REDEEMED CHURCH OF CHRIST

4 EAST OAK STREET, ALEXANDRIA, VA

DEVELOPMENT SITE PLAN

DRAINAGE CERTIFICATION

I HEREBY CERTIFY THAT THE EXISTING AND PROPOSED DRAINAGE PATTERNS ASSOCIATED WITH THIS PROJECT ARE AS DEPICTED HEREIN, THAT CONSTRUCTION OF THIS PROJECT WILL NOT CREATE A NUISANCE TO ADJACENT OR DOWNSTREAM PROPERTIES EITHER PUBLIC OR PRIVATE AND THAT ANY EXISTING DRAINAGE PROBLEMS ON ADJACENT OR DOWNSTREAM PROPERTIES EITHER PUBLIC OR PRIVATE WILL NOT BE EXACERBATED BY CONSTRUCTION OF THIS PROJECT. I ACKNOWLEDGE THAT SHOULD THIS PROJECT RESULT IN THE CREATION OF ANY NUISANCE, OR EXACERBATION IF ANY EXISTING DRAINAGE PROBLEM, THE CITY WILL ISSUE A STOP WORK ORDER AND WORK ON THIS PROJECT WILL NOT BE ALLOWED TO RESUME UNTIL THE REVISION IS SUBMITTED AND APPROVED BY THE CITY OF ALEXANDRIA, DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES.

FLOOR AREA TABULATIONS

EXISTING GROSS FLOOR AREA	3,562.69 SF.
EXISTING BUILDING EXCLUSIONS	174.39 SF.
EXISTING NET FLOOR AREA	3,388.30 SF.
TOTAL PROPOSED GROSS FLOOR AREA	5,908.64 SF.
EXISTING / PROPOSED BUILDING EXCLUSIONS	1,253.69 SF.
TOTAL PROPOSED NET FLOOR AREA	4,654.95 SF.

NOTE: INFORMATION HERE PROVIDED BY PROJECT ARCHITECT.
REFER TO SHEET G002.01 FOR DETAILED INFORMATION.

PARKING IN REQUIRED YARDS

CHAPMAN STREET FRONT YARD:
TOTAL YARD AREA = 10,297 SF
TOTAL PARKING AREA = 5,015 SF (48.7%)

OAK STREET FRONT YARD:
TOTAL YARD AREA = 2,547 SF.
TOTAL PARKING AREA = 0 SF (0%)

PER Z.O. SECTION 7-1005, THE EXISTING PARKING LOT COMPLIES BECAUSE LESS THAN 50% OF THE FRONT YARDS ARE USED FOR PARKING. FOR THIS ANALYSIS, THE FRONT YARD INCLUDES ALL AREA BETWEEN THE BUILDING AND THE FRONT LOT LINE.

BUILDING CODE ANALYSIS

INFORMATION PROVIDED BY MARK YOO ARCHITECT, PLLC

2. APPLICABLE REGULATIONS:
THE DESIGN OF THE BUILDING CONFORMS TO ALL THE APPLICABLE CODES FOR COUNTY OF FAIRFAX THE FOLLOWING ARE THE CURRENT APPLICABLE CODES AND WHERE APPROPRIATE INCLUDE LOCAL AMENDMENTS TO THESE CODES:

- 2018 INTERNATIONAL BUILDING CODE
- 2018 INTERNATIONAL ENERGY CONSERVATION CODE
- 2018 INTERNATIONAL FIRE PREVENTION CODE
- 2018 INTERNATIONAL FUEL GAS CODE
- 2018 INTERNATIONAL PLUMBING CODE
- 2018 INTERNATIONAL MECHANICAL CODE
- 2018 NATIONAL ELECTRIC CODE
- ICC ANSI A - 117.1-2009
- 2015 VUSBC

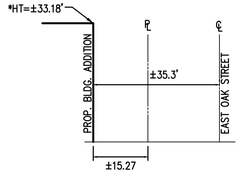
3. GENERAL BUILDING DATA:
a. MAP: 053.04-02-25
b. LOTS: 21, 22, 23, 24 BLOCK 4 ROSEMONT PARK FAITH CHAPEL
c. GROSS BUILDING FLOOR AREA : 1,983 GSF.
d. EXISTING BUILDING HEIGHT ABOVE GRADE: 1.5 STORY
e. BUILDING HEIGHT ABOVE GRADE: 29' FEET
- SPRINKLER : NO
- AREA INCREASE FOR FRONTAGE: N
- AREA INCREASE FOR SPRINKLER: N
- EXISTING BUILDING CONSTRUCTION TYPE: V-B
- EXISTING BUILDING OCCUPANCY CLASS: A3 (ASSEMBLY) E (EDUCATIONAL ACCESSORY TO A-3) & B (BUSINESS) (SECTION 305.1.1)
- HIGH RISE: N

BUILDING CALCULATIONS:

- ADDITION GROSS AREA: PHASE 1 896 GSF
- ADDITION BUILDING HEIGHT ABOVE GRADE: 1.5 STORY
- ADDITION BUILDING CONSTRUCTION TYPE: VB
- ADDITION OCCUPANCY CLASS: A3 (ASSEMBLY) , E (EDUCATIONAL ACCESSORY TO A-3) & B (BUSINESS) 305.1.1)
- TOTAL BUILDING GROSS AREA: 2,879 GSF (CHECK THIS)
- MINIMUM REQUIRED WATER CLOSETS: SEE LIFE&SAFETY PLAN
- MINIMUM REQUIRED SERVICE SINK: SEE LIFE&SAFETY PLAN
- MINIMUM REQUIRED DRINKING FOUNTAIN: SEE LIFE&SAFETY PLAN

HEIGHT TO SETBACK RELATIONSHIP

COMPLIANCE WITH Z.O. SECTION 6-403.A



AREA TABULATIONS

TOTAL SITE AREA (SURVEY) =	22,626 SQ. FT.	OR	0.52 ACRES
TOTAL TAX PARCEL AREA (LAND RECORDS) =	22,472 SQ. FT.	OR	0.52 ACRES
TOTAL EXISTING IMPERVIOUS AREA =	2,446 SQ. FT.	OR	0.056 ACRES (WITHIN DISTURBED AREA)
TOTAL PROPOSED IMPERVIOUS AREA =	2,352 SQ. FT.	OR	0.054 ACRES (WITHIN DISTURBED AREA)
TOTAL AREA OF DISTURBANCE =	3,992 SQ. FT.	OR	0.091 ACRES

ZONING TABULATIONS

ZONING :	EXISTING ZONE: R 2-5
MASTER PLAN :	POTOMAC WEST
SITE AREA (SQ. FT) (ACRES):	0.5194 AC OR 22,626 SF
USE:	EXISTING: CHURCH PROPOSED: CHURCH (MINOR EXPANSION)

	ZONING ORDINANCE	PROVIDED
ZONE	R 2-5	R 2-5
FAR	0.45	0.206
DENSITY	N/A	N/A
GROSS FLOOR AREA		
EXISTING (SF)	N/A	3,562.69 SF
PROPOSED (SF)	N/A	2,345.95 SF
TOTAL (SF)	N/A	5,908.64 SF
NET FLOOR AREA		
EXISTING (SF)	N/A	3,388.30 SF
PROPOSED (SF)	N/A	1,266.65 SF
TOTAL (SF)	N/A	4,654.95 SF
LOT SIZE (SF)	5,000 SF	22,626 SF
LOT WIDTH (FT)	50 FT	63.4 FT (E. CHAPMAN ST)
		120.47 FT (E. OAK ST)
LOT FRONTAGE (FT)	40 FT	63.4 FT (E. CHAPMAN ST)
		120.47 FT (E. OAK ST)
SETBACKS (FT)		
FRONT - E. OAK ST	25 FT	20.3 FT (EX.), 28.20 FT (ADDTN.)*, 15.27 FT (CANOPY)**
FRONT - E. CHAPMAN ST	25 FT	149.0 FT
SIDE - EAST	1:1 SETBACK, 25 FT MIN.	16.3 FT (EX.)***
SIDE - WEST	1:1 SETBACK, 25 FT MIN.	51.12 FT
REAR - MID PROPERTY	1:1 SETBACK, 25 FT MIN.	25.10 FT
AVERAGE GRADE	N/A	21.87
HEIGHT (FT)	40 FT MAX.	33.18 FT***
PARKING TABULATIONS		
TOTAL (SANCTUARY SEATS)	1 SP PER 5 SEATS @ 184 SEATS = 37 SP	38 EX. SPACES****
TOTAL (CLASS SEATS)	1 SP PER 10 SEATS @ 100 SEATS***** = 10 SP	38 EX. SPACES****
STANDARD	MIN. 25% OF TOTAL REQ.	MIN. 10 SP (26.3%)
COMPACT	MAX 75% OF TOTAL REQ.	MAX. 28 SP (73.7%)
ADA	2 (INCL. IN TOTAL)	2 (INCL. IN TOTAL)
EX. TRIP GENERATION	N/A	131 VPD******
PROP. TRIP GENERATION	N/A	216 VPD******
OPEN SPACE	N/A	±20%

* EXISTING BUILDING DOES NOT COMPLY WITH SETBACKS. PROPOSED WESTERN BUILDING ADDITION WILL NOT CREATE ADDITIONAL NONCOMPLIANCE.

** PROPOSED CANOPY FEATURE WILL REDUCE FRONT YARD SETBACK AND INCREASE DEGREE OF NONCONFORMITY. MODIFICATION IS REQUESTED FOR SETBACK REDUCTION.

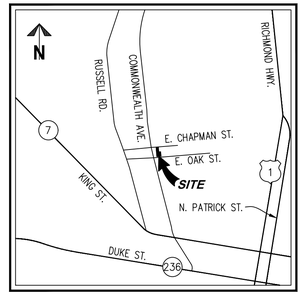
*** EXISTING BUILDING DOES NOT COMPLY WITH SETBACKS OR SETBACK RATIO. MODIFICATION IS REQUESTED TO DECREASE SETBACK RATIO. REFER TO ARCHITECTURAL SHEETS FOR DETAILED HEIGHT AND SETBACK INFORMATION.

**** EXISTING SPACES ARE PROVIDED WITHIN EXISTING GRAVEL AND GRASS AREAS. GEOMETRIC INFORMATION IS DEPICTED ON PLAN TO DEMONSTRATE THAT ADEQUATE SPACE IS AVAILABLE TO ACCOMMODATE REQUIRED PARKING AND DRIVE AISLE DIMENSIONS. AS NOTED ON PLAN, PARKING SPACES SHOWN WILL BE STRIPED OR OTHERWISE DELINEATED.

***** THERE ARE NO EXISTING CLASSROOMS IN THE BUILDING TODAY AND NO NEW CLASSROOMS ARE PROPOSED AT THIS TIME. THE EXISTING FELLOWSHIP HALL CONTAINS CAPACITY TO SEAT APPROXIMATELY 100 AND IS LISTED HERE FOR PARKING TABULATION PURPOSES AS IT MAY OCCASIONALLY BE USED IN A CLASSROOM CAPACITY.

****** TRIP GENERATION INFORMATION PER ITE TRIP GENERATION MANUAL, 7TH EDITION.

VICINITY MAP



SCALE: 1"=2000'

DEVELOPMENT TEAM INFORMATION

1. RECORD OWNER:
REDEEMED CHURCH OF OUR
LORD JESUS CHRIST
4 EAST OAK STREET
ALEXANDRIA, VA 22301

2. DEVELOPER:
REDEEMED CHURCH OF OUR
LORD JESUS CHRIST
4 EAST OAK STREET
ALEXANDRIA, VA 22301

3. CIVIL ENGINEER:
WALTER L. PHILLIPS, INC.
207 PARK AVE.
FALLS CHURCH, VA 22046
703-532-6163
AVINSON@WLPINC.COM
ATTN: MR. AARON VINSON, P.E.

PROJECT DESCRIPTION NARRATIVE

REDEEMED CHURCH OF CHRIST PROPOSES A SMALL BUILDING ADDITION FOR ENTRY, GATHERING, AND ACCESSIBILITY PURPOSES. IN ADDITION, A VERTICAL BUILDING EXPANSION IS PROPOSED TO EXPAND THE NUMBER OF SEATS IN THE SANCTUARY. NO CLASSROOM SPACE OR CHILDCARE OR EDUCATION USE IS PROPOSED. THE SITE WILL REMAIN LARGELY AS IT EXISTS TODAY. THE EXISTING GRAVEL PARKING LOT WILL CONTINUE TO PROVIDE NECESSARY PARKING. ADA COMPLIANT PARKING SPACES ARE PROPOSED, AS ARE OTHER MINOR SITE IMPROVEMENTS, INCLUDING ENTRY STAIRS, SIDEWALKS, AND RELATED SITE ENHANCEMENTS.

SPECIAL USE PERMITS/MODIFICATIONS/WAIVERS

1) MODIFICATION OF Z.O. SECTION 3-506.A.2 TO PERMIT A SIDE YARD SETBACK RATIO OF LESS THAN 1:1 FOR THE PROPOSED VERTICAL BUILDING ADDITION ALONG THE EASTERN PROPERTY LINE.
2) MODIFICATION OF Z.O. SECTION 3-506.A.1 TO PERMIT A DECREASE IN THE FRONT YARD SETBACK BELOW THE EXISTING DIMENSION:
A. TO ALLOW THE NEW CANOPY/ARCHITECTURAL FEATURE TO EXTEND INTO THE 25-FOOT SETBACK.
B. TO ALLOW THE NEW UPPER LEVEL/BALCONY ADDITION TO THE BUILDING ON THE EXISTING FOOTPRINT TO BE BUILT INTO THE 25-FOOT SETBACK.
3) MODIFICATION OF LANDSCAPE GUIDELINES, CHAPTER 4, PLANTING AREA STANDARDS, LANDSCAPE ISLANDS IN PARKING AREAS, SECTION 1.A, TO PERMIT PLANTING OF TREES THAT DO NOT MEET THE REQUIREMENTS OF SUBSECTIONS 1.A.i THROUGH 1.A.iv.

SHEET INDEX

ESI
Peer Review

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
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207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

SCALE: NONE | DATE: 11/08/2021, 8/4/2022, 10/05/2022, 11/16/2022 | DRAWN: RH / AV | CHECKED: AV

COMMONWEALTH OF VIRGINIA — AARON M. VINSON Lic. No.041851 — PROFESSIONAL ENGINEER — 11/16/2022

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

4 EAST OAK STREET
REDEEMED CHURCH OF CHRIST
GRADING PLAN
CITY OF ALEXANDRIA, VIRGINIA

COVER SHEET

APPROVED
SPECIAL USE PERMIT NO. 2021-0016
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

EXISTING CONDITIONS SURVEY NOTES

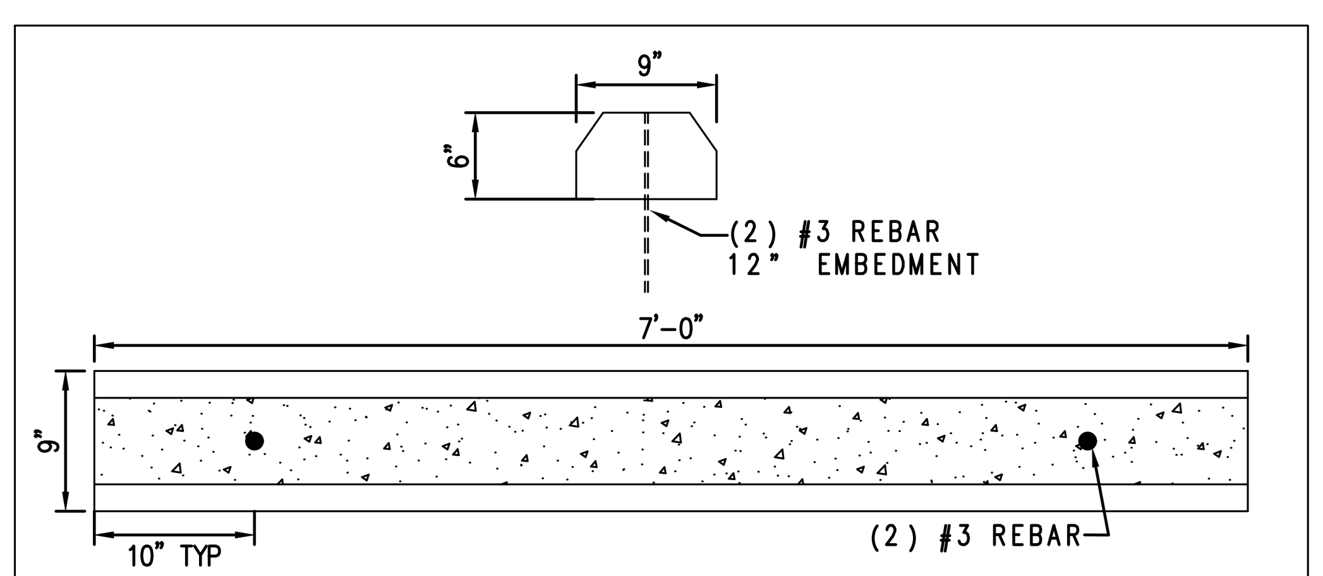
1. THE PROPERTIES SHOWN HEREON ARE DESIGNATED BY THE CITY OF ALEXANDRIA, VIRGINIA, AS MAP-BLOCK-LOT NUMBERS 053.04-02-01 AND 053.04-02-25, BOTH ZONED R 2-5.
2. THE PROPERTIES ARE NOW IN THE NAME OF REDEEMED CHURCH OF OUR LORD JESUS CHRIST, AS RECORDED IN DEED BOOK 1159 AT PAGE 661.
3. THIS PLAN AND THE SURVEY UPON WHICH IT IS BASED SHOWS ONLY THOSE IMPROVEMENTS THAT ARE OBSERVABLE AND CAN BE LOCATED USING NORMAL SURVEY METHODS. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION, MISS UTILITY MARKINGS AND EXISTING RECORDS. THERE ARE NO GUARANTEES, EITHER EXPRESS OR IMPLIED, THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED, OR THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE UNDERGROUND UTILITIES HAVE NOT BEEN PHYSICALLY LOCATED. WATER AND GAS LINE SIZES ARE FROM RECORD INFORMATION.
4. TOTAL AREA OF THE PROPERTIES IS 22,626 SQUARE FEET OR 0.5194 ACRES.
5. THIS PLAN IS BASED ON A FIELD SURVEY BY THIS FIRM DATED 07/23/2021. THE ORIGINAL SUBDIVISION PLAT FOR ROSEMONT PARK WAS NOT AVAILABLE FROM THE CITY OF ALEXANDRIA.
6. THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP FOR THE CITY OF ALEXANDRIA, VIRGINIA, MAP NUMBER 5155190033E, REVISED DATE JUNE 16, 2011, DESIGNATES THE PROPERTY AS BEING IN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
7. THIS SURVEY DOES NOT PURPORT TO SHOW AND/OR NOTE ALL DEDICATIONS, EASEMENTS, COVENANTS, OR RESTRICTIONS THAT MAY EXIST IN THE CHAIN OF TITLE. NO TITLE REPORT FURNISHED.
8. THE SITE SHOWN HEREON IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 AS COMPUTED FROM A FIELD RUN VERTICAL CONTROL SURVEY AND IS REFERENCED TO THE VIRGINIA COORDINATE SYSTEM OF 1983, [NAD 83(2011) (EPOCH: 2010.0000)] AS COMPUTED FROM A FIELD RUN BOUNDARY AND HORIZONTAL CONTROL SURVEY THAT TIES THIS BOUNDARY AND THE BENCHMARK(S) SHOWN TO THE TOPCON GNSS RTK REFERENCE NETWORK. THE COMBINED FACTOR APPLIED TO THE FIELD DISTANCES TO DERIVE THE REFERENCED COORDINATES IS 0.99995821. THE FOOT DEFINITION USED FOR CONVERSION OF THE MONUMENT COORDINATES AND IN THE PERFORMANCE OF THIS SURVEY IS THE U.S. SURVEY FOOT. CONTOUR INTERVAL IS ONE FOOT.
9. THIS SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF, DAVID N. ISHERWOOD, L.S., FROM AN ACTUAL [X] GROUND OR [ ] AIRBORNE SURVEY MADE UNDER MY SUPERVISION; THAT THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED ON JULY 23, 2021; AND THAT THIS PLAN, MAP, OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.

DEMOLITION NOTES

1. A SEPARATE PERMIT IS REQUIRED FOR DEMOLITION; HOWEVER, NO DEMOLITION SHALL BEGIN UNTIL ALL EROSION AND SEDIMENT AND TREE PROTECTION CONTROLS ARE IN PLACE AND ARE APPROVED BY AN EROSION AND SEDIMENT CONTROL INSPECTOR OF THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES.
2. ALL WORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE MOST CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS, INCLUDING BUT NOT LIMITED, TO ENVIRONMENTAL PROTECTION AGENCY (EPA), OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), VIRGINIA OCCUPATIONAL AND SAFETY HEALTH COMPLIANCE PROGRAM (VOSH ENFORCEMENT), VIRGINIA OVERHEAD HIGH VOLTAGE LINE SAFETY ACT, NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAPS), AND NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH (NIOSH).
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK WITH REPRESENTATIVE UTILITY COMPANIES AND FOR THE IMPLEMENTATION OF REQUIRED UTILITY-RELATED WORK.
4. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE UPON ENCOUNTERING ANY HAZARDOUS MATERIALS DURING DEMOLITION AND/OR CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL DOCUMENT SAME TO THE OWNER'S REPRESENTATIVE AND OBTAIN DIRECTION AS TO THE APPROPRIATE ACTION(S) TO BE TAKEN.
5. DISCONNECTION OF SERVICES AND SYSTEMS SUPPLYING UTILITIES TO BE ABANDONED OR DEMOLISHED SHALL BE COMPLETED PRIOR TO OTHER SITE DEMOLITION IN FULL COMPLIANCE WITH APPLICABLE CODES, REGULATIONS, AND THE REQUIREMENTS OF UTILITY PURVEYORS HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE UTILITY PURVEYORS, PAYMENT OF ASSOCIATED FEES AND PROCUREMENT OF ALL NECESSARY PERMTIS.
6. PRIOR TO REMOVAL OF MATERIALS OVER EXISTING UTILITY SYSTEMS, THE CONTRACTOR SHALL DOCUMENT EXISTING CONDITIONS AND, IF AT VARIANCE WITH CONDITIONS AS REPRESENTED ON THE PLANS, NOTIFY THE OWNER'S REPRESENTATIVE AND OBTAIN DIRECTIONS AS TO THE APPROPRIATE ACTION(S) TO BE TAKEN.
7. THE CONTRACTOR SHALL BACKFILL EXCAVATED AREAS WITH APPROVED MATERIALS/CLEAN FILL AS PER THE REQUIREMENTS OF VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT).
8. THE CONTRACTOR SHALL PROTECT AND PREVENT DAMAGE TO EXISTING ON-SITE UTILITY DISTRIBUTION FACILITIES THAT ARE TO REMAIN. ACTIVE UTILITY DISTRIBUTION FACILITIES ENCOUNTERD DURING DEMOLITION AND/OR CONSTRUCTION ACTIVITIES SHALL BE SHUT OFF AT THE SERVICE MAIN WITH THE APPROVAL OF THE OWNER'S REPRESENTATIVE.
9. DURING DEMOLITION AND/OR CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE UPON ENCOUNTERING ANY EXISTING UTILITIES AND/OR UTILITY SYSTEM STRUCTURES NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL DOCUMENT THE SAME AND FORWARD THE INFORMATION TO THE RESIDENT ENGINEER/OWNER'S REPRESENTATIVE, AND OBTAIN DIRECTION AS TO THE APPROPRIATE ACTION(S) TO BE TAKEN.
10. THE CONTRACTOR OR APPLICANT SHALL WORK WITH THE CITY STAFF TO REUSE THE EXISTING, LEFTOVER, UNUSED, AND/OR DISCARDED BUILDING MATERIALS AS PART OF THE DEMOLITION PROCESS OR THE CONSTRUCTION DEBRIS MUST BE REMOVED TO AN APPROVED LANDFILL WITH ADEQUATE FREQUENCY IN ACCORDANCE WITH THE VIRGINIA STATE LITTER CONTROL ACT.

ARCHAEOLOGY NOTES

1. THE APPLICANT/DEVELOPER SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) IF ANY AMERICAN INDIAN ARTIFACTS, SUCH AS SPEAR POINTS OR ARROW POINTS, ARE DISCOVERED DURING DEVELOPMENT. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS.
2. THE APPLICANT/DEVELOPER SHALL NOT ALLOW ANY METAL DETECTION OR ARTIFACT COLLECTION TO BE CONDUCTED ON THE PROPERTY, UNLESS AUTHORIZED BY ALEXANDRIA ARCHAEOLOGY.
3. ALL REQUIRED ARCHAEOLOGICAL PRESERVATION MEASURES SHALL BE COMPLETED IN COMPLIANCE WTIH SECTION 11-411 OF THE ZONING ORDINANCE.



STANDARD WHEELSTOP
NOT TO SCALE

CITY STANDARD GENERAL NOTES

1. THE SUBJECT SITE IS LOCATED ON CITY OF ALEXANDRIA ASSESSMENT MAP NO. 053.04-02-01 AND 053.04-02-25 AND IS ZONED R 2-5.
2. OWNER: REDEEMED CHURCH OF OUR LORD JESUS CHRIST
3. DEED BOOK 1159 AT PAGE 661
4. ADDRESS: 4 EAST OAK STREET, ALEXANDRIA, VA 22301
5. TOTAL DEVELOPMENT SITE AREA= 0.5194 AC OR 22,626 SF

   DISTURBED AREA= 0.0350 AC OR 1,525 SF
6. THE NATURAL SOILS AT THE SITE CONSIST OF URBAN LAND-GRIST MILL ACCORDING TO THE USDA SOIL SURVEY.
7. THE DEVELOPMENT SITE DRAINS TO THE HOOFFS RUN WATERSHED.
8. CONSTRUCTION PERMITS ARE REQUIRED FOR THIS PROJECT. THE APPROVED SITE PLAN MUST BE ATTACHED TO THE PERMIT APPLICATION THAT FULLY DETAILS THE CONSTRUCTION AS WELL AS LAYOUTS AND SCHEMATICS OF THE MECHANICAL, ELECTRICAL, AND PLUMBING SYSTEMS.
9. ALL PUBLIC AND PRIVATE EASEMENTS OR ALL KNOWN PUBLIC AND PRIVATE EASEMENTS, INCLUDING ALL UTILITY, EGRESS, AND CONSERVATION RESTRICTIONS ARE SHOWN. THE APPLICANT SHALL NOT CONSTRUCT ANY PERMANENT STRUCTURES OVER ANY EXISTING OR PROPOSED PUBLIC AND/OR PRIVATE EASEMENTS UNLESS OTHERWISE APPROVED BY THE PLANNING COMMISSION AND CITY OF ALEXANDRIA COUNCIL.
10. PLAT SUBJECT TO RESTRICTIONS OF RECORD.
11. BUILDING HEIGHT SHALL NOT EXCEED THE ALLOWABLE LIMIT BY CITY OF ALEXANDRIA ZONING ORDINANCE OR AS APPROVED BY THE PLANNING COMMISSION AND CITY OF ALEXANDRIA COUNCIL.
12. ALL NEW CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF ALEXANDRIA AND TO THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE (USBC).
13. FLOOR AREA CALCULATIONS WITH ALLOWABLE LIMITS, AS APPROVED BY PLANNING COMMISSION AND CITY COUNCIL, ARE DEMONSTRATED HEREIN.
14. PRIOR TO COMMENCING NEW WORK, THE CONTRACTOR SHALL PROTECT FROM DAMAGE ALL EXISTING ADJACENT AREAS. IF CITY'S EXISTING PUBLIC INFRASTRUCTURE, INCLUDING BUT NOT LIMITED, TO STREETS, ALLEYWAYS, DRIVEWAY APRONS, SANITARY AND STORM SEWERS, STREET LIGHTING, TRAFFIC AND PEDESTRIAN SIGNALS, SIDEWALKS, CURB AND GUTTER, AND STORM WATER DROP INLET STRUCTURES ARE DAMAGED BY THE CONTRACTOR OR BY ACTIVITIES RELATING TO THE SITE CONSTRUCTION THEN THE APPLICANT SHALL REPAIR THE SAME TO THE SATISFACTION OF DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES (T&ES). A PRE CONSTRUCTION WALK/SURVEY OF THE SITE SHALL OCCUR WITH CONSTRUCTION AND INSPECTION STAFF TO DOCUMENT EXISTING CONDITIONS PRIOR TO ANY LAND DISTURBING ACTIVITY.
15. ALL IMPROVEMENTS TO THE CITY'S RIGHT-OF-WAY SUCH AS CURB, GUTTER, SIDEWALK, AND DRIVEWAY APRONS, ETC., ARE DESIGNED PER THE CITY OF ALEXANDRIA STANDARDS AND SPECIFICATIONS.
16. ALL STREET CUT AND PATCH WORK LOCATED IN PUBLIC RIGHT-OF-WAYS, REQUIRED FOR ANY UTILITY INSTALLATION SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE CITY OF ALEXANDRIA STANDARDS AND SPECIFICATIONS AND TO THE SATISFACTION OF THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES (TE&S).
17. CONTRACTOR MUST ENSURE THAT THERE IS NO DISTURBANCE ON ADJACENT PROPERTIES WITHOUT RECORDED EASEMENT OR NOTARIZED LETTER OF PERMISSION FROM THE ADJACENT PROPERTY OWNERS.
18. ALL REQUIRED STATE AND FEDERAL PERMITS, WHICH COULD INCLUDE PERMITS FROM THE VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION (VDCR), VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (VDEQ), VIRGINIA DEPARTMENT OF HISTORIC RESOURCES (VDHR), UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (USEPA), ARMY CORPS OF ENGINEERS AND VIRGINIA MARINE RESOURCES, MUST BE IN PLACE FOR ALL PROJECT CONSTRUCTION AND MITIGATION WORK PRIOR TO RELEASE OF THE GRADING PLAN, WHEN APPLICABLE. THIS INCLUDES THE STATE REQUIREMENT FOR A VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMP) GENERAL PERMIT FOR DISCHARGES OF STORMWATER FROM CONSTRUCTION ACTIVITIES FOR LAND DISTURBING ACTIVITIES GREATER THAN 2,500. INFORMATION REGARDING THE VSMP GENERAL PERMIT CAN BE FOUND ONLINE AT: http://www.deq.virginia.gov/Programs/Water/StormwaterManagement/VSMPPermits.aspx
19. PERMITS FROM THE CITY OF ALEXANDRIA OFFICE OF ENVIRONMENTAL QUALITY (OEQ), TRANSPORTATION AND ENVIRONMENTAL SERVICES (TE&S), AND BUILDING AND FIRE CODE ADMINISTRATION SHALL BE OBTAINED BY THE APPLICANT, AS REQUIRED AND DOCUMENTED HEREIN. THE CONTRACTOR CAN CONTACT ALEXANDRIA FIRE AND CODE ADMINISTRATION DEPARTMENT AT (703) 838-4644 OR (703) 746-4200 FOR ANY QUESTIONS OR ADDITIONAL INFORMATION.
20. ANY WORK IN THE PUBLIC RIGHT OF WAY SHALL REQUIRE A SEPARATE PERMIT FROM THE DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES. THE CONTRACTOR CAN CONTACT THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES AT (703) 746-4035 FOR ANY QUESTIONS OR ADDITIONAL INFORMATION.
21. THE PROPERTY ADDRESS MUST BE CLEARLY MARKED IN THE FRONT AND BACK OF THE PROPOSED DEVELOPMENT SITE DURING CONSTRUCTION FOR EMERGENCY RESPONSE PURPOSE IN CONTRASTING COLORS FOR EASY IDENTIFICATION.
22. THE APPLICANT SHALL CONTACT THE CRIME PREVENTION UNIT OF THE ALEXANDRIA POLICE DEPARTMENT AT 703-838-4520 REGARDING SECURITY HARDWARE FOR NEW CONSTRUCTION. THIS SHALL BE COMPLETED PRIOR TO ISSUANCE OF BUILDING PERMIT.
23. ROOF DRAINAGE SYSTEM, SUMP PUMP DISCHARGE, AND FOUNDATION DRAIN SYSTEM MUST BE INSTALLED SO AS NEITHER TO ADVERSELY IMPACT UPON, NOR CAUSE EROSION DAMAGE TO ADJACENT PROPERTIES OR THE PUBLIC RIGHT-OF-WAY.
24. THE CONTRACTOR MUST ENSURE THAT POSITIVE DRAINAGE OCCURS ON SITE TO PREVENT PONDING OR DRAINAGE PROBLEMS ON ADJACENT PROPERTIES.
25. IN THE EVENT, THE PROPOSED ROOF DRAINAGE AND/OR SUMP PUMP DISCHARGE, AND FOUNDATION DRAIN SYSTEMS AND/OR GRADING ADVERSELY IMPACTS AND/OR CREATES A NUISANCE ON PUBLIC RIGHT OF WAY OR PRIVATE PROPERTIES THEN THE APPLICANT SHALL BE RESPONSIBLE TO PROVIDE ADDITIONAL IMPROVEMENTS TO THE ROOF DRAINAGE AND/OR SUMP PUMP DISCHARGE AND FOUNDATION DRAIN SYSTEMS AND/OR GRADING TO THE SATISFACTION OF DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES.
26. PER THE REQUIREMENTS OF SECTION 8-1-12 OF THE CITY CHARTER AND CODE; WHEN THE BUILDING FOOTING HAS BEEN PLACED AND THE WALLS HAVE BEEN RAISED TO THE FIRST JOIST BEARING OR STORY HEIGHT ABOVE GRADE, A PLOT PLAN SHOWING THE EXACT LOCATION OF THE WALLS SHALL BE PREPARED BY A LICENSED, CERTIFIED PUBLIC LAND SURVEYOR OR PROFESSIONAL ENGINEER AND FILED WITH THE BUILDING OFFICIAL FOR APPROVAL BEFORE PROCEEDING FURTHER WITH THE CONSTRUCTION.
27. A SEPARATE DESIGN IS REQUIRED FOR ALL WALLS 24" AND OVER IN HEIGHT FROM THE GRADE AND SUBJECT TO SEPARATE PERMITS TO BE OBTAINED BY THE OWNERS. GEOTECHNICAL AND STRUCTURAL DESIGN IS TO BE COMPLETED BY OTHERS. THIS GRADING PLAN SHOWS LOCATION AND PROPOSED GRADING ONLY OF ALL THE WALLS.
28. SUBMIT A SURVEY, CONSISTENT WITH THE REQUIREMENTS FOR CERTIFICATE OF OCCUPANCY CHECKLIST, TO THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES PRIOR TO REQUESTING AN INSPECTION FOR A CERTIFICATE OF OCCUPANCY.
29. ALL SANITARY LATERALS AND/OR SEWERS NOT SHOWN IN AN EASEMENTS SHALL BE OWNED AND MAINTAINED PRIVATELY.
30. ALL STORM DRAINS NOT SHOWN WITHIN AN EASEMENT OR IN A PUBLIC RIGHT OF WAY SHALL BE OWNED AND MAINTAINED PRIVATELY.
31. ALL WATER FACILITY CONSTRUCTION SHALL CONFORM TO VIRGINIA AMERICAN WATER COMPANY STANDARDS AND SPECIFICATIONS. CONTRACTOR SHALL CONTACT VIRGINIA AMERICAN WATER COMPANY AT (703) 549-7080 TO COORDINATE CONSTRUCTION AND INSPECTION OF WATER FACILITIES.
32. SIDEWALKS SHALL REMAIN OPENED DURING CONSTRUCTION OR PEDESTRIAN ACCESS SHALL BE MAINTAINED TO THE SATISFACTION OF THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES THROUGHOUT THE CONSTRUCTION OF THE PROJECT.
33. PRIOR TO THE RELEASE OF THE FINAL SITE PLAN, A TRAFFIC CONTROL PLAN FOR CONSTRUCTION DETAILING PROPOSED CONTROLS TO TRAFFIC MOVEMENT, LANE CLOSURES, CONSTRUCTION ENTRANCES, HAUL ROUTES, AND STORAGE AND STAGING SHALL BE PROVIDED FOR INFORMATION PURPOSE; HOWEVER, AN AMENDED TRAFFIC CONTROL PLAN, IF REQUIRED BY THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES SHALL BE SUBMITTED TO THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES ALONG WITH THE BUILDING PERMIT APPLICATION. THE FINAL SITE PLAN SHALL INCLUDE A STATEMENT "FOR INFORMATION ONLY" ON THE TRAFFIC CONTROL PLAN SHEETS.
34. A CERTIFICATE OF OCCUPANCY SHALL BE OBTAINED PRIOR TO ANY OCCUPANCY OF THE BUILDING OR PORTION THEREOF, IN ACCORDANCE WITH VIRGINIA USBC 115.0.

