

DOCKET ITEM #11
Development Special Use Permit #2019-0013
RiverRenew – Tunnel Dewatering Pumping Station

Application	General Data	
Project Name: RiverRenew - Tunnel Dewatering Pumping Station Location: 1500 Eisenhower Avenue Applicant: Alexandria Renew Enterprises	PC Hearing:	September 3, 2019
	CC Hearing:	September 14, 2019
	If approved, DSUP Expiration:	September 14, 2024
	Plan Acreage:	Total Site: 35.80 acres Improvement Area: 1.01 acres
	Zone:	UT/Utilities and Transportation
	Proposed Use:	Wastewater Treatment Facility
	Gross Floor Area:	23,631 sf (improvements) 383,638 sf (total on site)
	Small Area Plan:	Southwest Quadrant
	Historic District:	N/A
	Green Building Standard	Envision Certification

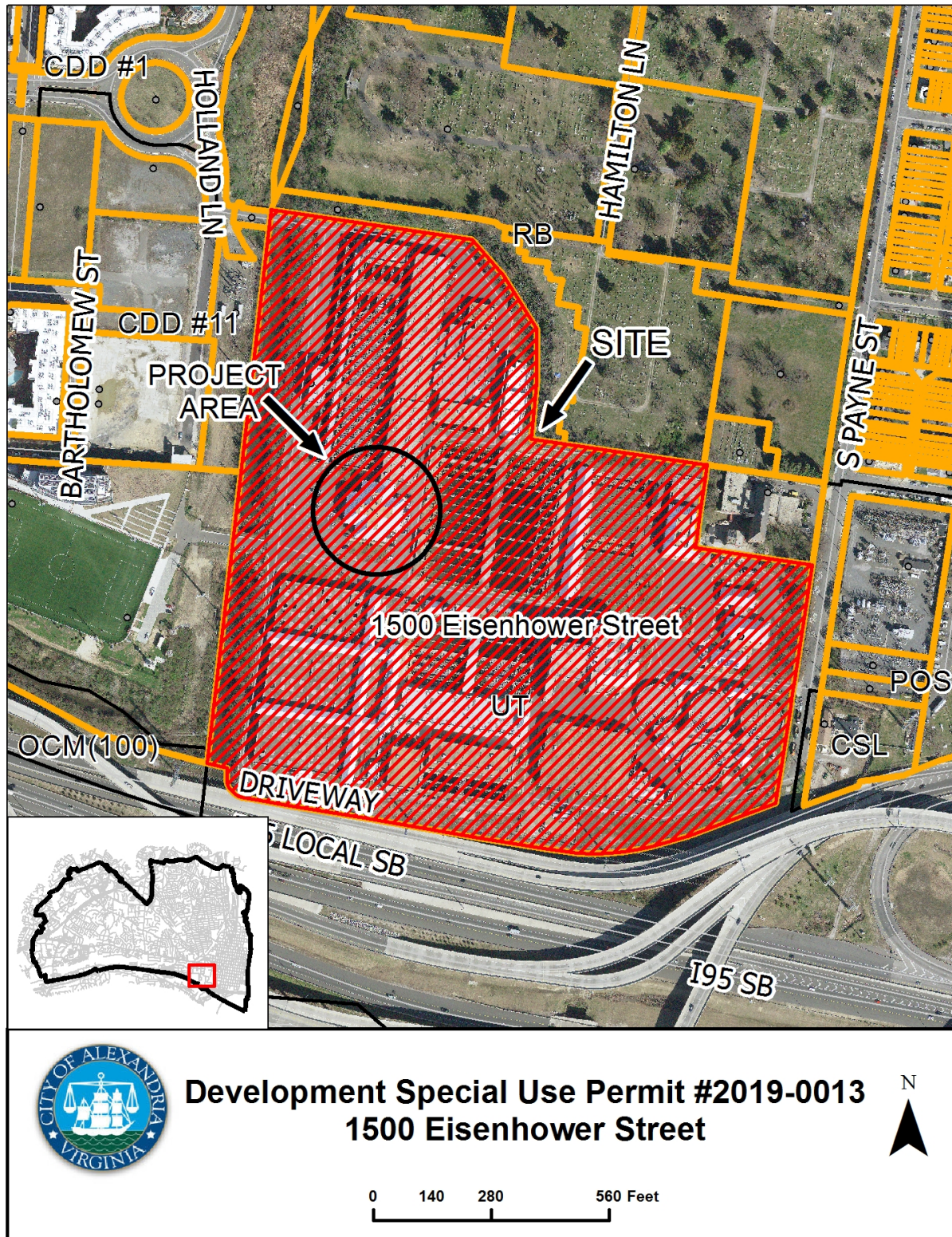
Purpose of Application

A request for a development special use permit, with site plan amending DSUP #2009-0017 to construct a Tunnel Dewatering Pumping Station for the RiverRenew Combined Sewer Remediation Project, including special use permits for an increase in building height and for a parking reduction, at Alexandria Renew Enterprises' existing Water Resource Recovery Facility.

Staff Recommendation: APPROVAL WITH CONDITIONS

Staff Reviewers:

Robert M. Kerns, AICP, Division Chief
Dirk H. Geratz, AICP, Principal Planner
Abigail Harwell, Urban Planner III



PROJECT LOCATION MAP

I. SUMMARY

A. Recommendation

Staff recommends **approval** of the Development Special Use Permit and associated special use permits subject to compliance with the staff recommendations. The proposal provides several public benefits including:

- Solution to the combined sewer overflows;
- Construction of a quality utility building;
- Green building with solar panels and green roof;
- Stormwater BMPs;
- New shade trees and landscaping.

B. General Project Description

Alexandria Renew Enterprises (AlexRenew) has requested approval of a Development Special Use Permit amendment of DSUP #2009-0017 for construction of additional wastewater treatment facilities on the existing wastewater treatment plant, Water Resource Recovery Facility (WRRF) site, located at 1500 Eisenhower Avenue. The application includes a new Tunnel Dewatering Pumping Station (TDPS) to be built where the old headquarters building is currently located. The pumping station is a key component of the RiverRenew Combined Sewer Remediation Project.

To construct this project, the applicant has requested approval of:

- A Development Special Use Permit amendment to allow the pumping station as a *Special Utility Use* and approval of the associated site plan;
- A Special Use Permit for an increase in building height up to 50 feet; and
- A Special Use Permit to allow for a parking reduction from 35 spaces to 14 spaces.

II. BACKGROUND

A. Site Context

The 35-acre AlexRenew property is located along the southern City limits at 1500 Eisenhower Avenue, between the extension of Holland Lane and South Payne Street. The Capital Beltway is immediately south of the site and cemeteries are located to the north. East of the site is a residential neighborhood, the Lee Recreation Center, and an electric substation. To the west is the South Carlyle neighborhood. This neighborhood is mostly undeveloped except for the AlexRenew Environmental Center (headquarters), a public

soccer field and the 800 Carlyle, which is a 5-story residential building on Block 27, northwest of the headquarters building.

B. Site History

AlexRenew, previously known as the Alexandria Sanitation Authority (ASA), was created in 1952 by City Council. AlexRenew constructs, operates, and maintains the City's wastewater treatment plant that serves the Alexandria sewershed, which encompasses most of the City of Alexandria and portions of Fairfax County. The existing wastewater treatment plant has been in operation since 1956. No approval by City Council for the initial construction was required because the site was zoned I-2/Heavy industrial, which permitted essentially any use without approval of a special use permit. In 1972, due a necessary expansion of the I-2 zoned lot, the Planning Director approved a special use permit (SUP #864) to upgrade and expand the facility from 18 million gallons per day to 54 million gallons per day. In the last decade, AlexRenew has received approval for various improvements and upgrades to the site and facility, as listed below:

- SUP #98-0037 (June 6, 1998):
Construction of a 105-foot tall Solids Processing Building and four smaller buildings.
- DSUP #99-0020 (June 12, 1999):
Construction of a Primary Weir Observation Building, demolition of the Sludge Dewatering Building, construction of an additional Sludge Digester with a Digester Complex structure, and relocation and construction of a new Waste Gas Burner Station (Flare Station) with a 60-foot tall stack.
- DSUP #2000-0013 (May 13, 2000):
Construction of a 1,334 square foot building addition to the Main Building to house conveying equipment for transferring materials to dumpsters.
- DSUP #2009-0017 (April 17, 2010):
Construction of additional wastewater treatment facilities on the existing site and for an increase in building height to 38 feet for a new building.
- DSUP #2018-0020 (June 25, 2019):
RiverRenew Project - Construction of a combined sewer remediation project to reduce discharges of combined sewage into the Potomac River, Hoofs Run and Hunting Creek from four existing outfalls.

III. DETAILED PROJECT DESCRIPTION

The proposed TDPS is a major component of RiverRenew, a major infrastructure program to remediate Alexandria's combined sewer system that was approved in July 2019. The

purpose of the TDPS is to pump captured combined sewer flows from the RiverRenew tunnel system, to the WRRF for treatment. The TDPS was originally included as part of the RiverRenew Concept 1 review submitted in October 2018. Since the TDPS will be constructed at the AlexRenew WRRF, it was decided to process the TDPS as an amendment to existing DSUP #2009-0017 and separate it from the RiverRenew tunnel system DSUP. The TDPS will be procured under the same design-build contract as the RiverRenew tunnel system. Final design of the TDPS will be the responsibility of the selected Design-Builder.

Apart from the green roof, the TDPS use is classified as a Factory Industrial Moderate Hazard by the Virginia Construction Code. The TDPS is primarily a wastewater treatment process facility designed to pump wastewater through existing treatment processes at the WRRF. The TDPS will generally not be occupied as the internal functions are mechanical and self-operating. Periodic inspections of the equipment are anticipated to be performed along with occasional tours.

The TDPS is comprised of the following main components:

- Approximately 65-foot diameter, 150-foot deep Pumping Station Shaft to house the wet weather, tunnel dewatering pumps and associated valving;
- Approximately 35-foot diameter, 150-foot deep Screening Shaft to house the screening and debris removal equipment and connect the Hooffs Run Interceptor to the Waterfront Tunnel;
- Hydraulic Grade Line (HGL) Control Structure to control sewer levels in the Hooffs Run Interceptor; and
- Superstructure with dedicated spaces for pumping, debris removal, mechanical, electrical, instrumentation, and training facilities to support the TDPS.

