



# County of Fairfax, Virginia

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

October 30, 2024

John McGranahan  
Hunton Andrews Kurth LLP  
8000 Towers Crescent Drive, Suite 1350  
Tysons, VA 22812

**RE: Special Exception Application SE 2023-PR-00046 – Fairfax County Water Authority  
Providence District**

Dear Mr. McGranahan:

At a regular meeting held on October 22, 2024, the Board of Supervisors approved Special Exception Application SE 2023-PR-00046, subject to the development conditions dated October 21, 2024, and the modifications dated July 18, 2024, as attached.

For additional information, please visit <https://plus.fairfaxcounty.gov/CitizenAccess/> or contact the Zoning Evaluation Division at (703) 324-1290.

Sincerely,

Jill G. Cooper  
Clerk for the Board of Supervisors

John McGranahan  
October 30, 2024

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Cc: Supervisor Dalia A. Palchik, Providence District  
Thomas Reed, Director, Real Estate Division, Dept. of Tax Administration  
David Pellegrino, Assistant Director, Real Estate Division, Dept. of Tax Administration  
Suzanne Wright, Director, Zoning Evaluation Division, Dept. of Planning and Development  
Drew Hushour, Deputy Zoning Administrator, Dept. of Planning and Development  
Michael Liddle, Director, GIS Services, Department of Information Technology  
Jeff Hermann, Chief, Site Analysis and Transportation Planning Division, FCDOT  
Randall Farren, Park Planning Branch Manager, FCPA  
Abdi Hamud, Program Administrator, DHCD/Design Development Division  
Leanna O'Donnell, Director, Office of Facilities Planning Services, FCPS  
Michael Guarino, Chief Capital Projects Sections, Dept. of Transportation  
Morgan Wolfe, Chief, Bonds & Agreements, Land Development Services

Attachments

## APPROVED DEVELOPMENT CONDITIONS

SE 2023-PR-00046

October 21, 2024

If it is the intent of the Board of Supervisors to approve SE 2023-PR-00046 located at Tax Map 50-1 ((2)) 89 and 94A; 50-1 ((12)) 1 (pt.), 5 (pt.), and 6, to permit a public facility, light (water storage tank), pursuant to the Fairfax County Zoning Ordinance, staff recommends that the approval be subject to the following development conditions.

1. This Special Exception (SE) is granted for and runs with the land indicated in this application and is not transferable to other land.
2. This SE is granted only for the purpose(s), structure(s) and/or use(s) indicated on the Special Exception Plat (SE Plat) approved with the application, as qualified by these development conditions.
3. This SE is subject to the site plan provisions of the Zoning Ordinance as may be determined by the Director, Land Development Services (LDS). Any plan submitted pursuant to this SE must be in substantial conformance with the approved SE Plat entitled "Poplar Heights Water Tank, Special Exception Plat, SE-2023-PR-00046" prepared by Dewberry, consisting of 17 sheets, dated February 2, 2024, as revised through September 4, 2024, and these conditions. Minor modifications to the approved SE may be permitted pursuant to the requirements listed in the Zoning Ordinance.
4. Sidewalk. Upon demand by Fairfax County, the applicant will provide all necessary dedication of right-of-way and associated easements at no public cost to accommodate construction of a five-foot-wide sidewalk along that portion of the Tower Street frontage of the site where no sidewalk exists.
5. Lighting. With the exception of any required Federal Aviation Administration (FAA) aircraft warning lights on top of the water tower, on-site lighting for the SE use will be provided as shown on the SE Plat and must comply with the Outdoor Lighting Standards of Section 5109 of the Zoning Ordinance, including the use of full cut-off fixtures that are mounted horizontal to the ground. Such lighting must be controlled through switches and/or motion sensors to ensure the lights do not remain illuminated longer than the amount of time necessary. All lighting will be LED lighting with a maximum color temperature of 3,000 K.
6. Limits of Clearing and Grading. The applicant must conform to the limits of clearing and grading as shown on the SE Plat, subject to allowances specified in these conditions and for the installation of utilities as determined necessary by the Director of the LDS, as described herein. If it is determined necessary to install utilities in areas protected by the limits of clearing and grading as shown on the SE Plat, such utilities

must be located in the least disruptive manner necessary as determined by the applicant and the Forest Conservation Branch (FCON) of LDS. A replanting plan must be developed and implemented, subject to approval by FCON, for any areas protected by the limits of clearing and grading that must be disturbed for such utilities.

7. Tree Inventory and Condition Analysis. A Tree Inventory and Condition Analysis will be submitted for review and approval as part of the first and all subsequent site plan submissions. The Tree Inventory and Condition Analysis must be prepared by a certified arborist or registered consulting arborist and must include elements of Public Facilities Manual (PFM) 12-0307 deemed appropriate to the property as determined by FCON.
8. Tree Preservation Plan. A Tree Preservation Plan and Narrative will be submitted for review and approval as part of the first and all subsequent site plan submissions for the SE use. The Tree Preservation Plan and Narrative must be prepared by a certified arborist or registered consulting arborist and must include elements of PFM 12-0309 deemed appropriate to the property as determined by FCON.
9. Tree Preservation Walk-Through. The applicant must retain the services of a certified arborist or registered consulting arborist ("Project Arborist") and must have the approved limits of clearing and grading marked with a continuous line of flagging prior to the walk-through meeting. During the tree preservation walk-through meeting, the Project Arborist or a landscape architect must walk the limits of clearing and grading with an FCON representative to determine where adjustments to the clearing limits can be made to increase the area of tree preservation and/or to increase the survivability of trees at the edge of the limits of clearing and grading. Such adjustments must be recorded by the Project Arborist and tree protection fencing must be implemented under the Project Arborist's supervision based on these adjustments.
10. Tree Protection Fencing. All trees shown to be preserved on the Tree Preservation Plan must be protected by tree protection fencing. Tree protection fencing must be in a form of four-foot (4') high, fourteen (14) gauge welded wire attached to six-foot (6') steel posts driven eighteen inches (18") into the ground and placed no farther than ten (10) feet apart, or super silt fence so long as any required trenching is done per the root pruning guidelines. All tree protection fencing must be installed after the tree preservation walk-through meeting but prior to any clearing and grading activities. The installation of all tree protection fencing must be performed under the direct supervision of the Project Arborist, and accomplished in a manner that does not harm existing vegetation that is to be preserved. Three (3) business days prior to commencement of any clearing or grading activities, but subsequent to the installation of the tree protection fencing, FCON must be notified and given the opportunity to inspect the property to ensure that all tree protection fencing has been correctly installed. If it is determined that the fencing has not been installed correctly, no grading or construction activities will occur until the fencing is installed correctly, as determined by FCON.

11. Tree Preservation Measures. Tree preservation measures must be clearly identified, labeled, and detailed on the Erosion and Sediment Control Plan sheets and the Tree Preservation Plan. Tree preservation measures may include, but are not limited to the following: root pruning, crown pruning, mulching and watering. Specifications must be provided on the Tree Preservation Plan detailing how preservation measures must be implemented. Tree preservation activities must be completed during implementation of the Erosion and Sediment Control Plan.
12. Demolition. The demolition of all existing structures and site features within or adjacent to tree preservation areas must be accomplished in the least disruptive manner practical as reviewed and approved by FCON. All tree protection fencing must be in place and verified by a County representative prior to commencement of demolition activities.
13. Site Monitoring. The Project Arborist must be present on-site during implementation of the Tree Preservation Plan and monitor any construction activities conducted within or adjacent to areas of trees to be preserved. Construction activities include, but may not be limited to clearing, root pruning, tree protection fence installation, vegetation/tree removal, and demolition activities. During implementation of the Erosion and Sediment Control Plan, the Project Arborist must visit the site on a regular basis to continue monitoring tree preservation measures and ensure that all activities are conducted as identified in the Tree Preservation Plan and approved by FCON. Written reports must be submitted to FCON and Site Development and Inspection Services (SDID) site inspectors detailing site visits. A monitoring schedule and Project Arborist reports must be described and detailed in the Tree Preservation Plan.
14. Invasive Plant Species Management. Forested areas containing plant species that are known to be invasive in quantities that threaten the long term health and survival of the existing vegetation present must be the subject of an invasive plant species management plan in order for the area to be awarded full 10-year canopy credit. At the time of site plan submission, the applicant must provide a management plan for review and approval by FCON specifying the common and scientific name of invasive species proposed for management, the target area for management efforts, methods of control and disposal of invasive plants, timing of treatments and monitoring, duration of the management program, and potential reforestation as needed.
15. Landscape Plan. Landscaping must be generally consistent with the quality, quantity and locations shown on the Landscape Plan included as Sheet 14 of the SE Plat, which illustrates the plantings to be provided on the property. The Landscape Plan is conceptual in nature and the tree species and planting locations may be modified by the applicant, in coordination with FCON, as part of final engineering and design, provided such modifications provide a similar quality and quantity of landscape plantings and materials as shown on the Landscape Plan. At the time of planting, the initial heights of the proposed trees will range from minimum heights of eight (8) feet to minimum heights of fourteen (14) to sixteen (16) feet (minimum 3-inch caliper), depending on the species of tree as shown on the SE Plat.

16. Landscape Planting Pre-installation Meeting. Prior to installation of plants to meet the requirements of the Landscape Plan, the applicant or its contractor must coordinate a pre-installation meeting on-site with the landscape contractor and FCON staff. Any proposed changes to the planting locations, tree/shrub planting sizes, and any proposed species substitutions for the plants shown on the Landscape Plan must be reviewed and approved by FCON prior to planting. The installation of plants to meet the requirements of the Landscape Plan that are not approved by FCON may require the submission of a revision to the Landscape Plan, or part thereof, or removal and replacement with approved trees/shrubs prior to bond release.
17. On-site Vegetation. The vegetation on-site, including existing trees identified as to be saved, is required to remain as generally depicted on the SE Plat. Minor modifications as allowed by the Zoning Ordinance may be permitted; however, replacement and appropriate maintenance of the vegetation will be provided as necessary to ensure the survival of the vegetation. Should the vegetation not survive or be damaged or removed as a result of maintenance of the water tank, the applicant will replace such vegetation, at the minimum initial planting heights identified on the SE Plat, and maintain it thereafter.
18. Soil Remediation. Soil in planting areas that contain construction debris and rubble, are compacted or are unsuitable for the establishment and long-term survival of landscape plants, must be the subject of remedial action to restore planting areas to satisfy cultural requirements of trees, shrubs and groundcovers specified in the Landscape Plan. The applicant must provide notes and details specifying how the soil will be restored for the establishment and long-term survival of landscape plants for review and approval by FCON.
19. Native Landscaping. All new landscaping planted on the property must be generally consistent with the quality, quantity and locations shown on the SE Plat and must include a plant selection that includes species that will reduce the need for supplemental watering and the use of chemical fertilizers, herbicides and pesticides. All landscaping provided must be native to the mid-Atlantic region to the extent available and feasible, and must be non-invasive (meaning the applicant must not use any plant species identified in the 2014, or latest version, of the Virginia Invasive Plant Species List published by the Virginia Department of Conservation and Recreation); provided, however, the applicant reserves the right to utilize Green Giant Arborvitae for some of the Large Evergreen trees shown on the SE Plat. The applicant reserves the right, in consultation with and approval by FCON, to modify the exact species to be used, such as when plant materials are not available or have been deemed by FCON to no longer be appropriate.
20. Offsite Landscaping. All new landscaping planted on applicant-owned property outside of the limits of the SE, and as further identified on the SE Plat as "Proposed Offsite Planting (not part of PFM required planting for the SE)" (the "Offsite

Landscaping”) must be shown on the site plan for the SE use. Such Offsite Landscaping must be installed and maintained until such time as the applicant secures either the earlier of the release of the bond associated with the site plan depicting the Offsite Landscaping or the sale of the offsite lots to third parties.

21. Construction Management Plan. The applicant must prepare a plan for the mitigation of construction impacts to be implemented during construction to mitigate construction impacts on adjoining properties and ensure safe and efficient pedestrian and vehicle circulation at all times along Tower Street. The construction management plan will address:

- Anticipated construction entrances, construction staging areas, construction vehicle routes and procedures for coordination with FCDOT and/or VDOT concerning construction material deliveries and lane, street or sidewalk closures, if any;
- Ensure the limits of clearing and grading are maintained as provided in these conditions;
- Off-street construction worker parking;
- Outreach to the Fairfax County Public Schools that serve the surrounding neighborhood to confirm the school bus routes, bus stop locations and timing of morning pick-ups and afternoon drop-offs so the applicant can coordinate construction activities to the extent possible and schedule and direct construction traffic to avoid conflicts with school bus traffic and students in the neighborhood;
- Providing a person along the Tower Street frontage of the property during the morning pick-up and afternoon drop-off of students from Fairfax County Public Schools buses and during times of day when deliveries of construction materials and equipment are scheduled in order to maintain safe pedestrian and vehicular traffic on Tower Street during construction;
- Including pedestrian and vehicle traffic control along the Tower Street frontage of the property in the contractor’s daily briefings;
- Locating dumpsters and other similar devices behind covered fencing or in a location on the property to reasonably limit public visibility and providing timely removal of the same when full; and
- Establishment and continuation of a website for the project which will provide alerts (which could include mass emails or use of social media) for high impact (for instance noise or traffic impacts) activities, designed to provide timely notification to the area residents and those who regularly travel on Tower Street and a contact for construction-related questions and complaints.

The applicant will inform all contractors and subcontractors of the plans for construction related traffic circulation. Signs providing such information will be posted at all construction entrances. Such plan will be prepared by a qualified professional and submitted for review and comment to VDOT, FCDOT and LDS prior to issuance of any land disturbance permit for construction of the SE use on the property. Such plan must identify the name and contact information for the person responsible for responding to complaints related to the construction and/or the

construction-related obligations in these conditions. The construction management plan must be provided to the Providence District Supervisor's office.

22. Domestic Water Service During Construction. At such time as the existing water tank is removed from service and until the new water tank is put into service, the applicant will take necessary steps consistent with water industry standards to maintain water service, including water pressure to existing residents, during construction.

23. Construction Noise and Glare. Construction of the SE use must be subject to the Noise Ordinance of Fairfax County. The following noise and glare mitigation measures must be implemented during construction:

- All motorized vehicles and equipment used during construction must be equipped with proper mufflers.
- Delivery routes must be arranged to minimize the use of backup alarms on commercial vehicles and equipment.
- The banging of tail gates must be prohibited. All drivers associated with this project must be informed about this prohibition.
- All lights used to illuminate the construction site, including any staging areas, must be full cut-off or directionally shielded so that the directed light must be substantially confined to the construction site.

24. Construction Hours and Activity. Construction hours must be limited to Monday through Friday 7:00 am to 7:00 pm and Saturday from 9:00 am to 7:00 pm. No construction work must be performed on Sundays. The construction hours noted above will not apply to emergency construction or maintenance. Construction and delivery vehicles must not park and idle on the surrounding residential streets prior to the start time for construction and signs stating this prohibition will be posted on the surrounding street subject to VDOT approval.

25. Construction Timeline. The applicant must notify the Providence District Supervisor's office when construction commences and when construction has been completed.

26. Point of Contact. The applicant must provide the Providence District Supervisor's office with the point of contact for construction-related questions and complaints. This information will also be posted on the applicant's project website. In addition to providing the point of contact to the Supervisor's office and posting it on the project website, prior to commencing construction activities related to the water tank, including demolition of any existing structures, the applicant will notify by first class mail all owners of the properties that abut the site or are located on both sides of Tower Street between Midway Street and Buckelew Drive of the anticipated start date and the point of contact, and if different, an after-hours or emergency number for construction-related questions and complaints. Further, the applicant will post and maintain a sign along the Tower Street frontage of the property that includes the point of contact for after-hours or emergency questions and complaints related to construction. The applicant must provide to the Providence District Supervisor's office

copies of construction related questions and complaints within 24 hours of receiving them.

27. Community Meetings. The applicant must host a pre-construction meeting with the surrounding community prior to the commencement of construction of the SE use on the property. The applicant will coordinate the invitations and date and location of this meeting with the Providence District Supervisor's office. Once construction commences, and until construction is completed, the applicant must host quarterly virtual meetings with the surrounding community (as identified by the Providence District Supervisor's Office) to provide them with project updates. In addition, prior to commencing construction, the applicant will provide a written invitation to the owners of the properties that abut the site or are located on both sides of Tower Street between Midway Street and Buckelew Drive to provide their email address in order to receive notifications of major construction milestones and deliveries, such as the demolition of the existing homes and the existing water tank, commencement of clearing, the pouring of the foundation for the new tank and the delivery of the crane. The applicant will maintain the list and will send email notifications at least one (1) business day prior to the date such milestones and deliveries are scheduled to occur.
28. Construction Parking Management Plan. The applicant will prepare and implement a construction parking management plan during construction of the SE use. Such plan must require that all construction vehicles (including personal vehicles of tradesman working on the property) must not be parked on Tower Street.
29. Dust Management Plan. The applicant will prepare and implement a dust management plan tailored to the characteristics of the property and designed to suppress dust from leaving the site. Such plan will be incorporated with the Erosion and Sediment Control Plan and will include, but not be limited to, installation of wash racks, regular use of dust-removing watering methods, and use of covered trucks for removal of construction debris. The applicant will work with all contractors on the dust management plan and will monitor and enforce its implementation.
30. Site Maintenance. The applicant will maintain the construction site for the SE use in a secure and orderly manner and will provide for: 1) a County-approved sedimentation control fence along the limits of disturbance of the construction site; 2) continuous construction fencing around the perimeter of the construction site, designed with screening material to block views into the construction site and prevent construction debris from blowing off the site; and 3) location of trailers, materials, and equipment inside the construction fence. The applicant will maintain the street surfaces adjacent to the property in a clean and safe condition during the construction activity. At the end of each work day during construction, any streets used for hauling construction materials and entrances to the construction site will be free of mud, dirt, trash, allaying dust, and debris, and all streets adjacent to the property will be free of construction-related trash and debris.

31. Resurfacing of Tower Street. The applicant must mill and overlay the surface of Tower Street prior to the release of the bond associated with the site plan depicting the SE use.
32. Antennas. No cellular antennas will be permitted on the top of the water tower, except antennas required for the applicant's or another governmental body's communication and security systems. This condition does not preclude the applicant from installing and maintaining the required FAA aircraft warning lights on top of the water tower.
33. Signs. All signs on-site must be subject to Article 7.
34. Watermain Improvements. In conjunction with construction of the SE use, the applicant will construct watermain improvements to provide the capability to obtain domestic water supply from the adjacent higher pressure zone in order to increase water pressures by approximately fifteen (15) pounds per square inch (psi) or more at the service connection for those customers who are located in certain of the higher elevations within the Poplar Heights Pressure Zone, including the dwellings located near the subject site.
35. During final engineering and design of the water tank, the Applicant will continue to work with the landowners who abut or are located immediately across Tower Street from the property on potential adjustments and/or enhancements to the commitments made in Conditions 4 (Sidewalk), 5 (Lighting), 15 (Landscape Plan) and 20 (Offsite Landscaping) in order to maintain the residential character of the surrounding community, as long as such adjustments and/or enhancements remain in substantial conformance with the SE Plat as determined by the Zoning Administrator.
36. Pursuant to the Zoning Ordinance, this Special Exception will automatically expire, without notice, thirty (30) months after the date of approval unless the use has been established or construction has commenced and been diligently prosecuted. The Board of Supervisors may grant additional time to establish the use or to commence construction if a written request for additional time is filed with the Zoning Administrator prior to the date of expiration of the Special Exception. The request must specify the amount of additional time requested, the basis for the amount of time requested and an explanation of why additional time is required.

This approval, contingent on the above noted conditions, does not relieve the applicant from compliance with the provisions of any applicable ordinances, regulations, or adopted standards. The applicant must be responsible for obtaining the required Non-Residential Use Permit through established procedures, and this Special Exception will not be valid until this has been accomplished.

## **Approved Modifications**

**SE 2023-PR-00046  
Fairfax County Water Authority**

**July 18, 2024**

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- Modification of the transitional screening requirement along the western property boundary in favor of the proposed landscaping as shown on the SE Plat.
- Modification of the transitional screening requirement along the southern property boundary in favor of the proposed landscaping as shown on the SE Plat.

