SE APPLICATION ACCEPTED: November 26, 2013
SE AMENDED: February 27, 2014
2232 APPLICATION ACCEPTED: March 10, 2014
PLANNING COMMISSION: October 30, 2014
BOARD OF SUPERVISORS: December 2, 2014 @ 4:00 p.m.

County of Fairfax, Virginia

October 14, 2014

STAFF REPORT

APPLICATION SE 2013-DR-019
& 2232-D13-9

DRANESVILLE DISTRICT

APPLICANT:	CWS VII, LLC and Trustees of Andrew Chapel United Methodist Church
ZONING:	R-1 (Residential, 1 dwelling unit/acre)
PARCEL:	19-4 ((1)) 47
ACREAGE:	7.01 acres
PLAN MAP:	Residential 1-2 du/ac
INTENSITY:	0.073 FAR
SE CATEGORY:	Mobile and Land Based Telecommunication Facilities (Category 1; Sect. 9-104) Church with a Nursery School and Child Care Center (Category 3; Sect. 9-304, 9-309, 9-314)
PROPOSAL:	The applicant has filed for review by the Planning Commission to determine whether the proposed 120-foot telecommunication facility and related ground structure satisfy the criteria of location, character and extent pursuant to Sect. 15.2-2232 of the Code of Virginia, and requests Special Exception approval to construct the proposed telecommunication facility on the property of the existing church with a nursery school/child care center.

Carmen Bishop

Department of Planning and Zoning
Zoning Evaluation Division
12055 Government Center Parkway, Suite 801
Fairfax, Virginia 22035-5509
Phone 703-324-1290 FAX 703-324-3924
www.fairfaxcounty.gov/dpz/

STAFF RECOMMENDATIONS:

Staff recommends that the Planning Commission find that the facility proposed under 2232-D13-9 satisfies the criteria of location, character, and extent as specified in Section 15-2.2232 of the Code of Virginia, and therefore is substantially in accord with the provisions of the Comprehensive Plan.

Staff recommends approval of SE 2013-DR-019, subject to the proposed development conditions contained in Appendix 1.

Staff recommends approval of the modification of Sections 13-303 and 13-304 of the Zoning Ordinance for the transitional screening and barrier requirements to permit the landscaping and barrier as shown on the Special Exception Plat.

It should be noted that it is not the intent of the staff to recommend that the Board, in adopting any conditions agreed to by the owner, relieve the applicant/owner from compliance with the provisions of any applicable ordinances, regulations, or adopted standards.

The approval of this application does not interfere with, abrogate or annul any easements, covenants, or other agreements between parties, as they may apply to the property subject to this application.

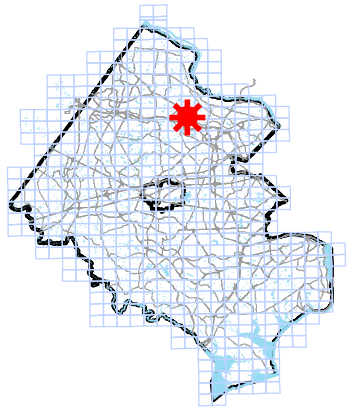
It should be noted that the content of this report reflects the analysis and recommendation of staff; it does not reflect the position of the Board of Supervisors.

For information, contact the Zoning Evaluation Division, Department of Planning and Zoning, 12055 Government Center Parkway, Suite 801, Fairfax, Virginia 22035-5505, (703) 324-1290.

Americans with Disabilities Act (ADA): Reasonable accommodation is available upon 48 hours advance notice. For additional information on ADA call (703) 324-1334 or TTY 711 (Virginia Relay Center).

Special Exception

SE 2013-DR-019



Applicant: CWS VII, LLC & THE TRUSTEES OF ANDREW CHAPEL UNITED METHODIST CHURCH

Accepted: 02/27/2014- AMENDED 11/26/2013

Proposed: CHURCH WITH NURSERY SCHOOL AND TELECOMMUNICATIONS FACILITY

Area: 7.0127 AC OF LAND; DISTRICT - DRANESVILLE

Zoning Dist Sect: 03-010403-0104

Art 9 Group and Use: 1-08 3-15

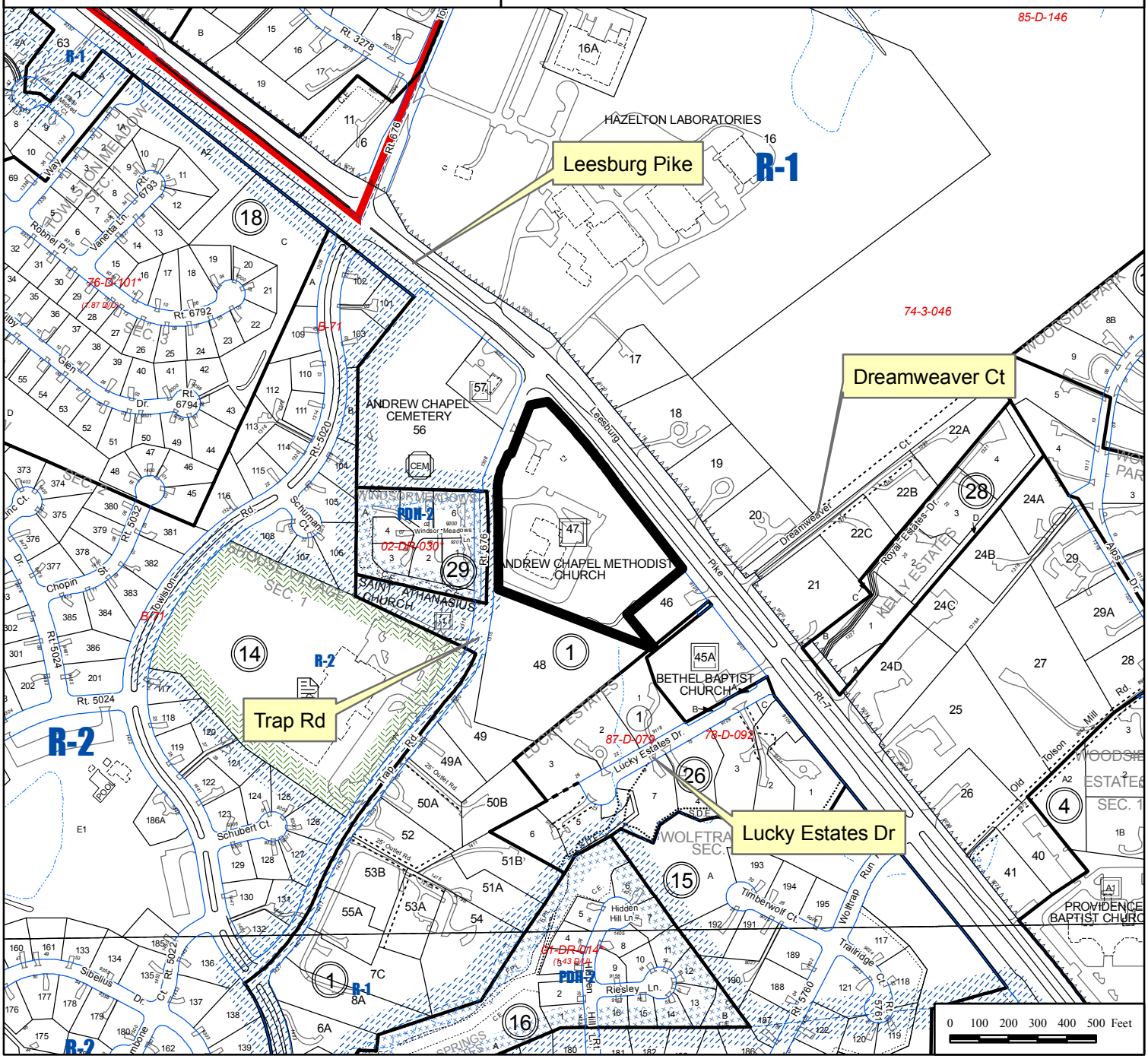
Located: 1301 TRAP ROAD, VIENNA, VA 22182

Zoning: R- 1

Plan Area: 2,

Overlay Dist:

Map Ref Num: 019-4- /01/ /0047



SE 2013-0166

CWS

2800 Shirlington Road
Suite 716
Arlington, VA 22206

SE/PLAT
CWS 91
ACUMC - BELL TOWER
1301 TRAP RD.
VIENNA, VA 22182

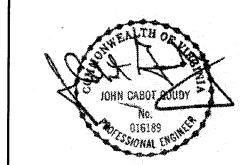
entrex
communication services, inc

6600 Rockledge Drive, Suite 550
BETHESDA, MD 20817
PHONE: (202)408-0960
FAX: (202)408-0961

SUBMITTALS

DATE	DESCRIPTION	REV.
05-29-13	ZONING REVIEW	
05-30-13	ZONING REVIEW	
06-25-13	ZONING	
10-11-13	COUNTY COMMENTS	
02-10-14	COUNTY COMMENTS	1
03-12-14	COUNTY COMMENTS	2
04-02-14	COUNTY COMMENTS	3
04-21-14	COUNTY COMMENTS	4

SEAL:



CWS
2800 Shirlington Road
Suite 716
Arlington, VA 22206
Phone 703-845-1971
Fax 703-845-1953

PROJECT NO:	1094.040
DESIGNER:	TMF
ENGINEER:	C.G.

SCALE:
0 1/2 1 2
GRAPHIC SCALE IN INCHES

SE/PLAT
CWS 91
ACUMC-BELL TOWER
1301 TRAP RD.
VIENNA, VA 22182

TITLE:

TITLE SHEET

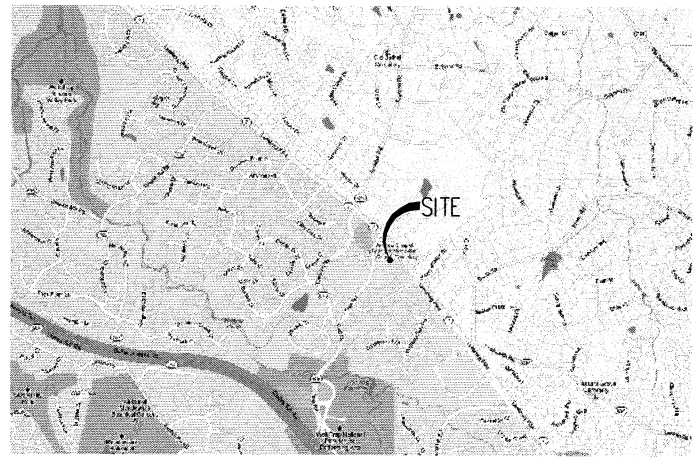
SHEET NUMBER:

T-1

GENERAL NOTES

1. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES.
2. THE ARCHITECT/ENGINEER HAS MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
3. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE CONSTRUCTION MANAGER OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
4. THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.
5. THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
6. THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWING/CONTRACT DOCUMENTS.
7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S/VENDOR'S SPECIFICATION UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
8. THE CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDA OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
9. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY.
11. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
12. THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
13. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT.
14. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT IS RESOLVED BY THE CONSTRUCTION MANAGER.
15. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC. ON THE PROJECT.

VICINITY MAP



SHEET INDEX

T-1 TITLE SHEET
Z-1 SITE PLAN
Z-2 EROSION AND SEDIMENT CONTROL PLAN
Z-3 SITE DETAILS
Z-4 CIVIL MAPS
Z-5 COMPOUND PLAN
Z-6 BELL TOWER ELEVATION
Z-7 TREE PRESERVATION PLAN AND NOTES
Z-7A COMPOUND LANDSCAPING PLAN 3
Z-7B EXISTING LANDSCAPING ENHANCEMENT PLAN 3
Z-7C LANSCAPING DETAILS
Z-8 SITE PROFILES

SYMBOLS AND ABBREVIATIONS

ADJ	ADJUSTABLE	MAX	MAXIMUM
APPROX	APPROXIMATE	MECH	MECHANICAL
CAB	CABINET	MFR	MANUFACTURER
CLG	CEILING	MGB	MAIN GROUND BAR
CONC	CONCRETE	MIN	MINIMUM
CONT	CONTINUOUS	MTL	METAL
CJ	CONSTRUCTION JOINT	NIC	NOT IN CONTRACT
DIA	DIAMETER	NTS	NOT TO SCALE
DWG	DRAWING	OC	ON CENTER
EGB	EQUIPMENT GROUND BAR	OPP	OPPOSITE
EA	EACH	SF	SQUARE FOOT
ELEC	ELECTRICAL	SHT	SHEET
EL	ELEVATION	SIM	SIMILAR
EQ	EQUAL	SS	STAINLESS STEEL
EQUIP	EQUIPMENT	STL	STEEL
(E)	EXISTING	TOC	TOP OF CONCRETE
EXT	EXTERIOR	TOM	TOP OF MASONRY
FF	FINISHED FLOOR	TYP	TYPICAL
GA	GAGE	VIF	VERIFY IN FIELD
GALV	GALVANIZED	UON	UNLESS OTHERWISE NOTED
GB	GROUND BAR	WWF	WELDED WIRE FABRIC
GC	GENERAL CONTRACTOR	W/	WITH
GRND	GROUND	&	AND
LG	LONG	@	AT
LLH	LONG LEG HORIZONTAL		

SPOT ELEVATION
℄ CENTERLINE
℘ PLATE
No. / SHT DETAIL NUMBER / SHEET NUMBER
—G— GROUND WIRE
COAXIAL CABLE

PROJECT DESCRIPTION

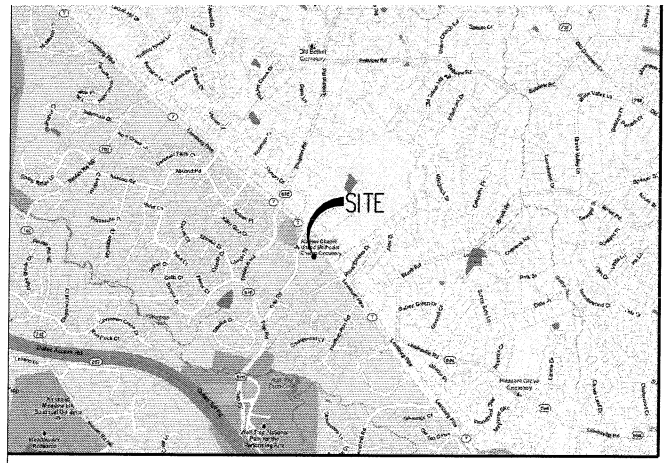
SCOPE OF WORK:
1. INSTALLATION OF A NEW 120' BELL TOWER INSIDE A NEW 70'X35' TELECOMMUNICATION EQUIPMENT COMPOUND AREA.
2. ROUTE ELECTRICAL SERVICE TO COMPOUND FROM EXISTING DEMARCATION POINT.
3. ROUTE TELCO SERVICE TO COMPOUND FROM EXISTING DEMARCATION POINT.

OWNER: ANDREW CHAPEL METHODIST CHURCH
1301 TRAP RD.
VIENNA, VA 22182

APPLICANT/LESSOR: COMMUNITY WIRELESS STRUCTURES
2800 SHIRLINGTON RD, SUITE 716
ARLINGTON, VA 22206
PHONE (703) 845-1971 FAX (703) 845-1953

LATITUDE: N 38° 56' 53.630"
LONGTITUDE: W 77° 15' 40.670"
ELEVATION AT BASE: 355.95' AMSL

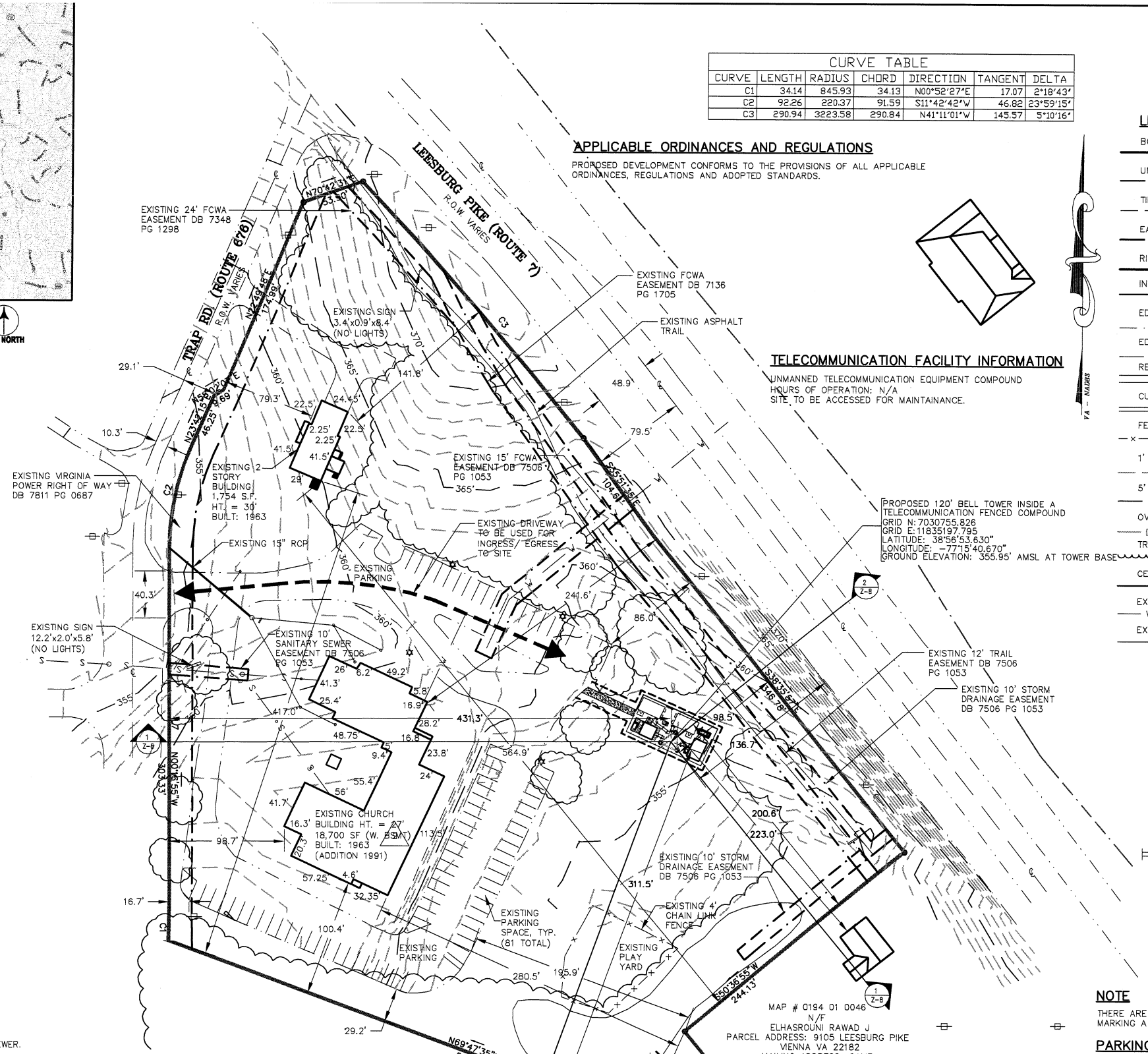
JURISDICTION: FAIRFAX COUNTY
PIN #: 0194 01 0047
CURRENT ZONING: R1
CURRENT USE: CHURCH
PROPOSED USE: CHURCH/TELECOMMUNICATIONS SITE



VICINITY MAP
SCALE: 1"=2000'-0"

TRUE NORTH

CURVE TABLE						
CURVE	LENGTH	RADIUS	CHORD	DIRECTION	TANGENT	DELTA
C1	34.14	845.93	34.13	N00°52'27"E	17.07	2°18'43"
C2	92.26	220.37	91.59	S11°42'42"W	46.82	23°59'15"
C3	290.94	3223.58	290.84	N41°11'01"W	145.57	5°10'16"



APPLICABLE ORDINANCES AND REGULATIONS

PROPOSED DEVELOPMENT CONFORMS TO THE PROVISIONS OF ALL APPLICABLE ORDINANCES, REGULATIONS AND ADOPTED STANDARDS.

TELECOMMUNICATION FACILITY INFORMATION

UNMANNED TELECOMMUNICATION EQUIPMENT COMPOUND
HOURS OF OPERATION: N/A
SITE TO BE ACCESSED FOR MAINTAINANCE.

LINE TYPES

- BOUNDARY LINE – PARENT PARCEL
- UNSURVEYED LINE – BOUNDARY OF ADJOINERS
- TIE LINE FOR DIMENSIONS
- EASEMENT BOUNDARY
- RIGHT OF WAY BOUNDARY
- INTERIOR LOT LINES
- EDGE OF ASPHALT
- EDGE OF CONCRETE
- RETAINING WALL
- CURB
- FENCE LINE – CHAIN
- 1' CONTOUR LINE
- 5' CONTOUR LINE
- OVERHEAD UTILITY LINE
- TREE OR VEGETATION LINE
- CENTER LINE OF ACCESS AND UTILITY EASEMENTS
- EXISTING WATERLINE
- EXISTING SANITARY SEWER LINE

SITE PLAN NOTES

1.) SITE NAME: ACUMC – BELL TOWER

2.) THIS IS NOT A BOUNDARY SURVEY AND IS NOT TO BE USED FOR THE TRANSFER OF PROPERTY.

3.) THE SUBJECT PARCEL INFORMATION;
OWNER: ANDREW CHAPEL METHODIST CHURCH
PREMISES ADDRESS: 1301 TRAP RD
VIENNA, VA 22182
MAILING ADDRESS: SAME
COUNTY: FAIRFAX COUNTY
MAP#: 0194 01 0047
TAX DISTRICT NUMBER: 20000
DISTRICT NAME: DRANESVILLE
ZONING: R-1 USE: CHURCHES, SYNAGOGUES

4.) THE RECORDED REFERENCES FOR THE SUBJECT PARCEL ARE AS FOLLOWS:
DEED: LIBER 7506, FOLIO 1053
AREA: 7.0127 AC

5.) THE DATUM'S ARE NAD 83 AND NAVD 88, AND THE BEARING BASE IS STATE GRID.

6.) NO UNDERGROUND UTILITIES HAVE BEEN LOCATED, THE PRESENCE OF ANY SUCH UTILITIES MUST BE CONFIRMED BY THE CONTRACTOR BEFORE CONSTRUCTION.

7.) NO WETLANDS HAVE BEEN DEFINED AND ANY AREAS SHOWN AS MARSH, PONDS OR DITCHES ARE DONE SO FROM VISIBLE SURFACE FEATURES AND IN NO WAY CONSTITUTE A DEFINED WETLAND.

8.) THE FLOOD ZONE OF THE NEW BELL TOWER IS AS FOLLOWS; FLOOD ZONE X, AREA OF MINIMUM FLOODING. SOURCE, FEMA FLOOD MAP FOR FAIRFAX COUNTY, VA.
COMMUNITY PANEL NUMBER 51059C 0135E.
EFFECTIVE, SEPTEMBER 17, 2010.

9.) A TITLE REPORT WAS FURNISHED FOR THIS SITE PLAN BY POTOMAC TITLE SOLUTIONS WITH CASE NUMBER CWS SITE 91: ACUMC, DATED 05-03-2013.

10.) THE DATA COLLECTED AND SHOWN ON THIS DRAWING ARE FOR THE PURPOSES OF CONSTRUCTION OF A BELL TOWER, ANY NECESSARY ANCILLARY EQUIPMENT AND ALL APPROPRIATE EASEMENTS.

11.) NO UNRECORDED EASEMENTS ARE SHOWN ON THIS SURVEY AND IT IS POSSIBLE THAT SUCH EASEMENTS IMPACT THE SITE.

12.) THIS PROPERTY IS SUBJECT TO ALL MATTERS OF PUBLIC RECORD.

13.) THIS PROPERTY IS ADEQUETLY SERVICED BY PUBLIC WATER AND SEWER.

14.) CONTROURS SHOWN ARE FROM FIELD RUN SURVEY.

15.) THE LOCATION OF THE NEW BELL TOWER IS AS FOLLOWS; THE VALUES LISTED BELOW ARE WITHIN ±50' HORIZONTAL AND ±20' VERTICAL.
LATITUDE: N 38° 56' 53.630"
LONGITUDE: W 77° 15' 40.670"
ELEVATION: 355.95' AMSL AT TOWER BASE

NEW BELL TOWER SETBACKS		
	ACTUAL	REQUIRED
FRONT YARD (WEST)	431.3'	40'
REAR YARD (SOUTHEAST)	200.6'	25'
SIDE YARD (NORTHEAST)	98.5'	20'
SIDE YARD (SOUTHWEST)	311.5'	20'
CLOSEST RESIDENCE	223.0'	N/A
CLOSEST ROAD	136.7'	N/A

EXISTING FACILITIES INFORMATION

THE NURSERY SCHOOL
HOURS OF OPERATION: 9:00 AM–2:00 PM
MAX. NO. EMPLOYEES: 14
PARKING SPACE REQUIRED: 19
MAX. STUDENT ENROLLMENT: 39
PLAY AREA IN ACCORDANCE WITH FAIRFAX COUNTY HEALTH DEPARTMENT STANDARDS
ADEQUATE OUTDOOR PLAY AREA PROVIDED AS REQUIRED

CHURCH
PARKING SPACE REQUIRED: 50
MAX. CAPACITY: 200

NEW BELL TOWER BULK PLANE ANGLES (SEE SHEET Z-7)		
	ACTUAL	REQUIRED
FRONT YARD (WEST)	75°	50°
REAR YARD (SOUTHEAST)	56°	45°
SIDE YARD (NORTHEAST)	38°	45°
SIDE YARD (SOUTHWEST)	68°	45°

LEGEND

- FOUND PROPERTY CORNER
- BENCH MARKS
- UTILITY POLE
- GUY ANCHOR
- SIGN
- LIGHT POLE
- TELEPHONE PEDESTAL
- CULVERT
- SANITARY MANHOLE
- INDIVIDUAL TREE – DECIDUOUS
- INDIVIDUAL TREE – CONIFER
- BUSH
- TRANSFORMER
- VAULT – HAND HOLE FOR UTILITIES
- FIRE HYDRANT

NOTE

THERE ARE NO GRAVES, OBJECTS OR STRUCTURES MARKING A PLACE OF BURIAL ON THE PROPERTY.

PARKING TABULATION

REQUIRED PARKING SPACE
CHURCH: 50
DAY CARE: 19
TELECOMMUNICATION FACILITY: 1
TOTAL REQUIRED: 70
EXISTING PARKING SPACE: 81

FAR AND DENSITY

MAXIMUM FLOOR AREA RATIO: 0.15
CHURCH: 18,700 SF (W. BSMT)
2 STORY BUILDING: 2*1,754 = 3,508 SF
TOTAL: 22,208 SF = 0.51 AC
FAR = 0.51/7.0127 = 0.073

MAXIMUM DENSITY: N/A

TRAFFIC IMPACT NOTE FROM TELECOMMUNICATION FACILITY

THE TELECOMMUNICATION FACILITY PORTION OF THIS PROJECT WILL NOT HAVE ANY IMPACT ON TRAFFIC. THIS PROJECT WILL GENERATE ABOUT 1 VEHICULAR TRIP PER MONTH.

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.(24 x 36 print)

SITE PLAN
SCALE: AS SHOWN

TRUE NORTH

entrex
communication services, inc
6600 Rockledge Drive, Suite 550
BETHESDA, MD 20817
PHONE: (202)408-0960
FAX: (202)408-0961

SUBMITTALS

DATE	DESCRIPTION	REV.
05-29-13	ZONING REVIEW	
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04-21-14	COUNTY COMMENTS	4

SEAL:

COMMONWEALTH OF VIRGINIA
JOHN CABOT CROUDY
No. 016189
PROFESSIONAL ENGINEER

CWS
2800 Shirlington Road
Suite 716
Arlington, VA 22206
Phone 703-845-1971
Fax 703-845-1953

PROJECT NO:	1094.040
DESIGNER:	M.A.
ENGINEER:	M.M.

SCALE:
0 1/2 1 2
GRAPHIC SCALE IN INCHES

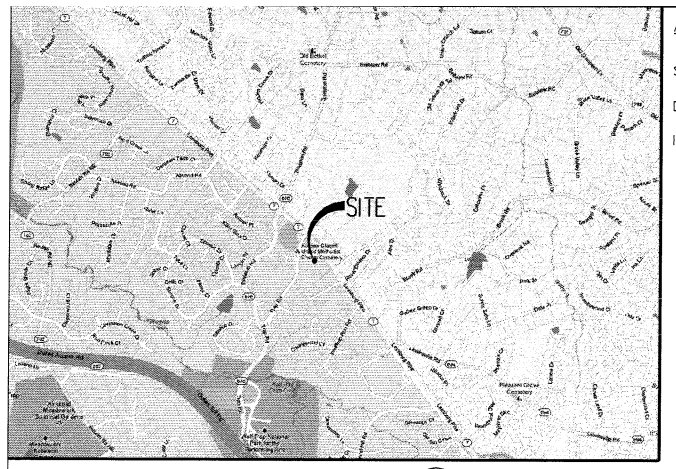
SE/PLAT
CWS 91
ACUMC-BELL TOWER
1301 TRAP RD.
VIENNA, VA 22182

TITLE:

SITE PLAN

SHEET NUMBER:

Z-1



VICINITY MAP
SCALE: 1"=2000'-0"

TRUE NORTH

AREA TABULATION

SITE AREA:	7.0127 AC
DISTURBED AREA:	3,923 SF (0.090 AC)
IMPERVIOUS AREA INCERASE:	2,735 SF (0.062 AC)

LEGEND

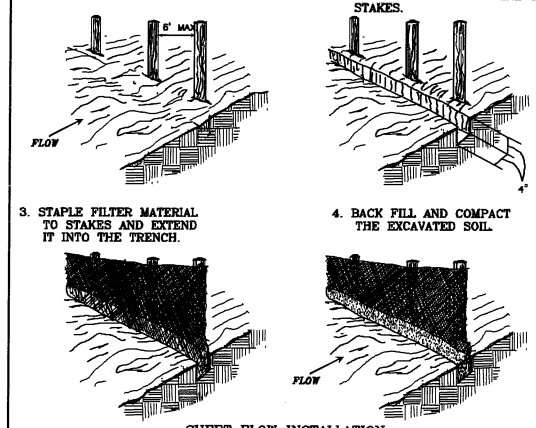
SCE — STABILIZED CONSTRUCTION ENTRANCE

LINE TYPES

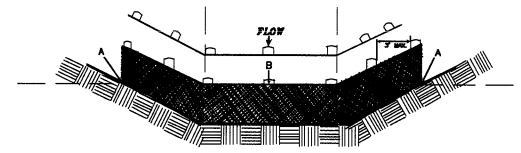
- BOUNDARY LINE – PARENT PARCEL
- RIGHT OF WAY BOUNDARY
- EDGE OF ASPHALT
- EDGE OF CONCRETE
- FENCE LINE – CHAIN
- 1' CONTOUR LINE
- 5' CONTOUR LINE
- LIMITS OF DISTURBANCE — LOD
- LIMITS OF DISTURBANCE/SILT FENCE — LOD/SF
- TREE PROTECTION FENCE — TPF
- TREE OR VEGETATION LINE

CONSTRUCTION OF A SILT FENCE (WITHOUT WIRE SUPPORT)

1. SET THE STAKES.
2. EXCAVATE A 4"X 4" TRENCH UPSLOPE ALONG THE LINE OF STAKES.
3. STAPLE FILTER MATERIAL TO STAKES AND EXTEND IT INTO THE TRENCH.
4. BACK FILL AND COMPACT THE EXCAVATED SOIL.



SHEET FLOW INSTALLATION
(PERSPECTIVE VIEW)



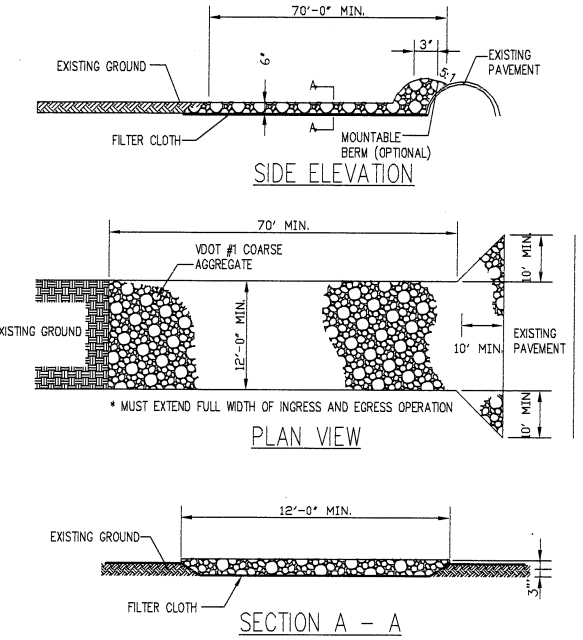
POINTS A SHOULD BE HIGHER THAN POINT B.

