DEVELOPMENT SPECIAL USE PERMIT WITH PRELIMINARY SITE PLAN

CHURCH OF THE RESURRECTION DEVELOPMENT

AREA TABULATIONS

EXISTING TAX PARCEL IDENTIFICATION = 011.03-01-05 (2.01 AC OR 87,473 SF)
PROPOSED EAST PARCEL = 1.32 AC OR 57,298 SF
PROPOSED WEST PARCEL = 0.69 AC OR 30,175 SF

TOTAL EXISTING IMPERVIOUS AREA = ±1.01 AC OR ±43,828 SF

TOTAL PROPOSED IMPERVIOUS AREA = ±1.25 AC OR ±54,490 SF

TOTAL DISTURBED AREA = ±2.21 AC OR ±96,210 SF

PARKING TABULATIONS

REQUIRED PARKING - EAST PARCEL

USE/RATE: MULTI-FAMILY – AFFORDABLE HOUSING (60% AMI): @ 0.75 SPACES/UNIT
USE/RATE: MULTI-FAMILY – AFFORDABLE HOUSING (50% AMI): @ 0.65 SPACES/UNIT

56-UNITS: 0.75 SP/UNIT * 56 UNITS = 42 SPACES
57-UNITS: 0.65 SP/UNIT * 57 UNITS = 38 SPACES
TOTAL REQUIRED = 80 SPACES

PARKING PROVIDED - EAST PARCEL

GARAGE PARKING = 80 SPACES
PARALLEL PARKING (DRIVE AISLE) = 4 SPACES
TOTAL PROVIDED = 84 SPACES

NOTE: SEE P-0301 FOR BUS STOPS AND ROUTES WITHIN THE CLOSE PROXIMITY TO THE SITE.

REQUIRED BIKE PARKING - EAST PARCEL

RATE: CLASS 1 OR 2: @ 3 SPACES / 10 UNITS
RATE: CLASS 2 OR 3: @ 1 SPACE / 50 UNITS

113-UNITS: 3 SP / 10 UNITS * 113 UNITS = 34 SPACES CLASS 1 OR 2
113-UNITS: 1 SP / 50 UNITS * 113 UNITS = 3 SPACES CLASS 2 OR 3

BIKE PARKING PROVIDED - EAST PARCEL

CLASS 1 – WITHIN GARAGE = 34 SPACES
CLASS 3 (ON SITE) = 4 SPACES

REQUIRED PARKING - WEST PARCEL

USE/RATE: CHURCH: @ 1 SP/5 SEATS

140-SEATS: 1 SP / 5 SEATS * 140 SEATS = 28 SPACES
TOTAL REQUIRED = 28 SPACES

PARKING PROVIDED - WEST PARCEL

EXISTING LOT = 19 SPACES
PARALLEL PARKING (DRIVE AISLE) = 3 SPACES
TOTAL PROVIDED = 22 SPACES

NOTE:
1. (6) ADDITIONAL TANDEM PARKING SPACES PROVIDED FOR A TOTAL OF 28 PARKING SPACES. A SPECIAL-USE PERMIT IS REQUESTED TO ALLOW A REDUCTION OF (6) PARKING SPACES FOR THE CHURCH USE.

REQUIRED BIKE PARKING - WEST PARCEL

CHURCH USE DOES NOT REQUIRE BIKE PARKING

SHEET INDEX

CIVIL

P-0101 COVER SHEET
P-0201 GENERAL NOTES
P-0202 DETAILS
P-0301 SITE CONTEXT PLAN
P-0302 EXISTING CONDITIONS PLAN
P-0303 EXISTING CONDITIONS NOTES & AS-BUILT DATA
P-0401 PRELIMINARY LAYOUT PLAN
P-0402 PRELIMINARY GEOMETRIC PLAN
P-0403 PRELIMINARY OPEN SPACE PLAN
P-0404 PRELIMINARY PHASING PLAN
P-0405 PRELIMINARY SITE SECTIONS
P-0406 PRELIMINARY SITE SECTIONS
P-0407 PRELIMINARY SUBDIVISION PLAT
P-0408 PRELIMINARY SUBDIVISION & EASMENT EXHIBIT
P-0501 PRELIMINARY GRADING PLAN
P-0502 AVERAGE FINISH GRADE - EAST PARCEL
P-0503 AVERAGE FINISH GRADE - WEST PARCEL
P-0701 STORMWATER MANAGEMENT PLAN
P-0702 PRELIMINARY BMP COMPUTATIONS - OVERALL SITE
P-0703 PRELIMINARY SWM COMPUTATIONS - EAST PARCEL
P-0704 PRELIMINARY BMP DESIGN - EAST PARCEL
P-0705 PRELIMINARY SWM COMPUTATIONS - WEST PARCEL
P-0706 PRELIMINARY BMP DESIGN - WEST PARCEL
P-0707 PRELIMINARY BMP & SWM DETAILS - EAST PARCEL
P-0708 PRELIMINARY BMP & SWM DETAILS - WEST PARCEL
P-0709 RPA LOCATION PLAN
P-0901 PRELIMINARY SANITARY SEWER OUTFALL ANALYSIS
P-1101 PRELIMINARY GARBAGE TRUCK MOVEMENT PLAN
P-1102 PRELIMINARY AASHTO P-CAR MOVEMENT PLAN
P-1103 PRELIMINARY LARGE CAR MOVEMENT PLAN
P-1104 PRELIMINARY LARGE CAR MOVEMENT PLAN
P-1105 PRELIMINARY LARGE CAR MOVEMENT PLAN GARAGE
P-1106 PRELIMINARY LARGE CAR MOVEMENT PLAN GARAGE
P-1107 PRELIMINARY LARGE CAR MOVEMENT PLAN GARAGE
P-1108 PRELIMINARY LARGE CAR MOVEMENT PLAN GARAGE
P-1109 PRELIMINARY LARGE CAR MOVEMENT PLAN GARAGE
P-1110 PRELIMINARY DRIVE AISLE PLAN AND PROFILE
P-1111 SIGHT DISTANCE PLAN & PROFILE - BEAUREGARD
P-1112 SIGHT DISTANCE PLAN & PROFILE - FILLMORE
P-1201 EXISTING VEGETATION MAP & TREE PRESERVATION PLAN
P-1202 EXISTING TREE INVENTORY
P-1203 TREE PRESERVATION NOTES & DETAILS
P-1301 PRELIMINARY FIRE SERVICE PLAN
P-1302 PRELIMINARY AMBULANCE MOVEMENT PLAN
P-1303 PRELIMINARY AMBULANCE MOVEMENT PLAN
P-1304 PRELIMINARY FIRE TRUCK MOVEMENT PLAN
P-1501 CORRESPONDENCE

ARCHITECTURE

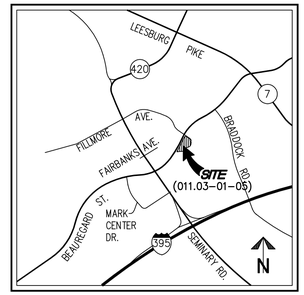
A0.10 FAR DIAGRAMS & DATA CALCS
A0.11 FAR DIAGRAMS & DATA CALCS
A0.12 FAR DIAGRAMS & DATA CALCS
A0.13 FAR DIAGRAMS & DATA CALCS
A1.01 MULTI-FAMILY LOWER LEVEL 2 FLOOR PLAN
A1.02 MULTI-FAMILY LOWER LEVEL 1 FLOOR PLAN
A1.03 MULTI-FAMILY PODIUM/PKG LEVEL FLOOR PLAN
A1.04 MULTI-FAMILY LEVEL 1 / PLAZA FLOOR PLAN
A1.05 MULTI-FAMILY TYPICAL FLOOR PLAN (LEVEL 2-5)
A1.06 MULTI-FAMILY ROOF PLAN
A2.01 MULTI-FAMILY EXTERIOR ELEVATIONS
A2.02 MULTI-FAMILY EXTERIOR ELEVATIONS
A2.03 MULTI-FAMILY EXTERIOR ELEVATIONS
A3.01 SITE SECTIONS
A3.02 SITE SECTIONS
A3.03 SITE SECTIONS
A4.01 CHURCH PLAN AND ELEVATIONS
A5.01 MULTI-FAMILY COLOR ELEVATIONS
A5.02 MULTI-FAMILY 3-D VIEWS
A5.03 CHURCH 3-D VIEWS

LANDSCAPE ARCHITECTURE

L1.01 ILLUSTRATIVE SITE PLAN
L2.01 HARDSCAPE PLAN
L3.01 PLANTING PLAN
L3.02 PLANT SCHEDULE & CANOPY COVERAGE
L3.03 PLANTING DETAILS
L5.01 LIGHTING PLAN
L5.02 LIGHTING DETAILS
L6.01 SITE AMENITIES & SIGNAGE

VICINITY MAP

SCALE: 1"=2000'



PROJECT DESCRIPTION NARRATIVE

THIS APPLICATION PROPOSES THE REZONING OF THE SUBJECT PARCEL FROM RA TO CDD #23 AND THE REDEVELOPMENT OF THE PROPERTY WHICH SHALL INCLUDE THE REMOVAL OF THE EXISTING CHURCH BUILDING, CONSTRUCTION OF A MULTIFAMILY RESIDENTIAL BUILDING WITH APPROXIMATELY 113 AFFORDABLE DWELLING UNITS AND UNDERGROUND GARAGE AND A NEW CHURCH. A PORTION OF THE EXISTING PARKING LOT ON THE WEST SIDE OF THE PROPERTY IS PROPOSED TO REMAIN, OTHERWISE ALL OTHER SUPPORTING INFRASTRUCTURE NECESSARY TO SUPPORT THIS DEVELOPMENT SHALL BE CONSTRUCTED.

IT IS THE APPLICANT'S INTENT TO CONSTRUCT THE ENTIRE DEVELOPMENT IN ONE PHASE, HOWEVER THERE MAY BE A NEED IN THE FUTURE TO CONSTRUCT THE DEVELOPMENT IN (2) TWO SEPARATE PHASES IN ACCORDANCE WITH SHEET P-0404.

THIS SITE IS BORDERED TO THE NORTH AND EAST BY FILLMORE AVENUE, TO THE WEST BY NORTH BEAUREGARD STREET, AND TO THE SOUTH BY THE GOODWIN HOUSE.

BUILDING CODE ANALYSIS

SEE SHEET P-0201 FOR BUILDING CODE ANALYSIS.

ARCHAEOLOGY NOTES

1. ALL REQUIRED ARCHAEOLOGICAL PRESERVATION MEASURES SHALL BE COMPLETED PRIOR TO GROUND-DISTURBING ACTIVITIES (SUCH AS CORING, GRADING, FILLING, VEGETATION REMOVAL, UNDERGROUNDING UTILITIES, PILE DRIVING, LANDSCAPING, AND OTHER EXCAVATIONS AS DEFINED IN SECTION 2-151 OF THE ZONING ORDINANCE) OR A RESOURCE MANAGEMENT PLAN MUST BE IN PLACE TO PRESERVE AND/OR RECOVER SIGNIFICANT RESOURCES IN CONCERT WITH CONSTRUCTION ACTIVITIES. TO CONFIRM, CALL ALEXANDRIA ARCHAEOLOGY AT 703-746-4399.

2. THE APPLICANT SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) IF ANY BURIED STRUCTURAL REMAINS (WALL FOUNDATIONS, WELLS, PRIVIES, CISTERNS, ETC.) OR CONCENTRATIONS OF ARTIFACTS ARE DISCOVERED DURING DEVELOPMENT. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS.

3. THE APPLICANT SHALL NOT ALLOW ANY METAL DETECTION AND/OR ARTIFACT COLLECTION TO BE CONDUCTED ON THE PROPERTY, UNLESS AUTHORIZED BY THE ALEXANDRIA ARCHAEOLOGY. FAILURE TO COMPLY SHALL RESULT IN PROJECT DELAY.

SPECIAL USE PERMITS/ZONING MODIFICATIONS/WAIVERS

1. REQUEST A MASTER PLAN AMENDMENT TO THE BEAUREGARD SMALL AREA PLAN TO MAKE SMALL AREA PLAN REQUIREMENTS CONSISTENT WITH PROPOSED DEVELOPMENT.
2. REQUEST AN AMENDMENT TO THE CDD #23 CONCEPT PLAN TO INCLUDE THE SUBJECT PROPERTY.
3. REQUEST A TEXT AMENDMENT TO THE CDD #23 USE TABLE IN THE ZONING ORDINANCE TO INCLUDE BOTH A MULTIFAMILY DWELLING AND A CHURCH USE.
4. REQUEST A REZONING OF THE EXISTING PARCEL 011.03-01-05 FROM ZONE RA TO CDD #23.
5. REQUEST A DEVELOPMENT SPECIAL USE PERMIT WITH PRELIMINARY SITE PLAN.
6. REQUEST A SPECIAL USE PERMIT TO REDUCE REQUIRED PARKING SPACES FOR CHURCH USE BY 6 SPACES.
7. REQUEST A SPECIAL USE PERMIT FOR A TIER 2 TRANSPORTATION MANAGEMENT PLAN.
8. REQUEST A SUBDIVISION OF THE SUBJECT PARCEL WITH THE OPTION TO DEVELOP THE PROJECT IN PHASES.

TRIP GENERATION ANALYSIS

PROVIDED BY GOROVE/SLADE -4/20/17

Existing Development

Use	ITE Land Use Code Trip Generation, 9th Ed.	Quantity		AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Weekday Daily	Sunday Peak Hour In	Sunday Peak Hour Out	Sunday Peak Hour Total
Church	560 Church	14	KSF	5	3	8	5	5	10	126	104	109	213
		Existing Site Trips		5	3	8	5	5	10	126	104	109	213

Proposed Development

Use	ITE Land Use Code Trip Generation, 9th Ed.	Quantity		AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Weekday Daily	Sunday Peak Hour In	Sunday Peak Hour Out	Sunday Peak Hour Total
Church	560 Church	5	KSF	2	1	3	3	4	7	46	63	66	129
Residential	220 Apartment	113	Affordable	12	47	59	52	28	80	808	29	29	58
		Proposed Development Site Trips		14	48	62	55	32	87	854	92	95	187

CDD#23 AREA TABULATION

	TOTAL EXISTING DEVELOPMENT **	EX. DEVELOPMENT TO BE DEMOLISHED PER THIS APPLICATION	CUMULATIVE EX. DEVELOPMENT DEMOLISHED TO DATE	NEW DEVELOPMENT PER THIS APPLICATION	CUMULATIVE NEW DEVELOPMENT TO DATE ***	NET NEW DEVELOPMENT PER THIS APPLICATION	CUMULATIVE NET NEW DEVELOPMENT TO DATE ****
NURSING BEDS (#)	80	0	0	0	0	**0**	**0**
RESIDENTIAL (UNITS)	346	0	13	113	126	**113**	**239**
RESIDENTIAL (SQ. FT.)*	363,470	0	0	154,153	237,127	**154,153**	**391,280**
CHURCH (SQ. FT.)*	12,610	12,610	0	5,005	0	**-7,605**	**-7,605**

* SQ. FT. REFLECTED IN THIS ROW IS "FLOOR AREA" AS DEFINED IN CDD#23 APPROVAL CONDITIONS CDD2014-0003
** PRE-DEVELOPMENT CONDITIONS PRIOR TO GOODWIN HOUSE APPLICATION, DSP2014-0012
*** CONDITIONS FOLLOWING GOODWIN HOUSE APPLICATION, DSP2014-0012
**** TOTAL NEW DEVELOPMENT WITHIN CDD#23, INCLUDING GOODWIN HOUSE (DSP2014-0012) AND THIS APPLICATION

ZONING TABULATIONS

ZONING:	EXISTING: RA PROPOSED: CDD #23
MASTER PLAN:	BEAUREGARD CORRIDOR SMALL AREA PLAN *
SITE AREA (SQ. FT) (ACRES):	2.01 AC OR 87,473 SF
USE:	EXISTING: CHURCH PROPOSED: MULTIFAMILY AFFORDABLE AND CHURCH

	EXISTING ALLOWED	PERMITTED/REQUIRED	PROPOSED
ZONE	RA	CDD #23	CDD #23 **
FAR (TOTAL)	MAX 0.75	MAX 2.5 ***	±1.82 (159,158/87,473)
EAST (MULTIFAMILY) (FOR INFO ONLY)	MAX 0.75	N/A	±2.69 ****
WEST (CHURCH) (FOR INFO ONLY)	MAX 0.75	N/A	±0.17 ****
DENSITY			
EAST (MULTIFAMILY)	MAX 27 DU/AC	N/A	±57 DU/AC (113 UNITS/2.01 AC)
1 BEDROOM UNITS	N/A	N/A	17
2 BEDROOM UNITS	N/A	N/A	84
3 BEDROOM UNITS	N/A	N/A	12
TOTAL GROSS FLOOR AREA (SF)	N/A	N/A	±170,737 SF
RESIDENTIAL	N/A	N/A	±108,187 SF
PARKING/BLDG SERVICE	N/A	N/A	±57,545 SF
CHURCH	N/A	N/A	±5,005 SF
TOTAL FLOOR AREA (SF)	MAX 65,605 SF	MAX 218,682 SF	±159,158 SF
RESIDENTIAL	MAX 43,516 SF	N/A	±108,187 SF
PARKING/BLDG SERVICE			±45,966 SF
CHURCH	MAX 22,088 SF	N/A	±5,005 SF
LOT AREA (SF)			
EAST (MULTIFAMILY)	MIN. 1,600 SF	N/A	57,298 SF OR 1.32 AC
WEST (CHURCH)	MIN. 1,600 SF	N/A	30,175 SF OR 0.69 AC
SETBACKS (FT)			
EAST PARCEL (MULTIFAMILY)			
FRONT - NORTH BEAUREGARD STREET	MIN. 20 FT	N/A	±22.2 FT
FRONT - FILLMORE AVENUE	MIN. 20 FT	N/A	±6.9 FT
SIDE (SOUTH)	MIN. 16 FT (W/ 1:2 RATIO)	N/A	±39.9 FT
SIDE (EAST)	MIN. 16 FT (W/ 1:2 RATIO)	N/A	±4.0 FT
WEST PARCEL (CHURCH)			
FRONT - NORTH BEAUREGARD STREET	MIN. 20 FT	N/A	±24.0 FT
SIDE	MIN. 16 FT (W/ 1:2 RATIO)	N/A	±21.1 FT; ±77.6 FT
REAR	MIN. 8 FT (W/ 1:1 RATIO)	N/A	±35.9 FT
FRONTAGE			
EAST PARCEL (MULTIFAMILY)			
NORTH BEAUREGARD STREET	MIN. 50 FT	N/A	±236.9 FT
FILLMORE AVENUE	MIN. 50 FT	N/A	±226.1 FT
WEST PARCEL (CHURCH)			
NORTH BEAUREGARD STREET	MIN. 50 FT	N/A	±244.5 FT
OPEN SPACE (SF)	MIN. 800 SF/DU (90,400 SF)	25% (MIN 21,869 SF)	±41% (±36,550 SF)
EAST - TOTAL	MIN. 800 SF/DU	N/A	±40% (±23,250 SF)
EAST - GROUND LEVEL	MIN. 800 SF/DU	N/A	±22.8% (±13,250 SF)
EAST - ROOFTOP/COURTYARD	UP TO 80 SF/DU ALLOWED	N/A	±17.2% (±10,000 SF)
WEST - TOTAL	MIN. 800 SF/DU	N/A	±45% (±13,300 SF)
WEST - GROUND LEVEL	MIN. 800 SF/DU	N/A	±45% (±13,300 SF)
WEST - ROOFTOP	UP TO 80 SF/DU ALLOWED	N/A	±0% (±0 SF)
AVERAGE FINISHED GRADE			
MULTIFAMILY	N/A	N/A	±213.65
CHURCH	N/A	N/A	±227.80
HEIGHT (FT)			
EAST (MULTIFAMILY)	MAX. 45 FT	150 FT	85 FT MAX
WEST (CHURCH)	MAX. 45 FT	150 FT	45 FT MAX
PARKING TABULATIONS			
MULTIFAMILY	80 SP	80 SP	±84 SP
STANDARD SPACE (GARAGE)	MIN 25%	MIN 25%	±35 SP
COMPACT SPACE (GARAGE)	MAX 75%	MAX 75%	±41 SP (51%)
ADA SPACE (GARAGE)	MIN 4 SP	MIN 4 SP	±4 SP
PARALLEL SPACE (AT GRADE)	N/A	N/A	±4 SP
BIKE PARKING	37	37 SP	±38 SP
CHURCH	28 SP	28 SP	±22 SP *****
STANDARD SPACE (AT GRADE)	MIN 30%	MIN 30%	±17 SP
COMPACT SPACE (AT GRADE)	MAX 70%	MAX 70%	±0 SP
ADA SPACE (AT GRADE)	MIN 2 SP	MIN 2 SP	±2 SP
PARALLEL SPACE (AT GRADE)	N/A	N/A	±3 SP
TANDEM SPACE (AT GRADE)	N/A	N/A	±6 SP *****
BIKE PARKING	N/A	0 SP	±0 SP
LOADING	N/A	N/A	±0 SP
TRIP GENERATION			
MULTIFAMILY (AM/PM PEAK)	N/A	N/A	±59/80 TRIPS ******
CHURCH (SUNDAY PEAK)	N/A	N/A	±109 TRIPS ******

NOTES
* A MASTER PLAN AMENDMENT IS REQUESTED TO THE BEAUREGARD SMALL AREA PLAN.
** AN AMENDMENT IS REQUESTED TO THE CDD # 23 CONCEPT PLAN.
*** AS APPROVED ON CDD #23.
**** FAR BREAKDOWN BY PARCEL PROVIDED INFORMATION ONLY. AS ALLOWED IN CDD ZONE, FAR COMPUTED OVER ENTIRE DEVELOPMENT AREA.
***** 6 TANDEM PARKING SPACES NOT COUNTED TOWARD MEETING Z.O. REQUIREMENT. SUP REQUESTED FOR PARKING REDUCTION.
****** PEAK TRIPS PER DAY PROVIDED BY GOROVE SLADE, 4/14/17.

COMPLETE STREET TABULATION

	NEW	UPGRADED
CROSSWALKS (NUMBER)	2	3
STANDARD	2	1
HIGH VISIBILITY	0	2
CURB RAMPS	4	N/A
SIDEWALKS (LF)	±1,000	±800
BICYCLE PARKING (NUMBER SPACES)	±38	N/A
PUBLIC/VISITOR	±3	N/A
PRIVATE/GARAGE	±34	N/A
BICYCLE PATHS (LF)	N/A	N/A
PEDESTRIAN SIGNALS	N/A	N/A

DEVELOPMENT TEAM INFORMATION

1. RECORD OWNER:
CHURCH OF THE RESURRECTION TRES OF
2280 N BEAUREGARD STREET
ALEXANDRIA VA 22311
PHONE: 703-998-0888
EMAIL: OFFICE@WELCOMETORESURRECTION.ORG

2. DEVELOPER:
AHC, INC.
2230 N. FAIRFAX DRIVE
ARLINGTON, VA 22201
ATTN: MR. JOHN WELSH
PHONE: 703-486-0626
EMAIL: AHC@AHCINC.ORG

3. CIVIL ENGINEER:
WALTER L. PHILLIPS, INC.
207 PARK AVE.
FALLS CHURCH, VA 22046
ATTN: MR. BEN FLOOD

4. ARCHITECT:
CUNNINGHAM QUILL ARCHITECTS PLLC.
1054 31ST STREET NW
SUITE 315
WASHINGTON, DC 20007
ATTN: MR. LEE QUILL

5. LAND USE ATTORNEY:
LAND, CARROLL & BLAIR, P.C.
524 KING STREET
ALEXANDRIA, VIRGINIA 22314
ATTN: MR. DUNCAN BLAIR

6. LANDSCAPE ARCHITECT:
CAMPION HRUBY
26 SOUTH STREET
ANNAPOLIS, MD 21401
ATTN: MR. KEVIN GAUGHAN

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-SHOWN DATE: 11/10/17 DRAWN: DP/DM CHECKED: BF

PLAN STATUS

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 11/10/17 PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA
COVER SHEET

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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.

BUILDING CODE ANALYSIS - EAST PARCEL

OCCUPANCY CLASSIFICATION

SEPARATED MIXED-USE

R-2: MULTI-FAMILY HOUSING
A-3: ASSEMBLY (RESIDENTIAL AMENITIES)
S-2: OPEN PARKING GARAGE, MECH. SPACES & MULTIFAMILY HOUSING
E: CLASSROOM

CONSTRUCTION TYPES

-5 STORIES OF CONSTRUCTION TYPE 3B OVER 3-HOUR RATED HORIZONTAL BUILDING SEPARATION PER VCC 510.2. CONSTRUCTION TYPE 1A BELOW THE HORIZONTAL SEPARATION
-THE HORIZONTAL BUILDING SEPARATION SHALL BE NO MORE THAN 1 STORY ABOVE THE GRADE PLANE
-OCCUPANCY ABOVE THE HORIZONTAL BUILDING SEPARATION: R-2
-OCCUPANCIES BELOW THE HORIZONTAL BUILDING SEPARATION: R-2, A-2 (LESS THAN 300 OCCUPANTS), S-2
-4% TAX CREDIT UNITS SEPARATED FROM 9% TAX CREDIT UNITS BY 2-HOUR FIRE RATED VERTICAL FIRE WALL

BUILDING HEIGHT

6 STORIES (WITH BASEMENTS) AND 71' ABOVE THE GRADE PLANE (AVERAGE FINISH GRADE) TO THE ROOF SURFACE

FIRE PROTECTION SYSTEMS

BUILDING FULLY FIRE SUPPRESSED PER NFPA 13.

HIGH RISE

THE HIGHEST OCCUPIED FLOOR (275.0') IS 71.37' ABOVE THE LOWEST LEVEL OF FIRE DEPARTMENT ACCESS (±203.63'). THE BUILDING IS NOT A HIGH RISE.

BUILDING CODE ANALYSIS - WEST PARCEL

OCCUPANCY CLASSIFICATION

ASSEMBLY

A-3: ASSEMBLY (WITH ACCESSORY E USE)

CONSTRUCTION TYPE

-1 STORY OF CONSTRUCTION TYPE 5B.

BUILDING HEIGHT

1 STORY AND UP TO 35' ABOVE THE GRADE PLANE (AVERAGE FINISH GRADE) TO THE ROOF SURFACE WITH A SPIRE OF 40' ABOVE THE GRADE PLANE (AVERAGE FINISH GRADE).

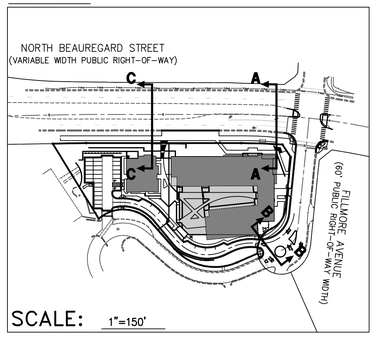
FIRE PROTECTION SYSTEMS

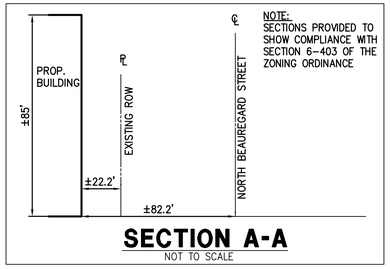
BUILDING FULLY FIRE SUPPRESSED PER NFPA 13.

HIGH RISE

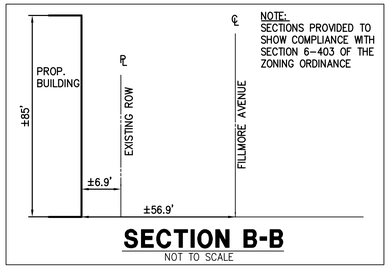
THE HIGHEST OCCUPIED FLOOR (229.50') IS 0' ABOVE THE LOWEST LEVEL OF FIRE DEPARTMENT ACCESS (±229.50'). THE BUILDING IS NOT A HIGH RISE.

KEY MAP

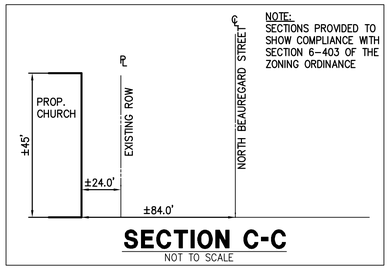




SECTION A-A
NOT TO SCALE

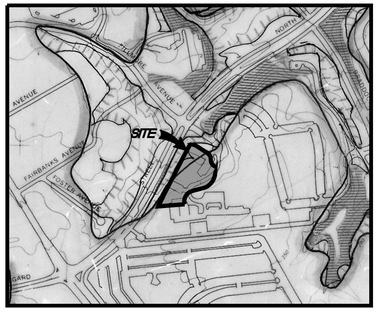


SECTION B-B
NOT TO SCALE



SECTION C-C
NOT TO SCALE

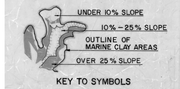
MARINE CLAY SOILS MAP



NOTE: ACCORDING TO THIS MAP, THERE ARE MARINE CLAYS LOCATED ON THE SUBJECT PARCEL.

SCALE: 1"=500'

LIMITS OF SITE



KEY TO SYMBOLS

RESOURCE PROTECTION AREA NOTES

ACCORDING TO THE CITY'S RPA MAPS, THERE ARE KNOWN RPA'S ON THIS SITE. HOWEVER, IT IS THE APPLICANT'S BELIEF THAT THERE ARE NO RPA'S ON THE SUBJECT PARCEL. A SURVEY OF THE EXISTING STREAM LOCATED IN NORTH BEAUREGARD STREET SHOWS THAT IT IS LOCATED MORE THAN 100' FROM THE PROPERTY LINE. SEE SHEET P-0709 FOR DETAILS.

FLOOD PLAIN NOTES

1. THE SITE DOES NOT LIE WITHIN 100-YEAR FLOOD PLAIN WATER SURFACE ELEVATION (WSE) PER THE DEMARCATION OF THE CURRENT FLOOD INSURANCE RATE MAP (FIRM) PUBLISHED BY FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA).

CONTAMINATION NOTES

1. THERE IS NO KNOWN SOIL AND/OR GROUNDWATER CONTAMINATION WITHIN THE LIMITS OF THIS DEVELOPMENT.

2. THERE ARE NO KNOWN UNDERGROUND STORAGE TANKS WITHIN THE SITE AREA.

3. THERE ARE NO KNOWN SANITARY LANDFILLS, DUMPS OR DISPOSAL AREAS WITHIN 1,000 FEET OF THE SITE.

4. THERE ARE NO KNOWN AREAS WITH THE POTENTIAL TO PRODUCE COMBUSTIBLE GASES ON SITE.

5. INFORMATION REGARDING CONTAMINATION PROVIDED IN PHASE 1 ESA PROVIDED BY ECS MID-ATLANTIC, LLC ON DECEMBER 16, 2015.

CEMETERY AND/OR BURIAL GROUNDS

THERE IS NO OBSERVABLE, HISTORICAL OR ARCHAEOLOGICAL EVIDENCE OF CEMETERIES OR BURIAL GROUNDS ON THIS PROPERTY.

UTILITY CONTACTS

ELECTRIC:
VIRGINIA DOMINION POWER
C/O KEN HOLMES
907 WEST GLEBE ROAD
ALEXANDRIA, VA 22305
(703) 838-2437

NATURAL GAS:
WASHINGTON GAS
C/O RAY BAKER
6801 INDUSTRIAL ROAD
SPRINGFIELD, VA 22151
(703) 750-5953

WATER:
VIRGINIA AMERICAN WATER COMPANY
C/O HAO (STEVE) CHEN
2223 DUKE STREET
ALEXANDRIA, VA 22314
(703) 706-3889

TELEPHONE:
VERIZON
C/O VAL FISHER
2980 FAIRVIEW PARK N., 6TH FLOOR
FALLS CHURCH, VA 22042
(703) 204-5068

CATV/HS INTERNET:
COMCAST
C/O BRIAN SHADE
3900 WHEELER AVENUE
ALEXANDRIA, VA 22304
(703) 567-4449

ENVIRONMENTAL SITE ASSESSMENT

1. THERE ARE NO TIDAL WETLANDS, TIDAL SHORES, TRIBUTARY STREAMS, FLOODPLAINS, CONNECTED TIDAL WETLANDS, ISOLATED WETLANDS, HIGHLY ERODIABLE/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 ON THE SITE. (SEE SHEET P-0709 FOR RPA LOCATION).

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 RELEASES TO THE ENVIRONMENT WILL BE HANDLED IN ACCORDANCE WITH FEDERAL, STATE, AND CITY REGULATIONS.

3. ALL WELLS TO BE DEMOLISHED IN THIS PROJECT, INCLUDING MONITORING WELLS MUST BE CLOSED IN ACCORDANCE WITH VIRGINIA STATE WATER CONTROL BOARD (VSWCB) REQUIREMENTS. CONTACT ENVIRONMENTAL HEALTH SPECIALIST AND COORDINATE WITH THE ALEXANDRIA HEALTH DEPARTMENT AT 703-838-4400 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 7 AM TO 6 PM, AND
- SATURDAYS FROM 9 AM TO 6 PM.
- NO CONSTRUCTION ACTIVITIES ARE PERMITTED ON SUNDAYS

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

GREEN BUILDING NARRATIVE

THE MULTIFAMILY BUILDING WILL BE DESIGNED AND CERTIFIED TO EARTHCRAFT GOLD, THE HIGHEST EARTHCRAFT RATING RECOGNIZED BY THE VIRGINIA HOUSING DEVELOPMENT AUTHORITY (VHDA). THIS BUILDING WILL INCLUDE HIGH-EFFICIENCY LIGHTING FIXTURES; LOW FLOW WATER FIXTURES; EPA ENERGY STAR-RATED EQUIPMENT; ENERGY STAR DOUBLE GLAZED, LOW-E WINDOWS; AND HIGH EFFICIENCY HVAC EQUIPMENT.

THE CHURCH BUILDING WILL INCLUDE HIGH-EFFICIENCY LIGHTING FIXTURES; LOW FLOW WATER FIXTURES; EPA ENERGY STAR-RATED EQUIPMENT; ENERGY STAR DOUBLE GLAZED, LOW-E WINDOWS; AND HIGH EFFICIENCY HVAC EQUIPMENT. THE EPISCOPAL CHURCH OF THE RESURRECTION WILL REQUEST "FLEXIBILITY" UNDER THE CITY'S GREEN BUILDING POLICY.

THE LANDSCAPE FOR BOTH THE MULTIFAMILY AND THE CHURCH INCLUDE SUSTAINABLE PRACTICES INCLUDING THE USE OF PERMEABLE PAVING; COLLECTION AND TREATMENT OF STORMWATER ON SITE; A HIGH EFFICIENCY DRIP IRRIGATION SYSTEM; HIGH-EFFICIENCY LED OUTDOOR LIGHT FIXTURES; NATIVE PLANTINGS; AN OVERALL INCREASE IN PROPOSED CANOPY COVERAGE ASSISTING WITH THE REDUCTION OF HEAT ISLAND EFFECT AND PASSIVE BUILDING COOLING; AND A DECREASE IN RESOURCE INTENSIVE LAWNS.

GEOTECHNICAL REPORT NOTE

A SITE SPECIFIC GEOTECHNICAL REPORT SHALL BE PREPARED FOR THIS PROPERTY AND PROVIDED TO T&ES AT TIME OF FINAL SITE PLAN.

COMBINED SEWER NOTE

THIS SITE IS NOT WITHIN A COMBINED SEWER AREA.

MASTER LEGEND

PROPOSED	DESCRIPTION	EXISTING
	CURB & GUTTER CSCG-1	
	COPING CSCG-1	
SPILL CATCH	TRANSITION FROM CATCH TO SPILL	CATCH SPILL
A	SANITARY SEWER STRUCTURE LABEL	A
S	SANITARY SEWER	S
SL	SANITARY LATERAL	SL
	COMBINED SEWER	
99	STORM SEWER STRUCTURE LABEL	99
	STORM SEWER	
W	WATER MAIN	W
	FIRE HYDRANT	
	PLUG	
	OVERHEAD WIRES	
	UTILITY POLE	
UE	UNDERGROUND ELECTRIC	UE
T	TELEPHONE	T
G	GAS MAIN	G
T	TRANSFORMER	T
	HANDICAP RAMP (CG-12)	
	GUARDRAIL	
X X X	FENCE	X X X
	TRAFFIC FLOW	
	STREET LIGHT	
	PEDESTRIAN LIGHT	
	COBRA HEAD LIGHT	
	WALL LIGHT	
	WALL SCONCE	
	BOLLARD LIGHT	
	BIKE RACK	
	PROPOSED SHRUBS	
	TREES	
	DOOR	
	PROPERTY LINE	
	MANHOLE	
	CLEAN OUT	C.O.
	CURB INLET	
260 264	CONTOURS	260 264
+264 50	SPOT ELEVATION DRAINAGE FLOW DIRECTION	+264 50
TC BC TW	TOP OF CURB BOTTOM OF CURB TOP OF WALL	TC BC TW
BW H.P.	BOTTOM OF WALL HIGH POINT	BW H.P.
	LIMITS OF DISTURBANCE	
	CONCRETE	
	RESOURCE PROTECTION AREA	

CATV..... CABLE TV BOX
CO..... CLEANOUT
CONC..... CONCRETE
DB, PG..... DEED BOOK, PAGE
DHF, DHS..... DRILL HOLE FOUND OR DRILL HOLE SET
D ..... DUMPSTER PAD
EB..... ELECTRIC BOX
EM..... ELECTRIC METER
EP..... EDGE OF PAVEMENT
EPAD..... ELECTRIC PAD
ESMT..... EASEMENT
FC..... FACE OF CURB
FDC..... FIRE DEPARTMENT CONNECTION
FH..... FIRE HYDRANT
FCAP..... FILLER CAP
GM..... GAS METER
GV..... GAS VALVE
IPF..... IRON PIN FOUND
IPS..... IRON PIN SET
MB..... US MAILBOX
MH..... MANHOLE
MW..... MONITORING WELL
PKF, PKS..... PK NAIL FOUND, PK NAIL SET
POB..... POINT OF BEGINNING
RD..... ROOF DRAIN
RET..... RETAINING WALL
SP..... SIGN POST
SS..... SANITARY SEWER MANHOLE
ST..... STORM STRUCTURE
SW..... SIDEWALK
T ..... TRANSFORMER PAD
TB..... TELEPHONE BOOTH
TCB..... TRAFFIC CONTROL BOX
TP..... TELEPHONE PEDESTAL
TAS..... TRAFFIC SIGNAL ARM
TSP..... TRAFFIC SIGNAL POLE
WM..... WATER METER
WSP..... WATER STAND PIPE
WV..... WATER VALVE
♿ ..... HANDICAPPED PARKING SPACE
☼ ..... LIGHT POLE
——/—— ..... OVERHEAD WIRES
——W—— ..... WATER LINE
——ST—— ..... STORM SEWER LINE
——S—— ..... SANITARY SEWER LINE
——T—— ..... UNDERGROUND TELEPHONE LINE
——E—— ..... UNDERGROUND ELECTRIC LINE
——→ ..... GUY WIRE
——X—— ..... FENCE

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: 11/10/17 | DRAWN: DP,DM | CHECKED: BF

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

GENERAL NOTES

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

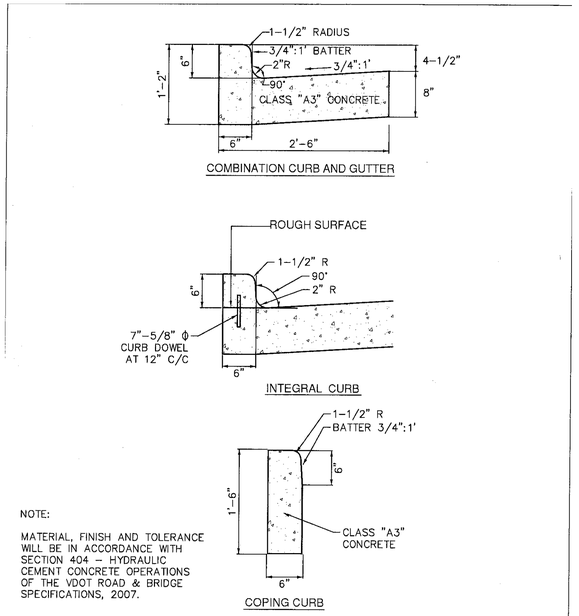
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.



NOTE:

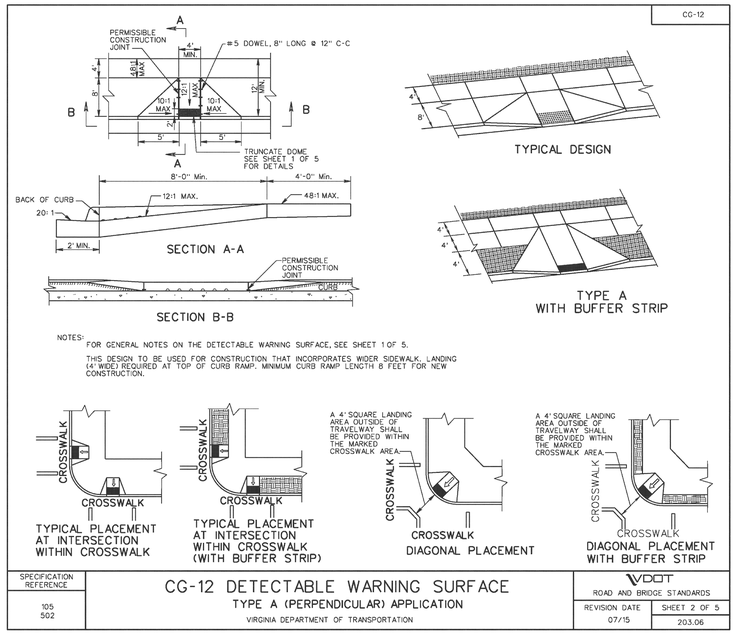
MATERIAL, FINISH AND TOLERANCE WILL BE IN ACCORDANCE WITH SECTION 404 – HYDRAULIC CEMENT CONCRETE OPERATIONS OF THE VDOT ROAD & BRIDGE SPECIFICATIONS, 2007.

CURB AND GUTTER AND COPING CURB

APPROVED	DATE	DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES ALEXANDRIA VIRGINIA	REVISION DATE CSCG-1 PAGE 38

CURB AND GUTTER DETAIL

NOT TO SCALE



CG-12A VDOT STD. ADA ACCESSIBLE RAMP

NOT TO SCALE

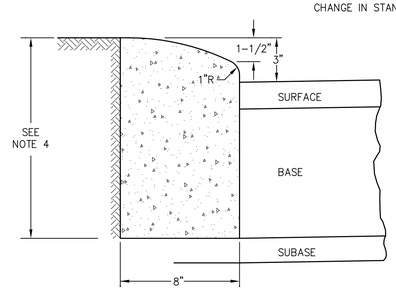
ACCESSIBILITY NOTES:

1. THE DESIGN PROFESSIONAL SIGNING THIS DOCUMENT REPRESENTS THAT TO THE BEST OF HIS/HER PROFESSIONAL JUDGEMENT, KNOWLEDGE, AND BELIEF THE DESIGN SPECIFICATIONS HEREIN COMPLY WITH THE CHAPTER 11 OF THE VCC AND ICC/ANSI A117.1 – 2003 (ANSI) AND, WHERE APPLICABLE, THE AMERICANS WITH DISABILITIES ACT (ADA).
2. ALL GRADES/SLOPES SHOWN ON THIS PLAN WERE DESIGNED AT OR BELOW MAXIMUMS ALLOWED BY ANSI. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE ANSI ACCESSIBILITY GUIDELINES, AND ADA. IN THE EVENT THAT A DESIGN QUESTION SHOULD ARISE, OR A FIELD CONDITION PRESENT ITSELF THAT IS DIFFERENT FROM THOSE SHOWN ON THESE PLANS, WORK SHOULD CEASE AND THE ENGINEER SHOULD BE NOTIFIED SO THAT AN ACCEPTABLE SOLUTION CAN BE DETERMINED.
3. THE CONTRACTOR IS ADVISED TO CAREFULLY CHECK ALL THE PHASES OR WORK RELATING TO ANSI ACCESSIBILITY FOR THIS PROJECT. SINCE THE CODE DOES NOT ALLOW FOR CONSTRUCTION TOLERANCE, ANY CONSTRUCTION THAT EXCEEDS MAXIMUM OR MINIMUM DIMENSIONS AND SLOPES AS REQUIRED BY ANSI ARE SUBJECT TO REJECTION AND MAY BE REQUIRED TO BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
4. SINCE THE CIVIL ENGINEER OR SURVEYOR CANNOT CONTROL THE EXACT METHODS OR MEANS USED BY THE GENERAL CONTRACTOR OR THEIR SUBCONTRACTORS DURING GRADING AND CONSTRUCTION OF THE PROJECT, THE CIVIL ENGINEER OR SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE FINAL ACCEPTANCE OF ANSI/ADA ACCESSIBILITY RELATED ITEMS BY THE CITY OR COUNTY, ANY OTHER AUTHORITY, OR OTHER AFFECTED PARTIES.

MOD. CG-3

NOTES:

1. THIS ITEM MAY BE PRECAST OR CAST IN PLACE.
2. CONCRETE TO BE CLASS A3 IF CAST IN PLACE, 4000 PSI IF PRECAST.
3. CURB HAVING A RADIUS OF 300 FEET OR LESS (ALONG FACE OF CURB) WILL BE PAID FOR AS RADIAL CURB.
4. THE DEPTH OF THE CURB MAY BE REDUCED AS MUCH AS 3" (13" DEPTH) OR INCREASED AS MUCH AS 3" (19" DEPTH) IN ORDER THE THE BOTTOM OF CURB WILL COINCIDE WITH THE TOP OF A COURSE OF THE PAVEMENT SUBSTRUCTURE. OTHERWISE THE DEPTH IS TO BE 16" AS SHOWN. NO ADJUSTMENT IN THE PRICE BID IS TO BE MADE FOR A DECREASE OR AN INCREASE IN DEPTH.
5. WHEN THE MODIFIED CURB IS TO BE TIED INTO BARRIER CURB THE TRANSITION IS TO BE MADE WITHIN 10' OR THE CHANGE IN STANDARDS MADE AT REGULAR OPENINGS.



MODIFIED 3" CURB

MOD.COMBINATION 3" CURB & GUTTER 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

SCALE: AS NOTED | DATE: 11/10/17 | DRAWN: DP,DM | CHECKED: BF

PLAN STATUS

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

DETAILS

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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.

BUS STOP ROUTES SERVED: 25A

BUS STOP ROUTES SERVED: 7B, 28A

FILLMORE AVENUE (NEIGHBORHOOD RESIDENTIAL)

BUS STOP ROUTES SERVED: 7A, 7B, 7F, 7Y, 25A, 25C, 25E, AT6

BUS STOP ROUTES SERVED: 7A, 7B, 7F, 7Y, 25A, 25C, 25E

W. BRADDOCK ROAD (COMMERCIAL CONNECTOR)

LIMITS OF BEAUREGARD CORRIDOR SMALL AREA PLAN

BUS STOP ROUTES SERVED: 22F, 25B, 28A, 28G

BUS STOP ROUTES SERVED: 7B, 25A, 25B, 25C, 25D, 25E, 28A, AT6

BUS STOP ROUTES SERVED: 7B, 25A, 25B, 25C, 25D, 25E, 28A, AT6

BUS STOP ROUTES SERVED: 7A, 7F, 7Y

1/4 MILE

N. BEAUREGARD STREET (NEIGHBORHOOD CONNECTOR)

SITE

LIMITS OF CDD # 23

BUS STOP ROUTES SERVED: 7A, 7B, 25A, 25C, 25E, AT6

BUS STOP ROUTES SERVED: 16L, 28F, 28G

BUS STOP ROUTES SERVED: 7A, 7F, 7Y, 25B, 25D, 28A

BUS STOP ROUTES SERVED: 28G

BUS STOP ROUTES SERVED: 7A, 7F, 7Y, 25B, 28A, 28G, AT1, AT2

SEMINARY ROAD (COMMERCIAL CONNECTOR)

LIMITS OF CDD # 21

BUS STOP ROUTES SERVED: 7A, 7F, 7W, 7X, 7Y, 25B, 28A, 28G, AT1, AT2

MARK CENTER DRIVE (COMMERCIAL CONNECTOR)

VAS 1983 - NORTH ZONE

LEGEND

- LIMITS OF BEAUREGARD SMALL AREA PLAN
- LIMITS OF CDD # 23
- LIMITS OF CDD # 21
- 1/4 MILE RADIOUS
- SITE AREA

NOTE:
EXISTING SITE FEATURES TAKEN FROM RECORD INFORMATION AND GIS DATA PROVIDED BY THE CITY OF ALEXANDRIA.

150 0 75 150 300 600

(IN FEET)
1 INCH = 150'

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" = 150' | DATE: 11/10/17 | DRAWN: DP,DM | CHECKED: BF

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

COMMONWEALTH OF VIRGINIA
AARON M. WINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

SITE CONTEXT PLAN

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

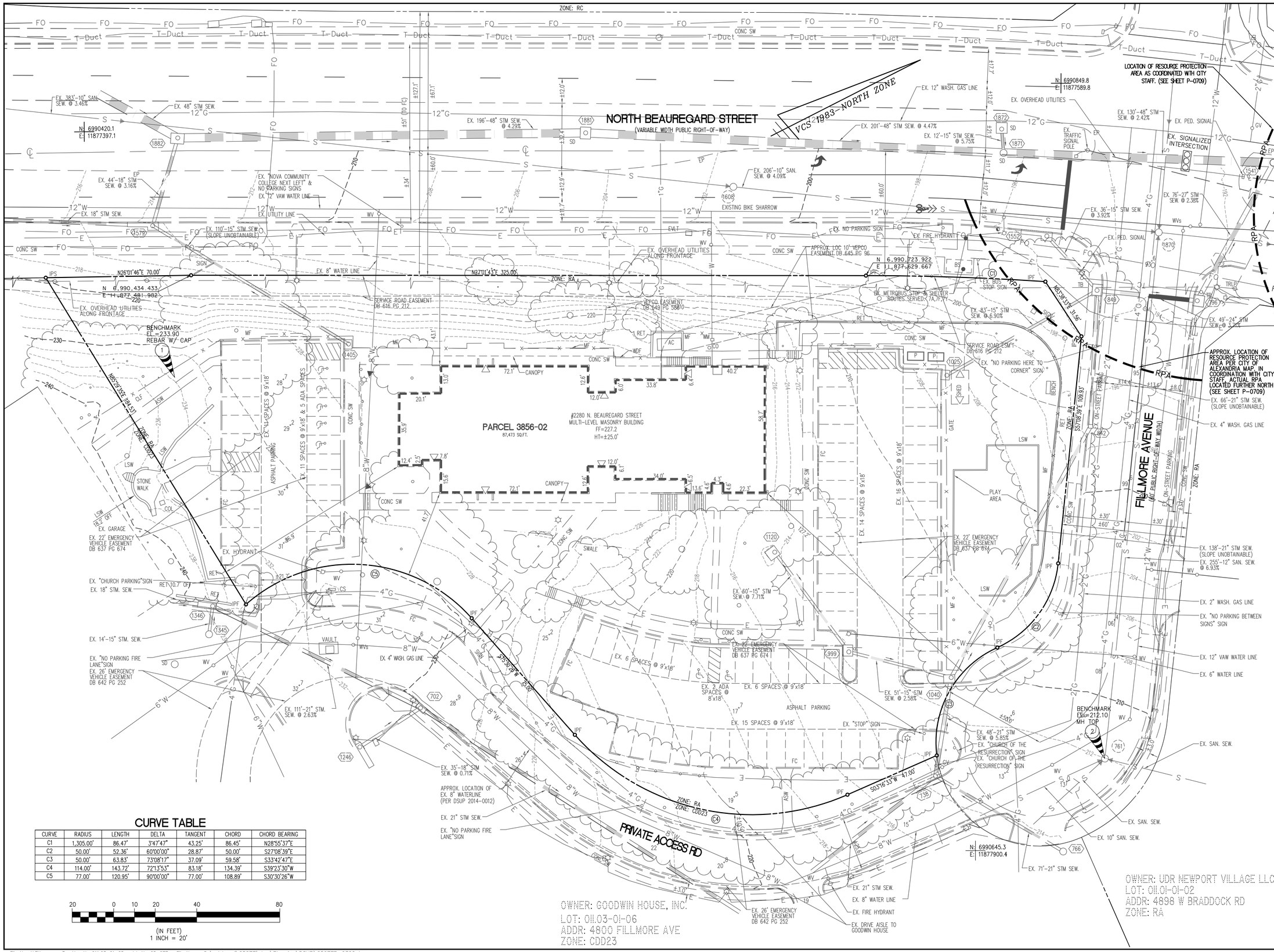
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

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

File No. ALEX Tax Map No. 011.03-01-05 Job No. 05-077 File Name Q:\sdskproj\05077\dwg\Planning\DSUP\05077P-0301.dwg

SHEET: P-0301



CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	TANGENT	CHORD	CHORD BEARING
C1	1,305.00'	86.47'	3°47'47"	43.25'	86.45'	N28°55'37"E
C2	50.00'	52.36'	60°00'00"	28.87'	50.00'	S27°08'39"E
C3	50.00'	63.83'	73°08'17"	37.09'	59.58'	S33°42'47"E
C4	114.00'	143.72'	72°13'53"	83.18'	134.39'	S39°23'30"W
C5	77.00'	120.95'	90°00'00"	77.00'	108.89'	S30°30'26"W

20 0 10 20 40 80

(IN FEET)
1 INCH = 20'

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: 11/10/17 | DRAWN: DP,DM | CHECKED: BF

PLAN STATUS		
DATE	DESCRIPTION	
09/08/17	DSUP SUBMISSION 1	
09/29/17	DSUP SUBMISSION 2	
10/20/17	DSUP SUBMISSION 3	
11/10/17	DSUP SUBMISSION 4	

COMMONWEALTH OF VIRGINIA
AARON M. WINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

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

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

EXISTING CONDITIONS PLAN

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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. 011.03-01-05 Job No. 05-077 File Name Q:\sdskproj\05077\dwg\Planning\DSUP\05077P-0302.dwg

SHEET: P-0302

SANITARY SEWER AS-BUILT

SMH 761	
MANHOLE TOP =	212.10
10"INV IN (SOUTH)=	199.20
INV IN (SOUTHEAST)=	199.20
INV IN (EAST)=	199.44
12"INV OUT (SMH 1870)=	199.02
* SMH 1870	
MANHOLE TOP =	193.38
10"INV IN (SMH 1608)=	182.40
10"INV IN (NORTHWEST)=	180.98
12"INV IN (SMH 761)=	181.35
15"INV OUT (NORTHEAST)=	180.45
* SMH 1608	
MANHOLE TOP =	201.52
10"INV IN (SOUTHWEST)=	190.88
10"INV OUT (SMH 1870)=	190.82

* FROM CITY OF ALEXANDRIA GIS

STORM SEWER AS-BUILT

SD 1405	
CURB INLET TOP =	227.30
INVERT INACCESSIBLE	
FULL OF DEBRIS	
SD 1346	
CURB INLET TOP =	234.49
15"RCP IN (SD 1345)=	223.74
21"RCP IN (SOUTH)=	223.78
21"RCP OUT (SD 702)=	223.49
SD 1246	
CURB INLET TOP =	233.58
18"RCP OUT (SD 702)=	221.07
SD 702	
CURB INLET TOP =	229.87
18"RCP IN (SD 1246)=	220.82
21"RCP IN (SD 1346)=	220.57
21"RCP OUT (N.EAST)=	220.47
SD 738	
CURB INLET TOP =	214.03
15"RCP IN (SD 766)=	207.18
21"RCP IN (SOUTH)=	204.77
21"RCP OUT (SD 1040)=	204.70
SD 1120	
YARD INLET TOP =	214.47
15"RCP OUT (SD 999)=	209.69
SD 999	
CURB INLET TOP =	214.21
15"RCP IN (SD 1120)=	205.06
15"RCP OUT (SD 1040)=	204.47
SD 1040	
CURB INLET TOP =	212.05
15"RCP IN (SD 999)=	203.15
21"RCP IN (SD 738)=	201.89
21"RCP OUT (SD 842)=	201.25
SD 842	
GRATE TOP =	197.00
INACCESSIBLE	
SD 1025	
CURB INLET TOP =	208.04
15"RCP OUT (SD 849)=	195.34
SD 1552	
CURB INLET TOP =	195.57
15"RCP OUT (SD 849)=	191.02
SD 849	
CURB INLET TOP =	193.86
15"RCP IN (SD 1552)=	189.33
15"RCP IN (SD 1025)=	189.61
21"RCP IN (SD 842)=	188.92
24"RCP OUT (SD 796)=	188.81
SD 796	
CURB INLET TOP =	193.81
24"RCP IN (SD 849)=	186.99
27"RCP OUT (SD 1541)=	186.43
SD 1579	
CURB INLET TOP =	214.30
18"RCP IN (SOUTH)=	208.55
18"RCP OUT (SD 1882)=	208.40
* SD 1882	
YARD INLET TOP =	212.84
18"RCP IN (SD 1579)=	207.01
48"RCP IN (EAST)=	204.27
48"RCP OUT (SD 1861)=	204.15
SD 1881	
YARD INLET TOP =	203.89
48"RCP IN (SD 1882)=	195.75
48"RCP OUT (SD 1871)=	195.57
SD 1872	
YARD INLET TOP =	195.29
15"RCP OUT (SD 1871)=	190.51
SD 1871	
MANHOLE TOP =	196.53
15"RCP IN (SD 1872)=	189.82
48"RCP IN (SD 1881)=	186.28
48"RCP OUT (SD 1541)=	185.73
SD 1541	
MANHOLE TOP =	191.09
27"RCP IN (SD 796)=	184.62
48"RCP IN (SD 1871)=	182.58
48"RCP OUT (N.EAST)=	182.34

* FROM CITY OF ALEXANDRIA GIS

NOTES

1. THE PROPERTY SHOWN HEREON IS DESIGNATED BY THE CITY OF ALEXANDRIA, VIRGINIA, AS MAP-BLOCK-LOT NUMBER 011.03-01-05 AND IS ZONED RA.
2. THE PROPERTY IS NOW IN THE NAME OF THE TRUSTEES OF THE CHURCH OF THE RESURRECTION, ALEXANDRIA, VIRGINIA AS RECORDED IN DEED BOOK 732 AT PAGE 376.
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.
4. TOTAL AREA OF THE PROPERTY IS 87,473 SQUARE FEET OR 2.0081 ACRES.
5. THIS PLAN IS BASED ON A FIELD SURVEY COMPLETED BY THIS FIRM ON FEBRUARY 11, 2015.
6. THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP FOR THE CITY OF ALEXANDRIA, VIRGINIA, MAP NUMBER 5155190028E, 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. EASEMENTS, CONDITIONS, COVENANTS AND RESTRICTIONS, SHOWN AND/OR NOTED, TAKEN FROM THE COMMITMENT FOR TITLE INSURANCE PREPARED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, CASE NUMBER 113540.00189 DATED JANUARY 26, 2015.
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 SUBDIVISION BOUNDARY AND THE BENCHMARK SHOWN TO NOAA/NGS MONUMENT PID NUMBER HV9141; GPS152 CORS ARP. THE COMBINED SCALE FACTOR APPLIED TO THE FIELD DISTANCES TO DERIVE THE REFERENCED COORDINATES IS 0.9999502. 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 TWO FEET.
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 FEBRUARY 11, 2015; AND THAT THIS PLAN, MAP, OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.
10. THIS SURVEY WAS PERFORMED AT THE REQUEST OF AHC, INC.

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: 11/10/17 DRAWN: DP.DM CHECKED: BF

COMMONWEALTH OF VIRGINIA AARON M. VANSON Lic. No.041851 11/10/17 PROFESSIONAL ENGINEER

PLAN STATUS		
DATE	DESCRIPTION	
09/08/17	DSUP SUBMISSION 1	
09/29/17	DSUP SUBMISSION 2	
10/20/17	DSUP SUBMISSION 3	
11/10/17	DSUP SUBMISSION 4	

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

EXISTING CONDITIONS NOTES & AS-BUILT DATA

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

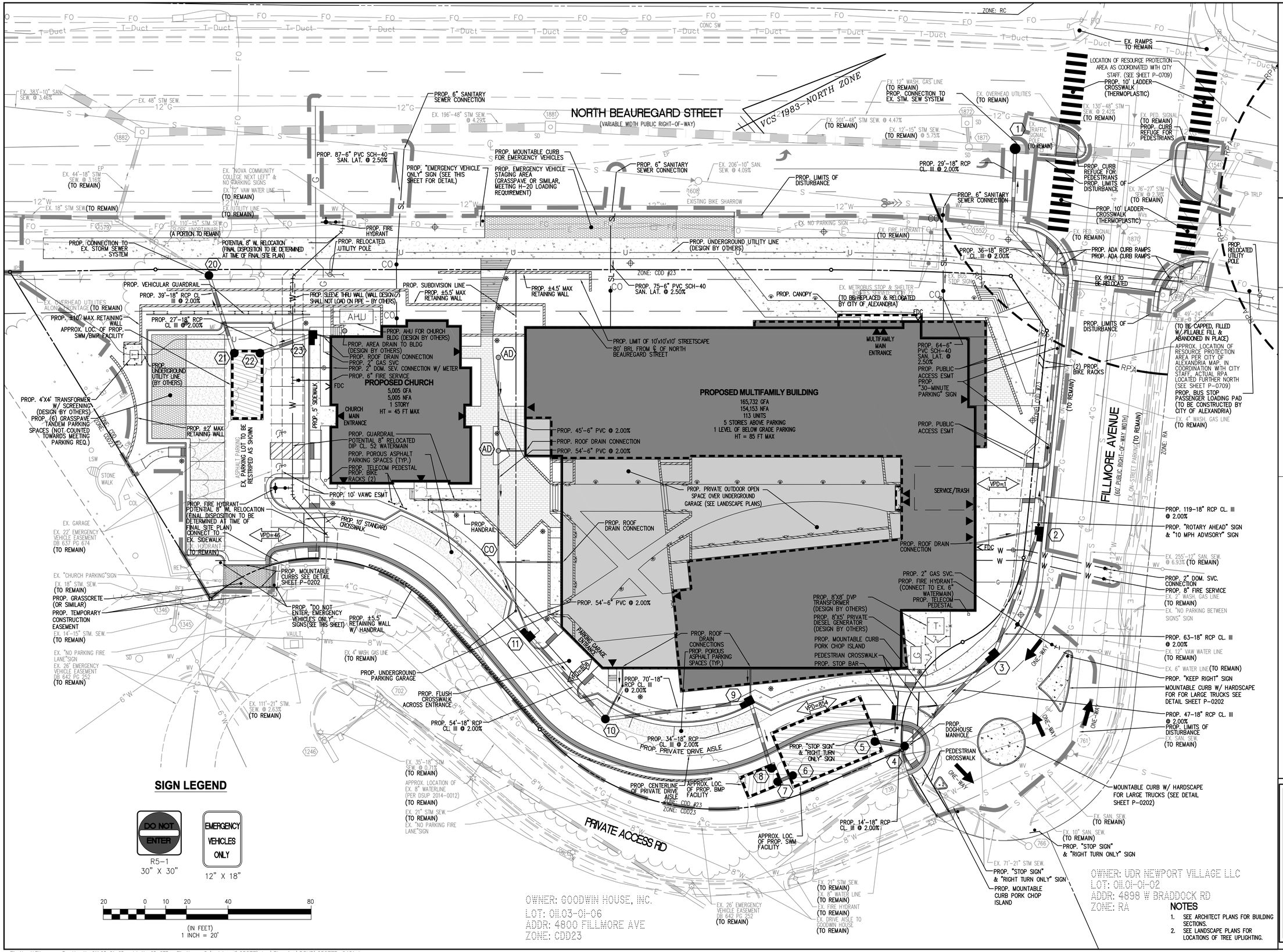
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.



NOTES

1. SEE ARCHITECT PLANS FOR BUILDING SECTIONS.
2. SEE LANDSCAPE PLANS FOR LOCATIONS OF TREE UPLIGHTING.

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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.