Prior to the installation of the TDPS equipment, the Pumping Station and Screening Shafts will be used as the primary location for mining operations associated with the Waterfront Tunnel.

The 23,631-square foot Superstructure will be designed to resemble a modern building and consists of four (4) primary structures that include:

- The approximately 44-foot tall Pumping Room constructed over the Pumping Station Shaft;
- The approximately 34-foot tall Screening Room constructed over the Screening Shaft;
- The approximately 28-foot tall Odor Control Room designed to house odor control fans and associated equipment; and
- The approximately 21-foot tall structure that houses the mechanical, electrical, and instrumentation rooms.

The Pumping Room, Screening Room, and Odor Control Room are arranged as staggered structures that reduce in height from west to east. Photovoltaic panels and skylights are proposed on top of each of these structures. Loading entry for trucks will be provided for each of the three structures along their southern-facing facades and accessed via the Main Plant Road.

The mechanical, electrical, and instrumentation roof will include an extensive green roof accessible by two (2) exterior stairways that will visually and physically connect the grade level and roof top open spaces. Entrances to the mechanical, electrical, and instrumentation rooms are proposed on the east and west sides of the Superstructure, respectively.

The Superstructure is proposed to be surrounded by access roads and landscaping including trees, shrubs, and green infrastructure elements. Additionally, 14 parking spaces are proposed to be constructed adjacent to the Superstructure. Based on the City's Zoning Regulations for Utilities (UT), the Superstructure will not exceed the maximum 50-foot height limit permitted by special use permit.

The Superstructure is proposed to be constructed of reinforced concrete and will include many green building design elements, including the solar panels, green roof and bio-retention areas. However, since it will be largely unoccupied, the appropriate green building certification(s) will be determined as part of the final design process. The applicant in consultation with City staff is aiming to achieve the Verified Award level under the Institute of Sustainable Infrastructure's (ISI) Envision program. Envision is a green building rating system designed specifically for infrastructure. This rating system was developed and is administered by the ISI, a not-for-profit education and research organization founded by the American Public Works Association, American Council of Engineering Companies and the American Society of Civil Engineers.

IV. ZONING

Property Address:	1500 Eisenhower Avenue / 835 South Payne Street
Total Site Area:	35.80acres / 1,559,267 square feet
Improvement Area:	1.01 acres / 43,952 square feet
Proposed Building Size:	23,631 square feet, gross
Zone:	UT / Utilities
Current Use:	Wastewater Treatment Facility / Special Use Utility
Proposed Use:	Wastewater Treatment Facility / Special Use Utility

	Permitted/Required	Proposed
Gross Floor Area	389,817 sf	383,638 sf
FAR:	0.25	0.246
Setbacks:	N/A for non-residential uses	N/A
Height:	35 feet; 50 feet with SUP	50 feet*
Parking:	35 spaces (1 per 600sf)	14 spaces**
Loading spaces:	3 (1 space per 20,000sf)	3 spaces
Open Space	N/A	20,231 sf at ground level
Crown Coverage	25%	31.8%
* SUP requested for additional height above 35 feet ** SUP requested for a parking reduction		

V. **STAFF ANALYSIS**

A. Master Plan Compliance

The use is also consistent with the City’s Master Plan, which addresses the sewer remediation project, of which the TDPS is a major component, through the Water Quality Management Supplement (2001) and the City of Alexandria Sanitary Sewer Master Plan (2012). The primary purpose of the Water Quality Management Supplement is to bring the City into compliance with the comprehensive planning requirements of the Chesapeake Bay Preservation Area Designation and Management Regulations. This supplement describes measures that the City can implement for controlling the combined sewer discharges. The Sanitary Sewer Master Plan provides the City with a framework for addressing projected wastewater flows, infrastructure upgrades, and regulatory drivers related to sanitary sewers.

B. Zoning and Special Use Requests

Zoning

The proposal complies with the UT (Utility and Transportation) zone apart from the use, parking and height which require special use permit approval as described in greater detail below. The UT zone has no yard (setback) or open space requirements for nonresidential uses.

Special Utility Use Request

Pursuant to Section 7-1202(A) the TDPS is classified as a *special use utility* and is permitted only with approval of a special use permit. Special use utilities are defined as utilities associated with public utilities, public service corporations, municipal departments, public commissions or public authorities. These special utilities may include tanks, towers, standpipes or other facilities used for storing water, sewage or other liquids or gases, electric power substations, telephone exchange buildings and structures, and pumping stations.

Staff has reviewed the proposed use regarding any potential impacts on surrounding properties. The isolated location of the building creates a situation where impacts to adjacent properties will be minimal. Furthermore, the building is buffered from adjoining properties by Hooffs Run, Interstate 495, and existing wastewater treatment facilities. Since the TDPS will handle raw wastewater, the control of odors is always a concern. The TDPS will be fully enclosed and connected into the WRRF's existing Centralized Odor Scrubber System to minimize the potential for any odorous air. Additionally, noise from the pumping operations will be mitigated through the cast-in-place concrete enclosure which will house the TDPS operations.

Special Use Permit for Parking Reduction

Pursuant to Section 8-200(A)(21), a utility use of this nature would trigger a need for 35 parking spaces based on a ratio of one space per 600 square feet of building area. The applicant, however, is requesting a parking reduction of 21 spaces to 14 on-site parking spaces. The proposed building is intended to be largely unoccupied and is only occasionally occupied when equipment within the structure is being serviced and maintained, or when visitors are touring the building for training or educational purposes. Since the building is located within a secured portion of the WRRF, visitors will be required to park in the adjacent Environmental Center parking garage at 1800 Limerick Street. Providing the 35 spaces pursuant to the zoning ordinance would create parking that would exceed what would be necessary to service the facility and take up valuable space needed for future wastewater treatment functions. Furthermore, providing this much parking would conflict with AlexRenew's sustainability goals by creating impervious area that could be used for landscaping to improve stormwater management on-site. Staff supports this environmentally sound request.

Special Use Permit for Increase in Building Height

The Utilities and Transportation (UT) zone permits building heights up to 35 feet. A building height up to 50 feet may be allowed with a special use permit. The Superstructure is proposed to be 44-feet at the tallest point, thus triggering the need for a special use permit. The Superstructure height is driven by the function for which it is designed to serve. In order to service the proposed pumps and screening system, overhead gantry cranes are required. The gantry cranes have a vertical dimension as well as clearances from the building floor and vehicles used to service the pumps and haul away sediment and debris. Therefore, the building height is driven by its function and cannot be modified.

Other existing buildings at the WRRF exceed the 35-foot height limit, which allow the Superstructure to blend into its built environment. Furthermore, the proposed building location does not abut any residential properties. Therefore, staff supports the SUP request for an additional height of 15-feet since it is necessary for the functionality of the TDPS and the design of the Superstructure is consistent with existing buildings at the WRRF.

C. Site Plan & Landscape Improvements

Pursuant to Section 11-403(A), the TDPS requires a site plan for a new building. As noted in this report, the TDPS Superstructure is proposed to be located at the site of AlexRenew's former administrative building and its associated parking lot. With this site plan, it is proposed to reduce the on-site parking and replace it with a new building, landscaping, and smaller parking lot. A minimum 22-foot wide driveway will loop around the Superstructure allowing for vehicle and truck access, while maintaining access to the remainder of the WRRF facilities.

The proposed landscaping plan includes significant landscape improvements and greenspace at the WRRF. The Superstructure is proposed to be surrounded by new landscaping and plaza spaces that include green infrastructure, ground covers, shrubs, and a total of 18 shade trees and 19 understory trees. As noted in this report, an accessible green roof is planned with extensive areas of plantings.

A modification to the 25% crown coverage requirement for the WRRF was approved with the 1998 special use permit. Given the size and number of the various facilities needed across the site to treat wastewater, a reduction of landscape areas to 12% was approved. However, with this site plan, more than three dozen new trees are being added which will bring much needed shade as well as an increase in the overall percentage of crown coverage to 31.8% or 30,294 square feet.

D. Construction Management Plan

Construction management will be a key component of this project and specific conditions have been recommended by staff to limit construction impacts on the surrounding neighborhoods and streets. Among the greatest impacts from construction will result from hauling and delivery of materials. Hauling and delivery of materials will follow designated haul routes from the WRRF.

Many of the conditions approved for the RiverRenew project (DSUP #2018-0020) will be applicable to this site plan. These include, but are not limited to, the establishment of a construction management plan that will include a construction schedule, location of construction trailers, and a plan for traffic closures and traffic control measures; establishment of designated haul routes, erosion control measures, location of construction worker parking and off-site staging areas.

AlexRenew will employ a resident engineering and inspection team dedicated to monitor compliance with the conditions. Similarly, the City will have inspectors assigned to this project as well and both parties will be expected to work closely with each other to address any concerns that arise during the construction.

Due to the limited open space available at the WRRF for construction staging, AlexRenew is proposing to use portions of three lots, located along Holland Lane for construction trailers, parking, and material and equipment laydown to support the construction of RiverRenew. The lots are currently undeveloped and located north of the Environmental Center (headquarters) in close proximity to the TDPS.

VI. COMMUNITY

AlexRenew has conducted an extensive outreach program for RiverRenew, including the TDPS component. Additionally, the City provided the Federation of Civic Associations with information regarding the proposed project at its June general meeting.

VII. CONCLUSION

Staff recommends **approval** of the development special use, with site plan including special use permits for an increase in building height and for a parking reduction, subject to compliance with all applicable codes and the following staff recommendations.

VIII. GRAPHICS

Site Plan and Landscaping



Green Roof Plan





IX. STAFF RECOMMENDATIONS

Note: The following DSUP Conditions have been carried forward from the most recent approval, DSUP #2009-0017, unless amended as indicated.

1. **CONDITION AMENDED:** The Final Site shall be in substantial conformance with the preliminary plans dated January 14, 2010 and August 14, 2019 and comply with the following conditions of approval.

