANITARY COMPUTATION:

	FROM	TO	UPPER INV	LOWER INV	L (FT)	SLOPE (%)	DIA (IN)	MATERIAL	N	CAPACITY (cfs)	CAPACITY (MGD)	DESIGN FLOW (cfs)	DESIGN FLOW (MGD)	V (ft/s)	Assumptions	Inc (MGD)	Peak Flow Factor	Design Inc (MGD)
	EX. S385	S17	351.91	350.95	110.02	0.87	10	PVC	0.011	2.39	1.54	0.70	0.450	3.4	PEAK FLOW FROM OFFSITE AREA #4 = 0.45 MGD			0.450
	S17	S16	350.85	349.95	99.85	0.90	10	PVC	0.011	2.43	1.57	0.71	0.458	3.4		0.002	4.0	0.008
	S16	S15	349.85	349.05	94.00	0.85	10	PVC	0.011	2.39	1.54	0.71	0.458	4.3				0.000
	S15	S14	348.95	347.21	188.74	0.92	10	PVC	0.011	2.46	1.59	0.73	0.470	5.7		0.003	4.0	0.012
	S14	S13	347.11	346.51	86.68	0.69	12	PVC	0.011	3.50	2.26	0.73	0.474	6.7		0.001	4.0	0.005
	S13	S12	346.41	343.75	203.14	1.31	12	PVC	0.011	4.82	3.12	0.74	0.479	6.7		0.001	4.0	0.005
	S12	S11	343.65	342.85	47.82	1.67	12	PVC	0.011	5.44	3.52	0.93	0.604	5.7	PEAK FLOW FROM OFFSITE AREA #3 = 0.07 MGD	0.014	4.0	0.126
	S11	S10	342.75	340.29	331.34	0.74	12	PVC	0.011	3.62	2.34	1.48	0.955	3.8	PEAK FLOW FROM OFFSITE AREA #1 = 0.23 MGD	0.030	4.0	0.351
	S10	EX. S615	339.22	337.15	97.14	2.13	12	RCP	0.015	6.14	3.97	1.48	0.955	4.0				0.000
	EX. S615	EX. S1008	336.89	332.59	430.00	1.00	12	RCP	0.015	3.30	2.13	2.01	1.297	4.3		0.086	4.0	0.342

Notes:
1. See contributing sewage flow estimates on sheet 8.
2. All velocities shown are calculated per a partial flow analysis.
3. A peak factor fo 4.0 was used on all flows.
4. The lower invert of EX. S1008 is an assumed elevation and will need to be surveyed.

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NORTHFAX WEST
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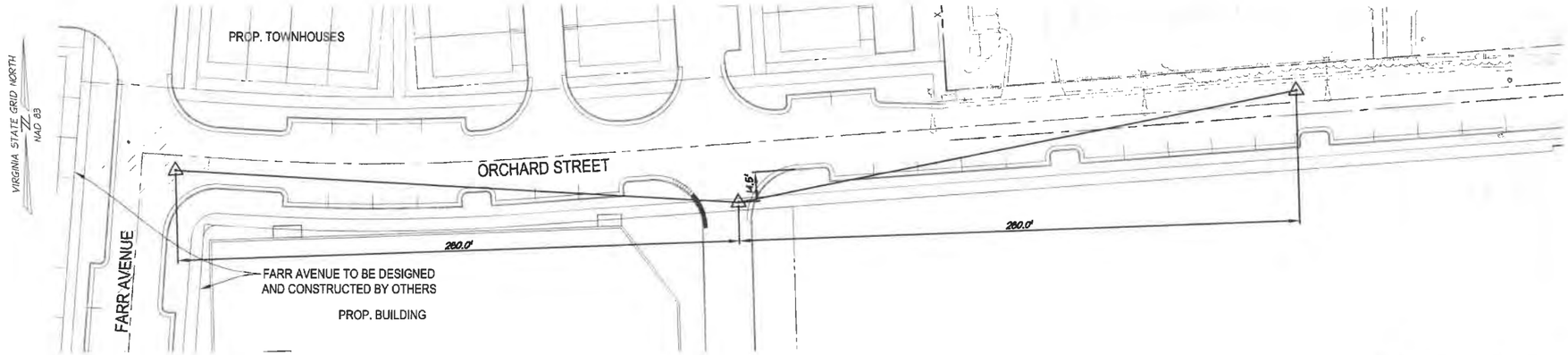
SHEET TITLE:

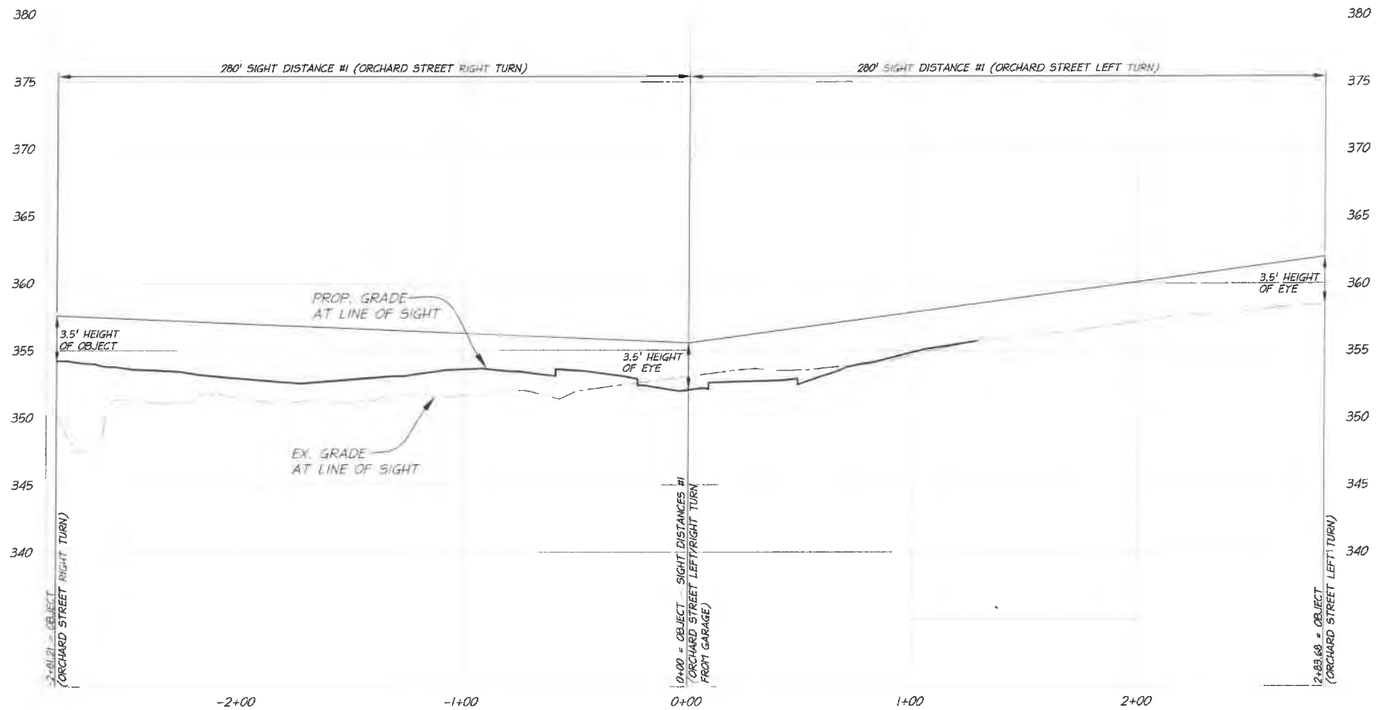
SANITARY SEWER ANALYSIS

SHEET No.
9

SCALE: 1"=30'

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





ORCHARD STREET SIGHT DISTANCE #1 (FROM PRIVATE STREET)
POSTED SPEED: 25 MPH

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01/03/2020
PROFESSIONAL ENGINEER

NORTHFAX WEST
MASTER DEVELOPMENT PLAN
FAIRFAX CITY, VIRGINIA

MARK	DATE	DESCRIPTION

PROJECT No.: 13139.005.00
DRAWING No.: 105632
DATE: 11-21-2019
DESIGN: EG
DRAWN: JS
CHECKED: KMW

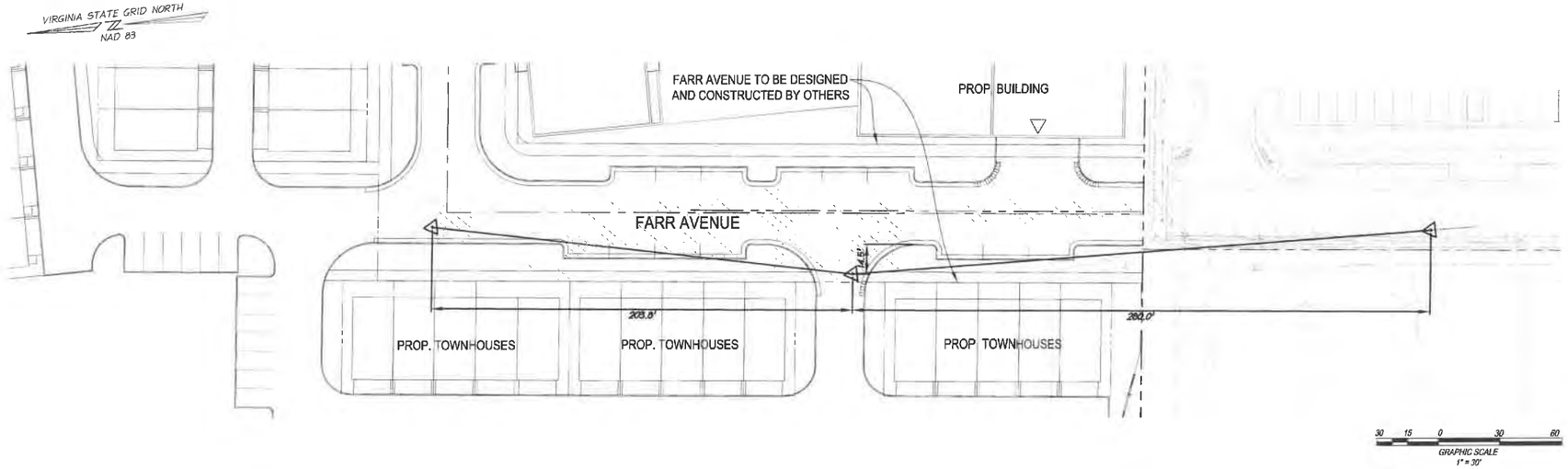
SHEET TITLE:

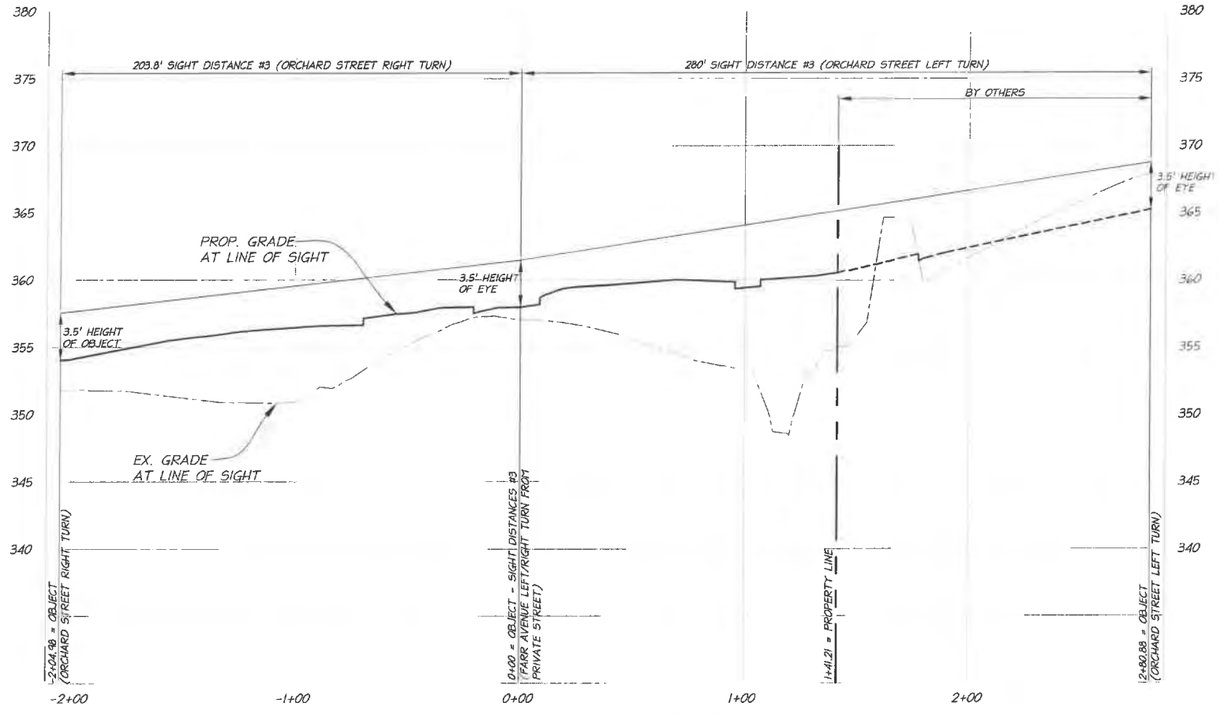
SIGHT DISTANCE

SHEET No.
10

SCALE: SEE DWGS.

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





FARR AVENUE SIGHT DISTANCE #3 (FROM PRIVATE STREET)
POSTED SPEED: 25 MPH

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CITY OF FAIRFAX, VIRGINIA

MARK	DATE	DESCRIPTION

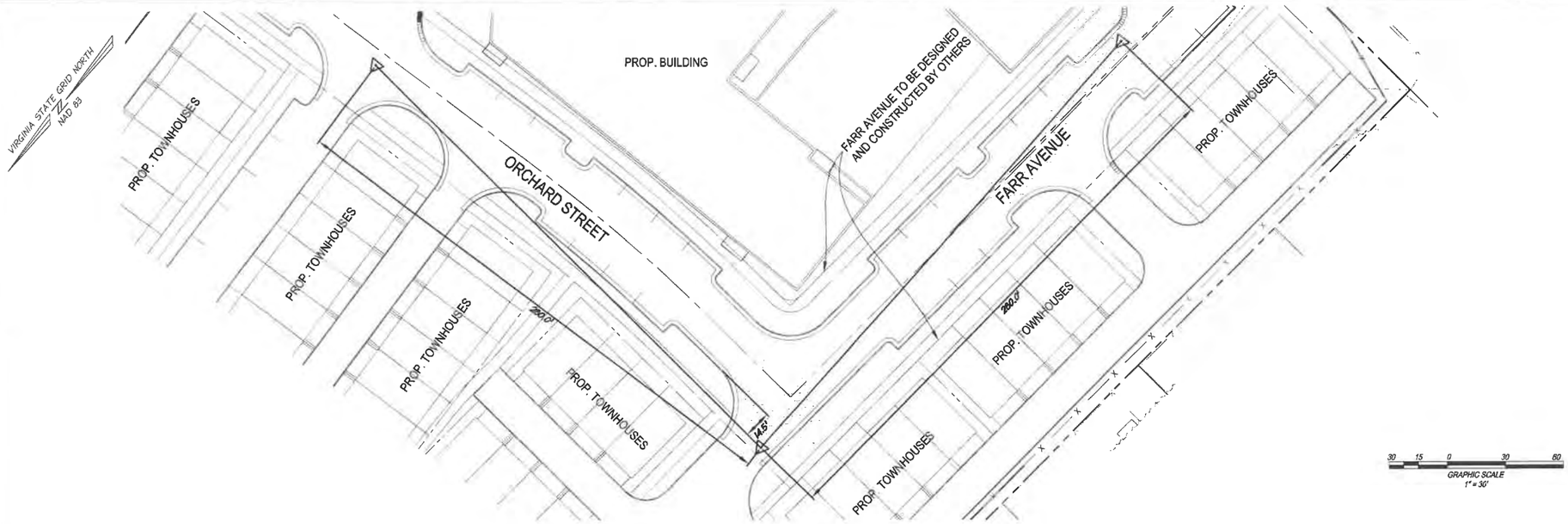
PROJECT No.: 13139.005.00
DRAWING No.: 109632
DATE: 11-21-2019
DESIGN: EG
DRAWN: JS
CHECKED: KMW

SHEET TITLE:

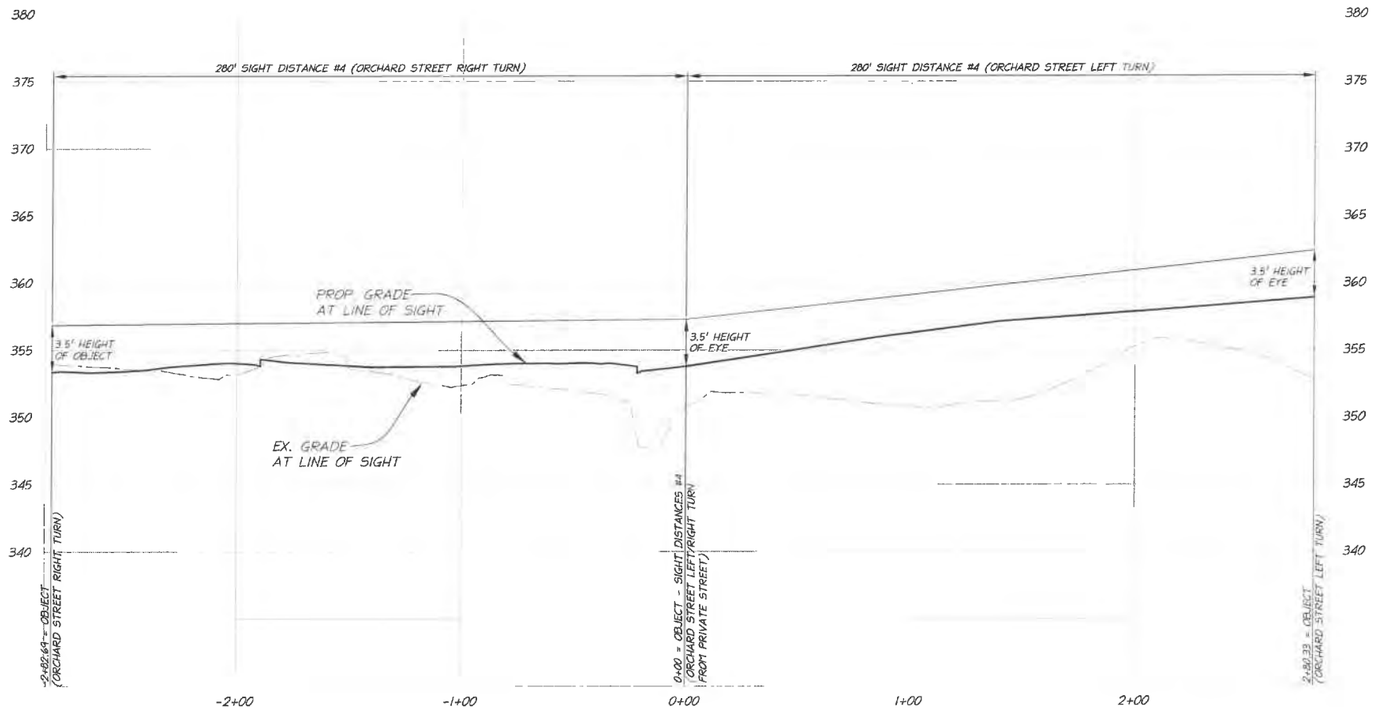
SIGHT DISTANCE

SHEET No.
11

SCALE: SEE DWGS.



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



ORCHARD STREET SIGHT DISTANCE #4 (FROM PRIVATE STREET)
POSTED SPEED: 25 MPH

5 2.5 0 5 10
VERTICAL GRAPHIC SCALE
1" = 5'

30 15 0 30 60
HORIZONTAL GRAPHIC SCALE
1" = 30'

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CITY OF FAIRFAX, VIRGINIA

MARK	DATE	DESCRIPTION

PROJECT No.: 13139.005.00
DRAWING No.: 105632
DATE: 11-21-2019
DESIGN: EG
DRAWN: JS
CHECKED: KMW

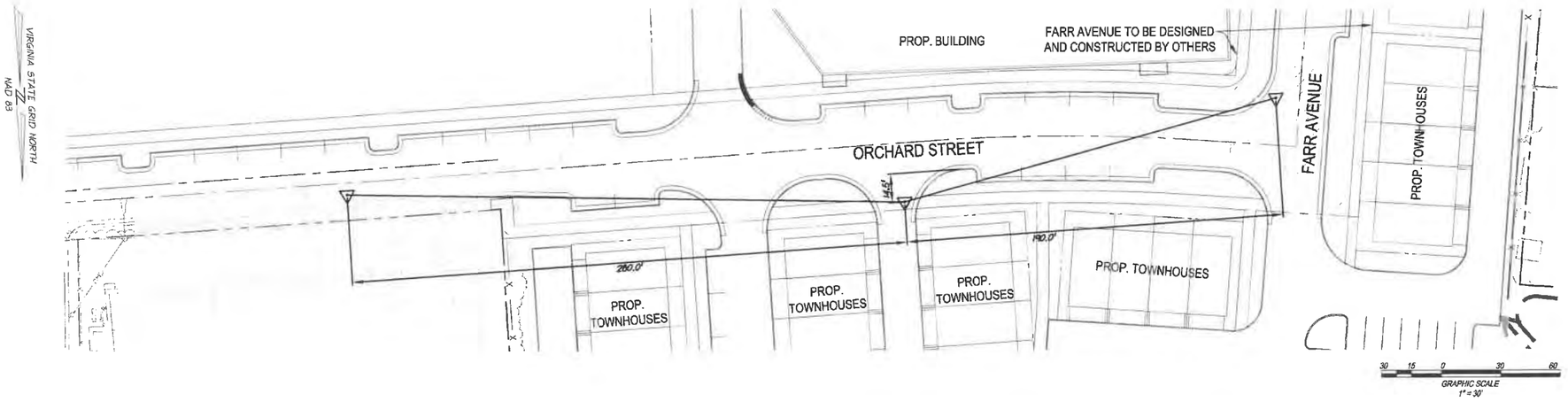
SHEET TITLE:

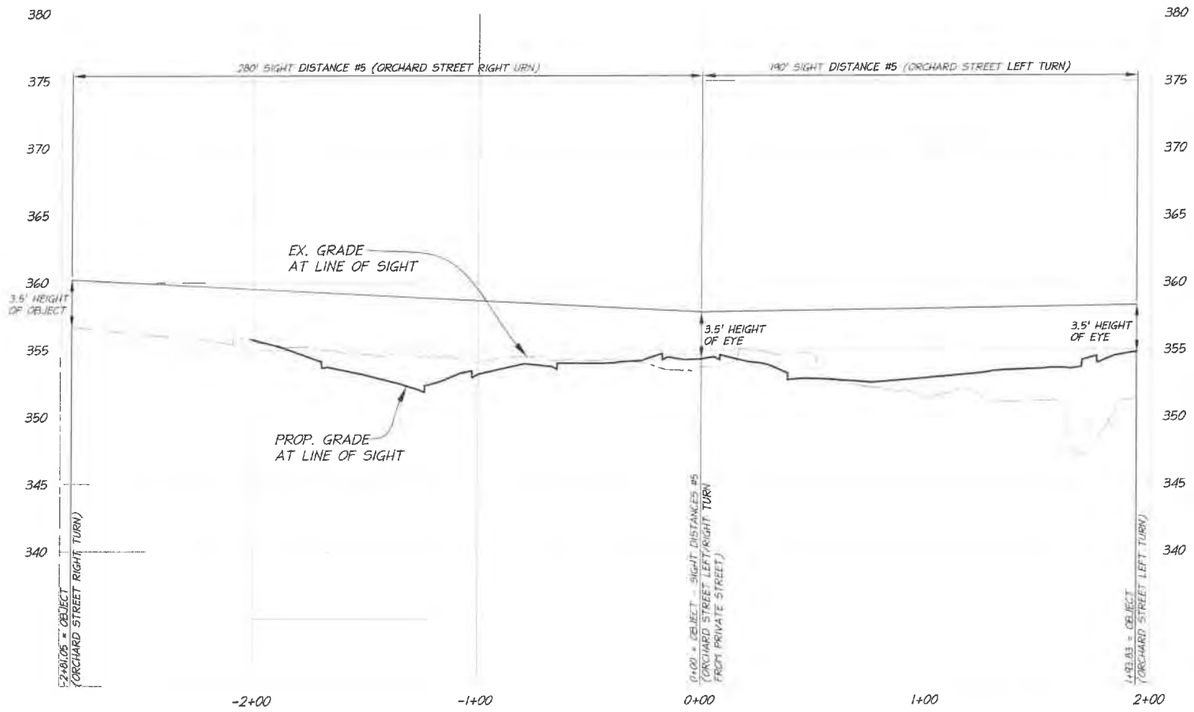
SIGHT DISTANCE

SHEET No.
12

SCALE: SEE DWGS.