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: 11/10/17 | DRAWN: DP,DM | CHECKED: BF

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

PLAN STATUS

COMMONWEALTH OF VIRGINIA — AARON M. WINSON Lic. No.041851 — 11/10/17 — PROFESSIONAL ENGINEER

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

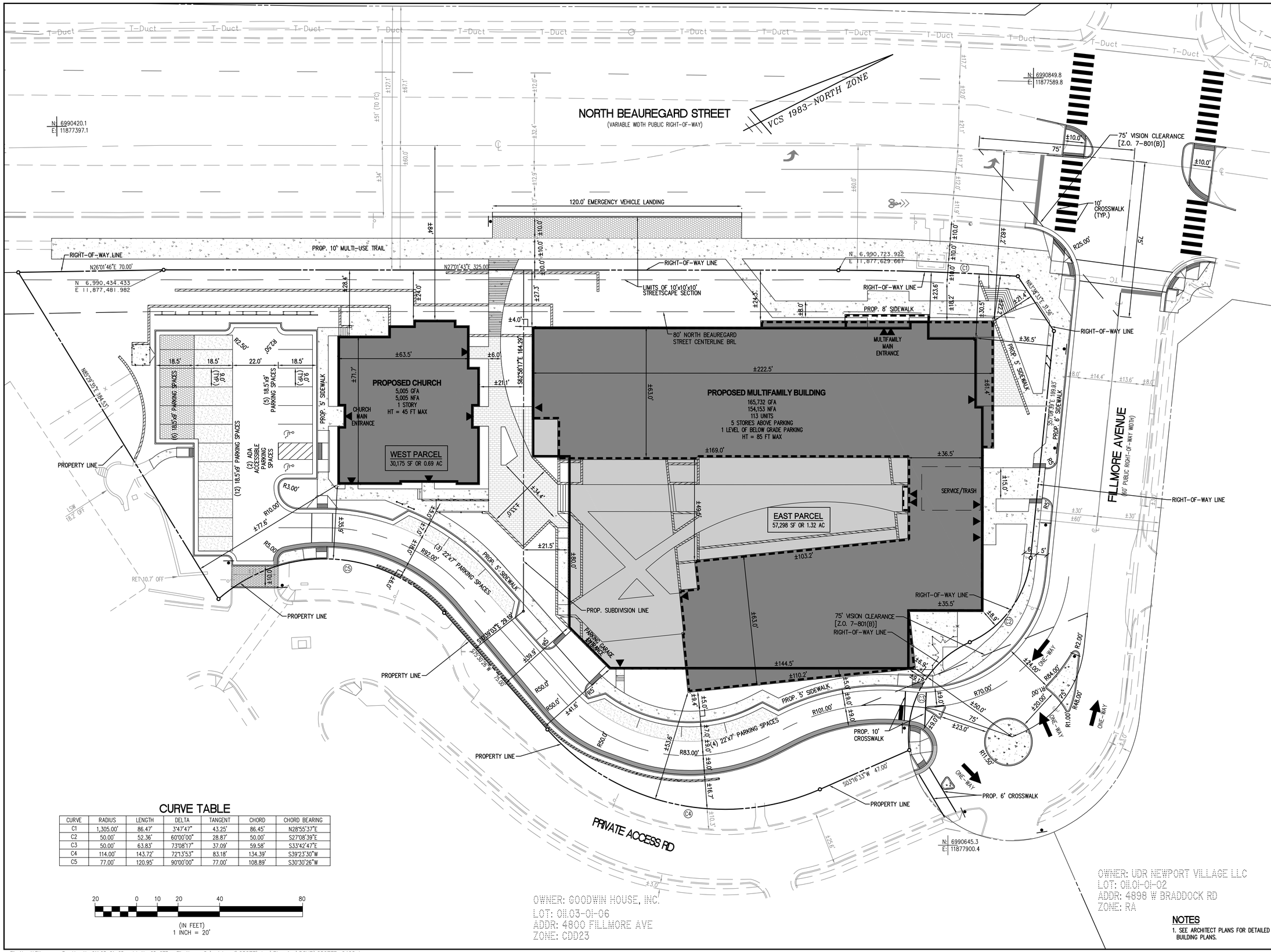
REVISION APPROVED BY

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY LAYOUT PLAN

File No. ALEX Tax Map No. 011.03-01-05 Job No. 05-077 File Name Q:\sdskproj\05077\dwg\Planning\DSUP\05077P-0401.dwg

SHEET: P-0401



CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	TANGENT	CHORD	CHORD BEARING
C1	1,305.00'	86.47'	3°47'47"	43.25'	86.45'	N28°55'37"E
C2	50.00'	52.36'	60°00'00"	28.87'	50.00'	S27°08'39"E
C3	50.00'	63.83'	73°08'17"	37.09'	59.58'	S33°42'47"E
C4	114.00'	143.72'	72°13'53"	83.18'	134.39'	S39°23'30"W
C5	77.00'	120.95'	90°00'00"	77.00'	108.89'	S30°30'26"W

20 0 10 20 40 80

(IN FEET)
1 INCH = 20'

OWNER: GOODWIN HOUSE, INC.
LOT: 011.03-01-06
ADDR: 4800 FILLMORE AVE
ZONE: CDD23

OWNER: UDR NEWPORT VILLAGE LLC
LOT: 011.01-01-02
ADDR: 4898 W BRADDOCK RD
ZONE: RA

NOTES

1. SEE ARCHITECT PLANS FOR DETAILED BUILDING PLANS.

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: 11/10/17 | DRAWN: DP/DM | CHECKED: BF

PLAN STATUS		
DATE	DESCRIPTION	DATE
09/08/17	DSUP SUBMISSION 1	10/20/17
09/29/17	DSUP SUBMISSION 2	11/10/17
	DSUP SUBMISSION 3	
	DSUP SUBMISSION 4	

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA
PRELIMINARY GEOMETRIC PLAN

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

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

DIRECTOR DATE

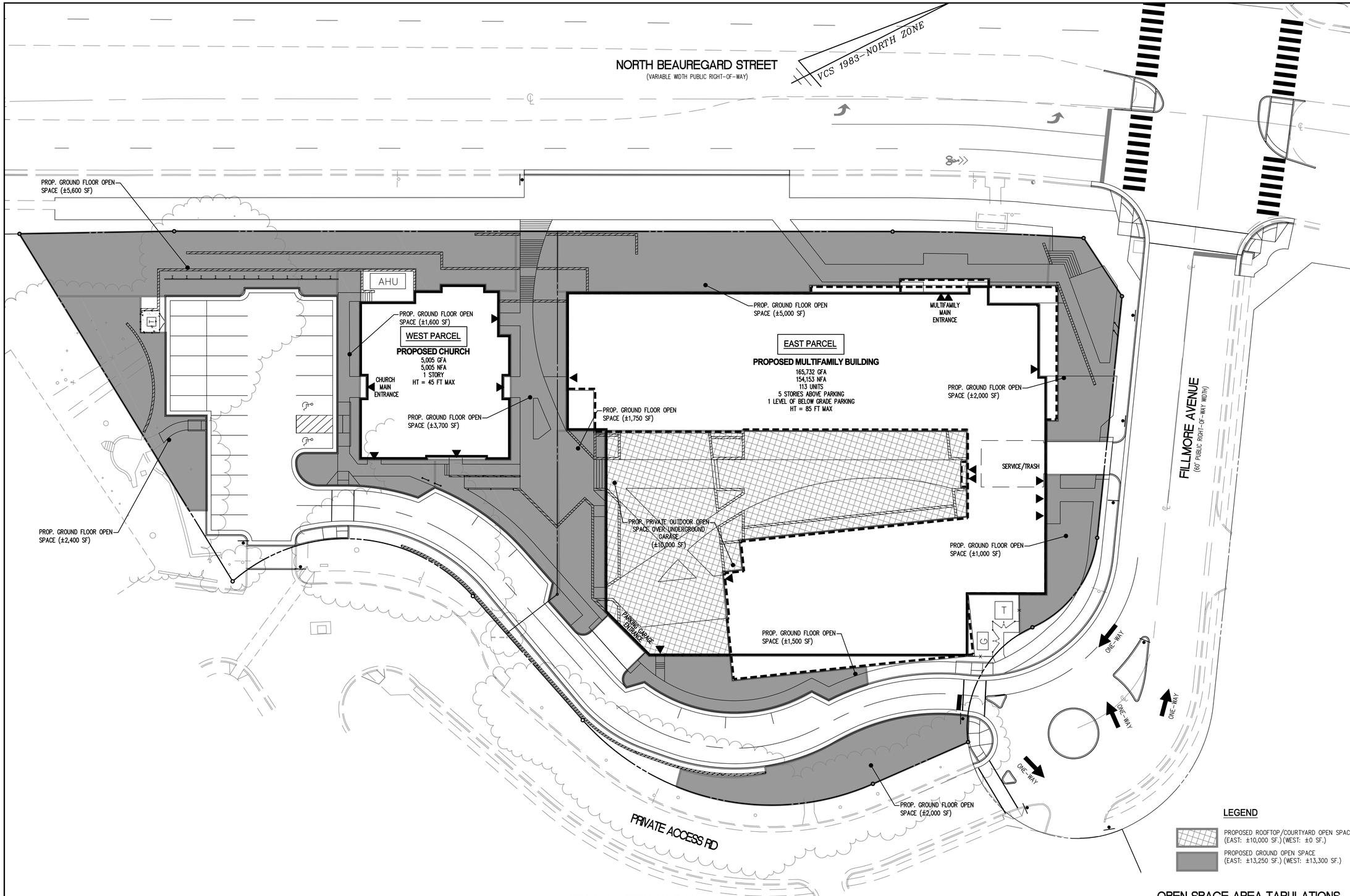
CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

File No. ALEX Tax Map No. 011.03-01-05 Job No. 05-077 File Name Q:\sdskproj\05077\dwg\Planning\DSUP\05077P-0402.dwg

SHEET: P-0402



LEGEND

PROPOSED ROOFTOP/COURTYARD OPEN SPACE (EAST: ±10,000 SF.) (WEST: ±0 SF.)

PROPOSED GROUND OPEN SPACE (EAST: ±13,250 SF.) (WEST: ±13,300 SF.)

OPEN SPACE AREA TABULATIONS

PROVIDED

EAST PARCEL
GROUND OPEN SPACE = ±13,250 SF. OR ±0.30 AC. (±22.8%)
ROOFTOP/COURTYARD OPEN SPACE = ±10,000 SF. OR ±0.23 AC. (±17.2%)

TOTAL OPEN SPACE PROVIDED = ±23,250 SF. OR ±0.53 AC. (±40%)

WEST PARCEL
GROUND OPEN SPACE = ±13,300 SF. OR ±0.31 AC. (±45%)
ROOFTOP OPEN SPACE = ±0 SF. OR ±0 AC. (±0%)

TOTAL OPEN SPACE PROVIDED = ±13,300 SF. OR ±0.31 AC. (±45%)

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: 11/10/17 | DRAWN: DP/DM | CHECKED: BF

PLAN STATUS

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY OPEN SPACE PLAN

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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. 011.03-01-05 Job No. 05-077 File Name Q:\sdskproj\05077\dwg\Planning\DSUP\05077P-0403.dwg

SHEET: P-0403

NORTH BEAUREGARD STREET
(VARIABLE WIDTH PUBLIC RIGHT-OF-WAY)

VCS 1983-NORTH ZONE

PROPOSED CHURCH
5,005 GFA
5,005 NFA
1 STORY
HT = 45 FT MAX

CHURCH MAIN ENTRANCE

PHASE 2

PROPOSED MULTIFAMILY BUILDING
165,732 GFA
154,153 NFA
113 UNITS
5 STORIES ABOVE PARKING
1 LEVEL OF BELOW GRADE PARKING
HT = 85 FT MAX

MULTIFAMILY MAIN ENTRANCE

SERVICE/TRASH

PARKING GARAGE ENTRANCE

PHASE 1

FILLMORE AVENUE
(60' PUBLIC RIGHT-OF-WAY WIDTH)

ONE-WAY

PRIVATE ACCESS RD

OWNER: GOODWIN HOUSE, INC.
LOT: 011.03-01-06
ADDR: 4800 FILLMORE AVE
ZONE: CDD23

OWNER: UDR NEWPORT VILLAGE LLC
LOT: 011.01-01-02
ADDR: 4898 W BRADDOCK RD
ZONE: RA

DEVELOPMENT PHASING NARRATIVE

IT IS CURRENTLY THE APPLICANT'S INTENT TO CONSTRUCT THE ENTIRE DEVELOPMENT IN ONE PHASE. HOWEVER, IF CONSTRUCTION MUST BE PHASED, IMPROVEMENTS WILL BE BUILT IN GENERAL CONFORMANCE WITH THIS PLAN.

THE PROPOSED DEVELOPMENT MAY BE CONSTRUCTED IN TWO PHASES AS GENERALLY DEPICTED ON THIS PLAN SHEET. PHASE 1 MAY INCLUDE THE CONSTRUCTION OF THE MULTIFAMILY RESIDENTIAL BUILDING AND GARAGE, THE DRIVE AISLE, PARKING LOT, STREETSCAPE IMPROVEMENTS, RETAINING WALLS AND ALL UTILITY CONNECTIONS AND STUBS RELATED TO THE PROPOSED CHURCH.

SITE WILL BE BROUGHT TO ULTIMATE GRADE IN PHASE 1 WITH THE EXCEPTION OF THE CHURCH PAD, WHICH WILL BE LEFT IN A STABLE CONDITION WITH POSITIVE DRAINAGE. PHASE 2 WOULD THEN INCLUDE THE CONSTRUCTION OF THE CHURCH BUILDING AS WELL AS THE CONNECTION OF WATER AND SANITARY SEWER FROM THE MAINS TO THE BUILDING. DISTURBANCE MAY OCCUR WITHIN THE ADJACENT PHASE OF DEVELOPMENT, AS NECESSARY TO CONSTRUCT EACH PHASE OF DEVELOPMENT.

IN ACCORDANCE WITH THE ALEXANDRIA ZONING ORDINANCE, WITHIN THIRTY-SIX (36) MONTHS OF DSUP APPROVAL, CONSTRUCTION OF PHASE 1 WILL COMMENCE AND BE DILIGENTLY PURSUED. CONSTRUCTION OF PHASE 2 WILL COMMENCE WITHIN TWENTY-FOUR (24) MONTHS OF THE COMPLETION OF PHASE 1 AND RECEIPT OF PHASE 1'S CERTIFICATE OF OCCUPANCY.

LEGEND

APPROXIMATE LIMITS OF PHASE 1

APPROXIMATE LIMITS OF PHASE 2

PHASE LINE

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

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: 11/10/17 | DRAWN: DP/DM | CHECKED: BF

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

PLAN STATUS		
DATE	DESCRIPTION	
09/08/17	DSUP SUBMISSION 1	
09/29/17	DSUP SUBMISSION 2	
10/20/17	DSUP SUBMISSION 3	
11/10/17	DSUP SUBMISSION 4	

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY PHASING PLAN

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

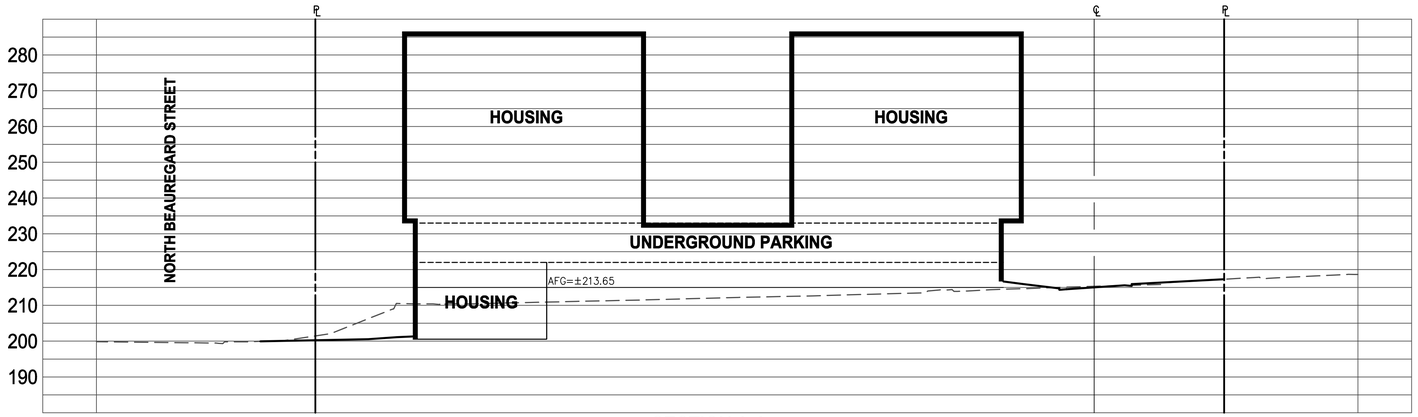
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

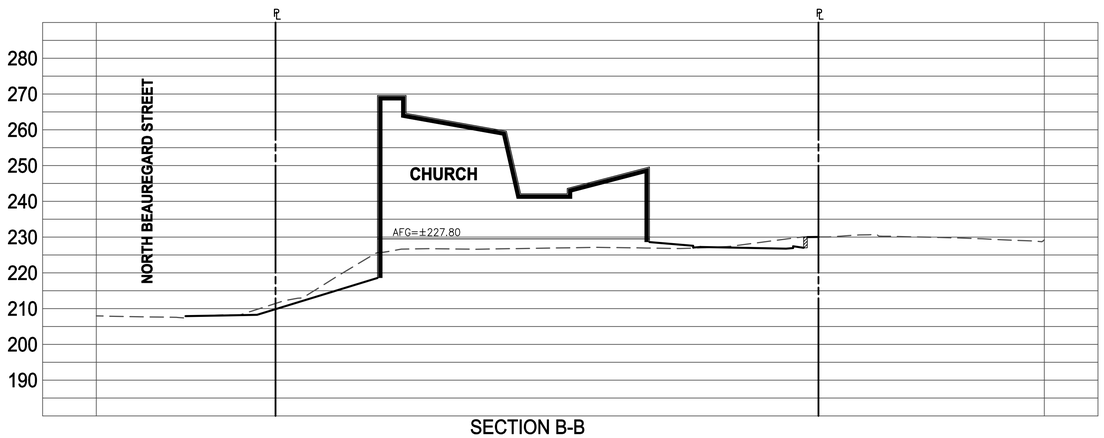
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

File No. ALEX Tax Map No. 011.03-01-05 Job No. 05-077 File Name Q:\sdskproj\05077\dwg\Planning\DSUP\05077P-0404.dwg

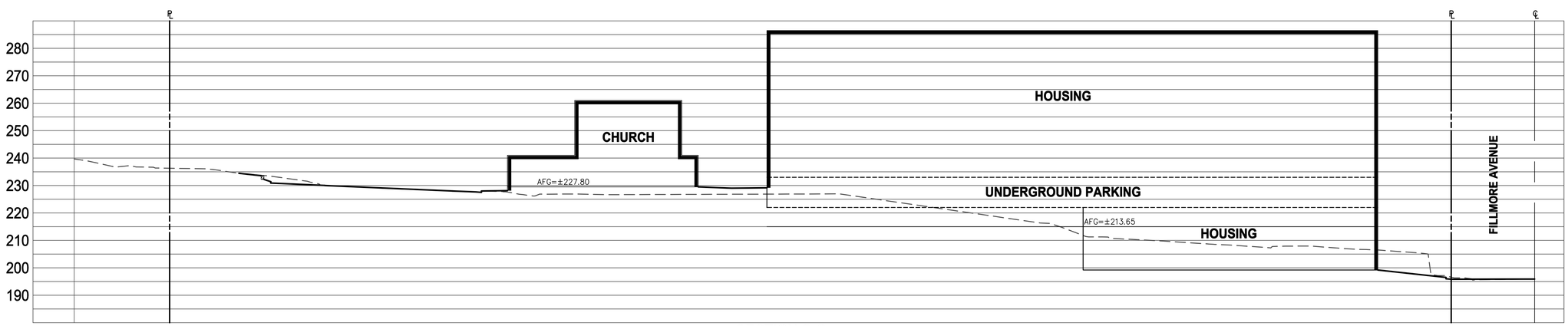
SHEET: P-0404



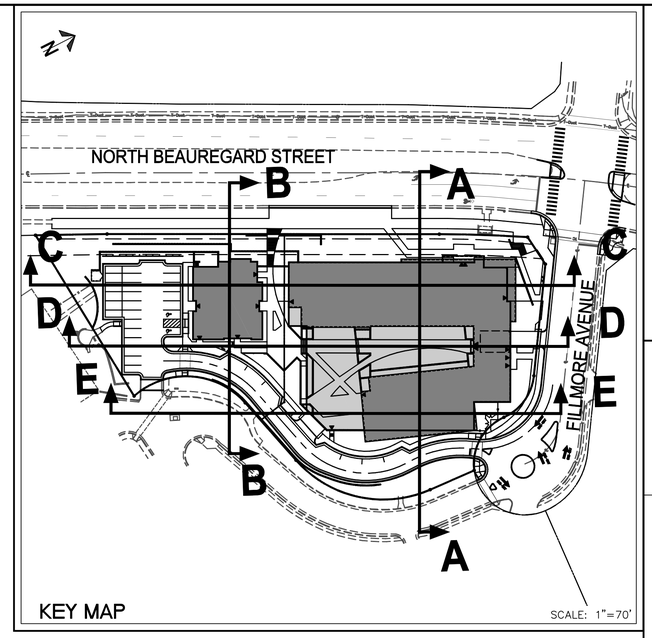
SECTION A-A
SCALE: 1"=20'



SECTION B-B
SCALE: 1"=20'



SECTION C-C
SCALE: 1"=20'



KEY MAP

NOTE

SECTIONS ARE DIAGRAMMATIC. SEE ARCHITECTURAL PLANS FOR ADDITIONAL DETAILS OF BUILDING DESIGN.

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

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: 11/10/17 DRAWN: DP,DM CHECKED: BF

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 11/10/17 PROFESSIONAL ENGINEER

PLAN STATUS		
DATE	DESCRIPTION	DATE
09/08/17	DSUP SUBMISSION 1	10/20/17
09/29/17	DSUP SUBMISSION 2	11/10/17
	DSUP SUBMISSION 3	
	DSUP SUBMISSION 4	

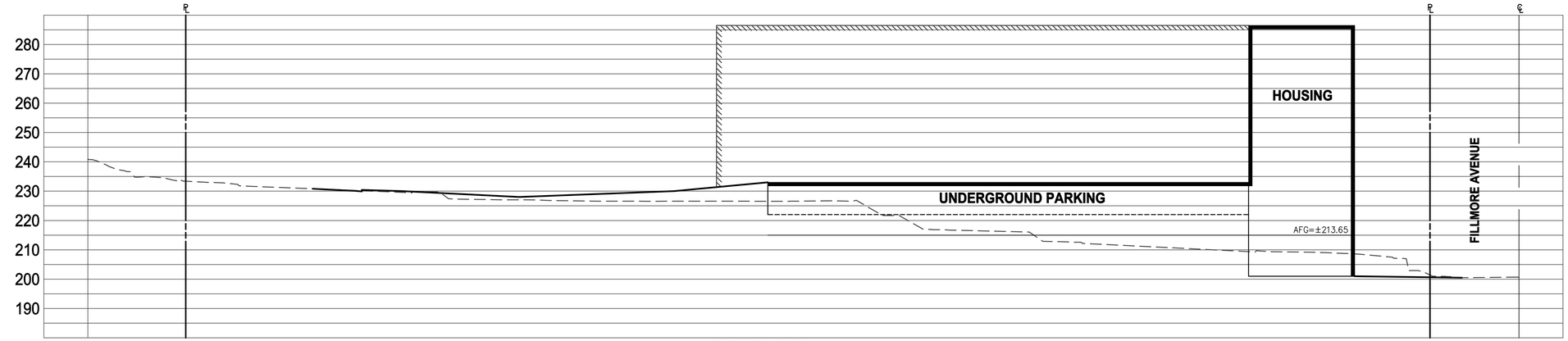
REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

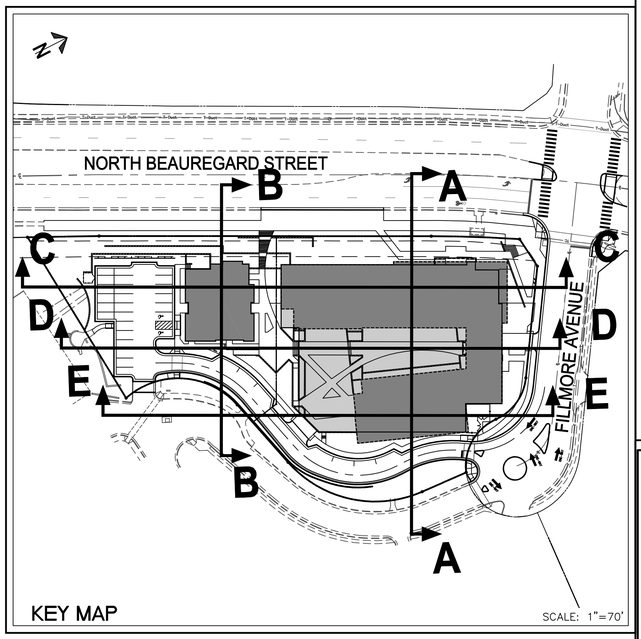
PRELIMINARY SITE SECTIONS

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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 D-D
SCALE: 1"=20'

SECTION E-E
SCALE: 1"=20'



KEY MAP
SCALE: 1"=70'

NOTE

SECTIONS ARE DIAGRAMMATIC. SEE ARCHITECTURAL PLANS FOR ADDITIONAL DETAILS OF BUILDING DESIGN.

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

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: 11/10/17 | DRAWN: DP,DM | CHECKED: BF

PLAN STATUS		
DATE	DESCRIPTION	DATE
09/08/17	DSUP SUBMISSION 1	10/20/17
09/29/17	DSUP SUBMISSION 2	11/10/17
	DESCRIPTION	
	DSUP SUBMISSION 3	
	DSUP SUBMISSION 4	

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY SITE SECTIONS

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

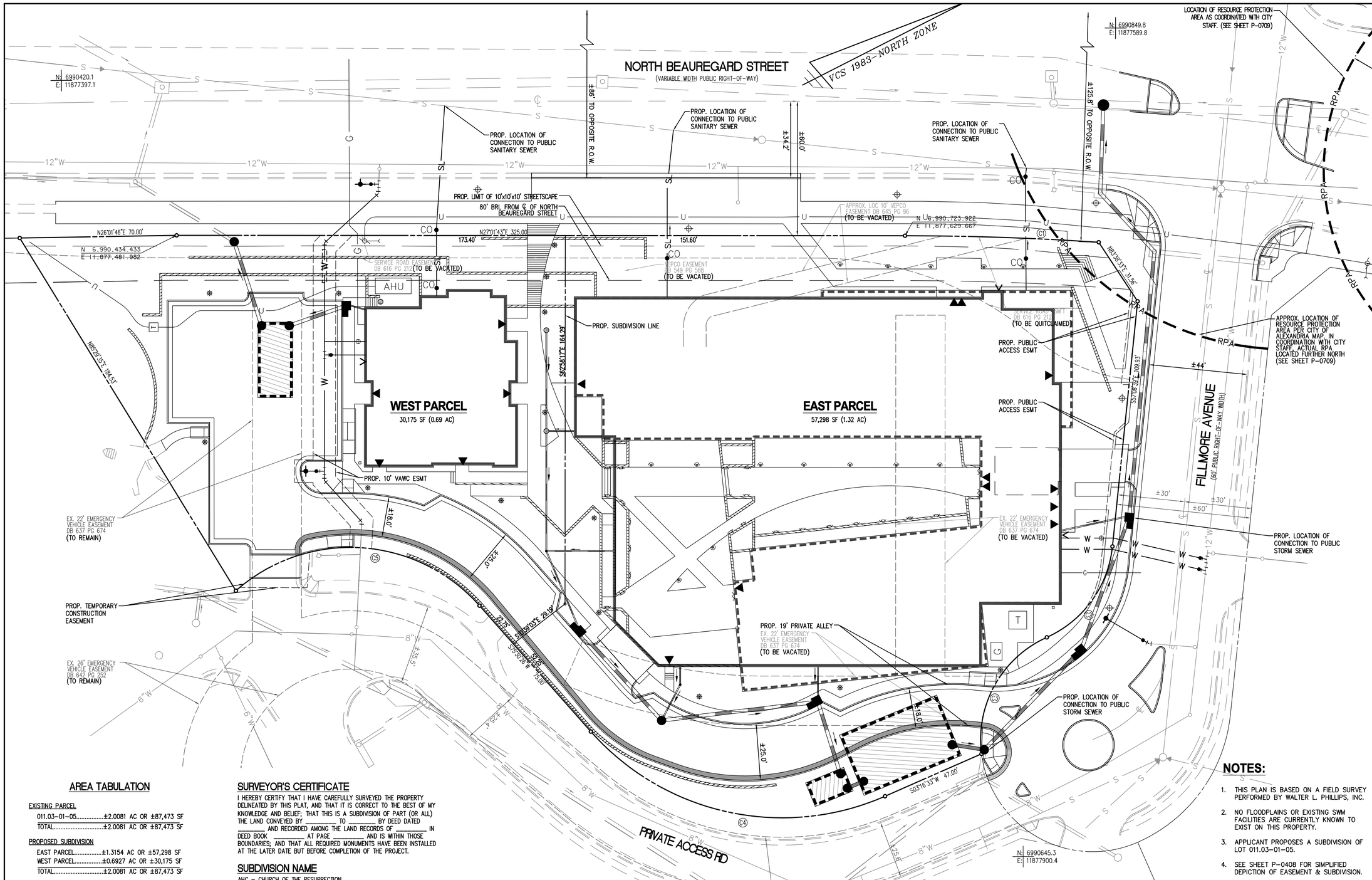
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.



AREA TABULATION

EXISTING PARCEL

011.03-01-05.....±2.0081 AC OR ±87,473 SF
TOTAL.....±2.0081 AC OR ±87,473 SF

PROPOSED SUBDIVISION

EAST PARCEL.....±1.3154 AC OR ±57,298 SF
WEST PARCEL.....±0.6927 AC OR ±30,175 SF
TOTAL.....±2.0081 AC OR ±87,473 SF

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT I HAVE CAREFULLY SURVEYED THE PROPERTY DELINEATED BY THIS PLAT, AND THAT IT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT THIS IS A SUBDIVISION OF PART (OR ALL) THE LAND CONVEYED BY _____ TO _____ BY DEED DATED _____ AND RECORDED AMONG THE LAND RECORDS OF _____ IN DEED BOOK _____ AT PAGE _____ AND IS WITHIN THOSE BOUNDARIES; AND THAT ALL REQUIRED MONUMENTS HAVE BEEN INSTALLED AT THE LATER DATE BUT BEFORE COMPLETION OF THE PROJECT.

SUBDIVISION NAME

AHC – CHURCH OF THE RESURRECTION

APPLICANT/DEVELOPER
AHC, INC.
2230 N. FAIRFAX DRIVE, SUITE 100
ARLINGTON, VA 22201
ATTN: JOHN WELSH
(703)-486-0626

RECORD OWNER
CHURCH OF THE RESURRECTION TRES OF
2280 N BEAUREGARD STREET
ALEXANDRIA, VA 22311
(703)-998-0888

TOTAL NUMBER OF BUILDINGS
EXISTING: 1
PROPOSED: 2

ZONING
CURRENT: RA
PROPOSED: CDD #23

CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	TANGENT	CHORD	CHORD BEARING
C1	1,305.00'	86.47'	3°47'47"	43.25'	86.45'	N28°55'37"E
C2	50.00'	52.36'	60°00'00"	28.87'	50.00'	S27°08'39"E
C3	50.00'	63.83'	73°08'17"	37.09'	59.58'	S33°42'47"E
C4	114.00'	143.72'	72°13'53"	83.18'	134.39'	S39°23'30"W
C5	77.00'	120.95'	90°00'00"	77.00'	108.89'	S30°30'26"W

RESOURCE PROTECTION AREA NOTES

1. ACCORDING TO THE CITY'S RPA MAPS, THERE ARE KNOWN RPA'S ON THIS SITE. HOWEVER, IT IS THE APPLICANT'S BELIEF THAT THERE ARE NO RPA'S ON THE SUBJECT PARCEL. A SURVEY OF THE EXISTING STREAM LOCATED IN NORTH BEAUREGARD STREET SHOWS THAT IT IS LOCATED MORE THAN 100' FROM THE PROPERTY LINE. SEE SHEET P-0709 FOR SCHEMATIC.

FLOOD PLAIN NOTES

1. THE SITE DOES NOT LIE WITHIN 100-YEAR FLOOD PLAIN WATER SURFACE ELEVATION (WSE) PER THE DEMARCATION OF THE CURRENT FLOOD INSURANCE RATE MAP (FIRM) PUBLISHED BY FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA).

NOTES:

1. THIS PLAN IS BASED ON A FIELD SURVEY PERFORMED BY WALTER L. PHILLIPS, INC.
2. NO FLOODPLAINS OR EXISTING SWM FACILITIES ARE CURRENTLY KNOWN TO EXIST ON THIS PROPERTY.
3. APPLICANT PROPOSES A SUBDIVISION OF LOT 011.03-01-05.
4. SEE SHEET P-0408 FOR SIMPLIFIED DEPICTION OF EASEMENT & SUBDIVISION.

FOR INFORMATION ONLY

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

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: 11/10/17 | DRAWN: DP,DM | CHECKED: BF

PLAN STATUS

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

COMMONWEALTH OF VIRGINIA
AARON M. HINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY SUBDIVISION PLAT

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

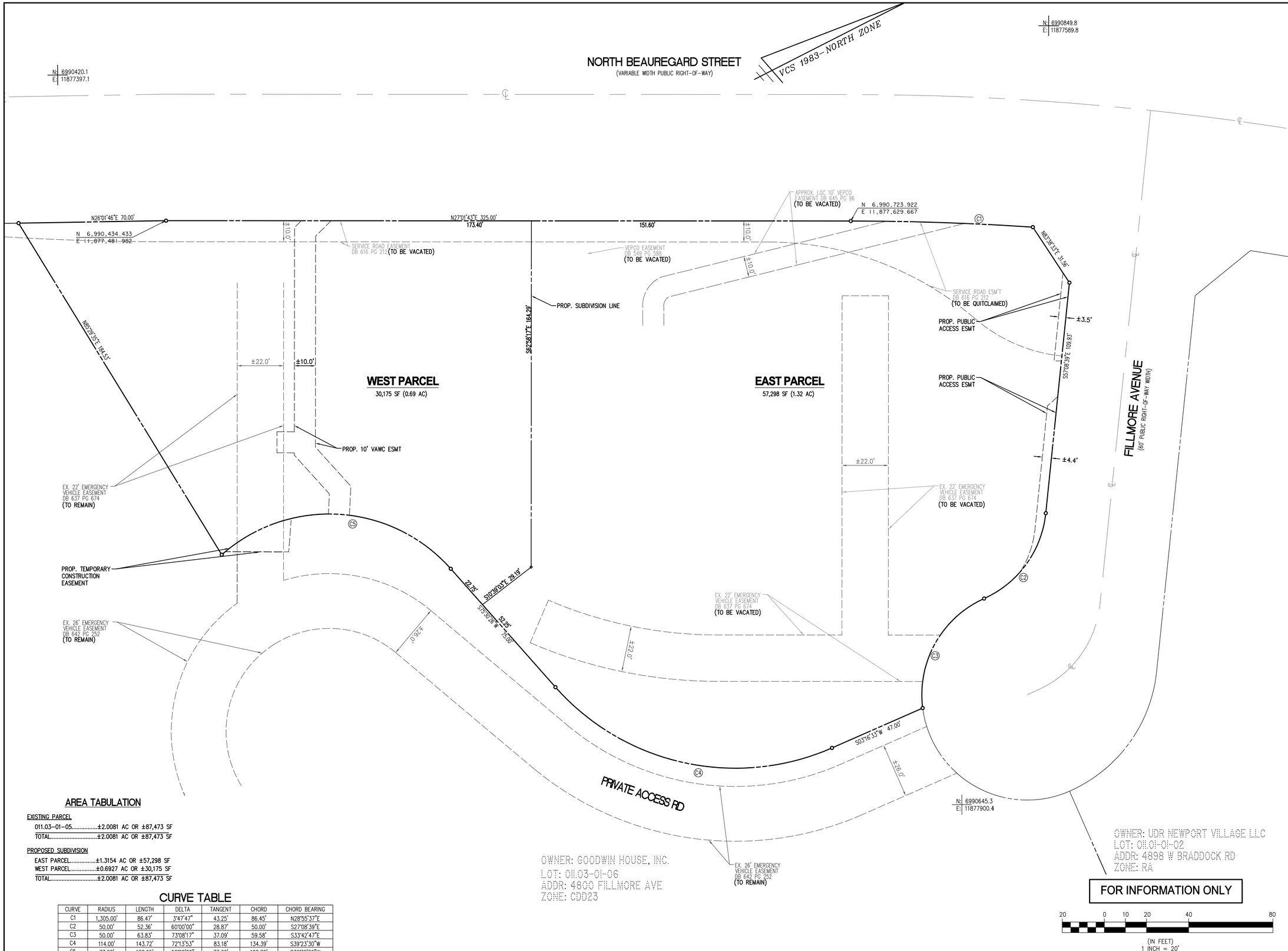
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.



AREA TABULATION

EXISTING PARCEL

011.03-01-05.....±2.0081 AC OR ±87,473 SF
TOTAL.....±2.0081 AC OR ±87,473 SF

PROPOSED SUBDIVISION

EAST PARCEL.....±1.3154 AC OR ±57,298 SF
WEST PARCEL.....±0.6927 AC OR ±30,175 SF
TOTAL.....±2.0081 AC OR ±87,473 SF

CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	TANGENT	CHORD	CHORD BEARING
C1	1,305.00'	86.47'	3°47'47"	43.25'	86.45'	N28°55'37"E
C2	50.00'	52.36'	60°00'00"	28.87'	50.00'	S27°08'39"E
C3	50.00'	63.83'	73°08'17"	37.09'	59.58'	S33°42'47"E
C4	114.00'	143.72'	72°13'53"	83.18'	134.39'	S39°23'30"W
C5	77.00'	120.95'	90°00'00"	77.00'	108.89'	S30°30'26"W

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: 11/10/17 | DRAWN: DP,DM | CHECKED: BF

COMMONWEALTH OF VIRGINIA PROFESSIONAL ENGINEER
AARON M. VINSON
Lic. No.041851
11/10/17

PLAN STATUS		
DATE	DESCRIPTION	
09/08/17	DSUP SUBMISSION 1	
09/29/17	DSUP SUBMISSION 2	
10/20/17	DSUP SUBMISSION 3	
11/10/17	DSUP SUBMISSION 4	

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY SUBDIVISION & EASEMENT EXHIBIT

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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. 011.03-01-05 Job No. 05-077 File Name Q:\sdskproj\05077\dwg\Planning\DSUP\05077P-0408.dwg

SHEET: P-0408

NORTH BEAUREGARD STREET
(VARIABLE WIDTH PUBLIC RIGHT-OF-WAY)

VCS 1983-NORTH ZONE

PROPOSED CHURCH
5,005 GFA
5,005 NFA
1 STORY
HT = 45 FT MAX

PROPOSED MULTIFAMILY BUILDING
165,732 GFA
154,153 NFA
113 UNITS
5 STORIES ABOVE PARKING
1 LEVEL OF BELOW GRADE PARKING
HT = 85 FT MAX

COURTYARD ABOVE STRUCTURE BY OTHERS, SEE LANDSCAPE PLANS

MULTIFAMILY MAIN ENTRANCE FF=200.00

CHURCH MAIN ENTRANCE FF=229.25

FF=229.25

FF=229.50

FF=200.00

SERVICE/TRASH
FF=202.00
FF=202.18
FF=202.50

FF=233.00

FF=232.00

PARKING GARAGE ENTRANCE

PROP. RETAINING WALL MAX HT=±10'

PROP. RETAINING WALL W/ GUARDRAIL MAX HT=±10'

PROP. RETAINING WALL MAX HT=±5.5'

PROP. RETAINING WALL MAX HT=±2.5'

PROP. RETAINING WALL W/ HANDRAIL MAX HT=±5.5'

PROP. LIMITS OF DISTURBANCE

LOCATION OF RESOURCE PROTECTION AREA AS COORDINATED WITH CITY STAFF. (SEE SHEET P-0709)

PROP. CURB, REFUGE FLUSH WITH PAVEMENT

APPROX. LOCATION OF RESOURCE PROTECTION AREA PER CITY OF ALEXANDRIA MAP. IN COORDINATION WITH CITY STAFF. ACTUAL RPA LOCATED FURTHER NORTH (SEE SHEET P-0709)

FILLMORE AVENUE
(60' PUBLIC RIGHT-OF-WAY WIDTH)

PRIVATE ACCESS RD

ONE-WAY

AHU

RPA

OWNER: GOODWIN HOUSE, INC.
LOT: 011.03-01-06
ADDR: 4800 FILLMORE AVE
ZONE: CDD23

OWNER: UDR NEWPORT VILLAGE LLC
LOT: 011.01-01-02
ADDR: 4898 W BRADDOCK RD
ZONE: RA

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

File No. ALEX Tax Map No. 011.03-01-05 Job No. 05-077 File Name Q:\sdskproj\05077\dwg\Planning\DSUP\05077P-0501.dwg

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: 11/10/17 DRAWN: DP/DM CHECKED: BF

PLAN STATUS		
DATE	DESCRIPTION	DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1	10/20/17	DSUP SUBMISSION 3
09/29/17	DSUP SUBMISSION 2	11/10/17	DSUP SUBMISSION 4

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

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

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY GRADING PLAN

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

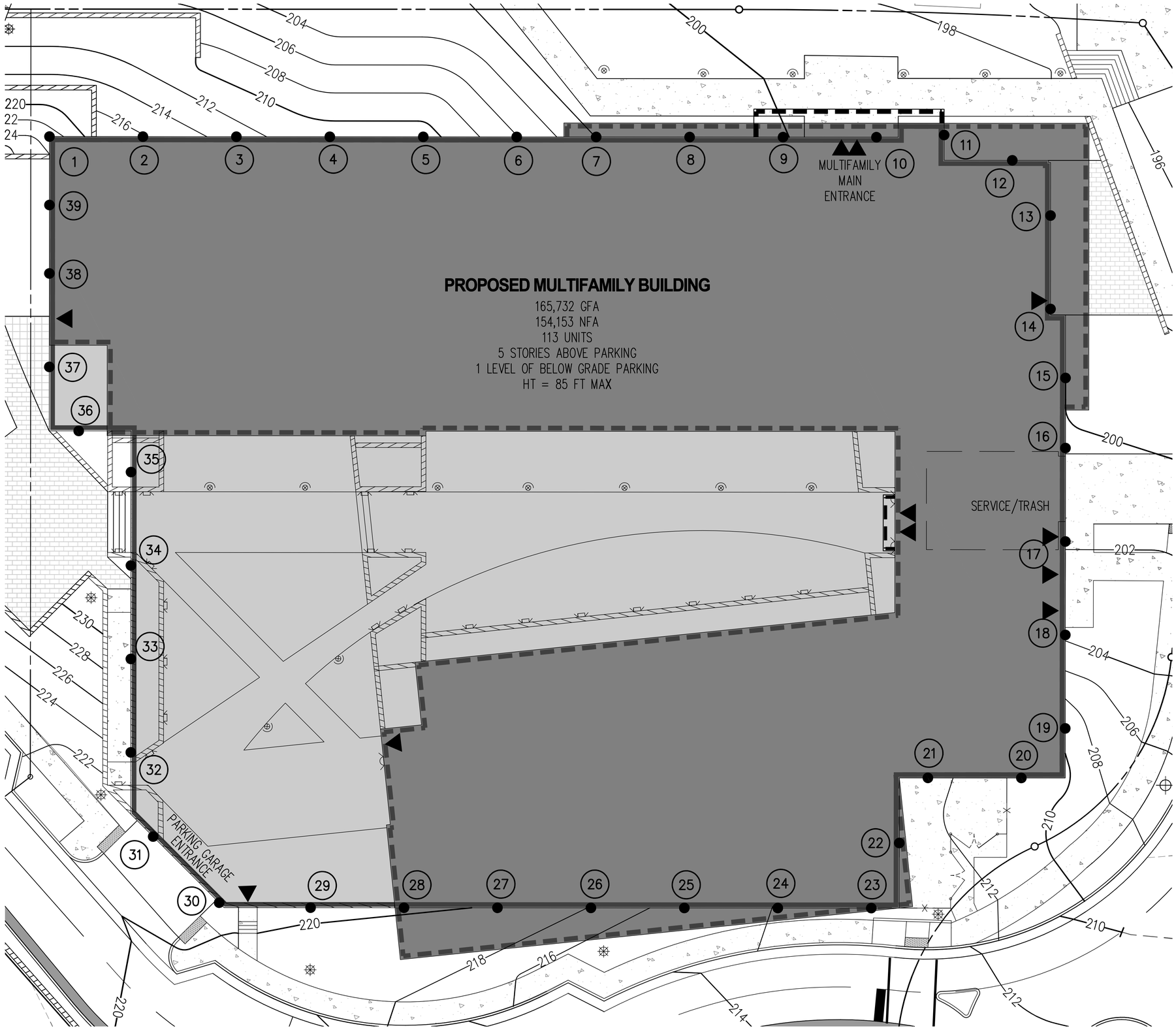
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

SHEET: P-0501

AVERAGE FINISH GRADE

PROP. BUILDING POINT	ELEVATION
1	223.50
2	216.20
3	213.00
4	211.27
5	210.20
6	206.10
7	202.00
8	201.03
9	200.06
10	200.00
11	199.44
12	198.80
13	199.96
14	199.96
15	200.00
16	202.00
17	202.00
18	203.95
19	209.08
20	210.34
21	211.00
22	211.30
23	213.22
24	213.95
25	215.44
26	217.95
27	219.70
28	220.32
29	220.86
30	221.50
31	221.00
32	231.51
33	230.12
34	229.30
35	229.25
36	229.20
37	229.30
38	229.30
39	229.05

FIRST FLOOR ELEVATION=	±200.00
STAIR OVERRUN ELEVATION=	±295.50
AVERAGE FINISHED GRADE=	±213.65
BUILDING HEIGHT=	85 FT MAX



LEGEND

PROPOSED	DESCRIPTION	EXISTING
	CURB & GUTTER CG-2	
CG-6R CG-6	TRANSITION FROM CG-6 TO CG-6R	CG-6 CG-6R
40 44	CONTOURS	40 44
	HANDICAP RAMP (CG-12)	
▼	DOOR	▽
	PROPERTY LINE	
1 ●	SPOT ELEVATION (AT BUILDING)	

NOTES:

1. EXTERIOR GRADE AT APPROXIMATELY 20' INTERVALS.
2. AVERAGE FINISHED GRADE IS APPROXIMATE AND SUBJECT TO CHANGE AT FINAL SITE PLAN.

10 0 5 10 20 40
(IN FEET)
1 INCH = 10'

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" = 10' DATE: 11/10/17 DRAWN: DP,DM CHECKED: BF

COMMONWEALTH OF VIRGINIA PROFESSIONAL ENGINEER
AARON M. VINSON Lic. No.041851 11/10/17

PLAN STATUS		
DATE	DESCRIPTION	DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1	10/20/17	DSUP SUBMISSION 3
09/29/17	DSUP SUBMISSION 2	11/10/17	DSUP SUBMISSION 4

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

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

AVERAGE FINISH GRADE - EAST PARCEL

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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.

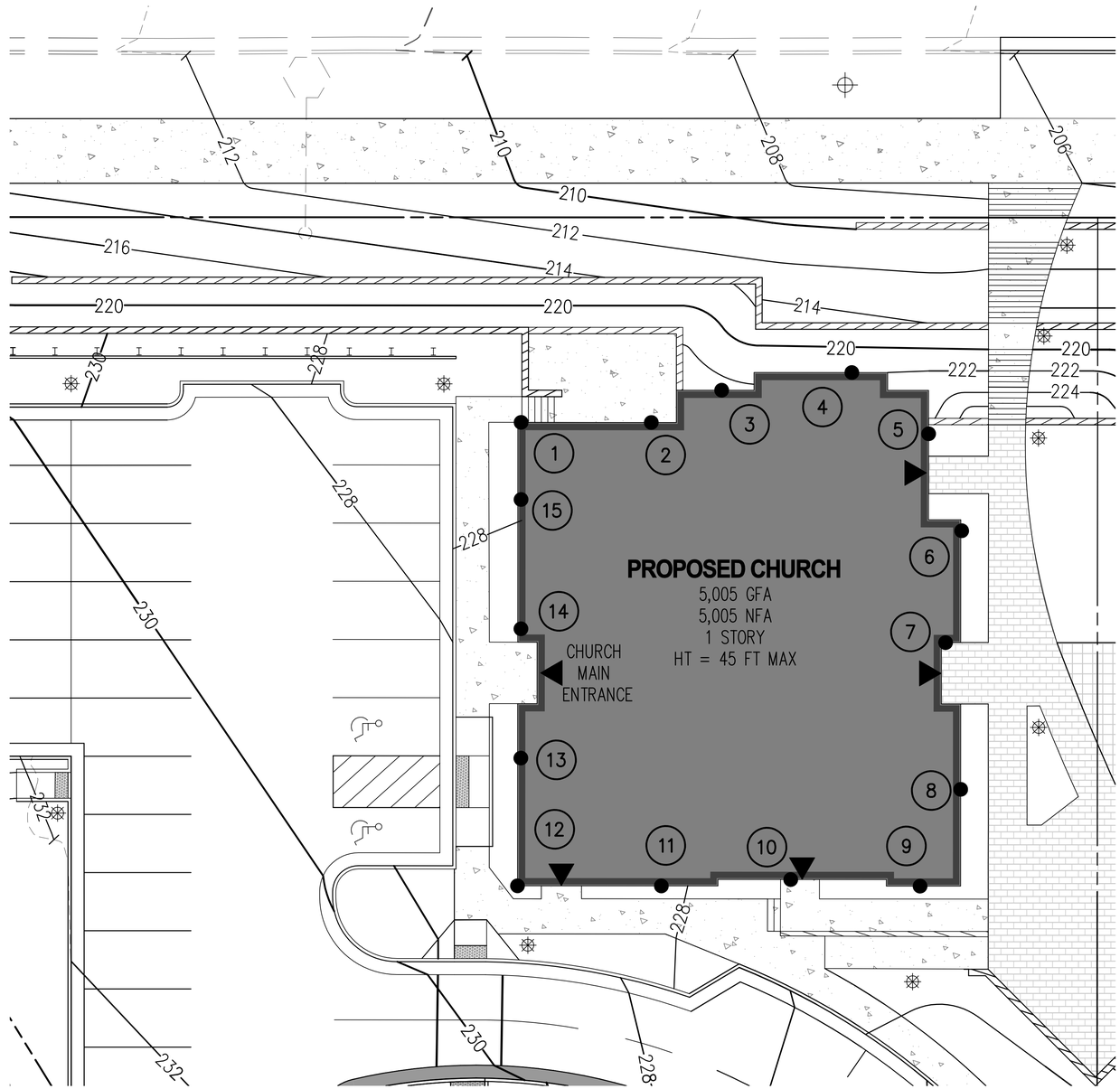
AVERAGE FINISH GRADE

PROP. CHURCH POINT	ELEVATION
1	227.10
2	224.25
3	223.50
4	222.00
5	228.70
6	229.02
7	229.21
8	229.21
9	229.19
10	229.21
11	229.21
12	229.54
13	229.70
14	229.19
15	227.90

FIRST FLOOR ELEVATION= ±229.25

ROOF LINE ELEVATION= ±269.50
AVERAGE FINISHED GRADE= ±227.80
BUILDING HEIGHT= 45 FT MAX*

*MEASUREMENT TAKEN TO TOP OF CHURCH TOWER



LEGEND

PROPOSED	DESCRIPTION	EXISTING
	CURB & GUTTER CG-2	
CG-6R CG-6	TRANSITION FROM CG-6 TO CG-6R	CG-6 CG-6R
40 44	CONTOURS	40 44
	HANDICAP RAMP (CG-12)	
▼	DOOR	▽
	PROPERTY LINE	
1 ●	SPOT ELEVATION (AT BUILDING)	

NOTES:

1. EXTERIOR GRADE AT APPROXIMATELY 20' INTERVALS.
2. AVERAGE FINISHED GRADE IS APPROXIMATE AND SUBJECT TO CHANGE AT FINAL SITE PLAN.

10 0 5 10 20 40
(IN FEET)
1 INCH = 10'

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" = 10' DATE: 11/10/17 DRAWN: DP,DM CHECKED: BF

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

COMMONWEALTH OF VIRGINIA LICENSED PROFESSIONAL ENGINEER
AARON M. VINSON Lic. No.041851 11/10/17

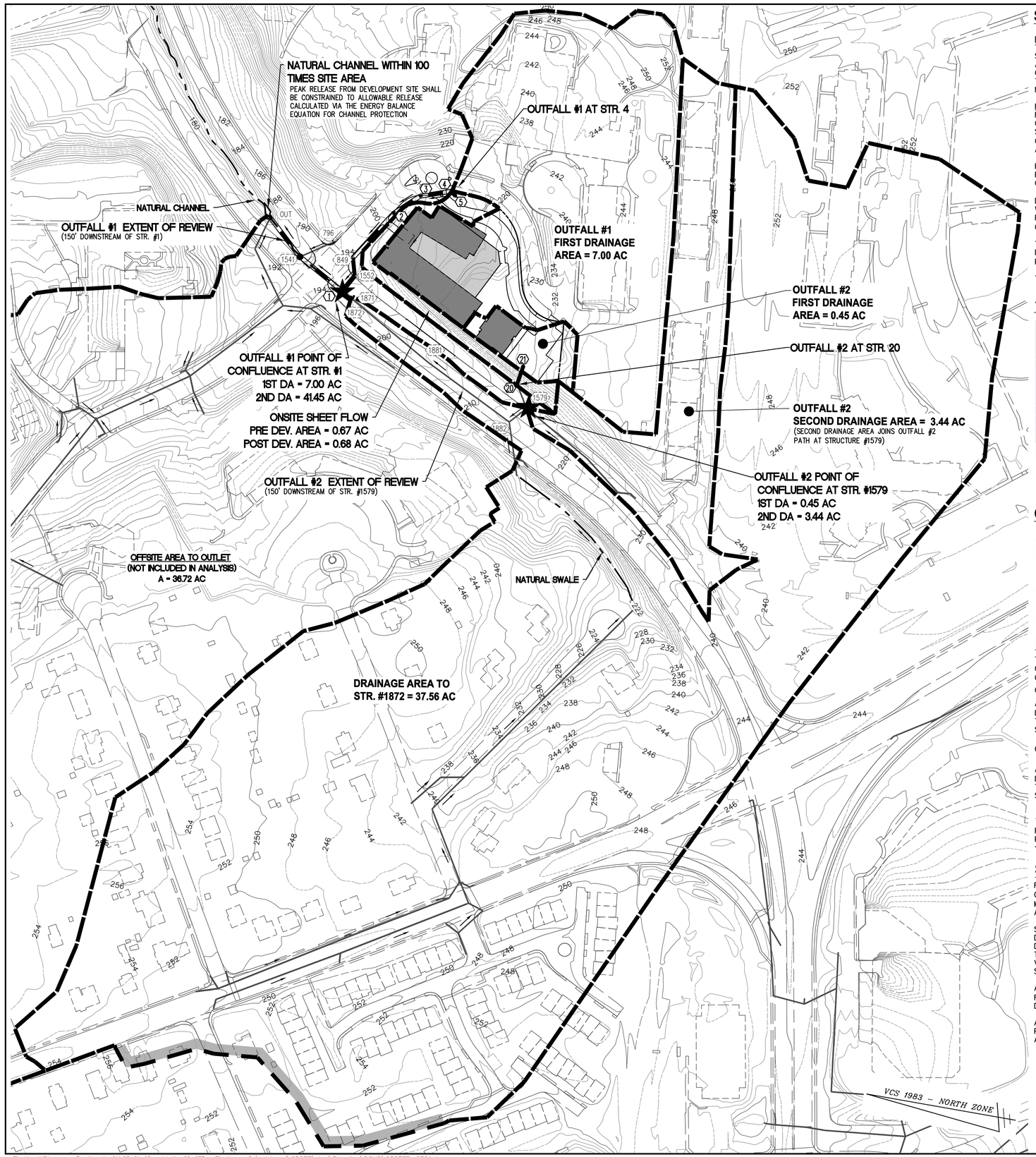
REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

AVERAGE FINISH GRADE - WEST PARCEL

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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.



STORM SEWER OUTFALL ANALYSIS

EXISTING CONDITIONS

THE SITE IS LOCATED WITHIN THE FOUR MILE RUN WATERSHED. STORMWATER RUNOFF FROM THE SITE CURRENTLY FLOWS NORTHWEST VIA SHEET FLOW INTO AN EXISTING STORM SEWER SYSTEM WHICH CONNECTS TO EXISTING STRUCTURE #849 LOCATED WITHIN FILLMORE AVENUE. AT THE SOUTHWEST CORNER OF THE SITE, A SMALL PORTION OF STORMWATER RUNOFF IS CAPTURED BY EXISTING STRUCTURE #1405, WHICH CONNECTS TO A STORM TRUNK WITHIN NORTH BEAUREGARD STREET. THE STORM SEWER SYSTEM FROM STRUCTURE #849 ALSO CONNECTS TO THE STORM TRUNK WITHIN NORTH BEAUREGARD STREET AND ULTIMATELY DISCHARGES INTO A NATURAL CHANNEL, A TRIBUTARY OF FOUR MILE RUN, RUNNING WITHIN NORTH BEAUREGARD STREET. SEE SHEET P-0302 FOR EXISTING CONDITIONS PLAN.

PROPOSED CONDITIONS

RUNOFF FROM THE SITE ULTIMATELY OUTFALLS IN THREE WAYS. SEE DRAINAGE MAP ON THIS SHEET FOR LOCATIONS OF OUTFALL #1, OUTFALL #2 AND AREAS OF SHEET FLOW. SINCE THE DEVELOPMENT MAY BE CONSTRUCTED IN PHASES, THE OUTFALL ANALYSIS, STORMWATER MANAGEMENT CALCULATIONS AND BMP CALCULATIONS HAVE BEEN PERFORMED SO THAT EACH POTENTIAL DEVELOPMENT PHASE OR PARCEL, CAN STAND ON IT'S OWN IF THE DEVELOPMENT IS NOT CONSTRUCTED IN ONE PHASE. APPLICANT MAY REVISE CALCULATIONS AT TIME OF FINAL SITE PLAN IF DEVELOPMENT IS CONSTRUCTED VIA A SINGLE FINAL SITE PLAN.

RUNOFF FROM EACH POTENTIAL PHASE IS COLLECTED ON SITE WITHIN STORM SEWER INLETS AND ROUTED TO AN UNDERGROUND DETENTION FACILITY. OUTFALL #1 IS LOCATED WITHIN FILLMORE AVE, OUTFALL #2 IS LOCATED WITHIN BEAUREGARD AND A PORTION OF THE SITE CONTINUES TO SHEET FLOW TOWARDS FILLMORE AVE AND N. BEAUREGARD STREET.

DUE TO THE PROXIMITY OF THE SITE TO AN EXISTING CHANNEL (WITHIN 100 TIMES THE SITE AREA), THE CRITERIA FOR CHANNEL PROTECTION WILL BE MET FOR OUTFALL #1 AND OUTFALL #2. RUNOFF WILL BE DETAINED WITHIN ON SITE UNDERGROUND DETENTION VAULTS AND RELEASED SO AS TO MEET ALLOWABLE RELEASE RATES CALCULATED VIA THE ENERGY BALANCE EQUATION, THEREFORE AN ADEQUATE OUTFALL IS AVAILABLE PER THE CITY'S CHANNEL PROTECTION REQUIREMENTS. .

THE 10 YEAR STORM SEWER COMPUTATIONS BELOW SHOW THAT THE EXISTING STORM SEWER SYSTEM FROM EACH OUTFALL POINT TO THE LIMITS OF ANALYSIS HAS SUFFICIENT CAPACITY TO CONVEY THE 10 YEAR PEAK RELEASE, THEREFORE AN ADEQUATE OUTFALL IS AVAILABLE PER THE CITY'S FLOOD PROTECTION REQUIREMENTS.

THE VOLUME OF WATER SHEET FLOWING FROM THE SITE IS DECREASED FROM THE PRE DEVELOPMENT TO POST DEVELOPMENT CONDITION.

10 YR STORM SEWER COMPUTATIONS (FLOOD PROTECTION)

FROM POINT	TO POINT	TOTAL AREA "A" ACRES	C FACTOR C	INLET TIME MIN	RAIN FALL IN/HR	RUNOFF ACCUM-ULATED C.F.S.	SLOPE FT./FT.	MANNING'S 'n'	DIA. IN.	CAPA-CITY C.F.S.
20	EX. 1579	0.45	*	5.00	9.00	2.06*	0.0970	0.015	18	28.24
EX. 1579	EX. 1882	3.89	0.60	20.00	5.10	11.90	0.0316	0.015	18	16.12
EX. 1882	EX. 1881	40.91	0.65	30.00	4.00	106.37	0.0429	0.015	48	257.70
EX. 1881	EX. 1871	41.18	0.65	30.00	4.00	107.07	0.0447	0.015	48	263.05
EX. 1871	1	41.45	0.65	30.00	4.00	107.77	0.0242	0.015	48	193.55
1	EX. 1541	42.80	0.65	30.00	4.00	111.28	0.0242	0.015	48	193.55
EX. 1541	OUTLET	43.16	0.65	30.00	4.00	112.22	0.0354	0.015	48	234.09

NOTES

* PEAK RELEASE FROM DETENTION PRACTICES

EX. PIPES HAVE THE CAPACITY TO CONVEY 10 YEAR-24 HOUR STORM WITHIN LIMITS OF ANALYSIS

CHANNEL PROTECTION ANALYSIS

THE LIMITS OF ANALYSIS FOR CHANNEL PROTECTION SHALL EXTEND TO A POINT IN WHICH THE WATERSHED IS 100 TIMES THE SITE'S CONTRIBUTING AREA (201 ACRES). AS SHOWN IN THE OUTFALL ANALYSIS MAP THERE IS A NATURAL STREAM PRESENT WITHIN THE LIMITS OF ANALYSIS. THEREFORE, THE DESIGN PARAMETERS OF Z.O. 13-107(F)(1)(C) FOR NATURAL STORMWATER CONVEYANCE SYSTEM HAVE BEEN UTILIZED IN ORDER TO COMPLY WITH THE CHANNEL PROTECTION REQUIREMENTS FOR EACH OUTFALL.

THE ALLOWABLE PEAK RELEASE FOR THE 1-YR, 24-HR STORM FOR THE SITE UNDER POST-DEVELOPMENT CONDITIONS HAS BEEN CALCULATED WITH THE FOLLOWING METHODOLOGY:

$$Q1\ POST \leq \frac{0.8\ (Q1\ PRE \times V1\ PRE)}{V1\ POST}$$

BASED ON THE COMPUTATIONS PROVIDED ON SHEETS P-0703 & P-0705, THE DESIGN CRITERIA FOR A NATURAL STORMWATER CONVEYANCE SYSTEM HAS BEEN SATISFIED, THEREFORE, THE OUTFALL IS DETERMINED TO BE ADEQUATE IN ACCORDANCE WITH THE CHANNEL PROTECTION PARAMETERS.

FLOOD PROTECTION ANALYSIS

THE RECEIVING CONVEYANCE SYSTEM DOES NOT EXPERIENCE LOCALIZED FLOODING WITHIN THE LIMITS OF ANALYSIS AS SHOWN IN THE COMPUTATIONS ABOVE. ADDITIONALLY, THE ONSITE 10-YR, 24 HR PEAK FLOW RATE WILL BE RELEASED TO EACH OUTFALL SO THAT THE OVERALL POST DEVELOPMENT PEAK RATE IS BELOW THE PRE DEVELOPMENT PEAK RATE.

OUTFALL 1

AS SHOWN IN THE OUTFALL ANALYSIS MAP, AT STRUCTURE #1 OUTFALL 1 IS JOINED BY A SECOND DRAINAGE AREA (41.45 AC) THAT IS AT LEAST 90% IN SIZE OF THE FIRST DRAINAGE AREA (7.00 AC). THE LIMITS OF ANALYSIS FOR FLOOD PROTECTION SHALL EXTEND 150' FROM THIS POINT OF CONFLUENCE. BASED ON PRELIMINARY ANALYSIS AND THE COMPUTATIONS PROVIDED ABOVE, THE EXISTING STORM SEWER SYSTEM WITHIN THE LIMITS OF ANALYSIS CAN ADEQUATELY CONVEY THE POST-DEVELOPMENT PEAK FLOW OF THE 10-YR, 24 HR STORM.

OUTFALL 2

AS SHOWN IN THE OUTFALL ANALYSIS MAP, AT STRUCTURE #1579 OUTFALL 2 IS JOINED BY A SECOND DRAINAGE AREA (3.44 AC) THAT IS AT LEAST 90% IN SIZE OF THE FIRST DRAINAGE AREA (0.45 AC). THE LIMITS OF ANALYSIS FOR FLOOD PROTECTION SHALL EXTEND 150' FROM THIS POINT OF CONFLUENCE. BASED ON PRELIMINARY ANALYSIS AND THE COMPUTATIONS PROVIDED ABOVE, THE EXISTING STORM SEWER SYSTEM WITHIN THE LIMITS OF ANALYSIS CAN ADEQUATELY CONVEY THE POST-DEVELOPMENT PEAK FLOW OF THE 10-YR, 24 HR STORM.

SHEET FLOW

PORTIONS OF THE DEVELOPED SITE SHALL CONTINUE TO SHEET FLOW OFFSITE IN THE POST DEVELOPMENT CONDITION. THE POST DEVELOPMENT PEAK RUNOFF AND TOTAL VOLUME LEAVING THE SITE VIA SHEET FLOW IS BELOW PRE-DEVELOPMENT. THEREFORE, IN ACCORDANCE WITH Z.O 13-109F(3), NO FURTHER ANALYSIS IS REQUIRED.

STORMWATER MANAGEMENT NARRATIVE

FOR PURPOSES OF THE COMPUTATIONS PROVIDED IN THIS PLAN, THE OVERALL DEVELOPMENT IS ASSUMED TO BE CONSTRUCTED IN PHASES. THE STORMWATER CONTROLS PROPOSED ON EACH PARCEL (EAST AND WEST) IS DESIGNED SUCH THAT IF DEVELOPED IN PHASES, EACH PARCEL CAN STAND ON ITS OWN IN TERMS OF MEETING THE CITY'S STORMWATER MANAGEMENT REQUIREMENTS FOR QUALITY AND QUANTITY. IF IN THE FUTURE A PHASED DEVELOPMENT APPROACH IS NOT REQUIRED, APPLICANT MAY ADJUST COMPUTATIONS SO LONG AS ALL CITY REQUIREMENTS ARE MET WITH RESPECT TO THE DEVELOPMENT APPLICATION.