DRAINAGE WAY INSTALLATION
(FRONT ELEVATION)

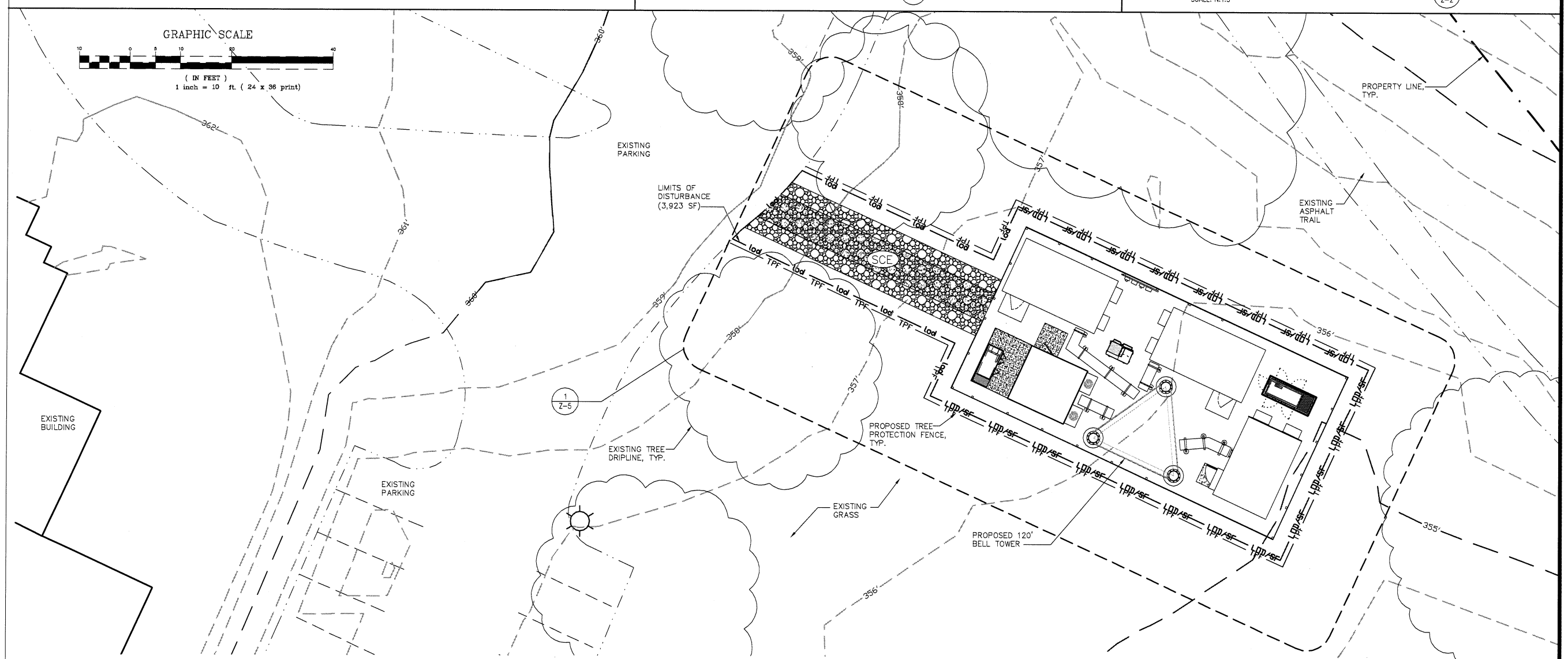
SILT FENCE (2 / Z-2)
SCALE: N.T.S.

NOTES:

1. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
2. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED SILT FENCE RESULTING FROM END RUNS AND UNDERCUTTING.
3. SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
4. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
5. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.



STABILIZED CONSTRUCTION ENTRANCE (3 / Z-2)
SCALE: N.T.S



EROSION AND SEDIMENT CONTROL PLAN (1 / Z-2)
SCALE: AS SHOWN

TRUE NORTH

entrex
communication services, inc
6600 Rockledge Drive, Suite 550
BETHESDA, MD 20817
PHONE: (202)408-0960
FAX: (202)408-0961

SUBMITTALS

DATE	DESCRIPTION	REV.
05-29-13	ZONING REVIEW	
05-30-13	ZONING REVIEW	
06-25-13	ZONING	
10-11-13	COUNTY COMMENTS	
02-10-14	COUNTY COMMENTS	1
03-12-14	COUNTY COMMENTS	2
04-02-14	COUNTY COMMENTS	3
04-21-14	COUNTY COMMENTS	4

SEAL:

COMMONWEALTH OF VIRGINIA
JOHN CABOT MOODY
No. 016185
PROFESSIONAL ENGINEER

CWS
2800 Shirlington Road
Suite 716
Arlington, VA 22206
Phone 703-845-1971
Fax 703-845-1953

PROJECT NO:	1094.040
DESIGNER:	M.A.
ENGINEER:	M.M.

SCALE:
0 1/2 1 2
GRAPHIC SCALE IN INCHES

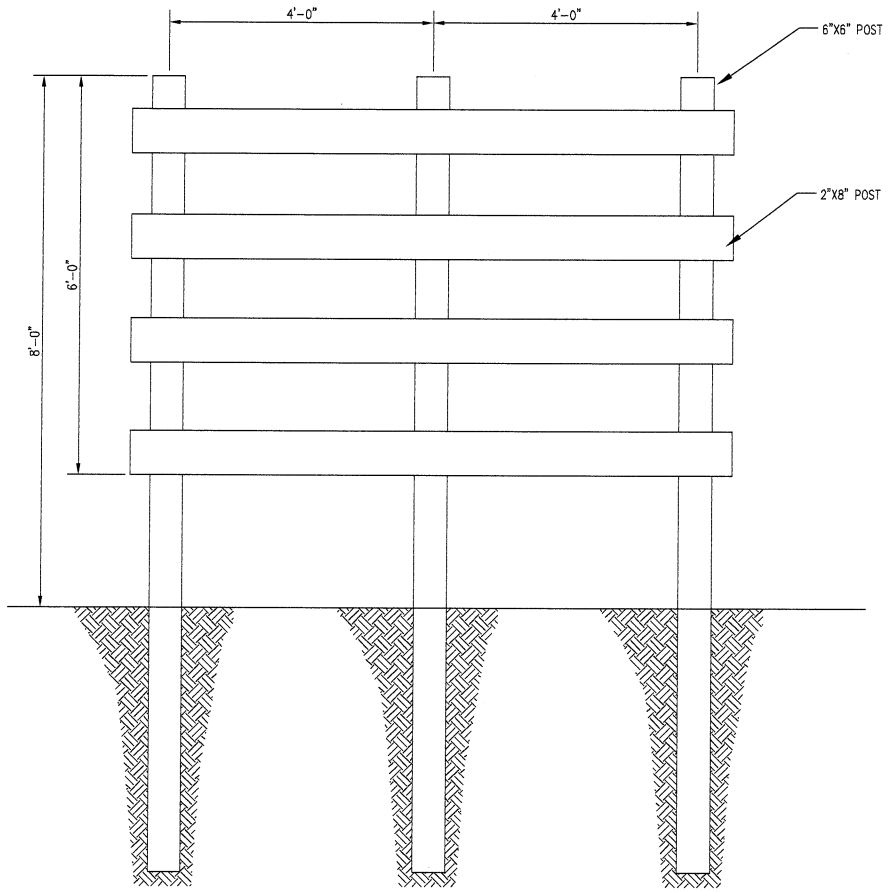
SE/PLAT
CWS 91
ACUMC-BELL TOWER
1301 TRAP RD.
VIENNA, VA 22182

TITLE:

EROSION AND SEDIMENT CONTROL PLAN

SHEET NUMBER:

Z-2

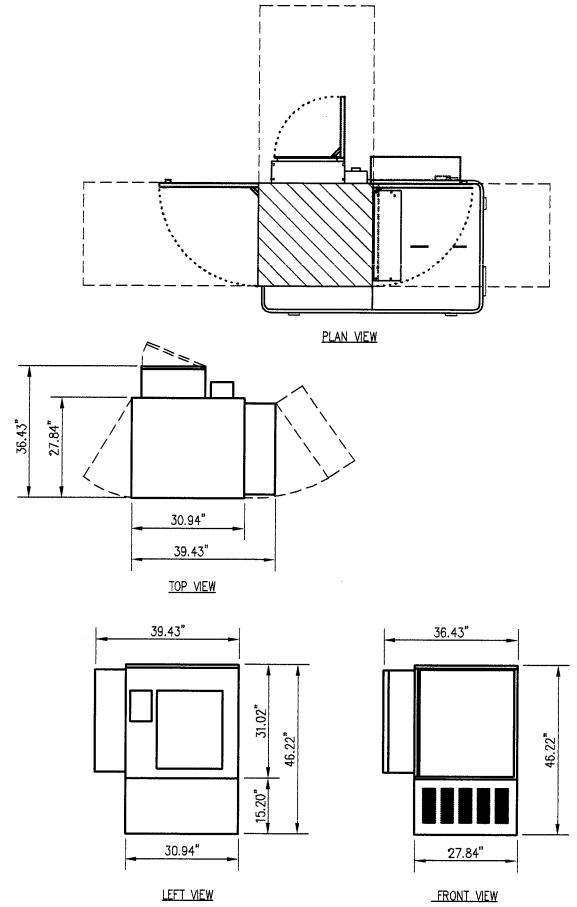


FRONT ELEVATION

UTILITY FRAME

SCALE: N.T.S.

1 / Z-3



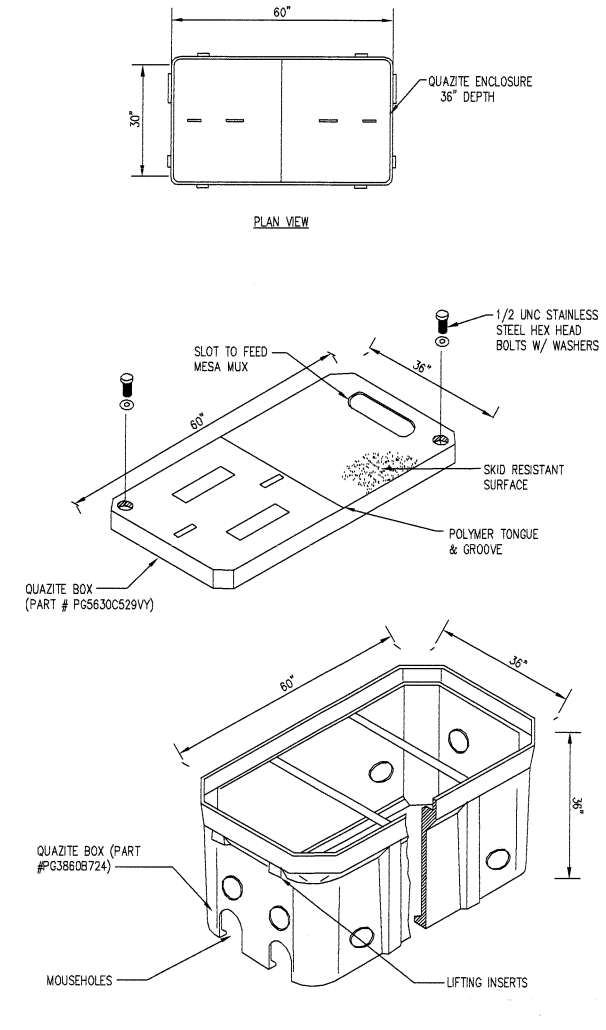
NOTES:

1. PROVIDE 3" GRAVEL IN BOTTOM OF QUAZITE VAULT AND #2 TINNED GROUND TO MESA CABINET.
2. CONTRACTOR SHALL HOOK UP AND POWER UP MESA CABINET, AND GROUND RING TO IT, AND NOTIFY CONSTRUCTION MANAGER WHEN DONE.
3. CONTRACTOR SHALL INSTALL 30AMP CIRCUIT DISCONNECT B

MESA SPAN XL TELCO CABINET DETAILS

SCALE: N.T.S.

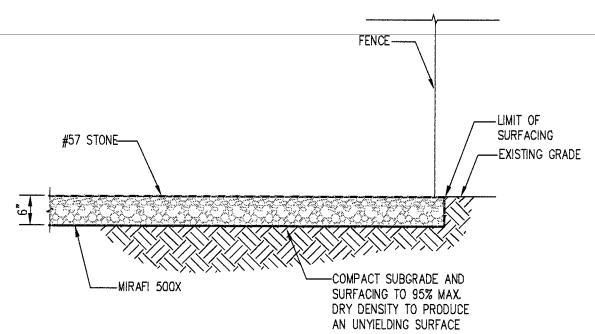
2 / Z-3



HANDHOLE QUAZITE BOX

SCALE: N.T.S.

3 / Z-3

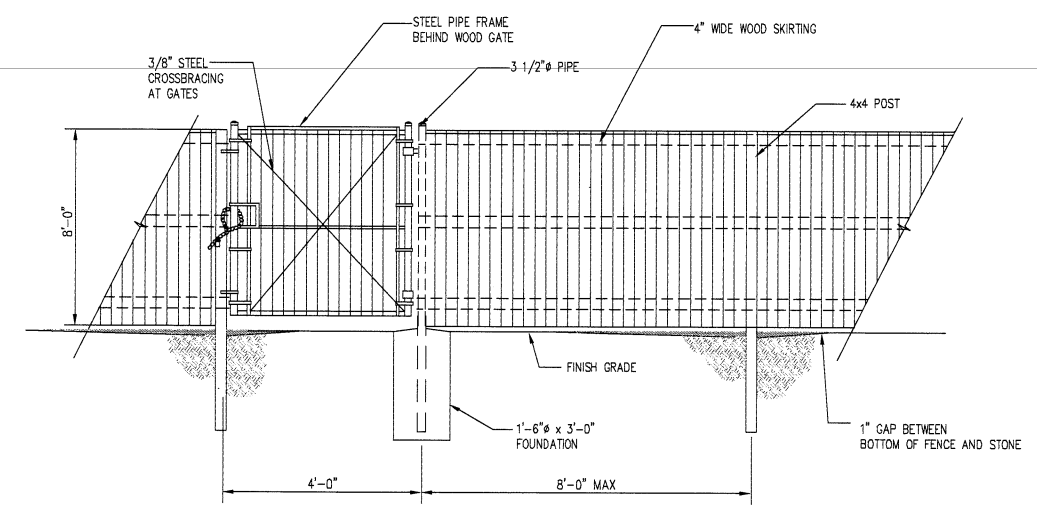


NOTE:
UTILITY AREA SHALL BE CLEARED AND GRUBBED. REMOVE UNSUITABLE LOOSE OR SOFT SOIL, ORGANIC MATERIAL OR RUBBLE TO FIRM GRADE. FILL UNDERCUT AND COMPACT UP TO 6" BELOW FINISH GRADE. PLACE A MIRAFI 500X SOIL STABILIZATION FABRIC ON SUBGRADE. FILL WITH 6" OF AASHTO 57 STONE TO FINISH GRADE.

COMPOUND SURFACING DETAIL

SCALE: N.T.S.

4 / Z-3



WOOD FENCE AND GATE ELEVATION

SCALE: N.T.S.

5 / Z-3

ALL LUMBER SHALL BE PRESSURE TREATED

entrex
communication services, inc
6600 Rockledge Drive, Suite 550
BETHESDA, MD 20817
PHONE: (202)408-0960
FAX: (202)408-0961

SUBMITTALS

DATE	DESCRIPTION	REV.
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SEAL:

CWS
2800 Shirlington Road
Suite 716
Arlington, VA 22206
Phone 703-845-1971
Fax 703-845-1953

PROJECT NO: 1094.040
DESIGNER: M.A.
ENGINEER: M.M.

SCALE:
0 1/2 1 2
GRAPHIC SCALE IN INCHES

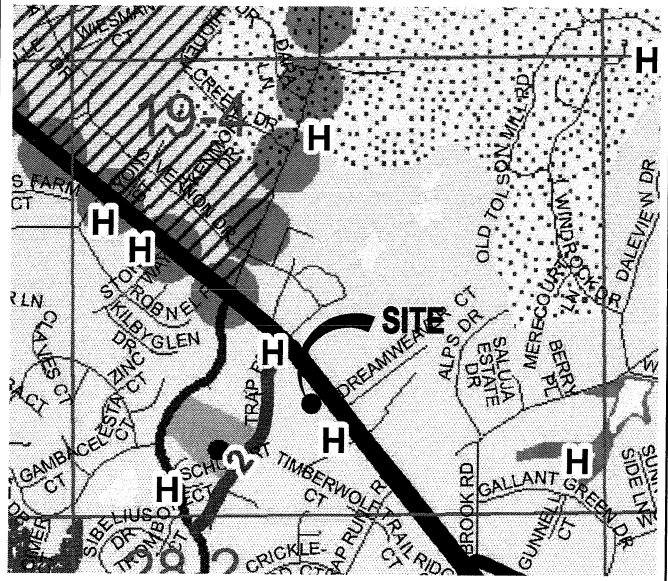
SE/PLAT
CWS 91
ACUMC-BELL TOWER
1301 TRAP RD.
VIENNA, VA 22182

TITLE:

SITE DETAILS

SHEET NUMBER:

Z-3



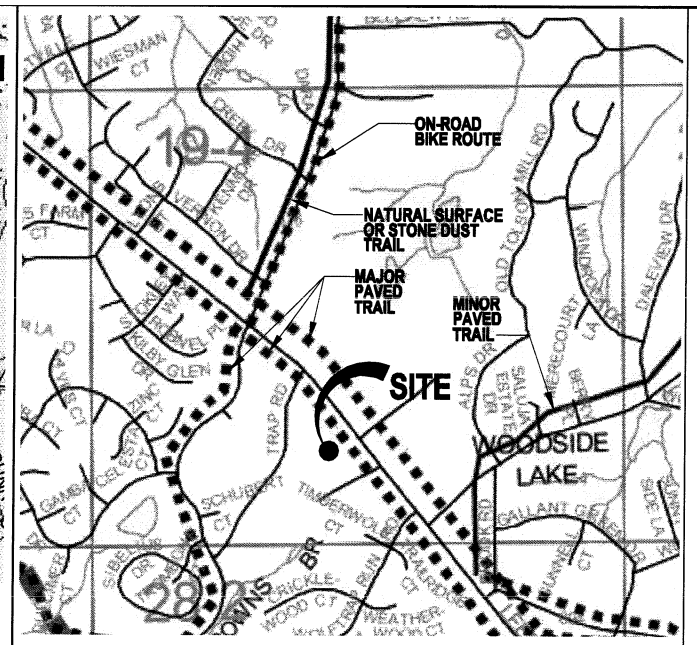
LAND USE MAP

SCALE: 1"=1000'

1 / Z-4

TRUE NORTH

SOURCE:
FAIRFAX COUNTY COMPREHENSIVE PLAN



TRAIL MAP

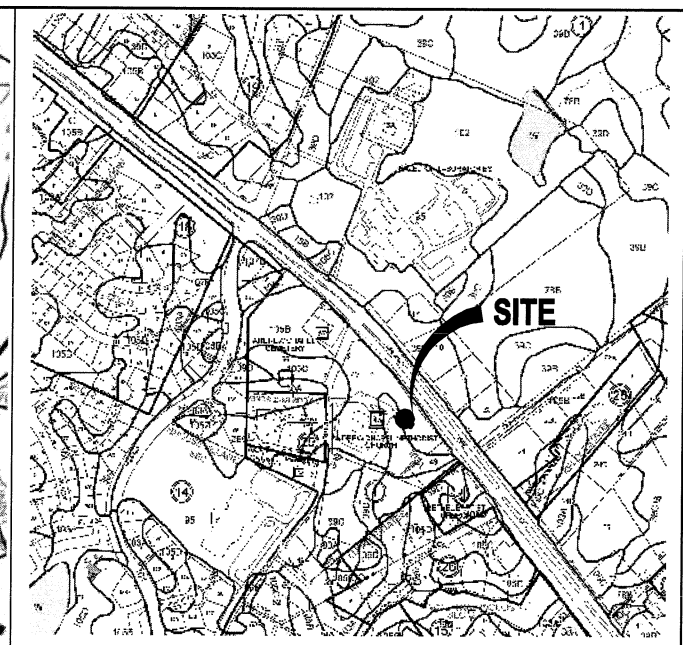
SCALE: 1"=1000'

2 / Z-4

TRUE NORTH

SOURCE:
FAIRFAX COUNTY COUNTYWIDE TRAILS PLAN
MAP SECTION 19-4

NOTES:
THERE IS A KNOWN NEARBY MAJOR PAVED TRAIL SYSTEM ALONG LEESBURG PIKE.
(SEE MAP ABOVE)



SOILS MAP

SCALE: 1"=500'

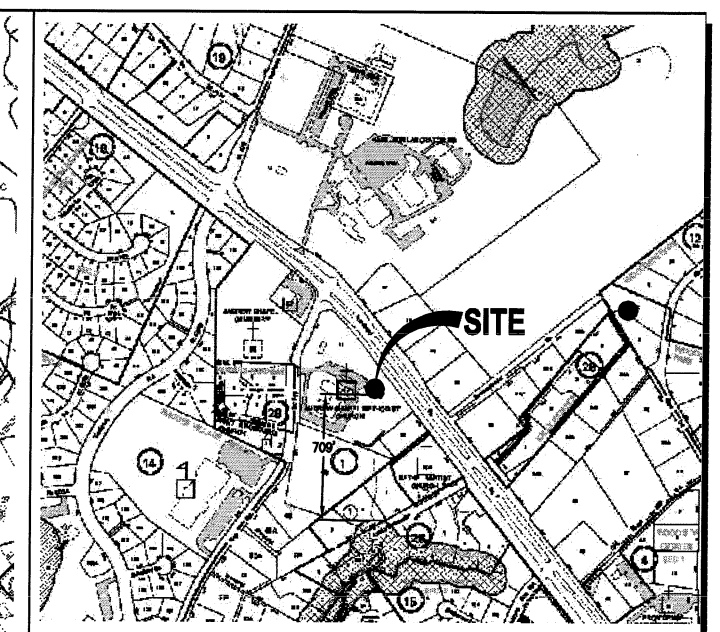
3 / Z-4

TRUE NORTH

SOURCE:
FAIRFAX COUNTY
MAP SECTION 19-4

NOTE:
SOIL TYPE: 103A
SOIL NAME: WHEATON-CODORUS COMPLEX, 0 TO 2 PERCENT SLOPES

SOIL TYPE: 105B
SOIL NAME: WHEATON-GLENELG COMPLEX, 2 TO 7 PERCENT SLOPES



RESOURCE MANAGEMENT MAP

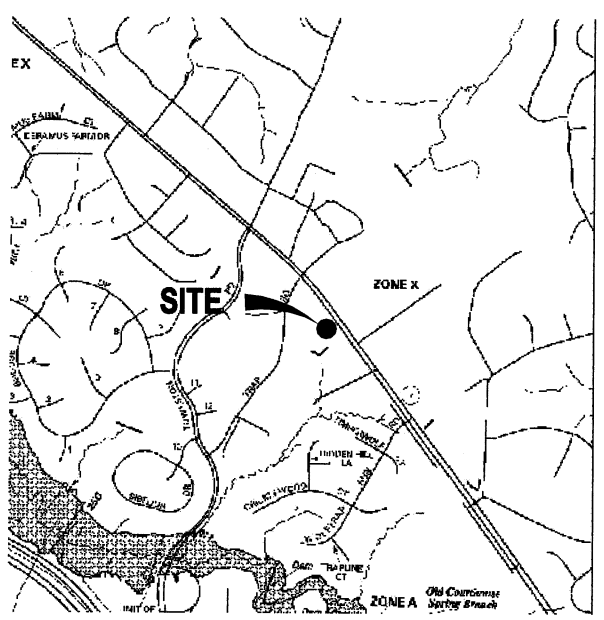
SCALE: 1"=500'

4 / Z-4

TRUE NORTH

SOURCE:
FAIRFAX COUNTY COMPREHENSIVE PLANS

NOTES:
THE PROJECT SITE IS LOCATED APPROXIMATELY 737' FROM THE NEAREST RESOURCE PROTECTION AREA.



FLOOD ZONE MAP

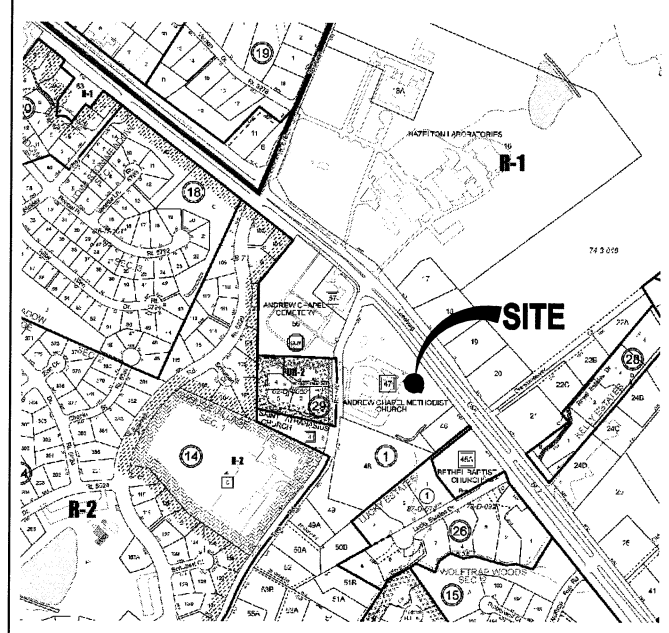
SCALE: 1"=1000'

5 / Z-4

TRUE NORTH

SOURCE:
FEMA FLOOD MAP FOR FAIRFAX COUNTY, VA.
COMMUNITY PANEL NUMBER 51059C 0135 E. SEPTEMBER 17, 2010.

NOTES:
THE PROJECT SITE IS LOCATED IN FLOOD ZONE X, AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOOD-PLAIN.



ZONING MAP

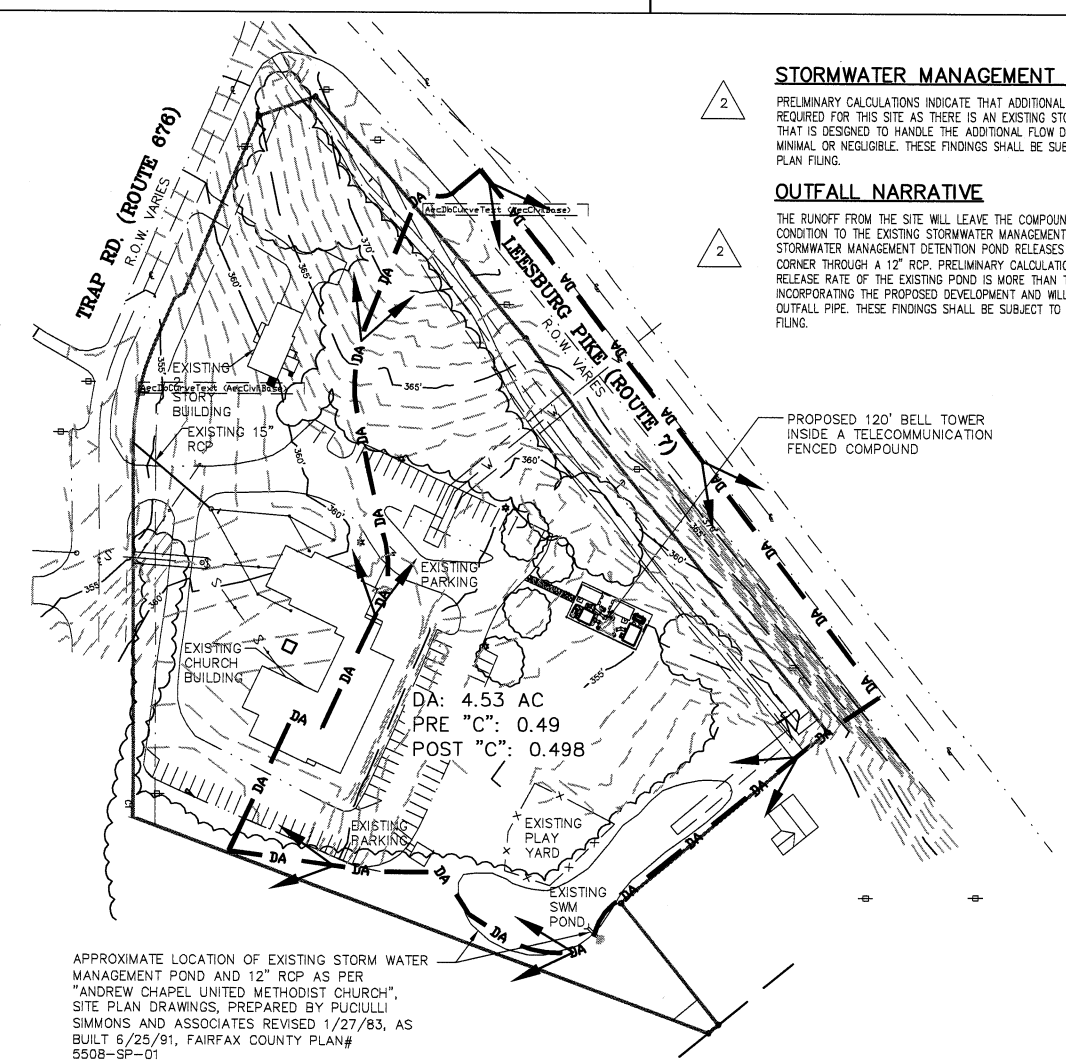
SCALE: 1"=500'

6 / Z-4

TRUE NORTH

SOURCE:
FAIRFAX COUNTY COMPREHENSIVE PLANS

NOTES:
THE PROJECT SITE IS LOCATED IN A RESIDENTIAL AREA R-1.



DRAINAGE AREA MAP

SCALE: 1"=80'

7 / Z-4

TRUE NORTH

2

STORMWATER MANAGEMENT NARRATIVE

PRELIMINARY CALCULATIONS INDICATE THAT ADDITIONAL STORMWATER MANAGEMENT FACILITY IS NOT REQUIRED FOR THIS SITE AS THERE IS AN EXISTING STORMWATER MANAGEMENT FACILITY ONSITE THAT IS DESIGNED TO HANDLE THE ADDITIONAL FLOW DUE TO THIS PROJECT, WHICH IS VERY MINIMAL OR NEGLIGIBLE. THESE FINDINGS SHALL BE SUBJECT TO FULL REVIEW AT TIME OF SITE PLAN FILING.

2

OUTFALL NARRATIVE

THE RUNOFF FROM THE SITE WILL LEAVE THE COMPOUND IN ALMOST PRE-DEVELOPMENT CONDITION TO THE EXISTING STORMWATER MANAGEMENT DETENTION POND. THE EXISTING STORMWATER MANAGEMENT DETENTION POND RELEASES OUTFALL TO THE SOUTHEAST PROPERTY CORNER THROUGH A 12" RCP. PRELIMINARY CALCULATIONS INDICATE THAT THE ALLOWABLE RELEASE RATE OF THE EXISTING POND IS MORE THAN THE REQUIRED RELEASE RATE AFTER INCORPORATING THE PROPOSED DEVELOPMENT AND WILL NOT AFFECT THE DOWNSTREAM OF THE OUTFALL PIPE. THESE FINDINGS SHALL BE SUBJECT TO FULL REVIEW AT TIME OF SITE PLAN FILING.

entrex
communication services, inc
6600 Rockledge Drive, Suite 550
BETHESDA, MD 20817
PHONE: (202)408-0960
FAX: (202)408-0961

SUBMITTALS

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04-02-14	COUNTY COMMENTS	3
04-21-14	COUNTY COMMENTS	4

SEAL:

COMMONWEALTH OF VIRGINIA
JOHN CABOT GOODY
No. 016189
PROFESSIONAL ENGINEER

CWS
2800 Shirlington Road
Suite 716
Arlington, VA 22206
Phone 703-845-1971
Fax 703-845-1953

PROJECT NO:	1094.040
DESIGNER:	M.A.
ENGINEER:	M.M.

SCALE:

0 1/2 1 2
GRAPHIC SCALE IN INCHES

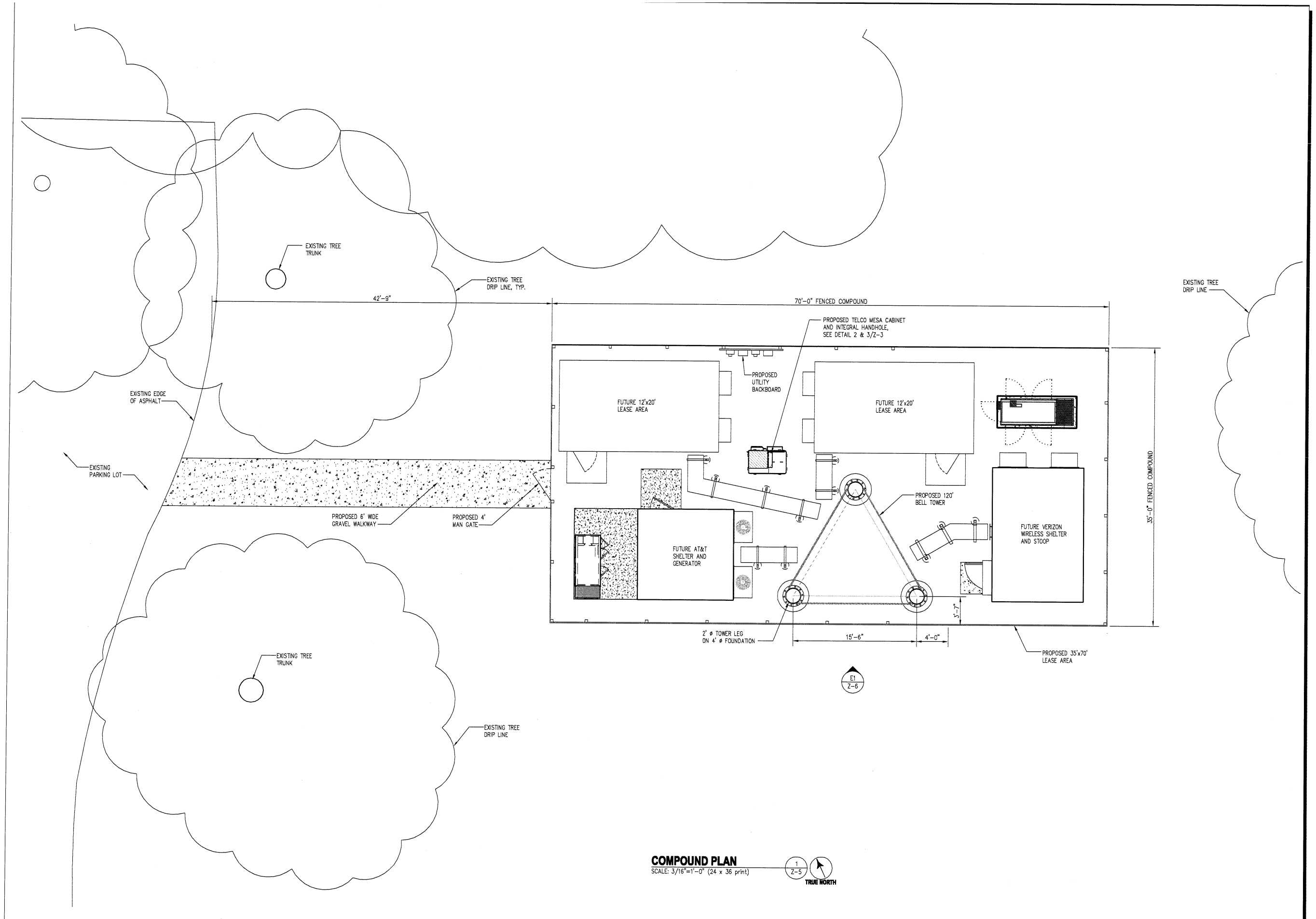
SE/PLAT
CWS 91
ACUMC-BELL TOWER
1301 TRAP RD.
VIENNA, VA 22182

TITLE:

CIVIL MAPS

SHEET NUMBER:

Z-4



COMPOUND PLAN
SCALE: 3/16"=1'-0" (24 x 36 print)

entrex
communication services, inc
6600 Rockledge Drive, Suite 550
BETHESDA, MD 20817
PHONE: (202)408-0960
FAX: (202)408-0961

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SEAL:

COMMONWEALTH OF VIRGINIA
JOHN CABOT MOUDY
No. 016189
PROFESSIONAL ENGINEER

CWS
2800 Shirlington Road
Suite 716
Arlington, VA 22206
Phone 703-845-1971
Fax 703-845-1953

PROJECT NO: 1094.040
DESIGNER: M.A.
ENGINEER: M.M.