ENVIRONMENTAL SITE ASSESSMENT

1. THERE ARE NO TIDAL WETLANDS, RPA'S, TIDAL SHORES, TRIBUTARY STREAMS, FLOODPLAINS, CONNECTED TIDAL WETLANDS, ISOLATED WETLANDS, HIGHLY ERODIBLE/PERMEABLE SOILS OR BUFFER AREAS ASSOCIATED WITH SHORES, STREAMS OR WETLANDS LOCATED ON THIS SITE. FURTHER, THERE ARE NO WETLAND PERMITS REQUIRED FOR THIS DEVELOPMENT PROJECT. ADDITIONALLY, THERE ARE NO KNOWN UNDERGROUND STORAGE TANKS OR AREAS OF SOIL OR GROUNDWATER CONTAMINATION OF THE SITE.
2. THE CITY OF ALEXANDRIA DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES, OFFICE OF ENVIRONMENTAL QUALITY MUST BE NOTIFIED IF UNUSUAL OR UNANTICIPATED CONTAMINATION OR UNDERGROUND STORAGE TANKS, DRUMS AND CONTAINERS ARE ENCOUNTERED AT THE SITE. IF THERE IS ANY DOUBT ABOUT PUBLIC SAFETY OR A RELEASE TO THE ENVIRONMENT, THE ALEXANDRIA FIRE DEPARTMENT MUST BE CONTACTED IMMEDIATELY BY CALLING 911. THE TANK OR CONTAINER'S REMOVAL, ITS CONTENTS, ANY SOIL CONTAMINATION AND RELEASE TO THE ENVIRONMENT WILL BE HANDLED IN ACCORDANCE WITH FEDERAL, STATE, AND CITY REGULATIONS.
3. ALL WELLS TO BE DEMOLISHED ON THIS PROJECT, INCLUDING MONITORING WELLS, MUST BE CLOSED IN ACCORDANCE WITH VIRGINIA STATE WATER CONTROL BOARD (VSWCB) REQUIREMENTS. CONTACT ENVIRONMENTAL HEALTH SPECIALIST AND AND COORDINATE WITH THE ALEXANDRIA HEALTH DEPARTMENT AT 703-746-4400 EXT. 267/255.
4. ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH THE ALEXANDRIA NOISE CONTROL CODE TITLE 11, CHAPTER 5, WHICH PERMITS CONSTRUCTION ACTIVITIES TO OCCUR BETWEEN THE FOLLOWING HOURS:
   - MONDAY THROUGH FRIDAY FROM 7AM TO 6PM AND
   - SATURDAYS FROM 9AM TO 6PM
   - NO CONSTRUCTION ACTIVITIES ARE PERMITTED ON SUNDAYS.

   PILE DRIVING IS FURTHER RESTRICTED TO THE FOLLOWING HOURS:
   - MONDAY THROUGH FRIDAY FROM 9AM TO 6PM AND
   - SATURDAYS FROM 10AM TO 4PM

STORMWATER BEST MANAGEMENT PRACTICES (BMP) NOTES

THE STORMWATER BEST MANAGEMENT PRACTICES (BMP) REQUIRED FOR THIS PROJECT SHALL BE CONSTRUCTED AND INSTALLED UNDER THE DIRECT SUPERVISION OF THE DESIGN ENGINEER OR HIS DESIGNATED REPRESENTATIVE. THE DESIGN ENGINEER SHALL MAKE A WRITTEN CERTIFICATION TO THE CITY THAT THE BMPS ARE CONSTRUCTED AND INSTALLED AS DESIGNED AND IN ACCORDANCE WITH THE APPROVED SITE PLAN. IN ADDITION, AGGREGATE LAYERS AND COLLECTOR PIPES MAY NOT BE INSTALLED UNLESS THE DESIGN ENGINEER OR HIS REPRESENTATIVE IS PRESENT.

THE CONTRACTOR SHALL FURNISH THE CITY WITH AN OPERATION AND MAINTENANCE MANUAL FOR ALL BMPS ON THE PROJECT. THE MANUAL SHALL INCLUDE AN EXPLANATION OF THE FUNCTIONS AND OPERATIONS OF EACH BMP AND ANY SUPPORTING UTILITIES, CATALOG CUTS ON ANY MECHANICAL OR ELECTRICAL EQUIPMENT AND A SCHEDULE OF ROUTINE MAINTENANCE FOR THE BMPS AND SUPPORTING EQUIPMENT.

SANITARY SEWER NOTES/CALCS

1. SEWAGE GENERATION RATES FOR CHURCHES ARE NOT DEFINED IN MEMORANDUM TO INDUSTRY 06-14; HOWEVER, SEWAGE GENERATION IS TYPICALLY ASSOCIATED WITH SEATS IN THE SANCTUARY. FOR PURPOSES OF ANALYSIS, THE INCREASE IN SEWAGE GENERATION IS EVALUATED ON A PER-PERSON BASIS WITH RATES SIMILAR TO SCHOOL (16 GPD PER PERSON).
   - 1.1. EXISTING: 180 PEOPLE @ 16 GPD PER PERSON X 4 PF = 11,520 GPD
   - 1.2. PROPOSED: 190 PEOPLE @ 16 GPD PER PERSON X 4 PF = 12,160 GPD
   - 1.3. NET INCREASE = 640 GPD
2. THE PROPOSED IMPROVEMENTS WILL NOT GENERATE A NET INCREASE IN SANITARY FLOW AND THEREFORE IS EXEMPT FROM SANITARY OUTFALL ANALYSIS PER MEMORANDUM TO INDUSTRY NO. 06-14.
3. THE PROPERTY IS LOCATED IN A SEPARATED SEWER DISTRICT.
4. CONTRACTOR SHALL ENSURE ALL DISCHARGES ARE IN ACCORDANCE WITH CITY OF ALEXANDRIA CODE TITLE 5, CHAPTER 6, ARTICLE B.
5. DEWATERING AND OTHER CONSTRUCTION RELATED DISCHARGE LIMITS TO THE SEWER SYSTEM ARE REGULATED BY ALEXRENEW PRETREATMENT. CONTRACTOR IS REQUIRED TO CONTACT ALEXRENEW'S PRETREATMENT COORDINATOR AT 703-721-3500 X 2020.

CODE NOTES

1. REQUIRED MEANS OF EGRESS SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION, DEMOLITION, REMODELING OR ALTERATIONS AND ADDITIONS TO ANY BUILDING.
2. WASTE MATERIALS SHALL BE REMOVED IN A MANNER WHICH PREVENTS INJURY OR DAMAGE TO PERSONS, ADJOINING PROPERTIES AND PUBLIC RIGHTS-OF-WAY.
3. SERVICE UTILITY CONNECTIONS SHALL BE DISCONTINUED AND CAPPED IN ACCORDANCE WITH THE APPROVED RULES AND THE REQUIREMENTS OF THE APPLICABLE GOVERNING AUTHORITY.
4. PROVISIONS SHALL BE MADE TO PREVENT THE ACCUMULATION OF WATER OR DAMAGE TO ANY FOUNDATION ON THE PREMISES OR ADJOINING PROPERTY.
5. CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE STORED AND PLACED SO AS NOT TO ENDANGER THE PUBLIC, THE WORKERS OR ADJOINING PROPERTY FOR THE DURATION OF THE CONSTRUCTION PROJECT, MATERIALS AND EQUIPMENT SHALL NOT BE PLACED OR STORED SO AS TO OBSTRUCT ACCESS TO FIRE HYDRANTS, STANDPIPES, FIRE OR POLICE ALARM BOXES, CATCH BASINS OR MANHOLES.
6. DURING CONSTRUCTION, DWELLINGS SHALL HAVE APPROVED ADDRESS NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION PLACED IN A POSITION THAT IS PLAINLY LEGIBLE AND VISIBLE FOR THE STREET OR ROAD FRONTING THE PROPERTY.
7. ADJOINING PUBLIC AND PRIVATE PROPERTY SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION, REMODELING AND DEMOLITION WORK. PROTECTION SHALL BE PROVIDED FOR FOOTINGS, FOUNDATIONS, PARTY WALLS, CHIMNEYS, SKYLIGHTS AND ROOFS. PROVISIONS SHALL BE MADE TO CONTROL WATER RUNOFF AND EROSION DURING CONSTRUCTION OR DEMOLITION ACTIVITIES. THE PERSON MAKING OR CAUSING AN EXCAVATION TO BE MADE SHALL PROVIDE WRITTEN NOTICE TO THE OWNERS OF ADJOINING BUILDINGS ADVISING THEM THAT THE EXCAVATION IS TO BE MADE AND THAT THE ADJOINING BUILDINGS SHOULD BE PROTECTED. SAID NOTIFICATION SHALL BE DELIVERED NOT LESS THAN 10 DAYS PRIOR TO THE SCHEDULED STARTING DATE OF THE EXCAVATION.
8. BUILDING, TRADE AND DEMOLITION PERMITS ARE REQUIRED FOR THIS PROJECT. A PRE-DEMOLITION SITE INSPECTION IS REQUIRED, PRIOR TO ANY START OF CONSTRUCTION.
9. NEW CONSTRUCTION MUST COMPLY WITH THE CURRENT EDITION OF THE UNIFORM STATEWIDE BUILDING CODE (USBC).

UTILITY WORKS

UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING MINIMUM STANDARDS DESCRIBED IN SECTION 4VAC50-30-40 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH) AND ADDITIONAL APPLICABLE PRACTICES FOLLOWED BY THE CITY OF ALEXANDRIA:

A. ALL PRIVATE UTILITIES SHALL BE LOCATED OUTSIDE OF THE PUBLIC RIGHT-OF-WAY AND PUBLIC UTILITY EASEMENTS UNLESS THE UTILITY OWNERS HAVE FRANCHISE AGREEMENT WITH THE CITY OF ALEXANDRIA; HOWEVER, NO ELECTRIC TRANSFORMERS AND SWITCH GEARS/CONTROL BOXES SHALL BE PLACED IN THE PUBLIC RIGHT OF WAY.

B. ALL THE EXISTING AND PROPOSED PUBLIC AND PRIVATE UTILITIES AND EASEMENTS SHALL BE SHOWN AND A DESCRIPTIVE NARRATION OF VARIOUS UTILITIES SHALL BE PROVIDED ON THE PLAN.

C. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN UTILITY SERVICES AT ALL TIMES DURING CONNECTION AND/OR CONSTRUCTION.

D. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.

E. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.

F. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.

G. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ACCORDANCE WITH THE CITY OF ALEXANDRIA STANDARDS AND SPECIFICATIONS TO MINIMIZE EROSION AND PROMOTE STABILIZATION.

H. SHOULD UTILITY CONSTRUCTION BE PERFORMED AFTER COMPLETING EARTHWORK, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACHIEVING 98 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D-1551) COMPACTION IN ALL TRENCH BACKFILL.

I. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE VIRGINIA REGULATIONS §4VAC50-30 EROSION AND SEDIMENT CONTROL REGULATIONS, VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH).

J. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.

K. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL CONTROL MEASURES AS NECESSARY TO PREVENT EROSION AND SEDIMENTATION, AS DETERMINED BY THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES, CITY OF ALEXANDRIA.

L. GRADING CAN BE PERFORMED ON INSTALLATION OF UTILITIES.

M. A REMEDIATION PLAN SHALL BE SUBMITTED DETAILING HOW CONTAMINATED SOILS AND/OR GROUNDWATER WILL BE DEALT WITH, INCLUDING PLANS TO PREMEDITATE UTILITY CORRIDORS.

N. UTILITY CORRIDORS IN CONTAMINATED SOIL SHALL BE OVER EXCAVATED BY 2 FEET AND BACKFILLED WITH "CLEAN" SOIL.

O. ALL UTILITIES SUCH AS ELECTRICAL LINES, GAS PIPES, COMMUNICATION CABLES, INCLUDING WATER AND SEWER LATERALS ON PRIVATE AND PUBLIC PROPERTY IN THE CITY OF ALEXANDRIA SHALL BE PROVIDED WITH MINIMUM 3" WIDE 5 MIL OVERALL THICKNESS DETECTABLE UNDERGROUND WARNING TAPE (DUWT). THE DUWT SHALL BE INSTALLED AT DEPTHS OF 12" TO 18" FOR DUWT WIDTHS OF 3" AND 24" FOR WIDTHS OF 6" SO AS TO MAKE UNDERGROUND INSTALLATION EASY TO FIND USING A NON-FERROUS LOCATOR. THE DUWT SHALL BE WITH ALUMINUM BACKING OR SOLID ALUMINUM CORE LAMINATED WITH A PROTECTIVE CLEAR FILM ON BOTH SIDES, SEALING AND PROTECTING THE GRAPHICS FROM UNDERGROUND MOISTURE, ACIDS, ALKALIS, AND OTHER SOLID SUBSTANCES. ALL DUWT TAPES SHALL BE PRINTED IN BLACK INK ON AMERICAN PUBLIC WORKS ASSOCIATION (APWA) APPROVED COLORS TO MEET OR EXCEED INDUSTRY STANDARDS. (SEE TABLE BELOW)

COLOR	CODES
RED	CAUTION BURIED ELECTRIC POWER LINES, CABLES, CONDUITS, AND LIGHTING CABLES
YELLOW	CAUTION GAS, OIL, STEAM, PETROLEUM, OR GASEOUS MATERIALS
ORANGE	CAUTION COMMUNICATIONS, ALARM OR SIGNAL LINES, CABLES, OR CONDUITS
BLUE	CAUTION POTABLE WATER
PURPLE	CAUTION RECLAIMED WATER, IRRIGATION AND SLURRY LINES
GREEN	CAUTION SEWER, DRAIN LINES, AND FORCE MAIN

RODENT ABATEMENT NOTE

PRIOR TO THE ISSUANCE OF A DEMOLITION PERMIT, A RODENT ABATEMENT PLAN SHALL BE SUBMITTED TO THE CITY OF ALEXANDRIA DEPARTMENT OF CODE ADMINISTRATION THAT WILL OUTLINE WHAT STEPS HAVE AND WILL BE TAKEN TO PREVENT THE SPREAD OF RODENTS FROM THE CONSTRUCTION SITE TO THE SURROUNDING COMMUNITY AND SEWERS. THE CONTRACTOR CAN CONTACT THE ALEXANDRIA DEPARTMENT OF CODE ADMINISTRATION AT (703) 746-4200 FOR ANY QUESTIONS OR ADDITIONAL INFORMATION. PLEASE BE ADVISED ONCE ANY DEMOLITION HAS BEEN COMPLETED ANY ABOVE GROUND BAIT BOXES MUST BE RELOCATED WITHIN 50 FEET OF A STRUCTURE IN KEEPING WITH EPA REGULATIONS. IF THIS IS NOT POSSIBLE, THEY SHALL BE REMOVED AND REGULAR INSPECTION OF THE SITE CONDUCTED BY A VIRGINIA LICENSED PEST EXTERMINATOR TO ENSURE THE SITE REMAINS RODENT FREE.

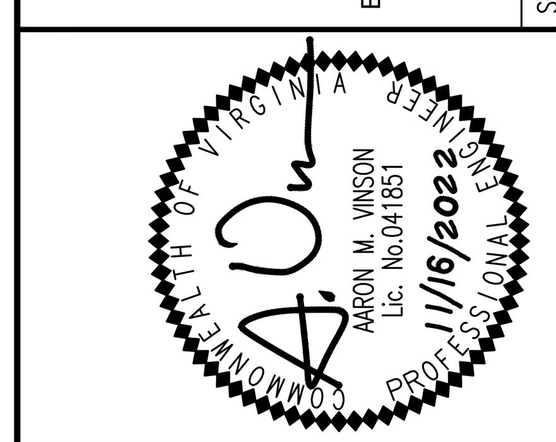
MOSQUITO CONTROL NOTES

1. SINCE STORMWATER MANAGEMENT (SWM) AND BEST MANAGEMENT PRACTICE (BMP) SYSTEMS THAT HOLD WATER FOR MORE THAN 5 DAYS BETWEEN THE MONTHS OF MAY- OCTOBER HAVE THE POTENTIAL TO CAUSE MOSQUITO BREEDING HABITATS; THEREFORE, SUCH BMPS SHALL BE TRATED WITH A REGISTERED MOSQUITO LARVAL CONTROL PRODUCT. ALL LABELS SHOULD BE FOLLOWED FOR APPLICATION RATES AND AMOUNTS.
2. SINCE EXCESSIVE VEGETATION IN EXISTING BMPS ALSO INCREASE THE POTENTIAL FOR MOSQUITO PROBLEMS; THEREFORE, VEGETATION SHALL BE CONTROL AND CUT TU REDUCE MOSQUITO BREEDING.
3. CONTACT THE CITY OF ALEXANDRIA ENVIRONMENTAL HEALTH VECTOR BORNE ILLNESS PROGRAM (703-746-4910) FOR QUESTIONS OR TREATMENT ASSISTANCE.

ESI
Peer Review

WALTER L. PHILLIPS
INCORPORATED
ESTABLISHED 1945
Engineers • Surveyors • Planners • Landscape Architects • Arborists
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

SCALE: AS NOTED	DATE: 11/08/2021, 8/4/2022, 10/05/2022, 11/16/2022	DRAWN: RH / AV	CHECKED: AV



REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

4 EAST OAK STREET
REDEEMED CHURCH OF CHRIST
GRADING PLAN
CITY OF ALEXANDRIA, VIRGINIA

NOTES AND DETAILS

APPROVED
SPECIAL USE PERMIT NO. 2021-0016
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. ____________

DIRECTOR DATE

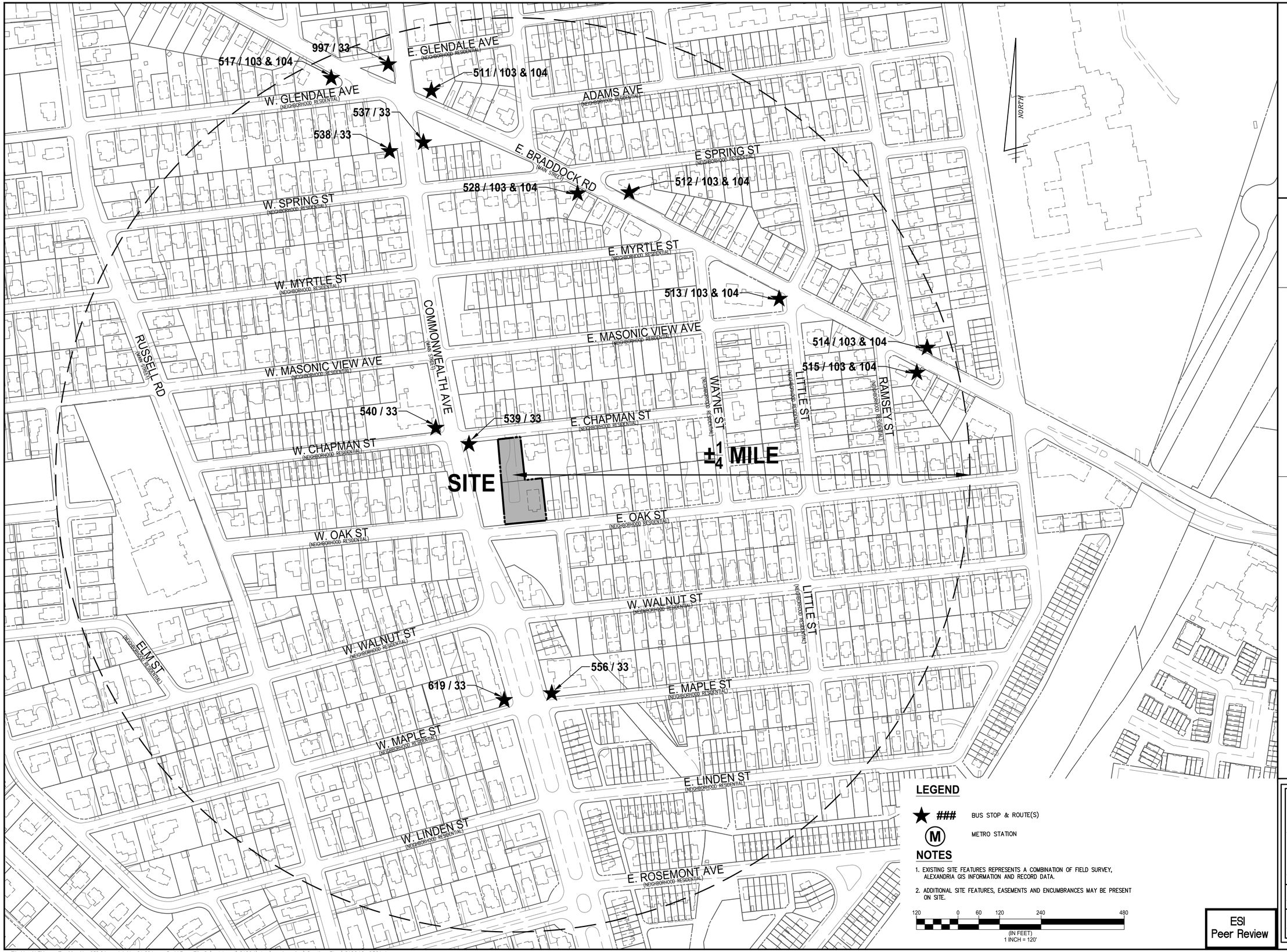
CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED ____________

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

File No. ALEX Tax Map No. 053.04 Job No. 21-094 Cadd Dwg. File: Q:\sdskproj\21094\dwg\engineering\Grading Plan\21094C-0201.dwg

SHEET: C-0201



LEGEND

★ ### BUS STOP & ROUTE(S)

Ⓜ METRO STATION

NOTES

1. EXISTING SITE FEATURES REPRESENTS A COMBINATION OF FIELD SURVEY, ALEXANDRIA GIS INFORMATION AND RECORD DATA.
2. ADDITIONAL SITE FEATURES, EASEMENTS AND ENCUMBRANCES MAY BE PRESENT ON SITE.

120 0 60 120 240 480
(IN FEET)
1 INCH = 120'

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SCALE: 1" = 120'
DATE: 11/08/2021, 8/4/2022, 10/05/2022, 11/16/2022
DRAWN: RH / AV
CHECKED:

COMMONWEALTH OF VIRGINIA AARON M. VINSON LIC. NO. 041851 PROFESSIONAL ENGINEER 11/16/2022

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

4 EAST OAK STREET
REDEEMED CHURCH OF CHRIST
GRADING PLAN
CITY OF ALEXANDRIA, VIRGINIA

CONTEXT PLAN

APPROVED
SPECIAL USE PERMIT NO. 2021-0016
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

SHEET: C-0301

File No. ALEX Tax Map No. 053.04 Job No. 21-094 Cadd Dwg. File: Q:\sdskproj\21094\dwg\engineering\Grading Plan\21094C-0301.dwg

NOTES:

1. THE PROPERTIES SHOWN HEREON ARE DESIGNATED BY THE CITY OF ALEXANDRIA, VIRGINIA, AS MAP-BLOCK-LOT NUMBERS 053.04-02-01 AND 053.04-02-25, BOTH ZONED R 2-5.

2. THE PROPERTIES ARE NOW IN THE NAME OF REDEEMED CHURCH OF OUR LORD JESUS CHRIST, AS RECORDED IN DEED BOOK 1159 AT PAGE 661.

3. THIS PLAN AND THE SURVEY UPON WHICH IT IS BASED SHOWS ONLY THOSE IMPROVEMENTS THAT ARE OBSERVABLE AND CAN BE LOCATED USING NORMAL SURVEY METHODS. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION, MISS UTILITY MARKINGS AND EXISTING RECORDS. THERE ARE NO GUARANTEES, EITHER EXPRESS OR IMPLIED, THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED, OR THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE UNDERGROUND UTILITIES HAVE NOT BEEN PHYSICALLY LOCATED. WATER AND GAS LINE SIZES ARE FROM RECORD INFORMATION.

4. TOTAL AREA OF THE PROPERTIES IS 22,626 SQUARE FEET OR 0.5194 ACRES.

5. THIS PLAN IS BASED ON A FIELD SURVEY BY THIS FIRM DATED 7/23/2021. THE ORIGINAL SUBDIVISION PLAT FOR ROSEMONT PARK WAS NOT AVAILABLE FROM THE CITY OF ALEXANDRIA.

6. THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP FOR THE CITY OF ALEXANDRIA, VIRGINIA, MAP NUMBER 5155190033E, REVISED DATE JUNE 16, 2011, DESIGNATES THE PROPERTY AS BEING IN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

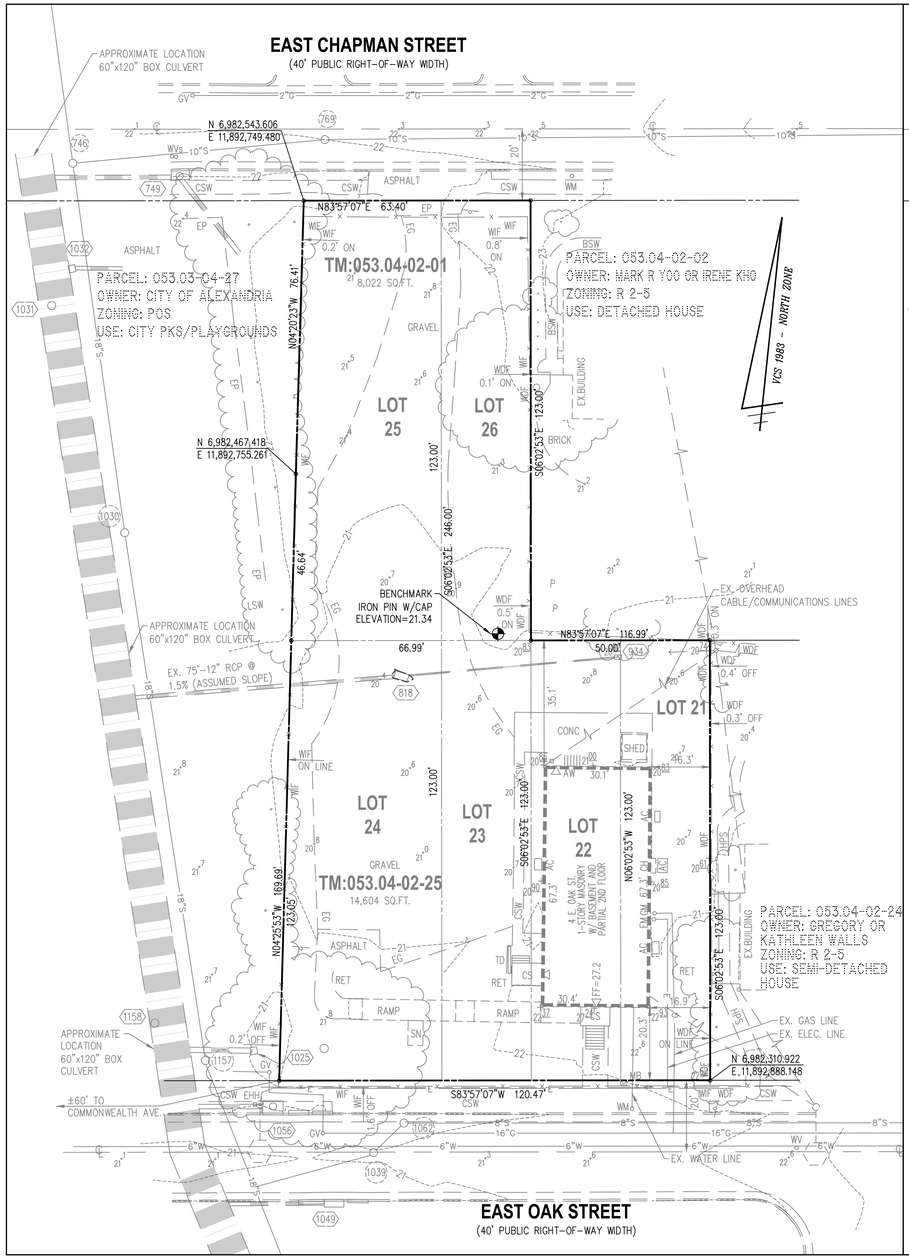
7. THIS SURVEY DOES NOT PURPORT TO SHOW AND/OR NOTE ALL DEDICATIONS, EASEMENTS, COVENANTS, OR RESTRICTIONS THAT MAY EXIST IN THE CHAIN OF TITLE. NO TITLE REPORT FURNISHED.