STORMWATER RUNOFF FROM THE SITE CURRENTLY FLOWS NORTHWEST VIA SHEET FLOW INTO AN EXISTING STORM SEWER SYSTEM WHICH DISCHARGES INTO N. BEAUREGARD STREET AND FILLMORE AVENUE. FROM THERE, STORMWATER CONTINUES TO THE WEST WHERE IT THEN DISCHARGES INTO A NATURAL STREAM WHICH ULTIMATELY DRAINS TO FOUR MILE RUN. UNDER POST DEVELOPMENT CONDITIONS, RUNOFF FROM THE SITE WILL BE CAPTURED WITHIN ON SITE PIPES, TREATED AT VARIOUS BMP FACILITIES AND DETAINED WITHIN UNDERGROUND DETENTION VAULTS. RUNOFF WILL THEN BE RELEASED INTO THE EXISTING STORM SEWER SYSTEM WITHIN FILLMORE AVENUE AND NORTH BEAUREGARD STREET, ULTIMATELY DISCHARGING INTO THE EXISTING CHANNEL.

ALLOWABLE RELEASE FROM THE ON SITE DETENTION VAULTS COMBINED WITH THE UNDETAINED PEAK FLOW, WILL BE RESTRICTED TO THE REQUIREMENTS AS SET FORTH BY THE CITY'S CHANNEL AND FLOOD PROTECTION REGULATIONS THROUGH THE INSTALLATION OF ONSITE DETENTION STRUCTURES. SEE SHEETS P-0703 AND P-0705 FOR DETAILED STORMWATER MANAGEMENT COMPUTATIONS.

APPROXIMATE LOCATIONS OF STORMWATER MANAGEMENT CONTROLS SHOWN IN THESE PLANS ARE PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL DESIGN AT TIME OF FINAL SITE PLAN. AT THIS TIME, ALL COMPUTATIONS ASSUME THE PHASED CONSTRUCTION OF THE CHURCH AND MULTIFAMILY BUILDING. IF CONSTRUCTED CONCURRENTLY, COMPUTATIONS MAY BE REVISED.

LEGEND

- DRAINAGE DIVIDES
- POINT OF CONFLUENCE
- FLOW DIRECTION IN PIPE

DESIGN RAINFALL DEPTHS

2-YR STORM	I = 3.2 INCHES
10-YR STORM	I = 5.2 INCHES
100-YR STORM	I = 8.2 INCHES

100 0 50 100 200 400

(IN FEET)
1 INCH = 100'

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" = 100' DATE: 11/10/17 DRAWN: DP/DM CHECKED: BF

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 11/10/17 PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

STORMWATER MANAGEMENT PLAN

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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.

Project Name: CHURCH OF THE RESURRECTION - RESIDENTAIL
Date: 10/13/2017
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)* → 2.01

Maximum reduction required:	*20%*
The site's net increase in impervious cover (acres) is:	*0.46*
Post-Development TP Load Reduction for Site (lb/yr):	*1.31*

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				1.00	1.00
Impervious Cover (acres)				1.01	1.01
					2.01

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				0.54	0.54
Impervious Cover (acres)				1.47	1.47
Area Check	OK.	OK.	OK.	OK.	2.01

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)	1.00	0.54
Weighted Rv(turf)	0.25	0.25
% Managed Turf	50%	35%
Impervious Cover (acres)	1.01	1.01
Rv(impervious)	0.95	0.95
% Impervious	50%	65%
Total Site Area (acres)	2.01	1.55
Site Rv	0.60	0.71

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)	0.54
Weighted Rv (turf)	0.25
% Managed Turf	27%
Impervious Cover (acres)	1.47
Rv(impervious)	0.95
% Impervious	73%
Final Site Area (acres)	2.01
Final Post Dev Site Rv	0.76

Land Cover Summary-Post

Post-ReDevelopment	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.54
Weighted Rv (turf)	0.25
% Managed Turf	35%
ReDev. Impervious Cover (acres)	1.01
Rv(impervious)	0.95
% Impervious	65%
Total ReDev. Site Area (acres)	1.55
ReDev Site Rv	0.71

Land Cover Summary-Post

Post-Development New Impervious	
New Impervious Cover (acres)	0.46
Rv(impervious)	0.95

Treatment Volume and Nutrient Load

Pre-ReDevelopment Treatment Volume (acre-ft)	0.1008
Pre-ReDevelopment Treatment Volume (cubic feet)	4,390
Pre-ReDevelopment TP Load (lb/yr)	2.76
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	1.37
Baseline TP Load (lb/yr) (0.41 lbs/acre/yr applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)	*0.64*

Treatment Volume and Nutrient Load

Final Post-Development Treatment Volume (acre-ft)	0.1276
Final Post-Development Treatment Volume (cubic feet)	5,559
Final Post-Development TP Load (lb/yr)	3.49
Final Post-Development TP Load per acre (lb/acre/yr)	1.74

Post-ReDevelopment Treatment Volume (acre-ft)	0.0912
Post-ReDevelopment Treatment Volume (cubic feet)	3,973
Post-ReDevelopment Load (TP) (lb/yr)*	2.50
Post-ReDevelopment TP Load per acre (lb/acre/yr)	1.61
Max. Reduction Required (Below Pre-ReDevelopment Load)	20%
TP Load Reduction Required for Redeveloped Area (lb/yr)	0.50

Post-Development Treatment Volume (acre-ft)	0.0364
Post-Development Treatment Volume (cubic feet)	1,586
Post-Development TP Load (lb/yr)	1.00
TP Load Reduction Required for New Impervious Area (lb/yr)	0.81

[1] *Adjusted Land Cover Summary:*
Pre ReDevelopment land cover minus pervious land cover (forest/open space or managed turf) acreage proposed for new impervious cover.

Adjusted total acreage is consistent with Post-ReDevelopment acreage (minus acreage of new impervious cover).

Column I shows load reduction requriement for new impervious cover (based on new development load limit, 0.41 lbs/acre/year).

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr)	1.31

← PHOSPHOROUS REDUCTION REQUIRED

Drainage Area A

CLEAR BMP AREAS

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)				0.17	0.17	0.25
Impervious Cover (acres)				0.94	0.94	0.95
				Total	1.11	

Total Phosphorus Available for Removal in D.A. A (lb/yr) 2.13
Post Development Treatment Volume in D.A. A (ft^3) 3,396

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft^3)	Runoff Reduction (ft^3)	Remaining Runoff Volume (ft^3)	Total BMP Treatment Volume (ft^3)	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		0.02	0	31	38	69	25	0.00	0.04	0.03	0.02	14.a. MTD - **Bayfilter**
14. Manufactured Treatment Devices (no RR)													
14.a. Manufactured Treatment Device- **Bayfilter**	0	0.17	0.91	38	0	3,330	3,330	50	0.02	2.07	1.04	1.04	14.b. MTD - Filtering
14.b. Manufactured Treatment Device-Filtering	0			3,330	0	3,330	3,330	40	1.04	0.00	0.42	0.63	

TOTAL IMPERVIOUS COVER TREATED (ac) 0.93 AREA CHECK: OK.
TOTAL MANAGED TURF AREA TREATED (ac) 0.17 AREA CHECK: OK.

TOTAL PHOSPHORUS REMOVAL REQUIRED ON SITE (lb/yr) 1.31

TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. A (lb/yr) 2.13
TOTAL PHOSPHORUS REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr) 1.46
TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr) 0.03
TOTAL PHOSPHORUS LOAD REDUCTION ACHIEVED IN D.A. A (lb/yr) 1.48 ← PHOSPHOROUS REDUCTION ACHIEVED
TOTAL PHOSPHORUS REMAINING AFTER APPLYING BMP LOAD REDUCTIONS IN D.A. A (lb/yr) 0.65

Drainage Area B

CLEAR BMP AREAS

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)				0.06	0.06	0.25
Impervious Cover (acres)				0.28	0.28	0.95
				Total	0.34	

Total Phosphorus Available for Removal in D.A. B (lb/yr) 0.64
Post Development Treatment Volume in D.A. B (ft^3) 1,020

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft^3)	Runoff Reduction (ft^3)	Remaining Runoff Volume (ft^3)	Total BMP Treatment Volume (ft^3)	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		0.05	0	78	95	172	25	0.00	0.11	0.06	0.04	14.b. MTD - Filtering
14. Manufactured Treatment Devices (no RR)													
14.b. Manufactured Treatment Device-Filtering	0	0.06	0.21	95	0	873	873	40	0.04	0.49	0.21	0.32	

TOTAL IMPERVIOUS COVER TREATED (ac) 0.26 AREA CHECK: OK.
TOTAL MANAGED TURF AREA TREATED (ac) 0.06 AREA CHECK: OK.

TOTAL PHOSPHORUS REMOVAL REQUIRED ON SITE (lb/yr) 1.31

TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. B (lb/yr) 0.64
TOTAL PHOSPHORUS REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. B (lb/yr) 0.21
TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. B (lb/yr) 0.06
TOTAL PHOSPHORUS LOAD REDUCTION ACHIEVED IN D.A. B (lb/yr) 0.28 ← PHOSPHOROUS REDUCTION ACHIEVED
TOTAL PHOSPHORUS REMAINING AFTER APPLYING BMP LOAD REDUCTIONS IN D.A. B (lb/yr) 0.36

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)	0.94	0.28	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	0.93	0.26	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.17	0.06	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.17	0.06	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft^3) 5,559

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 (ft^3)	31	78	0	0	0	109
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	2.13	0.64	0.00	0.00	0.00	2.77
TP LOAD REDUCTION ACHIEVED (lb/yr)	1.48	0.28	0.00	0.00	0.00	1.76
TP LOAD REMAINING (lb/yr)	0.65	0.36	0.00	0.00	0.00	1.01
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.18	0.45	0.00	0.00	0.00	0.64

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	3.49
TP LOAD REDUCTION REQUIRED (lb/yr)	1.31
TP LOAD REDUCTION ACHIEVED (lb/yr)	1.76
TP LOAD REMAINING (lb/yr)	1.73
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.00 **

** TARGET TP REDUCTION EXCEEDED BY 0.45 LB/YEAR **

← COMPLIANCE VERIFICATION

PROJECT DESCRIPTION

DEVELOPMENT OR REDEVELOPMENT

DRAINAGE AREA	IMPERVIOUS	PERVIOUS	TOTAL
SITE AREA	1.47	0.54	2.01
ON-SITE TREATED	1.12	0.23	1.35
OFF-SITE TREATED	0.00	0.00	0.00
TOTAL IMPERVIOUS AREA TREATED	1.12		
ON-SITE IMPERVIOUS AREAS DISCONNECTED BY A VEGETATED BUFFER	0.00		
TOTAL IMPERVIOUS AREA TREATED OR DISCONNECTED	1.12		

WATER TREATMENT ON SITE*

BMP TYPE	AREA TREATED BY BMP (ACRES)	IMPERVIOUS AREA TREATED BY BMP (ACRES)	PERVIOUS AREA TREATED BY BMP (ACRES)	BMP EFFICIENCY (%)	PHOSPHOROUS REMOVAL (LBS)	LATITUDE	LONGITUDE
BAYFILTER	1.08	0.91*	0.17*	50	1.04	38.836271°	−77.113584°
STORMTECH ISOLATOR ROW	1.35	1.12*	0.23*	40	0.63	38.836387° 38.835934°	−77.113515° −77.114546°
PERMEABLE PAVEMENT (L1)	0.07	0.07	0.00	25	0.09	38.836330° 38.835874°	−77.113514° −77.114436°

*TREATMENT TRAIN, SEE THIS SHEET FOR VRRM SPREADSHEET.

MISCELLANEOUS

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

PROJECT IS WITHIN WHICH WATERSHED? FOUR MILE RUN
DISCHARGES TO WHICH BODY OF WATER? FOUR MILE RUN
WQV TREATMENT REQUIRED= 1,816 CF/AC OF IMPERVIOUS AREA
= 1,816 X 1.47 AC
= 2670 CF (0.061 AC*FT)

% WQV PROVIDED= 1,816 CF/AC X 1.12 AC
= 2034 CF (0.047 AC*FT) =76% WQV PROVIDED

A MONETARY CONTRIBUTION MAY BE MADE FOR THE REMAINDER OF WATER QUALITY VOLUME IF FULL WATER QUALITY TREATMENT IS NOT PROVIDED AT THE TIME OF FINAL SITE PLAN

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" = 10' DATE: 11/10/17 DRAWN: DP,DM CHECKED: BF

PLAN STATUS

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT

PRELIMINARY SITE PLAN

CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY BMP COMPUTATIONS - OVERALL SITE

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

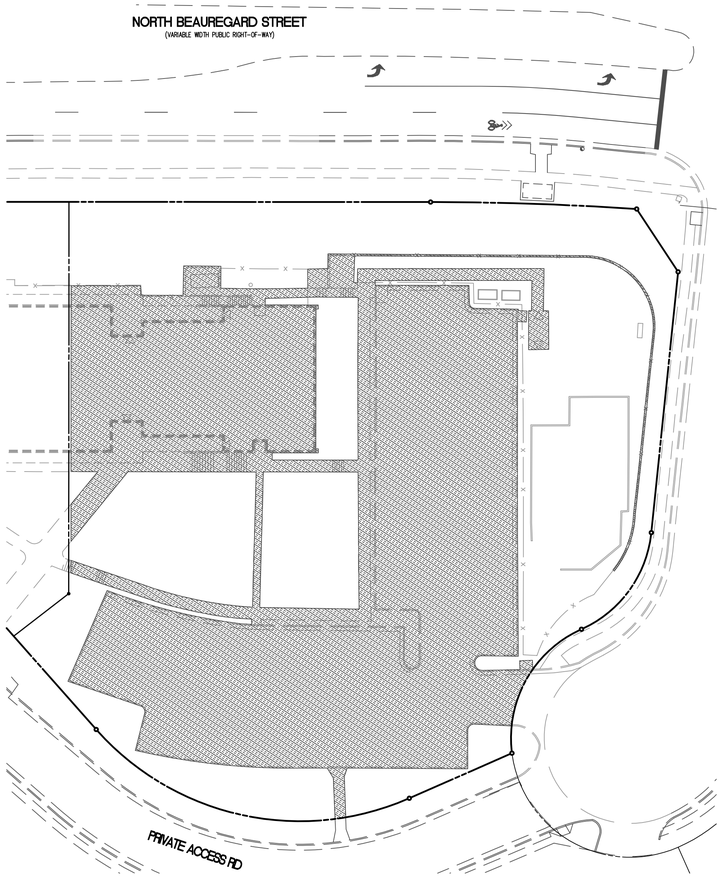
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

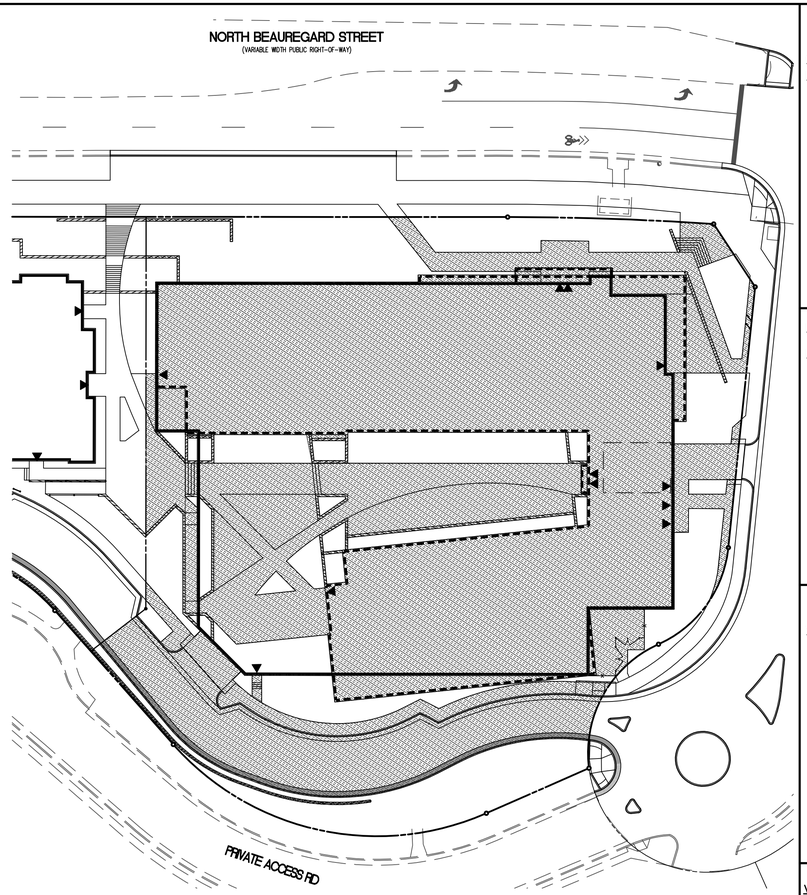
INSTRUMENT NO. DEED BOOK NO. PAGE NO.



PRE-DEVELOPMENT- IMPERVIOUS AREA MAP

SCALE: 1" = 30'

IMPERVIOUS AREA (0.72 ACRES)



POST-DEVELOPMENT- IMPERVIOUS AREA MAP

SCALE: 1" = 30'

IMPERVIOUS AREA (1.05 ACRES)

40 0 20 40 80 160

(IN FEET)
1 INCH = 40'

STORMWATER MANAGEMENT COMPUTATIONS

OUTFALL 1

I. PRE-DEVELOPMENT CONDITION (OVERALL)

SITE AREA = 1.33 AC

A. CONTRIBUTING AREAS:	HSG D AC	HSG D CN
PERVIOUS	0.61	80
IMPERVIOUS	0.72	98

B. WEIGHTED CN = 90

C. TIME OF CONCENTRATION = 6 MIN.

D. RUNOFF
Q1 = 3.80 CFS (V1 = 7743 CF)
Q2 = 4.73 CFS
Q10 = 8.56 CFS
Q100 = 14.22 CFS

II. POST-DEVELOPMENT CONDITION (OVERALL)

SITE AREA = 1.33 AC

A. CONTRIBUTING AREAS:	HSG D AC	HSG D CN
PERVIOUS	0.28	80
IMPERVIOUS	1.05	98

B. WEIGHTED CN = 94

C. TIME OF CONCENTRATION = 6 MIN.

D. RUNOFF
Q1 = 4.37 CFS (V1 = 9328 CF)
Q2 = 5.32 CFS
Q10 = 9.08 CFS
Q100 = 14.64 CFS

POST DEVELOPMENT CONDITIONS – AREA BREAKDOWN

III. UNDETAINED RUNOFF

UNDETAINED AREA = 0.48 AC

A. CONTRIBUTING AREAS:	HSG D AC	HSG D CN
PERVIOUS	0.19	80
IMPERVIOUS	0.29	98

B. WEIGHTED CN = 91

C. TIME OF CONCENTRATION = 6 MIN.

D. RUNOFF
Q1 = 1.42 CFS (V1 = 2929 CF)
Q2 = 1.76 CFS
Q10 = 3.14 CFS
Q100 = 5.17 CFS

IV. ON-SITE RUNOFF TO DETENTION 2

DETAINED AREA = 0.85 AC

A. CONTRIBUTING AREAS:	HSG D AC	HSG D CN
PERVIOUS	0.09	80
IMPERVIOUS	0.76	98

B. WEIGHTED CN = 96

C. TIME OF CONCENTRATION = 6 MIN.

D. RUNOFF
Q1 = 2.96 CFS (V1 = 6529 CF)
Q2 = 3.56 CFS
Q10 = 5.93 CFS
Q100 = 9.45 CFS

V. OFFSITE RUNOFF TO DETENTION 2 FROM WEST PARCEL (BY-PASS)

DETAINED AREA = 0.23 AC

A. CONTRIBUTING AREAS:	HSG D AC	HSG D CN
PERVIOUS	0.13	80
IMPERVIOUS	0.10	98

B. WEIGHTED CN = 90

C. TIME OF CONCENTRATION = 6 MIN.

D. RUNOFF
Q1 = 0.65 CFS (V1 = 1339 CF)
Q2 = 0.82 CFS
Q10 = 1.48 CFS
Q100 = 2.46 CFS

VI. STORMWATER MANAGEMENT REQUIREMENT – ALLOWABLE RELEASE FROM DEVELOPMENT

A. Q1 = $\frac{0.8\ (3.80\ CFS \times 7743\ CF)}{9328\ CF}$ = 2.52 CFS

CHANNEL PROTECTION REQUIREMENT
– ENERGY BALANCE EQUATION PER SECTION 109(F)(1)(c)(i) (NATURAL CHANNEL WITHIN 100x SITE AREA)

B. Q10 = 8.56 CFS

FLOOD PROTECTION
– PREDEVELOPMENT SITE RELEASE FOR 10YR, 24 HR STORM

C. Q100 = 14.22 CFS

FOUR MILE RUN WATERSHED
– PREDEVELOPMENT SITE RELEASE FOR 100YR, 24 HR STORM

VII. ALLOWABLE RELEASE ADJUSTED TO INCLUDE OFFSITE AREA FLOWING THROUGH THE SITE

INCLUDES PEAK RELEASE FROM OFFSITE AREAS FROM THE WEST PARCEL WHICH FLOWS THROUGH THE DETENTION STRUCTURE #2. (SEE SECTION V ABOVE)

Q(ALLOW) = Q(OFFSITE) + Q(COMPUTED ALLOWABLE PER SECTION VII ABOVE)
Q1 = 0.65 CFS + 2.52 CFS = 3.17 CFS
Q2 = 0.82 CFS + 4.73 CFS = 5.55 CFS
Q10 = 1.48 CFS + 8.56 CFS = 10.04 CFS
Q100 = 2.46 CFS + 14.22 CFS = 16.68 CFS

VIII. STORMWATER RELEASES FROM DETENTION

RELEASES FROM DETENTION STRUCTURE 2
Q1 = 1.69 CFS
Q2 = 2.88 CFS
Q10 = 6.27 CFS
Q100 = 11.51 CFS

IX. COMPLIANCE

DEMONSTRATE THAT RELEASES FROM THE SITE (INCLUDES RELEASES FROM DETENTION AND UNDETAINED RUNOFF FROM THE SITE) DO NOT EXCEED STORMWATER REQUIREMENT OF SECTION VII.

	FROM DETENTION 2		UNDETAINED		TOTAL FROM SITE		ALLOWABLE (ADJ.)*
Q1	1.69 CFS	+	1.42 CFS	=	3.11 CFS	≤	3.17 CFS
Q2	2.88 CFS	+	1.76 CFS	=	4.64 CFS	≤	5.55 CFS
Q10	6.27 CFS	+	3.14 CFS	=	9.41 CFS	≤	10.04 CFS
Q100	11.51 CFS	+	5.17 CFS	=	16.68 CFS	≤	16.68 CFS

* SEE SECTION VII FOR COMPUTATION OF "ADJUSTED" ALLOWABLE RELEASE FROM THE SITE.

PROJECT DESCRIPTION

DEVELOPMENT OR REDEVELOPMENT

DRAINAGE AREA	IMPERVIOUS	PERVIOUS	TOTAL
SITE AREA	1.05	0.28	1.33
ON-SITE TREATED	0.76	0.09	0.85
OFF-SITE TREATED	0.13	0.10	0.23
TOTAL IMPERVIOUS AREA TREATED	0.89		
ON-SITE IMPERVIOUS AREAS DISCONNECTED BY A VEGETATED BUFFER	0.00		
TOTAL IMPERVIOUS AREA TREATED OR DISCONNECTED	0.89		

WATER TREATMENT ON SITE*

BMP TYPE	AREA TREATED BY BMP (ACRES)	IMPERVIOUS AREA TREATED BY BMP (ACRES)	PERVIOUS AREA TREATED BY BMP (ACRES)	BMP EFFICIENCY (%)	PHOSPHOROUS REMOVAL (LBS)	LATITUDE	LONGITUDE
BAYFILTER	0.85	0.76*	0.09*	50	0.85	38.836271°	−77.113584°
STORMTECH ISOLATOR ROW	0.85	0.76*	0.09*	40	0.34	38.836387°	−77.113515°
PERMEABLE PAVEMENT	0.02	0.02	0.00	25	0.04	38.836330°	−77.113514°

*TREATMENT TRAIN, SEE P-0704 FOR VRRM SPREADSHEET.

MISCELLANEOUS

TOTAL WQV TREATED: YES [NO]

DETENTION ON SITE: [YES] NO

PROJECT IS WITHIN WHICH WATERSHED? FOUR MILE RUN

DISCHARGES TO WHICH BODY OF WATER? FOUR MILE RUN

WQV TREATMENT REQUIRED= 1,816 CF/AC OF IMPERVIOUS AREA
= 1,816 X 1.05 AC
= 1907 CF (0.044 AC*FT)

% WQV PROVIDED= 1,816 CF/AC X 0.88 AC
= 1598 CF (0.037 AC*FT) =84% WQV PROVIDED

A MONETARY CONTRIBUTION MAY BE MADE FOR THE REMAINDER OF WATER QUALITY VOLUME IF FULL WATER QUALITY TREATMENT IS NOT PROVIDED AT THE TIME OF FINAL SITE PLAN

WATER QUALITY NARRATIVE

FOR PURPOSES OF THE COMPUTATIONS PROVIDED IN THIS PLAN, THE OVERALL DEVELOPMENT IS ASSUMED TO BE CONSTRUCTED IN PHASES. THE STORMWATER CONTROLS PROPOSED ON EACH PARCEL (EAST AND WEST) IS DESIGNED SUCH THAT IF DEVELOPED IN PHASES, EACH PARCEL CAN STAND ON ITS OWN IN TERMS OF MEETING THE CITY'S STORMWATER MANAGEMENT REQUIREMENTS FOR QUALITY AND QUANTITY. IF IN THE FUTURE A PHASED DEVELOPMENT APPROACH IS NOT REQUIRED, APPLICANT MAY ADJUST COMPUTATIONS SO LONG AS ALL CITY REQUIREMENTS ARE MET WITH RESPECT TO THE DEVELOPMENT APPLICATION.

AS SHOWN IN THE COMPUTATIONS ON THIS SHEET, THE AMOUNT OF IMPERVIOUS AREA ON SITE WILL INCREASE WITH THE PROPOSED DEVELOPMENT BY 0.33 AC. THE SITE AREA USED FOR THE ANALYSIS IS THE RECORDED PARCEL AREA OF 1.33 AC. AS COMPUTED USING THE DEQ VRRM SPREADSHEET SHOWN IN SHEET P-0704, THE REQUIRED PHOSPHOROUS REMOVAL TO BE PROVIDED ON SITE SHALL BE AT LEAST 0.92 LB/YR. THE REQUIRED PHOSPHOROUS REDUCTION IS PROPOSED TO BE ACHIEVED BY TREATING APPROXIMATELY 0.88 AC ON SITE WITH
A STORMTECH ISOLATOR ROW A BAYFILTER TREATMENT DEVICE AND PERMEABLE PAVEMENT. APPROXIMATELY 0.23 AC OF OFFSITE AREA IS ALSO TO BE TREATED BY THIS SYSTEM HOWEVER CREDIT IS NOT TAKEN FOR THE TREATMENT OF THE OFFSITE AREA IN REGARDS TO MEETING VRRM REQUIREMENTS.

THE COMPUTED PHOSPHOROUS REMOVAL ON SITE IS EQUAL TO 1.22 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, SHOWING PRELIMINARY BMP ANALYSIS.

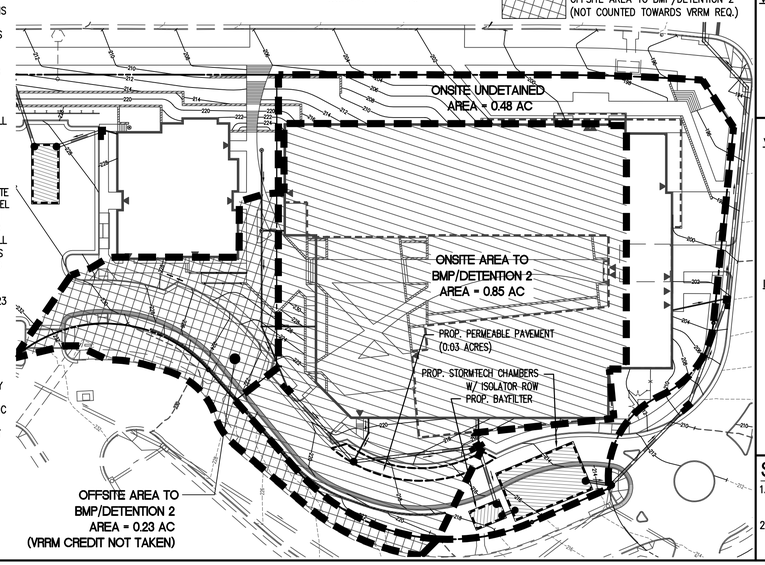
IT IS EXPECTED THAT 84% OF THE WATER QUALITY VOLUME WILL BE TREATED WITH THE PROPOSED STORMTECH ISOLATOR ROW AND BAYFILTER TREATMENT DEVICES AS WELL AS THE PERMEABLE PAVEMENT LOCATED ON SITE. THEREFORE, A MONETARY CONTRIBUTION TO THE CITY'S WATER QUALITY EQUIVALENCY FUND IS EXPECTED TO BE REQUIRED AT TIME OF FINAL SITE PLAN.

BMP DRAINAGE MAP

SCALE: 1" = 40'

ONSITE AREA TO BMP/DETENTION 2

OFFSITE AREA TO BMP/DETENTION 2 (NOT COUNTED TOWARDS VRRM REQ.)



SOIL NOTE

1. ALL SOILS ONSITE ARE ASSUMED TO BE HYDROLOGIC GROUP D IN ACCORDANCE WITH GEOTECHNICAL REPORT PREPARED BY OTHERS.
2. ACCORDING TO THE CITY OF ALEXANDRIA SOIL MAP PROVIDED ON SHEET P-0201, THERE ARE MARINE CLAYS LOCATED ON THE SUBJECT PARCEL.

NOTES

1. INFORMATION PROVIDED ON THIS SHEET IS PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL DESIGN.
2. TARGET NITROGEN REDUCTION NOT REQUIRED.
3. ALTERNATIVE NUMBER AND TYPE OF BMP FACILITIES MAY BE PROVIDED SO LONG AS REQUIREMENTS OF VRRM SPREADSHEETS ARE MET.

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: 11/10/17
DRAWN: DP/DM
CHECKED: BF

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT

PRELIMINARY SITE PLAN

CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY SWM COMPUTATIONS - EAST PARCEL

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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.

VRRM SPREADSHEET COMPUTATIONS - EAST PARCEL

Project Name:	CHURCH OF THE RESURRECTION - RESIDENTAIL
Date:	4/12/2017
Linear Development Project?	No

CLEAR ALL (Ctrl+Shift+R)

data input cells
constant values
calculation cells
final results

Site Information

Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area *(acres)* → 1.33

Maximum reduction required:	*20%*
The site's net increase in impervious cover (acres) is:	*0.33*
Post-Development TP Load Reduction for Site (lb/yr):	*0.92*

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				0.61	0.61
Impervious Cover (acres)				0.72	0.72
					1.33

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				0.28	0.28
Impervious Cover (acres)				1.05	1.05
Area Check	OK.	OK.	OK.	OK.	1.33

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)	0.61	0.28
Weighted Rv(turf)	0.25	0.25
% Managed Turf	46%	28%
Impervious Cover (acres)	0.72	0.72
Rv(impervious)	0.95	0.95
% Impervious	54%	72%
Total Site Area (acres)	1.33	1.00
Site Rv	0.63	0.75

Treatment Volume and Nutrient Load

Pre-ReDevelopment Treatment Volume (acre-ft)	0.0697	0.0628
Pre-ReDevelopment Treatment Volume (cubic feet)	3,036	2,737
Pre-ReDevelopment TP Load (lb/yr)	1.91	1.72
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	1.43	1.72
Baseline TP Load (lb/yr) (0.41 lbs/acre/yr applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		*0.41*

[1] *Adjusted Land Cover Summary:*
Pre ReDevelopment land cover minus pervious land cover (forest/open space or managed turf) acreage proposed for new impervious cover.

Adjusted total acreage is consistent with Post-ReDevelopment acreage (minus acreage of new impervious cover).

Column I shows load reduction requriement for new impervious cover (based on new development load limit, 0.41 lbs/acre/year).

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)	0.28
Weighted Rv (turf)	0.25
% Managed Turf	21%
Impervious Cover (acres)	1.05
Rv(impervious)	0.95
% Impervious	79%
Final Site Area (acres)	1.33
Final Post Dev Site Rv	0.80

Land Cover Summary-Post

Post-ReDevelopment	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.28
Weighted Rv (turf)	0.25
% Managed Turf	28%
ReDev. Impervious Cover (acres)	0.72
Rv(impervious)	0.95
% Impervious	72%
Total ReDev. Site Area (acres)	1.00
ReDev Site Rv	0.75

Land Cover Summary-Post

Post-Development New Impervious	
New Impervious Cover (acres)	0.33
Rv(impervious)	0.95

Treatment Volume and Nutrient Load

Final Post-Development Treatment Volume (acre-ft)	0.0890
Final Post-Development Treatment Volume (cubic feet)	3,875
Final Post-Development TP Load (lb/yr)	2.43
Final Post-Development TP Load per acre (lb/acre/yr)	1.83

Post-ReDevelopment Treatment Volume (acre-ft)	0.0628
Post-ReDevelopment Treatment Volume (cubic feet)	2,737
Post-ReDevelopment Load (TP) (lb/yr)*	1.72
Post-ReDevelopment TP Load per acre (lb/acre/yr)	1.72
Max. Reduction Required (Below Pre-ReDevelopment Load)	20%
TP Load Reduction Required for Redeveloped Area (lb/yr)	0.34

Post-Development Treatment Volume (acre-ft)	0.0261
Post-Development Treatment Volume (cubic feet)	1,138
Post-Development TP Load (lb/yr)	0.72
TP Load Reduction Required for New Impervious Area (lb/yr)	0.58

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr)	0.92

← PHOSPHOROUS REDUCTION REQUIRED

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)				0.09	0.09	0.25
Impervious Cover (acres)				0.79	0.79	0.95
				Total	0.88	

CLEAR BMP AREAS

Total Phosphorus Available for Removal in D.A. A (lb/yr)	1.76
Post Development Treatment Volume in D.A. A (ft^3)	2,806

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft^3)	Runoff Reduction (ft^3)	Remaining Runoff Volume (ft^3)	Total BMP Treatment Volume (ft^3)	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		0.02	0	31	38	69	25	0.00	0.04	0.03	0.02	None
14. Manufactured Treatment Devices (no RR)													
14.a. Manufactured Treatment Device- **Boyfilter**	0	0.09	0.76	0	0	2,703	2,703	50	0.00	1.70	0.85	0.85	14.b. MTD - Filtering
14.b. Manufactured Treatment Device-Filtering	0			2,703	0	2,703	2,703	40	0.85	0.00	0.34	0.51	

TOTAL IMPERVIOUS COVER TREATED (ac)	0.78	AREA CHECK: OK.
TOTAL MANAGED TURF AREA TREATED (ac)	0.09	AREA CHECK: OK.

TOTAL PHOSPHORUS REMOVAL REQUIRED ON SITE (lb/yr)	0.92
TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. A (lb/yr)	1.76
TOTAL PHOSPHORUS REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	1.19
TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.03
TOTAL PHOSPHORUS LOAD REDUCTION ACHIEVED IN D.A. A (lb/yr)	1.21
TOTAL PHOSPHORUS REMAINING AFTER APPLYING BMP LOAD REDUCTIONS IN D.A. A (lb/yr)	0.55

← PHOSPHOROUS REDUCTION ACHIEVED

WATER QUALITY COMPLIANCE

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)	0.79	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	0.78	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.09	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.09	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft^3) 3,875

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 (ft^3)	31	0	0	0	0	31
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	1.76	0.00	0.00	0.00	0.00	1.76
TP LOAD REDUCTION ACHIEVED (lb/yr)	1.21	0.00	0.00	0.00	0.00	1.21
TP LOAD REMAINING (lb/yr)	0.55	0.00	0.00	0.00	0.00	0.55
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.18	0.00	0.00	0.00	0.00	0.18

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	2.43
TP LOAD REDUCTION REQUIRED (lb/yr)	0.92
TP LOAD REDUCTION ACHIEVED (lb/yr)	1.21
TP LOAD REMAINING (lb/yr):	1.22
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.00 **

← COMPLIANCE VERIFICATION

** TARGET TP REDUCTION EXCEEDED BY 0.29 LB/YEAR **

NOTES

1. INFORMATION PROVIDED ON THIS SHEET IS PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL DESIGN.
2. ALTERNATIVE BMPS MAY BE PROVIDED SO LONG AS REQUIREMENTS OF THE DEQ VRRM SPREADSHEET ARE MET.

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" = 40' DATE: 11/10/17 DRAWN: DP,DM CHECKED: BF

DATE	DESCRIPTION	DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1	10/20/17	DSUP SUBMISSION 3
09/29/17	DSUP SUBMISSION 2	11/10/17	DSUP SUBMISSION 4

PLAN STATUS

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 11/10/17 PROFESSIONAL ENGINEER

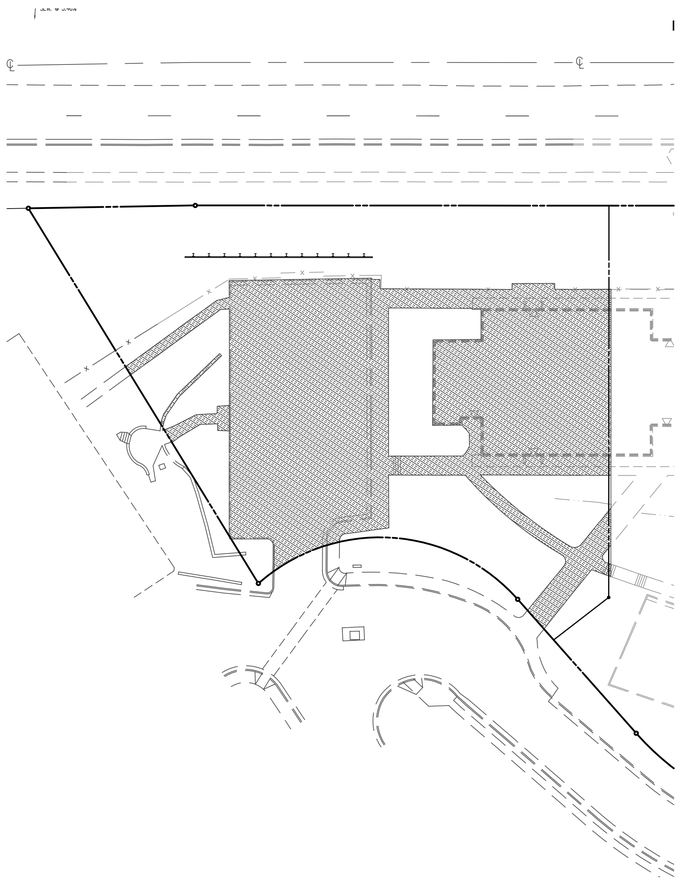
NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

REVISION APPROVED BY

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

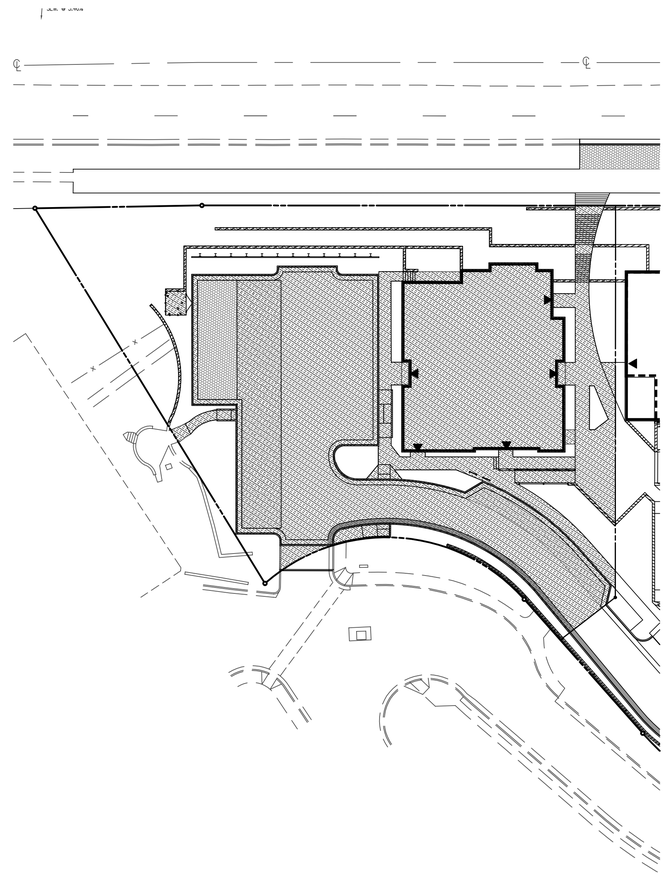
PRELIMINARY BMP DESIGN - EAST PARCEL

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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.



PRE-DEVELOPMENT- IMPERVIOUS AREA MAP

SCALE: 1" = 30'



POST-DEVELOPMENT- IMPERVIOUS AREA MAP

SCALE: 1" = 30'

IMPERVIOUS AREA (0.29 ACRES)

40 0 20 40 80 160

(IN FEET)
1 INCH = 40'

IMPERVIOUS AREA (0.42 ACRES)

STORMWATER MANAGEMENT COMPUTATIONS

OUTFALL 1

I. PRE-DEVELOPMENT CONDITION (OVERALL)

SITE AREA = 0.68 AC

A. CONTRIBUTING AREAS:

	HSG D AC	HSG D CN
PERVIOUS	0.39	80
IMPERVIOUS	0.29	98

B. WEIGHTED CN = 88

C. TIME OF CONCENTRATION = 6 MIN.

D. RUNOFF
Q1 = 1.77 CFS (V1 = 3597 CF)
Q2 = 2.25 CFS
Q10 = 4.22 CFS
Q100 = 7.13 CFS

II. POST-DEVELOPMENT CONDITION (OVERALL)

SITE AREA = 0.68 AC

A. CONTRIBUTING AREAS:

	HSG D AC	HSG D CN
PERVIOUS	0.26	80
IMPERVIOUS	0.42	98

B. WEIGHTED CN = 91

C. TIME OF CONCENTRATION = 6 MIN.

D. RUNOFF
Q1 = 2.01 CFS (V1 = 4150 CF)
Q2 = 2.50 CFS
Q10 = 4.45 CFS
Q100 = 7.38 CFS

POST DEVELOPMENT CONDITIONS – AREA BREAKDOWN

III. UNDETAINED RUNOFF

UNDETAINED AREA = 0.34 AC

A. CONTRIBUTING AREAS:

	HSG D AC	HSG D CN
PERVIOUS	0.20	80
IMPERVIOUS	0.14	98

B. WEIGHTED CN = 87

C. TIME OF CONCENTRATION = 6 MIN.

D. RUNOFF
Q1 = 0.85 CFS (V1 = 1713 CF)
Q2 = 1.09 CFS
Q10 = 2.07 CFS
Q100 = 3.53 CFS

IV. RUNOFF TO DETENTION 1

DETAINED AREA = 0.34 AC

A. CONTRIBUTING AREAS:

	HSG D AC	HSG D CN
PERVIOUS	0.06	80
IMPERVIOUS	0.28	98

B. WEIGHTED CN = 95

C. TIME OF CONCENTRATION = 6 MIN.

D. RUNOFF
Q1 = 1.15 CFS (V1 = 2496 CF)
Q2 = 1.39 CFS
Q10 = 2.35 CFS
Q100 = 3.76 CFS

V. STORMWATER MANAGEMENT REQUIREMENT – ALLOWABLE RELEASE FROM DEVELOPMENT

A. $Q1 = \frac{0.9\ (1.77\ CFS \times 3597\ CF)}{4150\ CF} = 1.38\ CFS$

B. Q10 = 4.22 CFS

C. Q100 = 7.13 CFS

CHANNEL PROTECTION REQUIREMENT
– ENERGY BALANCE EQUATION PER SECTION 109(F)(1)(c)(i) (NATURAL CHANNEL WITHIN 100x SITE AREA)

FLOOD PROTECTION
– PREDEVELOPMENT SITE RELEASE FOR 10YR, 24 HR STORM

FOUR MILE RUN WATERSHED
– PREDEVELOPMENT SITE RELEASE FOR 100YR, 24 HR STORM

VI. STORMWATER RELEASES FROM DETENTION

RELEASES FROM DETENTION STRUCTURE 1
Q1 = 0.49 CFS
Q2 = 1.00 CFS
Q10 = 2.06 CFS
Q100 = 3.60 CFS

VII. COMPLIANCE

DEMONSTRATE THAT RELEASES FROM THE SITE (INCLUDES RELEASES FROM DETENTION AND UNDETAINED RUNOFF FROM THE SITE) DO NOT EXCEED STORMWATER REQUIREMENT OF SECTION V.

	FROM DETENTION 1		UNDETAINED		TOTAL FROM SITE		ALLOWABLE
Q1 =	0.49 CFS	+	0.85 CFS	=	1.34 CFS	≤	1.38 CFS
Q2 =	1.00 CFS	+	1.09 CFS	=	2.09 CFS	≤	2.25 CFS
Q10 =	2.06 CFS	+	2.07 CFS	=	4.13 CFS	≤	4.22 CFS
Q100 =	3.60 CFS	+	3.53 CFS	=	7.13 CFS	≤	7.13 CFS

PROJECT DESCRIPTION

DEVELOPMENT OR REDEVELOPMENT

DRAINAGE AREA	IMPERVIOUS	PERVIOUS	TOTAL
SITE AREA	0.42	0.26	0.68
ON-SITE TREATED	0.26	0.06	0.32
OFF-SITE TREATED	0.00	0.00	0.00
TOTAL IMPERVIOUS AREA TREATED	0.28		
ON-SITE IMPERVIOUS AREAS DISCONNECTED BY A VEGETATED BUFFER	0.00		
TOTAL IMPERVIOUS AREA TREATED OR DISCONNECTED	0.28		

WATER TREATMENT ON SITE*

BMP TYPE	AREA TREATED BY BMP (ACRES)	IMPERVIOUS AREA TREATED BY BMP (ACRES)	PERVIOUS AREA TREATED BY BMP (ACRES)	BMP EFFICIENCY (%)	PHOSPHOROUS REMOVAL (LBS)	LATITUDE	LONGITUDE
PERMEABLE PAVEMENT (L1)	0.05	0.05*	0.00*	25	0.07	38.835874°	-77.114436°
STORMTECH ISOLATOR ROW	0.27	0.21*	0.06*	40	0.21	38.835934°	-77.114546°
OFFSITE TREATMENT	0.23	0.15	0.08	N/A	N/A	38.836387°	-77.113515°

*TREATMENT TRAIN, SEE P-0706 FOR VRRM SPREADSHEET.

MISCELLANEOUS

TOTAL WQV TREATED: YES [NO]

DETENTION ON SITE: [YES] NO

PROJECT IS WITHIN WHICH WATERSHED? FOUR MILE RUN

DISCHARGES TO WHICH BODY OF WATER? FOUR MILE RUN

WQV TREATMENT REQUIRED= 1,816 CF/AC OF IMPERVIOUS AREA
= 1,816 X 0.42 AC
[= 763 CF (0.018 AC*FT)]

% WQV PROVIDED= 1,816 CF/AC X 0.36 AC
[= 653 CF (0.015 AC*FT) =86% WQV PROVIDED]

A MONETARY CONTRIBUTION MAY BE MADE FOR THE REMAINDER OF WATER QUALITY VOLUME IF FULL WATER QUALITY TREATMENT IS NOT PROVIDED AT THE TIME OF FINAL SITE PLAN

WATER QUALITY NARRATIVE

FOR PURPOSES OF THE COMPUTATIONS PROVIDED IN THIS PLAN, THE OVERALL DEVELOPMENT IS ASSUMED TO BE CONSTRUCTED IN PHASES. THE STORMWATER CONTROLS PROPOSED ON EACH PARCEL (EAST AND WEST) IS DESIGNED SUCH THAT IF DEVELOPED IN PHASES, EACH PARCEL CAN STAND ON ITS OWN IN TERMS OF MEETING THE CITY'S STORMWATER MANAGEMENT REQUIREMENTS FOR QUALITY AND QUANTITY. IF IN THE FUTURE A PHASED DEVELOPMENT APPROACH IS NOT REQUIRED, APPLICANT MAY ADJUST COMPUTATIONS SO LONG AS ALL CITY REQUIREMENTS ARE MET WITH RESPECT TO THE DEVELOPMENT APPLICATION.

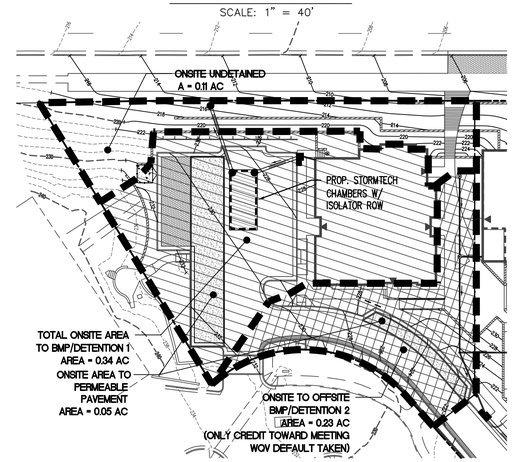
AS SHOWN IN THE COMPUTATIONS ON THIS SHEET, THE AMOUNT OF IMPERVIOUS AREA ON SITE WILL INCREASE WITH THE PROPOSED DEVELOPMENT BY 0.13 AC. THE SITE AREA USED FOR THE ANALYSIS IS THE RECORDED PARCEL AREA OF 0.68 AC. AS COMPUTED USING THE DEQ VRRM SPREADSHEET SHOWN IN SHEET P-0705, THE REQUIRED PHOSPHOROUS REMOVAL TO BE PROVIDED ON SITE SHALL BE AT LEAST 0.28 LB/YR. THE REQUIRED PHOSPHOROUS REDUCTION IS PROPOSED TO BE ACHIEVED BY TREATING APPROXIMATELY 0.34 AC ON SITE WITH LEVEL 1 PERMEABLE PAVEMENT AND A STORMTECH ISOLATOR ROW.

THE COMPUTED PHOSPHOROUS REMOVAL ON SITE IS EQUAL TO 0.28 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, SHOWING PRELIMINARY BMP ANALYSIS.

IT IS EXPECTED THAT 86% OF THE WATER QUALITY VOLUME WILL BE TREATED WITH THE PROPOSED PERMEABLE PAVEMENT AND STORMTECH ISOLATOR ROW LOCATED ON SITE. THEREFORE, A MONETARY CONTRIBUTION TO THE CITY'S WATER QUALITY EQUIVALENCY FUND IS EXPECTED TO BE REQUIRED AT TIME OF FINAL SITE PLAN.

BMP DRAINAGE MAP

SCALE: 1" = 40'



AREA TREATED BY ISOLATOR ROW

AREA TREATED BY PERMEABLE PAVEMENT

AREA TREATED BY OFFSITE BAYFILTER AND ISOLATOR ROW (AREA TREATED BY OFFSITE FACILITY NOT COUNTED TOWARD VRRM REQUIREMENT. THIS AREA IS HOWEVER COUNTED TOWARD MEETING WATER QUALITY VOLUME DEFAULT FOR WEST PARCEL)

NOTES:

1. INFORMATION PROVIDED ON THIS SHEET IS PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL DESIGN.
2. TARGET NITROGEN REDUCTION NOT REQUIRED.
3. ALTERNATIVE NUMBER AND TYPE OF BMP FACILITIES MAY BE PROVIDED SO LONG AS REQUIREMENTS OF VRRM SPREADSHEETS ARE MET.

SOIL NOTE

1. ALL SOILS ONSITE ARE ASSUMED TO BE HYDROLOGIC GROUP D IN ACCORDANCE WITH GEOTECHNICAL REPORT PREPARED BY OTHERS.
2. ACCORDING TO THE CITY OF ALEXANDRIA SOILS MAP PROVIDED ON SHEET P-0201, THERE ARE MARINE CLAYS LOCATED ON THE SUBJECT PARCEL.

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: 11/10/17
DRAWN: DP/DM
CHECKED: BF

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

PLAN STATUS

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

REVISION APPROVED BY

CHURCH OF THE RESURRECTION DEVELOPMENT

PRELIMINARY SITE PLAN

CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY SWM COMPUTATIONS - WEST PARCEL

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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.

VRRM SPREADSHEET COMPUTATIONS - WEST PARCEL

Project Name:	CHURCH OF THE RESURRECTION - CHURCH
Date:	7/24/2017
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)* → 0.68

Maximum reduction required:	*10%*
The site's net increase in impervious cover (acres) is:	*0.13*
Post-Development TP Load Reduction for Site (lb/yr):	*0.31*

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				0.39	0.39
Impervious Cover (acres)				0.29	0.29
					0.68

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				0.26	0.26
Impervious Cover (acres)				0.42	0.42
Area Check	OK.	OK.	OK.	OK.	0.68

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)	0.39	0.26
Weighted Rv(turf)	0.25	0.25
% Managed Turf	57%	47%
Impervious Cover (acres)	0.29	0.29
Rv(impervious)	0.95	0.95
% Impervious	43%	53%
Total Site Area (acres)	0.68	0.55
Site Rv	0.55	0.62

Treatment Volume and Nutrient Load

Pre-ReDevelopment Treatment Volume (acre-ft)	0.0311	0.0284
Pre-ReDevelopment Treatment Volume (cubic feet)	1,354	1,236
Pre-ReDevelopment TP Load (lb/yr)	0.85	0.78
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	1.25	1.41
Baseline TP Load (lb/yr) (0.41 lbs/acre/yr applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		*0.23*

[1] *Adjusted Land Cover Summary:*
Pre ReDevelopment land cover minus pervious land cover (forest/open space or managed turf) acreage proposed for new impervious cover.

Adjusted total acreage is consistent with Post-ReDevelopment acreage (minus acreage of new impervious cover).

Column I shows load reduction requriement for new impervious cover (based on new development load limit, 0.41 lbs/acre/year).

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)	0.26
Weighted Rv (turf)	0.25
% Managed Turf	38%
Impervious Cover (acres)	0.42
Rv(impervious)	0.95
% Impervious	62%
Final Site Area (acres)	0.68
Final Post Dev Site Rv	0.68

Land Cover Summary-Post

Post-ReDevelopment	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.26
Weighted Rv (turf)	0.25
% Managed Turf	47%
ReDev. Impervious Cover (acres)	0.29
Rv(impervious)	0.95
% Impervious	53%
Total ReDev. Site Area (acres)	0.55
ReDev Site Rv	0.62

Land Cover Summary-Post

Post-Development New Impervious	
New Impervious Cover (acres)	0.13
Rv(impervious)	0.95

Treatment Volume and Nutrient Load

Final Post-Development Treatment Volume (acre-ft)	0.0387	Post-ReDevelopment Treatment Volume (acre-ft)	0.0284	Post-Development Treatment Volume (acre-ft)	0.0103
Final Post-Development Treatment Volume (cubic feet)	1,684	Post-ReDevelopment Treatment Volume (cubic feet)	1,236	Post-Development Treatment Volume (cubic feet)	448
Final Post-Development TP Load (lb/yr)	1.06	Post-ReDevelopment Load (TP) (lb/yr)*	0.78	Post-Development TP Load (lb/yr)	0.28
Final Post-Development TP Load per acre (lb/acre/yr)	1.56	Post-ReDevelopment TP Load per acre (lb/acre/yr)	1.41		
		Max. Reduction Required (Below Pre-ReDevelopment Load)	10%		
		TP Load Reduction Required for Redeveloped Area (lb/yr)	0.08	TP Load Reduction Required for New Impervious Area (lb/yr)	0.23

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr)	0.31	← PHOSPHOROUS REDUCTION REQUIRED

Drainage Area A

CLEAR BMP AREAS

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)				0.06	0.06	0.25
Impervious Cover (acres)				0.28	0.28	0.95
				Total	0.34	

Total Phosphorus Available for Removal in D.A. A (lb/yr)	0.63
Post Development Treatment Volume in D.A. A (ft^3)	1,003

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft^3)	Runoff Reduction (ft^3)	Remaining Runoff Volume (ft^3)	Total BMP Treatment Volume (ft^3)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream	Untreated Phosphorus Load to Practice	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		0.05	0	84	102	186	25	0.00	0.12	0.07	0.05	14.b. MTD - Filtering
14. Manufactured Treatment Devices (no RR)													
14.b. Manufactured Treatment Device-Filtering	0	0.06	0.21	76	0	855	855	40	0.04	0.49	0.21	0.31	

TOTAL IMPERVIOUS COVER TREATED (ac)	0.27	AREA CHECK: OK.
TOTAL MANAGED TURF AREA TREATED (ac)	0.06	AREA CHECK: OK.
TOTAL PHOSPHORUS REMOVAL REQUIRED ON SITE (lb/yr)	0.29	
TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. A (lb/yr)	0.63	
TOTAL PHOSPHORUS REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.22	
TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.07	
TOTAL PHOSPHORUS LOAD REDUCTION ACHIEVED IN D.A. A (lb/yr)	0.29	← PHOSPHOROUS REDUCTION ACHIEVED
TOTAL PHOSPHORUS REMAINING AFTER APPLYING BMP LOAD REDUCTIONS IN D.A. A (lb/yr)	0.34	

WATER QUALITY COMPLIANCE

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)	0.28	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	0.27	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.06	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.06	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft^3) 1,672

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 (ft^3)	84	0	0	0	0	84
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	0.63	0.00	0.00	0.00	0.00	0.63
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.29	0.00	0.00	0.00	0.00	0.29
TP LOAD REMAINING (lb/yr)	0.34	0.00	0.00	0.00	0.00	0.34
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.49	0.00	0.00	0.00	0.00	0.49

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	1.05
TP LOAD REDUCTION REQUIRED (lb/yr)	0.29
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.29
TP LOAD REMAINING (lb/yr):	0.76
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.00 ** ← COMPLIANCE VERIFICATION

**No further TP load reduction required (Required - Achieved < 0.005 lb/yr)

NOTES

1. INFORMATION PROVIDED ON THIS SHEET IS PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL DESIGN.
2. ALTERNATIVE BMPS MAY BE PROVIDED SO LONG AS REQUIREMENTS OF THE DEQ VRRM SPREADSHEET ARE MET.

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" = 40' | DATE: 11/10/17 | DRAWN: DP,DM | CHECKED: BF

PLAN STATUS		
DATE	DESCRIPTION	
09/08/17	DSUP SUBMISSION 1	
09/29/17	DSUP SUBMISSION 2	
10/20/17	DSUP SUBMISSION 3	
11/10/17	DSUP SUBMISSION 4	

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

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

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY BMP DESIGN - WEST PARCEL

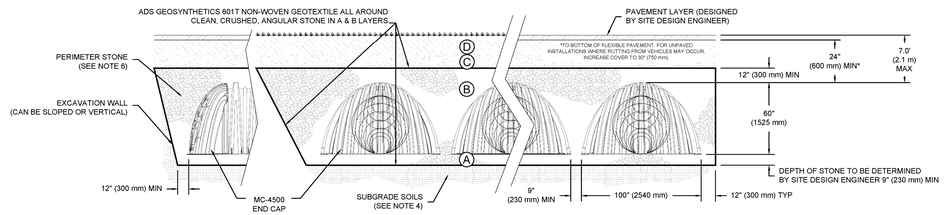
APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

EAST PARCEL - STORMTECH FACILITY DETAILS

ACCEPTABLE FILL MATERIALS: STORMTECH MC-4500 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. * *

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



*FOR COVER DEPTHS GREATER THAN 7.0' (2.1 m) PLEASE CONTACT STORMTECH

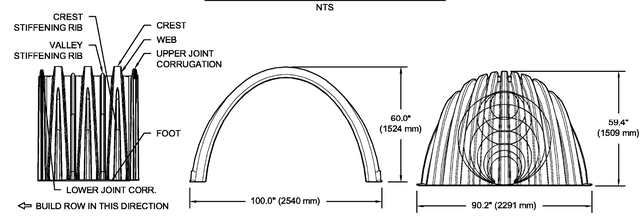
NOTES:

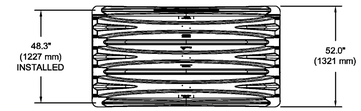
1. MC-4500 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. MC-4500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
4. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
5. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
6. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

MC-4500 STANDARD CROSS SECTION
DATE: 11/18/14 DRAWN: JLM CHECKED: JLM PROJECT #
REV | DRW | CHK | DESCRIPTION
StormTech® 70 INNOVATION DRIVE, SUITE 3 | SHORY HILL, CT | 06067 | 800-228-9189 | 888-892-2694 | WWW.STORMTECH.COM
4640 TRUEMAN BLVD HILLIARD, OH 43026 1-800-733-7473
ADVANCED DRAINAGE SYSTEMS, INC.
THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) SPECIFIED AND SHOWN ON THIS DRAWING MEET ALL SITE DESIGN REQUIREMENTS.
SHEET 1 OF 1

MC-4500 TECHNICAL SPECIFICATION

NTS





NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	100.0" X 60.0" X 48.3"	(2540 mm X 1524 mm X 1227 mm)
CHAMBER STORAGE	106.5 CUBIC FEET	(3.01 m^3)
MINIMUM INSTALLED STORAGE*	162.6 CUBIC FEET	(4.60 m^3)
WEIGHT	130.0 lbs.	(59.0 kg)

NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	90.2" X 59.4" X 30.7"	(2291 mm X 1509 mm X 781 mm)
END CAP STORAGE	35.7 CUBIC FEET	(1.01 m^3)
MINIMUM INSTALLED STORAGE*	108.7 CUBIC FEET	(3.08 m^3)
WEIGHT	135.0 lbs.	(61.2 kg)

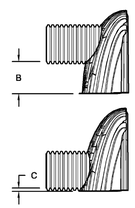
*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION AND BETWEEN CHAMBERS, 12" (305 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY.

STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"

PART #	STUB	B	C
MC4500REPE06T	6" (150 mm)	42.54" (1.081 m)	---
MC4500REPE06B		---	0.86" (22 mm)
MC4500REPE08T	8" (200 mm)	40.50" (1.029 m)	---
MC4500REPE08B		---	1.01" (26 mm)
MC4500REPE10T	10" (250 mm)	38.37" (975 mm)	---
MC4500REPE10B		---	1.33" (34 mm)
MC4500REPE12T	12" (300 mm)	35.69" (907 mm)	---
MC4500REPE12B		---	1.55" (39 mm)
MC4500REPE15T	15" (375 mm)	32.72" (831 mm)	---
MC4500REPE15B		---	1.70" (43 mm)
MC4500REPE18TC	18" (450 mm)	29.36" (746 mm)	---
MC4500REPE18BC		---	1.97" (50 mm)
MC4500REPE24TC	24" (600 mm)	23.05" (585 mm)	---
MC4500REPE24BC		---	2.26" (57 mm)
MC4500REPE30BC	30" (750 mm)	---	2.95" (75 mm)
MC4500REPE36BC	36" (900 mm)	---	3.25" (83 mm)
MC4500REPE42BC	42" (1050 mm)	---	3.55" (90 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

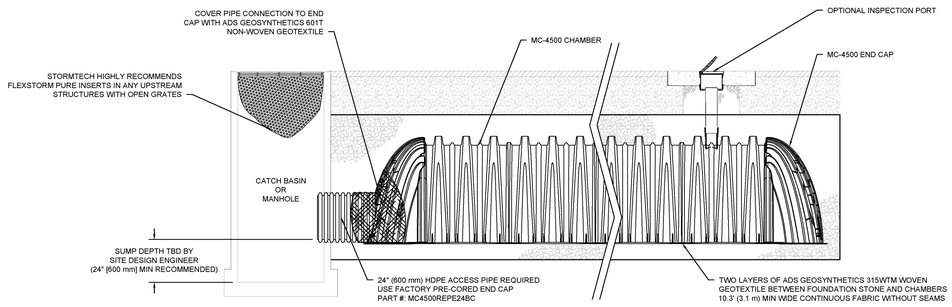
CUSTOM PRECORED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS.
CUSTOM INVERT LOCATIONS ON THE MC-4500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm)
THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHTEST POSSIBLE FOR THE PIPE SIZE.



STORMWATER 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 OPERATATIONS 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.