# POPLAR HEIGHTS WATER TANK

Providence District Fairfax County, Virginia

## Special Exception Plat SE-2023-PR-00046



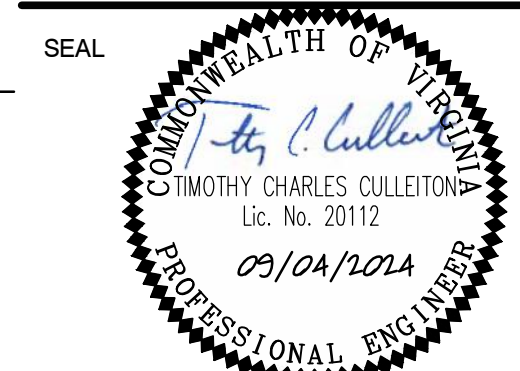
VICINITY MAP  
 SCALE : 1"= 500'

**Applicant/Owner:**  
 Fairfax County Water Authority  
 8570 Executive Park Ave.  
 Fairfax, VA 22031

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POPLAR HEIGHTS  
 WATER TANK  
 SPECIAL EXCEPTION PLAT  
 FAIRFAX COUNTY, VA



KEY PLAN

SCALE NORTH

No.	DATE	BY	Description
5	09/04/24		Addressed Comments
4	06/28/24		Addressed Comments
3	05/31/24		Addressed Comments
2	04/11/24		Addressed Comments
1	02/02/24		SE Submission

REVISIONS

DRAWN BY: BWB  
 APPROVED BY: TCC  
 CHECKED BY: TCC  
 DATE: 09/04/2024

TITLE  
**COVER SHEET**

PROJECT NO. P2729-001

NOTES:

- THE PROPERTY THAT IS THE SUBJECT OF THIS SPECIAL EXCEPTION PLAT IS IDENTIFIED ON THE FAIRFAX COUNTY ZONING MAP AS 50-1 ((2)) 0089 & 50-1 ((2)) 0094A, 50-1 ((12)) 0006, 50-1 ((12)) 0001 (PART), AND 50-1 ((12)) 0005 (PART).
- THE TOTAL LAND AREA OF THIS SPECIAL EXCEPTION APPLICATION IS APPROXIMATELY 0.934 ± ACRES.
- THE BOUNDARY INFORMATION SHOWN HEREON IS FROM A FIELD RUN SURVEY BY DEWBERRY ENGINEERS INC.
- THE TOPOGRAPHY SHOWN HEREON IS AT A CONTOUR INTERVAL OF ONE (1) FOOT FROM A FIELD RUN SURVEY PERFORMED BY DEWBERRY ENGINEERS INC.
- THE PURPOSE OF THIS SPECIAL EXCEPTION IS TO REPLACE AN EXISTING WATER STORAGE TANK, A CATEGORY 1 LIGHT PUBLIC USE. THE LIGHT PUBLIC USE WILL BE LOCATED ON LAND ZONED R-4, WHICH IS ALLOWED BY SPECIAL EXCEPTION. THE EXISTING USE OF THE PROPERTY INCLUDED WITHIN THE AREA OF THE SPECIAL EXCEPTION IS WATER STORAGE AND SINGLE-FAMILY RESIDENTIAL.
- THE SPECIAL EXCEPTION PROPOSES THE DEMOLITION OF TWO (2) SINGLE-FAMILY RESIDENTIAL HOMES AND AN EXISTING WATER STORAGE TANK. THE RESIDENTIAL STRUCTURE LOCATED ON PARCEL 50-1 ((2)) 0089 WAS CONSTRUCTED IN 1951; THE RESIDENTIAL STRUCTURE ON PARCEL 50-1 ((12)) 0006 WAS CONSTRUCTED IN 1959. THE WATER STORAGE TANK WAS CONSTRUCTED IN 1952.
- THE PROPERTY IS CURRENTLY OWNED BY FAIRFAX COUNTY WATER AUTHORITY.
- PUBLIC WATER AND SEWER ARE CURRENTLY AVAILABLE IN PROXIMITY TO THE SITE AND WILL BE EXTENDED ON SITE TO SERVE THE PROPOSED DEVELOPMENT PROGRAM.
- TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO GRAVES LOCATED ON THE SUBJECT PROPERTY.
- TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITY EASEMENTS HAVING A WIDTH OF TWENTY-FIVE (25) FEET OR MORE LOCATED ON THE SUBJECT PROPERTY.
- THERE IS NO FLOODPLAIN, ENVIRONMENTAL QUALITY CORRIDOR (EQC), OR RESOURCE PROTECTION AREA (RPA) ON THE SUBJECT PROPERTY.
- STORMWATER MANAGEMENT (SWM) AND BEST MANAGEMENT PRACTICES (BMPs) FOR THE PROPOSED DEVELOPMENT PROGRAM WILL BE PROVIDED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE FAIRFAX COUNTY STORMWATER MANAGEMENT ORDINANCE AND PUBLIC FACILITIES MANUAL.
- THE PROPANE TANKS SERVING THE EXISTING WATER STORAGE TANK WILL BE REMOVED FROM THE SITE. THE PROPOSED WATER STORAGE TANK WILL NOT GENERATE, UTILIZE, STORE, TREAT, OR DISPOSE OF HAZARDOUS OR TOXIC SUBSTANCES AS SET FORTH BY TITLE 40, CODE OF FEDERAL REGULATIONS, PART 116.4, 302.4 AND 355; ALL HAZARDOUS WASTE AS SET FORTH IN VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY HAZARDOUS AND WASTE MANAGEMENT REGULATIONS; AND PETROLEUM PRODUCTS AS DEFINED IN TITLE 40, CODE OF FEDERAL REGULATIONS, PART 280.
- PROPOSED NUMBER OF EMPLOYEES ONSITE FULL TIME IS ZERO (0). IT IS EXPECTED THAT A FAIRFAX WATER EMPLOYEE WILL VISIT THE WATER STORAGE TANK WEEKLY, TYPICALLY DURING DAYLIGHT HOURS.
- THE AREA OF THE SPECIAL EXCEPTION IS ZONED R-4. IN ACCORDANCE WITH 2102.7 OF THE ORDINANCE, THE APPLICABLE BUILDING SETBACKS ARE AS FOLLOWS: FRONT = 30 FEET, REAR = 25 FEET, SIDE = 10 FEET. THE MINIMUM REQUIRED LOT AREA IS 8,400 SF.
- UPON COMPLETION OF CONSTRUCTION OF THE PROPOSED WATER STORAGE TANK, THE USE OF THE PUBLICLY (FAIRFAX WATER) OWNED PARCELS 50-1 ((12)) 0005 AND 50-1 ((12)) 0001 WILL BE MAINTAINED AS SINGLE-FAMILY DETACHED RESIDENTIAL.
- THE LIGHT PUBLIC USE PROPOSED WITH THIS SPECIAL EXCEPTION REQUIRES A TYPE II TRANSITIONAL SCREENING BARRIER D AND E PER §5108.2 OF THE ORDINANCE. BETWEEN THE PROPOSED USE AND THE ADJACENT SINGLE-FAMILY DETACHED DWELLINGS, A TYPE II TRANSITIONAL SCREENING CONSISTS OF A PLANTED STRIP OF OPEN SPACE 35 FEET WIDE. THE TRANSITIONAL SCREENING PROPOSED CONSISTS OF AN UNBROKEN STRIP OF PLANTED OPEN SPACE A MINIMUM OF 50 FEET WIDE TO SCREEN ALL PRIVATELY OWNED ADJACENT PARCELS. A BARRIER CONSISTING OF A SIX (6) FOOT TALL SOLID WOOD FENCE ALONG THE FRONT YARD AND A SEVEN (7) FOOT TALL SOLID WOOD FENCE ALONG THE SIDE AND REAR YARDS IS ALSO PROPOSED.
- A MODIFICATION OF THE TRANSITIONAL SCREENING IS REQUIRED ALONG THE SOUTHERN BOUNDARY OF THE SPECIAL EXCEPTION AREA TO THE PUBLICLY (FAIRFAX WATER) OWNED PARCELS (PARCELS 50-1 ((12)) 0005 AND 50-1 ((12)) 0001), THE PROPOSED TRANSITIONAL SCREENING WIDTH IS PROPOSED TO BE REDUCED TO 16.67 FEET WITH A SIX (6) FOOT TALL WOOD FENCE ALONG THE FRONT YARD AND A SEVEN (7) FOOT TALL SOLID WOOD FENCE PROPOSED ALONG THE SIDE AND REAR YARDS AS THE BARRIER.
- AT THIS TIME, IT IS ANTICIPATED THAT DEVELOPMENT OF THIS PROJECT WILL COMMENCE AS SOON AS ALL NECESSARY APPROVALS AND PERMITS ARE OBTAINED.
- PARKING SPACES FOR THE PROPOSED DEVELOPMENT PROGRAM ON THE SUBJECT PROPERTY WILL BE PROVIDED IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN ARTICLE 6 OF THE ZONING ORDINANCE.
- THE LIMITS OF CLEARING AND GRADING SHOWN HEREON ARE SUBJECT TO MINOR MODIFICATIONS WITH FINAL ENGINEERING AND DESIGN.
- ALL OUTDOOR LIGHTING WILL BE IN CONFORMANCE WITH THE PERFORMANCE STANDARDS FOR OUTDOOR LIGHTING AS SET FORTH IN SECTION 5109 OF THE ZONING ORDINANCE. (ALSO SEE SPECIAL EXCEPTION CONDITIONS).
- THERE ARE NO TRAILS REQUIRED BY THE COMPREHENSIVE PLAN WITHIN THE LIMITS OF THIS APPLICATION.
- OTHER THAN THE MODIFICATIONS NOTED ABOVE, TO THE BEST OF OUR KNOWLEDGE, THE PROPOSED DEVELOPMENT OF THE SUBJECT PROPERTY CONFORMS TO ALL CURRENT APPLICABLE LAND DEVELOPMENT ORDINANCES, REGULATIONS AND ADOPTED STANDARDS.
- IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN THE ZONING ORDINANCE, APPLICABLE APPROVALS BY THE HEALTH DEPARTMENT, VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY, AND OTHER APPROPRIATE AGENCIES OF THE COUNTY AND STATE WILL BE OBTAINED.
- THE SUBJECT PROPERTY IS NOT WHOLLY OR PARTIALLY WITHIN OR CONTIGUOUS TO A HISTORIC OVERLAY DISTRICT.
- LOCATION AND WIDTH OF ALL EXISTING UTILITY EASEMENTS AND THE PRELIMINARY LOCATION(S) OF NEW AND RELOCATED UTILITIES ARE SHOWN.
- NOTWITHSTANDING THE FENCE HEIGHTS NOTED ABOVE OR DEPICTED ON THIS SE PLAT, THE APPLICANT RESERVES THE RIGHT TO INSTALL TALLER FENCES TO THE EXTENT THE APPLICABLE PROVISIONS OF THE ZONING ORDINANCE ARE INTERPRETED OR AMENDED IN THE FUTURE TO PERMIT TALLER FENCES. IN THAT EVENT, THE APPLICANT CAN INSTALL SUCH TALLER FENCES UP TO THE MAXIMUM PERMITTED BY THE ZONING ORDINANCE WITHOUT REQUIRING A SPECIAL EXCEPTION AMENDMENT.

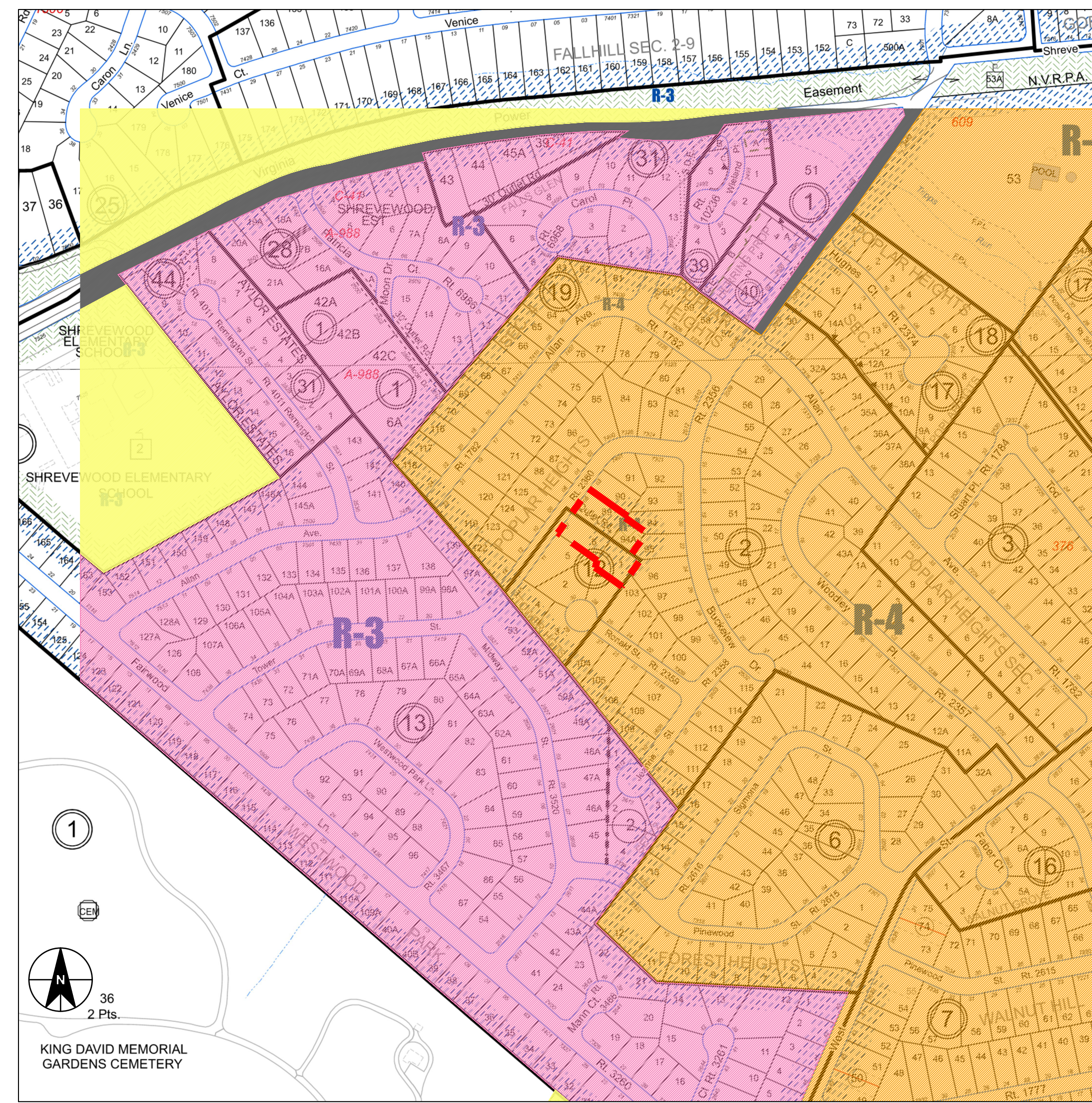
SITE TABULATION:

AREA OF SPECIAL EXCEPTION.....	0.934± AC (± 40,692 SF)
EXISTING ZONING.....	R-4
FLOOR AREA RATIO (MAXIMUM).....	0.35 PUBLIC USES
FLOOR AREA RATIO PROPOSED.....	0.00
OPEN SPACE REQUIRED.....	NO REQUIREMENT
OPEN SPACE PROPOSED.....	0.779±AC (±33,961 SF)
EXISTING STORAGE TANK HEIGHT	
TANK STRUCTURE.....	94.06 FT
TANK VENT.....	96.46 FT
HIGHEST ANTENNA AT TOP OF TANK.....	±110 FT
PROPOSED STORAGE TANK HEIGHT.....	±100 FT
PARKING SPACES REQUIRED.....	2
PARKING SPACES PROPOSED.....	2

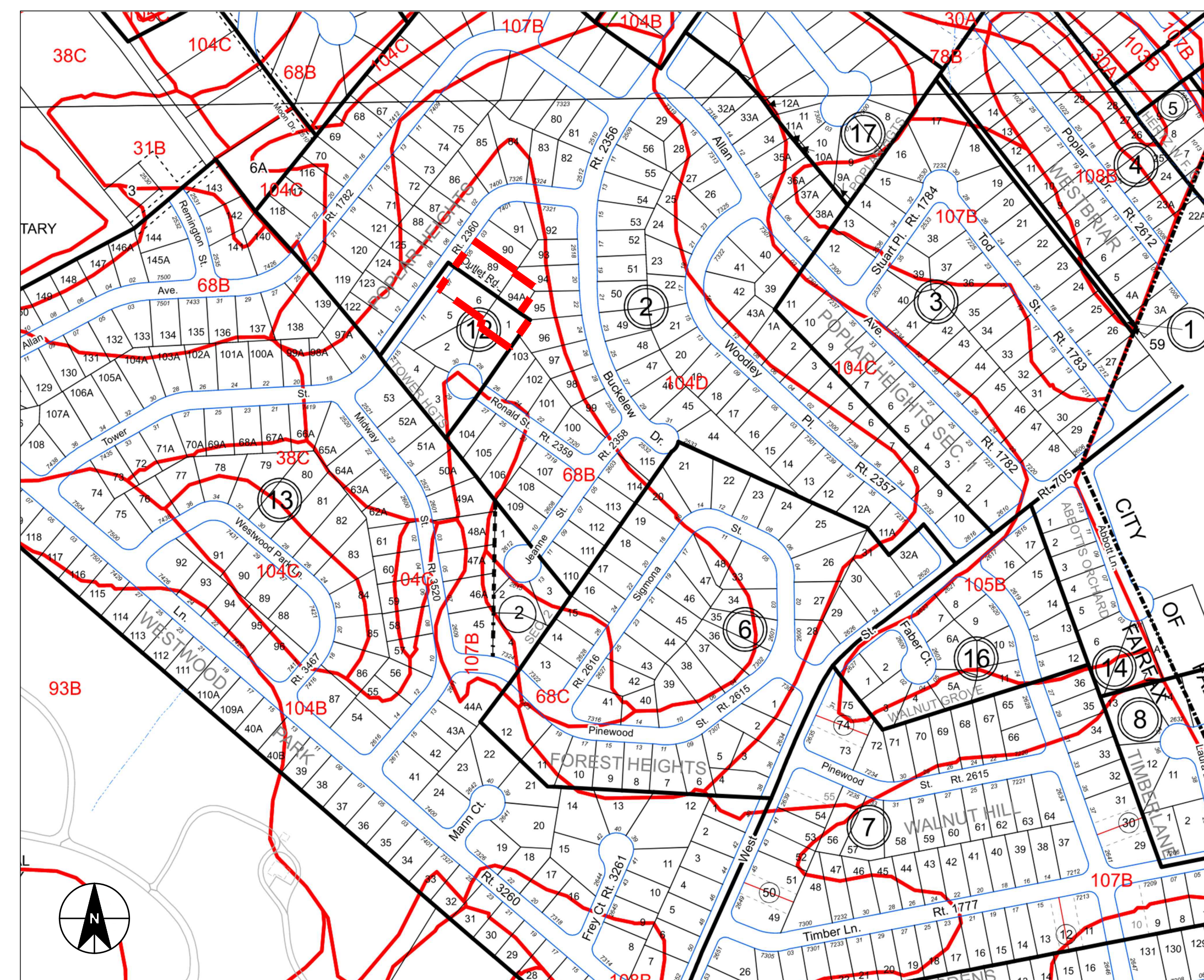
LEGEND

ADDITIONAL LEGEND INFORMATION PROVIDED ON APPLICABLE SHEETS

PROPOSED IMPROVEMENTS BY OTHERS	---
EXISTING CONTOUR INDEX	---200---
PROPOSED CONTOUR	---86---
EXISTING EDGE OF PAVEMENT	EX. E.P.
PROPOSED EDGE OF PAVEMENT	PROP. E.P.
PROPOSED HEADER CURB	---
EXISTING CURB	---
EXISTING WATERLINE W/TEE	W
PROPOSED WATERLINE W/TEE	W
EXISTING TELEPHONE LINE	---T---
EXISTING STORM SEWER	EX. 15" RCP
PROPOSED STORM SEWER	15" RCP
EXISTING SANITARY SEWER	SS
PROPOSED SANITARY SEWER	SS
EXISTING ELECTRIC SERVICE	E
EXISTING GAS LINE	G
PROPERTY LINE	---
EASEMENT LINE	---
CENTER LINE	10+00 11+00
LIMITS OF CLEARING & GRADING	---
EXISTING SPOT ELEVATIONS	x12.0
PROPOSED SPOT ELEVATION	+12.0
EXISTING TREE LINE	o 12" DIM.
EXISTING TREE W/TRUNK DIAMETER	o 12" DIM.
EXISTING TREE W/DRIPLINE	o 12" DIM.
PROPOSED TREE	o 12" DIM.
BOARD-ON-BOARD WOOD FENCE	---
PROPOSED STREET LIGHT	---
EXISTING UTILITY POLE	---
EXISTING FIRE HYDRANT	---
EXISTING WATER VALVE	---
PROPOSED WATER VALVE	---
PARKING INDICATOR	9
INDICATES THE NUMBER OF PARKING SPACES	9
TEST PIT	---
EXISTING STREET LIGHT	---
DIAMETER	---