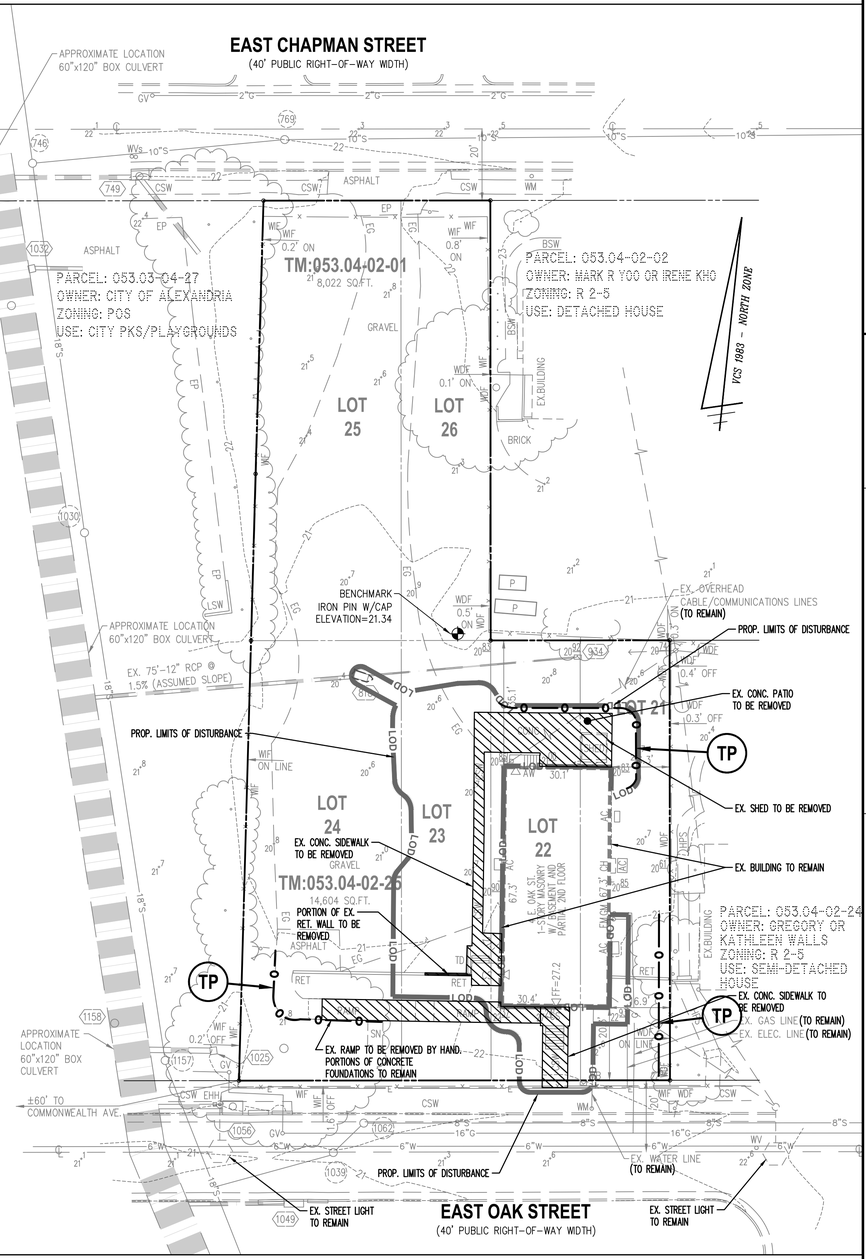
8. THE SITE SHOWN HEREON IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 AS COMPUTED FROM A FIELD RUN VERTICAL CONTROL SURVEY AND IS REFERENCED TO THE VIRGINIA COORDINATE SYSTEM OF 1983, [NAD 83(2011) (EPOCH:2010.0000)] AS COMPUTED FROM A FIELD RUN BOUNDARY AND HORIZONTAL CONTROL SURVEY THAT TIES THIS BOUNDARY AND THE BENCHMARK(S) SHOWN TO THE TOPCON GNSS RTK REFERENCE NETWORK. THE COMBINED FACTOR APPLIED TO THE FIELD DISTANCES TO DERIVE THE REFERENCED COORDINATES IS 0.99995821. THE FOOT DEFINITION USED FOR CONVERSION OF THE MONUMENT COORDINATES AND IN THE PERFORMANCE OF THIS SURVEY IS THE U.S. SURVEY FOOT. CONTOUR INTERVAL IS ONE FOOT.

9. THIS SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF, DAVID N. ISHERWOOD, L.S., FROM AN ACTUAL [X] GROUND OR [ ] AIRBORNE SURVEY MADE UNDER MY SUPERVISION; THAT THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED ON JULY 23, 2021; AND THAT THIS PLAN, MAP, OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.

LEGEND

AC..... AIR CONDITIONER
AW..... AREAWAY
BSW..... BRICK SIDEWALK
CH..... CHIMNEY
CLF..... CHAINLINK FENCE
CMP..... CORRUGATED METAL PIPE
CONC..... CONCRETE
CS..... CONCRETE STOOP
CSW..... CONCRETE SIDEWALK
DB..... DEED BOOK
EG..... EDGE OF GRAVEL
EHH..... ELECTRIC HAND HOLE
EM..... ELECTRIC METER
EP..... EDGE OF PAVEMENT
FF..... FIRST/FINISH FLOOR ELEVATION
GM..... GAS METER
GV..... GAS VALVE
HPS..... HAND PLACED STONE
INV..... INVERT
IPF..... IRON PIN FOUND (PROPERTY CORNER)
IPS..... IRON PIN SET (PROPERTY CORNER)
LSW..... LANDSCAPING WALL
N/F..... NOW OR FORMERLY
P..... PLANTER
PG..... PAGE
RCP..... REINFORCED CONCRETE PIPE
RET..... RETAINING WALL
SD. (123)..... STORM SEWER STRUCTURE
SMH. (123)..... SANITARY SEWER STRUCTURE
SQ.FT..... SQUARE FEET
SN..... SIGN
TD..... TRACK DRAIN
WDF..... WOODEN FENCE
WIF..... WROUGHT IRON FENCE
WM..... WATER METER
WV..... WATER VALVE
..... FIRE HYDRANT
..... DOORWAY/ENTRANCE
..... UTILITY POLE
..... LIGHT POLE
X ..... FENCE
..... GUY WIRE
..... OVERHEAD WIRES
E ..... UNDERGROUND ELECTRIC LINE
G ..... UNDERGROUND GAS LINE
S ..... UNDERGROUND SANITARY LINE
SL ..... UNDERGROUND SANITARY LATERAL LINE
..... UNDERGROUND STORM SEWER LINE
W ..... UNDERGROUND WATER LINE
..... TREE
..... LIMITS OF TREE CANOPY/VEGETATION
..... CURB AND GUTTER
123.4 ..... SPOT ELEVATION
..... SIGN





EXISTING CONDITIONS PLAN

SCALE: 1"=20'

DEMOLITION PLAN

SCALE: 1"=20'

STORM SEWER AS-BUILT

SD 749	
CURB INLET TOP =	21.77
15"CMP IN (S.EAST)=	18.72
15"RCP OUT (WEST)=	18.54
SD 1032	
GRATE INLET TOP =	21.90
12"RCP IN (EAST)=	19.03
SD 934	
GRATE INLET TOP =	20.78
4"PVC OUT (SD 818)=	20.01
SD 818	
GRATE INLET TOP =	19.99
4"PVC IN (SD 924)=	18.70
12"RCP OUT (WEST)=	18.69

PIPE SIZES ARE PER RECORD INFORMATION

SD 1025	
GRATE INLET TOP =	21.08
18"RCP OUT (WEST)=	16.93
SD 1056	
CURB INLET TOP =	21.04
15"RCP OUT (WEST)=	16.30
SD 1031	
MANHOLE TOP =	22.41
CL INV BOX CULVERT	15.12
SD 1158	
MANHOLE TOP =	20.91
MANHOLE IS BURIED	

PIPE SIZES ARE PER RECORD INFORMATION

SANITARY SEWER AS-BUILT

SMH 724	
MANHOLE TOP =	33.00
10"INV IN (EAST)=	28.91
10"INV OUT (SMH 769)=	28.75
SMH 769	
MANHOLE TOP =	21.99
10"INV IN (SMH 724)=	16.31
10"INV OUT (SMH 746)=	16.27
SMH 746	
MANHOLE TOP =	21.87
10"INV IN (SMH 769)=	14.57
18"INV IN (NORTH)=	13.82
18"INV OUT (SMH 1030)=	13.75
SMH 1030	
MANHOLE TOP =	22.35
18"INV IN (SMH 746)=	13.24
18"INV OUT (SOUTH)=	13.14

PIPE SIZES ARE PER RECORD INFORMATION

SMH 1157	
MANHOLE TOP =	21.32
MANHOLE INSIDE OF MANHOLE	
CAN NOT AS-BUILT	
SMH 1131	
MANHOLE TOP =	24.43
INV IN (NORTH)=	17.06
8"INV IN (SMH 1134)=	17.38
8"INV OUT (SMH 1062)=	16.93
SMH 1062	
MANHOLE TOP =	20.92
8"INV IN (SMH 1131)=	14.89
8"INV OUT (SMH 1039)=	14.86
SMH 1039	
MANHOLE TOP =	21.04
8"INV IN (SMH 1062)=	14.71
8"INV OUT (S.WEST)=	14.55

PIPE SIZES ARE PER RECORD INFORMATION

DEMOLITION NOTES

1. CONTRACTOR RESPONSIBLE FOR ENSURING EXISTING UTILITIES TO REMAIN ARE PROTECTED THROUGHOUT CONSTRUCTION.
2. SEE TREE PRESERVATION DETAILS, C-1200 SHEETS.
3. WATERLINE PIPES AND SIZES ON THIS PLAN ARE SHOWN PER RECORD INFORMATION.
4. SEE SHEETS C-0601 AND C-0602 FOR EROSION AND SEDIMENT CONTROL PLAN.
5. ALL EXISTING FEATURES WITHIN THE LIMITS OF DISTURBANCE ARE TO BE REMOVED UNLESS OTHERWISE NOTED.

DEMOLITION LEGEND

EXISTING FEATURE TO BE DEMOLISHED
X TREE TO BE REMOVED
TP TREE PROTECTION

TOTAL DISTURBED AREA = 3,992 SF OR 0.091 ACRES

20 0 10 20 40 80
(IN FEET)
1 INCH = 20'

ESI Peer Review

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
Engineers • Surveyors • Planners • Landscape Architects • Arborists
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

SCALE: 1" = 20' | DATE: 11/08/2021, 8/4/2022, 10/05/2022, 11/16/2022 | DRAWN: RH / AV | CHECKED: AV

COMMONWEALTH OF VIRGINIA — AARON M. VINSON — Lic. No.041851 — PROFESSIONAL ENGINEER — 11/16/2022

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

4 EAST OAK STREET
REDEEMED CHURCH OF CHRIST
GRADING PLAN
CITY OF ALEXANDRIA, VIRGINIA

EXISTING CONDITIONS AND DEMOLITION PLAN

APPROVED
SPECIAL USE PERMIT NO. 2021-0016
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

File No. ALEX Tax Map No. 053.04 Job No. 21-094 Cadd Dwg. File:Q:\sdskproj\21094\dwg\engineering\Grading Plan\21094C-0302.dwg

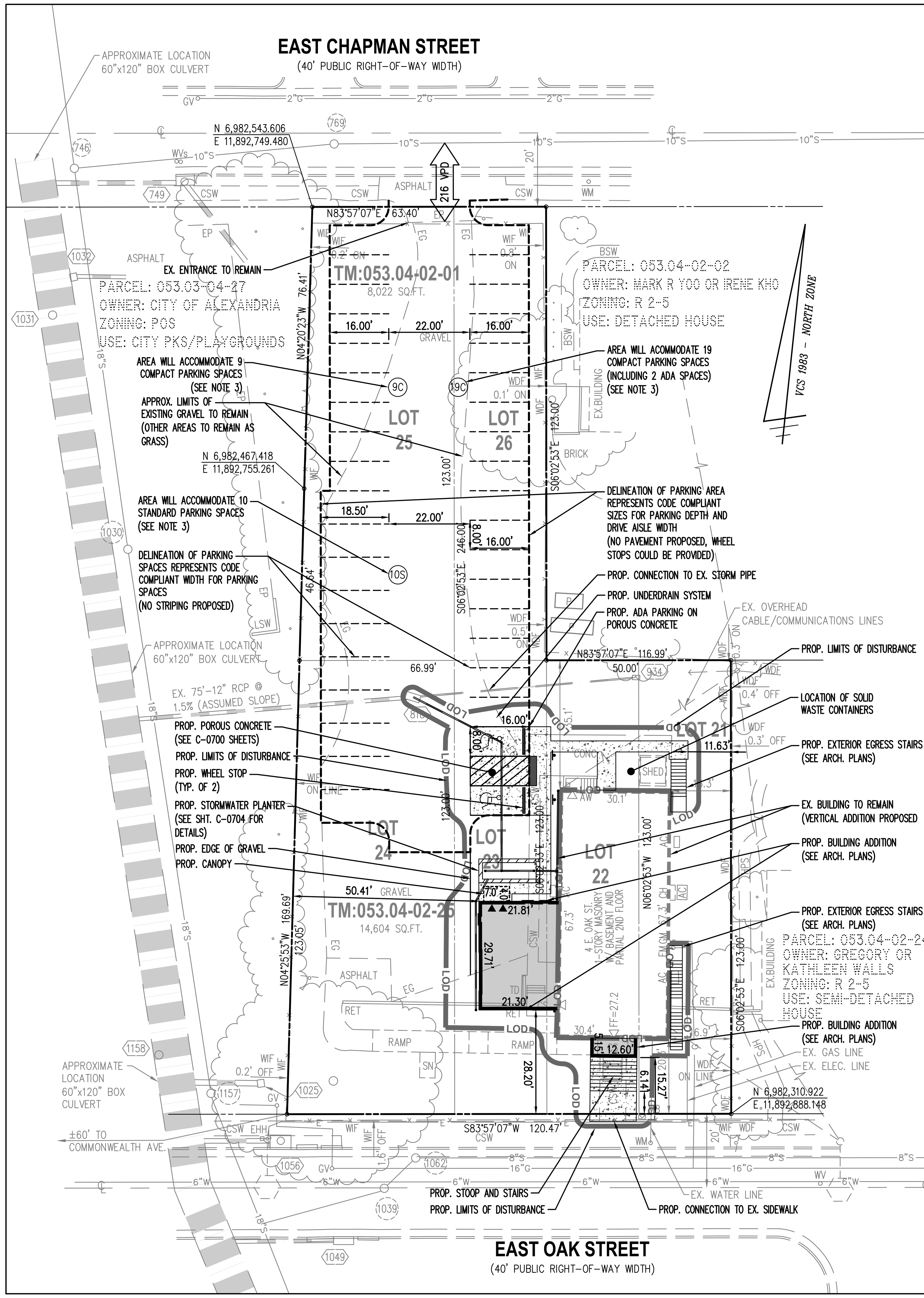
SHEET: C-0302

LEGEND

PROPOSED	DESCRIPTION	EXISTING
	CURB & GUTTER CG-2	
CG-6R CG-6	TRANSITION FROM CG-6 TO CG-6R	CG-6 CG-6R
S	SANITARY SEWER	S
SL	SANITARY LATERAL	SL
● C.O.	CLEAN OUT	○ C.O.
	STORM SEWER	
W	WATER MAIN	W
	FIRE HYDRANT	
	PLUG	
	OVERHEAD WIRES	
	UTILITY POLE	
UE	UNDERGROUND ELECTRIC	UE
T	TELEPHONE	T
G	GAS MAIN	G
E	ELECTRICAL	E
T	TRANSFORMER	T
	HANDICAP RAMP (CG-12)	
	GUARDRAIL	
X	FENCE	X
	TRAFFIC FLOW	
	LIGHT	
▼	DOOR	▽
	TREES	
260 264	CONTOURS	260 264
+264 50	SPOT ELEVATION	+264 50
	DRAINAGE FLOW DIRECTION	
TC	TOP OF CURB	TC
BC	BOTTOM OF CURB	BC
TW	TOP OF WALL	TW
BW	BOTTOM OF WALL	BW
HP	HIGH POINT	H.P.
TP	TEST PIT	
LOD	LIMITS OF DISTRUBANCE	
	CONCRETE	

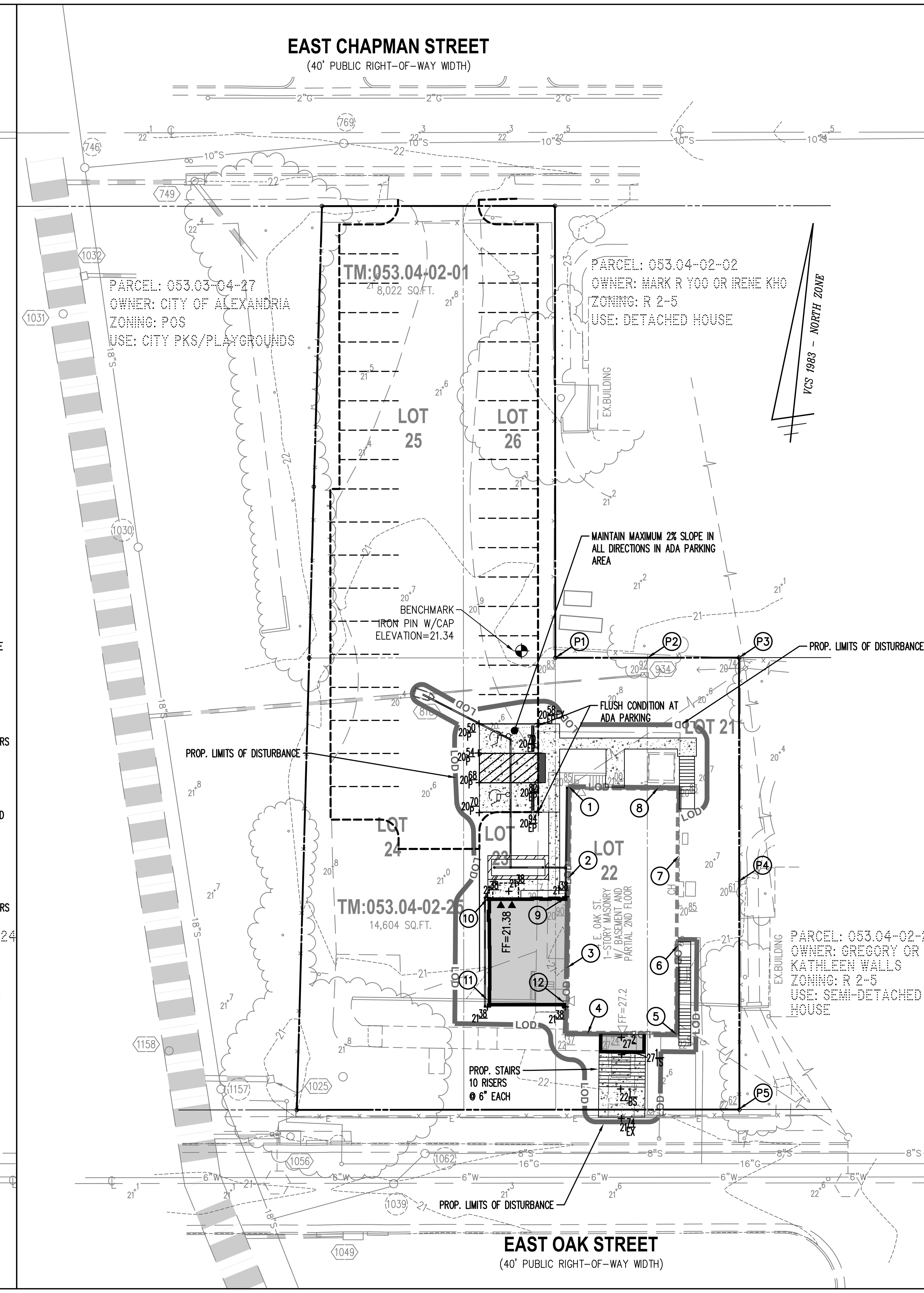
NOTES

1. SEE C-1200 SHEETS FOR TREE PRESERVATION PLAN.
2. IN THE EVENT THE PROPOSED GRADING ADVERSELY IMPACTS AND/OR CREATES A NUISANCE ON PUBLIC RIGHT OF WAY OR PRIVATE PROPERTIES, THEN THE APPLICANT AND/OR OWNER SHALL BE RESPONSIBLE TO PROVIDE ADDITIONAL IMPROVEMENTS TO THE GRADING AND DRAINAGE TO THE SATISFACTION OF THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES.
3. ALL INDIVIDUAL PARKING SPACES SHOWN ON THIS PLAN WILL BE STRIPED OR DELINEATED.



LAYOUT PLAN

SCALE: 1"=20'



GRADING PLAN

SCALE: 1"=20'

AVERAGE FINISHED GRADE

EXISTING BUILDING GRADE

Spot	Elevation
1	20.85
2	20.90
3	22.37
4	27.24
5	22.93
6	20.85
7	20.83
8	21.00
Average	**22.12**

PROPOSED BUILDING GRADE

Spot	Elevation
1	20.85
2	20.90
3	22.37
4	27.24
5	22.93
6	20.85
7	20.83
8	21.00
9	21.38
10	21.38
11	21.38
12	21.38
Average	**21.87**

AVERAGE LOT LINE GRADES

FOR SETBACK RATIO PURPOSES

EASTERN SIDE LOT LINE

Spot	Elevation
3	20.74
4	20.61
5	22.62
Average	**21.32**

NORTHERN REAR LOT LINE

Spot	Elevation
1	20.83
2	20.92
3	20.74
Average	**20.83**

TOTAL DISTURBED AREA = 3,992 SF OR 0.091 ACRES

20 0 10 20 40 80
(IN FEET)
1 INCH = 20'

ESI
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COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/16/2022
PROFESSIONAL ENGINEER
[illegible]

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

REVISION APPROVED BY

4 EAST OAK STREET
REDEEMED CHURCH OF CHRIST
GRADING PLAN
CITY OF ALEXANDRIA, VIRGINIA

LAYOUT AND GRADING PLAN

APPROVED
SPECIAL USE PERMIT NO. 2021-0016
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. ____________

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED ____________

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

SHEET: C-0401

File No. ALEX Tax Map No. 053.04 Job No. 21-094 Cadd Dwg. File: Q: \sdskproj\21094\dwg\engineering\Grading Plan\21094C-0401.dwg

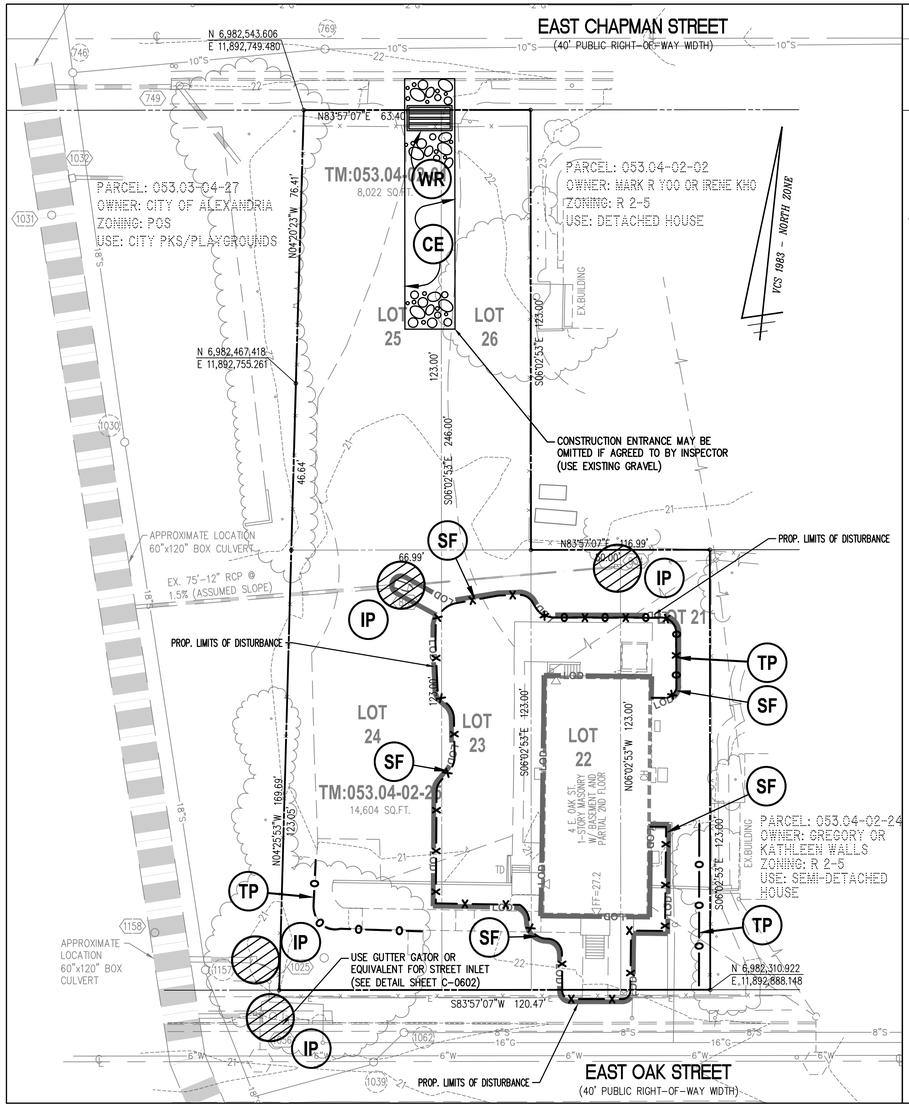
KEY	TITLE	SYMBOL
CE	TEMPORARY GRAVEL CONSTRUCTION	
SF	SILT FENCE	
TP	TREE PROTECTION	
IP	STORM DRAIN INLET PROTECTION	

EROSION CONTROL NOTES

1. WATER SOURCE TO BE PROVIDED BY PUMPER TRUCK OR WATER TANK.
2. THERE ARE NO MAPPED RESOURCE PROTECTION AREA ON THIS SITE.
3. THERE IS NO KNOWN SOIL CONTAMINATION ON THIS SITE.
4. CONTRACTOR IS TO PROVIDE SUPPLEMENTARY MEASURES AS REQUIRED BY INSPECTORS.
5. CONTRACTOR IS TO REMOVE ONLY TREES IDENTIFIED IN THE TREE INVENTORY AS "TO BE REMOVED". SEE SHEETS C-0302.
6. SILT FENCE TO BE INSTALLED AT THE DISCRETION OF THE INSPECTOR. CONTRACTOR TO COORDINATE TIMING AND LOCATION OF PLACEMENT WITH INSPECTOR.
7. CONTRACTOR MAY INSTALL MOVABLE SAFETY FENCE DURING CONSTRUCTION ACTIVITY AT THEIR AND THE INSPECTORS DISCRETION.
8. CONTRACTOR TO PROVIDE INLET PROTECTION TO ANY EXISTING INLET DOWNSTREAM OF THE SITE THAT MAY BE AFFECTED BY EROSION AND SEDIMENT GENERATED ONSITE.
9. THE LIMITS OF DISTURBANCE AS SHOWN ON THIS PLAN ARE THE ULTIMATE LIMITS FOR THE PROJECT. THE CONTRACTOR MUST APPLY SEPARATELY TO THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES (T&ES) FOR ANY WORK, INCLUDING THE PLACEMENT OF CONSTRUCTION FENCING, WITHIN THE RIGHT-OF-WAY. THE CITY OF ALEXANDRIA WILL NOT ALLOW INCLUSION OF ANY PORTION OF THE PUBLIC RIGHT-OF-WAY, INCLUDING SIDEWALKS, INTO THE PROJECT AREA FOR THE PROJECT DURATION. WORK AND ASSOCIATED CLOSURES IN THE PUBLIC RIGHT-OF-WAY WILL BE PERMITTED SEPARATELY ON AN AS NEEDED BASIS BY T&ES.
10. INLET PROTECTION, IF PROVIDED, SHALL NOT EXTEND BEYOND LIMITS OF GUTTER PAN.
11. SEE SHEET C-0302 FOR DEMOLITION PLAN.
12. THE SITE INSPECTOR MAY REQUEST ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES BASED ON SITE CONDITIONS.

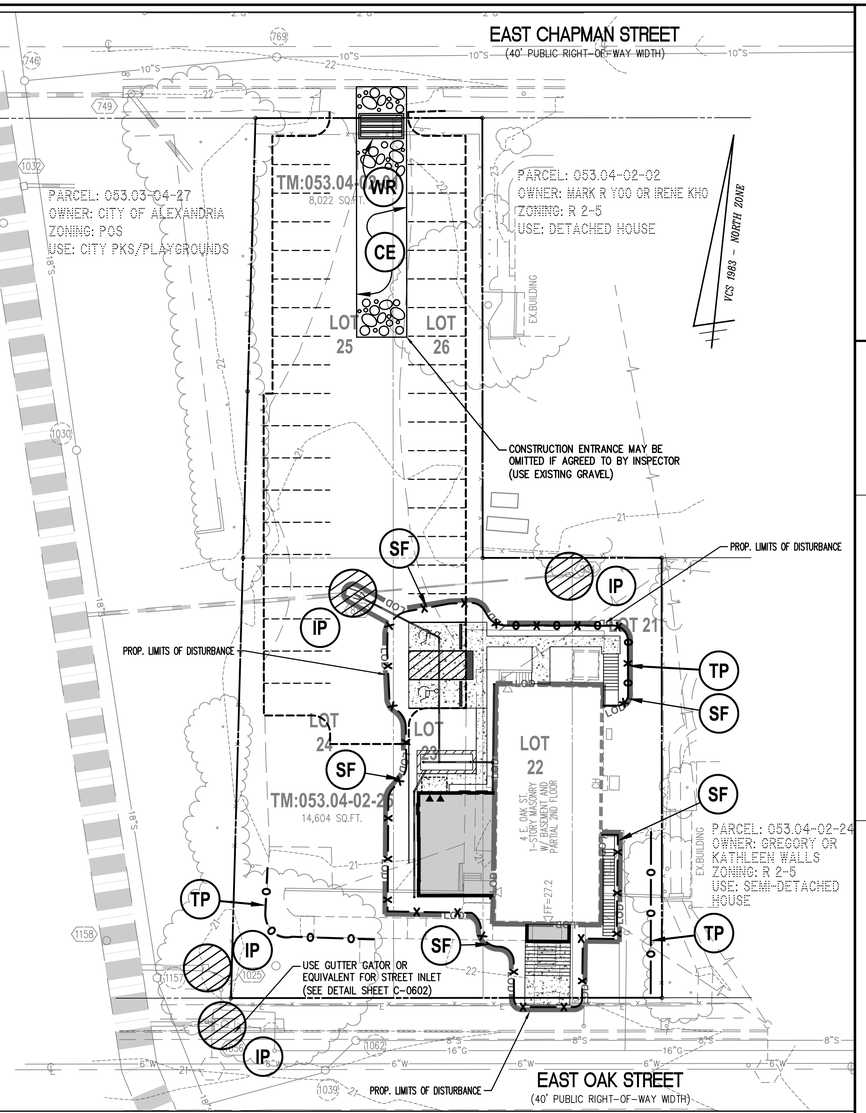
ARCHAEOLOGY NOTES

1. THE APPLICANT/DEVELOPER SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) IF ANY AMERICAN INDIAN ARTIFACTS, SUCH AS SPEAR POINTS OR ARROW POINTS, ARE DISCOVERED DURING DEVELOPMENT. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS.
2. THE APPLICANT/DEVELOPER SHALL NOT ALLOW ANY METAL DETECTION OR ARTIFACT COLLECTION TO BE CONDUCTED ON THE PROPERTY, UNLESS AUTHORIZED BY ALEXANDRIA ARCHAEOLOGY.



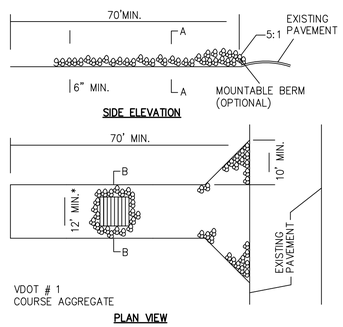
EROSION & SEDIMENT CONTROL - PHASE 1 PLAN

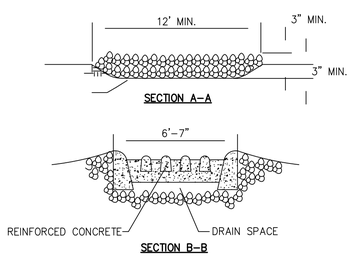
SCALE: 1"=20'



EROSION & SEDIMENT CONTROL - PHASE 2 PLAN

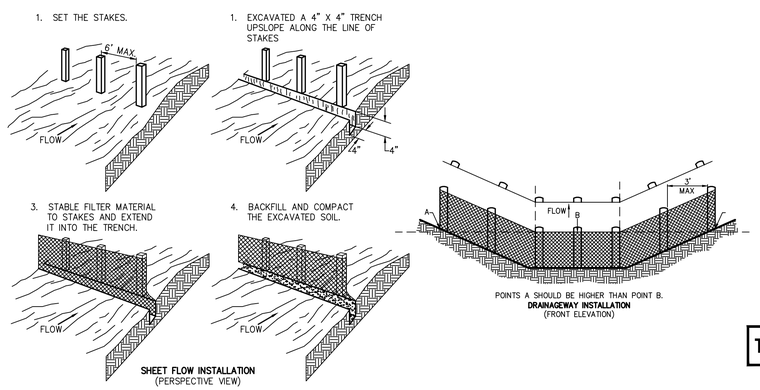
SCALE: 1"=20'





CONSTRUCTION ENTRANCE

NOT TO SCALE
(TO BE PROVIDED AS NEEDED)



SILT FENCE (W/O WIRE SUPPORT) DETAIL

NOT TO SCALE

TOTAL DISTURBED AREA = 3,992 SF OR 0.091 ACRES

20 0 10 20 40 80
(IN FEET)
1 INCH = 20'

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COMMONWEALTH OF VIRGINIA — AARON M. VINSON — Lic. No.041851 — PROFESSIONAL ENGINEER — 11/16/2022

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

4 EAST OAK STREET

REDEEMED CHURCH OF CHRIST

GRADING PLAN
CITY OF ALEXANDRIA, VIRGINIA

EROSION AND SEDIMENT CONTROL PLAN - PHASE 1 AND 2

APPROVED
SPECIAL USE PERMIT NO. 2021-0016
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

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INSTRUMENT NO. DEED BOOK NO. PAGE NO.