MC-4500 ISOLATOR ROW DETAIL

NTS

ISOLATOR ROW DETAILS MC-4500
DATE: 03/08/17 DRAWN: JLM CHECKED: PROJECT #
REV | DRW | CHK | DESCRIPTION
StormTech® 70 INNOVATION DRIVE, SUITE 3 | SHORY HILL, CT | 06067 | 800-228-9189 | 888-892-2694 | WWW.STORMTECH.COM
4640 TRUEMAN BLVD HILLIARD, OH 43026 1-800-733-7473
ADVANCED DRAINAGE SYSTEMS, INC.
THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) SPECIFIED AND SHOWN ON THIS DRAWING MEET ALL SITE DESIGN REQUIREMENTS.
SHEET 1 OF 1

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

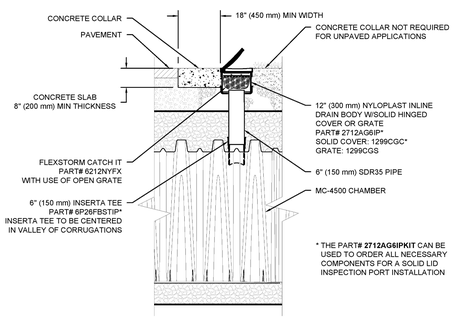
STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

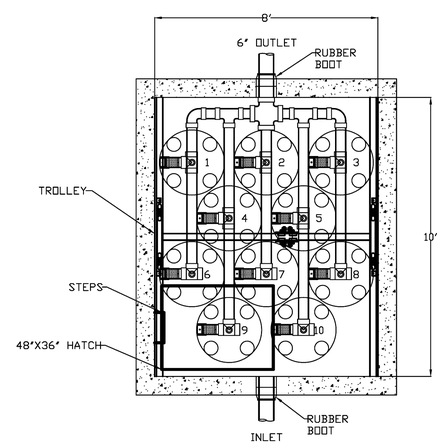


MC-4500 6" INSPECTION PORT DETAIL

NTS

EAST PARCEL - BAYFILTER DETAILS

BAYFILTER STORMWATER FILTRATION SYSTEM PROTECTED BY U.S. PATENT # 6,869,528



REV	DESCRIPTION	DATE	APPR	NOTES:

BaySaver Technologies, Inc. WWW.BAYSAVER.COM

DESIGNED:	TEP	DATE:	9/16/08
DRAWN:	EKH	SCALE:	N.T.S.
CHECKED:	EKH	DWG NO:	BF-207

VAULT BAYFILTER MODEL PVF-8-10-10

NOTES

1. INFORMATION PROVIDED ON THIS SHEET IS PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL DESIGN.
2. ALTERNATIVE BMPS MAY BE PROVIDED SO LONG AS REQUIREMENTS OF THE DEQ VRRM SHREADSHEET ARE MET.

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: 11/10/17 DRAWN: DP,DM CHECKED: BF

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 11/10/17 PROFESSIONAL ENGINEER

DATE	DESCRIPTION	PLAN STATUS
09/08/17	DSUP SUBMISSION 1	DSUP SUBMISSION 3
09/29/17	DSUP SUBMISSION 2	DSUP SUBMISSION 4

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY BMP & SWM DETAILS - EAST PARCEL

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

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

DIRECTOR DATE

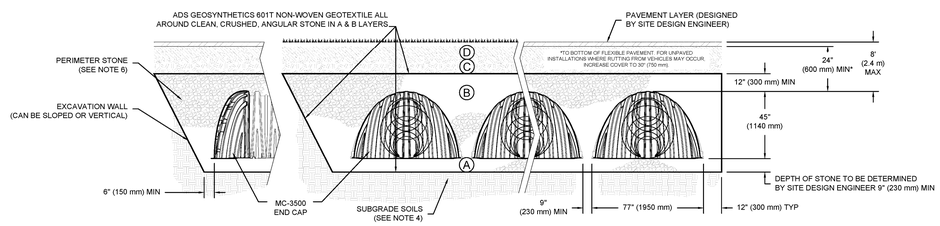
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

WEST PARCEL - STORMTECH FACILITY DETAILS

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. * *

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



*FOR COVER DEPTHS GREATER THAN 8.0' (2.4 m) PLEASE CONTACT STORMTECH

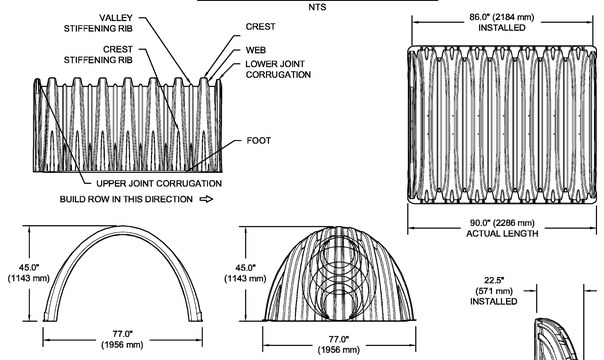
NOTES:

1. MC-3500 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
4. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
   PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

MC-3500 STANDARD CROSS SECTION
DATE: 11/18/14 DRAWN: JLM CHECKED: JLM PROJECT #:
REV | DRW | CHK | DESCRIPTION: 03/19/15 JLM JJE UPDATE
STormTech 70 INNOVATION DRIVE, SUITE 3 | HOOKSETT, NH | 03106 | 800-228-8182 | 603-622-3454 | WWW.STORMTECH.COM
ADS 4640 TRUEMAN BLVD HILLIARD, OH 43026 1-800-733-7473 ADVANCED DRAINAGE SYSTEMS, INC.
THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) SPECIFIED AND PROVIDED BY ADS MEET THE SITE DESIGN REQUIREMENTS.
SHEET 1 OF 1

MC-3500 TECHNICAL SPECIFICATION

NTS



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 86.0"	(1956 mm X 1143 mm X 2184 mm)
CHAMBER STORAGE	109.9 CUBIC FEET	(3.11 m³)
MINIMUM INSTALLED STORAGE*	178.9 CUBIC FEET	(5.06 m³)
WEIGHT	135.0 lbs.	(61.2 kg)

NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 22.5"	(1956 mm X 1143 mm X 571 mm)
END CAP STORAGE	14.9 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	46.0 CUBIC FEET	(1.30 m³)
WEIGHT	50.0 lbs.	(22.7 kg)

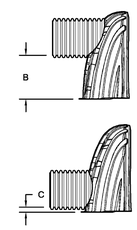
*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION AND BETWEEN CHAMBERS, 12" (305 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY

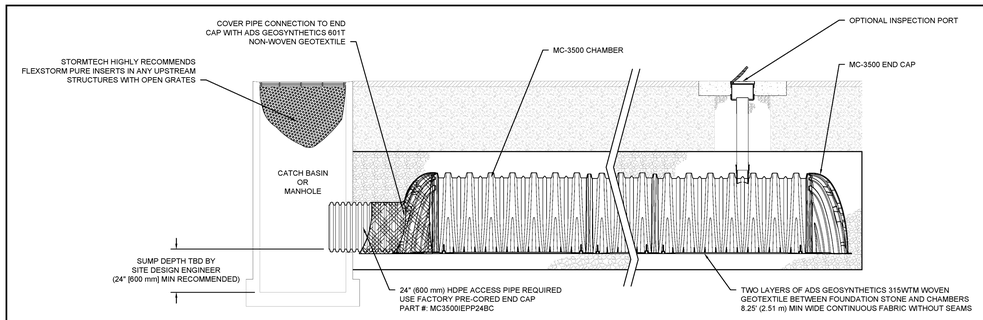
STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"

PART #	STUB	B	C
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	---
MC3500IEPP06B		---	0.66" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	---
MC3500IEPP08B		---	0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	---
MC3500IEPP10B		---	0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	26.36" (670 mm)	---
MC3500IEPP12B		---	1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	---
MC3500IEPP15B		---	1.50" (38 mm)
MC3500IEPP18TC	18" (450 mm)	20.03" (509 mm)	---
MC3500IEPP18BC		---	1.77" (45 mm)
MC3500IEPP24TC	24" (600 mm)	14.48" (368 mm)	---
MC3500IEPP24BC		---	2.06" (52 mm)
MC3500IEPP30BC	30" (750 mm)	---	

NOTE: ALL DIMENSIONS ARE NOMINAL

CUSTOM PRECORED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS.
CUSTOM INVERT LOCATIONS ON THE MC-3500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm)
THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHTEST POSSIBLE FOR THE PIPE SIZE.





MC-3500 ISOLATOR ROW DETAIL
NTS

ISOLATOR ROW DETAILS MC-3500
DATE: 03/08/17 DRAWN: JLM CHECKED:
REV | DRW | CHK | DESCRIPTION
STormTech 70 INNOVATION DRIVE, SUITE 3 | HOOKSETT, NH | 03106 | 800-228-8182 | 603-622-3454 | WWW.STORMTECH.COM
ADS 4640 TRUEMAN BLVD HILLIARD, OH 43026 1-800-733-7473 ADVANCED DRAINAGE SYSTEMS, INC.
THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) SPECIFIED AND PROVIDED BY ADS MEET THE SITE DESIGN REQUIREMENTS.
SHEET 1 OF 1

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

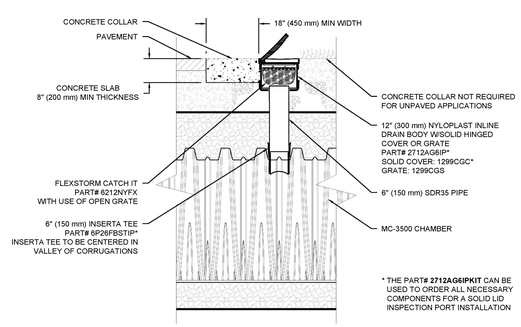
STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



MC-3500 6" INSPECTION PORT DETAIL
NTS

WEST PARCEL - POROUS ASPHALT DETAILS

DETAILS AND SPECIFICATIONS FROM VIRGINIA DEQ DESIGN MANUAL (2011)

Table 7.2. Comparative Properties of the Three Major Permeable Pavement Types

Design Factor	Porous Concrete (PC)	Porous Asphalt (PA)	Interlocking Pavers (IP)
Scale of Application	Small and large scale paving applications	Small and large scale paving applications	Micro, small and large scale paving applications
Pavement Thickness [1]	5 to 8 inches	3 to 4 inches	3 inches [1, 8]
Bedding Layer [1, 8]	None	2 inches No. 57 stone	2 inches of No. 8 stone
Reservoir Layer [2, 8]	No. 57 stone	No. 2 stone	No. 2 stone 3-4 inches of No.57 stone
Construction Properties [3]	Cast in place, seven day cure, must be covered	Cast in place, 24 hour cure	No cure period; manual or mechanical installation of pre-manufactured units, over 5000 sf/day per machine
Design Permeability [4]	10 feet/day	6 feet/day	2 feet/day
Construction Cost [5]	$ 2.00 to $6.50/sq. ft.	$ 0.50 to $1.00/ sq. ft.	$ 5.00 to $ 10.00/ sq. ft.
Min. Batch Size	500 sq. ft.		NA
Longevity [6]	20 to 30 years	15 to 20 years	20 to 30 years
Overflow	Drop inlet or overflow edge	Drop inlet or overflow edge	Surface, drop inlet or overflow edge
Temperature Reduction	Cooling in the reservoir layer	Cooling in the reservoir layer	Cooling at the pavement surface & reservoir layer
Colors/Texture	Limited range of colors and textures	Black or dark grey color	Wide range of colors, textures, and patterns
Traffic Bearing Capacity [7]	Can handle all traffic loads, with appropriate bedding layer design.		
Surface Clogging	Replace paved areas or install drop inlet	Replace paved areas or install drop inlet	Replace permeable stone jointing materials
Other Issues		Avoid seal coating	Snowplow damage
Design Reference	American Concrete Institute # 522.1.08	Jackson (2007) NAPA	Smith (2006) ICPI

[1] Individual designs may depart from these typical cross-sections, due to site, traffic and design conditions.
[2] Reservoir storage may be augmented by corrugated metal pipes, plastic arch pipe, or plastic lattice blocks.
[3] ICPI (2008)
[4] NVRA (2008)
[5] WERF 2005 as updated by NVRA (2008)
[6] Based on pavement being maintained properly, Resurfacing or rehabilitation may be needed after the indicated period.
[7] Depends primarily on on-site geotechnical considerations and structural design computations.
[8] Stone sizes correspond to ASTM D 448 *Standard Classification for Sizes of Aggregate for Road and Bridge Construction.*

Table 7.3. 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 exceeds 0.5 in./hr.
Underdrain required	Underdrain not required; ***OR*** If an underdrain is used, a 12-inch stone sump must be provided below the underdrain invert; ***OR*** The Tv has at least a 48-hour drain time, as regulated by a control structure.
CDA = The permeable pavement area plus upgradient parking, as long as the ratio of external contributing area to permeable pavement does not exceed 2:1.	CDA = The permeable pavement area

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

SECTION 4: TYPICAL DETAILS

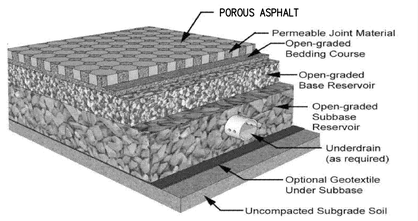


Figure 7.2. Typical Detail (Source: Smith, 2009)

STORMWATER 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 OPERATATIONS 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.

NOTES

1. INFORMATION PROVIDED ON THIS SHEET IS PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL DESIGN.
2. ALTERNATIVE BMPS MAY BE PROVIDED SO LONG AS REQUIREMENTS OF THE DEQ VRRM SHREADSHEET ARE MET.

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: 11/10/17 | DRAWN: DP,DM | CHECKED: BF

DATE	DESCRIPTION	PLAN STATUS
09/08/17	DSUP SUBMISSION 1	DSUP SUBMISSION 3
09/29/17	DSUP SUBMISSION 2	DSUP SUBMISSION 4
10/20/17	DSUP SUBMISSION 3	
11/10/17	DSUP SUBMISSION 4	

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 11/10/17 PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

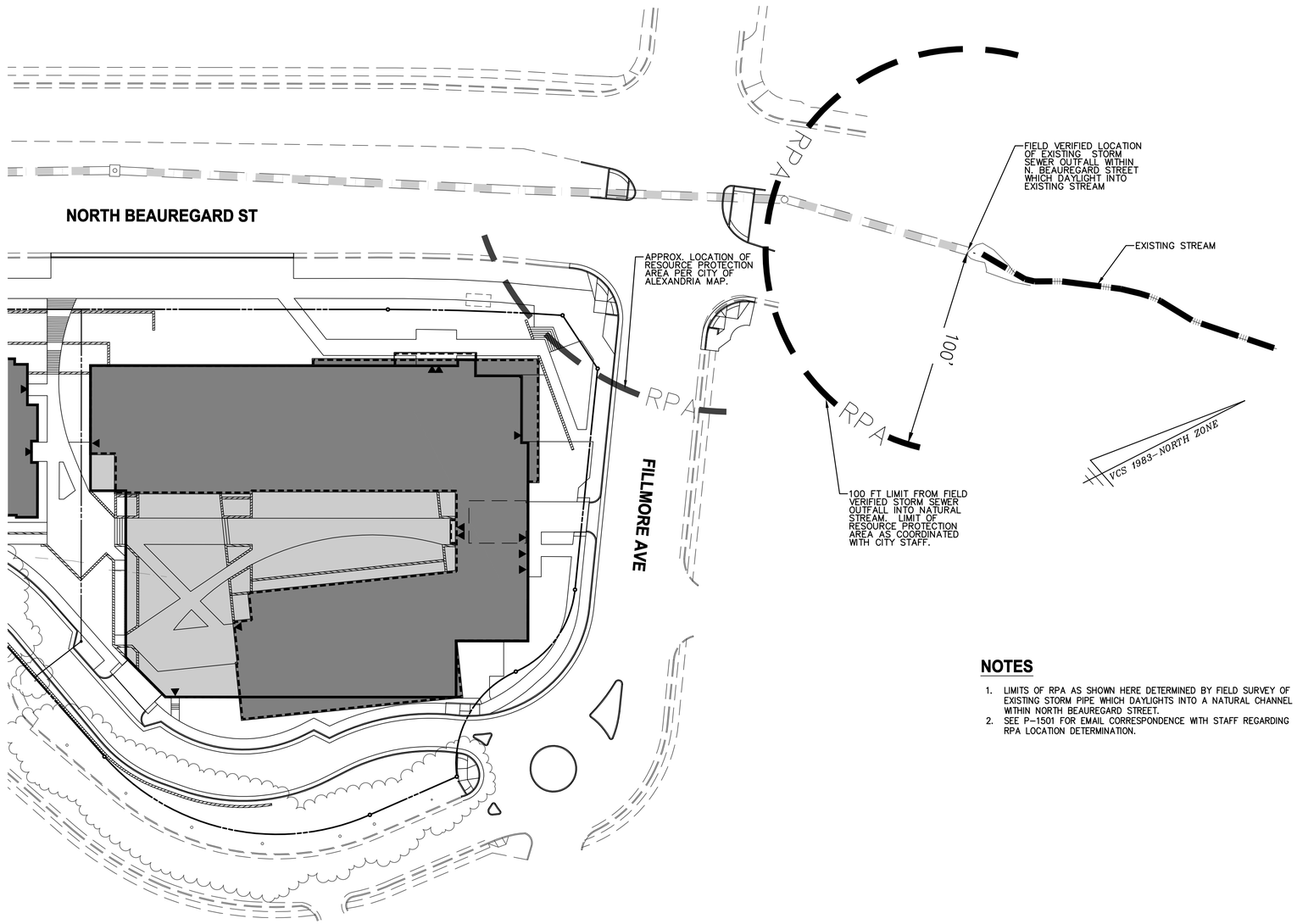
CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY BMP & SWM DETAILS - WEST PARCEL

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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.

LEGEND

- RPA — RPA LIMITS PER CITY OF ALEXANDRIA RPA MAP
- RPA — RPA LIMITS AS COORDINATED WITH CITY OF ALEXANDRIA STAFF
- EXISTING STREAM
- EXISTING STORM SEWER



NOTES

1. LIMITS OF RPA AS SHOWN HERE DETERMINED BY FIELD SURVEY OF EXISTING STORM PIPE WHICH DAYLIGHTS INTO A NATURAL CHANNEL WITHIN NORTH BEAUREGARD STREET.
2. SEE P-1501 FOR EMAIL CORRESPONDENCE WITH STAFF REGARDING RPA LOCATION DETERMINATION.

30 0 15 30 60 120
(IN FEET)
1 INCH = 30'

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" = 30' | DATE: 11/10/17 | DRAWN: DP,DM | CHECKED: BF

COMMONWEALTH OF VIRGINIA PROFESSIONAL ENGINEER
AARON M. VINSON
Lic. No.041851
11/10/17

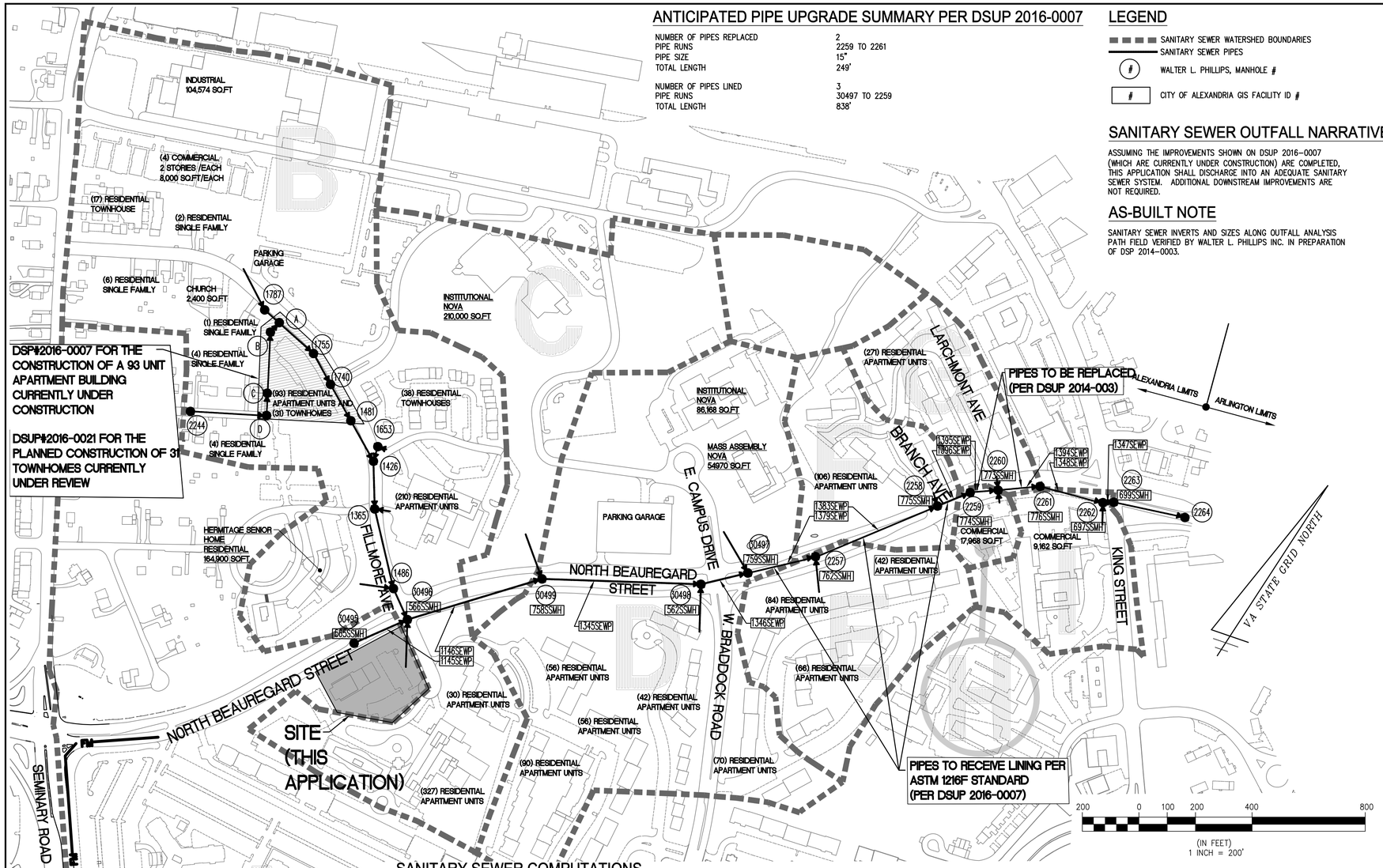
PLAN STATUS		
DATE	DESCRIPTION	
09/08/17	DSUP SUBMISSION 1	
09/29/17	DSUP SUBMISSION 2	
10/20/17	DSUP SUBMISSION 3	
11/10/17	DSUP SUBMISSION 4	

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA
RPA LOCATION PLAN

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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.



ANTICIPATED PIPE UPGRADE SUMMARY PER DSUP 2016-0007

NUMBER OF PIPES REPLACED	2
PIPE RUNS	2259 TO 2261
PIPE SIZE	15"
TOTAL LENGTH	249'
NUMBER OF PIPES LINED	3
PIPE RUNS	30497 TO 2259
TOTAL LENGTH	838'

LEGEND

- SANITARY SEWER WATERSHED BOUNDARIES
- SANITARY SEWER PIPES
- (#) WALTER L. PHILLIPS, MANHOLE #
- [#] CITY OF ALEXANDRIA GIS FACILITY ID #

SANITARY SEWER OUTFALL NARRATIVE

ASSUMING THE IMPROVEMENTS SHOWN ON DSUP 2016-0007 (WHICH ARE CURRENTLY UNDER CONSTRUCTION) ARE COMPLETED, THIS APPLICATION SHALL DISCHARGE INTO AN ADEQUATE SANITARY SEWER SYSTEM. ADDITIONAL DOWNSTREAM IMPROVEMENTS ARE NOT REQUIRED.

AS-BUILT NOTE

SANITARY SEWER INVERTS AND SIZES ALONG OUTFALL ANALYSIS PATH FIELD VERIFIED BY WALTER L. PHILLIPS INC. IN PREPARATION OF DSP 2014-0003.

SANITARY SEWER DESIGN FLOWS

Subshed B

West	USE	DESIGN FLOW (GPD)	UNITS	TOTAL FLOW (GPD)
1787	INDUSTRIAL	200	104.574	20,915
	COMMERCIAL	200	32	6,400
	RESIDENTIAL (TH)	350	17	5,950
	RESIDENTIAL (SF)	350	2	700
	RESIDENTIAL (SF)	350	6	2,100
	CHURCH COMMERCIAL	200	2.4	480
	RESIDENTIAL (SF)	350	1	350
A	RESIDENTIAL (SF)	350	4	1,400
	RESIDENTIAL (SF)	350	4	1,400
	RESIDENTIAL (APTS-PER DSUP 2016-0007)	300	93	27,900
* 1740	RESIDENTIAL (TH-PER DSUP 2016-0021)	350	31	10,850
1426	RESIDENTIAL (TH)	350	38	13,300
1365	RESIDENTIAL (APTS)	300	210	63,000
1486	HERMITAGE SENIOR HOME (APTS)	200	164.9	32,980
				187,725
East	USE	DESIGN FLOW (GPD)	UNITS	TOTAL FLOW (GPD)
30496	RESIDENTIAL (APTS)	300	327	98,100
	RESIDENTIAL (APTS)	300	30	9,000
				107,100
		TOTAL SUBSHED B =		294,825

Subshed C

	USE	DESIGN FLOW (GPD)	UNITS	TOTAL FLOW (GPD)
30499	INSTITUTIONAL	200	210	42,000
		TOTAL SUBSHED C =		42,000

Subshed D

West	USE	DESIGN FLOW (GPD)	UNITS	TOTAL FLOW (GPD)
30497	INSTITUTIONAL	200	86.168	17,234
	INSTITUTIONAL	200	54.97	10,994
				28,228
East	USE	DESIGN FLOW (GPD)	UNITS	TOTAL FLOW (GPD)
30498	RESIDENTIAL (APTS)	300	90	27,000
	RESIDENTIAL (APTS)	300	56	16,800
	RESIDENTIAL (APTS)	300	56	16,800
	RESIDENTIAL (APTS)	300	42	12,600
	RESIDENTIAL (APTS)	300	70	21,000
				94,200
		TOTAL SUBSHED D =		122,428

Subshed E

	USE	DESIGN FLOW (GPD)	UNITS	TOTAL FLOW (GPD)
2257	RESIDENTIAL (APTS)	300	42	12,600
	RESIDENTIAL (APTS)	300	84	25,200
	RESIDENTIAL (APTS)	300	66	19,800
				57,600
		TOTAL SUBSHED E =		57,600

Subshed F

	USE	DESIGN FLOW (GPD)	UNITS	TOTAL FLOW (GPD)
2258	RESIDENTIAL (APTS)	300	106	31,800
		TOTAL SUBSHED F =		31,800

Subshed G

	USE	DESIGN FLOW (GPD)	UNITS	TOTAL FLOW (GPD)
2260	RESIDENTIAL (APTS)	300	271	81,300
		TOTAL SUBSHED G =		81,300

Subshed H

	USE	DESIGN FLOW (GPD)	UNITS	TOTAL FLOW (GPD)
2260	COMMERCIAL	200	17.968	3,594
		TOTAL SUBSHED H =		3,594

Subshed I

	USE	DESIGN FLOW (GPD)	UNITS	TOTAL FLOW (GPD)
2262	COMMERCIAL	200	9.162	1,832
		TOTAL SUBSHED I =		1,832

* ASSUMES CONSTRUCTION OF IMPROVEMENTS SHOWN ON DSUP 2016-0007 AND DSUP 2016-0021 ARE COMPLETE.

SANITARY SEWER OUTFALL NARRATIVE

IT IS ANTICIPATED THAT THE PROPOSED NET INCREASE IN SANITARY FLOW RESULTING FROM THIS DEVELOPMENT WILL BE APPROXIMATELY:

RESIDENTIAL: 113 UNITS x 300 = 33,900
CHURCH: NO NET INCREASE
33,900 GPD

33,900 GPD x 4 (PEAK FACTOR) = 135,600 GPD

135,600 GPD EXCEEDS 10,000 GPD, THEREFORE A SANITARY SEWER OUTFALL ANALYSIS IS REQUIRED. THE PRELIMINARY ANALYSIS PROVIDED ON THIS SHEET SHOWS THE EXISTING OUTFALL TO BE ADEQUATE, ASSUMING THE IMPROVEMENTS TO THE DOWNSTREAM SEWER SYSTEM PROPOSED ON DSUP 2016-0007 ARE COMPLETE. REQUIREMENTS OF MEMO TO INDUSTRY NO. 06-14 FOR AN ADEQUATE OUTFALL ARE THEREFORE MET.

SANITARY SEWER COMPUTATIONS

FROM	TO	INCREMENTAL CONTRIBUTING	MODELED FLOW FROM CITY (GPM)	INCREMENTAL FLOW (GPD)	CUMULATIVE (GPD)	PEAK FLOW FACTOR	CUMULATIVE PEAK FLOW (GPD)	CUMULATIVE PEAK FLOW (CFS)	INVERTS UPPER END	INVERTS LOWER END	PIPE SIZE (IN)	AREA (SF)	PIPE LENGTH (FT)	PIPE SLOPE (FT)	MANNINGS n	MAX CAPACITY (CFS)	VELOCITY AT PEAK (FPS)	FLOW DEPTH (IN)
1787	A (1)	-		36,895	36,895	4	147,579	0.228	228.27	224.31	10	0.55	83	0.0477	0.015	4.12	4.09	1.59
A (1)	1755			30,700	67,595	4	270,379	0.418	224.31	217.26	10	0.55	148	0.0476	0.015	4.12	4.88	2.14
1755	1740	-		0	67,595	4	270,379	0.418	216.41	212.46	10	0.55	123	0.0321	0.015	3.38	4.25	2.36
1740 (1)	1481	-		10,850	78,445	4	313,779	0.485	212.36	207.75	10	0.55	148	0.0311	0.015	3.33	4.38	2.57
1481	1426	-		0	78,445	4	313,779	0.485	207.70	203.18	10	0.55	163	0.0277	0.015	3.14	4.21	2.64
1426	1365	-		13,300	91,745	4	366,979	0.568	203.08	196.56	10	0.55	167	0.0390	0.015	3.73	4.97	2.63
1365	1486	-		63,000	154,745	4	618,979	0.958	196.26	183.55	10	0.55	289	0.0440	0.015	3.96	6.01	3.34
1486	30496	-		32,980	187,725	4	750,899	1.162	186.45	181.56	10	0.55	123	0.0398	0.015	3.76	6.12	3.80
30495 (2)(3)	30496	subshed A	1621		2,469,840	1	2,469,840	3.821	196.14	183.60	10	0.55	206	0.0609	0.015	5.04	9.60	6.85
30496 (4)	30499	subshed B	2026		3,194,000	1	3,194,000	4.942	181.51	167.71	12	0.79	497	0.0278	0.015	5.54	7.48	9.41
30499	30498	Subshed C	2033		3,204,080	1	3,204,080	4.957	167.61	153.41	12	0.79	562	0.0253	0.015	5.28	7.14	9.92
30498	30497	Subshed D (East)	2137		3,353,840	1	3,353,840	5.189	153.22	148.41	12	0.79	170	0.0283	0.015	5.59	7.56	9.80
30497 (5)	2257	Subshed D (West)	2241		3,503,600	1	3,503,600	5.421	148.37	143.80	11.44 (5)(6)	0.71	246	0.0186	0.010	5.98	8.90	9.11
2257 (5)	2258	Subshed E	2330		3,631,760	1	3,631,760	5.619	143.75	132.32	11.44 (5)(6)	0.71	467	0.0245	0.010	6.87	10.11	8.32
2258 (5)	2259	Subshed F	2384		3,709,520	1	3,709,520	5.739	132.12	128.40	11.44 (5)(6)	0.71	125	0.0298	0.010	7.54	11.01	7.84
2259 (8)	2260	-	2392		3,758,332	1	3,758,332	5.815	128.34	126.78	18 (7)	1.77	99	0.0158	0.010	17.16	8.78	7.22
2260	2261	Subshed G and H	2510		3,928,252	1	3,928,252	6.078	126.68	123.37	18 (7)	1.77	149	0.0222	0.010	20.35	10.07	6.73
2261	2262	-	2602		4,060,732	1	4,060,732	6.283	123.27	119.53	15	1.23	229	0.0163	0.015	7.69	6.59	10.88
2262 (9)	2263	Subshed I	2612		4,602,608	1	4,602,608	7.121	119.27	118.58	15	1.23	38	0.0182	0.015	8.12	7.01	11.57
2263	2264	-	2612		4,602,608	1	4,602,608	7.121	118.56	113.52	18	1.77	257	0.0196	0.015	13.71	7.43	9.60

MAX CAPACITY CALCULATED VIA FLOWMASTER MODELING SOFTWARE

Notes:
(1) Assumes demolition of existing church, sanitary relocation, construction of 93 unit affordable housing building (DSUP 2016-0007) and construction of 31 townhome units (DSUP 2016-0021)
(2) Existing flow data provided by City of Alexandria
(3) Cumulative flows from 30496 to 2264 includes additional 113 units (peaked) from the proposed development (135,600 GPD) (Existing Church flows assumed to remain constant)
(4) Assumes demolition of existing church, construction of 93 unit affordable housing building (DSUP 2016-0007) and construction of 31 townhome units (DSUP 2016-0021), net increase of 140,960 GPD (peaked)
(5) Assumes improvements shown on DSUP 2016-0007 to line 3 pipes (30497 to 2257, 2257 to 2258 and 2258 to 2259) is complete
(6) Assumes liner thickness of 0.28" as shown on DSUP 2016-0007 for a total diameter reduction of 0.56"
(7) Assumes replacement of 2 pipes (2259 to 2260 and 2260 to 2261) as shown on DSUP 2016-0007 is complete
(8) Cumulative flows from 2259 to 2264 includes additional 64,583 SF of Office/Retail from DSUP 2013-0001 and removal of 17,968 SF of Office/Retail, increase of 37,292 GPD (peaked)
(9) Cumulative flows from 2262 to 2264 includes additional 140,507 SF of Office/Retail and 352 Multifamily Units from DSUP 2013-0001 and removal of 9,162 SF of Office/Retail, increase of 527,476 GPD (peaked)
(10) Ultimate build out of surrounding area has not been assumed in this analysis

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" = 200' | DATE: 11/10/17 | DRAWN: DP,DM | CHECKED: BF

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

COMMONWEALTH OF VIRGINIA — AARON M. VINSON, Lic. No.041851, 11/10/17, PROFESSIONAL ENGINEER

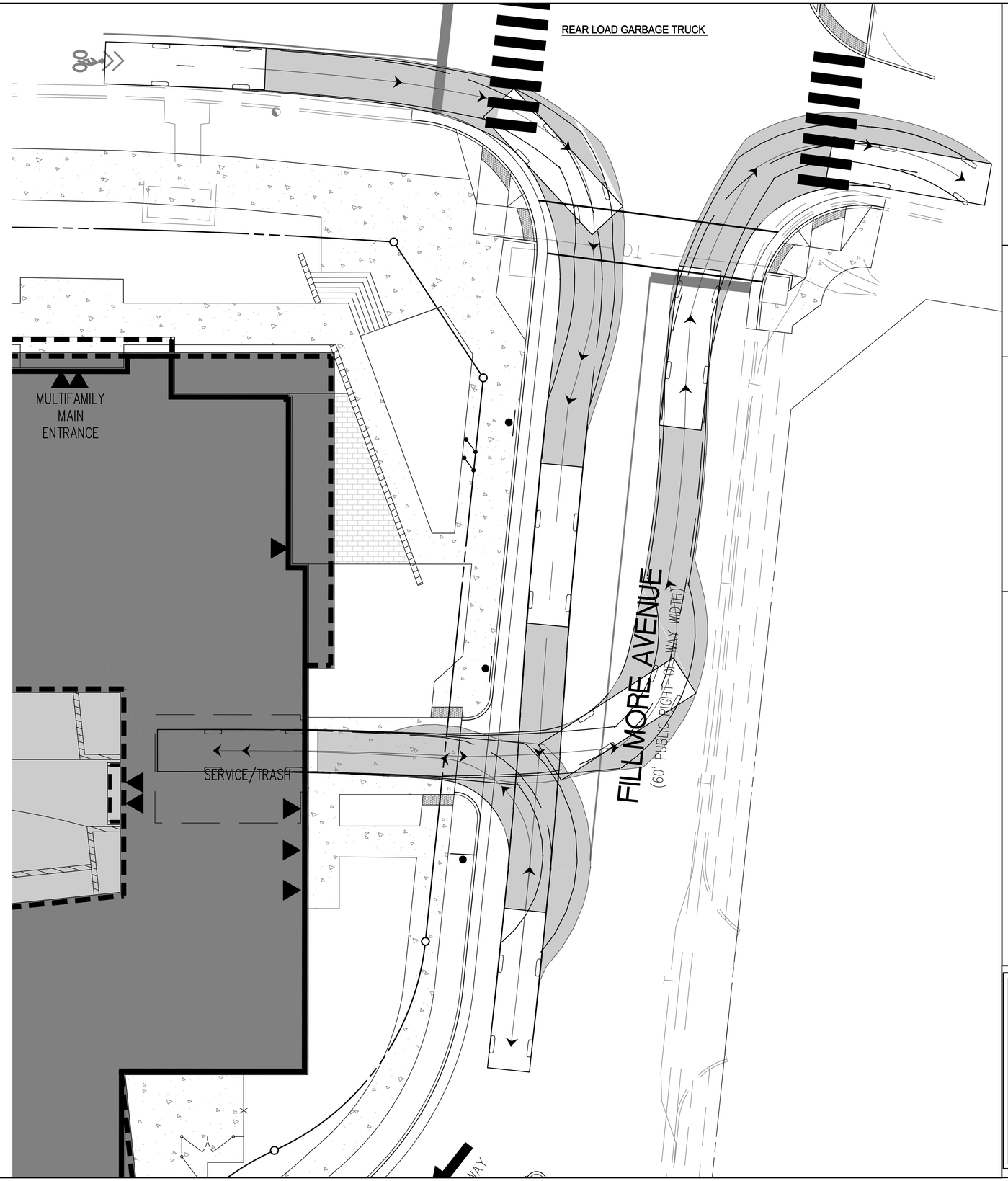
NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

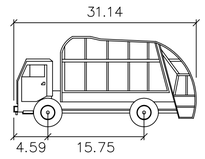
REVISION APPROVED BY

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY SANITARY SEWER OUTFALL ANALYSIS

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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.





GARBAGE TRUCK

	feet
Width	: 8.17
Track	: 8.17
Lock to Lock Time	: 6.0
Steering Angle	: 46.4

NOTE:

1. NOTE THAT DESIGN VEHICLE USED ON THIS PLAN IS LARGER THAN EXPECTED. A FORD F-750 SIZED TRUCK IS THE EXPECTED TYPICAL SIZE VEHICLE USED AT AHC DEVELOPMENTS.
2. TRUCK MOVEMENTS CREATED USING AUTOTURN 9 MODELING SOFTWARE FOR AUTOCAD. ACTUAL TURNING MOVEMENTS MAY VARY.
3. UNLESS NOTED, ALL CURB CITY STANDARD 6" CURB. (SEE P-0202 FOR DETAIL)

10 0 5 10 20 40
(IN FEET)
1 INCH = 10'

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" = 10' DATE: 11/10/17 DRAWN: DP,DM CHECKED: BF

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

PLAN STATUS		
DATE	DESCRIPTION	
09/08/17	DSUP SUBMISSION 1	
09/29/17	DSUP SUBMISSION 2	
10/20/17	DSUP SUBMISSION 3	
11/10/17	DSUP SUBMISSION 4	

REVISION APPROVED BY

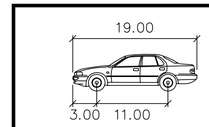
NO.	DESCRIPTION	DATE	REV-BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY GARBAGE TRUCK MOVEMENT PLAN

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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.

VCS 1983–NORTH ZONE

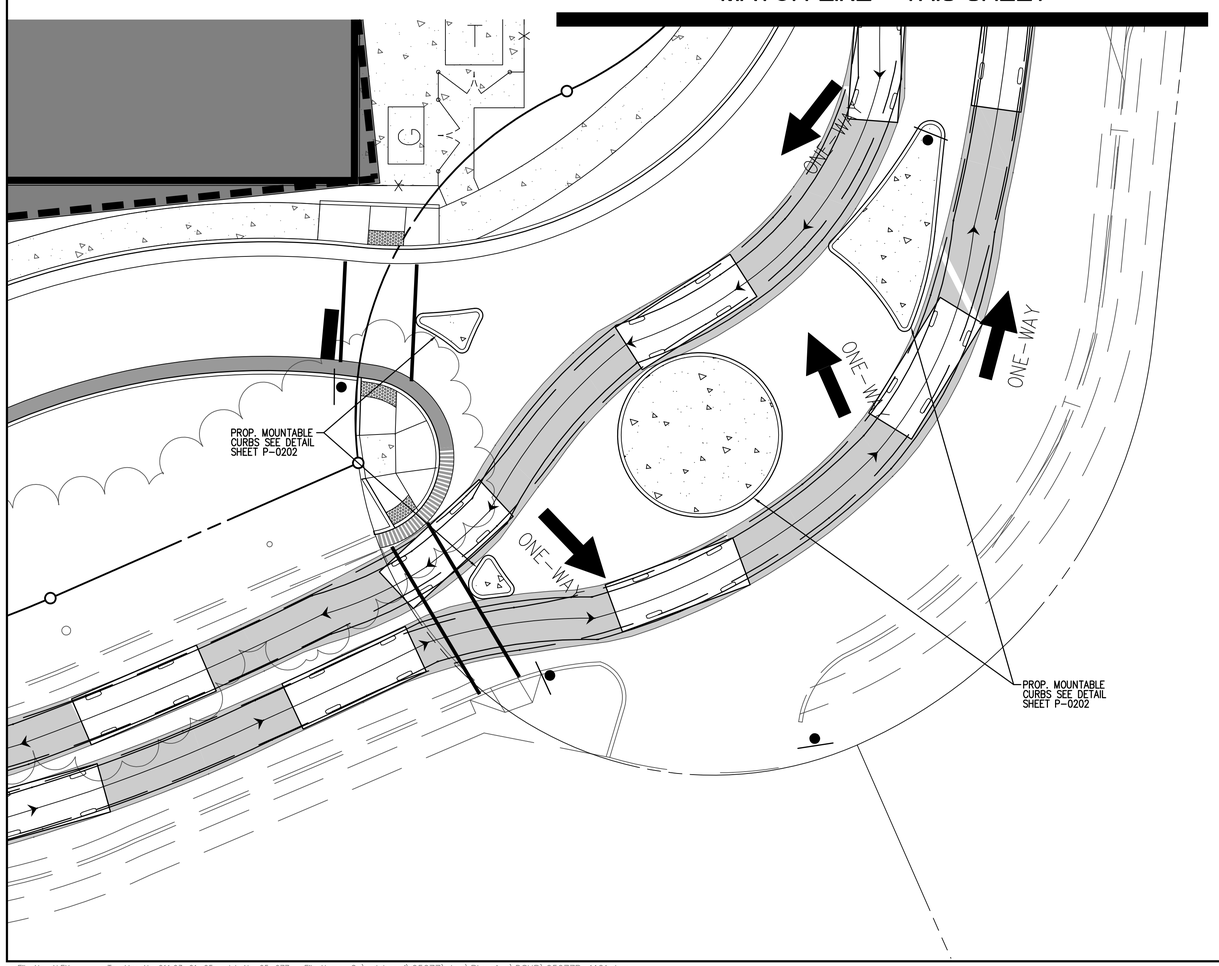


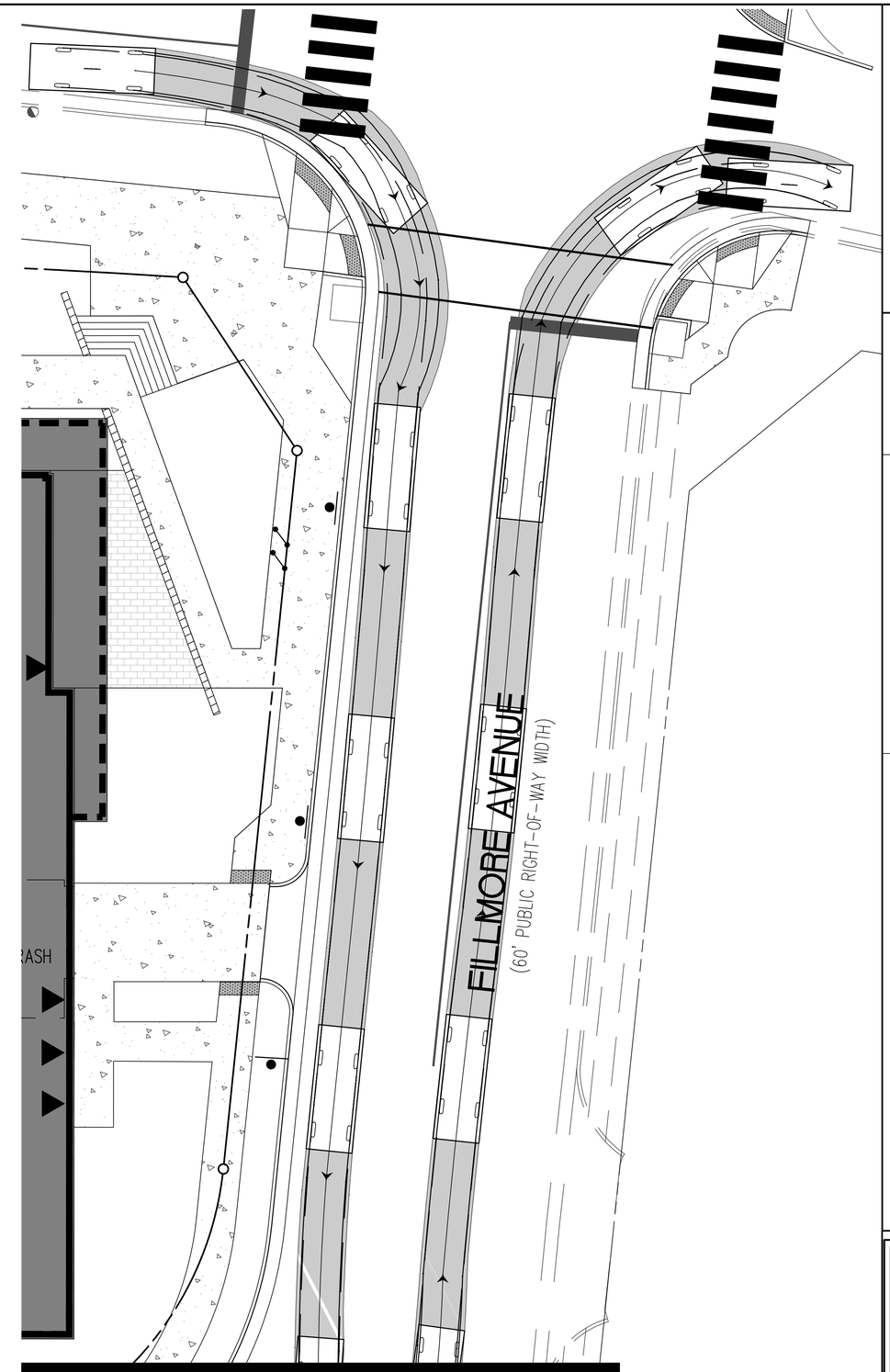
P	feet
Width	: 7.00
Track	: 6.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.6

NOTE:

1. TRUCK MOVEMENTS CREATED USING AUTOTURN 9 MODELING SOFTWARE FOR AUTOCAD. ACTUAL TURNING MOVEMENTS MAY VARY.
2. UNLESS NOTED, ALL CURB CITY STANDARD 6" CURB. (SEE P–0202 FOR DETAIL)

MATCH LINE – THIS SHEET





MATCH LINE – THIS SHEET

10 0 5 10 20 40
(IN FEET)
1 INCH = 10'

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" = 10' | DATE: 11/10/17 | DRAWN: DP,DM | CHECKED: BF

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

PLAN STATUS		
DATE	DESCRIPTION	DATE
09/08/17	DSUP SUBMISSION 1	10/20/17
09/29/17	DSUP SUBMISSION 2	11/10/17
	DSUP SUBMISSION 3	
	DSUP SUBMISSION 4	

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY AASHTO P-CAR MOVEMENT PLAN

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016–0044
DEPARTMENT OF PLANNING & ZONING

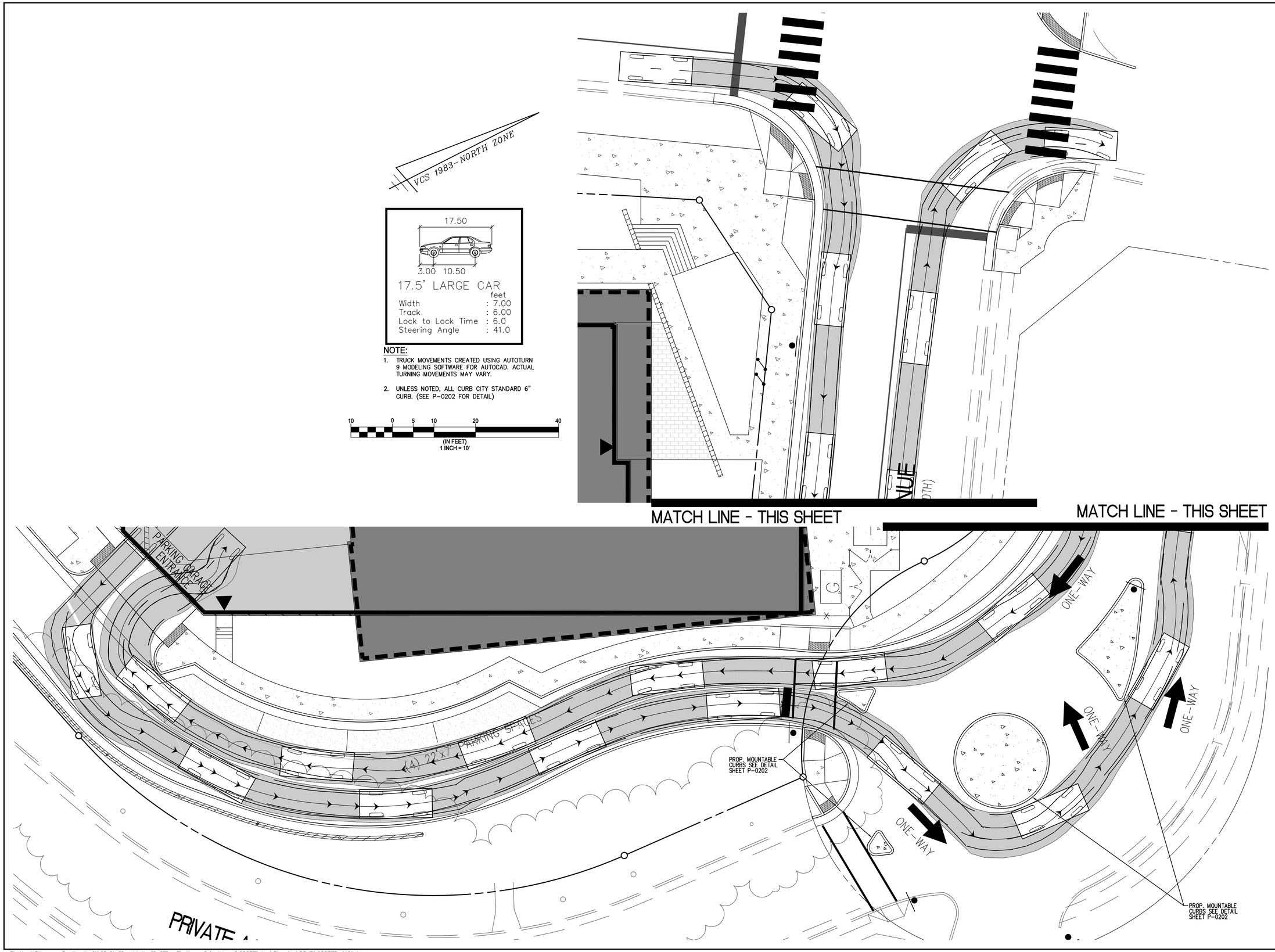
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.



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: 11/10/17 | DRAWN: DP,DM | CHECKED: BF

COMMONWEALTH OF VIRGINIA PROFESSIONAL ENGINEER

AARON M. VINSON Lic. No.041851 11/10/17

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

PLAN STATUS

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT

PRELIMINARY SITE PLAN

CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY LARGE CAR MOVEMENT PLAN

APPROVED

SPECIAL USE PERMIT NO. DSUP 2016-0044

DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

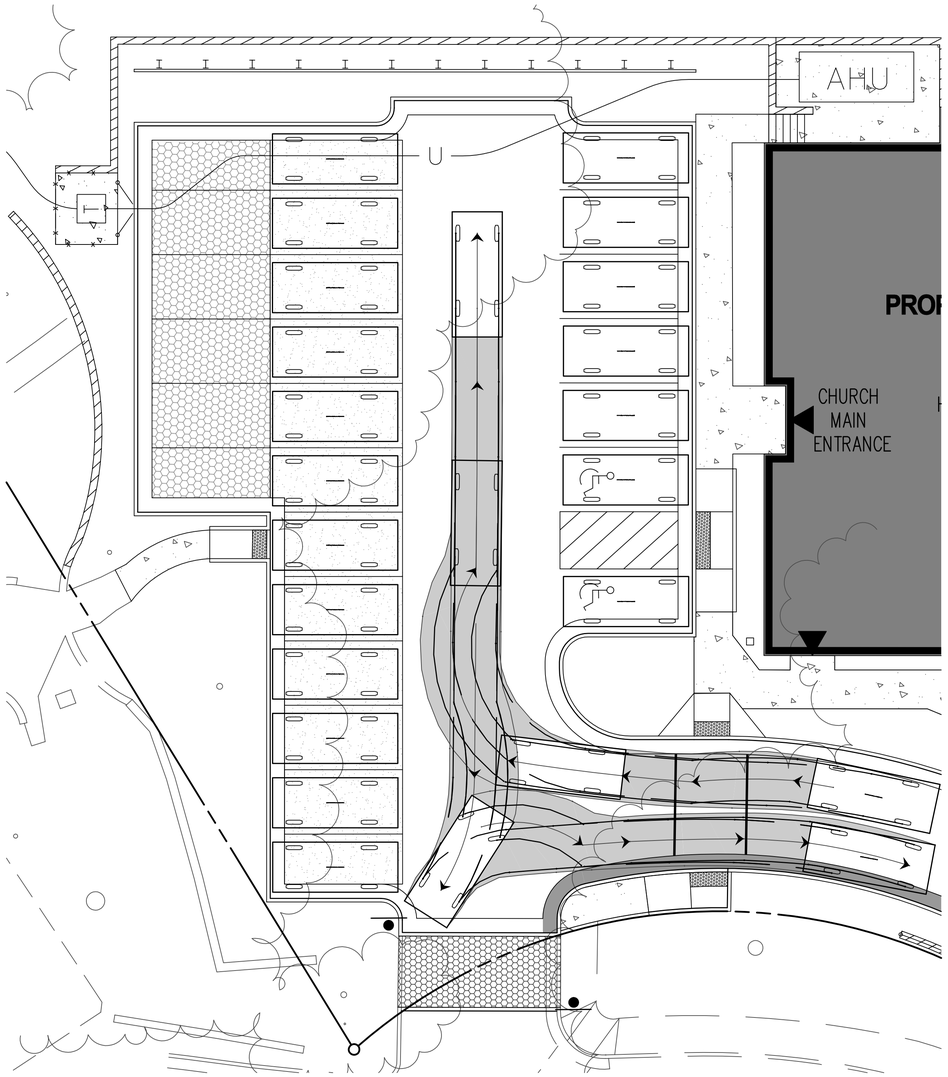
SITE PLAN No. _____

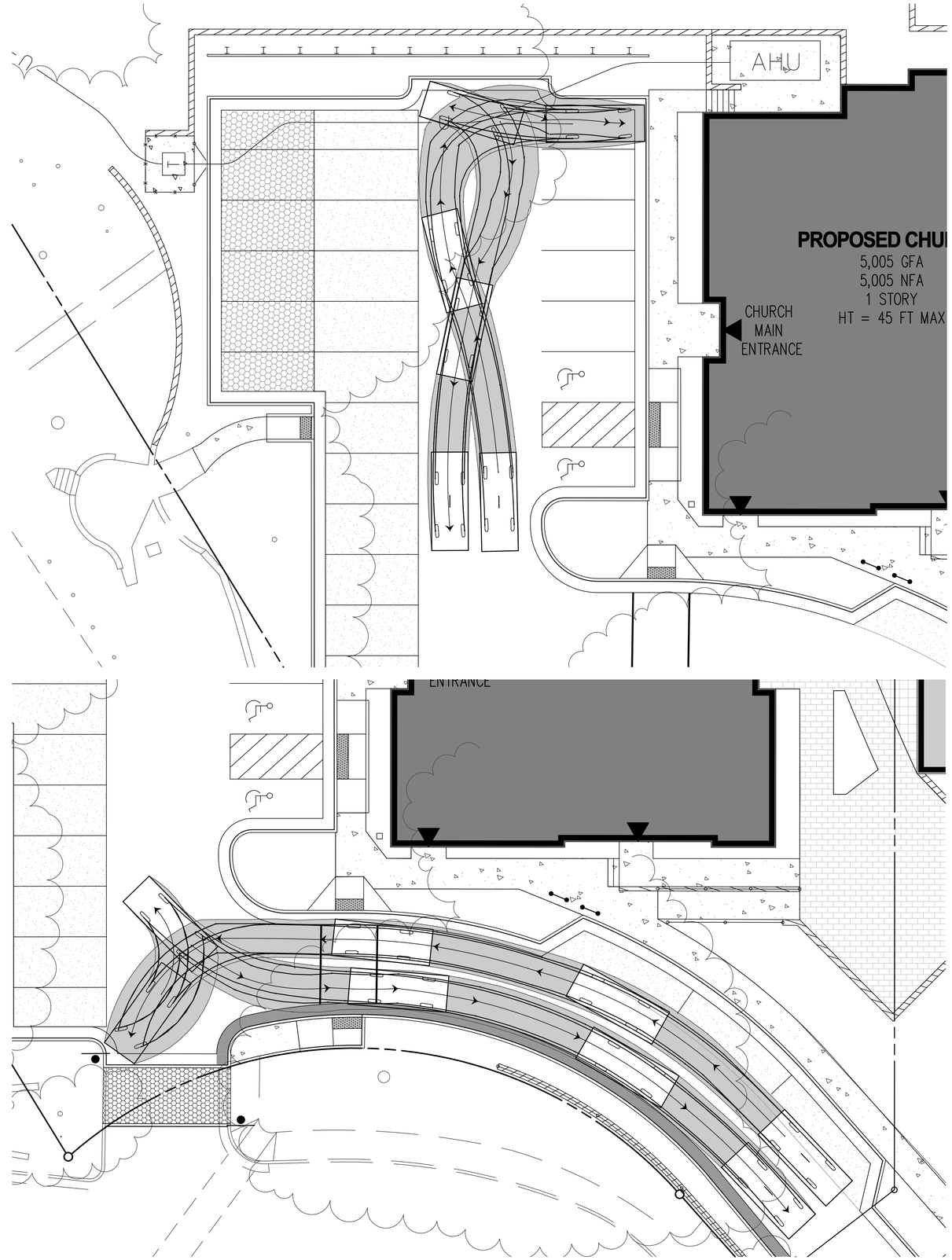
DIRECTOR DATE

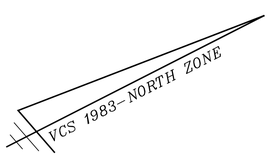
CHAIRMAN, PLANNING COMMISSION DATE

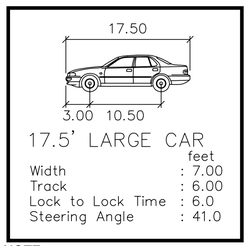
DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.









NOTE:

1. TRUCK MOVEMENTS CREATED USING AUTOTURN 9 MODELING SOFTWARE FOR AUTOCAD. ACTUAL TURNING MOVEMENTS MAY VARY.
2. UNLESS NOTED, ALL CURB CITY STANDARD 6" CURB. (SEE P-0202 FOR DETAIL)

10 0 5 10 20 40
(IN FEET)
1 INCH = 10'

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: 11/10/17 | DRAWN: DP/DM | CHECKED: BF

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

PLAN STATUS		
DATE	DESCRIPTION	DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1	10/20/17	DSUP SUBMISSION 3
09/29/17	DSUP SUBMISSION 2	11/10/17	DSUP SUBMISSION 4

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY LARGE CAR MOVEMENT PLAN

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

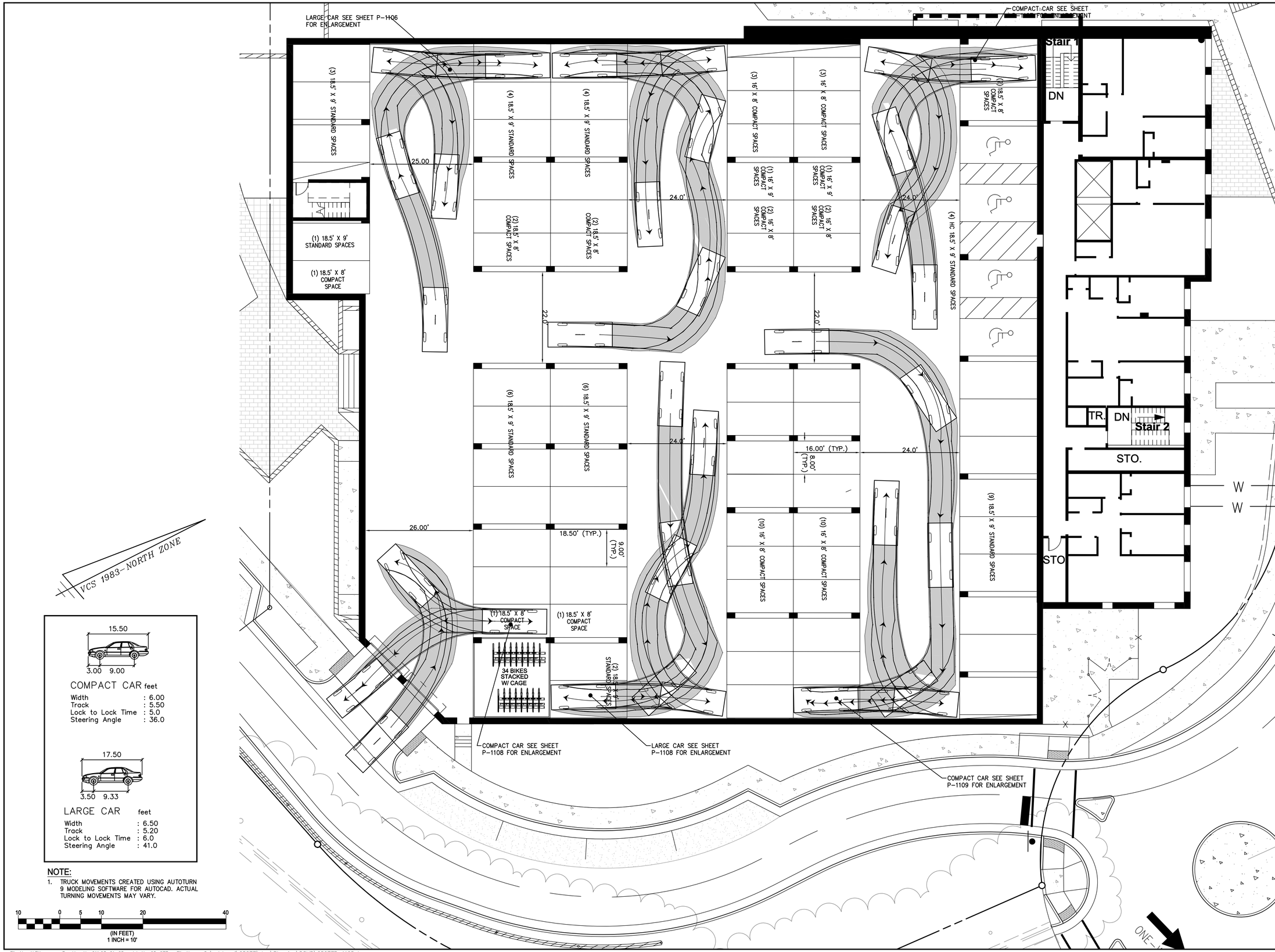
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.