ZONING/LAND USE MAP



SOILS MAP



Dewberry Engineers Inc.  
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703.849.0518 (FAX)

POPLAR HEIGHTS  
WATER TANK  
SPECIAL EXCEPTION PLAT

FAIRFAX COUNTY, VA



KEY PLAN

SCALE NORTH  
AS NOTED AS NOTED

No.	DATE	BY	Description
5	09/04/24		Addressed Comments
4	06/28/24		Addressed Comments
3	05/31/24		Addressed Comments
2	04/11/24		Addressed Comments
1	02/02/24		SE Submission

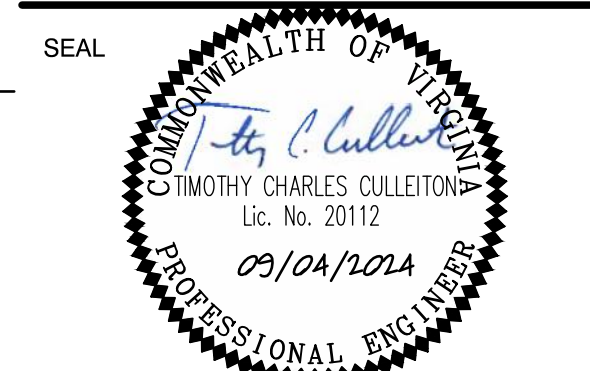
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APPROVED BY: TCC  
CHECKED BY: TCC  
DATE: 09/04/2024

TITLE  
NOTES AND  
TABULATION

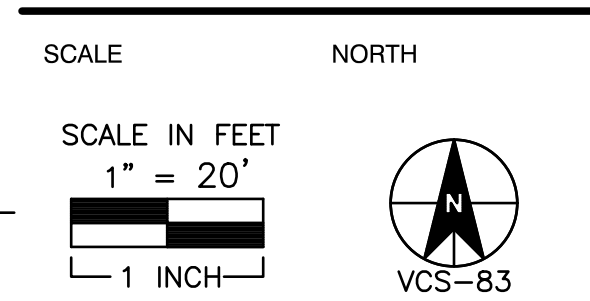
PROJECT NO. P2729-001

**POPLAR HEIGHTS  
WATER TANK  
SPECIAL EXCEPTION PLAN**

FAIRFAX COUNTY, VA



KEY PLAN



No.	DATE	BY	Description
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4	06/28/24		Addressed Comments
3	05/31/24		Addressed Comments
2	04/11/24		Addressed Comments
1	02/02/24		SE Submission

REVISIONS

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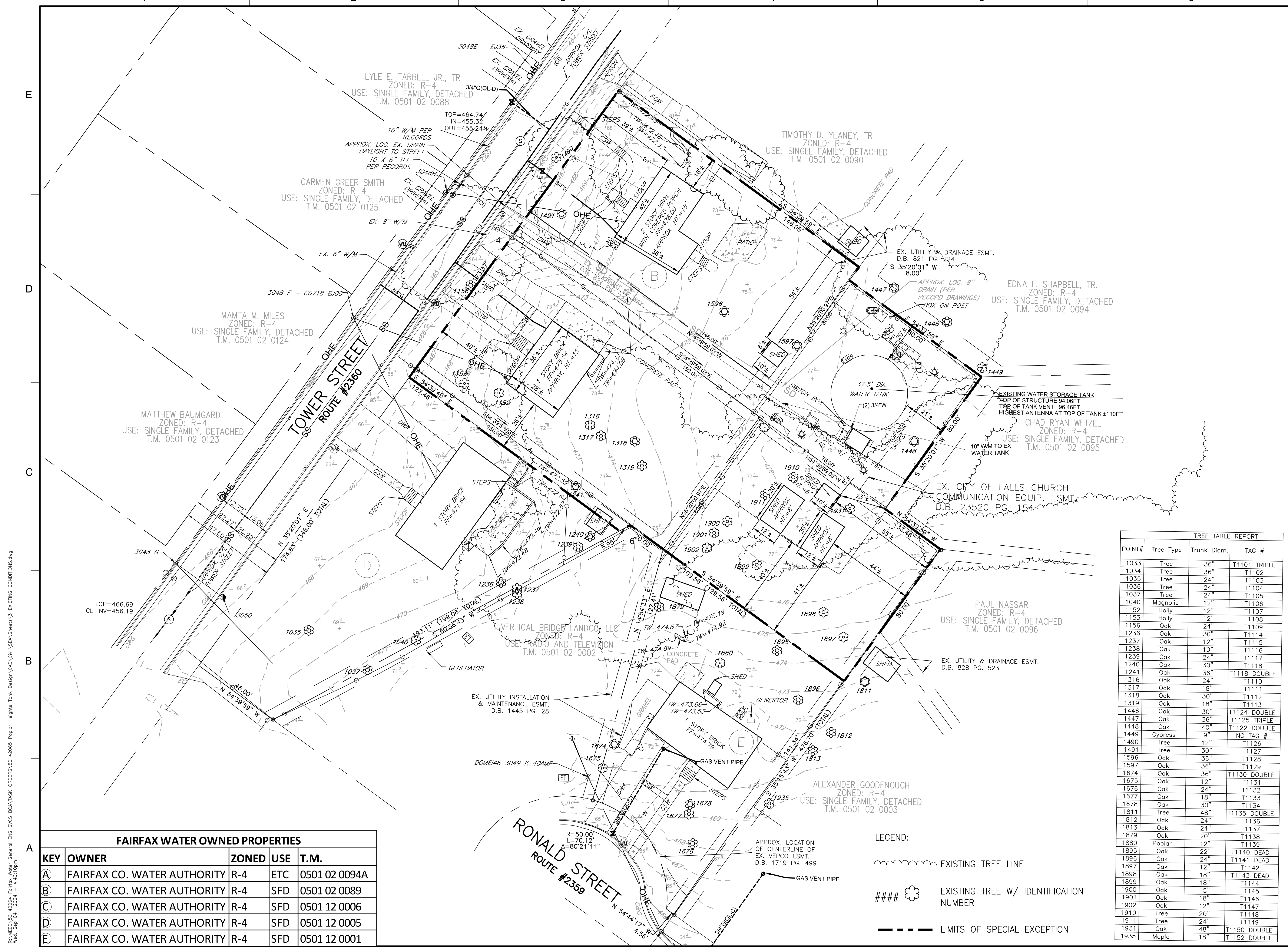
APPROVED BY: TCC

CHECKED BY: TCC

DATE: 09/04/2024

**EXISTING  
CONDITIONS  
PLAN**

PROJECT NO. P2729-001



TREE TABLE REPORT

POINT#	Tree Type	Trunk Diam.	TAG #
1033	Tree	36"	T1101 TRIPLE
1034	Tree	36"	T1102
1035	Tree	24"	T1103
1036	Tree	24"	T1104
1037	Tree	24"	T1105
1040	Magnolia	12"	T1106
1152	Holly	12"	T1107
1153	Holly	12"	T1108
1156	Oak	24"	T1109
1236	Oak	30"	T1114
1237	Oak	12"	T1115
1238	Oak	10"	T1116
1239	Oak	24"	T1117
1240	Oak	30"	T1118
1241	Oak	36"	T1118 DOUBLE
1316	Oak	24"	T1110
1317	Oak	18"	T1111
1318	Oak	30"	T1112
1319	Oak	18"	T1113
1446	Oak	30"	T1124 DOUBLE
1447	Oak	36"	T1125 TRIPLE
1448	Oak	40"	T1122 DOUBLE
1449	Cypress	9"	NO TAG #
1490	Tree	12"	T1126
1491	Tree	30"	T1127
1596	Oak	36"	T1128
1597	Oak	36"	T1129
1674	Oak	36"	T1130 DOUBLE
1675	Oak	12"	T1131
1676	Oak	24"	T1132
1677	Oak	18"	T1133
1678	Oak	30"	T1134
1811	Tree	48"	T1135 DOUBLE
1812	Oak	24"	T1136
1813	Oak	24"	T1137
1879	Oak	20"	T1138
1880	Poplar	12"	T1139
1895	Oak	22"	T1140 DEAD
1896	Oak	24"	T1141 DEAD
1897	Oak	12"	T1142
1898	Oak	18"	T1143 DEAD
1899	Oak	18"	T1144
1900	Oak	15"	T1145
1901	Oak	18"	T1146
1902	Oak	12"	T1147
1910	Tree	20"	T1148
1911	Tree	24"	T1149
1931	Oak	48"	T1150 DOUBLE
1935	Maple	18"	T1152 DOUBLE

LEGEND:

--- EXISTING TREE LINE

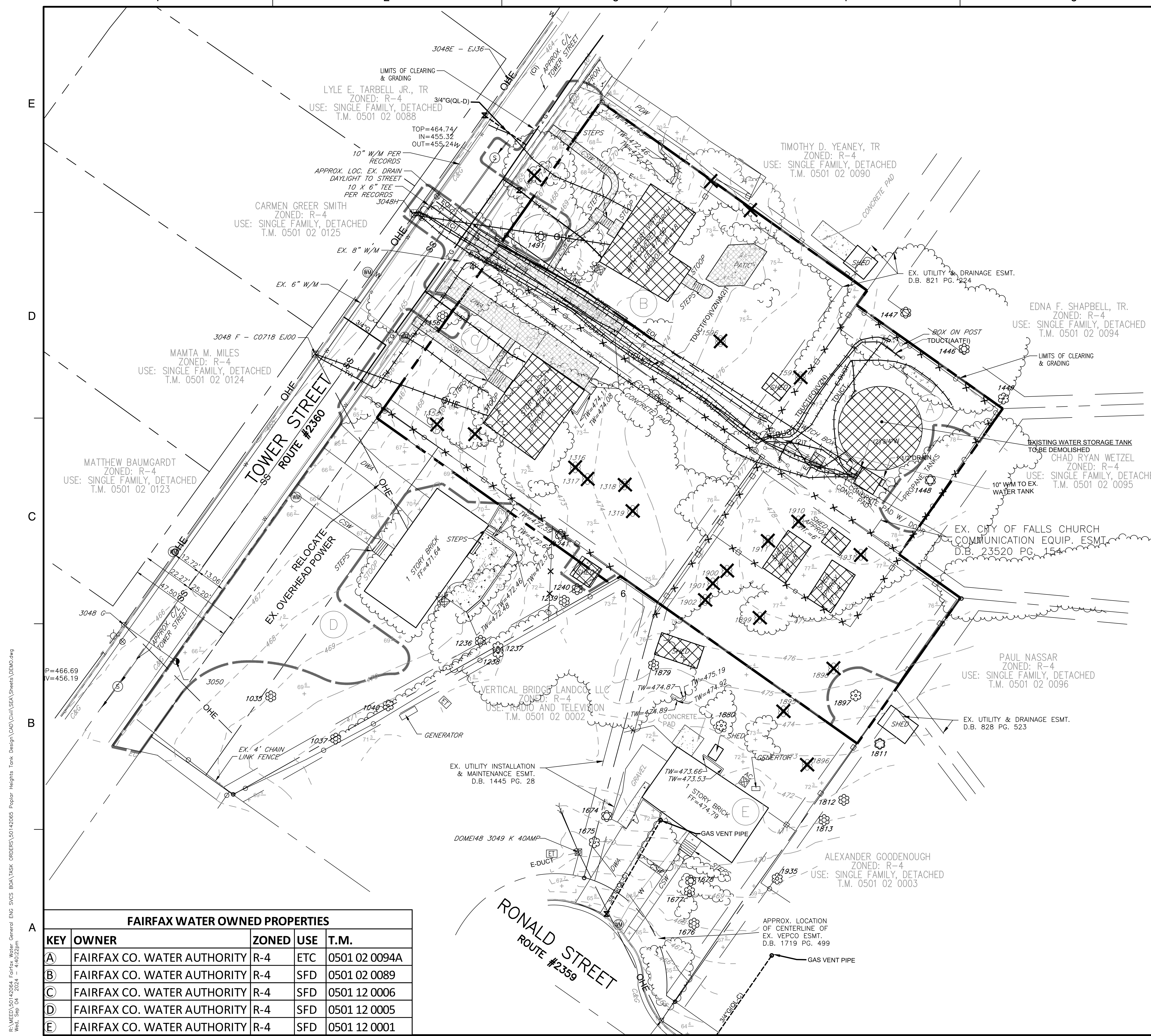
#### ◉ EXISTING TREE W/ IDENTIFICATION NUMBER

--- LIMITS OF SPECIAL EXCEPTION

**FAIRFAX WATER OWNED PROPERTIES**

KEY	OWNER	ZONED	USE	T.M.
A	FAIRFAX CO. WATER AUTHORITY	R-4	ETC	0501 02 0094A
B	FAIRFAX CO. WATER AUTHORITY	R-4	SFD	0501 02 0089
C	FAIRFAX CO. WATER AUTHORITY	R-4	SFD	0501 12 0006
D	FAIRFAX CO. WATER AUTHORITY	R-4	SFD	0501 12 0005
E	FAIRFAX CO. WATER AUTHORITY	R-4	SFD	0501 12 0001

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**DEMOLITION LEGEND**

- EX. UTILITY TO BE ABANDONED/REMOVED\*
- EX. BUILDING / STRUCTURE TO BE DEMOLISHED
- EX. HARDSCAPE TO BE DEMOLISHED
- TREE TO REMAIN
- TREE TO BE REMOVED

\* EX. SANITARY LATERALS SERVING LOT 89 AND LOT 6 SHALL BE FIELD LOCATED, DEMOLISHED, AND CAPPED AT MAIN PRIOR TO DEMOLITION OF THE EXISTING SINGLE FAMILY STRUCTURES

**LIMITS OF SPECIAL EXCEPTION**

- CHAIN LINK FENCE TO BE REMOVED
- BOARD ON BOARD FENCE TO BE REMOVED

**Dewberry**

Dewberry Engineers Inc.  
 8401 ARLINGTON BLVD.  
 FAIRFAX, VA 22031  
 703.849.0100 (PHONE)  
 703.849.0518 (FAX)

**POPLAR HEIGHTS WATER TANK**  
**SPECIAL EXCEPTION PLAN**  
 FAIRFAX COUNTY, VA

SEAL

KEY PLAN

SCALE NORTH

SCALE IN FEET  
 1" = 20'  
 1 INCH

No.	DATE	BY	Description
5	09/04/24		Addressed Comments
4	06/28/24		Addressed Comments
3	05/31/24		Addressed Comments
2	04/11/24		Addressed Comments
1	02/02/24		SE Submission

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APPROVED BY:            TCC

CHECKED BY:            TCC

DATE:            09/04/2024

TITLE

**DEMOLITION PLAN**

PROJECT NO.            P2729-001

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**FAIRFAX WATER OWNED PROPERTIES**

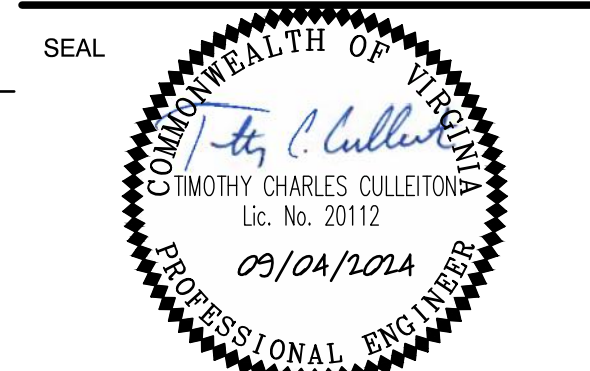
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B	FAIRFAX CO. WATER AUTHORITY	R-4	SFD	0501 02 0089
C	FAIRFAX CO. WATER AUTHORITY	R-4	SFD	0501 12 0006
D	FAIRFAX CO. WATER AUTHORITY	R-4	SFD	0501 12 0005
E	FAIRFAX CO. WATER AUTHORITY	R-4	SFD	0501 12 0001

RESIDUAL PROPERTY TABULATION  
EXISTING ZONING R-4

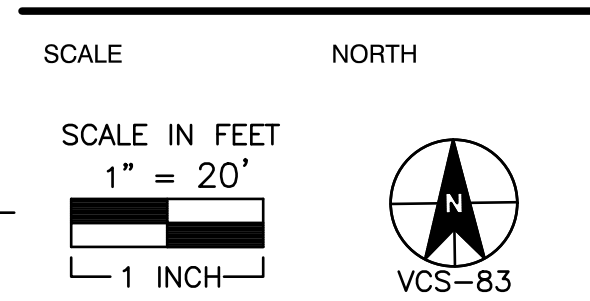
	MIN. REQUIRED	MIN. PROVIDED	
		PARCEL (D)	PARCEL (E)
LOT AREA	8,400 SF	15,751 SF	14,912 SF
FRONT SETBACK	30 FT	40.20 FT	40.83 FT
REAR SETBACK	25 FT	24.93 FT	46± FT
SIDE SETBACK	10 FT	10± FT	15.05 FT
BUILDING HT.	35 FT	18 FT	18 FT
LOT WIDTH	70 FT	174.62 FT	77.70 FT

POPLAR HEIGHTS  
WATER TANK  
SPECIAL EXCEPTION PLAN

FAIRFAX COUNTY, VA



KEY PLAN



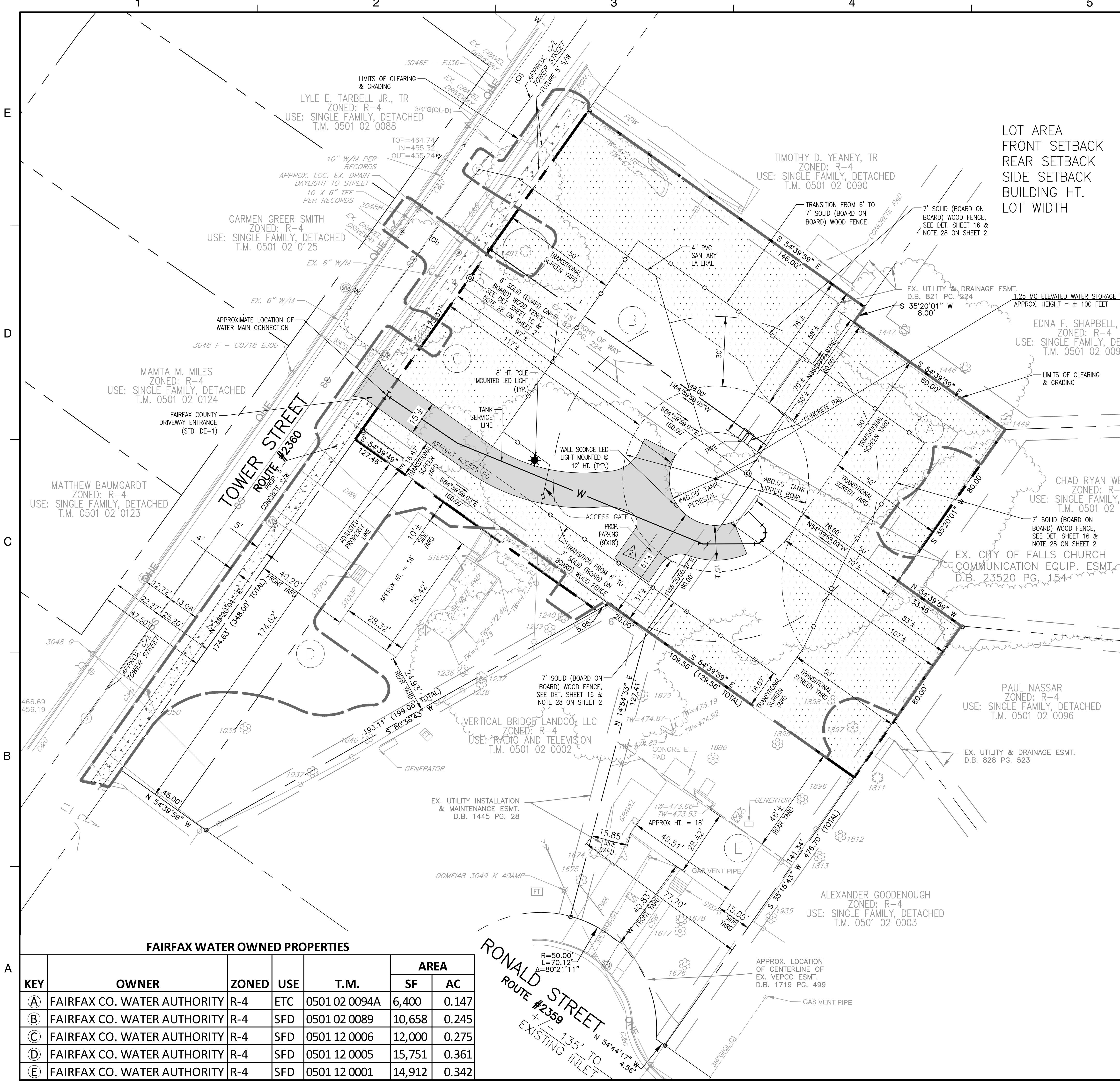
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3	05/31/24		Addressed Comments
2	04/11/24		Addressed Comments
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REVISIONS