File No. ALEX Tax Map No. 053.04 Job No. 21-094 Cadd Dwg. File:Q:\sdskproj\21094\dwg\engineering\Grading Plan\21094C-0601.dwg

SHEET: C-0601

EROSION & SEDIMENT CONTROL NARRATIVE:

PROJECT DESCRIPTION:
THE APPLICANT PROPOSES A SMALL BUILDING ADDITION AND PARKING LOT IMPROVEMENTS ALONG WITH SUPPORTING INFRASTRUCTURE. THE LIMITS OF DISTURBANCE ARE 16,586 SQUARE FEET OR 0.3808 ACRES.

EXISTING SITE CONDITIONS:
THE SITE CURRENTLY CONSISTS OF AN EXISTING CHURCH WITH A GRAVEL PARKING LOT. THERE ARE LIMITED TREES AND VEGETATION.

CRITICAL AREAS:
THERE ARE NO CRITICAL AREAS WITHIN THE LIMIT OF DISTURBANCE.

ADJACENT PROPERTIES:
NORTH: EAST CHAPMAN STREET
EAST: EXISTING HOUSES
SOUTH: EAST OAK STREET
WEST: PUBLIC OPEN SPACE

OFFSITE AREAS:
NONE.

EROSION AND SEDIMENT CONTROL MEASURES:

1. SEDIMENT AND EROSION CONTROL MEASURES ARE TO BE INSTALLED PRIOR TO GRADING.
2. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL ALL GROUND DISTURBING ACTIVITY CEASES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS IS COMPLETE.
3. ALL STANDARDS AND SPECIFICATIONS REFER TO THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
4. TOPSOIL SHALL BE STRIPPED FROM AREAS TO BE GRADED AND STOCKPILED FOR LATER USE. STOCKPILE LOCATIONS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR TO PROVIDE APPROPRIATE EROSION CONTROL MEASURES FOR ANY STOCKPILED AREA.
5. ALL AREAS DISTURBED BY CONSTRUCTION THAT ARE NOT TO BE CONSTRUCTED UPON SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISH GRADING BY SEEDING AND MULCHING PER STD. AND SPEC. NO. 3.32 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
6. BARE SOIL SURFACES NOT AT FINISH GRADE, WHICH WILL BE EXPOSED MORE THAN 7 DAYS, SHALL BE STABILIZED WITH TEMPORARY SEEDING AND MULCHING PER STD. AND SPEC. NO.3.31 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.

CONTAMINATED SOILS:
THE CITY OF ALEXANDRIA DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES, DIVISION OF ENVIRONMENTAL QUALITY MUST BE NOTIFIED IF UNUSUAL OR UNANTICIPATED CONTAMINATION OR UNDERGROUND STORAGE TANKS, DRUMS AND CONTAINERS ARE ENCOUNTERED AT THE SITE. IF THERE IS ANY DOUBT ABOUT PUBLIC SAFETY OR A RELEASE TO THE ENVIRONMENT, THE ALEXANDRIA FIRE DEPARTMENT MUST BE CONTACTED IMMEDIATELY BY CALLING 911. THE TANK OR CONTAINER'S REMOVAL, ITS CONTENTS, ANY SOIL CONTAMINATION AND RELEASES TO THE ENVIRONMENT WILL BE HANDLED IN ACCORDANCE WITH FEDERAL, STATE AND CITY REGULATIONS.

EROSION CONTROL PROGRAM:
SOIL DISTURBANCE (DENUDED AREA) FROM THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS IS ANTICIPATED TO BE MINOR. WE HEREBY REQUEST THAT EROSION CONTROL MEASURES FOR THIS PROJECT BE ACCOMPLISHED IN ONE PHASE. INSTALLATION OF THE PERIMETER CONTROLS SHOWN ON SHEET C-0601 IS TO OCCUR PRIOR TO ANY LAND DISTURBING ACTIVITIES AND SHALL REMAIN IN PLACE UNTIL FINAL SITE STABILIZATION AND GRADING IS ACHIEVED.

TEMPORARY SEEDING AND MULCHING ARE TO BE APPLIED TO ANY DISTURBED AREA NOT WORKED FOR 7 DAYS.

RESPONSIBLE LAND DISTURBER WILL BE DESIGNATED PRIOR TO THE ISSUANCE OF A GRADING PERMIT.

1. PRIOR TO INSTALLATION OF THE E&S CONTROL MEASURES, CONTRACTOR IS TO COORDINATE WITH THE CITY INSPECTORS AND MAKE NECESSARY ADJUSTMENTS TO THE E&S CONTROL PLAN AS COORDINATED.
2. E&S CONTROL DEVICES SUCH AS TREE PROTECTION, SILT FENCE AND INLET PROTECTIONS AROUND THE SITE AREA, AS SHOWN ON SHEET C-0601 ARE TO BE INSTALLED PRIOR TO ANY LAND DISTURBANCE ACTIVITIES.
3. ALL E&S CONTROLS ARE TO REMAIN IN PLACE FOR THE DURATION OF LAND DISTURBING ACTIVITIES. SUPPLEMENTAL CONTROLS ARE TO BE PROVIDED AS COORDINATED WITH THE CITY INSPECTORS. E&S CONTROLS SHALL BE REMOVED, FOLLOWING FINE GRADING, TO FACILITATE LANDSCAPING.

EROSION AND SEDIMENT CONTROL PRACTICES:

1. TEMPORARY CONSTRUCTION ENTRANCE – VESCH SPECIFICATION 3.02.
2. SILT FENCE – VESCH SPECIFICATION 3.05.
3. TREE PROTECTION – VESCH SPECIFICATION 3.38 AND CITY OF ALEXANDRIA TREE PROTECTION STANDARDS.
4. ALL TEMPORARY SEEDING SHALL CONFORM TO VESCH. SPECIFICATION 3.31.
5. ALL PERMANENT SEEDING SHALL CONFORM TO VESCH. SPECIFICATION 3.32.
6. ALL SODDING SHALL CONFORM TO VESCH. SPECIFICATION SPECIFICATION. 3.33.

MAINTENANCE PROGRAM:
THE SITE SUPERINTENDENT, OR REPRESENTATIVE, SHALL MAKE A VISUAL INSPECTION OF ALL MECHANICAL CONTROLS AND NEWLY STABILIZED AREAS (I.E. SEEDED AND MULCHED AREAS) ON A DAILY BASIS. ESPECIALLY AFTER A HEAVY RAINFALL EVENT TO INSURE THAT ALL CONTROLS ARE MAINTAINED AND PROPERLY FUNCTIONING. ANY DAMAGED CONTROLS SHALL BE REPAIRED PRIOR TO THE END OF THE WORK DAY INCLUDING RE-SEEDING AND MULCHING IF NECESSARY.

MAINTENANCE NOTES

1. PERIMETER CONTROLS SHALL BE INSPECTED AT THE END OF EACH DAY AND AFTER EACH RAINFALL. ANY REQUIRED REPAIRS OR REPLACEMENTS SHALL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS WILL BE REMOVED AFTER EACH RAINFALL AND AT ANY TIME THE DEPOSITS REACH APPROXIMATELY ½ THE HEIGHT OF THE BARRIER.
2. EROSION AND SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED IN PLACE UNTIL GROUND DISTURBING CONSTRUCTION AND PERMANENT STABILIZATION IS COMPLETE AND SHALL BE REMOVED BY PERMISSION OF THE CITY INSPECTOR.
3. EROSION AND SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED IN PLACE UNTIL GROUND DISTURBING CONSTRUCTION AND PERMANENT STABILIZATION IS COMPLETE AND SHALL BE REMOVED BY PERMISSION OF THE CITY OF ALEXANDRIA INSPECTOR.

1. AN EROSION AND SEDIMENT CONTROL PLAN MUST BE APPROVED BY THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES PRIOR TO ANY LAND DISTURBING ACTIVITY GREATER THAN 2,500 SQUARE FEET.
2. ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE CITY OF ALEXANDRIA AND VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH), VIRGINIA REGULATIONS §4VAC50-30 EROSION AND SEDIMENT CONTROL REGULATIONS.
3. AN EROSION AND SEDIMENT CONTROL PLAN IS INCLUDED WITH THESE FINAL PLANS FOR APPROVAL BY THE DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES FOR REFERENCE BY THE EROSION AND SEDIMENT CONTROL PERMIT.
4. A "CERTIFIED LAND DISTURBER" (CLD) SHALL BE NAMED IN A LETTER TO THE DIVISION CHIEF OF CONSTRUCTION AND INSPECTION (C&I), DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES 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.
5. THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES, CONSTRUCTION AND INSPECTION (C&I) DIVISION MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENTS OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION. THE RESPONSIBLE CERTIFIED LAND DISTURBER (CLD) SHALL ATTEND THE PRE-CONSTRUCTION MEETING.
6. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND ALL OTHER EROSION AND SEDIMENT CONTROL MEASURES INTENDED TO CONTROL EROSION AND TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY AND SHALL BE MADE FUCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
7. CONSTRUCTION SHALL BE SEQUENCED SUCH THAT GRADING OPERATION CAN BEGIN AND END AS QUICKLY AS POSSIBLE. AREAS NOT TO BE DISTURBED MUST BE CLEARLY FLAGGED OR MARKED.
8. AN INSPECTION BY THE CITY OF ALEXANDRIA IS REQUIRED AFTER INITIAL INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND BEFORE ANY CLEARING OR GRADING CAN BEGIN.
9. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
10. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN THOSE INDICATED ON THESE PLANS INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS, THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE CITY OF ALEXANDRIA.
11. THE DEVELOPER AND CONTRACTORS ARE TO KEEP DENUDED AREAS TO A MINIMUM. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR. ANY STOCKPILED MATERIAL WHICH WILL REMIAIN IN PLACE LONGER THAN 10 DAYS MUST BE SEEDED FOR TEMPORARY VEGETATION AND MULCHED WITH STRAW MUCLH OR OTHERWISE STABILIZED.
12. ALL TEMPORARY EARTH BERMS, DIVERSIONS AND SEDIMENT CONTROL DAMS SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED AS SOON AS POSSIBLE BUT NO LATER THAN 48 HOURS AFTER GRADING.
13. ALL DISTURBED AREAS ARE TO DRAIN APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
14. DURING DEWATERING OPERATIONS, WATER SHALL BE PUMPED THROUGH AN APPROVED FILTERING DEVICE OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY IMPACT FLOWING STREAMS OR OFF-SITE PROPERTY.
15. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES DAILY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT, ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.
16. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES AS NECESSARY TO PREVENT EROSION AND SEDIMENTATION AND AS DETERMINED BY THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL (T&ES) SERVICES OF THE CITY OF ALEXANDRIA.
17. ANY DENUDED SLOPES, EITHER DISTURBED OR CREATED BY THIS PLAN THAT EXCEED 2500 SQUARE FEET SHALL BE SODDED AND PEGGED FOR STABILITY AND EROSION CONTROL. AT THE COMPLETION OF THE PROJECT AND PRIOR TO THE RELEASE OF THE BOND, ALL DISTURBED AREAS SHALL BE STABILIZED PERMANENTLY AND ALL TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL BE REMOVED.
18. ALL VEHICLES SHALL BE CLEANED BEFORE ENTERING ONTO THE PUBLIC RIGHT-OF-WAY.
19. THE WASH WATER FROM THE CONSTRUCTION ENTRANCE SHALL BE FILTERED THROUGH THE PROVIDED SILT FENCE TO ENSURE THAT NO SEDIMENT LADEN RUNOFF IS ALLOWED TO RUNOFF ON TO THE ADJACENT PROPERTY OR THE PUBLIC RIGHT OF WAY.
20. INSTALL SILT FENCE AND TREE PROTECTION, WHERE APPLICABLE.
21. DUST CONTROL SHALL BE ACCOMPLISHED BY TEMPORARY VEGETATIVE COVER AND BY IRRIGATION AS NEEDED.

SEQUENCE OF CONSTRUCTION FOR INSTALLATION OF EROSION AND SEDIMENT CONTROL DEVICES

1. INSTALL PERIMETER EROSION AND SEDIMENT CONTROLS; AND STABILIZE CONSTRUCTION ENTRANCE AS SHOWN ON THIS PLAN.
2. ALL VEGETATION PRESERVATION AND PROTECTION METHODS SHALL BE APPROVED/VERIFIED IN FIELD BY THE CITY ARBORIST PRIOR TO COMMENCEMENT OF ANY GROUND DISTURBING ACTIVITY.
3. INSTALL INLET PROTECTION AT EXISTING STORM DRAIN INLETS AS NECESSARY AND AS SHOWN ON THIS PLAN.
4. INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL PRACTICES AS NECESSARY AND AS DIRECTED BY THE EROSION AND SEDIMENT CONTROL INSPECTOR.
5. CONDUCT DEMOLITION AND CONSTRUCTION ACTIVITIES ACCORDING TO THE APPLICABLE PLANS.
6. AS CONTRIBUTORY DRAINAGE AREAS ARE STABILIZED AND WITH THE PERMISSION OF THE EROSION AND SEDIMENT CONTROL INSPECTOR, REMOVE INDIVIDUAL EROSION AND SEDIMENT CONTROL PRACTICES.
7. UPON COMPLETION OF DEMOLITION, CONSTRUCTION AND LAND DISTURBING ACTIVITIES; PROVIDE PERMANENT STABILIZATION ACCORDING TO APPROVED METHODS AND REMOVE ALL REMAINING EROSION AND SEDIMENT CONTROL MEASURES WITH THE APPROVAL OF THE EROSION AND SEDIMENT CONTROL INSPECTOR.

TABLE 3.31-B
(Revised June 2003)
TEMPORARY SEEDING SPECIFICATIONS
QUICK REFERENCE FOR ALL REGIONS

SEED		
APPLICATION DATES	SPECIES	APPLICATION RATES
Sept. 1 - Feb. 15	50/50 Mix of Annual Ryegrass (lolium multi-florum) & Cereal (Winter) Rye (Secale cereale)	50 -100 (lbs/acre)
Feb. 16 - Apr. 30	Annual Ryegrass (lolium multi-florum)	60 - 100 (lbs/acre)
May 1 - Aug. 31	German Millet	50 (lbs/acre)

FERTILIZER & LIME

- Apply 10-10-10 **fertilizer** at a rate of 450 lbs. / acre (or 10 lbs. / 1,000 sq. ft.)
- Apply **Pulverized Agricultural Limestone** at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)

NOTE:
1 - A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site.
2 - Incorporate the lime and fertilizer into the top 4 – 6 inches of the soil by disking or by other means.
3 - When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin # 4, 2003 Nutrient Management for Development Sites at http://www.dcr.state.va.us/sw/e&s.htm#pubs

TABLE 3.32-D

SITE SPECIFIC SEEDING MIXTURES FOR COASTAL PLAIN AREA

	Total Lbs. Per Acre
Minimum Care Lawn	
- Commercial or Residential	
- Kentucky 31 or Turf-Type Tall Fescue	175-200 lbs.
or	
- Common Bermudagrass **	75 lbs.
High-Maintenance Lawn	
- Kentucky 31 or Turf-Type Tall Fescue	200-250 lbs.
or	
- Hybrid Bermudagrass (seed) **	40 lbs. (unhulled)
or	30 lbs. (hulled)
- Hybrid Bermudagrass (by other vegetative establishment method, see Std. & Spec. 3.34)	
General Slope (3:1 or less)	
- Kentucky 31 Fescue	128 lbs.
- Red Top Grass	2 lbs.
- Seasonal Nurse Crop *	20 lbs.
	150 lbs.
Low Maintenance Slope (Steeper than 3:1)	
- Kentucky 31 Tall Fescue	93-108 lbs.
- Common Bermudagrass **	0-15 lbs.
- Red Top Grass	2 lbs.
- Seasonal Nurse Crop *	20 lbs.
- Sericea Lespedeza **	20 lbs.
	150 lbs.

* Use seasonal nurse crop in accordance with seeding dates as stated below:
February, March through April .... Annual Rye
May 1st through August .... Foxtail Millet
September, October through November 15th ..... Annual Rye
November 16th through January .... Winter Rye

** May through October, use hulled seed. All other seeding periods, use unhulled seed. Weeping Lovegrass may be added to any slope or low-maintenance mix during warmer seeding periods; add 10-20 lbs./acre in mixes.

PERMANENT AND TEMPORARY SEEDING SPECIFICATIONS

SEEDING AND MULCH SPECIFICATION

SEEDING AND MULCH SHALL ACCORDANCE WITH 3.31, 3.32, AND 3.35 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.

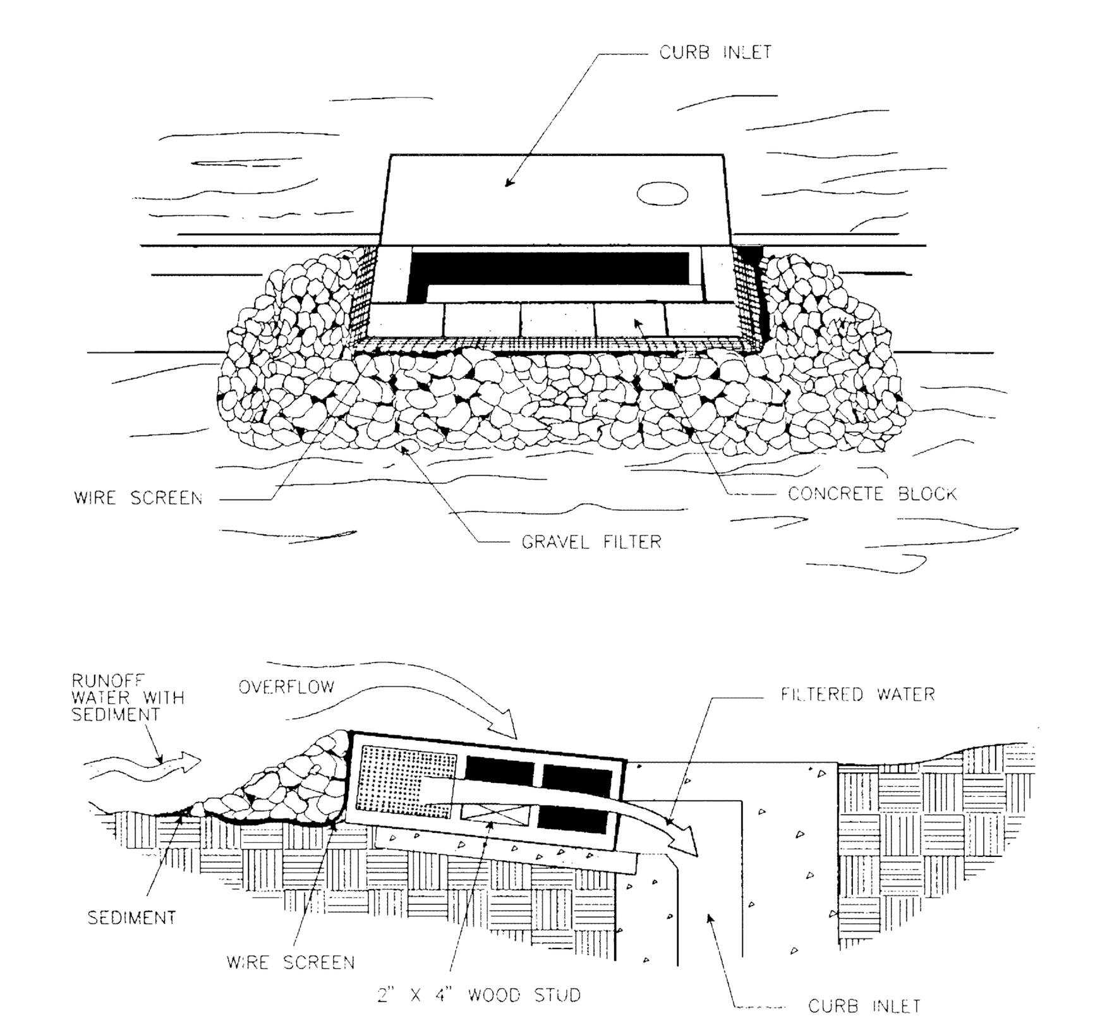
NOTE: THE ABOVE SPECIFICATION INCLUDES SOME INVASIVE SPECIES. UTILIZE THE DEQ SPECIFICATION FOR ALTERANTIVE NATIVE SPECIES FOR SEEDING AND MULCHING ON THIS SITE.
HTTP://WWW.DEQ.VIRIGINIA.GOV/PORTALS/0/DEQ/WATER/PUBLICATIONS/NATIVEINVASIVEFAQ.PDF FOR ALTERNATIVE VIRGINIA NATIVE SPECIES.

GENERAL LAND CONSERVATION NOTES

1. NO DISTURBED AREA WILL BE DENUDED FOR MORE THAN 7 CALENDAR DAYS UNLESS OTHERWISE AUTHORIZED BY THE DIRECTOR OR HIS AGENT.
2. ALL EROSION AND SILTATION CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN GRADING. FIRST AREAS TO BE CLEARED ARE TO BE THOSE REQUIRED FOR THE PERIMETER CONTROLS.
3. ALL STORM AND SANITARY LINES NOT IN STREETS ARE TO BE MULCHED AND SEEDED WITHIN 5 DAYS AFTER BACKFILL. NO MORE THAN 500 FEET ARE TO BE OPEN AT ANY ONE TIME.
4. ELECTRIC POWER, TELEPHONE, AND GAS SUPPLY TRENCHES AREA TO BE COMPACTED, SEEDED, AND MULCHED WITHIN 5 DAYS AFTER BACKFILL.
5. DURING CONSTRUCTION, ALL STORM SEWER INLETS WILL BE PROTECTED BY INLET PROTECTION DEVICES, MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS.
6. ANY DISTURBED AREA NOT COVERED BY NOTE #1 ABOVE AND NOT PAVED, SODDED OR BUILT UPON BY NOVEMBER 1ST, OR DISTURBED AFTER THAT DATE, IS TO BE MULCHED WITH HAY OR STRAW MULCH AT THE RATE OF TWO TONS PER ACRE AND OVERSEEDED NO LATER THAN MARCH 15TH.
7. AT THE COMPLETION OF CONSTRUCTION PROJECTS, AND PRIOR TO THE RELEASE OF THE BOND, ALL TEMPORARY SILTATION AND EROSION CONTROLS SHALL BE REMOVED AND DISTURBED AREAS SHALL BE STABILIZED.
8. IF THE MAXIMUM PERIOD FOR DENUDATION IS EXCEEDED AND ANY AREAS REMAIN EXPOSED WITHOUT COVER OR SURFACE, THE CITY MAY (IN THE EVENT THE DEVELOPER DOES NOT) INSTALL SUCH GROUND COVER OR OTHER STABILIZING DEVICES AND/OR MATERIAL TO THE MINIMUM EXTENT NECESSARY TO ACHIEVE EROSION AND SEDIMENT CONTROL EQUAL TO THAT WHICH WOULD HAVE BEEN FURNISHED BY THE PERMANENT COVER SHOWN ON THE APPROVED PLANS. THE COST OF ANY SUCH TEMPORARY MEASURES TAKEN BY THE CITY SHALL BE BORNE BY THE DEVELOPER AND SHALL BE A CHARGE AGAINST THE CONSERVATION DEPOSIT.
9. TEMPORARY DIVERSIONS, SEEDED, AND MULCHED OR SILT FENCE AND OTHER CONTROL MEASURES AS NECESSARY ARE TO BE PLACED AS INDICATED ON THE DRAWINGS PRIOR TO OR AS THE FIRST STEP IN EXCAVATION.
10. WHERE CONSISTENT WITH JOB SAFETY REQUIREMENTS, ALL EXCAVATED MATERIAL IS TO BE PLACED ON THE UPHILL SIDE OF TRENCHES. NO MATERIAL IS TO BE PLACED IN STREAMBEDS. NO STOCKPILE IS PERMITTED. WHERE SOIL IS PLACED ON DOWNHILL SIDE OF TRENCHES, IT IS TO BE BACKSLOPED TO DRAIN TOWARD THE TRENCH. WHEN NECESSARY TO DEWATER THE TRENCHES, THE PUMP DISCHARGE HOSES MUST OUTLET IN A STABILIZED AREA TO AN EXISTING STORM INLET.
11. ANY SOIL REMOVED FROM THE SITE SHALL BE PLACED IN A PERMITTED SITE, ANY SOIL THAT IS BROUGHT ONTO THE SITE WILL BE OBTAINED FROM A PERMITTED SITE.

1992 3.07

BLOCK & GRAVEL CURB INLET SEDIMENT FILTER

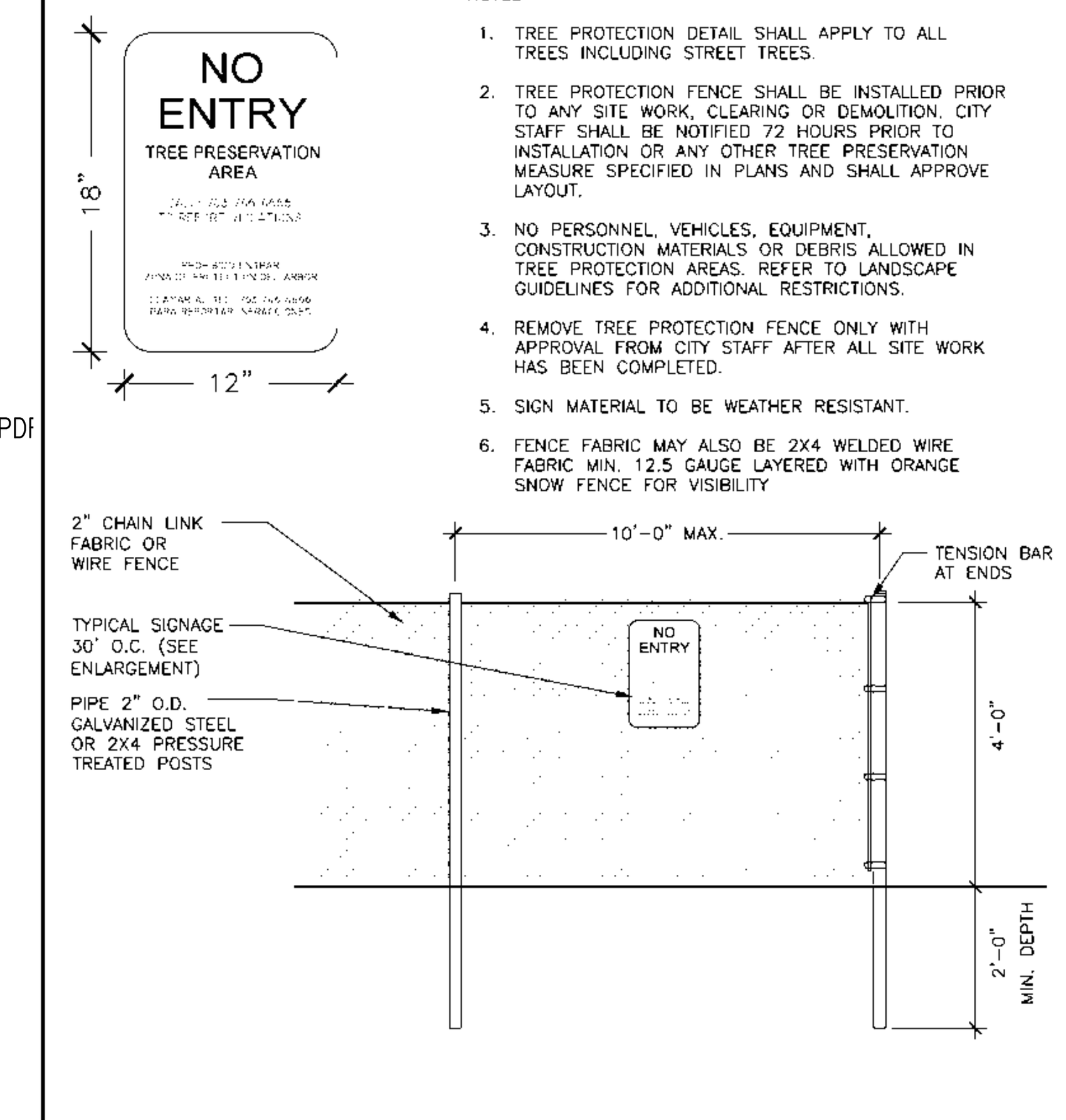


SPECIAL APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE AT CURB INLETS WHERE AN OVERFLOW CAPABILITY IS NECESSARY TO PREVENT EXCESSIVE PONDING IN FRONT OF THE STRUCTURE.

* GRAVEL SHALL BE VDOT #3, #357 OR #5 COARSE AGGREGATE

Source: Va. DSWC Plate 3.07-8



NOTES

1. TREE PROTECTION DETAIL SHALL APPLY TO ALL TREES INCLUDING STREET TREES.
2. TREE PROTECTION FENCE SHALL BE INSTALLED PRIOR TO ANY SITE WORK, CLEARING OR DEMOLITION. CITY STAFF SHALL BE NOTIFIED 72 HOURS PRIOR TO INSTALLATION OR ANY OTHER TREE PRESERVATION MEASURE SPECIFIED IN PLANS AND SHALL APPROVE LAYOUT.
3. NO PERSONNEL, VEHICLES, EQUIPMENT, CONSTRUCTION MATERIALS OR DEBRIS ALLOWED IN TREE PROTECTION AREAS. REFER TO LANDSCAPE GUIDELINES FOR ADDITIONAL RESTRICTIONS.
4. REMOVE TREE PROTECTION FENCE ONLY WITH APPROVAL FROM CITY STAFF AFTER ALL SITE WORK HAS BEEN COMPLETED.
5. SIGN MATERIAL TO BE WEATHER RESISTANT.
6. FENCE FABRIC MAY ALSO BE 2X4 WELDED WIRE FABRIC MIN. 12.5 GAUGE LAYERED WITH ORANGE SNOW FENCE FOR VISIBILITY

(A) TREE PROTECTION FENCE
NOT TO SCALE

OF UPDATES: 00 LAST UPDATED:

CITY OF ALEXANDRIA, VIRGINIA STANDARD LANDSCAPE DETAILS	NOTE:	Source:	TREE PROTECTION FENCE
		Approved by: COA	
		1 OF 1	Date drawn: 01/01/19 — LD 014

GUTTER GATOR™

Sediment Containment

GutterGator™
Curb Inlet Filter

GutterGator™ Advantages

- *7" Tall - allows for overflow*
- *Unique design - ships in 4' box*
- *Easy to transport and install*
- *Easy to assemble*
- *Keeps sediment, trash, and debris out of storm sewers*
- *Easy to clean and reuse*
- *Weight pocket holds unit in place*
- *Unique multi-dimensional outer filter with rigid inner frame allows high flow rates*
- *Low profile to curb helps prevent damage from vehicles*
- *Tie back straps for additional support*
- *Custom sizes available*

GutterGator™
The GutterGator™ is the latest inlet filter technology available from ACF Environmental.

Designed for curb inlets, GutterGator™ is designed for high flow volumes while maintaining maximum sediment retention.

With its unique multi-dimensional outer filter combined with a rigid inner frame, the GutterGator™ maintains a low profile to the curb preventing damage.

Save time and money! GutterGator™ installs in seconds, removes in minutes and is reusable. Stop sediment in its tracks with GutterGator!

Call ACF Environmental for more information.

GutterGator Specification
For Curb Gutter Storm Drains

1.0 Description

1.1 This work shall consist of furnishing, placing, maintaining and removing the GutterGator sediment control device as directed by the engineer and as shown on the contract drawings. The GutterGator sediment control system manufactured by:

ACF Environmental Inc.
2831 Cardwell Road
Richmond, Virginia 23234
Phone: 800-448-3636 • Fax: 804-743-7779
www.acfenvironmental.com

2.0 Materials

2.1 GUTTERGATOR

2.1.1 The GutterGator will be manufactured to 3' molds in 3', 6', 9', 12', 15' and 18' lengths and a minimum of twenty-four (24) inches longer than the curb inlet opening. This will allow for sufficient length to cover the inlet with twelve (12) inches beyond the inlet on both ends

3.0 Construction Sequence

3.1 General

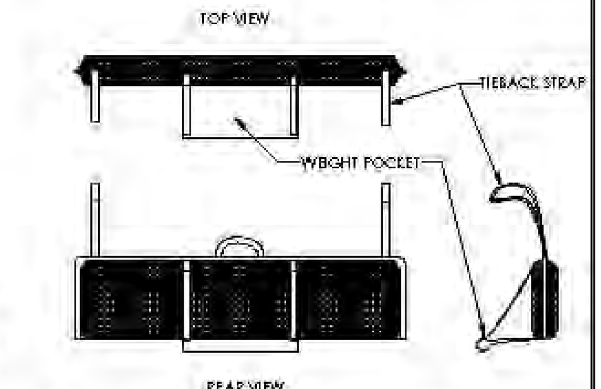
3.1.1 Install the GutterGator in front of the curb inlet opening. Drop 7lb weight sock into inlet opening, secure tie back straps, if applicable. Each end of the GutterGator should overlap the curb inlet approximately 12".