COMPACT CAR feet

Width	: 6.00
Track	: 5.50
Lock to Lock Time	: 5.0
Steering Angle	: 36.0

LARGE CAR feet

Width	: 6.50
Track	: 5.20
Lock to Lock Time	: 6.0
Steering Angle	: 41.0

NOTE:

1. TRUCK MOVEMENTS CREATED USING AUTOTURN 9 MODELING SOFTWARE FOR AUTOCAD. ACTUAL TURNING MOVEMENTS MAY VARY.

10 0 5 10 20 40

(IN FEET)
1 INCH = 10'

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" = 10' | DATE: 11/10/17 | DRAWN: DP/DM | CHECKED: BF

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT

PRELIMINARY SITE PLAN

CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY LARGE CAR MOVEMENT PLAN GARAGE

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

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

DIRECTOR DATE

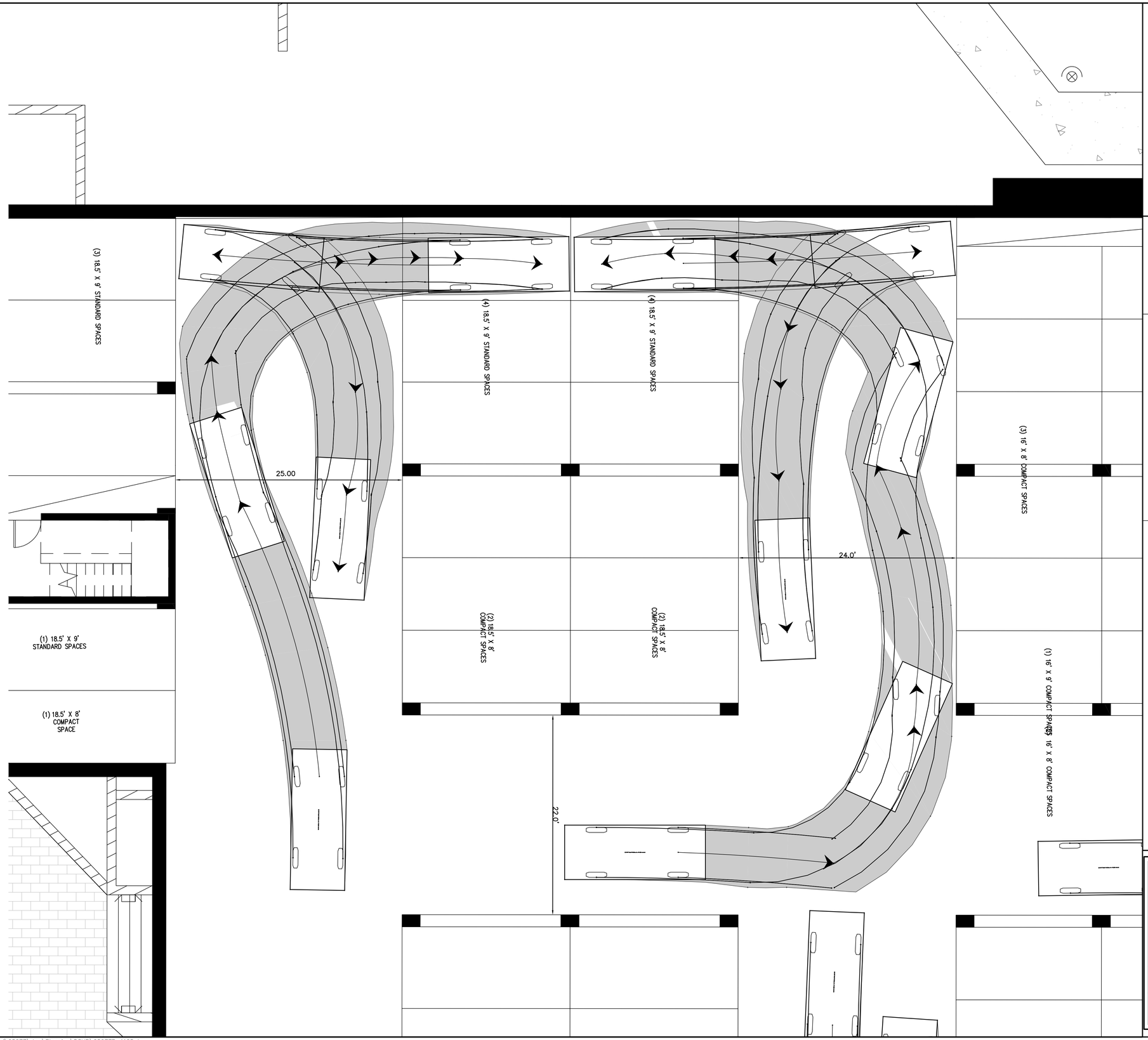
CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

File No. ALEX Tax Map No. 011.03-01-05 Job No. 05-077 File Name Q:\sdskproj\05077\dwg\Planning\DSUP\05077P-1105.dwg

SHEET: P-1105



15.50

3.00 9.00

COMPACT CAR feet

Width	: 6.00
Track	: 5.50
Lock to Lock Time	: 5.0
Steering Angle	: 36.0

17.50

3.50 9.33

LARGE CAR feet

Width	: 6.50
Track	: 5.20
Lock to Lock Time	: 6.0
Steering Angle	: 41.0

NOTE:

1. TRUCK MOVEMENTS CREATED USING AUTOTURN 9 MODELING SOFTWARE FOR AUTOCAD. ACTUAL TURNING MOVEMENTS MAY VARY.

5 0 2.5 5 10 20

(IN FEET)
1 INCH = 5'

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" = 5' DATE: 11/10/17 DRAWN: DP,DM CHECKED: BF

COMMONWEALTH OF VIRGINIA PROFESSIONAL ENGINEER
AARON M. VINSON
Lic. No.041851
11/10/17

PLAN STATUS		
DATE	DESCRIPTION	DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1	10/20/17	DSUP SUBMISSION 3
09/29/17	DSUP SUBMISSION 2	11/10/17	DSUP SUBMISSION 4

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT

PRELIMINARY SITE PLAN

CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY LARGE CAR MOVEMENT PLAN GARAGE

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

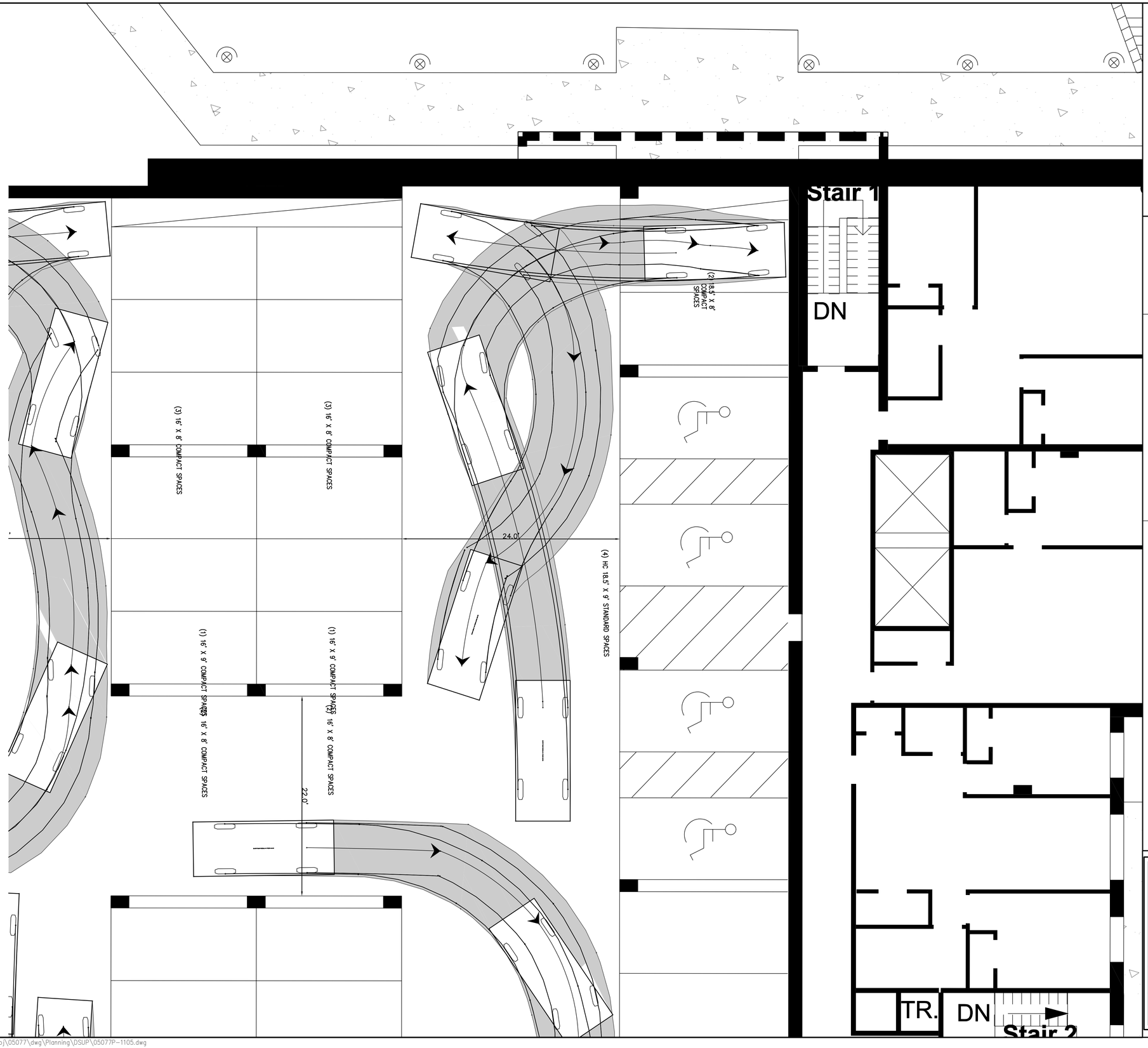
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

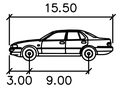
CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

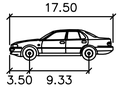


VCS 1983-NORTH ZONE



COMPACT CAR feet

Width	: 6.00
Track	: 5.50
Lock to Lock Time	: 5.0
Steering Angle	: 36.0



LARGE CAR feet

Width	: 6.50
Track	: 5.20
Lock to Lock Time	: 6.0
Steering Angle	: 41.0

NOTE:

1. TRUCK MOVEMENTS CREATED USING AUTOTURN 9 MODELING SOFTWARE FOR AUTOCAD. ACTUAL TURNING MOVEMENTS MAY VARY.

5 0 2.5 5 10 20

(IN FEET)
1 INCH = 5'

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" = 5' DATE: 11/10/17 DRAWN: DP,DM CHECKED: BF

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 11/10/17 PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT

PRELIMINARY SITE PLAN

CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY LARGE CAR MOVEMENT PLAN GARAGE

PLAN STATUS

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

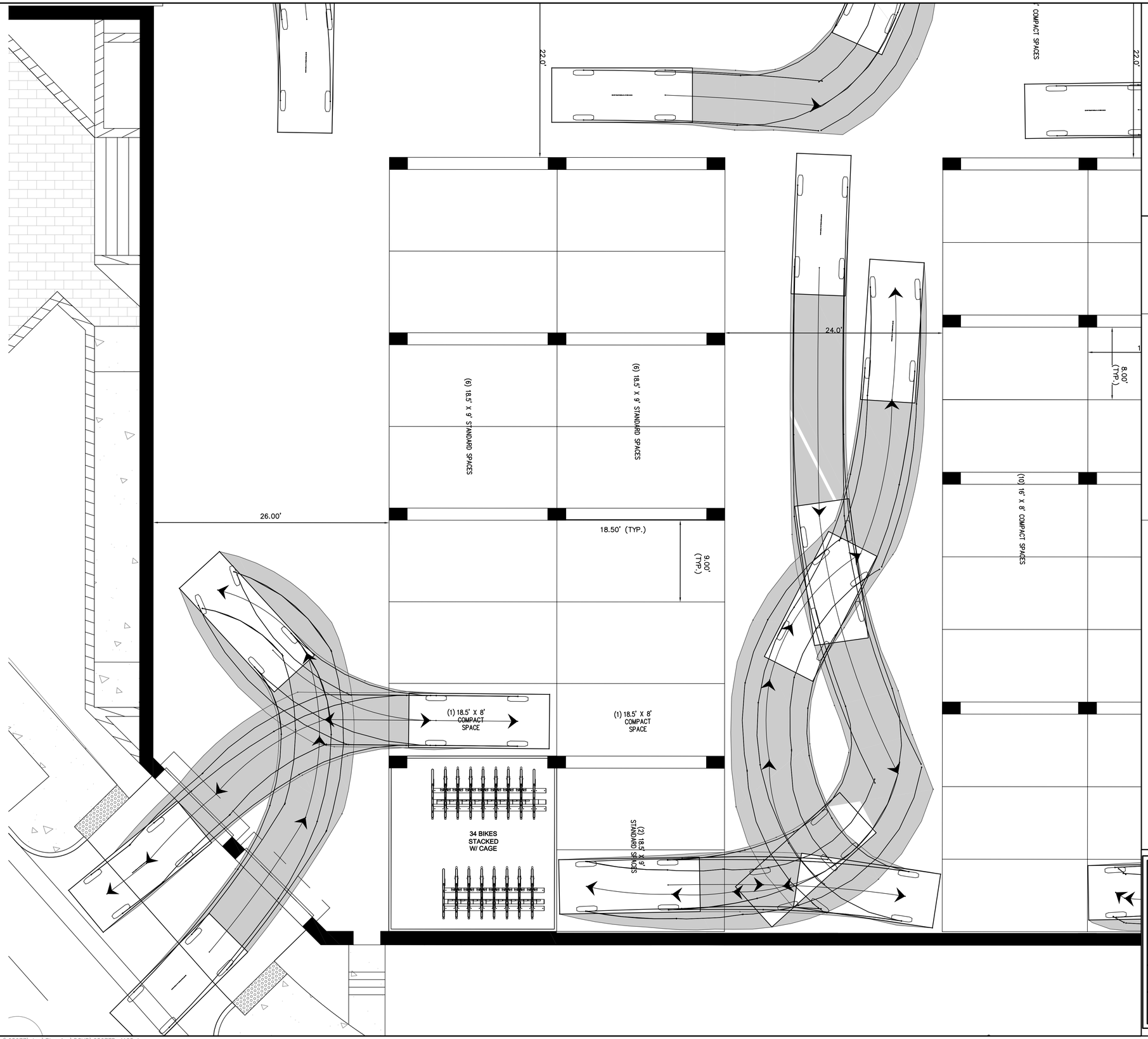
CHAIRMAN, PLANNING COMMISSION DATE

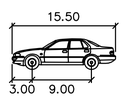
DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

File No. ALEX Tax Map No. 011.03-01-05 Job No. 05-077 File Name Q:\sdskproj\05077\dwg\Planning\DSUP\05077P-1105.dwg

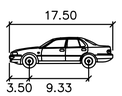
SHEET: P-1107





COMPACT CAR feet

Width	: 6.00
Track	: 5.50
Lock to Lock Time	: 5.0
Steering Angle	: 36.0



LARGE CAR feet

Width	: 6.50
Track	: 5.20
Lock to Lock Time	: 6.0
Steering Angle	: 41.0

NOTE:

1. TRUCK MOVEMENTS CREATED USING AUTOTURN 9 MODELING SOFTWARE FOR AUTOCAD. ACTUAL TURNING MOVEMENTS MAY VARY.

5 0 2.5 5 10 20

(IN FEET)
1 INCH = 5'

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" = 5' | DATE: 11/10/17 | DRAWN: DP/DM | CHECKED: BF

COMMONWEALTH OF VIRGINIA PROFESSIONAL ENGINEER
AARON M. VINSON
Lic. No.041851
11/10/17

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

REVISION APPROVED BY

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

PLAN STATUS

CHURCH OF THE RESURRECTION DEVELOPMENT

PRELIMINARY SITE PLAN

CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY LARGE CAR MOVEMENT PLAN GARAGE

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016–0044
DEPARTMENT OF PLANNING & ZONING

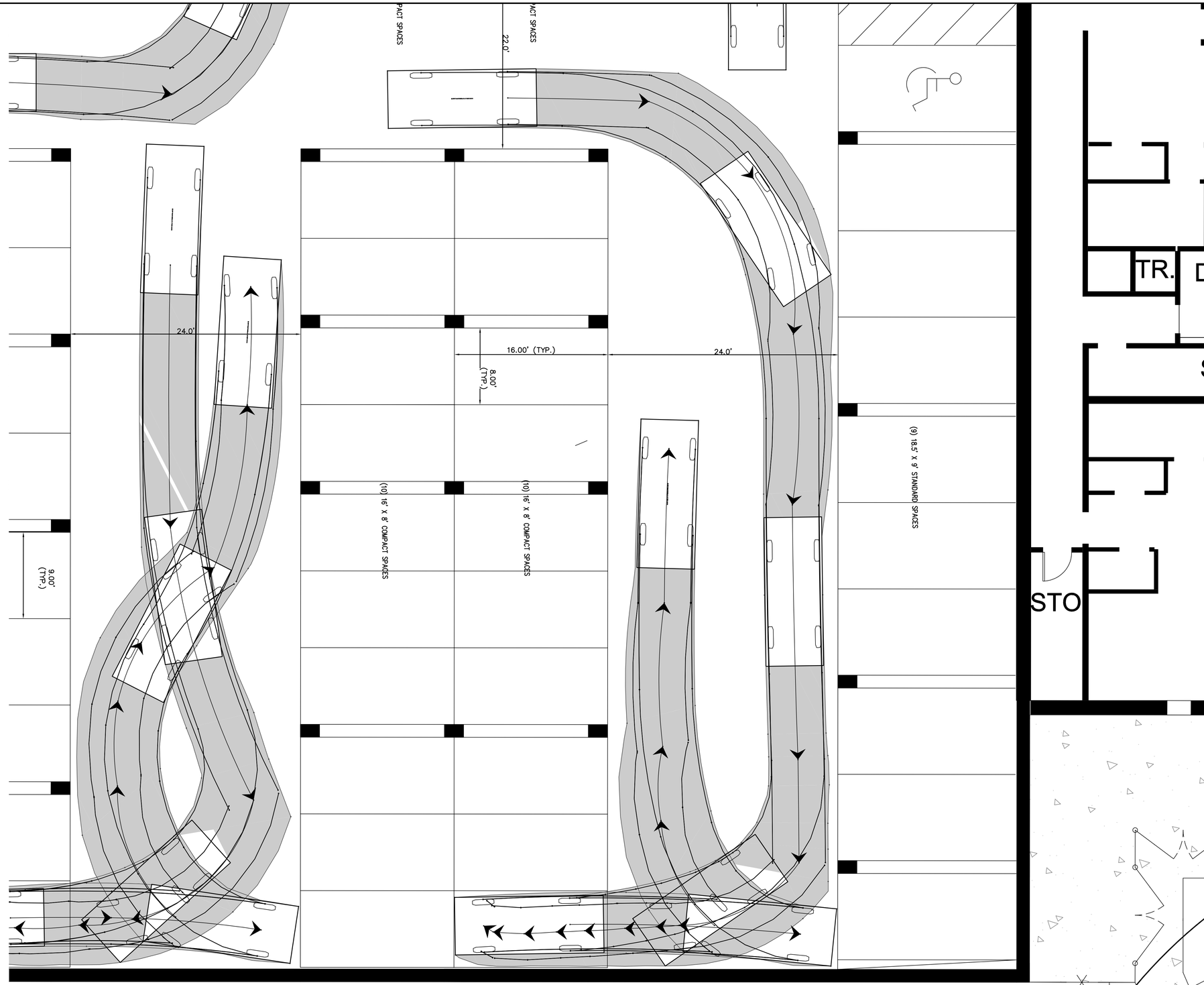
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

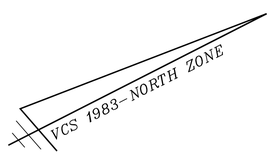
DIRECTOR DATE

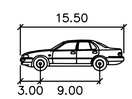
CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

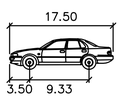






COMPACT CAR feet

Width	: 6.00
Track	: 5.50
Lock to Lock Time	: 5.0
Steering Angle	: 36.0



LARGE CAR feet

Width	: 6.50
Track	: 5.20
Lock to Lock Time	: 6.0
Steering Angle	: 41.0

NOTE:

1. TRUCK MOVEMENTS CREATED USING AUTOTURN 9 MODELING SOFTWARE FOR AUTOCAD. ACTUAL TURNING MOVEMENTS MAY VARY.

5 0 2.5 5 10 20

(IN FEET)
1 INCH = 5'

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

COMMONWEALTH OF VIRGINIA PROFESSIONAL ENGINEER
AARON M. VINSON
Lic. No.041851
11/10/17

SCALE: 1" = 5' | DATE: 11/10/17 | DRAWN: DP,DM | CHECKED: BF

PLAN STATUS

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV-BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT

PRELIMINARY SITE PLAN

CITY OF ALEXANDRIA, VIRGINIA

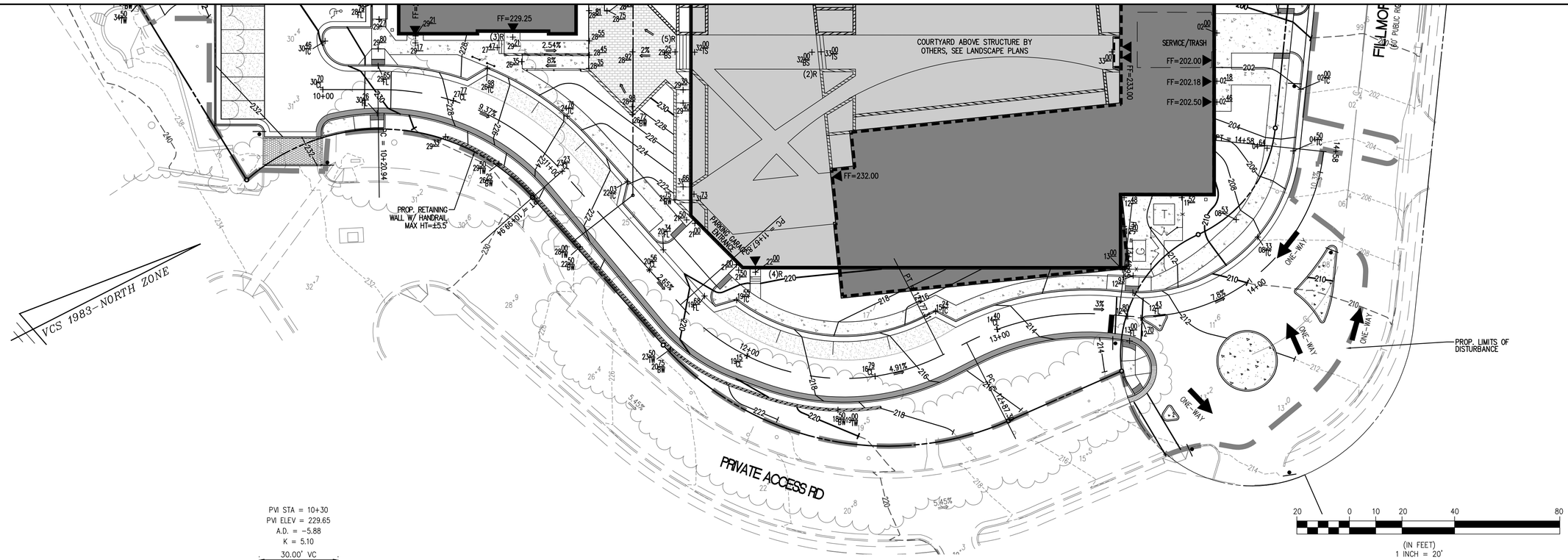
PRELIMINARY LARGE CAR MOVEMENT PLAN GARAGE

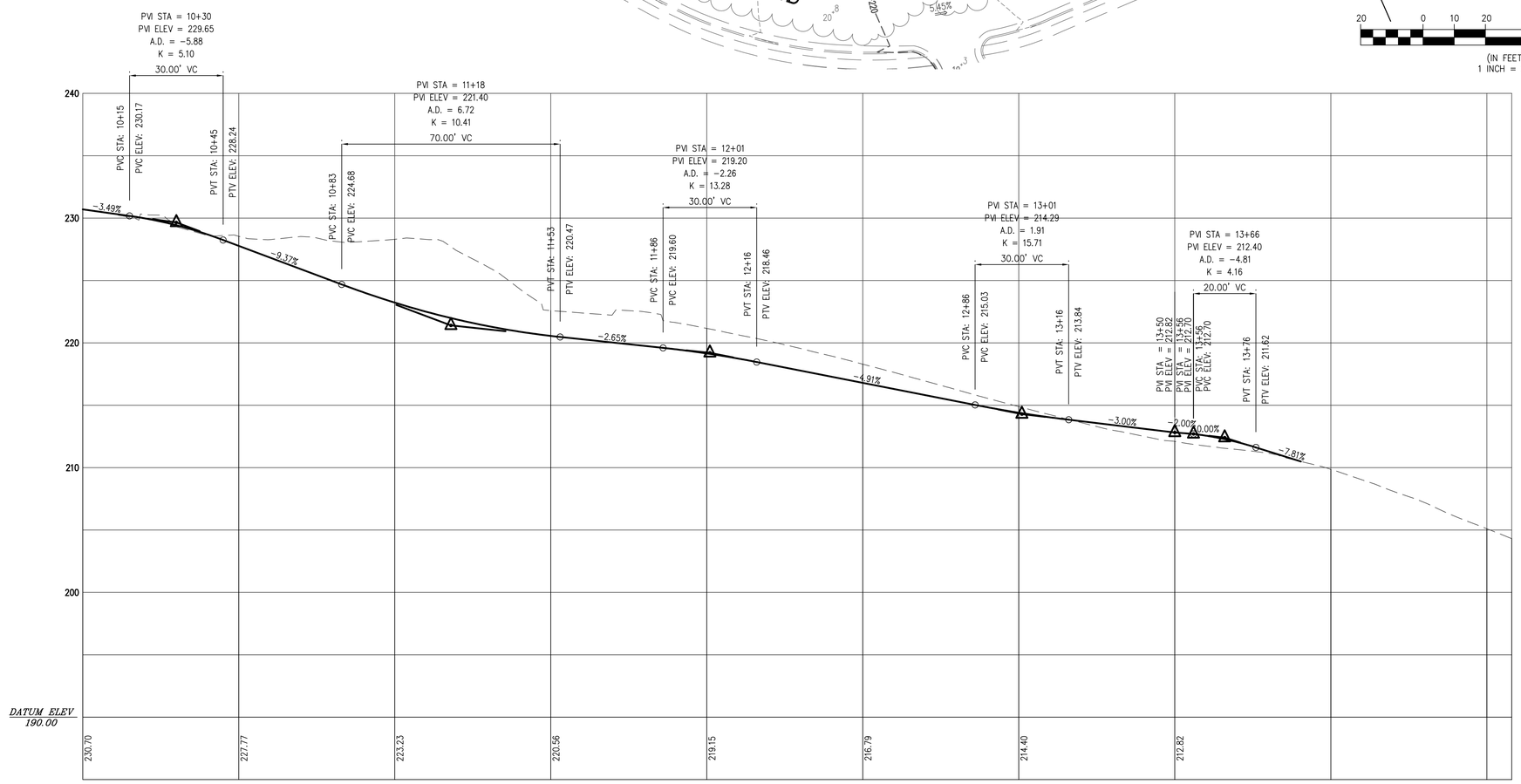
APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

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.





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: 11/10/17 | DRAWN: DP/DM | CHECKED: BF

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

PLAN STATUS

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

REVISION APPROVED BY

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA
PRELIMINARY DRIVE AISLE PLAN AND PROFILE

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

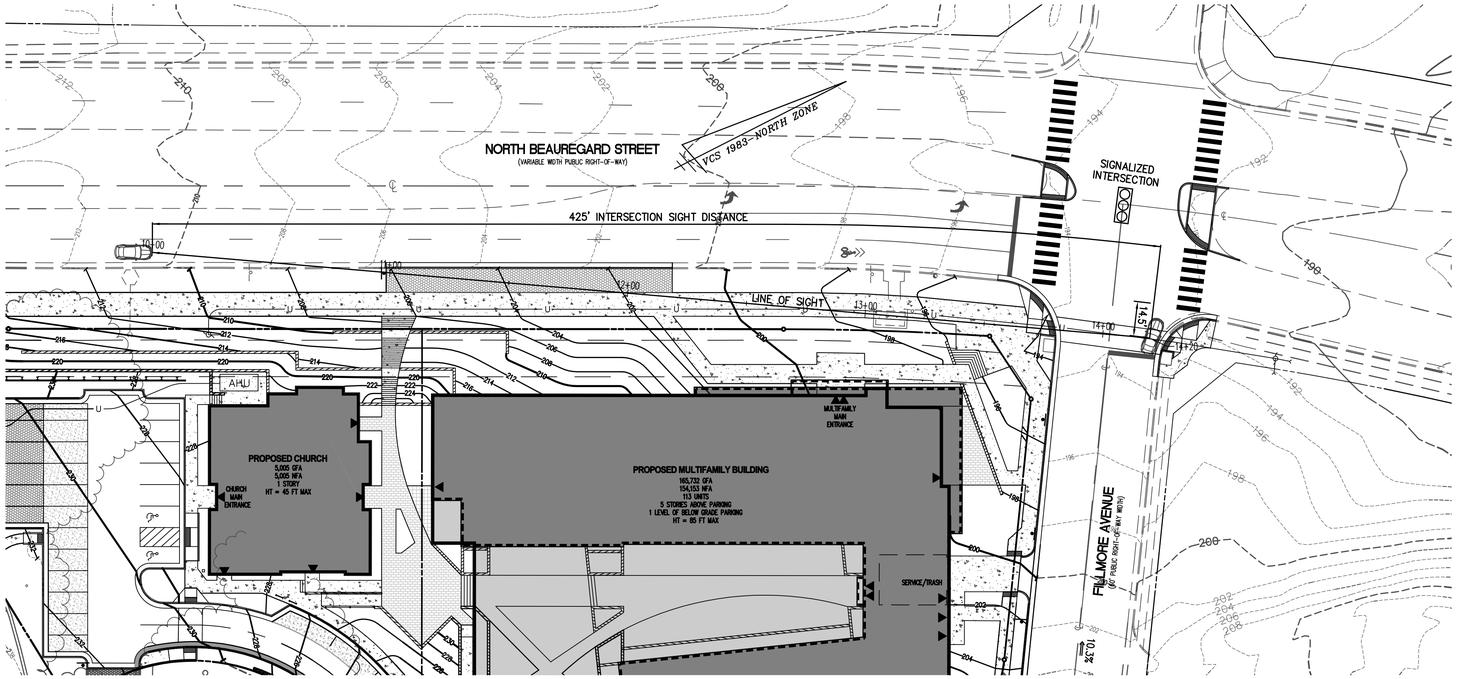
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

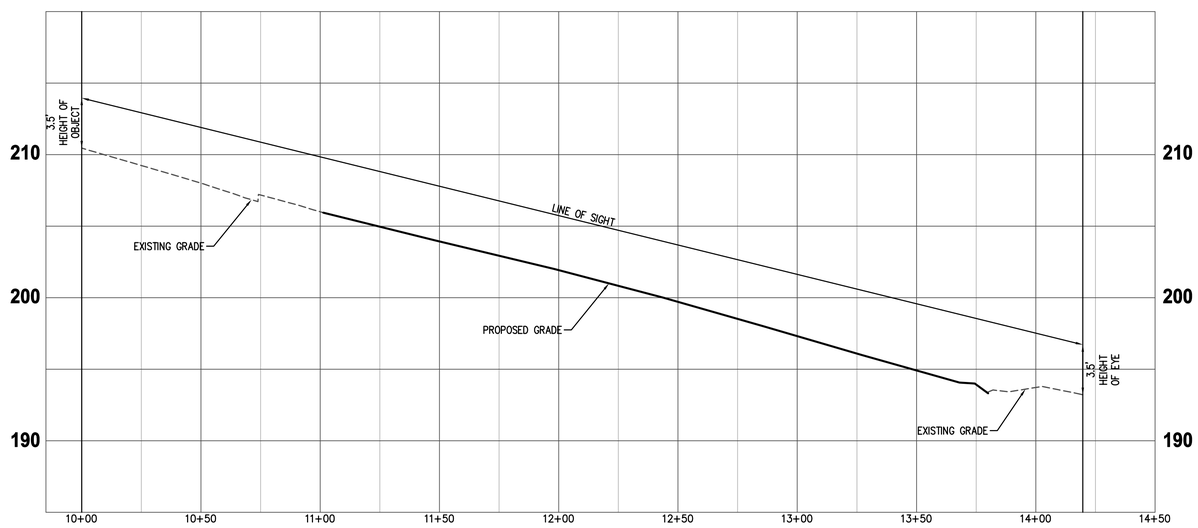
INSTRUMENT NO. DEED BOOK NO. PAGE NO.



PLAN VIEW

N BEAUREGARD ST. POSTED SPEED: 35 MPH
N BEAUREGARD ST. DESIGN SPEED: 40 MPH
SCALE: 1"=30'

40 MPH SIGHT DISTANCE = 385'
4.4% ROAD GRADE ADJUSTMENT = (385')(1.1) = 423.5'
FINAL SIGHT DISTANCE = 425'



PROFILE VIEW

N BEAUREGARD ST. POSTED SPEED: 35 MPH
N BEAUREGARD ST. DESIGN SPEED: 35 MPH
SCALE: 1"=30' (H); 1"=5' (V)

NOTE:

SIGHT DISTANCE CALCULATIONS PERFORMED USING SECTION 9.5.3 OF THE 6TH EDITION "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS" (2011 AASHTO GREEN BOOK).

30 0 15 30 60 120
(IN FEET)
1 INCH = 30'

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: HOR. 1" = 30' VERT. 1" = 5'
DATE: 11/10/17
DRAWN: DP,DM
CHECKED: BF

COMMONWEALTH OF VIRGINIA
AARON M. WINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

PLAN STATUS		
DATE	DESCRIPTION	DATE
09/08/17	DSUP SUBMISSION 1	10/20/17
09/29/17	DSUP SUBMISSION 2	11/10/17
	DSUP SUBMISSION 3	
	DSUP SUBMISSION 4	

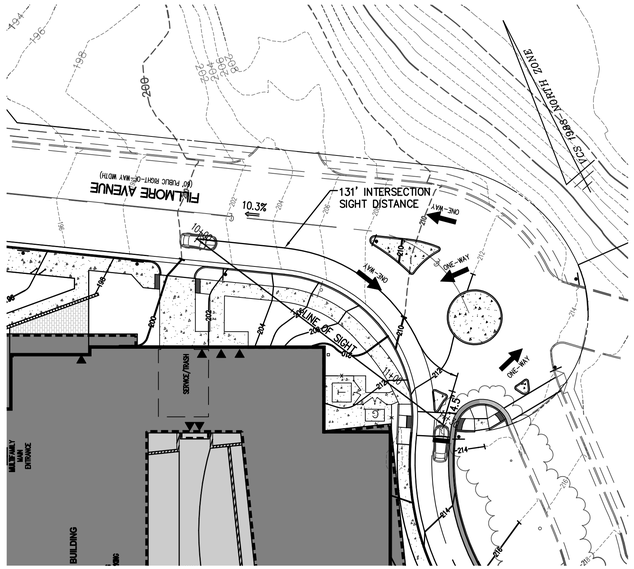
REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

SIGHT DISTANCE PLAN & PROFILE - BEAUREGARD

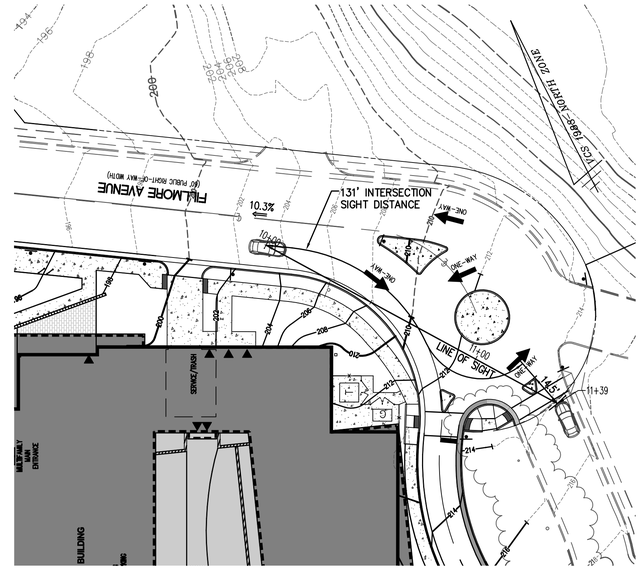
APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.



PLAN VIEW

FILLMORE AVE POSTED SPEED: 10 MPH
FILLMORE AVE DESIGN SPEED: 15 MPH
SCALE: 1"=30'

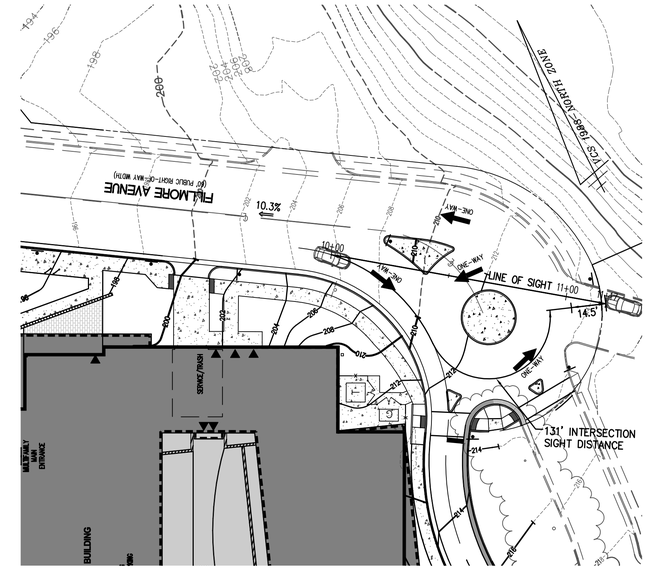
15 MPH SIGHT DISTANCE = 145'
10% ROAD GRADE ADJUSTMENT = (145')(0.9) = 130.5'
FINAL SIGHT DISTANCE = 131'



PLAN VIEW

FILLMORE AVE POSTED SPEED: 10 MPH
FILLMORE AVE DESIGN SPEED: 15 MPH
SCALE: 1"=30'

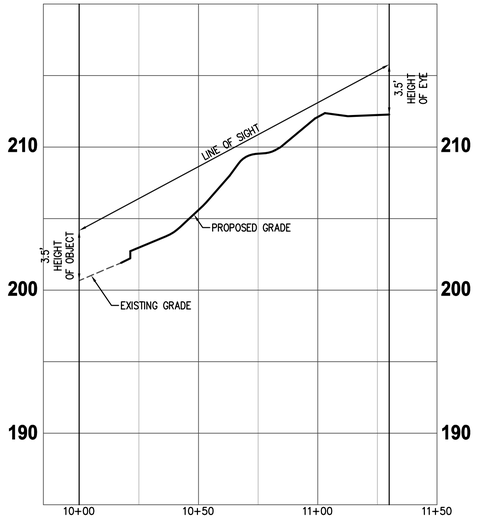
15 MPH SIGHT DISTANCE = 145'
10% ROAD GRADE ADJUSTMENT = (145')(0.9) = 130.5'
FINAL SIGHT DISTANCE = 131'



PLAN VIEW

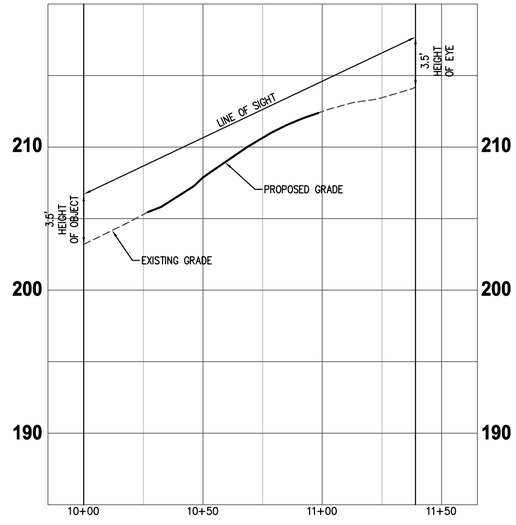
FILLMORE AVE POSTED SPEED: 10 MPH
FILLMORE AVE DESIGN SPEED: 15 MPH
SCALE: 1"=30'

15 MPH SIGHT DISTANCE = 145'
10% ROAD GRADE ADJUSTMENT = (145')(0.9) = 130.5'
FINAL SIGHT DISTANCE = 131'



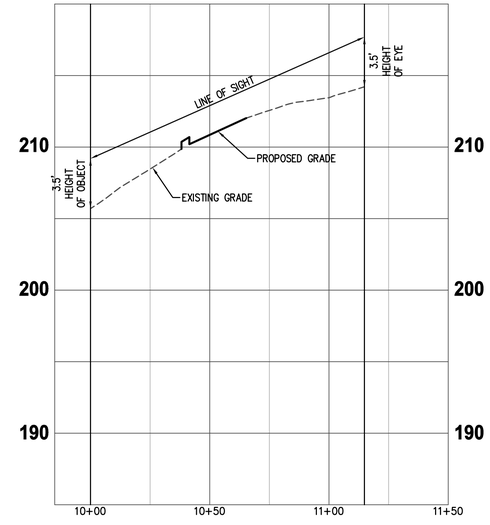
PROFILE VIEW

ROTARY ADVISORY POSTED SPEED: 10 MPH
ROTARY ADVISORY DESIGN SPEED: 15 MPH
SCALE: 1"=30' (H); 1"=5' (V)



PROFILE VIEW

ROTARY ADVISORY POSTED SPEED: 10 MPH
ROTARY ADVISORY DESIGN SPEED: 15 MPH
SCALE: 1"=30' (H); 1"=5' (V)



PROFILE VIEW

ROTARY ADVISORY POSTED SPEED: 10 MPH
ROTARY ADVISORY DESIGN SPEED: 15 MPH
SCALE: 1"=30' (H); 1"=5' (V)

NOTE:

SIGHT DISTANCE CALCULATIONS PERFORMED USING SECTION 9.5.3 OF THE 6TH EDITION "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS" (2011 AASHTO GREEN BOOK).

30 0 15 30 60 120
(IN FEET)
1 INCH = 30'

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: HOR. 1" = 30' VERT. 1" = 5'
DATE: 11/10/17
DRAWN: DP,DM CHECKED: BF

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

PLAN STATUS

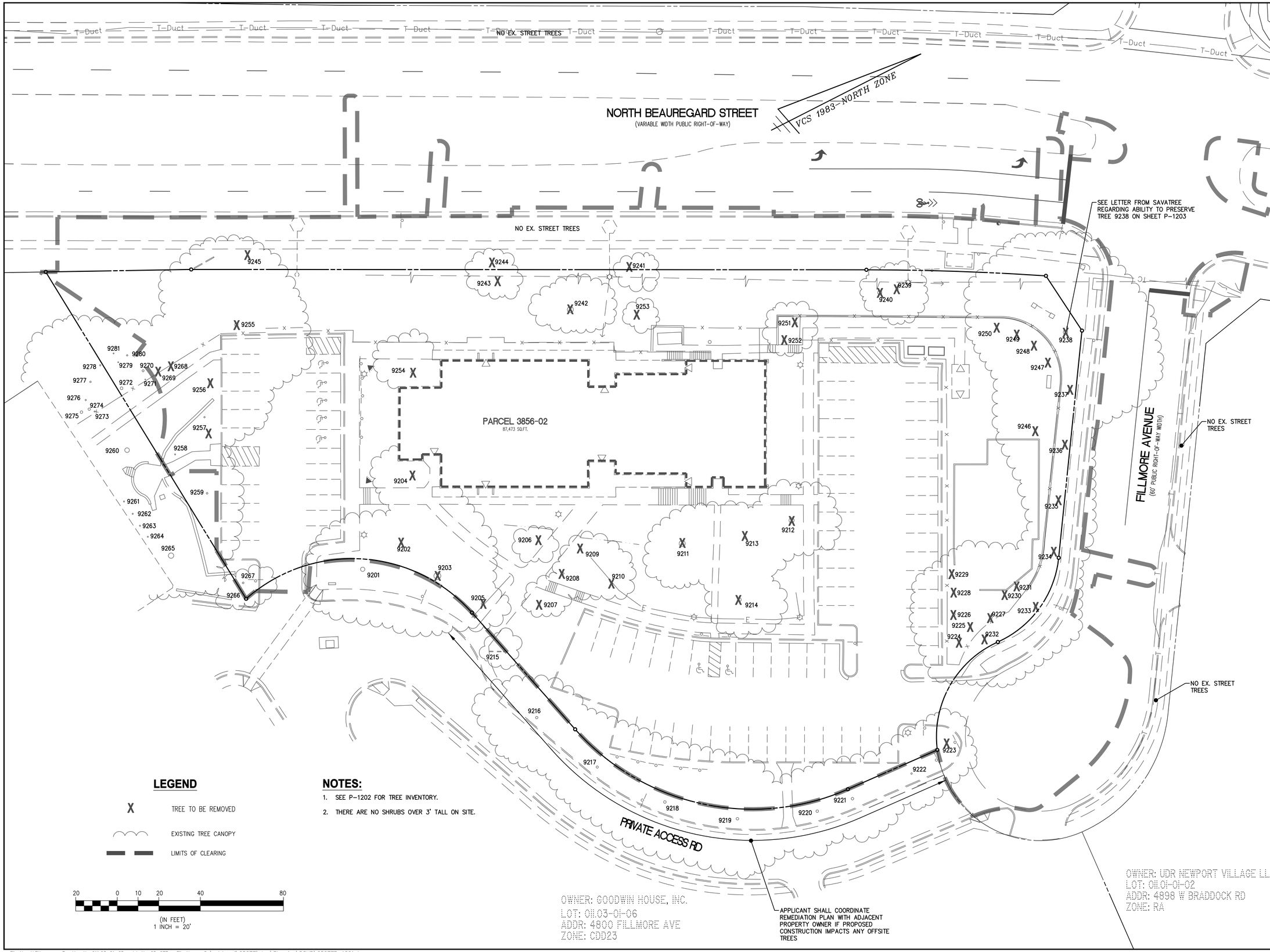
REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

SIGHT DISTANCE PLAN & PROFILE - FILLMORE

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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.



LEGEND

X TREE TO BE REMOVED

EXISTING TREE CANOPY

LIMITS OF CLEARING

20 0 10 20 40 80

(IN FEET)
1 INCH = 20'

NOTES:

1. SEE P-1202 FOR TREE INVENTORY.
2. THERE ARE NO SHRUBS OVER 3' TALL ON SITE.

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: 11/10/17 | DRAWN: DP/DM | CHECKED: BF

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

PLAN STATUS		
DATE	DESCRIPTION	
09/08/17	DSUP SUBMISSION 1	
09/29/17	DSUP SUBMISSION 2	
10/20/17	DSUP SUBMISSION 3	
11/10/17	DSUP SUBMISSION 4	

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

EXISTING VEGETATION MAP & TREE PRESERVATION PLAN

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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.

Tree Inventory - 2280 N. Beauregard Street

Tree #	Botanical Name	Common Name	Size DBH (in)	Critical Root Zone (CRZ) Radius (ft)	Species Rating (%)	Condition %	Removal
Tree Survey Information Completed by Walter Phillips, Inc - Arborist Ben Schitter- ISA # MA-5385A #05-077 6 November 2015							
9201	Platanus occidentalis	American sycamore	23"	23'	45%	72%	
9202	Picea pungens	Blue spruce	11"	11'	30%	63%	X
9203	Quercus phellos	Willow oak	36"	36'	60%	72%	X
9204	Ilex opaca	American holly	14"	14'	60%	66%	X
9205	Cornus kousa	Kousa dogwood	5"	8'	80%	69%	X
9206	Cornus kousa	Kousa dogwood	5"	8'	80%	69%	X
9207	Cornus kousa	Kousa dogwood	5"	8'	80%	69%	X
9208	Cornus kousa	Kousa dogwood	5"	8'	80%	69%	X
9209	Cornus florida	Flowering dogwood	6"	8'	40%	69%	X
9210	Cornus florida	Flowering dogwood	6"	8'	40%	69%	X
9211	Quercus palustris	Pin oak	29"	29'	50%	72%	X
9212	Pinus strobus	Eastern white pine	27"	27'	30%	66%	X
9213	Ilex opaca	American holly	13"	13'	60%	69%	X
9214	Prunus spp.	Ornamental Cherry	13"	13'	35%	56%	X
9215	Cornus florida	Flowering dogwood	5"	8'	40%	69%	
9216	Tilia cordata	Littleleaf linden	14"	14'	60%	66%	
9217	Tilia cordata	Littleleaf linden	14"	14'	60%	66%	
9218	Tilia cordata	Littleleaf linden	15"	15'	60%	63%	
9219	Tilia cordata	Littleleaf linden	15"	15'	60%	69%	
9220	Tilia cordata	Littleleaf linden	9"	9'	60%	66%	
9221	Tilia cordata	Littleleaf linden	8"	8'	60%	66%	
9222	Tilia cordata	Littleleaf linden	9"	9'	60%	66%	
9223	Tilia cordata	Littleleaf linden	7"	8'	60%	66%	X
9224	Cercis canadensis	Eastern redbud	9"	9'	60%	69%	X
9225	Cercis canadensis	Eastern redbud	9"	9'	60%	69%	X
9226	Cercis canadensis	Eastern redbud	9"	9'	60%	66%	X
9227	Cercis canadensis	Eastern redbud	9"	9'	60%	66%	X
9228	Lagerstroemia indica	Crape Myrtle	10"	10'	70%	66%	X
9229	Lagerstroemia indica	Crape Myrtle	10"	10'	70%	66%	X
9230	Lagerstroemia indica	Crape Myrtle	10"	10'	70%	66%	X
9231	Lagerstroemia indica	Crape Myrtle	10"	10'	70%	66%	X
9232	Fraxinus pennsylvanica	Green ash	9"	9'	25%	66%	X
9233	Fraxinus pennsylvanica	Green ash	11"	11'	25%	66%	X
9234	Fraxinus pennsylvanica	Green ash	9"	9'	25%	66%	X
9235	Fraxinus pennsylvanica	Green ash	9"	9'	25%	66%	X
9236	Fraxinus pennsylvanica	Green ash	8"	8'	25%	66%	X
9237	Fraxinus pennsylvanica	Green ash	8"	8'	25%	66%	X
9238	Pinus taeda	Loblolly pine	20"	20'	30%	63%	X
9239	Pinus taeda	Loblolly pine	8"	8'	30%	44%	X
9240	Pinus taeda	Loblolly pine	21"	21'	30%	63%	X
9241	Ilex opaca	American holly	7"	8'	60%	59%	X
9242	Prunus spp.	Ornamental Cherry	30"	30'	35%	56%	X
9243	Juniperus virginiana	Eastern redcedar	5"	8'	60%	69%	X
9244	Juniperus virginiana	Eastern redcedar	5"	8'	60%	69%	X
9245	Ilex opaca	American holly	5"	8'	60%	69%	X
9246	Salix babylonica	Weeping willow	9"	9'	40%	69%	X
9247	Magnolia stellata	Star magnolia	6"	8'	60%	72%	X
9248	Magnolia stellata	Star magnolia	6"	8'	60%	72%	X
9249	Magnolia stellata	Star magnolia	6"	8'	60%	72%	X
9250	Magnolia stellata	Star magnolia	6"	8'	60%	72%	X
9251	Magnolia stellata	Star magnolia	6"	8'	60%	72%	X
9252	Magnolia stellata	Star magnolia	6"	8'	60%	72%	X
9253	Ilex opaca	American holly	5"	8'	60%	53%	X
9254	Ilex opaca	American holly	13"	13'	60%	66%	X
9255	Prunus spp.	Ornamental Cherry	10"	10'	35%	63%	X
9256	Pyrus calleryana	Callery pear	16"	16'	20%	66%	X
9257	Gleditsia triacanthos	Honeylocust	8"	8'	40%	72%	X
9258	Gleditsia triacanthos	Honeylocust	8"	8'	40%	72%	
9259	Gleditsia triacanthos	Honeylocust	8"	8'	40%	72%	
9260	Quercus palustris	Pin oak	29"	29'	50%	59%	
9261	Juniperus virginiana	Eastern redcedar	5"	8'	60%	63%	
9262	Juniperus virginiana	Eastern redcedar	9"	9'	60%	63%	
9263	Juniperus virginiana	Eastern redcedar	5"	8'	60%	63%	
9264	Juniperus virginiana	Eastern redcedar	5"	8'	60%	63%	
9265	Quercus prinus	Chestnut oak	27"	27'	60%	66%	
9266	Cornus kousa	Kousa dogwood	5"	8'	80%	63%	
9267	Cornus kousa	Kousa dogwood	5"	8'	80%	63%	
9268	Liriodendron tulipifera	Yellow-poplar	9"	9'	60%	66%	X

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

CRZ = Critical Root Zone = 1 foot radius per inch of tree diameter, trees over 30" DBH= 1.5 foot radius per inch of tree diameter

CRZ values for trees with multiple stems were calculated using the diameter of a tree with the basal area equivalent to the sum of the basal areas for all stems.

Condition Ratings provided as percentages based on methods outlined in the 9th edition of the Guide for Plant Appraisal, published by the I.S.A.

Tree Inventory - 2280 N. Beauregard Street

Tree #	Botanical Name	Common Name	Size DBH (in)	Critical Root Zone (CRZ) Radius (ft)	Species Rating (%)	Condition %	Removal
Tree Survey Information Completed by Walter Phillips, Inc - Arborist Ben Schitter- ISA # MA-5385A #05-077 6 November 2015							
9269	Prunus spp.	Ornamental Cherry	5"	8'	35%	50%	X
9270	Robinia pseudoacacia	Black locust	8"	8'	45%	66%	
9271	Robinia pseudoacacia	Black locust	10"	10'	45%	66%	
9272	Prunus spp.	Ornamental Cherry	13"	13'	35%	66%	
9273	Prunus spp.	Ornamental Cherry	5"	8'	35%	56%	
9274	Robinia pseudoacacia	Black locust	13"	13'	45%	66%	
9275	Robinia pseudoacacia	Black locust	11"	11'	45%	66%	
9276	Robinia pseudoacacia	Black locust	8"	8'	45%	66%	
9277	Prunus spp.	Ornamental Cherry	6"	8'	35%	59%	
9278	Prunus spp.	Ornamental Cherry	7"	8'	35%	59%	
9279	Prunus spp.	Ornamental Cherry	5"	8'	35%	66%	
9280	Robinia pseudoacacia	Black locust	9"	9'	45%	66%	
9281	Liriodendron tulipifera	Yellow-poplar	5"	8'	60%	63%	

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: 11/10/17 | DRAWN: DP,DM | CHECKED: BF

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 11/10/17 PROFESSIONAL ENGINEER

PLAN STATUS		
DATE	DESCRIPTION	
09/08/17	DSUP SUBMISSION 1	
09/29/17	DSUP SUBMISSION 2	
10/20/17	DSUP SUBMISSION 3	
11/10/17	DSUP SUBMISSION 4	

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

EXISTING TREE INVENTORY

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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.

TREE ASSESSMENT LETTER

Thrive SAVATREE Tree, Shrub & Lawn Care

45830 Woodland Road, Sterling, VA 20166
phone: (703) 709-0007
fax: (571) 313-8027
email: sterling@savatree.com

savatree.com

August 29, 2017

Campion Hruby Landscape Architects
Attn. Kevin Gaughan
26 South Street
Annapolis, Maryland 21401

Site Name and Location: Episcopal Church of the Resurrection at the corner of N. Beauregard St. and Fillmore Avenue, Alexandria Virginia

RE: Assessment of Loblolly Pine (*Pinus taeda)* approximately 17 inch diameter

Dear Mr. Gaughan:

Upon your request I stopped by the Episcopal Church of the Resurrection to review and assess the condition of the Pine tree at the corner of N. Beauregard Street and Fillmore Avenue. I also reviewed the Landscape Plan, sheet L2.01 dated August 2, 2017. After an onsite visual inspection the Pine tree is in fair to good condition, has vines growing on it, has surface roots growing out towards the intersection, has a retaining wall within approximately 6 feet of tree.

After review of the landscape plan provided it appears there will be extensive construction around this tree. Given the species of tree it will not respond well to construction activities within the critical root zone. Pine trees tend to be particularly susceptible to land disturbing activities due to the roots being shallow and near the surface.

Given the proposed land disturbing activities within the critical root zone of this tree, I do not recommend preserving this tree.

Should you or anyone else have any questions regarding this assessment and or recommendation please do not hesitate to contact me via e-mail at rrubin@savatree.com or phone (703)709-0007.

Respectfully,

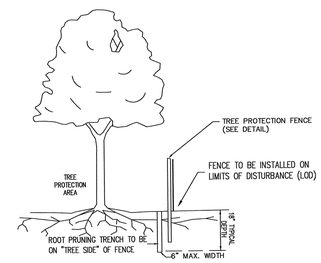
Ron Rubin
ISA Certified Arborist #0057
MD Licensed Tree Expert #000588
American Society of Consulting Arborists
ISA Certified Tree Risk Assessor

Trees | Shrubs | Lawn | Deer | Consulting

LANDSCAPE NOTES

1. ALL PROTECTION AND PRESERVATION MEASURES FOR EXISTING VEGETATION, INCLUDING MAINTENANCE AND PENALTIES SHALL BE PREPARED IN COMPLIANCE WITH LANDSCAPE GUIDELINES OF THE CITY OF ALEXANDRIA AND APPROVED BY THE CITY ARBORIST IN–FIELD PRIOR TO COMMENCEMENT OF ANY SITE DISTURBING AND CONSTRUCTION ACTIVITIES.
2. ALL VEGETATION PRESERVATION AND PROTECTION METHODS SHALL BE APPROVED / VERIFIED IN FIELD BY CITY ARBORIST PRIOR TO COMMENCEMENT OF ANY GROUND DISTURBING ACTIVITY.
3. LOCATION AND METHOD FOR PROTECTION AND PRESERVATION OF EXISTING TREES WILL BE SHOWN ON DEMOLITION, SEDIMENT AND EROSION CONTROL AND LANDSCAPE PLAN SHEETS.
4. IT IS THE CONTRACTORS RESPONSIBILITY TO MAKE SURE THAT ANY EXISTING LANDSCAPING WHICH IS TO BE RELOCATED ON THE SITE WILL BE CAREFULLY STORED IN A DESIGNATED AREA BEFORE BEING REPLANTED. COORDINATION WITH THE OWNER FOR MUTUALLY AGREEABLE STORAGE LOCATIONS FOR LANDSCAPE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF PLANT MATERIAL THAT DOES NOT SURVIVE STORAGE AND REPLANTING.
5. APPLICANT MUST INCLUDE ON THE PLAN DOCUMENTATION OF COMMUNICATION WITH THE ADJACENT PROPERTY OWNER(S) VERIFYING NOTIFICATION OF AND AGREEMENT WITH CONSTRUCTION IMPACT, POTENTIAL FOR LOSS, AND AGREED UPON REMEDIAL MEASURES PERTAINING TO THE EXISTING TREE(S) ON ADJACENT PROPERTIES THAT WILL BE AFFECTED BY THE PROJECT WORK.
6. INCLUDE SPECIFIC CONSTRUCTION STAGING INFORMATION ON THE PLAN THAT INDICATES THE METHODS, AND PROCEDURES TO BE IMPLEMENTED FOR PROTECTION OF EXISTING ON–SITE AND OFF–SITE VEGETATION.
7. PROPOSED PLANTINGS SHALL BE PROVIDED IN COMPLIANCE WITH LANDSCAPE GUIDELINES OF THE CITY OF ALEXANDRIA.
8. SPECIFICATION FOR ALL PLANTINGS SHALL BE IN ACCORDANCE WITH THE CURRENT AND MOST UP TO DATE EDITION OF ANSI–Z60.1, THE AMERICAN STANDARD FOR NURSERY STOCK AS PRODUCED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, WASHINGTON, DC.
9. THE APPLICANT SHALL MAKE SUITABLE ARRANGEMENTS FOR PRE–SELECTION TAGGING, PRE–CONTRACT GROWING, OR IS UNDERTAKING SPECIALIZED PLANTING STOCK DEVELOPMENT WITH A NURSERY OR GROWER THAT IS CONVENIENTLY LOCATED TO THE PROJECT SITE, OR UTILIZING OTHER PROCEDURES THAT WILL ENSURE AVAILABILITY OF SPECIFIED MATERIALS. IN THE EVENT THAT SHORTAGES AND/OR INABILITY TO OBTAIN SPECIFIED PLANTINGS OCCUR, REMEDIAL EFFORTS INCLUDING SPECIES CHANGES, ADDITIONAL PLANTINGS AND MODIFICATION TO THE LANDSCAPE PLAN SHALL BE UNDERTAKEN BY THE APPLICANT. ALL REMEDIAL EFFORTS SHALL, WITH PRIOR APPROVAL BY THE CITY, BE PERFORMED TO THE SATISFACTION OF THE DIRECTORS OF PLANNING AND ZONING, RECREATION, PARKS AND CULTURAL ACTIVITIES AND TRANSPORTATION AND ENVIRONMENTAL SERVICES.
10. IN LIEU OF MORE STRENUOUS SPECIFICATIONS, ALL LANDSCAPE RELATED WORK SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE CURRENT AND MOST UP–TO–DATE EDITION (AT TIME OF CONSTRUCTION) OF LANDSCAPE SPECIFICATION GUIDELINES AS PRODUCED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF MARYLAND, DISTRICT OF COLUMBIA AND VIRGINIA; GAITHERSBURG, MARYLAND.
11. PRIOR TO COMMENCEMENT OF LANDSCAPE INSTALLATION/PLANTING OPERATIONS, A PRE–INSTALLATION/CONSTRUCTION MEETING WILL BE SCHEDULED WITH THE CITY'S ARBORIST AND LANDSCAPE ARCHITECTS TO REVIEW THE SCOPE OF INSTALLATION PROCEDURES AND PROCESSES.
12. MAINTENANCE FOR THIS PROJECT SHALL BE PERFORMED IN PERPETUITY BY THE APPLICANT/OWNER/SUCCESSOR, IN COMPLIANCE WITH CITY OF ALEXANDRIA LANDSCAPE GUIDELINES AND/OR AS CONDITIONED BY PROJECT APPROVAL.
13. A CERTIFICATION LETTER FOR TREE WELLS, TREE TRENCHES AND PLANTINGS ABOVE STRUCTURE SHALL BE PROVIDED BY THE PROJECT'S LANDSCAPE ARCHITECT. THE LETTER SHALL CERTIFY THAT ALL BELOW GRADE CONSTRUCTION IS IN COMPLIANCE WITH APPROVED DRAWINGS AND SPECIFICATIONS. THE LETTER SHALL BE SUBMITTED TO THE CITY ARBORIST AND APPROVED PRIOR TO APPROVAL OF THE LAST AND FINAL CERTIFICATE OF OCCUPANCY FOR THE PROJECT. THE LETTER SHALL BE SUBMITTED BY THE OWNER/APPLICANT/SUCCESSOR AND SEALED AND DATED AS APPROVED BY THE PROJECT'S LANDSCAPE ARCHITECT.
14. AS–BUILT DRAWINGS FOR THIS LANDSCAPE PLAN AND/OR IRRIGATION/WATER MANAGEMENT SYSTEM WILL BE PROVIDED IN COMPLIANCE WITH CITY OF ALEXANDRIA LANDSCAPE GUIDELINES. AS–BUILT DRAWINGS SHALL INCLUDE CLEAR IDENTIFICATION OF ALL VARIATION(S) AND CHANGES FROM APPROVED DRAWINGS INCLUDING LOCATION, QUANTITY, AND SPECIFICATION OF ALL PROJECT ELEMENTS.

ROOT PRUNING DETAIL (TYPICAL)



NOTE:

TREE PROTECTION AREA WILL BE DETERMINED AS PART OF THE PLAN REVIEW PROCESS. EXACT LOCATION, DEPTH AND METHODS OF ROOT PRUNING TO BE DETERMINED IN THE FILED BY PROJECT FORESTER.

EXACT LOCATION OF TREE PROTECTION AREAS SHALL BE STAKED OR FLAGGED PRIOR TO TRENCHING.

TRENCH SHOULD BE BACKFILLED IMMEDIATELY.

ROOTS SHALL BE SEVERED BY TRENCHER, VIBRATORY PLOW OR APPROVED EQUIVALENT. ROOTS OVER 1.0" DIAMETER SHALL BE CLEANLY CUT BY HAND. ROOT PRUNING ADJACENT TO SPECIMEN TREES MAY REQUIRE SOIL REMOVAL BY SUPERSONIC AIR TOOL TO MINIMIZE TREE AND ROOT IMPACTS.

TREE PRESERVATION TECHNIQUES
(Both techniques described below can be combined with the pruning of roots that may occur beyond the area of treatment).

#1 – For Use in Areas Where Equipment Must Operate in Areas That Will Remain at Existing Grade:

- In the woodchip and plywood or chainlink fence area shown in figure 1 below, spread 10-15" of wood chips by hand.
- On top of the wood chips, lay 5/8 to ¾ inch plywood or heavy-gauge chain link fence to provide a path for equipment and workers to operate.

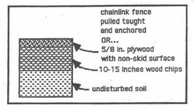


Figure 1

#2 – For Use in Areas Where Fill Soil Will Be Placed Over the Root Zone:

- An aeration system shall be installed in the area shown in figure 2 below prior to grading. The aeration system (see diagram below) shall consist of *geotextile* fabric laid on top of the undisturbed ground; with not less than six inches of river rock on top of it; and with a second layer of *geotextile* fabric laid on top of the rock.
- Fill dirt can then be placed on top of the *geotextile* fabric.

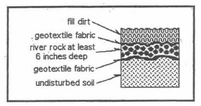


Figure 2

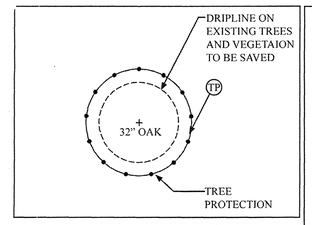
Standards and Requirements

Figure I-A. Required Notes on Drawing Submissions

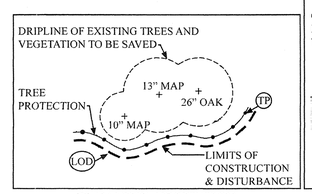
1. All protection and preservation measures for existing vegetation, including maintenance shall be approved by the City Arborist in-field prior to commencement of any site disturbing activity.
2. Specification for all plantings shall be in accordance with the current and most up to date edition of ANSI-Z60.1, The American Standard for Nursery Stock as produced by the American Association of Nurserymen; Washington, DC.
3. The applicant has made suitable arrangements for pre-selection tagging, pre-contract growing, or is undertaking specialized planting stock development with a nursery or grower that is conveniently located to the project site, other procedures that will ensure availability of specified materials. In the event that shortages and/or inability to obtain specified plantings occurs, remedial efforts including species changes, additional plantings and modification to the landscape plan shall be undertaken by the applicant. All remedial efforts shall, with prior approval by the city, be performed to the satisfaction of the Directors of Planning & Zoning, Recreation, Parks & Cultural Activities and Transportation & Environmental Services.
4. In lieu of more strenuous specifications, all landscape related work shall be installed and maintained in accordance with the current and most up-to-date edition (at time of construction) of Landscape Specification Guidelines as produced by the Landscape Contractors Association of Maryland, District of Columbia and Virginia; Gaithersburg, Maryland.
5. Prior to commencement of landscape installation/planting operations, a pre-installation/construction meeting will be scheduled with the City's Arborist and Landscape Architects to review the scope of installation procedures and processes.
6. Maintenance for this project shall be performed in perpetuity, in compliance with City of Alexandria Landscape Guidelines and/or as conditioned by project approval.
7. A certification letter for tree wells, tree trenches and plantings above structure shall be provided by the project's Landscape Architect. The letter shall certify that all below grade construction is in compliance with approved drawings and specifications. The letter shall be submitted to the City Arborist and approved prior to approval of the last and final Certificate of Occupancy for the project. The letter shall be submitted by the owner/applicant/successor and sealed and dated as approved by the project's Landscape Architect.
8. As-built drawings for this landscape and/or irrigation/water management system will be provided in compliance with City of Alexandria Landscape Guidelines. As-built drawings shall include clear identification of all variation(s) and changes from approved drawings including location, quantity and specification of all project elements.
9. MAINTENANCE OF ALL TREES AND LANDSCAPE MATERIALS SHALL CONFORM TO ACCEPTED INDUSTRY STANDARDS SET FORTH BY THE LANDSCAPE CONTRACTORS ASSOCIATION, AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS, THE INTERNATIONAL SOCIETY OF ARBORICULTURE, AND THE AMERICAN NATIONAL STANDARDS INSTITUTE.