SCALE:
0 1/2 1 2
GRAPHIC SCALE IN INCHES

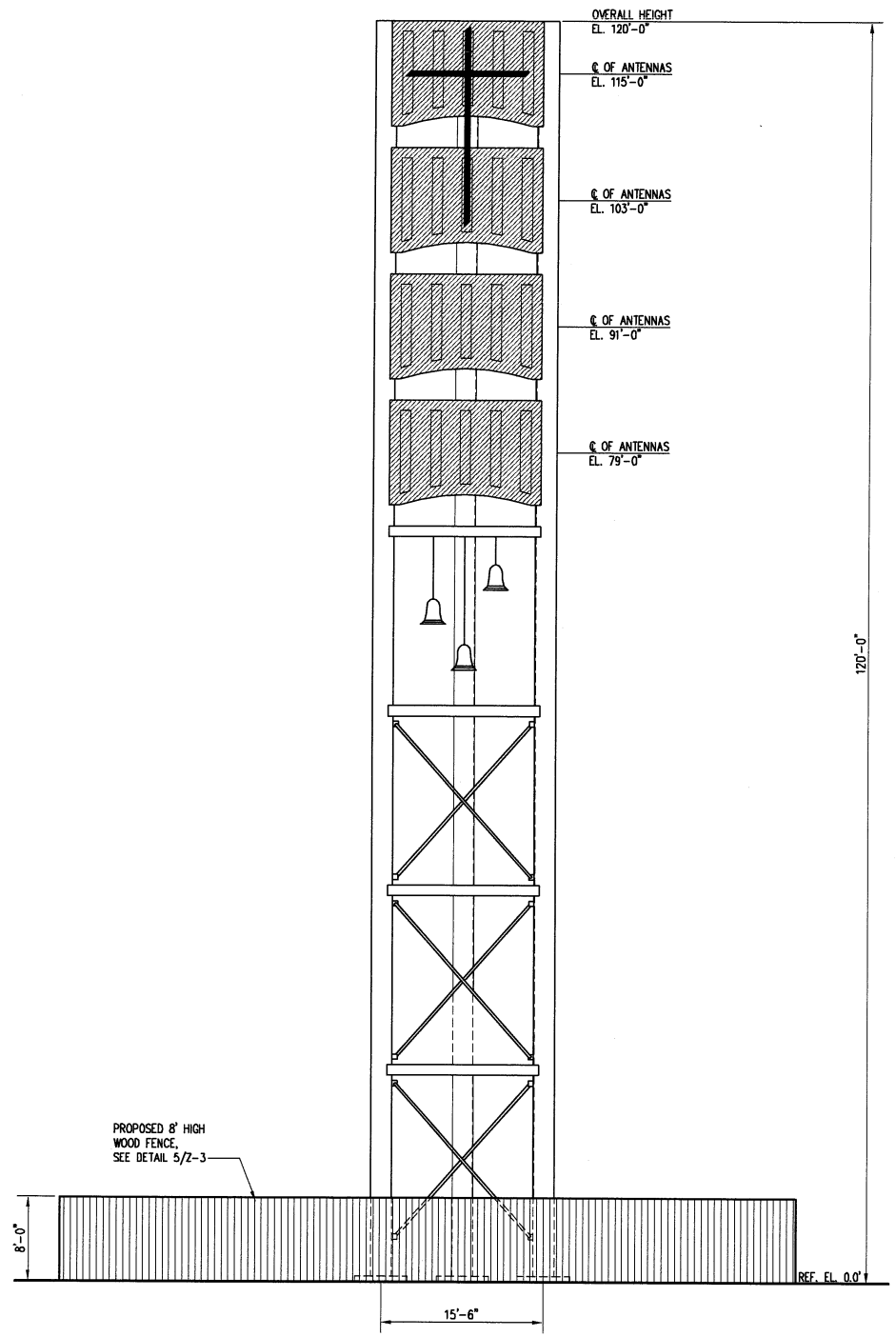
SE/PLAT
CWS 91
ACUMC-BELL TOWER
1301 TRAP RD.
VIENNA, VA 22182

TITLE:

COMPOUND PLAN

SHEET NUMBER:

Z-5



BELL TOWER ELEVATION (E1 / Z-6)

SCALE: 1/8"=1'-0" (24 x 35 print)

entrex
communication services, inc

6600 Rockledge Drive, Suite 550
BETHESDA, MD 20817
PHONE: (202)408-0960
FAX: (202)408-0961

SUBMITTALS

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SEAL:

COMMONWEALTH OF VIRGINIA
JOHN CABOT ROUDY
No. 016189
PROFESSIONAL ENGINEER

CWS
2800 Shirlington Road
Suite 716
Arlington, VA 22206
Phone 703-845-1971
Fax 703-845-1953

PROJECT NO: 1094.040
DESIGNER: M.A.
ENGINEER: M.M.

SCALE:
0 1/2 1 2
GRAPHIC SCALE IN INCHES

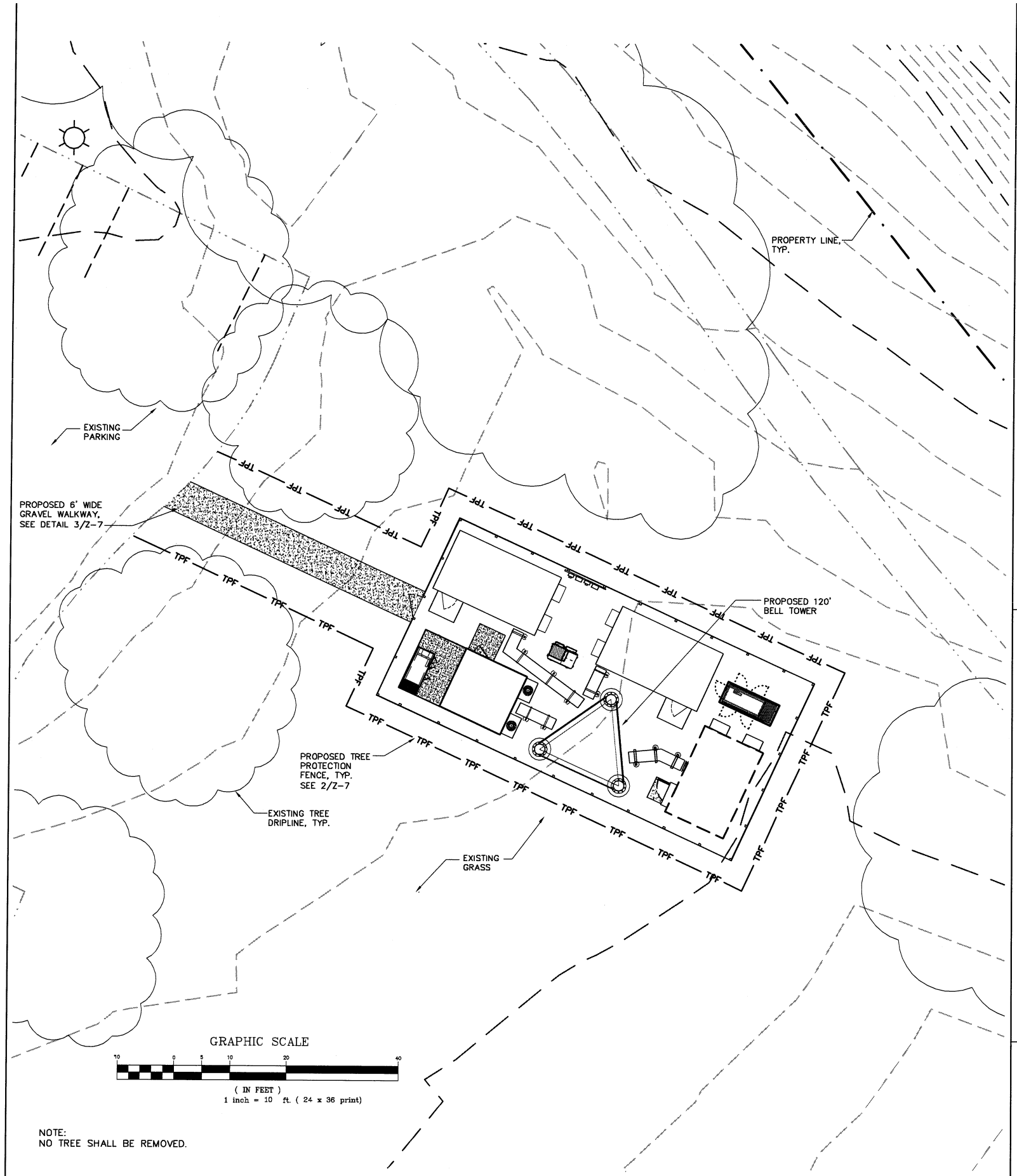
SE/PLAT
CWS 91
ACUMC-BELL TOWER
1301 TRAP RD.
VIENNA, VA 22182

TITLE:

BELL TOWER ELEVATION

SHEET NUMBER:

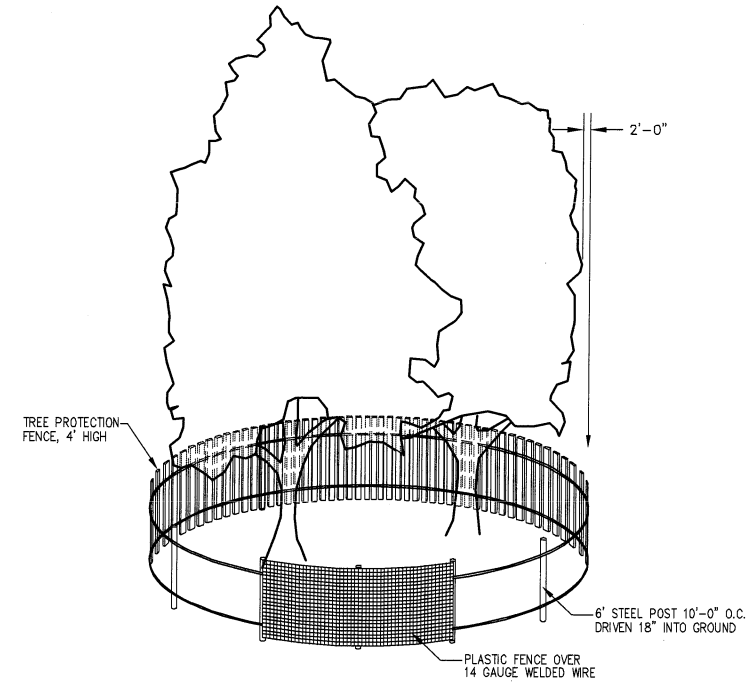
Z-6



NOTE:
NO TREE SHALL BE REMOVED.

TREE PRESERVATION PLAN (1 / Z-7)
SCALE: AS SHOWN

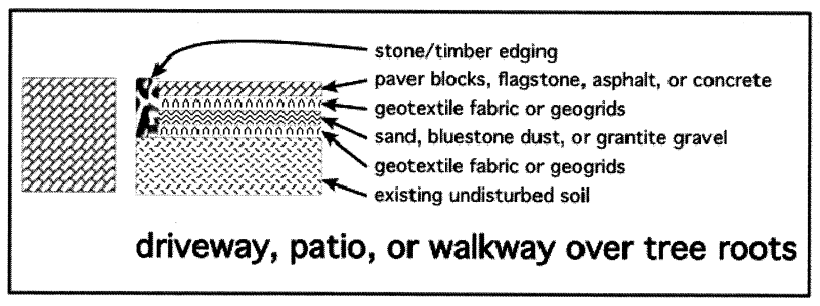
TRUE NORTH



TREE PROTECTION DETAIL (2 / Z-7)
SCALE: N.T.S.

TreesPlease®

P. O. Box 1025 Haymarket, Virginia 20168 703-927-2048
http://www.treesplease.com ed@treesplease.com



PROPOSED WALKWAY DETAIL (3 / Z-7)
SCALE: N.T.S.

1. THE TREE PROTECTION FENCING SHALL BE INSTALLED UNDER THE SUPERVISION OF ENTREX COMMUNICATIONS ENGINEER. THE TREE PROTECTION FENCE SHALL BE INSTALLED PRIOR TO THE INSTALLATION OF THE SILT FENCE AND ANY CLEARING AND GRADING ACTIVITY.

2. THE TREE PROTECTION FENCE TO BE PLACED 2 FEET OUTSIDE THE SILT FENCE MARKING THE LIMITS OF THE DISTURBANCE/CLEARING AND GRADING.

entrex
communication services, inc

6600 Rockledge Drive, Suite 550
BETHESDA, MD 20817
PHONE: (202)408-0960
FAX: (202)408-0961

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SEAL:

COMMONWEALTH OF VIRGINIA
JOHN CABOT BOUDY
No. 016189
PROFESSIONAL ENGINEER

CWS
2800 Shirlington Road
Suite 716
Arlington, VA 22206
Phone 703-845-1971
Fax 703-845-1953

PROJECT NO: 1094.040
DESIGNER: R.S.
ENGINEER: M.M.

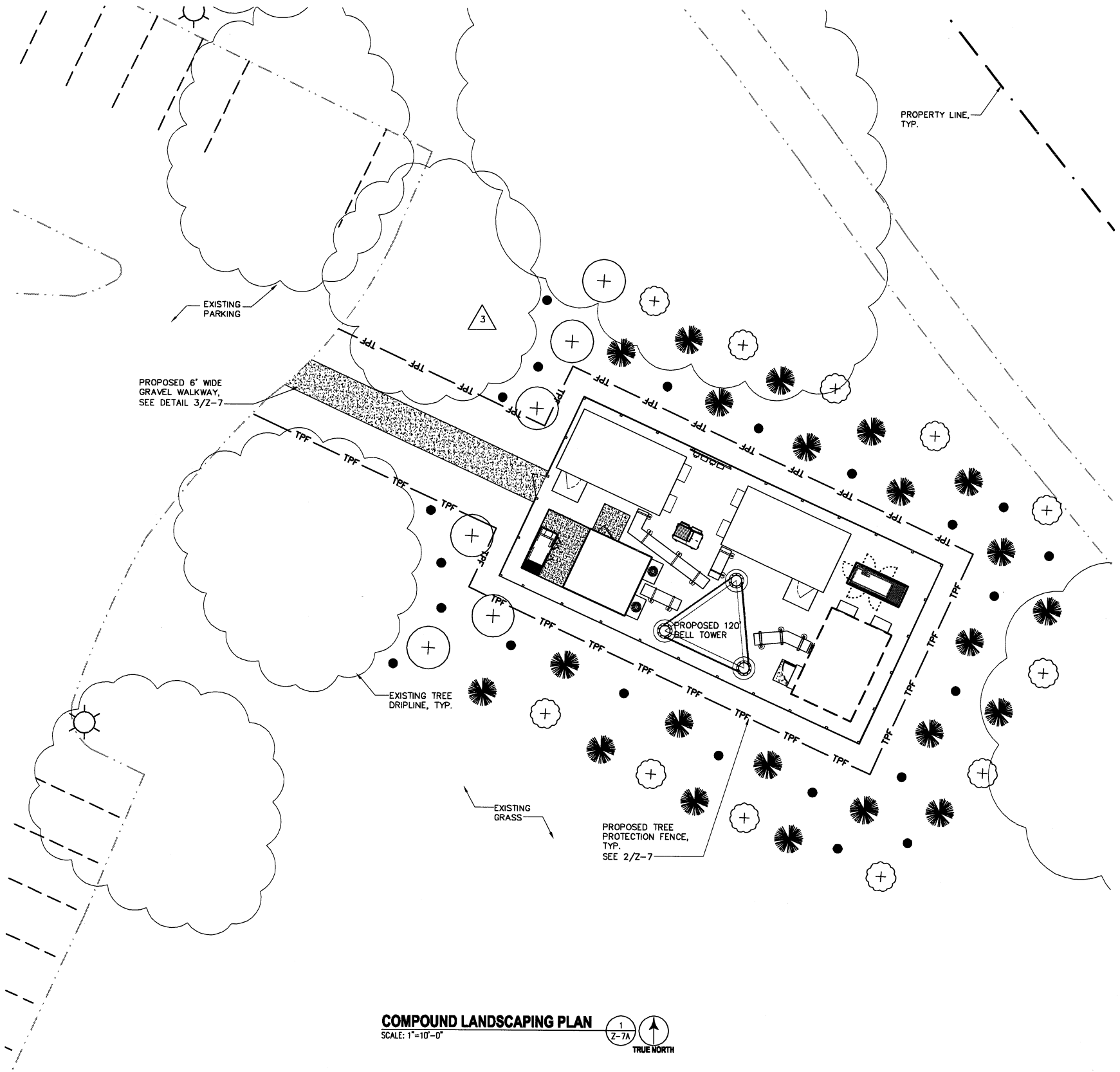
SCALE:
0 1/2 1 2
GRAPHIC SCALE IN INCHES

SE/PLAT
CWS 91
ACUMC-BELL TOWER
1301 TRAP RD.
VIENNA, VA 22182

TITLE:

TREE PRESERVATION PLAN AND NOTES

SHEET NUMBER:
Z-7



COMPOUND LANDSCAPING PLAN
SCALE: 1"=10'-0"
1 / Z-7A
TRUE NORTH

LANDSCAPE PLANTING SCHEDULE

6 SOUTHERN MAGNOLIA (MANOGLIA GRANDIFLORA) 6FT, B&B OR CONTAINER

22 PRAGUE VIBURNUM (VIBURNUM PRAGENSIS) 18-24 IN, B&B OR CONTAINER

11 EASTERN RED CEDAR (JUNIPERUS VIRGINIANA) 6FT, B&B OR CONTAINER
11 AMERICAN HOLLY (ILEX OPACA) 6FT, B&B OR CONTAINER

11 SPICEBUSH (LINDERA BENZOIN) 18-24 IN, B&B OR CONTAINER

DISTRIBUTE PLANTS IN A RANDOM PATTERN SO AS TO APPEAR NATURAL.

NOTE:
LANDSCAPING PLAN PREPARED BY ED MILHOUS, REGISTERED CONSULTING ARBORIST #350.

entrex
communication services, inc
6600 Rockledge Drive, Suite 550
BETHESDA, MD 20817
PHONE: (202)408-0960
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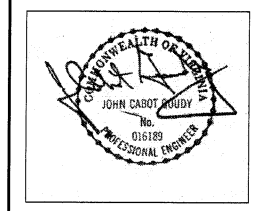
SEAL:



CWS
2800 Shirlington Road
Suite 716
Arlington, VA 22206
Phone 703-845-1971
Fax 703-845-1953

PROJECT NO:	1094.040
DESIGNER:	R.S.
ENGINEER:	C.G.

SCALE:
0 1/2 1 2
GRAPHIC SCALE IN INCHES

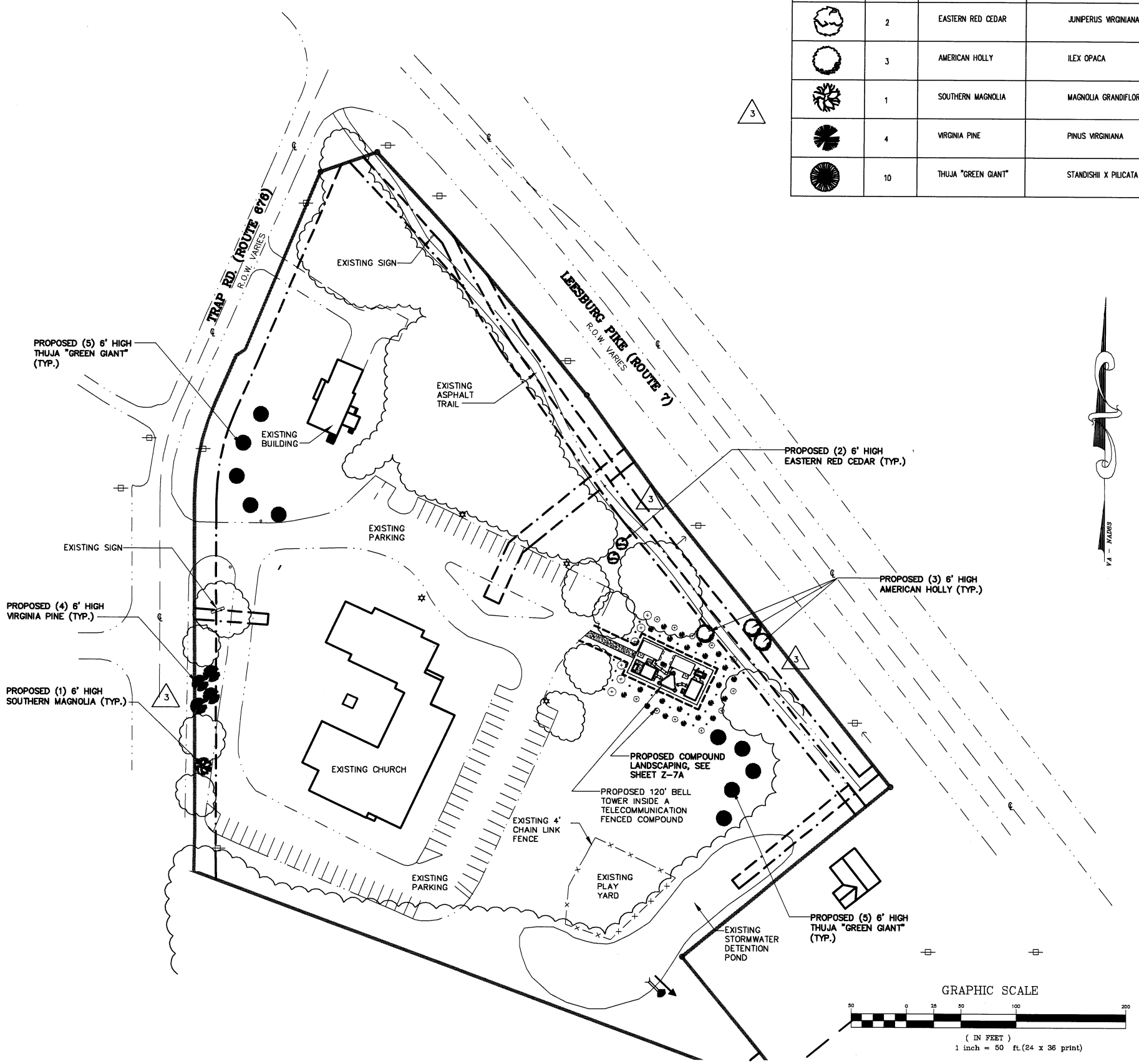
SE/PLAT
CWS 91
ACUMC-BELL TOWER
1301 TRAP RD.
VIENNA, VA 22182

TITLE:
3
COMPOUND LANDSCAPING PLAN

SHEET NUMBER:
Z-7A

PLANT LIST

TREE SYMBOL	QTY.	COMMON NAME	SPECIES NAME	SIZE/REMARKS
	2	EASTERN RED CEDAR	JUNIPERUS VIRGINIANA	HEALTHY STRAIGHT TRUNK TREE, WELL BRANCHED, 6'-0" MIN. HEIGHT AT PLANTING
	3	AMERICAN HOLLY	ILEX OPACA	HEALTHY STRAIGHT TRUNK TREE, WELL BRANCHED, 6'-0" MIN. HEIGHT AT PLANTING
	1	SOUTHERN MAGNOLIA	MAGNOLIA GRANDIFLORA	HEALTHY STRAIGHT TRUNK TREE, WELL BRANCHED, 6'-0" MIN. HEIGHT AT PLANTING
	4	VIRGINIA PINE	PINUS VIRGINIANA	HEALTHY STRAIGHT TRUNK TREE, WELL BRANCHED, 6'-0" MIN. HEIGHT AT PLANTING
	10	THUJA "GREEN GIANT"	STANDISHII X PILICATA	HEALTHY STRAIGHT TRUNK TREE, WELL BRANCHED, 6'-0" MIN. HEIGHT AT PLANTING



EXISTING LANDSCAPING ENHANCEMENT PLAN
SCALE: AS SHOWN

1 Z-7B TRUE NORTH

entrex communication services, inc
6600 Rockledge Drive, Suite 550
BETHESDA, MD 20817
PHONE: (202)408-0960
FAX: (202)408-0961

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SEAL:

COMMONWEALTH OF VIRGINIA
JOHN CABOT GOODY
No. 016189
PROFESSIONAL ENGINEER

CWS
2800 Shirlington Road
Suite 716
Arlington, VA 22206
Phone 703-845-1971
Fax 703-845-1953

PROJECT NO: 1094.040
DESIGNER: W.A.
ENGINEER: C.G.

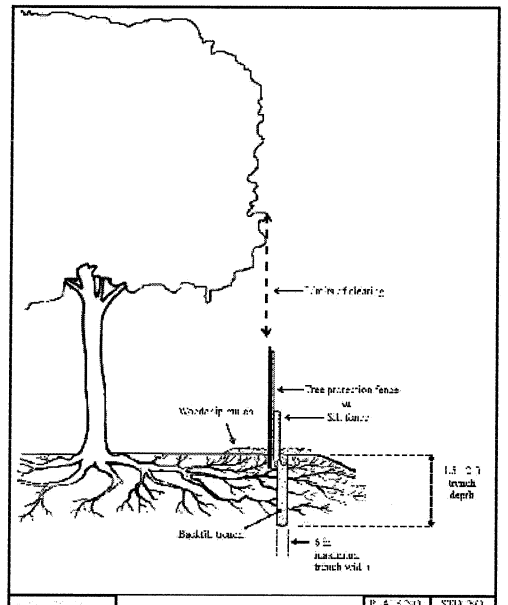
SCALE:
0 1/2 1 2
GRAPHIC SCALE IN INCHES

SE/PLAT
CWS 91
ACUMC-BELL TOWER
1301 TRAP RD.
VIENNA, VA 22182

TITLE: 3
EXISTING LANDSCAPING ENHANCEMENT PLAN

SHEET NUMBER:
Z-7B

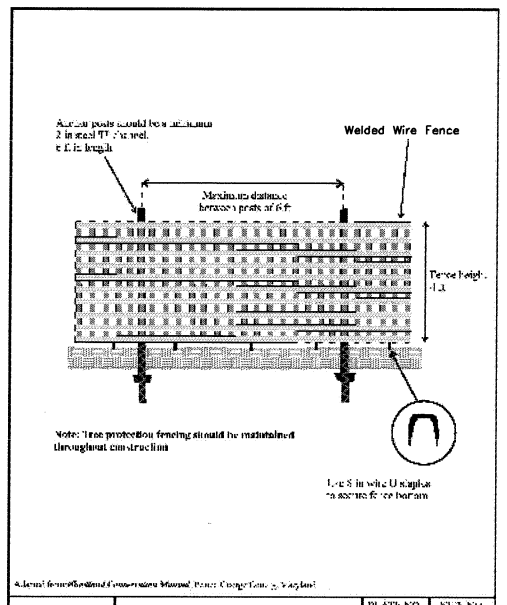
FAIRFAX COUNTY PUBLIC FACILITIES MANUAL



Rev. Sep. 12 2006 Rev. 2 02 2011 Regular	ROOT PRUNING	PLATE NO. 7-12	STD. NO.

TREE FENCE DETAIL (1 / Z-7C)
SCALE: N.T.S.

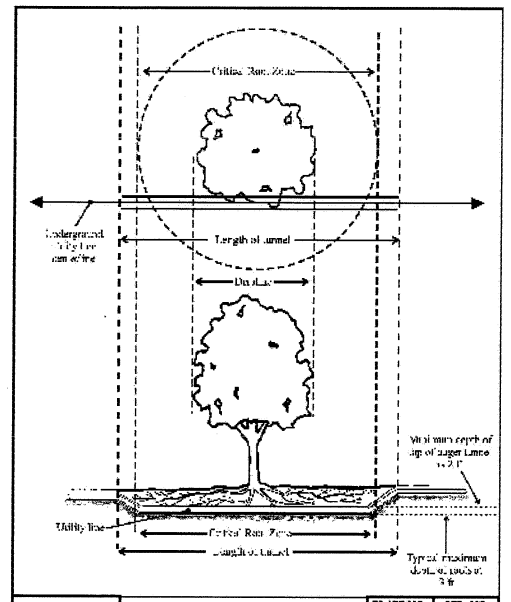
FAIRFAX COUNTY PUBLIC FACILITIES MANUAL



Rev. Sep. 12 2006 Rev. 2 02 2011 Regular	TREE PROTECTION FENCE INSTALLATION	PLATE NO. 6-12	STD. NO.

FENCING AND ARMORING DETAIL (2 / Z-7C)
SCALE: N.T.S.

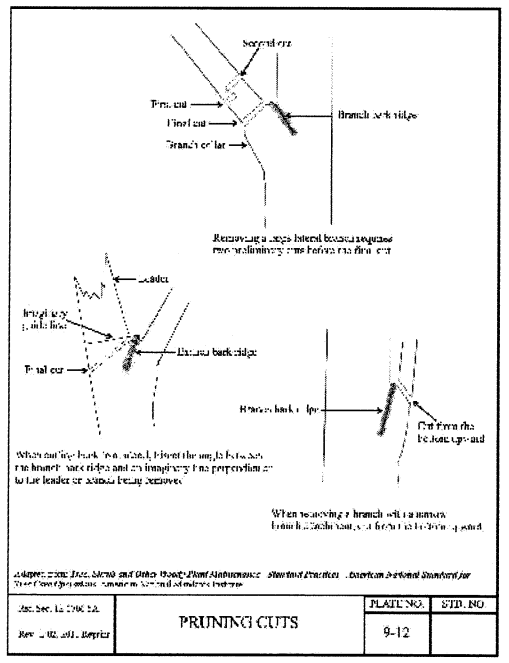
FAIRFAX COUNTY PUBLIC FACILITIES MANUAL



Rev. Sep. 12 2006 Regular	TUNNELING	PLATE NO. 3-12	STD. NO.

TUNNELING DETAIL (3 / Z-7C)
SCALE: N.T.S.

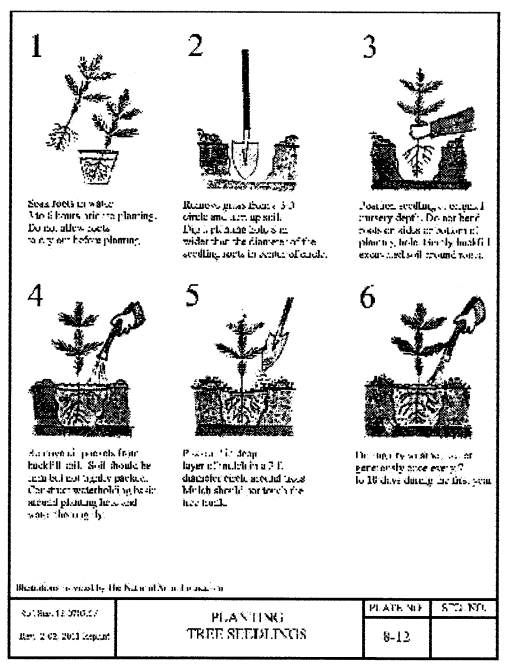
FAIRFAX COUNTY PUBLIC FACILITIES MANUAL



Rev. Sep. 12 2006 Rev. 2 02 2011 Regular	PRUNING CUTS	PLATE NO. 9-12	STD. NO.

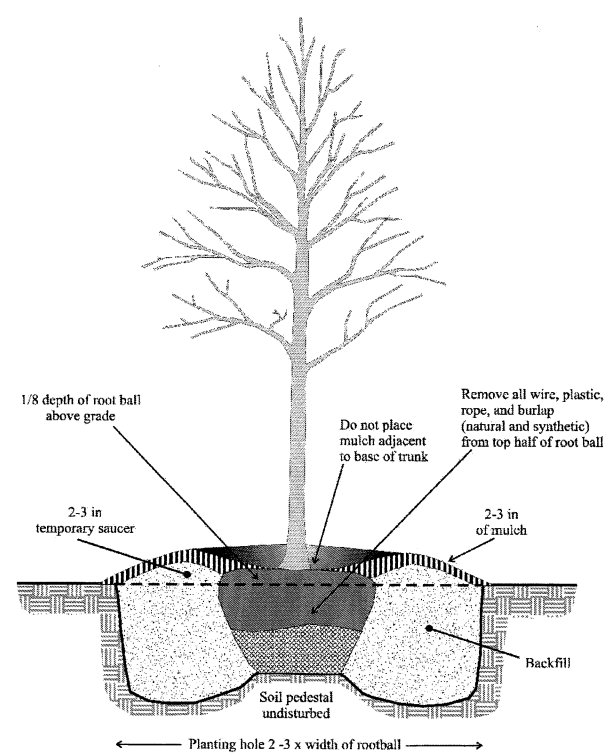
TREE CARE DETAIL (4 / Z-7C)
SCALE: N.T.S.

FAIRFAX COUNTY PUBLIC FACILITIES MANUAL



Rev. Sep. 12 2006 Rev. 2 02 2011 Regular	PLANTING TREE SEEDLINGS	PLATE NO. 8-12	STD. NO.

TREE FERTILIZATION DETAIL (5 / Z-7C)
SCALE: N.T.S.