3.1.2 The GutterGator should be cleaned if a visual inspection shows sediment and debris build up around the GutterGator.

3.1.3 To remove the GutterGator, lift out of curb opening with provided carrying handle.

3.1.4 Clean as needed. Store out of direct sunlight.

3.1.5 Ponding is likely if sediment is not removed regularly. Inspection of GutterGator should be on a regular basis and immediately after wet weather events.



INLET PROTECTION DETAIL
NOT TO SCALE

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
Engineers • Surveyors • Planners • Landscape Architects • Arborists
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

DATE: 11/08/2021, 8/4/2022, 10/05/2022, 11/16/2022
DRAWN: RH / AV
CHECKED: AV
SCALE: NONE

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/16/2022
PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

4 EAST OAK STREET
REDEEMED CHURCH OF CHRIST
GRADING PLAN
CITY OF ALEXANDRIA, VIRGINIA

EROSION AND SEDIMENT CONTROL PLAN - NOTES AND DETAILS

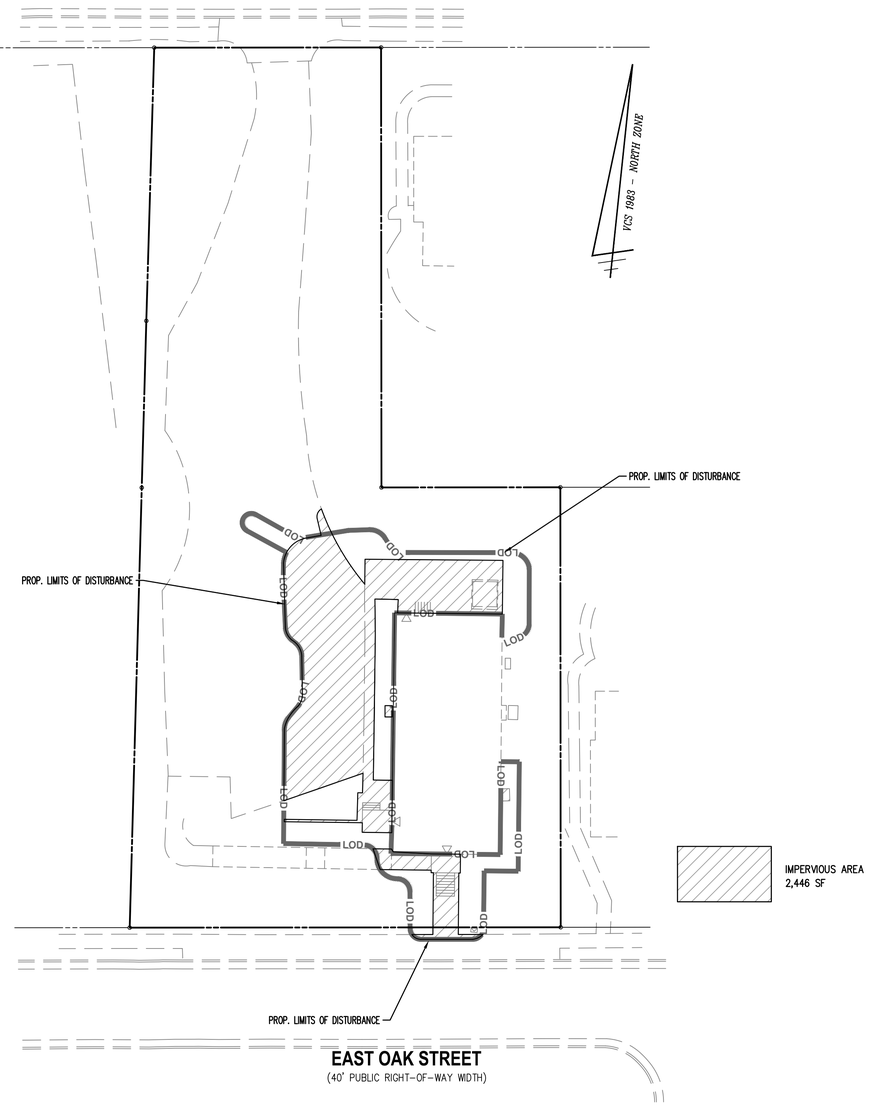
APPROVED
SPECIAL USE PERMIT NO. 2021-0016
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. ________

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED ________
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

ESI
Peer Review



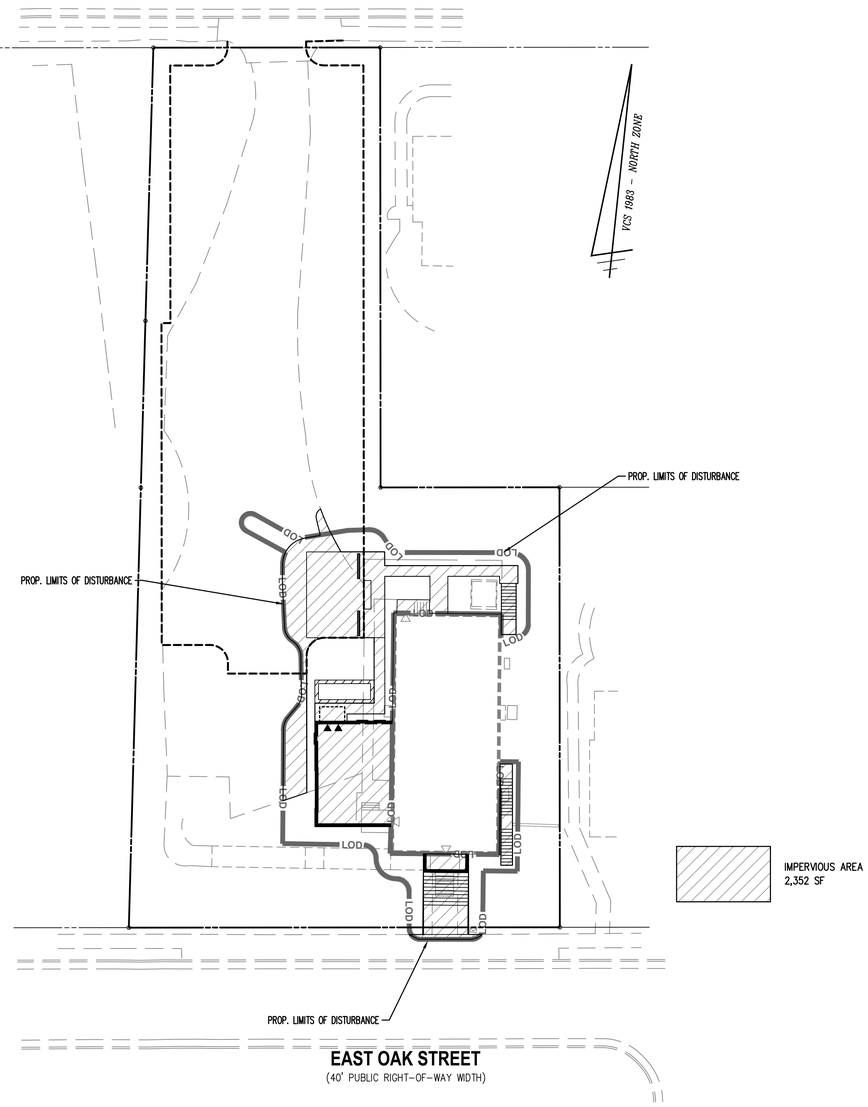
EXISTING CONDITIONS

STORMWATER MANAGEMENT COMPUTATIONS

IMPERVIOUS AREA (SF)=	2,446
PERVIOUS AREA (SF)=	1,546
TOTAL AREA (SF)=	3,992

CN = (2,446 X 98 + 1,596 X 80)/3,992 = 91.03

Q2 = 0.330 CFS
Q10 = 0.553 CFS



PROPOSED CONDITIONS

STORMWATER MANAGEMENT COMPUTATIONS

IMPERVIOUS AREA (SF)=	2,352
PERVIOUS AREA (SF)=	1,640
TOTAL AREA (SF)=	3,992

CN = (2,352 X 98 + 1,640 X 80)/3,992 = 90.60

Q2 = 0.326 CFS
Q10 = 0.549 CFS

NOTE:

1. REFER TO C-0702 FOR STORMWATER COMPUTATIONS.
2. PROPOSED RELEASE RATES NO NOT ACCOUNT FOR ANY ADJUSTMENTS RESULTING FROM PROPOSED STORMWATER MANAGEMENT MEASURES.

TOTAL DISTURBED AREA = 3,992 SF OR 0.091 ACRES

20 0 10 20 40 80
(IN FEET)
1 INCH = 20'

ESI
Peer Review

WALTER L. PHILLIPS INCORPORATED
ESTABLISHED 1945
Engineers • Surveyors • Planners • Landscape Architects • Arborists
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

SCALE: 1" = 20'
DATE: 11/08/2021, 8/4/2022, 10/05/2022, 11/16/2022
DRAWN: RH / AV
CHECKED: AV

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
PROFESSIONAL ENGINEER
11/16/2022

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

4 EAST OAK STREET
REDEEMED CHURCH OF CHRIST
GRADING PLAN
CITY OF ALEXANDRIA, VIRGINIA

IMPERVIOUS AREA ANALYSIS

APPROVED
SPECIAL USE PERMIT NO. 2021-0016
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

File No. ALEX Tax Map No. 053.04 Job No. 21-094 Cadd Dwg. File: Q:\sdskproj\21094\dwg\engineering\Grading Plan\21094C-0701.dwg

SHEET: C-0701

STORMWATER MANAGEMENT COMPUTATIONS

EXISTING CONDITIONS

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TOTAL AREA (SF)= 3,992

CN = (2,352 X 98 + 1,640 X 80)/3,992 = 90.60

Q2 = 0.326 CFS
Q10 = 0.549 CFS

WATER QUALITY VOLUME COMPUTATIONS

PROJECT DESCRIPTION

DEVELOPMENT OR [REDEVELOPMENT]

DRAINAGE AREA	IMPERVIOUS	PERVIOUS	TOTAL
SITE AREA (LIMITS OF DISTURBANCE)	0.05 AC	0.04 AC	0.091 AC
ON-SITE TREATED	0.03 AC	0	0.03 AC
OFF-SITE TREATED	0 AC	0 AC	0 AC
TOTAL IMPERVIOUS AREA TREATED	0.03 AC		0.03 AC
ON-SITE IMPERVIOUS AREAS DISCONNECTED BY A VEGETATED BUFFER	0 AC		0 AC
TOTAL IMPERVIOUS AREA TREATED	0.03 AC		0.03 AC

WATER TREATMENT

BMP TYPE	AREA TREATED BY BMP (ACRES)	IMPERVIOUS AREA TREATED BY BMP (ACRES)	PERVIOUS AREA TREATED BY BMP (ACRES)	BMP EFFICIENCY (%)	PHOSPHORUS REMOVAL (LBS)
LEVEL 1 PERM. PVMT.	0.01 AC	0.01 AC	0 AC	45%	0.01
LEVEL 1 URBAN BIORETENTION	0.02 AC	0.02 AC	0 AC	65%	0.03

MISCELLANEOUS

TOTAL WQV TREATED: YES [NO]
DETENTION ON SITE: YES [NO]

PROJECT IS WITHIN WHICH WATERSHED? HOOFS RUN
DISCHARGES TO WHICH BODY OF WATER? SEPARATED STORM SYSTEM
WQV TREATMENT REQUIRED= 1,816 CF/AC OF IMPERVIOUS AREA
= 1,816 X 0.05 AC
= 91 CF (0.002 AC*FT)
% WQV PROVIDED= 1,816 CF/AC X 0.05 AC
= 55 CF (0.0001 AC*FT) =60.4% WQV PROVIDED

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945

October 5, 2022

Ms. Melanie Mason
Transportation and Environmental Services
City of Alexandria
301 King Street, Room 3000
Alexandria, VA 22314

Re: Redeemed Church of Christ, 4 East Oak Street

Dear Ms. Mason,

This letter shall serve to request an equivalency option under section 13-110(A)(2) of the municipal zoning ordinance to provide a monetary contribution to the Alexandria Water Quality Improvement Fund in lieu of treating the default water quality volume on site.

Due to the limited nature of the proposed improvements as well as other site constraints, a portion of impervious area for the site cannot be captured and treated. The post development impervious area for the site is 2,352 sq. ft. and 1,459 sq. ft. will be captured and treated. The site will comply with all requirements for phosphorus removal. However, 893 sq. ft. (37.9%) of the post-development impervious area cannot be captured. The applicant therefore requests to pay into the Alexandria Water Quality Improvement Fund for this untreatable area.

The uncaptured area includes 893 sq. ft. of impervious surface and equates to a required fee of $1,786 ($2/sq. ft.).

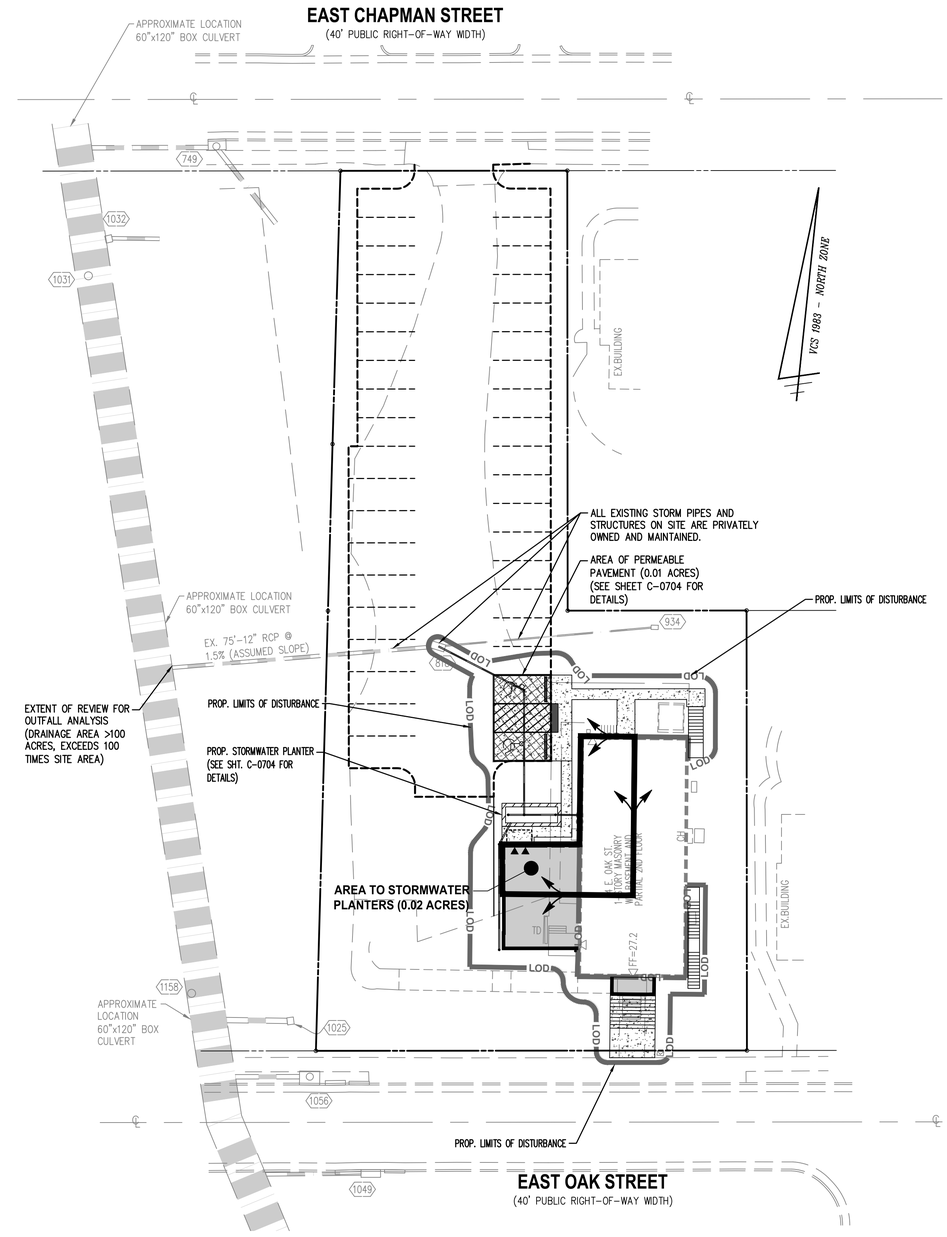
Should you have any questions or require additional information, please feel free to contact me at 703-532-6163 or via email at avinson@wlpinc.com.

Sincerely,

Aaron M. Vinson, P.E.
Director of Engineering

CIVIL ENGINEERS
LAND SURVEYORS
PLANNERS
LANDSCAPE ARCHITECTS
ARBORISTS

207 PARK AVENUE
FALLS CHURCH, VA 22046
PHONE: (703) 532-6163
FAX: (703) 533-1301
WWW.WLPINC.COM



STORM SEWER COMPUTATIONS

FROM POINT	TO POINT	AREA "A" ACRES	C FACTOR C	CA INCRE-MENT	CA ACCUM-ULATED	INLET TIME MIN	RAIN FALL IN/HR	RUNOFF Q INCRE-MENT C.F.S.	RUNOFF Q10 C.F.S.	INVERT ELEV'S UPPER END	INVERT ELEV'S LOWER END	LENGTH FT.	SLOPE FT./FT.	MANNING'S 'n'	DIA. IN.	CAPA-CITY C.F.S.
934	818	0.05	0.45	0.02	0.02	5.00	9.00	0.20	0.20	20.01	18.70	60	0.0218	0.013	4	0.28
818	CULVERT	0.45	0.45	0.20	0.23	5.00	9.00	1.82	2.03	18.70	17.57	75	0.0151	0.011	12	5.14

20 0 10 20 40 80
(IN FEET)
1 INCH = 20'

STORMWATER OUTFALL NARRATIVE

STORMWATER RUNOFF FROM THE AREAS OF DISTURBANCE WILL SHEET FLOW INTO LAWN AND GRAVEL AREAS. A SMALL AMOUNT OF IMPERVIOUS AREA WILL BE COLLECTED IN THE UNDERDRAIN SYSTEM OF PERMEABLE PAVEMENT AND STORMWATER PLANTER AND THEN DIRECTED INTO THE EXISTING STORM SEWER SYSTEM. THE ONSITE STORM SEWER SYSTEM RUNS WEST WHERE IT CONNECTS TO AN EXISTING 66" x 120" BOX CULVERT IN COMMONWEALTH AVENUE. THE EXISTING BOX CULVERT HAS A DRAINAGE AREA THAT FAR EXCEEDS 100 TIMES THE DISTURBED AREA OF 0.091 ACRES. THEREFORE THE EXTENT OF REVIEW CONCLUDES AT THE POINT WHERE THE STORM PIPE FROM OUR SITE ENTERS THE BOX CULVERT.

CHANNEL PROTECTION ANALYSIS

STORMWATER RUNOFF FROM THE SITE IS CONVEYED BY A MANMADE PIPE SYSTEM WHICH HAS BEEN ANALYZED TO A POINT WHERE THE WATERSHED IS AT LEAST 100 TIMES THE SITE AREA. THE RECEIVING CONVEYANCE SYSTEM CONSISTS OF NON-EROSIVE MATERIAL TO THE EXTENT OF THE LIMITS OF ANALYSIS FOR CHANNEL PROTECTION. DUE TO THE THE EXISTING PIPE DIAMETER AND SLOPE OF DOWNSTREAM PIPES AND BASED ON THE EXPECTED EXISTING AND PROPOSED FLOWS, IT IS ESTIMATED THAT THE EXISTING DOWNSTREAM STORM SEWER SYSTEM DOES NOT EXPERIENCE EROSIVE VELOCITIES DURING THE 2-YR STORM EVENT. AS DEMONSTRATED BY THE COMPUTATIONS ON THIS SHEET, THE ONSITE 2-YEAR, 24-HOUR PEAK FLOW RATE WILL DECREASE AS A RESULT OF THIS DEVELOPMENT. THEREFORE, IN ACCORDANCE WITH Z.O. 13-109(F)(1)(a)(i), IT IS THE ENGINEER'S OPINION THAT THE OUTFALL IS ADEQUATE FOR CHANNEL PROTECTION WITHIN THE LIMITS OF ANALYSIS.

FLOOD CONTROL ANALYSIS

AS SHOWN BY THE STORMWATER COMPUTATIONS ON THIS SHEET, THE 10YR, 24 HR STORM EVENT PEAK RATE OF RUNOFF WILL BE REDUCED RELATIVE TO PRE-DEVELOPMENT CONDITIONS. THE EXISTING STORM SEWER CONVEYING RUNOFF FROM THIS SITE IS NOT BELIEVED TO EXPERIENCE LOCALIZED FLOODING. THEREFORE, THE ONSITE 10 YEAR-24 HOUR PEAK FLOW RATE SHALL BE RELEASED AT A RATE THAT DOES NOT CAUSE THE DOWNSTREAM SYSTEM TO BECOME INADEQUATE.

COMPUTATIONS PROVIDED ON THIS SHEET SHOW THE OUTFALL SYSTEM IS ADEQUATE AND DOES NOT EXPERIENCE FLOODING FOR THE 10-YEAR STORM TO A POINT WHERE THE EXTENT OF REVIEW IS REACHED. THEREFORE, IN ACCORDANCE WITH Z.O. 13-109(F)(2)(a)(i) AND (ii), IT IS THE ENGINEER'S OPINION THAT THE OUTFALL IS ADEQUATE FOR FLOOD PROTECTION WITHIN THE LIMITS OF ANALYSIS.

STORMWATER MANAGEMENT NARRATIVE

CURRENTLY STORMWATER FROM THE SITE FLOWS TO EXISTING INLETS WHERE IT IS THEN CONVEYED TO A REGIONAL CULVERT IN COMMONWEALTH AVENUE. ONCE DEVELOPED, THE PRE-DEVELOPMENT DRAINAGE PATTERNS WILL CONTINUE, WITH A DECREASE IN IMPERVIOUS AREA AND STORMWATER RUNOFF. A PORTION OF STORMWATER RUNOFF WILL BE TREATED BY PERMEABLE PAVEMENT. STORMWATER WILL THEN PASS THROUGH THE SITE BEFORE DISCHARGING INTO THE PUBLIC STORM SEWER SYSTEM LOCATED WITHIN COMMONWEALTH AVENUE.

AS SHOWN ON THE COMPUTATIONS ON THIS SHEET, THE PRE-DEVELOPMENT CURVE NUMBER FOR THE SITE (LIMITS OF DISTURBANCE) IS 91.03, WHICH GENERATES A PEAK RATE OF RUNOFF OF 0.330 CFS AND 0.553 CFS FOR THE 2 AND 10 YEAR, 24 HOUR STORM EVENTS, RESPECTIVELY. THE POST-DEVELOPMENT UNADJUSTED CURVE NUMBER IS 90.60, RESULTING IN A PEAK RATE OF RUNOFF OF 0.326 CFS AND 0.549 CFS FOR THE 2 AND 10 YEAR, 24 HOUR STORM EVENTS.

SINCE THE POST-DEVELOPMENT PEAK RATE OF RUNOFF WILL BE REDUCED FROM THE PRE-DEVELOPMENT RATE, AND THE OUTFALL IS ADEQUATE FOR BOTH CHANNEL AND FLOOD PROTECTION, THE STORMWATER QUANTITY REQUIREMENTS OF 13-109(F)(1) AND 13-109(F)(2) ARE MET.

THE PROPOSED BMP FACILITIES SHALL BE OWNED AND MAINTAINED PRIVATELY. A MAINTENANCE AGREEMENT SHALL BE RECORDED WITHIN THE CITY OF ALEXANDRIA'S LAND RECORDS.

WATER QUALITY NARRATIVE

AS SHOWN IN THE COMPUTATIONS ON SHEET C-0702, THE AMOUNT OF IMPERVIOUS AREA ON SITE WILL DECREASE AS A RESULT OF THE PROPOSED DEVELOPMENT. THE SITE AREA USED FOR THE ANALYSIS IS THE LIMITS OF DISTURBANCE (0.091 AC), AS SHOWN ON THE LIMITS OF DISTURBANCE MAP AND COMPUTED USING THE DEQ VRRM SPREADSHEET, BOTH SHOWN ON C-0700 SHEETS.

THE REQUIRED PHOSPHOROUS REMOVAL TO BE PROVIDED ON SITE SHALL BE 0.01 LB/YR. THE REQUIRED PHOSPHOROUS REDUCTION IS PROPOSED TO BE ACHIEVED BY TREATING APPROXIMATELY 0.01 AC ON SITE WITH LEVEL 1 PERMEABLE PAVEMENT AND 0.02 AC OF ROOF AREA WITH A STORMWATER PLANTER.

THE COMPUTED PHOSPHOROUS REMOVAL ON SITE IS EQUAL TO 0.01 LB/YR, WHICH SATISFIES WATER QUALITY CONTROL REQUIREMENTS OF SECTION 13-109 OF THE CITY OF ALEXANDRIA ZONING ORDINANCE. AN ELECTRONIC COPY OF THE DEQ VRRM SPREADSHEET HAS BEEN PROVIDED WITH THIS SUBMISSION,

IT IS EXPECTED THAT 52% OF THE WATER QUALITY VOLUME WILL BE TREATED WITH THE PROPOSED MEASURES DESCRIBED ABOVE. THEREFORE, RELIEF FROM THE CITY'S WATER QUALITY VOLUME REQUIREMENT IS REQUESTED, AND A CONTRIBUTION TO THE CITY'S WATER QUALITY EQUIVALENCY FUND IS PROPOSED.

ALL PROPOSED BMP FACILITIES SHALL BE OWNED AND MAINTAINED PRIVATELY.

MARINE CLAY NOTE

IN ACCORDANCE WITH THE CITY OF ALEXANDRIA'S MARINE CLAY MAP, THERE ARE NO MARINE CLAYS ON THE SUBJECT PROPERTY.

STORMWATER BEST MANAGEMENT PRACTICES BMP NOTES

1. THE STORMWATER BEST MANAGEMENT PRACTICES (BMP) REQUIRED FOR THIS PROJECT SHALL BE CONSTRUCTED AND INSTALLED UNDER THE DIRECT SUPERVISION OF THE DESIGN ENGINEER OR HIS DESIGNATED REPRESENTATIVE. THE DESIGN ENGINEER SHALL MAKE A WRITTEN CERTIFICATION TO THE CITY THAT THE BMPS ARE CONSTRUCTED AND INSTALLED AS DESIGNED AND IN ACCORDANCE WITH THE APPROVED SITE PLAN. IN ADDITION, AGGREGATE LAYERS AND COLLECTOR PIPES MAY NOT BE INSTALLED UNLESS THE DESIGN ENGINEER OR HIS REPRESENTATIVE IS PRESENT.
2. THE CONTRACTOR SHALL FURNISH THE CITY WITH AN OPERATION AND MAINTENANCE MANUAL FOR ALL BMPS ON THE PROJECT. THE MANUAL SHALL INCLUDE AN EXPLANATION OF THE FUNCTIONS AND OPERATIONS OF EACH BMP AND ANY SUPPORTING UTILITIES, CATALOG CUTS ON ANY MECHANICAL OR ELECTRICAL EQUIPMENT AND A SCHEDULE OF ROUTINE MAINTENANCE FOR THE BMPS AND SUPPORTING EQUIPMENT.

CONSTRUCTION INSPECTION

CONSTRUCTION INSPECTION CHECKLIST AND ASSOCIATED PHOTOGRAPHIC DOCUMENTATION MUST BE COMPLETED FOR EACH STORMWATER BEST MANAGEMENT PRACTICE (BMP) AND DETENTION FACILITY DURING CONSTRUCTION. PRIOR TO THE RELEASE OF THE PERFORMANCE BOND, THE APPLICANT MUST SUBMIT ALL DOCUMENTS REQUIRED BY THE CITY OF ALEXANDRIA AS-BUILT STORMWATER REQUIREMENTS TO THE CITY INCLUDING AS BUILT PLANS, CAD DATA, BMP CERTIFICATIONS AND COMPLETED CONSTRUCTION INSPECTION CHECKLIST. (SWM)

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DRAWN: RH / AV | CHECKED:
DATE: 11/08/2021, 8/4/2022, 10/05/2022, 11/16/2022
SCALE: 1" = 20'

COMMONWEALTH OF VIRGINIA AARON M. VINSON No.041851 PROFESSIONAL ENGINEER 11/16/2022

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

4 EAST OAK STREET
REDEEMED CHURCH OF CHRIST
GRADING PLAN
CITY OF ALEXANDRIA, VIRGINIA

APPROVED
SPECIAL USE PERMIT NO. 2021-0016
DEPARTMENT OF PLANNING & ZONING

DIRECTOR
DEPARTMENT OF TRANSPORTATION & ENVIRONMENT
SITE PLAN No. _____

DIRECTOR

CHAIRMAN, PLANNING COMMISSION

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO.

ESI Peer Review

SHEET:

File No. ALEX Tax Map No. 053.04 Job No. 21-094 Cadd Dwg. File: Q: \sdskproj\21094\dwg\engineering\Grading Plan\21094C-0702.dwg

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

○ 2011 BMP Standards and Specifications ⊙ 2013 Draft BMP Standards and Specifications

Project Name: Redeemed Church of Christ
Date: 10/1/2022
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)* → 0.09

Maximum reduction required: 10%
The site's net increase in impervious cover (acres) is: 0.002
Post-Development TP Load Reduction for Site (lb/yr): 0.01

Check:
BMP Design Specifications List: 2013 Draft Stds & Specs
Linear project? No
Land cover areas entered correctly? ✓
Total disturbed area entered? ✓

Pre-ReDevelopment Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
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				0.06	0.06
Impervious Cover (acres)				0.04	0.04
					0.09

Post-Development Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
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				0.05	0.05
Impervious Cover (acres)				0.04	0.04
Area Check	OK.	OK.	OK.	OK.	0.09

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
Target TP Load (lb/acre/yr)	0.41
Pj (unitless correction factor)	0.90

Runoff Coefficients (Rv)

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

LAND COVER SUMMARY -- PRE-REDEVELOPMENT

Land Cover Summary-Pre		
Pre-ReDevelopment	**Listed**	**Adjusted[1]**
Forest/Open Space Cover (acres)	0.00	0.00
Weighted Rv(forest)	0.00	0.00
% Forest	0%	0%
Managed Turf Cover (acres)	0.06	0.05
Weighted Rv(turf)	0.25	0.25
% Managed Turf	62%	61%
Impervious Cover (acres)	0.04	0.04
Rv(impervious)	0.95	0.95
% Impervious	38%	39%
Total Site Area (acres)	**0.09**	**0.09**
Site Rv	**0.52**	**0.53**

Treatment Volume and Nutrient Load

Pre-ReDevelopment Treatment Volume (acre-ft)	0.0039	0.0039
Pre-ReDevelopment Treatment Volume (cubic feet)	172	170
Pre-ReDevelopment TP Load (lb/yr)	**0.11**	**0.11**
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	1.18	1.20
Baseline TP Load (lb/yr) (**0.41 lbs/acre/yr** applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		*0.04*

LAND COVER SUMMARY -- POST DEVELOPMENT

Land Cover Summary-Post (Final)	
Post ReDev. & New Impervious	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.05
Weighted Rv (turf)	0.25
% Managed Turf	59%
Impervious Cover (acres)	0.04
Rv(impervious)	0.95
% Impervious	41%
Final Site Area (acres)	**0.09**
Final Post Dev Site Rv	**0.53**

Land Cover Summary-Post	
Post-ReDevelopment	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.05
Weighted Rv (turf)	0.25
% Managed Turf	61%
ReDev. Impervious Cover (acres)	0.04
Rv(impervious)	0.95
% Impervious	39%
Total ReDev. Site Area (acres)	**0.09**
ReDev Site Rv	**0.53**

Land Cover Summary-Post	
Post-Development New Impervious	
New Impervious Cover (acres)	0.00
Rv(impervious)	0.95

Treatment Volume and Nutrient Load

Final Post-Development Treatment Volume (acre-ft)	0.0041	**Post-ReDevelopment Treatment Volume (acre-ft)**	0.0039	**Post-Development Treatment Volume (acre-ft)**	0.0002
Final Post-Development Treatment Volume (cubic feet)	177	**Post-ReDevelopment Treatment Volume (cubic feet)**	170	**Post-Development Treatment Volume (cubic feet)**	7
Final Post-Development TP Load (lb/yr)	**0.11**	**Post-ReDevelopment Load (TP) (lb/yr)***	**0.11**	**Post-Development TP Load (lb/yr)**	**0.00**
Final Post-Development TP Load per acre (lb/acre/yr)	1.22	Post-ReDevelopment TP Load per acre (lb/acre/yr)	1.20		
		Max. Reduction Required (Below Pre-ReDevelopment Load)	**10%**		

Drainage Area A

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)				0.05	0.05	0.25
Impervious Cover (acres)				0.04	0.04	0.95
				Total	0.09	

CLEAR BMP AREAS

Total Phosphorus Available for Removal in D.A. A (lb/yr) 0.11
Post Development Treatment Volume in D.A. A (ft³) 177

Stormwater Best Management Practices (RR = Runoff Reduction)

--Select from dropdown lists--

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft³)	Runoff Reduction (ft³)	Remaining Runoff Volume (ft³)	Total BMP Treatment Volume (ft³)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
3. Permeable Pavement (RR)													
3.a. Permeable Pavement #1 (Spec #7)	45		0.01	0	16	19	34	25	0.00	0.02	0.01	0.01	
3.b. Permeable Pavement #2 (Spec #7)	75				0	0	0	25		0.00	0.00	0.00	
6. Bioretention (RR)													
6.a. Bioretention #1 or Micro-Bioretention #1 or Urban Bioretention (Spec #9)	40		0.02	0	28	41	69	25	0.00	0.04	0.02	0.02	
6.b. Bioretention #2 or Micro-Bioretention #2 (Spec #9)	80			0	0	0	0	50	0.00	0.00	0.00	0.00	

TOTAL IMPERVIOUS COVER TREATED (ac) 0.03 AREA CHECK: OK.
TOTAL MANAGED TURF AREA TREATED (ac) 0.00 AREA CHECK: OK.
TOTAL RUNOFF REDUCTION IN D.A. A (ft³) 43

TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. A (lb/yr) 0.11
TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr) 0.04
TOTAL PHOSPHORUS REMAINING AFTER APPLYING RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr) 0.07

SEE WATER QUALITY COMPLIANCE TAB FOR SITE COMPLIANCE CALCULATIONS

TOTAL IMPERVIOUS COVER TREATED (ac) 0.03 AREA CHECK: OK.
TOTAL MANAGED TURF AREA TREATED (ac) 0.00 AREA CHECK: OK.