1. Standards and Requirement

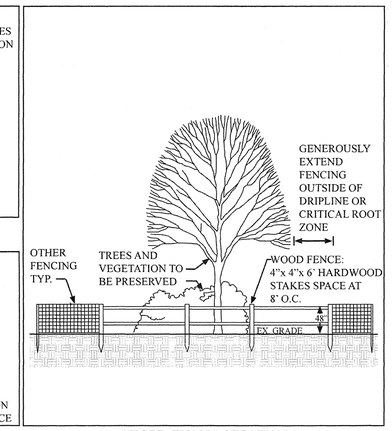
Figure I-B. Tree Protection



PLAN VIEW: SINGLE SPECIMEN



PLAN VIEW: VEGETATION



VEGETATION PROTECTION AND PRESERVATION DETAIL SECTION

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

– MINIMUM DIMENSION: 11 X 8 INCHES (W X H)
– BACKGROUND COLOR: RED OR YELLOW

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: 11/10/17 | DRAWN: DP,DM | CHECKED: BF

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 11/10/17 PROFESSIONAL ENGINEER

PLAN STATUS		
DATE	DESCRIPTION	
09/08/17	DSUP SUBMISSION 1	
09/29/17	DSUP SUBMISSION 2	
10/20/17	DSUP SUBMISSION 3	
11/10/17	DSUP SUBMISSION 4	

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

TREE PRESERVATION NOTES & DETAILS

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016–0044
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.

NORTH BEAUREGARD STREET
(VARIABLE WIDTH PUBLIC RIGHT-OF-WAY)

VCS 1983-NORTH ZONE

EX. 12" VAW WATER LINE (TO REMAIN)

PROP. FIRE HYDRANT

POTENTIAL 8" WL RELOCATION (FINAL DISPOSITION TO BE DETERMINED AT TIME OF FINAL SITE PLAN)

EX. FIRE HYDRANT (TO REMAIN)

EX. METROBUS STOP & SHELTER
ROUTES SERVED: 7A,7F,7Y

PROP. SLEEVE THRU WALL (WALL DESIGN SHALL NOT LOAD ON PIPE - BY OTHERS)

PROP. 2" DOM. SEV. CONNECTION W/ METER

PROP. 6" FIRE SERVICE

PROPOSED CHURCH
5,005 GFA
5,005 NFA
1 STORY
HT = 45 FT MAX

CHURCH MAIN ENTRANCE

POTENTIAL 8" RELOCATED DIP CL. 52 WATERMAIN

PROPOSED MULTIFAMILY BUILDING
165,732 GFA
154,153 NFA
113 UNITS
5 STORIES ABOVE PARKING
1 LEVEL OF BELOW GRADE PARKING
HT = 85 FT MAX

MULTIFAMILY MAIN ENTRANCE

SERVICE/TRASH

PROP. FIRE HYDRANT POTENTIAL 8" WL RELOCATION (FINAL DISPOSITION TO BE DETERMINED AT TIME OF FINAL SITE PLAN)

EX. 22' EMERGENCY VEHICLE EASEMENT DB 637 PG 674

EX. HYDRANT (TO REMAIN)

PROP. MOUNTABLE CURB

EX. 26' EMERGENCY VEHICLE EASEMENT DB 642 PG 252

PARKING GARAGE ENTRANCE

PROP. FIRE HYDRANT (CONNECT TO EX. 6" WATERMAIN)

FILLMORE AVENUE
(60' PUBLIC RIGHT-OF-WAY WIDTH)

PROP. 2" DOM. SVC. CONNECTION
PROP. 8" FIRE SERVICE

EX. 12" VAW WATER LINE (TO REMAIN)

EX. 6" WATER LINE (TO REMAIN)

ONE-WAY

PROP. MOUNTABLE CURB

APPROX. LOCATION OF EX. 8" WATERLINE (PER DSUP 2014-0012) (TO REMAIN)

PRIVATE ACCESS RD

EX. 26' EMERGENCY VEHICLE EASEMENT DB 642 PG 252

EX. 8" WATER LINE (TO REMAIN)

EX. FIRE HYDRANT (TO REMAIN)

OWNER: GOODWIN HOUSE, INC.
LOT: 011.03-01-06
ADDR: 4800 FILLMORE AVE
ZONE: CDD23

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

NOTES:

1. SEE P-0202 FOR MOUNTABLE CURB DETAIL.

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: 11/10/17 | DRAWN: DP,DM | CHECKED: BF

PLAN STATUS		
DATE	DESCRIPTION	DATE
09/08/17	DSUP SUBMISSION 1	10/20/17
09/29/17	DSUP SUBMISSION 2	11/10/17
	DSUP SUBMISSION 3	
	DSUP SUBMISSION 4	

COMMONWEALTH OF VIRGINIA
AARON M. HINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY FIRE SERVICE PLAN

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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.

NORTH BEAUREGARD STREET
(VARIABLE WIDTH PUBLIC RIGHT-OF-WAY)

VCS 1983-NORTH ZONE

AMBULANCE MOVEMENT

ALEXANDRIA #203 FIRE TRUCK

PROPOSED CHURCH
5,005 GFA
5,005 NFA
1 STORY
HT = 45 FT MAX

CHURCH MAIN ENTRANCE

PROPOSED MULTIFAMILY BUILDING
165,732 GFA
154,153 NFA
113 UNITS
5 STORIES ABOVE PARKING
1 LEVEL OF BELOW GRADE PARKING
HT = 85 FT MAX

MULTIFAMILY MAIN ENTRANCE

SERVICE/TRASH

PARKING GARAGE ENTRANCE

FILLMORE AVENUE
(60' PUBLIC RIGHT-OF-WAY WIDTH)

EX. 22' EMERGENCY VEHICLE EASEMENT DB 637 PG 674

EX. 26' EMERGENCY VEHICLE EASEMENT DB 642 PG 252

PROP. MOUNTABLE CURB

PRIVATE ACCESS RD

ONE-WAY

55.67'

51.77'

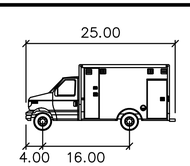
41.80'

OWNER: GOODWIN HOUSE, INC.
LOT: 011.03-01-06
ADDR: 4800 FILLMORE AVE
ZONE: CDD23

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

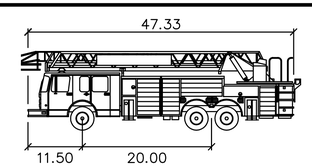
NOTES:

1. TRUCK MOVEMENTS CREATED USING AUTOTURN 9 MODELING SOFTWARE FOR AUTOCAD. ACTUAL TURNING MOVEMENTS MAY VARY
2. SEE P-0202 FOR MOUNTABLE CURB DETAIL.



AMBULANCE

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 45.0



Fire Truck Alexandria 203

	feet
Width	: 8.17
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 28.5

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: 11/10/17 | DRAWN: DP,DM | CHECKED: BF

PLAN STATUS

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

COMMONWEALTH OF VIRGINIA PROFESSIONAL ENGINEER
AARON M. HINSON
Lic. No.041851
11/10/17

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY AMBULANCE MOVEMENT PLAN

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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.

NORTH BEAUREGARD STREET
(VARIABLE WIDTH PUBLIC RIGHT-OF-WAY)

VCS 1983-NORTH ZONE

AMBULANCE MOVEMENT

ALEXANDRIA #203 FIRE TRUCK

PROPOSED CHURCH
5,005 GFA
5,005 NFA
1 STORY
HT = 45 FT MAX

CHURCH MAIN ENTRANCE

PROPOSED MULTIFAMILY BUILDING
165,732 GFA
154,153 NFA
113 UNITS
5 STORIES ABOVE PARKING
1 LEVEL OF BELOW GRADE PARKING
HT = 85 FT MAX

MULTIFAMILY MAIN ENTRANCE

SERVICE/TRASH

PARKING GARAGE ENTRANCE

AMBULANCE MOVEMENT

FILLMORE AVENUE
(60' DEDICATED R/W WIDTH)

EX. 22' EMERGENCY VEHICLE EASEMENT DB 637 PG 674

EX. 26' EMERGENCY VEHICLE EASEMENT DB 642 PG 252

PROP. MOUNTABLE CURB

PROP. MOUNTABLE CURB

PROP. MOUNTABLE CURB

PRIVATE ACCESS RD

ONE-WAY

55.67'

51.77'

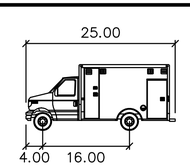
41.80'

OWNER: GOODWIN HOUSE, INC.
LOT: 011.03-01-06
ADDR: 4800 FILLMORE AVE
ZONE: CDD23

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

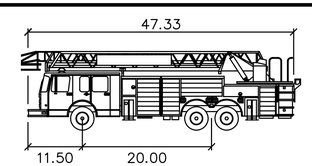
NOTES:

1. TRUCK MOVEMENTS CREATED USING AUTOTURN 9 MODELING SOFTWARE FOR AUTOCAD. ACTUAL TURNING MOVEMENTS MAY VARY
2. SEE P-0202 FOR MOUNTABLE CURB DETAIL.



AMBULANCE

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 45.0



Fire Truck Alexandria 203

	feet
Width	: 8.17
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 28.5

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: 11/10/17
DRAWN: DP,DM
CHECKED: BF

PLAN STATUS

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

COMMONWEALTH OF VIRGINIA
AARON M. WINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT

PRELIMINARY SITE PLAN

CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY AMBULANCE MOVEMENT PLAN

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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.

NORTH BEAUREGARD STREET
(VARIABLE WIDTH PUBLIC RIGHT-OF-WAY)

VCS 1983-NORTH ZONE

AMBULANCE

ALEXANDRIA #203 FIRE TRUCK MOVEMENT

12"W

PROPOSED CHURCH
5,005 GFA
5,005 NFA
1 STORY
HT = 45 FT MAX

CHURCH MAIN ENTRANCE

55.67'

PROPOSED MULTIFAMILY BUILDING
165,732 GFA
154,153 NFA
113 UNITS
5 STORIES ABOVE PARKING
1 LEVEL OF BELOW GRADE PARKING
HT = 85 FT MAX

MULTIFAMILY MAIN ENTRANCE

SERVICE/TRASH

PARKING GARAGE ENTRANCE

51.77'

41.80'

FILLMORE AVENUE
(60' PUBLIC RIGHT-OF-WAY WIDTH)

EX. 22' EMERGENCY VEHICLE EASEMENT DB 637 PG 674

EX. 26' EMERGENCY VEHICLE EASEMENT DB 642 PG 252

PROP. MOUNTABLE CURB

ALEXANDRIA #203 FIRE TRUCK MOVEMENT

PRIVATE ACCESS RD

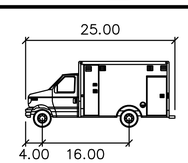
ONE-WAY

OWNER: GOODWIN HOUSE, INC.
LOT: 011.03-01-06
ADDR: 4800 FILLMORE AVE
ZONE: CDD23

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

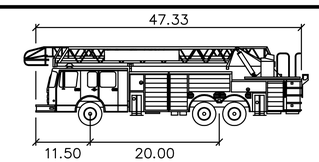
NOTES:

1. TRUCK MOVEMENTS CREATED USING AUTOTURN 9 MODELING SOFTWARE FOR AUTOCAD. ACTUAL TURNING MOVEMENTS MAY VARY
2. SEE P-0202 FOR MOUNTABLE CURB DETAIL.



AMBULANCE

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 45.0



Fire Truck Alexandria 203

	feet
Width	: 8.17
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 28.5

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: 11/10/17
DRAWN: DP/DM
CHECKED: BF

PLAN STATUS

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PRELIMINARY FIRE TRUCK MOVEMENT PLAN

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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.

RPA LOCATION CORRESPONDENCE

From: Ben Flood [mailto:bflood@wlpinc.com]
Sent: Friday, November 13, 2015 8:42 AM
To: Jesse Maines <Jesse.Maines@alexandriava.gov>
Cc: Diana Villa <dvilla@wlpinc.com>; Maya Contreras <Maya.Contreras@alexandriava.gov>
Subject: RE: DSUP 2015-0013 Church of the Resurrection - RPA

Sounds good. We will show on the next submission the location of the storm sewer end wall with a 100' dimension. That can set the starting point for the discussion and we can go out to the site together if need be in the future.

Thanks,

BEN A. FLOOD, P.E.
PROJECT MANAGER
WALTER L. PHILLIPS
Founded 1945
CIVIL ENGINEERS | LAND SURVEYORS | LAND PLANNERS
ZONING | LANDSCAPE ARCHITECTS | ARBORISTS
207 PARK AVENUE, FALLS CHURCH, VIRGINIA 22046
O (703) 532-6163 | C (703) 501-7317 | F (703) 533-1301
Map | Email | Website |LinkedIn

From: Jesse Maines [mailto:Jesse.Maines@alexandriava.gov]
Sent: Thursday, November 12, 2015 5:05 PM
To: Ben Flood
Cc: Diana Villa; Maya Contreras
Subject: RE: DSUP 2015-0013 Church of the Resurrection - RPA

Ben,

The RPA map is based on stream assessments and desktop GIS analysis. Since they can be off at this scale, we require the RPA to be field-verified. In this case, I think we can do it without having to get WSSI to delineate it. We could do an onsite using a wheel – since we wouldn't use a tape measure across the roadway.

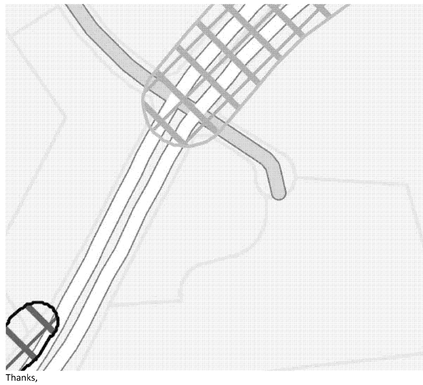
Thanks,

Jesse Maines, MPA

Watershed Management Planner
City of Alexandria
T&ES, Storm and Sanitary Infrastructure
703.746.4643 (direct)
571.414.8237 (mobile)

From: Ben Flood [mailto:bflood@wlpinc.com]
Sent: Thursday, November 12, 2015 4:25 PM
To: Jesse Maines
Cc: Diana Villa; Maya Contreras
Subject: DSUP 2015-0013 Church of the Resurrection - RPA

Jessie,
We noticed on the City's RPA map that there appears to be a RPA that extends onto this property. Attached is screen shot from the City's map as well as our Concept 1 plan submission for reference. It appears that the RPA buffer area as shown on the map extends well beyond 100' from the start of the perennial stream located in the median of Beauregard street. We located the storm sewer endwall and found it to be more than 100' from the property. Given the large scale of the map, I am hoping it is incorrect, however can you confirm? If not, I assume we would need someone like WSSI to do an RPA determination to locate the exact limits of the RPA boundary, but let me know if you think there is an easier way to delineate the limit.



Thanks,

BEN A. FLOOD, P.E.
PROJECT MANAGER
WALTER L. PHILLIPS
Founded 1945
CIVIL ENGINEERS | LAND SURVEYORS | LAND PLANNERS
ZONING | LANDSCAPE ARCHITECTS | ARBORISTS
207 PARK AVENUE, FALLS CHURCH, VIRGINIA 22046
O (703) 532-6163 | C (703) 501-7317 | F (703) 533-1301
Map | Email | Website |LinkedIn

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: 11/10/17 | DRAWN: DP,DM | CHECKED: BF

PLAN STATUS

DATE	DESCRIPTION
09/08/17	DSUP SUBMISSION 1
09/29/17	DSUP SUBMISSION 2
10/20/17	DSUP SUBMISSION 3
11/10/17	DSUP SUBMISSION 4

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/10/17
PROFESSIONAL ENGINEER

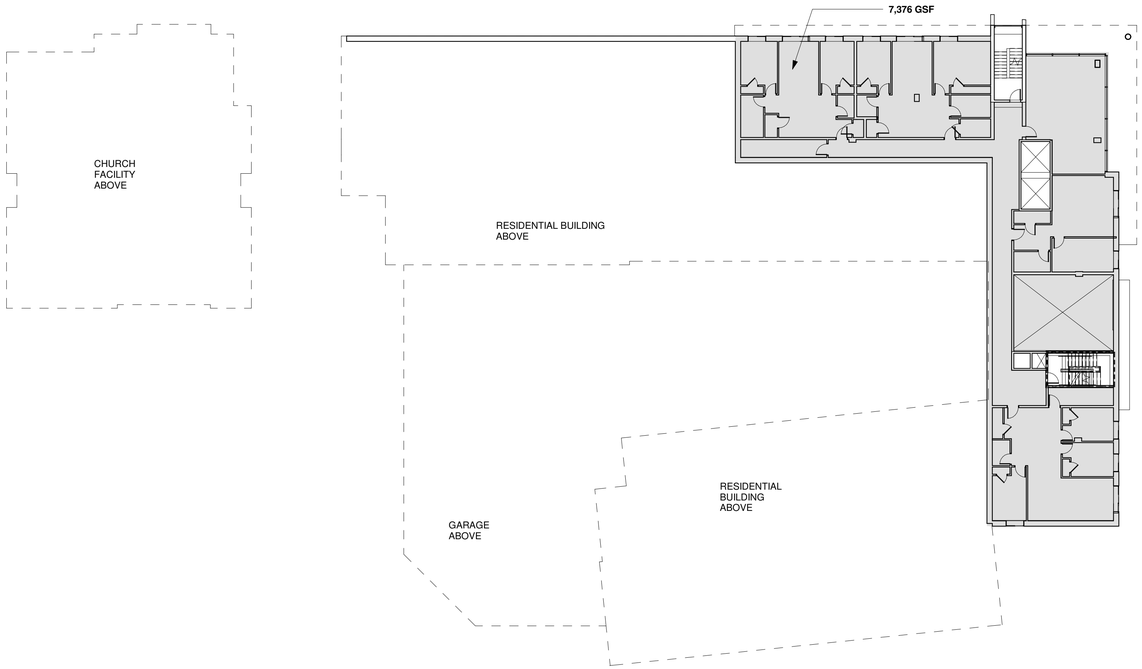
REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

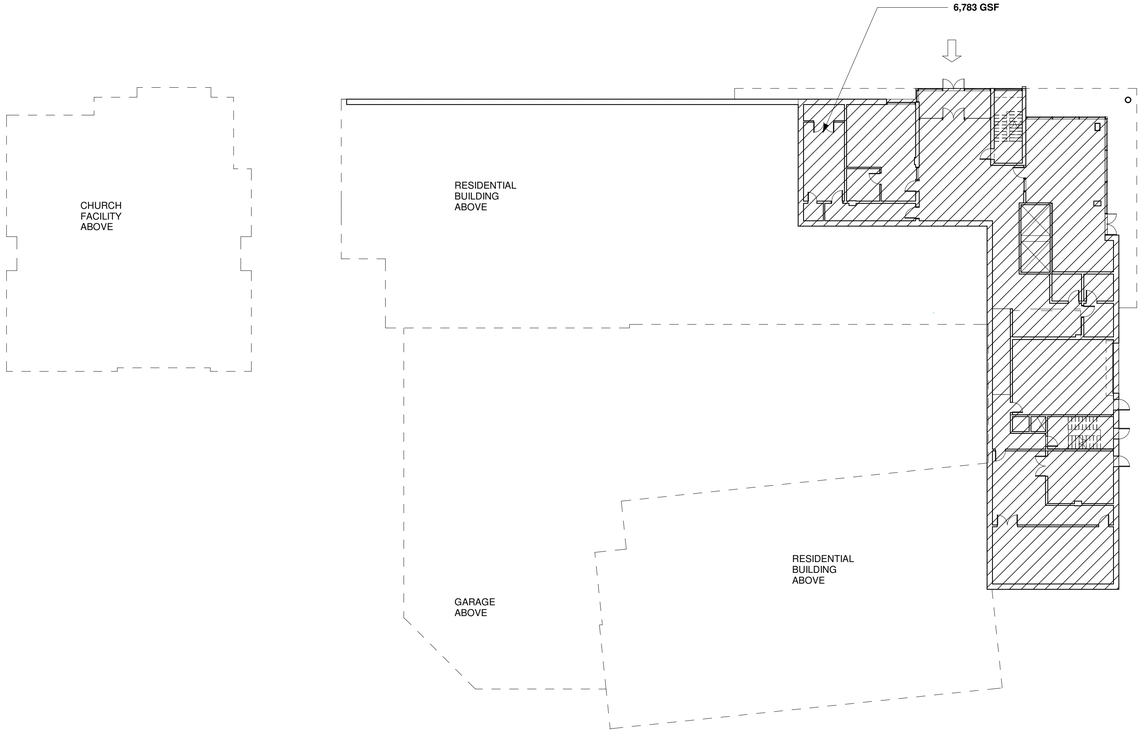
CHURCH OF THE RESURRECTION DEVELOPMENT
PRELIMINARY SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

CORRESPONDENCE

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
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.



2 LL 1 FAR Diagram
1" = 20'-0"



1 LL 2 FAR Diagram - Basement , NON-FAR
1" = 20'-0"

FAR Calculations

Multi-Family Building

	Floor	Gross Floor Area			Excluded Area	FAR Area (Net Floor Area)			Floor Elevation	Min AFG value for Basement Classification	Notes
		Residential	Pkg / Bldg Service	Total	Stairs, Shafts, Elevators	Residential	Pkg / Bldg Service	Total			
	LL2	0	6,783	6,783	638	0	0	0	200	207.93	**AFG 213.65 -** Basement excluded from FAR
	LL1	3,102	4,274	7,376	638	3,102	3,636	6,738	211	218.93	
	Podium/Pkg	3,715	29,638	33,353	638	3,715	29,000	32,715	222		
	1	20,274	3,370	23,644	704	20,274	2,666	22,940	233		
	2	20,274	3,370	23,644	704	20,274	2,666	22,940	243.5		
	3	20,274	3,370	23,644	704	20,274	2,666	22,940	254		
	4	20,274	3,370	23,644	704	20,274	2,666	22,940	264.5		
	5	20,274	3,370	23,644	704	20,274	2,666	22,940	275		
Sub-Total		***108,187***	***57,545***	***165,732***		***108,187***	***45,966***	***154,153***			

Church

	Floor	Gross Floor Area			Excluded Area	FAR area			Floor Elevation	Min AFG value for Basement Classification	Notes
	1		5,005		0		5,005		229.5	N/A	
Property Area (SF)	***30,175***										
Property Area (AC)	***0.69***										

KEY:

- FAR AREA
- EXCLUDED AREA (STAIRS, SHAFTS AND ELEVATORS)
- NON-FAR AREA (BASEMENT)

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

NOT FOR CONSTRUCTION

CUNNINGHAM | QUILL ARCHITECTS PLLC

1054 31ST STREET NW
SUITE 315
WASHINGTON, DC
20007

PH. 202.337.0090
FX. 202.337.0092
www.cunninghamquill.com

Record Owner:
Church of the Resurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Walter L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Landscape Architect:
Campion Hruby
111 Cathedral St.
Annapolis, MD 21401

Phone: 410-280-8850
Attn.: Mr. Kevin Gaughan

Land Use Attorney
Land, Carroll & Blair, P.C.
524 King Street
Alexandria, VA 22314

Phone:
Attn.: Mr. Duncan Blair

COMMONWEALTH OF VIRGINIA
LEE C. QUILL
Lic. No. 0401004897
ARCHITECT
10/19/17

KEY PLAN

Copyright © 2017

Issues / Revisions

9.08.17	DSUP Initial Completeness
10.20.17	DSUP Submission 03
11.10.17	DSUP Submission 04

New Episcopal Church of the Resurrection

City of Alexandria, Virginia

CQA # 21501

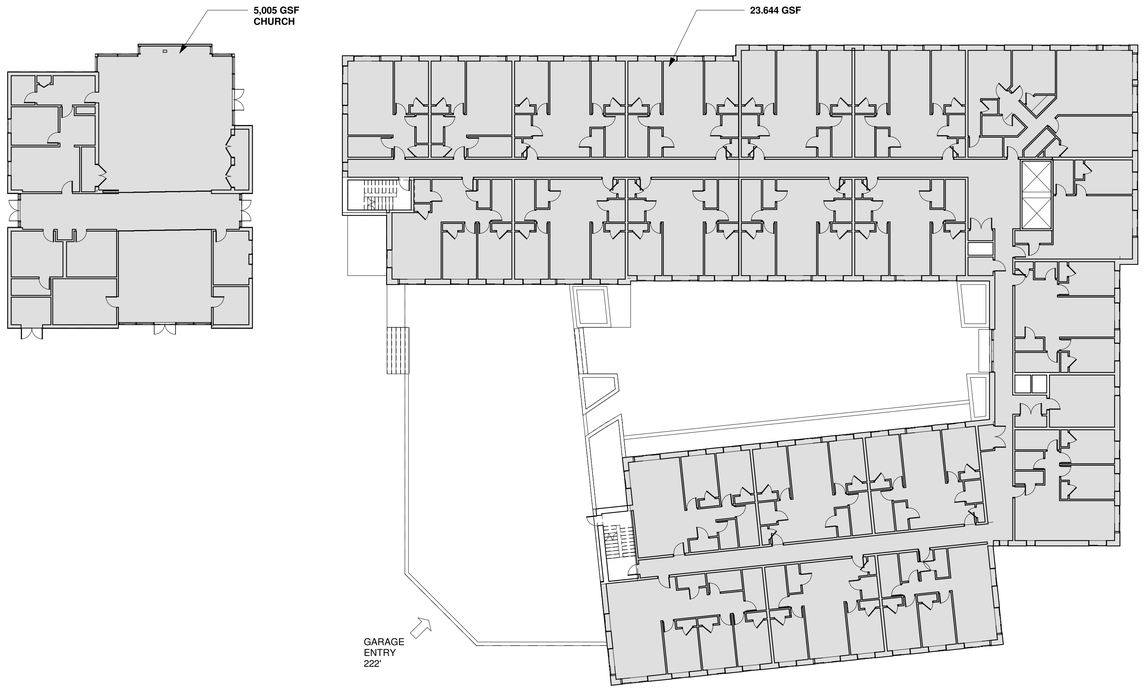
Drawing Title

FAR Diagrams & Data Calcs

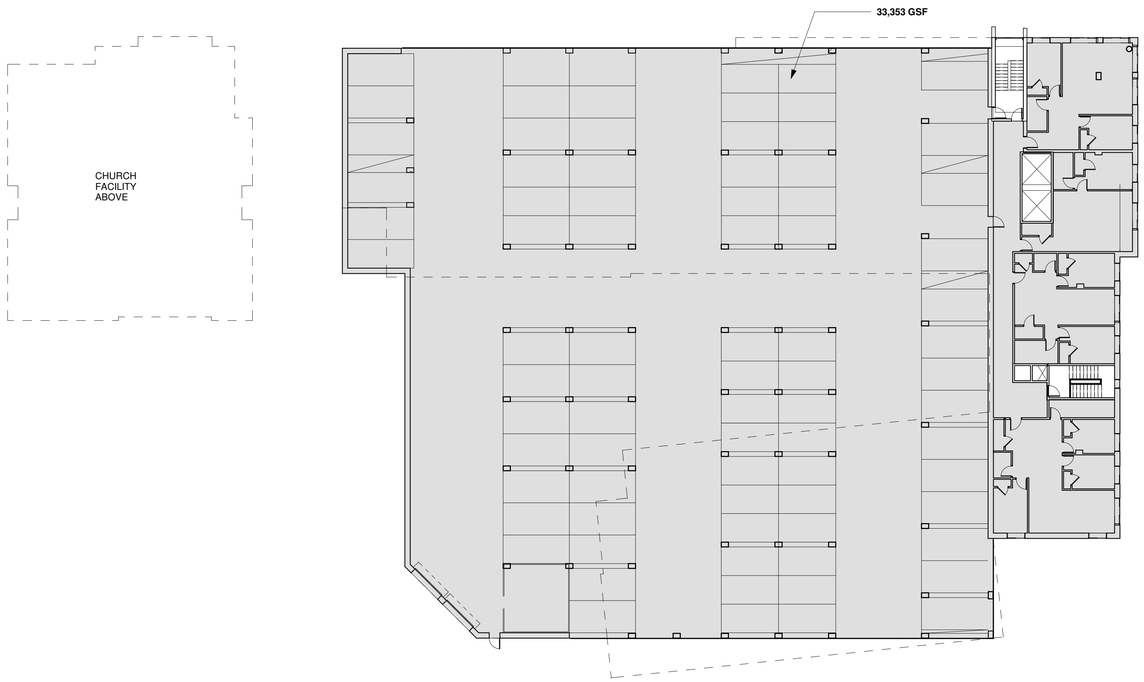
Scale: As indicated	Drawn By: RM
Date: 11/10/17	Checked By: LQ

A0.10

11/9/2017 11:44:51 AM



2 Level 1 FAR Diagram
1" = 20'-0"



1 Podium/Parking Level FAR Diagram
1" = 20'-0"

FAR Calculations

Multi-Family Building

	Floor	Gross Floor Area			Excluded Area	FAR Area (Net Floor Area)			Floor Elevation	Min AFG value for Basement Classification	Notes
		Residential	Pkg / Bldg Service	Total	Stairs, Shafts, Elevators	Residential	Pkg / Bldg Service	Total			
	LL2	0	6,783	6,783	638	0	0	0	200	207.93	**AFG 213.65 -** Basement excluded from FAR
	LL1	3,102	4,274	7,376	638	3,102	3,636	6,738	211	218.93	
	Podium/Pkg	3,715	29,638	33,353	638	3,715	29,000	32,715	222		
	1	20,274	3,370	23,644	704	20,274	2,666	22,940	233		
	2	20,274	3,370	23,644	704	20,274	2,666	22,940	243.5		
	3	20,274	3,370	23,644	704	20,274	2,666	22,940	254		
	4	20,274	3,370	23,644	704	20,274	2,666	22,940	264.5		
	5	20,274	3,370	23,644	704	20,274	2,666	22,940	275		
Sub-Total		***108,187***	***57,545***	***165,732***		***108,187***	***45,966***	***154,153***			

Church

	Floor	Gross Floor Area			Excluded Area	FAR area			Floor Elevation	Min AFG value for Basement Classification	Notes
	1		5,005		0		5,005		229.5	N/A	
Property Area (SF)	***30,175***										
Property Area (AC)	***0.69***										

KEY:

- FAR AREA
- EXCLUDED AREA (STAIRS, SHAFTS AND ELEVATORS)
- NON-FAR AREA (BASEMENT)

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

NOT FOR CONSTRUCTION

CUNNINGHAM | QUILL ARCHITECTS PLLC

1054 31ST STREET NW
SUITE 315
WASHINGTON, DC
20007

PH. 202.337.0090
FX. 202.337.0092
www.cunninghamquill.com

Record Owner:
Church of the Resurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Walter L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Landscape Architect:
Campion Hruby
111 Cathedral St.
Annapolis, MD 21401

Phone: 410-280-8850
Attn.: Mr. Kevin Gaughan

Land Use Attorney
Land, Carroll & Blair, P.C.
524 King Street
Alexandria, VA 22314

Phone:
Attn.: Mr. Duncan Blair

COMMONWEALTH OF VIRGINIA
LEE C. QUILL
Lic. No. 0401004897
ARCHITECT
10/19/17

KEY PLAN

Copyright © 2017

Issues / Revisions

9.08.17	DSUP Initial Completeness
10.20.17	DSUP Submission 03
11.10.17	DSUP Submission 04

New Episcopal Church of the Resurrection

City of Alexandria, Virginia

CQA # 21501

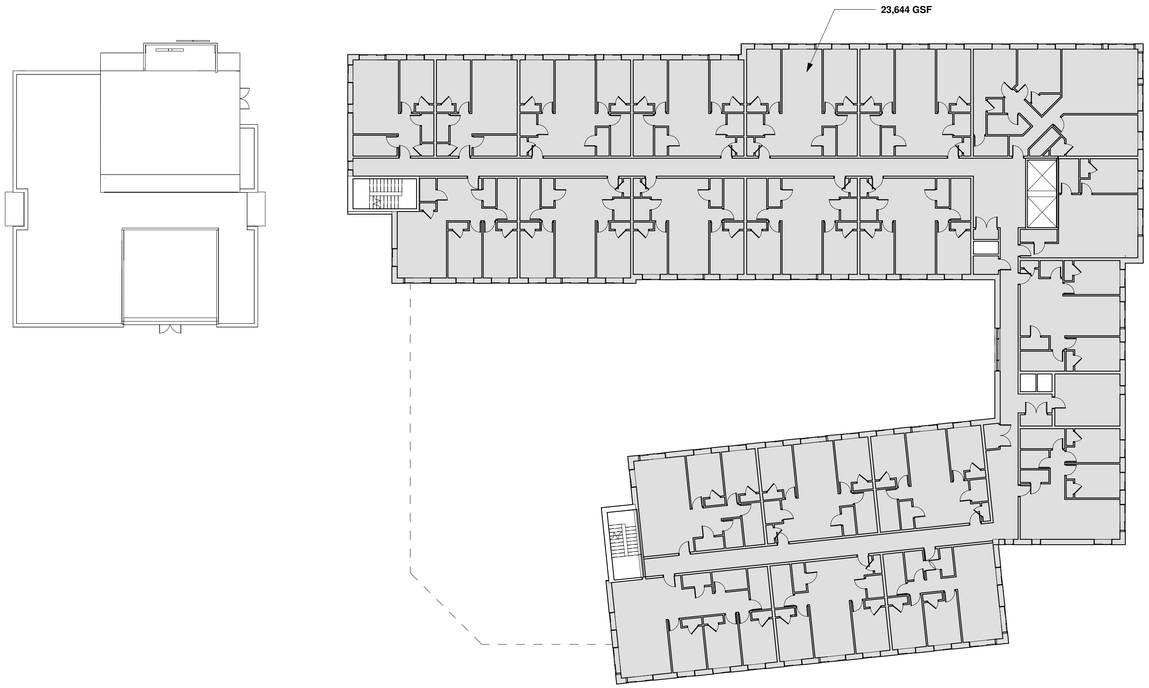
Drawing Title

FAR Diagrams & Data Calcs

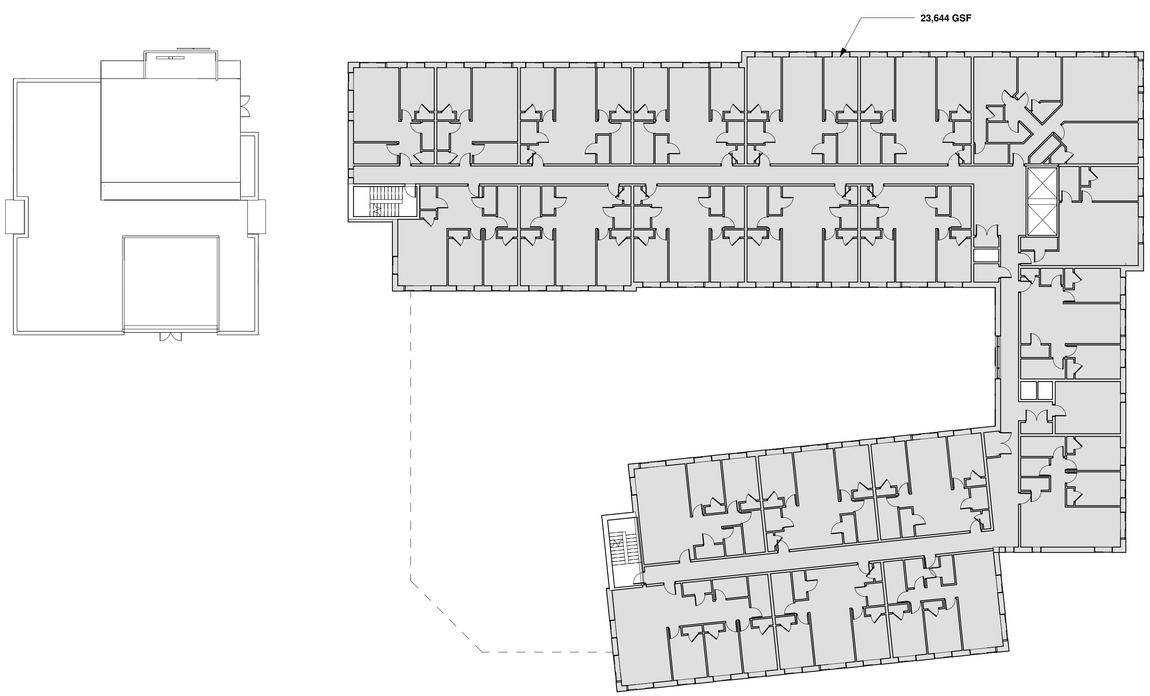
Scale: As indicated	Drawn By: RM
Date: 11/10/17	Checked By: LQ

A0.11

11/9/2017 11:44:53 AM



② Level 3 FAR Diagram
1" = 20'-0"



① Level 2 FAR Diagram
1" = 20'-0"

FAR Calculations

Multi-Family Building

Floor	Gross Floor Area: Residential	Gross Floor Area: Pkg / Bldg Service	Gross Floor Area: Total	Excluded Area: Stairs, Shafts, Elevators	FAR Area (Net Floor Area): Residential	FAR Area (Net Floor Area): Pkg / Bldg Service	FAR Area (Net Floor Area): Total	Floor Elevation	Min AFG value for Basement Classification	Notes
LL2	0	6,783	6,783	638	0	0	0	200	207.93	**AFG 213.65** - Basement excluded from FAR
LL1	3,102	4,274	7,376	638	3,102	3,636	6,738	211	218.93	
Podium/Pkg	3,715	29,638	33,353	638	3,715	29,000	32,715	222		
1	20,274	3,370	23,644	704	20,274	2,666	22,940	233		
2	20,274	3,370	23,644	704	20,274	2,666	22,940	243.5		
3	20,274	3,370	23,644	704	20,274	2,666	22,940	254		
4	20,274	3,370	23,644	704	20,274	2,666	22,940	264.5		
5	20,274	3,370	23,644	704	20,274	2,666	22,940	275		
Sub-Total	***108,187***	***57,545***	***165,732***		***108,187***	***45,966***	***154,153***			

Church

Floor	Gross Floor Area			Excluded Area	FAR area			Floor Elevation	Min AFG value for Basement Classification	Notes
1		5,005		0		5,005		229.5	N/A	
Property Area (SF) ***30,175***										
Property Area (AC) ***0.69***										

KEY:

- FAR AREA
- EXCLUDED AREA (STAIRS, SHAFTS AND ELEVATORS)
- NON-FAR AREA (BASEMENT)

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

NOT FOR CONSTRUCTION

CUNNINGHAM | QUILL ARCHITECTS PLLC

1054 31ST STREET NW
SUITE 315
WASHINGTON, DC
20007

PH. 202.337.0090
FX. 202.337.0092
www.cunninghamquill.com

Record Owner:
Church of the Resurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Walter L Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Landscape Architect:
Campion Hruby
111 Cathedral St.
Annapolis, MD 21401

Phone: 410-280-8850
Attn.: Mr. Kevin Gaughan

Land Use Attorney
Land, Carroll & Blair, P.C.
524 King Street
Alexandria, VA 22314

Phone:
Attn.: Mr. Duncan Blair

COMMONWEALTH OF VIRGINIA
LEE C. QUILL
Lic. No. 0401004897
ARCHITECT
10/19/17

KEY PLAN

Copyright © 2017

Issues / Revisions

9.08.17	DSUP Initial Completeness
10.20.17	DSUP Submission 03
11.10.17	DSUP Submission 04

New Episcopal Church of the Resurrection

City of Alexandria, Virginia

CQA # 21501

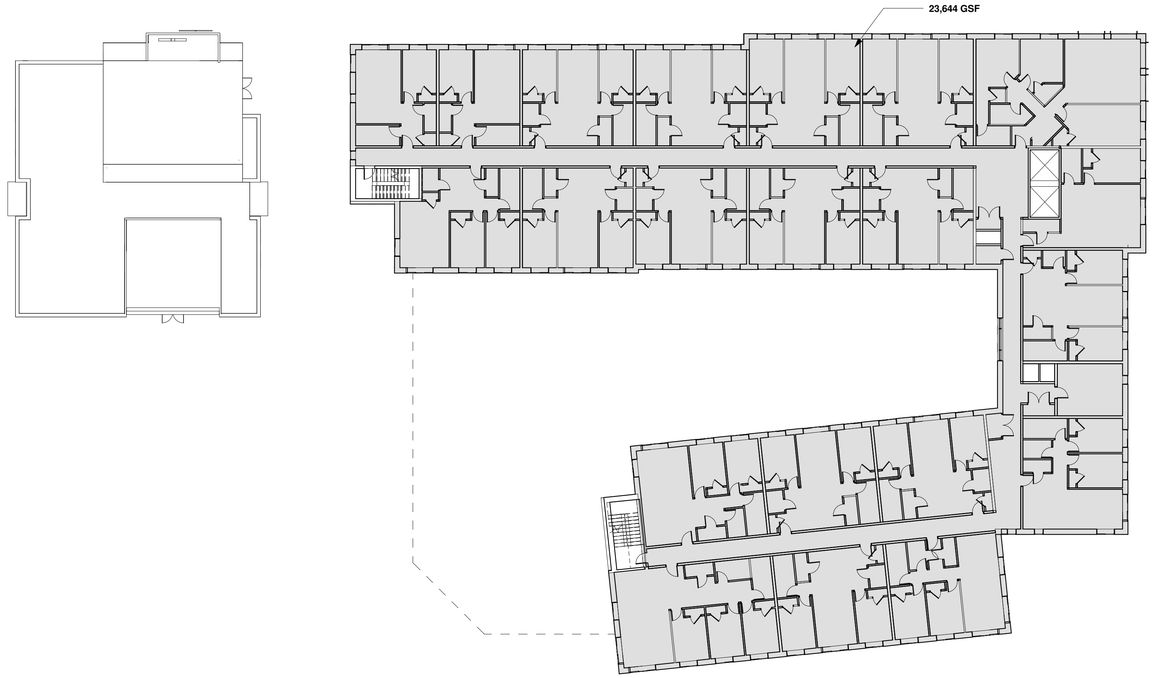
Drawing Title

FAR Diagrams & Data Calcs

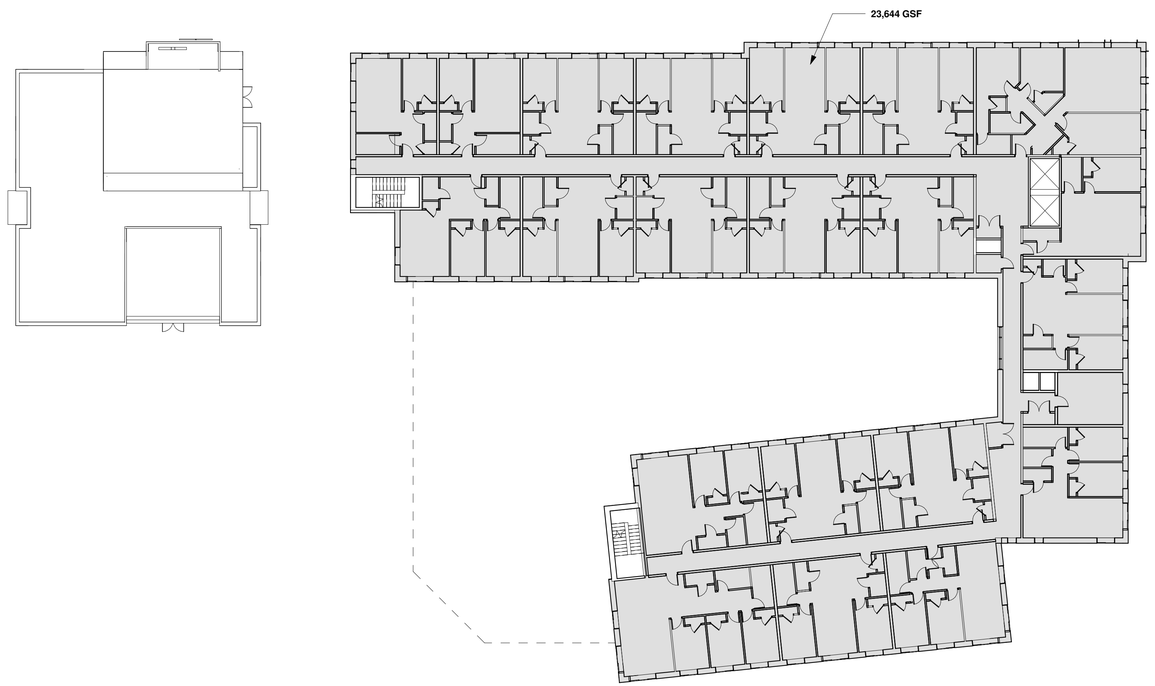
Scale	Drawn By
As indicated	RM
Date 11/10/17	Checked By LQ

A0.12

11/9/2017 11:44:56 AM



2 Level 5 FAR Diagram
1" = 20'-0"



1 Level 4 FAR Diagram
1" = 20'-0"

FAR Calculations

Multi-Family Building

Floor	Gross Floor Area: Residential	Gross Floor Area: Pkg / Bldg Service	Gross Floor Area: Total	Excluded Area: Stairs, Shafts, Elevators	FAR Area (Net Floor Area): Residential	FAR Area (Net Floor Area): Pkg / Bldg Service	FAR Area (Net Floor Area): Total	Floor Elevation	Min AFG value for Basement Classification	Notes
LL2	0	6,783	6,783	638	0	0	0	200	207.93	**AFG 213.65 -** Basement excluded from FAR
LL1	3,102	4,274	7,376	638	3,102	3,636	6,738	211	218.93	
Podium/Pkg	3,715	29,638	33,353	638	3,715	29,000	32,715	222		
1	20,274	3,370	23,644	704	20,274	2,666	22,940	233		
2	20,274	3,370	23,644	704	20,274	2,666	22,940	243.5		
3	20,274	3,370	23,644	704	20,274	2,666	22,940	254		
4	20,274	3,370	23,644	704	20,274	2,666	22,940	264.5		
5	20,274	3,370	23,644	704	20,274	2,666	22,940	275		
Sub-Total	***108,187***	***57,545***	***165,732***		***108,187***	***45,966***	***154,153***			

Church

	Floor	Gross Floor Area			Excluded Area	FAR area		Floor Elevation	Min AFG value for Basement Classification	Notes
	1		5,005		0		5,005	229.5	N/A	
Property Area (SF)	***30,175***									
Property Area (AC)	***0.69***									

KEY:

- FAR AREA
- EXCLUDED AREA (STAIRS, SHAFTS AND ELEVATORS)
- NON-FAR AREA (BASEMENT)

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE

NOT FOR CONSTRUCTION

CUNNINGHAM | QUILL ARCHITECTS PLLC
1054 31ST STREET NW
SUITE 315
WASHINGTON, DC
20007
PH. 202.337.0090
FX. 202.337.0092
www.cunninghamquill.com

Record Owner:
Church of the Resurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201
Phone: 703-486-0626
Attn.: Mr. John Welsh

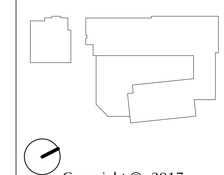
Civil Engineer:
Walter L Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046
Phone: 703-532-6163
Attn.: Mr. Ben Flood

Landscape Architect:
Campion Hruby
111 Cathedral St.
Annapolis, MD 21401
Phone: 410-280-8850
Attn.: Mr. Kevin Gaughan

Land Use Attorney
Land, Carroll & Blair, P.C.
524 King Street
Alexandria, VA 22314
Phone:
Attn.: Mr. Duncan Blair

COMMONWEALTH OF VIRGINIA
LEE C. QUILL
Lic. No. 0401004897
ARCHITECT
10/19/17

KEY PLAN



Copyright © 2017

Issues / Revisions

9.08.17	DSUP Initial Completeness
10.20.17	DSUP Submission 03
11.10.17	DSUP Submission 04

New Episcopal Church of the Resurrection

City of Alexandria, Virginia

CQA # 21501

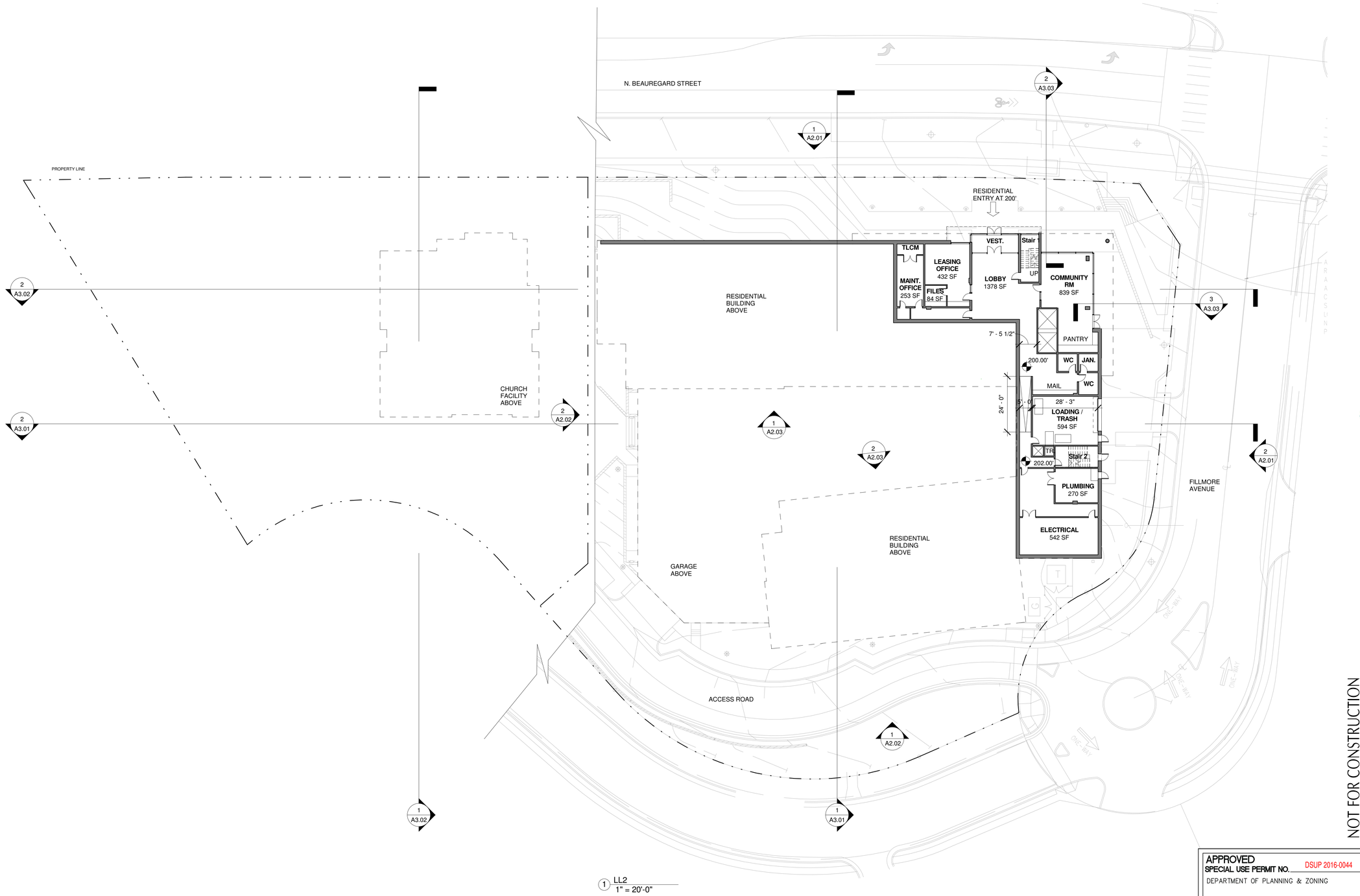
Drawing Title

FAR Diagrams & Data Calcs

Scale: As indicated	Drawn By: EA/RM
Date: 11/10/17	Checked By: LQ

A0.13

11/9/2017 11:45:01 AM



NOT FOR CONSTRUCTION

Unit Mix					
Floor	Studio	1 BR	2 BR	3BR	Total
B2	0	0	0	0	0
B1	0	1	2	1	4
Podium	0	1	2	1	4
1	0	3	16	2	21
2	0	3	16	2	21
3	0	3	16	2	21
4	0	3	16	2	21
5	0	3	16	2	21
Total	0	17	84	12	113

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

CUNNINGHAM | QUILL ARCHITECTS PLLC

1054 31ST STREET NW
SUITE 315
WASHINGTON, DC
20007

PH. 202.337.0090
FX. 202.337.0092
www.cunninghamquill.com

Record Owner:
Church of the Resurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Walter L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Landscape Architect:
Campion Hruby
111 Cathedral St.
Annapolis, MD 21401

Phone: 410-280-8850
Attn.: Mr. Kevin Gaughan

Land Use Attorney
Land, Carroll & Blair, P.C.
524 King Street
Alexandria, VA 22314

Phone:
Attn.: Mr. Duncan Blair

COMMONWEALTH OF VIRGINIA
LEE C. QUILL
Lic. No. 040100497
ARCHITECT
10/19/17

KEY PLAN

Copyright © 2017

Issues / Revisions

9.08.17	DSUP Initial Completeness
10.20.17	DSUP Submission 03
11.10.17	DSUP Submission 04

New Episcopal Church of the Resurrection

City of Alexandria, Virginia

CQA # 21501

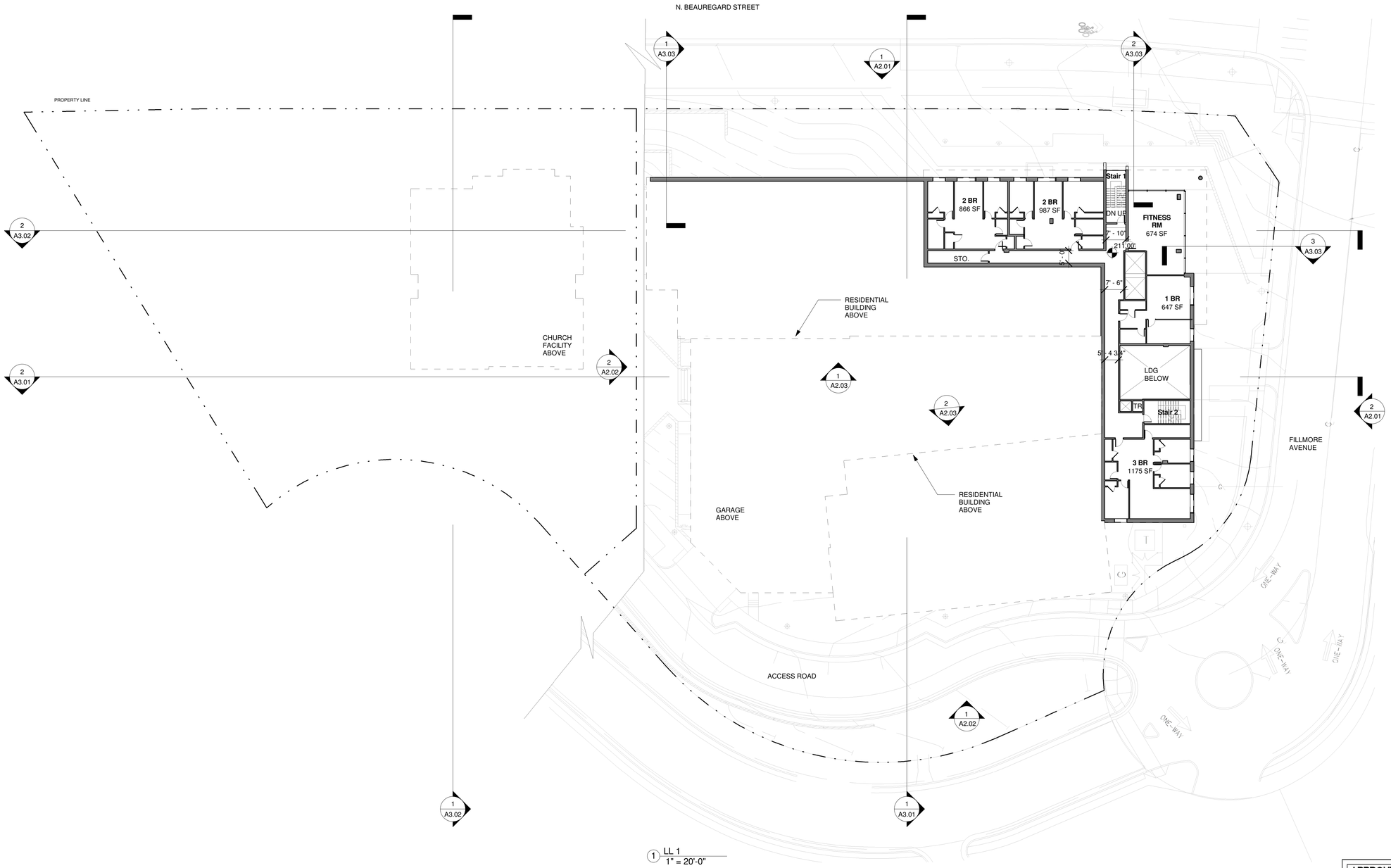
Drawing Title

Multi-Family Lower Level 2 Floor Plan

Scale: As indicated	Drawn By: FA/RM
Date: 11/10/17	Checked By: LQ

A1.01

11/9/2017 11:45:02 AM



Unit Mix					
Floor	Studio	1 BR	2 BR	3BR	Total
B2	0	0	0	0	0
B1	0	1	2	1	4
Podium	0	1	2	1	4
1	0	3	16	2	21
2	0	3	16	2	21
3	0	3	16	2	21
4	0	3	16	2	21
5	0	3	16	2	21
Total	0	17	84	12	**113**

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

NOT FOR CONSTRUCTION

CUNNINGHAM | QUILL ARCHITECTS PLLC

1054 31ST STREET NW
SUITE 315
WASHINGTON, DC
20007

PH. 202.337.0090
FX. 202.337.0092
www.cunninghamquill.com

Record Owner:
Church of the Resurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Walter L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Landscape Architect:
Campion Hruby
111 Cathedral St.
Annapolis, MD 21401

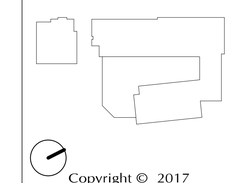
Phone: 410-280-8850
Attn.: Mr. Kevin Gaughan

Land Use Attorney
Land, Carroll & Blair, P.C.
524 King Street
Alexandria, VA 22314

Phone:
Attn.: Mr. Duncan Blair

COMMONWEALTH OF VIRGINIA
LEE C. QUILL
Lic. No. 0401004897
ARCHITECT
10/19/17

KEY PLAN



Copyright © 2017

Issues / Revisions

9.08.17	DSUP Initial Completeness
10.20.17	DSUP Submission 03
11.10.17	DSUP Submission 04

New Episcopal Church of the Resurrection

City of Alexandria, Virginia

CQA # 21501

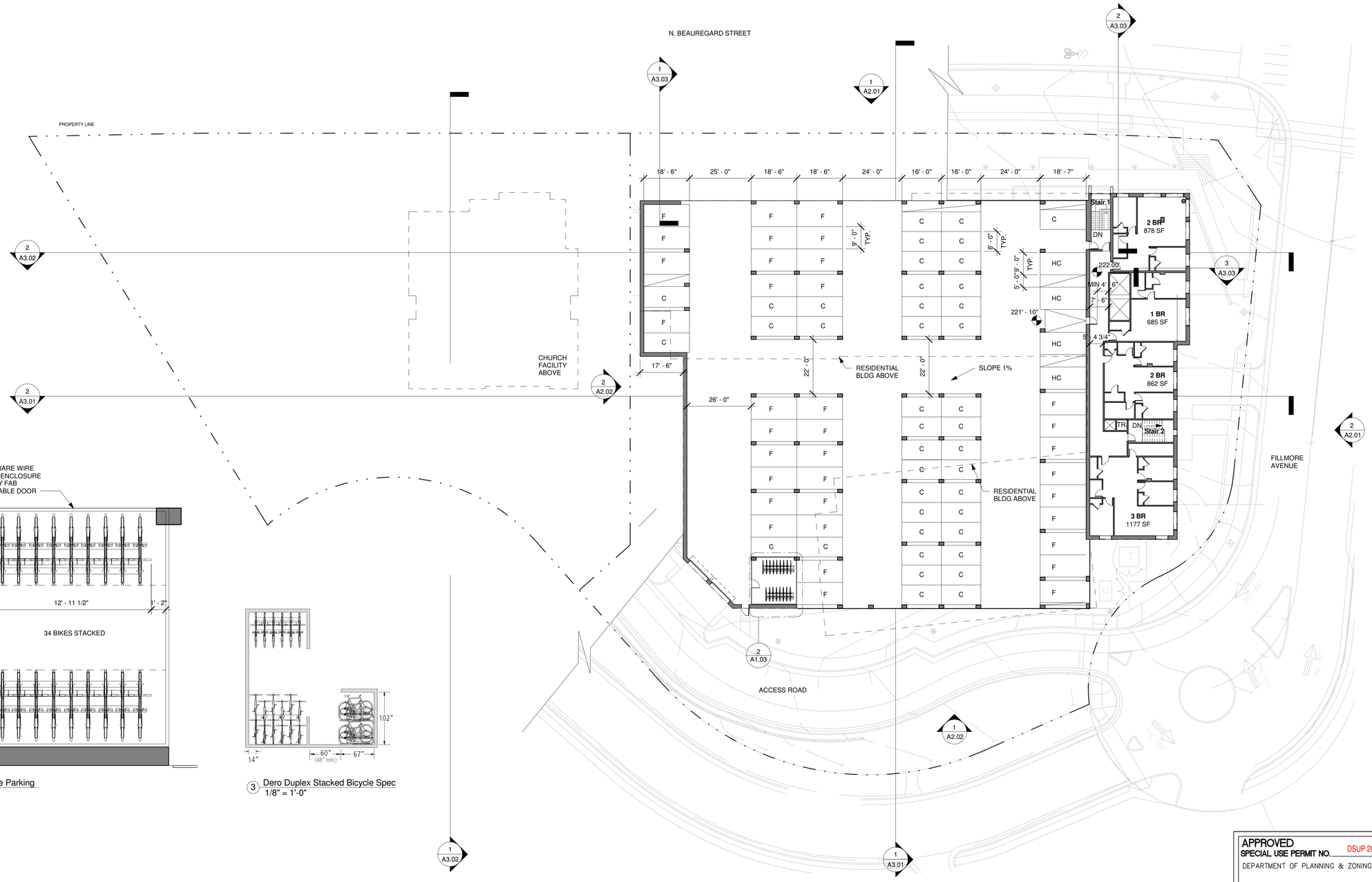
Drawing Title

Multi-Family Lower Level 1 Floor Plan

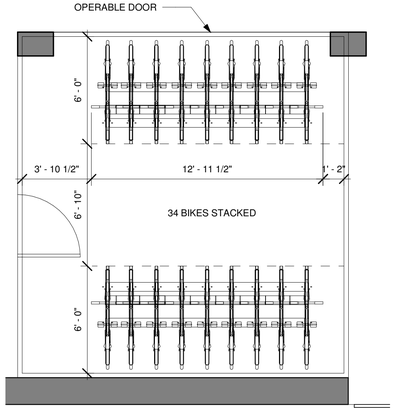
Scale: As indicated	Drawn By: EA/RM
Date: 11/10/17	Checked By: LQ

A1.02

11/9/2017 11:45:05 AM



1 Podium/Pkg
1" = 20'-0"



2 Enlarged Bike Parking
1/4" = 1'-0"

3 Dero Duplex Stacked Bicycle Spec
1/8" = 1'-0"

NOT FOR CONSTRUCTION

Unit Mix					
Floor	Studio	1 BR	2 BR	3BR	Total
B2	0	0	0	0	0
B1	0	1	2	1	4
Podium	0	1	2	1	4
1	0	3	16	2	21
2	0	3	16	2	21
3	0	3	16	2	21
4	0	3	16	2	21
5	0	3	16	2	21
Total	0	17	84	12	113

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

CUNNINGHAM | QUILL ARCHITECTS PLLC

1054 31ST STREET NW
SUITE 315
WASHINGTON, DC
20007

PH. 202.337.0090
FX. 202.337.0092
www.cunninghamquill.com

Record Owner:
Church of the Resurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Walter L Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Landscape Architect:
Campion Hruby
111 Cathedral St.
Annapolis, MD 21401

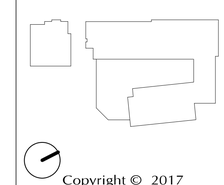
Phone: 410-280-8850
Attn.: Mr. Kevin Gaughan