TREE PLANTING DETAIL (6 / Z-7C)
SCALE: N.T.S.

THE APPLICANT AGREES TO THE FOLLOWING CONDITIONS:

TREE PRESERVATION: "THE APPLICANT SHALL SUBMIT A TREE PRESERVATION PLAN AND NARRATIVE AS PART OF THE FIRST AND ALL SUBSEQUENT SITE PLAN SUBMISSIONS. THE PRESERVATION PLAN AND NARRATIVE SHALL BE PREPARED BY A CERTIFIED ARBORIST OR A REGISTERED CONSULTING ARBORIST, AND SHALL BE SUBJECT TO THE REVIEW AND APPROVAL OF THE URBAN FOREST MANAGEMENT DIVISION, DPWES.

THE TREE PRESERVATION PLAN SHALL INCLUDE A TREE INVENTORY THAT IDENTIFIES THE LOCATION, SPECIES, CRITICAL ROOT ZONE, SIZE, CROWN SPREAD AND CONDITION ANALYSIS PERCENTAGE RATING FOR ALL INDIVIDUAL TREES TO BE PRESERVED, AS WELL AS ALL ON AND OFF-SITE TREES, LIVING OR DEAD WITH TRUNKS 8 INCHES IN DIAMETER AND GREATER (MEASURED AT 4 ½ -FEET FROM THE BASE OF THE TRUNK OR AS OTHERWISE ALLOWED IN THE LATEST EDITION OF THE GUIDE FOR PLANT APPRAISAL PUBLISHED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE) LOCATED WITHIN 25 FEET TO EITHER SIDE OF THE LIMITS OF CLEARING AND GRADING. THE TREE PRESERVATION PLAN SHALL PROVIDE FOR THE PRESERVATION OF THOSE AREAS SHOWN FOR TREE PRESERVATION ON THE SEA/SPA, THOSE AREAS OUTSIDE OF THE LIMITS OF CLEARING AND GRADING AND THOSE ADDITIONAL AREAS IN WHICH TREES CAN BE PRESERVED AS A RESULT OF FINAL ENGINEERING. THE TREE PRESERVATION PLAN AND NARRATIVE SHALL INCLUDE ALL ITEMS SPECIFIED IN PFM 12-0507 AND 12-0509. SPECIFIC TREE PRESERVATION ACTIVITIES THAT WILL MAXIMIZE THE SURVIVABILITY OF ANY TREE IDENTIFIED TO BE PRESERVED, SUCH AS: CROWN PRUNING, ROOT PRUNING, MULCHING, FERTILIZATION, CAMBISTAT, RADIAL MULCHING, AND OTHERS AS NECESSARY, SHALL BE INCLUDED IN THE PLAN."

TREE PRESERVATION WALK-THROUGH. "THE APPLICANT SHALL RETAIN THE SERVICES OF A CERTIFIED ARBORIST OR LANDSCAPE ARCHITECT, AND SHALL HAVE THE LIMITS OF CLEARING AND GRADING MARKED WITH A CONTINUOUS LINE OF FLAGGING PRIOR TO THE WALK-THROUGH MEETING. DURING THE TREE-PRESERVATION WALK-THROUGH MEETING, THE APPLICANT'S CERTIFIED ARBORIST OR LANDSCAPE ARCHITECT SHALL WALK THE LIMITS OF CLEARING AND GRADING WITH AN UFMD, DPWES, REPRESENTATIVE TO DETERMINE WHERE ADJUSTMENTS TO THE CLEARING LIMITS CAN BE MADE TO INCREASE THE AREA OF TREE PRESERVATION AND/OR TO INCREASE THE SURVIVABILITY OF TREES AT THE EDGE OF THE LIMITS OF CLEARING AND GRADING, AND SUCH ADJUSTMENT SHALL BE IMPLEMENTED. TREES THAT ARE IDENTIFIED AS DEAD OR DYING MAY BE REMOVED AS PART OF THE CLEARING OPERATION. ANY TREE THAT IS SO DESIGNATED SHALL BE REMOVED USING A CHAIN SAW AND SUCH REMOVAL SHALL BE ACCOMPLISHED IN A MANNER THAT AVOIDS DAMAGE TO SURROUNDING TREES AND ASSOCIATED UNDERSTORY VEGETATION. IF A STUMP MUST BE REMOVED, THIS SHALL BE DONE USING A STUMP-GRINDING MACHINE IN A MANNER CAUSING AS LITTLE DISTURBANCE AS POSSIBLE TO ADJACENT TREES AND ASSOCIATED UNDERSTORY VEGETATION AND SOIL CONDITIONS."

LIMITS OF CLEARING AND GRADING. "THE APPLICANT SHALL CONFORM STRICTLY TO THE LIMITS OF CLEARING AND GRADING AS SHOWN ON THE SEA/SPA APPLICATION, SUBJECT TO ALLOWANCES SPECIFIED IN THESE PROFFERED CONDITIONS AND FOR THE INSTALLATION OF UTILITIES AND/OR TRAILS AS DETERMINED NECESSARY BY THE DIRECTOR OF DPWES, AS DESCRIBED HEREIN. IF IT IS DETERMINED NECESSARY TO INSTALL UTILITIES AND/OR TRAILS IN AREAS PROTECTED BY THE LIMITS OF CLEARING AND GRADING AS SHOWN ON THE SEA/SPA APPLICATION, THEY SHALL BE LOCATED IN THE LEAST DISRUPTIVE MANNER NECESSARY AS DETERMINED BY THE UFMD, DPWES. A REPLANTING PLAN SHALL BE DEVELOPED AND IMPLEMENTED, SUBJECT TO APPROVAL BY THE UFMD, DPWES, FOR ANY AREAS PROTECTED BY THE LIMITS OF CLEARING AND GRADING THAT MUST BE DISTURBED FOR SUCH TRAILS OR UTILITIES."

TREE PRESERVATION FENCING: "ALL TREES SHOWN TO BE PRESERVED ON THE TREE PRESERVATION PLAN SHALL BE PROTECTED BY TREE PROTECTION FENCE. TREE PROTECTION FENCING IN THE FORM OF FOUR (4) FOOT HIGH, FOURTEEN (14) GAUGE WELDED WIRE ATTACHED TO SIX (6) FOOT STEEL POSTS DRIVEN EIGHTEEN (18) INCHES INTO THE GROUND AND PLACED NO FURTHER THAN TEN (10) FEET APART OR, SUPER SILT FENCE TO THE EXTENT THAT REQUIRED TRENCHING FOR SUPER SILT FENCE DOES NOT SEVER OR WOUND COMPRESSION ROOTS WHICH CAN LEAD TO STRUCTURAL FAILURE AND/OR UPROOTING OF TREES SHALL BE ERECTED AT THE LIMITS OF CLEARING AND GRADING AS SHOWN ON THE DEMOLITION, AND PHASE I & II EROSION AND SEDIMENT CONTROL SHEETS, AS MAY BE MODIFIED BY THE "ROOT PRUNING" PROFFER BELOW.

ALL TREE PROTECTION FENCING SHALL BE INSTALLED AFTER THE TREE PRESERVATION WALK-THROUGH MEETING BUT PRIOR TO ANY CLEARING AND GRADING ACTIVITIES, INCLUDING THE DEMOLITION OF ANY EXISTING STRUCTURES. THE INSTALLATION OF ALL TREE PROTECTION FENCING SHALL BE PERFORMED UNDER THE SUPERVISION OF A CERTIFIED ARBORIST, AND ACCOMPLISHED IN A MANNER THAT DOES NOT HARM EXISTING VEGETATION THAT IS TO BE PRESERVED. THREE (3) DAYS PRIOR TO THE COMMENCEMENT OF ANY CLEARING, GRADING OR DEMOLITION ACTIVITIES, BUT SUBSEQUENT TO THE INSTALLATION OF THE TREE PROTECTION DEVICES, THE UFMD, DPWES, SHALL BE NOTIFIED AND GIVEN THE OPPORTUNITY TO INSPECT THE SITE TO ENSURE THAT ALL TREE PROTECTION DEVICES HAVE BEEN CORRECTLY INSTALLED. IF IT IS DETERMINED THAT THE FENCING HAS NOT BEEN INSTALLED CORRECTLY, NO GRADING OR CONSTRUCTION ACTIVITIES SHALL OCCUR UNTIL THE FENCING IS INSTALLED CORRECTLY, AS DETERMINED BY THE UFMD, DPWES."

ROOT PRUNING. "THE APPLICANT SHALL ROOT PRUNE, AS NEEDED TO COMPLY WITH THE TREE PRESERVATION REQUIREMENTS OF THESE PROFFERS. ALL TREATMENTS SHALL BE CLEARLY IDENTIFIED, LABELED, AND DETAILED ON THE EROSION AND SEDIMENT CONTROL SHEETS OF THE SUBDIVISION PLAN SUBMISSION. THE DETAILS FOR THESE TREATMENTS SHALL BE REVIEWED AND APPROVED BY THE UFMD, DPWES, ACCOMPLISHED IN A MANNER THAT PROTECTS AFFECTED AND ADJACENT VEGETATION TO BE PRESERVED, AND MAY INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:

- ROOT PRUNING SHALL BE DONE WITH A TRENCHER OR VIBRATORY PLOW TO A DEPTH OF 18 INCHES.
- ROOT PRUNING SHALL TAKE PLACE PRIOR TO ANY CLEARING AND GRADING, OR DEMOLITION OF STRUCTURES.
- ROOT PRUNING SHALL BE CONDUCTED WITH THE SUPERVISION OF A CERTIFIED ARBORIST.
- AN UFMD, DPWES, REPRESENTATIVE SHALL BE INFORMED WHEN ALL ROOT PRUNING AND TREE PROTECTION FENCE INSTALLATION IS COMPLETE."

SITE MONITORING. "DURING ANY CLEARING OR TREE/VEGETATION/STRUCTURE REMOVAL ON THE APPLICANT PROPERTY, A REPRESENTATIVE OF THE APPLICANT SHALL BE PRESENT TO MONITOR THE PROCESS AND ENSURE THAT THE ACTIVITIES ARE CONDUCTED AS PROFFERED AND AS APPROVED BY THE UFMD. THE APPLICANT SHALL RETAIN THE SERVICES OF A CERTIFIED ARBORIST OR LANDSCAPE ARCHITECT TO MONITOR ALL CONSTRUCTION AND DEMOLITION WORK AND TREE PRESERVATION EFFORTS IN ORDER TO ENSURE CONFORMANCE WITH ALL TREE PRESERVATION PROFFERS, AND UFMD APPROVALS. THE MONITORING SCHEDULE SHALL BE DESCRIBED AND DETAILED IN THE LANDSCAPING AND TREE PRESERVATION PLAN, AND REVIEWED AND APPROVED BY THE UFMD, DPWES."

entrex
communication services, inc
6600 Rockledge Drive, Suite 550
BETHESDA, MD 20817
PHONE: (202)408-0960
FAX: (202)408-0961

SUBMITTALS

DATE	DESCRIPTION	REV.
05-29-13	ZONING REVIEW	
05-30-13	ZONING REVIEW	
06-25-13	ZONING	
10-11-13	COUNTY COMMENTS	
02-10-14	COUNTY COMMENTS	1
03-12-14	COUNTY COMMENTS	2
04-02-14	COUNTY COMMENTS	3
04-21-14	COUNTY COMMENTS	4

SEAL:

COMMONWEALTH OF VIRGINIA
JOHN CABOT ROUDY
No. 016189
PROFESSIONAL ENGINEER

CWS
2800 Shirlington Road
Suite 716
Arlington, VA 22206
Phone 703-845-1971
Fax 703-845-1953

PROJECT NO:	1094.040
DESIGNER:	W.A.
ENGINEER:	C.G.

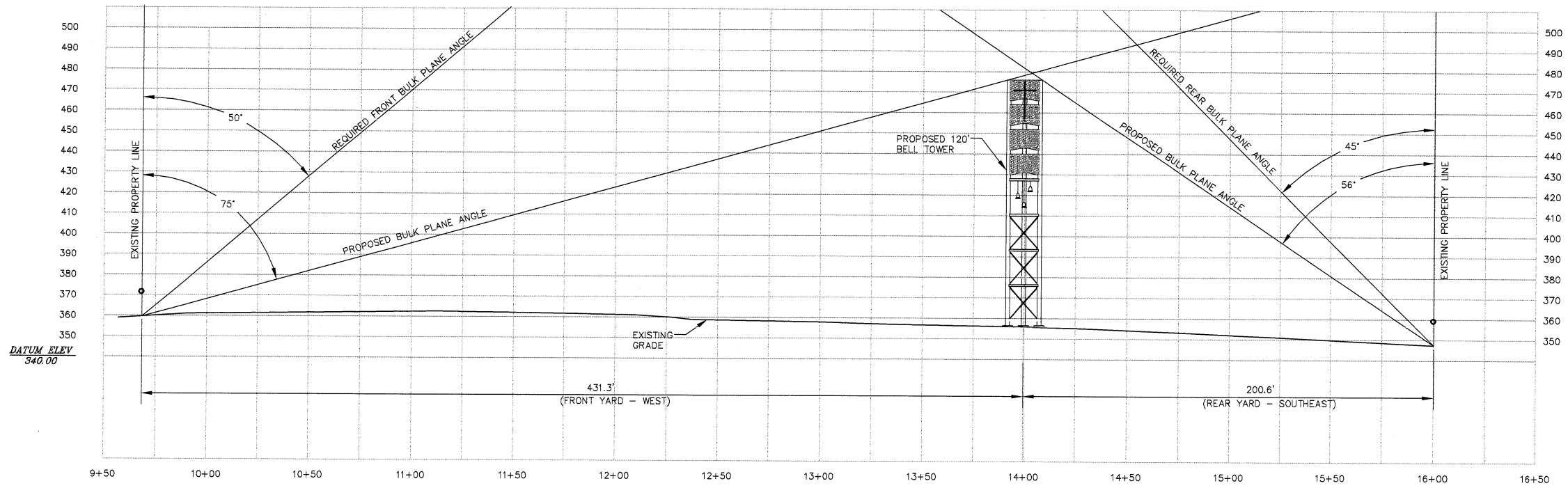
SCALE:
0 1/2 1 2
GRAPHIC SCALE IN INCHES

SE/PLAT
CWS 91
ACUMC-BELL TOWER
1301 TRAP RD.
VIENNA, VA 22182

TITLE: 3

TREE PROTECTION AND PLANTING DETAILS

SHEET NUMBER:
Z-7C



SITE PROFILE
WEST TO EAST (1 / Z-8)
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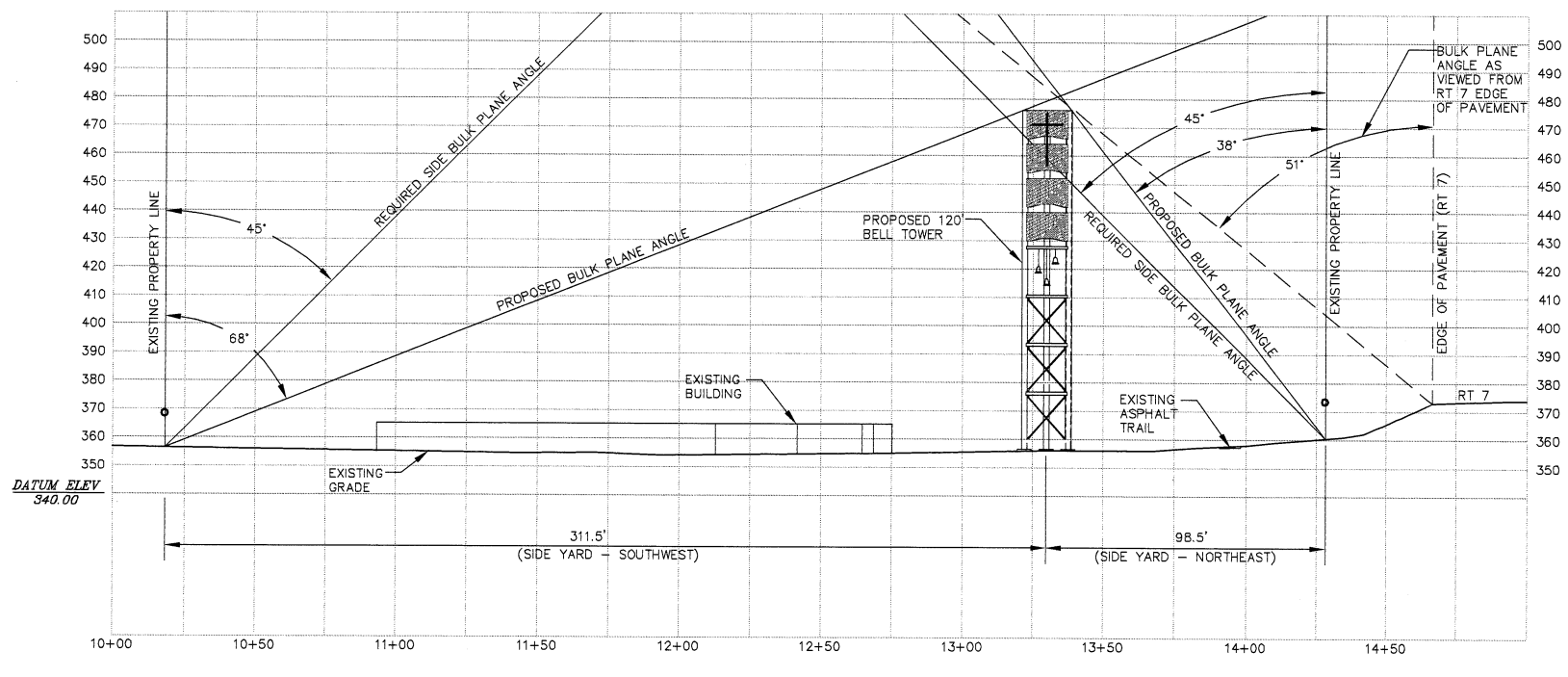
1"=30'-0" (V) (24 x 36 print)



SITE PROFILE
SOUTH TO NORTH (2 / Z-8)
SCALE: 1"=30'-0" (H) (24 x 36 print)
1"=30'-0" (V) (24 x 36 print)

entrex
communication services, inc
6600 Rockledge Drive, Suite 550
BETHESDA, MD 20817
PHONE: (202)408-0960
FAX: (202)408-0961

SUBMITTALS

DATE	DESCRIPTION	REV.
05-29-13	ZONING REVIEW	
05-30-13	ZONING REVIEW	
06-25-13	ZONING	
10-11-13	COUNTY COMMENTS	
02-10-14	COUNTY COMMENTS	1
03-12-14	COUNTY COMMENTS	2
04-02-14	COUNTY COMMENTS	3
04-21-14	COUNTY COMMENTS	4

SEAL:

COMMONWEALTH OF VIRGINIA
JOHN CABOT MOODY
No. 016189
PROFESSIONAL ENGINEER

CWS
2800 Shirlington Road
Suite 716
Arlington, VA 22206
Phone 703-845-1971
Fax 703-845-1953

PROJECT NO: 1094.040
DESIGNER: R.S.
ENGINEER: M.M.

SCALE:
0 1/2 1 2
GRAPHIC SCALE IN INCHES

SE/PLAT
CWS 91
ACUMC-BELL TOWER
1301 TRAP RD.
VIENNA, VA 22182

TITLE:

SITE PROFILES

SHEET NUMBER:

Z-8

DESCRIPTION OF THE APPLICATION

The applicants, CWS VII, LLC and the Trustees of Andrew Chapel United Methodist Church, have filed for review by the Planning Commission to determine whether a proposed 120-foot tall bell tower-style telecommunications facility and related ground structures satisfy the criteria of location, character and extent pursuant to Sect. 15-2-2232 of the Code of Virginia, and therefore may be determined to be in substantial conformance with the Comprehensive Plan. Concurrently, the applicants request Special Exception (SE) approval to erect the telecommunications tower and related facilities in an R-1 District at the site of a previously approved and existing church and nursery school/child care center. There are no other proposed changes to the church or school uses. The SE application for the church, nursery school/child care center and telecommunications facility will supersede the previous special permit approvals for the church and nursery school/child care center.

Specifically, the proposal is for a 120-foot tall bell tower-style telecommunications facility for up to four providers with a 35-foot by 70-foot fenced equipment compound. The triangular tower is 15.5 feet wide on each side. Four panels separated by 2 to 3-foot arched gaps conceal the antennas. The top two panels include a cross, and below the bottom panel hang three non-functioning bells. The concealment panels are beige in color.

The property is approved for and developed with an 18,700-square foot church with a sanctuary with 200 seats, and a nursery school and child care center with a combined enrollment not to exceed 99 children and a total of 81 parking spaces. The hours of operation for the nursery school/child care center are 9:00 a.m. to 2:00 p.m. and the combined maximum number of employees is 14. As noted above, there are no proposed changes to the church and nursery school/child care center.

A reduced copy of the proposed SE Plat is included in the front of this report. The proposed SE development conditions, the applicants' Statement of Justification and affidavit are included in Appendices 1 - 3, respectively.

Waivers and Modifications

The applicants have requested a modification of the transitional screening and barrier requirements pursuant to Sections 13-303 and 13-304 of the Zoning Ordinance in favor of the landscaping and barrier as shown on the SE Plat.

LOCATION AND CHARACTER

The property is located at 1301 Trap Road in Vienna at the southeast corner of the intersection with Leesburg Pike. As shown below, the property is located in a low-density single family area. The property and surrounding area are designated for Residential at 1 – 2 dwelling units/acre on the Comprehensive Plan Map.

Figure 1: Subject property with location of proposed telecommunications facility identified, and surrounding land uses and zoning districts. Source: Fairfax County GIS, 2013 Imagery

Figure 2: Bird's-eye view of subject property with the approximate location of the proposed telecommunications facility identified. Source: Fairfax County GIS, 2013 Imagery

BACKGROUND

The table below summarizes the zoning history of the site. The approvals in effect for the church and nursery school/child care, SPA 74-D-081-1 and SPA 83-D-045-1, are included in Appendix 4. If this Special Exception application is approved, the Special Permit conditions would be superseded by the SE conditions. If this application is denied, the church and nursery school/child care could continue to operate under the previous Special Permit approvals.

Date	Case Number	Description
1963		The church was constructed with 8,870 sq.ft., 200 seats and 60 parking spaces.
7/14/1970	S-116-70	The Board of Zoning Appeals (BZA) approved operation of a pre-school for 40 children in the existing church facility.
7/24/1974	S-81-74	The BZA permitted an increase in enrollment at the nursery school/child care from 40 to 75 children.
8/02/1983	SP 83-D-045	The BZA approved the bell tower (10 ft. x 10 ft., 33 ft. high) addition.
10/13/1987	SPA 74-D-081-1	The BZA amended S-81-74 (renumbered as SP 74-D-081) for the nursery school/child care center to allow an addition of 9,830 sq.ft. and 23 parking spaces, and an increase in the maximum enrollment from 75 to 99.
	SPA 83-D-045-1	The BZA amended SP 83-D-045 for the church and related facilities to permit the building and parking additions noted above (same plat for both SPAs).
Withdrawn 12/12/2002	SE 01-D-023, SPA 83-D-045-02 & 2232-D01-17	CWS submitted initial applications for a 165-foot tall flagpole monopole (without flag) in the southeast corner of the property, and amended the applications to propose a 125-foot tall tree monopole; staff recommended denial of both proposals. The applications were withdrawn before the Planning Commission hearing.
Submitted 11/25/2008 & Inactive 6/2/2011	2232-D09-1	An application was submitted by T-Mobile for a 120-foot tall flagpole monopole to be located near the parsonage. A SE application was not filed and no staff review was conducted.
8/14/2012	Interpretation	A 588 sq.ft. shed, 14 feet tall, was found to be in substantial conformance with the approved plats.

In the staff report for SE 01-D-023 dated October 11, 2001, for the proposed 165-foot tall flagpole type monopole, staff recommended denial due to the undesirable visual impact on the adjoining residence. The facility was proposed to be located in the

narrow, southern portion of the property. The report stated that the facility was too close (20 feet from the rear property line) to the adjoining residential property, the portion of the site was too constrictive to adequately screen the facility from the residence, and the 50-foot transitional screening requirement could not be met. The report noted the visual impact of the 165-foot height and that the flagpole would have no conceptual connection with the church. The report recommended that the facility be located closer to Leesburg Pike and further from residences. After publication of the staff report, the applicant, Community Wireless Structures II, LLC, submitted a revised proposal for a 125-foot tall monopine in the same location as the previously proposed flagpole, and subsequently a staff report addendum was published on April 10, 2002. The addendum recommended denial and noted that at the proposed location, the facility would appear to be in the backyard of the closest residence. The applications were ultimately withdrawn before the Planning Commission public hearing. Copies of the staff report and addendum are available at the Department of Planning and Zoning, Zoning Evaluation Division.

COMPREHENSIVE PLAN PROVISIONS

The Fairfax County Comprehensive Plan 2013 Edition, Area II, McLean Planning District, Wolftrap Community Planning Sector, amended through April 29, 2014, under the heading, "Recommendations, Land Use," on pages 131 and 133, provides the following guidance on the land use and the intensity/density for the property:

1. *Low-density residential development at 1-2 dwelling units per acre is planned for the area east of Beulah Road.*

   …

3 *Land along the south side of Leesburg Pike should maintain the pattern of an average density of 1-2 dwelling units per acre, but permit cluster development so that land immediately adjacent to the highway would remain as open space and provide a buffer for the residential area.*

The Inventory of Historic Sites McLean Planning District, Figure 4, on page 9 of the Comprehensive Plan includes the "Bethel Primitive Baptist Church" located at 9101 Leesburg Pike southeast of the subject property, the "Andrew Chapel United Methodist Church" located across Trap Road from the subject property at 9201 Leesburg Pike, "Spring Glade" located at 1442 Towlston Road southwest of the property, the "Vernon Leigh House" located at 9352 Mildred Court northwest of the property, and the "Andrew Chapel School" located at 9325 Leesburg Pike northwest of the property.

The applicable Comprehensive Plan provisions of the Public Facilities Element of the 2013 edition of the Policy Plan, under the heading, "Mobile and Land-Based Telecommunication Services" can be found in the 2232 Review in Appendix 5 and at: http://www.fairfaxcounty.gov/dpz/comprehensiveplan/policyplan/pubfacilities.pdf

ANALYSIS

Special Exception (SE) Plat (copy at front of staff report)

The SE Plat, titled "CWS 91, ACUMC-Bell Tower, 1301 Trap Rd. Vienna, VA 22182" was submitted by Entrex Communication Services, Inc., and consists of 12 sheets dated May 29, 2013, revised through April 21, 2014.

The property has a single access point from Trap Road. The 18,700-square foot church is surrounded by asphalt parking and drive aisles. A parsonage house and shed are located in the northwestern portion of the property. An approximately 5,000-square foot fenced play area and a shed are located in the southeastern portion of the site. A stormwater management area is located in the south/southeast area of the site, behind the playground. The property is relatively flat and gently slopes to the southeast. Existing trees are located around much of the perimeter of the site.

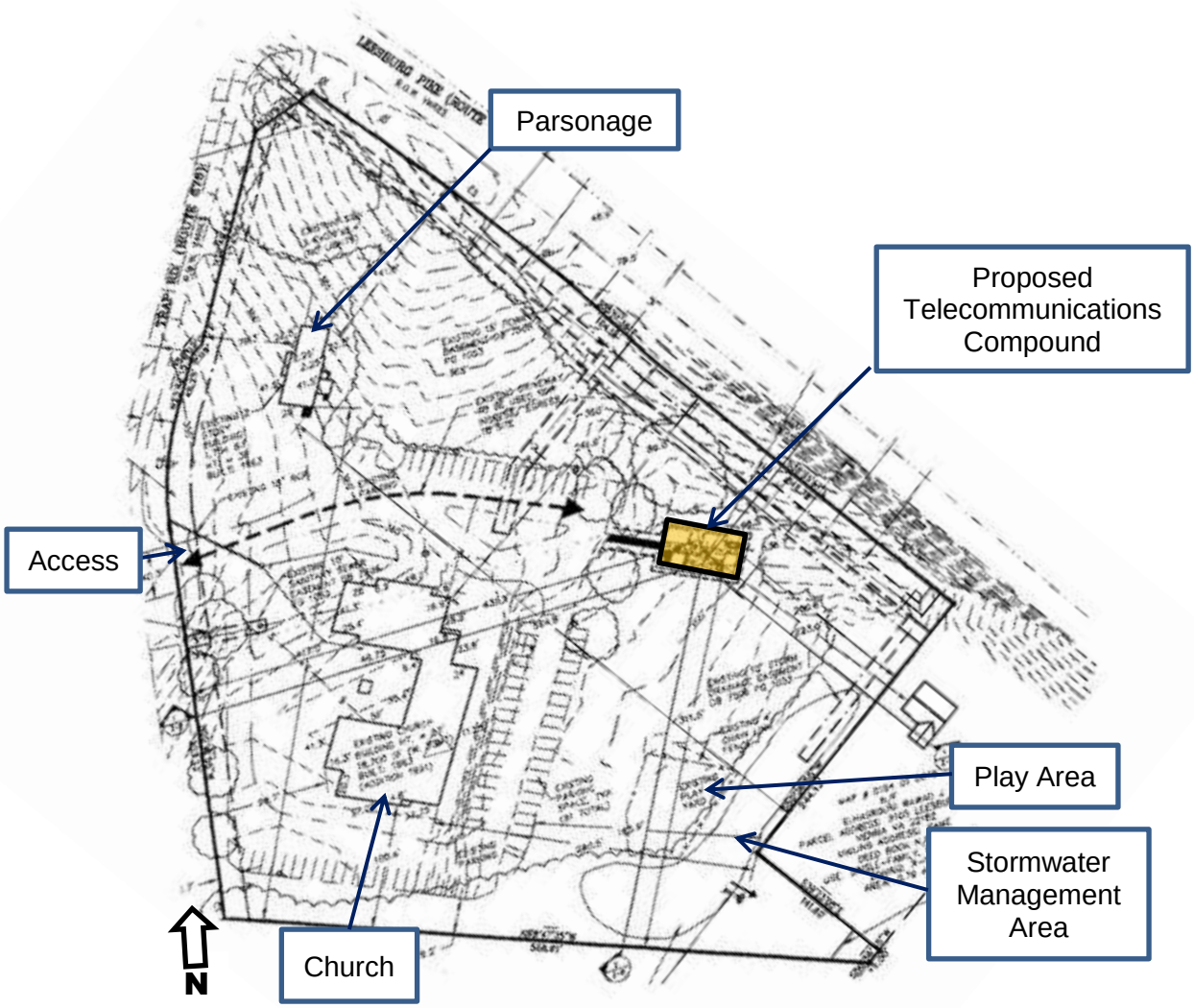


Figure 3: Portion of Site Plan (Sheet Z-1) with identification added by staff

The proposed telecommunications facility compound is located in an open, grassy area in the northeastern portion of the site. The perimeter of the compound is approximately 47 feet from the church parking lot, 60 feet from the property line to the northeast along Leesburg Pike, 168 feet to the property line to the southeast adjoining the most proximate residential lot and 190 feet to this dwelling unit, and 148 feet from the playground to the south. The tower, as measured from the nearest support leg, is approximately 77 feet from the parking lot, 90 feet from the property line to the northeast, 190 feet to the property line and 212 feet to the dwelling unit to the southeast, and 150 feet from the playground. The compound will be accessed by a 12-foot wide gravel entrance during construction; after construction, the gravel path from the parking lot will be 6 feet wide. The wood fence surrounding the compound is 8 feet high and has a locked gate. The application was initially for a 140-foot tall tower, but in response to staff concerns, the applicant reduced the height to 120 feet, reducing the potential number of carriers from five to four. The applicant also reduced the width of the tower from 17.5 to 15.5 feet wide, and provided gaps between the panels to allow light to pass through and reduce the mass of the structure. Figure 4, below, depicts a photo-simulation of the proposed tower.

Figure 4: Photo-simulation provided by the applicant of the proposed facility from the church parking lot

Land Use/2232 Analysis (Appendix 5)

Section 15.2-2232 of the Code of Virginia, as amended, charges the Planning Commission with determining whether the general location or approximate location, character and extent of the proposed facility are substantially in accord with the adopted Comprehensive Plan. The applicants have filed a concurrent 2232 application with this Special Exception and the 2232 Review is included as Appendix 5.

Location

The property and immediate vicinity are planned for low-density residential as noted above under the Comprehensive Plan Provisions. The proposed location is internal to a relatively large property developed with an existing church. The property's size permits substantial setbacks of the facility, and the existing and proposed landscaping provide buffering and open space as encouraged by the Comprehensive Plan.

The objectives and policies of the Comprehensive Plan (Policy Plan Element, Mobile and Land-Based Telecommunications Services, see Appendix 5) provide guidance for the location of proposed telecommunications facilities. The Policy Plan, in Objective 42 and associated policies, encourages the location of facilities on available existing structures or public lands, co-location, and the selection of a site which provides the least visual impact and the protection of historically significant resources and areas of environmental sensitivity, as well as areas necessary for future road improvements.

The applicants' target area is along Leesburg Pike from the Tysons area to the Difficult Run stream valley. The applicants' Statement of Justification indicates that in lieu of one tall tower, which would be perhaps 199 feet, to serve the entire area, two lower towers are more feasible. The proposed tower at Andrew Chapel is intended to serve the eastern portion of the target area. The target area and alternate sites that were considered are described in the applicants' Statement of Justification (Appendix 2). Appendix 6 includes the coverage plots and a letter dated October 7, 2014, from Millennium Engineering, P.C., providing an explanation of the maps. The coverage plots, prepared by Radio Frequency engineers for Verizon and T-Mobile, illustrate the areas that would receive coverage and capacity relief with the proposed facility. According to the letter from Millennium Engineering, the proposed facility is "particularly suited" to bridge a "significant gap in reliable 4G LTE wireless service" along Leesburg Pike and surrounding residential areas. Staff notes that the coverage maps conflict with the online carrier maps. The applicants have indicated that while online carrier maps show more coverage than the plots submitted with the application, the online maps provide a general overview given ideal conditions and are not intended to be used for facility engineering or design.