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





ORCHARD STREET SIGHT DISTANCE #5 (FROM PRIVATE STREET)
POSTED SPEED: 25 MPH

5 2.5 0 5 10
VERTICAL GRAPHIC SCALE
1" = 5'

30 15 0 30 60
HORIZONTAL GRAPHIC SCALE
1" = 30'

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CITY OF FAIRFAX, VIRGINIA

MARK	DATE	DESCRIPTION

PROJECT No.: 13139.005.00
DRAWING No.: 109632
DATE: 11-21-2019
DESIGN: ES
DRAWN: JS
CHECKED: KMW

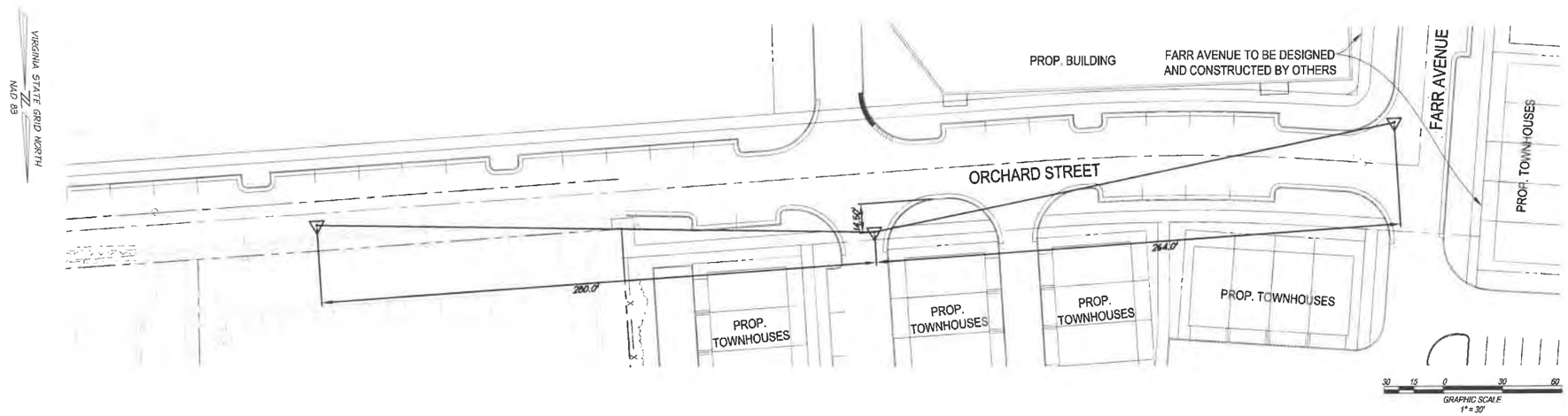
SHEET TITLE:

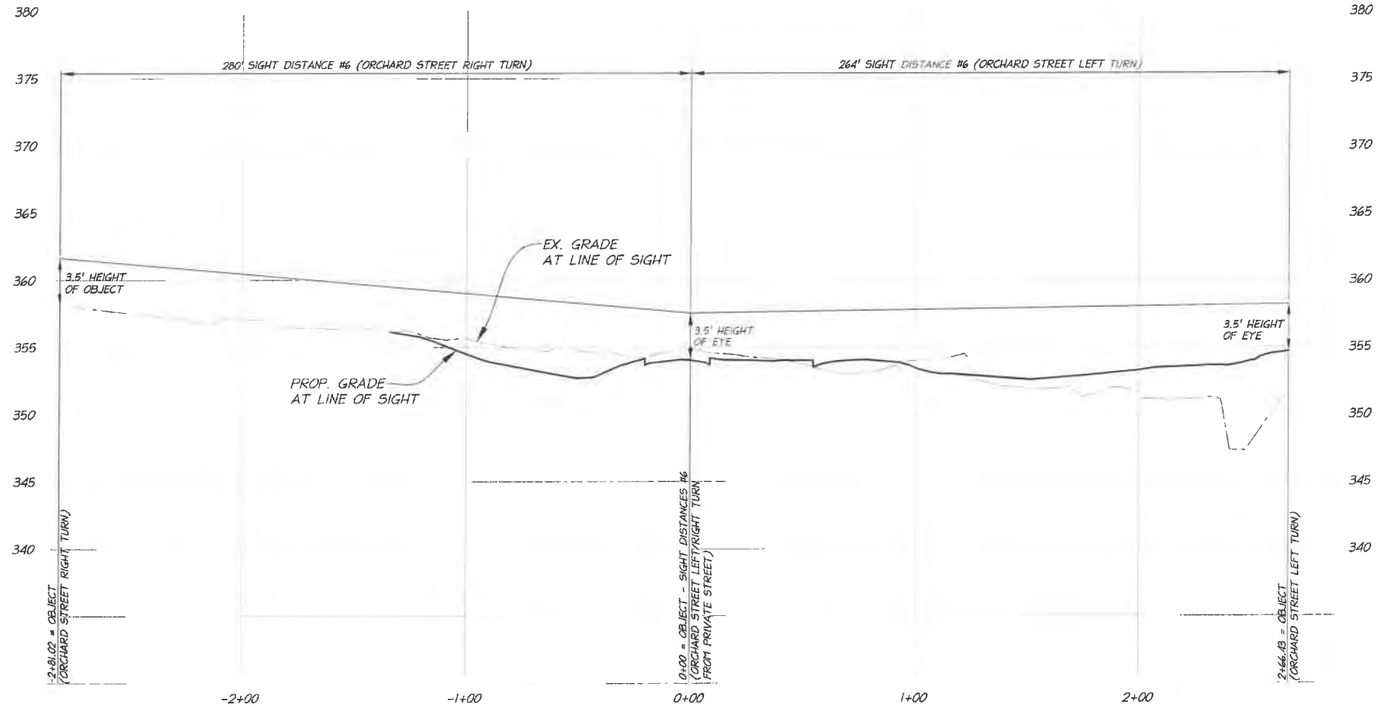
SIGHT DISTANCE

SHEET No.
13

SCALE: SEE DWGS.

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





ORCHARD STREET SIGHT DISTANCE #6 (FROM PRIVATE STREET)
POSTED SPEED: 25 MPH

5 2.5 0 5 10
VERTICAL GRAPHIC SCALE
1" = 5'

30 15 0 30 60
HORIZONTAL GRAPHIC SCALE
1" = 30'

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CITY OF FAIRFAX, VIRGINIA

MARK	DATE	DESCRIPTION

PROJECT No.: 13139.005.00
DRAWING No.: 109632
DATE: 11-21-2019
DESIGN: EG
DRAWN: JS
CHECKED: KMW

SHEET TITLE:

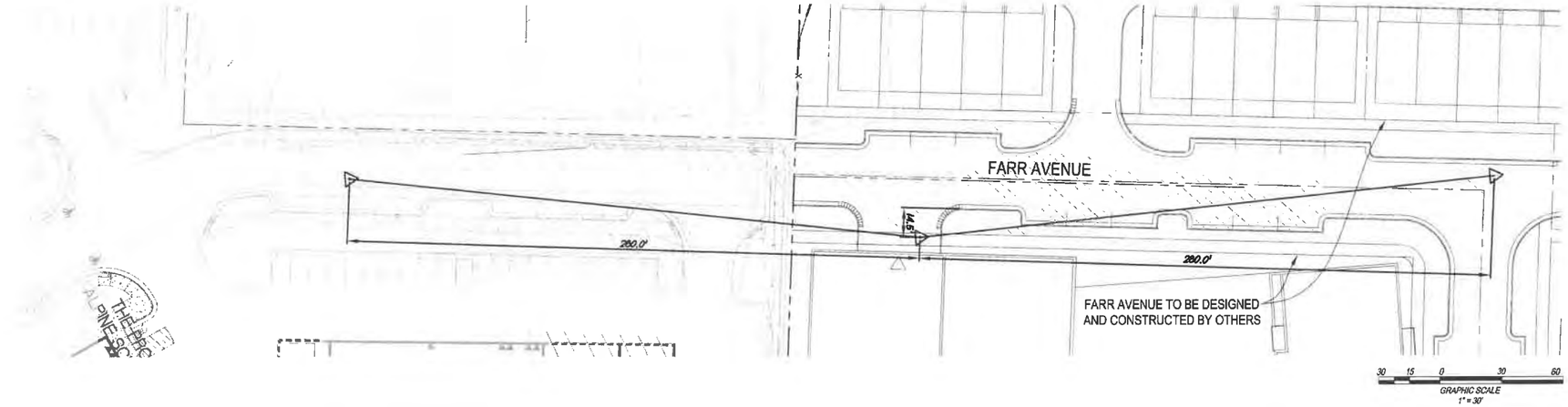
SIGHT DISTANCE

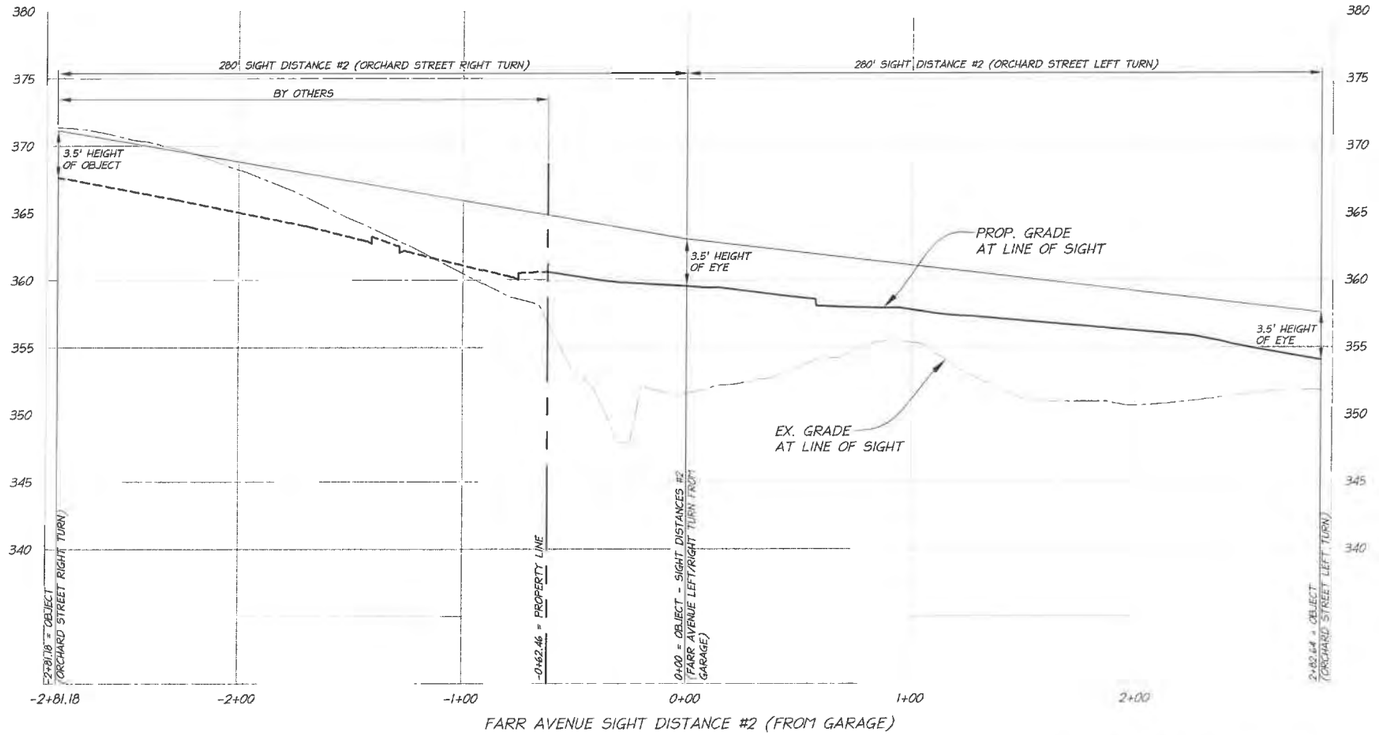
SHEET No.
14

SCALE: SEE DWGS.

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

VIRGINIA STATE GRID NORTH
NAD 83





FARR AVENUE SIGHT DISTANCE #2 (FROM GARAGE)
POSTED SPEED: 25 MPH

5 2.5 0 5 10
VERTICAL GRAPHIC SCALE
1" = 5'

30 15 0 30 60
HORIZONTAL GRAPHIC SCALE
1" = 30'

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NORTHFAX WEST
MASTER DEVELOPMENT PLAN
CITY OF FAIRFAX, VIRGINIA

MARK	DATE	DESCRIPTION

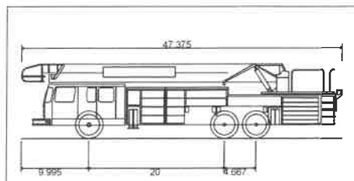
PROJECT No.: 13139.005.00
DRAWING No.: 109832
DATE: 11-21-2019
DESIGN: EG
DRAWN: JS
CHECKED: KMW

SHEET TITLE:

SIGHT DISTANCE

SHEET No.
15

SCALE: SEE DWGS.



Tower 203 Fire Truck	
Overall Length	47.375ft
Overall Width	8.167ft
Overall Body Height	11.082ft
Min Body Ground Clearance	1.512ft
Track Width	7.667ft
Lock-to-lock time	4.00s
Wall to Wall Turning Radius	54.980ft

FIRE TRUCK TURNING MOVEMENTS
SCALE: 1"=40'

40 20 0 40 80
HORIZONTAL GRAPHIC SCALE
1" = 40'

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

VIRGINIA STATE GRID NORTH
ZZ
NAD 83

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CITY OF FAIRFAX, VIRGINIA

MARK	DATE	DESCRIPTION

PROJECT No.: 13139.005.00
DRAWING No.: 109632
DATE: 11-21-2019
DESIGN: EG
DRAWN: JS
CHECKED: KMW

SHEET TITLE:

TURNING MOVEMENTS

SHEET No.
16

SCALE: 1"=40'

LEGEND

- : PROPOSED R.O.W.
- : BUILDING ENTRANCE
- FDC : PROPOSED FIRE DEPARTMENT CONNECTION
- : PROPOSED FIRE LANE
- : PROPOSED WATERLINE
- : EXISTING WATERLINE
- : EXISTING FIRE HYDRANT

SENIOR LIVING BUILDING:

BUILDING TYPE:	7 STORY
OCCUPANCY TYPE:	RESIDENTIAL R-2
CONSTRUCTION TYPE:	I-B
SPRINKLER TYPE:	FULLY SPRINKLED, NFPA 13
BUILDING AREA:	230,000 SF

BUILDING HEIGHT: REFER TO ARCHITECTURAL EXTERIOR ELEVATIONS

TOWNHOUSE:

BUILDING TYPE:	TOWNHOUSE
OCCUPANCY TYPE:	RESIDENTIAL R-3
CONSTRUCTION TYPE:	5-B
SPRINKLER TYPE:	NFPA 13R

BUILDING HEIGHT: REFER TO ARCHITECTURAL EXTERIOR ELEVATIONS

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF FAIRFAX STANDARDS AND SPECIFICATIONS

40 20 0 40 80
HORIZONTAL GRAPHIC SCALE
1" = 40'

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MASTER DEVELOPMENT PLAN

CITY OF FAIRFAX, VIRGINIA

MARK	DATE	DESCRIPTION

PROJECT No.: 13139.005.00
DRAWING No.: 109632
DATE: 11-21-2019
DESIGN: EG
DRAWN: JS
CHECKED: KMW

SHEET TITLE:

FIRE SERVICE PLAN

SHEET No.
17

SCALE: 1"=40'

100-YR FLOODPLAIN
(PRE-DEVELOPED)

EX. RPA
LINE

100-YR FLOODPLAIN
(PRE-DEVELOPED)

McLEAN AVENUE
VARIABLE WIDTH PUBLIC
RIGHT-OF-WAY

ORCHARD STREET
50' PUBLIC RIGHT-OF-WAY
D.B. 401- PG. 312

ORCHARD STREET
50' PUBLIC RIGHT-OF-WAY
D.B. 407- PG. 115

McLEAN COURT
50' RIGHT-OF-WAY

CHAIN BRIDGE ROAD - ROUTE #123
VARIABLE WIDTH PUBLIC RIGHT-OF-WAY
CITY OF FAIRFAX PROJ. #0029-151-105

FAIRFAX BOULEVARD - ROUTE #50
VARIABLE WIDTH PUBLIC RIGHT-OF-WAY
CITY OF FAIRFAX PROJ. #0029-151-105

VIRGINIA STATE GRID NORTH
NAD 83

50 25 0 50 100
HORIZONTAL GRAPHIC SCALE
1" = 50'

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF FAIRFAX STANDARDS AND SPECIFICATIONS

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NORTHFAX WEST
MASTER DEVELOPMENT PLAN
CITY OF FAIRFAX, VIRGINIA

MARK	DATE	DESCRIPTION

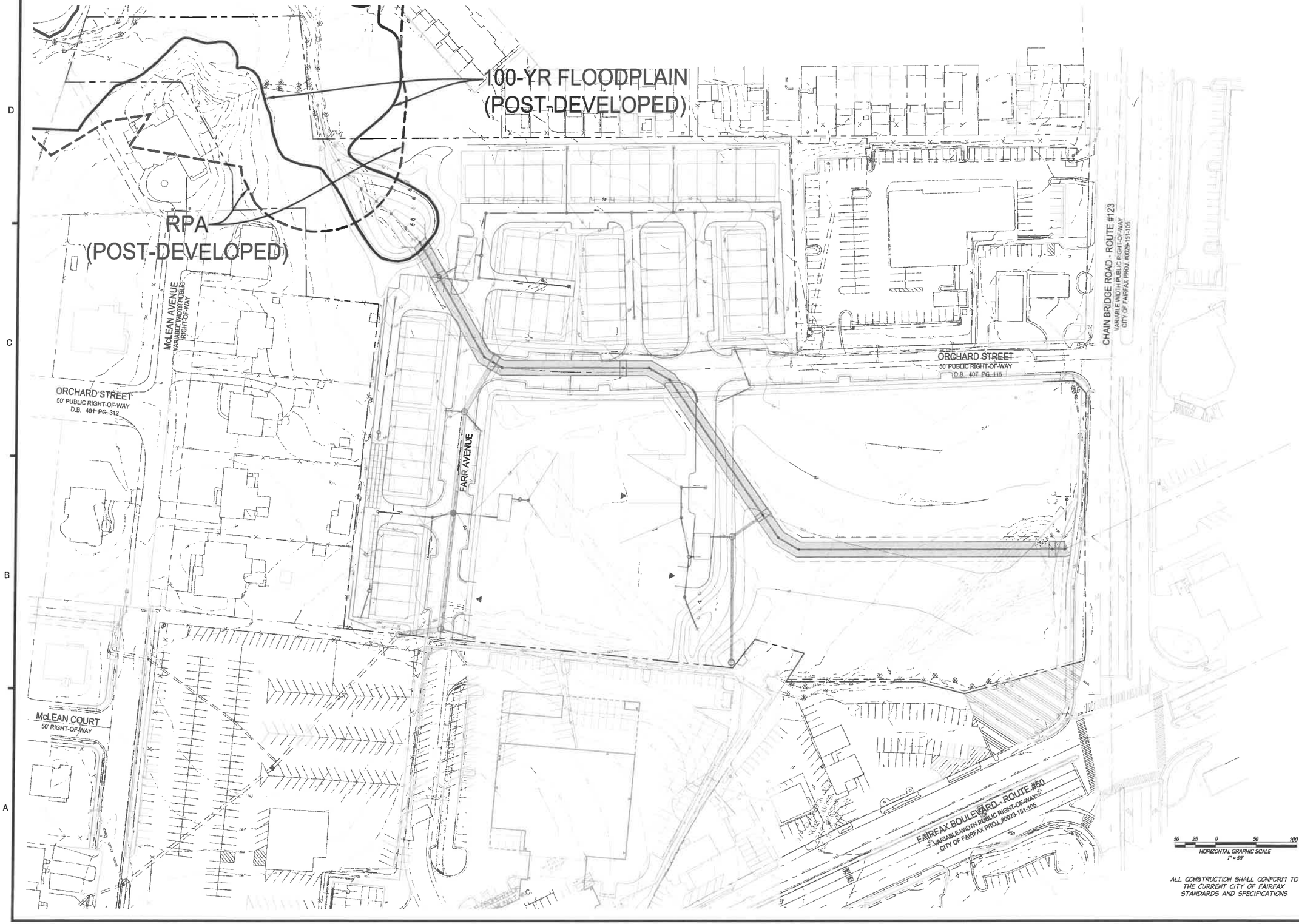
PROJECT No.: 13139.005.00
DRAWING No.: 109632
DATE: 11-21-2019
DESIGN: EG
DRAWN: JS
CHECKED: KMW

SHEET TITLE:

FLOODPLAIN AND RPA (PRE-DEVELOPED)

SHEET No.
18

SCALE: 1"=50'



50 25 0 50 100
HORIZONTAL GRAPHIC SCALE
1" = 50'

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF FAIRFAX STANDARDS AND SPECIFICATIONS

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NORTHFAX WEST
MASTER DEVELOPMENT PLAN
CITY OF FAIRFAX, VIRGINIA

MARK	DATE	DESCRIPTION

PROJECT No.: 13139.005.00
DRAWING No.: 109632
DATE: 11-21-2019
DESIGN: EG
DRAWN: JS
CHECKED: KMW

SHEET TITLE:

FOODPLAIN AND RPA (POST-DEVELOPED)

SHEET No.

18A

SCALE: 1"=50'

Appendix E – BEHI and NBS Study

Northfax Project - Bank Erosion Hazard Index and Near Bank Stress Assessment

The following Bank Erosion Hazard Index (BEHI) and Near Bank Stress (NBS) study was conducted for two streams (A1 & A2) located on the Northfax Project in the City of Fairfax, Virginia. Stream A1 and A2 are approximately 5 to 6 feet wide with banks ranging from 1 to 6 feet high, and are bordered by riparian woodlands, residential development, and commercial property. The project area is located within the Middle Potomac-Anacostia-Occoquan watershed (HUC 02070010) and the Accotink Creek subwatershed (HUC 020700100402).

On December 16, 2019, Apex Companies, LLC (Apex) conducted a site visit to analyze potential for stream bank erosion on an approximately 1,750 linear feet (LF) of stream channel within the project area. Apex used the BEHI rating system to evaluate the bank characteristics and NBS to assess the flow distribution and risk ratings based on multiple erosional processes. Factors which affect the risk rating for a stream bank include bank-height ratio, root-depth ratio, weighted root density, bank angle, surface protection, bank material, and stratification of bank substrate. Using these factors stream banks were assigned ratings of very low, low, moderate, high, very high, or extreme erosion potential. NBS was evaluated to determine Total Suspended Sediment (TSS), Total Nitrogen (TN) and Total Phosphorus (TP) using methods discussed in *Recommendations of the Expert Panel to Define Removal Rates for Individual Stream Restoration Projects* (Schueler, T., Stack, B. 2013).

The study resulted in five (5) assessment points to document bank characteristics and collect data BEHI and NBS evaluations (Figure 1: Site Location and BEHI Map). Table 1 summarizes the following results of the BEHI assessment across all streams onsite.

Table 1: Summary of BEHI Assessment Results for the Northfax Project

Stream ID	Erosion Hazard Potential				
	Extreme	Very High	High	Moderate	Low
Stream A1	321 LF	1,192 LF	434 LF	0 LF	735 LF
Stream A2	217 LF	311 LF	290 LF	0 LF	0 LF
Total	538 LF	1,503 LF	724 LF	0 LF	735 LF

The NBS data collected for each stream were assessed to predict potential sediment loading for the streams caused by near bank stress. Apex estimated the potential for approximately 3,036 tons/year of TSS caused by near bank stress and erosion for Stream A1 and Stream A2. Further, approximately 0.13 tons/year of TN and 0.12 tons/year of TP were also estimated to result from near bank stress.

Attachment 1 provides a Site Location and BEHI Map (Figure 1) and a Photograph Location Map (Figure 2) to accompany the results of Apex's assessment. The photograph log in Attachment 2 shows existing conditions along Stream A1 and A2, including the assessment points used to collect BEHI and NBS data. BEHI and NBS data collected by Apex is provided in Attachment 3 and 4, respectively.

Attachment 1: Figures

Apex Companies, LLC
203 Wylderose Ct, Midlothian, VA 23113
Phone: 804-897-2718
www.apexcos.com

Northfax Project
Fairfax, Virginia

Figure 1.
Site Location and BEHI Map

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Apex Companies, LLC
203 Wylderose Ct, Midlothian, VA 23113
Phone: 804-897-2718
www.apexcos.com

Northfax Project
Fairfax, Virginia

Figure 2
Photograph Location Map

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Attachment 2: Photograph Log

Photo 1 Stream A1 – Very high erosion potential on right bank and high erosion potential on left bank with low erosion potential open bottom stone culvert	
Photo 2 Stream A1 – high erosion potential on right bank	
Photo 3 Stream A1 – very high erosion potential on left bank	

Photo 4 Stream A1 – collapsing culverts under road	
Photo 5 Stream A2 – extreme erosion potential	
Photo 6 Stream A2 – extreme erosion potential	

Photo 7 Stream A1 – extreme erosion potential on east bank	
Photo 8 Stream A2 – high erosion potential	
Photo 9 Stream A1 – high erosion potential	

Photo 10

Stream A1 – very high erosion potential on both banks

Photo 11

Stream A2 – high erosion potential on right bank

Photo 12

Stream A1 – low erosion potential due to riprap on east bank

Photo 13

Stream A1 – low erosion potential due to riprap

Photo 14

Stream A1 – low erosion potential due to riprap

Photo 15

Stream A1 – very high erosion potential on both banks

Photo 16 Stream A1 – very high erosion potential on east bank and extreme erosion potential on west bank	
Photo 17 Stream A1 – very high erosion potential on east bank and extreme erosion potential on west bank	

Attachment 3: BEHI Data

Stream:	**Stream A1, High 1**	Location:	
Station:		Observers:	
Date:	**12/16/19**	Stream Type:	Valley Type:

								BEHI Score (Fig. 5-19)
Study Bank Height (ft) =	**1.5**	**(A**	**Bankfull Height (ft) =**	**0.51**	**(B)**	**(A) / (B) =**	**2.94 (C)**	**9**
Root Depth (ft) =	**0.7**	**(D**	**Study Bank Height (ft) =**	**0.85**	**(A)**	**(D) / (A) =**	**0.824 (E)**	**2.5**
			Root Density as % =	**30%**	**(F)**	**(F) X (E) =**	**24.71 (G)**	**6.5**
						Bank Angle as *Degrees* =	**85 (H)**	**7**
						Surface Protection as % =	**10% (I)**	**9**

Bank Material Adjustment:

Bedrock (Overall Very Low BEHI)
Boulders (Overall Low BEHI)
Cobble (Subtract 10 points if uniform medium to large cobble)
Gravel or Composite Matrix (Add 5–10 points depending on percentage of bank material that is composed of sand)
Sand (Add 10 points)
Silt/Clay (no adjustment)

Bank Material Adjustment

Stratification Adjustment
Add 5–10 points, depending on position of unstable layers in relation to bankfull stage

Very Low	Low	Moderate	High	Very High	Extreme
5 – 9.5	10 – 19.5	20 – 29.5	30 – 39.5	40 – 45	46 – 50

Adjective Rating and Total Score **34**

Stream:	**Stream A1, High 2**	Location:	
Station:		Observers:	
Date:	**12/16/19**	Stream Type:	Valley Type:

						BEHI Score (Fig. 5-19)
Study Bank Height / Bankfull Height (C)						
Study Bank Height (ft) =	2.5 (A	Bankfull Height (ft) =	0.51 (B)	(A) / (B) =	4.9 (C)	10
Root Depth / Study Bank Height (E)						
Root Depth (ft) =	0.75 (D	Study Bank Height (ft) =	2.5 (A)	(D) / (A) =	0.3 (E)	5.5
Weighted Root Density (G)						
		Root Density as % =	10% (F)	(F) x (E) =	3.00 (G)	9
Bank Angle (H)						
				Bank Angle as *Degrees* =	40 (H)	3
Surface Protection (I)						
				Surface Protection as % =	10% (I)	9

Bank Material Adjustment:

Bedrock (Overall Very Low BEHI)

Boulders (Overall Low BEHI)

Cobble (Subtract 10 points if uniform medium to large cobble)

Gravel or Composite Matrix (Add 5–10 points depending on percentage of bank material that is composed of sand)

Sand (Add 10 points)

Silt/Clay (no adjustment)

Bank Material Adjustment

Stratification Adjustment

Add 5–10 points, depending on position of unstable layers in relation to bankfull stage