Land Use Attorney
Land, Carroll & Blair, P.C.
524 King Street
Alexandria, VA 22314

Phone:
Attn.: Mr. Duncan Blair

COMMONWEALTH OF VIRGINIA
LEE C. QUILL
Lic. No. 040104897
ARCHITECT
10/19/17

KEY PLAN



Copyright © 2017

Issues / Revisions

9.08.17	DSUP Initial Completeness
10.20.17	DSUP Submission 03
11.10.17	DSUP Submission 04

New Episcopal Church of the Resurrection

City of Alexandria, Virginia

CQA # 21501

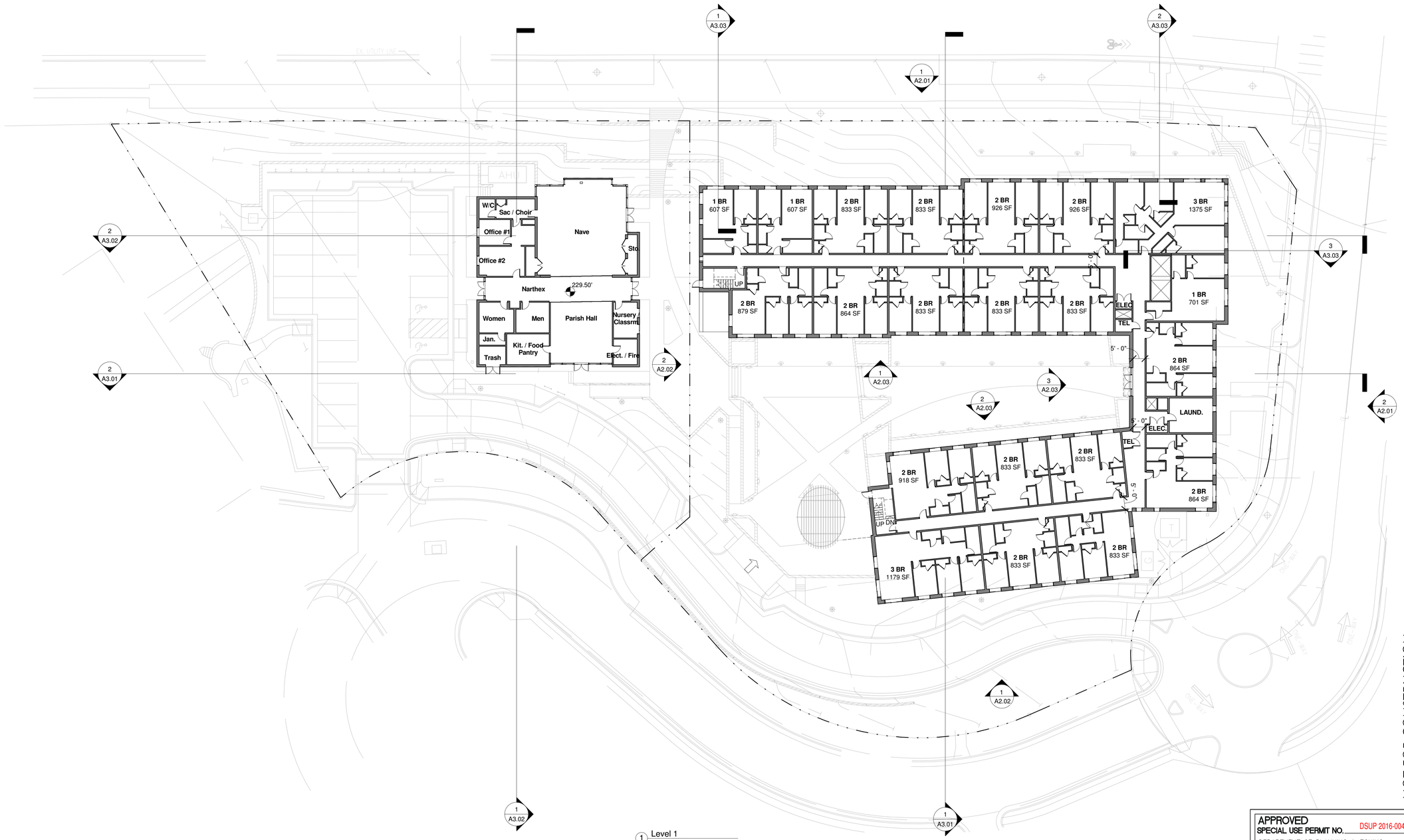
Drawing Title

Multi-Family Podium/Pkg Level Floor Plan

Scale: As indicated
Drawn By: FA/RM
Date: 10/20/17
Checked By: LQ

A1.03

11/9/2017 11:45:07 AM



1 Level 1
1" = 20'-0"

NOT FOR CONSTRUCTION

Unit Mix					
Floor	Studio	1 BR	2 BR	3BR	Total
B2	0	0	0	0	0
B1	0	1	2	1	4
Podium	0	1	2	1	4
1	0	3	16	2	21
2	0	3	16	2	21
3	0	3	16	2	21
4	0	3	16	2	21
5	0	3	16	2	21
Total	0	17	84	12	113

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

CUNNINGHAM | QUILL ARCHITECTS PLLC

1054 31ST STREET NW
SUITE 315
WASHINGTON, DC
20007

PH. 202.337.0090
FX. 202.337.0092
www.cunninghamquill.com

Record Owner:
Church of the Resurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Walter L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Landscape Architect:
Campion Hruby
111 Cathedral St.
Annapolis, MD 21401

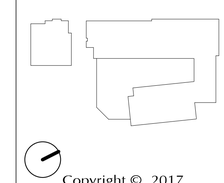
Phone: 410-280-8850
Attn.: Mr. Kevin Gaughan

Land Use Attorney
Land, Carroll & Blair, P.C.
524 King Street
Alexandria, VA 22314

Phone:
Attn.: Mr. Duncan Blair

COMMONWEALTH OF VIRGINIA
LEE C. QUILL
Lic. No. 0401004897
ARCHITECT
10/19/17

KEY PLAN



Copyright © 2017

Issues / Revisions

9.08.17	DSUP Initial Completeness
10.20.17	DSUP Submission 03
11.10.17	DSUP Submission 04

New Episcopal Church of the Resurrection

City of Alexandria, Virginia

CQA # 21501

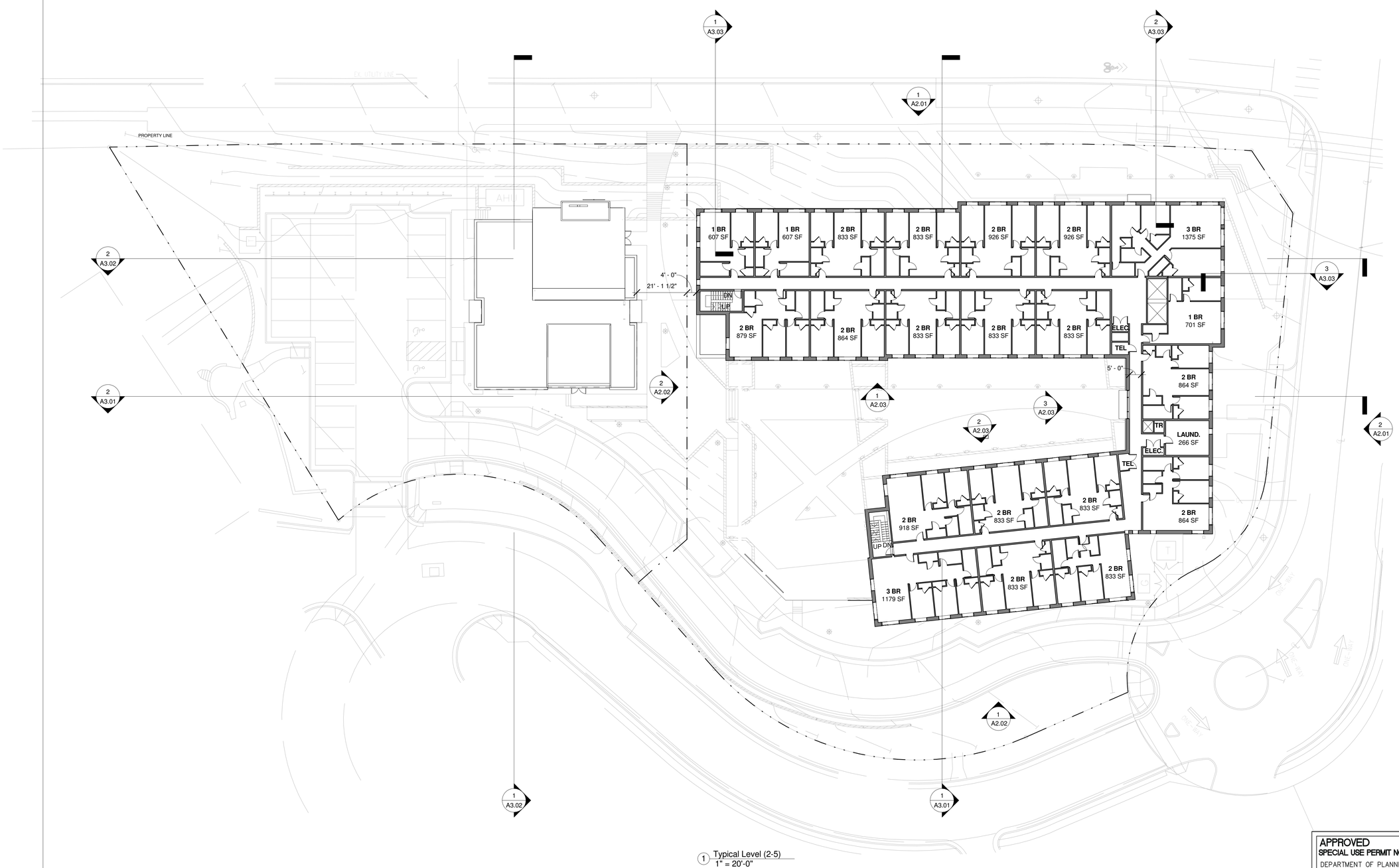
Drawing Title

Multi-Family Level 1 / Plaza Floor Plan

Scale: As indicated
Drawn By: EA/RM
Date: 11/10/17
Checked By: LQ

A1.04

11/9/2017 11:45:09 AM



1 Typical Level (2-5)
1" = 20'-0"

Unit Mix					
Floor	Studio	1 BR	2 BR	3BR	Total
B2	0	0	0	0	0
B1	0	1	2	1	4
Podium	0	1	2	1	4
1	0	3	16	2	21
2	0	3	16	2	21
3	0	3	16	2	21
4	0	3	16	2	21
5	0	3	16	2	21
Total	0	17	84	12	113

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

NOT FOR CONSTRUCTION

CUNNINGHAM | QUILL ARCHITECTS PLLC

1054 31ST STREET NW
SUITE 315
WASHINGTON, DC
20007

PH. 202.337.0090
FX. 202.337.0092
www.cunninghamquill.com

Record Owner:
Church of the Resurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Walter L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Landscape Architect:
Campion Hruby
111 Cathedral St.
Annapolis, MD 21401

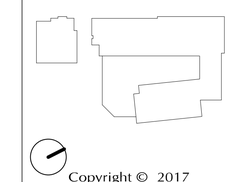
Phone: 410-280-8850
Attn.: Mr. Kevin Gaughan

Land Use Attorney
Land, Carroll & Blair, P.C.
524 King Street
Alexandria, VA 22314

Phone:
Attn.: Mr. Duncan Blair

COMMONWEALTH OF VIRGINIA
LEE C. QUILL
Lic. No. 040100497
ARCHITECT
10/19/17

KEY PLAN



Copyright © 2017

Issues / Revisions

9.08.17	DSUP Initial Completeness
10.20.17	DSUP Submission 03
11.10.17	DSUP Submission 04

New Episcopal Church of the Resurrection

City of Alexandria, Virginia

CQA # 21501

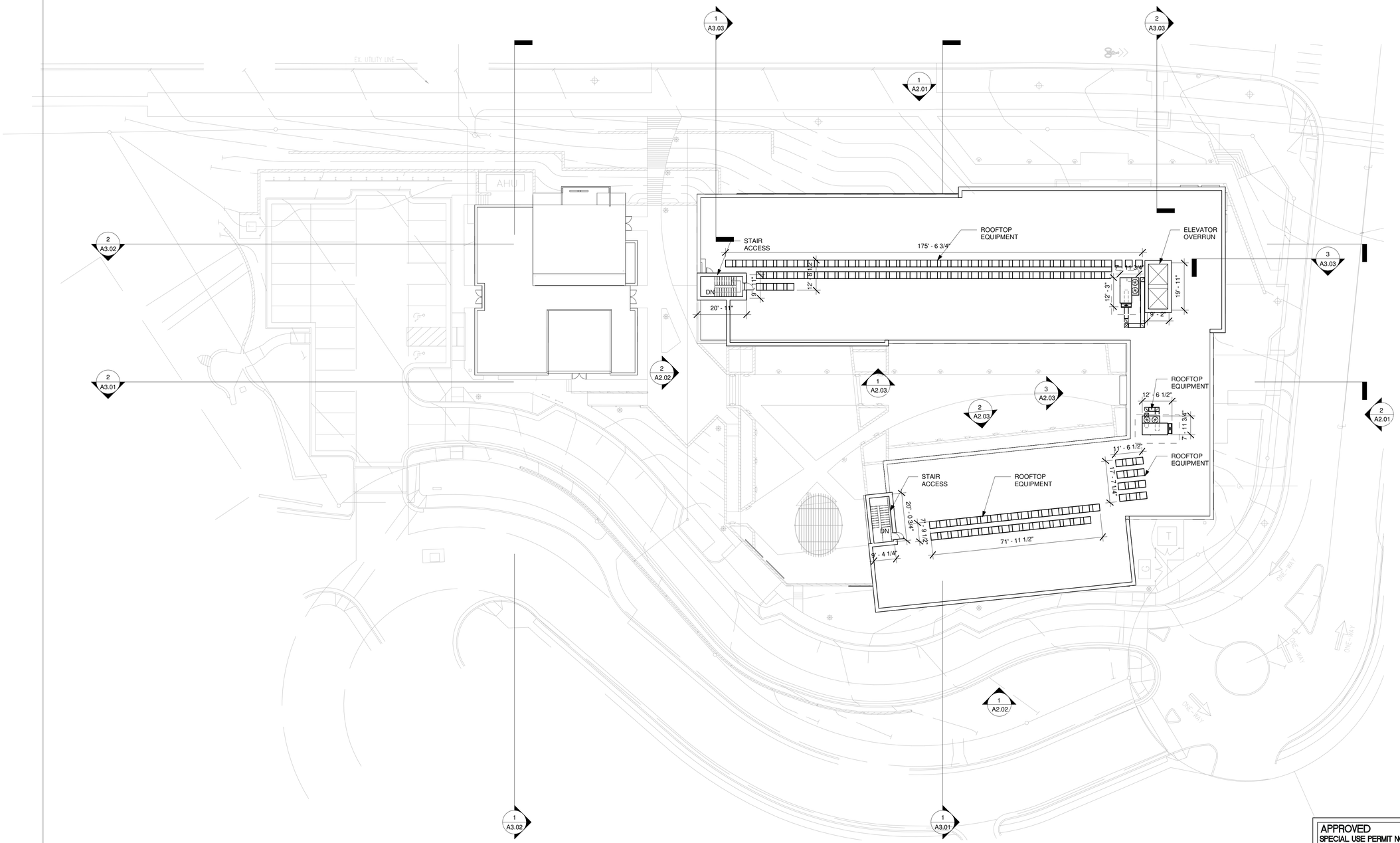
Drawing Title

Multi-Family Typical Floor Plan (Level 2-5)

Scale: As indicated
Drawn By: EA/RM
Date: 11/10/17
Checked By: LQ

A1.05

11/9/2017 11:45:10 AM



1 Roof
1" = 20'-0"

NOT FOR CONSTRUCTION

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

CUNNINGHAM | QUILL ARCHITECTS PLLC

1054 31ST STREET NW
SUITE 315
WASHINGTON, DC
20007

PH. 202.337.0090
FX. 202.337.0092
www.cunninghamquill.com

Record Owner:
Church of the Resurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Walter L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Landscape Architect:
Campion Hruby
111 Cathedral St.
Annapolis, MD 21401

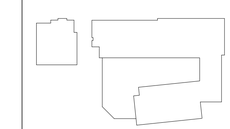
Phone: 410-280-8850
Attn.: Mr. Kevin Gaughan

Land Use Attorney
Land, Carroll & Blair, P.C.
524 King Street
Alexandria, VA 22314

Phone:
Attn.: Mr. Duncan Blair

COMMONWEALTH OF VIRGINIA
LEE C. QUILL
Lic. No. 040100489?
ARCHITECT
10/19/17

KEY PLAN



Copyright © 2017

Issues / Revisions

9.08.17	DSUP Initial Completeness
10.20.17	DSUP Submission 03
11.10.17	DSUP Submission 04

New Episcopal Church of the Resurrection

City of Alexandria, Virginia

CQA # 21501

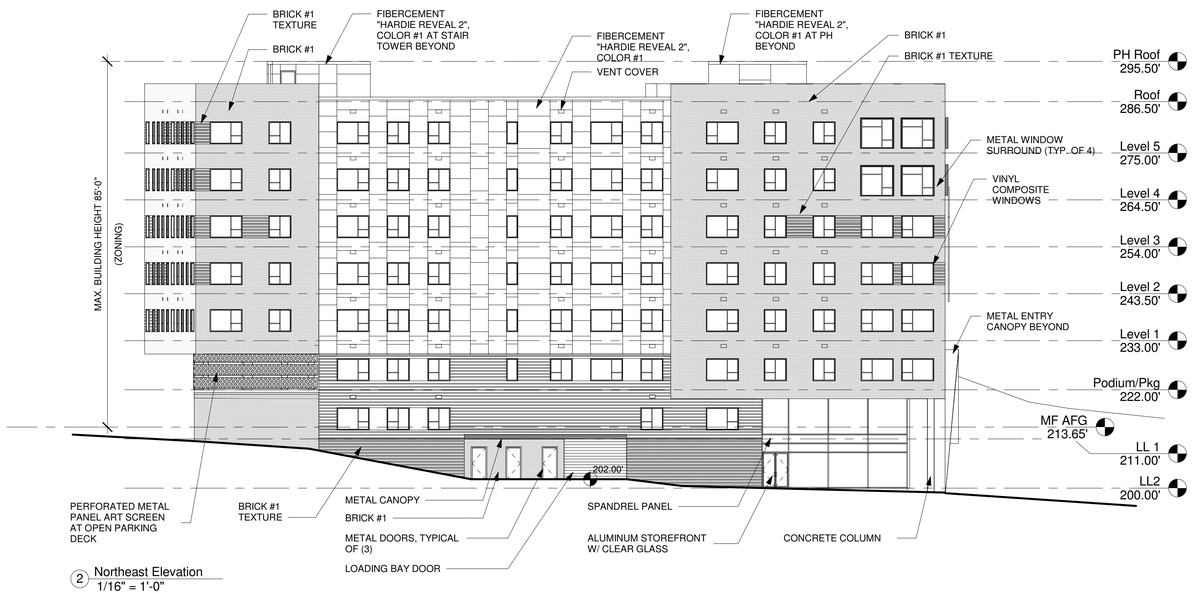
Drawing Title

Multi-Family Roof Plan

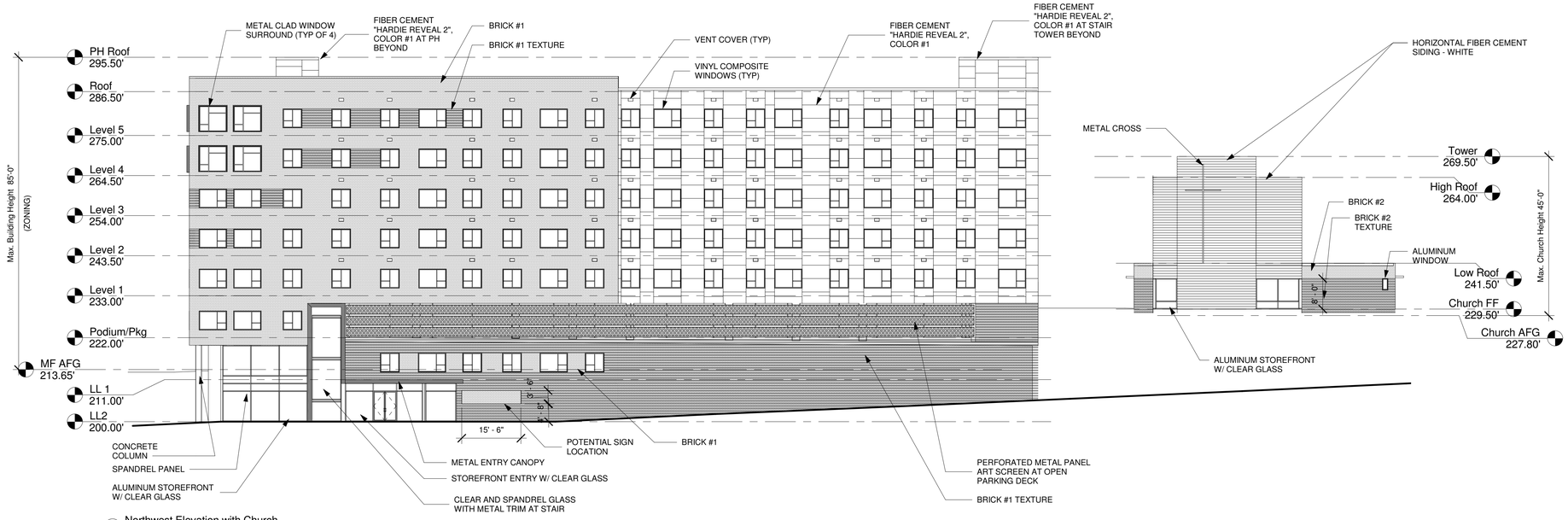
Scale: As indicated	Drawn By: EA/RM
Date: 11/10/17	Checked By: LQ

A1.06

11/9/2017 11:45:11 AM



2 Northeast Elevation
1/16" = 1'-0"



1 Northwest Elevation with Church
1/16" = 1'-0"

NOT FOR CONSTRUCTION

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

CUNNINGHAM | QUILL ARCHITECTS PLLC

1054 31ST STREET NW
SUITE 315
WASHINGTON, DC
20007

PH. 202.337.0090
FX. 202.337.0092
www.cunninghamquill.com

Record Owner:
Church of the Resurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Walter L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Landscape Architect:
Campion Hruby
111 Cathedral St.
Annapolis, MD 21401

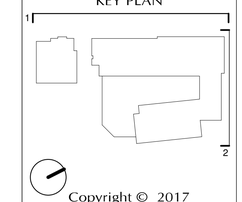
Phone: 410-280-8850
Attn.: Mr. Kevin Gaughan

Land Use Attorney
Land, Carroll & Blair, P.C.
524 King Street
Alexandria, VA 22314

Phone:
Attn.: Mr. Duncan Blair

COMMONWEALTH OF VIRGINIA
LEE C. QUILL
Lic. No. 0401004897
ARCHITECT
10/19/17

KEY PLAN



Copyright © 2017

Issues / Revisions

9.08.17	DSUP Initial Completeness
10.20.17	DSUP Submission 03
11.10.17	DSUP Submission 04

New Episcopal Church of the Resurrection

City of Alexandria, Virginia

CQA # 21501

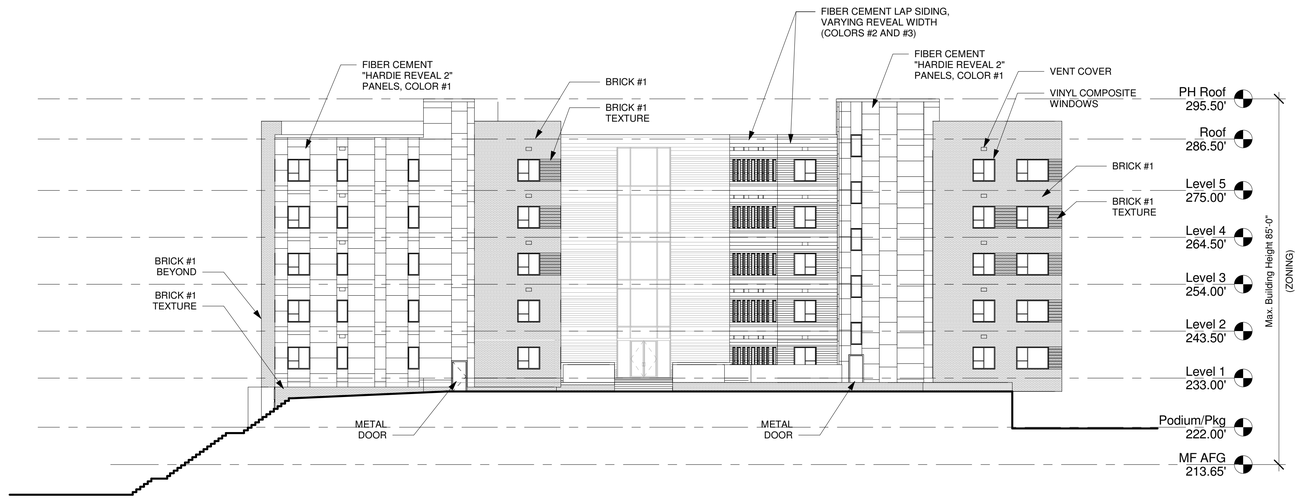
Drawing Title

Multi-Family Exterior Elevations

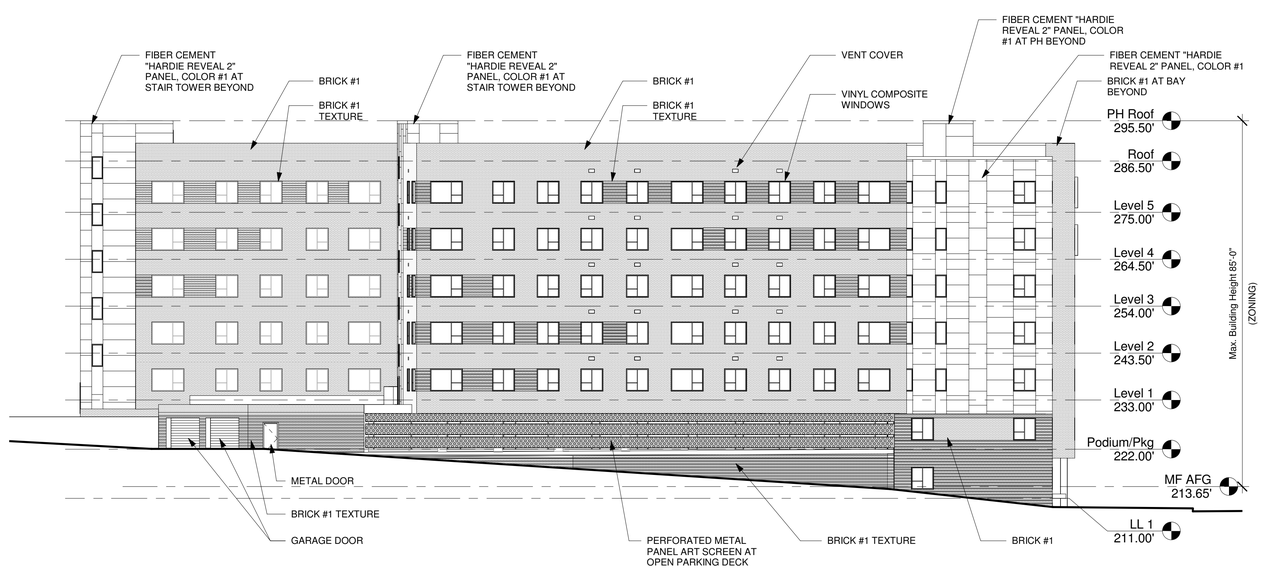
Scale: As indicated	Drawn By: EA/RM
Date: 11/10/17	Checked By: LQ

A2.01

11/9/2017 11:45:16 AM



2 Southwest Elevation
1/16" = 1'-0"



1 Southeast Elevation
1/16" = 1'-0"

CUNNINGHAM | QUILL ARCHITECTS PLLC

1054 31ST STREET NW
SUITE 315
WASHINGTON, DC
20007

PH. 202.337.0090
FX. 202.337.0092
www.cunninghamquill.com

Record Owner:
Church of the Resurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Walter L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Landscape Architect:
Campion Hruby
111 Cathedral St.
Annapolis, MD 21401

Phone: 410-280-8850
Attn.: Mr. Kevin Gaughan

Land Use Attorney
Land, Carroll & Blair, P.C.
524 King Street
Alexandria, VA 22314

Phone:
Attn.: Mr. Duncan Blair

COMMONWEALTH OF VIRGINIA
LEE C. QUILL
Lic. No. 0401004897
ARCHITECT
10/19/17

KEY PLAN

Copyright © 2017

Issues / Revisions

9.08.17	DSUP Initial Completeness
10.20.17	DSUP Submission 03
11.10.17	DSUP Submission 04

NOT FOR CONSTRUCTION

New Episcopal Church of the Resurrection

City of Alexandria, Virginia

CQA # 21501

Drawing Title

Multi-Family Exterior Elevations

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

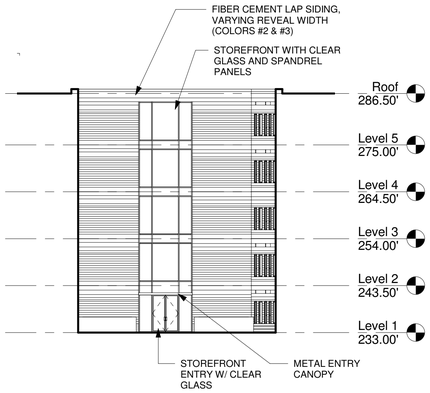
DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

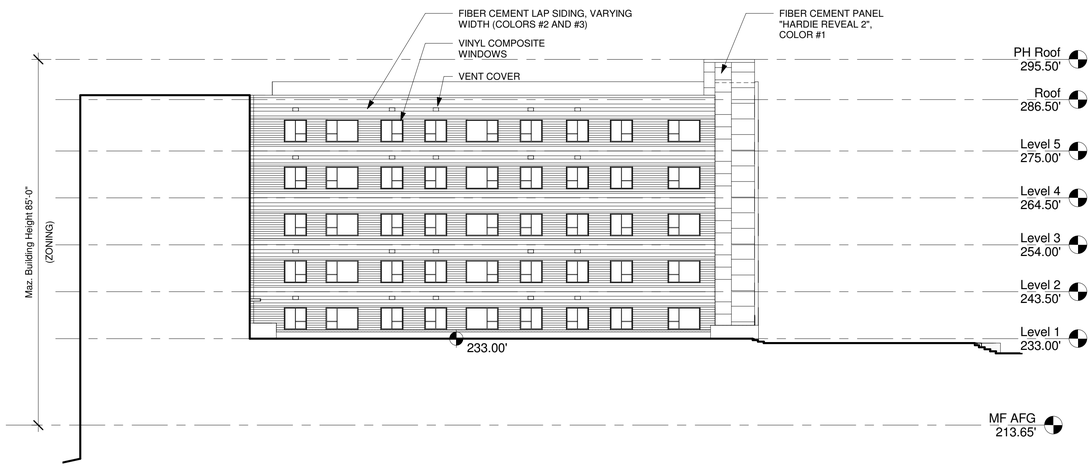
Scale: As indicated	Drawn By: EA/RM
Date: 11/10/17	Checked By: LQ

A2.02

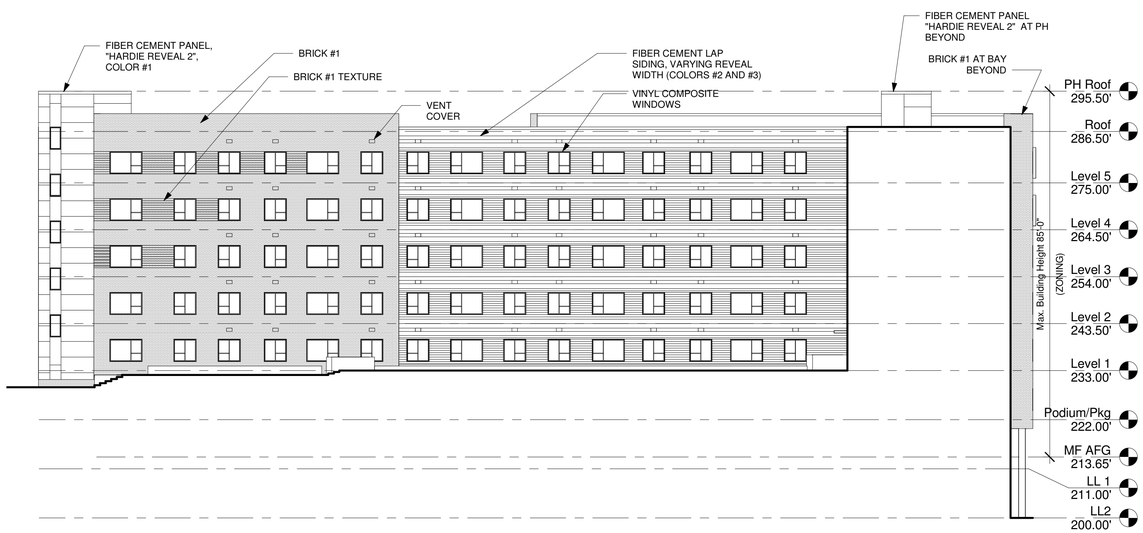
11/9/2017 11:45:22 AM



3 Southwest Courtyard
1/16" = 1'-0"



2 Northwest Courtyard
1/16" = 1'-0"



1 Southeast Courtyard
1/16" = 1'-0"

CUNNINGHAM | QUILL ARCHITECTS PLLC

1054 31ST STREET NW
SUITE 315
WASHINGTON, DC
20007

PH. 202.337.0090
FX. 202.337.0092
www.cunninghamquill.com

Record Owner:
Church of the Resurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Walter L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Landscape Architect:
Campion Hruby
111 Cathedral St.
Annapolis, MD 21401

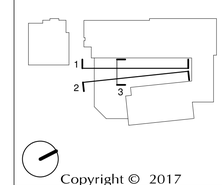
Phone: 410-280-8850
Attn.: Mr. Kevin Gaughan

Land Use Attorney
Land, Carroll & Blair, P.C.
524 King Street
Alexandria, VA 22314

Phone:
Attn.: Mr. Duncan Blair

COMMONWEALTH OF VIRGINIA
LEE C. QUILL
Lic. No. 0401004897
ARCHITECT
10/19/17

KEY PLAN



Copyright © 2017

Issues / Revisions

9.08.17	DSUP Initial Completeness
10.20.17	DSUP Submission 03
11.10.17	DSUP Submission 04

NOT FOR CONSTRUCTION

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

New Episcopal Church of the Resurrection

City of Alexandria, Virginia

CQA # 21501

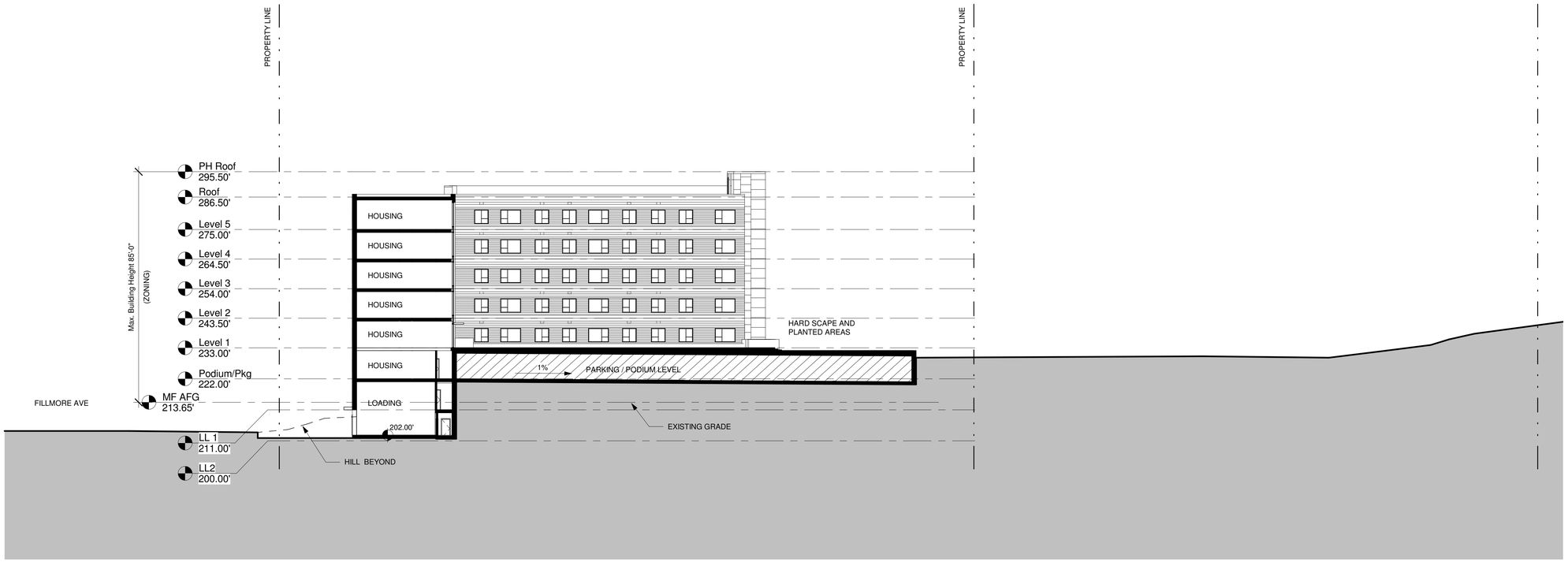
Drawing Title

Multi-Family Exterior Elevations

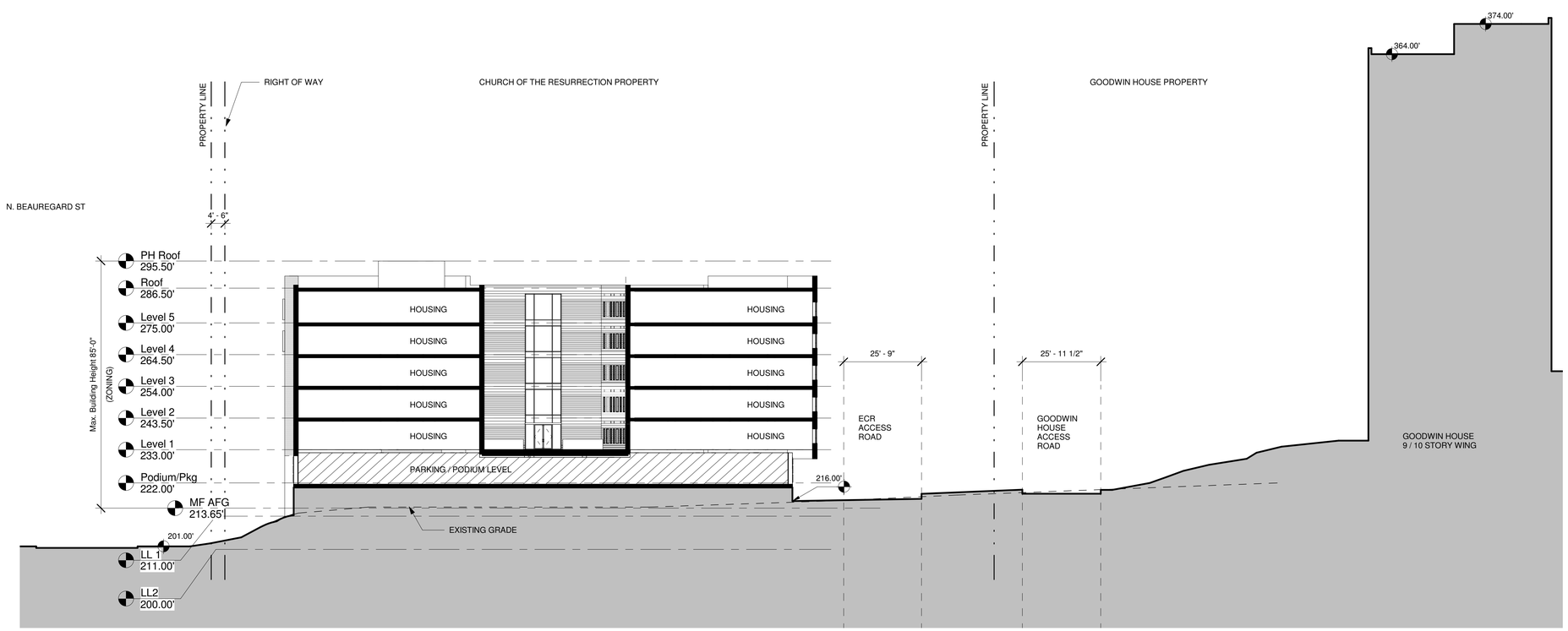
Scale: As indicated	Drawn By: EA/RM
Date: 11/10/17	Checked By: LQ

A2.03

11/9/2017 11:45:25 AM



2 Section 2 - North-South
1" = 20'-0"



1 Section 1 - East-West
1" = 20'-0"

NOT FOR CONSTRUCTION

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

CUNNINGHAM | QUILL
ARCHITECTS
PLLC

1054 31ST STREET NW
SUITE 315
WASHINGTON, DC
20007

PH. 202.337.0090
FX. 202.337.0092
www.cunninghamquill.com

Record Owner:
Church of the Resurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Walter L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Landscape Architect:
Campion Hruby
111 Cathedral St.
Annapolis, MD 21401

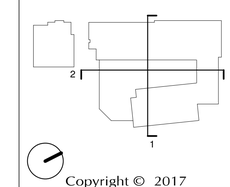
Phone: 410-280-8850
Attn.: Mr. Kevin Gaughan

Land Use Attorney
Land, Carroll & Blair, P.C.
524 King Street
Alexandria, VA 22314

Phone:
Attn.: Mr. Duncan Blair

COMMONWEALTH OF VIRGINIA
LEE C. QUILL
Lic. No. 0401004897
ARCHITECT
10/19/17

KEY PLAN



Copyright © 2017

Issues / Revisions

9.08.17	DSUP Initial Completeness
10.20.17	DSUP Submission 03
11.10.17	DSUP Submission 04

New Episcopal Church of the Resurrection

City of Alexandria, Virginia

CQA # 21501

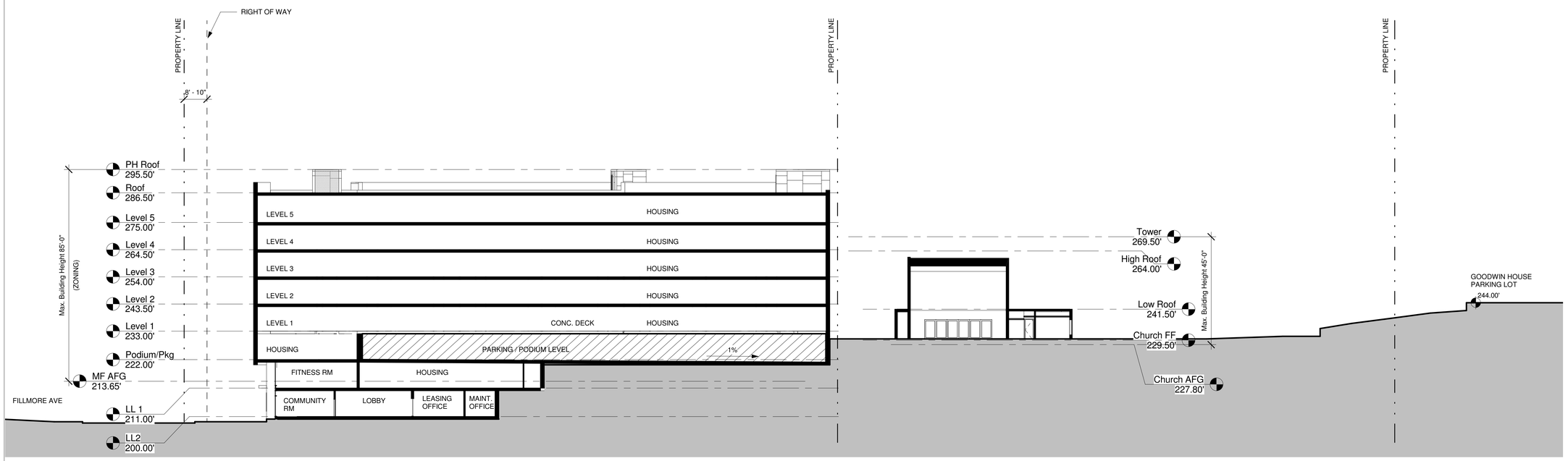
Drawing Title

Site Sections

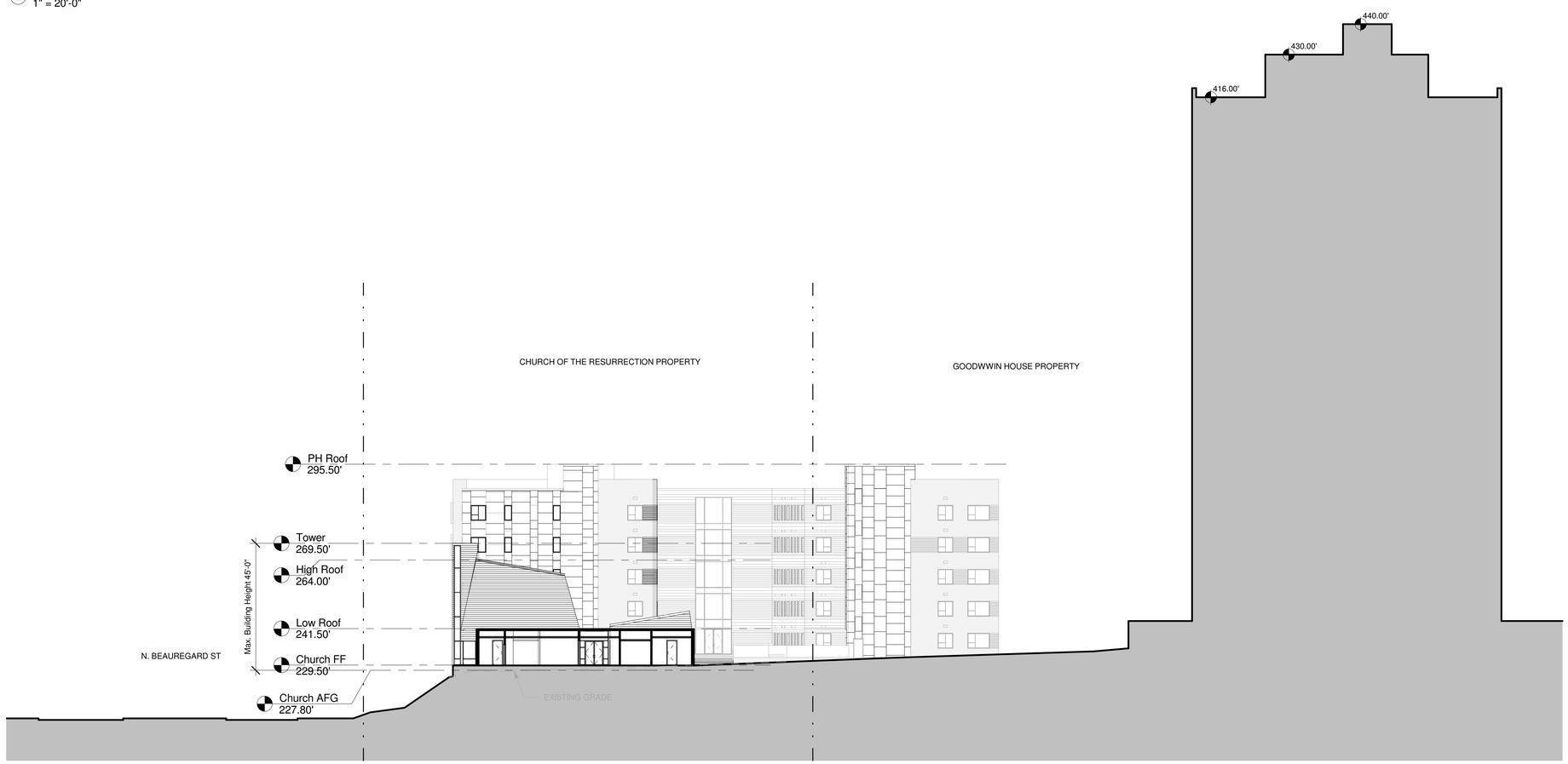
Scale: As indicated	Drawn By: EA/RM
Date: 11/10/17	Checked By: LQ

A3.01

11/9/2017 11:45:28 AM



2 Section 2 - North-South
1" = 20'-0"



1 Section 1 - East-West
1" = 20'-0"

NOT FOR CONSTRUCTION

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

CUNNINGHAM | QUILL ARCHITECTS PLLC

1054 31ST STREET NW
SUITE 315
WASHINGTON, DC
20007

PH. 202.337.0090
FX. 202.337.0092
www.cunninghamquill.com

Record Owner:
Church of the Resurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Walter L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Landscape Architect:
Campion Hruby
111 Cathedral St.
Annapolis, MD 21401

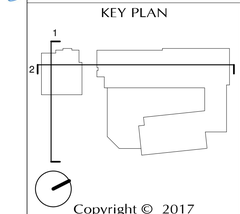
Phone: 410-280-8850
Attn.: Mr. Kevin Gaughan

Land Use Attorney
Land, Carroll & Blair, P.C.
524 King Street
Alexandria, VA 22314

Phone:
Attn.: Mr. Duncan Blair

COMMONWEALTH OF VIRGINIA
LEE C. QUILL
Lic. No. 0401004897
ARCHITECT
10/19/17

KEY PLAN



Copyright © 2017

Issues / Revisions

9.08.17	DSUP Initial Completeness
10.20.17	DSUP Submission 03
11.10.17	DSUP Submission 04

New Episcopal Church of the Resurrection

City of Alexandria, Virginia

CQA # 21501

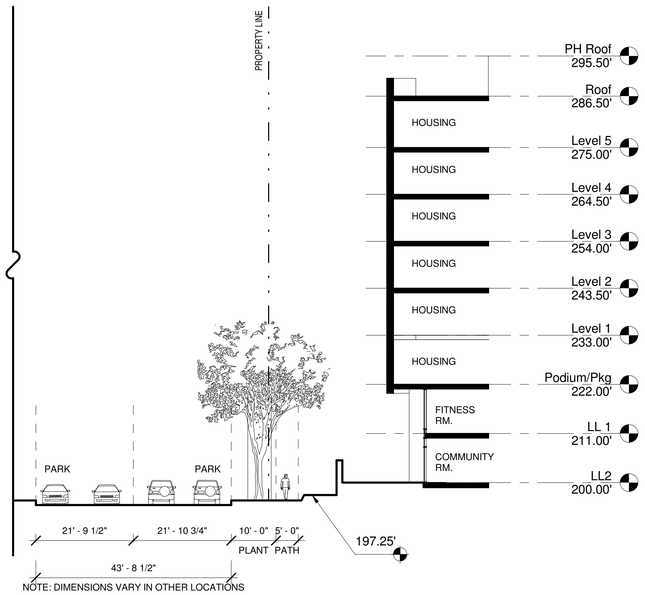
Drawing Title

Site Sections

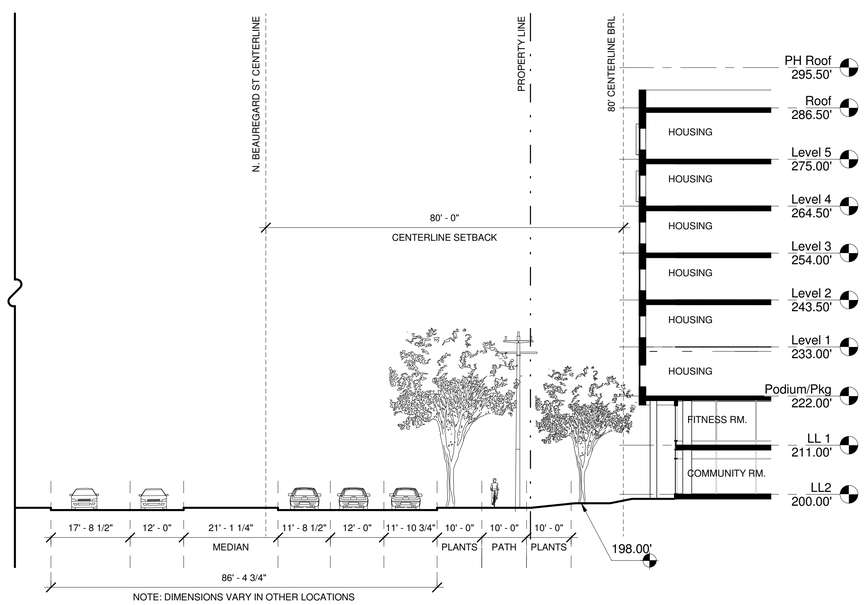
Scale: As indicated	Drawn By: EA/RM
Date: 11/10/17	Checked By: LQ

A3.02

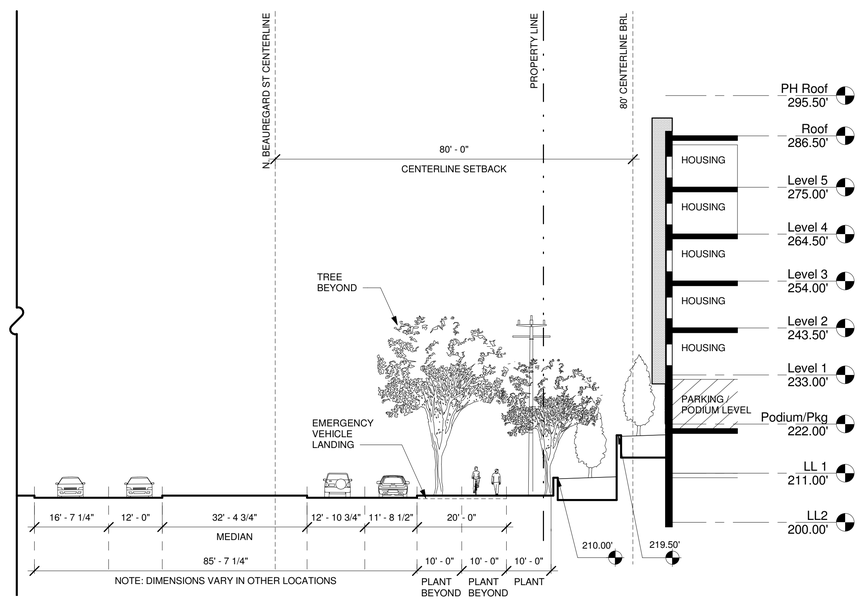
11/9/2017 11:45:33 AM



3 Fillmore Avenue Street Section
1/16" = 1'-0"



2 N. Beauregard Street Section 2
1/16" = 1'-0"



1 N. Beauregard Street Section 1
1/16" = 1'-0"

CUNNINGHAM | QUILL ARCHITECTS PLLC

1054 31ST STREET NW
SUITE 315
WASHINGTON, DC
20007

PH. 202.337.0090
FX. 202.337.0092
www.cunninghamquill.com

Record Owner:
Church of the Resurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Walter L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Landscape Architect:
Campion Hruby
111 Cathedral St.
Annapolis, MD 21401

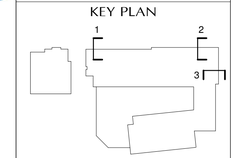
Phone: 410-280-8850
Attn.: Mr. Kevin Gaughan

Land Use Attorney
Land, Carroll & Blair, P.C.
524 King Street
Alexandria, VA 22314

Phone:
Attn.: Mr. Duncan Blair

COMMONWEALTH OF VIRGINIA
LEE C. QUILL
Lic. No. 0401004897
ARCHITECT
10/19/17

KEY PLAN



Copyright © 2017

Issues / Revisions

9.08.17	DSUP Initial Completeness
10.20.17	DSUP Submission 03
11.10.17	DSUP Submission 04

NOT FOR CONSTRUCTION

New Episcopal Church of the Resurrection

City of Alexandria, Virginia

CQA # 21501

Drawing Title

Site Sections

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

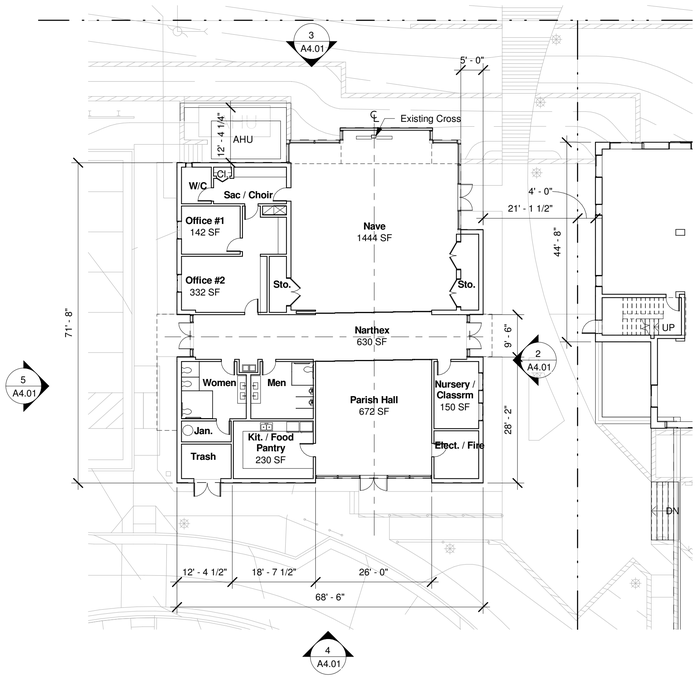
DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

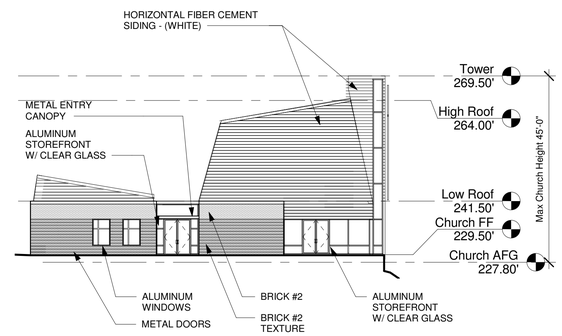
Scale: As indicated	Drawn By: EA/RM
Date: 11/10/17	Checked By: LQ

A3.03

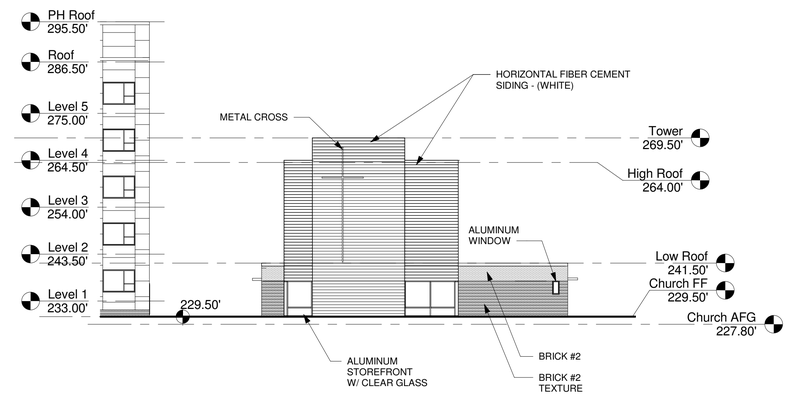
11/9/2017 11:45:34 AM



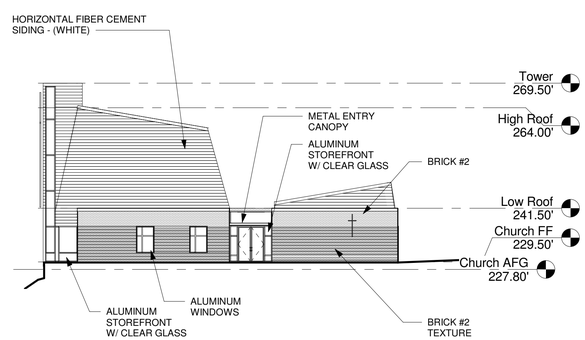
1 Church Plan
1/16" = 1'-0"



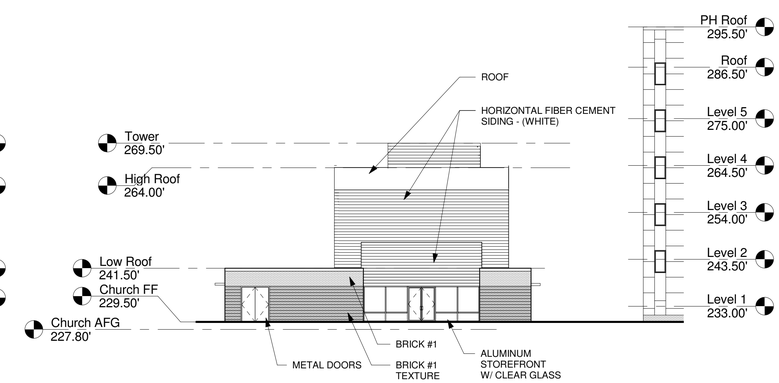
2 Church NE Elevation
1/16" = 1'-0"



3 Church NW Elevation
1/16" = 1'-0"



5 Church SW Elevation
1/16" = 1'-0"



4 Church SE Elevation
1/16" = 1'-0"

NOT FOR CONSTRUCTION

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

CUNNINGHAM | QUILL
ARCHITECTS
PLLC

1054 31ST STREET NW
SUITE 315
WASHINGTON, DC
20007

PH. 202.337.0090
FX. 202.337.0092
www.cunninghamquill.com

Record Owner:
Church of the Resurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Walter L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Landscape Architect:
Campion Hruby
111 Cathedral St.
Annapolis, MD 21401

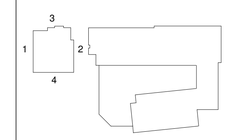
Phone: 410-280-8850
Attn.: Mr. Kevin Gaughan

Land Use Attorney
Land, Carroll & Blair, P.C.
524 King Street
Alexandria, VA 22314

Phone:
Attn.: Mr. Duncan Blair

COMMONWEALTH OF VIRGINIA
LEE C. QUILL
Lic. No. 0401004897
ARCHITECT
10/19/17

KEY PLAN



Copyright © 2017

Issues / Revisions

9.08.17	DSUP Initial Completeness
10.20.17	DSUP Submission 03
11.10.17	DSUP Submission 04

New Episcopal Church
of the Resurrection

City of Alexandria, Virginia

CQA # 21501

Drawing Title

Church Plan and Elevations

Scale: As indicated	Drawn By: EA/RM
Date: 11/10/17	Checked By: LQ

A4.01

11/9/2017 11:45:35 AM

NOTE: ALL IMAGES ARE FOR REFERENCE ONLY

6 Northeast Elevation
NTS

5 Northwest Elevation
NTS

3 Southeast Elevation
NTS

4 Southwest Elevation
NTS

2 Southeast Courtyard Elevation
NTS

1 Northwest Courtyard Elevation
NTS

CUNNINGHAM | QUILL ARCHITECTS PLLC

1054 31ST STREET NW
SUITE 315
WASHINGTON, DC
20007

PH. 202.337.0090
FX. 202.337.0092
www.cunninghamquill.com

Record Owner:
Church of the Resurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Walter L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Landscape Architect:
Campion Hruby
111 Cathedral St.
Annapolis, MD 21401

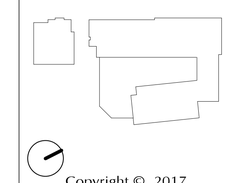
Phone: 410-280-8850
Attn.: Mr. Kevin Gaughan

Land Use Attorney
Land, Carroll & Blair, P.C.
524 King Street
Alexandria, VA 22314

Phone:
Attn.: Mr. Duncan Blair

COMMONWEALTH OF VIRGINIA
LEE C. QUILL
Lic. No. 0401004897
ARCHITECT
10/19/17

KEY PLAN



Copyright © 2017

Issues / Revisions

9.08.17	DSUP Initial Completeness
10.20.17	DSUP Submission 03
11.10.17	DSUP Submission 04

NOT FOR CONSTRUCTION

New Episcopal Church of the Resurrection

City of Alexandria, Virginia

CQA # 21501

Drawing Title

Multi-Family Color Elevations

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

Scale: As indicated	Drawn By: EA/RM
Date: 11/10/17	Checked By: LQ

A5.01

11/9/2017 11:45:41 AM

NOTE: ALL IMAGES ARE FOR REFERENCE ONLY

3 View 1 Access Road
NTS

4 View 2 from Access Road
NTS

2 View from N. Beauregard Street
NTS

1 View from Fillmore Avenue
NTS

NOT FOR CONSTRUCTION

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

CUNNINGHAM | QUILL ARCHITECTS PLLC

1054 31ST STREET NW
SUITE 315
WASHINGTON, DC
20007

PH. 202.337.0090
FX. 202.337.0092
www.cunninghamquill.com

Record Owner:
Church of the Resurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Walter L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Landscape Architect:
Campion Hruby
111 Cathedral St.
Annapolis, MD 21401

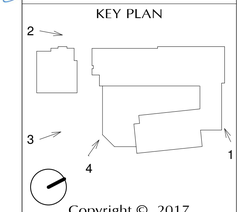
Phone: 410-280-8850
Attn.: Mr. Kevin Gaughan

Land Use Attorney
Land, Carroll & Blair, P.C.
524 King Street
Alexandria, VA 22314

Phone:
Attn.: Mr. Duncan Blair

COMMONWEALTH OF VIRGINIA
LEE C. QUILL
Lic. No. 0401004897
ARCHITECT
10/19/17

KEY PLAN



Copyright © 2017

Issues / Revisions

9.08.17	DSUP Initial Completeness
10.20.17	DSUP Submission 03
11.10.17	DSUP Submission 04

New Episcopal Church of the Resurrection

City of Alexandria, Virginia

CQA # 21501

Drawing Title

Multi-Family 3-D Views

Scale: As indicated	Drawn By: EA/MA
Date: 11/10/17	Checked By: LQ

A5.02

11/9/2017 11:45:44 AM

NOTE: ALL IMAGES ARE FOR REFERENCE ONLY

3 West View from N. Beauregard Street
NTS

4 North View from N. Beauregard Street
NTS

2 South View from Private Access Road
NTS

1 East View from Private Access Road
NTS

NOT FOR CONSTRUCTION

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

CUNNINGHAM | QUILL ARCHITECTS PLLC

1054 31ST STREET NW
SUITE 315
WASHINGTON, DC
20007

PH. 202.337.0090
FX. 202.337.0092
www.cunninghamquill.com

Record Owner:
Church of the Resurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Walter L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Landscape Architect:
Campion Hruby
111 Cathedral St.
Annapolis, MD 21401

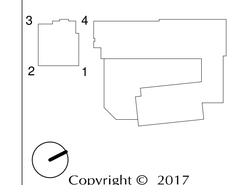
Phone: 410-280-8850
Attn.: Mr. Kevin Gaughan

Land Use Attorney
Land, Carroll & Blair, P.C.
524 King Street
Alexandria, VA 22314

Phone:
Attn.: Mr. Duncan Blair

COMMONWEALTH OF VIRGINIA
LEE C. QUILL
Lic. No. 0401004897
ARCHITECT
10/19/17

KEY PLAN



Copyright © 2017

Issues / Revisions

9.08.17	DSUP Initial Completeness
10.20.17	DSUP Submission 03
11.10.17	DSUP Submission 04

New Episcopal Church of the Resurrection

City of Alexandria, Virginia

CQA # 21501

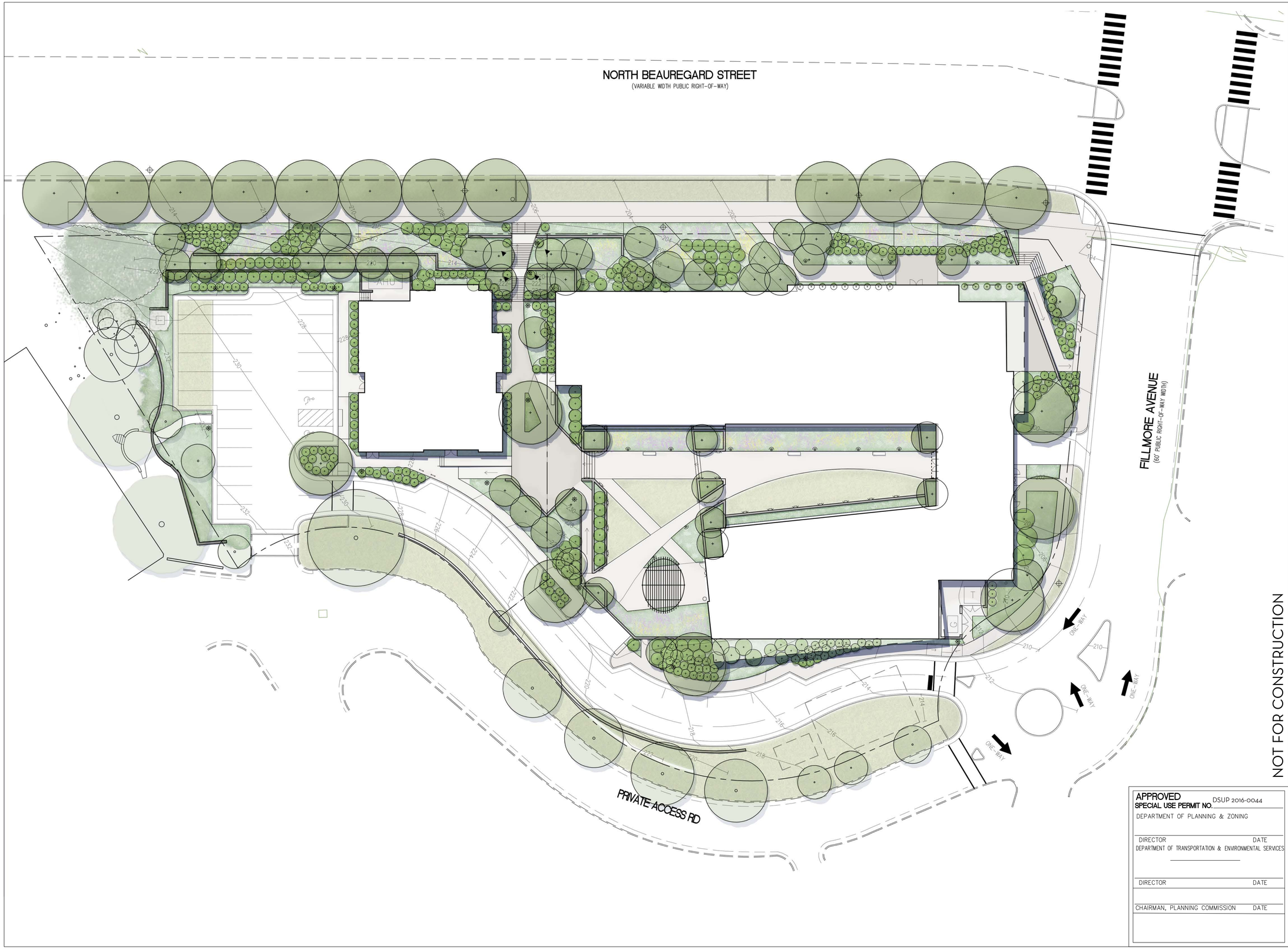
Drawing Title

Church 3-D Views

Scale: As indicated	Drawn By: EA/MA
Date: 11/10/17	Checked By: LQ

A5.03

11/9/2017 11:45:57 AM



NOT FOR CONSTRUCTION

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044

DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

CAMPION HRUBY
LANDSCAPE ARCHITECTS

AHC INC.