Objective 42, Policy a. of the Policy Plan encourages avoiding the construction of new structures through the use of available existing structures; however, the applicants have indicated that there are no existing tall structures available to address the coverage and capacity needs of the eastern portion of their target area. The proposed tower instead

provides for the co-location of up to four providers in conformance with Objective 42, Policy g. which encourages co-location by different service providers on single structures. The applicants have provided letters from Verizon, Sprint and T-Mobile expressing interest in locating on the tower (Appendix 2).

Objective 42, Policy d. states, “When multiple sites provide similar or equal opportunity to minimize impacts, public lands shall be the preferred location.” Colvin Run Elementary School and the Wolftrap Fire Station are the nearest public properties. Based upon a review by Fairfax County Public Schools, the school does not appear to have space to accommodate telecommunications facilities. The Wolftrap Fire Station is located almost a mile from Andrew Chapel at the corner of Leesburg Pike and Beulah Road. The property is zoned R-2 and surrounded by existing and proposed residential development. Application PCA 78-D-060 was approved on January 9, 2006, for development of a fire station and 11 single family detached dwellings on the property. The fire station was built in 2012. To construct a telecommunications facility on this property, a proffered condition amendment, special exception and 2232 approvals would be required. The Facilities Management Division (FMD) indicated to staff that they had expressed to the applicants and other wireless providers in the past that they were not interested in considering leasing a portion of the fire station property for a telecommunications facility; however, FMD has indicated to staff and the applicants that they have re-evaluated their position and they would be open to such consideration. The applicants have indicated that the fire station site is too far west to serve the eastern portion of the target area, and would not address the coverage and capacity needs served by the Andrew Chapel site. Verizon Wireless analyzed the fire station location and provided a coverage map for this location (Appendix 6). The applicants and Verizon have acknowledged that the fire station property could potentially be an additional telecommunications site to serve the western portion of the target area, but that it would complement, not replace the proposed site at Andrew Chapel. Verizon has further noted that even at a mounting height of 150 feet, a tower at the fire station does not replace the Andrew Chapel site. The applicants have elected not to pursue the fire station property at this time. Ramey Meadow Park and the Great Falls sewage disposal site are publicly-owned properties, but are located west of the target area and in the low-lying Difficult Run stream valley.

The proposed location on the church property, an established quasi-public use, provides the opportunity to conceal the facilities as a bell tower that is conceptually compatible with the church use. The bell tower design minimizes the visual impact on surrounding properties by concealing the antennas behind panels in conformance with Objective 42, Policy c., which encourages camouflage structure design. The selection of the relatively large 7.01-acre property makes it possible to preserve distance between the tower and adjoining properties. Furthermore, the specific location on the site toward the rear of the subject property, between a paved parking lot and Leesburg Pike, maximizes the distance between the facility and residential properties, consistent with the Plan guidelines of Objective 42, Policy b. to minimize impacts on surrounding areas. The proposed siting near Leesburg Pike allows this major arterial to provide additional distance and buffering to properties across Leesburg Pike. In contrast with the location

proposed in 2001, where the compound was only 20 feet from the rear property line of adjacent residential Lot 46, the currently proposed compound is 168 feet from the side property line for this lot. The proposed location is in keeping with the recommendation in the staff report dated October 11, 2001 for SE 01-D-023.

Objective 42, Policy m. states that the views of and vistas from historically significant structures should not be impaired or diminished. As further discussed below under General Special Exception Standards, the location is in proximity to the historic Bethel Primitive Baptist Church, Andrew Chapel, Spring Glade, the Vernon Leigh House, and the Andrew Chapel School. Existing vegetation and topography will provide screening of the tower from these historic sites. The County's Historic Preservation Planner has reviewed the application and determined that there will be no effect on historic properties (Appendix 7). Andrew Chapel has an adjoining cemetery which is not listed as a historic resource in the Comprehensive Plan. There will be a view of the tower from the cemetery. The applicants have proposed additional landscaping near the parsonage, which in time is expected to provide screening of the view from the cemetery. The design of the facility as a bell tower, a compatible feature with the church, minimizes the impact on the view from the cemetery. Additionally, the proposed location does not impact areas of environmental sensitivity or areas necessary for future right-of-way for road improvements in conformance with Objective 42, Policies n. and p.

Staff believes that the proposal conforms to the Plan guidelines for locating facilities on properties that can conceal the telecommunications facility and minimize its visual impact on surrounding areas.

Character

The Policy Plan recommends that the height and mass of facilities be in character with the surrounding residential area and effective design options be used to mitigate the visual impact. Based on observations during the height test and a review of the applicants' plans and photographic simulations, it is staff's opinion that the applicants have demonstrated the appropriateness of the design, siting and landscaping to minimize impacts on the character of the property and surrounding areas in conformance with Objective 42, Policies j and l. Staff recognizes that the proposed bell tower is taller than the existing or future mature heights of trees on the site. Existing and proposed trees do, however, provide a vegetative buffer. Staff notes that the tower will be visible to residential properties, most specifically, immediately across Trap Road and Leesburg Pike and the adjacent Lot 46. In staff's opinion, these homes are of sufficient distance from the proposed tower to not create an adverse impact on the visual quality or character of the residential areas as further described below under Extent.

The applicants have proposed a bell tower design to camouflage the facility. The proposed bell tower, as a feature often found on church properties, would not appear out of character with the use of the property. Staff recognizes that it would be difficult to capture the character of a church bell tower with a telecommunications tower;

nevertheless, the stealth design mitigates the visual impact, as all antennas will be hidden from view with concealment panels. The applicants' design modifications to the proposed tower, specifically the reduced height from 140 feet to 120 feet and reduced width from 17.5 feet to 15.5 feet, the gaps between the panels, and the beige/earth-tone color are intended to reduce the height and mass of the facility in character with the surrounding area and mitigate visual impacts in conformance with Objective 42, Policy i. The equipment compound will be effectively screened by the proposed 8-foot high board-on-board fence, creating a solid barrier around the compound. The applicants also propose additional plantings around the compound and in select areas around the property boundary for the purpose of softening the impacts of the facilities.

In furtherance of Objective 42, Policy k., the photographic simulations, drawings, and height test address Plan recommendations that the applicants demonstrate that the selected site for the proposed bell tower provides the least visual impact on residential areas and the public way. It is staff's opinion that the subject application balances factors of need, location and design and that the proposed facility would not have an adverse visual impact on the character of the surrounding area.

Extent

The extent of the impacts of the proposed tower was assessed with regard to the Plan guidance in Objective 43 for telecommunication facilities to mitigate their visual presence and prominence. The Plan does not require telecommunication facilities to be invisible. Rather, the Plan recommends that facilities be designed and located to provide the greatest opportunity to conceal the facilities and mitigate their visual impact.

Distances from the proposed tower to surrounding properties are sufficient to reduce the primary visual impact. The tower would be visible from the adjacent Lot 46, the residences across Leesburg Pike and on Windsor Meadows Lane. Views from other surrounding properties would be substantially screened as a result of existing trees and topography. Regarding Lot 46, this property is developed with a single family detached dwelling located approximately 212 feet from the proposed tower. The existing trees along the property line and the proposed landscaping will minimize the impact on this dwelling. The properties across Leesburg Pike are separated from the proposed tower by a 4-lane divided highway, which is proposed to be widened to 6 lanes, plus a turn lane. Based on a preliminary design for the road widening, it does not appear that the existing vegetation on the subject property along Leesburg Pike near the proposed tower will be impacted; however, it is likely that existing vegetation within the existing right-of-way will be eliminated. The nearest dwelling across Leesburg Pike is approximately 365 feet from the tower. The distance between the closest dwelling on Windsor Meadows Lane and the proposed tower is approximately 565 feet, with the church building and existing and proposed landscaping in between. Although the tower height will exceed the building and landscaping, the existing deciduous and proposed evergreen trees between the church building and Trap Road will help buffer the views as further discussed below. Additionally, the orientation of the dwellings minimizes views of the proposed tower from the rear yards and any associated decks or patios.

The applicants initially proposed a 140-foot tall bell tower structure. Upon staff expressing concern regarding the height, mass and design of the originally proposed structure, the applicants revised their proposal to reduce the height and width of the tower, and to provide gaps between the panels. The gaps allow light to pass between the panels, which reduces the mass and breaks up the façade so that it does not appear as a continuous flat panel. Staff believes this effort meets the intent of Objective 42, Policy h. which states: "Ensure that the height of the proposed telecommunications facility is no greater than necessary to allow for co-location on the telecommunication facility based on its service area requirements while still mitigating the visual impact of the facility."

While the bell tower would be visible to some residents, staff does not find the extent of these visual impacts to be extensive, adverse, or detrimental to the character of the existing neighborhoods. Mitigation is provided for the proposed facility by its bell tower design, distance to surrounding properties and existing and proposed landscaping. In staff's opinion, the proposal meets Plan guidelines pertaining to the extent of proposed telecommunications facility.

ZONING ORDINANCE PROVISIONS

As set forth below, the church and nursery school/child care continue to satisfy the lot size requirements and bulk regulations for the R-1 District. In accordance with Sect. 9-104 (1) of the Zoning Ordinance, Category 1 Special Exception uses are not required to comply with lot size requirements or bulk regulations.

Standards for R-1 District		
Standard	Required	Provided
Minimum lot area	36,000 sq. ft.	7.01 acres
Minimum lot width	175 ft. (corner lot)	650+ ft
Front yard	40' (50° angle of bulk plane)	79.3 ft (Trap Rd to parsonage) 98.7 ft (Trap Rd to church) 141.8 ft (Rt. 7 to parsonage) 241.6 ft (Rt. 7 to church)
Side yard	20' (45° angle of bulk plane)	280.5 ft (to church)
Rear yard	25' (45° angle of bulk plane)	100.4 ft (to church)
Max. building height	60'	30 ft (parsonage), 27 ft (church)
Max. FAR	0.15	0.073
Parking spaces	70 (+ 2 at parsonage)	81 (+ 2 at parsonage)

<u>Special Exception Requirements</u> (Appendix 12)

Church and Nursery School/Child Care

Sect. 9-314 of the Zoning Ordinance provides that a place of worship with a child care center, nursery school or private school may be approved as a special exception or as a special permit use at the applicant's discretion. In either event, the use is subject to the standards set forth in Sect. 9-309 (Additional Standards for Child Care Centers and Nursery Schools). The existing church and nursery school/child care were previously approved through the special permit process. To facilitate this application for the telecommunication facility, the applicants have elected to bring the church and nursery school/child care center under the special exception process. Any future modifications to the church or nursery school/child care will require a special exception amendment. Applicable previous conditions from the special permit approvals have been carried forward to the proposed special exception conditions. The church and nursery school/child care center uses are required to apply for Non-Residential Use Permits following approval of the Special Exception.

No changes are proposed to the existing church or nursery school/child care uses. Staff finds that the existing uses satisfy the General Special Exception Standards (Sect. 9-006), the Category 3 Standards (Sect. 9-304), and the Additional Standards for Child Care Centers and Nursery Schools (Sect. 9-309) pursuant to previous approvals SPA 74-D-081-1 and SPA 83-D-045-1. These standards address harmony with the comprehensive plan, zoning district regulations, neighboring properties, and traffic, access, facilities, parking, signage, performance standards, outdoor recreation, drop-off and pick-up for the nursery school and compliance with state requirements for the child care center. One caveat pertains to signage. Only one freestanding sign with a maximum of 40 square feet and 8 feet in height and a minimum 10 foot setback is permitted for the property pursuant to Sect. 12-208 (2B) of the Zoning Ordinance. The primary freestanding sign for the property is located at the entrance off Trap Road, but a second freestanding sign is located along Leesburg Pike. Staff has proposed a condition requiring signage to be brought into compliance with the Zoning Ordinance within 60 days after SE approval.

Telecommunication Facility

<u>General Special Exception Standards</u>: (Sect. 9-006)

1. *The proposed use at the specified location shall be in harmony with the adopted comprehensive plan*.

   As detailed in the Land Use/2232 Analysis, staff believes the proposal is in harmony with the Comprehensive Plan.

2. *The proposed use shall be in harmony with the general purpose and intent of the applicable zoning district regulations.*

   The R-1 District is intended to provide for single family detached dwellings and to allow other selected uses which are compatible with the low density residential character. Mobile and land based telecommunication facilities are permitted in residential districts with SE approval. The proposed telecommunications facility is compatible with the low density residential character of the district because it is located internal to the site near Leesburg Pike and includes existing and proposed landscaping to minimize its impact on the surrounding neighborhoods. Further, the use will generate virtually no traffic. In staff's opinion, the bell tower design screens the antennas behind panels and is conceptually compatible with the church use.

3. *The proposed use shall be such that it will be harmonious with and will not adversely affect the use or development of neighboring properties in accordance with the applicable zoning district regulations and the adopted comprehensive plan. The location, size and height of buildings, structures, walls and fences, and the nature and extent of screening, buffering and landscaping shall be such that the use will not hinder or discourage the appropriate development and use of adjacent or nearby land and/or buildings or impair the value thereof.*

   The proposed facility is sited away from surrounding properties and close to a major arterial roadway. The closest property, Lot 46, is developed with a single family detached dwelling. This dwelling is approximately 212 feet from the proposed tower. The compound is approximately 168 feet from the property line. The existing trees along the property line and the proposed landscaping will minimize the impact on this dwelling. At staff's request, the applicants added evergreen trees to further reduce the visibility of the facilities from the adjacent residence.

   The properties to the northeast are separated from the proposed facility by Leesburg Pike, a four-lane divided highway with overhead power lines, which is proposed to be expanded to a six-lane divided highway with a turn lane. The properties to the west are separated by the church building and Trap Road; however, the residences on Windsor Meadows Lane would have a view of the tower. Additional landscaping is proposed between the church building and Trap Road to further buffer these residences. The nearest face of the tower is approximately 305 feet from the property line to the south. This portion of the property includes approximately 70 feet of a wooded buffer, the playground and an open grass field. The property to the south is presently vacant.

   As noted above under the Comprehensive Plan Provisions and the Land Use/2232 Analysis, several historic sites are located near the property. Bethel Primitive Baptist Church which dates to 1912, is located approximately 600 feet to the southeast of the proposed telecommunication tower. In staff's opinion, based on observations at the balloon-fly, existing trees on the Bethel Church property adequately screen the proposed tower. Spring Glade dates to 1840, and is located

approximately 1,856 feet southwest of the proposed tower. The Vernon Leigh House dates to 1914, and is located approximately 2,559 feet northwest of the proposed tower. The Andrew Chapel School dates to 1914, and is located about 3,023 feet northwest of the proposed tower. The tower will be adequately screened from these historic resources. The historic Andrew Chapel United Methodist Church which dates to 1855 and is now used by the St. Athanasius Church and the adjoining Andrew Chapel cemetery are located across Trap Road, approximately 665 feet to the northwest of the proposed tower. Existing trees screen the view of the proposed tower from the historic Andrew Chapel. The cemetery is not listed in the inventory of historic sites; however, the lower portion of the cemetery does not have adequate screening. At staff's request, the applicants provided additional trees to the south of the parsonage to improve screening.

In order for the proposed tower to not adversely affect the use or development of neighboring properties, staff believes that the design, width and height of the tower should be considered. The applicants revised the design of the tower to provide a break between the panels to reduce the overall mass. The applicants also reduced the width of the panels from 17.5 to 15.5 feet. The applicants reduced the proposed height from 140 to 120 feet. In staff's opinion, the proposed facility would not adversely affect the use or development of neighboring properties.

4. *The proposed use shall be such that pedestrian and vehicular traffic associated with such use will not be hazardous or conflict with the existing and anticipated traffic in the neighborhood.*

After construction, the telecommunication facility will generate virtually no traffic as it will be unmanned and serviced by a technician only once or twice per month. The proposed use will not generate pedestrian traffic. The Fairfax County Department of Transportation review did not identify any issues (Appendix 8).

The proposed improvement plan for Leesburg Pike may require a small amount of additional right-of-way (ROW) (0.062 acres) on this property. Staff had requested that the applicants consider dedicating three feet of additional ROW along Leesburg Pike and related easements. The applicants declined to provide the ROW and related easements as part of this application. The proposed telecommunications facility does not interfere with the future ROW area, and no condition for dedication is proposed.

5. *In addition to the standards which may be set forth in this Article for a particular category or use, the Board shall require landscaping and screening in accordance with the provisions of Article 13.*

As a light public utility use, a 50-foot wide strip of landscape screening is required pursuant to Sect. 13-303 of the Zoning Ordinance. The applicants have requested a modification of this requirement in favor of the existing and proposed landscaping.

Significant additional landscaping is proposed and staff supports the requested modification as further discussed below.

Initially, the compound was proposed to be located approximately 12 feet from the parking lot. In response to staff comments, the applicants shifted the compound to approximately 47 feet away from the parking lot in order to protect the critical root zones of two Willow Oaks that are part of the perimeter parking lot landscaping. Tree protection fencing and a detail for construction of the gravel walkway over tree roots are shown on Sheet Z-7 of the SE Plat. The Urban Forest Management Division (UFMD) review recommended that the proposed landscaping be located outside the dripline of the existing Willow Oaks and that species other than White Pine be considered (Appendix 11). The applicants have worked with UFMD and revised the SE Plat to address these concerns.

As shown on Sheet Z-7A of the SE Plat, the proposed landscaping plan for surrounding the telecommunications compound depicts 61 plants, including 28 evergreen trees and 33 shrubs, to be distributed in a random pattern to provide a natural look. The Southern Magnolias are positioned between the compound and the parking lot. The American Holly, Eastern Red Cedar, Spicebush and Prague Viburnum encircle the compound, with the flowering viburnums positioned toward the outside. A review of the preliminary plans for the improvement of Leesburg Pike shows that one or more of the proposed plants could be impacted by the temporary construction easement. Staff has proposed a condition requiring the applicants to replace any of the landscaping impacted by the widening of Leesburg Pike.

The property contains parking lot and perimeter landscaping in accordance with the previous special permit and site plan approvals. In addition to the compound landscaping described above, the applicants propose a total of 20 additional trees as shown on Sheet Z-7B of the SE Plat in order to supplement the existing landscaping and improve screening from adjacent properties. Ten trees are proposed along Trap Road, with five in front of the church and five on the north side of the entrance opposite the cemetery. Five trees are proposed along Leesburg Pike and five are proposed between the telecommunications facility and the adjacent residential Lot 46.

The proposed Virginia Pines and Southern Magnolia shown on Sheet Z-7B along Trap Road within the Virginia Power easement should be moved from outside the easement to the area in front of the church so they can grow to their full height. The trees should be positioned to improve screening for the residences located on Windsor Meadows Lane across Trap Road to the west. A condition has been proposed to address this issue. Additionally, a condition is proposed to allow the proposed American Holly trees shown adjacent to Leesburg Pike to be relocated if it is determined that they may be impacted by the widening of Leesburg Pike. Based on the preliminary plan for the improvement of Leesburg Pike, these are the only proposed plant materials that might be impacted by the right-of-way acquisition,

although additional plants could be impacted by the temporary construction easement as noted above.

The UFMD reviewed the proposed landscaping and determined that it will adequately screen the compound. The existing trees on the property are presently 40 to 60 feet high. Potential height at maturity, depending on the species, is expected to be up to 80 feet. The proposed trees have a potential height, depending on the species, of approximately 60 feet. The landscaping will not conceal the tower, but it will be a benefit in reducing the visual impact.

6. *Open space shall be provided in an amount equivalent to that specified for the zoning district in which the proposed use is located.*

   Open space is not required for the R-1 District.

7. *Adequate utility, drainage, parking, loading and other necessary facilities to serve the proposed use shall be provided. Parking and loading requirements shall be in accordance with the provisions of Article 11.*

   Facilities are in place to serve the proposed use. The proposed telecommunications facility will result in 2,735 square feet of impervious surface and 3,923 square feet of disturbed area. It will be subject to minor site plan review which will address water quality control requirements. The applicants indicate that the existing on-site stormwater management pond will be satisfactory, but this will be confirmed through the site plan review.

   As noted in the review by the Department of Public Works and Environmental Services, the site does not contain any Resource Protection Areas or floodplains (Appendix 10). The soils in the area of the proposed telecommunications facility are Wheaton – Codorus Complex (103A) and Wheaton – Gleneig Complex (105B). Soil 105B requires a geotechnical report, prepared according to the geotechnical guidelines of the Public Facility Manual and the Virginia Uniform Statewide Building Code, before any construction or grading. A condition is proposed requiring approval of a geotechnical report prior to site plan approval.

8. *Signs shall be regulated by the provisions of Article 12; however, the Board may impose more strict requirements for a given use than those set forth in this Ordinance.*

   No signs are permitted or proposed for the telecommunications use.

In staff's opinion, with the proposed conditions, the application satisfies the General Special Exception standards.

General Standards for All Category 1 Uses: (Sect. 9-104)

1. *Category 1 special exception uses shall not have to comply with the lot size requirements or the bulk regulations set forth for the zoning district in which located.*

   The proposed telecommunications use is not subject to bulk regulations. The lot meets the R-1 District requirements.

2. *No land or building in any district other than the I-5 and I-6 District shall be used for the storage of materials or equipment, or for the repair or servicing of vehicles or equipment, or for the parking of vehicles except those needed by employees connected with the operation of the immediate facility.*

   A proposed condition is included to restrict the storage of materials, equipment and vehicles.

3. *If the proposed location of a Category 1 use is in an R district, there shall be a finding that there is no alternative site available for such use in a C or I district within 500 feet of the proposed location; except that in the case of electric transformer stations and telecommunication central offices, there shall be a finding that there is no alternative site available in a C or I district within a distance of one (1) mile, unless there is a substantial showing that it is impossible for satisfactory service to be rendered from an available location in such C or I district.*

   There are no properties zoned to a Commericial or Industrial District within 500 feet of the proposed location. The applicants have indicated that T-Mobile, Verizon Wireless and Sprint have expressed interest in this location to provide adequate coverage and capacity along and near Leesburg Pike. According to the applicants, there are no existing tall structures suitable for mounting of antennas that would address their coverage and capacity objectives. The Filene Center at Wolf Trap is located approximately one mile south of the proposed facility. According to the applicants, T-Mobile and Verizon are currently installed at Wolf Trap and this does not provide the desired coverage as shown in the attached plots (Appendix 6). The applicants' Statement of Justification and 2232 application discuss the alternative sites that were considered. The applicants have indicated that there are no other sites that meet their coverage objectives and where they are able to acquire a ground lease.

4. *Before establishment, all uses, including modifications or alterations to existing uses, shall be subject to the provisions of Article 17, Site Plans.*

   The proposed telecommunications use will be subject to site plan review.

In staff's opinion, with the proposed conditions, the application satisfies the General Standards for All Category 1 Uses.

Additional Standards for Mobile and Land Based Telecommunication Facilities:
(Sect. 9-105)

1. *Except for antennas completely enclosed within a structure, all antennas and their supporting mounts shall be of a material or color that closely matches and blends with the structure on which it is mounted.*

   The antennas will not be visible behind the concealment panels, which will be beige in color.

2. *Except for a flag mounted on a flagpole as permitted under the provisions of Par. 2 of Sect. 12-203, no commercial advertising or signs shall be allowed on any monopole, tower, antenna, antenna support structure, or related equipment cabinet or structure.*

   No advertising or signs are proposed. Initially, the application included the United Methodist Church logo on the tower. Use of the specific logo was determined to constitute a sign; however, based on an interpretation by the Zoning Administration Division, the proposed cross shown on the concealment panels is not subject to the limitations of Article 12 of the Zoning Ordinance.

3. *If any additions, changes or modifications are to be made to monopoles or towers, the Director shall have the authority to require proof, through the submission of engineering and structural data, that the addition, change, or modifications conforms to structural wind load and all other requirements of the Virginia Uniform Statewide Building Code.*

   A development condition has been included that would require conformance with this standard should any modifications be made to the proposed facility.

4. *No signals, lights or illumination shall be permitted on an antenna unless required by the Federal Communications Commission, the Federal Aviation Administration or the County, provided, however, that on all antenna structures which exceed 100 feet in height, a steady red marker light shall be installed and operated at all times, unless the Zoning Administrator waives the red marker light requirement upon a determination by the Police Department that such marker light is not necessary for flight safety requirements for police and emergency helicopter operations. All such lights shall be shielded to prevent the downward transmission of light.*

   A development condition has been included prohibiting signals, lights or illumination of the tower unless required by the Federal Aviation Administration, Federal Communications Commission or the County. On August 29, 2014, the Zoning Administrator approved a waiver of the red marker light.

5. *All antennas and related equipment cabinets or structures shall be removed within 120 days after such antennas or related equipment cabinets or structures are no longer in use.*

   A development condition requiring conformance with the standard has been included.

In staff's opinion, with the proposed conditions, the application satisfies the Additional Standards for Mobile and Land Based Telecommunication Facilities.

Modifications/Waivers

Modification of Transitional Screening and Barrier Requirements

In accordance with Sect. 13-303, Type 3 transitional screening is required between the proposed on-site Category 1 Light Public Utility use and the adjacent single family detached uses. A Type 3 screening consists of a 50-foot wide unbroken strip of landscaping.[1] The property is already developed with a church and contains transitional screening in accordance with its previous approval. The addition of the telecommunications facility on the lot requires the application of Type 3 screening.

Sect. 13-305 (3) of the Zoning Ordinance permits a modification or waiver of the transitional screening where the building, barrier and/or land have been designed to minimize adverse impact. Due to the configuration of the existing development, providing a 50-foot unbroken strip of open space along all lot lines of the property is not feasible. The existing screening along the property lines is as follows. Along Trap Road in front of the church, landscaping is 10 to over 40 feet in width. The width of the planting strip along Trap Road was diminished by the right-of-way dedication and construction of the deceleration lane. Along Leesburg Pike, the landscaping is of a variable width, from zero to over 100 feet. The compound is located approximately 23 feet from the pedestrian trail along Leesburg Pike and 60 feet from the property line where there is a gap in the existing landscaping. Next to Lot 46 to the southeast, screening has a width of about 60 feet, but is sparse in some areas. Next to Lot 48 to the southwest, existing screening is a minimum of 20 feet next to the parking lot and approximately 70 feet next to the playground.

As noted above under General Special Exception Standard 5, the applicants propose a total of 48 trees and 33 shrubs, including landscaping around the compound as well as

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[1] Type 3 transitional screening shall consist of an unbroken strip of open space a minimum of fifty (50) feet wide planted with all of the following:

(1) A mixture of large and medium evergreen trees and large deciduous trees that achieves a minimum ten (10) year tree canopy of seventy-five (75) percent of greater;
(2) A mixture of trees consisting of at least (70) percent evergreen trees, and consisting of no more than thirty-five (35) percent of any single species of evergreen or deciduous tree; and
(3) A mixture of predominately medium evergreen shrubs at a rate of three (3) shrubs for every ten (10) linear feet for the length of the transition yard area. The shrubs shall generally be located away from the barrier and staggered along the outer boundary of the transition yard.

supplementing gaps around the perimeter along Trap Road, Leesburg Pike and adjacent to Lot 46. The proposed landscaping around the compound is approximately 25 feet wide to the north, east and south, and approximately 15 feet wide to the west, next to the parking lot landscaping. Staff believes that with the existing and proposed landscaping along the perimeter of the property and around the compound, the intent of the requirement is met. Staff does not object to the requested modification.

In accordance with Sect. 13-304, a Type D, E or F barrier is required between the existing and proposed uses on-site and the adjacent single family detached uses.[2] The barrier requirement was previously waived for the existing church and nursery school/child care uses in the resolution of approval for SPA 83-D-045-1, condition 7. The applicants propose a barrier, an 8-foot tall solid wood fence, around the telecommunications compound. The applicants propose to maintain the church property without a barrier. Staff does not object to the modification of the barrier requirement in favor of the fencing of the telecommunications compound as shown on the SE Plat.

CONCLUSIONS AND RECOMMENDATIONS

Staff Conclusions

Overall, the applicants addressed staff concerns by selecting a location that maximizes the distance to adjacent residential development, reducing the height and width of the telecommunications facility, and incorporating design modifications and proposed landscaping to minimize and mitigate visual impacts. In staff's opinion the proposed facility satisfies the criteria of location, character, and extent as specified in Section 15.2-2232, as amended, of the Code of Virginia. In staff's opinion, with the adoption of the proposed development conditions the Special Exception application is in harmony with the Comprehensive Plan and in conformance with applicable Zoning Ordinance provisions.

Recommendations

Staff recommends that the Planning Commission find that the facility proposed under 2232-D13-9 satisfies the criteria of location, character, and extent as specified in Section 15-2.2232 of the Code of Virginia, and therefore is substantially in accord with the provisions of the Comprehensive Plan.

Staff recommends approval of SE 2013-DR-019, subject to the proposed development conditions contained in Appendix 1.

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[2] Barrier D shall consist of a 42-48 inch chain link fence and may be required by the Director to have inserts in the fence fabric, to be coated, or to be supplemented by trees and/or shrubs.
Barrier E shall consist of a 6 foot wall, brick or architectural block faced on the side facing the existing use and may be required to be so faced on both sides as determined by the Director.
Barrier F shall consist of a 6 foot high solid wood or otherwise architecturally solid fence.

Staff recommends approval of the modification of Sections 13-303 and 13-304 of the Zoning Ordinance for the transitional screening and barrier requirements to permit the landscaping and barrier as shown on the Special Exception Plat.

APPENDICES

1. Special Exception Conditions
2. Statement of Justification
3. Affidavit
4. SPA 74-D-081-1 and SPA 83-D-045-1
5. 2232 Review
6. Antenna Support Structures in the Vicinity, Coverage Plots, Millennium Engineering Letter
7. Historic Preservation Review
8. Fairfax County Department of Transportation Review
9. Environment and Development Review Branch Review
10. DPWES, Site Development and Inspection Division Review
11. Urban Forest Management Division, Forest Conservation Branch Review
12. Special Exception Standards
13. Glossary of Terms

PROPOSED DEVELOPMENT CONDITIONS

SE 2013-DR-019

October 14, 2014

If it is the intent of the Board of Supervisors to approve Special Exception SE 2013-DR-019, located at 1301 Trap Road, Tax Map 19-4 ((1)) 47, to permit a place of worship with a nursery school, child care center and telecommunications facility pursuant to Sect. 3-304, 9-104, 9-304, 9-309 and 9-314 of the Zoning Ordinance, staff recommends that the Board condition the approval by requiring conformance with the following development conditions.

General

1. This Special Exception is granted for and runs with the land indicated in the application and is not transferable to other land.

2. This Special Exception is granted only for the purpose(s), structure(s), and/or use(s) indicated on the Special Exception Plat approved with this application, as qualified by these development conditions.

3. This Special Exception is subject to the provisions of Article 17 of the Zoning Ordinance, Site Plans, as may be determined by the Director, Department of Public Works and Environmental Services (DPWES). Any site plan submitted pursuant to this special exception shall be in substantial conformance with the approved Special Exception plat entitled SE Plat CWS 91 ACUMC – Bell Tower and prepared by Entrex Communication Services, Inc., containing twelve sheets dated May 29, 2013, and revised through April 21, 2014, and these conditions. Minor modifications to the approved special exception may be permitted pursuant to Par. 4 of Sect. 9-004 of the Zoning Ordinance.

4. A copy of the Special Exception conditions shall be posted in a conspicuous place along with the Non-Residential Use Permit of the use(s) and shall be made available to all Departments of the County of Fairfax during hours of operation of the permitted use(s).

5. Parking lot lighting shall be the low intensity type, on standards not to exceed twelve feet in height and shielded, if necessary, so as to prevent light or glare from projecting onto adjacent residential properties. New or replaced outdoor lighting fixtures shall be in accordance with Sect. 14-902 of the Zoning Ordinance.

Church

6. The maximum number of seats in the principal place of worship shall be 200.

7. The single family detached dwelling shall be used as a parsonage only.

8. Only one sign for the church, child care and nursery school is permitted on the property in accordance with Article 12 of the Zoning Ordinance. All non-permitted signs shall be removed within 60 days of the Special Exception approval.

Nursery School/Child Care Center

9. The combined maximum daily enrollment of the child care center and the nursery school shall not exceed 99 children.

10. The hours of operation for the nursery school and child care programs shall be limited to 9:00 a.m. to 2:00 p.m.

11. There shall be a combined maximum of 14 employees on site at any one time associated with the nursery school and child care programs.

12. The play area shall be provided as shown on the Special Exception Plat, and shall be fenced in accordance with the Fairfax County Health Department standards.

Telecommunications Facility

13. The telecommunications tower shall be designed as a bell tower in substantial conformance with the approved SE Plat. The maximum height of the tower shall not exceed 120 feet inclusive of all antennas and other appurtenances. The maximum width of each side will be 15.5 feet, measured from centerline of pole to centerline of pole.

14. The equipment compound for the telecommunications facility shall be enclosed with a locked, 8-foot tall solid wood fence as shown on the SE Plat. The area of the compound shall not exceed 2,450 square feet as shown on the SE Plat.

15. The bells on the telecommunications tower shall be non-functional and no taped bell sounds or music shall be broadcast.

16. Subject to Federal Aviation Administration (FAA) approval, the bell tower/telecommunications facility shall be beige or earth-tone in color and have a non-reflective finish.

17. No signals, lights or illumination of the tower shall be permitted unless required by the FAA, Federal Communications Commission or the County.

18. All antennas and related equipment cabinets or structures shall be removed within 120 days after such antennas or related equipment cabinets or structures are no long in use.

19. No signs shall be permitted for the advertisement of the users of the telecommunications facility.

20. Any proposed additions, changes or modifications to the tower shall require proof, through the submission of engineering and structural data to the Director of DPWES, that the addition, change, or modifications conforms to structural wind load and all other requirements of the Virginia Uniform Statewide Building Code.

21. There shall be no outdoor storage of materials, equipment, or vehicles.

22. A site plan addressing storm water quality control for the telecommunications facilities shall be submitted to DPWES and approved prior to issuance of a Non-Residential Use Permit (Non-RUP).

23. Prior to site plan approval, a geotechnical report shall be submitted and approved in accordance with the geotechnical guidelines (Chapter 4 of the Public Facilities Manual) and the Virginia Uniform Statewide Building Code.