TOTAL PHOSPHORUS REMOVAL REQUIRED ON SITE (lb/yr) 0.01

TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. A (lb/yr) 0.11
TOTAL PHOSPHORUS REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr) 0.00
TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr) 0.04
TOTAL PHOSPHORUS LOAD REDUCTION ACHIEVED IN D.A. A (lb/yr) 0.04
TOTAL PHOSPHORUS REMAINING AFTER APPLYING BMP LOAD REDUCTIONS IN D.A. A (lb/yr) 0.07

SEE WATER QUALITY COMPLIANCE TAB FOR SITE COMPLIANCE CALCULATIONS

NITROGEN REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr) 0.29
NITROGEN REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr) 0.00
TOTAL NITROGEN REMOVED IN D.A. A (lb/yr) 0.29

Site Results (Water Quality Compliance)

Area Checks	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FOREST/OPEN SPACE (ac)	0.00	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER (ac)	0.04	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	0.03	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.05	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.00	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft³) 177

Runoff Reduction Volume and TP By Drainage Area

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	TOTAL
RUNOFF REDUCTION VOLUME ACHIEVED (ft³)	43	0	0	0	0	43
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	0.11	0.00	0.00	0.00	0.00	0.11
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.04	0.00	0.00	0.00	0.00	0.04
TP LOAD REMAINING (lb/yr)	0.07	0.00	0.00	0.00	0.00	0.07
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.29	0.00	0.00	0.00	0.00	0.29

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr) 0.11
TP LOAD REDUCTION REQUIRED (lb/yr) 0.01
TP LOAD REDUCTION ACHIEVED (lb/yr) 0.04
TP LOAD REMAINING (lb/yr) 0.07
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr): 0.00 **
** TARGET TP REDUCTION EXCEEDED BY 0.02 LB/YEAR **

Total Nitrogen (For Information Purposes)

POST-DEVELOPMENT LOAD (lb/yr) 0.79
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr) 0.29
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr) 0.50

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DRAWN: RHF/ AV CHECKED:
DATE: 11/08/2021, 8/4/2022, 10/05/2022, 11/16/2022
SCALE: NONE

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 PROFESSIONAL ENGINEER 11/16/2022

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

4 EAST OAK STREET
REDEEMED CHURCH OF CHRIST
GRADING PLAN
CITY OF ALEXANDRIA, VIRGINIA

VRRM COMPLIANCE SPREADSHEET

APPROVED
SPECIAL USE PERMIT NO. 2021-0016
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

ESI Peer Review

File No. ALEX Tax Map No. 053.04 Job No. 21-094 Cadd Dwg. File: Q: \sdskproj\21094\dwg\engineering\Grading Plan\21094C-0703.dwg

SHEET: C-0703

PRE-DEVELOPMENT HYDROGRAPHS

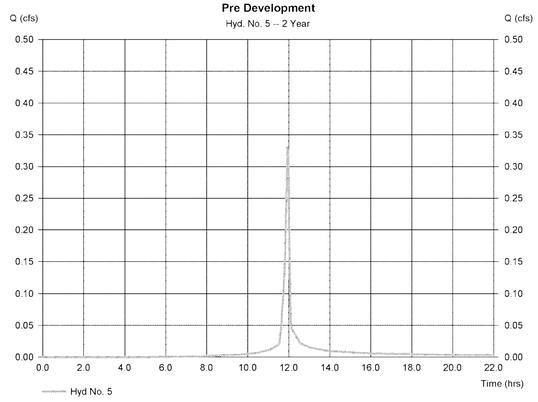
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020 — Tuesday, 10 / 4 / 2022

Hyd. No. 5

Pre Development

Hydrograph type	= SCS Runoff	Peak discharge	= 0.330 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 691 cuft
Drainage area	= 0.091 ac	Curve number	= 91
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.17 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



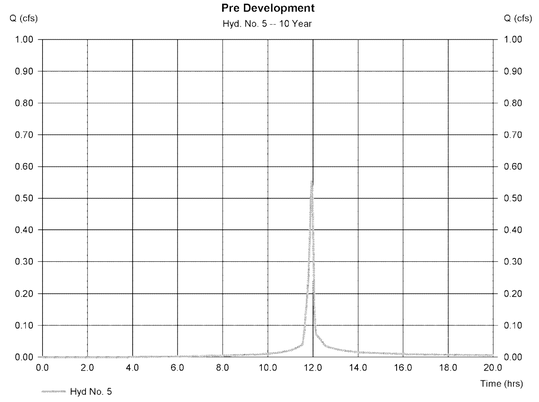
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020 — Tuesday, 10 / 4 / 2022

Hyd. No. 5

Pre Development

Hydrograph type	= SCS Runoff	Peak discharge	= 0.553 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 1,194 cuft
Drainage area	= 0.091 ac	Curve number	= 91
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 4.87 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



POST-DEVELOPMENT HYDROGRAPHS

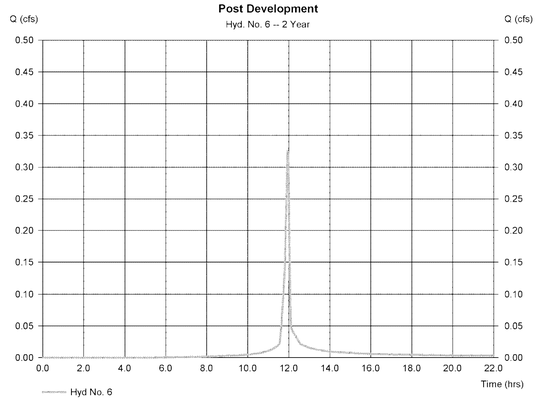
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020 — Tuesday, 10 / 4 / 2022

Hyd. No. 6

Post Development

Hydrograph type	= SCS Runoff	Peak discharge	= 0.326 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 679 cuft
Drainage area	= 0.091 ac	Curve number	= 90.6
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.17 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



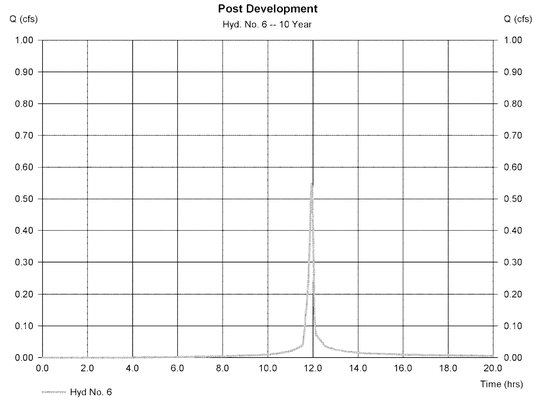
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020 — Tuesday, 10 / 4 / 2022

Hyd. No. 6

Post Development

Hydrograph type	= SCS Runoff	Peak discharge	= 0.549 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 1,181 cuft
Drainage area	= 0.091 ac	Curve number	= 90.6
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 4.87 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



VA DEQ STORMWATER DESIGN SPECIFICATION NO. 7 — **PERMEABLE PAVEMENT**

- Micro-scale and small-scale permeable pavement installations are acceptable if they are designed according to the Level 1 criteria (i.e., they possess an impermeable bottom liner and an underdrain).
- The stone used in the reservoir layer should be carbonate in nature to provide extra chemical buffering capacity.

Table 7.6. Material Specifications for Underneath the Pavement Surface

Material	Specification	Notes
Bedding Layer	PC: None PA: 2 in. of No. 57 stone IP: 2 in. of No. 8 stone over 4 inches of No. 57 stone	ASTM D448 size No. 8 stone (e.g. 3/8 to 3/16 inch in size). Should be washed and clean and free of all fines.
Reservoir Layer	PC: No. 57 stone PA: No. 2 stone IP: No. 2, 3, or 4 stone	ASTM D448 size No. 57 stone (e.g. 1 1/2 to 1/2 inch in size); No. 2 Stone (e.g. 3 inch to 3/4 inch in size). Depth is based on the pavement structural and hydraulic requirements. Should be washed and clean and free of all fines.
Underdrain	Use 4 to 6 inch diameter perforated PVC (AASHTO M 252) pipe, with 3/8-inch perforations at 6 inches on center; each underdrain installed at a minimum 0.5% slope located 20 feet or less from the next pipe (or equivalent corrugated HDPE may be used for smaller load-bearing applications). Perforated pipe installed for the full length of the permeable pavement cell, and non-perforated pipe, as needed, is used to connect with the storm drain system. T's and Y's installed as needed, depending on the underdrain configuration. Extend cleanout pipes to the surface with vented caps at the Ts and Ys.	
Filter Layer	The underlying native soils should be separated from the stone reservoir by a thin, 2 to 4 inch layer of choker stone (e.g. No. 8) covered by a 6 to 8 inch layer of coarse sand (e.g. ASTM C 33, gradation).	The sand should be placed between the stone reservoir and the choker stone, which should be placed on top of the underlying native soils.
Filter Fabric (optional)	Use an appropriate filter fabric for the particular application based on AASHTO M288-06 Filter Fabric should have a Flow Rate greater than 125 gpm/sq. ft. (ASTM D4491), and an Apparent Opening Size (AOS) equivalent to a US # 70 or # 80 sieve (ASTM D4751). The geotextile AOS selection is based on the percent passing the No. 200 sieve in "A" Soil subgrade, using FHWA or AASHTO selection criteria.	
Impermeable Liner	Use a thirty mil (minimum) PVC Geomembrane liner covered by 8 to 12 oz./sq. yd.2 non-woven geotextile. NOTE: THIS IS USED ONLY FOR KARST REGIONS.	
Observation Well	Use a perforated 4 to 6 inch vertical PVC pipe (AASHTO M 252) with a lockable cap, installed flush with the surface.	

Table 7.4. Permeable Pavement Design Criteria

Level 1 Design	Level 2 Design
Tv = (1)(Rv)(A) / 12 – the volume reduced by an upstream BMP [1]	Tv = (1.1)(Rv)(A) / 12
Soil infiltration is less than 0.5 in./hr.	Soil infiltration rate must exceed 0.5 in./hr to remove underdrain requirement, or use a drawdown design in accordance with **Section 6.**
Underdrain required	1. No underdrain; ***OR*** 2. If an underdrain is used, provide a 12-inch (minimum) stone reservoir infiltration sump below the underdrain invert that meets the drawdown requirements of Section 6; ***OR*** 3. The Tv stone reservoir volume has at least a 48-hour drain time, as regulated by a control structure.
CDA[1] = The permeable pavement area plus upgradient parking, as long as the ratio of external contributing area to permeable pavement does not exceed 2.5:1.	• CDA = The permeable pavement area; ***OR*** • If option 3 above is used, CDA ratio may be 2.5:1.

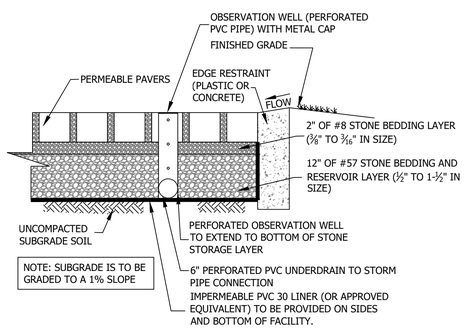
[1] The contributing drainage area to the permeable pavements should be limited to paved surfaces in order to avoid sediment wash-on. When pervious areas are conveyed to permeable pavement, sediment source controls and/or pre-treatment must be provided strip or sump should be used. The pre-treatment may qualify for a runoff reduction credit if designed accordingly.

MAINTENANCE NOTE

PERMEABLE PAVEMENT TO BE PRIVATELY MAINTAINED BY THE OWNERS.

WATER PROOFING NOTES

NOTE: WALTER L. PHILLIPS, INC. IS NOT RESPONSIBLE FOR WATER PROOFING DESIGN REQUIRED AT BUILDING FOUNDATION. CONTRACTOR AND OWNER TO PROVIDE PROPER WATERPROOFING ESPECIALLY NEAR PROPOSED BMP FACILITIES.



TYPICAL PERVIOUS PAVER CONSTRUCTION DETAIL
N.T.S.

NOTE:
IF SEASONALLY HIGH GROUNDWATER IS FOUND WITHIN PAVER SECTION DEPTH, SECTION TO BE WRAPPED IN IMPERMEABLE LINING. FINAL DETERMINATIONS TO BE MADE AT TIME OF FINAL SITE PLAN.

CONSTRUCTION NOTES:

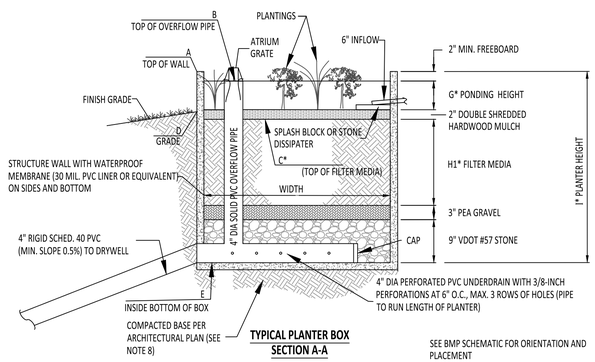
THE PERMEABLE PAVEMENT HAS BEEN DESIGNED IN ACCORDANCE WITH VIRGINIA DEQ/DCR STORMWATER DESIGN SPECIFICATION No. 7, VERSION 2.0 DATED JAN. 1, 2013 AND FAIRFAX COUNTY PFM SECTION 6-1304. THE CONTRACTOR SHALL CONSTRUCT THE PERMEABLE PAVEMENT FACILITY IN ACCORDANCE WITH THESE SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE MATERIAL DELIVERY TICKETS AND CERTIFICATIONS AND A SIGNED CERTIFICATION THAT THE FACILITY WAS CONSTRUCTED IN ACCORDANCE WITH THESE PLANS AND THE SPECIFICATIONS REFERENCED ABOVE. REFER TO SHEET C-0705 FOR VIRGINIA DEQ/DCR CONSTRUCTION SEQUENCE AND CONSTRUCTION INSPECTION RECOMMENDATIONS.

MAINTENANCE NOTES:

THE OWNER SHOULD BE AWARE THAT A MAINTENANCE AGREEMENT IS REQUIRED TO BE EXECUTED AND RECORDED IN LAND RECORDS BETWEEN THE OWNER AND THE LOCAL JURISDICTION. THE OWNER SHOULD MAKE HIMSELF FULLY AWARE OF ALL CONSTRUCTION, INSPECTION AND MAINTENANCE OBLIGATIONS CONTAINED IN THE AGREEMENT AND THE SPECIFICATIONS REFERENCED ABOVE. REFER TO SHEET C-0705 FOR VIRGINIA DEQ/DCR MAINTENANCE AND MAINTENANCE INSPECTION RECOMMENDATIONS.

NOTE:

1. PERMEABLE PAVEMENT FACILITY WILL BE PRIVATELY OWNED AND MAINTAINED
2. IF BEDROCK IS ENCOUNTERED, THE EXCAVATION FOR THE FACILITY SHALL EXTEND A MINIMUM OF 2' DOWN BELOW THE BMP SYSTEM INTO UNDERLYING BEDROCK.



TYPICAL PLANTER BOX SECTION A-A

SEE BMP SCHEMATIC FOR ORIENTATION AND PLACEMENT

NOTES:
1. LENGTH (L) AND WIDTH (W) DIMENSIONS MUST BE A MINIMUM OF 2 FEET EACH.
2. NO STORAGE VOLUME CREDIT IS GIVEN FOR THE MULCH LAYER.
3. SEE VIRGINIA DEQ STORMWATER DESIGN SPECIFICATION NO. 9 FOR ADDITIONAL DESIGN AND CONSTRUCTION INFORMATION.
4. THE PLANTER BOX MAY BE CONTAINED IN A PRECAST CONCRETE, CAST-IN-PLACE CONCRETE OR 6"X6" PRESSURE TREATED WOOD VAULT. OTHER MATERIALS MAY INCLUDE MOLDED POLYPROPYLENE CELLS AND PRECAST MODULAR BLOCK SYSTEMS (VIRGINIA DEQ DESIGN SPECIFICATION NO. 9, SECTION 9-A-1).
5. SINCE PLANTER BOXES ARE LOCATED NEAR THE BUILDING FOUNDATION, WATERPROOFING BY USING A WATERTIGHT CONCRETE SHELL OR AN IMPERMEABLE LINER IS REQUIRED TO PREVENT SEEPAGE.
6. AN ATRIUM GRATE OR EQUIVALENT MAY BE USED FOR THE OVERFLOW ON TOP OF THE PVC STANDPIPE.
7. CONTRACTOR TO ENSURE THAT THE PROPER DOWNSPOUTS DISCHARGE INTO THE PLANTER BOX. RIVER ROCK OR OTHER ENERGY DISSIPATION SHALL BE USED WHERE DOWNSPOUTS TIE INTO THE PLANTER BOX.
8. FOR PLANTER BOXES ATTACHED TO THE FOUNDATION AND/OR A RETAINING WALL, SEE ARCHITECTURAL PLANS FOR STRUCTURAL DETAILS/REQUIREMENTS.

URBAN BIORETENTION - PLANTER BOX DETAIL

PLANTER BOX ID	ELEVATIONS						PLANTER DIMENSIONS					
	A	B	C	D	E	F	G (FT)	H1 (FT)	I (FT)	WIDTH (FT)	LENGTH (FT)	SURFACE AREA (SF)
1	21.58	21.42	20.75	VARIES	19.00	N/A	0.50	1.00	2.58	4.50	14.50	65.3

Planter # 1
AREA TO URBAN BIORETENTION STORMWATER PLANTER — 972 SF
TREAT 1" STORM RUNOFF PER DEQ SPEC. #9
TvBMP = 0.95 x 972 SF x 0.0833' = 77 CF
SIZE OF THE PLANTER = 65.3 SF
V1 (PONDING DEPTH) = 65.3 SF X 0.5 = 32 CF
V2 (SOIL MEDIA) = 65.3 SF X 1 X 0.25 (VOIDS) = 16 CF
V3 (#57 & PEA GRAVEL) = 65.3 SF X 0.75 X 0.4 (VOIDS = 19 CF
TOTAL VOLUME = 67 CF PROVIDED

ESI Peer Review

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
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(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

SCALE: NONE — DATE: 11/08/2021, 8/4/2022, 10/05/2022, 11/16/2022 — DRAWN: RH / AV — CHECKED:

COMMONWEALTH OF VIRGINIA — AARON M. VINSON — Lic. No.041851 — 11/16/2022 — PROFESSIONAL ENGINEER

REVISION APPROVED BY	NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

4 EAST OAK STREET
REDEEMED CHURCH OF CHRIST
GRADING PLAN
CITY OF ALEXANDRIA, VIRGINIA

RUNOFF HYDROGRAPHS AND STORMWATER MANAGEMENT DETAILS

APPROVED
SPECIAL USE PERMIT NO. 2021-0016
DEPARTMENT OF PLANNING & ZONING
DIRECTOR — DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____
DIRECTOR — DATE
CHAIRMAN, PLANNING COMMISSION — DATE
DATE RECORDED _____
INSTRUMENT NO. — DEED BOOK NO. — PAGE NO.

SHEET: C-0704

File No. ALEX Tax Map No. 053.04 Job No. 21-094 Cadd Dwg. File: Q:\sdskproj\21094\dwg\engineering\Grading Plan\21094C-0703.dwg

TREE PROTECTION LEGEND

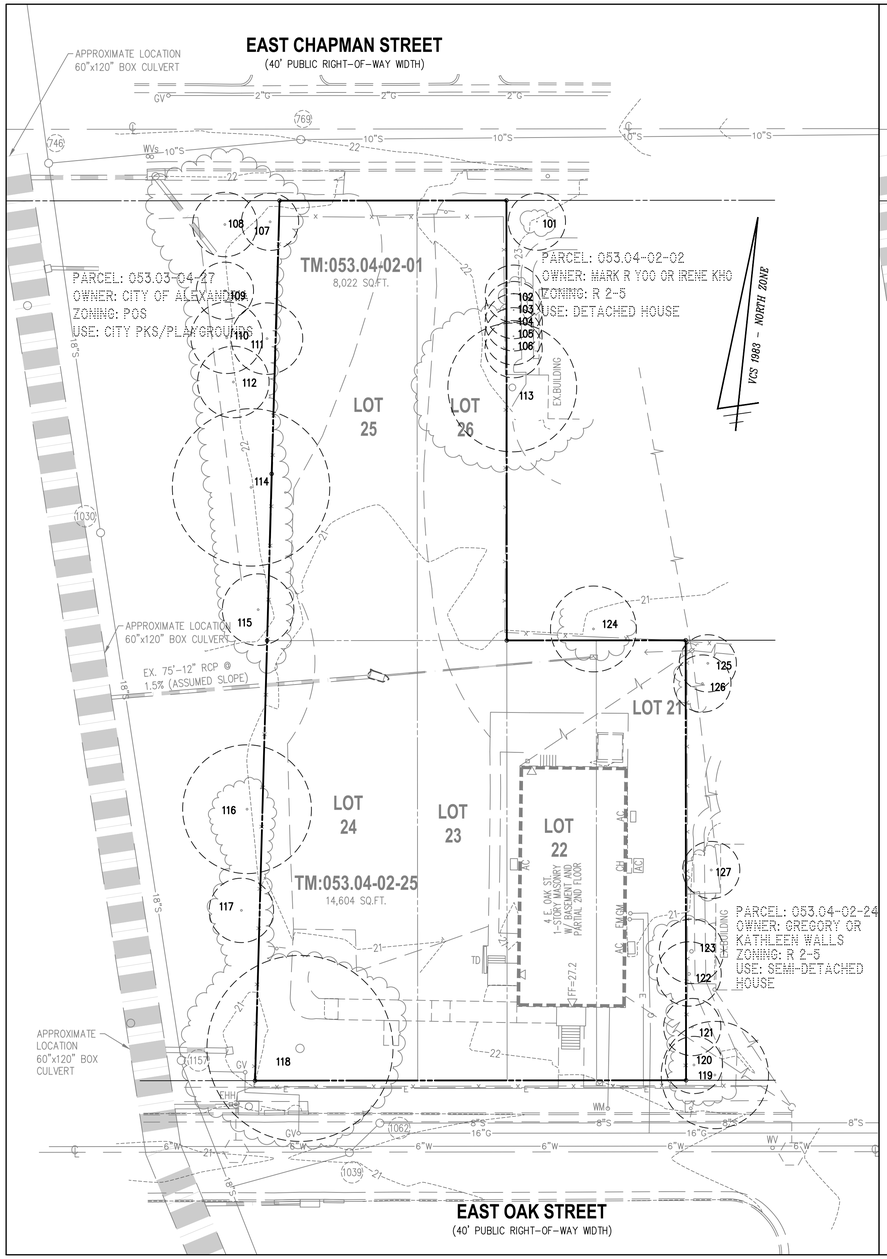
KEY	TITLE	SYMBOL
TP	TREE PROTECTION	—o—o—
RP	ROOT PRUNING	
	ROOT PADDING	
	TREE TO BE REMOVED	X
	EXISTING TREELINE	
	LIMITS OF DISTURBANCE	LOD
	CRITICAL ROOT ZONE (CRZ)	
	TREE CANOPY TO BE PRESERVED	

ARCHAEOLOGY NOTES

1. THE APPLICANT/DEVELOPER SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) IF ANY AMERICAN INDIAN ARTIFACTS, SUCH AS SPEAR POINTS OR ARROW POINTS, ARE DISCOVERED DURING DEVELOPMENT. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS.
2. THE APPLICANT/DEVELOPER SHALL NOT ALLOW ANY METAL DETECTION OR ARTIFACT COLLECTION TO BE CONDUCTED ON THE PROPERTY, UNLESS AUTHORIZED BY ALEXANDRIA ARCHAEOLOGY.

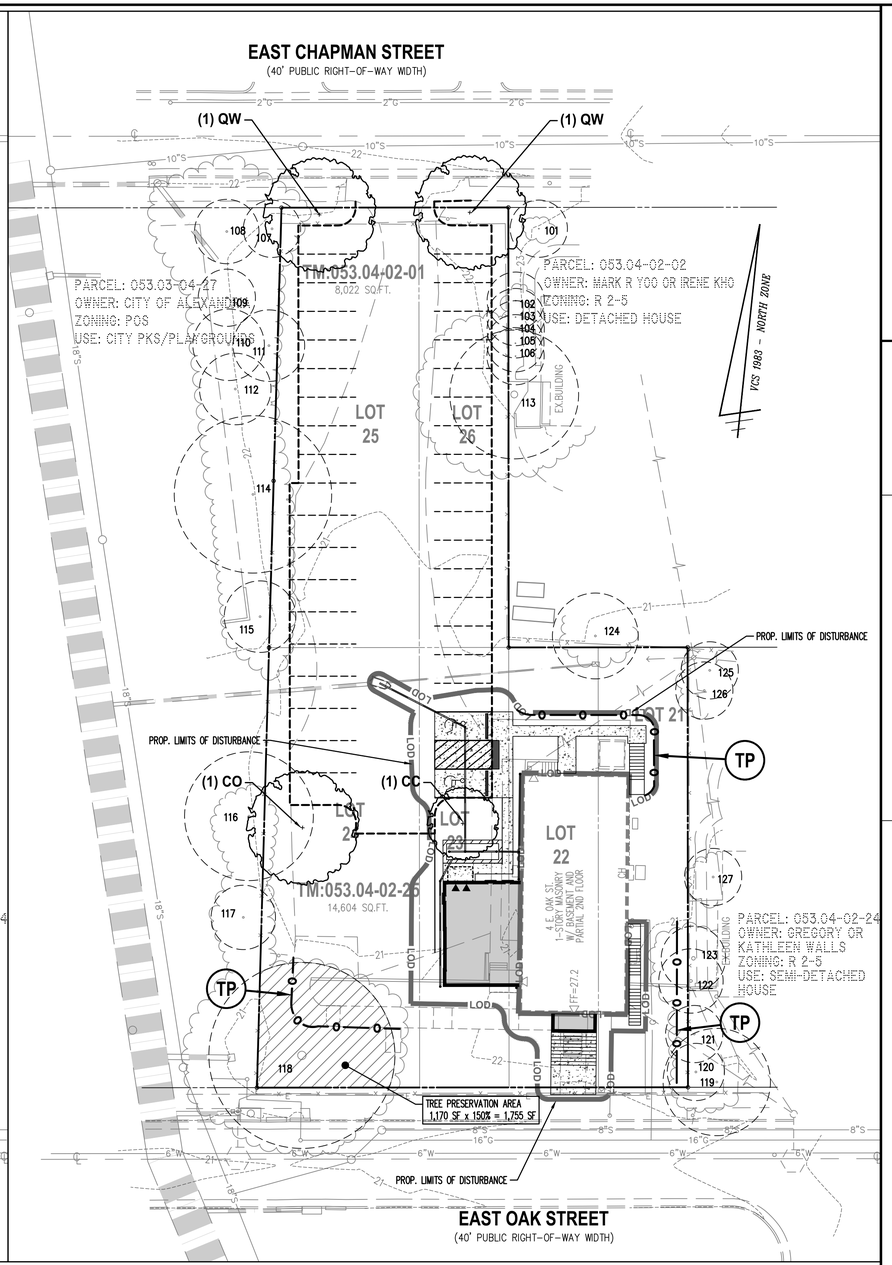
LANDSCAPE NOTES

1. THERE ARE NO RPA, INTERMITTENT STREAM, WETLANDS, ASSOCIATED BUFFER, OR EXISTING STORMWATER FACILITIES LOCATED ONSITE. THE SITE IS NOT LOCATED WITHIN A FLOODPLAIN.
2. NO KNOWN MARINE CLAY ONSITE, NO KNOWN CONTAMINATION ONSITE.
3. LIMITED PLANTINGS ARE PROPOSED WITH THIS PLAN.
4. ALL EXISTING TREES ONSITE ARE TO BE PRESERVED. NO TREE REMOVAL IS PROPOSED WITH THIS PLAN.
5. THERE ARE NO EASEMENTS LOCATED ON SITE.
6. THERE ARE NO KNOWN EXISTING CULTURAL RESOURCES ON SITE.



TREE INVENTORY

SCALE: 1"=20'



TREE PRESERVATION PLAN / LANDSCAPE PLAN

SCALE: 1"=20'

PLANT SCHEDULE

	PLAN KEY	QUANTITY	GENUS	SPECIES		COMMON NAME	CALIPER/HEIGHT		CCA PER TREE (SF)	TOTAL CROWN COVER (SF)
STANDARD TREES	CO	1	Celtis	occidentalis		Hackberry	2"-2.5" cal./12-14 ft. ht.	B&B, full specimen	1,250	1,250
	CC	1	Cercis	canadensis	x canadensis	Eastern Redbud	2"-2.5" cal./12-14 ft. ht.	B&B, full specimen	500	500
	AS	1	Acer	saccharum		Sugar Maple	2"-2.5" cal./12-14 ft. ht.	B&B, full specimen	1,250	1,250
	QW	1	Quercos	phellos		Willow Oak	2"-2.5" cal./12-14 ft. ht.	B&B, full specimen	1,250	1,250
	TOTALS	4							STANDARD TREE CCA:	4,250

TOTAL DISTURBED AREA = 3,992 SF OR 0.091 ACRES

20 0 10 20 40 80
(IN FEET)
1 INCH = 20'

ESI Peer Review

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SCALE: 1" = 20'

COMMONWEALTH OF VIRGINIA — AARON M. VINSON — Lic. No.041851 — PROFESSIONAL ENGINEER — 11/16/2022

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

4 EAST OAK STREET

REDEEMED CHURCH OF CHRIST

GRADING PLAN

CITY OF ALEXANDRIA, VIRGINIA

TREE PRESERVATION PLAN AND LANDSCAPE PLAN

APPROVED
SPECIAL USE PERMIT NO. 2021-0016
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

SHEET: C-1201

File No. ALEX Tax Map No. 053.04 Job No. 21-094 Cadd Dwg. File: Q:\sdskproj\21094\dwg\engineering\Grading Plan\21094C-1201.dwg

BIODIVERSITY TABULATIONS

PLANT TYPE	PLAN INFORMATION		BOTANIC/COMMON NAME				SIZE
	PLAN KEY	QUANTITY	GENUS	SPECIES	VAR./CULTIVAR/HYBRID	COMMON NAME	CALIPER/HEIGHT
URBAN TREES	AR	0	Acer	rubrum		Red Maple	2"-3" cal./12-14 ft. ht.
	QP	0	Quercus	palustris		Pin Oak	2"-3" cal./12-14 ft. ht.
	TC	0	Tilia	cordata		Little Leaf Linden	2"-3" cal./12-14 ft. ht.
	BN	0	Betula	nigra		River Birch	2"-3" cal./12-14 ft. ht.
	GB	0	Ginkgo	biloba		Maidenhair Tree	2"-3" cal./12-14 ft. ht.