A. PEDESTRIAN/STREETSCAPE:

2. Provide the following pedestrian improvements to the satisfaction of the Directors of P&Z, RP&CA and T&ES:
 - a. Complete all pedestrian improvements prior to the issuance of a certificate of occupancy permit. ***
CONDITION REMOVED: ~~Replace the Mill Race bike trail in its present location along Hooff's Run or provide for a permanent relocation to the satisfaction of the Directors of P&Z, T&ES and RP&CA. The trail recently installed by VDOT should be extended to connect to South Payne Street, as outlined in the City's "Transportation Master Plan" and "Pedestrian and Bicycle Mobility Plan". The trail shall be designed to conform to Virginia Dept. of Transportation "Bicycle Facility Guidelines", as applicable.~~
 - b. **NEW CONDITION:** All new paths and sidewalks shall be a minimum of 5 feet wide. (P&Z)(RP&CA)(T&ES) (SUP98-0037)***
3. **NEW CONDITION:** All on-street parking controls and restrictions within the project area public right-of-way shall be determined by the City. Any such controls and restrictions which the applicant desires shall be shown on the Final Site Plan. (P&Z) (T&ES) *

B. OPEN SPACE/LANDSCAPING:

4. **CONDITION AMENDED:** Develop, provide, install and maintain an integrated Landscape Plan within the limits of disturbance on the Final Site Plan that is coordinated with other associated site conditions to the satisfaction of the Director of P&Z. Landscape plans shall be submitted in accordance with the City of Alexandria's Landscape Guidelines, available online at: www.alexandriava.gov/uploadedFiles/recreation/ParkPlanning/LandscapeGuidelinesFinalv2Final.pdf. ~~Develop, provide, install and maintain an integrated Landscape Plan with the final site plan that is coordinated with other associated site conditions to the satisfaction of the Directors of P&Z and RP&CA. At a minimum the Landscape Plan shall:~~
 - a. ~~Ensure positive drainage in all planted areas.~~

- ~~b. Provide detail, section and plan drawings of tree wells showing proposed plantings and associated materials, irrigation, adjacent curb/pavement construction, including edge restraint system, dimensions, drainage, and coordination with site utilities.~~
 - ~~c. Provide detail sections showing above and below grade conditions for plantings above a structure or pipes.~~
 - ~~d. Provide planting details for all proposed conditions including street trees, multi-trunk trees, shrubs, perennials, and groundcovers. (P&Z) *~~
5. Provide a site irrigation/water management plan developed installed and maintained to the satisfaction of the Directors of RP&CA and Code Administration. *
- a. Provide an exhibit that demonstrates that all parts of the site can be accessed by a combination of building mounted hose bibs and ground set hose connections.
 - b. Provide external water hose bibs continuous at perimeter of building. Provide at least one accessible external water hose bib on all building sides at a maximum spacing of 90 feet apart.
 - c. Hose bibs, ground set water connections and FDCs must be fully accessible and not blocked by plantings, site utilities or other obstructions.
 - d. Install all lines beneath paved surfaces as sleeved connections.
 - e. Locate water sources and hose bibs in coordination with City Staff. (Code Administration) (RP&CA) (DSUP #2009-0017)

CONDITION REMOVED: ~~Revise the landscape plan to develop and implement plantings that require minimum maintenance and that are indigenous to the region to the satisfaction of the Director of P&Z and the City Arborist. All required landscaping shall be maintained in good condition. (P&Z)(SUP 98-0037)~~

CONDITION REMOVED: ~~Provide landscape screening as needed along the frontage of the parcel located on the west side of Hooff's Run where construction staging is proposed. (P&Z) (SUP 98-0037)~~

C. TREE PROTECTION AND PRESERVATION:

- 6. Provide, implement and follow a tree conservation and protection program that is developed per the City of Alexandria Landscape Guidelines and to the satisfaction of the Directors of P&Z, RP&CA and the City Arborist. (P&Z)(RP&CA) (DSUP#2009-0017) *
- 7. A fine shall be paid by the applicant in an amount not to exceed \$10,000 for each tree that is destroyed and/or the City may request that replacement trees of similar caliper and species be provided for damaged trees if the approved tree protection methods have not been followed. The replacement trees shall be installed and if

applicable the fine shall be paid prior to the issuance of the last certificate of occupancy permit. (P&Z)(RP&CA)(DSUP#2009-0017)

8. **CONDITION AMENDED:** The area of the limits of disturbance and clearing for the site shall be limited to the areas as generally depicted on the preliminary site plan dated ~~January 14, 2010~~August 14, 2019 and reduced if possible to retain existing trees and grades. (P&Z)(RP&CA)(DSUP#2009-0017)*

D. BUILDING:

9. **CONDITION AMENDED:** The applicant shall work with the City for recycling and/or reuse of the existing building materials as part of the demolition process, leftover, unused, and/or discarded building materials, where feasible. (T&ES)
10. **NEW CONDITION:** Final building design and architectural details, including materials and finishes and materials board, shall be subject to review and approval by the City Architect and Director of Planning and Zoning. (P&Z)*
11. **NEW CONDITION:** Achieve a Verified Award level under the Institute of Sustainable Infrastructure's (ISI) Envision program or an equivalent to the satisfaction of the Directors of P&Z, and/or RP&CA and T&ES, pursuant to the City's 2009 Green Building Policy. Diligent pursuance and achievement of this award shall be monitored through the following:
- a. Provide evidence of the project's registration with Envision, or equivalent with the submission of the first Final Site Plan and provide a draft checklist showing how the project plans to achieve the award level. *
 - b. Provide evidence of submission of materials for third-party certification within six months of submission.
 - c. Provide documentation certification within two (2) years of obtaining a final certificate of occupancy.
 - d. Failure to achieve a Verified Award level under the ISI (or equivalent) for the infrastructure project will be evaluated by City staff, and if staff determines that a good faith, reasonable, and documented effort was not made, then any City-wide Green Building policies existing at the time of staffs' release of Final Site Plan will apply.
12. **NEW CONDITION:** In order to provide a more sustainable use of natural resources, the applicant shall use EPA-labeled WaterSense or equivalent low flow fixtures. In addition, the applicant is encouraged to explore the possibilities of adopting water reduction strategies (i.e., use of gray water system on-site) and other measures that could reduce the consumption of potable water on this site. A list of applicable mechanisms can be found at <http://www.epa.gov/WaterSense>. (T&ES)*

E. SIGNAGE:

13. **CONDITION AMENDED:** Install a temporary informational sign as required by Section 11-303(D) of the Zoning Ordinance on the site prior to the approval of the Final Site Plan for the project. The sign shall be displayed until construction is complete or replaced with a temporary sign incorporating the required information; the sign shall notify the public of the nature of the upcoming project and shall provide a phone number for public questions regarding the project. ~~Install a temporary informational sign on the site prior to the approval of the final site plan for the project and shall be displayed until construction is complete or replaced with a contractor or real estate sign incorporating the required information; the sign shall notify the public of the nature of the upcoming project and shall provide a phone number for public questions regarding the project.~~ (P&Z)(T&ES)*

F. PARKING:

14. Provide 10 bicycle parking space(s) per Alexandria's current Bicycle Parking Standards. Bicycle parking standards, acceptable rack types for short- and long-term parking and details for allowable locations are available at: www.alexandriava.gov/bicycleparking. (T&ES) (DSUP#2009-0017)*

G. SITE PLAN:

15. **CONDITION AMENDED:** Per Section 11-418 of the Zoning Ordinance, the development special use permit shall expire and become null and void, unless substantial construction of the project is commenced within ~~36 months~~ five (5) years after initial approval and such construction is thereafter pursued with due diligence. ~~The applicant shall provide a written status report to staff 18 months after initial approval to update the City Council on the project status if substantial construction has not commenced at such time.~~ The period of validity may be extended upon petition by the applicant and after adequate notice and public hearing. (P&Z)
16. **NEW CONDITION:** Coordinate location of site utilities with other site conditions to the satisfaction of the Directors of P&Z and T&ES. These items include:
- a. Location of site utilities including above grade service openings and required clearances for items such as transformers, telephone, HVAC units and cable boxes.
 - b. Minimize conflicts with plantings, pedestrian areas and major view sheds.
 - c. Do not locate above grade utilities in dedicated open space areas and tree wells.
 - d. If applicable, all utilities shall be screened from the public ROW to the satisfaction of the Director of P&Z. (P&Z) (T&ES)*

17. Provide a lighting plan for the project area with the final site plan to verify that lighting meets City standards. The plan shall be to the satisfaction of the Directors of T&ES, P&Z, and RP&CA in consultation with the Chief of Police and shall include the following:
- a. Clearly show location of all existing and proposed street lights and site lights, shading back less relevant information.
 - b. A lighting schedule that identifies each type and number of all fixtures, mounting height, and strength of fixture in Lumens or Watts.
 - c. Manufacturer's specifications and details for all proposed fixtures including site, landscape, pedestrian, sign(s) and security lighting.
 - d. **CONDITION AMENDED:** A photometric plan with lighting calculations that include all existing and proposed light fixtures, including any existing street lights located on the opposite side(s) of all adjacent streets. Photometric calculations must extend from proposed building face(s) to property line and from property line to the opposite side(s) of all adjacent streets and/or 20 feet beyond the project limits of disturbance ~~property line on all adjacent properties and rights-of-way~~. Show existing and proposed street lights and site lights.
 - e. Photometric site lighting plan shall be coordinated with architectural/building mounted lights, site lighting, street trees and street lights to minimize light spill into adjacent residential areas.
 - f. Provide location of conduit routing between site lighting fixtures so as to avoid conflicts with street trees.
 - g. Detail information indicating proposed light pole and footing in relationship to adjacent grade or pavement. All light pole foundations shall be concealed from view.
 - h. The lighting for the areas not covered by the City of Alexandria' standards shall be designed to the satisfaction of Directors of T&ES and P&Z.
 - i. Provide numeric summary for various areas (i.e., roadway, walkway/sidewalk, alley, and parking lot, etc.) in the proposed development.
 - j. **NEW CONDITION:** Upon installation of all exterior light fixtures for the site/building, the applicant shall provide photographs of the site demonstrating compliance with this condition.
 - k. Full cut-off lighting shall be used at the development site to prevent light spill onto adjacent properties. (P&Z)(T&ES)(RP&CA)(Police)*