24. Tree Preservation and Landscaping

    a. Prior to issuance of the Non-RUP for the telecommunications facility, the landscaping in conformance with Sheets Z-7A and Z-7B shall be installed and inspected by staff from the Urban Forest Management Division (UFMD) to ensure conformance with the SE Plat and the Public Facilities Manual. In addition, the 12-foot wide construction entrance shall be reduced to the 6-foot walkway as shown on the SE Plat.

    b. The Virginia Pines and Southern Magnolia shown along Trap Road on Sheet Z-7B of the plat shall be relocated outside the Virginia Power easement to a location to be approved by the Urban Forest Management Division. The intent of this development condition is to maximize screening of the telecommunications tower from Windsor Meadows Lane.

    c. Existing and proposed landscape materials and barriers on-site shall be maintained and replaced in accordance with Article 13-106 of the Zoning Ordinance. Any diseased, dead or dying plantings shall be replaced with the same species unless an alternative species is approved by the Urban Forest Management Division.

    d. All plant material shall be tended and maintained in a healthy growing condition, replaced when necessary due to poor health or unsafe conditions and shall be kept free of refuse and debris. If any of the existing or proposed

landscaping on the subject property is removed as a result of the improvements to Leesburg Pike, the applicants shall replace the affected landscaping within six months of completion of the project along the property frontage.

e. The two American Holly trees shown adjacent to Route 7 on Sheet Z-7B of the plat may be relocated at the time of site plan approval if it is determined by the Urban Forest Management Division that the trees may be impacted by improvements to Route 7. There shall be no change in the quantities or species shown on the plat, and the trees shall be sited to maximize screening of the telecommunications facility from Route 7 and the adjacent residential dwellings.

f. Tree Preservation Plan: The Applicant shall contract with a certified arborist or registered consulting arborist (the "Project Arborist") to prepare a tree preservation plan to be submitted as part of the first and all subsequent site plan submissions. The tree preservation plan shall be reviewed and approved by the Urban Forest Management Division. The tree preservation plan shall provide a tree inventory which includes the location, species, size, crown spread and condition rating percent of all trees 8 inches or greater in diameter, measured 4.5 feet from the ground and located within twenty-five feet of the proposed limits of clearing and grading. The condition analysis shall be prepared using methods outlined in the latest edition of the Guide for Plant Appraisal. Specific tree preservation activities designed to maximize the survivability of trees designated for preservation shall be incorporated into the tree preservation plan. Activities should include, but are not limited to, crown pruning, root pruning, mulching and fertilization.

g. Tree Preservation Walk-Through: The Applicant shall have the limits of clearing and grading marked with a continuous line of flagging prior to the walk-through meeting. During the tree preservation walk-through meeting, the Project Arborist shall walk the limits of clearing and grading with a UFMD representative to determine where adjustments to the clearing limits can be made to increase the area of tree preservation and/or to increase the survivability of trees at the edge of the limits of clearing and grading, and such adjustment shall be implemented. Trees that are identified as dead or dying may be removed as part of the clearing operation. Any tree that is so designated shall be removed using a chain saw, and such removal shall be accomplished in a manner that avoids damage to surrounding trees and associated understory vegetation. If a stump must be removed, this shall be done using a stump-grinding machine in a manner causing as little disturbance as possible to adjacent trees and associated understory vegetation and soil conditions.

h. Limits of Clearing and Grading: Clearing, grading and construction shall conform to the limits of clearing and grading as shown on the SE Plat, subject

to the installation of necessary utility lines and other required site improvements, all of which shall be installed in the least disruptive manner possible, as determined in accordance with the approved plans. A replanting plan shall be developed and implemented, subject to approval by the UFMD, for any areas protected by the limits of clearing and grading that must be disturbed.

i. Tree Preservation Fencing: All trees shown to be preserved on the tree preservation plan shall be protected by tree protection fencing. Tree protection fencing, consisting of four foot high, 14 gauge welded wire attached to six foot steel posts driven 18 inches into the ground and placed no farther than ten feet apart or super silt fence, to the extent that required trenching for super silt fence does not sever or wound compression roots which can lead to structural failure and/or uprooting of trees, shall be placed at the limits of clearing and grading as shown on the erosion and sediment control sheets in all areas. The tree protection fencing shall be installed after the tree preservation walk-through meeting but prior to the performance of any clearing and grading activities on the site. The installation of all tree protection fencing shall be performed under the supervision of a certified arborist, and accomplished in a manner that does not harm existing vegetation that is to be preserved. Three days prior to the commencement of any clearing or grading activities, but subsequent to the installation of the tree protection devices, the UFMD shall be notified and given the opportunity to inspect the site to ensure that all devices have been correctly installed. If it is determined that the fencing has not been correctly installed, no grading or construction activities shall occur until the fencing is installed correctly, as determined by the UFMD.

j. Root Pruning: The Applicant shall root prune as needed to comply with the tree preservation requirements of these conditions. Areas that will be root pruned shall be clearly identified on the Tree Preservation Plan. All treatments for such trees and vegetation shall be clearly specified, labeled, and detailed on the erosion and sediment control sheets of the grading plan submission. The details for these treatments shall be included in the Tree Preservation Plan and shall be subject to the review and approval of UFMD.

All root pruning shall be performed in a manner that protects adjacent trees and vegetation that are required to be preserved and may include, but not be limited to, the following:

- Root pruning shall be done with a trencher or vibratory plow to a depth of 18 inches, or as specified by UFMD at the pre-construction meeting.
- Root pruning shall take place prior to any clearing and grading.
- Root pruning shall not sever or significantly damage structural or compression roots in a manner that may compromise the structural

integrity of trees or the ability of the root system to provide anchorage for the above ground portions of the trees.

- Root pruning shall be conducted with the on-site supervision of the Project Arborist.
- Tree protection fencing shall be installed immediately after root pruning.
- UFMD shall be informed in writing (email is acceptable) when all root pruning and tree protection fence installation is complete.

k. Site Monitoring: During the installation of tree protection fencing, performance of root pruning and during any clearing or removal of trees, vegetation, or structures, the Project Arborist shall be present to effectively monitor the process and ensure that the activities are conducted in accordance with these conditions and as approved by the UFMD. The Project Arborist shall be a certified arborist or landscape architect retained by the applicant and shall monitor all construction, demolition, landscape installation and tree preservation efforts to ensure conformance with the conditions and UFMD approvals. The monitoring schedule shall be described and detailed in the Landscaping and Tree Preservation Plan and shall be reviewed and approved in writing by UFMD.

The above proposed conditions are staff recommendations and do not reflect the position of the Board of Supervisors unless and until adopted by that Board.

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

Pursuant to Sect. 9-015 of the Zoning Ordinance, this special exception shall automatically expire, without notice, 30 months after the date of approval unless the uses have been established by obtaining the required Non-Residential Use Permits noted above.

APPENDIX 2

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Zoning Evaluation Division

Statement of Justification
In Support of the Application
By CWS VII, LLC & The Trustees of Andrew Chapel United Methodist Church
For a Special Exception

In accordance with the requirements of the Zoning Ordinance of Fairfax County, Virginia, CWS VII, LLC and the Trustees of Andrew Chapel United Methodist Church ("Applicants") hereby submit this Statement of Justification in support of their application for a Special Exception to allow for the construction of a telecommunications facility on property (the "Property") located at 1301 Trap Road, Vienna, Virginia and owned by the Andrew Chapel United Methodist Church.

1. **Description of Proposed Use**

Applicants are submitting this application to construct a telecommunications facility housed within a 120 feet tall church bell tower with a 35 foot by 70 foot fenced equipment compound on the Property. The details of the facility are described on the SE Plat entitled "CWS 91 ACUMC- Bell Tower" prepared by Entrex Communications Services, Inc., dated April 2, 2014. The only site modifications proposed for the Property are those required for the construction of the telecommunications facility. No alterations to the church or parking area are proposed.

The proposed telecommunications facility is a passive facility and will not have employees, personnel, or traffic. The telecommunications facility will not create any noise, dust, fumes or vibrations. The impact of the church use is well known and established and will not materially change.

No changes in the as-built condition of the Property or the use requirements or conditions are proposed, except as are needed in conjunction with the telecommunications facility and as shown on the SE Plat.

Type of Operation: There is an existing church and nursery school on site. A Mobile and Land Based Telecommunications Facility is proposed. The proposed use will provide space for up to four telecommunication providers.

Hours of Operation: The existing church holds services between 9:00 am and 12:00 pm on Sundays. The existing nursery school's hours of operation are 9:00 am to 2:00 pm Monday through Friday. Mobile and Land Based Telecommunications Facility: The facility will be unmanned and operate continuously, 24 hours a day, 365 days a year for wireless telecommunication purposes.

Estimated Number of Patrons/Clients/ Pupils, etc: There will be no change in the existing number of church members or employees. The existing church has a maximum number of 200 patrons. The existing nursery school has a maximum number of pupils of 99 and a maximum number of employees of 14. The Mobile and Land Based Telecommunications Facility: No personnel on site; a technician will visit the communications facility approximately once or twice per month to perform routine maintenance. Applicants will use the existing parking when they visit telecommunications facility. No additional parking will be required.

Estimate of Traffic Impact: The telecommunications facility will add no significant traffic to the Property or adjacent and nearby roadways; it is estimated that a service technician will visit the site once or twice per month in an SUV type vehicle to perform routine maintenance. Traffic patterns of the existing church will not change.

Vicinity of General Area to be Served: The existing church primarily serves the Vienna and Great Falls area. Mobile and Land Based Telecommunications Facility: The telecommunications facility will serve those traveling along Route 7 in the vicinity of the Property, as well as neighborhoods and communities to the north of Wolf Trap and to the south of the Old Dominion Drive corridor. T-Mobile and Verizon Wireless have provided propagation maps showing coverage with and without the proposed facility.

Description of Building Façade/Architecture of Proposed New Building/Additions: No new construction or modifications to the church or parking areas is proposed. The proposed telecommunications facility will consist of a 120 foot tall bell tower sited in a 35 foot by 70 foot fenced equipment compound, as further described on the Plat submitted with this application. The triangular bell tower will stand on three cylindrical legs. In the top 30 foot portion, earth tone panels will conceal the antennas of three carriers. Finally, one stealth panel below the will conceal the antennas of one additional carrier. Three ornamental, non-functioning bells will hang from the bottom of this section at varying heights. An 8 foot tall board on board fence, with a locking gate to prevent unauthorized access, will define the 35 foot by 70 foot equipment compound. Supplemental landscaping (to include a variety of trees and shrubs as recommended by the Urban Forester) will be planted on all sides of the proposed compound, as well as along Trap Road and Route 7, as shown on sheet Z-7A and Z-7B of the SE Plat entitled "CWS 91 ACUMC- Bell Tower" prepared by Entrex Communications Services, Inc., dated April 2, 2014.

Hazardous or Toxic Substances: There will be no hazardous or toxic substances are generated, utilized, stored, treated or disposed of at the Property

2. **Requirement for Proposed Use**

Verizon Wireless and T-Mobile require a facility in this location in order to address both network coverage and capacity requirements in the surrounding area. There are no existing tall structures (i.e. monopoles, utility structures, water towers, tall buildings, etc.) suitable for the mounting of antennas that could be utilized to address the carrier technical requirements at this location. Other antennas support structures in the vicinity of the proposed facility are detailed on the enclosed map of "Antenna Support Structures". The closest support structure for telecommunications purposes is the Filene Center at Wolf Trap, approximately one mile south of the proposed bell tower. Both T-Mobile and Verizon are currently installed on the roof of this structure, and utilize these sites address the capacity needs of Wolf Trap, the Dulles Toll Road and the neighborhoods in closest proximity. Neither carrier currently has adequate coverage along and near Route 7.

The Property offers an excellent land-use and visual solution. The parcel was selected because of its current use, size and potential for screening from neighboring residential parcels and the public roadway. A church property provides an excellent opportunity for disguising a telecommunication facility as a bell tower that is both in context with and complimentary to the existing use of the Property.

3. **Anticipated Impacts on Adjoining Properties and On and Off –Site Environmental Features**

The proposed telecommunications facility will have no impact on traffic, noise, light pollution, or water quality on the adjoining properties. The 120 foot tall stealth bell tower is in keeping with the existing use of the property and character of the surrounding neighborhoods. The bell tower design is consistent and in context with the current place of worship, and there are several other churches in the surrounding area. Existing tree cover on the Property and in the surrounding area will screen and obstruct views of the facility from surrounding vantage points. In addition, Applicants will install supplemental landscaping (as recommended by the Urban Forester) around the compound and the perimeter of the Property (refer to sheet Z-7A and Z-7B of the SE Plat entitled "CWS 91 ACUMC- Bell Tower" prepared by Entrex Communications Services, Inc., dated April 2, 2014).

Antennas and other appurtenances will be hidden behind stealth panels. Equipment shelters and cabinets will be located inside the fenced in compound, screened by an 8 foot tall board on board fence. Photo-simulations have also been provided to demonstrate the visual impact from the surrounding area.

4. **Alternative Sites Considered by Applicants**

Refer to Attachment 1

5. **Relationship of the Proposal to the Comprehensive Plan**

The property is located in the McLean Planning District, Wolf Trap Community Planning Sector (M7), in Planning Area II. This Planning Sector is planned for low-density residential use at 1-2 dwelling units per acre. The church property is shown on the Comprehensive Plan for residential use at 1-2 dwelling units per acre. The Andrew Chapel United Methodist Church is shown under the Inventory of Historic Sites McLean Planning District on page 9 of the District-Wide recommendations for the District.

The Applicants' proposed telecommunications facility use is consistent with the objectives under the policy plan element of the Comprehensive Plan regarding Mobile and Land Based Telecommunications Services.

Objective 42: In order to provide for the mobile and land based telecommunications network for wireless telecommunications systems licensed by the Federal Communications Commission, and to achieve opportunities for the collocation of related facilities and the reduction or elimination of their visual impact, locate the network's necessary support facilities which include antennas, support structures and equipment buildings or equipment boxes in accordance with the following policies.

Policy a. **Avoid the construction of new structures by locating proposed telecommunications facilities on available existing structures such as rooftops, telecommunication and broadcast support structures, electric utility poles and towers, and water storage facilities when the telecommunication facilities can be placed inconspicuously to blend with such existing structures.**

The Applicants searched for existing tall structures in the area as a first choice for the location of its telecommunications facility. However, this general area of the County is residential in nature

and there are no suitable existing structures to support the proposed communications facility and provide coverage in the target area. Construction of a new facility is needed to provide the required services.

Policy b. **When existing structures are not available for co-location, or co-location is not appropriate because of adverse visual impacts or service needs, locate new structures that are required to support telecommunication antennas on properties that provide the greatest opportunity to conceal the telecommunication facilities and minimize their visual impact on surrounding areas.**

As there are no existing structures available for carrier co-location, Applicants are proposing to locate the telecommunications facility on a vacant portion of the Property, away from the church and inside the mature white pines that line Route 7. Applicants are proposing a stealth bell tower that will blend with the church property and minimize the facility's visual impact. Antennas and other appurtenances will be hidden behind stealth panels. Equipment shelters and cabinets will be located inside the fenced in compound, screened by an 8 foot tall wood fence.

Policy c. **When new structures or co-locations are required to serve residential neighborhoods, consider minimizing visual impacts on the surrounding area by utilizing camouflage structure design and/or micro-cell technologies or similar miniaturization technologies, such as distributed antenna systems (DAS), if feasible.**

Applicants are proposing a stealth bell tower design to camouflage the use and minimize visual impact. DAS is not a cost effective solution and would not provide effective coverage to the surrounding neighborhoods.

Policy d. **When multiple sites provide similar or equal opportunity to minimize impacts, public lands shall be the preferred location.**

Within the Applicants' search area there are no public properties that meet the technical requirements and offer an equal or better opportunity to minimize visual impacts on the surrounding area. The nearest public parcels are detailed on Attachment 1.

Policy e. **Locate mobile and land-based telecommunication facilities on public property only after a lease agreement between the County, or related board or authority and the service provider has been established.**

The proposed facility will not be located on public property.

Policy f. **Ensure that the use of public property by mobile and land-based telecommunication facilities does not interfere with the existing or planned operational requirements of the public use and complies with adopted policies and plans to protect natural resources.**

The proposed facility will not be located on public property.

Policy g. **Co-locate mobile and land-based telecommunication facilities operated by different service providers on single sites and/or structures whenever appropriate. Locate single-use structures on a property when a co-location structure for multiple service providers is not desirable or feasible due to technological differences, site limitations or visual impact concerns.**

The proposed structure is designed for the co-location of up to four service providers. The site and design of the structure can successfully accommodate co-location without creating visual impact concerns.

Policy h. **Ensure that height of the proposed telecommunication facility is no greater than necessary to allow for co-location on the telecommunication facility based on its service requirements while still mitigating the visual impact of the facility.**

A height of 120 feet is the minimum necessary to allow for the co-location of four service providers and to meet coverage requirements. The bell tower design mitigates the visual impacts.

Policy i. **When new structures, co-locations and/or technologies (such as distributed antenna systems, micro-cell technology or miniaturization technology) are necessary to meet the service area requirements for the residential neighborhood(s), ensure that the height and mass of any appropriate co-location on the telecommunication facility is in character with the surrounding residential area and mitigates the visual impact of the facility on the surrounding residential area.**

The stealth bell tower is in keeping with the existing use of the property and character of the surrounding neighborhoods. The bell tower design is consistent and in context with the current place of worship, and there are several other churches in the surrounding area. Mature pines along Route 7 and Trap Road on the Property and in the surrounding area will screen and block views of the facility from surrounding vantage points (refer to enclosed aerial photos).

Policy j. **Design, site and/or landscape proposed telecommunication facilities to minimize impacts on the character of the property and surrounding areas. Demonstrate the appropriateness of the design through facility schematics and plans which detail the type, location, height and material of the proposed structures and their relationship to other structures on the property and surrounding areas.**

The stealth bell tower design of the proposed facility minimizes impacts on the character of the property and surrounding area. Existing tree cover on the Property and in the surrounding area will screen and obstruct views of the facility from surrounding vantage points. In addition, Applicants will install supplemental landscaping (as recommended by the Urban Forester) around the compound and the perimeter of the Property (refer to sheet Z-7A and Z-7B of the SE Plat entitled "CWS 91 ACUMC- Bell Tower" prepared by Entrex Communications Services, Inc., dated April 2, 2014).

The enclosed site plan details the design of the structure and the surrounding equipment compound and their relationship to the site. Photo-simulations have also been provided to demonstrate the visual impact from the surrounding area.

Policy k. **Demonstrate that the selected site for a new telecommunication facility provides the least visual impact on residential areas and the public way, as compared with alternate sites. Analyze the potential impacts from other vantage points in the area, especially from residential properties, to show how the selected site provides the best opportunity to minimize its visual impact on the area and on properties near the proposed site.**

The attached photo simulations provide an analysis of the visual impact of the proposed use from several vantage points throughout the nearby community. The proposed facility will be located adjacent to a church use immediately adjacent to a major arterial roadway (Leesburg Pike). The photo simulations demonstrate that while there are some views of the proposed structure from various vantage points, the views are mitigated by the structure's design, by existing vegetation on-site and in the overall area, and distance. There are no other sites in the search area that provide a potential camouflage solution that is consistent with the site and existing use.

Policy l. **A key concept in assessing the telecommunication facilities is mitigation which is defined as actions taken to reduce or eliminate negative visual impacts.**

Applicants have followed the recommendations of this policy by:

1. Proposing a bell tower consistent with the character of the property, and
2. Locating the proposed structure within an area of mature vegetation and tree cover.
3. Proposing supplemental landscaping around the fenced compound and along Trap Road and Route 7.

Policy m. **Locate proposed telecommunication facilities to ensure the protection of historically significant landscapes and cultural resources. The views of and vistas from architecturally and/or historically significant structures should not be impaired or diminished by the placement of telecommunication facilities.**

The Andrew Chapel United Methodist Church is identified in the Comprehensive Plan under the Historic Sites Inventory for the McLean Planning District in Planning Area II. However, the site is not within a historic overlay district. The proposed facility and the bell tower design will not negatively impact the church property or other historically significant landscapes or cultural resources. Applicants will submit, prior to construction, a full engineering study showing compliance with all NEPA regulations, including Section 106 historic review.

Policy n. **Site proposed telecommunication facilities to avoid areas of environmental sensitivity, such as steep slopes, floodplains, wetlands, environmental quality corridors, and resource protection areas.**

The proposed facility will not have adverse impacts on areas of environmental quality or sensitivity. Applicants will submit, prior to construction, a full engineering study showing

compliance with all NEPA regulations, including those dealing with areas of environmental sensitivity.

Policy o. **Site proposed telecommunication facilities to allow for future expansion and with corresponding levels of screening to accommodate expansion.**

The proposed structure has been designed to house up to four service providers.

Policy p. **Design and site proposed telecommunication facilities to preserve areas necessary for future right–of-way dedication and ancillary easements for construction of road improvements.**

The facility compound is located approximately 136 feet from the edge of the nearest Route 7 traffic lane, and will not impede upon any areas planned or reserved for future road right-of-way or improvement.

Policy q. **Locate and construct antennas used for purposes other than mobile and land based telecommunication services in accordance with the same guidelines established in this "Mobile and Land-based Telecommunications Services" section.**

The facility is a Mobile and Land-based Telecommunications use.

Objective 43: Design proposed telecommunication facilities to mitigate their visual presence and prominence, particularly when located in residential areas, by concealing their intended purpose in a way that is consistent with the character of the surrounding area.

Policy a. **Disguise or camouflage the appearance of proposed telecommunication facilities to resemble other man-made structures and natural features (such as flagpoles, bell towers, and trees) that are typically found in context and belong to the setting where placed.**

The proposed use will be designed as a bell tower and located adjacent to a church use to camouflage and disguise its appearance and reduce its prominence and visual presence. The bell tower design will conceal the intended purpose of the structure and be in context with the setting in which it is located.

Policy b. **Design proposed telecommunication facilities that are disguised and camouflaged to be of a bulk, mass and height typical of and similar to the feature selected.**

The design, bulk, mass, and height of the camouflaged structure is consistent with that of a bell tower on a church property and will appear in context with the portion of the church site on which it is located.

Policy c. **Use appropriately other new and existing structures and vegetation of comparable form and style to establish a grouping that complements a camouflaged telecommunications facility and supports it design, location and appearance.**

The bell tower will be in proximity to the church building that will complement and reinforce its design. Existing mature vegetation on the property and throughout the nearby areas will serve to mitigate views of the proposed use.

Waiver

Applicants are requesting a waiver of the Transitional Screening and Barrier requirements specified in Section 13-303 and 13-304 of the Zoning Ordinance.

Conclusion

The proposed telecommunications facility will be designed as a bell tower to disguise its use and function. The facility will be consistent with the existing church use on the property and compatible with the surrounding residential areas. There will no adverse visual impacts or noise, odor, light, or traffic created by the use. The applicant has designed and located the facility to meet Comprehensive Plan and Zoning Ordinance provisions for telecommunication facilities and special exception uses. In light of the foregoing, the Applicants respectfully submit that granting the request will be appropriate and in the interest of the citizens of Fairfax County.

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Attachment 1

CWS focused on Route 7 and its surrounding neighborhoods from Tysons Corner west to the Difficult Run stream valley -- a three (3) mile stretch of Route 7 where coverage and capacity are poor for all four national carriers. In considering a wireless infrastructure remedy for this part of eastern Dranesville, CWS asked the question, "Is this a one site or a two site solution?"

The quick answer that many would give is that one telecom site is better than two, but the devil is in the detail. See the map "One Tall Site?" for the first major detail -- where to locate one this one site

For one site to work effectively it needs to be tall, considerably tall, perhaps 199'. The factors which dictate the need for considerable height include the long 3-mile gap, rolling terrain, and the density of mature trees which dampens signal propagation. Is a structure of 199' realistic or feasible in this area? The answer is "not likely" for a variety of reasons.

First, a willing ground lessor is not available at the center of the gap, the intersection of Rt. 7 and Atwood Road. E. E. Lyons operates an excavating business at this corner (9325 Leesburg Pike) and the parcel is large (approx 1.9 acres), but heavy trucks and equipment crowd this yard, and the owner is not receptive to a telecom ground lease. In conversations as recent as the week of April 7, E. E. Lyon reiterated their lack of interest.

Second, there are no non-residential parcels (other than E. E. Lyons) in this vicinity that are large enough to host a tower ground lease.

And finally, the area is densely residential and these local residents would insist on some form of disguising or concealment. Unfortunately, there is no effective way to make a 199' structure look like anything but a telecom tower. Structures of shorter stature, from 50 feet to 140 feet, can be effectively disguised --as trees, bell towers, clock towers, etc-- but this is not possible on really tall structures.

A traditional telecom structure—very tall and no stealthing-- is not a realistic solution in this part of eastern Dranesville. For aesthetic and community considerations, the antenna support structure needs to be short, and it needs to be disguised. Two structures, of stealth design and short in stature, are needed to address this service gap. One is needed to the east (towards Tysons) and one to the west (towards Difficult Run). See the map "Two Site Solution".

To the east, CWS focused on 1301 Trap Road for 3 reasons: 1) it's a large parcel offering buffering from surrounding residential use, 2) the parcels surrounding 1301 Trap are very large, offering even more buffering (See map "Extraordinary Buffering") and 3) ACUMC was a willing landlord. Other large parcels that CWS also considered in the eastern search area are summarized in the attached "Ground Lease Candidates to the East".

CWS has no current plans to develop the structure that is needed to the west on Route 7. The geographic center of this western search area is the barn and silo on the Locust Hill HOA property which fronts Route 7. CWS engaged in a dialogue with Locust Hill in 2013, and that HOA decided not pursue a telecom ground lease. In addition to the Locust Hill HOA property, the large, non-residential use parcels to the west include Wolf Trap Fire Station # 42 and the Wolf Trap Nursery at 9439 Leesburg Pike. The large size of these parcels makes them possible candidates for the west search area. Ground lease terms, title work and other factors would need to be worked out as well.

In an email of April 7, Chris Caperton noted that residents living in the ACUMC area inquired with his office about a list of nine (9) alternative sites. CWS provides a written analysis of each candidate on the attached Alternative Ground Lease Chart – List B, and a visual/geographic analysis in the attached map "List B—Alternative Sites". As discussed above, two relatively short structures are needed to address the service gap between Tysons Corner and the Difficult Run stream valley—one to the east and one to the west. Most of these List B parcels lie too distant from either the east or west search area. Two List B candidates do fall in the search area to the west—Fire Station # 42 and Wolf Trap Nursery—and one of these could possibly be part of a future west application.

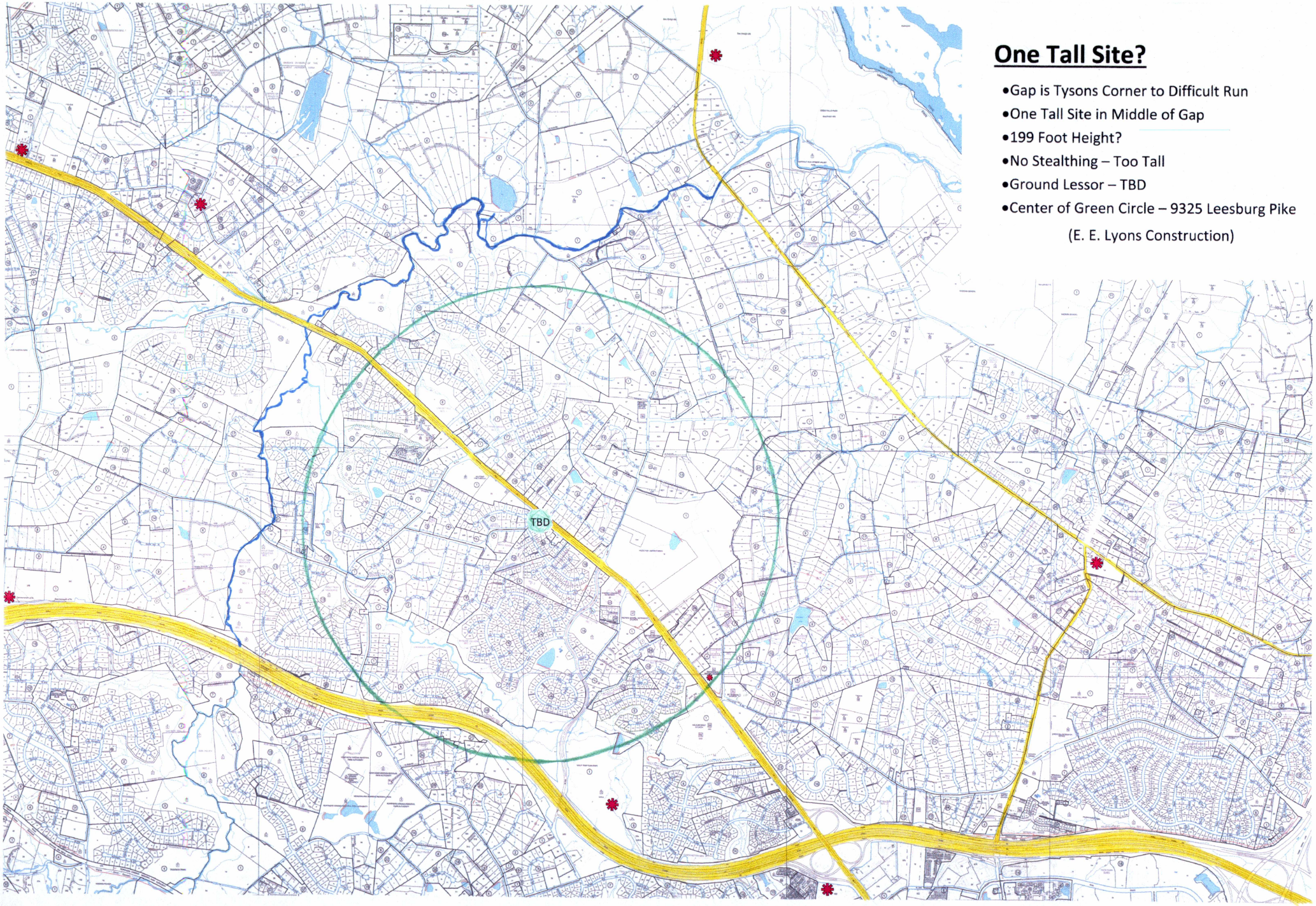
One List B candidate, Mill Creek Nursery, does fall in the search area to the east. This parcel has no buffering from residences – it's relatively small and has homeowners on three sides. CWS spoke with the owner of the nursery on April 9, 2014, and there is no interest in entering a ground lease for a telecom site.

Ground Lease Candidates to the East

Reference	Tax Map	Acres	Comments
Convance Laboratories, Inc.	0194 01 0031 & 0194 01 0016	121.1	Former owners and current owners have refused to talk.
Colvin Run Elementary School	0194 14 C	12.6	It's rare for elementary schools in Fairfax County to host a telecommunications tower.
Catholic Traditionalist	0194 01 0048	4.0	Vacant, wooded parcel and telecom would be first use. Owner did not return calls.
Andrew Chapel Cemetery	0194 01 0056	5.5	ACUMC preferred to host CWS on primary parcel.
Mill Creek Landscaping	0194 01 0024D	1.8	Owner is not interested in a ground lease.

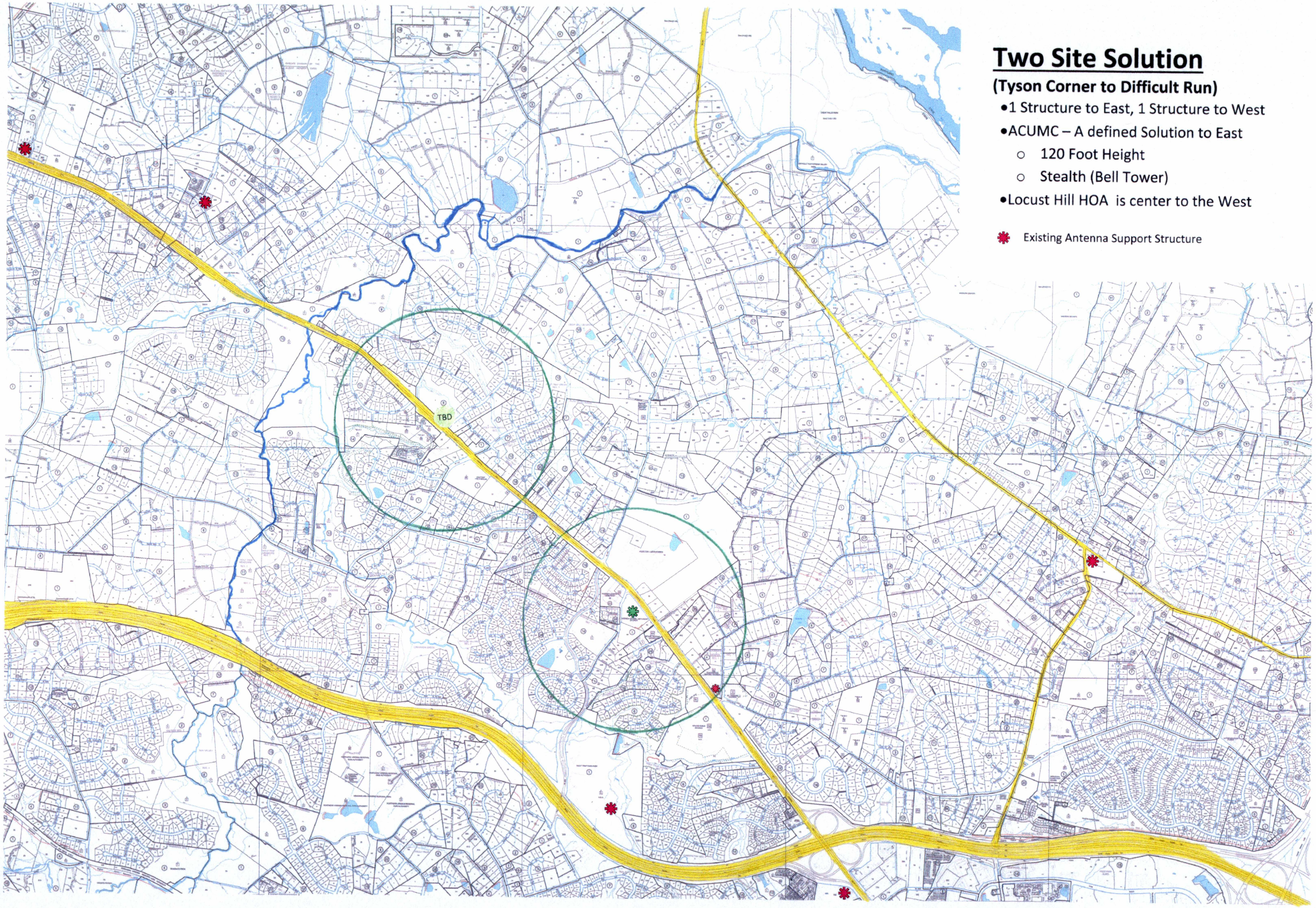
List B
Alternative Ground Lease Chart
(from Chris Caperton email of April 7th)

Cum	Reference	Address	Tax Map	Acres	Comments
1	Wolf Trap Nursery	9439 Leesburg Pike	0193 01 0019	6.721	Parcel is approximately 3/4 of a mile west of ACUMC. This is a possible candidate for the second area to the west.
2	Mill Creek Landscaping	9034 Leesburg Pike	0194 01 0024D	1.799	CWS spoke with nursery and owner said no to a ground lease. Additionally, the location offers no buffering from adjacent residential uses.
3	St. Thomas Episcopal Church	8991 Brook Road	0282 01 0012	4.963	Too far to the East: A site here would overlap the service from Sheraton and Wolf Trap Filene Center cell sites.
4	Holy Transfiguration Melkite Church	8501 Lewinsville Road	0291 01 0021A	4.410	Too distant from Route 7; approximately 1.41 miles from ACUMC.
5	Sunoco	8121 Old Dominion Dive	0204 01 0086A	0.944	Too distant from Route 7; approximately 1.92 miles from ACUMC.
6	Shopping Center	8100 Old Dominion Drive	0204 01 0024	0.838	Too distant from Route 7; approximately 1.97 miles from ACUMC.
7	Wolf Trap Fire Station No. 42	1315 Beulah Road	0193 01 0020	11.496	Too distant: Station # 42 is approximately 1 mile from ACUMC. It could be a possible location for the second site needed on Route 7 to the west.
8	Ramey Meadow Park	Leigh Mill Road	0191 05 A	49.473	Location is too distant: approximately 1.75 miles. FCPA will not consider telecom in stream valley.
9	Great Falls Sewage Disposal Site	9950 Colvin Run Road	0191 01 0002B	1.209	This area is served already by the tree pole at the Serbian Crown restaurant. Also, It's too far west of ACUMC (2.13 miles) and too low lying (in the Difficult Run stream valley)



One Tall Site?