NATIVE PLANT TABULATIONS

			MARCH 2, 2019 – JANUARY 1, 2020			JANUARY 2, 2020 – JANUARY 1, 2024			BEGINNING JANUARY 2, 2024		
			REQUIRED	PROVIDED		REQUIRED	PROVIDED		REQUIRED	PROVIDED	
PLANT TYPE	QUANTITY	NATIVE TYPE	%	QTY.	%	%	QTY.	%	%	QTY.	%
Standard Trees	4	Regional/Local	15%	4	100.0%	25%			40%		
		Total Natives	40%	4	100.0%	60%			80%		

TOTALS		
TOTAL PLANTS SPECIFIED	TOTAL SUM OF REGIONAL/LOCAL NATIVE PLANTS	TOTAL SUM OF NATIVE PLANTS
4	4	4
	100.0%	100.0%

NOTES:

1) Percentages apply to the total quantity of each plant type specifed on Completeness/Preliminary Plans and Final #1 Grading Plans submitted during the listed time frames.
2) Total Natives is the sum of Eastern U.S. Native, Regionally Native, and Locally Native vegetation specifed on the plans for each plant type.
3) Non-native vegetation for the purposes of providing edible fruits, seeds, or nuts may be planted and shall not be calculated in the above-stated requirements for native species regardless of plant type.

CROWN COVER CALCULATIONS

TOTAL SITE AREA (SF)	22,626
25% CROWN COVER REQUIRED (SF)	5,657
EXISTING CROWN COVER (SF)	1,755
REMOVED CROWN COVER (SF)	0
PRESERVED CROWN COVER (SF)	
Crown Cover from Preserved Trees	1,755
Crown Cover from Preserved Shrubs	0
PROPOSED CROWN COVER (SF)	
Crown Cover from Proposed Trees	4,250
Crown Cover from Proposed Shrubs	0
TOTAL CROWN COVER PROVIDED (%)	26.5%
TOTAL CROWN COVER PROVIDED (SF)	6,005

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COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 PROFESSIONAL ENGINEER 11/16/2022

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

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4 EAST OAK STREET

REDEEMED CHURCH OF CHRIST

GRADING PLAN

CITY OF ALEXANDRIA, VIRGINIA

TREE PRESERVATION TABULATIONS

APPROVED
SPECIAL USE PERMIT NO. 2021-0016
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

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SHEET: C-1202

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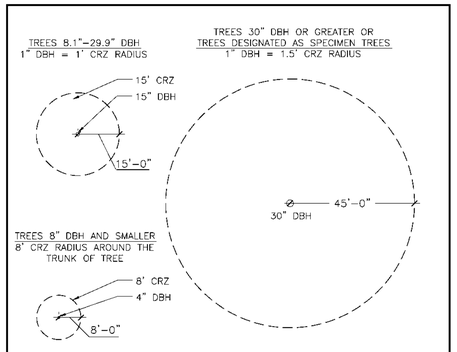


NOTES:

1. GRAPHICALLY, THE CRITICAL ROOT ZONE (CRZ) IS REPRESENTED AS A CIRCULAR REGION MEASURED OUTWARD FROM A TREE TRUNK REPRESENTING THE AREA OF ROOTS THAT MUST BE MAINTAINED OR PROTECTED FOR THE TREE'S SURVIVAL.
2. PLOT ACCURATE TRUNK LOCATIONS OF ALL TREES GREATER THAN 2" DIAMETER AT 54" ABOVE GRADE AND/OR TREE STANDS WITHIN DEVELOPMENT AREAS ON ALL PLANS FOR THE PROJECT AND DELINEATE THEIR ESTIMATED CRITICAL ROOT ZONE.
3. PLOT ACCURATE TRUNK LOCATIONS OF OFFSITE TREES WHICH WILL HAVE THEIR CRZ AFFECTED BY DEVELOPMENT AND DELINEATE THEIR ESTIMATED CRITICAL ROOT ZONE.

A TREE PROTECTION DETAIL FOR DETERMINING CRITICAL ROOT ZONE
NOT TO SCALE

OF UPDATES: 00 LAST UPDATED:

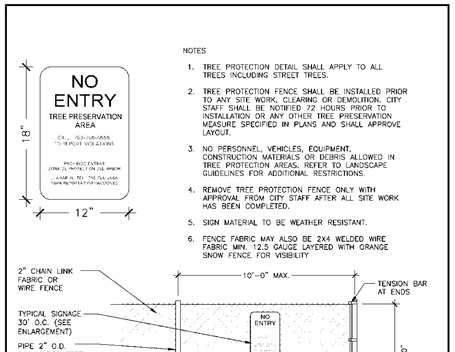
CITY OF ALEXANDRIA, VIRGINIA
STANDARD LANDSCAPE DETAILS

NOTE: THE INFORMATION SHOWN HEREIN THIS DOCUMENT IS FOR GENERAL GUIDANCE ONLY AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES. ITS USE SHALL NOT RELIEVE THE DESIGN PROFESSIONAL OR CONTRACTOR OF ANY LEGAL RESPONSIBILITY.

Source: ——
Approved by: COA
Date drawn: 01/01/19

CRITICAL ROOT ZONE

1 OF 1 | LD 013



A TREE PROTECTION FENCE
NOT TO SCALE

OF UPDATES: 00 LAST UPDATED:

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STANDARD LANDSCAPE DETAILS

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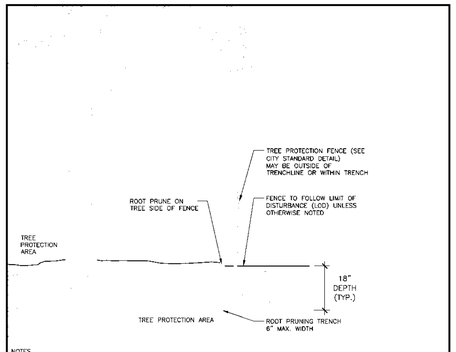
Approved by: COA
Date drawn: 01/01/19

TREE PROTECTION FENCE

1 OF 1 | LD 014



NOTES

1. ROOT PRUNING SHALL BE DONE WITH TRENCHER OR VIBRATORYPLOW TO DEPTH OF 18". ROOTS OVER 1.5" IN DIAMETER SHALL HAVE A CLEAN CUT MADE BY A CLEAN SAW ON THE SURFACE OF THE ROOT, WHICH IS STILL ATTACHED TO THE TREE. DO NOT BREAK OR CHOP. DO NOT PAINT THE CUT ROOT END. IF EXCAVATION IS FOR INSTALLATION OF UNDERGROUND UTILITIES, LEAVE THE ROOT INTACT AND THREAD THE LINES UNDERNEATH.
2. ROOT PRUNING SHALL TAKE PLACE PRIOR TO ANY CLEARING AND GRADING. EXACT LOCATION OF TREE PROTECTION AREAS SHALL BE STAKED OR FLAGGED PRIOR TO TRENCHING AND SHALL BE APPROVED BY CITY STAFF.
3. ROOT PRUNING SHALL BE CONDUCTED WITH THE SUPERVISION OF AN ISA CERTIFIED ARBORIST. CERTIFICATION SHALL BE PROVIDED TO THE CITY UPON COMPLETION.
4. BACKFILL THE ROOT-PRUNING TRENCH WITH APPROVED LOOSE TOPSOIL MIX AND TOP WITH 3-4" BARK MULCH AND MARK LOCATION FOR FUTURE REFERENCE. SILT FENCE MAY BE INSTALLED IN TRENCH PRIOR TO BACKFILLING AS LONG AS THE TRENCH IS NOT OPEN FOR LONGER THAN 48 HOURS WITHOUT WATERING.
5. ROOT PRUNING WORK SHALL NOT BE DONE WHEN MORE THAN THE TOP 1 INCH OF SOIL IS FROZEN. ROOT PRUNING SHALL NOT BE UNDERTAKEN WHEN THE SOIL IS WET AND CONDITIONS ARE MUDDY.
6. CITY OF ALEXANDRIA STAFF SHALL BE NOTIFIED 72 HOURS PRIOR TO TRENCHING AND WHEN ALL ROOT PRUNING AND TREE PROTECTION FENCE INSTALLATION IS COMPLETE.

A ROOT PRUNING
NOT TO SCALE

OF UPDATES: 00 LAST UPDATED:

CITY OF ALEXANDRIA, VIRGINIA
STANDARD LANDSCAPE DETAILS

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Source: ——
Approved by: COA
Date drawn: 01/01/19

ROOT PRUNING

1 OF 1 | LD 015

A STANDARD LANDSCAPE PLAN NOTES
NOT TO SCALE

OF UPDATES: 00 LAST UPDATED:

CITY OF ALEXANDRIA, VIRGINIA
STANDARD LANDSCAPE DETAILS

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Source: ——
Approved by: COA
Date drawn: 01/01/19

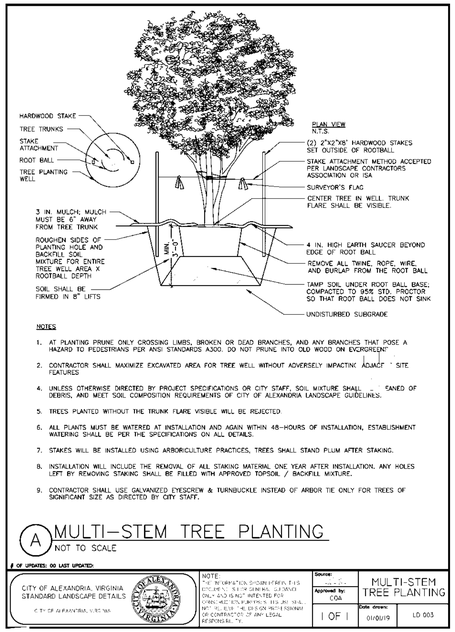
STANDARD LANDSCAPE PLAN NOTES

1 OF 1 | LD 016

TREE PRESERVATION AREA
KEEP OUT
NO EQUIPMENT OR MATERIALS ARE TO BE STORED OR DEPOSITED IN THIS AREA
(COMPANY NAMES AND CONTACT NUMBERS)
PENALTY FOR VIOLATIONS STRICTLY ENFORCED

SPECIFICATIONS
- MINIMUM DIMENSION: 11 X 8 INCHES (W X H)
- BACKGROUND COLOR: RED OR YELLOW
- SIGNS MADE OF WEATHERPROOF MATERIAL

TREE PRESERVATION SIGN DETAIL



NOTES

1. AT PLANTING PRUNE ONLY CROSSING LIMBS, BROKEN OR DEAD BRANCHES, AND ANY BRANCHES THAT POSE A HAZARD TO PEDESTRIANS PER ANSI STANDARDS A300. DO NOT PRUNE INTO OLD WOOD ON EVERGREENS
2. CONTRACTOR SHALL MAXIMIZE EXCAVATED AREA FOR TREE WELL WITHOUT ADVERSELY IMPACTING ADJACENT SITE FEATURES
4. UNLESS OTHERWISE DIRECTED BY PROJECT SPECIFICATIONS OR CITY STAFF, SOIL MIXTURE SHALL BE CLEANED OF DEBRIS, AND MEET SOIL COMPOSITION REQUIREMENTS OF CITY OF ALEXANDRIA LANDSCAPE GUIDELINES.
5. TREES PLANTED WITHOUT THE TRUNK FLARE VISIBLE WILL BE REJECTED.
6. ALL PLANTS MUST BE WATERED AT INSTALLATION AND AGAIN WITHIN 48-HOURS OF INSTALLATION, ESTABLISHMENT WATERING SHALL BE PER THE SPECIFICATIONS ON ALL DETAILS.
7. STAKES WILL BE INSTALLED USING ARBORICULTURE PRACTICES, TREES SHALL STAND PLUM AFTER STAKING.
8. INSTALLATION WILL INCLUDE THE REMOVAL OF ALL STAKING MATERIAL ONE YEAR AFTER INSTALLATION. ANY HOLES LEFT BY REMOVING STAKING SHALL BE FILLED WITH APPROVED TOPSOIL / BACKFILL MIXTURE.
9. CONTRACTOR SHALL USE GALVANIZED EYESCREW & TURNBUCKLE INSTEAD OF ARBOR TIE ONLY FOR TREES OF SIGNIFICANT SIZE AS DIRECTED BY CITY STAFF.

A MULTI-STEM TREE PLANTING
NOT TO SCALE

OF UPDATES: 00 LAST UPDATED:

CITY OF ALEXANDRIA, VIRGINIA
STANDARD LANDSCAPE DETAILS

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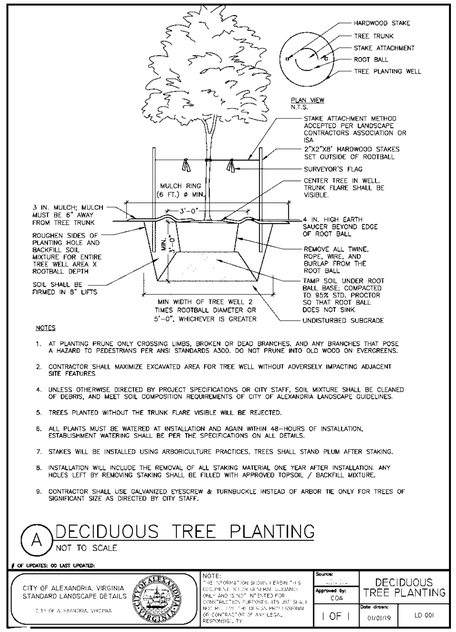
Source: ——
Approved by: COA
Date drawn: 01/01/19

MULTI-STEM TREE PLANTING

1 OF 1 | LD 003



NOTES

1. AT PLANTING PRUNE ONLY CROSSING LIMBS, BROKEN OR DEAD BRANCHES, AND ANY BRANCHES THAT POSE A HAZARD TO PEDESTRIANS PER ANSI STANDARDS A300. DO NOT PRUNE INTO OLD WOOD ON EVERGREENS.
2. CONTRACTOR SHALL MAXIMIZE EXCAVATED AREA FOR TREE WELL WITHOUT ADVERSELY IMPACTING ADJACENT SITE FEATURES
4. UNLESS OTHERWISE DIRECTED BY PROJECT SPECIFICATIONS OR CITY STAFF, SOIL MIXTURE SHALL BE CLEANED OF DEBRIS, AND MEET SOIL COMPOSITION REQUIREMENTS OF CITY OF ALEXANDRIA LANDSCAPE GUIDELINES.
5. TREES PLANTED WITHOUT THE TRUNK FLARE VISIBLE WILL BE REJECTED.
6. ALL PLANTS MUST BE WATERED AT INSTALLATION AND AGAIN WITHIN 48-HOURS OF INSTALLATION, ESTABLISHMENT WATERING SHALL BE PER THE SPECIFICATIONS ON ALL DETAILS.
7. STAKES WILL BE INSTALLED USING ARBORICULTURE PRACTICES, TREES SHALL STAND PLUM AFTER STAKING.
8. INSTALLATION WILL INCLUDE THE REMOVAL OF ALL STAKING MATERIAL ONE YEAR AFTER INSTALLATION. ANY HOLES LEFT BY REMOVING STAKING SHALL BE FILLED WITH APPROVED TOPSOIL / BACKFILL MIXTURE.
9. CONTRACTOR SHALL USE GALVANIZED EYESCREW & TURNBUCKLE INSTEAD OF ARBOR TIE ONLY FOR TREES OF SIGNIFICANT SIZE AS DIRECTED BY CITY STAFF.

A DECIDUOUS TREE PLANTING
NOT TO SCALE

OF UPDATES: 00 LAST UPDATED:

CITY OF ALEXANDRIA, VIRGINIA
STANDARD LANDSCAPE DETAILS

NOTE: THE INFORMATION SHOWN HEREIN THIS DOCUMENT IS FOR GENERAL GUIDANCE ONLY AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES. ITS USE SHALL NOT RELIEVE THE DESIGN PROFESSIONAL OR CONTRACTOR OF ANY LEGAL RESPONSIBILITY.

Source: ——
Approved by: COA
Date drawn: 01/01/19

DECIDUOUS TREE PLANTING

1 OF 1 | LD 001

Alexandria | **Tree Inventory**

Tree #	Botanical Name	Common Name	Size DBH (in)	Critical Root Zone (CRZ) Radius (ft)	Species Rating (%)	Condition (%)	Invasive	Offsite/ Shared/ ROW	Activities: Removal	Hand Removal/ Selective Removal	Tree Protection Fence	Root Prune	Root Padding	Notes
Tree Survey Information Completed by Walter Phillips, Inc - Arborist Ben Schitter- ISA # MA-5385A #(21-094) 11/04/2021														
101	Lagerstroemia indica	Crape Myrtle	6"	8'	78%	75%		O			X			
102	Thuja occidentalis	Northern white-cedar	3"	8'	60%	75%		O			X			
103	Thuja occidentalis	Northern white-cedar	3"	8'	60%	75%		O			X			
104	Thuja occidentalis	Northern white-cedar	3"	8'	60%	75%		O			X			
105	Thuja occidentalis	Northern white-cedar	3"	8'	60%	75%		O			X			
106	Thuja occidentalis	Northern white-cedar	3"	8'	60%	75%		O			X			
107	Ailanthus altissima	Tree-of-heaven	6"	8'	25%	69%	X	O			X			
108	Cercis canadensis	Eastern redbud	9"	9'	73%	66%		O			X			
109	Cladrastis kentukea	Yellowwood	6"	8'	60%	63%		O			X			
110	Cladrastis kentukea	Yellowwood	10"	10'	60%	59%		O			X			
111	Morus alba	White mulberry	10"	10'	30%	53%	X	O			X			
112	Cladrastis kentukea	Yellowwood	10"	10'	60%	63%		O			X			
113	Prunus spp.	Ornamental Cherry	18"	18'	55%	66%		O			X			
114	Pyrus calleryana	Callery pear	22"	22'	20%	63%	X	O			X			
115	Morus alba	White mulberry	10"	10'	30%	66%	X	O			X			Multi-stem
116	Ulmus parvifolia	Chinese elm	18"	18'	70%	69%		O			X			
117	Prunus spp.	Ornamental Cherry	9"	9'	55%	66%		O			X			
118	Acer rubrum	Red maple	26"	26'	70%	66%					X			
119	Cupressocyparis leylandii	Leyland cypress	15"	15'	60%	63%		O			X			
120	Cornus florida	Flowering dogwood	6"	8'	60%	75%		O			X			
121	Lagerstroemia indica	Crape Myrtle	6"	8'	78%	75%		O			X			Multi-stem
122	Cupressocyparis leylandii	Leyland cypress	9"	9'	60%	63%		O			X			
123	Cupressocyparis leylandii	Leyland cypress	9"	9'	60%	63%		O			X			
124	Morus alba	White mulberry	12"	12'	30%	63%	X	O			X			Multi-stem
125	Acer rubrum	Red maple	4"	8'	70%	66%		O			X			
126	Hibiscus syriacus	Rose-of-sharon	3"	8'	0%	63%		O			X			
127	Acer rubrum	Red maple	6"	8'	70%	66%		O			X			

DBH = Diameter at Breast Height (measured 4.5 feet above ground)

CRZ = Critical Root Zone - As determined by the corresponding jurisdiction

CRZ values for trees with multiple stems were calculated based on methods outlined in the 9th edition of the Guide for Plant Appraisal, published by the I.S.A.

Shared trees shall not be removed without written permission from adjacent property owners.

Offsite trees were assesd without trespassing. Measurements are approximate.

TREE INVENTORY PLAN PREPARED BY:

11/8/2021

BENJAMIN J. SCHITTER, CERTIFIED ARBORIST ISA #MA-5385A

ESI
Peer Review

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
Engineers • Surveyors • Planners • Landscape Architects • Arborists
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

SCALE: NONE | DATE: 11/08/2021, 8/4/2022, 10/05/2022, 11/16/2022 | DRAWN: RH / AM | CHECKED: AV

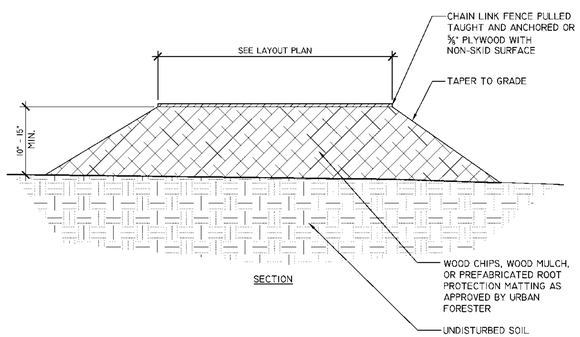
REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

COMMONWEALTH OF VIRGINIA — AARON M. VINSON — Lic. No.041851 — PROFESSIONAL ENGINEER — 11/16/2022

4 EAST OAK STREET
REDEEMED CHURCH OF CHRIST
GRADING PLAN
CITY OF ALEXANDRIA, VIRGINIA
TREE PRESERVATION AND LANDSCAPE DETAILS

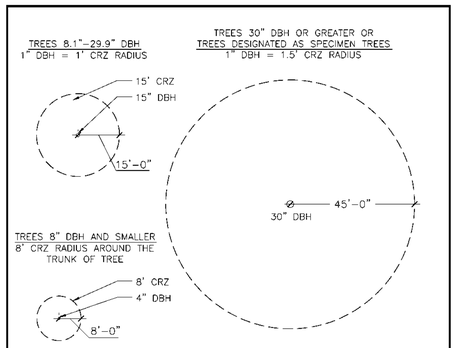
APPROVED
SPECIAL USE PERMIT NO. 2021-0016
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.



SECTION

A ROOT PAD DETAIL

1" = 1'-0"



NOTES:

1. GRAPHICALLY, THE CRITICAL ROOT ZONE (CRZ) IS REPRESENTED AS A CIRCULAR REGION MEASURED OUTWARD FROM A TREE TRUNK REPRESENTING THE AREA OF ROOTS THAT MUST BE MAINTAINED OR PROTECTED FOR THE TREE'S SURVIVAL.
2. PLOT ACCURATE TRUNK LOCATIONS OF ALL TREES GREATER THAN 2" DIAMETER AT 54" ABOVE GRADE AND/OR TREE STANDS WITHIN DEVELOPMENT AREAS ON ALL PLANS FOR THE PROJECT AND DELINEATE THEIR ESTIMATED CRITICAL ROOT ZONE.
3. PLOT ACCURATE TRUNK LOCATIONS OF OFFSITE TREES WHICH WILL HAVE THEIR CRZ AFFECTED BY DEVELOPMENT AND DELINEATE THEIR ESTIMATED CRITICAL ROOT ZONE.

A TREE PROTECTION DETAIL FOR DETERMINING CRITICAL ROOT ZONE

NOT TO SCALE

OF UPDATES: 00 LAST UPDATED:

CITY OF ALEXANDRIA, VIRGINIA STANDARD LANDSCAPE DETAILS — CITY OF ALEXANDRIA, VIRGINIA

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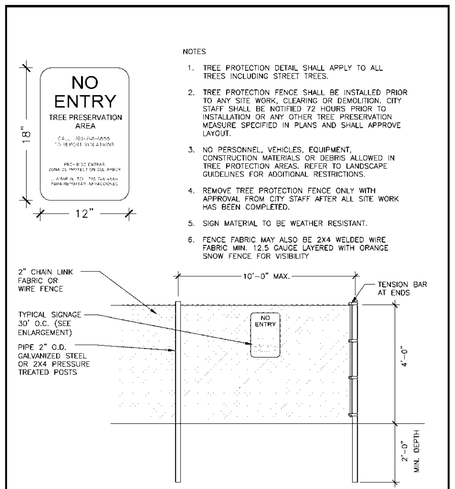
Source: City of Alexandria
Approved by: COA
Date drawn: 01/01/19
1 OF 1
CRITICAL ROOT ZONE
LD 013



NOTES

1. TREE PROTECTION DETAIL SHALL APPLY TO ALL TREES INCLUDING STREET TREES.
2. TREE PROTECTION FENCE SHALL BE INSTALLED PRIOR TO ANY SITE WORK, CLEARING OR DEMOLITION. CITY STAFF SHALL BE NOTIFIED 72 HOURS PRIOR TO INSTALLATION OR ANY OTHER TREE PRESERVATION MEASURE SPECIFIED IN PLANS AND SHALL APPROVE LAYOUT.
3. NO PERSONNEL, VEHICLES, EQUIPMENT, CONSTRUCTION MATERIALS OR DEBRIS ALLOWED IN TREE PROTECTION AREAS. REFER TO LANDSCAPE GUIDELINES FOR ADDITIONAL RESTRICTIONS.
4. REMOVE TREE PROTECTION FENCE ONLY WITH APPROVAL FROM CITY STAFF AFTER ALL SITE WORK HAS BEEN COMPLETED.
5. SIGN MATERIAL TO BE WEATHER RESISTANT.
6. FENCE FABRIC MAY ALSO BE 2X4 WELDED WIRE FABRIC MIN. 12.5 GAUGE LAYERED WITH ORANGE SNOW FENCE FOR VISIBILITY

A TREE PROTECTION FENCE

NOT TO SCALE

OF UPDATES: 00 LAST UPDATED:

CITY OF ALEXANDRIA, VIRGINIA STANDARD LANDSCAPE DETAILS — CITY OF ALEXANDRIA, VIRGINIA

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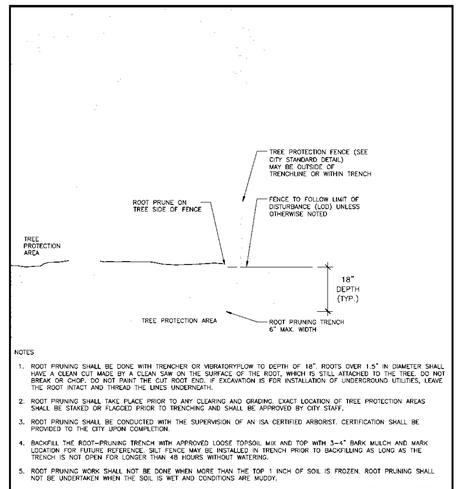
Source: City of Alexandria
Approved by: COA
Date drawn: 01/01/19
1 OF 1
TREE PROTECTION FENCE
LD 014



NOTES

1. ROOT PRUNING SHALL BE DONE WITH TRENCHER OR VIBRATORYPLOW TO DEPTH OF 18". ROOTS OVER 1.5" IN DIAMETER SHALL HAVE A CLEAN CUT MADE BY A CLEAN SAW ON THE SURFACE OF THE ROOT, WHICH IS STILL ATTACHED TO THE TREE. DO NOT BREAK OR CHOP. DO NOT PAINT THE CUT ROOT END. IF EXCAVATION IS FOR INSTALLATION OF UNDERGROUND UTILITIES, LEAVE THE ROOT INTACT AND THREAD THE LINES UNDERNEATH.
2. ROOT PRUNING SHALL TAKE PLACE PRIOR TO ANY CLEARING AND GRADING. EXACT LOCATION OF TREE PROTECTION AREAS SHALL BE STAKED OR FLAGGED PRIOR TO TRENCHING AND SHALL BE APPROVED BY CITY STAFF.
3. ROOT PRUNING SHALL BE CONDUCTED WITH THE SUPERVISION OF AN ISA CERTIFIED ARBORIST. CERTIFICATION SHALL BE PROVIDED TO THE CITY UPON COMPLETION.
4. BACKFILL THE ROOT-PRUNING TRENCH WITH APPROVED LOOSE TOPSOIL MIX AND TOP WITH 3-4" BARK MULCH AND MARK LOCATION FOR FUTURE REFERENCE. SILT FENCE MAY BE INSTALLED IN TRENCH PRIOR TO BACKFILLING AS LONG AS THE TRENCH IS NOT OPEN FOR LONGER THAN 48 HOURS WITHOUT WATERING.
5. ROOT PRUNING WORK SHALL NOT BE DONE WHEN MORE THAN THE TOP 1 INCH OF SOIL IS FROZEN. ROOT PRUNING SHALL NOT BE UNDERTAKEN WHEN THE SOIL IS WET AND CONDITIONS ARE MUDDY.
6. CITY OF ALEXANDRIA STAFF SHALL BE NOTIFIED 72 HOURS PRIOR TO TRENCHING AND WHEN ALL ROOT PRUNING AND TREE PROTECTION FENCE INSTALLATION IS COMPLETE.

A ROOT PRUNING

NOT TO SCALE

OF UPDATES: 00 LAST UPDATED:

CITY OF ALEXANDRIA, VIRGINIA STANDARD LANDSCAPE DETAILS — CITY OF ALEXANDRIA, VIRGINIA

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Source: City of Alexandria
Approved by: COA
Date drawn: 01/01/19
1 OF 1
ROOT PRUNING
LD 015

A STANDARD LANDSCAPE PLAN NOTES

NOT TO SCALE

OF UPDATES: 00 LAST UPDATED:

CITY OF ALEXANDRIA, VIRGINIA STANDARD LANDSCAPE DETAILS — CITY OF ALEXANDRIA, VIRGINIA

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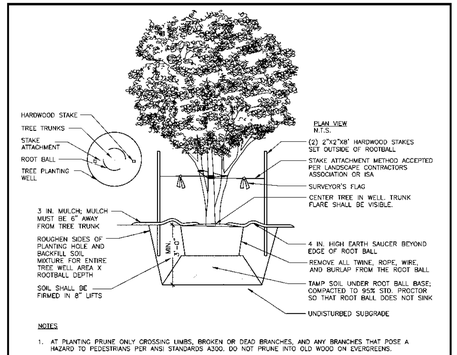
Source: City of Alexandria
Approved by: COA
Date drawn: 01/01/19
1 OF 1
STANDARD LANDSCAPE PLAN NOTES
LD 016



NOTES

1. AT PLANTING PRUNE ONLY CROSSING LIMBS, BROKEN OR DEAD BRANCHES, AND ANY BRANCHES THAT POSE A HAZARD TO PEDESTRIANS PER ANSI STANDARDS A300. DO NOT PRUNE INTO OLD WOOD ON EVERGREENS.
2. CONTRACTOR SHALL MAXIMIZE EXCAVATED AREA FOR TREE WELL WITHOUT ADVERSELY IMPACTING ADJACENT SITE FEATURES
4. UNLESS OTHERWISE DIRECTED BY PROJECT SPECIFICATIONS OR CITY STAFF, SOIL MIXTURE SHALL BE CLEANED OF DEBRIS, AND MEET SOIL COMPOSITION REQUIREMENTS OF CITY OF ALEXANDRIA LANDSCAPE GUIDELINES.
5. TREES PLANTED WITHOUT THE TRUNK FLARE VISIBLE WILL BE REJECTED.
6. ALL PLANTS MUST BE WATERED AT INSTALLATION AND AGAIN WITHIN 48-HOURS OF INSTALLATION, ESTABLISHMENT WATERING SHALL BE PER THE SPECIFICATIONS ON ALL DETAILS.
7. STAKES WILL BE INSTALLED USING ARBORICULTURE PRACTICES, TREES SHALL STAND PLUM AFTER STAKING.
8. INSTALLATION WILL INCLUDE THE REMOVAL OF ALL STAKING MATERIAL ONE YEAR AFTER INSTALLATION. ANY HOLES LEFT BY REMOVING STAKING SHALL BE FILLED WITH APPROVED TOPSOIL / BACKFILL MIXTURE.
9. CONTRACTOR SHALL USE GALVANIZED EYESCREW & TURNBUCKLE INSTEAD OF ARBOR TIE ONLY FOR TREES OF SIGNIFICANT SIZE AS DIRECTED BY CITY STAFF.