H. CONSTRUCTION MANAGEMENT:

18. **CONDITION AMENDED:** Submit a construction phasing plan to the satisfaction of the Director of T&ES, for review. ~~approval and partial release of Erosion and Sediment Control for the final site plan. In addition, building and construction permits required for site preconstruction shall be permitted prior to release of the final site plan to the satisfaction of the Director of T&ES.~~ (T&ES)*

19. **NEW CONDITION:** Special Inspections, Trade and other Permits:
Coordinate with the Departments of Code Administration and Transportation and Environmental Services to obtain any required permits from the City for the project. Information requested may include, but is not limited to:
- a. Civil and/or Engineering drawings
 - b. Geotechnical Data Report
 - c. Utility drawings (Excavation)
 - d. Calculations
 - e. Dewatering plan
 - f. Support of excavation plans**
20. **CONDITION AMENDED:** Submit a separate construction management plan to the Directors of P&Z, T&ES and Code Administration prior to Final Site Plan release. The plan shall:
- ~~a. Include the overall schedule for construction and the hauling route;~~
 - a. Copies of the plan shall be posted in the construction trailer and given to each subcontractor before they commence work;
 - ~~b. If the plan is found to be violated during the course of construction, citations will be issued for each infraction and a correction notice will be forwarded to the applicant. If the violation is not corrected within five (5) calendar days, a “stop work order” will be issued, with construction halted until the violation has been corrected.~~
 - b. No street lights within the public right-of-way shall be removed without authorization from the City of Alexandria.
 - c. If street lights are to be removed from the public right of way, then temporary lights shall be provided until the installation and commissioning of new lights.
 - d. Include an analysis as to whether temporary street or site lighting is needed in the public right-of-way for safety during the construction on the site and how it is to be installed.
 - e. Provide a detailed sequence of demolition and construction of improvements in the public right of way along with an overall proposed schedule for demolition and construction;
 - f. Include an overall proposed schedule for construction;
 - g. Include a plan for temporary pedestrian circulation, within the public right-of-way if required;
 - h. Include the location and size of proposed construction trailers, if any;
 - i. Include a preliminary Maintenance of Traffic Plan (MOT) as part of the construction management plan for informational purposes only, to include proposed controls for traffic movement, lane closures, construction entrances and storage of materials. (P&Z) (T&ES)*
21. **NEW CONDITION:** The demolition debris, defined as residue from a building demolition, building debris accumulated as a result of building construction/reconstruction, and excavation material taken out of the site shall be fully and securely covered to the satisfaction of the Director of T&ES, in order to haul in

and out of the site, as applicable, to ensure that haulage of the material shall not create a nuisance or adversely affect public health. The condition shall be applicable to all modes of haulage. (T&ES)

22. **NEW CONDITION:** The demolition, building debris, and excavated soil shall be disposed of in accordance with all the local, state, and federal guidelines. (T&ES)
23. **NEW CONDITION:** All material conveyed to and from the site is subject to the following:
- a. Demolition debris, construction materials and/or soil may be conveyed to and from the site by truck, on routes specifically approved by director of T&ES.
 - b. Ensure erosion and sediment control requirements are monitored throughout the duration of construction.
 - c. No stacking of trucks will be permitted in the public right-of-way.

CONDITION REMOVED: ~~Submit a construction management plan for review and approval by the Directors of P&Z, T&ES and Code Administration prior to final site plan release. The plan shall:~~

- ~~a. Include the overall schedule for construction and the hauling route;~~
 - ~~b. Copies of the plan shall be posted in the construction trailer and given to each subcontractor before they commence work;~~
 - ~~c. If the plan is found to be violated during the course of construction, citations will be issued for each infraction and a correction notice will be forwarded to the applicant. If the violation is not corrected within five (5) calendar days, a "stop work order" will be issued, with construction halted until the violation has been corrected. (P&Z)(T&ES)(Code)~~
24. Provide off-street parking for all construction workers without charge to the construction workers. Construction workers shall be not permitted to park on public streets. For the construction workers who use Metro, DASH, or another form of mass transit to the site, the applicant shall subsidize a minimum of 50% of the fees for mass transit. Compliance with this condition shall be a component of the construction management plan, which shall be submitted to the Department of P&Z and T&ES prior to final site plan release. This plan shall:
- a. Establish the location of the parking to be provided at various stages of construction, how many spaces will be provided, how many construction workers will be assigned to the work site, and mechanisms which will be used to encourage the use of mass transit.
 - b. Provide for the location on the construction site at which information will be posted regarding Metro schedules and routes, bus schedules and routes.
 - c. If the plan is found to be violated during the course of construction, a "stop work order" will be issued, with construction halted until the violation has been corrected. (P&Z)(T&ES) (DSUP#2009-0017)*

25. **NEW CONDITION:** No major construction staging shall be allowed within the public right-of-way. The applicant shall meet with T&ES to discuss construction staging activities prior to release of any permits for ground disturbing activities. A MOT and grading permit shall be obtained from the Director T&ES for staging on or closure of City Street (T&ES) **
26. A “Certified Land Disturber” (CLD) shall be named in a letter to the Division Chief of Construction & Inspection prior to any land disturbing activities. If the CLD changes during the project, that change must be noted in a letter to the Division Chief. A note to this effect shall be placed on the Phase I Erosion and Sediment Control sheets on the site plan. (T&ES) (DSUP#2009-0017) *
27. **NEW CONDITION:** Prior to commencing clearing and grading of the site, the applicant shall hold a meeting with notice to all adjoining property owners and civic associations to review the location of construction worker parking, plan for temporary pedestrian and vehicular circulation, and hours and overall schedule for construction. The Departments of P&Z and T&ES shall be notified a minimum of 14 calendar days prior to the meeting date, and the meeting must be held before any permits are issued. (P&Z) (T&ES)
28. Identify a person who will serve as a liaison to the community throughout the duration of construction. The name and telephone number, including an emergency contact number, of this individual shall be provided in writing to residents, property managers and business owners whose property abuts the site and shall be placed on the project sign, to the satisfaction of the Directors of P&Z, RP&CA and T&ES. (P&Z)(RP&CA)(T&ES) (DSUP#2009-0017)**
29. **CONDITION AMENDED:** Implement a waste and refuse control program during the construction phase of this development. This program shall control wastes such as discarded building materials, concrete truck washout, chemicals, litter or trash, trash generated by construction workers or mobile food vendor businesses serving them, and all sanitary waste at the construction site and prevent offsite migration that may cause adverse impacts to neighboring properties or to the environment to the satisfaction of Directors of T&ES and Code Administration. All wastes shall be properly disposed offsite in accordance with all applicable federal, state and local laws. Provide information on the program in construction management plan. If program is implemented in coordination with green building certification, include documentation as appropriate per the City’s Green Building Policy and conditions herein. (T&ES)*
30. Temporary construction and/or on-site sales trailer(s) shall be permitted and be subject to the approval of the Director of P&Z. The trailer(s) shall be removed prior to the issuance of a final certificate of occupancy permit. (P&Z) (DSUP#2009-0017)***

31. Submit a wall check prior to the commencement of construction of the first floor above grade framing for the building(s). The wall check shall include the building footprint, as depicted in the approved final site plan, the top-of-slab elevation and the first floor elevation. The wall check shall be prepared and sealed by a registered engineer or surveyor, and shall be approved by the P&Z prior to commencement of framing. (P&Z) (DSUP#2009-0017)
32. **CONDITION AMENDED:** Submit an as-built development site plan, pursuant to the requirements outlined in the site plan checklist to the Department of Transportation and Environmental Services. The as-built development site plan survey shall be prepared and sealed by a registered architect, engineer, or surveyor. The as-built drawing shall be submitted and approved by the City prior to the expiration of their contractors' performance bond. The applicant is required to obtain a contractors' performance and payment bond pursuant to Section 2.2-4337 of the Virginia Code. As such, a performance or other bonds for the benefit of the City may not be required. (P&Z) (T&ES) **** ~~Submit a height certification and a location survey for all site improvements to the Department of P&Z as part of the request for a certificate of occupancy permit. The height certification and the location survey shall be prepared and sealed by a registered architect, engineer, or surveyor. The height certification shall state that the height was calculated based on all applicable provisions of the Zoning Ordinance. (P&Z)~~
33. Contractors shall not cause or permit vehicles to idle for more than 10 minutes when parked. (T&ES) (DSUP#2009-0017)
34. **NEW CONDITION:** Any off-site staging or construction worker parking may be permitted subject to the following:
 - a. Uses of the off-site location may be used for material or equipment staging, construction worker parking and storage of construction office trailers.
 - b. A security and screening fence shall be provided around the perimeter of the site. The fence shall be a minimum six (6) feet in height and shall provide a visual barrier into the lot from the adjoining streets, to the satisfaction of the Directors of T&ES and P&Z.
 - c. Any security lighting shall be directed away from adjacent residential properties.
 - d. A site layout of the temporary parking lot shall be provided at final site plan and shall include location of fencing, entry points to the site, and general depiction of what and where various activities on the site will take place, to the satisfaction of the Directors of T&ES and P&Z. (P&Z)(T&ES)*

J. STREETS / TRAFFIC:

35. If the City's existing public infrastructure is damaged during construction, or patch work required for utility installation then the applicant shall be responsible for construction/ installation or repair of the same as per the City of Alexandria

standards and specifications and to the satisfaction of Director of Transportation and Environmental Services. (T&ES) (DSUP#2009-0017)