NO.	DATE	BY	DESCRIPTION
		BWB	DRAWN BY
		TCC	APPROVED BY
		TCC	CHECKED BY
	09/04/2024		DATE

TITLE  
**SPECIAL EXCEPTION PLAN**

PROJECT NO. P2729-001



FAIRFAX WATER OWNED PROPERTIES

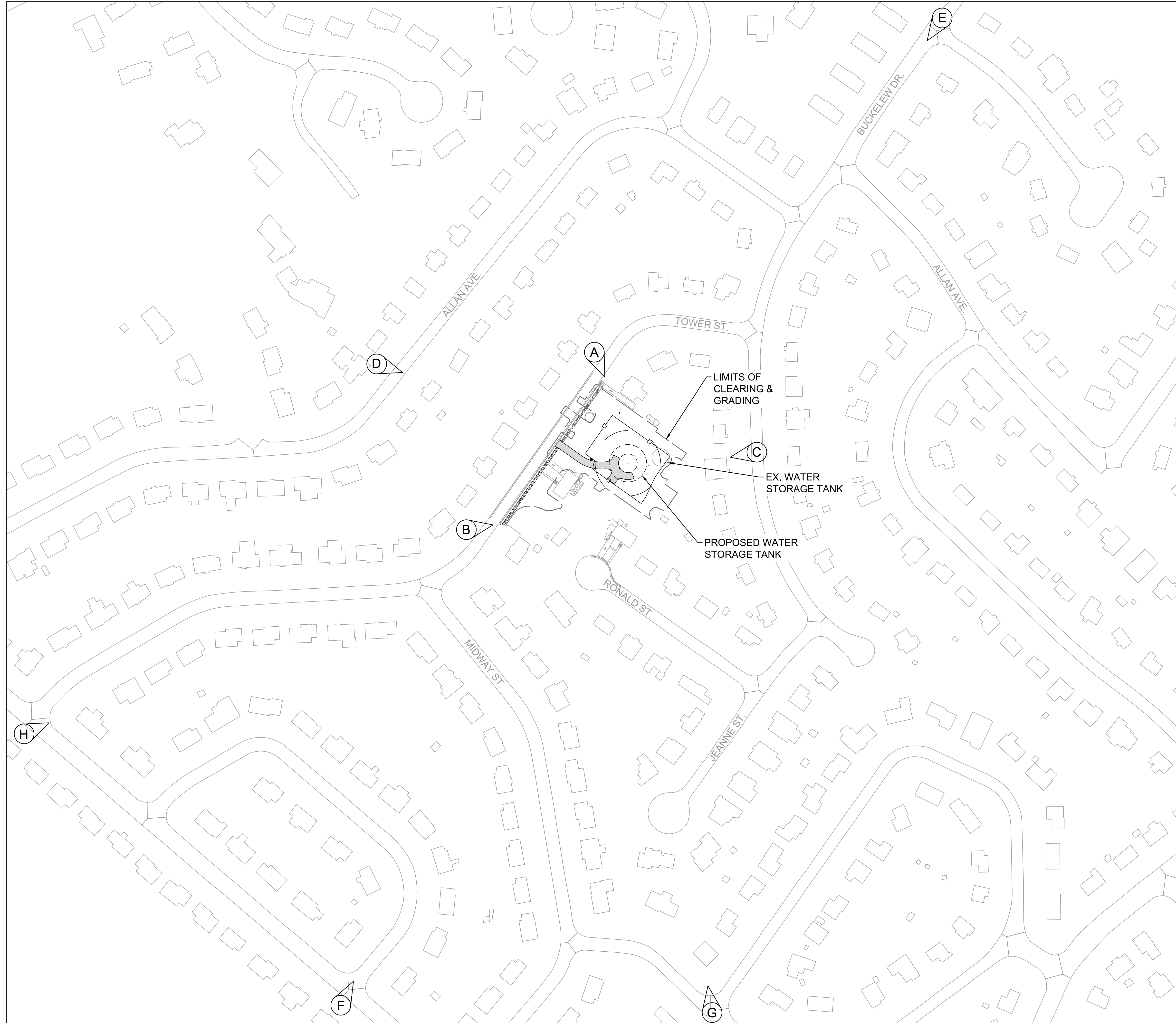
KEY	OWNER	ZONED	USE	T.M.	AREA	
					SF	AC
(A)	FAIRFAX CO. WATER AUTHORITY	R-4	ETC	0501 02 0094A	6,400	0.147
(B)	FAIRFAX CO. WATER AUTHORITY	R-4	SFD	0501 02 0089	10,658	0.245
(C)	FAIRFAX CO. WATER AUTHORITY	R-4	SFD	0501 12 0006	12,000	0.275
(D)	FAIRFAX CO. WATER AUTHORITY	R-4	SFD	0501 12 0005	15,751	0.361
(E)	FAIRFAX CO. WATER AUTHORITY	R-4	SFD	0501 12 0001	14,912	0.342

LEGEND:

- TRANSITIONAL SCREEN YARD
- EXISTING TREE LINE
- EXISTING TREE W/ IDENTIFICATION NUMBER
- LIMITS OF SPECIAL EXCEPTION
- CLEARANCE TO FACILITATE CONSTRUCTION OF UPPER BOWL
- BOARD-ON-BOARD WOOD FENCE
- FUTURE 5' CONCRETE SIDEWALK (SEE SE DEVELOPMENT CONDITIONS)
- PROPOSED 5' CONCRETE SIDEWALK

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PHOTO LOCATION MAP

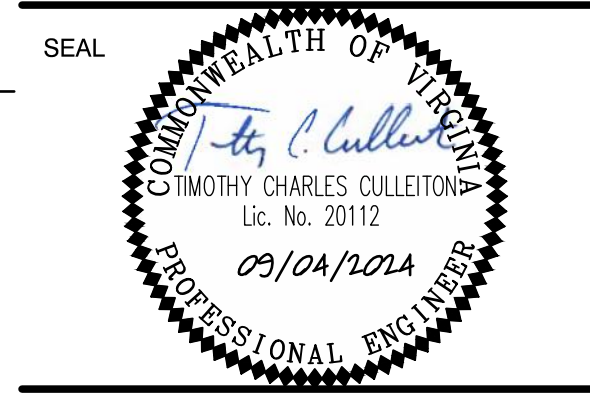


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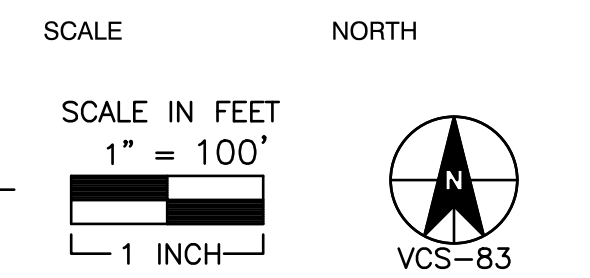


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 703.849.0518 (FAX)

**POPLAR HEIGHTS  
 WATER TANK  
 SPECIAL EXCEPTION PLAT**  
 FAIRFAX COUNTY, VA



KEY PLAN



No.	DATE	BY	Description
5	09/04/24		Addressed Comments
4	06/28/24		Addressed Comments
3	05/31/24		Addressed Comments
2	04/11/24		Addressed Comments
1	02/02/24		SE Submission

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 APPROVED BY:            TCC  
 CHECKED BY:            TCC  
 DATE:            09/04/2024

TITLE  
**EXTERIOR SITE  
 PHOTOGRAPH  
 LOCATIONS**

PROJECT NO. P2729-001

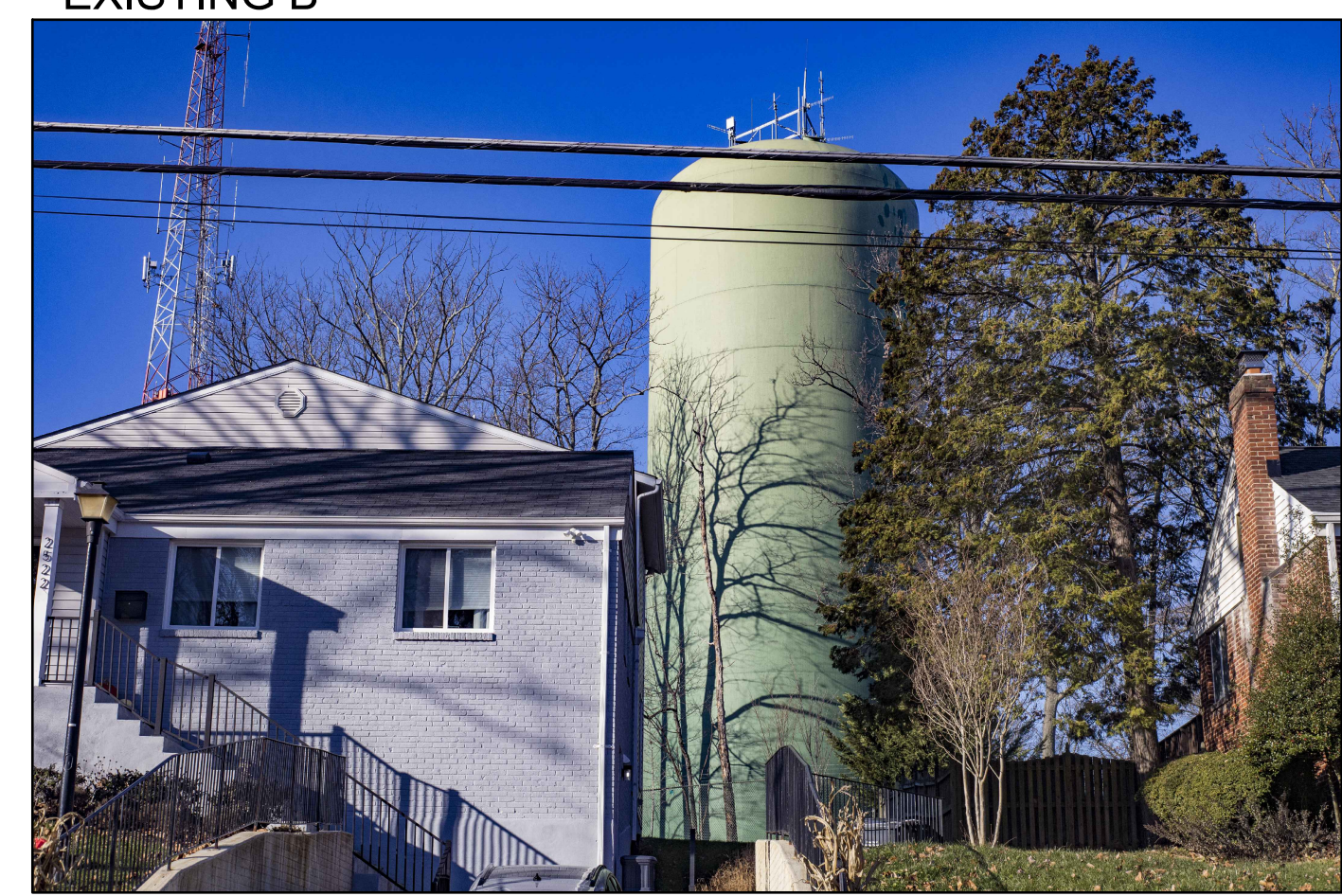
**EXISTING A** LOCATION A



**PROPOSED A**



**EXISTING B** LOCATION B



**PROPOSED B**



**EXISTING C** LOCATION C



**PROPOSED C**



**EXISTING D** LOCATION D



**PROPOSED D**



**EXISTING E** LOCATION E



**PROPOSED E**



**EXISTING F** LOCATION F



**PROPOSED F**



**EXISTING G** LOCATION G



**PROPOSED G**



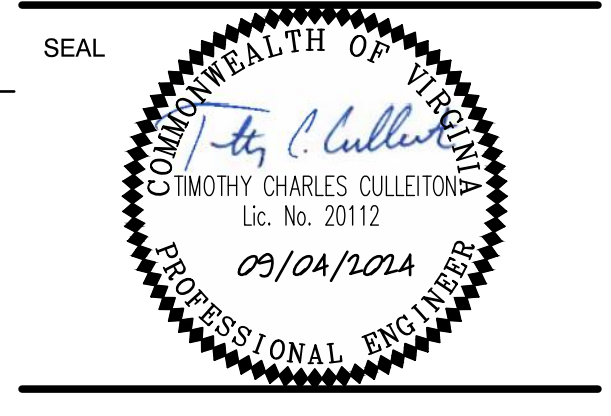
**EXISTING H** LOCATION H



**PROPOSED H**



**POPLAR HEIGHTS  
WATER TANK  
SPECIAL EXCEPTION PLAN**



KEY PLAN  
SCALE NORTH

No.	DATE	BY	Description
5	09/04/24		Addressed Comments
4	06/28/24		Addressed Comments
3	05/31/24		Addressed Comments
2	04/11/24		Addressed Comments
1	02/02/24		SE Submission

REVISIONS  
DRAWN BY: BWB  
APPROVED BY: TCC  
CHECKED BY: TCC  
DATE: 09/04/2024

**TITLE  
EXTERIOR SITE  
PHOTOGRAPHS**

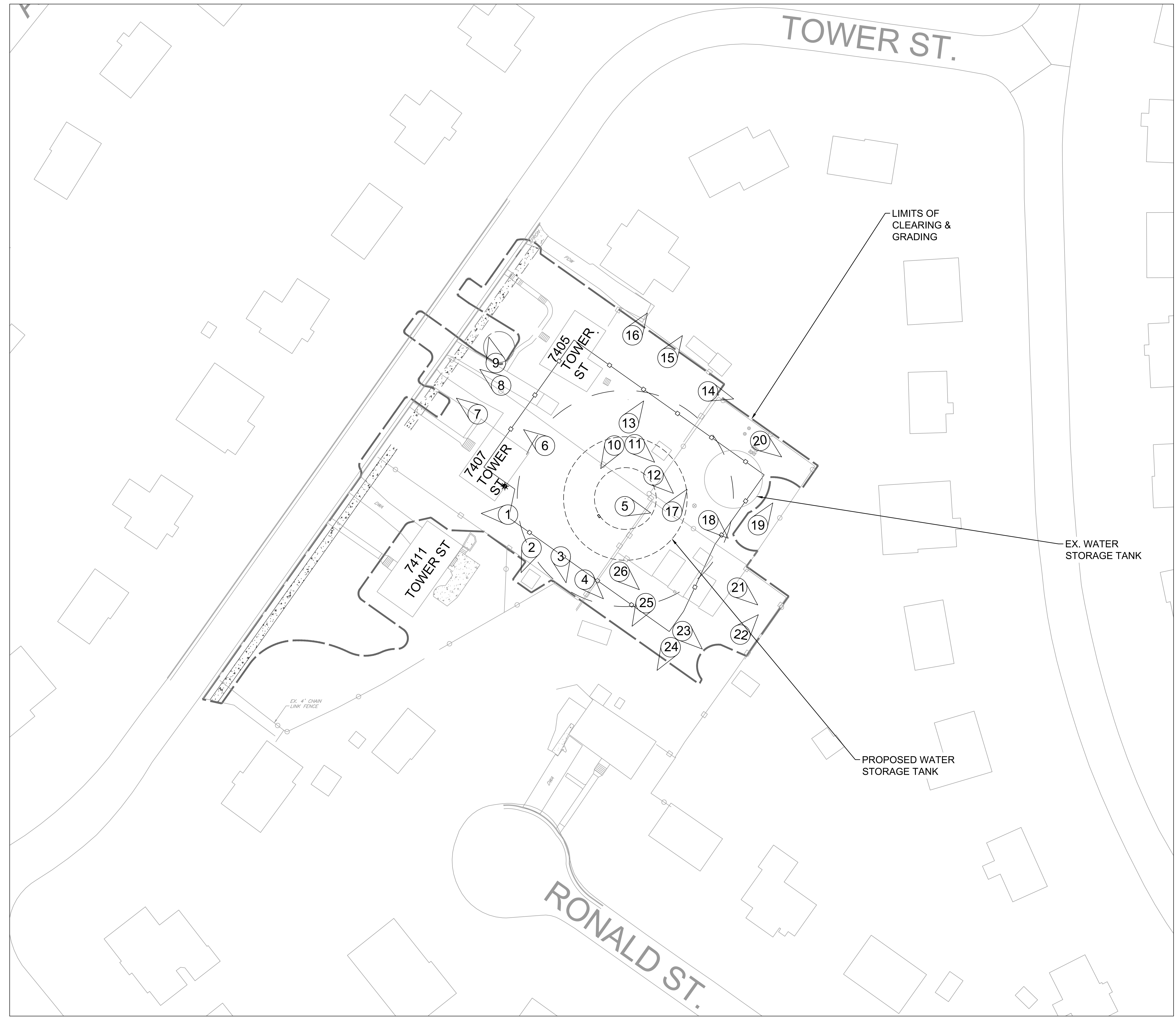
PROJECT NO. P2729-001

ALL PHOTOGRAPHS TAKEN DURING SUMMER & WINTER OF 2022  
PROPOSED PHOTOS INCLUDE PROPOSED TANK LOCATION

SEE SHEET 6 FOR LOCATIONS

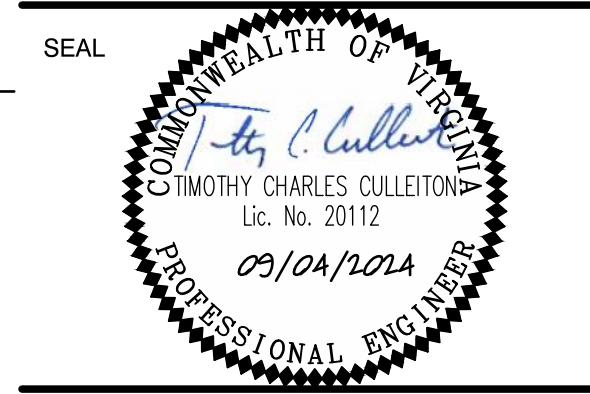
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Wed, Sep 04, 2024 11:40:47pm

PHOTO LOCATION MAP



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 FAIRFAX, VA 22031  
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POPLAR HEIGHTS  
 WATER TANK  
 SPECIAL EXCEPTION PLAT  
 FAIRFAX COUNTY, VA