- Gap is Tysons Corner to Difficult Run
- One Tall Site in Middle of Gap
- 199 Foot Height?
- No Stealthing – Too Tall
- Ground Lessor – TBD
- Center of Green Circle – 9325 Leesburg Pike (E. E. Lyons Construction)



Two Site Solution

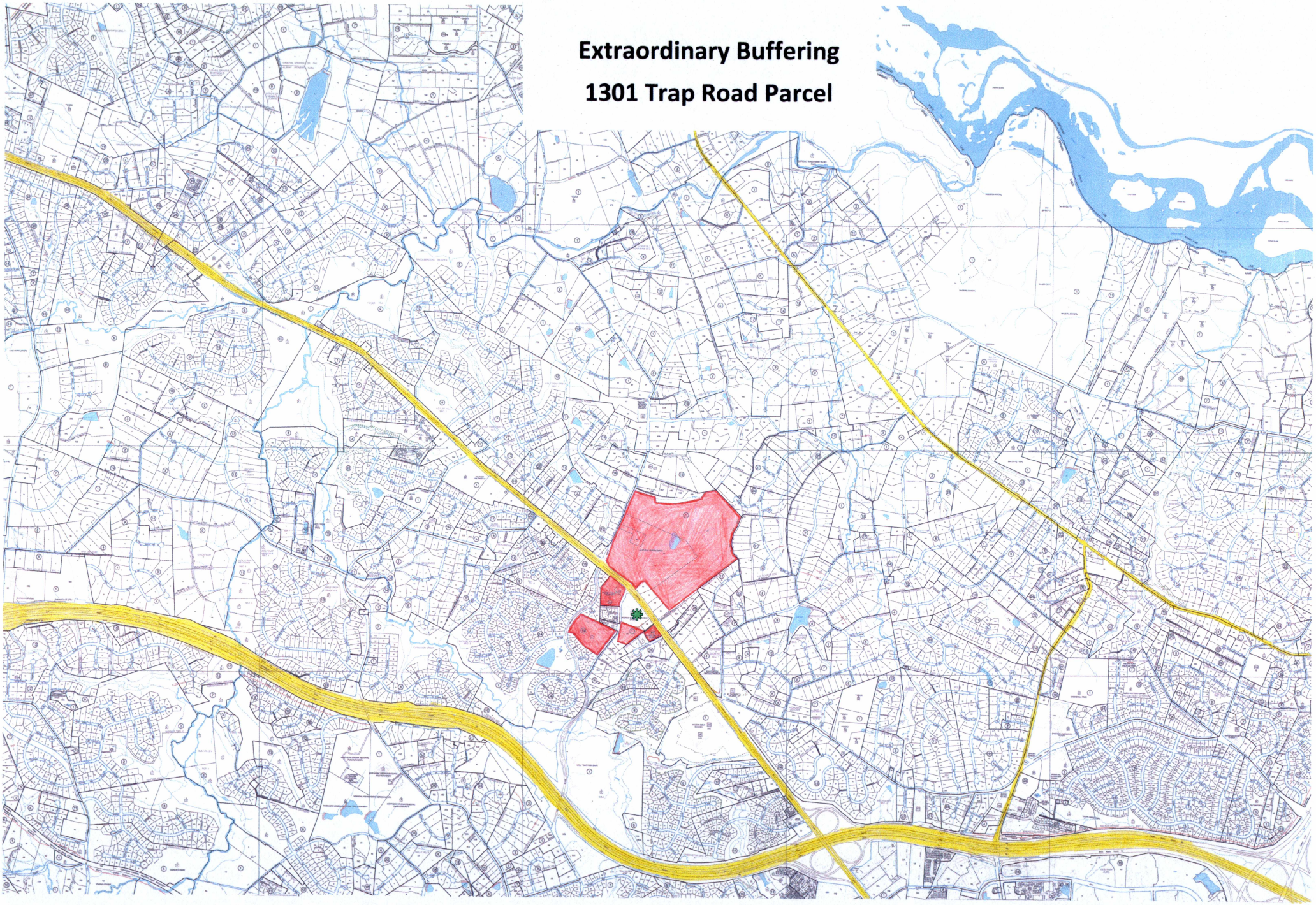
(Tyson Corner to Difficult Run)

- 1 Structure to East, 1 Structure to West
- ACUMC – A defined Solution to East
  - 120 Foot Height
  - Stealth (Bell Tower)
- Locust Hill HOA is center to the West

Existing Antenna Support Structure

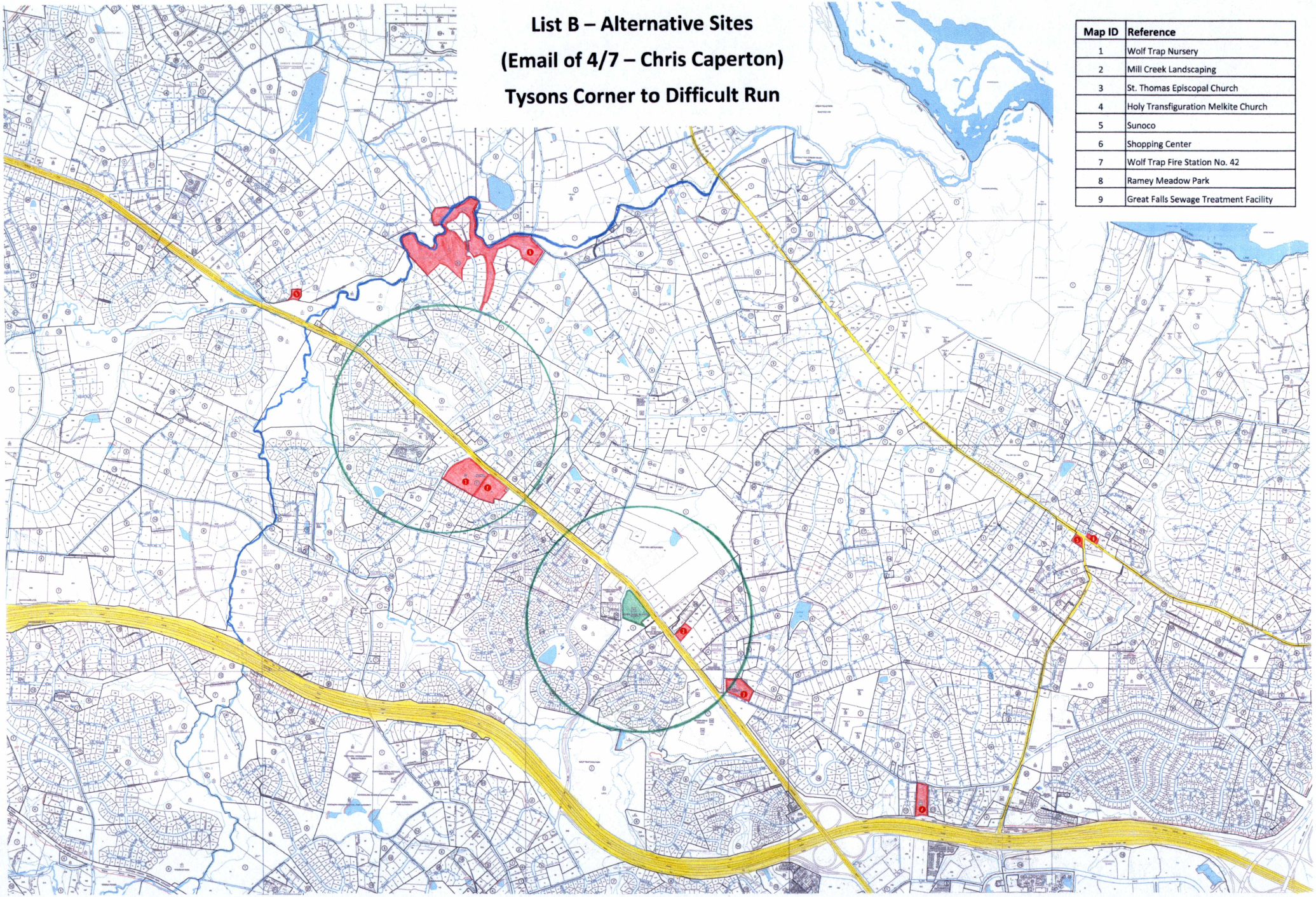
Extraordinary Buffering

1301 Trap Road Parcel



List B – Alternative Sites
(Email of 4/7 – Chris Caperton)
Tysons Corner to Difficult Run

Map ID	Reference
1	Wolf Trap Nursery
2	Mill Creek Landscaping
3	St. Thomas Episcopal Church
4	Holy Transfiguration Melkite Church
5	Sunoco
6	Shopping Center
7	Wolf Trap Fire Station No. 42
8	Ramey Meadow Park
9	Great Falls Sewage Treatment Facility



verizonwireless
We never stop working for you.

August 7, 2014

Ms. Carmen Bishop
Staff Coordinator
Zoning Evaluation Division
Fairfax County Department of Planning and Zoning
12055 Government Center Parkway, Ste 730
Fairfax, VA 22035
(703) 324-1221

Re: Verizon need for CWS 91: ACUMC– Tysons West ("Old Ash")
1301 Trap Road, Vienna
Andrew Chapel United Methodist Church
SE 2013-DR-019

Dear Ms. Bishop:

Verizon Wireless is seeking to improve its wireless services along Route 7, and in adjacent neighborhoods, between Tysons Corner and the Difficult Run stream valley.

CWS 91: Tysons West is a necessary site to improve both our coverage and network capacity. Locating at a height of 117' (mid-point of antennas) on the CWS bell tower will be a big improvement for our network.

My understanding is that the Wolf Trap Fire Station at the corner of Route 7 and Beulah Road is in consideration as a place to host a telecommunications structure. Verizon Wireless Radio Frequency Engineers have analyzed this location and an installation here would benefit our network as well. Please note though that a fire station installation will compliment, not replace, our Old Ash site (CWS 91: ACUMC).

Note as well that a taller tower (at even a mounting height of 150') at the fire station does not replace our Old Ash search ring.

Verizon Wireless looks forward to discussing its network and the need for the Old Ash site with the Planning Commission at the public hearing on Thursday, October 2nd.

Sincerely,

Mercy Luhanga
Radio Frequency Engineer

verizon wireless
We never stop working for you.

August 14, 2014

Statement of Certified Engineer
Site Selection and Performance Standards

Site Name: Old Ash
Site Address: 1301 Trap Road, Vienna, VA 22182

The proposed Bell Tower by CWS located at 1301 Trap Road in Vienna, VA, was selected by Verizon Wireless to provide and improve wireless coverage along Leesburg Pike, in between Laurel Hill Road and Towlson Road. The site will also enhance 4G-LTE coverage to the neighboring residential communities especially neighborhoods east of the proposed site, where there is little to no coverage.

The applicant identified that there were no existing structures of sufficient height to meet the intended coverage objectives of the Old Ash site.

The propagation maps attached to the application, illustrate the improved coverage that will result with the addition of the new telecommunications site.

This letter certifies that the proposed Bell Tower will meet the performance standards of the R-1 district pursuant to §9-103 of the Fairfax County Zoning Ordinance.

/s/
Mercy Luhanga
Radio Frequency Engineer
900 Junction Dr.
Annapolis Junction, MD 20701

verizon wireless

Verizon Wireless
9000 Junction Drive
Annapolis Junction, MD 20701
(301) 512-2000

Brian A. Stover
Principal Engineer – Real Estate
Direct Dial (301) 512-2459
Fax (301) 512-2186
Mobile (410) 404-4633

September 3, 2014

CWS VII, LLC
c/o Thomas A. Murray
2800 Shirlington Road Suite 716
Arlington, Virginia 22206

Re: Verizon's proposal for antennas and equipment at CWS 91: ACUMC
1301 Trap Road, Vienna, VA 22182
38 56' 53.63"N
77 15' 40.67"W

Dear Mr. Murray:

Verizon seeks to improve its wireless telecommunications network to the west of Tysons Corner. Verizon is interested and motivated to finalize an arrangement that will allow it to install a wireless communications facility on your proposed bell tower.

Verizon will enter an Agreement with CWS to use the following described areas for the duration of the term of the Agreement:

a) Equipment Space: Verizon shall have the right to use a 12' X 20' square foot portion of the proposed compound; this area shall be used to locate wireless communications equipment cabinets.
b) Antenna Space: Verizon shall have the right to install up to Twelve (12) panel antennas on the proposed bell tower at a mounting height of 115 feet including 12 (12) - 1 and 5/8 inch coax lines.
c) Accessory Space: Verizon shall have the right to install wires, cables, conduits and other ancillary and complimentary devices by, through and between the Equipment Space and the Antenna Space and the source of telephone and electric utility service.

Verizon Authorized Signatory
Name: Brian Stover
Title Principal Engineer Network Real Estate
Address:

Please be advised that this is not contractually binding on the parties. This letter is only an expression of the basic terms and conditions to be incorporated in a formal written agreement. The parties shall not be contractually bound unless and until they execute a formal lease, which must be in the form and content satisfactory to each party in their sole discretion. Neither party may rely on this letter as creating any legal obligation of any kind.

Sprint
7055 Samuel Morse Drive
Suite 110
Columbia, MD 21046
Office (410) 953-7444

September 1, 2014

CWS VII, LLC
c/o Thomas A. Murray
2800 Shirlington Road Suite 716
Arlington, Virginia 22206

Re: Sprint's proposal for antennas and equipment at CWS 91: ACUMC
1301 Trap Road, Vienna, VA 22182
38 56' 53.63"N
77 15' 41.67"W

Dear Mr. Murray:

Sprint seeks to improve its wireless telecommunications network to the west of Tysons Corner. Sprint is interested in an arrangement that will allow it to install a wireless communications facility on your proposed bell tower.

Sprint will use the following described areas for the duration of its lease term:

a) Equipment Space: Sprint shall have the right to use a 12' X 20' square foot portion of the proposed compound; this area shall be used to locate wireless communications equipment cabinets.
b) Antenna Space: Sprint shall have the right to install up to Twelve (12) panel antennas on the proposed bell tower at a mounting height of Ninety-Five (95) feet including Twelve (12) - 1 and 5/8 inch coax lines, and 12 RRUs.
c) Accessory Space: Sprint shall have the right to install wires, cables, conduits and other ancillary and complimentary devices by, through and between the Equipment Space and the Antenna Space and the source of telephone and electric utility service.

Sprint Authorized Signatory
Name: Donna Marvin
Title: Washington, DC / N. VA Market Manager
Address: 7267 Park Circle Drive, Hanover, MD. 21076

Please be advised that this is not contractually binding on the parties. This letter is only an expression of the basic terms and conditions to be incorporated in a formal written agreement. The parties shall not be contractually bound unless and until they execute a formal lease, which must be in the form and content satisfactory to each party in their sole discretion. Neither party may rely on this letter as creating any legal obligation of any kind.

T-Mobile

T-Mobile Northeast LLC, a subsidiary of T-Mobile USA, Inc.

12050 Baltimore Ave.
Beltsville, MD 20705

September 10, 2014

CWS VII, LLC
c/o Thomas A. Murray
2800 Shirlington Road Suite 716
Arlington, Virginia 22206

Re: T-Mobile's proposal for antennas and equipment at CWS 91: ACUMC
1301 Trap Road, Vienna, VA 22182
38 56' 53.95"N
77 15' 41.12"W

Dear Mr. Murray:

T-Mobile seeks to improve its wireless telecommunications network to the west of Tysons Corner. T-Mobile previously pursued a zoning application for a wireless facility at 1301 Trap Road and now T-Mobile welcomes the opportunity to be party to your application at this replacement location. T-Mobile is interested and motivated to finalize an arrangement that will allow it to install a wireless communications facility on your proposed bell tower.

Please be advised that this is not contractually binding on the parties. This letter is only an expression of the basic terms and conditions to be incorporated in a formal written agreement. The parties shall not be contractually bound unless and until they execute a formal lease, which must be in the form and content satisfactory to each party in their sole discretion. Neither party may rely on this letter as creating any legal obligation of any kind.

Should CWS obtain all jurisdictional and regulatory approvals necessary to build the proposed facility, T-Mobile will enter into nonbinding contractual negotiations with CWS to use the following described areas for the duration of the term of the Agreement:

a) Equipment Space: T-Mobile shall have the right to use a 10' X 20' square foot portion of the proposed compound; this area shall be used to locate wireless communications equipment cabinets.
b) Antenna Space: T-Mobile shall have the right to install up to Nine (9) panel antennas on the proposed bell tower at a mounting height of 105 feet including Nine (9) - 1 and 5/8 inch coax lines.
c) Accessory Space: T-Mobile shall have the right to install wires, cables, conduits and other ancillary and complimentary devices by, through and between the Equipment Space and the Antenna Space and the source of telephone and electric utility service

William O'Brien

T-Mobile Authorized Signatory
William O'Brien
Partner Delivery Manager
12050 Baltimore Avenue
Beltsville, MD 20705

CONTRACTING EXCAVATION PIPE CONCRETE EQUIPMENT RENTAL ALL SITE WORK ASPHALT

E.E. LYONS
CONSTRUCTION CO., INC.

ESTABLISHED 1930
POST OFFICE BOX 498 VIENNA, VIRGINIA 22183
(703) 759-2171 • DAX: (703) 759-5031

August 4, 2014

To Whom It May Concern:

I have no interest in leasing a tower site at 9325 Leesburg Pike Vienna, VA 22182 for any outside use.

Thank you,

James A. Lyons, President
E. E. Lyons Construction Co., Inc.

DONOHUE & STEARNS, PLC

July 16, 2014

Mr. Thomas R. Devaney, Leasing Manager
Real Estate Management Services
Facilities Management Department
12000 Government Center Parkway, Suite 424
Fairfax, Virginia 22035

Re: Beulah Road Fire Station as Alternate Candidate for Telecommunications Facility Proposed at Andrew Chapel United Methodist Church

Mr. Devaney:

This will confirm our conversation of July 10, 2014 regarding my client's inquiry about the referenced Fire Station, located at Leesburg Pike and Beulah Road. To re-cap, in connection with a pending application for special exception and 2232 review for proposed facilities at Andrew Chapel United Methodist Church, the applicant is required to evaluate alternative sites, such as the Fire Station at Beulah Road. Our client, Community Wireless Structures (CWS) has evaluated numerous alternate sites, including the Fire Station. CWS has concluded the Fire Station property is west of the coverage objective which is to be served by Andrew Chapel, and you also confirmed that the County is not willing to consider leasing a portion of such property for a cell tower or similar support structure.

Please let me know if the foregoing needs any correction or clarification. And thank you for taking the time to respond.

Sincerely,

Edward L. Donohue

117 Oronoco Street Alexandria, Virginia 22314 • 703.549.1123 • www.DonohueStearns.com

DONOHUE & STEARNS, PLC

September 12, 2014

Mr. Thomas R. Devaney, Leasing Manager
Real Estate Management Services
Facilities Management Department
12000 Government Center Parkway, Suite 424
Fairfax, Virginia 22035

Cc: Carmen Bishop

Re: Beulah Road Fire Station as Alternate Candidate for Telecommunications Facility Proposed at Andrew Chapel United Methodist Church

Tom,

We understand that the County has clarified its position on the fire station located at Leesburg Pike and Beulah Road and that it would consider leasing space on the parcel to the Applicant, CWS, for a telecommunications facility. This location, however, is not an alternate solution for the facility proposed to be located at Andrew Chapel United Methodist Church. The fire station is located nearly a mile west of the proposed site and would not achieve the coverage objective. CWS has provided staff with materials from Verizon Wireless RF engineers documenting this and has explained that a future site at the fire station may be useful *in addition* to the proposed facility at the Church, but will not serve as a replacement. Moreover, existing proffers and resource protection areas on the parcel pose significant challenges to the design and construction of a telecommunications facility there.

Thank you,

Edward L. Donohue

Attorney/ Agent for the Applicant

SPECIAL EXCEPTION AFFIDAVIT

DATE: October 9, 2014
(enter date affidavit is notarized)

I, Edward L. Donohue, do hereby state that I am an
(enter name of applicant or authorized agent)

(check one) [ ] applicant
[✓] applicant's authorized agent listed in Par. 1(a) below

123434b

in Application No.(s): SE 2013-DR-019
(enter County-assigned application number(s), e.g. SE 88-V-001)

and that, to the best of my knowledge and belief, the following information is true:

1(a). The following constitutes a listing of the names and addresses of all **APPLICANTS, TITLE OWNERS, CONTRACT PURCHASERS,** and **LESSEES** of the land described in the application,* and, if any of the foregoing is a **TRUSTEE,**** each **BENEFICIARY** of such trust, and all **ATTORNEYS** and **REAL ESTATE BROKERS,** and all **AGENTS** who have acted on behalf of any of the foregoing with respect to the application:

(**NOTE:** All relationships to the application listed above in **BOLD** print are to be disclosed. Multiple relationships may be listed together, e.g., **Attorney/Agent, Contract Purchaser/Lessee, Applicant/Title Owner**, etc. For a multiparcel application, list the Tax Map Number(s) of the parcel(s) for each owner(s) in the Relationship column.)

NAME (enter first name, middle initial, and last name)	**ADDRESS** (enter number, street, city, state, and zip code)	**RELATIONSHIP(S)** (enter applicable relationships listed in **BOLD** above)
CWS VII, LLC	2800 Shirlington Road	Applicant/ Agent / Lessee
Thomas A. Murray	Suite 716 Arlington, VA 22206	
Trustees of Andrew Chapel United Methodist Church	1301 Trap Road Vienna, VA 22182	Applicant/ Title Owner/ Lessor
David L. Nordean	9463 Shouse Drive Vienna, VA 22182	Trustee
Spencer J. Copland	115 Beulah Road, Suite 200C Vienna, VA 22180	Trustee
Benjamin H. Pruett	1318 Towlston Road Vienna, VA 22182	Trustee
Darrin M. Schmidt	751 Park Avenue Herndon, VA 20170	Trustee
Dennis C. Hall	1421 Montague Drive Vienna, VA 22182	Trustee
Sharon K. Mailey	11287 Stones Throw Drive Reston, VA 20194	Trustee
Peter J. Stavish (Deceased)	9411 Gamba Court Vienna, VA 22182	Trustee
James R. Cantrall, also known of record as Robert Cantrall	1107 Sugar Maple Lane Herndon, VA 20170	Trustee
Susan K. Grunin	1658 Valley Avenue McLean, VA 22101	Trustee
Carol A. Blackwell	1034 Cup Leaf Holly Court Great Falls, VA 22066	Trustee
Donohue & Stearns, PLC	117 Oronoco Street Alexandria, VA 22314	Attorneys/Agents/Applicants for Title Owner/Lessor
Edward L. Donohue	117 Oronoco Street Alexandria, VA 22314	
Tracy L. Themak	117 Oronoco Street Alexandria, VA 22314	

(check if applicable) [ ] There are more relationships to be listed and Par. 1(a) is continued on a "Special Exception Attachment to Par. 1(a)" form.

* In the case of a condominium, the title owner, contract purchaser, or lessee of 10% or more of the units in the condominium.

** List as follows: Name of trustee, Trustee for (name of trust, if applicable), for the benefit of: (state name of each beneficiary).

Special Exception Attachment to Par. 1(a)

DATE: October 9, 2014
(enter date affidavit is notarized)

for Application No. (s): SE 2013-DR-019
(enter County-assigned application number (s))

123434b

(**NOTE**: All relationships to the application are to be disclosed. Multiple relationships may be listed together, e.g., **Attorney/Agent, Contract Purchaser/Lessee, Applicant/Title Owner**, etc. For a multiparcel application, list the Tax Map Number(s) of the parcel (s) for each owner(s) in the Relationship column.)

NAME (enter first name, middle initial, and last name)	**ADDRESS** (enter number, street, city, state, and zip code)	**RELATIONSHIP(S)** (enter applicable relationships listed in **BOLD** above)
Entrex Communication Services, Inc.	6600 Rockledge Drive, Suite 550 Bethesda, MD 20817	Engineers
John Cabot Goudy		Engineer
Millennium Engineering, P.C.	508 Ferncastle Drive Downingtown, PA 19335	Engineers
Paul A. Dugan		Engineer

(check if applicable) [ ] There are more relationships to be listed and Par. 1(a) is continued further on a "Special Exception Attachment to Par. 1(a)" form.

SPECIAL EXCEPTION AFFIDAVIT

DATE: October 9, 2014
(enter date affidavit is notarized)

for Application No. (s): SE 2013-DR-019
(enter County-assigned application number(s))

1234346

1(b). The following constitutes a listing*** of the **SHAREHOLDERS** of all corporations disclosed in this affidavit who own 10% or more of any class of stock issued by said corporation, and where such corporation has 10 or less shareholders, a listing of all of the shareholders:

(**NOTE**: Include **SOLE PROPRIETORSHIPS, LIMITED LIABILITY COMPANIES,** and **REAL ESTATE INVESTMENT TRUSTS** herein.)

CORPORATION INFORMATION

NAME & ADDRESS OF CORPORATION: (enter complete name and number, street, city, state, and zip code) CWS VII, LLC
2800 Shirlington Road
Suite 716
Arlington, VA 22206

DESCRIPTION OF CORPORATION: (check one statement)

[✓] There are 10 or less shareholders, and all of the shareholders are listed below.

[ ] There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.

[ ] There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

NAMES OF SHAREHOLDERS: (enter first name, middle initial and last name)
Thomas A. Murray, Managing Member
Lauren I. Murray, Member
Hope P. McCreary, Member
Queli I. Campos, Member

(check if applicable) [✓] There is more corporation information and Par. 1(b) is continued on a "Special Exception Affidavit Attachment 1(b)" form.

*** All listings which include partnerships, corporations, or trusts, to include the names of beneficiaries, must be broken down successively until: (a) only individual persons are listed or (b) the listing for a corporation having more than 10 shareholders has no shareholder owning 10% or more of any class of stock. ***In the case of an APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE* of the land that is a partnership, corporation, or trust, such successive breakdown must include a listing and further breakdown of all of its partners, of its shareholders as required above, and of beneficiaries of any trusts. Such successive breakdown must also include breakdowns of any partnership, corporation, or trust owning 10% or more of the APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE* of the land. Limited liability companies and real estate investment trusts and their equivalents are treated as corporations, with members being deemed the equivalent of shareholders; managing members shall also be listed.*** Use footnote numbers to designate partnerships or corporations, which have further listings on an attachment page, and reference the same footnote numbers on the attachment page.

Special Exception Attachment to Par. 1(b)

DATE: October 9, 2014
(enter date affidavit is notarized)

for Application No. (s): SE 2013-DR-019
(enter County-assigned application number (s))

1234346

NAME & ADDRESS OF CORPORATION: (enter complete name, number, street, city, state, and zip code)
Donohue & Stearns, PLC
117 Oronoco Street
Alexandria, VA 22314
201 Liberty Street
Leesburg, VA 20175

DESCRIPTION OF CORPORATION: (check one statement)

[✓] There are 10 or less shareholders, and all of the shareholders are listed below.
[ ] There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.
[ ] There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

NAMES OF THE SHAREHOLDERS: (enter first name, middle initial, and last name)
Edward L. Donohue, Partner
Frank W. Stearns, Partner

NAME & ADDRESS OF CORPORATION: (enter complete name, number, street, city, state, and zip code)
Entrex Communications Services, Inc.
6600 Rockledge Drive, Suite 550
Bethesda, MD 20817

DESCRIPTION OF CORPORATION: (check one statement)

[✓] There are 10 or less shareholders, and all of the shareholders are listed below.
[ ] There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.
[ ] There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

NAMES OF THE SHAREHOLDERS: (enter first name, middle initial, and last name)
Marc A. Marzullo
Camille F. Shabshab
John Cabot Goudy

(check if applicable) [✓] There is more corporation information and Par. 1(b) is continued further on a "Special Exception Attachment to Par. 1(b)" form.

Special Exception Attachment to Par. 1(b)

DATE: October 9, 2014
(enter date affidavit is notarized)

for Application No. (s): SE 2013-DR-019
(enter County-assigned application number (s))

1234346

NAME & ADDRESS OF CORPORATION: (enter complete name, number, street, city, state, and zip code)
Millennium Engineering, P.C.
508 Ferncastle Drive
Downingtown, PA 19335

DESCRIPTION OF CORPORATION: (check one statement)

[✓] There are 10 or less shareholders, and all of the shareholders are listed below.
[ ] There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.
[ ] There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

NAMES OF THE SHAREHOLDERS: (enter first name, middle initial, and last name)
Paul A. Dugan

NAME & ADDRESS OF CORPORATION: (enter complete name, number, street, city, state, and zip code)

DESCRIPTION OF CORPORATION: (check one statement)

[ ] There are 10 or less shareholders, and all of the shareholders are listed below.
[ ] There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.
[ ] There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

NAMES OF THE SHAREHOLDERS: (enter first name, middle initial, and last name)

(check if applicable) [ ] There is more corporation information and Par. 1(b) is continued further on a "Special Exception Attachment to Par. 1(b)" form.

SPECIAL EXCEPTION AFFIDAVIT

DATE: October 9, 2014
(enter date affidavit is notarized)

for Application No. (s): SE 2013-DR-019
(enter County-assigned application number(s))

1234346

1(c). The following constitutes a listing*** of all of the **PARTNERS,** both **GENERAL** and **LIMITED**, in any partnership disclosed in this affidavit:

PARTNERSHIP INFORMATION

PARTNERSHIP NAME & ADDRESS: (enter complete name, and number, street, city, state, and zip code)

(check if applicable) [ ] The above-listed partnership has no limited partners.

NAMES AND TITLE OF THE PARTNERS (enter first name, middle initial, last name, and title, e.g. **General Partner, Limited Partner, or General and Limited Partner)**

(check if applicable) [ ] There is more partnership information and Par. 1(c) is continued on a "Special Exception Affidavit Attachment to Par. 1(c)" form.

*** All listings which include partnerships, corporations, or trusts, to include the names of beneficiaries, must be broken down successively until: (a) only individual persons are listed or (b) the listing for a corporation having more than 10 shareholders has no shareholder owning 10% or more of any class of stock. ***In the case of an APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE* of the land that is a partnership, corporation, or trust, such successive breakdown must include a listing and further breakdown of all of its partners, of its shareholders as required above, and of beneficiaries of any trusts. Such successive breakdown must also include breakdowns of any partnership, corporation, or trust owning 10% or more of the APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE* of the land. Limited liability companies and real estate investment trusts and their equivalents are treated as corporations, with members being deemed the equivalent of shareholders; managing members shall also be listed.*** Use footnote numbers to designate partnerships or corporations, which have further listings on an attachment page, and reference the same footnote numbers on the attachment page.

SPECIAL EXCEPTION AFFIDAVIT

DATE: October 9, 2014
(enter date affidavit is notarized)

for Application No. (s): SE 2013-DR-019
(enter County-assigned application number(s))

1234346

1(d). One of the following boxes **must** be checked:

[ ] In addition to the names listed in Paragraphs 1(a), 1(b), and 1(c) above, the following is a listing of any and all other individuals who own in the aggregate (directly and as a shareholder, partner, and beneficiary of a trust) 10% or more of the **APPLICANT, TITLE OWNER, CONTRACT PURCHASER,** or **LESSEE*** of the land:

[✓] Other than the names listed in Paragraphs 1(a), 1(b), and 1(c) above, no individual owns in the aggregate (directly and as a shareholder, partner, and beneficiary of a trust) 10% or more of the **APPLICANT, TITLE OWNER, CONTRACT PURCHASER,** or **LESSEE*** of the land.