Very Low	Low	Moderate	High	Very High	Extreme	Adjective Rating and Total Score
5 – 9.5	10 – 19.5	20 – 29.5	30 – 39.5	40 – 45	46 – 50	36.5

Stream:	**Stream A1, Extreme 1**	Location:	
Station:		Observers:	
Date:	**12/16/19**	Stream Type:	Valley Type:

							BEHI Score (Fig. 5-19)
Study Bank Height / Bankfull Height (C)							
Study Bank Height (ft) =	4 (A)	Bankfull Height (ft) =	0.51 (B)	(A) / (B) =	7.8 (C)		10
Root Depth / Study Bank Height (E)							
Root Depth (ft) =	0.8 (D)	Study Bank Height (ft) =	4 (A)	(D) / (A) =	0.2 (E)		7
Weighted Root Density (G)							
		Root Density as % =	20% (F)	(F) X (E) =	4 (G)		9.5
Bank Angle (H)							
				Bank Angle as *Degrees* =	110 (H		8.5
Surface Protection (I)							
				Surface Protection as % =	5% (I		10

Bank Material Adjustment:

Bedrock (Overall Very Low BEHI)

Boulders (Overall Low BEHI)

Cobble (Subtract 10 points if uniform medium to large cobble)

Gravel or Composite Matrix (Add 5–10 points depending on percentage of bank material that is composed of sand)

Sand (Add 10 points)

Silt/Clay (no adjustment)

Bank Material Adjustment

Stratification Adjustment

Add 5–10 points, depending on position of unstable layers in relation to bankfull stage

10

Very Low	Low	Moderate	High	Very High	Extreme	Adjective Rating and Total Score	
5 – 9.5	10 – 19.5	20 – 29.5	30 – 39.5	40 – 45	46 – 50		55

Stream:	**Stream A2, Very High 1**	Location:	
Station:		Observers:	
Date:	**12/16/19**	Stream Type:	Valley Type:

							BEHI Score (Fig. 5-19)
Study Bank Height (ft) =	**6**	**(A**	**Bankfull Height (ft) =**	**0.51**	**(B)**	**(A) / (B) = 11.8 (C)**	**10**
Root Depth (ft) =	**2**	**(D**	**Study Bank Height (ft) =**	**6**	**(A)**	**(D) / (A) = 0.33 (E)**	**6**
			Root Density as % =	**50%**	**(F)**	**(F) X (E) = 16.67 (G)**	**8**
						Bank Angle as *Degrees* = 120 (H)	**10**
						Surface Protection as % = 30% (I)	**6**

Study Bank Height / Bankfull Height (C)

Root Depth / Study Bank Height (E)

Weighted Root Density (G)

Bank Angle (H)

Surface Protection (I)

Bank Material Adjustment:

Bedrock (Overall Very Low BEHI)

Boulders (Overall Low BEHI)

Cobble (Subtract 10 points if uniform medium to large cobble)

Gravel or Composite Matrix (Add 5–10 points depending on percentage of bank material that is composed of sand)

Sand (Add 10 points)

Silt/Clay (no adjustment)

Bank Material Adjustment

Stratification Adjustment

Add 5–10 points, depending on position of unstable layers in relation to bankfull stage

5

Very Low	Low	Moderate	High	Very High	Extreme
5 – 9.5	10 – 19.5	20 – 29.5	30 – 39.5	40 – 45	46 – 50

Adjective Rating and Total Score

45

Stream:	**Stream A2, Extreme 2**	Location:	
Station:		Observers:	
Date:	**12/16/19**	Stream Type:	Valley Type:

								BEHI Score (Fig. 5-19)
Study Bank Height (ft) =	**4 (A**	**Bankfull Height (ft) =**	**0.51 (B)**	**(A) / (B) =**	**7.8 (C**	**Study Bank Height / Bankfull Height (C)**		**10**
Root Depth (ft) =	**0.5 (D**	**Study Bank Height (ft) =**	**4 (A)**	**(D) / (A) =**	**0.125 (E**	**Root Depth / Study Bank Height (E)**		**8**
		Root Density as % =	**15% (F)**	**(F) X (E) =**	**1.88 (G)**	**Weighted Root Density (G)**		**9.5**
				Bank Angle as *Degrees* =	**90 (H**	**Bank Angle (H)**		**7**
				Surface Protection as % =	**10% (I**	**Surface Protection (I)**		**8.5**

Bank Material Adjustment:

Bedrock (Overall Very Low BEHI)
Boulders (Overall Low BEHI)
Cobble (Subtract 10 points if uniform medium to large cobble)
Gravel or Composite Matrix (Add 5–10 points depending on percentage of bank material that is composed of sand)
Sand (Add 10 points)
Silt/Clay (no adjustment)

Bank Material Adjustment — **5**

Stratification Adjustment
Add 5–10 points, depending on position of unstable layers in relation to bankfull stage

Very Low	Low	Moderate	High	Very High	Extreme	Adjective Rating and Total Score	
5 – 9.5	10 – 19.5	20 – 29.5	30 – 39.5	40 – 45	46 – 50		**48**

Attachment 4: NBS Data

NBS Data

Table 1: Near-Bank Stress (NBS) Data

Location	Bank Depth (ft)	Bank-full Depth (ft.)	Bank Depth / Bank-full Depth	NBS Rating	Bank Erosion Rate	Length of Bank	Study Bank Height	Erosion Rate (ft3/yr.)
Low	5	0.51	9.80	Extreme (6)	1.3218	735	5	4857.60
Moderate	1	0.51	1.96	High (4)	0.4203	0	1	0.00000
High	2	0.51	3.92	Extreme (6)	1.3218	724	2	1913.96
Very High	4	0.51	7.84	Extreme (6)	1.3218	1503	4	7946.64
Extreme	5	0.51	9.80	Extreme (6)	17.973	538	5	48346.27
Total Erosion Rate								
							ft^3/yr.	63064.48
							yd^3/yr.	2335.72
							tons/yr.	3036.43
							tons/yr./ft	0.87

Table 1.5: Converting Values to Near-Bank Stress Rating

NBS Rating	Bank Depth / Bank-full Depth
Very Low	<1.00
Low	1.00 – 1.50
Moderate	1.51 – 1.80
High	1.81 – 2.50
Very High	2.51 – 3.00
Extreme	>3.00

Table 2: Total Nitrogen

Linear Feet of Stream Bank	TN Rate (lbs/ft/yr)	TN (lb/yr)	TN (tons/yr)
3500	0.075	262.5	0.13125

Table 3: Total Phosphorus

Linear Feet of Stream Bank	TP Rate (lbs/ft/yr)	TP (lb/yr)	TP (tons/yr)
3500	0.068	238	0.119

APEX COMPANIES, LLC

Resource Protection Area Site-specific Study

Northfax West
10510 Orchard Street
Fairfax, Virginia 22030

PREPARED FOR:

Northfax JV LLC c/o The Lann Companies
3900 Jermantown Route, Suite 300
Fairfax, Virginia 22030

February 26, 2020

Apex Companies, LLC
203 Wylderose Court
Midlothian, Virginia 23113

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Figure 2 – Project Vicinity Map

Figure 3 – City of Fairfax RPA Map

Figure 4 - Northfax West RPA Map

APPENDICES

Appendix A – Application Form

Appendix B – 2018 Preliminary Jurisdictional Determination

Appendix C – Perennial Stream Identification Protocol Data Sheets

Appendix D – Respresentative Photographs

Appendix E – RPA Exhibits

1.0 Introduction

The City of Fairfax (the City) 2019 Zoning Ordinance documents Chesapeake Bay Preservation Area (CBPA) regulations designed to protect local waterways in the Chesapeake Bay watershed from nonpoint source pollution generated from urban development. As with other municipalities in the watershed, the City's CBPA ordinance has been approved by the Virginia Department of Environmental Quality (DEQ) to implement the requirements of the Code of Virginia needed to comply with the federal Chesapeake Bay Preservation Act. Examples of CBPA features in the City include the Resource Protection Area (RPA) and the Resource Management Area (RMA). To better define the extent and location of these features, the City adopted a CBPA Map in November 25, 2003. The City ordinance codifies the regulations that apply to the CBPA in order to prevent development projects from compromising water quality.

Section 4.18 of the Zoning Ordinance mandates that a RPA Site-specific Study must be submitted for any proposed land disturbance, development, or redevelopment within the RPA. Based on the proposed activities for the Northfax West project, Apex Companies LLC (Apex) performed a RPA Site-specific Study to supplement the Northfax West Major Water Quality Impact Assessment (WQIA) previously submitted to the City (dated January 28, 2020). The City's application form for the RPA Site-specific Study is provided as Appendix A, and the report herein presents the methods used by Apex to investigate potential RPA features and data documenting the results of the study. The report meets the standards set forth in the City's Chesapeake Bay Preservation ordinance (Section 4.18) for a RPA Site-specific Study.

2.0 Purpose

To comply with the City's ordinance, development of property that has an RPA depicted on the City's CBPA Map must include a site-specific determination showing the boundaries of RPA components. As such, the primary purpose of this study was to investigate the existing, pre-development conditions within the Northfax West project area and delineate the extent of potential RPA components. Secondarily, this study also assessed the post-development extent of RPA components based on the Northfax West Master Development Plan submitted to the City.

3.0 Project Description

The Northfax West project is part of a comprehensive strategy for the growth and redevelopment of the Fairfax Boulevard corridor through the City, as demonstrated by the City of Fairfax 2035 Comprehensive Plan. In accordance with this plan the project will create a mix of residential and commercial uses in a highly urbanized setting, serving the needs of the community, while attracting those who would otherwise just pass through the area. The project will occur in an area which has not seen significant improvement in many years and will allow residents to work near where they live, reducing traffic congestion on area roads. The project envisions the revitalization of the area through the construction of residential homes, potentially a mix of townhouses, condominiums and a senior living facility, to maximize living space, while also providing commercial space for businesses.

3.1 Location

The Northfax West project is located in the northwest quadrant at the intersection of Fairfax Boulevard (Route 50) and Chain Bridge Road (Route 123) (Figure 1). The project site consists of an assemblage of 17 parcels with an aggregate area of approximately 11.32 acres, which has historically been used for residential and commercial purposes. The project area is part of the Accotink Creek watershed and located within the Middle Potomac River drainage area identified by Hydrologic Unit Code (HUC) 02070010.

3.2 Existing Conditions

The project area currently consists of two single family homes with mowed grass yards, two parking lots (approx. 3 acres) constructed of rolled stone over fabric, and approximately 4 acres of woods. Orchard Street is located within the project limits and dead ends in a cul-de-sac. The 4-acre wooded area is composed of a mixed hardwood vegetation community surrounding a perennial and two intermittent streams that flow through the site from west to east. The perennial stream enters the site at the northwest corner of the project area and flows southeast before eventually entering a twin, 8-foot box culvert that conveys water under Route 123. The two intermittent streams flow into the perennial stream from the west. One of the intermittent streams begins at a culvert outlet near the southwest corner of the project area, while the other intermittent stream originates from a concrete spring box close to the bank of the perennial channel.

A delineation of Waters of the U.S. (WOTUS) was performed in 2017 and a Preliminary Jurisdictional Determination (PJD) was issued by the U.S. Army Corps of Engineers (USACE) on February 5, 2018 (Appendix B). The PJD documented the limits of perennial and intermittent stream channels and the absence of non-tidal wetlands within the project boundaries. The flow regime of each stream was investigated in 2017 in a site-specific perennial stream determination, the results of which concurred with the City's RPA map (Figure 3). Since then, the eastern extent of the perennial stream has been redirected to the north into 8-foot box culverts, installed by the City under Route 123 to improve drainage and reduce flooding. As a result, the RPA buffer associated with the perennial stream shifted to the north, as shown on Figure 4 and on Sheet 1 of Appendix E.

4.0 Methods

Apex conducted a RPA Site-specific Study in accordance with Section 4.18 of the City's Zoning Ordinance titled "Chesapeake Bay Preservation," as shown below:

- Delineation by applicant
    - For any property that is depicted on the city's Chesapeake Bay preservation area map as a resource protection area, the applicant shall determine the site-specific boundaries of the RPA components through the performance of a RPA site-specific study. The Chesapeake Bay preservation area map shall be used only as a guide to the general location of resource protection areas within the city.
- Where conflict arises over delineation
    - Where the applicant has provided a site-specific delineation of the resource protection area, the zoning administrator shall review and verify the accuracy of the boundary delineation. In determining the site-specific resource protection area boundary, the zoning administrator may render adjustments to the applicant's boundary delineation based on the RPA site-specific study features required in §6.13.2. B.

Apex's RPA study was conducted using the results of the WOTUS delineation and a perennial stream determination completed in 2017 and verified in 2019. The WOTUS delineation was completed using the methods and technical criteria outlined in the *1987 Corps of Engineers Wetland Delineation Manual* and the 2010 *Regional Supplement to the USACE Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0)*. The PJD issued by the USACE in 2018 is provided in Appendix B. The perennial stream determination was completed using the 2003 Fairfax County Perennial Stream Field Identification Protocol. A data sheet from the protocol was completed for two stream reaches to confirm the presence of perennial or intermittent flow. An additional reach was assessed with ephemeral flow and was consequently removed by the USACE from the PJD. The main channel flowing through the project area was previously documented by the City as perennial; therefore, in concurrence with the City's assessment no additional

data was collected on the perennial reach.

5.0 Results

The results of the 2017 perennial stream determination and 2019 verification indicate that the project area has one perennial stream and two intermittent streams. The results are summarized in Table 1 followed by a description of each stream assessment reach. The location of each reach is shown on Sheet 1 of Appendix E.

Table 1: Summary of Perennial Stream Determination Results

Reach ID	Score using Data Sheet from Perennial Stream Field Identification Protocol	Intermittent or Perennial
A1	N/A (Previously mapped perennial)	Perennial
A2	12.5	Intermittent
A3	Non-jurisdictional*	N/A*
A4	2.5	Intermittent

*Stream was determined to be non-jurisdictional, as verified under the USACE jurisdictional determination (NAO-2017-02192).

Reach A1 (Perennial): This perennial stream originates offsite to the northwest of the property, where it enters the site via culverts. The onsite channel's bed and banks are very well defined with an average depth of 3-6 feet and an average width of 10-15 feet. The channel is moderately sinuous with a well-defined riffle/pool sequence and strong substrate sorting. Gravel and large cobble are found in riffles and pools typically have sand and other fine material. Small schools of fish were observed in several areas of the channel.

Reach A2 (Intermittent): This intermittent stream is a secondary channel that carries flow from a storm-sewer system in an easterly direction to its confluence with Stream A1. The channel originates at the terminus of a 36-inch storm-sewer pipe, where the outfall has been severely degraded from high volume flow and the resulting reversal flow eddies. Banks are 6 feet deep or more in some locations. Standing water was observed in pools at some locations in the channel, but continuous flow was absent.

Reach A3 (Non-jurisdictional): This non-jurisdictional feature is an ephemeral scour that carries overland flow to the perennial stream from Lots 5 and 6. Soil material is similar to adjacent upland with no rock/gravelly substrate. Based on the lack of bed and banks this feature was not considered a potential WOTUS.

Reach A4 (Intermittent): A short intermittent stream that originates at a concrete spring box and carries flow to the perennial channel. It is located on Lots 15/16 and observed with poorly defined bed and bank characteristics. The channel bed has some deposition of sand and silt, but no gravel or rock bed material.

The data sheets completed in 2017 are provided in Appendix C and representative photographs are provided in Appendix D. Apex reviewed the data recorded in 2017 during a site visit on December 16th, 2019 and verified that no significant changes have occurred since the time of the original investigation.

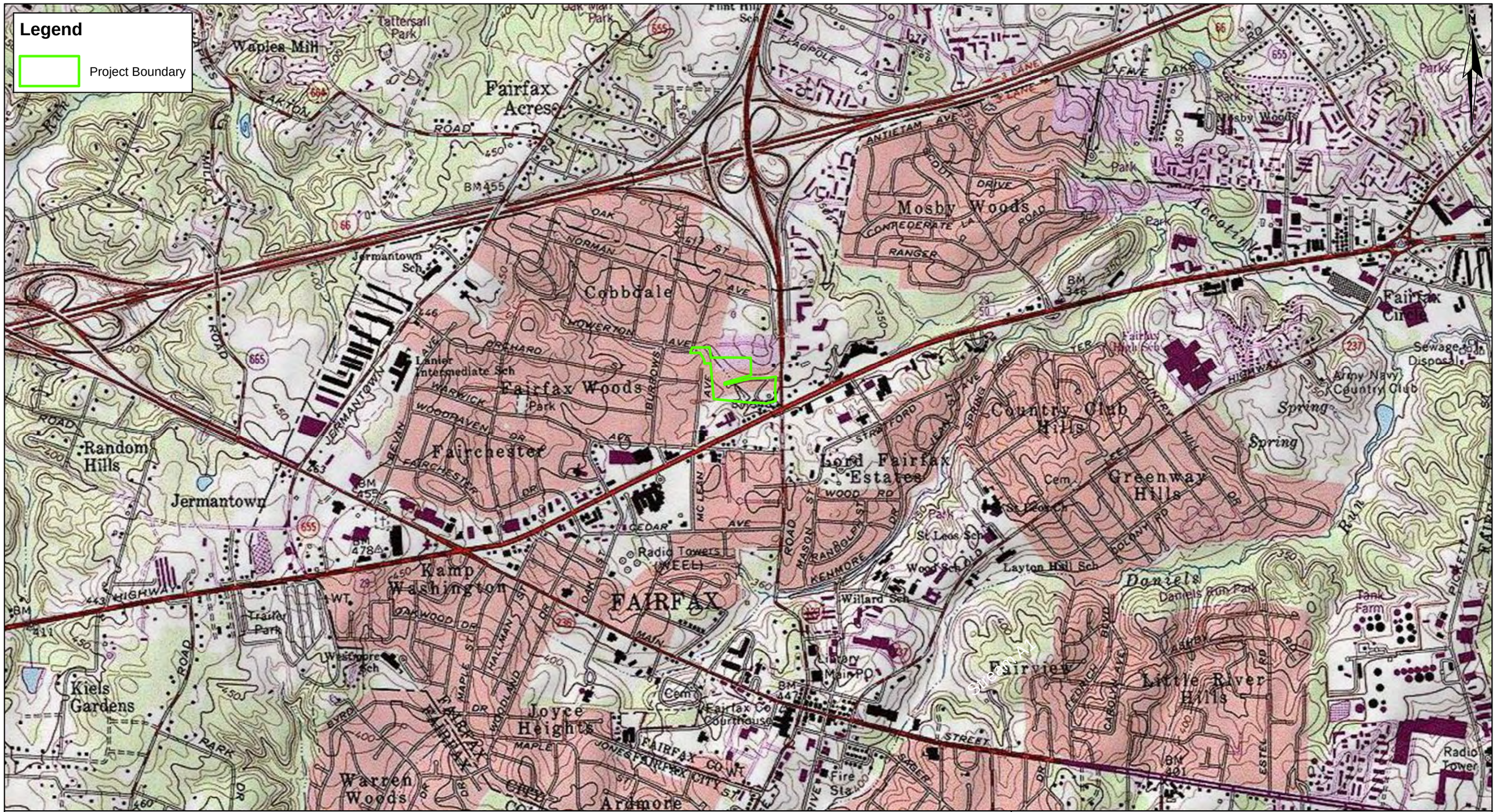
6.0 Conclusions

Apex performed a RPA Site-specific Study to supplement the Northfax West Major WQIA previously submitted to the City (dated January 28, 2020). The results of the study document the presence of a perennial stream and two intermittent streams within the project area. The perennial stream is included in the onsite RPA, as well as the 100-foot buffer adjacent and landward of the perennial stream (see Sheet 1 of Appendix E). The intermittent streams were determined to be non-RPA features due to unnatural channel conditions resulting from adjacent development.

These results concur with the City's CBPA mapping adopted November 25, 2003 (Figure 3); however, since the 2003 CBPA mapping was adopted, the eastern extent of the perennial stream was redirected to the north into 8-foot box culverts installed by the City under Route 123. As a result, the RPA buffer associated with the perennial stream has also shifted to the north. The 100-foot RPA Buffer based on the existing conditions is depicted on Figure 4 and on Sheet 1 of Appendix E. In accordance with the Northfax West Master Development Plan (MDP) and Major WQIA currently under review at the City, the Post-development RPA exhibit (Sheet 2 of Appendix E) shows the anticipated change to the RPA once the proposed activities are complete.

On behalf of Northfax JV LLC (c/o The Lann Companies), Apex respectfully requests that the City's Zoning Office review the application provided in Appendix A of this report and the other supporting figures and appendices. If the City has questions or comments prior to approval of the application, please contact Chris Senfield via email at chris.senfield@apexcos.com.

Figures



Apex Companies, LLC 203 Wylderose Ct, Midlothian, VA 23113 Phone: 804-897-2718 www.apexcos.com	**Northfax West** **City of Fairfax, Virginia**	**Figure 1** **Project Location Map**
	0 0.25 0.5 1 Miles	Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed Drawn By: Rob LaPosa 01/16/2020 38°5'33.44"N 77°18'36.93"W

Apex Companies, LLC
203 Wylderose Ct, Midlothian, VA 23113
Phone: 804-897-2718
www.apexcos.com

Northfax West
City of Fairfax, Virginia

Figure 2
Project Vicinity Map

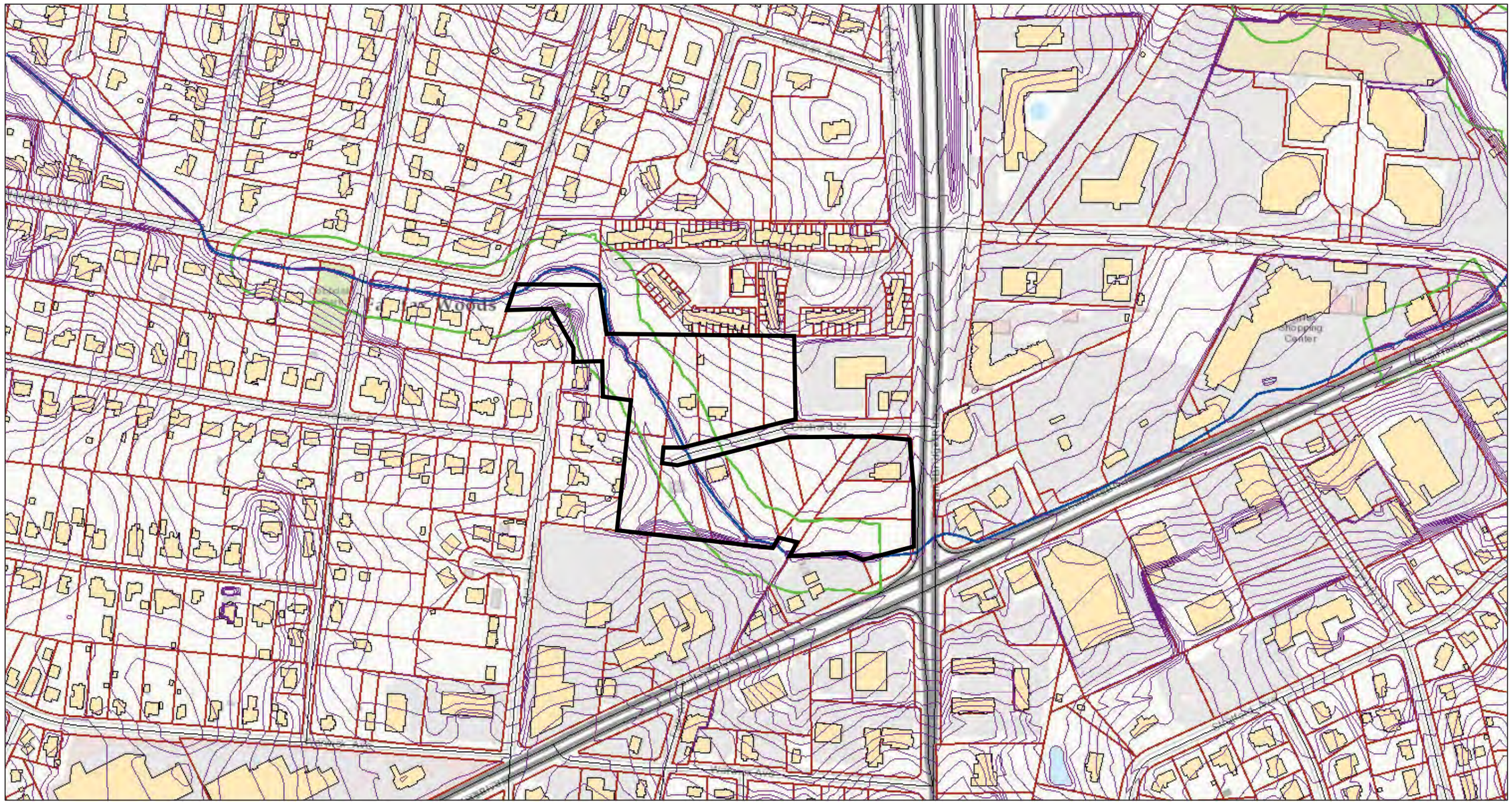
0 0.025 0.05 0.1 Miles

Drawn By: Rob LaPosa
01/16/2020

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

38°5'33.44"N
77°18'36.93"W

Figure 3: City of Fairfax RPA Map



October 25, 2016

1:4,514

Contour Lines (2 foot intervals)
Parcels
Streets
Streams
Buildings
Resource Protection Areas
City Limits

0 0.05 0.1 0.2 mi
0 0.075 0.15 0.3 km

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

City of Fairfax
County of Fairfax, County of Prince William, VITA, Esri, HERE, DeLorme, INCREMENT P, Intermap, USGS, EPA, USDA |

Apex Companies, LLC
203 Wylderose Ct, Midlothian, VA 23113
Phone: 804-897-2718
www.apexcos.com

Northfax West
City of Fairfax, Virginia

Figure 4
Resource Protection Area Map

0 175 350 700 Feet

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Drawn By: Rob LaPosa (01/17/2020)
Reviewed By: John H. Brooks III(1/28/2020)

38°5'33.44"N
77°18'36.93"W

Appendices

Appendix A – Application Form

City of Fairfax – Community Development and Planning
10455 Armstrong Street #207A Fairfax, VA 22030
Phone: 703-385-7820 Fax: 703-385-7824

Application #:_____

RESOURCE PROTECTION AREA (RPA)
SITE-SPECIFIC STUDY
- $290.00 NON REFUNDABLE FEE -

1. JOB LOCATION INFORMATION:

Job Location Address 10510 Orchard St. Fairfax, Virginia 22030

Project Name Northfax West

Tax Map # See Attached List

2. APPLICANT INFORMATION:

Name Northfax JV LLC c/o The Lann Companies

Address 3900 Jermantown Rd., Suite 300, Fairfax VA, 22030

Phone (703) 934-4600 Email john@lann.com

3. PROPERTY OWNER INFORMATION: (Same as Applicant ☑)

Name _____

Address _____

Phone _____ Email _____

4. ENGINEER, SURVEYOR or LANDSCAPE ARCHITECT: (Same as Applicant ☐)

Name Christopher Consultants; Attn: Christopher Fillmore, LS; License No. 2607

Address 9900 Main St., Suite 400, Fairfax, VA, 22031

Phone (703) 273-6820 Email chrisfillmore@ccl-eng.com

5. WETLANDS EXPERT: (Same as Applicant ☐)

Name Apex Companies, LLC; Attn: John Brooks, III, PWD; Certification No. 3402000003

Address 203 Wylderose Ct., Midlothian, VA 23113

Phone (804) 897-2718 Email john.brooks@apexcos.com

OFFICE USE ONLY

Receipt # _____ **Fee Paid** _____

ZONING OFFICE APPROVAL SIGNATURE

This Application is Approved By_____ Date _____
Zoning Official

The City of Fairfax is committed to the letter and spirit of the Americans with Disabilities Act. To request a reasonable accommodation for any type of disability, please call 703-385-7930, (TTY 711)

I. RPA Delineation Elements – The RPA site-specific study shall be drawn to the same scale as the site plan or subdivision plan and shall be certified as complete and accurate by a class IIIB certified land surveyor and a professional wetlands expert. The study should clearly delineate the RPA components. Wetland delineations shall be performed consistent with the procedures specified in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands.