Record Owner:
Church of the Ressurection Tres of
2280 N. Beauregard St.
Alexandria, VA 2231

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Walsh

Civil Engineer:
Water L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Architect:
Cunningham Quill
1054 31st St. NW, Suite 315
Washington D.C., 20007

Land Use Attorney:
Land, Carroll & Blair, P.C.
524 King St.
Alexandria, VA 22314

Attn.: Mr. Duncan Blair

KEY PLAN

Issues / Revisions

09.08.2017	DSUP INITIAL COMPLETENESS
10.20.2017	DSUP SUB 03
11.10.2017	DSUP SUB 04

EPISCOPAL
CHURCH
OF THE
RESURRECTION
REDEVELOPMENT

City of
Alexandria, Virginia

CHLA # 21742

Drawing Title
Illustrataive Site
Plan

Campion Hruby Landscape Architects
111 Cathedral Street
Suite 100
Annapolis, MD 21401

This drawing and the design shown hereon are the property of Campion Hruby Landscape Architects. The reproduction, copying or use f this drawing without written consent is prohibited and any infringemenet will be subject to legal action.

Scale 1"=20'	Drawn By DW
Date 11/10/2017	Checked By KJG

L1.01

NORTH BEAUREGARD STREET
(VARIABLE WIDTH PUBLIC RIGHT-OF-WAY)

VCS 1983-NORTH ZONE

CONCRETE STEPS WITH 1 1/2" O.D. METAL GUARDRAILS ON BOTH SIDES; SEE CIVIL DRAWINGS FOR GRADING, TYP.

SEGMENTAL CONCRETE RETAINING WALL SEE CIVIL DRAWINGS FOR HEIGHTS

SPECIALTY PAVING (TYP.); CONCRETE OR CLAY UNIT PAVER ON CONCRETE

PLANTING AREA

SEGMENTAL CONCRETE RETAINING WALL WITH 42" GUARDRAIL, TYP. SEE CIVIL DRAWINGS FOR HEIGHTS

CELL-TEK REINFORCED TURF (OVER-FLOW PARKING AREA)

MASONRY RETAINING WALL SEE CIVIL DRAWINGS FOR HEIGHTS

WOODEN SCREEN

BUILDING OUTLINE, SEE ARCH, TYP.

EX. MEMORIAL GARDEN

AHU

PARKING LOT

CHURCH

MULTI-FAMILY RESIDENTIAL

TW 235.5

TW 235.0

TW 234.5

SYNTHETIC TURF, TYP

(1/L6.01) (2) BIKE RACK

PERMEABLE ASPHALT

CAST IN PLACE CONCRETE RETAINING WALL, TYP. SEE CIVIL DRAWINGS FOR WALL HEIGHTS

MASONRY PLANTER WALL WITH BRICK VENEER TO MATCH ARCHITECTURE, TYP. SEE ARCHITECTURE DRAWINGS

CONCRETE RAMP WITH 1 1/2" O.D. METAL HANDRAILS ON BOTH SIDES; SEE CIVIL DRAWINGS FOR GRADING

PARAPET WALL SEE ARCHITECTURE DRAWINGS

CAST IN PLACE CONCRETE RETAINING WALL, TYP. SEE CIVIL DRAWINGS FOR WALL HEIGHTS

CONCRETE PLANTER WALL WITH WOOD CAP

MASONRY PLANTER WALL WITH BRICK VENEER TO MATCH ARCHITECTURE, TYP. SEE ARCHITECTURE DRAWINGS

PERGOLA

SPECIALTY PAVING (TYP); PEDESTAL PAVER SYSTEM OVER STRUCTURE

PERMEABLE ASPHALT

SIGNAGE LOCATION CAST IN PLACE CONCRETE ACCENT WALL

(3/L6.01)TRASH RECEPTACLE, TYP.

CONCRETE STAIRS WITH 1 1/2" O.D. METAL HANDRAILS ON BOTH SIDES; SEE CIVIL DRAWINGS FOR GRADING

(1/L6.01) (2) BIKE RACKS

BUILDING OVERHANG FURNISHING AREA TBD

(2/L6.01) BENCH, TYP.

CURB AND GUTTER, SEE CIVIL, TYP.

CAST IN PLACE CONCRETE RETAING WALL SEE CIVIL DRAWINGS FOR HEIGHT

SERVICE/ TRASH

FILLMORE AVENUE
(60' PUBLIC RIGHT-OF-WAY)

FREE STANDING BRICK WALL TO MATCH ARCHITECTURE

CONCRETE SIDEWALK SEE CIVIL DRAWINGS FOR GRADING

ONE-WAY

PRIVATE ACCESS RD

LEGEND

PERMEABLE PAVING	
CELL-TEK REINFORCED TURF	
CONCRETE OR UNIT PAVER ON CONCRETE	
SYNTHETIC TURF ON GRAVEL	
PEDESTAL PAVER SYSTEM OVER STRUCTURE	
PEDESTAL PAVER SYSTEM OVER STRUCTURE	
CONCRETE	

0 10 20 IN FEET

N

NOT FOR CONSTRUCTION

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

CAMPION HRUBY
LANDSCAPE ARCHITECTS

AHC INC.

Record Owner:
Church of the Ressurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Water L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Architect:
Cunningham Quill
1054 31st St. NW, Suite 315
Washington D.C., 20007

Land Use Attorney:
Land, Carroll & Blair, P.C.
524 King St.
Alexandria, VA 22314

Attn.: Mr. Duncan Blair

KEY PLAN

Issues / Revisions

09.08.2017	DSUP INITIAL COMPLETENESS
10.20.2017	DSUP SUB 03
11.10.2017	DSUP SUB 04

EPISCOPAL CHURCH OF THE RESURRECTION REDEVELOPMENT

City of Alexandria, Virginia

CHLA # 21742

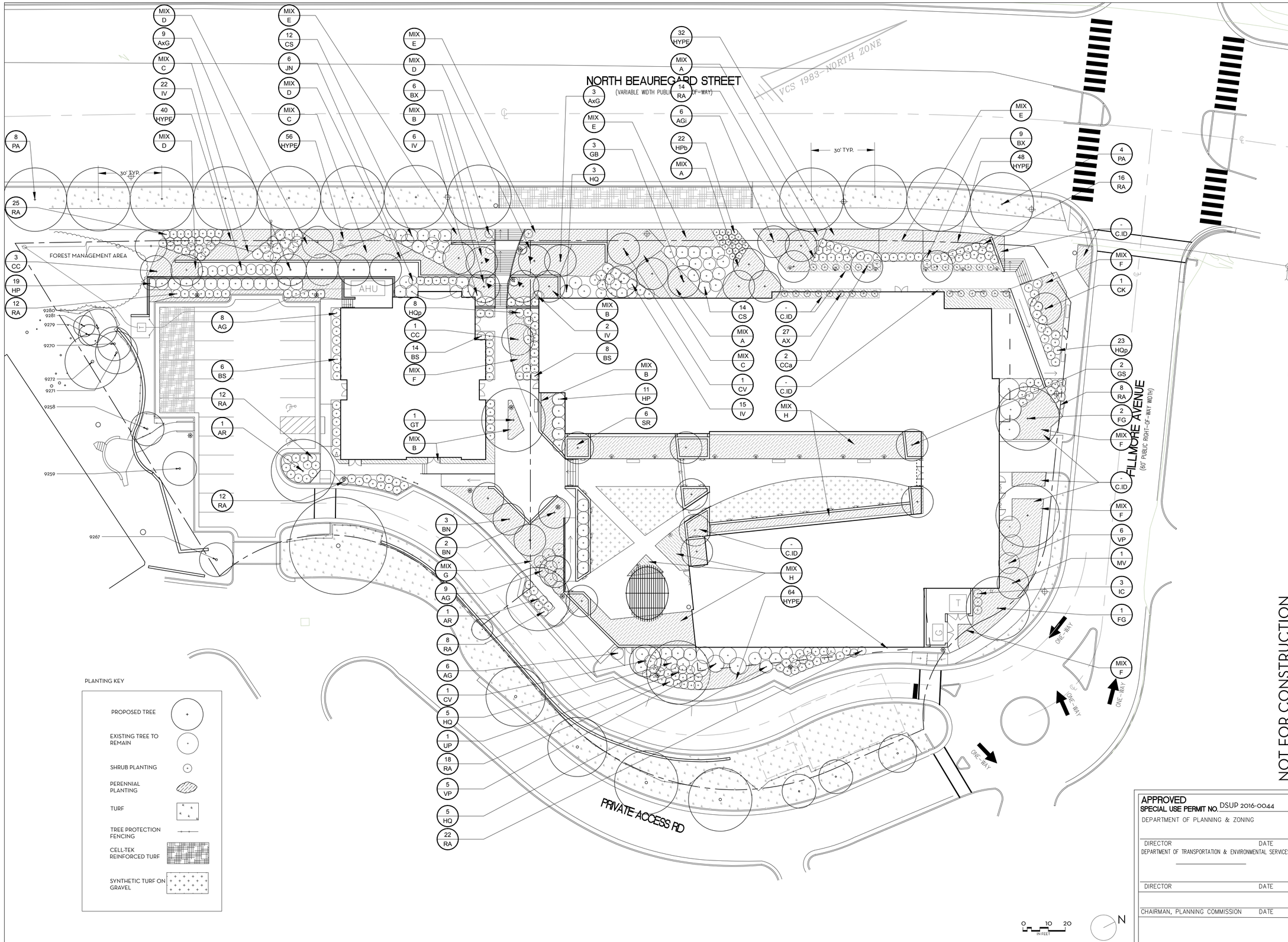
Drawing Title
Hardscape Plan

Campion Hruby Landscape Architects
111 Cathedral Street
Suite 100
Annapolis, MD 21401

This drawing and the design shown hereon are the property of Campion Hruby Landscape Architects. The reproduction, copying or use f this drawing without written consent is prohibited and any infringemenet will be subject to legal action.

Scale 1"=20'	Drawn By DW
Date 11/10/2017	Checked By KJG

L2.01



PLANTING KEY

- PROPOSED TREE
- EXISTING TREE TO REMAIN
- SHRUB PLANTING
- PERENNIAL PLANTING
- TURF
- TREE PROTECTION FENCING
- CELL-TEK REINFORCED TURF
- SYNTHETIC TURF ON GRAVEL

0 10 20 IN FEET

N

NOT FOR CONSTRUCTION

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

CAMPION HRUBY
LANDSCAPE ARCHITECTS

AHC INC.

Record Owner:
Church of the Ressurection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Water L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Architect:
Cunningham Quill
1054 31st St. NW, Suite 315
Washington D.C., 20007

Land Use Attorney:
Land, Carroll & Blair, P.C.
524 King St.
Alexandria, VA 22314

Attn.: Mr. Duncan Blair

KEY PLAN

Issues / Revisions

09.08.2017	DSUP INITIAL COMPLETENESS
10.20.2017	DSUP SUB 03
11.10.2017	DSUP SUB 04

EPISCOPAL CHURCH OF THE RESURRECTION REDEVELOPMENT

City of Alexandria, Virginia

CHLA # 21742

Drawing Title
PLANTING PLAN

Campion Hruby Landscape Architects
111 Cathedral Street
Suite 100
Annapolis, MD 21401

This drawing and the design shown hereon are the property of Campion Hruby Landscape Architects. The reproduction, copying or use f this drawing without written consent is prohibited and any infringemenet will be subject to legal action.

Scale	Drawn By
1"=20'	DW
Date 11/10/2017	Checked By KJG

L3.01

ECR – WEST PARCEL (CHURCH) – PLANTING SCHEDULE

Prepared by Campion Hruby Landscape Architects

STREET TREES

KEY	QTY	BOTANICAL NAME	COMMON NAME	HEIGHT	CALIPER	NOTES	CCA	TOTAL
PA	8	Platanus x acerifolia	London Plane	16–18'	3.5–4"	PROW	N/A	
LARGE SHADE TREES								
KEY	QTY	BOTANICAL NAME	COMMON NAME	HEIGHT	CALIPER	NOTES	CCA	TOTAL
AR	1	Acer rubrum 'October Glory'	Red Maple	16–18'	3.5–4"		1,250	1,250
MEDIUM SHADE TREES								
KEY	QTY	BOTANICAL NAME	COMMON NAME	HEIGHT	CALIPER	NOTES	CCA	TOTAL
GT	1	Gleditsia tricanthos	Thornless Honeylocust	12–14'	2–2.5"		750	750
BN	3	Betula nigra	River Birch	12'14	2–2.5"		750	2,250
MEDIUM ORNAMENTAL TREES								
KEY	QTY	BOTANICAL NAME	COMMON NAME	HEIGHT	CALIPER	NOTES	CCA	TOTAL
AxG	9	Amelanchier x grandiflora 'Autumn Brilliance'	Serviceberry	8–10'	1.5" min.		500	4,500
CC	4	Cercis canandensis	Redbud	8–10'	1.5" min.		500	2,000
SHRUBS								
KEY	QTY	BOTANICAL NAME	COMMON NAME		SIZE	NOTES	CCA	TOTAL
AG	8	Abelia x grandiflora 'Little Richard'	Glossy Abelia		Gal			
BS	20	Buxus sempervirens 'Winter Green'	Boxwood		Gal			
BX	6	Buxus x 'Green Mountain'	Green Mountain Boxwood		Gal			
HP	19	Hydrangea paniculata 'Little Lime'	Panicle Hydrangea		Gal			
HQp	8	Hydrangea quercifolia 'Pee Wee'	Dwarf Oakleaf Hydrangea		Gal			
HYPE	96	Hypericum 'Hidcote'	St. John's Wort		Gal			
IV	28	Itea virginica 'Henry's Garnet'	Virginia sweetspire		Gal			
JN	6	Jasminum nudiflorum	Winter Jasmine		Gal			
RA	61	Rhus aromatica	Fragrant Sumac		Gal			
CS	12	Cornus sericea	Red Twig Dogwood		Gal			
						TOTAL PROPOSED CCA		10,750
EXISTING TREES TO REMAIN								
LARGE SHADE TREES								
KEY	ID	BOTANICAL NAME	COMMON NAME	DBH		NOTES	CCA	
LT	9281	Liriodendron tulipifera	Tulip Poplar	5"			1,250	
MEDIUM SHADE TREES								
KEY	ID	BOTANICAL NAME	COMMON NAME	DBH		NOTES	CCA	
RS	9270	Robinia pseudoacacia	Black Locust	8"			750	
RS	9271	Robinia pseudoacacia	Black Locust	10"			750	
RS	9280	Robinia pseudoacacia	Black Locust	9"			750	
GT	9258	Gleditsia triacanthos	Honey Locust	8"			750	
GT	9259	Gleditsia triacanthos	Honey Locust	8"			750	
ORNAMENTAL TREES								
KEY	ID	BOTANICAL NAME	COMMON NAME	DBH		NOTES	CCA	
PS	9272	Prunus sp.	Ornamental Cherry	13"			500	
PS	9279	Prunus sp.	Ornamental Cherry	5"			500	
KC	9267	Cornus kousa	Kousa Dogwood	5"			250	
						TOTAL EXISTING CCA		6,250

CROWN COVERAGE WEST PARCEL		
SITE AREA	30,361	SF
REQUIRED CROWN COVERAGE (25%)	7,590	SF
EXISTING CROWN COVERAGE TO REMAIN	6,250	SF
MINIMUM REQUIRED PROPOSED COVERAGE	1,340	SF
PROPOSED COVERAGE	10,750	SF

PERENNIAL MIX A:
HAKONECHLOA
ASTILBE 'PEACH BLOSSOM'
PERSICARIA AMPLEXICAULIS 'FIRETAIL'

PERENNIAL MIX B:
CAREX 'ICE DANCE' (C.ID)
HEUCHERA VILLOSA 'AUTUMN BRIDE'

PERENNIAL MIX C:
AMSONIA HUBRICTII
ECHINACEA MAGNUS

PERENNIAL MIX D:
CALAMAGROSTIS X ACUTIFLORA 'KARL FOSTER'
HIBISCUS 'LORD BALTIMORE'

PERENNIAL MIX E:
PENISETUM 'KARLEY ROSE'
PEROVSKIA ATRIPLICIFOLIA

PERENNIAL MIX F:
HEUCHERA 'SIVER BELLS'
DRYOPTERIS MARGINALIS
GERANIUM INGWERSEN

PERENNIAL MIX G:
PANICUM VIRGATUM 'HEAVY METAL'
PENNISETUM 'KARLEY ROSE'
RUDBECKIA FULGIDA
MUHLENBERGIA CAPILLARIS

PERENNIAL MIX H:
CALAMAGROSTIS 'KARL FOERSTER'
PANICUM VIRGATUM 'HEAVY METAL'
PENNISETUM 'HAMELN'
PEROVSKIA ATRIPLICIFOLIA
RUDBECKIA FULGIDA 'DEAMII'
NEPETA RACEMOSA 'WALKER'S LOW'
LEUCANTHEMUM X SUPERBUM 'BECKY'
LIATRIS SPICATA
MAZUS REPTANS

ECR – EAST PARCEL (MULTI-FAMILY) – PLANTING SCHEDULE

Prepared by Campion Hruby Landscape Architects

STREET TREES

KEY	QTY	BOTANICAL NAME	COMMON NAME	HEIGHT	CALIPER	NOTES	CCA	TOTAL
PA	4	Platanus x acerifolia	London Plane	16–18'	3.5–4"	Matching	N/A	
LARGE SHADE TREES								
KEY	QTY	BOTANICAL NAME	COMMON NAME	HEIGHT	CALIPER	NOTES	CCA	TOTAL
AR	1	Acer rubrum 'October Glory'	Red Maple	16–18'	3.5–4"		1,250	1,250
FG	3	Fagus grandifolia	American Beech	16–18'	3.5–4"		1,250	3,750
UP	1	Ulmus parvifolia	Chinese Elm	16–18'	3.5–4"		1,250	1,250
MEDIUM SHADE TREES								
KEY	QTY	BOTANICAL NAME	COMMON NAME	HEIGHT	CALIPER	NOTES	CCA	TOTAL
BN	2	Betula nigra	River Birch	12–14'	2–2.5"	Single Stem	750	1,500
GB	3	Ginko biloba 'Princeton Sentry'	Ginkgo	12–14'	2–2.5"		750	2,250
GS	2	Ginko biloba 'Gold Spire'	Ginkgo	12–14'	2–2.5"	Over Structure, matching		
CK	1	Cladrasti kentukea	Yellowwood	12–14'	2–2.5"	Specimen	750	750
MEDIUM ORNAMENTAL TREES								
KEY	QTY	BOTANICAL NAME	COMMON NAME	HEIGHT	CALIPER	NOTES	CCA	TOTAL
AxG	3	Amelanchier x grandiflora	Serviceberry	8–10'	1.5" min.		500	1,500
								0
SMALL ORNAMENTAL TREE								
KEY	QTY	BOTANICAL NAME	COMMON NAME	HEIGHT	CALIPER	NOTES	CCA	TOTAL
AGi	6	Acer ginnala 'Flame'	Amur Maple	8–10'	1.5" min.		250	1,500
CCa	2	Carpinus caroliniana	American Hornbeam	8–10'	1.5" min.		250	500
CV	2	Chionanthus virginicus	Fringe Tree	8–10'	1.5" min.	Matching	250	500
MV	1	Magnolia virginiana	Sweet Bay Magnolia	8–10'	1.5" min.		250	250
SR	6	Syringa reticulate	Tree Lilac	8–10'	1.5" min.	Over Structure, matching		
SHRUBS								
KEY	QTY	BOTANICAL NAME	COMMON NAME		SIZE	NOTES	CCA	TOTAL
AG	15	Abelia x grandiflora 'Little Richard'	Glossy Abelia		Gal			
AX	27	Abelia x 'Rose Creek'	Rose Creek Abelia		Gal			
BS	8	Buxus sempervirens 'Winter Green'	Boxwood		Gal			
BX	9	Buxus x 'Green Mountain'	Boxwood		Gal			
CS	14	Cornus sericea	Red Twig Dogwood		Gal			
HP	11	Hydrangea paniculata 'Little Lime'	Panicle Hydrangea		Gal			
HPb	22	Hydrangea paniculata 'Bobo'	Panicle Hydrangea 'Bobo'		Gal			
HQ	13	Hydrangea quercifolia	Oakleaf Hydrangea		Gal			
HQp	23	Hydrangea quercifolia 'Pee Wee'	Dwarf Oakleaf Hydrangea		Gal			
HYPE	144	Hypericum 'Hidcote'	St. John's Wort		Gal			
IC	3	Ilex crenata	Japanese Holly		Gal			
IV	17	Itea virginica 'Henry's Garnet'	Virginia sweetspire		Gal			
RA	86	Rhus aromatica	Fragrant Sumac		Gal			
VP	11	Viburnum x pragense	Prague Viburnum		Gal			
						TOTAL PROPOSED CCA		15,000

CROWN COVERAGE EAST PARCEL		
SITE AREA	57,112	SF
REQUIRED CROWN COVERAGE (25%)	14,278	SF
EXISTING CROWN COVERAGE TO REMAIN	0	SF
MINIMUM REQUIRED PROPOSED COVERAGE	14,278	SF
PROPOSED COVERAGE	15,000	SF

NOT FOR CONSTRUCTION

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

CAMPION HRUBY
LANDSCAPE ARCHITECTS

AHC INC.

Record Owner:
Church of the Ressurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Water L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Architect:
Cunningham Quill
1054 31st St. NW, Suite 315
Washington D.C., 20007

Land Use Attorney:
Land, Carroll & Blair, P.C.
524 King St.
Alexandria, VA 22314

Attn.: Mr. Duncan Blair

KEY PLAN

Issues / Revisions

09.08.2017	DSUP INITIAL COMPLETENESS
10.20.2017	DSUP SUB 03
11.10.2017	DSUP SUB 04

EPISCOPAL CHURCH OF THE RESURRECTION REDEVELOPMENT

City of Alexandria, Virginia

CHLA # 21742

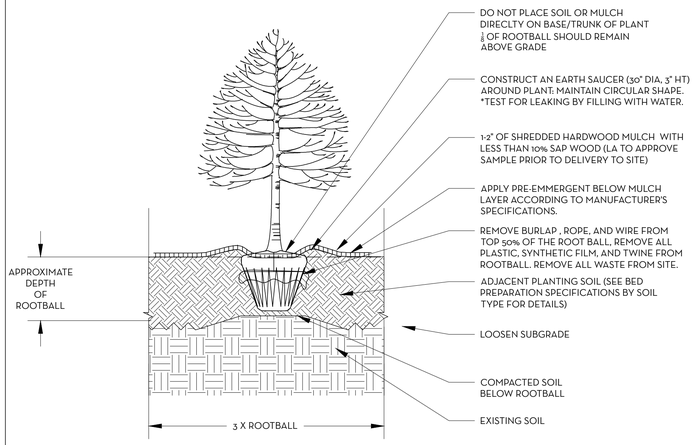
Drawing Title
Plant Schedule & Canopy Coverage

Campion Hruby Landscape Architects
111 Cathedral Street
Suite 100
Annapolis, MD 21401

This drawing and the design shown hereon are the property of Campion Hruby Landscape Architects. The reproduction, copying or use f this drawing without written consent is prohibited and any infringemenet will be subject to legal action.

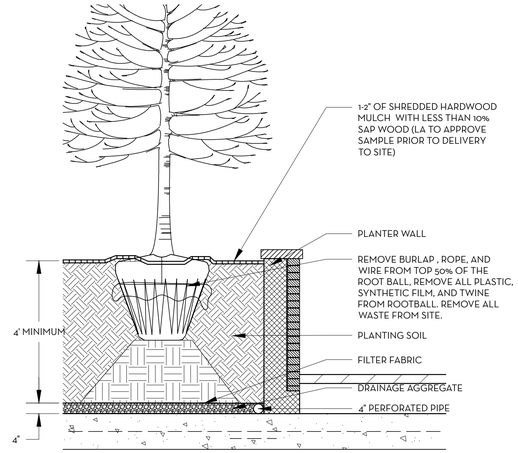
Scale	Drawn By
see detail	DW
Date 11/10/2017	Checked By KJG

L3.02



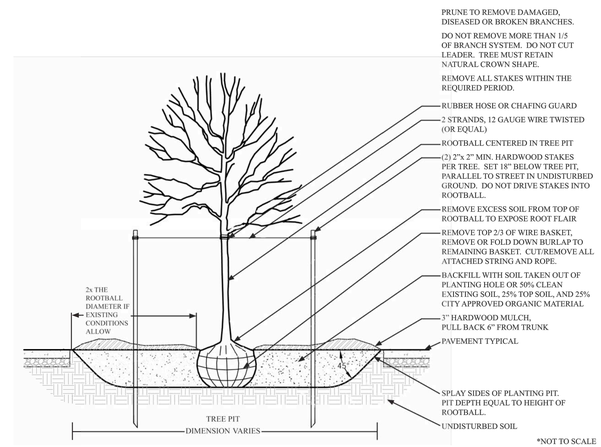
1 TREE PLANTING

Scale: NTS



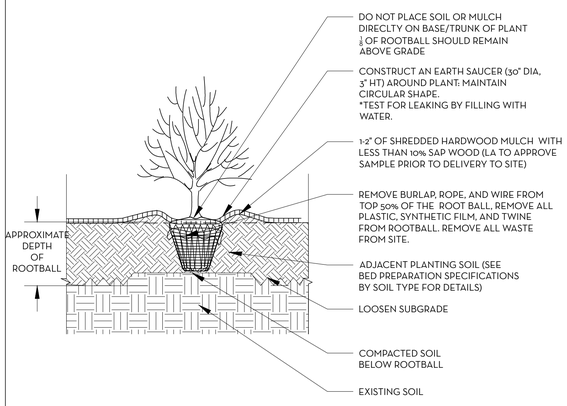
2 TREE IN PLANTER

Scale: NTS



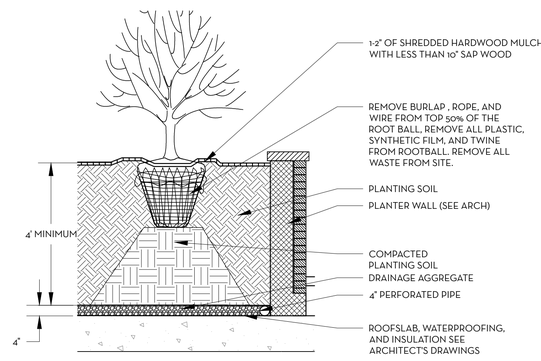
3 STREET TREE PLANTING

Scale: NTS



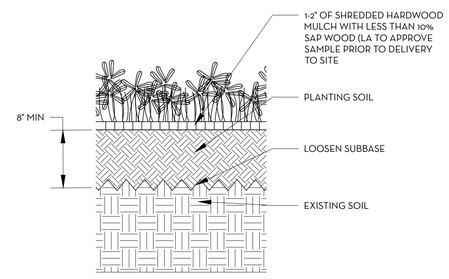
4 SHRUB PLANTING

Scale: NTS



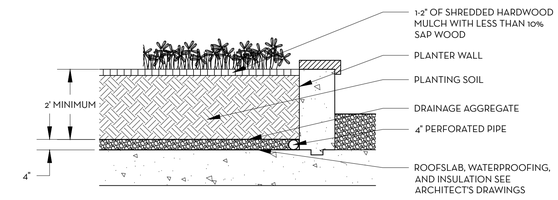
5 SHRUB IN PLANTER OVER STRUCTURE

Scale: NTS



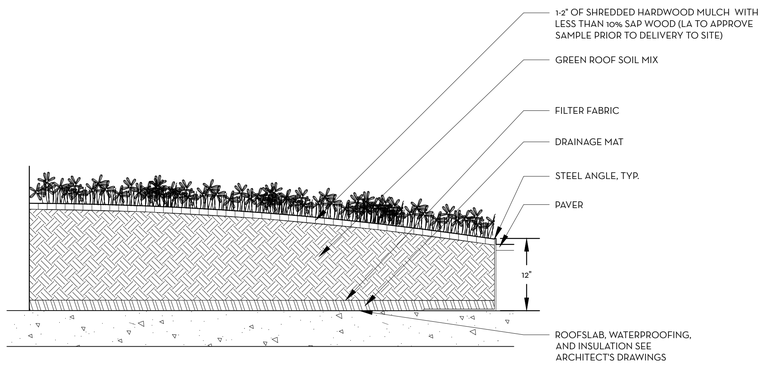
6 PERENNIAL PLANTING

Scale: NTS



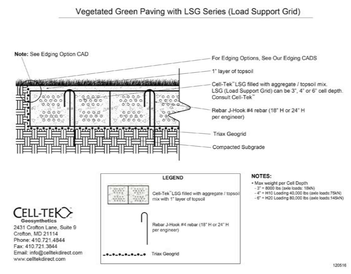
7 PERENNIALS IN PLANTER OVER STRUCTURE

Scale: NTS



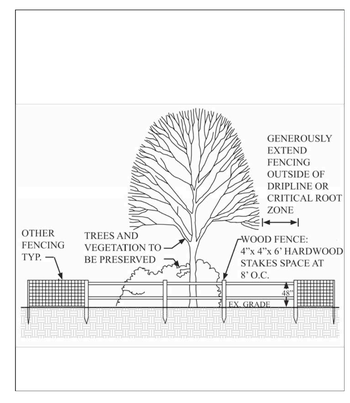
8 PERENNIAL PLANTING OVER STRUCTURE

Scale: NTS



9 VEGETATED GREEN PAVING WITH LOAD SUPPORT GRID

Scale: NTS



10 TREE PROTECTION FENCING

Scale: NTS

CAMPION HRUBY
LANDSCAPE ARCHITECTS

AHC INC.

Record Owner:
Church of the Ressurection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2200 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Water L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Architect:
Cunningham Quill
1054 31st St. NW, Suite 315
Washington D.C., 20007

Land Use Attorney:
Land, Carroll & Blair, P.C.
524 King St.
Alexandria, VA 22314

Attn.: Mr. Duncan Blair

KEY PLAN

Issues / Revisions

09.08.2017	DSUP INITIAL COMPLETENESS
10.20.2017	DSUP SUB 03
11.10.2017	DSUP SUB 04

NOT FOR CONSTRUCTION

EPISCOPAL CHURCH OF THE RESURRECTION REDEVELOPMENT

City of Alexandria, Virginia

CHLA # 21742

Drawing Title

Planting Details

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044

DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

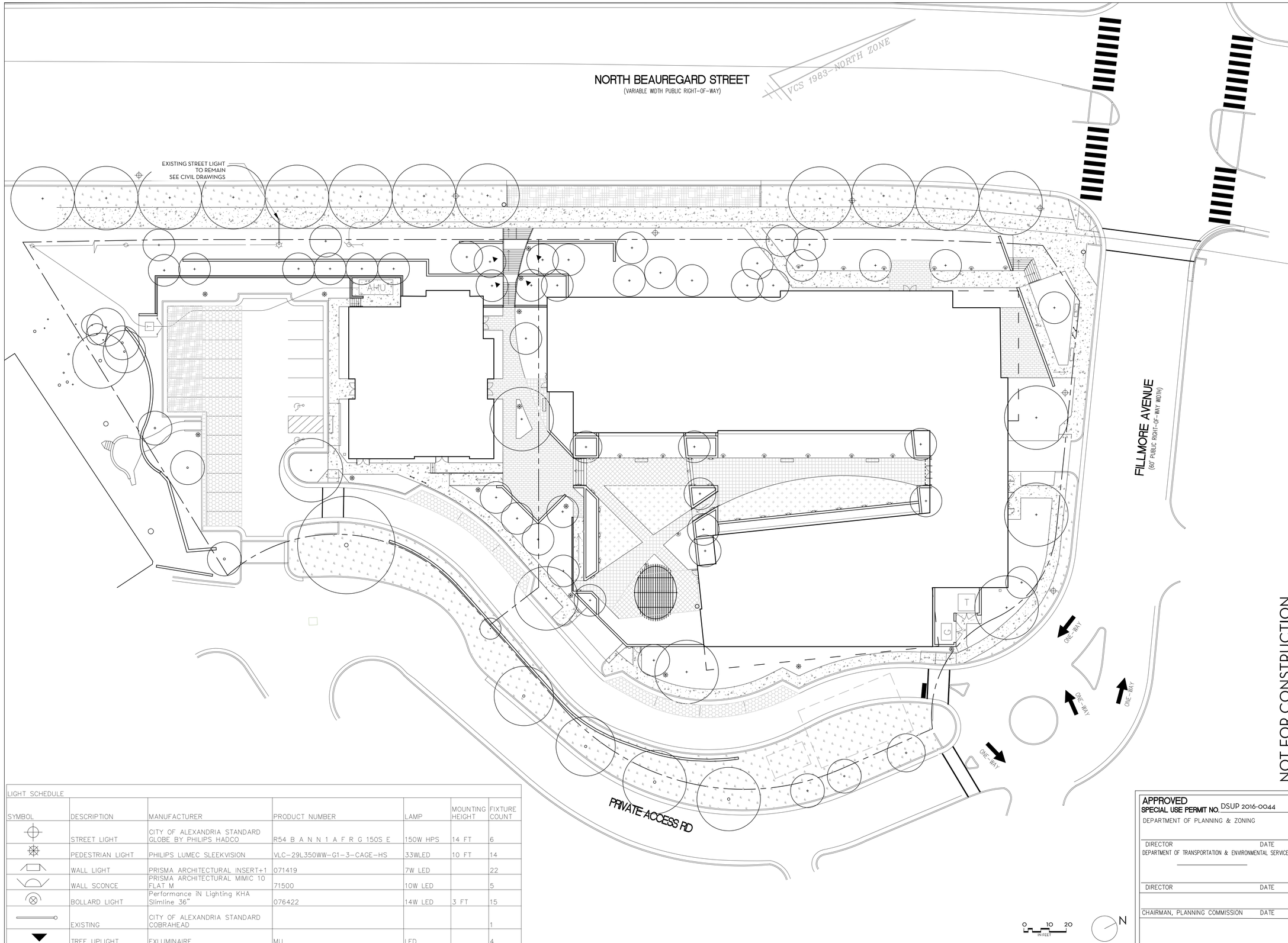
CHAIRMAN, PLANNING COMMISSION DATE

Campion Hruby Landscape Architects
11 Cathedral Street
Suite 100
Annapolis, MD 21401

This drawing and the design shown hereon are the property of Campion Hruby Landscape Architects. The reproduction, copying or use f this drawing without written consent is prohibited and any infringemenet will be subject to legal action.

Scale	Drawn By
AS NOTED	DW
Date 11/10/2017	Checked By KJG

L3.03



LIGHT SCHEDULE

SYMBOL	DESCRIPTION	MANUFACTURER	PRODUCT NUMBER	LAMP	MOUNTING HEIGHT	FIXTURE COUNT
	STREET LIGHT	CITY OF ALEXANDRIA STANDARD GLOBE BY PHILIPS HADCO	R54 B A N N 1 A F R G 150S E	150W HPS	14 FT	6
	PEDESTRIAN LIGHT	PHILIPS LUMEC SLEEKVISION	VLC-29L350WW-G1-3-CAGE-HS	33WLED	10 FT	14
	WALL LIGHT	PRISMA ARCHITECTURAL INSERT+1	071419	7W LED		22
	WALL SCONCE	PRISMA ARCHITECTURAL MIMIC 10 FLAT M	71500	10W LED		5
	BOLLARD LIGHT	Performance iN Lighting KHA Slimline 36"	076422	14W LED	3 FT	15
	EXISTING	CITY OF ALEXANDRIA STANDARD COBRAHEAD				1
	TREE UPLIGHT	FXLUMINAIRE	MU	LED		4

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

NOT FOR CONSTRUCTION

CAMPION HRUBY
LANDSCAPE ARCHITECTS

AHC INC.

Record Owner:
Church of the Ressurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2220 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Water L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Architect:
Cunningham Quill
1054 31st St. NW, Suite 315
Washington D.C., 20007

Land Use Attorney:
Land, Carroll & Blair, P.C.
524 King St.
Alexandria, VA 22314

Attn.: Mr. Duncan Blair

KEY PLAN

Issues / Revisions

09.08.2017	DSUP INITIAL COMPLETENESS
10.20.2017	DSUP SUB 03
11.10.2017	DSUP SUB 04

EPISCOPAL CHURCH OF THE RESURRECTION REDEVELOPMENT

City of Alexandria, Virginia

CHLA # 21742

Drawing Title
Lighting Plan

Campion Hruby Landscape Architects
111 Cathedral Street
Suite 100
Annapolis, MD 21401

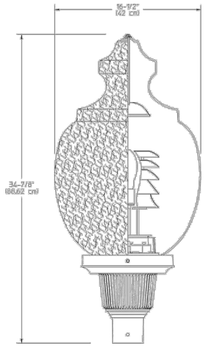
This drawing and the design shown hereon are the property of Campion Hruby Landscape Architects. The reproduction, copying or use f this drawing without written consent is prohibited and any infringemenet will be subject to legal action.

Scale	Drawn By
1"=20'	DW
Date 11/10/2017	Checked By KJG

L5.01

Victorian (V72) Specification Sheet

Project Name:	Location:	MFG: Philips Hadco
Fixture Type:	Catalog No.:	Qty:



Ordering Guide

Example: V72 A T0 N D 70S E

Product Code	V72	Victorian	
Finish	A	Black	
	B	White	
	G	Verde	
	H	Bronze	
	J	Green	
Optics	T0	Symmetric	
	T3	Type III Refractor Bowl	
	T5	Type V Refractor Bowl	
	TL	Type V Louvers	*1
Photo Control	N	None	
	B	Button Eye Photo Control	
Socket	D	Medium	
	G	Mogul	
Wattage	70S	70W HPS	
	100S	100W HPS	
	150S	150W HPS	
	250S	250W HPS	*3
	70H	70W MH	*2
	100H	100W MH	
	150H	150W PMH	
	250H	250W PMH	*3
Voltage	E	120V	
	F	208V	
	G	240V	
	H	277V	
	K	347V	

*1 TL optics available with Medium base (D) socket only
*2 Available with Medium base (D) socket only
*3 Available with Mogul base (G) socket only

Specifications

HOUSING:
360 low-copper die-cast aluminum alloy . Easy access to lamp. A weatherproof ballast assembly isolates the ballast from water and heat for longer life. The optional photo control eye is located in the ballast enclosure for easy access via a hinged door. All non-ferrous fasteners prevent corrosion and ensure longer life. Slip Fitter Dimensions: 3" I.D. x 3" deep .

FINISH:
Thermoset polyester powdercoat is electrostatically applied after a five-stage conversion cleaning process and bonded by heat fusion thermosetting. Laboratory tested for

ISO 9001:2008 Registered

Page 1 of 2

PHILIPS HADCO

Note: Philips reserves the right to modify the above details to reflect changes in the cost of materials and/or production and/or design without prior notice.
100 Craftway Drive, Littlestown, PA 17340 | P: +1-717-359-7131 F: +1-717-359-9289 | http://www.hadco.com | Copyright 2013 Philips
HRQ

1 STREET LIGHT FIXTURE

Scale: NTS

Decorative Lamp Post

Whatley — a valmont/shakespeare company

POLE **CF50**

FLUTED TAPERED POLE

DECORATIVE BASE **D3M**

- Fluted, tapered composite pole
- Direct Embedded and Anchor Base models
- XTREME® elastomeric urethane base cover

Ordering Information

Sample Description Number Logic

	B	C	D	E	F
CF50-D3M	12	AB	BLK	30	RC
CF50-D3M	15	DE	WHT	40	♦
BASE & POLE DESIGN	ABOVE GRADE HEIGHT	INSTALLATION METHOD	COLOR	TENON O.D.	OPTIONS

B Above Grade Height

Cat No.	Description
6	6 feet/1.83M
7	7 feet/2.13M
8	8 feet/2.44M
9	9 feet/2.74M
10	10 feet/3.0M
11	11 feet/3.4M
12	12 feet/3.7M
13	13 feet/4.0M
14	14 feet/4.3M
15	15 feet/4.6M
16	16 feet/4.9M
17	17 feet/5.2M

C Installation Method

Cat No.	Description
DE	Direct Embedded
AB	Anchor Base

D Color

Cat No.	Description
BLK	Black
DBZ	Dark Bronze
DGR	Dark Green
SLV	Silver
WHT	White
GRY	Grey
CC	Custom color - Please provide a min. 3"x3" color chip.
RAL	Please provide a four digit RAL color number.

E Tenon O.D. (outside diameter)

Cat No.	Description
30	3" (76mm) OD X 3" (76mm) height
40	4" (102mm) OD X 6" (178mm) height
99	Custom Tenon Size

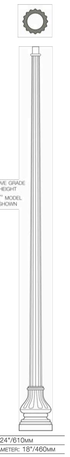
Tenons include a cast decorative ring at the top of the pole.

- *For other tenon sizes contact the factory.*

F Options

Cat No.	Description
RC	Receptacle housing and a NEC approved cover with GFCI receptacle. Standard location is 12"/305mm below the top of the pole.

- *Other accessories are shown on the Accessories specification sheet.*



HEIGHT: 24"/610MM
BASE DIAMETER: 15"/460MM

Whatley - Valmont Composite Structures, Inc.
19845 U.S. Highway 76 • Newberry, SC 29108 USA
Tel: 877.959.7678 | 803.276.5507 • Fax: 803.276.8940 • **whatley.com**

2 STREET LIGHT POLE

Scale: NTS

Project:
Location:
Cat.No.:
Type:
Lamps: Qty:
Notes:

SleekVision outdoor urban post-top luminaires feature ClearGuide, a revolutionary, vertically-oriented light engine designed to reduce pixelation and glare.

Ordering guide

example: VLC-30L350NW-G1-ACDR-C-S-UNIV-DE25-TLRDS-PHB-GY3TX

Luminaire	LED Module	Board Generation	Globe Material	Globe Finish	Optical System	Voltage	Driver Options*	Luminaire Options	Luminaire Accessories*	Poles & Brackets	Finish
VLC SleekVision Post Top	Type 3, 20 LEDs: **29L350NW** **29L530NW** **29L700NW** **29L820NW** **29L350WW** **29L530WW** **29L700WW** **29L820WW** Type 5, 30 LEDs: **30L350NW** **30L530NW** **30L700NW** **30L820NW** **30L350WW** **30L530WW** **30L700WW** **30L820WW***	G1 Gen.1	ACDR Acrylic Diffuser PC Polycarbonate Globe	C Clear	3 Type III 5 Type V	UNV 120-277 HVU 347-480	AST Adjustable Start Time CLO Constant Light Output DALI Digital Addressable Lighting Interface Dynaadimmer DCP Dimming Level determined by user Economy Profile DE25 DE50 DE75 Medium Profile DM25 DM50 DM75 Safety Profile DS25 DS50 DS75 OTL Over The Life	CGCE Decorative Cap and Base HS House Side Shield OVR Overvoltage Override Function SP2 Surge Protection 20KV 20KA 120-277 TLRDS Tool Less Recess Receptacle (3 Pin) TLRDP Dimming Receptacle (3 Pin) TNP Filter to fit over a 3" (76 mm) O.D. by 4" (102 mm) long tenon TNS 3" Filter to fit over a 3 1/2" (89 mm) O.D.by 4" (102 mm) long tenon	PHB Photocell UNV (120-277) PHB/347 Photocell UNV (347) PHB/480 Photocell UNV (480) PHB Shorting cap PHXL Extended Life UNV Photocell (120-277)	Consult Philips.com/ Luminaires for details and the complete line of Philips poles and brackets.	BEZTX Textured Midnight Blue BEBTX Textured Ocean Blue BERTX Textured Royal Blue BGZTX Textured Sandstone BKTX Textured Black BRTX Textured Bronze GMTX Textured Blue Green GMETX Textured Forest Green GMYTX Textured Dark Forest Green GNTX Textured Green GR Grey Anodized GY3TX Textured Medium Grey JN Natural Aluminum RDBTX Textured Burgundy RDHTX Textured Scarlet TG Hammertone Gold TS Hammertone Silver WHTX Textured White

1. Luminaire always shipped with a dimmable 0-10V driver
2. 347-480V not available
3. HS only available with Type 3. Factory installed only.
4. Use of photoelectric cell or shorting cap is required to ensure proper illumination.
5. Not available with Motion Response.
6. Luminaire option TLRDS or TLRDT is required with these accessories.

3 PEDESTRIAN LIGHT

Scale: NTS

PRISMA ARCHITECTURAL

PRODUCT CODE
PROJECT
TYPE

INSERT+ 1 / INSERT+ 2

The product is provided precabled with brass cable clamp PG13.5.

The fixture requires recessed fixing box which must be ordered separately.

Installed in accordance with NEC/CEC wet location

Water protected jbox, can be used also for through wiring

PRISMA ARCHITECTURAL is a brand of Performance in Lighting - 2621 Keys Pointe - Conyers, Georgia 30013 - USA - voice 770.822.2115 - fax 700.822.9925 - info@pil-usa.com
www.performanceinlighting.com

4 WALL LIGHT

Scale: NTS

KHA SLIM 36" IN

KHA SLIM 36" LED

TEXTURED BLACK | STAINLESS STEEL | IRON GRAY

Wet location

Body and top manufactured in AISI 316 stainless steel for marine applications, or extruded aluminium finished polyester painted Iron grey or Textured black.
-Double reflector optical system for downward light distribution below horizontal and zero upward light pollution. High efficiency comfortable glare free light is provided through indirect light distribution and the upper facetted reflector. The high performance reflector system is designed to provide an efficient light distribution based on height and area to be illuminated.
-Imax 2 x 80°.
-Integral driver and available in 3000, 4000 or 5000 degrees kelvin
-UV stabilised high-tech technopolymer impact resistant lamp cover (PC-HT).
-Reflector in high purity aluminium provides comfortable low glare light control and avoids back reflection onto lamp for improved longevity.
-Electronic control gear for long life.
-Complete with polyamide connection box complete with M16 x 1.5 anti-tearing IP68 gland suitable for a 5-10 mm cables.
-Electronic control gear for 120-277 V, 50/60 Hz supply.
-Anti-ageing silicone gaskets.
-Stainless steel external screws.

SOCKET	POWER (W)	FINISH	IP	KELVIN	LIFE CYCLE	LIFE HOURS	BUILDING LUMEN FLUX	LIFETIME	CRI(R)	UL	VOLTAGE	CODE
HIGH POWER LEDS 120/277 V												
LED	14 W	IRON GRAY	IP 66	3000	C/EW	-	276 lm	30000 h	+	-		**076416**
LED	14 W	IRON GRAY	IP 66	4000	C/EW	-	293 lm	30000 h	+	-		**076419**
LED	14 W	IRON GRAY	IP 66	5000	C/EW	-	319 lm	30000 h	+	-		**076424**
LED	14 W	STAINLESS STEEL	IP 66	3000	C/EW	-	276 lm	30000 h	+	-		**076417**
LED	14 W	STAINLESS STEEL	IP 66	4000	C/EW	-	293 lm	30000 h	+	-		**076420**
LED	14 W	STAINLESS STEEL	IP 66	5000	C/EW	-	319 lm	30000 h	+	-		**076423**
LED	14 W	TEXTURED BLACK	IP 66	3000	C/EW	-	276 lm	30000 h	+	-		**076415**
LED	14 W	TEXTURED BLACK	IP 66	4000	C/EW	-	293 lm	30000 h	+	-		**076418**
LED	14 W	TEXTURED BLACK	IP 66	5000	C/EW	-	319 lm	30000 h	+	-		**076421**

KHA SLIM 36" MH

TEXTURED BLACK | STAINLESS STEEL | IRON GRAY

Wet location

Double reflector optical system for downward light distribution below horizontal and zero upward light pollution. High efficiency comfortable glare free light is provided through indirect light distribution and the upper facetted reflector. The high performance reflector system is designed to provide an efficient light distribution based on height and area to be illuminated.
-Imax 2 x 80°.

-Body and top manufactured in AISI 316 stainless steel for marine applications, or extruded
-aluminium finished polyester painted Iron grey or Textured black.
-UV stabilised high-tech technopolymer impact resistant lamp cover (PC-HT).
-Reflector in high purity aluminium provides comfortable low glare light control and avoids back reflection onto lamp for improved longevity.
-Electronic control gear for long life.
-Complete with polyamide connection box complete with M16 x 1.5 anti-tearing IP68 gland suitable for a 5-10 mm cables.
-Electronic control gear for 120-277 V, 50/60 Hz supply.
-Anti-ageing silicone gaskets.
-Stainless steel external screws.

SOCKET	POWER (W)	FINISH	IP	KELVIN	LIFE CYCLE	LIFE HOURS	BUILDING LUMEN FLUX	LIFETIME	CRI(R)	UL	VOLTAGE	CODE
METAL HALIDE 120/277 V												
GU6,5	1x20 W	IRON GRAY	IP 66	-	C/EW	-	-	-	+	-		**076350**
GU6,5	1x20 W	STAINLESS STEEL	IP 66	-	C/EW	-	-	-	+	-		**076352**
GU6,5	1x20 W	TEXTURED BLACK	IP 66	-	C/EW	-	-	-	+	-		**076412**

PRISMA ARCHITECTURAL is a brand of Performance in Lighting - 2621 Keys Pointe - Conyers, Georgia 30013 - USA - voice 770.822.2115 - fax 700.822.9925 - info@pil-usa.com
www.performanceinlighting.com

5 BOLLARD LIGHT

Scale: NTS

MIMIK 10 IN

MIMIK 10 FLAT M

TEXTURED WHITE WHITE LED | IRON GRAY IRON GRAY LED | TEXTURED BLACK BLACK LED

Wet location

Series of wall and ceiling mounting LED luminaires for indoor and outdoor use, extruded aluminum
Polyester powder-painted die-cast aluminium housing
Powder polyester painting process optimized against UV rays in 13 different colours
Silicone gasket
LED versions include 120/277V safety transformer
Flat, microprismatic tempered glass diffuser, screen-printed on the inner surface
for MIMIK FLAT, MIMIK 10 CEILING TECH
Available in single (M) emission versions

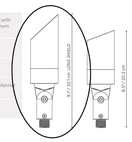
SOCKET	POWER (W)	FINISH	IP	KELVIN	LIFE CYCLE	LIFE HOURS	BUILDING LUMEN FLUX	LIFETIME	CRI(R)	UL	VOLTAGE	CODE
MID POWER LEDS 120/277 V												
LED	5 W	ALUMINIUM METALLIC - WHITE LED	IP 65	3000	-	-	-	451 lm	54000 h	+	-	**071490**
LED	5 W	ALUMINIUM METALLIC - WHITE LED	IP 65	4000	-	-	-	473 lm	54000 h	+	-	**071493**
LED	5 W	IRON GRAY - WHITE LED	IP 65	3000	-	-	-	451 lm	54000 h	+	-	**071491**
LED	5 W	IRON GRAY - WHITE LED	IP 65	4000	-	-	-	473 lm	54000 h	+	-	**071494**
LED	5 W	TEXTURED WHITE - WHITE LED	IP 65	3000	-	-	-	451 lm	54000 h	+	-	**071492**
LED	5 W	TEXTURED WHITE - WHITE LED	IP 65	4000	-	-	-	473 lm	54000 h	+	-	**071495**
LED	10 W	ALUMINIUM METALLIC - WHITE LED	IP 65	3000	-	-	-	771 lm	54000 h	+	-	**071496**
LED	10 W	ALUMINIUM METALLIC - WHITE LED	IP 65	4000	-	-	-	810 lm	54000 h	+	-	**071499**
LED	10 W	IRON GRAY - WHITE LED	IP 65	3000	-	-	-	771 lm	54000 h	+	-	**071497**
LED	10 W	IRON GRAY - WHITE LED	IP 65	4000	-	-	-	810 lm	54000 h	+	-	**071500**
LED	10 W	TEXTURED WHITE - WHITE LED	IP 65	3000	-	-	-	771 lm	54000 h	+	-	**071498**
LED	10 W	TEXTURED WHITE - WHITE LED	IP 65	4000	-	-	-	810 lm	54000 h	+	-	**071501**

6 SCONCE LIGHT

Scale: NTS

MU: Up Light

MATERIALS:	Die-cast aluminum A360 housing and shroud with stainless steel hardware. Die-cast zinc/aluminum alloy knuckle
SOCKET:	MR16 GU5.3 socket with retaining clips
WIRING:	18 AWG SPT-1W 105° C 300V
POWER:	Input 10-15VAC/VDC 50/60Hz (Remote transformer required (sold separately)
LAMP OPTIONS:	No Lamp, LED lamp, ZD LED lamp, Halogen



LANDSCAPE LIGHTING

A Hunter Industries Comporopany

7 TREE UPLIGHT

Scale: NTS

CAMPION HRUBY
LANDSCAPE ARCHITECTS

AHC INC.

Record Owner:
Church of the Ressurection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2230 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Water L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Architect:
Cunningham Quill
1054 31st St. NW, Suite 315
Washington D.C., 20007

Land Use Attorney:
Land, Carroll & Blair, P.C.
524 King St.
Alexandria, VA 22314

Attn.: Mr. Duncan Blair

KEY PLAN

NOT FOR CONSTRUCTION

Issues / Revisions

09.08.2017	DSUP INITIAL COMPLETENESS
10.20.2017	DSUP SUB 03
11.10.2017	DSUP SUB 04

EPISCOPAL CHURCH OF THE RESURRECTION REDEVELOPMENT

City of Alexandria, Virginia

CHLA # 21742

Drawing Title
Lighting Details

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-0044
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

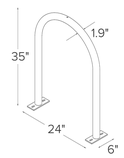
Campion Hruby Landscape Architects
in Cathedral Street
Suite 100
Annapolis, MD 21401

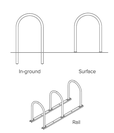
This drawing and the design shown hereon are the property of Campion Hruby Landscape Architects. The reproduction, copying or use f this drawing without written consent is prohibited and any infringemenet will be subject to legal action.

Scale	Drawn By
see detail	DW
Date 11/10/2017	Checked By KJG

L5.02

HOOP RACK
Submittal Sheet





CAPACITY 2 Bikes

MATERIALS
- [x] **Standard** 1.5" schedule 40 pipe (1.9" OD)
- [ ] **Lightweight** 1.5" schedule 10 pipe (1.9" OD)

FINISHES
- [ ] **Galvanized** An after fabrication hot dipped galvanized finish is our standard option.
- [ ] **Powder Coat** Our powder coat finish assures a high level of adhesion and durability by following these steps: 1. Sandblast 2. Epoxy primer electrostatically applied 3. Final thick TGIC polyester powder coat
- [ ] **Thermoplastic** In addition to an increased thickness (8-10mils), the thermoplastic finish covers a galvanized layer and offers superior impact resistance over powder coating.
- [ ] **PVC Dip** (plastisol) Other colors available by special order (minimum orders apply)
- [x] **Stainless** Stainless Steel: 304 grade stainless steel material finished in either a high polished shine or satin finish

MOUNT OPTIONS
- [ ] **In-ground** In ground mount is embedded into concrete base. Specify in ground mount for this option.
- [x] **Surface** Foot Mount has two 2.5"x6"x.25" feet with two anchors per foot. Specify foot mount for this option.
- [ ] **Rail** Rail Mounted Racks are bolted to two parallel rails which can be left freestanding or anchored to the ground. Rails are heavy duty 3"x1.4"x3/16" thick galvanized mounting rails. Specify rail mount for this option.

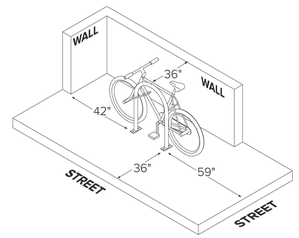
DERO a PLAYCORE company www.dero.com | 1-888-337-6729

© 2016 Dero

1 BIKE RACK

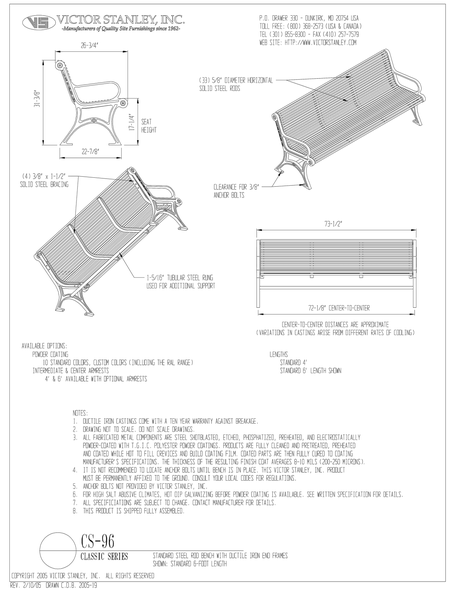
Scale: NTS

HOOP RACK
Setbacks



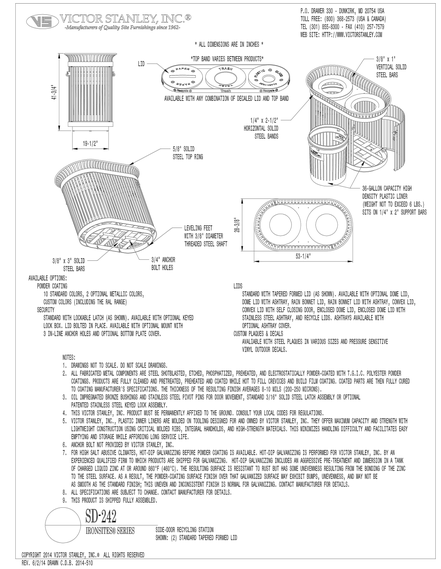
DERO a PLAYCORE company www.dero.com | 1-888-337-6729

© 2016 Dero



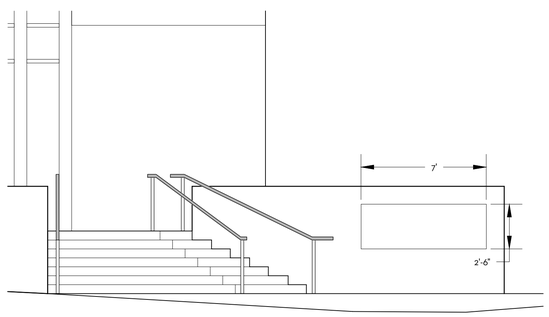
2 BENCH

Scale: NTS



3 TRASH

Scale: NTS



4 ENTRY SIGNAGE

Scale: 1/4" = 1'-0"

NOT FOR CONSTRUCTION

APPROVED
SPECIAL USE PERMIT NO. DSUP 2016-00044

DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

CAMPION HRUBY
LANDSCAPE ARCHITECTS

AHC INC.

Record Owner:
Church of the Ressurrection Tres of
2280 N. Beauregard St.
Alexandria, VA 22311

Developer:
AHC, Inc.
2200 N. Fairfax Dr.
Arlington, VA 22201

Phone: 703-486-0626
Attn.: Mr. John Welsh

Civil Engineer:
Water L. Phillips, Inc.
207 Park Ave.
Falls Church, VA 22046

Phone: 703-532-6163
Attn.: Mr. Ben Flood

Architect:
Cunningham Quill
1054 31st St. NW, Suite 315
Washington D.C., 20007

Land Use Attorney:
Land, Carroll & Blair, P.C.
524 King St.
Alexandria, VA 22314

Attn.: Mr. Duncan Blair

KEY PLAN

Issues / Revisions

09.08.2017	DSUP INITIAL COMPLETENESS
10.20.2017	DSUP SUB 03
11.10.2017	DSUP SUB 04

EPISCOPAL CHURCH OF THE RESURRECTION REDEVELOPMENT

City of Alexandria, Virginia

CHLA # 21742

Drawing Title
Site Ameneties & Signage

Campion Hruby Landscape Architects
19 Cathedral Street
Suite 100
Annapolis, MD 21401

This drawing and the design shown hereon are the property of Campion Hruby Landscape Architects. The reproduction, copying or use f this drawing without written consent is prohibited and any infringemenet will be subject to legal action.

Scale: see detail	Drawn By: DW
Date: 11/10/2017	Checked By: KJG

L6.01