KEY PLAN

SCALE NORTH  
 SCALE IN FEET  
 1" = 30'  
 1 INCH

No.	DATE	BY	Description
5	09/04/24		Addressed Comments
4	06/28/24		Addressed Comments
3	05/31/24		Addressed Comments
2	04/11/24		Addressed Comments
1	02/02/24		SE Submission

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 CHECKED BY: TCC  
 DATE: 09/04/2024

TITLE  
 INTERIOR SITE  
 PHOTOGRAPH  
 LOCATIONS

PROJECT NO. P2729-001

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LOCATION 1



LOCATION 2



LOCATION 3



LOCATION 4



LOCATION 5



LOCATION 6



LOCATION 7



LOCATION 8



LOCATION 9



LOCATION 10



LOCATION 11



LOCATION 12



LOCATION 13



LOCATION 14



LOCATION 15



LOCATION 16

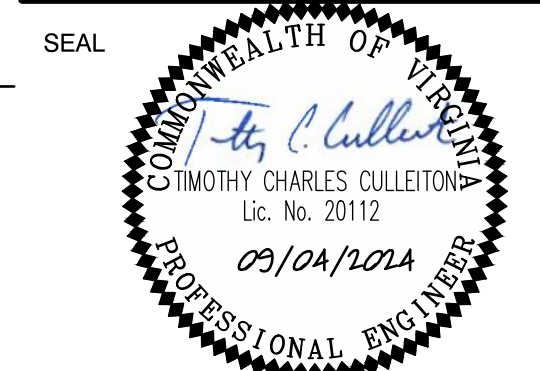


ALL PHOTOGRAPHS TAKEN ON 01/11/2024

SEE SHEET 8 FOR LOCATIONS

POPLAR HEIGHTS  
WATER TANK  
SPECIAL EXCEPTION PLAT

FAIRFAX COUNTY, VA



KEY PLAN

SCALE NORTH

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3	05/31/24		Addressed Comments
2	04/11/24		Addressed Comments
1	02/02/24		SE Submission

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APPROVED BY: TCC  
CHECKED BY: TCC  
DATE: 09/04/2024

TITLE  
INTERIOR SITE  
PHOTOGRAPHS

PROJECT NO. P2729-001

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LOCATION 17



LOCATION 18



LOCATION 19



LOCATION 20



LOCATION 21



LOCATION 22



LOCATION 23



LOCATION 24



LOCATION 25

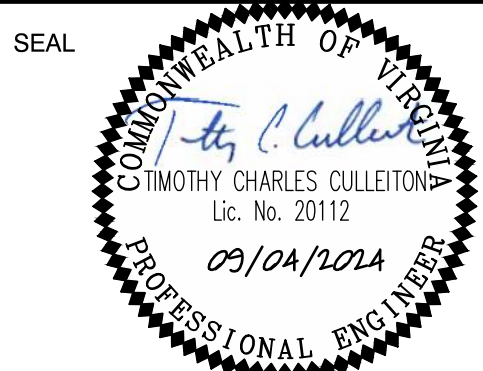


LOCATION 26



POPLAR HEIGHTS  
WATER TANK  
SPECIAL EXCEPTION PLAT

FAIRFAX COUNTY, VA



KEY PLAN

SCALE NORTH

No.	DATE	BY	Description
5	09/04/24		Addressed Comments
4	06/28/24		Addressed Comments
3	05/31/24		Addressed Comments
2	04/11/24		Addressed Comments
1	02/02/24		SE Submission

REVISIONS

DRAWN BY: BWB

APPROVED BY: TCC

CHECKED BY: TCC

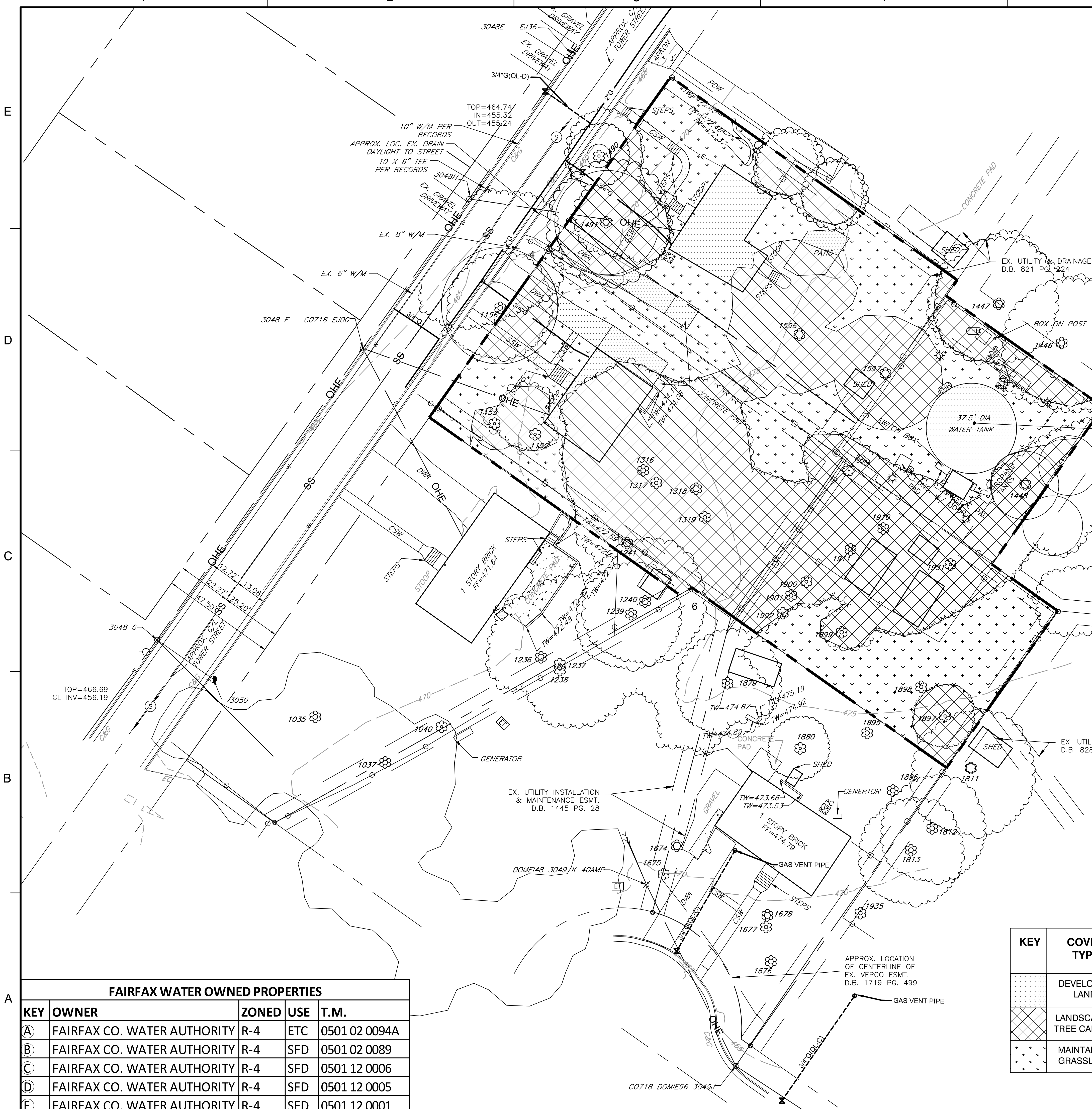
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TITLE  
INTERIOR SITE  
PHOTOGRAPHS

PROJECT NO. P2729-001

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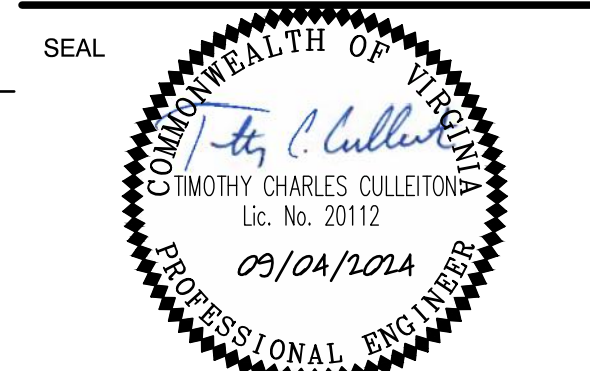
**Table 12.3 Tree Preservation Target Calculations and Statement**

A	Pre-development area of existing tree canopy (from Existing Vegetation Map) =	0.54 ± AC (23,350 ± SF)
B	Percentage of gross site area covered by existing tree canopy =	57.3 %
C	Percentage of 10-year tree canopy required for site (see Table 12.4) =	25 % = 0.23 AC (10,173 ± SF)
D	Percentage of the 10-year tree canopy requirement that should be met through tree preservation =	57.3 %
E	Proposed percentage of canopy requirement that will be met through tree preservation =	0.13 ± AC (5,829 ± SF)
F	Has the Tree Preservation Target minimum been met?	61.9 %
F	Provide Yes or No	YES
G	If No for line F, then a request to deviate from the Tree Preservation Target shall be provided on the plan that states one or more of the justifications listed in § 12-0308.3 along with a narrative that provides a site-specific explanation of why the Tree Preservation Target cannot be met. Provide sheet number where deviation request is located.	
H	If step G requires a narrative, it shall be prepared in accordance with § 12-0507.4	
I	Place this information prior to the 10-year Tree Canopy Calculations as per instructions in Table 12.9.	

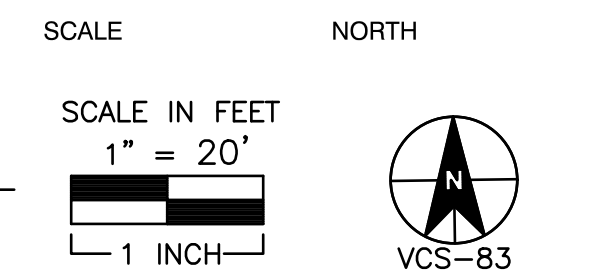


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 703.849.0100 (PHONE)  
 703.849.0518 (FAX)

**POPLAR HEIGHTS  
 WATER TANK  
 SPECIAL EXCEPTION PLAN**  
 FAIRFAX COUNTY, VA



KEY PLAN



No.	DATE	BY	Description
5	09/04/24		Addressed Comments
4	06/28/24		Addressed Comments
3	05/31/24		Addressed Comments
2	04/11/24		Addressed Comments
1	02/02/24		SE Submission

REVISIONS

DRAWN BY: BWB

APPROVED BY: TCC

CHECKED BY: TCC

DATE: 09/04/2024

**EXISTING VEGETATION MAP**

PROJECT NO. P2729-001

**EXISTING VEGETATION INVENTORY**

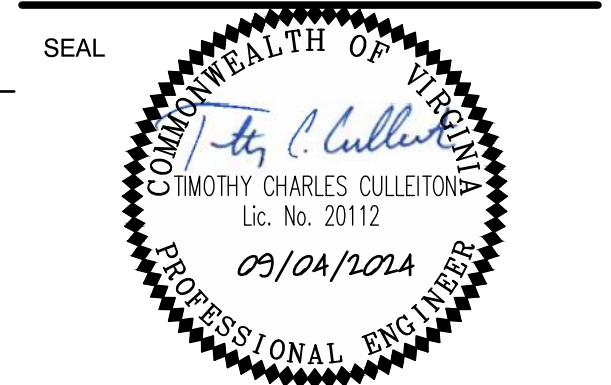
KEY	COVER TYPE	PRIMARY SPECIES	SUCCESSIONAL STAGES	CONDITION	AREA	COMMENTS
[Pattern]	DEVELOPED LAND	N/A	N/A	N/A	0.094 AC (4,095 SF)	EX. BUILDINGS, WATER TANK, DRIVEWAYS
[Pattern]	LANDSCAPED TREE CANOPY	OAK & MAPLE	CLIMAX	FAIR	0.536 AC (23,350 SF)	MATURE LANDSCAPE
[Pattern]	MAINTAINED GRASSLAND	N/A	N/A	N/A	0.288 AC (13,247 SF)	LAWNS AND FOUNDATION PLANTINGS
<b>TOTAL ACREAGE:</b>					<b>0.918 ACRES (40,692 SF)</b>	

**FAIRFAX WATER OWNED PROPERTIES**

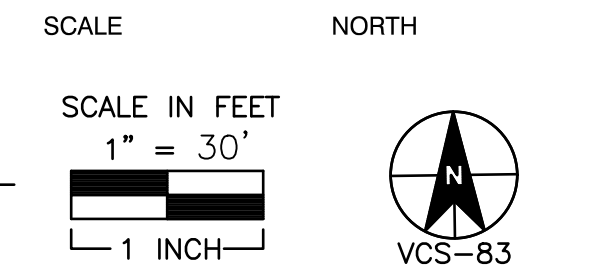
KEY	OWNER	ZONED	USE	T.M.
A	FAIRFAX CO. WATER AUTHORITY	R-4	ETC	0501 02 0094A
B	FAIRFAX CO. WATER AUTHORITY	R-4	SFD	0501 02 0089
C	FAIRFAX CO. WATER AUTHORITY	R-4	SFD	0501 12 0006
D	FAIRFAX CO. WATER AUTHORITY	R-4	SFD	0501 12 0005
E	FAIRFAX CO. WATER AUTHORITY	R-4	SFD	0501 12 0001

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DRAWN BY: BWB

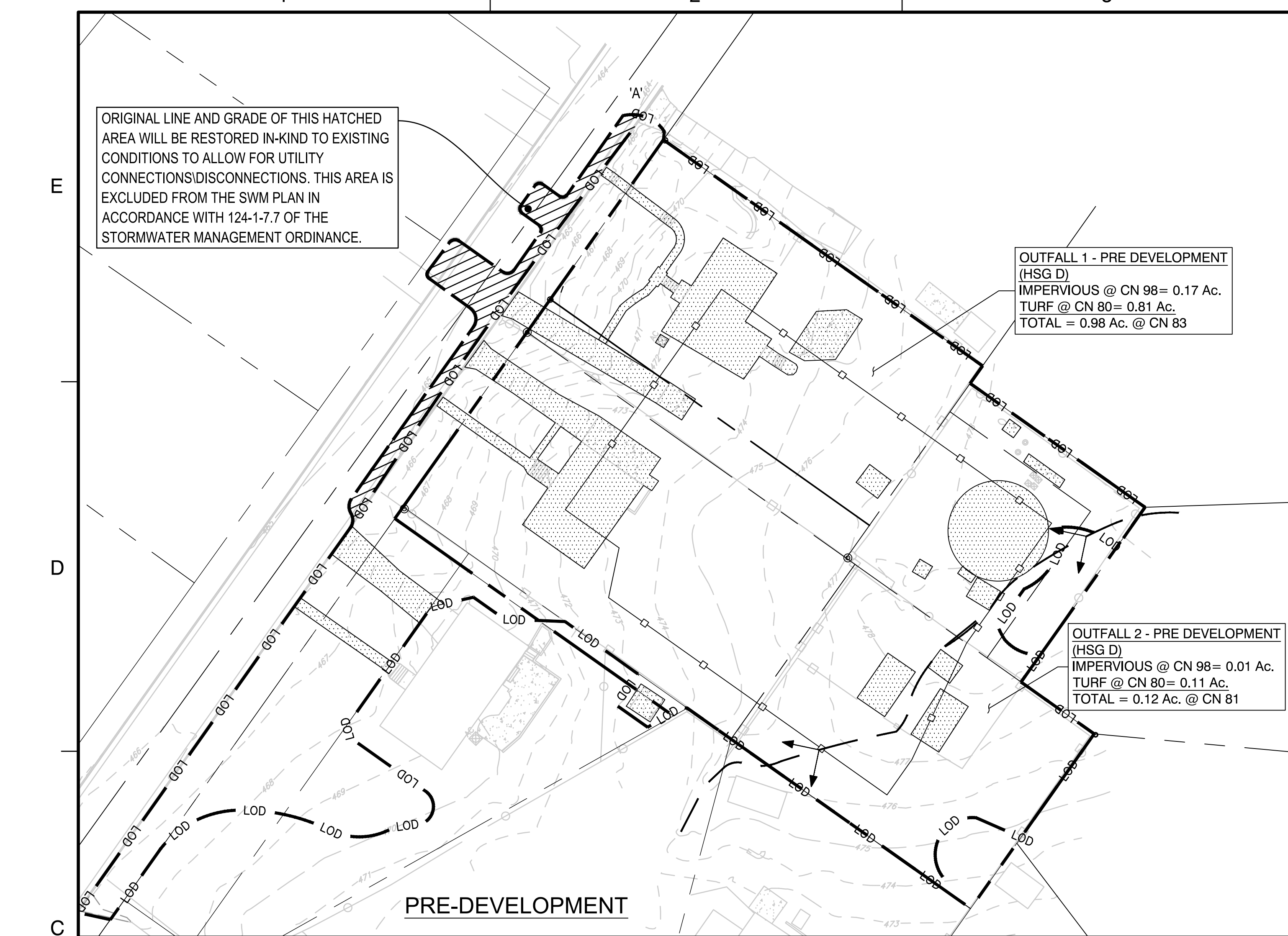
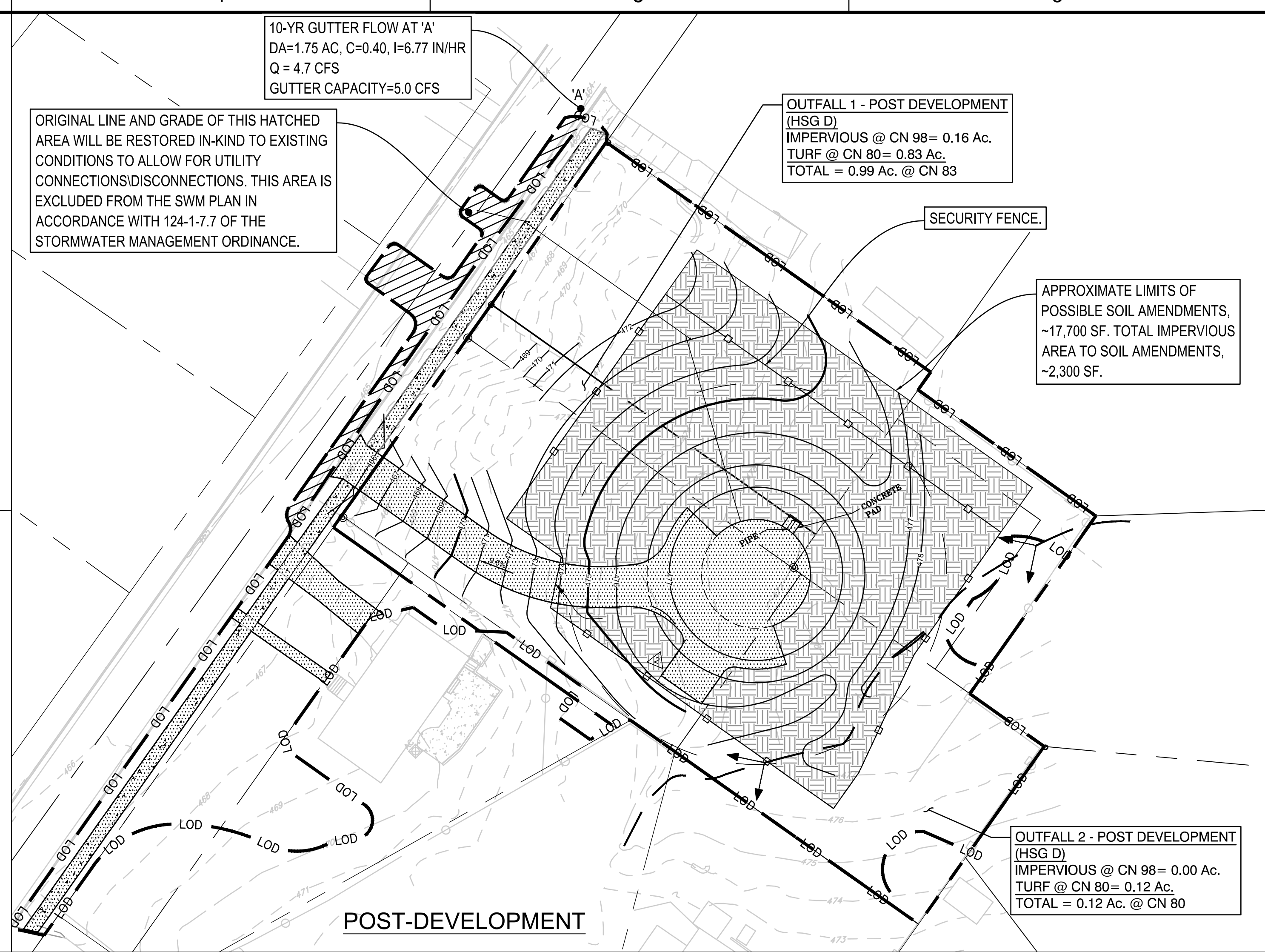
APPROVED BY: TCC

CHECKED BY: TCC

DATE: 09/04/2024

**TITLE**  
**SWM PLAN &  
NARRATIVE**

PROJECT NO. P2729-001



**STORMWATER MANAGEMENT NARRATIVE**

THE STORMWATER MANAGEMENT PLAN FOR THIS SPECIAL EXCEPTION APPLICATION HAS BEEN PREPARED IN ACCORDANCE WITH THE FAIRFAX COUNTY STORMWATER MANAGEMENT ORDINANCE AND PUBLIC FACILITIES MANUAL.