A MULTI-STEM TREE PLANTING

NOT TO SCALE

OF UPDATES: 00 LAST UPDATED:

CITY OF ALEXANDRIA, VIRGINIA STANDARD LANDSCAPE DETAILS — CITY OF ALEXANDRIA, VIRGINIA

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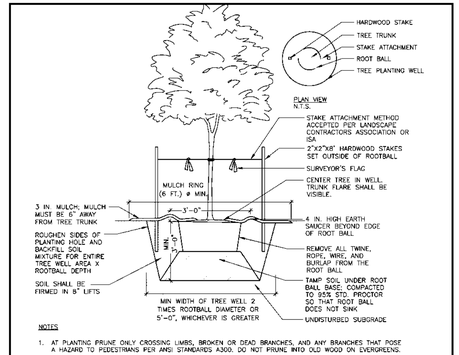
Source: City of Alexandria
Approved by: COA
Date drawn: 01/01/19
1 OF 1
MULTI-STEM TREE PLANTING
LD 003



NOTES

1. AT PLANTING PRUNE ONLY CROSSING LIMBS, BROKEN OR DEAD BRANCHES, AND ANY BRANCHES THAT POSE A HAZARD TO PEDESTRIANS PER ANSI STANDARDS A300. DO NOT PRUNE INTO OLD WOOD ON EVERGREENS.
2. CONTRACTOR SHALL MAXIMIZE EXCAVATED AREA FOR TREE WELL WITHOUT ADVERSELY IMPACTING ADJACENT SITE FEATURES
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A DECIDUOUS TREE PLANTING

NOT TO SCALE

OF UPDATES: 00 LAST UPDATED:

CITY OF ALEXANDRIA, VIRGINIA STANDARD LANDSCAPE DETAILS — CITY OF ALEXANDRIA, VIRGINIA

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Source: City of Alexandria
Approved by: COA
Date drawn: 01/01/19
1 OF 1
DECIDUOUS TREE PLANTING
LD 001

WALTER L. PHILLIPS, INCORPORATED
Engineers • Surveyors • Planners
Landscape Architects • Arborists
207 PARK AVENUE
FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301
www.WLPINC.com
ESTABLISHED 1945

DRAWN: TT | CHECKED: AW

SCALE: 1" = 20' | DATE: 9/23/2022, 11/10/2022

ARRON M. VINSON Lic. No.041851 11/10/2022

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV.' BY	APPROVED

TREE PRESERVATION PLANTING DETAILS

GRADING PLAN

619 SOUTH LEE STREET

CITY OF ALEXANDRIA, VIRGINIA

GRD2022-00049

APPROVED DATE _____

DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES

LEGEND

PROPOSED	DESCRIPTION	EXISTING
	CURB & GUTTER CG-2	
CG-6R CG-6	TRANSITION FROM CG-6 TO CG-6R	CG-6 CG-6R
S	SANITARY SEWER	S
SL	SANITARY LATERAL	SL
● C.O.	CLEAN OUT	○ C.O.
	STORM SEWER	
W	WATER MAIN	W
	FIRE HYDRANT	
E	PLUG	E
	OVERHEAD WIRES	
	UTILITY POLE	
UE	UNDERGROUND ELECTRIC	UE
T	TELEPHONE	T
G	GAS MAIN	G
E	ELECTRICAL	E
	TRANSFORMER	
	HANDICAP RAMP (CG-12)	
	GUARDRAIL	
X X X	FENCE	X X X
	TRAFFIC FLOW	
	LIGHT	
	DOOR	
	TREES	
260 264	CONTOURS	260 264
+264 50	SPOT ELEVATION	+264 50
	DRAINAGE FLOW DIRECTION	
TC	TOP OF CURB	TC
BC	BOTTOM OF CURB	BC
TW	TOP OF WALL	TW
BW	BOTTOM OF WALL	BW
HP	HIGH POINT	H.P.
TP	TEST PIT	
	LIMITS OF CLEARING AND GRADING	
	CONCRETE	

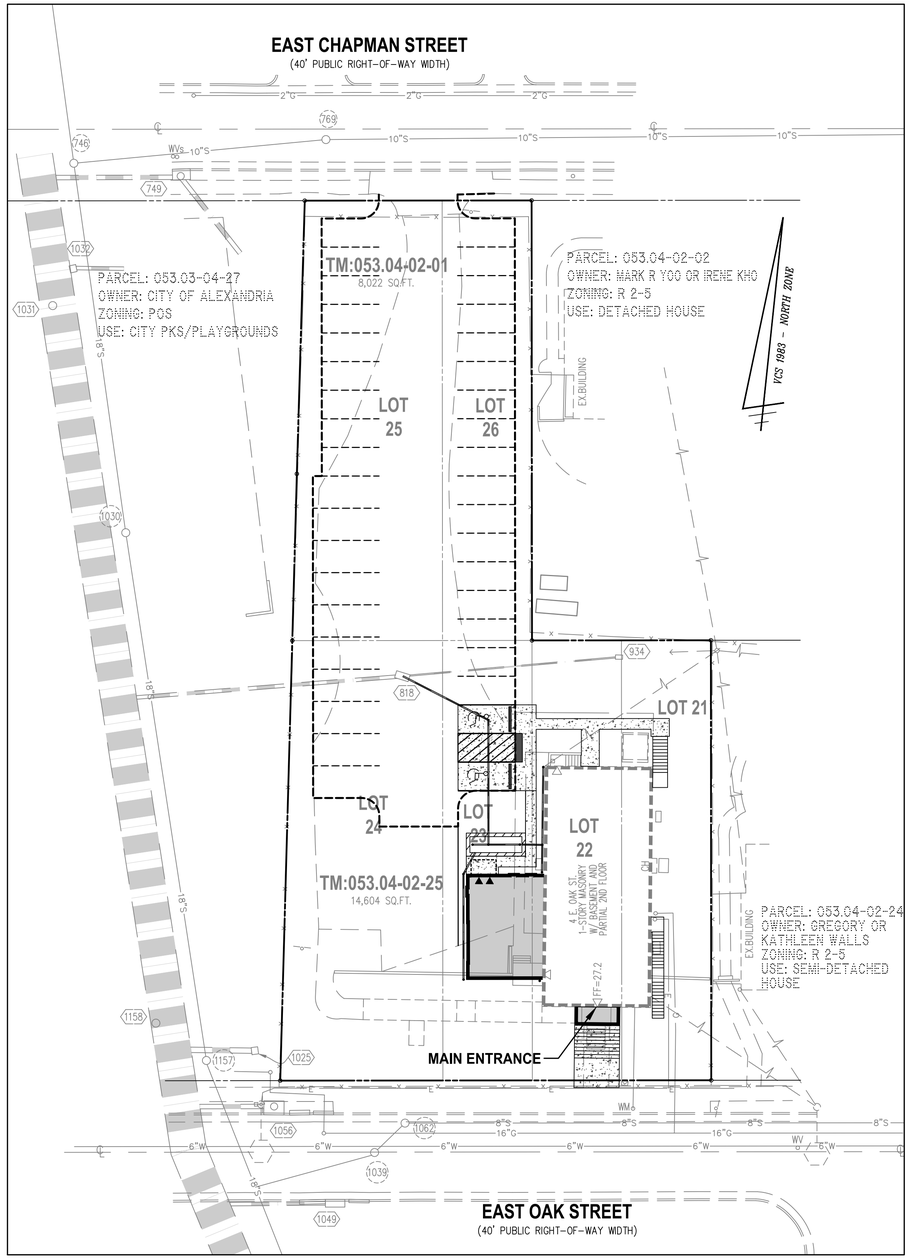
2. APPLICABLE REGULATIONS:
THE DESIGN OF THE BUILDING CONFORMS TO ALL THE APPLICABLE CODES FOR COUNTY OF FAIRFAX THE FOLLOWING ARE THE CURRENT APPLICABLE CODES AND WHERE APPROPRIATE INCLUDE LOCAL AMENDMENTS TO THESE CODES:

- 2018 INTERNATIONAL BUILDING CODE
- 2018 INTERNATIONAL ENERGY CONSERVATION CODE
- 2018 INTERNATIONAL FIRE PREVENTION CODE
- 2018 INTERNATIONAL FUEL GAS CODE
- 2018 INTERNATIONAL PLUMBING CODE
- 2018 INTERNATIONAL MECHANICAL CODE
- 2018 NATIONAL ELECTRIC CODE
- ICC ANSI A - 117.1-2009
- 2015 VUSBC

3. GENERAL BUILDING DATA:
a. MAP: 053.04-02-25
b. LOTS: 21, 22, 23, 24 BLOCK 4 ROSEMONT PARK FAITH CHAPEL
c. GROSS BUILDING FLOOR AREA : 1,983 GSF.
d. EXISTING BUILDING HEIGHT ABOVE GRADE: 1.5 STORY
e. BUILDING HEIGHT ABOVE GRADE: 29' FEET
- SPRINKLER : NO
- AREA INCREASE FOR FRONTAGE: N
- AREA INCREASE FOR SPRINKLER: N
- EXISTING BUILDING CONSTRUCTION TYPE: V-B
- EXISTING BUILDING OCCUPANCY CLASS: A3 (ASSEMBLY) E (EDUCATIONAL ACCESSORY TO A-3) & B (BUSINESS) (SECTION 305.1.1)
- HIGH RISE: N

BUILDING CALCULATIONS:

- ADDITION GROSS AREA: PHASE I 896 GSF
- ADDITION BUILDING HEIGHT ABOVE GRADE: 1.5 STORY
- ADDITION BUILDING CONSTRUCTION TYPE: VB
- ADDITION OCCUPANCY CLASS: A3 (ASSEMBLY) , E (EDUCATIONAL ACCESSORY TO A-3) & B (BUSINESS) 305.1.1)
- TOTAL BUILDING GROSS AREA: 2,879 GSF (CHECK THIS)
- MINIMUM REQUIRED WATER CLOSETS: SEE LIFE&SAFETY PLAN
- MINIMUM REQUIRED SERVICE SINK: SEE LIFE&SAFETY PLAN
- MINIMUM REQUIRED DRINKING FOUNTAIN: SEE LIFE&SAFETY PLAN



FIRE SERVICE PLAN
SCALE: 1"=20'

20 0 10 20 40 80
(IN FEET)
1 INCH = 20'

ESI
Peer Review

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
Engineers • Surveyors • Planners • Landscape Architects • Arborists
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

SCALE: 1" = 20'
DATE: 11/08/2021, 8/4/2022, 10/05/2022, 11/16/2022
DRAWN: RH / AV
CHECKED: AV

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 PROFESSIONAL ENGINEER 11/16/2022

NO.	DESCRIPTION	DATE	REV'D BY	APPROVED	DATE

REVISION APPROVED BY

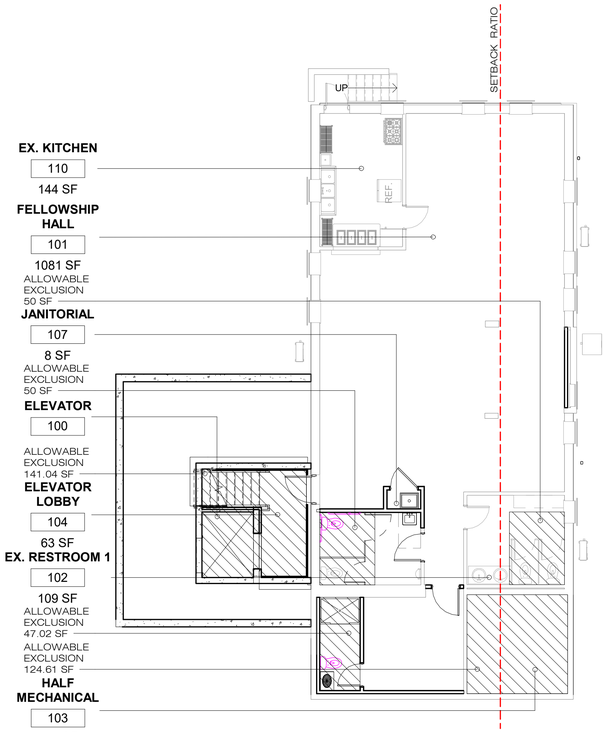
4 EAST OAK STREET
REDEEMED CHURCH OF CHRIST
GRADING PLAN
CITY OF ALEXANDRIA, VIRGINIA

FIRE SERVICE PLAN

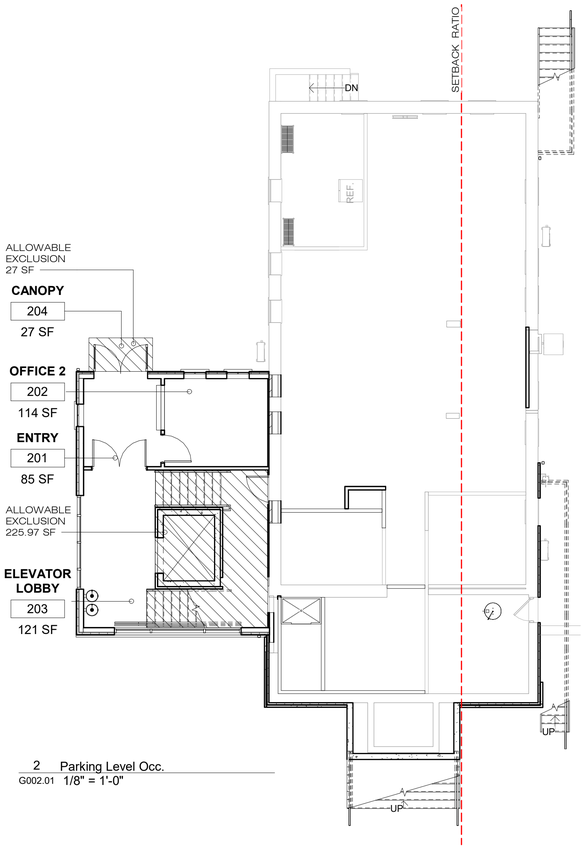
APPROVED
SPECIAL USE PERMIT NO. 2021-0016
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

SHEET: C-1301

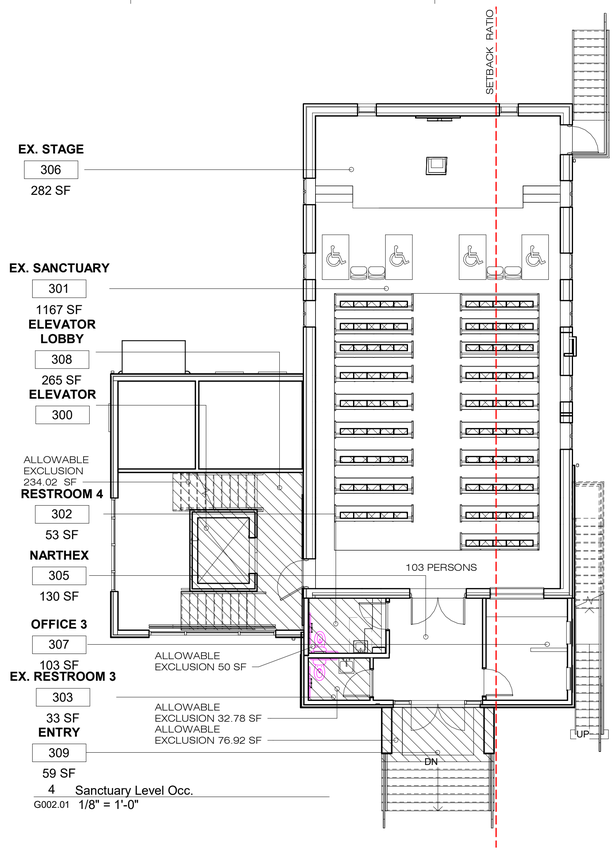
File No. ALEX Tax Map No. 053.04 Job No. 21-094 Cadd Dwg. File: Q:\sdskproj\21094\dwg\engineering\Grading Plan\21094C-1301.dwg



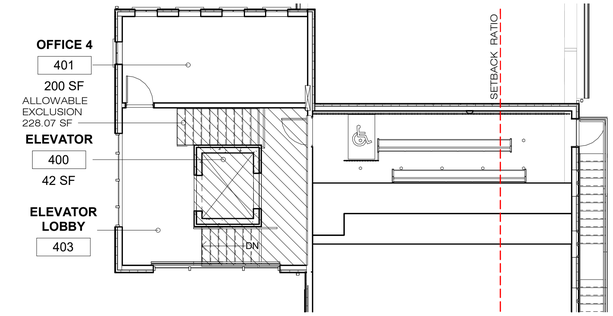
1 Basement Occ.
G002.01 1/8" = 1'-0"



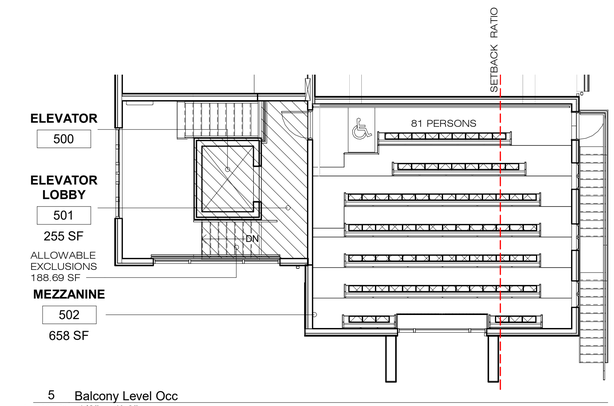
2 Parking Level Occ.
G002.01 1/8" = 1'-0"



4 Sanctuary Level Occ.
G002.01 1/8" = 1'-0"



3 Second Level Occ.
G002.01 1/8" = 1'-0"



5 Balcony Level Occ
G002.01 1/8" = 1'-0"

DRAWING INDEX

		dsp set 07/21/2022	dsp rev 11/16/2022					
G002.01	occ.	0	0					
A103.01	roof plans	0	0					
A201.01	ext. elev.	0	0					
A201.02	ext. elev.	0	0					
A201.03	ext. elev.	0	0					
A201.04	ext. elev.	0	0					
SK008	PZ - Section 1	0	0					
SK009	PZ - Section 2	0	0					

NOTE:
GREEN BUILDING CERTIFICATION IS NOT REQUIRED AND WILL NOT BE PERSUED.
IT IS IMPOSSIBLE TO MEET GREEN BUILDING REQUIREMENTS. THE EXISTIING BUILDING GROSS FLOOR AREA IS 1,983 SQ.FT. AND WE ARE PROPOSING AN ADDDITION OF 638 SQ.FT. FOR ACCESSIBILITY UPGRADES. THE PROJECT WILL COMPLY WITH ALL ENERGY STANDARDS TO THE BEST OF ITS ABILITIES.

THIS IS AN EXISTING BUILDING THAT WAS BUILT IN 1960. DUE TO THE EXISTING AND OLD NATURE OF THIS BUILDING, THE ENTIRE BUILDING WOULD HAVE TO BE UPGRADED WHICH IS NOT PART OF THE SCOPE OF WORK.

AS STANDARD PRACTICE, IN ALL NEW AREAS, WE PROVIDE A FULLY INSULATED BUILDING BY CODE, LED LIGHT BULBS AND OCCUPANCY SENSORS, MECHANICAL SYSTEMS AND LOW FLOW PLUMBING FIXTURES AS REQUIRED BY THE IECC.

Existing Gross Area

Basement	1575.97
Parking Level	NA
Sanctuary Level	1776.84
Second Level	NA
Balcony Level	NA
Attic	NA
Porches	NA
Balcony/ Deck	NA
Lavatory	209.88
Other	NA
Total Gross	3562.69

Allowable Exclusions

Basement	NA
Parking Level	NA
Sanctuary Level	41.67
Second Level	NA
Balcony Level	NA
Attic	NA
Porches	NA
Balcony/ Deck	NA
Lavatory	132.72
Other	NA
Total Exclusions	174.39

Proposed Gross Area

Basement	1695.46
Parking Level	600.67
Sanctuary Level	1932.07
Second Level	483.27
Balcony Level	951.86
Attic	NA
Porches	76.92
Balcony/ Deck	NA
Lavatory	333.93
Other	NA
Total Gross	6074.21

Allowable Exclusions

Basement	265.65	STAIRS, ELEVATOR AND MECHANICAL
Parking Level	252.87	STAIRS, ELEVATOR AND CANOPY
Sanctuary Level	234.02	STAIRS AND ELEVATOR
Second Level	228.07	STAIRS AND ELEVATOR
Balcony Level	188.69	STAIRS AND ELEVATOR
Attic	NA	
Porches	76.92	
Balcony/ Deck	NA	
Lavatory	229.8	BASEMENT AND SANCTUARY
Other	NA	
Total Exclusions	1476.02	

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202.251.3235

CONSULTANT:

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PROJECT:

Redeemed Church of Christ
4 E. Oak St.
Alexandria, VA 22301

ISSUES / REVISIONS:

No.	Date	Description
	11/03/2021	SD Set
	11/22/2021	Eng Bid Set
	7/21/2022	DSP Package
B	11/16/2022	DSP Package - Rev

SEAL:

DRAWING SCALE: 1/8" = 1'-0"

PROJECT NUMBER: 2020-03-001

TITLE:
OCC.

SHEET NUMBER: G002.01
NOVEMBER 16, 2022

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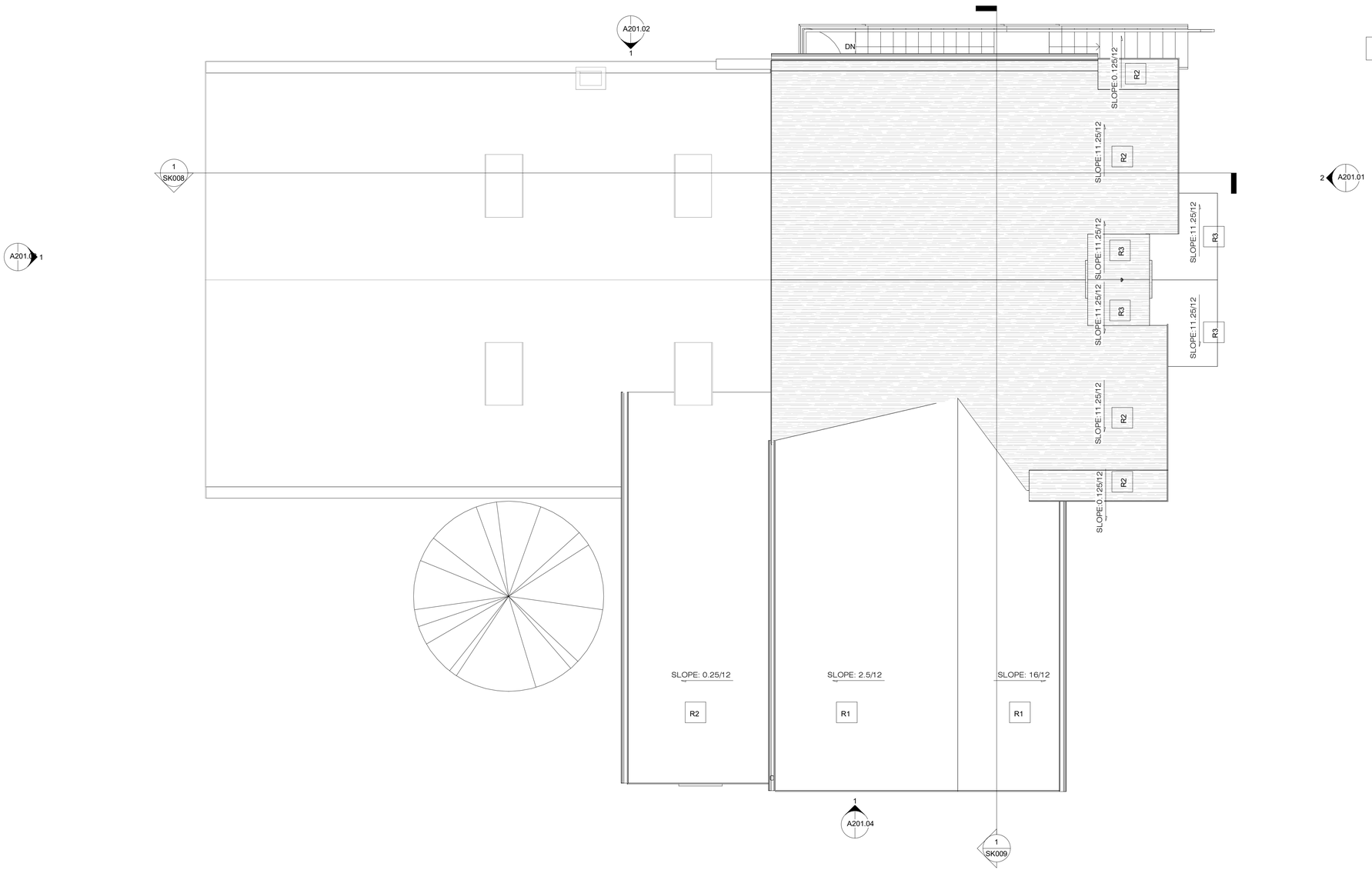

1 Roof Level
A106.01 1/4" = 1'-0"

Sheet Notes

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ISSUES / REVISIONS:

No.	Date	Description
	11/22/2021	Eng Bid Set
	01/18/2022	Eng Backgrounds
A	03/03/2022	Value Engineering Set
	7/21/2022	DSP Package
B	11/16/2022	DSP Package - Rev

SEAL:

DRAWING SCALE: 1/4" = 1'-0"

PROJECT NUMBER: 2020-03-001

TITLE:
roof plans

SHEET NUMBER: A106.01
NOVEMBER 16, 2022

11/15/2022 4:41:01 PM

2 Front Elev.
A201.01 1/4" = 1'-0"

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ISSUES / REVISIONS:

No.	Date	Description
	12/14/2021	SD Set 2
	7/21/2022	DSP Package
B	11/16/2022	DSP Package - Rev

SEAL:

DRAWING SCALE: 1/4" = 1'-0"

PROJECT NUMBER: 2020-03-001

TITLE:
ext. elev.

SHEET NUMBER: A201.01
NOVEMBER 16, 2022

11/15/2022 4:41:13 PM

1 East Elev.
A201.02 1/4" = 1'-0"

ARCHITECT:

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PROJECT:

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Alexandria, VA 22301

ISSUES / REVISIONS:

No.	Date	Description
	12/14/2021	SD Set 2
	7/21/2022	DSP Package
B	11/16/2022	DSP Package - Rev

SEAL:

DRAWING SCALE: 1/4" = 1'-0"

PROJECT NUMBER: 2020-03-001

TITLE:

ext. elev.

SHEET NUMBER: A201.02

NOVEMBER 16, 2022

11/15/2022 4:41:24 PM

1 Rear Elev.
A201.03 1/4" = 1'-0"

ARCHITECT:
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ISSUES / REVISIONS:

No.	Date	Description
	12/14/2021	SD Set 2
	7/21/2022	DSP Package
B	11/16/2022	DSP Package - Rev

SEAL:

DRAWING SCALE: 1/4" = 1'-0"

PROJECT NUMBER: 2020-03-001

TITLE:
ext. elev.

SHEET NUMBER: A201.03
NOVEMBER 16, 2022

11/15/2022 4:41:35 PM

1 Stair Shaft North Elev.
A201.04 1/4" = 1'-0"

ARCHITECT:
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CONSULTANT:

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PROJECT:

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ISSUES / REVISIONS:

No.	Date	Description
	12/14/2021	SD Set 2
	7/21/2022	DSP Package
B	11/16/2022	DSP Package - Rev

SEAL:

DRAWING SCALE: 1/4" = 1'-0"

PROJECT NUMBER: 2020-03-001

TITLE:
ext. elev.

SHEET NUMBER: A201.04
NOVEMBER 16, 2022

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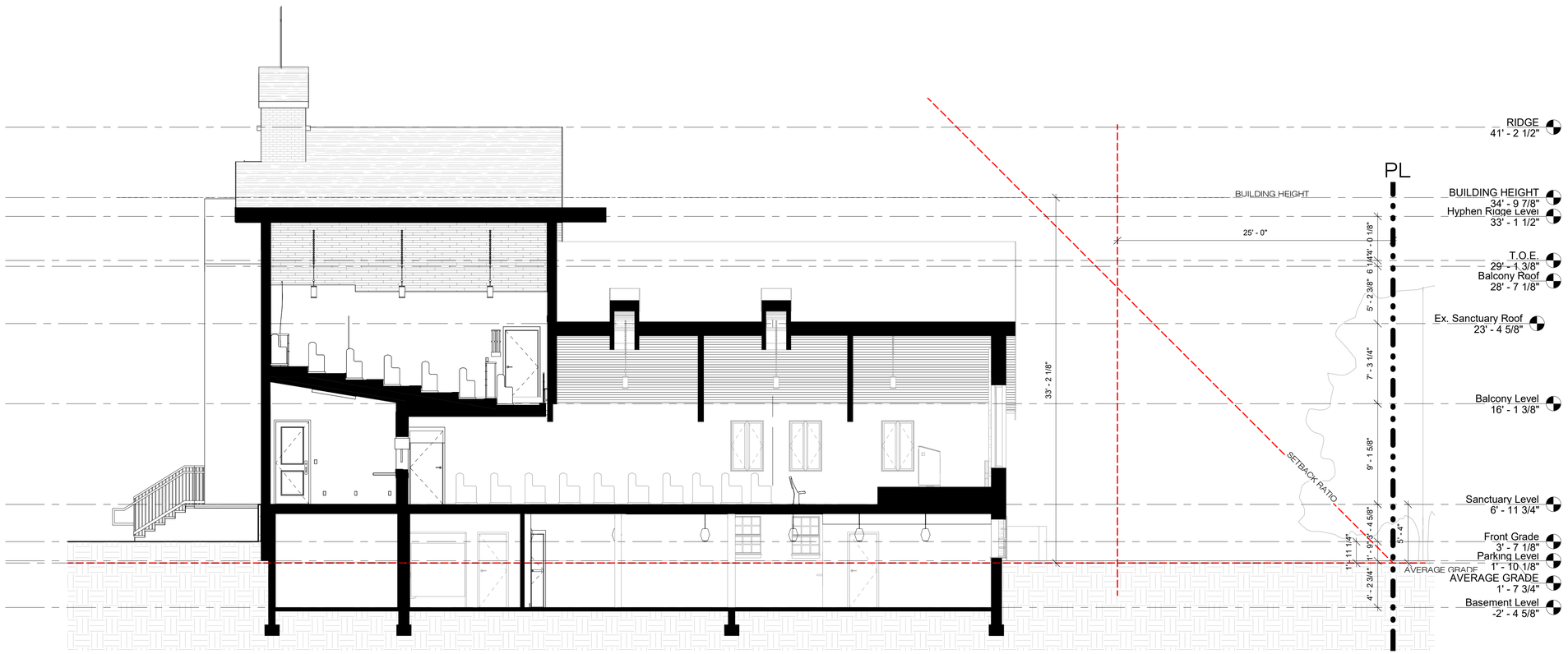

1 Section 68
SK008 3/16" = 1'-0"

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PROJECT:

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ISSUES / REVISIONS:

No.	Date	Description
	7/21/2022	DSP Package
B	11/16/2022	DSP Package - Rev

SEAL:

DRAWING SCALE 3/16" = 1'-0"

PROJECT NUMBER: 2020-03-001

TITLE:
PZ - Section 1

SHEET NUMBER: SK008
NOVEMBER 16, 2022

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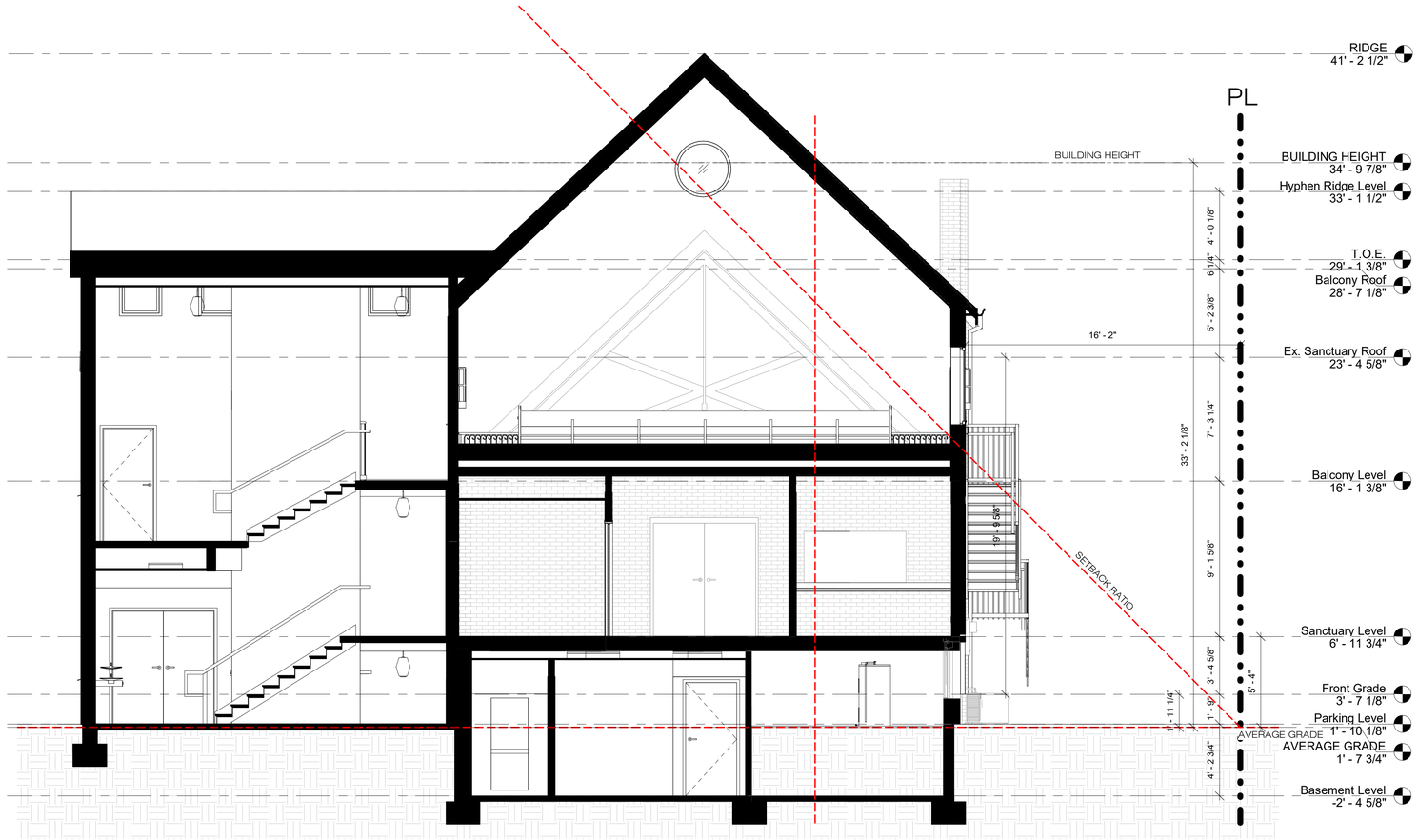

1 Section 69
SK009 1/4" = 1'-0"

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ISSUES / REVISIONS:

No.	Date	Description
	7/21/2022	DSP Package
B	11/16/2022	DSP Package - Rev

SEAL:

DRAWING SCALE: 1/4" = 1'-0"

PROJECT NUMBER: 2020-03-001

TITLE:
PZ - Section 2

SHEET NUMBER: SK009
NOVEMBER 16, 2022

11/15/2022 4:41:52 PM