Mark below which features are included in your RPA Site-Specific Study:

Present (Y/N)	Resource Protection Area Elements §110-4.18.2
N	a) Tidal Wetlands
N	b) Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow
N	c) Tidal shores
N	d) Intermittent streams that remain largely in a natural condition and that have not been significantly impacted by adjacent development
Y	e) Water bodies with perennial flow
Y	f) A 100-foot vegetated buffer area located adjacent to and landward of the above components and expanded to include noncontiguous wetlands within the floodplain that are partially located within the buffer, along both sides of any water body with perennial flow. The full buffer area shall be designated as the landward component of the resource protection area notwithstanding the presence of permitted uses, encroachments or permitted vegetation clearing in compliance with the performance criteria of this division.

II. Site Information

Total Parcel(s) Area: 493,099.2 sf

Total Delineated RPA: 250,966.5 sf

Will you be developing in an RPA? (Circle one) (Yes) / No

If Yes, check the type of development:

- ✓ Redevelopment (see §110-4.18.7.C) and §110-4.18.7.D
- ____ Roadway or driveway meeting the requirements of §110-4.18.4.B.2
- ____ Flood control or stormwater management facility meeting the requirements of §110-4.18.4.B.3
- ✓ New Development (see §110-4.18.4.B.4)

RPA Study Summary

✓ I hereby certify that the RPA Site-Specific Study does not conflict with the City of Fairfax Chesapeake Bay Area Preservation Map (adopted November 25, 2003).

___ I hereby certify that the RPA Site-Specific Study does conflict with the City of Fairfax Chesapeake Bay Area Preservation map. The Zoning Administrator will review and consider the inconsistencies in order to determine whether or not the City's map should be adjusted.

Describe conflicting features:

_____

_____

_____

_____

Signature of Applicant or Authorized Agent	*Title or Relationship*	*Date*
	Co-operating Mgr.	3-2-2020

Northfax West Tax Map #'s

57 2 08 005
57 2 08 006
57 2 08 007
57 2 08 008
57 2 08 010
57 2 08 011
57 2 08 012
57 2 08 013
57 2 08 014
57 2 07 015 B
57 2 47 000 A
57 2 02 003
57 2 02 005
57 2 02 017
57 2 02 018
57 2 02 019
57 2 02 020

Appendix B – 2018 Preliminary Jurisdictional Determination

DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NORFOLK DISTRICT
FORT NORFOLK
803 FRONT STREET
NORFOLK VA 23510-1011

February 5, 2018

PRELIMINARY JURISDICTIONAL DETERMINATION

Northern Virginia Regulatory Section
NAO-2017-02192 (Northfax Project)

Northfax JV LLC
c/o The Lann Companies
Attn: Mr. John Napolitano
3900 Jermantown Road, Suite 300
Fairfax, Virginia 22030

Dear Mr. Napolitano:

This letter is in regard to your request for a verification of a preliminary jurisdictional determination for waters of the U.S. (including wetlands) on property known as the Northfax Project, located on 16 parcels on approximately 10.3 acres, northwest quadrant at the intersection of Chain Bridge Road (Route 123) and Fairfax Boulevard (U.S. Routes 29/50) in the City of Fairfax, Virginia.

The map entitled "Northfax Project", by Christopher Consultants and submitted by Apex Companies, LLC dated December 4, 2017 and revised January 19, 2018 (*copy enclosed)* provides the location of waters and/or wetlands on the property listed above. The basis for this delineation includes the presence of an ordinary high water mark. This letter is not confirming the Cowardin classifications of these aquatic resources.

Discharges of dredged or fill material, including those associated with mechanized landclearing, into waters and/or wetlands on this site may require a Department of the Army permit and authorization by state and local authorities including a Virginia Water Protection Permit from the Virginia Department of Environmental Quality (DEQ), a permit from the Virginia Marine Resources Commission (VMRC) and/or a permit from your local wetlands board. This letter is a confirmation of the Corps preliminary jurisdiction for the waters and/or wetlands on the subject property and does not authorize any work in these areas. Please obtain all required permits before starting work in the delineated waters/wetland areas.

This is a preliminary jurisdictional determination and is therefore not a legally binding determination regarding whether Corps jurisdiction applies to the waters or wetlands in question. Accordingly, you may either consent to jurisdiction as set out in this preliminary jurisdictional determination and the attachments hereto if you agree with the determination, or you may request and obtain an approved jurisdictional determination.

"This preliminary jurisdictional determination and associated wetland delineation map may be submitted with a permit application."

Enclosed is a copy of the "Preliminary Jurisdictional Determination Form". Please review the document, sign, and return one copy to Ms. Theresita Crockett-Augustine either via email (**theresita.m.crockett-augustine@usace.army.mil**) or via standard mail to US Army Corps of Engineers, Northern Virginia Field Office at 18139 Triangle Plaza, Suite 213, Dumfries, Virginia 22026 within 30 days of receipt and keep one for your records. This delineation of waters and/or wetlands is valid for a period of five years from the date of this letter unless new information warrants revision prior to the expiration date.

If you have any questions, please contact Ms. Theresita Crockett-Augustine at (703) 221-9736 or **theresita.m.crockett-augustine@usace.army.mil**.

Sincerely,

Theresita Crockett-Augustine
Environmental Scientist
Northern Virginia Regulatory Section

Enclosures

AUGUSTINE.THERESITA.CROCKETT.1230827040

Digitally signed by AUGUSTINE.THERESITA.CROCKETT.1230827040
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=AUGUSTINE.THERESITA.CROCKETT.1230827040
Date: 2018.02.05 16:42:10 -05'00'

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION:

A. REPORT COMPLETION DATE FOR PJD: February 5, 2018

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:
Northfax JV LLC
c/o The Lann Companies
Attn: Mr. John Napolitano
3900 Jermantown Road, Suite 300
Fairfax, Virginia 22030

DISTRICT OFFICE, FILE NAME, AND NUMBER: NAO, **Northfax Project**, 2017-02192

C. PROJECT LOCATION(S) AND BACKGROUND INFORMATION: (USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT DIFFERENT SITES)

State: **VIRGINIA** County/parish/borough: Fairfax City: Fairfax

Center coordinates of site (lat/long in degree decimal format):

Latitude: 38.859 ° N Longitude: - 77.309 ° W

Universal Transverse Mercator:

Name of nearest waterbody: UT to Accotink Creek

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☐ Office (Desk) Determination. Date:
☒ Field Determination. Date(s): 01/19/18

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

Site Number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
1			2,064 LF	RPW	Section 404
2					
3					

1. The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre- construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there "may be" waters of the U.S. and/or that there "may be" navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA: Data reviewed for preliminary JD (check all that apply)

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items.

☒ Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
Map:

☒ Data sheets prepared/submitted by or on behalf of the PJD requestor.

☒ Office concurs with data sheets/delineation report.

☐ Office does not concur with data sheets/delineation report. Rationale:

☐ Data sheets prepared by the Corps:

☐ Corps navigable waters' study:

☐ U.S. Geological Survey Hydrologic Atlas: USGS

☐ NHD data.

☐ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name:

☒ Natural Resources Conservation Service Soil Survey. Citation:

☒ National wetlands inventory map(s). Cite name:

☒ State/Local wetland inventory map(s):

☐ FEMA/FIRM maps:

☐ 100-year Floodplain Elevation: (National Geodetic Vertical Datum of 1929)

☒ Photographs ☒ Aerial (Name & Date):

or ☒ Other (Name & Date):

☐ Previous determination(s):

File no. and date of response letter:

☐ Other information (please specify):

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

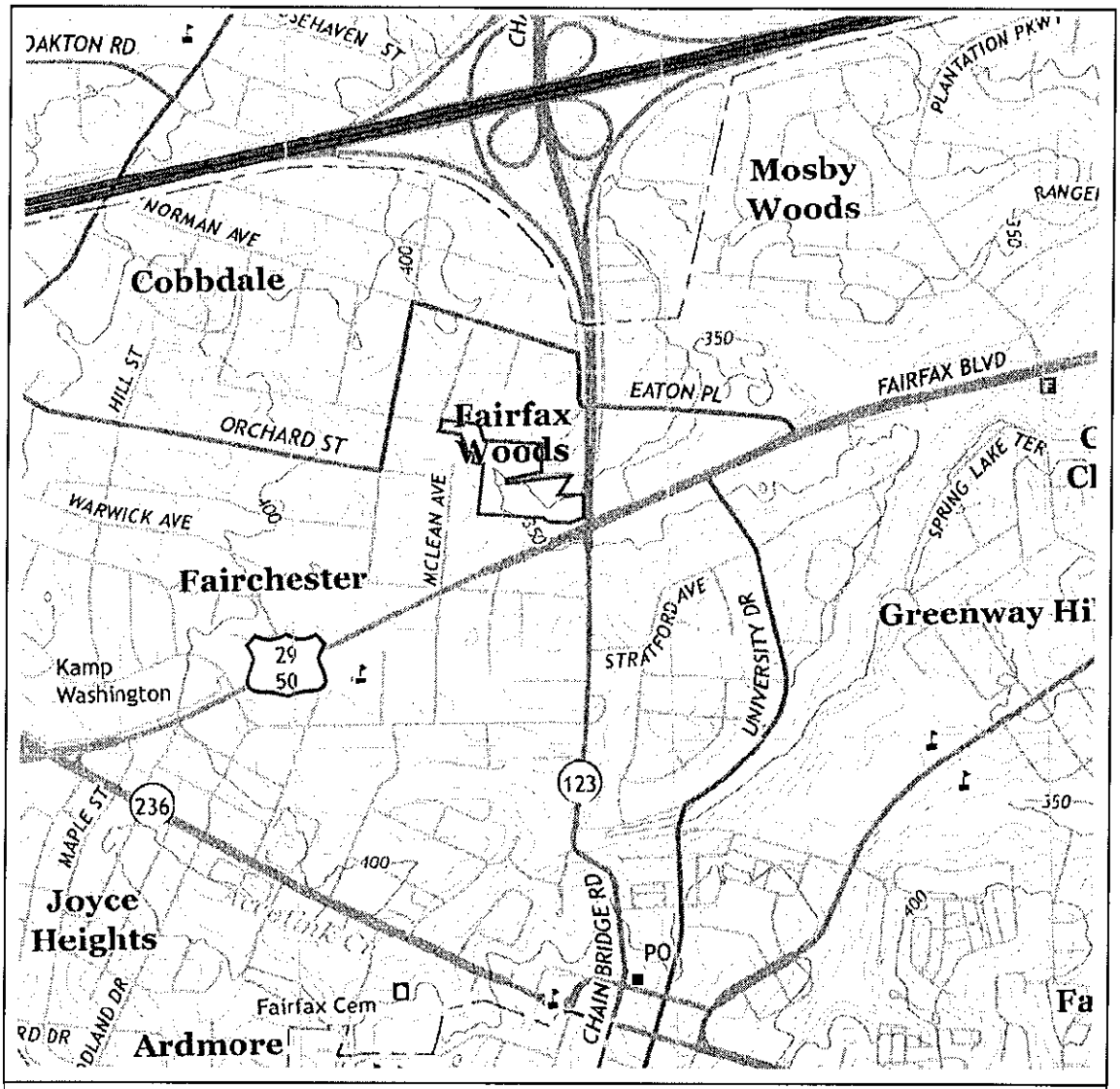
AUGUSTINE.THERESITA.CROCKETT.1230827040

Digitally signed by AUGUSTINE.THERESITA.CROCKETT.1230827040
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=AUGUSTINE.THERESITA.CROCKETT.1230827040
Date: 2018.02.05 16:41:37 -05'00'

Signature and date of Regulatory staff member completing PJD

Signature and date of person requesting PJD (REQUIRED, unless obtaining the signature is impracticable)[1]

1 Districts may establish timeframes for requester to return signed PJD forms. If the requester does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.



Scale: Not to Scale

Date: USGS Quadrangle 2013

Apex Companies LLC.
8854 Rixlew Lane
Manassas, VA 20109

APEX

© Apex Companies LLC

USGS Quadrangle Map
Northfax
38.859309 N/ -77.310054 W
Fairfax USGS Quadrangle
Fairfax County, VA

Prepared for:
Northfax JV LLC c/o The Lann Companies
3900 Jermantown Road – Suite 300
Fairfax, VA 22030

Scale: Metric Scale

Date: USGS Quadrangle 2013

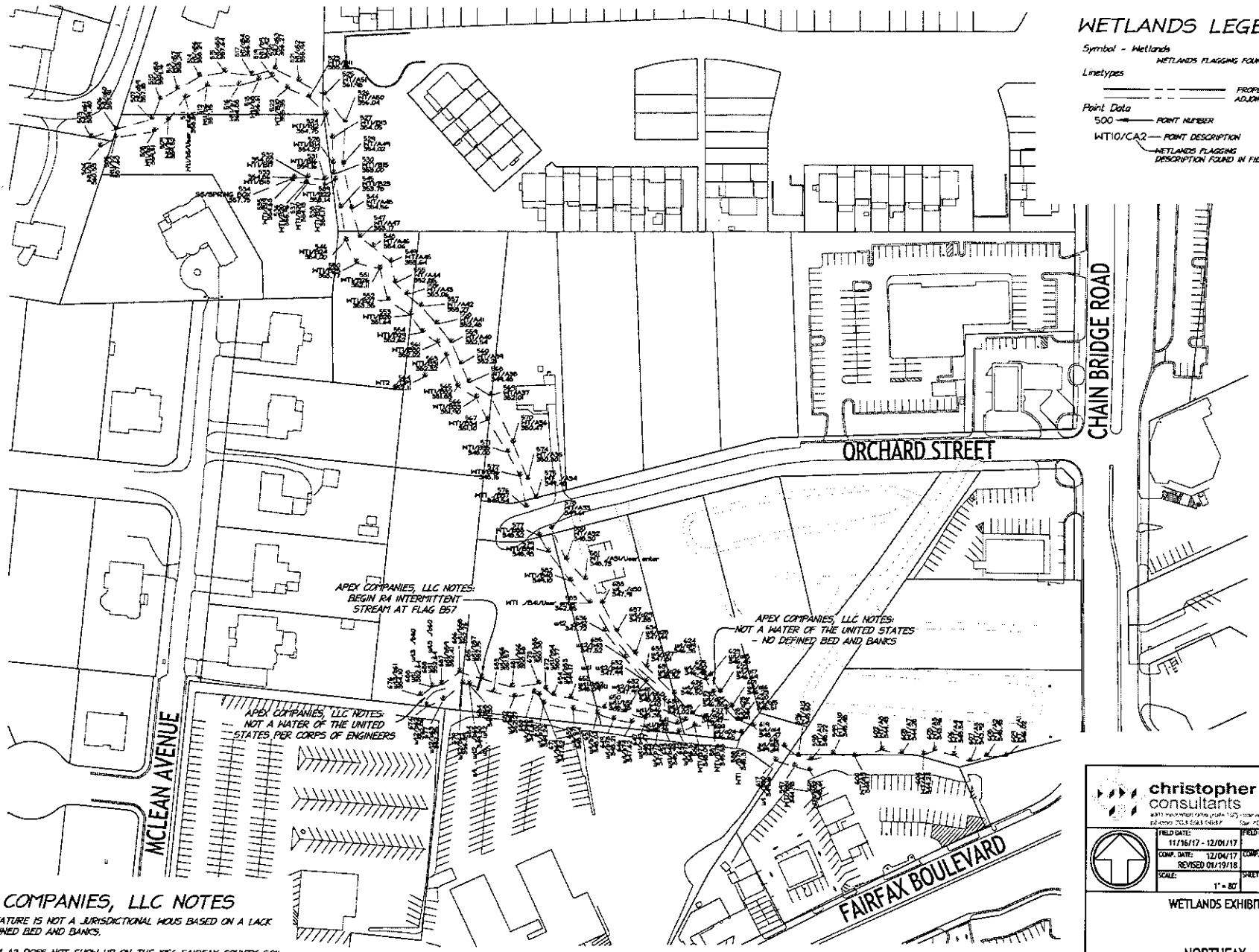
Apex Companies LLC
8884 Rixlew Lane
Manassas, VA 20109

APEX

© Apex Companies LLC

USGS Aerial Map
Northfax
[illegible]
[illegible] Quadrangle
Fairfax County, VA

Prepared for:
[illegible]
[illegible]
[illegible]



APEX COMPANIES, LLC NOTES

1. THIS FEATURE IS NOT A JURISDICTIONAL HOUS BASED ON A LACK OF DEFINED BED AND BANKS.
2. STREAM A2 DOES NOT SHOW UP ON THE 1856 FAIRFAX COUNTY SOIL SURVEY AND IT IS SUSPECTED THAT THE CHANNEL WAS CUT BY STORMWATER RUNOFF DISCHARGED BY THE CITY STORMWATER SYSTEM.

LEGEND:
- STAKED POINT LOCATION (SEE STAKED POINT LEGEND BELOW)
- 6000 — STAKED POINT NUMBER (DESCRIPTION)
- 300.00 — STAKED POINT ELEVATION (STAKE ELEV.)
- BLD — STAKED POINT DESCRIPTION

THIS EXHIBIT IS FOR GRAPHICALLY DEPICTING THE STAKEOUT LOCATIONS ONLY.
THIS EXHIBIT MAY NOT SHOW ALL DESIGN INFORMATION.
PLEASE REFERENCE THE FOLLOWING CONSTRUCTION PLAN FOR ALL PERTINENT DESIGN INFORMATION:
DESIGN PLAN: WETLANDS EXHIBIT
PLAN DATE: 11/15/17
DESIGNED BY: APEX COMPANIES, LLC
COUNTY #: N/A
APPROVED ON: N/A

christopher consultants

EX-01

FIELD DATE: 11/16/17 - 12/01/17	FIELD CREW: W. OSBURN
COMP. DATE: 12/04/17 REVISED 01/19/18	COMP. BY: M. SMITH R. CEBRICK
SCALE: 1" = 80'	SHEET: 1 OF 1

WETLANDS EXHIBIT

NORTHFAX

CITY OF FAIRFAX, VIRGINIA

F:\Projects\13120600\GIS\SURVEY\ETopo\Archived\Set topo NAD83 NOV2017 - M3.dwg, 1/19/2018 12:45:08 PM, richardson.b, 1:1, christopher consultants, ltd.

DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NORFOLK DISTRICT
FORT NORFOLK
803 FRONT STREET
NORFOLK VIRGINIA 23510-1011

FEBRUARY 5, 2018

Supplemental Preapplication Information

Project Number: NAO-2017-02192 (Northfax Project)
Applicant: Northfax JV LLC
Project Location: City of Fairfax

1. A search of the Virginia Department of Historic Resources data revealed the following:

☐ No known historic properties are located on the property.

☒ The following known architectural resources are located on the property:

DHR ID	Address	Restricted	Property Names
151-5468	10500 Orchard Street	Unrestricted	Trolley Bed, 10500 Orchard Street (Function/Location), Washington, Arlington and Falls Church Electric Railway (Historic)
029-5470	Arlington Boulevard - Alt Route 50	Unrestricted	Washington and Virginia Railway Company (Historic), Washington, Arlington and Falls Church Electric Railway (Historic)

☐ The following known archaeological resources are located on the property:

☐ The following known historic resources are located in the vicinity of the property (potential for effects to these resources from future development):

NOTE:

1) *The information above is for planning purposes only. In most cases, the property has not been surveyed for historic resources. Undiscovered historic resources may be located on the subject property or adjacent properties and this supplemental information is not intended to satisfy the Corps' requirements under Section 106 of the National Historic Preservation Act (NHPA).*
2) *Prospective permittees should be aware that Section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant.*

2. A search of the data supplied by the U.S. Fish & Wildlife Service, the Virginia Department of Conservation and Recreation and the Virginia Department of Game and Inland Fisheries revealed the following:

☒ No known populations of threatened or endangered species are located on or within the vicinity of the subject property.

☐ The following federally-listed species may occur within the vicinity of the subject property. See attached.

☐ The following state-listed (or other) species may occur within the vicinity of the subject property:

Please note this information is being provided to you based on the preliminary data you submitted to the Corps relative to project boundaries and project plans. Consequently, these findings and recommendations are subject to change if the project scope changes or new information becomes available and the accuracy of the data.

Appendix C – Perennial Stream Identification Protocol Data Sheets

Site ID: Northfax - A2 **Total Score:** 12.5

Watershed: Accotink Creek Recorder: J. Irre

Date: 11/6/17 Time: 1409 Evaluators: J. Irre

Field Indicators:

I.) Streamflow and Hydrology	Absent	Weak	Moderate	Strong
1.) Presence or absence of flowing water and > 48 hrs since last rainfall	0 ○	1 ◉	2 ○	3 ○
2.) Presence of high groundwater table or seeps and springs	0 ◉	1 ○	2 ○	3 ○
3.) Leaflitter in streambed	1.5 ○	1 ◉	0.5 ○	0 ○
4.) Drift lines	0 ○	0.5 ◉	1 ○	1.5 ○
5.) Sediment on debris or plants	0 ◉	0.5 ○	1 ○	1.5 ○

Total Streamflow and Hydrology Points: 2.5

II.) Geomorphology	Absent	Weak	Moderate	Strong
1.) Riffle-pool sequence	0 ○	1 ◉	2 ○	3 ○
2.) USDA texture in streambed	0 ○	1 ○	2 ◉	3 ○
3.) Natural Levees	0 ◉	1 ○	2 ○	3 ○
4.) Sinuosity	0 ○	1 ◉	2 ○	3 ○
5.) Active or Relic Floodplain	0 ○	1 ◉	2 ○	3 ○
6.) Braided Channel	0 ◉	1 ○	2 ○	3 ○
7.) Recent Alluvial Deposits	0 ◉	1 ○	2 ○	3 ○
8.) Bankfull Bench present	0 ○	1 ◉	2 ○	3 ○
9.) Continuous Bed and Bank	0 ○	1 ○	2 ○	3 ◉
10.) 2nd order or greater **channel** present	***Yes*** = 3 ○		***No*** = 0 ◉	

Total Geomorphology Points: 9

III.) Streambed Soils				
1.) Redoximorphic features present in sides of channel or head cut.	***Present*** = 0 ◉		***Absent*** = 1.5 ○	
2.) Chroma	gleyed = 3 ○	1 = 2 ○	2 = 1 ◉	> 2 = 0 ○

Total Streambed Soils Points: 1

IV.) Vegetation	Absent	Weak	Moderate	Strong
1.) Rooted AQUATIC Plants in Streambed	0 ◉	1 ○	2 ○	3 ○
2.) Presence of Periphyton/green algae	0 ◉	1 ○	2 ○	3 ○
3.) Iron Oxidizing Bacteria/Fungus	0 ◉	0.5 ○	1 ○	1.5 ○

4.) Wetland Plants in Streambed (Skip if no plants present in streambed)

SAV = 3 ○ Mostly OBL = 1.5 ○ Mostly FACW = 1 ○ Mostly FAC = 0.5 ○ Mostly FACU, UPL, or None = 0 ◉

Total Vegetation Points: 0

Comments:

Front Page Total 612.5 points

V.) Benthic Macroinvertebrates	Absent	Weak	Moderate	Strong
1.) Benthic Macroinvertebrates	0 ◉	0.5 ○	1 ○	1.5 ○
2.) Bivalves	0 ◉	1 ○	2 ○	3 ○
3.) EPT taxa	***Present*** = 3 ○			***Absent*** = 0 ◉

Total Benthic Macroinvertebrates Points: 0

VI.) Vertebrates	Absent	Weak	Moderate	Strong
1.) Fish	0 ◉	0.5 ○	1 ○	1.5 ○
2.) Amphibians	0 ◉	0.5 ○	1 ○	1.5 ○

Total Vertebrates Points: 0

Total Score: 12.5

Benthics/Amphibians Found:
None

Weather
Rain Gauge NOAA.GOV Date of Last Rainfall 11/5/17 Rainfall Amount 0.10" at Dulles

Reach Description
Upstream: Trib ○ Headcut ○ Grade Control ◉ Structure ○ Other: storm-drain outfall
Downstream: Trib ◉ Headcut ○ Grade Control ○ Structure ○ Other:
Comments:

Storm Network Connections and Watershed Observations
input from city storm-sewer system and uncontrolled runoff from adjacent impervious areas.

Riparian Buffers Width

LB: Distance >25 feet ○ 26-50 ◉ 51-75 ○ 76-100 ○ 100+ ○
Cover type: Tree ◉ Shrub ○ Herbaceous ○ Lawn ○ Other: ○
Dominant Species: Tulip Tree, Black Cherry, Black Walnut

RB: Distance >25 feet ○ 26-50 ○ 51-75 ○ 76-100 ○ 100+ ◉
Cover type: Tree ◉ Shrub ○ Herbaceous ○ Lawn ○ Other: ○
Dominant Species: Same as left buffer

Riparian Buffer Comments
buffer in very poor condition from past disturbance

Other Observations and Comments:
stream reach is highly disturbed from past storm events.