**I. SITE AREA**

THE SITE AREA EVALUATED FOR WATER QUALITY AND WATER QUANTITY IS 1.11 AC. THE SITE BOUNDARY IS CALLED OUT ON SHEET 5.

**II. WATER QUALITY**

THE VIRGINIA RUNOFF REDUCTION METHOD AS DESCRIBED IN SECTION 124-4-2 OF THE FAIRFAX COUNTY STORMWATER MANAGEMENT ORDINANCE WAS USED TO EVALUATE WATER QUALITY FOR THIS SITE. BECAUSE THE SITE AREA INCLUDES NEW DEVELOPMENT ON PRIOR DEVELOPED LAND, THE VIRGINIA RUNOFF REDUCTION METHOD (VRRM) REDEVELOPMENT WORKSHEET WAS USED TO SHOW WATER QUALITY COMPLIANCE IN ACCORDANCE WITH ARTICLE 4. AS CALCULATED BY THE VRRM WORKSHEET, THE TOTAL PHOSPHORUS LOAD REDUCTION REQUIRED IS APPROXIMATELY 0.15 LB/YR. COMPOST SOIL AMENDMENTS (VIRGINIA DEQ STORMWATER DESIGN SPECIFICATIONS #2 AND #4 IS PROPOSED AS A POSSIBLE RUNOFF REDUCTION PRACTICE TO MEET THE PHOSPHORUS LOAD REDUCTION REQUIREMENT FOR THE PROJECT. AN APPROXIMATE TOTAL PHOSPHOROUS LOAD REDUCTION OF APPROXIMATELY 0.17 LB/YR IS PROVIDED WITH THIS PRACTICE, WHICH EXCEEDS THE REQUIRED LOAD REDUCTION BY APPROXIMATELY 0.02 LB/YR. ALTERNATE BMP DEVICES MAY BE CONSIDERED AT SITE PLAN PROVIDED THAT THE REQUIRED PHOSPHORUS LOAD REDUCTION IS ACHIEVED ONSITE, UNLESS APPROVED OTHERWISE BY THE DIRECTOR.

**III. WATER QUANTITY**

THERE ARE TWO (2) MAIN OUTFALLS WHERE RUNOFF LEAVES THE SITE.

OUTFALL 1 DISCHARGES TO TOWER STREET WHERE IT IS INTERCEPTED BY CURB AND GUTTER. DOWNSTREAM OF OUTFALL 1 THE CONCEYANCE SYSTEM IS MANMADE, CONSISTING OF CURB AND GUTTER AND CLOSED STORM SEWER TO WHERE IT DISCHARGES INTO TRIPPS RUN. THERE ARE NO KNOWN DOCUMENTED EROSION OR FLOODING PROBLEMS ASSOCIATED WITH THIS MANMADE CONCEYANCE SYSTEM. THE CONTRIBUTING DRAINAGE AREA FROM OUTFALL 1 IS APPROXIMATELY 0.98 AC AND THE TOTAL DRAINAGE AREA AT TRIPPS RUN WHERE IT DAYLIGHTS IS MORE THAN 220 AC. RUNOFF TO OUTFALL 1 WILL NOT BE INCREASED DUE TO THE PROJECT. AT SITE PLAN, DRAINAGE CALCULATIONS WILL BE PROVIDED TO DEMONSTRATE THAT THE MANMADE DRAINAGE SYSTEM DOWNSTREAM OF OUTFALL 1 IS ADEQUATE TO THE LIMIT OF ANALYSIS AT TRIPPS RUN.

OUTFALL 2 DISCHARGES AS SHEET FLOW TO THE SOUTH-EAST TOWARDS ADJACENT PROPERTIES. SHEET FLOW TO THESE PROPERTIES WILL BE REDUCED UNDER PROPOSED CONDITIONS WITH REMOVAL OF EXISTING IMPERVIOUS COVER AND PLANTINGS AS REFLECTED ON SHEET 14. AT SITE PLAN, DRAINAGE CALCULATIONS WILL BE PROVIDED TO DEMONSTRATE THAT SHEET FLOW TO THE ADJACENT PROPERTIES HAS BEEN REDUCED.

2- AND 10-YR DETENTION FOR THE PROJECT WILL BE PROVIDED THROUGH A COMBINATION OF PROPOSED ONSITE RUNOFF REDUCTION PRACTICES AND REMOVAL OF EXISTING IMPERVIOUS COVER. THE PRE-DEVELOPED RUNOFF CURVE NUMBER FOR THE 1.11 AC SITE IS CALCULATED TO BE 83 WHEREAS THE POST-DEVELOPED ADJUSTED RUNOFF CURVE NUMBER REFLECTED ON SHEET 13 IS CALCULATED TO BE 82, WHICH IMPLIES DETENTION WILL BE SATISFIED. AT SITE PLAN, DETENTION CALCULATIONS WILL BE PROVIDED TO DEMONSTRATE THAT 2- AND 10-YEAR DETENTION IS MET FOR THE PROJECT.

THE TOTAL 10-YEAR GUTTER FLOW TO POINT 'A' ON THE POST-DEVELOPMENT MAP ABOVE IS APPROXIMATELY 4.7 CFS. THIS VALUE WOULD BE LESS THAN PRE-DEVELOPMENT CONDITIONS FLOW BECAUSE THE PROJECT RESULTS IN A REDUCTION IN RUNOFF CURVE NUMBER COMPARED TO PRE-DEVELOPMENT CONDITIONS. THE CAPACITY OF THE GUTTER PLUS PAVEMENT SECTION TO THE NORMAL CROWN OF TOWER STREET IS APPROXIMATELY 5.0 CFS. BASED ON THIS, IT IS EXPECTED THAT FOR STORM EVENTS LESS THAN OR EQUAL TO A 10-YEAR FLOOD, GUTTER FLOW WILL BE MAINTAINED TO THE SOUTH SIDE OF TOWER STREET AT POINT 'A', WHERE THE STORM SEWER OUTFALL IS PROPOSED.

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

The following information is required to be shown or provided in all zoning applications, or a waiver request of the submission requirement with justification shall be attached. Note: Waivers will be acted upon separately. Failure to adequately address the required submission information may result in a delay in processing this application.

This information is required under Zoning Ordinance subsection 8101.1.G.

- 1. Plat is at a minimum scale of 1"=50' (Unless it is depicted on one sheet with a minimum scale of 1"=100')
- 2. A graphic depicting the stormwater management facility(ies) and limits of clearing and grading accommodate the stormwater management facility(ies), storm drainage pipe systems and outlet protection, pond spillways, access roads, site outfalls, energy dissipation devices, and stream stabilization measures as shown on Sheet(s) 5 & 12.  
If infiltration is proposed the soils should be tested for suitability prior to submission of the development plan and results of the infiltration test provided as part of the description of the facility.

3. Provide:

Facility Name/ Type & No.	On-site area served (acres)	Off-site area served (acres)	Drainage area (acres)	Footprint area (sf)	Storage volume (cf)	If pond, dam height (ft.)
SOIL AMENDMENTS	-0.45	0.00	-0.45	17,700	268	N/A
<b>Totals:</b>	-0.45	0.00	-0.45	17,700	268	N/A

- 4. Onsite drainage channels, outfalls and pipe systems are shown on Sheet(s) 5 & 12. Pond inlet and outlet pipe systems are shown on Sheet(s) 5 & 12.
- 5. Maintenance access (road) to stormwater management facility(ies) are shown on Sheet(s) 5 & 12. Type of maintenance access road surface noted on the plat is ASHPHALT (asphalt, geoblock, gravel, etc.)
- 6. Landscaping and tree preservation in and near the stormwater management facility is shown on Sheet(s) 5 & 14.
- 7. Stormwater management and BMP narratives including Virginia Runoff Reduction Spreadsheet and descriptions of how detention and best management practices requirements will be met are provided on Sheet(s) 12-13.
- 8. A description of existing conditions of each numbered site outfall extended downstream from the site to a point which is at least 100 times the site area or which has a drainage area of at least one square mile (640 acres) is provided on Sheet(s) SEE NOTE 2. If the outfall is proposed to be improved off-site it should be specifically noted. NOTE 2: THIS IS N/A BECAUSE RUNOFF FROM THE EXISTING SITE IS ALL SHEET FLOW, NOT CONCENTRATED FLOW.
- 9. A detailed description and analysis of how the channel protection requirements and flood protection requirements of each numbered outfall will be satisfied per Stormwater Management Ordinance and Public Facilities Manual are provided on Sheet(s) 12.
- 10. Existing topography with maximum contour intervals of two (2) feet and a note as to whether it is an air survey or field run is provided on Sheet(s) 3 & 12.
- 11. A submission waiver is required for N/A.
- 12. Stormwater management is not required because N/A.

Revised: 8/4/2015 Zoning Ordinance Citation only revised 7/1/2021

**LEGEND:**

- PROPERTY LINE
- APPROX. LIMITS OF CONSTRUCTION \*
- APPROX. LIMITS OF DISTURBANCE FOR SWM/BMP PURPOSES
- DRAINAGE DIVIDES
- IMPERVIOUS AREA
- TURF AREA
- SOIL AMENDMENTS

\* WHERE THE LIMITS OF CONSTRUCTION IS COINCIDENT WITH THE LOD, ONLY THE LOD IS SHOWN.

DEQ Virginia Runoff Reduction Method Re-Development Compliance Spreadsheet - Version 3.0

Project Name: Poplar Heights Water Tank - SEA
Date: 4/3/2024
Linear Development Project? No
CLEAR ALL (Ctrl+Shift+R)
data input cells
constant values
calculation cells
final results

Site Information
Post-Development Project (Treatment Volume and Loads)
Enter Total Disturbed Area (acres) -> 1.11
Check: BMP Design Specifications List: 2013 Draft Stds & Specs
Linear project? No
Land cover areas entered correctly? Yes
Total disturbed area entered? Yes

Pre-ReDevelopment Land Cover (acres)
Forest/Open Space (acres) -- undisturbed forest/open space: 0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be: 0.93
Impervious Cover (acres): 0.18
Totals: 1.11

Post-Development Land Cover (acres)
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested: 0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be: 0.95
Impervious Cover (acres): 0.16
Area Check: OK

Constants
Annual Rainfall (inches): 43
Target Rainfall Event (inches): 1.00
Total Phosphorus (TP) EMC (mg/L): 0.26
Total Nitrogen (TN) EMC (mg/L): 1.86
Runoff Coefficients (Rv)
Forest/Open Space: A Soils 0.02, B Soils 0.03, C Soils 0.04, D Soils 0.05

LAND COVER SUMMARY -- PRE-REDEVELOPMENT
Pre-ReDevelopment: Forest/Open Space Cover (acres) 0.00, Weighted Rv(forest) 0.00, % Forest 0%

LAND COVER SUMMARY -- POST DEVELOPMENT
Final Post-Development: Forest/Open Space Cover (acres) 0.00, Weighted Rv(forest) 0.00, % Forest 0%

Treatment Volume and Nutrient Load
Pre-ReDevelopment Treatment Volume (acre-ft): 0.0336
Pre-ReDevelopment Treatment Volume (cubic feet): 1,465
Pre-ReDevelopment TP Load (lb/yr): 0.92

Treatment Volume and Nutrient Load
Final Post-Development Treatment Volume (acre-ft): 0.0325
Final Post-Development Treatment Volume (cubic feet): 1,414
Final Post-Development TP Load (lb/yr): 0.89

Post-Development Requirement for Site Area
TP Load Reduction Required (lb/yr): 0.15
Nitrogen Loads (Informational Purposes Only)
Pre-ReDevelopment TN Load (lb/yr): 6.58
Final Post-Development TN Load (Post-ReDevelopment & New Impervious) (lb/yr): 6.36

Drainage Area A
Drainage Area A Land Cover (acres)
Forest/Open Space (acres): 0.00
Managed Turf (acres): 0.95
Impervious Cover (acres): 0.16
Totals: 1.11
Total Phosphorus Available for Removal in D.A. A (lb/yr): 0.89
Post Development Treatment Volume in D.A. A (ft³): 1,414

Stormwater Best Management Practices (RR = Runoff Reduction)
Practice: 6.a. Bioretention #1 or Micro-Bioretention #1
Runoff Reduction Credit (%): 40
Managed Turf Credit Area (acres): 0
Impervious Cover Credit Area (acres): 0
Volume from Upstream Practice (ft³): 0
Runoff Reduction (ft³): 0
Remaining Runoff Volume (ft³): 0
Total BMP Treatment Volume (ft³): 0
Phosphorus Removal Efficiency (%): 25
Phosphorus Load from Upstream Practices (lb): 0.00
Untreated Phosphorus Load to Practice (lb): 0.00
Phosphorus Removed By Practice (lb): 0.00
Remaining Phosphorus Load (lb): 0.00

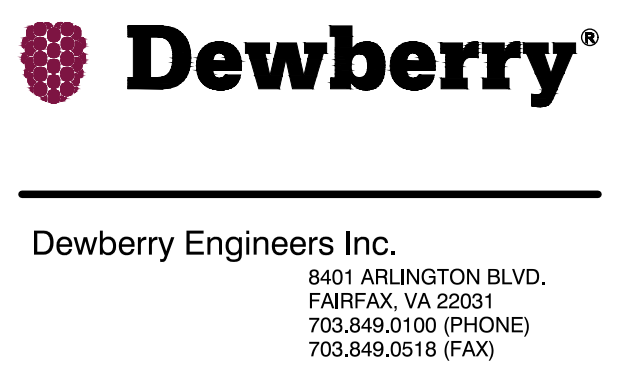
TOTAL IMPERVIOUS COVER TREATED (ac): 0.05
TOTAL MANAGED TURF AREA TREATED (ac): 0.40
TOTAL RUNOFF REDUCTION IN D.A. A (ft³): 268
TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. A (lb/yr): 0.89
TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr): 0.17
TOTAL PHOSPHORUS REMAINING AFTER APPLYING RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr): 0.72

Site Results (Water Quality Compliance)
Area Checks: FOREST/OPEN SPACE (ac): 0.00, IMPERVIOUS COVER (ac): 0.16, MANAGED TURF AREA (ac): 0.95, MANAGED TURF AREA TREATED (ac): 0.40
Site Treatment Volume (ft³): 1,414
Runoff Reduction Volume and TP By Drainage Area
D.A. A: Runoff Reduction Volume Achieved (ft³): 268, TP Load Available for Removal (lb/yr): 0.89, TP Load Reduction Achieved (lb/yr): 0.17, TP Load Remaining (lb/yr): 0.72

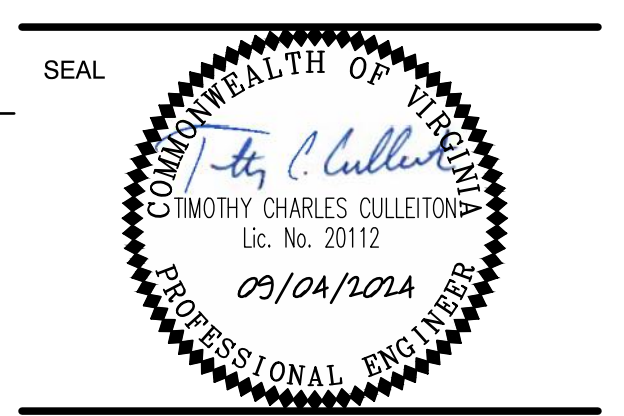
Runoff Volume and Curve Number Calculations
Enter design storm rainfall depths (in):
1-year storm: 2.62, 2-year storm: 3.17, 10-year storm: 4.87
Use NOAA Atlas 14 (http://hdsc.nws.noaa.gov/hdsc/rfdly/)
\*Notes (see below):
[1] The curve numbers and runoff volumes computed in this spreadsheet for each drainage area are limited in their applicability for determining and demonstrating compliance with water quantity requirements.

Drainage Area Curve Numbers and Runoff Depths\*
Curve numbers (CN, CNadj) and runoff depths (RV\_Developed) are computed with and without reduction practices.
Drainage Area A: Forest/Open Space (Area: 0.00, CN: 30), Managed Turf (Area: 0.95, CN: 39), Impervious Cover (Area: 0.16, CN: 98)

RV\_Developed (watershed-inch) with no Runoff Reduction\*: 1.15, 1.58, 3.06
RV\_Developed (watershed-inch) with Runoff Reduction\*: 1.08, 1.52, 2.99
Adjusted CN\*: 82, 82, 82



POPLAR HEIGHTS WATER TANK SPECIAL EXCEPTION PLAT
FAIRFAX COUNTY, VA



KEY PLAN
SCALE NORTH

REVISIONS
No. DATE BY Description
5 09/04/24 Addressed Comments
4 06/28/24 Addressed Comments
3 05/31/24 Addressed Comments
2 04/11/24 Addressed Comments
1 02/02/24 SE Submission

DRAWN BY: BWB
APPROVED BY: TCC
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DATE: 09/04/2024

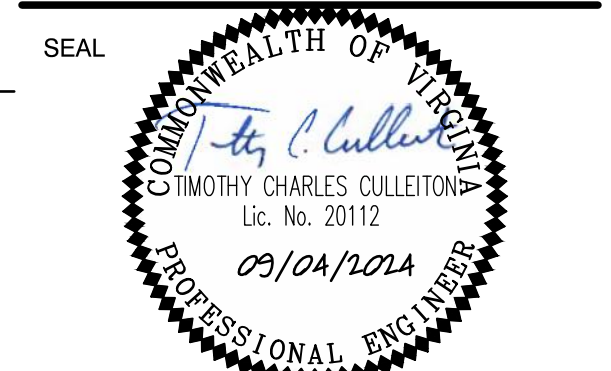
SWM COMPUTATIONS

PROJECT NO. P2729-001

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**POPLAR HEIGHTS  
WATER TANK  
SPECIAL EXCEPTION PLAN**

FAIRFAX COUNTY, VA



KEY PLAN

SCALE NORTH

SCALE IN FEET  
1" = 20'  
1 INCH

VCS-83

No.	DATE	BY	Description
5	09/04/24		Addressed Comments
4	06/28/24		Addressed Comments
3	05/31/24		Addressed Comments
2	04/11/24		Addressed Comments
1	02/02/24		SE Submission

REVISIONS

DRAWN BY: BWB

APPROVED BY: TCC

CHECKED BY: TCC

DATE: 09/04/2024

**LANDSCAPE PLAN**

PROJECT NO. P2729-001

**LEGEND:**

- Tree Save with canopy credit
- Tree Save No canopy credit taken
- Fast-growing Large Deciduous Tree 3" cal. min., 14'-16' ht. (Cat. IV)\*
- Large Evergreen 10' Ht (Cat. IV)
- Medium Evergreen 8' Ht (Cat. II)
- Small/Medium Evergreen 8' Ht (Cat. I)
- Medium Evergreen Shrub 24-30" Ht.
- Mulch/Groundcover See Note 1 on this sheet
- Large Deciduous Tree 2" cal. min., 12'-14' ht. (Cat. IV)\*
- Ornamental Deciduous Tree 1" cal. min., 8'-10' ht. (Cat. II)\*
- Proposed Offsite Planting (not part of PFM required planting for the SE)