36. **NEW CONDITION:** If necessary, asphalt patches in the public right-of-way larger than 20% of the total asphalt surface, measured along the length of the road adjacent to the property frontage and/or extending to the centerline of the street, will require full curb to curb restoration. (T&ES)
37. A pre-construction walk/survey of the site shall occur with Transportation and Environmental Services Construction and Inspection staff to document existing conditions prior to any land disturbing activities. (T&ES) (DSUP#2009-0017)
38. **NEW CONDITION:** Show turning movements of standard vehicles for loading areas and parking lots. Show turning movements of the largest delivery vehicle projected to use the loading area. Turning movements shall be to the satisfaction of the Director of T&ES. (T&ES)*
39. Submit a Traffic Control Plan as part of the final site plan, for construction detailing proposed controls to traffic movement, lane closures, construction entrances, haul routes, and storage and staging shall be provided for informational purposes. In addition, the Traffic Control Plan, shall be amended as necessary and submitted to the Director of T&ES along with the Building and other Permit Applications as required. The Final Site Plan shall include a statement “FOR INFORMATION ONLY” on the Traffic Control Plan Sheets. (T&ES) (DSUP#2009-0017)*
40. All Traffic Control Device design plans, Work Zone Traffic Control plans, and Traffic Studies shall be signed and sealed by a professional engineer, registered in the Commonwealth of Virginia. (T&ES) (DSUP#2009-0017)*

K. UTILITIES:

41. Locate all private utilities outside of the public right-of-way and public utility easements. (T&ES) (DSUP#2009-0017)
42. **NEW CONDITION:** No transformer and switch gears shall be located in the public right of way. (T&ES)

L. SOILS:

43. **CONDITION AMENDED:** Provide a geotechnical report, ~~including recommendations from a geotechnical professional for proposed cut slopes and embankments.~~ (T&ES)**

M. WATERSHED, WETLANDS, & RPAs:

44. The storm water collection system is located within the ~~Timber Branch~~ Hooffs Run watershed. All on-site storm water curb inlets and public curb inlets within 50 feet of the property line shall be duly marked using standard City markers, or to the satisfaction of the Director of T&ES. (T&ES) (DSUP#2009-0017)

CONDITION REMOVED: ~~Site plan must reflect the field-verified location of the RPA.~~
(T&ES)

45. **NEW CONDITION:** Provide Environmental Site Assessment Notes that clearly delineate the individual components of the RPA (where applicable) as well as the total geographic extent of the RPA, to include the appropriate buffer, in a method approved by the Director of Transportation and Environmental Services. The Environmental Site Assessment shall also clearly describe, map or explain intermittent streams and associated buffer; highly erodible and highly permeable soils; steep slopes greater than 15 percent in grade; known areas of contamination; springs, seeps or related features; and a listing of all wetlands permits required by law. (T&ES)*
46. **NEW CONDITION:** The project is located within an existing RPA or mapped wetland area; therefore, the applicant shall prepare a Water Quality Impact Assessment in accordance with the provisions of Article XIII of the City of Alexandria Zoning Ordinance to the satisfaction of the Director of Transportation and Environmental Services. (T&ES)*
47. **NEW CONDITION:** Mitigate any impacts on water quality of the development by encroachment into and/or destruction of an existing resource protection areas (RPAs) and mapped wetland area by the following methods to the satisfaction of the Director of Transportation and Environmental Services:
- a. Restoring streams subject to historic erosion damage.
 - b. Increasing vegetation onsite and/or performing offsite plantings.
 - c. Contribution to T&ES/DEQ funds to stream restoration / water quality projects.
 - d. These mitigation efforts shall be quantified and tabulated against encroachments as follows:
 - e. Wetlands destruction shall be mitigated at a ratio of 2:1 and offsite at 3:1.
 - f. Resource Protection Area Encroachments shall be mitigated according to the guidelines suggested in the “Riparian Buffers Modification & Mitigation Guidance Manual” by the Chesapeake Bay Local Assistance Department. (T&ES)*

N. STORMWATER MANAGEMENT:

48. **CONDITION AMENDED:** ~~Prior to release of the performance bond approval of the as-built drawings,~~ the Applicant is required to submit a certification by a qualified professional to the satisfaction of the Director of T&ES that any existing storm water management facilities adjacent to the project and associated conveyance systems were not adversely affected by construction operations and that they are functioning as designed and are unaffected by construction activities. If maintenance of the facility or systems were required in order to make this certification, provide a description of the maintenance measures performed. (T&ES) (DSUP#2009-0017)****
49. **NEW CONDITION:** This plan utilizes a stormwater master plan that accounts for the disturbance from both DSP2019-00013 and DSP2018-00020. Any changes made to either DSP that affect the stormwater management design or calculations requires an update to be made to both plans. (T&ES)
50. **NEW CONDITION:** The City of Alexandria's stormwater management regulations regarding water quality are two-fold: 1) state phosphorus removal requirement and 2) Alexandria Water Quality Volume Default. Compliance with the state phosphorus reduction requirement does not relieve the applicant from the Alexandria Water Quality Default requirement. The Alexandria Water Quality Volume Default, as determined by the site's post-development impervious area shall be treated in a Best Management Practice (BMP) facility. (T&ES)
51. **NEW CONDITION:** Provide BMP narrative and complete pre and post development drainage maps that include areas outside that contribute surface runoff from beyond project boundaries to include adequate topographic information, locations of existing and proposed storm drainage systems affected by the development, all proposed BMPs and a completed Virginia Runoff Reduction Method (VRMM) worksheet showing project compliance. The project must use hydrologic soil group "D" in the spreadsheet unless a soils report from a soil scientist or geotechnical engineer delineates onsite soils otherwise. (T&ES)*
52. **NEW CONDITION:** All stormwater Best Management Practices (BMPs) must be designed to comply with the most recent standards and specifications published in the Virginia Stormwater BMP Clearinghouse. Provide complete design details for all BMPs. This includes site specific plan views, cross sections, planting plans, and complete design calculations for each BMP. (T&ES)*
53. **NEW CONDITION:** Provide a BMP table with a separate listing for each individual BMP that includes the name of the practice, total area treated (acres), pervious area treated (acres), impervious area treated (acres), phosphorous removal efficiency (percentage), phosphorous removal efficiency (percentage),

phosphorous removed by the practice (lbs.), and latitude and longitude in decimal degrees (NAD83). (T&ES)*

54. **NEW CONDITION:** Prior to approval of the as-built drawings, the Applicant is required to submit all documents required by the City of Alexandria, VA As-Built Stormwater Requirements. This includes the As-Built stormwater plan set, BMP certification, Downstream conveyance certification, Notice of termination, CAD/Shapefile with spatial reference data, As-Built stormwater data spreadsheet, and BMP construction checklist and associated photos. Construction record drawings for permanent stormwater management must be appropriately signed and sealed by a professional registered in the Commonwealth of Virginia and certify that the stormwater management facilities have been constructed in accordance approved plans and specifications. (T&ES)****
55. **NEW CONDITION:** The stormwater Best Management Practices (BMPs) required for this project shall be constructed and installed under the direct supervision of the design professional or his designated representative. Prior to approval of the as-built drawings, the design professional shall submit a written certification to the Director of T&ES that the BMPs are:
a. Constructed and installed as designed and in accordance with the released Final Site Plan.****
b. Clean and free of debris, soil, and litter by either having been installed or brought into service after the site was stabilized. (T&ES) ****
56. **NEW CONDITION:** Surface-installed stormwater Best Management Practice (BMP) measures, i.e. Bio-Retention Filters, Vegetated Swales, etc. that are employed for this site, require installation of descriptive signage to the satisfaction of the Director of T&ES. (T&ES)***
57. **NEW CONDITION:** Submit two (2) originals of the stormwater quality BMP Maintenance Agreement, to include the BMP Schedule and Guidelines Addendum with the City to be reviewed as part of the Final #2 Site Plan. The agreement must be executed and recorded with the Land Records Division of Alexandria Circuit Court prior to approval of the Final Site Plan. (T&ES) *
58. **NEW CONDITION:** The Applicant/Owner shall be responsible for installing and maintaining stormwater Best Management Practices (BMPs). The Applicant/Owner shall execute a maintenance service contract with a qualified private contractor for a minimum of three (3) years and develop an Owner's Operation and Maintenance Manual for all Best Management Practices (BMPs) on the project. The manual shall include at a minimum: an explanation of the functions and operations of the BMP(s); drawings and diagrams of the BMP(s) and any supporting utilities; catalog cuts on maintenance requirements including mechanical or electrical equipment; manufacturer contact names and phone numbers; a copy of the executed maintenance service contract; and a copy of the

maintenance agreement with the City. A copy of the contract shall also be placed in the BMP Operation and Maintenance Manual. Prior to release of the approval of the as-built drawings, a copy of the maintenance contract shall be submitted to the City. (T&ES) ****

59. **NEW CONDITION:** Submit a copy of the Operation and Maintenance Manual to the T&ES Stormwater Management Division on digital media prior to approval of the as-built drawings. (T&ES) ****

O. FLOODPLAIN MANAGEMENT:

60. **NEW CONDITION:** If applicable, demonstrate compliance with flood plain ordinance Section 6-300 to Section 6-311 of Article VI Special and Overlay Zones. No final site plan shall be approved until full compliance with flood plain ordinance has been demonstrated. (T&ES)*
61. **NEW CONDITION:** All required information must appear on the final site plan submission (application) in order to be compliant with the City of Alexandria Floodplain Ordinance and allow for proper review of further compliance. Required items shall include, at a minimum, the following:
- a. The base flood elevation (BFE) in or near the site;
 - b. The elevation of the lowest floor for any buildings in the floodplain (including basement);
 - c. For structures in the floodplain to be floodproofed (nonresidential only), the elevation to which the structure will be floodproofed; and,
 - d. Topographic information showing existing and proposed ground elevations. (T&ES)*
62. **NEW CONDITION:** Where any portion of the development effects topography within the boundaries or finished conditions encroaches into boundaries of the effective FEMA floodplain, the applicant shall furnish specific engineering data and information, in addition to Zoning Ordinance Requirements, as to the effect of the proposed construction on future flood heights. No Final Site Plan shall be released until the applicant has demonstrated that no increase in water surface elevation for the 100-year flood will result due to implementation of this project. Computations are to include backwater calculations starting at a downstream cross section to an upstream cross section. Computations shall be made by modifying the existing HEC-RAS model, where appropriate, as prepared by the U.S. Army Corps of Engineers, Baltimore District. (T&ES)*
63. **NEW CONDITION:** For all Residential and Non-Residential development (New and/or Substantial Improvement) in Special Flood Hazard Area (SFHA):
- a. Upon placement of the lowest floor (including basements and garages) and prior to further vertical construction, an Elevation Certificate (FEMA Form 086-0-33), completed and certified by a Licensed Land Surveyor or Licensed