Is the reach perennial? **YES** ○ **NO** ◉

Photo #	Direction (US, DS, LB, RB)	Notes
18	US	facing west looking at storm-drain outfall
19	DS	facing east looking downstream

Site ID: Northfax - A3 **Total Score:** 2.5

Watershed: Accotink Creek Recorder: J. Irre

Date: 11/6/17 Time: 1435 Evaluators: J. Irre

Field Indicators:

I.) Streamflow and Hydrology	Absent	Weak	Moderate	Strong
1.) Presence or absence of flowing water and > 48 hrs since last rainfall	0 ◉	1 ○	2 ○	3 ○
2.) Presence of high groundwater table or seeps and springs	0 ◉	1 ○	2 ○	3 ○
3.) Leaflitter in streambed	1.5 ○	1 ○	0.5 ◉	0 ○
4.) Drift lines	0 ◉	0.5 ○	1 ○	1.5 ○
5.) Sediment on debris or plants	0 ◉	0.5 ○	1 ○	1.5 ○

Total Streamflow and Hydrology Points: 0.5

II.) Geomorphology	Absent	Weak	Moderate	Strong
1.) Riffle-pool sequence	0◉	1○	2○	3○
2.) USDA texture in streambed	0◉	1○	2○	3○
3.) Natural Levees	0◉	1○	2○	3○
4.) Sinuosity	0◉	1○	2○	3○
5.) Active or Relic Floodplain	0◉	1○	2○	3○
6.) Braided Channel	0◉	1○	2○	3○
7.) Recent Alluvial Deposits	0◉	1○	2○	3○
8.) Bankfull Bench present	0◉	1○	2○	3○
9.) Continuous Bed and Bank	0○	1○	2◉	3○
10.) 2nd order or greater **channel** present	***Yes*** = 3○		***No*** = 0◉	

Total Geomorphology Points: 2

III.) Streambed Soils				
1.) Redoximorphic features present in sides of channel or head cut.	***Present*** = 0○		***Absent*** = 1.5◉	
2.) Chroma	gleyed = 3○	1 = 2○	2 = 1○	> 2 = 0◉

Total Streambed Soils Points: 1.5

IV.) Vegetation	Absent	Weak	Moderate	Strong
1.) Rooted AQUATIC Plants in Streambed	0◉	1○	2○	3○
2.) Presence of Periphyton/green algae	0◉	1○	2○	3○
3.) Iron Oxidizing Bacteria/Fungus	0◉	0.5○	1○	1.5○

4.) Wetland Plants in Streambed (Skip if no plants present in streambed)

SAV = 3○ Mostly OBL = 1.5○ Mostly FACW = 1○ Mostly FAC = 0.5○ Mostly FACU, UPL, or None = 0◉

Total Vegetation Points: 0

Comments:

Front Page Total 2.5 points

V.) Benthic Macroinvertebrates	Absent	Weak	Moderate	Strong
1.) Benthic Macroinvertebrates	0 ◉	0.5 ○	1 ○	1.5 ○
2.) Bivalves	0 ◉	1 ○	2 ○	3 ○
3.) EPT taxa	***Present*** = 3 ○			***Absent*** = 0 ◉

Total Benthic Macroinvertebrates Points: 0

VI.) Vertebrates	Absent	Weak	Moderate	Strong
1.) Fish	0 ◉	0.5 ○	1 ○	1.5 ○
2.) Amphibians	0 ◉	0.5 ○	1 ○	1.5 ○

Total Vertebrates Points: 0

Total Score: 2.5

Benthics/Amphibians Found:
None

Weather
Rain Gauge NOAA.GOV Date of Last Rainfall 11/5/17 Rainfall Amount 0.10" at Dulles

Reach Description
Upstream: Trib ○ Headcut ○ Grade Control ○ Structure ◉ Other: upland
Downstream: Trib ◉ Headcut ○ Grade Control ○ Structure ○ Other:
Comments:

Storm Network Connections and Watershed Observations

Riparian Buffers Width
LB: Distance >25 feet ○ 26-50 ○ 51-75 ○ 76-100 ○ 100+ ◉
Cover type: Tree ◉ Shrub ○ Herbaceous ○ Lawn ○ Other: ○
Dominant Species: Tulip Tree, Black Cherry, Black Walnut, Red Maple

RB: Distance >25 feet ○ 26-50 ○ 51-75 ○ 76-100 ◉ 100+ ○
Cover type: Tree ◉ Shrub ○ Herbaceous ○ Lawn ○ Other: ○
Dominant Species: Same as left buffer

Riparian Buffer Comments
buffer in very poor condition from past disturbance

Other Observations and Comments:

Is the reach perennial? **YES** ○ **NO** ◉

Photo #	Direction (US, DS, LB, RB)	Notes
3	US	looking upstream in ephemeral stream
4	DS	looking at head of ephemeral stream

Appendix D – Representative Photographs

Photo 1 – Facing east looking at old concrete bridge along main stream A1

Photo 2 – Facing west looking upstream from same location as previous photo

Photo 3 – Facing NW, looking upstream at Reach A3 (removed by the USACE and called non-jurisdictional)

Photo 4 – Facing NW, looking upstream in Stream A1 on Lot 7

Photo 5 – Facing SE, looking downstream in Stream A1 on Lot 7

Photo 6 – Looking at concrete structure on Lot 15

Photo 7 – Looking downstream from concrete structure at Stream A4

Photo 8 – Facing E, looking at confluence of Stream A1 and Stream A4

Photo 9 – Facing NW, looking upstream in Stream A1 from same location as previous photo

Photo 10 – Facing SE, looking downstream in Stream A1

Photo 11 – Forested upland riparian area adjacent to Stream A1

Photo 12 – Representative soil profile in upland buffer

Photo 13 – Facing NW, looking upstream in Stream A1 on Lot 12/13 boundary

Photo 14 – Facing SE, looking downstream in Stream A1 from Lot 12/13 boundary

Photo 15 – Facing W, looking at City storm-drain outfall in Stream A2

Photo 16 – Facing E, looking downstream from same location as previous photo

Photo 17 – Facing E, looking at 2017 location of downstream extent of Stream A1

Photo 18 – Facing NE, looking downstream along Stream A1 at current location toward box culverts under Route 123

Photo 19 – Facing SW, looking upstream along Stream A1 at current location, away from box culverts under Route 123

Appendix E –RPA Exhibits

REACH A4
(INTERMITTENT)

REACH A1
(PERENNIAL)

EX.
100-FOOT
RPA BUFFER

REACH A2
(INTERMITTENT)

McLEAN AVENUE
VARIABLE WIDTH PUBLIC
RIGHT-OF-WAY

ORCHARD STREET
50' PUBLIC RIGHT-OF-WAY
D.B. 401 PG. 312

ORCHARD STREET
50' PUBLIC RIGHT-OF-WAY
D.B. 407 PG. 115

McLEAN COURT
50' RIGHT-OF-WAY

CHAIN BRIDGE ROAD - ROUTE #123
VARIABLE WIDTH PUBLIC RIGHT-OF-WAY
CITY OF FAIRFAX PROJ. #0029-151-105

FAIRFAX BOULEVARD - ROUTE #50
VARIABLE WIDTH PUBLIC RIGHT-OF-WAY
CITY OF FAIRFAX PROJ. #0029-151-105

VIRGINIA STATE GRID NORTH
NAD 83

50 25 0 50 100
HORIZONTAL GRAPHIC SCALE
1" = 50'

christopher consultants
9900 main st
suite 400
fairfax, va 22031
p 703.273.6820
engineering surveying land planning

NORTHFAX WEST
RPA SITE-SPECIFIC STUDY
CITY OF FAIRFAX, VIRGINIA

MARK	DATE	DESCRIPTION

PROJECT No.: 13139.005.00
DRAWING No.: 109821
DATE: 02-20-2020
DESIGN: EG
DRAWN: JS
CHECKED: KMW

SHEET TITLE:

RPA MAP
(PRE-DEVELOPMENT)

SHEET No.
1 OF 2

SCALE: 1"=50'

P:\FX\Projects\13139\00500\EXHIBITS\109821 RPA\18 FLOODPLAIN AND RPA (PRE-DEVELOPED).dwg, 2/20/2020 1:40:42 PM, DWG To PDF.pc3

christopher consultants
9900 main st
suite 400
fairfax, va 22031
p 703.273.6820
engineering surveying land planning

NORTHFAX WEST
RPA SITE-SPECIFIC STUDY
CITY OF FAIRFAX, VIRGINIA

MARK	DATE	DESCRIPTION

PROJECT No.: 13139.005.00
DRAWING No.: 109821
DATE: 02-20-2020
DESIGN: EG
DRAWN: JS
CHECKED: KMW

SHEET TITLE:

RPA MAP
(POST-DEVELOPMENT)

SHEET No.
2 OF 2

SCALE: 1"=50'

P:\FX\Projects\13139\00500\EXHIBITS\109821 RPA\18A FOODPLAIN AND RPA (POST-DEVELOPED).dwg, 2/20/2020 1:37:43 PM, DWG To PDF.pc3

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
NORTHERN REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193
(703) 583-3800
www.deq.virginia.gov

Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director

Thomas A. Faha
Regional Director

January 2, 2019

City of Fairfax City Council
City Hall
10455 Armstrong Street
Fairfax, Virginia 22030

SENT VIA EMAIL: Mayor&Council@fairfaxva.gov

RE: Joint Permit Application Number 18-1003
Northfax, City of Fairfax, Virginia
Notification of Public Notice of Draft Permit

To Whom It May Concern:

The Department of Environmental Quality (DEQ) has received an application for a Virginia Water Protection (VWP) individual permit for the above-referenced project. Attached is a copy of the Public Notice for the proposed permit action for your review pursuant to Section 62.1-44.15:01 of the Code of Virginia. Notice of the proposed action will also be published in a newspaper circulated in the vicinity of the project site. The publication will establish a 30-calendar day public comment period for this proposal. If you wish to comment on this proposed action, please respond to DEQ at the above address.

If no response is received within the 30-day public comment period, DEQ will assume that you have no objections to the proposed action. If you have any questions, please contact me by phone at 703-583-3871 or by email at Wynn.Prusaczyk@deq.virginia.gov.

Respectfully,

Wynn Prusaczyk
VWP Permit Writer

Enclosure: Public Notice

Public Notice – Environmental Permit

PURPOSE OF NOTICE: To seek public comment on a draft permit from the Department of Environmental Quality that will allow the filling of a stream for a mixed-use development in City of Fairfax, Virginia.

PUBLIC COMMENT PERIOD: For 30 days, starting from the day after the notice is in the newspaper: MONTH DAY, YEAR to MONTH DAY, YEAR

PERMIT NAME: Virginia Water Protection Permit issued by DEQ, under the authority of the State Water Control Board

APPLICANT NAME, ADDRESS AND PERMIT NUMBER: Northfax JV LLC; 3900 Jermantown Road, Suite 300, Fairfax, Virginia 22030; VWPP No. 18-1003

PROJECT DESCRIPTION: Northfax JV LLC has applied for a new permit for the Northfax development. The project is located northeast of the intersection of Chain Bridge Road (VA-123) and Fairfax Boulevard (US-50) in the City of Fairfax. The permit will allow the applicant to pipe a stream channel. The proposed activity would affect 1,646 linear feet of stream channel. The activity proposed in the permit will affect unnamed tributaries in the Accotink Creek watershed. A watershed is the land area drained by a river and its incoming streams. To compensate for the affected area, the applicant would purchase 1,675 stream credits or 4,761 Stream Condition Units from a DEQ approved mitigation bank. DEQ's preliminary decision is to issue the permit.

HOW TO COMMENT AND/OR REQUEST A PUBLIC HEARING: DEQ accepts comments and requests for public hearing by e-mail, hand delivery, fax or postal mail. All comments and requests must be in writing and be received by DEQ during the comment period. Submittals must include the names, mailing addresses and telephone numbers of the commenter/requester and of all persons represented by the commenter/requester. A request for public hearing must also include: 1) The reason why a public hearing is requested. 2) A brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requestor, including how and to what extent such interest would be directly and adversely affected by the permit. 3) Specific references, where possible, to terms and conditions of the permit with suggested revisions. A public hearing may be held, including another comment period, if public response is significant, based on individual requests for a public hearing, and there are substantial, disputed issues relevant to the permit.

CONTACT FOR PUBLIC COMMENTS, DOCUMENT REQUESTS AND ADDITIONAL INFORMATION: Wynn Prusaczyk; Northern Regional Office, 13901 Crown Court, Woodbridge, Virginia 22193; Phone: (703) 583-3871; E-mail: Wynn.Prusaczyk@deq.virginia.gov; Fax: (703) 583-3821. The public may review the draft permit and application at the DEQ office named above by appointment or may request copies of the documents from the contact person listed below.

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

VWP Individual Permit Number 18-1003
Effective Date: March 5, 2019
Expiration Date: March 4, 2034

VIRGINIA WATER PROTECTION PERMIT ISSUED PURSUANT TO THE STATE WATER CONTROL LAW AND SECTION 401 OF THE CLEAN WATER ACT

In compliance with § 401 of the Clean Water Act, as amended (33 USC § 1341) and the State Water Control Law and regulations adopted pursuant thereto, the board has determined that there is a reasonable assurance that this VWP permit, if complied with, will protect instream beneficial uses, will not violate applicable water quality standards, and will not cause or contribute to a significant impairment of state waters or fish and wildlife resources. In issuing this VWP permit, the board has not taken into consideration the structural stability of any proposed activities.

Permittee: Northfax JV LLC

Address: 3900 Jermantown Road, Suite 300, Fairfax, Virginia 22030

Activity Location: The project is located northeast of the intersection of Chain Bridge Road (VA-123) and Fairfax Boulevard (US-50) in the City of Fairfax, Virginia.

Activity Description: The permittee proposes to construct a mixed-use development and associated infrastructure on an approximately 10.6 acre development area known as "Northfax." Permitted activities shall be conducted as described in the Joint Permit Application dated June 22, 2018, received on June 25, 2018, and supplemental materials, revisions and clarifications received through December 11, 2018.

Authorized Surface Water Impacts:

This permit authorizes the total permanent impact of 0.50 acre (1,646 linear feet) of stream channel. Authorized surface water impacts shall be as depicted on the impacts map entitled *Stream Impact Exhibit* dated August 9, 2018, with latest revision date of August 21, 2018, and received September 12, 2018.

Approved Compensation:

The permittee shall compensate for the authorized surface water impacts through the following:

1. Compensation for permanent stream impacts shall be provided through the purchase of 1,675 stream credits or 4,761 Stream Condition Units from a DEQ approved mitigation bank, in-lieu fee

fund, or a combination thereof that is authorized and approved by DEQ to sell credits in the area in which the impacts will occur and has credits available (as released by DEQ).

2. Mitigation bank credits shall be purchased prior to the purchase of in-lieu fee program credits in accordance with 9VAC25-210-116.C.2.

3. The credit sale shall be in accordance with the approved Mitigation Banking Instrument for the mitigation bank.

The permitted activity shall be in accordance with this Permit Cover Page, Part I - Special Conditions, and Part II - General Conditions.

Thomas A. Faha, Regional Director

March 5, 2019
Date

Part I – Special Conditions

A. Authorized Activities

1. This permit authorizes the total impact permanent impact of 0.50 acre (1,646 linear feet) of stream channel. Authorized surface water impacts described under this condition shall be as depicted on the impacts map entitled *Stream Impact Exhibit* dated August 9, 2018, with latest revision date of August 21, 2018, and received September 12, 2018.

2. The permittee shall conduct authorized activities as described in the Joint Permit Application dated June 22, 2018, and received June 25, 2018, and supplemental materials, revisions and clarifications received through December 11, 2018. Any changes to the authorized activities or impacts map that affect permitted areas shall be submitted to DEQ immediately upon determination that changes are necessary, and DEQ approval shall be required prior to implementing the changes.

3. The permittee shall notify the DEQ of any changes in authorized impacts to surface waters or any changes to the design or type of construction activities in surface waters authorized by this permit. DEQ approval shall be required prior to implementing the changes. Any additional impacts, modifications, or changes shall be subject to individual permit review and/or modification of this permit.

B. Permit Term

1. This permit is valid for **fifteen (15) years** from the date of issuance. A new permit may be necessary for the continuance of the authorized activities, or any permit requirement that has not been completed, including compensation provisions.

2. The permittee shall notify DEQ in writing at least 120 calendar days prior to the expiration of this permit if reissuance will be requested.

C. Standard Project Conditions

1. The activities authorized by this permit shall be executed in such a manner that any impacts to beneficial uses are minimized. As defined in § 62.1-10(b) of the Code, "beneficial use" means both instream and offstream uses. Instream beneficial uses include, but are not limited to, the protection of fish and wildlife habitat, maintenance of waste assimilation, recreation, navigation, and cultural and aesthetic values. The preservation of instream flows for purposes of the protection of navigation, maintenance of waste assimilation capacity, the protection of fish and wildlife resources and habitat, recreation, cultural and aesthetic values is an instream beneficial use of Virginia's waters. Offstream beneficial uses include, but are not limited to, domestic uses (including public water supply), agricultural uses, electric power generation, commercial uses, and industrial uses. Public water supply uses for human consumption shall be considered the highest priority.

2. No activity shall substantially disrupt the movement of aquatic life indigenous to the water body, including those species which normally migrate through the area, unless the primary purpose of the activity is to impound water.

3. Flows downstream of the project area shall be maintained to protect all uses.

4. No activity shall cause more than minimal adverse effect on navigation, and no activity shall block more than half of the width of the stream at any given time.

5. The activity shall not impede the passage of normal or expected high flows, and any associated structure shall withstand expected high flows.

6. Continuous flow of perennial springs shall be maintained by the installation of spring boxes, French drains, or other similar structures.

7. All excavation, dredging, or filling in surface waters shall be accomplished in a manner that minimizes bottom disturbance and turbidity.

8. All in-stream activities shall be conducted during low-flow conditions whenever practicable.

9. All construction, construction access, and demolition activities associated with this project shall be accomplished in a manner that minimizes construction materials or waste materials from entering surface waters, unless authorized by this permit. Wet, excess, or waste concrete shall be prohibited from entering surface waters.

10. All fill material placed in surface waters shall be clean and free of contaminants in toxic concentrations or amounts in accordance with all applicable laws and regulations.

11. Measures shall be employed at all times to prevent and contain spills of fuels, lubricants, or other pollutants into surface waters.

12. Machinery or heavy equipment in temporarily impacted wetlands shall be placed on mats or geotextile fabric, or other suitable means shall be implemented, to minimize soil disturbance to the maximum extent practical. Mats, fabrics, or other measures shall be removed as soon as the work is complete in the temporarily impacted wetland.

13. Stream channel restoration activities shall be conducted in the dry or during low flow conditions. When site conditions prohibit access from the streambank or upon prior authorization from the Department of Environmental Quality, heavy equipment may be authorized for use within the stream channel. The equipment shall be stationed on cobble bars.

14. Temporary disturbances to wetlands, stream channels, and/or stream banks during project construction activities shall be avoided and minimized to the maximum extent practicable.

15. All temporarily disturbed wetland areas shall be restored to preconstruction conditions within 30 calendar days of completing work in the areas, which shall include re-establishing pre-

construction contours, and planting or seeding with appropriate wetland vegetation according to cover type (emergent, scrub/shrub, or forested), except for invasive species identified on DCR's Virginia Invasive Plant Species List. The permittee shall take all appropriate measures to promote and maintain the revegetation of temporarily disturbed surface waters through the second year post-disturbance.

16. All temporarily impacted streams and stream banks shall be restored to their original elevations and contours within 30 calendar days following the construction at that stream segment, and the banks shall be seeded or planted with the same vegetative cover type originally present along the banks, including supplemental erosion control grasses if necessary but not including invasive species identified on DCR's Virginia Invasive Plant Species List.

17. All materials (including fill, construction debris, excavated materials, and woody materials, that are temporarily placed in wetlands, in stream channels, or on stream banks) shall be placed on mats or geotextile fabric, shall be immediately stabilized to prevent the material or leachate from entering surface waters, and shall be entirely removed within 30 calendar days following completion of that construction activity. After removal, disturbed areas shall be returned to original contours, shall be stabilized, and shall be restored to the original vegetated state within 30 calendar days.

18. Temporary in-stream construction features such as cofferdams shall be made of non-erodible materials.

19. Virginia Water Quality Standards shall not be violated in any surface waters as a result of the project activities.

20. All non-impacted surface waters that are within the project or right-of-way limits, and that are within fifty feet of any project activities, shall be clearly flagged or demarcated for the life of the construction activity within that area. The permittee shall notify all contractors and subcontractors that *no activities are to occur in these marked areas*.

21. All required notifications and submittals shall include project name and permit number and be submitted electronically to vwp.nro@deq.virginia.gov or mailed to the DEQ office stated below, to the attention of the VWP permit manager, unless directed in writing by DEQ subsequent to the issuance of this permit: Department of Environmental Quality- Northern Regional Office, 13901 Crown Court, Woodbridge, Virginia 22193.

22. All reports required by this permit and other information requested by DEQ shall be signed by the permittee or a person acting in the permittee's behalf, with the authority to bind the permittee. A person is a duly authorized representative only if *both* criteria below are met. If a representative authorization is no longer valid because of a change in responsibility for the overall operation of the facility, a new authorization shall be immediately submitted to DEQ.

    a. The authorization is made in writing by the permittee.

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, superintendent, or position of equivalent responsibility. A duly authorized representative may thus be either a named individual or any individual occupying a named position.

23. All submittals shall contain the following signed certification statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

24. Any fish kills or spills of fuels or oils shall be reported to DEQ immediately upon discovery at (703) 583-3800. If DEQ cannot be reached, the spill shall be reported to the Virginia Department of Emergency Management (DEM) at 1-800-468-8892 or the National Response Center (NRC) at 1-800-424-8802.

25. DEQ shall be notified in writing within 24 hours or as soon as possible on the next business day when potential environmentally threatening conditions are encountered which require debris removal or involve potentially toxic substances. Measures to remove the obstruction, material, or toxic substance or to change the location of any structure are prohibited until approved by DEQ.

D. Stream Modifications, Including Intake/Outfall Structures

1. Redistribution of existing stream substrate for erosion control purposes is prohibited.

2. Material removed from the stream bottom shall not be deposited into surface waters unless otherwise authorized in this permit.

3. Riprap apron for all outfalls shall be designed in accordance with Virginia Erosion and Sediment Control Handbook, Third Edition, 1992, or the most recent version in effect at the time of construction.

4. For streambank protection activities, structures and backfill shall be placed as close to the streambank as practical, while still avoiding and minimizing impacts to surface waters to the maximum extent practical. No material shall be placed in excess of the minimum necessary for erosion protection.

5. Asphalt and materials containing asphalt or other toxic substances shall not be used in the construction of submerged sills, breakwaters, dams, or weirs.

E. Installation of Utilities

1. All utility line work in surface waters shall be performed in a manner that minimizes disturbance in each area. Temporarily disturbed surface waters shall be restored in accordance with Part I.C.15, C.16, and C.17, unless otherwise authorized by this permit.

2. Material resulting from trench excavation may be temporarily sidecast into wetlands not to exceed a total of 90 calendar days, provided the material is not placed in a manner such that it is dispersed by currents or other forces.

3. The trench for a utility line cannot be constructed in a manner that drains wetlands (e.g., backfilling with extensive gravel layers creating a French drain effect).

F. Road Crossings

1. Access roads authorized by this permit shall be constructed to minimize the adverse effects on surface waters to the maximum extent practicable and to follow as near as possible pre-construction contours and elevations.

2. Installation of pipes and road crossings shall occur in the dry via the implementation of cofferdams, sheetpiling, stream diversions or other similar structures.

3. All surface waters temporarily affected by a road crossing shall be restored to their original elevations immediately following the removal of that particular temporary crossing. Temporary access roads shall be removed entirely following activity completion.

4. At crossings of streams, pipes and culverts must be installed to maintain low flow conditions and shall be countersunk at both inlet and outlet ends of the pipe or culvert, unless otherwise specifically approved by the Department of Environmental Quality on a case-by-case basis, and as follows: The requirement to countersink does not apply to extensions or maintenance of existing pipes and culverts that are not countersunk, floodplain pipes and culverts being placed above ordinary high water, pipes and culverts being placed on bedrock, or pipes and culverts required to be placed on slopes 5.0% or greater. Bedrock encountered during construction must be identified and approved in advance of a design change where the countersunk condition cannot be met. Pipes and culverts 24 inches or less in diameter shall be countersunk three inches below the natural stream bed elevations, and pipes and culverts greater than 24 inches shall be countersunk at least six inches below the natural stream bed elevations. Hydraulic capacity shall be determined based on the reduced capacity due to the countersunk position. In all stream crossings appropriate measures shall be implemented to minimize any disruption of aquatic life movement.

5. Stream bottom elevations at road crossings shall be measured at the inlet and outlet of the proposed structure and recorded prior to construction and within one week after the completion of construction to ensure that the design elevations were met. This information shall be recorded on the *Monthly VWP Permit Inspection Checklist (Attachment 2)* completed after the crossing is installed.

G. Stormwater Management Structures

1. The outfall and overflow structure shall be constructed and maintained to prevent downstream sediment deposition, erosion, or scour that may be associated with normal flow and any expected storm flows. Construction shall include the use of an appropriately sized riprap outlet protection apron at the outfall site.

2. Draining of a stormwater management facility shall be performed by a method that prevents downstream sediment deposition, erosion, or scour.

H. Project Construction Monitoring and Submittals (Impact Sites)

1. The permittee shall submit written notification at least **ten (10) calendar days** prior to the initiation of land disturbance or construction activities in permitted areas. The notification shall include a projected schedule for initiating and completing work at each permitted impact area.

2. Site inspections shall be conducted **once every calendar month** and recorded on the *Monthly VWP Permit Inspection Checklist (Attachment 2)* by the permittee or the permittee's qualified designee during active construction within authorized surface water impact areas. Monthly inspections shall be conducted in the following areas: all authorized permanent and temporary impact areas; all avoided surface waters, including wetlands, stream channels, and open water; surface water areas within 50 feet of any land disturbing activity; and all on-site areas designated for permanent preservation. The *Monthly VWP Permit Inspection Checklist (Attachment 2)* shall be completed in its entirety for each monthly inspection and shall be kept on-site and made available for review by DEQ staff upon request during normal business hours.

3. The *VWP Permit Construction Status Update Form (Attachment 1)* enclosed with this permit shall be completed in June and December of every year for the duration of this permit. The *VWP Permit Construction Status Update Form (Attachment 1)* shall include reference to the VWP permit authorization number and one of the following statements for each authorized surface water impact location:

   a. Construction activities not yet started;

   b. Construction activities started;

   c. Construction activities started but are currently inactive, or;

   d. Construction activities complete.

4. The *VWP Permit Construction Status Update Form (Attachment 2)* shall be submitted and must be received by DEQ no later than January 10 and July 10 of every year.

5. The permittee shall notify DEQ within 24 hours of discovering impacts to surface waters including wetlands, stream channels, and open water that are not authorized by this permit. The

notification shall include photographs, estimated acreage and/or linear footage of impacts, and a description of the impacts.

6. The permittee shall submit written notification of completion within 30 calendar days after the completion of all activities in all permitted impact areas authorized under this permit.