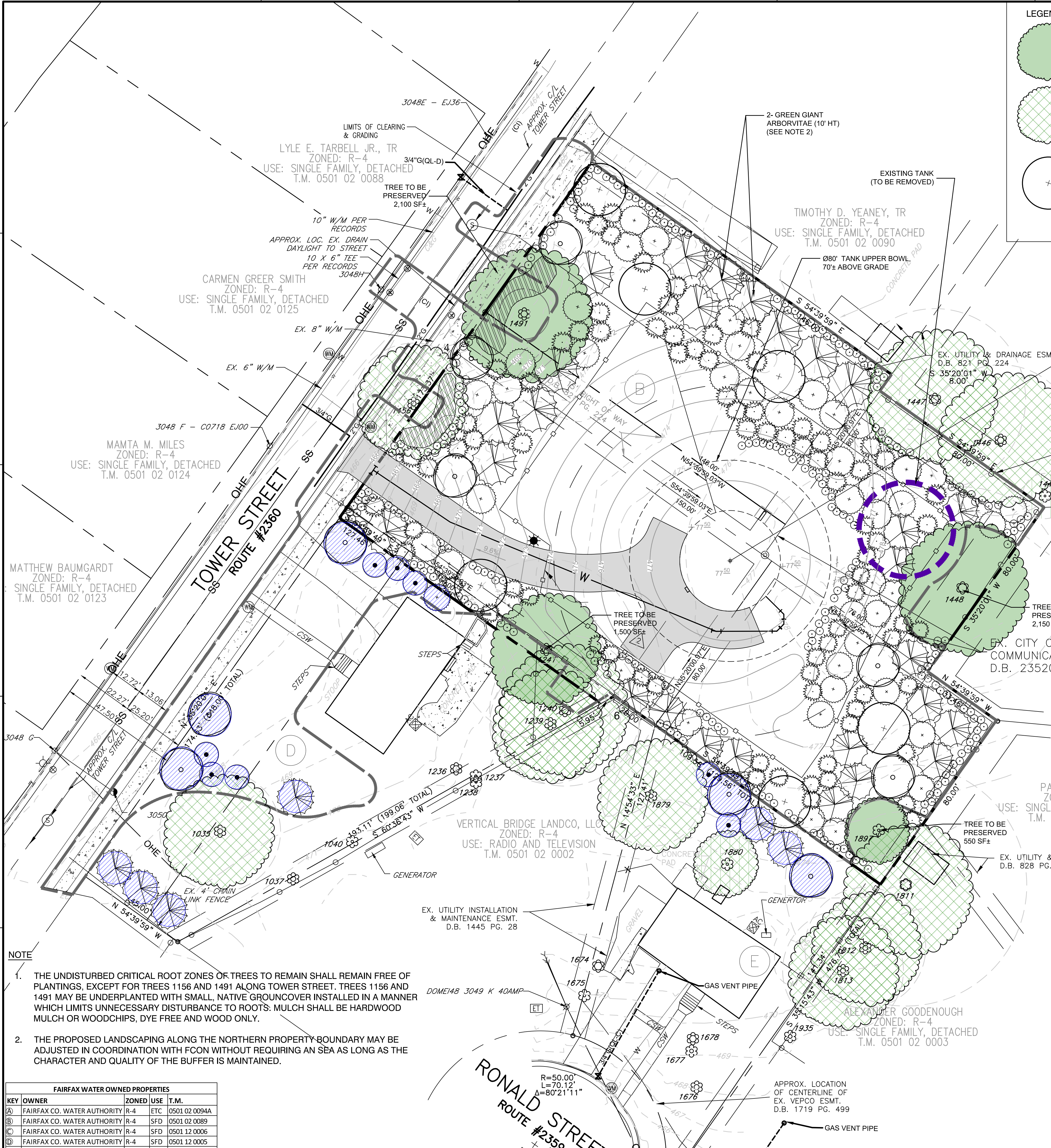
\*THE HEIGHT RANGES REFLECTED IN THE LEGEND FOR DECIDUOUS TREES ARE AVERAGE HEIGHTS PER AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1-2014

SEE PRELIMINARY TREE CANOPY CALCULATIONS ON SHEET 15

**TRANSITIONAL SCREENING CALCULATIONS**

Notes:

	REQUIRED	PROVIDED	
<b>BUFFER #1 WESTERN PROPERTY LINE @ TOWER STREET FRONTAGE - 173.37 LF</b>			
LENGTH	173.37		
WIDTH		35 FT	50 FT
SHRUBS	173.37/10 x 3 =	52	52
BARRIER		D or E	7' SOLID WOOD FENCE
CANOPY COVERAGE	173.37' L x 35' W x 75% =	4,551 SF	4,550 SF
EVERGREEN	70%	3,186 SF	3,700 SF
DECIDUOUS			850 SF
<b>BUFFER #2 NORTHERN PROPERTY LINE 1 - 146.00 LF</b>			
LENGTH	146		
WIDTH		35 FT	50 FT
SHRUBS	146/10 x 3 =	44	44
BARRIER		D or E	7' SOLID WOOD FENCE
CANOPY COVERAGE	146' L x 35' W x 75% =	3,833 SF	4,650 SF
EVERGREEN	70%	2,683 SF	3,700 SF
DECIDUOUS			950 SF
<b>BUFFER #3 NORTHERN PROPERTY LINE 2 - 80 LF</b>			
LENGTH	80		
WIDTH		35	50 FT
SHRUBS	80/10 x 3 =	24	24
BARRIER		D or E	7' SOLID WOOD FENCE
CANOPY COVERAGE	80' L x 35' W x 75% =	2,100 SF	4,200 SF
EVERGREEN	70%	1,470 SF	2,050 SF
DECIDUOUS			2150 SF
<b>BUFFER #4 EASTERN PROPERTY LINE 1 - 80 LF</b>			
LENGTH	80		
WIDTH		35	50 FT
SHRUBS	80/10 x 3 =	24	24
BARRIER		D or E	7' SOLID WOOD FENCE
CANOPY COVERAGE	80' L x 35' W x 75% =	2,100 SF	4,550 SF
EVERGREEN	50%	1,050 SF	2,400 SF
DECIDUOUS			2150 SF
<b>BUFFER #5 SOUTHERN PROPERTY LINE 1 - 33.46 LF</b>			
LENGTH	33.46		
WIDTH		35	50 FT
SHRUBS	33.46/10 x 3 =	10	10
BARRIER		D or E	7' SOLID WOOD FENCE
CANOPY COVERAGE	33.46' L x 35' W x 75% =	878 SF	1,650 SF
EVERGREEN	70%	615 SF	1,650 SF
DECIDUOUS			0
<b>BUFFER #6 EASTERN PROPERTY LINE 2 - 80 LF</b>			
LENGTH	80		
WIDTH		35	50 FT
SHRUBS	80/10 x 3 =	24	24
BARRIER		D or E	7' SOLID WOOD FENCE
CANOPY COVERAGE	80' L x 35' W x 75% =	2,100 SF	4,650 SF
EVERGREEN	50%	1,050 SF	3,850 SF
DECIDUOUS			800 SF
<b>BUFFER #7 SOUTHERN PROPERTY LINE 2 - 109.56 LF</b>			
LENGTH	109.56		
WIDTH		35	16.67 FT
SHRUBS	109.56/10 x 3 =	33	33
BARRIER		D or E	7' SOLID WOOD FENCE
CANOPY COVERAGE	109.56' L x 16.67' W x 75% =	1,370 SF	2,100 SF
EVERGREEN	70%	959 SF	1,850 SF
DECIDUOUS			250 SF
<b>BUFFER #8 SOUTHERN PROPERTY LINE 3 - 20 LF</b>			
LENGTH	20		
WIDTH		0	16.67 FT
SHRUBS	NO REQUIREMENT	0	5
BARRIER		NONE	7' SOLID WOOD FENCE
CANOPY COVERAGE	NO REQUIREMENT	0 SF	100 SF
EVERGREEN		0 SF	1850 SF
DECIDUOUS			100 SF
<b>BUFFER #9 SOUTHERN PROPERTY LINE 4 - 127.46 LF</b>			
LENGTH	127.46		
WIDTH		35	16.67 FT
SHRUBS	127.46/10 x 3 =	38	38
BARRIER		D or E	7' SOLID WOOD FENCE
CANOPY COVERAGE	127.46' L x 16.67' W x 75% =	1,594 SF	3,050 SF
EVERGREEN	70%	1,115 SF	1,300 SF
DECIDUOUS			1750 SF

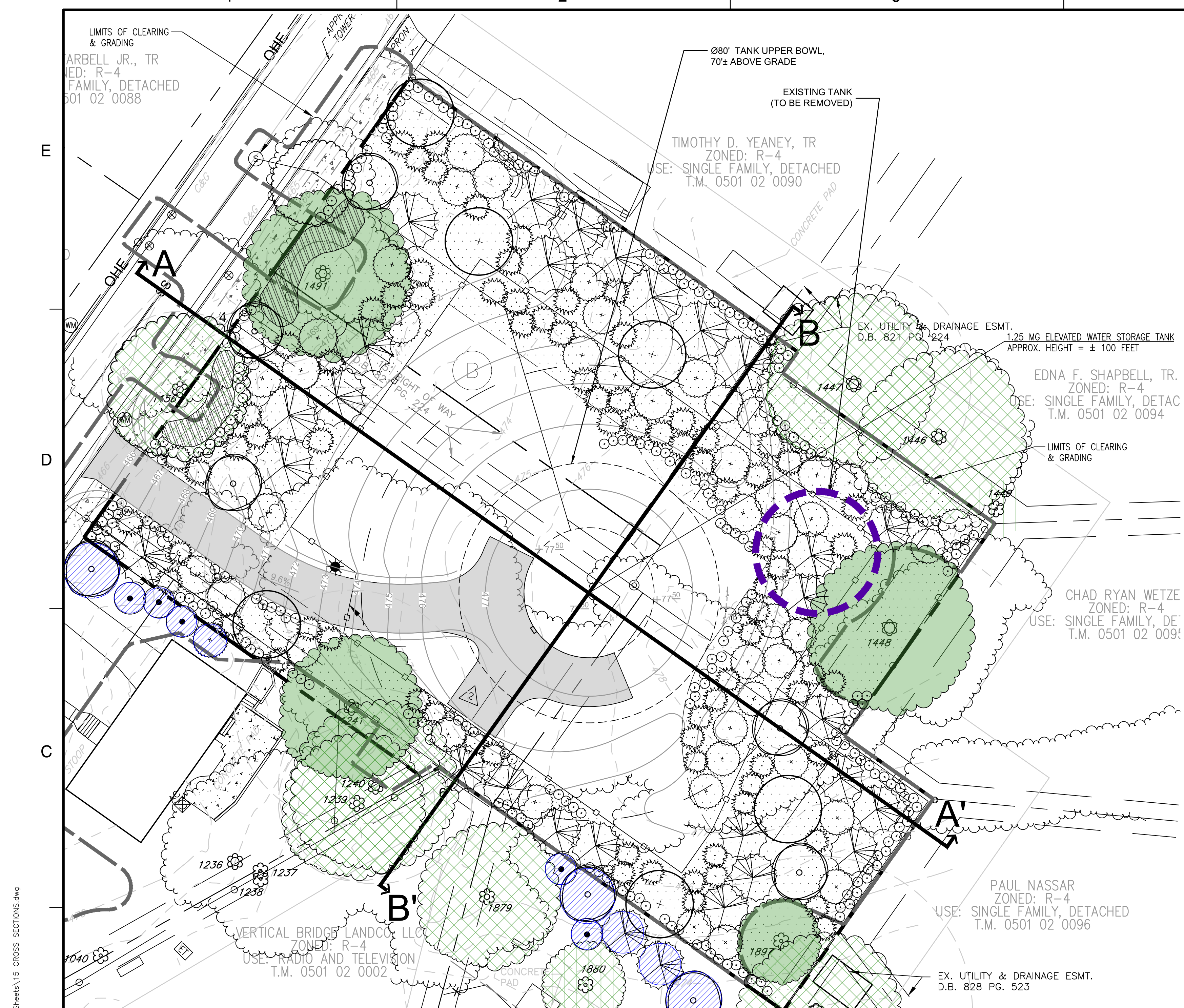


- NOTE**
- THE UNDISTURBED CRITICAL ROOT ZONES OF TREES TO REMAIN SHALL REMAIN FREE OF PLANTINGS, EXCEPT FOR TREES 1156 AND 1491 ALONG TOWER STREET. TREES 1156 AND 1491 MAY BE UNDERPLANTED WITH SMALL, NATIVE GROUNDCOVER INSTALLED IN A MANNER WHICH LIMITS UNNECESSARY DISTURBANCE TO ROOTS. MULCH SHALL BE HARDWOOD MULCH OR WOODCHIPS, DYE FREE AND WOOD ONLY.
  - THE PROPOSED LANDSCAPING ALONG THE NORTHERN PROPERTY BOUNDARY MAY BE ADJUSTED IN COORDINATION WITH FCN WITHOUT REQUIRING AN SEA AS LONG AS THE CHARACTER AND QUALITY OF THE BUFFER IS MAINTAINED.

**FAIRFAX WATER OWNED PROPERTIES**

KEY	OWNER	ZONED	USE	T.M.
A	FAIRFAX CO. WATER AUTHORITY	R-4	ETC	0501 02 0094A
B	FAIRFAX CO. WATER AUTHORITY	R-4	SFD	0501 02 0089
C	FAIRFAX CO. WATER AUTHORITY	R-4	SFD	0501 12 0005
D	FAIRFAX CO. WATER AUTHORITY	R-4	SFD	0501 12 0006
E	FAIRFAX CO. WATER AUTHORITY	R-4	SFD	0501 12 0001

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**PRELIMINARY TREE CANOPY CALCULATIONS**

Table 12.9 10-year Tree Canopy Calculation Worksheet

SHEET 11

**A. Tree Preservation Target and Statement**

B1	Identify gross site area =	40,692 SF
B2	Subtract area dedicated to parks, road frontage, and	0 SF
B3	Subtract area of exemptions =	0 SF
B4	Adjusted gross site area (B1-B2) =	40,692 SF
B5	Identify site's zoning and/or use	R-4
B6	Percentage of 10-year tree canopy required =	25 %
B7	Area of 10-year tree canopy required (B4 x B6) =	10,173 SF
B8	Modification of 10-year Tree Canopy Requirements requested?	NO
B9	If B8 is yes, then list plan sheet where modification request is located	

**C. Tree Preservation**

C1	Tree Preservation Target Area =	5,829 SF
C2	Total canopy area meeting standards of 12-0400 =	0 SF
C3	C2 x 1.25 =	0 SF
C4	Total canopy area provided by unique or valuable forest or woodland communities =	0
C5	C4 x 1.5 =	0
C6	Total of canopy area provided by "Heritage," "Memorial," "Specimen," or "Street" trees =	0
C7	C6 x 1.5 to 3.0 =	0
C8	Canopy of trees within Resource Protection Areas and 100-year floodplains =	0 SF
C9	C8 x 1.0 =	0 SF
C9a	Tree Canopy receiving 1.0 multiplier =	6,300 SF
C10	Total of C3, C5, C7, C9 and C9a =	6,300 SF

**D. Tree Planting**

D1	Area of canopy to be met through tree planting (B7-C10) =	3,873 SF
D2	Area of canopy planted for air quality benefits =	0
D3	x 1.5 =	0
D4	Area of canopy planted for energy conservation =	0
D5	x 1.5 =	0
D6	Area of canopy planted for water quality benefits =	0
D7	x 1.25 =	0
D8	Area of canopy planted for wildlife benefits =	0
D9	x 1.5 =	0
D10	Area of canopy provided by native trees =	0 SF
D11	x 1.5 =	0 SF
D12	Area of canopy provided by improved cultivars and varieties =	0
D13	x 1.25 =	0
D14	Area of canopy provided through tree seedlings =	0
D15	x 1.0 =	0
D16	Area of canopy provided through native shrubs or woody seed mix =	0
D17	x 1.0 =	0
D18	Percentage of D14 represented by D15 =	N/A
D19	Area of canopy provided with no multipliers =	0 SF

**E. Total of 10-year Tree Canopy Provided**

E1	Total of canopy area provided through tree preservation (C10) =	6,300 SF
E2	Total of canopy area provided through tree planting (D17) =	23,150 SF
E3	Total of canopy area provided through offsite mechanism (D19) =	0
E4	Total of 10-year Tree Canopy Provided =	29,450 SF

- NOTES**
- EXISTING WATER TANK REFLECTED FOR REFERENCE ONLY. THE EXISTING WATER TANK WILL BE DEMOLISHED AND REMOVED FROM THE SITE PRIOR TO CONSTRUCTION OF THE PROPOSED TANK.
  - PROPOSED TRANSITIONAL SCREEN YARD PLANTINGS IN PLAN VIEW AND CROSS SECTIONS ARE REPRESENTATIVE OF 10 YEAR GROWTH

**D. Tree Planting**

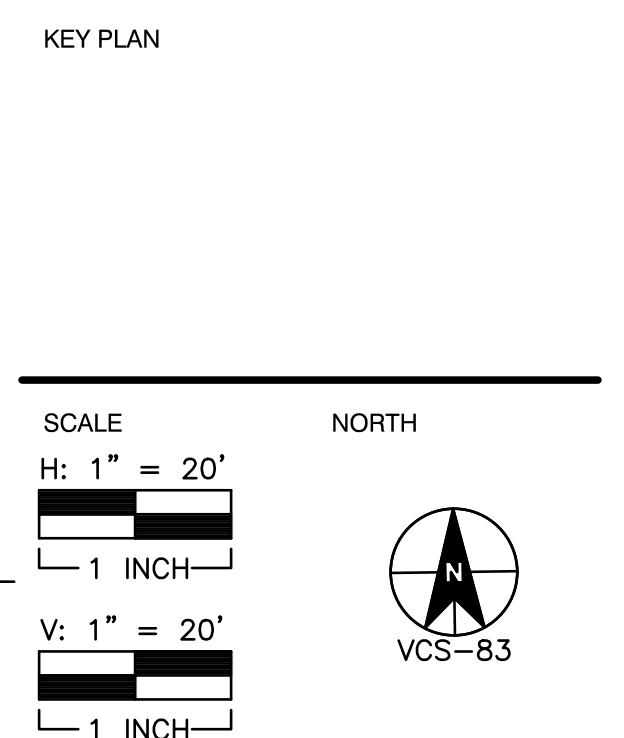
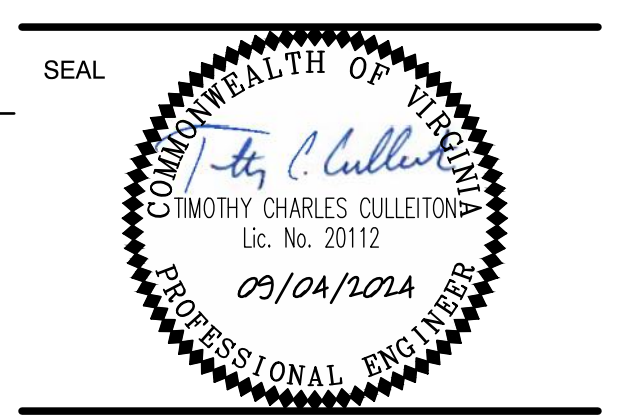
D1	Area of canopy to be met through tree planting (B7-C10) =	3,873 SF
D2	Area of canopy planted for air quality benefits =	0
D3	x 1.5 =	0
D4	Area of canopy planted for energy conservation =	0
D5	x 1.5 =	0
D6	Area of canopy planted for water quality benefits =	0
D7	x 1.25 =	0
D8	Area of canopy planted for wildlife benefits =	0
D9	x 1.5 =	0
D10	Area of canopy provided by native trees =	0 SF
D11	x 1.5 =	0 SF
D12	Area of canopy provided by improved cultivars and varieties =	0
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D14	Area of canopy provided through tree seedlings =	0
D15	x 1.0 =	0
D16	Area of canopy provided through native shrubs or woody seed mix =	0
D17	x 1.0 =	0
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**POPLAR HEIGHTS  
WATER TANK  
SPECIAL EXCEPTION PLAN**