Professional Engineer, shall be provided to the T&ES Development Coordinator. (T&ES)

64. **NEW CONDITION:** For all Non-Residential development (New and/or Substantial Improvement) in Special Flood Hazard Area (SFHA) that includes Dry Floodproofing:
- a. At substantial completion of construction and prior to issuance of Certificate of Occupancy, a Certificate of Floodproofing (FEMA Form 086-0-34), completed and certified by a Licensed Professional Engineer or Architect, shall be provided to the T&ES Development Coordinator. (T&ES)***

P. CONTAMINATED LAND:

65. **CONDITION AMENDED:** Should any unanticipated contamination, underground storage tanks, drums or containers be encountered at the site during construction, the Applicant must immediately notify the City of Alexandria Department of Transportation and Environmental Services, Office of Environmental Quality. Should unanticipated conditions warrant, construction within the impacted area shall be stopped until the appropriate environmental reports identified in a. through f. above are submitted and approved at the discretion of the Director of Transportation and Environmental Services. This shall be included as a note on the Final Site Plan. (T&ES) (Code)* ~~Indicate whether or not there is any known soil and groundwater contamination present as required with all preliminary submissions. Should any unanticipated contamination, underground storage tanks, drums or containers be encountered at the site, the Applicant must immediately notify the City of Alexandria Department of Transportation and Environmental Services, Office of Environmental Quality. (T&ES) (DSUP#2009-0017)~~
66. **CONDITION AMENDED:** If environmental site assessments or investigations discover the presence of contamination on site, the final site plan shall not be released, and no construction activity shall take place until the following has been submitted and approved by the Director of T&ES:
- a. Submit a Site Characterization Report/Extent of Contamination Study detailing the location, applicable contaminants, and the estimated quantity of any contaminated soils and/or groundwater at or in the immediate vicinity of the site.
- b. Submit a Risk Assessment indicating any risks associated with the contamination.
- c. Submit a Remediation Plan detailing how any contaminated soils and/or groundwater will be dealt with, including plans to remediate utility corridors. Utility corridors in contaminated soil shall be over excavated by 2 feet and backfilled with “clean” soil. Include description of environmentally sound methods of off-site transport and disposal of contaminated soils and debris

- (including, but not limited to types of vehicles appropriate for handling specific materials and ensuring vehicle loads are covered).
- d. Submit a Health and Safety Plan indicating measures to be taken during remediation and/or construction activities to minimize the potential risks to workers, the neighborhood, and the environment. Initial Air Monitoring may be required during site activities to demonstrate acceptable levels of volatiles and/or airborne particles. The determination whether air monitoring is needed must be adequately addressed in the Health and Safety Plan submitted for review.
 - e. The applicant shall screen for PCBs as part of the site characterization if any of the past uses are within the identified high risk category sites for potential sources of residual PCBs, which includes the following SICs: 26&27 (Paper and Allied Products), 30 (Rubber and Misc. Plastics), 33 (Primary Metal Industries), 34 (Fabricated Metal Products), 37 (Transportation Equipment), 49 (Electrical, Gas, and Sanitary Services), 5093 (Scrap Metal Recycling), and 1221&1222 (Bituminous Coal).
 - f. Applicant shall submit three (3) electronic and two (2) hard copies of the above. The remediation plan must be included in the Final Site Plan. (T&ES)

*

~~The final site plan shall not be released, and no construction activity shall take place until the following has been submitted and/or updated and approved by the Director of T&ES:~~

- ~~g. Submit a Site Characterization Report/Extent of Contamination Study detailing the location, applicable contaminants, and the estimated quantity of any contaminated soils and/or groundwater at or in the immediate vicinity of the site.~~
- ~~h. Submit a Risk Assessment indicating any risks associated with the contamination.~~
- ~~i. Submit a Remediation Plan detailing how any contaminated soils and/or groundwater will be dealt with, including plans to remediate utility corridors. Utility corridors in contaminated soil shall be over excavated by 2 feet and backfilled with “clean” soil.~~
- ~~j. Submit a Health and Safety Plan indicating measures to be taken during remediation and/or construction activities to minimize the potential risks to workers, the neighborhood, and the environment. Applicant shall submit 5 copies of the above. The remediation plan must be included in the Final Site Plan. (T&ES) (DSUP#2009-0017)~~

67. **CONDITION AMENDED:** If warranted by a Site Characterization report, design and install a vapor barrier and ventilation system for buildings and parking areas in order to prevent the migration or accumulation of methane or other gases, or conduct a study and provide a report signed by a professional engineer showing that such measures are not required to the satisfaction of Directors of T&ES and Code Administration. The installed vapor barrier and ventilation system must include a passive ventilation system that can be converted to an active ventilation system if warranted. (T&ES)** ~~Design and install a vapor barrier and ventilation~~

~~system for buildings and parking areas in order to prevent the migration or accumulation of methane or other gases, or conduct a study and provide a report signed by a professional engineer showing that such measures are not required to the satisfaction of Directors of T&ES and Code Administration. (T&ES) (DSUP#2009-0017)~~

CITY DEPARTMENT CODE COMMENTS

Legend: C - Code Requirement R - Recommendation S - Suggestion F – Finding

Transportation and Environnemental Services (T&ES)

- F-1 **NEW FINDING:** Since the record drawings, maps, and other documents of the City of Alexandria, State, and Federal agencies show the true north pointing upwards, therefore, the Site Plan shall show the true north arrow pointing upward as is customary; however, for the sake of putting the plan together and/or ease of understanding, the project north arrow pointing upward, preferably east, or west may be shown provided it is consistently shown in the same direction on all the sheets with no exception at all. The north arrow shall show the source of meridian. The project north arrow pointing downward will not be acceptable even if, it is shown consistently on all the sheets. (T&ES)
- F-2 **NEW FINDING:** The Final Site Plan must be prepared per the requirements of Memorandum to Industry 02-09 dated December 3, 2009, Design Guidelines for Site Plan Preparation, which is available at the City's website:
- F-3 **NEW FINDING:** The plan shall show sanitary and storm sewer, and water line in plan and profile in the first final submission and cross reference the sheets on which the plan and profile is shown, if plan and profile is not shown on the same sheet. Clearly label the sanitary and storm sewer, or water line plans and profiles. Provide existing and proposed grade elevations along with the rim and invert elevations of all the existing and proposed sanitary and storm sewer at manholes, and water line piping at gate wells on the respective profiles. Use distinctive stationing for various sanitary and storm sewers (if applicable or required by the plan), and water line in plan and use the corresponding stationing in respective profiles. (T&ES)
- F-4 **NEW FINDING:** The Plan shall include a dimension plan with all proposed features fully dimensioned and the property line clearly shown. (T&ES)
- F-5 **NEW FINDING:** Include all symbols, abbreviations, and line types in the legend. (T&ES)
- F-6 **NEW FINDING:** All storm sewers shall be constructed to the City of Alexandria standards and specifications. Minimum diameter for storm sewers shall be 18" in the public Right of Way (ROW) and the minimum size storm sewer catch basin lead is 15". The acceptable pipe materials will be Reinforced Concrete Pipe (RCP) ASTM C-76 Class

IV. Alternatively, AWWA C-151 (ANSI A21.51) Class 52 may be used if approved by the Director of T&ES. For roof drainage system, Polyvinyl Chloride (PVC) ASTM D-3034-77 SDR 26 and ASTM 1785-76 Schedule 40 pipes will be acceptable. The acceptable minimum and maximum velocities will be 2.0 fps and 15 fps, respectively. The storm sewers immediately upstream of the first manhole in the public Right of Way shall be owned and maintained privately (i.e., all storm drains not shown within an easement or in a public Right of Way shall be owned and maintained privately). (T&ES)

- F-7 **NEW FINDING:** All sanitary sewers shall be constructed to the City of Alexandria standards and specifications. Minimum diameter of sanitary sewers shall be 10 inches in the public Right of Way and sanitary lateral 6 inches for all commercial and institutional developments; however, a 4-inch sanitary lateral will be acceptable for single family residences. The acceptable pipe materials will be Polyvinyl Chloride (PVC) ASTM D-3034-77 SDR 26, ASTM 1785-76 Schedule 40, Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52, or reinforced concrete pipe ASTM C-76 Class IV (For 12 inch or larger diameters); Class III may be acceptable on private properties. The acceptable minimum and maximum velocities will be 2.5 fps and 10 fps, respectively. Laterals shall be connected to the sanitary sewer through a manufactured “Y” or “T” or approved sewer saddle. Where the laterals are being connected to existing Terracotta pipes, replace the section of main and provide manufactured “Y” or “T”, or else install a manhole. (T&ES)
- F-8 **NEW FINDING:** Lateral Separation of Sewers and Water Mains: A horizontal separation of 10 feet (edge to edge) shall be provided between a storm or sanitary sewer and a water line; however, if this horizontal separation cannot be achieved then the sewer and water main shall be installed in separate trenches and the bottom of the water main shall be at least 18 inches above of the top of the sewer. If both the horizontal and vertical separations cannot be achieved, then the sewer pipe material shall be Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 and pressure tested in place without leakage prior to installation. (T&ES)
- F-9 **NEW FINDING:** Crossing Water Main Over and Under a Sanitary or Storm Sewer: When a water main over crosses or under crosses a sanitary / storm sewer then the vertical separation between the bottom of one (i.e., sanitary / storm sewer or water main) to the top of the other (water main or sanitary / storm sewer) shall be at least 18 inches for sanitary sewer and 12 inches for storm sewer; however, if this cannot be achieved then both the water main and the sanitary / storm sewer shall be constructed of Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 with joints that are equivalent to water main standards for a distance of 10 feet on each side of the point of crossing. A section of water main pipe shall be centered at the point of crossing and the pipes shall be pressure tested in place without leakage prior to installation. Sewers crossing over the water main shall have adequate structural support (concrete pier support and/or concrete encasement) to prevent damage to the water main. Sanitary sewers under creeks and storm sewer pipe crossings with less than 6-inch clearance shall be encased in concrete. (T&ES)