I. Compensatory Mitigation

1. The permittee shall compensate for permanent stream impacts through the purchase of 1,675 stream credits or 4,761 Stream Condition Units (SCUs) from a DEQ approved mitigation bank, in-lieu fee fund, or a combination thereof that is authorized and approved by DEQ to sell credits in the area in which the impacts will occur and has credits available (as released by DEQ). Mitigation bank credits shall be purchased prior to the purchase of in-lieu fee program credits in accordance with 9VAC25-210-116.C.2. The credit sale shall be in accordance with the approved Mitigation Banking Instrument for the mitigation bank.

2. The permittee shall submit documentation to DEQ prior to initiating work in permitted impact areas that 1,675 stream credits or 4,761 SCUs were acquired and debited from the ledger of a DEQ approved mitigation bank, in-lieu fee fund, or a combination thereof to satisfy the requirement of Part I.I.1.

Part II – General Conditions

A. Duty to Comply

The permittee shall comply with all conditions and limitations of the VWP permit. Nothing in this chapter shall be construed to relieve the permittee of the duty to comply with all applicable federal and state statutes, regulations, toxic standards, and prohibitions. Any VWP permit violation or noncompliance is a violation of the Clean Water Act and State Water Control Law and is grounds for enforcement action, VWP permit termination, VWP permit revocation, VWP permit modification, or denial of an application for a VWP permit extension or reissuance.

Nothing in this VWP permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

B. Duty to Cease or Confine Activity

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the activity for which a VWP permit has been granted in order to maintain compliance with the conditions of the VWP permit.

C. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any impacts in violation of the VWP permit that may have a reasonable likelihood of adversely affecting human health or the environment.

D. VWP Permit Actions

A VWP permit may be modified in whole or in part, revoked and reissued, extended, transferred, or terminated in accordance with 9 VAC 25-210-180.

1. During the drafting and authorization of a permit modification, only those conditions to be modified shall be addressed with preparing a draft modified permit. VWP permit terms and conditions of the existing permit shall remain in full force and effect during the modification of the permit.

2. This VWP permit may be modified upon the request of the permittee or upon board initiative when any of the following developments occur:

    a. When new information becomes available about the project or activity covered by the VWP permit, including project additions or alterations, that was not available at VWP permit issuance and would have justified the application of different VWP permit conditions at the time of VWP permit issuance;

b. When a change is made in the promulgated standards or regulations on which the VWP permit was based;

c. When changes occur that are subject to "reopener clauses" in the VWP permit; or

d. When developments applicable to surface water withdrawals as specified in 9VAC25-210-380 occur.

3. When this VWP permit authorizes surface water withdrawals, it may be modified when any of the following developments occur:

a. When the board determines that minimum instream flow levels resulting directly from the permittee's withdrawal of surface water are detrimental to the instream beneficial use, existing at the time of permit issuance, and the withdrawal of surface water should be subject to further net limitations or when an area is declared a surface water management area pursuant to §§ 62.1-242 through 62.1-253 of the Code of Virginia, during the term of the VWP permit.

b. Significant changes to the location of the surface water withdrawal system are proposed such that the Department of Environmental Quality determines a new review is warranted due to the potential effect of the surface water withdrawal to existing beneficial uses of the new location.

c. Changes to the permitted project or the surface water withdrawal, including increasing the storage capacity for the surface water withdrawal, that propose an increase in the maximum permitted withdrawal volumes or rate of withdrawal or that cause more than a minimal change to the instream flow requirements with potential to result in a detrimental effect to existing beneficial uses.

d. A revision to the purpose of the surface water withdrawal that proposes to include a new use or uses that were not identified in the permit application or a modification of the existing authorized use or uses such that the use description in the permit application and permit is no longer applicable. Examples of uses include, but are not limited to agricultural irrigation, golf course irrigation, public water supply, manufacturing, and electricity generation.

4. When the permittee has submitted a timely and complete application for reissuance of an existing VWP individual permit, but through no fault of the permittee, the board does not reissue or reissue with conditions a VWP individual permit or the board does not provide notice of its tentative decision to deny the application before an existing VWP individual permit expires, the conditions of the expiring VWP individual permit shall be administratively continued in full force and effect until the effective date of a reissued permit or the date on which the board denies the application. Timely application shall be a minimum of 180 days for an individual permit or a minimum of 270 days for an individual permit for a surface water withdrawal, unless otherwise specified in the existing permit.

5. Any permittee desiring to continue a previously permitted activity after the expiration date of this VWP permit shall apply for and obtain a new permit or, if applicable, shall request an extension in

accordance with 9VAC25-210-180. Any permittee with an effective VWP permit for an activity that is expected to continue after the expiration date of the VWP permit, without any change in the activity authorized by the VWP permit other than as may be allowed under 9VAC25-210-180, shall submit written notification requesting an extension. The permittee must file the request 90 days prior to the expiration date of the VWP permit. VWP permit modifications shall not be used to extend the term of a VWP permit beyond 15 years from the date of original issuance. When a permit term, other than that of an Emergency Virginia Water Protection Permit, is less than 15 years, an extension of the permit terms and conditions may be granted in accordance with 9VAC25-210-180. Emergency Virginia Water Protection Permits shall not exceed a duration of one year or shall expire upon the issuance of a regular Virginia Water Protection Permit, whichever comes first.

6. This VWP permit may be transferred to a new permittee only by modification to reflect the transfer, by revoking and reissuing the permit, or by automatic transfer. Automatic transfer to a new permittee shall occur if the current permittee: a) Notifies the board of the proposed transfer of the permit and provides a written agreement between the current and proposed permittees containing the date of transfer of VWP permit responsibility, authorization, and liability to the new permittee; and b) the board does not within 15 days notify the existing permittee of its intent to modify the VWP permit.

7. After notice and opportunity for a formal hearing pursuant to § 62.1-44.15:02 of the Code of Virginia, a VWP permit can be terminated for cause. Reasons for termination for cause are as follows:

   a. Noncompliance by the permittee with any condition of the VWP permit;

   b. The permittee's failure in the application or during the VWP permit process to disclose fully all relevant facts or the permittee's misrepresentation of any relevant facts at any time;

   c. The permittee's violation of a special or judicial order;

   d. A determination by the board that the permitted activity endangers human health or the environment and can be regulated to acceptable levels by VWP permit modification or termination;

   e. A change in any condition that requires either a temporary or permanent reduction or elimination of any activity controlled by the VWP permit; and

   f. A determination that the permitted activity has ceased and that the compensation for unavoidable adverse impacts has been successfully completed.

8. The board may terminate this permit without cause when the permittee is no longer a legal entity due to death, dissolution, or when a company is no longer authorized to conduct business in the Commonwealth. The termination shall be effective 30 days after notice of the proposed

termination is sent to the last known address of the permittee or registered agent, unless the permittee objects within that time. If the permittee does object during that period, the board shall follow the applicable procedures for termination under § 62.1-44.15:25 of the Code of Virginia and 9VAC25-230.

9. This VWP permit may be terminated by consent, as initiated by the permittee. The permittee shall submit a request for termination by consent within 30 days of completing or canceling all permitted activities and all required compensatory mitigation requirements. When submitted for project completion, the request for termination by consent shall constitute a notice of project completion. The director may accept this termination on behalf of the board. The permittee shall submit the following information:

   a. Name, mailing address, and telephone number;

   b. Name and location of the activity;

   c. The VWP permit number; and

   d. One of the following certifications:

      i. For project completion: "I certify under penalty of law that all activities and any required compensatory mitigation authorized by a VWP permit have been completed. I understand that by submitting this notice of termination that I am no longer authorized to perform activities in surface waters in accordance with the VWP permit, and that performing activities in surface waters is unlawful where the activity is not authorized by a VWP permit, unless otherwise excluded from obtaining a permit. I also understand that the submittal of this notice does not release me from liability for any violations of this VWP permit."

      ii. For project cancellation: "I certify under penalty of law that the activities and any required compensatory mitigation authorized by this VWP permit will not occur. I understand that by submitting this notice of termination that I am no longer authorized to perform activities in surface waters in accordance with the VWP permit, and that performing activities in surface waters is unlawful where the activity is not authorized by a VWP permit, unless otherwise excluded from obtaining a permit. I also understand that the submittal of this notice does not release me from liability for any violations of this VWP permit, nor does it allow me to resume the permitted activities without reapplication and issuance of another permit."

      iii. For events beyond permittee control, the permittee shall provide a detailed explanation of the events, to be approved by DEQ, and the following certification statement: "I certify under penalty of law that the activities or the required compensatory mitigation authorized by this VWP permit have changed as the result of events beyond my control (see attached). I understand that by submitting this notice of termination that I am no longer authorized to perform activities in surface waters in accordance with the VWP permit, and that

performing activities in surface waters is unlawful where the activity is not authorized by a VWP permit, unless otherwise excluded from obtaining a permit. I also understand that the submittal of this notice does not release me from liability for any violations of this VWP permit, nor does it allow me to resume the permitted activities without reapplication and issuance of another permit.

E. Inspection and Entry

Upon presentation of credentials, the permittee shall allow the board or any duly authorized agent of the board, at reasonable times and under reasonable circumstances, to conduct the actions listed in this section. For the purpose of this section, the time for inspection shall be deemed reasonable during regular business hours. Nothing contained herein shall make an inspection time unreasonable during an emergency.

1. Enter upon any permittee's property, public or private, and have access to, inspect and copy any records that must be kept as part of the VWP permit conditions;

2. Inspect any facilities, operations or practices (including monitoring and control equipment) regulated or required under the VWP permit; and

3. Sample or monitor any substance, parameter, or activity for the purpose of ensuring compliance with the conditions of the VWP permit or as otherwise authorized by law.

F. Duty to Provide Information

The board may request (i) such plans, specifications, and other pertinent information as may be necessary to determine the effect of an applicant's discharge on the quality of state waters or (ii) such other information as may be necessary to accomplish the purposes of this chapter. Any owner, permittee, or person applying for a VWP permit or general permit coverage shall provide the information requested by the board.

G. Monitoring and Records Requirements

1. Monitoring of parameters, other than pollutants, shall be conducted according to approved analytical methods as specified in the VWP permit. Analysis of pollutants will be conducted according to 40 CFR Part 136 (2000), Guidelines Establishing Test Procedures for the Analysis of Pollutants.

2. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

3. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart or electronic recordings for continuous monitoring instrumentation, copies of all reports required by the VWP permit, and records of all data used to

complete the application for the VWP permit, for a period of at least three years from the date of permit expiration. This period may be extended by request of the board at any time.

4. Records of monitoring information shall include:

   a. The date, exact place and time of sampling or measurements;

   b. The name of the individuals who performed the sampling or measurements;

   c. The date and time the analyses were performed;

   d. The name of the individuals who performed the analyses;

   e. The analytical techniques or methods supporting the information such as observations, readings, calculations and bench data used;

   f. The results of such analyses; and

   g. Chain of custody documentation.

H. Property rights

The issuance of a VWP permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize injury to private property or any invasion of personal rights or any infringement of federal, state or local laws or regulations.

I. Reopener

This VWP permit may be reopened for the purpose of modifying the conditions of the VWP permit to meet new regulatory standards duly adopted by the board. Cause for reopening VWP permits includes, but is not limited to when the circumstances on which the previous VWP permit was based have materially and substantially changed, or special studies conducted by the board or the permittee show material and substantial change, since the time the VWP permit was issued and thereby constitute cause for VWP permit modification or revocation and reissuance.

J. Compliance with State and Federal Law

As to the permitted activity(ies), compliance with a VWP permit constitutes compliance with the VWP permit requirements of the Law and regulations. .

K. Severability

The provisions of this VWP permit are severable.

L. Oil and Hazardous Substance Liability

Nothing in this VWP permit shall be construed to preclude the institution of legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under § 311 of the Clean Water Act or §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

M. Unauthorized Discharge of Pollutants

Except in compliance with a VWP permit, unless the activity is otherwise exempted or excluded, no person shall dredge, fill, or discharge any pollutant into, or adjacent to surface waters; withdraw surface water; otherwise alter the physical, chemical, or biological properties of state waters regulated under this chapter and make them detrimental to the public health, to animal or aquatic life, or to the uses of such waters for domestic or industrial consumption, for recreation, or for other uses; excavate in wetlands; or on or after October 1, 2001, conduct the following activities in a wetland:

1. New activities to cause draining that significantly alters or degrades existing wetland acreage or functions;

2. Filling or dumping;

3. Permanent flooding or impounding; or

4. New activities that cause significant alteration or degradation of existing wetland acreage or functions.

Attachment 1: VWP PERMIT CONSTRUCTION STATUS UPDATE FORM

Attached to VWP Individual Permit Number 18-1003

Permit Issuance March 5, 2019

Date (check one):

☐ June____, _____

☐ December _____, _____

VWP Individual Permit Number: 18-1003

Project Name and Location: Northfax, City of Fairfax

Status within each authorized surface water impact location, as identified on *Stream Impact Exhibit*, dated August 9, 2018, with latest revision date of August 21, 2018, and received September 12, 2018: (check one of the following status options for each impact number/location. Attach additional sheet(s) if needed.)

Authorized impact number	Construction activities not started	Construction activities started	Construction activities started but currently not active	Does this impact involve culvert(s)[1]?	Construction activities complete[2]
A1					
B1					
A2					
C1					

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation.

Authorized Signature: _____

Print Name: _____

Title: _____ Phone: _____

Date: _____ Email: _____

[1] Provide spot elevations of the stream bottom within the thalweg at the beginning and end of the pipe or culvert, extending to a minimum of 10 feet beyond the limits of the impact, with completion of all culvert installations.

[2] If all construction activities and compensatory mitigation requirements are complete, the permittee completes and signs the Termination Agreement section below within 30 days of last authorized activity and/or compensation completion. A completed and signed Agreement serves as Notice of Project Completion (9VAC25-210-130 F).

TERMINATION AGREEMENT BY CONSENT – PROJECT COMPLETION

Permittee Name: _____

Permittee Mailing Address: _____

Permittee Phone: _____

I hereby consent to the termination of coverage for VWP Individual Permit Number 18-1003.

"I certify under penalty of law that all activities and any required compensatory mitigation authorized by a VWP permit have been completed. I understand that by submitting this notice of termination that I am no longer authorized to perform activities in surface waters in accordance with the VWP permit, and that performing activities in surface waters is unlawful where the activity is not authorized by a VWP permit, unless otherwise excluded from obtaining a permit. I also understand that the submittal of this notice does not release me from liability for any violations of this VWP permit."

Permittee Signature: _____

DEQ
VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

Attachment 2: MONTHLY VWP PERMIT INSPECTION CHECKLIST

An inspection of all permitted impact areas, avoided waters and wetlands, and permanently preserved waters, wetlands and upland areas must be conducted at least once every month during active construction activities. Maintain this record on-site and available for inspection by DEQ staff.

Project Name	Northfax	**VWP Permit #**	18-1003	**Inspection Date**	
Inspector Name & Affiliation		**Phone # & Email Address**			

Based on reading of VWP permit No. 18-1003 including authorized impacts map entitled "Stream Impact Exhibit" dated August 9, 2018, with latest revision date of August 21, 2018, and received September 12, 2018, and my inspection on the date referenced above, to the best of my knowledge this project (____is in compliance / ____ is not in compliance) with the VWP Permit.

I certify that the information contained in this report is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Inspector _____ Date _____

REVIEWED DURING SITE INSPECTION	**Yes**	**No**	**N/A**	**Notes & Corrective Action Taken / Date Completed (use back of page if necessary)**
Unauthorized impacts to surface waters, including wetlands, or upland preservation areas **have occurred**.* *(This includes sedimentation impacts due to inadequate or failed erosion controls.)*	☐	☐		
Non-impacted wetlands, streams and preservations areas within 50 feet of construction are clearly marked to prevent unpermitted impacts.	☐	☐	☐	
Temporary impacts are being restored to original contours, stabilized, and allowed to re-establish with wetland vegetation.	☐	☐	☐	
Construction activities are **not** substantially disrupting aquatic life movement.	☐	☐	☐	
E&S controls are present, properly maintained, and functioning.	☐	☐	☐	
In-stream work is being performed in the dry with the appropriate use of cofferdams, sheetpiling, etc., to minimize stream bottom disturbance and turbidity.	☐	☐	☐	
Pipes and/or culverts for road crossings are countersunk to provide for the re-establishment of low flow fish passage and/or a natural stream bottom, unless otherwise authorized.	☐	☐	☐	
Time-of-year restrictions regarding impacts to surface waters are being adhered to.	☐	☐	☐	
Water quality monitoring is being conducted during stream impacts.	☐	☐	☐	
Streams and wetlands are free from any sheen or discoloration that may indicate a spill of oil, lubricants, concrete or other pollutants. **	☐	☐	☐	
Heavy equipment is placed on mats or geotextile fabric when working in wetlands.	☐	☐	☐	
Exposed slopes/stream banks are stabilized immediately upon completion of work in each impact area.	☐	☐	☐	

* If unauthorized impacts have occurred, you **must** email or fax a copy of this report to DEQ within 24 hours of discovery. Email: vwp.nro@deq.virginia.gov Fax: 703-583-3821

** Any fish kills, or spills of fuels or oils must be reported to DEQ **immediately upon discovery** at 703-583-3864. If DEQ cannot be reached, the spill or fish kill shall be reported to the Virginia Department of Emergency Management (VDEM) at 1-800-468-8892 or the National Response Center (NRC) at 1-800-424-8802. Any spill of oil as defined in § 62.1-44.34:14 of the Code of Virginia that is less than 25 gallons and that reaches, or that is expected to reach, land only is not reportable, if recorded per § 62.1-44.34:19.2 of the Code of Virginia and if properly cleaned up.

Notes

March 5, 2019

FACT SHEET
Virginia Water Protection Individual Permit No. 18-1003
Northfax, City of Fairfax

DEQ has reviewed the application for the Virginia Water Protection (VWP) Individual Permit Number 18-1003 and has determined that the project qualifies for an individual permit.

The following details the application review process and summarizes relevant information for developing the Part I - Special Conditions for permit issuance.

1. Contact Information:

Permittee Legal Name and Address:

Northfax JV LLC
3900 Jermantown Road, Suite 300
Fairfax, Virginia 22030
Mr. John E. Napolitano, Manager
703-934-4600

Agent Legal Name and Address:

Apex Companies, LLC c/o
9700 Capital Court, Suite 100
Manassas, Virginia 20110
Mr. Jason Franti
703-396-6730

2. Processing Dates:

Received Application:	June 25, 2018
Received VMRC Number:	June 25, 2018
Application Complete:	September 12, 2018
Permit Fee Deposited by Accounting:	August 27, 2018
Application Suspended:	September 26, 2018
Application Reinstated:	December 11, 2018
Processing Deadline (120 days from Complete Application):	March 27, 2019
1st Request for Additional Information Sent:	July 3, 2018
Final Request for Additional Information Received:	September 12, 2018
Section 106 SPGP Coordination Initiated:	August 13, 2018
Section 7 SPGP Coordination Initiated:	August 13, 2018
Request for comments sent to USACE, USEPA and USFWS:	August 13, 2018
Completion of SPGP coordination:	October 31, 2018
Notification of JPA sent to Local Government(s):	June 28, 2018
Commissioner of Revenue Contacted:	*N/A*
Request for comments sent to VDH, VDGIF, VDCR, VMRC:	June 28, 2018
Letters sent to Riparian Land Owners:	July 11, 2018
Draft Permit Package Issued:	January 2, 2019
Copy of Public Notice sent to DEQ Central Office:	January 2, 2019
Copy of Public Notice sent to Local Gov't and Planning District:	January 2, 2019
Application Suspended Pending Public Notice:	January 17, 2019
Public Notice Published:	January 18, 2019
Application Reinstated:	January 18, 2019
End of 30-Day Public Comment Period:	February 18, 2019
Received Verification of Publication:	January 22, 2019
Permit Issued:	March 5, 2019

3. Project Location:

The project site is located northeast of the intersection of Chain Bridge Road (VA-123) and Fairfax Boulevard (US-50) in the City of Fairfax, Virginia.

City/County:	City of Fairfax
Waterbody:	Accotink Creek, UT
Basin:	Potomac
Subbasin:	Middle Potomac
Section:	7
Class:	III
Special Standards:	b
HUC:	02070010
Latitude & Longitude:	38.859417, -77.309689
U.S.G.S. Quadrangle:	Fairfax
State Watershed No.:	VAN-A15R

4. Project Description:

The permittee proposes to construct a mixed-use development with associated infrastructure, on an approximately 10.6 acre development site, known as "Northfax."

5. Avoidance and Minimization Efforts:

Avoidance and minimization efforts have been documented by the applicant in the JPA as well as subsequent submittals. The purpose and need of the project is a mixed-use development. However, the purpose and need cannot be met without flood control. A perennial stream channel bisects the property and the development site has been known historically to flood. Complete and partial avoidance was considered by the applicant, however due to the flood conditions and the location of surface waters onsite, completely avoiding or partially piping the channel would result in minimizing the developable area to around fifty-percent of the original design with flooding concerns further minimizing the developable area.

Complete avoidance was considered and deemed infeasible to meet the projects purpose and need as it would reduce the developable land to 4.40 acres thus reducing the Annualized Cost on Return (IRR) to well below the target. In addition, the flood elevations would still render approximately fifty-percent of the developable land area in an unusable condition due to the presence of RPA and flood zones. A historic trolley bridge is located just off-site over the intermittent channel, downstream of the confluence of the two channels, which causes back watering due to its limiting size. Discharge at the confluence of the stream channels during the 100-year storm creates a significant back-water situation thus further limiting developable area due to flood concerns.

A partial stream piping scenario was also considered, in which approximately 500 linear feet of stream channel would be piped leaving most of the perennial stream and all the intermittent stream intact. In this scenario Orchard Road would be still constructed in order to access the western portion of the property. As the stream channel bisects the 10.6 acre development site, the use of Orchard Road would necessitate significant alteration to the flood zones through the installation of a culverted road crossing, thus constricting flood flows and increasing flooding to the northern portion of the property. The back-water flooding associated with the historic trolley bridge would still be a limiting factor for developable land. Flood elevations will allow development of approximately fifty-percent of the total developable area rendering the IRR for the alternative well below the target, thus this alternative was deemed infeasible to meet the projects purpose and need.

For additional information, see page 4-5 of the JPA dated June 22, 2018, the additional information response dated August 10, 2018, and the response to EPA comments dated October 16, 2018.

Based upon staff review, the applicant has demonstrated that the proposed plan represents the least environmentally damaging and practicable alternative and all unavoidable permanent impacts will be adequately mitigated through the proposed compensation plan.

6. Project Impacts:

This permit authorizes the total permanent impact to 0.50 acre (1,646 linear feet) of stream channel. Authorized surface water impacts shall be as depicted on the impacts map entitled Stream Impact Exhibit dated August 9, 2018, with latest revision date of August 21, 2018, and received September 12, 2018.

7. Compensation for Unavoidable Impacts:

The permittee shall compensate for permanent stream impacts through the purchase of 1,675 stream credits or 4,761 Stream Condition Units from a DEQ approved mitigation bank, in-lieu fee fund, or a combination thereof that is authorized and approved by DEQ to sell credits in the area in which the impacts will occur and has credits available (as released by DEQ). The credit sale shall be in accordance with the approved Mitigation Banking Instrument for the mitigation bank. Purchase of required mitigation credits shall occur first through the purchase of available released credits followed by the purchase of advance credits.

The compensation package conforms with the preference hierarchy of the 2008 Compensatory Mitigation Rule issued by the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers (USACE) and DEQ's Guidance Memorandum No. 09-2004 (Applying Compensatory Mitigation Preferences Provided in the EPA Mitigation Rule to Virginia Water Protection Permitting).

8. Site Inspection:

A site visit was conducted on July 23, 2018. The site visit confirmed the site description provided in the applications materials accurately characterized the surface waters on the site. A summary of the site inspection is located in VWP Permit File No. 18-1003.

9. Relevant Regulatory Agency Comments:

As part of the application review process, DEQ contacted the appropriate state regulatory agencies and coordinated with various federal regulatory agencies, including the U.S. Army Corps of Engineers (USACE). No comments received required a change to VWP individual permit Part I - Special Conditions. Therefore, the staff anticipates no adverse effect on water quality and fish and wildlife resources provided the applicant adheres to the permit conditions.

a. Summary of State Agency Comments and Actions

By email/letter dated June 28, 2018, comments were requested from the following state agencies: Virginia Department of Game and Inland Fisheries (DGIF), Virginia Department of Conservation and Recreation (DCR), Virginia Marine Resources Commission (VMRC), and

Virginia Department of Health (VDH). Failure to provide comments within 45 calendar days of the DEQ request for comments infers that the agency has no comments on the project activities.

DCR
DCR provided the following comments in a memorandum dated and transmitted by email on August 10, 2018:

- Recommends the implementation of the following USFWS voluntary measures for the conservation of the Rusty patched bumble bee (*Bombus affinis*): avoid pesticide use, avoid herbicide use, and plant native flowers that bloom throughout the spring and summer to support pollinator habitat.

The measures will not be included in the permit as they are listed as voluntary.

DGIF
DGIF provided comments to DEQ by email dated August 10, 2018.

- Recommended conducting any in-stream activities during low or no-flow conditions, using non-erodible cofferdams or turbidity curtains to isolate the construction area, blocking no more than 50% of the streamflow at any given time, stockpiling excavated material in a manner that prevents reentry into the stream, restoring original streambed and streambank contours, revegetating barren areas with native vegetation, and implementing strict erosion and sediment control measures.

  The special conditions of the permit address these activities.

- Recommend coordination with DCR's Department of Natural Heritage as the project is located within 2 miles of a documented occurrence of a state or federal threatened or endangered plant or insect species and/or other Natural Heritage coordination species.

Staff requested comments from DCR on the proposed project on June 28, 2018.

- Recommend that the permittee avoid and minimize impacts to undisturbed forest, wetlands, and streams to the fullest extent practicable to minimize overall impacts to wildlife and our natural resources. DGIF also recommended maintaining undisturbed naturally vegetated buffers of at least 100 feet in width around all on-site wetlands and on both sides of all perennial and intermittent streams.

  Staff reviewed the proposed impacts to surface waters and determined those proposed have been minimized to the maximum extent practicable.

- Recommended that the stormwater controls for this project be designed to replicate and maintain the hydrographic condition of the site prior to the change in landscape.

  Oversight of stormwater management and erosion and sediment control measures is the responsibility of DEQ-Stormwater Management or the locality, if such responsibility has

been delegated. Any such requirements will be implemented under the oversight of that program.

- Recommended that all tree removal and ground clearing adhere to a time of year restriction protective of resident and migratory songbird nesting from March 15 through August 15 of any year.

  This time of year restriction was not included in the permit as it's not associated with a threatened or endangered species. The recommendation was forwarded to the permittee for their consideration.

- Recommended adherence to erosion and sediment controls during ground disturbance.