FAIRFAX COUNTY, VA



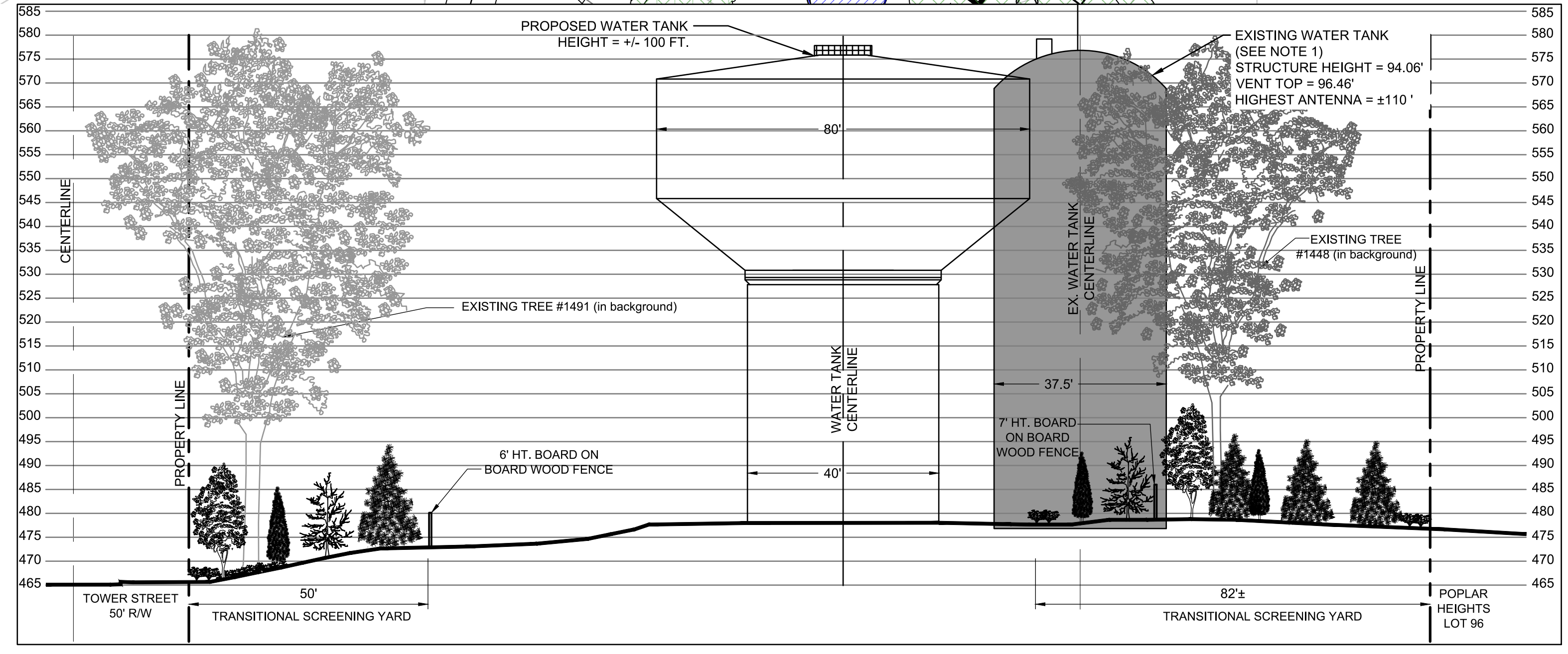
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4	06/28/24		Addressed Comments
3	05/31/24		Addressed Comments
2	04/11/24		Addressed Comments
1	02/02/24		SE Submission

REVISIONS

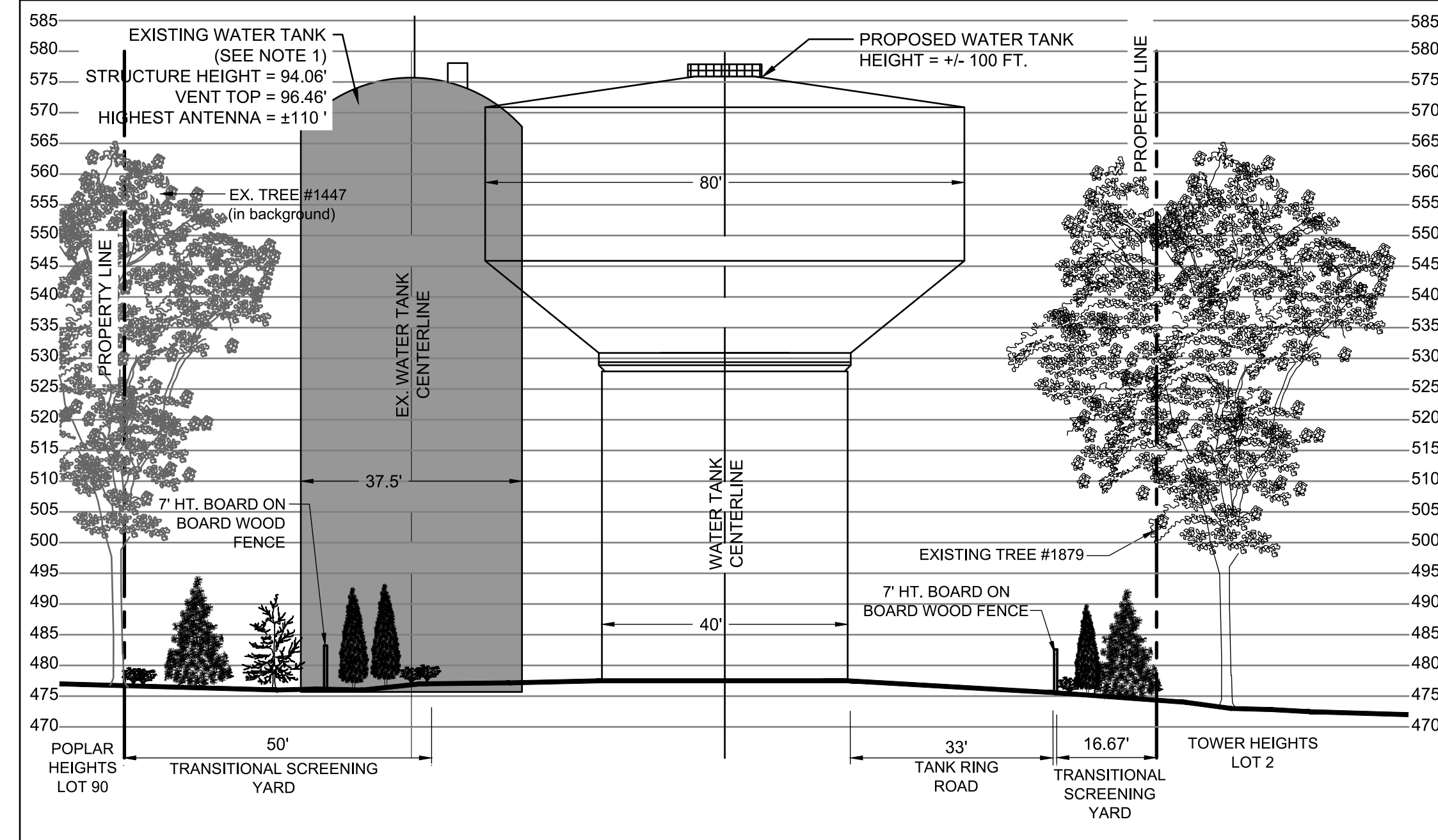
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APPROVED BY: TCC  
CHECKED BY: TCC  
DATE: 09/04/2024

**CROSS SECTIONS**

PROJECT NO. P2729-001



SECTION A-A'



SECTION B-B'

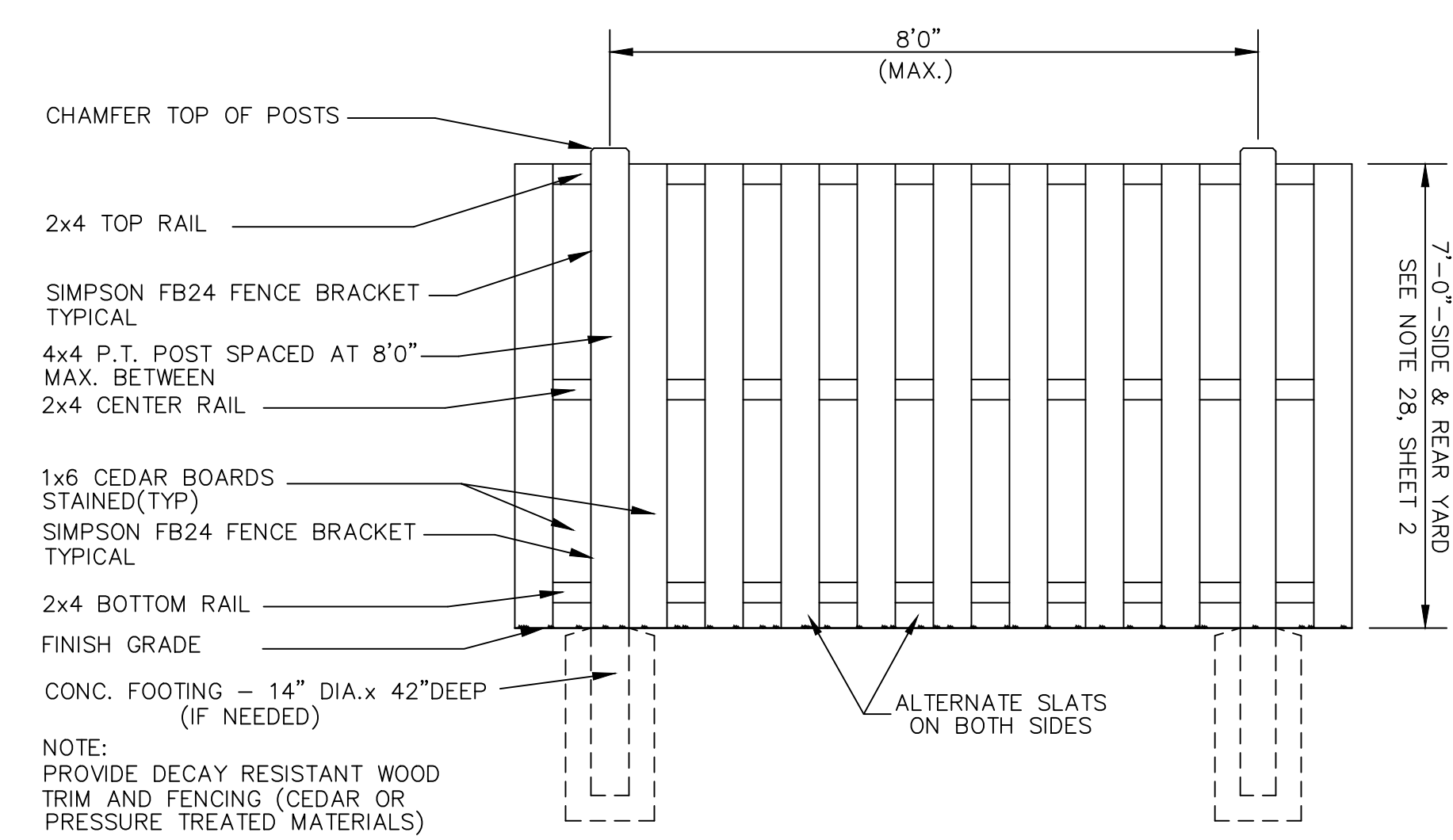
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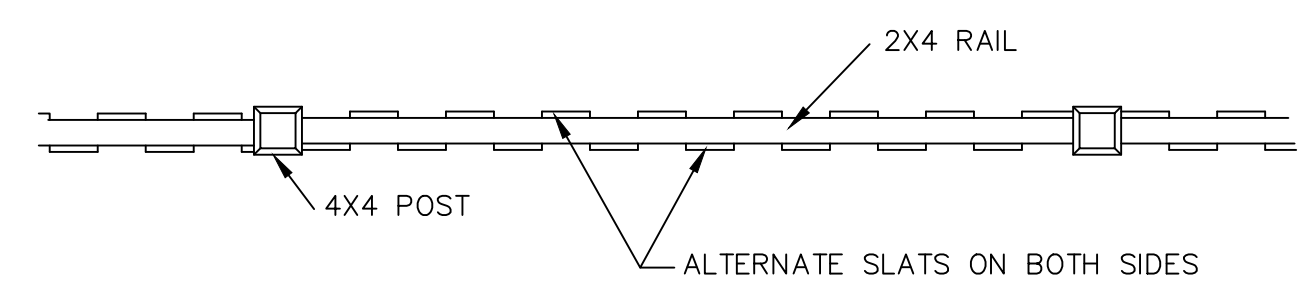
E  
D  
C  
B  
A



TANK ACCESS DETAIL  
F-150 PICK UP DESIGN VEHICLE  
1" = 20'

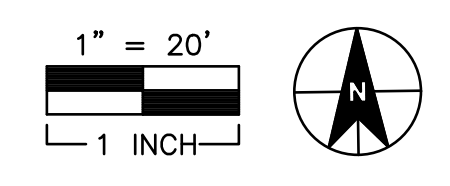


ELEVATION



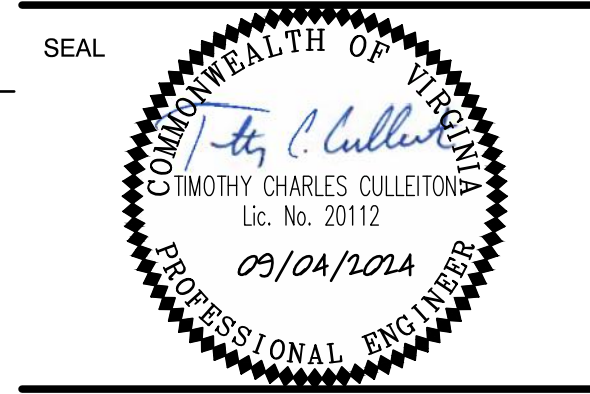
PLAN

SOLID BOARD ON BOARD WOOD FENCE  
NO SCALE



Dewberry Engineers Inc.  
8401 ARLINGTON BLVD.  
FAIRFAX, VA 22031  
703.849.0100 (PHONE)  
703.849.0518 (FAX)

POPLAR HEIGHTS  
WATER TANK  
SPECIAL EXCEPTION PLAT  
FAIRFAX COUNTY, VA



KEY PLAN

SCALE NORTH  
AS NOTED

No.	DATE	BY	Description
5	09/04/24		Addressed Comments
4	06/28/24		Addressed Comments
3	05/31/24		Addressed Comments
2	04/11/24		Addressed Comments
1	02/02/24		SE Submission

REVISIONS  
DRAWN BY: BWB  
APPROVED BY: TCC  
CHECKED BY: TCC  
DATE: 09/04/2024

TITLE  
SITE DETAILS

PROJECT NO. P2729-001

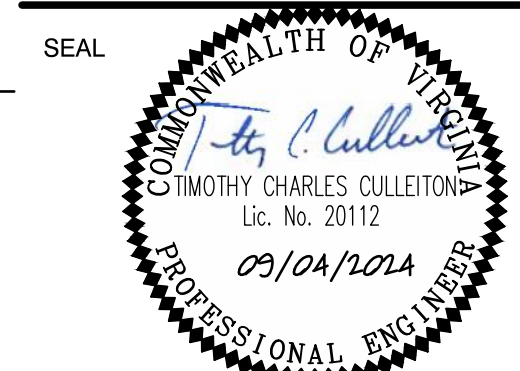
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SHEET NO. 16 OF 17

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**POPLAR HEIGHTS  
WATER TANK  
SPECIAL EXCEPTION PLAT**

FAIRFAX COUNTY, VA



KEY PLAN

SCALE NORTH

SCALE IN FEET  
1" = 20'

VCS-83

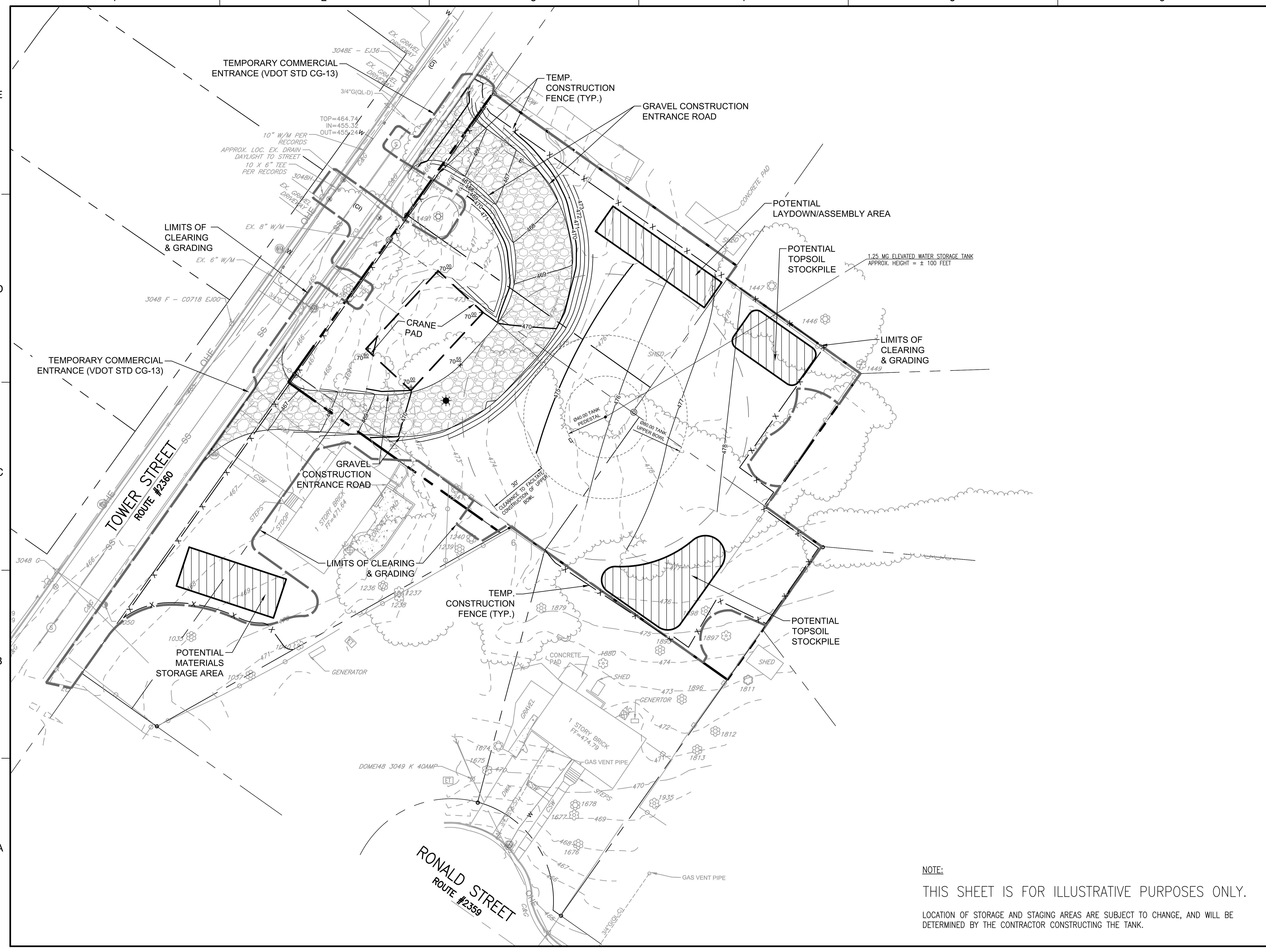

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No.	DATE	BY Description

DRAWN BY	BWB
APPROVED BY	TCC
CHECKED BY	TCC
DATE	09/04/2024

TITLE  
**STAGING PLAN**

PROJECT NO. P2729-001

SHEET NO. 017 OF 17



**NOTE:**  
THIS SHEET IS FOR ILLUSTRATIVE PURPOSES ONLY.  
LOCATION OF STORAGE AND STAGING AREAS ARE SUBJECT TO CHANGE, AND WILL BE DETERMINED BY THE CONTRACTOR CONSTRUCTING THE TANK.

B:\MEE\65142064\_Fairfax Water General\ENG SVCS BDA\TASK ORDERS\65142065 Poplar Heights Tank Design\CAD\Civil\SEA\Sheets\65142065-STAGING.dwg  
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