- F-10 **NEW FINDING:** No water main pipe shall pass through or come in contact with any part of sanitary / storm sewer manhole. Manholes shall be placed at least 10 feet horizontally from the water main whenever possible. When local conditions prohibit this horizontal separation, the manhole shall be of watertight construction and tested in place. (T&ES)
- F-11 **NEW FINDING:** Crossing Existing or Proposed Utilities: Underground telephone, cable T.V., gas, and electrical duct banks shall be crossed maintaining a minimum of 12 inches of separation or clearance with water main, sanitary, or storm sewers. If this separation cannot be achieved, then the sewer pipe material shall be Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 for a distance of 10 feet on each side of the point of crossing and pressure tested in place without leakage prior to installation. Sanitary / storm sewers and water main crossing over the utilities shall have adequate structural support (pier support and/or concrete encasement) to prevent damage to the utilities. (T&ES)
- F-12 **NEW FINDING:** All the existing and proposed public and private utilities and easements shall be shown on the plan and a descriptive narration of various utilities shall be provided. (T&ES)
- F-13 **NEW FINDING:** A Maintenance of Traffic Plan shall be provided within the Construction Management Plan and shall replicate the existing vehicular and pedestrian routes as nearly as practical. Pedestrian and bike access shall be maintained adjacent to the site per Memo to Industry #04-18. These sheets are to be provided as “Information Only.” (T&ES)
- F-14 **NEW FINDING:** The following notes shall be included on all Maintenance of Traffic Plan Sheets: (T&ES)
 - a. The prepared drawings shall include a statement “FOR INFORMATION ONLY” on all MOT Sheets.
 - b. Sidewalk closures will not be permitted for the duration of the project. Temporary sidewalk closures are subject to separate approval from Transportation and Environmental Services (T&ES) at the time of permit application.
 - c. Contractor shall apply for all necessary permits for uses of the City Right of Way and shall submit MOT Plans with the T&ES Application for final approval at that time. *
- C-1 **NEW CODE REQUIREMENT:** Per the requirements of the City of Alexandria Zoning Ordinance Article XI, the applicant shall complete a drainage study and adequate outfall analysis for the total drainage area to the receiving sewer that serves the site. If the existing storm system is determined to be inadequate, then the applicant shall design and build on-site or off-site improvements to discharge to an adequate outfall; even if the post development stormwater flow from the site is reduced from the pre-development flow. The Plan shall demonstrate to the satisfaction of the Director of T&ES that a non-erosive stormwater outfall is present. (T&ES)

- C-2 **NEW CODE REQUIREMENT:** Per the requirements of the City of Alexandria Zoning Ordinance (AZO) Article XIII, Environmental Management Ordinance, the applicant shall comply with the stormwater quality and quantity requirements and provide channel protection and flood protection in accordance with these requirements. If combined uncontrolled and controlled stormwater outfall is proposed, the peak flow requirements of the Zoning Ordinance shall be met. If the project site lies within the Braddock-West watershed or known flooding area, then the applicant shall provide an additional 10 percent storage of the pre-development flows in this watershed to meet detention requirements. (T&ES)
- C-3 **NEW CODE REQUIREMENT:** Per the requirements of Article 13-114 (f) of the AZO, all stormwater designs that require analysis of pressure hydraulic systems, including but not limited to the design of flow control structures and stormwater flow conveyance systems shall be signed and sealed by a professional engineer, registered in the Commonwealth of Virginia. The design of storm sewer shall include the adequate outfall, inlet, and hydraulic grade line (HGL) analyses that shall be completed to the satisfaction of the Director of T&ES. Provide appropriate reference and/or source used to complete these analyses. (T&ES)
- C-4 **NEW CODE REQUIREMENT:** The proposed development shall conform to all requirements and restrictions set forth in Section 6-300 (Flood plain District) of Article VI (Special and Overlay Zones) of the City of Alexandria Zoning Ordinance. (T&ES)
- C-5 **NEW CODE REQUIREMENT:** If it is determined that the site is not in compliance with Section 13-1-3 of the City Code, then the applicant shall make additional improvements to adjust lighting levels to the satisfaction of the Director of T&ES to comply with the Code. (T&ES)
- C-6 **NEW CODE REQUIREMENT:** Location of customer utility services and installation of transmission, distribution and main lines in the public rights of way by any public service company shall be governed by franchise agreement with the City in accordance with Title 5, Chapter 3, Section 5-3-2 and Section 5-3-3, respectively. The transformers, switch gears, and boxes shall be located outside of the public right of way. (T&ES)
- C-7 **NEW CODE REQUIREMENT:** (a) Per the requirements of Section 5-3-2, Article A, Chapter 3 of the City of Alexandria Code, all new customer utility services, extensions of existing customer utility services and existing overhead customer utility services supplied by any existing overhead facilities which are relocated underground shall, after October 15, 1971 be installed below the surface of the ground except otherwise exempted by the City Code and to the satisfaction of the Director, Department of Transportation and Environmental Services. (b) Per the requirements of Section 5-3-3, Article A, Chapter 3 of the City of Alexandria Code, all new installation or relocation of poles, towers, wires, lines, cables, conduits, pipes, mains, and appurtenances used or intended to be used to transmit or distribute any service such as electric current, telephone, telegraph, cable television, traffic control, fire alarm, police communication, gas, water, steam or

petroleum, whether or not on the streets, alleys, or other public places of the City shall, after October 15, 1971, be installed below the surface of the ground or below the surface in the case of bridges and elevated highways except otherwise exempted by the City Code and to the satisfaction of Director, Department of Transportation and Environmental Services. (T&ES)

- C-8 **NEW CODE REQUIREMENT:** Flow from downspouts, foundation drains, and sump pumps shall be discharged to the storm sewer per the requirements of Memorandum to Industry 05-14 that is available on the City of Alexandria's web site. The downspouts and sump pump discharges shall be piped to the storm sewer outfall, where applicable after treating for water quality as per the requirements of Article XIII of Alexandria Zoning Ordinance (AZO). (T&ES)
- C-9 **NEW CODE REQUIREMENT:** Per the requirements of Title 4, Chapter 2, Article B, Section 4-2-21, Appendix A, Section A 106(6), Figure A 106.1 Minimum Standards for Emergency Vehicle Access: provide a total turning radius of 25 feet to the satisfaction of Directors of T&ES and Office of Building and Fire Code Administration and show turning movements of standard vehicles in the parking lot as per the latest AASHTO vehicular guidelines. (T&ES)
- C-10 **NEW CODE REQUIREMENT:** The applicant shall be responsible to deliver all solid waste, as defined by the City Charter and Code of the City of Alexandria, to the Covanta Energy Waste Facility located at 5301 Eisenhower Avenue. A note to that effect shall be included on the plan. The developer further agrees to stipulate in any future lease or property sales agreement that all tenants and/or property owners shall also comply with this requirement. (T&ES)
- C-11 **NEW CODE REQUIREMENT:** The applicants shall submit a Recycling Implementation Plan (RIP) form to the Solid Waste Division, as outlined in Article H of Title 5 (Ordinance Number 4438), which requires all commercial properties to recycle. Instructions for how to obtain a RIP form can be found at: waste or by calling the Solid Waste Division at 703.746.4410 or by e-mailing . (T&ES)
- C-12 **NEW CODE REQUIREMENT:** Plans and profiles of utilities and roads in public easements and/or public Right of Way must be approved prior to release of the plan. (T&ES) *
- C-13 **NEW CODE REQUIREMENT:** Provide a phased erosion and sediment control plan consistent with grading and construction plan. (T&ES)
- C-14 **NEW CODE REQUIREMENT:** Per the Memorandum to Industry, dated July 20, 2005, the applicant is advised regarding a requirement that applicants provide as-built sewer data as part of the final as-built process. Upon consultation with engineering firms, it has been determined that initial site survey work and plans will need to be prepared using Virginia State Plane (North Zone) coordinates based on NAD 83 and NAVD 88.

Control points/Benchmarks which were used to establish these coordinates should be referenced on the plans. To ensure that this requirement is achieved, the applicant is requested to prepare plans in this format including initial site survey work if necessary. (T&ES)

- C-15 **NEW CODE REQUIREMENT:** The thickness of sub-base, base, and wearing course shall be designed using “California Method” as set forth on page 3-76 of the second edition of a book entitled, “Data Book for Civil Engineers, Volume One, Design” written by Elwyn E. Seelye. Values of California Bearing Ratios used in the design shall be determined by field and/or laboratory tests. An alternate pavement section for Emergency Vehicle Easements (EVE) to support H-20 loading designed using California Bearing Ratio (CBR) determined through geotechnical investigation and using Virginia Department of Transportation (VDOT) method (Vaswani Method) and standard material specifications designed to the satisfaction of the Director of Transportation and Environmental Services (T&ES) will be acceptable. (T&ES)
- C-16 **NEW CODE REQUIREMENT:** All pedestrian, traffic, and way finding signage shall be provided in accordance with the Manual of Uniform Traffic Control Devices (MUTCD), latest edition to the satisfaction of the Director of T&ES. (T&ES)
- C-17 **NEW CODE REQUIREMENT:** All driveway entrances, curbing, etc. in the public ROW or abutting public ROW shall meet City design standards. (T&ES)
- C-18 **NEW CODE REQUIREMENT:** All sanitary laterals and/or sewers not shown in the easements shall be owned and maintained privately. (T&ES)
- C-19 **NEW CODE REQUIREMENT:** The applicant shall comply with the City of Alexandria’s Noise Control Code, Title 11, Chapter 5, which sets the maximum permissible noise level as measured at the property line. (T&ES)
- C-20 **NEW CODE REQUIREMENT:** All construction activities must comply with the Alexandria Noise Control Code Title 11, Chapter 5, Section 11-5-4(b)(15), which permits construction activities to occur between the following hours:
a. Monday Through Friday from 7 AM To 6 PM and
b. Saturdays from 9 AM to 6 PM.
c. No construction activities are permitted on Sundays and holidays.