  Oversight of stormwater management and erosion and sediment control measures is the responsibility of DEQ-Stormwater Management or the locality, if such responsibility has been delegated. Any such requirements will be implemented under the oversight of that program.

VDH
VDH provided comments in a memorandum dated July 12, 2018, and received on July 16, 2018, that no public raw water intakes were found, in the commonwealth, downstream from the proposed construction site.

VMRC
VMRC provided comments in a letter dated and transmitted by email on August 7, 2018, stating that the project is not within the purview of the agency and the Commission has no objection to DEQ's issuance of a VWP individual permit. A "No Permit Necessary" letter was issued on June 6, 2018.

b. Summary of Federal Agency Comments and Actions

The project is being reviewed by DEQ for a State Programmatic General Permit (SPGP). By letter dated July 13, 2018, comments were requested from the following federal agencies: Environmental Protection Agency (EPA), U.S. Army Corps of Engineers (USACE), and U.S. Fish and Wildlife (FWS).

Section 106
USACE provided comments to DEQ by email transmitted October 30, 2018 stating the Department of Historic Resources concurs with the Corps' determination that there will be "No Historic Properties Affected" by the proposed project.

Section 7
FWS responded to the request for Section 7 comments by email transmitted on August 14, 2018 requesting a Self-Certification Letter. DEQ responded on August 24, 2018, with the Self-Certification Letter. No response was received within 30 days of the latest transmittal.

Federal Review
EPA responded to the request for Federal Review by email transmitted on August 28, 2018, requesting more information on avoidance and minimization. The applicant responded to the comments, and the response was forwarded to EPA on October 16, 2018. No response was received within 15 days of the latest transmittal. No project comments were received from FWS or USACE.

10. Riparian Landowner Notification:

Staff notified riparian landowners located adjacent to the impact area by letter dated July 11, 2018. The impacted stream channel is piped starting at the edge of the property continuing offsite, therefore downstream landowners were not notified.

Notifications of riparian and adjacent landowners were conducted in accordance with DEQ's Guidance Memorandum No. 11-2005 (Revised Local Government, Riparian Property Owner, Adjacent Property Owner or Resident, and General Public Notification Procedures for VPDES, VPSA and VWP Permit Applications and Draft Permits).

No significant responses were received.

11. Changes in Permit Part I - Special Conditions Due to Public Comments:

The public notice was published in Fairfax County Times Friday-Sunday, January 18-20, 2019, on January 18, 2019. The public comment period ran from January 19, 2019, to February 18, 2019.

One public comment letter was received. However, no substantial or disputed issues were presented that warranted revisions to the draft conditions of the permit.

12. Special Conditions:

The following conditions were developed to protect instream beneficial uses, to ensure compliance with applicable water quality standards, to prevent significant impairment of state waters or fish and wildlife resources, to provide for no net loss of wetland acreage, and to provide no net loss of functions in all surface waters through compensatory mitigation and monitoring and reporting.

Section A Authorized Activities

Nos. 1-3 addresses the activities authorized by this permit, including impact types and limits.

Section B Permit Term

Nos. 1-2 addresses the permit term and re-issuance process to ensure that all permit conditions are completed.

Section C Standard Project Conditions

No. 1 addresses the requirement for the minimization of adverse impacts to instream beneficial uses.
No. 2 ensures that the project will be executed in a manner that limits the disruption of the movement of aquatic life.
No. 3 ensures that downstream flows will be maintained to protect both instream and off-stream beneficial uses
No. 4 ensures the minimization of adverse effects on navigation.
No. 5 ensures the passage of high flows.
No. 6 requires maintenance of continuous flow of perennial springs for the protection of instream beneficial use.
No. 7 ensures that dredging and filling operations will minimizes stream bottom disturbances and turbidity.
No. 8 requires instream activities to be conducted during low-flow conditions to protect instream beneficial uses.
Nos. 9 through 11 provide requirements and limitations on the entry of various materials (including concrete, fill, construction and waste material, fuels, lubricants, and untreated stormwater runoff) into state waters.
Nos. 12 and 13 limit the use of machinery and equipment in surface waters to protect beneficial uses
Nos. 14 through 18 require temporary disturbances to surface waters during construction to be avoided and minimized to the maximum extent practicable and the restoration of such temporary disturbances.
No. 19 prohibits the violation of Water Quality Standards in surface waters as a result of project activities
No. 20 requires the identification of all non-impacted surface waters in the vicinity of the proposed activity to prevent unpermitted impacts
Nos. 21 through 25 set forth all reporting requirements concerning construction, monitoring, compensation, and restoration as required by current law and regulations.

Section D Stream Modifications, Including Intake/Outfall Structures

No. 1 prohibits the use of stream substrate for erosion control to avoid additional impacts to state waters.
No. 2 requires upland disposal of material removed from stream substrate to avoid unpermitted impacts to surface waters.
No. 3 ensures riprap placement conforms to current law and regulation.
Nos. 4 and 5 direct the placement and contents of materials for the construction of submerged structures, and on-bank storage and staging of materials, to protect water quality and fish and wildlife resources.

Section E Installation of Utilities

No. 1 requires the minimization of disturbance to surface waters and restoration to preconstruction conditions following utility line installation.

No. 2 sets a 90-day time limit for temporary sidecasting during trench excavation to minimize impacts to surface waters.
No. 3 provides the requirements for trench construction to avoid the drainage of surface waters.

Section F Road Crossings

No. 1 provides specifications for access road construction to minimize adverse effects to surface waters.
No. 2 ensures pipes and culvert construction is conducted in the dry to protect water quality and wildlife habitat.
No. 3 requires that temporary impacts be restored immediately following construction to minimize impacts to water quality and fish and wildlife resources.
No. 4 summarizes requirements for pipe and culvert placement and countersinking to provide for the re-establishment of a natural stream bottom and low flow channel to maintain instream beneficial uses
No. 5 requires measurement of stream bottom elevations at road crossings to ensure for the re-establishment of a natural stream bottom and low flow channel to maintain instream beneficial uses. The intent of this condition is to maintain a hydrologic connection and enable the stream bottom to reestablish in the culvert. The stream crossing(s) to which this condition pertains is identified in the condition.

Section G Stormwater Management Facilities

No. 1 defines the general requirements for stormwater management facility construction to minimize adverse effects to aquatic resources and provide for long-term aquatic resources protection and enhancement.
No. 2 provides limits and guidance for maintenance excavation to avoid unpermitted impacts to surface waters.

Section H Project Construction Monitoring and Submittals (Impact Site)

Nos. 1 through 6 address monitoring and submittals required for pre-construction, during construction and post-construction for the impact areas on site.

Section I Compensatory Mitigation

No. 1 describe the compensatory mitigation required to mitigate for the permitted impacts.
No. 2 describes the documentation requirement for the purchase of the required amount of credits.

13. General Conditions:

The general conditions specified in the effective VWP Permit Program Regulation 9VAC25-210 apply to all VWP individual permits.

14. General Criteria (9VAC25-260-20 A):

State waters, including wetlands, shall be free from substances attributable to sewage, industrial waste, or other waste in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such water or which are inimical or harmful to human, animal, plant, or aquatic life.

Specific substances to be controlled include, but are not limited to: floating debris, oil, scum, and other floating materials; toxic substances (including those which bioaccumulate); substances that produce color, tastes, turbidity, odors, or settle to form sludge deposits; and substances which nourish undesirable or nuisance aquatic plant life. Effluents which tend to raise the temperature of the receiving water will also be controlled. Conditions within mixing zones established according to 9VAC25-260-20 B do not violate the provisions of this subsection.

15. Staff Findings and Recommendations:

- In compliance with § 401 of the Clean Water Act, as amended (33 USC § 1341) and the State Water Control Law and regulations adopted pursuant thereto, the board has determined that there is a reasonable assurance that this VWP permit, if complied with, will protect instream beneficial uses, will not violate applicable water quality standards, and will not cause or contribute to a significant impairment of state waters or fish and wildlife resources. In issuing this VWP permit, the board has not taken into consideration the structural stability of any proposed activities.

- The proposed permit conditions address no net loss of wetland acreage and no net loss of functions in all surface waters, through the avoidance and minimization of wetland impacts to the maximum extent practicable; compensatory mitigation; and compensation monitoring and reporting. Permitted wetland impacts have been inventoried in evaluating this proposed permit.

- The draft permit reflects the required consultation with and full consideration of the written recommendations of VMRC, VDH, DCR and DGIF.

Staff recommends VWP Individual Permit Number 18-1003 be issued as proposed.

Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193
(703)583-3800
www.deq.virginia.gov

Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director
(804) 698-4000

Thomas A. Faha
Regional Director

March 5, 2019

Mr. John E. Napolitano, Manager
Northfax JV LLC
3900 Jermantown Road, Suite 300
Fairfax, Virginia 22030

SENT VIA E-MAIL: john@lann.com
RECEIPT CONFIRMATION REQUESTED

RE: State Program General Permit (17-SPGP-01) Authorization
Permit Number: 18-1003
Northfax, City of Fairfax, Virginia

Dear Mr. Napolitano:

The Virginia Department of Environmental Quality (DEQ) has received and completed technical review of your application request dated June 22, 2018, and received June 25, 2018. Based on DEQ's technical review, DEQ has determined the proposed project satisfies the terms and conditions contained in the USACE's, Norfolk District State Program General Permit (17-SPGP-01). You are required to adhere to all terms and conditions contained within the attached 17-SPGP-01 and any Special Conditions listed below. Your 17-SPGP-01 verification is effective as of the date on this letter and remains effective until **May 31, 2022**.

The impacts are associated with the construction of a mixed-use development and associated infrastructure on an approximately 10.6 acre development site.

The applicant is hereby authorized to permanently impact 0.50 acre (1,646 linear feet) of stream channel.

The conceptual mitigation plan submitted with your application indicated that mitigation will include the purchase of 1,675 stream credits or 4,761 Stream Condition Units. This mitigation shall be completed and documentation shall be submitted to DEQ prior to commencement of project impacts.

This letter shall serve as verification to proceed with the project as proposed. The permittee shall be responsible for contacting DEQ to revise this verification, including provisions for compensatory mitigation, if the location or amount of the impacts changes.

Please contact Wynn Prusaczyk by phone at (703) 583-3871 or email at Wynn.Prusaczyk@deq.virginia.gov if you have any questions or concerns regarding the information contained herein.

Respectfully,

Trisha M. Beasley

Trisha M. Beasley, Regional VWPP Program Manager

Attachments: 17-SPGP-01

Cc (via E-mail):

Mr. Jason Franti, Apex Companies, LLC
Mr. Jim Irre, Apex Companies, LLC
Ms. Theresita Crockett-Augustine, USACE, Northern VA Field Office

DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NORFOLK DISTRICT
FORT NORFOLK
803 FRONT STREET
NORFOLK VA 23510-1011

CENAO-WRR STATE PROGRAMMATIC GENERAL PERMIT 17-SPGP-01

Effective Date: June 29, 2017 Expiration Date: May 31, 2022

I. AUTHORITIES:

A. 17-SPGP-01 authorizes the discharge of dredged or fill material in non-tidal waters, of the United States, including wetlands, associated with certain residential, commercial, and institutional developments and linear transportation projects within the geographical limits of the Commonwealth of Virginia and under the regulatory jurisdiction of the U.S. Army Corps of Engineers, Norfolk District (Corps or Norfolk District). These projects must have no more than minimal individual and cumulative impacts and must meet all the terms and conditions outlined herein. The use of 17-SPGP-01 is restricted to those projects that have avoided and minimized impacts to waters of the U.S., including wetlands, to the maximum extent practicable.

B. The people of the Commonwealth of Virginia (Virginia or "the Commonwealth") are hereby authorized by the Secretary of the Army and the Chief of Engineers, under Section 404 of the Clean Water Act (CWA) (33 U.S.C. § 1344), to perform the aforementioned work in non-tidal waters and wetlands of the Commonwealth as described herein. The Corps' authority and guidance to develop general permits is contained in 33 U.S.C. § 1344(e), 33 C.F.R. § 325.2(e)(2), 33 C.F.R. § 325.3(b), and Corps Regulatory Guidance Letter (RGL) 83-7.

II. PROCEDURES:

A. Delineation Confirmations: Prior to the submission of an application for any Residential, Commercial, or Institutional Development Activity or Linear Transportation Activity covered by 17-SPGP-01, a proponent must first obtain a Corps confirmed delineation that is approved for use with a permit application (Preliminary JD) or a confirmed jurisdictional determination that includes the limits of all waters of the U.S., including wetlands that are located within the project boundaries (Approved JD). The applicant will contact the Corps to obtain a delineation confirmation/jurisdictional determination. When appropriate, a separate delineation confirmation may also be required from the Environmental Protection Agency (EPA).

B. Application: The application must be submitted to the Virginia Marine Resource Commission (VMRC) and clearly marked 17-SPGP-01. The following information must be submitted as part of the complete application package:
   1) A completed and signed Standard Joint Permit Application (JPA). The applicant must utilize the most recent version.

http://www.nao.usace.army.mil/Missions/Regulatory/

2) A completed SPGP Complete Application Checklist. The applicant must utilize the most recent version.
3) A Corps confirmed delineation that is approved for use with a permit application OR a confirmed jurisdictional determination that includes the limits of all waters of the U.S., including wetlands that are located within the project boundaries.

This information listed above will be required to render an application complete for 17-SPGP-01 purposes. The application package must be submitted to the Virginia Marine Resource Commission (VMRC) and clearly marked 17-SPGP-01. The VMRC will forward a copy of the application to the applicable VDEQ office. Once the VDEQ has deemed the application complete the VDEQ will forward the complete application to the appropriate federal agency when coordination is required.

For purposes of 17-SPGP-01, the VDEQ is the agency responsible for ensuring permit applications meet the informational and technical requirements of 17-SPGP-01 and for issuance of 17-SPGP-01 verification letters for qualifying Residential, Commercial, and Institutional and Linear Transportation projects.

C. State Approvals: In order for 17-SPGP-01 to be valid, permittees must obtain the following state approvals prior to commencement of work in waters of the U.S.:

1) Virginia Department of Environmental Quality (VDEQ) Virginia Water Protection (VWP) permit
2) VMRC permit, when required
3) VDEQ informal resolution, letter of agreement, executive compliance agreement or consent order when the 17-SPGP-01 is utilized for resolution of non-compliance and/or enforcement (at Corps discretion).

The 17-SPGP-01 may also be used for activities excluded from State VWP permitting when those activities are associated with a larger residential, commercial, institutional development and/or linear transportation project that requires state approval..

III. DEFINITIONS:

A. Loss of waters of the United States: Waters of the United States (WOUS), including wetlands that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage/linear footage of the loss of WOUS is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for 17-SPGP-01; it is not a net threshold that is

calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services.

1) The loss of stream bed includes the linear feet of stream bed that is filled or excavated. WOUS temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of WOUS. Impacts resulting from activities eligible for exemptions under Section 404(f) of the Clean Water Act are not considered when calculating the loss of WOUS.
2) Per Norfolk District Pipe Repair Guidelines: pipe repair and replacement is considered a permanent impact
3) The length of any box culvert, pipe, or bridge that is being removed and replaced, whether in the same location or not, is considered a permanent impact. However, if a pipe/culvert/bridge is left in place and is extended or rip-rapped, then only the length and area of the extension or rip-rap is considered a permanent impact. [Based on Norfolk District letter guidance May 5, 2009 to VDOT]

B. Natural stream design: a stream channel design that mimics the dimension, pattern, and profile of a representative reference stream reach.

C. Permittee: the responsible party in receipt of the 17-SPGP-01 verification from the VDEQ. The permittee will be the responsible party for complying with all 17-SPGP-01 general conditions as well as any additional special conditions required of each project.

D. Residential developments: construction or expansion of a multiple unit residential development or a residential subdivision including the construction of building foundations, building pads and attendant features that are necessary for the use of the residence or residential development. Attendant features may include but are not limited to roads, parking lots, garages, yards, utility lines, storm water management facilities, septic fields, and recreation facilities such as playgrounds, playing fields, and golf courses (provided the golf course is an integral part of the residential development).

E. Commercial and Institutional Developments: construction or expansion of commercial and institutional building foundations, building pads, and attendant features that are necessary for the use and maintenance of the structures. Attendant features may include, but are not limited to, roads, parking lots, garages, yards, utility lines, storm water management facilities, and recreation facilities such as playgrounds and playing fields. Examples of commercial developments include retail stores, industrial facilities, restaurants, business parks, and shopping centers. Examples of institutional developments include schools, fire stations, government office buildings, judicial buildings, public works buildings, libraries, hospitals, and places of worship.

F. Linear transportation: the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxi ways).

IV. AUTHORIZED ACTIVITIES

A. Residential, Commercial, and Institutional Development Activities Eligibility Criteria:

1) Activities are subject to Corps regulations;

2) Activities involve the discharge of dredged/fill material associated with residential, commercial, and institutional projects and propose:
   a. the TOTAL permanent loss of not more than 1 acre of non-tidal waters of the US, to include stream channel, wetlands and open waters.
   AND
   b. the permanent loss of not more than 2,000 linear feet of stream channel;

3) Activities meet the general and special conditions of 17-SPGP-01 listed in this document and any special conditions required of each project-specific verification;

4) Compensatory mitigation is provided in accordance with the mitigation standards and general conditions listed in this document.

5) Activities have received and completed all applicable federal review as listed in the general conditions of this document.

****The following activities are NOT authorized under the 17-SPGP-01:**

- The Construction of one stand-alone single family home and/or its attendant features.
- Golf courses that are not an integral part of a residential development.
- The construction of new ski areas.

B. Linear Transportation Activities Eligibility Criteria:

1) Activities are subject to Corps regulations;

2) Activities involve the discharge of dredged/ fill material associated with the construction, expansion, modification, or improvement of linear transportation projects that are single and complete with independent utility and propose:

a. the TOTAL permanent loss of not more than ½ acre of non-tidal waters of the US, to include stream channel, wetlands and open waters
AND
b. the permanent loss of not more than 1,000 linear feet of stream channel at any single impact site with independent utility.

3) Activities meet all general conditions of 17-SPGP-01 listed in this document and any special conditions required of each project-specific verification;

4) Compensatory mitigation is provided in accordance with the mitigation standards and general conditions listed in this document.

5) Activities have received and completed all applicable federal review as listed in the general conditions of this document.

6) Construction and/or relocation of utility lines by the applicant and within the right-of- way/easements of the project and performed in direct relation with the project are included in the project impact totals.

V. GENERAL CONDITIONS:

The following conditions apply to all activities authorized under 17-SPGP-01. Work that does not meet one or more of the terms or general conditions of 17-SPGP-01, including work that has been determined to be more than minimal in nature (at any impact level), will require consideration under a different type of Corps permit.

1) Other permits: Authorization does not obviate the need to obtain other Federal, state, or local authorizations required by law or to comply with all Federal, state, or local laws.

2) Minimal effects: Projects authorized shall have no more than minimal individual or cumulative adverse environmental impacts.

3) Discretionary authority: The Corps District Commander retains discretionary authority to require processing of an individual permit based on concerns for the aquatic environment or for any other factor of the public interest (33 C.F.R. § 320.4(a)). This authority is exercised on a case-by-case basis.

4) Single and complete projects: The activity must be a single and complete project.
   a. For non-linear projects: the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other

association of owners/developers. A single and complete non-linear project must have independent utility (see "independent utility" as defined in these general conditions). Single and complete non-linear projects may not be "piecemealed" to avoid the limits in a17-SPGP-01 authorization.

b. For linear transportation: For projects with multiple crossings or encroachments a determination of "single and complete" will typically apply to each crossing or encroachment of waters that occurs (i.e., single waterbody and/or wetlands) at separate and distinct locations and with independent utility. However, in cases where there are many crossings in close proximity, numerous crossings of the same waterbody, multiple crossings, or multiple encroachments that otherwise may have more than minimal individual or cumulative impacts; the Corps has the discretion to consider all the crossings cumulatively as one single and complete project.

5) Independent utility: A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. A phase of a project that would be constructed even if the other phases were not built can be considered as a separate, single and complete project with independent utility. For a linear transportation project, separate impact areas on a new location roadway are not considered to have independent utility and thus impacts would be considered cumulatively and eligible for a single 17-SPGP-01 verification. However, separate impact areas on a roadway that is being widened or where pipes are being replaced at multiple crossings are considered to have independent utility, and each crossing would be considered eligible for a separate 17-SPGP-01 verification. Although such impacts are not considered cumulatively for permitting purposes, they are considered cumulatively when assessing the need for federal review.

6) Multiple general permit authorizations.: The 17-SPGP-01 may be combined with other Corps general permits (including Nationwide, Regional or Letters of Permission) as long as the impacts are considered cumulatively and do not exceed the acreage limit or linear footage limits of the 17-SPGP-01. Two separate activities (e.g. Residential and Linear, within 17-SPGP-01, may be combined as long as they do not exceed the acreage or linear footage threshold of the activity with the highest specified acreage or linear footage threshold).

7) Permit on-site: The permittee shall ensure that a copy of 17-SPGP-01 and the accompanying authorization letter are at the work site at all times. These copies must be made available to any regulatory representative upon request. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be expected to comply with all conditions of any 17-SPGP-01 verification.

8) Historic Properties: In cases where the Corps determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the District Engineer with the appropriate documentation to demonstrate compliance with those requirements. The District Engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the 17-SPGP-01 activity or whether additional section 106 consultation is necessary.

Non-federal permittees shall not begin work on the activity until Section 106 review and/or coordination has been completed AND they have received their 17-SPGP verification letter from the VDEQ.

Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such permit or assistance despite the adverse effect created or allowed by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

Discovery of Previously Unknown Remains and Artifacts: If a permittee discovers any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, the permittee must immediately notify the District Engineer of what has been found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The District Engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

Tribal Rights: No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

9) Federal Lands: Authorized activities shall not impinge upon the value of any National Wildlife Refuge, National Forest, National Park, or any other area administered by the United States Fish and Wildlife Service (USFWS), U.S. Forest Service, or National Park Service unless approval from the applicable land management agency is provided with the permit application.

10) Endangered Species: No activity is authorized under any 17-SPGP-01 which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any 17-SPGP-01 which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the District Engineer with the appropriate documentation to demonstrate compliance with those requirements. The District Engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the 17-SPGP-01 activity, or whether additional ESA consultation is necessary.

Non-federal permittees shall not begin work on the activity until Section 7 review and/or consultation has been completed AND they have received their 17-SPGP verification letter from the VDEQ.

Authorization of an activity by a 17-SPGP-01 does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the National Marine Fisheries Service (NMFS), The Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS or their World Wide Web

pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.noaa.gov/fisheries.html respectively.

11) Migratory Birds and Bald and Golden Eagles: The permittee is responsible for obtaining any "take" permits required under the USFWS regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the USFWS to determine if such "take" permits are required for a particular activity. As of the issuance date of the 17-SPGP the current contact, concerning this matter, is at the U.S. Fish and Wildlife Service, Thomas Wittig at 413-253-8577 or Thomas_wittig@fws.gov. Information on active bald eagle nests in the project area can be obtained via The Center for Conservation Biology (CCB) Virginia Eagles Nest Locator: http://www.ccb-wm.org/virginiaeagles/index.htm.

12) Wild and Scenic Rivers: Currently, there are no designated Wild and Scenic Rivers in Virginia. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river has determined, in writing, that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service (NPS), U.S. Forest Service (USFS), Bureau of Land Management (BLM), USFWS). Impacts that occur in these resource areas will require coordination with the appropriate Federal agency.

13) Department of Defense (DOD) Siting Clearinghouse Coordination: For all commercial and institutional development projects that include the construction of wind energy generating structures, solar towers, or overhead powerlines the VDEQ must notify the DOD Clearinghouse of the permitted project. The VDEQ will send a copy of the joint permit application and SPGP verification letter to the following address: DoD Clearinghouse, Attn: David Blalock, 101 Marietta St. NW, Suite 3120, Atlanta, Georgia 30303 or david.c.blalock2.civ@mail.mil

14) Navigation: No authorized activity may cause more than a minimal adverse effect on navigation.

The permittee understands and agrees that if future operations by the United States require the removal, relocation, or other alteration of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his/her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United

States. No claim shall be made against the United States on account of any such removal or alteration.

15) Floodplains: The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

16) 408 Certification: Under 33 USC 408, no activity may temporarily or permanently alter or make use of a U.S. Army Corps of Engineers civil works project unless reviewed and permitted by the Secretary of the Army. The Corps may grant this permission if the work does not impair the usefulness of the project and is not injurious to the public interest.

17) Environmental justice: Activities authorized under 17-SPGP-01 must comply with Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations".

18) Federal liability: In issuing 17-SPGP-01, the Federal government does not assume any liability for the following: (a) damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes; (b) damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest; (c) damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by 17-SPGP-01; (d) design or construction deficiencies associated with the permitted work; (e) damage claims associated with any future modification, suspension, or revocation of this permit.

19) Avoidance and minimization: Except as provided under section 404(b)(2), no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.(40 CFR 230.l0(a)-(d) Section 404 (b)(l) Guidelines).

20) Compensatory Mitigation: Mitigation will be required for all permanent impacts, on a project site, once the compensatory mitigation threshold has been exceeded for waters OR wetland impacts.

a. Wetland mitigation: will generally be required for all residential, commercial, and institutional development projects where the total permanent impacts exceed 1/10 acre AND for all wetland impacts on linear transportation projects that are funded in part or in total by local, state or federal funds.

Generally, the minimum required wetland mitigation ratios will be as follows:

- 2:1 for forested wetlands
- 1.5:1 for scrub-shrub wetlands
- 1:1 for herbaceous emergent wetlands
- 0.5:1 for permanent loss of open waters
- 1:1 for conversion of forested wetlands to herbaceous emergent wetlands.

Compensatory mitigation may be required on a case-by-case basis to ensure impacts are minimal for:

- permanent or temporary conversion of one wetland type to another
- wetland impacts totaling less than 1/10 acre
- at mitigation ratios beyond the generally recommend ratios

All wetland mitigation will comply with the Mitigation Rule [Corps-EPA Compensatory Mitigation for Losses of Aquatic Resources, dated April 10, 2008, 33 CFR 325 and 332/40 CFR 230].

b. Stream mitigation: will generally be required for all residential, commercial, institutional developments AND linear transportation projects where the total permanent stream channel impacts exceed 300 linear feet.

Minimum stream mitigation requirements will be determined using the current Corps and VDEQ endorsed assessment methodology.

Stream mitigation that exceeds the assessment methodology recommendation and mitigation for impacts totaling less the 300 linear feet may be required on a case-by-case basis to ensure impacts are minimal.

All stream mitigation will comply with Mitigation Rule [Corps-EPA Compensatory Mitigation for Losses of Aquatic Resources dated April 10, 2008 33 CFR 325 and 332; 40 CFR 230].