Section 11-5-4(b)(19) further restricts the Pile Driving to the following hours:

- d. Monday Through Friday from 9 AM To 6 PM and
- e. Saturdays from 10 AM To 4 PM
- f. No pile driving is permitted on Sundays and holidays.

Section 11-5-109 restricts work in the right of way for excavation to the following:

- g. Monday through Saturday 7 AM to 5 pm
- h. No excavation in the right of way is permitted on Sundays. (T&ES)

- C-21 **NEW CODE REQUIREMENT:** The applicant shall comply with the Article XIII of the City of Alexandria Zoning Ordinance, which includes requirements for stormwater pollutant load reduction, treatment of the Alexandria Water Quality Volume Default and stormwater quantity management. (T&ES)
- C-22 **NEW CODE REQUIREMENT:** The applicant shall comply with the City of Alexandria, Erosion and Sediment Control Code, Section 5, Chapter 4. (T&ES)
- C-23 **NEW CODE REQUIREMENT:** All required permits from Virginia Department of Environmental Quality, Environmental Protection Agency, Army Corps of Engineers, and/or Virginia Marine Resources shall be in place for all project construction and mitigation work prior to release of the Final Site Plan. This includes the state requirement for a state General VPDES Permit for Discharges of Stormwater from Construction Activities (general permit) and associated Stormwater Pollution Prevention Plan (SWPPP) for land disturbing activities equal to or greater than one acre. See memo to industry 08-14 which can be found on-line here: <http://alexandriava.gov/tes/info/default.aspx?id=3522>. (T&ES) *
- C-24 **NEW CODE REQUIREMENT:** The applicant must provide a Stormwater Pollution Prevention Plan (SWPPP) Book with the Final 1 submission. The project's stormwater management (SWM) plan and the erosion and sediment control (E&SC) plan must be approved prior to the SWPPP being deemed approved and processed to receive coverage under the VPDES Construction General Permit. Upon approval, an electronic copy of the approved SWPPP Book must be provided with the Mylar submission and the coverage letter must be copied onto the plan sheet containing the stormwater management calculations. An electronic copy and a hardcopy of the SWPPP Binder Book must be included in the released site plans, and the approved hardcopy SWPPP Binder Book must accompany the construction drawings onsite. Separate parcel owners will be required to seek separate VPDES Construction General Permit Coverage unless a blanket entity incorporated in Virginia has control of the entire project. (T&ES-Storm)

Asterisks denote the following:

- * Condition must be fulfilled prior to release of the Final Site Plan
- ** Condition must be fulfilled prior to release of the building permit
- *** Condition must be fulfilled prior to release of the certificate of occupancy
- **** Condition must be fulfilled prior to approval of the as-built drawing



APPLICATION

DEVELOPMENT SPECIAL USE PERMIT with SITE PLAN

DSUP # 2019-0013

Project Name: RiverRenew TDPS

PROPERTY LOCATION: 1500 Eisenhower Avenue

TAX MAP REFERENCE: 079.02-02-01

ZONE: UT

APPLICANT:

Name: Alexandria Renew Enterprises

Address: 1800 Limerick Street, Alexandria VA 22314

PROPERTY OWNER:

Name: Alexandria Renew Enterprises

Address: 1500 Eisenhower Avenue

SUMMARY OF PROPOSAL Requesting DSUP for new facilities required at AlexRenew's WRRF to accommodate and treat combined sewer flows collected and conveyed by the RiverRenew tunnel system.

MODIFICATIONS REQUESTED n/a

SUP's REQUESTED Special Use Utilities, Special Use Permit to Increase Building Height to 50 Feet, Parking Reduction

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

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

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

Caitlin Feehan

Print Name of Applicant or Agent

1800 Limerick Street

Mailing/Street Address

Alexandria, VA 22314

City and State

Zip Code

Signature

703.549.3381 x2205

Telephone #

Fax #

caitlin.feehan@alexrenew.com

Email address

5/15/2019

Date

DO NOT WRITE IN THIS SPACE - OFFICE USE ONLY

Application Received: _____

Received Plans for Completeness: _____

Fee Paid and Date: _____

Received Plans for Preliminary: _____

ACTION - PLANNING COMMISSION: _____

ACTION - CITY COUNCIL: _____

ALL APPLICANTS MUST COMPLETE THIS FORM.

Supplemental forms are required for child care facilities, restaurants, automobile oriented uses and freestanding signs requiring special use permit approval.

1. The applicant is: (check one)

☒ the Owner ☐ Contract Purchaser ☐ Lessee or ☐ Other: _____ of the subject property.

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

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

☐ **Yes.** Provide proof of current City business license.

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

OWNERSHIP AND DISCLOSURE STATEMENT

Use additional sheets if necessary

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

Name	Address	Percent of Ownership
1. City of Alexandria, Virginia Sanitation Authority,	1800 Limerick Street, Alexandria, VA 22314	100%
2. d/b/a Alexandria Renew Enterprises		
3.		

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

Name	Address	Percent of Ownership
1. City of Alexandria, Virginia Sanitation Authority,	1800 Limerick Street, Alexandria, VA 22314	100%
2. d/b/a Alexandria Renew Enterprises		
3.		

3. Business or Financial Relationships. Each person or entity listed above (1 and 2), with an ownership interest in the applicant or in the subject property is required to disclose any business or financial relationship, as defined by Section 11-350 of the Zoning Ordinance, existing at the time of this application, or within the 12-month period prior to the submission of this application with any member of the Alexandria City Council, Planning Commission, Board of Zoning Appeals or either Boards of Architectural Review.

Name of person or entity	Relationship as defined by Section 11-350 of the Zoning Ordinance	Member of the Approving Body (i.e. City Council, Planning Commission, etc.)
1. N/A per Section 11-352(E)		
2.		
3.		

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

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

7/15/19 Caitlin Feehan Caitlin Feehan
Date Printed Name Signature

- See attached Project Narrative

3. How many patrons, clients, pupils and other such users do you expect?

Specify time period (i.e., day, hour, or shift).

n/a

4. How many employees, staff and other personnel do you expect?

Specify time period (i.e. day, hour, or shift).

The building will be occupied infrequently and as needed to service equipment.

5. Describe the proposed hours and days of operation of the proposed use: N/A

Day	Hours	Day	Hours

6. Describe any potential noise emanating from the proposed use:

A. Describe the noise levels anticipated from all mechanical equipment and patrons.
 Odor control units will be installed with the structure and operated on an intermittent basis,
 the noise associated with the odor control unit should not exceed 50 decibels.

B. How will the noise from patrons be controlled?
 N/A

7. Describe any potential odors emanating from the proposed use and plans to control them:

Odor control units will be installed at AlexRenew's Water Resource Recovery Facility to mitigate the potential of odors emanating from the tunnel system.

8. Provide information regarding trash and litter generated by the use:

- A. What type of trash and garbage will be generated by the use?
Debris collected in the tunnel system will be removed at the tunnel dewatering pumping station shaft via a clam shell and rake system. The collected debris will be hauled to landfills for disposal.
- B. How much trash and garbage will be generated by the use?
The amount of debris collected in the tunnel system will be variable depending on frequency of storms and time of year. More debris is anticipated in the fall.
- C. How often will trash be collected?
Debris will be collected on an as needed basis to maintain the hydraulic functionality of the tunnel dewatering pumping station.
- D. How will you prevent littering on the property, streets and nearby properties?
n/a

9. Will any hazardous materials, as defined by the state or federal government, be handled, stored, or generated on the property?

☐ Yes. ☒ No.

If yes, provide the name, monthly quantity, and specific disposal method below:

10. Will any organic compounds (for example: paint, ink, lacquer thinner, or cleaning or degreasing solvent) be handled, stored, or generated on the property?

☐ Yes. ☒ No.

If yes, provide the name, monthly quantity, and specific disposal method below:

11. What methods are proposed to ensure the safety of residents, employees and patrons?

The public does not have direct access to the AlexRenew water resource recovery facility which is a secure site.

ALCOHOL SALES**12. Will the proposed use include the sale of beer, wine or mixed drinks?**

☐ Yes. ☒ No.

If yes, describe alcohol sales below, including if the ABC license will include on-premises and/or off-premises sales. Existing uses must describe their existing alcohol sales and/or service and identify any proposed changes in that aspect of the operation.

PARKING AND ACCESS REQUIREMENTS**13. Provide information regarding the availability of off-street parking:**

A. How many parking spaces are required for the proposed use pursuant to section 8-200 (A) of the zoning ordinance?

n/a

B. How many parking spaces of each type are provided for the proposed use:

13	Standard spaces
0	Compact spaces
1	Handicapped accessible spaces
2	Other Loading Spaces

- C. Where is required parking located? (check one) ☒ on-site [] off-site

If the required parking will be located off-site, where will it be located?

Additional parking is available at AlexRenew's Environmental Center at 1800 Limerick Street

Pursuant to section 8-200 (C) of the zoning ordinance, commercial and industrial uses may provide off-site parking within 500 feet of the proposed use, provided that the off-site parking is located on land zoned for commercial or industrial uses. All other uses must provide parking on-site, except that off-street parking may be provided within 300 feet of the use with a special use permit.

- D. If a reduction in the required parking is requested, pursuant to section 8-100 (A) (4) or (5) of the zoning ordinance, complete the **Parking Reduction Supplemental Application**. A parking reduction supplemental application is attached

14. Provide information regarding loading and unloading facilities for the use:

- A. How many loading spaces are required for the use, per section 8-200 (B) of the zoning ordinance? Two loading access points are provided

- B. How many loading spaces are available for the use?

- C. Where are off-street loading facilities located?

N/A

- D. During what hours of the day do you expect loading/unloading operations to occur?
7am to 4pm

- E. How frequently are loading/unloading operations expected to occur, per day or per week, as appropriate?

As appropriate - The need to remove debris is a function of both the time of year (season) and the frequency of rainfall events.

15. Is street access to the subject property adequate or are any street improvements, such as a new turning lane, necessary to minimize impacts on traffic flow?

n/a