Where local zoning ordinances provide for riparian and floodplain protection pursuant to the Chesapeake Bay Preservation Act (Virginia Code 10.1-2100 et seq.) and the Chesapeake Bay Preservation Area Designation and Management Regulations (9 VAC 1-20 et seq.), the use of buffers as a form of compensatory mitigation shall be allowed only:

- where the extent of the buffer exceeds the lateral extent already required by local ordinances pursuant to the Act and the regulations
- where the quality of the existing protected buffer area is enhanced to provide greater water quality protection benefits
- where the proposed compensatory mitigation is undertaken in

compliance with the Mitigation Rule [Corps-EPA Compensatory Mitigation for Losses of Aquatic Resources: Final Rule dated April 10, 2008 33 CFR 332.4(c)(2)-(14) and 33 CFR 332.3(h)]

21) Heavy Equipment: Heavy equipment working in wetlands must be placed on mats, or other measures must be taken to minimize soil disturbance.

22) Temporary fills: All temporarily disturbed waters and wetlands must be restored to their pre-construction contours within 12 months of commencing the temporary impact's construction. Impacts that will not be restored within 12 months (calculated from the start of the temporary impacts construction) will be considered permanent unless otherwise approved by the Corps, and compensatory mitigation may be required. Once restored to their natural contours, soil in these temporarily disturbed areas must be mechanically loosened to a depth of 12 inches and wetland areas must be seeded or sprigged with appropriate native vegetation.

23) Sedimentation and erosion control: Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

24) Countersinking of Pipes and Culverts: Following consultation with the Virginia Department of Game and Inland Fisheries (VDGIF), the Norfolk District assumes there are fish and other aquatic organisms present in any stream being crossed, in the absence of site-specific evidence to the contrary. Although prospective permittees have the option of providing such evidence, extensive efforts to collect such information is not encouraged, since countersinking will in most cases be required except as outlined in the conditions below:

   a. All pipes and culverts placed in streams will be countersunk at both the inlet and outlet ends, unless indicated otherwise by the VDEQ on a case-by-case basis (see below). Pipes that are 24" or less in diameter shall be countersunk 3" below the natural stream bottom. Pipes that are greater than 24" in diameter shall be countersunk at least 6" below the natural stream bottom. The countersinking requirement does not apply to bottomless pipes/culverts or pipe arches. All single pipes or culverts (with bottoms) shall be depressed (countersunk) below the natural streambed at both the inlet and outlet of the structure. In sets of multiple pipes or culverts (with bottoms) at least one pipe or culvert shall be depressed (countersunk) at both the inlet and outlet to convey low flows.
   b. When countersinking culverts, permittees must ensure reestablishment of a surface water channel (within 15 days post

construction) that allows for the movement of aquatic organisms and maintains the same hydrologic regime that was present pre-construction (i.e. the depth of surface water through the permit area should match the upstream and downstream depths). This may require the addition of finer materials to choke the larger stone and/or placement of riprap to allow for a low flow channel.

c. Exemption for extensions and certain maintenance: The requirement to countersink does not apply to extensions of existing pipes or culverts that are not countersunk, or to maintenance to pipes/culverts that does not involve replacing the pipe/culvert (such as repairing cracks, adding material to prevent/correct scour, etc.).

d. Floodplain pipes: The placement of pipes/culverts above ordinary high water, such as those placed to allow for flood plain flows, is not jurisdictional (provided no fill is discharged into wetlands).

e. Hydraulic opening: Pipes should be adequately sized to allow for the passage of ordinary high water with the countersinking and invert restrictions taken into account.

f. Pipes on bedrock or above existing utility lines: Different procedures will be followed for pipes or culverts to be placed on bedrock or above existing buried utility lines where it is not practicable to relocate the lines, depending on whether the work is for replacement of an existing pipe/culvert or a new pipe/culvert:

    i. Replacement of an existing pipe/culvert: Countersinking is not required provided the elevations of the inlet and outlet ends of the replacement pipe/culvert are no higher above the stream bottom than those of the existing pipe/culvert. Documentation (photographic or other evidence) must be maintained in the permittee's records showing the bedrock condition and the existing inlet and outlet elevations. That documentation will be available to the Norfolk District upon request, but notification or coordination with the Norfolk District is not otherwise required.

    ii. A pipe/culvert is being placed in a new location: If the prospective permittee determines that bedrock or an existing buried utility line that is not practicable to relocate prevents countersinking, they should evaluate the use of a bottomless pipe/culvert, bottomless utility vault, span (bridge) or other bottomless structure to cross the waterway, and also evaluate alternative locations for the new pipe/culvert that will allow for countersinking. If the prospective permittee determines that neither a bottomless structure nor an alternative location is practicable, then they must submit supporting documentation in the JPA. The prospective permittee must provide documentation of measures evaluated to minimize disruption of the movement of aquatic

life as well as documentation of the cost, engineering factors, and site conditions that prohibit countersinking the pipe/culvert. Options that must be considered include partial countersinking (such as less than 3" of countersinking, or countersinking of one end of the pipe), and constructing stone step pools, low rock weirs downstream, or other measures to provide for the movement of aquatic organisms. The permit application must also include photographs documenting site conditions. The prospective permittee may find it helpful to contact his/her regional fishery biologist for the VDGIF, for recommendations about the measures to be taken to allow for fish movements. When seeking advice from VDGIF, the prospective permittee should provide the VDGIF biologist with all available information such as location, flow rates, stream bottom features, description of proposed pipe(s), slopes, etc. Any recommendations from VDGIF should be included in the JPA. The VDEQ will notify the prospective permittee whether the proposed work qualifies for the 17-SPGP-01. NOTE: Blasting of stream bottoms through the use of explosives is not acceptable as a means of providing for countersinking of pipes on bedrock.

g. Pipes on steep terrain: Pipes being placed on steep terrain (slope of 5% or greater) must be countersunk in accordance with the conditions above. It is recommended that on slopes greater than 5%, a larger pipe than required be installed to allow for the passage of ordinary high water in order to increase the likelihood that natural velocities can be maintained. There may be situations where countersinking both the inlet and outlet may result in a slope in the pipe that results in flow velocities that cause excessive scour at the outlet and/or prohibit some fish movement. This type of situation could occur on the side of a mountain where falls and drop pools occur along a stream. Should this be the case, or should the prospective permittee not want to countersink the pipe/culvert for other reasons, they must provide documentation of measures evaluated to minimize disruption of the movement of aquatic life as well as documentation of the cost, engineering factors, and site conditions that prohibit countersinking the pipe/culvert. The prospective permittee should design the pipe to be placed at a slope as steep as stream characteristics allow, countersink the inlet 3-6", and implement measures to minimize any disruption of fish movement. These measures can include constructing a stone step/pool structure, preferably using river rock/native stone rather than riprap, constructing low rock weirs to create a pool or pools, or other structures to allow for fish movements in both directions. Stone structures should be designed with sufficient-sized stone to prevent

erosion or washout and should include keying-in as appropriate. These structures should be designed both to allow for fish passage and to minimize scour at the outlet. The quantities of fill discharged below ordinary high water necessary to comply with these requirements (i.e., the cubic yards of stone, riprap or other fill placed below the plane of ordinary high water) must be included in project totals. The prospective permittee may find it helpful to contact the regional fishery biologist for the VDGIF, for recommendations about the measures to be taken to allow for fish movements. When seeking advice from VDGIF, the applicant should provide the VDGIF biologist with all available information such as location, flow rates, stream bottom features, description of proposed pipe(s), slopes, etc. Any recommendations from DGIF should be included in the permit application. The VDEQ will notify the prospective permittee whether the proposed work qualifies for the 17-SPGP-01.

h. Problems encountered during construction: When a pipe/culvert is being replaced, and the design calls for countersinking at both ends of the pipe/culvert, and during construction it is found that the streambed/banks are on bedrock, a utility line, or other documentable obstacle, then the permittee must stop work and contact the VDEQ (contact by telephone and/or email is acceptable). The permittee must provide the VDEQ with specific information concerning site conditions and limitations on countersinking. The VDEQ will work with the permittee to determine an acceptable plan, taking into consideration the information provided by the permittee, but the permittee should recognize that the VDEQ and/or Corps could determine that the work will not qualify for a 17-SPGP-01 authorization.

i. Emergency pipe replacements: In the case of an emergency situation, such as when a pipe/culvert washes out during a flood, a permittee is encouraged to countersink the replacement pipe at the time of replacement, in accordance with the conditions above. However, if conditions or timeframes do not allow for countersinking, then the pipe can be replaced as it was before the washout, but the permittee will have to come back and replace the pipe/culvert and countersink it in accordance with the guidance above. In other words, the replacement of the washed out pipe is viewed as a temporary repair, and a countersunk replacement should be made at the earliest possible date. The VDEQ must be notified of all pipes/culverts that are replaced without countersinking at the time that it occurs, and must provide the permittee's planned schedule for installing a countersunk replacement (it is acceptable to submit such notification by email). The permittee should anticipate whether bedrock or steep terrain will limit countersinking and, if so, should follow the procedures outlined in (g) and/or (h) above.

25) Discharge of pollutants: All authorized activities involving any discharge of pollutants into waters of the United States shall be consistent with applicable water quality standards, effluent limitations, standards of performance, prohibitions, and pretreatment standards and management practices established pursuant to the CWA (33 U.S.C. § 1251 et seq.) and applicable state and local laws.

26) Suitable Material: No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

27) Obstruction of high flows: Discharges of dredged or fill material must not permanently restrict or impede the passage of normal or expected high flows.

28) Aquatic Life Movements: No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.

29) Spawning Areas: Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

30) Migratory Bird Breeding Areas: Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

31) Native trout and anadromous fishes: Authorizations for discharges of dredged or fill material into native trout waters or anadromous fish spawning areas are conditioned to limit in-stream work within the timeframes recommended by the DGIF. http://206.16.194.16/environmental-programs/files/VDGIF-Time-of-Year-Restrictions-Table.pdf

32) Water supply intakes: No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization

33) Invasive Species: Plant species on the most current Virginia Department of Conservation and Recreation's Invasive Plant Species List shall not be used for replanting activities authorized by the SPGP. The list of invasive plants in Virginia

may be found at: http://www.dcr.virginia.gov/natural-heritage/document/nh-invasive-plant-list-2014.pdf

34) Inspections: The permittee understands and agrees that the Corps and/or the VDEQ are permitted and allowed to make periodic inspections at any time the Corps or VDEQ deems necessary in order to assure that the activities being performed under authority of this permit are in accordance with the terms and conditions prescribed herein. The Corps reserves the right to require post-construction engineering drawings and/or surveys of any work authorized under 17- SPGP-01, as deemed necessary on a case-by-case basis.

35) Maintenance: The permittee shall maintain the work authorized herein in good condition and in conformance with all terms and conditions of this permit. All fills shall be properly maintained to ensure public safety.

36) Property rights: 17-SPGP-01 does not convey any property rights, either in real estate or material, or convey any exclusive privileges, nor does it authorize any injury to property or invasion of rights or any infringement of Federal, state, or local laws or regulations. If real estate rights are needed from the Corps, you must contact the Corps Real Estate Office at (757) 201-7735 or at the address listed on the front page of this permit.

37) Suspension and revocation: 17-SPGP-01 and individual verifications under 17-SPGP-01 maybe either suspended or revoked in whole or in part pursuant to the policies and procedures of 33 C.F.R. § 325.7. Any such action shall not be the basis for any claim for damages against the United States.

38) Restoration directive: The permittee, upon receipt of a restoration directive, shall restore the waters of the United States to their former conditions without expense to the United States and as directed by the Secretary of the Army or his/her authorized representative. If the permittee fails to comply with such a directive, the Secretary or his/her designee, may restore the waters of the United States to their former conditions, by contract or otherwise, and recover the cost from the permittee.

39) Special conditions: The Corps may impose other special conditions on a project verified pursuant to 17-SPGP-01 that are determined necessary to minimize adverse navigational and/or environmental effects or based on any other factor of the public interest. Failure to comply with all conditions of the authorization/verification, including special conditions, constitutes a permit violation and may subject the permittee, or his/her contractor, to criminal, civil, or administrative penalties and/or restoration.

40) False or incomplete information: In granting authorization pursuant to this permit, the Corps has relied upon information and data provided by the permittee. If,

subsequent to notification by the Corps or the VDEQ that a project qualifies for this permit, such information and data prove to be materially false or materially incomplete, the Corps may suspend or revoke authorization, in whole or in part, and/or the United States or Corps may institute appropriate legal proceedings.

41) Abandonment: If the permittee decides to abandon the activity authorized under I7-SPGP-01, unless such abandonment is merely the transfer of property to a third party, they may be required to restore the area to the satisfaction of the Corps.

42) Transfer of verification: In order to transfer verification under 17-SPGP-01, the transferee and permittee must supply the Corps and the VDEQ with a written and signed, by all appropriate parties, request to make such a transfer. Such transfer is not effective until written approval has been granted by the Corps or the VDEQ.

43) Binding effect. The provisions of the permit authorization shall be binding on any assignee or successor in interest of the original permittee.

44) Expiration of 17-SPGP-01: Unless further suspended or revoked the 17-SPGP-01 will be in effect until May 31, 2022. Activities which have commenced (i.e., are under construction) or are under contract to commence construction in reliance upon 17-SPGP-01 will remain authorized provided the activity is completed within twelve months of the date of this 17-SPGP-01's expiration of May 31, 2022, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization in accordance with 33 CFR 325.7(a-e).

Jason E. Kelly, PMP
Colonel, U.S. Army
Commanding

Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193
(703)583-3800
www.deq.virginia.gov

Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director
(804) 698-4000

Thomas A. Faha
Regional Director

March 5, 2019

By e-mail: john@lann.com
Receipt Confirmation Requested

Mr. John E. Napolitano, Manager
Northfax JV LLC
3900 Jermantown Road, Suite 300
Fairfax, Virginia 22030

Re: Virginia Water Protection (VWP) Individual Permit Number 18-1003
Northfax, City of Fairfax, Virginia
Final VWP Individual Permit

Dear Mr. Napolitano:

Pursuant to the VWP Permit Program Regulation 9 VAC 25-210 and § 401 of the Clean Water Act Amendments of 1977, Public Law 95-217, the Department of Environmental Quality has enclosed the VWP Individual Permit for the "Northfax" project.

This permit is valid for 15 years from the date of issuance. An extension of the permit may not occur as the permit term cannot exceed the maximum of 15 years. A new permit may be necessary if any portion of the authorized activities or any permit requirement (including compensatory mitigation provisions) is not complete at the end of the 15 year permit term.

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have **30 calendar days** from the date of service (the date you actually received this decision or the date it was e-mailed to you, whichever occurred first) within which to appeal this decision by filing a notice of appeal in accordance with the Rules of the Supreme Court of Virginia with the Director, Department of Environmental Quality. In the event that this decision is served on you by mail, three days are added to that period. Refer to Part 2A of the Rules of the Supreme Court of Virginia for additional requirements governing appeals from administrative agencies.

Alternatively, an owner may request a formal hearing for the formal taking of evidence upon relevant fact issues under Section 2.2-4020 of the Administrative Process Act. A petition for a formal hearing must meet the requirements set forth in 9VAC25-230 of the Virginia Administrative Code. In cases involving

actions of the board, such petition must be filed within 30 calendar days after notice of such action is sent to such owner by certified mail.

The work authorized by this permit also satisfies the terms and conditions contained in the Norfolk District, Corps of Engineers' State Program General Permit (17- SPGP-01) and the special conditions, if any, attached to 17-SPGP-01. No additional authorization from the Corps is required. Your 17-SPGP-01 authorization is effective as of the date on this letter and remains effective until May 31, 2022.

If you have any questions, please contact Wynn Prusaczyk by phone at (703) 583-3871 or by email at Wynn.Prusaczyk@deq.virginia.gov.

Respectfully,

Trisha M. Beasley

Trisha M. Beasley
Regional VWPP Program Manager

Enclosures: Permit Cover Page, Part I - Special Conditions, Part II - General Conditions, Monthly VWP Permit Inspection Checklist, VWP Permit Construction Status Update Form, 17-SPGP-01 Verification Letter, and 17-SPGP-01

Cc (by e-mail):
Mr. Jason Franti, Apex Companies, LLC
Mr. Jim Irre, Apex Companies, LLC
Ms. Theresita Crockett-Augustine, U.S. Army Corps of Engineers, Northern VA Field Office

Federal Emergency Management Agency

Washington, D.C. 20472

April 1, 2019

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CERTIFIED MAIL
RETURN RECEIPT REQUESTED

IN REPLY REFER TO:
Case No.: 18-03-2239R

Community Name: City of Fairfax, Virginia
Community No.: 515524

104

Mr. Robert A. Stalzer
Manager, City of Fairfax
10455 Armstrong Street, Room 316
Fairfax, VA 22030

Dear Mr. Stalzer:

We are providing our comments with the enclosed Conditional Letter of Map Revision (CLOMR) on a proposed project within your community that, if constructed as proposed, could revise the effective Flood Insurance Study (FIS) report and Flood Insurance Rate Map (FIRM) for your community.

If you have any questions regarding the floodplain management regulations for your community, the National Flood Insurance Program (NFIP) in general, or technical questions regarding this CLOMR, please contact the Director, Mitigation Division of the Federal Emergency Management Agency (FEMA) Regional Office in Philadelphia, Pennsylvania, at (215) 931-5512, or the FEMA Map Information eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP). Additional information about the NFIP is available on our website at https://www.fema.gov/national-flood-insurance-program.

Sincerely,

Patrick "Rick" F. Sacbibit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration

Enclosure:
Conditional Letter of Map Revision Comment Document

cc: Ms. Michelle Coleman
Zoning Administrator
City of Fairfax

Mr. David Hodgkins
Assistant City Manager and Finance Director
City of Fairfax

Mr. William R. Zink, P.E.
President
christopher consultants, ltd.

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Washington, D.C. 20472

CONDITIONAL LETTER OF MAP REVISION
COMMENT DOCUMENT

COMMUNITY INFORMATION		PROPOSED PROJECT DESCRIPTION	BASIS OF CONDITIONAL REQUEST
COMMUNITY	City of Fairfax (Independent City) Virginia	CHANNELIZATION CULVERT GRADING	HYDRAULIC ANALYSIS UPDATED TOPOGRAPHIC DATA
	COMMUNITY NO.: 515524		
IDENTIFIER	NORTHFAX	APPROXIMATE LATITUDE AND LONGITUDE: 38.859, -77.310 SOURCE: Precision Mapping Streets DATUM: NAD 83	
AFFECTED MAP PANEL			
TYPE: FIRM* NO.: 5155240002D DATE: June 2, 2006		* FIRM - Flood Insurance Rate Map	

FLOODING SOURCE AND REACH DESCRIPTION

North Fork Accotink Creek – from just upstream of Chain Bridge Road to approximately 1,670 feet upstream of Chain Bridge Road

PROPOSED PROJECT DESCRIPTION

Flooding Source	Proposed Project	Location of Proposed Project
North Fork Accotink Creek	New Twin 8'x8' Box Culvert Extension	From approximately 80 feet upstream of Chain Bridge Road to approximately 1,050 feet upstream of Chain Bridge Road.
	Channelization	From approximately 1,050 feet upstream of Chain Bridge Road to approximately 1,200 feet upstream of Chain Bridge Road.
	Grading	From just upstream of Chain Bridge Road to approximately 1,200 feet upstream of Chain Bridge Road.

SUMMARY OF IMPACTS TO FLOOD HAZARD DATA

Flooding Source	Effective Flooding	Proposed Flooding	Increases	Decreases
North Fork Accotink Creek	Zone AE	Zone AE	Yes	Yes
	BFEs*	BFEs	Yes	Yes
	Zone X (shaded)	Zone X (shaded)	Yes	Yes

* BFEs - Base (1-percent-annual-chance) Flood Elevations

COMMENT

This document provides the Federal Emergency Management Agency's (FEMA's) comment regarding a request for a CLOMR for the project described above. This document is not a final determination; it only provides our comment on the proposed project in relation to the flood hazard information shown on the effective National Flood Insurance Program (NFIP) map. We reviewed the submitted data and the data used to prepare the effective flood hazard information for your community and determined that the proposed project meets the minimum floodplain management criteria of the NFIP. Your community is responsible for approving all floodplain development and for ensuring that all permits required by Federal or State/Commonwealth law have been received. State/Commonwealth, county, and community officials, based on their knowledge of local conditions and in the interest of safety, may set higher standards for construction in the Special Flood Hazard Area (SFHA), the area subject to inundation by the base flood). If the State/Commonwealth, county, or community has adopted more restrictive or comprehensive floodplain management criteria, these criteria take precedence over the minimum NFIP criteria.

This comment is based on the flood data presently available. If you have any questions about this document, please contact the FEMA Map Information eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on the FEMA website at https://www.fema.gov/national-flood-insurance-program.

Patrick "Rick" F. Sacbibit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration

Federal Emergency Management Agency

Washington, D.C. 20472

CONDITIONAL LETTER OF MAP REVISION
COMMENT DOCUMENT (CONTINUED)

COMMUNITY INFORMATION

To determine the changes in flood hazards that will be caused by the proposed project, we compared the hydraulic modeling reflecting the proposed project (referred to as the proposed conditions model) to the hydraulic modeling used to prepare the Flood Insurance Study (FIS) (referred to as the effective model). If the effective model does not provide enough detail to evaluate the effects of the proposed project, an existing conditions model must be developed to provide this detail. This existing conditions model is then compared to the effective model and the proposed conditions model to differentiate the increases or decreases in flood hazards caused by more detailed modeling from the increases or decreases in flood hazards that will be caused by the proposed project.

The table below shows the changes in the BFEs:

BFE Comparison Table

Flooding Source: North Fork Accotink Creek		BFE Change (feet)	Location of maximum change
Existing vs. Effective	Maximum increase	2.6	Approximately 1,090 feet upstream of Chain Bridge Road
	Maximum decrease	2.1	Approximately 270 feet upstream of Chain Bridge Road
Proposed vs. Existing	Maximum increase	0.6	Approximately 1,450 feet upstream of Chain Bridge Road
	Maximum decrease	7.1	Approximately 1,000 feet upstream of Chain Bridge Road
Proposed vs. Effective	Maximum increase	0.6	Approximately 1,450 feet upstream of Chain Bridge Road
	Maximum decrease	7.1	Approximately 1,040 feet upstream of Chain Bridge Road

NFIP regulations Subparagraph 60.3(b)(7) requires communities to ensure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained. This provision is incorporated into your community's existing floodplain management ordinances; therefore, responsibility for maintenance of the altered or relocated watercourse, including any related appurtenances such as bridges, culverts, and other drainage structures, rests with your community. We may request that your community submit a description and schedule of maintenance activities necessary to ensure this requirement.

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Patrick "Rick" F. Sacbibit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration

Federal Emergency Management Agency

Washington, D.C. 20472

CONDITIONAL LETTER OF MAP REVISION
COMMENT DOCUMENT (CONTINUED)

COMMUNITY INFORMATION (CONTINUED)

DATA REQUIRED FOR FOLLOW-UP LOMR

Upon completion of the project, your community must submit the data listed below and request that we make a final determination on revising the effective FIRM and FIS report. If the project is built as proposed and the data below are received, a revision to the FIRM and FIS report would be warranted.

• Detailed application and certification forms must be used for requesting final revisions to the maps. Therefore, when the map revision request for the area covered by this letter is submitted, Form 1, entitled "Overview and Concurrence Form," must be included. A copy of this form may be accessed at https://www.fema.gov/media-library/assets/documents/1343.

• The detailed application and certification forms listed below may be required if as-built conditions differ from the proposed plans. If required, please submit new forms, which may be accessed at https://www.fema.gov/media-library/assets/documents/1343, or annotated copies of the previously submitted forms showing the revised information.

Form 2, entitled "Riverine Hydrology and Hydraulics Form." Hydraulic analyses for as-built conditions of the base flood, the 10-percent, 2-percent, and 0.2-percent-annual-chance floods must be submitted with Form 2.

Form 3, entitled "Riverine Structures Form."

• A certified topographic work map showing the revised and effective base and 0.2-percent-annual-chance floodplain boundaries. Please ensure that the revised information ties in with the current effective information at the downstream and upstream ends of the revised reach and any tributaries.

• An annotated copy of the FIRM, at the scale of the effective FIRM, that shows the revised base and 0.2-percent-annual-chance floodplain boundary delineations shown on the submitted work map and how they tie-in to the base and 0.2-percent-annual-chance floodplain boundary delineations shown on the current effective FIRM at the downstream and upstream ends of the revised reach, as well as any tributaries.

• As-built plans, certified by a registered Professional Engineer, of all proposed project elements.

• Documentation of the individual legal notices sent to property owners who will be affected by any widening or shifting of the base floodplain and/or any BFE increases along North Fork Accotink Creek.

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Patrick "Rick" F. Sacbibit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration

Federal Emergency Management Agency

Washington, D.C. 20472

CONDITIONAL LETTER OF MAP REVISION
COMMENT DOCUMENT (CONTINUED)

COMMUNITY INFORMATION (CONTINUED)

DATA REQUIRED FOR FOLLOW-UP LOMR (continued)

• FEMA's fee schedule for reviewing and processing requests for conditional and final modifications to published flood information and maps may be accessed at https://www.fema.gov/forms-documents-and-software/flood-map-related-fees. The fee at the time of the map revision submittal must be received before we can begin processing the request. Payment of this fee can be made through a check or money order, made payable in U.S. funds to the National Flood Insurance Program, or by credit card (Visa or MasterCard only). Please either forward the payment, along with the revision application, to the following address:

LOMC Clearinghouse
Attention: LOMR Manager
3601 Eisenhower Avenue, Suite 500
Alexandria, Virginia 22304-6426

or submit the LOMR and fee using the Online LOMC portal at: https://hazards.fema.gov/femaportal/onlinelomc/signin

After receiving appropriate documentation to show that the project has been completed, FEMA will initiate a revision to the FIRM and FIS report. Because the flood hazard information (i.e., base flood elevations, base flood depths, SFHAs, zone designations, and/or regulatory floodways) will change as a result of the project, a 90-day appeal period will be initiated for the revision, during which community officials and interested persons may appeal the revised flood hazard information based on scientific or technical data.

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Patrick "Rick" F. Sacbibit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration

Federal Emergency Management Agency

Washington, D.C. 20472

CONDITIONAL LETTER OF MAP REVISION
COMMENT DOCUMENT (CONTINUED)

COMMUNITY INFORMATION (CONTINUED)

COMMUNITY REMINDERS

We have designated a Consultation Coordination Officer (CCO) to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:

Ms. Janice Barlow
Director, Mitigation Division
Federal Emergency Management Agency, Region III
One Independence Mall, Sixth Floor
615 Chestnut Street
Philadelphia, PA 19106-4404
(215) 931-5512

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Engineering Services Branch
Federal Insurance and Mitigation Administration