2. That no member of the Fairfax County Board of Supervisors, Planning Commission, or any member of his or her immediate household owns or has any financial interest in the subject land either individually, by ownership of stock in a corporation owning such land, or through an interest in a partnership owning such land.

EXCEPT AS FOLLOWS: (**NOTE**: If answer is none, enter "**NONE**" on the line below.)
NONE

(check if applicable) [ ] There are more interests to be listed and Par. 2 is continued on a "Special Exception Attachment to Par. 2" form.

Application No.(s): SE 2013-DR-019

(county-assigned application number(s), to be entered by County Staff)

SPECIAL EXCEPTION AFFIDAVIT

DATE: October 9, 2014

(enter date affidavit is notarized)

1234346

3. That within the twelve-month period prior to the public hearing of this application, no member of the Fairfax County Board of Supervisors, Planning Commission, or any member of his or her immediate household, either directly or by way of partnership in which any of them is a partner, employee, agent, or attorney, or through a partner of any of them, or through a corporation in which any of them is an officer, director, employee, agent, or attorney or holds 10% or more of the outstanding bonds or shares of stock of a particular class, has, or has had any business or financial relationship, other than any ordinary depositor or customer relationship with or by a retail establishment, public utility, or bank, including any gift or donation having a value of more than $100, singularly or in the aggregate, with any of those listed in Par. 1 above.

EXCEPT AS FOLLOWS: (**NOTE**: If answer is none, enter "**NONE**" on line below.)

During the twelve month period prior to the public hearing of this application, Frank W. Stearns, Esq., a partner in the law firm of Donohue & Stearns, PLC, made a contribution in excess of $100 to Supervisor Pat Herrity.

NOTE: Business or financial relationships of the type described in this paragraph that arise after the filing of this application and before each public hearing must be disclosed prior to the public hearings. See Par. 4 below.)

(check if applicable) [ ] There are more disclosures to be listed and Par. 3 is continued on a "Special Exception Attachment to Par. 3" form.

4. **That the information contained in this affidavit is complete, that all partnerships, corporations, and trusts owning 10% or more of the APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE* of the land have been listed and broken down, and that prior to each and every public hearing on this matter, I will reexamine this affidavit and provide any changed or supplemental information, including business or financial relationships of the type described in Paragraph 3 above, that arise on or after the date of this application.**

WITNESS the following signature: E. L. Donohue

(check one) [ ] Applicant [✓] Applicant's Authorized Agent

Edward L. Donohue

(type or print first name, middle initial, last name, and & title of signee)

Subscribed and sworn to before me this 9th day of October 2014, in the State/Comm. of Virginia, County/City of Alexandria.

M. Louise Comninakis

Notary Public

My commission expires: 1-31-2015

M. LOUISE COMNINAKIS NOTARY PUBLIC REG. #7076753 MY COMMISSION EXPIRES 1-31-2015 COMMONWEALTH OF VIRGINIA

FORM SEA-1 Updated (7/1/06)

COMMONWEALTH OF VIRGINIA

COUNTY OF FAIRFAX

OFFICE OF COMPREHENSIVE PLANNING
BOARD OF ZONING APPEALS SUPPORT BRANCH
CITY SQUARE BUILDING
10640 PAGE AVENUE, 3RD FLOOR
Fairfax, Virginia 22030

691-4261

October 13, 1987

Donald W. Ellison
Chairman, Trustees
1301 Trap Road
Vienna, Virginia 22180

Re: Special Permit Amendment Application SPA 83-D-045-1
Andrew Chapel United Methodist Church

Dear Mr. Ellison:

At its October 21, 1987 meeting, the Board of Zoning Appeals took action to **GRANT** your application. A copy of the Resolution is attached. This should be posted in a conspicuous place along with a copy of the Residential or Non-Residential Use Permit.

This action does not constitute exemption from the various requirements of this County and State. The applicant is responsible for fulfilling his obligations to obtain Building Permits (691-3446); Residential or Non-Residential Use Permits, formerly called Occupancy Permits (691-2381); etc. through the established procedures.

This Special Use Permit will not be valid until a residential or Non-Residential Use Permit has been issued.

Sincerely,

Patti M. Hicks, Clerk
Board of Zoning Appeals

Enclosure As Stated

10:45 A.M. ANDREW CHAPEL UNITED METHODIST CHURCH, SPA 83-D-045-1, application under Sect. 3-103 of the Zoning Ordinance to amend SP 83-D-045 for church and related facilities to permit building and parking additions to existing facilities, located at 1301 Trap Road, on approximately 7.17 acres, zoned R-1, Dranesville District, Tax Map 19-4((1))47. (TO BE HEARD CONCURRENT WITH SPA 74-D-081-1)

10:45 A.M. ANDREW CHAPEL UNITED METHODIST CHURCH, SPA 74-D-081-1, application under Sect. 3-103 of the Zoning Ordinance to amend S-81-74 for nursery school/child care center to permit building and parking additions and increase in maximum daily enrollment to 99, and changes to other conditions, located at 1301 Trap Road, on approximately 7.17 acres, zoned R-1, Dranesville District, Tax Map 19-4((1))47. (TO BE HEARD CONCURRENT WITH SPA 83-D-045-1)

Lori Greenlief, Staff Coordinator, presented the staff report and advised the Board that the staff report represents two requests by the applicant. One application is to amend the original church application for an addition of a buiilding and parking spaces and the other application is to amend the child care center application to increase the number of children from 75 to 99. She explained that one unresolved issue was the transportation improvement along Trap Road. Staff is requesting dedication to 35 feet from centerline and the applicant is requesting dedication to 30 feet from centerline. Another unresolved issue was that a trail along Route 7, the applicant is proposing 10 feet of dedication and staff is requesting dedication and construction for a trail in accordance with the trails plan as set forth in the Comprehensive Plan and as required by the site plan requirements of the Ordinance. Ms. Greenlief added that staff was also requesting additional landscaping. She further advised the Board that there were some changes in the proposed development conditions in Appendix 2 of the staff report: SPA 74-D-081-1, Condition 6, the hours of operation shall be 9:00 A.M. to 2:00 P.M. Condition 7, the combined maximum number of employees will be 13 on site at any one time. The third change is in condition 11 concerning the noise attenuation measures, the first paragraph should remain the same, the rest should be deleted and insert the revised condition submitted to the Board.

Following a question from Mr. Hammack, Ms. Greenlief stated that even with the combined uses there was excess parking.

Bruce Bussell, 1406 Claves Court, Vienna, Virginia, representative for the applicant, appeared before the Board and submitted six letters in support of the applications and also noted that the McLean Citizens Association also supported the applications. Mr. Bussell expressed concern over the following development conditions in Appendix 1: 5, regarding dedication of 35 feet from the centerline of Trap Road, the church was suggesting that only 30 feet was necessary as this was all that required of the church across the street (SP 86-D-009). With regard to condition 6, request waiver of that dedication until it is determined whether or not the service road will be completed. With regard to condition 12, they would like to forego construction until there is something to connect with. Concerning condition 7, in terms of planting of the "u" area, it will be landscaped, but in terms of the three talls trees being planted between the building and the parking area it was not necessary but they were proposing to provide some plantings.

With regard to Appendix 2, concerning condition 6, the hours of operation should be changed to 9:00 A.M. to 2:00 P.M. Concerning condition 7, the applicant would like to add one more position from 13 to 14 employees on site at any one time. Condition 11, waiver of the screening of the play area.

In closing, Ms. Greenlief reiterated that staff was recommending approval of the applications subject to the development conditions as stated by staff.

Since there were no speakers to address this application, Chairman Smith closed the public hearing.

Prior to making the motion, Mr. Hammack noted that the standards of the Zoning Ordinance had been met and therefore moved to grant SPA 83-D-045-1 subject to the revised development conditions.

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COUNTY OF FAIRFAX, VIRGINIA

SPECIAL PERMIT RESOLUTION OF THE BOARD OF ZONING APPEALS

In Special Permit Amendment Application SPA 74-D-081-1 by ANDREW CHAPEL UNITED METHODIST CHURCH, under Section 3-103 of the Zoning Ordinance to amend S-81-74 for nursery school/child care center to permit building and parking additions and increase in maximum daily enrollment to 99, and changes to other conditions, on property located at 1301 Trap Road, Tax Map Reference 19-4((1))47, Mr. Hammack moved that the Board of Zoning Appeals adopt the following resolution:

WHEREAS, the captioned application has been properly filed in accordance with the requirements of all applicable State and County Codes and with the by-laws of the Fairfax County Board of Zoning Appeals; and

WHEREAS, following proper notice to the public, a public hearing was held by the Board on October 13, 1987; and

WHEREAS, the Board has made the following findings of fact:

1. That the applicant is the owner of the land.
2. The present zoning is R-1.
3. The area of the lot is 7.17 acres of land.

AND WHEREAS, the Board of Zoning Appeals has reached the following conclusions of law:

THAT the applicant has presented testimony indicating compliance with the general standards for Special Permit Uses as set forth in Sect. 8-006 and the additional standards for this use as contained in Sections 8-303 and 8-305 of the Zoning Ordinance.

NOW, THEREFORE, BE IT RESOLVED that the subject application is **GRANTED** with the following limitations:

1. This approval is granted to the applicant only and is not transferable without further action of this Board, and is for the location indicated on the application and is not transferable to other land.

2. This approval is granted for the Phase 1 buildings and uses indicated on the plat submitted with this application, except as qualified below. Any additional structures of any kind, changes in use, additional uses, or changes in the plans approved by this Board, other than minor engineering details, whether or not these additional uses or changes require a Special Permit, shall require approval of this Board. It shall be the duty of the Permittee to apply to this Board for such approval. Any changes, other than minor engineering details, without this Board's approval, shall constitute a violation of the conditions of this Special Permit.

3. A copy of this Special Permit and the Non-Residential Use Permit SHALL BE POSTED in a conspicuous place on the property of the use and be made available to all departments of the County of Fairfax during the hours of operation of the permitted use.

4. This use shall be subject to the provisions set forth in Article 17, Site Plans.

5. The combined maximum daily enrollment of the Mother's Day Out child care center and the nursery school shall not exceed 99 children.

6. The hours of operation for the programs shall be limited to 9:00 a.m. to 2:00 p.m.

7. There shall be a combined maximum of 14 employees on site at any one time associated with the programs.

8. There shall be 19 parking spaces provided for this use. All parking shall be on site.

9. The play area shall be provided as shown on the approved plat and shall be fenced in accordance with the Fairfax County Health Department standards.

10. Any sign erected in association with this use shall conform to Article 12 of the Zoning Ordinance.

11. All portions of the school facility, which for noise attenuation is considered a residential structure, between the centerline and 330 feet from the centerline of Leesburg Pike shall meet the following guidelines for the acoustical treatment of residential structures within the highway noise impact zone with levels in excess of 70 dBA Ldn. All portions of the school facility between 330 and 1050 feet from the centerline of Leesburg Pike shall meet the following guidelines for the acoustical treatment of residential structures within the highway noise impact zone with levels in excess of 65 dBA Ldn.

A. In order to achieve a maximum interior noise level of 45 dBA Ldn in all units located within that area impacted by highway noise having levels between 65 and 70 dBA Ldn, all units within this impacted area should have the following acoustical attributes:

1. Exterior walls should have a laboratory sound transmission class (STC) of at least 39, and

2. Doors and windows should have a laboratory sound transmission class (STC) of at least 28. If "windows" function as the walls, then they should have the STC specified for exterior walls.

3. Adequate measures to seal and caulk between surfaces should be provided.

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

Under Sect. 8-015 of the Zoning Ordinance, this Special Permit shall automatically expire, without notice, eighteen (18) months after the approval date* of the Special Permit unless the activity authorized has been established, or unless construction has started and is diligently pursued, or unless additional time is approved by the Board of Zoning Appeals because of occurrence of conditions unforeseen at the time of the approval of this Special Permit. A request for additional time shall be justified in writing, and must be filed with the Zoning Administrator prior to the expiration date.

Mrs. Thonen seconded the motion.

The motion carried by a vote of 5-0 with Mr. Hyland not present for the vote; Mr. DiGiulian absent from the meeting.

*This decision was officially filed in the office of the Board of Zoning Appeals and became final on October 21, 1987. This date shall be deemed to be the final approval date of this special permit.

//

Mr. Hammack then moved to grant SPA 74-D-081-1 subject to the revised development conditions.

//

COUNTY OF FAIRFAX, VIRGINIA

SPECIAL PERMIT RESOLUTION OF THE BOARD OF ZONING APPEALS

In Special Permit Amendment Application SPA 83-D-045-1 by ANDREW CHAPEL UNITED METHODIST CHURCH, under Section 3-103 of the Zoning Ordinance to amend SP 83-D-045-1, on property located at 1301 Trap Road, Tax Map Reference 19-4((1))47, Mr. Hammack moved that the Board of Zoning Appeals adopt the following resolution:

WHEREAS, the captioned application has been properly filed in accordance with the requirements of all applicable State and County Codes and with the by-laws of the Fairfax County Board of Zoning Appeals; and

WHEREAS, following proper notice to the public, a public hearing was held by the Board on October 13, 1987; and

WHEREAS, the Board has made the following findings of fact:

1. That the applicant is the owner of the land.
2. The present zoning is R-1.
3. The area of the lot is 7.17 acres of land.

AND WHEREAS, the Board of Zoning Appeals has reached the following conclusions of law:

THAT the applicant has presented testimony indicating compliance with the general standards for Special Permit Uses as set forth in Sect. 8-006 and the additional standards for this use as contained in Sections 8-303 and 8-305 of the Zoning Ordinance.

NOW, THEREFORE, BE IT RESOLVED that the subject application is **GRANTED** with the following limitations:

1. This approval is granted to the applicant only and is not transferable without further action of this Board, and is for the location indicated on the application and is not transferable to other land.

2. This approval is granted for the Phase 1 buildings and uses indicated on the plat submitted with this application, except as qualified below. Any additional structures of any kind, changes in use, additional uses, or changes in the plans approved by this Board, other than minor engineering details, whether or not these additional uses or changes require a Special Permit, shall require approval of this Board. It shall be the duty of the Permittee to apply to this Board for such approval. Any changes, other than minor engineering details, without this Board's approval, shall constitute a violation of the conditions of this Special Permit.

3. A copy of this Special Permit and the Non-Residential Use Permit SHALL BE POSTED in a conspicuous place on the property of the use and be made available to all departments of the County of Fairfax during the hours of operation of the permitted use.

4. This use shall be subject to the provisions set forth in Article 17, Site Plans.

5. In order to facilitate the construction of the planned four-lane undivided road, dedication of a right-of-way to 30 feet from centerline along Trap Road and temporary grading easements for construction shall be provided along the site's frontage. In addition, the applicant shall dedicate, upon notice from Department of Environmental Management or Virginia Department of Transportation, an additional twelve (12) feet for replacement of a deceleration lane on the east side of Trap Road. The proposed entrance and

right-turn deceleration lane shall be constructed to Virginia Department of Transportation (VDOT) standards. This requirement may be modified by DEM if determined to be necessary for consistency with adjacent development proposals. Grading and construction easements shall be provided as determined at the time of site plan review.

6. Dedication of right-of-way to ninety-eight (98) feet from centerline shall be provided along the site's frontage on Leesburg Pike if a service drive is required. If the requirement for a service drive is waived, adequate dedication has already been made. Grading and construction easements shall be provided as determined at the time of site plan review.

7. Landscaping and screening shall be provided as shown on the landscape plan submitted with this application with additional plantings, the location and type to be approved by the County Arborist, along the proposed hill in the eastern portion of the site. The purpose of these plantings on the hill shall be to screen and to provide a positive visual appearance. The landscaping should cover the entire length of the hill leaving no bare spots. Three additional shade trees shall be provided on the east side of the existing building between the building and the existing parking lot. The barrier requirement shall be waived. Interior parking lot landscaping shall be provided in accordance with Article 13 of the Zoning Ordinance.

8. There shall be a minimum planting yard of ten (10) feet after dedication for public street purposes along the western lot line in the vicinity of the existing parking lot.

9. The maximum number of seats in the principal place of worship shall be 200.

10. A minimum of 50 parking spaces shall be provided for the church use. All parking for the church use shall be on site.

11. All signs erected on site shall conform to the regulations specified in Article 12 of the Zoning Ordinance.

12. Dedication of a trail only shall be provided along Leesburg Pike. The type, size, and exact location shall be determined at the time that a service drive is required.

13. Parking lot lighting, if installed, shall be the low intensity type, on standards no to exceed twelve (12) feet in height and shielded, if necessary, so as to prevent light or glare from projecting onto adjacent residential properties.

14. This approval is for Phase 1 as shown on the plat submitted with this application only.

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

Under Sect. 8-015 of the Zoning Ordinance, this Special Permit shall automatically expire, without notice, eighteen (18) months after the approval date* of the Special Permit unless the activity authorized has been established, or unless construction has started and is diligently pursued, or unless additional time is approved by the Board of Zoning Appeals because of occurrence of conditions unforeseen at the time of the approval of this Special Permit. A request for additional time shall be justified in writing, and must be filed with the Zoning Administrator prior to the expiration date.

Mrs. Day and Mrs. Thonen seconded the motion.

The motion carried by a vote of 5-0 with Mr. Hyland not present for the vote; Mr. DiGiulian absent from the meeting.

*This decision was officially filed in the office of the Board of Zoning Appeals and became final on October 21, 1987. This date shall be deemed to be the final approval date of this special permit.

//

County of Fairfax, Virginia

MEMORANDUM

DATE: September 9, 2014

TO: Barbara C. Berlin, Director
Zoning Evaluation Division, DPZ

FROM: Chris Caperton, Chief
Facilities Planning Branch, DPZ

SUBJECT: Section 15.2-2232 Review
Application 2232-D13-9 (concurrent with **SE 2013-DR-019)**
CWS VII, LLC & The Trustees of Andrew Chapel United Methodist Church
1301 Trap Road, Vienna, 22182
Tax Map 19-4 ((1)) 47

Pursuant to Va. Code Sec. 15.2-2232, the Facilities Planning Branch of the Planning Division offers the following comments and recommendation on the proposed telecommunications facility.

PROJECT DESCRIPTION

The applicant, CWS VII, LLC & The Trustees of Andrew Chapel United Methodist Church, propose to construct a 120' telecommunications facility (bell tower) for co-location of up to four (4) carriers. Verizon Wireless is the first carrier proposed on the facility. A 35' x 70' equipment compound is proposed at the base of the bell tower which will be screened with an 8' board-on-board fence and landscape plantings around the perimeter of the fence. The details of the proposal are described in the 2232 Review Application (Attachment A). The proposal is also subject to review and approval of SE 2013-DR-019.

Location: The property is located at 1301 Trap Road, Vienna, 22182, in the southeast quadrant of Trap Road's intersection with Leesburg Pike.

Site: The site is currently developed with the Andrew Chapel United Methodist Church and its associated paved parking lot with 81 total spaces. An existing two-story residential dwelling is located in the northwestern quadrant of the property. The 18,700 square foot one-story, with basement, brick church building with 200 seats is also used for a nursery school for up to 99 children. A fenced play area and shed are located southeast of the church. The property is relatively flat with existing mature trees located around much of the perimeter of the site.

Background: The applicant originally filed 2232-D13-9 on June 28, 2013 with the Planning Division of the Department of Planning and Zoning (DPZ) to request a telecommunications facility, consisting of a 140' bell tower and an associated equipment compound, for co-location of up to five (5) wireless providers to be located at the edge of the paved parking lot to the rear of the church. The applicant provided community outreach at a community meeting held at the church on August 21, 2013.

At staff's request, the applicant performed a balloon fly on Tuesday, September 24, 2013, from 7:30 am to 9:30 am. The applicant presented the application to the McLean Citizen's Association on September 24, 2013. The balloon was not flown at the proposed height and was re-flown on October 10, 2013 (7:30 am to 9:30 am).

During this timeframe, the applicant also submitted applications to the Zoning Evaluation Division (ZED), DPZ, to permit a telecommunications facility on property zoned to the R-1 Zoning District. Revisions were made to the application on February 25, 2014 and March 10, 2014. The revised March application, on which this review is based, proposes a 120' tall bell tower structure that can accommodate 4 carriers.

The applicant notified approximately 63 property owners immediately adjacent and/or abutting the application property of an additional balloon fly performed on Saturday, March 15, 2014 (8:00 am to noon). Also contacted were affected Homeowners Associations, Civic Associations, and the local Board member and Planning Commission member.

Additionally, the applicant submitted documentation to the Historic Preservation Planner of DPZ requesting a Section 106 review of the potential impacts of the proposed tower on nearby historic properties. In an email dated January 8, 2014, (Attachment B) staff determined that "because the proposed telecommunications facility would be enclosed by a bell tower structure, it is believed that the effect on the two historic properties would not be adverse." The applicant has also provided a Phase 1 Archaeological Survey with the submitted application materials.

As mentioned, during the review period for both the 2232 and SE 2013-DR-019, the applicant submitted additional application information. This included a revised Statement of Justification, revised photo simulations, and revised plans. The Statement of Justification and revised photo simulations are found in Attachment C.

PROPOSED USE: Telecommunications facility for up to four (4) wireless carriers

Facility: See application (Attachment A) for full description; all dimensions are approximate:

- Structure – A 120' tall bell tower with concealment panels to screen antenna and non-working bells located below the final panel. The structure is proposed to accommodate up to four (4) co-located wireless providers. The wireless carrier Verizon Wireless is the first carrier proposed, plus three (3) future carriers subject to 2232 approval. Verizon Wireless will be located at the top position at 115'.
- Location – The proposed telecommunications facility is located adjacent to the church parking lot and approximately 87' from the property line to Leesburg Pike and approximately 60' to the compound itself.
- Antennas – Panel antennas are proposed, screened behind cream color stealth panels for a maximum build-out as noted below:

- *up to 60 panel antennas in total (typically up to 15 antenna per carrier)*
- *up to 102" in height*
- *up to 24" in width*

Note: Verizon Wireless will be located at a RAD center of 115' leaving 105', 95' and 85' respectively for future carriers.

- Equipment Compound – Proposed 35' wide x 70' long, 2,450 square feet area for the bell tower structure and associated equipment. Space available for up to four (4) co-located wireless providers.
- Equipment Cabinets and Shelters – All equipment as shown on Sheet Z-2 will be placed within the 35' x 70' equipment compound for a maximum build-out as noted below:
  - *up to 16 equipment cabinets measuring (typically up to 4 cabinets per carrier)*
    - *up to 8' in height*
    - *up to 10' in width*
    - *up to 10' in depth*
  - *up to 3 equipment shelters measuring*
    - *up to 12' in height*
    - *up to 30' in width*
    - *up to 20' in depth*

  Note: the carriers may choose either equipment cabinets OR an equipment shelter; therefore, the 19 pieces of equipment proposed would be a combination of either cabinets or shelters located within the compound
- Screening – The compound is to be screened with an 8' tall board-on-board fence made of natural wood to create a solid visual barrier which will enclose the compound area and conceal the equipment from view. Supplemental landscape plantings will be placed along the perimeter of the compound to provide further screening.
- Stormwater runoff – Storm water management, water quality control Best Management Practices, and water quantity issues, are site plan review requirements because the area of disturbance exceeds 2,500 square feet.
- Access – Access to the compound will be via a 6' wide gravel walkway with a 4' wide proposed main gate to enter into the compound, located approximately 45' from the edge of the paved parking lot.
- Operations – A service technician will visit the site approximately once or twice per month to perform routine maintenance.

Off-Site Impacts: The applicant indicates the proposed use will not generate noise, light, dust, glare, or vibrations. The traffic generated will be minimal as the facility is unmanned. The applicant further states that the proposed use will have no negative impacts on air quality, water quality, or any existing environmental features of the subject property.

Alternate locations: The applicant identified the following alternate locations:

Public

- **Colvin Run Elementary School 1400 Trap Road**
  This parcel is located too far south of the coverage objective.

- **Fire Station #42 Route 7 and Beulah Road**
  This parcel is located too far west of the coverage objective.

Other

- **Covance Laboratories 9200 Leesburg Pike**
  This large parcel which is residentially zoned has been approached by numerous carriers and tower developers (including T-Mobile in 2009/2010). The owners of this property are not interested in locating a telecommunications structure here due to security concerns. They are also planning to sell the parcel in the future and are not willing to enter into any long term commitments.

- **J. Byron Landscape 9034 Leesburg Pike**
  The owner is not interested in a ground lease.

- **Mclean Bible Church 8925 Leesburg Pike**
  The church is not interested in a ground lease.

- **Other Church Parcels (Baptist Bethel, Catholic Traditionalist, Saint Athanasius)**
  The proposed church parcel is the largest and provides a better opportunity for screening from nearby residential neighborhoods.

The applicant indicates that this location fills an existing service void and addresses capacity issues and that co-location on tall existing buildings or structures in the area was not an option.

DESCRIPTION OF SURROUNDING AREA

Adjacent and Nearby Land Uses:

- Subject property – Church use zoned R-1
- North/Northeast – Former Hazelton Laboratories site (now vacant, with buildings removed) / single-family detached uses zoned R-1
- South – Single-family detached uses and vacant land owned by Catholic Traditionalist Movement zoned R-1
- West – Andrew Chapel consisting of a historic church and cemetery zoned R-1 and single-family detached uses zoned PDH-2

The Comprehensive Plan Map designates the immediate area as planned for Residential Use at 1-2 du/ac.

COMPREHENSIVE PLAN PROVISIONS

COMPREHENSIVE PLAN CITATIONS: An assessment of this proposal for substantial conformance with land use and design recommendations of the Comprehensive Plan ("the Plan") is guided by the following citations from the Plan:

COMPREHENSIVE PLAN PROVISIONS (Attachment C)

Plan Area: McLean Planning District, Area II

Planning Sector: Wolftrap Community Planning Sector

Plan Map: Residential 1-2 du/ac

The Comprehensive Plan provides the following guidance on the land use and the intensity/density for the property. On pages 132 and 134 of the McLean Planning District section of the 2013 edition of the Area II Plan, under the heading, "Recommendations, Land Use," the Plan states:

1. *Low-density residential development at 1-2 dwelling units per acre is planned for the area east of Beulah Road.*

   ...

3 *Land along the south side of Leesburg Pike should maintain the pattern of an average density of 1-2 dwelling units per acre, but permit cluster development so that land immediately adjacent to the highway would remain as open space and provide a buffer for the residential area.*

On page 9 of the McLean Planning District section of the 2013 edition of the Area II Plan, Figure 4, Inventory of Historic Sites McLean Planning District, includes the "Andrew Chapel United Methodist Church" located at 9201 Leesburg Pike, situated across Trap Road from the subject property, and the "Bethel Primitive Baptist Church" located at 9101 Leesburg Pike, southeast of the subject property.

On pages 37 through 40 of the Public Facilities section of the 2013 edition of the Policy Plan, under the heading, Mobile and Land-Based Telecommunication Services" ... "General Guidelines," the Comprehensive Plan provides the following guidance:

"Objective 42: **In order to provide for the mobile and land-based telecommunication network for wireless telecommunication systems licensed by the Federal Communications Commission, and to achieve opportunities for the co-location of related facilities and the reduction or elimination of their visual impact, locate the network's necessary support facilities which include any antennas, support structures and equipment buildings or equipment boxes in accordance with the following policies.**

Policy b. When existing structures are not available for co-location, or co-location is not appropriate because of adverse visual impacts or service needs, locate new structures that are required to support telecommunication antennas on properties that provide the greatest opportunity to conceal the telecommunication facilities and minimize their visual impact on surrounding areas.

Policy g. Co-locate mobile and land-based telecommunication facilities operated by different service providers on single sites and/or structures whenever appropriate. Locate single-use structures on a property only when a co-location structure for multiple service providers is not desirable or feasible due to technological differences, site limitations or visual impact concerns.

Policy h. Ensure that the height of the proposed telecommunication facility is no greater than necessary to allow for co-location on the telecommunication facility based on its service area requirements while still mitigating the visual impact of the facility.

Policy i. When new structures, co-locations and/or technologies (such as distributed antenna systems, micro-cell technology or miniaturization technology) are necessary to meet the service area requirements for the residential neighborhood(s), ensure that the height and mass of any appropriate co-location on the telecommunication facility is in character with the surrounding residential area and mitigates the visual impact of the facility on the surrounding residential area.

Policy j. Design, site and/or landscape proposed telecommunication facilities to minimize impacts on the character of the property and surrounding areas. Demonstrate the appropriateness of the design through facility schematics and plans which detail the type, location, height, and material of the proposed structures and their relationship to other structures on the property and surrounding areas.

Policy k. Demonstrate that the selected site for a new telecommunication facility provides the least visual impact on residential areas and the public way, as compared with alternate sites. Analyze the potential impacts from other vantage points in the area, especially from residential properties, to show how the selected site provides the best opportunity to minimize its visual impact on the area and on properties near the proposed site.

Policy l. A key concept in assessing telecommunication facilities is mitigation which is defined as actions taken to reduce or eliminate negative visual impacts. Mitigate the visual impact of proposed telecommunication facilities and their equipment, by using effective design options appropriate to the site such as:

- Design, site and/or landscape the proposed facility to minimize impacts on the character of the area;
- Locate proposed telecommunication facilities near or within areas of mature vegetation and trees that effectively screen or provide an appropriate setting for the proposed structure provided such location

does not adversely impact sensitive resources or cause fragmentation of forested communities. When viewed in context, consider perspective views, relative topography and other factors, to mitigate the visual presence and prominence of the structure;

- Blend proposed telecommunication facilities with an existing pattern of tall structures;
- Obscure or block the views of proposed telecommunication facilities with other existing structures, vegetation, tree cover, or topographic features to the maximum extent feasible; and
- Replace existing telecommunication facilities with taller structures or extend their overall height to reduce the need for another structure when such height increases or structure replacements are visually appropriate to the site, including the surrounding area and are consistent with the type, style and pattern of the existing structure.

Policy m. Locate proposed telecommunication facilities to ensure the protection of historically significant landscapes and cultural resources. The views of and vistas from architecturally and/or historically significant structures should not be impaired or diminished by the placement of telecommunication facilities.

Policy n. Site proposed telecommunication facilities to avoid areas of environmental sensitivity, such as steep slopes, floodplains, wetlands, environmental quality corridors, and resource protection areas.

Policy p. Design and site proposed telecommunication facilities to preserve areas necessary for future right-of-way dedication and ancillary easements for construction of road improvements.

Policy q. Locate and construct antennas used for purposes other than mobile and land-based telecommunication services in accordance with the same guidelines established in this "Mobile and Land-Based Telecommunications Services" section.

Objective 43: Design proposed telecommunication facilities to mitigate their visual presence and prominence, particularly when located in residential areas, by concealing their intended purpose in a way that is consistent with the character of the surrounding area. (See Figures 11 and 12.)

Policy a. Disguise or camouflage the appearance of proposed telecommunication facilities to resemble other man-made structures and natural features (such as flagpoles, bell towers, and trees) that are typically found in a similar context and belong to the setting where placed.

Policy b. Design proposed telecommunication facilities that are disguised and camouflaged to be of a bulk, mass and height typical of and similar to the feature selected.

Policy c. Use other new and existing structures and vegetation of comparable form and style to establish a grouping that complements a camouflaged telecommunication facility and supports its design, location and appearance."

STAFF ANALYSIS

CONFORMANCE WITH THE COMPREHENSIVE PLAN

Va. Code Sec. 15.2-2232, as amended, requires the Planning Commission to determine whether the general location or approximate location, character, and extent of the proposed facility, as amended, are substantially in accord with the adopted Comprehensive Plan:

LOCATION: The proposed bell tower location toward the rear of the subject property, beyond a paved parking lot, maximizes the distance between the facility and residential properties, thus providing a buffer consistent with Plan guidelines to minimize impacts on surrounding areas. The one-story, with basement, church building helps obscure or block views of the equipment compound from surrounding properties, as recommended by the Plan. The proposed siting with landscaping treatment on Route 7 allows this major arterial to provide additional distance and buffering to properties east of Route 7. Staff believes that the proposal conforms to the Plan guidelines for locating facilities on properties that can conceal the telecommunications facility and minimize its visual impact on surrounding areas.

CHARACTER: Based on observations during the height test and a review of the applicant's photographic simulations, it is staff's opinion that the surrounding residential properties will be largely buffered from the proposed 120' tall bell tower by distance and existing trees and vegetation that will serve to mitigate the facility's visual impact. Staff notes the existence of visual impacts to residential properties near the site, specifically, immediately across Trap Road on Windsor Meadows Lane and the property south/southeast of the of the church on Route 7, where the bell tower will be visible. In staff's opinion, these homes are of sufficient distance from the proposed tower to not create an adverse impact on the visual quality or character of the residential areas.

Additionally, the proposed bell tower, as a feature often found on church properties, would not appear out of character with the use of the property. All antennas will be hidden from view by concealment panels to further camouflage the proposed telecommunications facility. The proposed configuration will allow light to pass between panels which, in staff's opinion, is less obtrusive than the originally proposed solid panels. The equipment compound should be effectively screened by the proposed 8' foot high board-on-board fence, creating a solid barrier around the compound. The applicant also proposes additional plantings around the compound and along the rear property boundary and Leesburg Pike for the purpose of softening the impacts of the compound when entering the church parking lot and, to a lesser extent, from Rte. 7.

In staff's opinion, the photographic simulations, drawings, and height test conform with Plan recommendations that the applicant demonstrate that the selected site for the proposed bell tower

provides the least visual impact on residential areas and the public way, and demonstrate the appropriateness of the proposed design.

The church represents an established institutional or non-residential use on R-1 zoned property. Staff believes the placement of the bell tower toward the rear of the 7-acre property and immediately adjacent to the existing parking lot maximizes the existing mature vegetation and, with additional landscape plantings, is an effective design option appropriate to this site, as recommended by the Plan. The antennas will be obscured from view by concealing panels, consistent with Plan guidelines to disguise and camouflage the appearance of telecommunications facilities to resemble man-made materials that are "typically found in a similar context and belong to the setting where placed" as stated in Objective 43, Policy a.

Staff recognizes that the proposed bell tower is taller than existing trees on the site. Existing trees do, however, provide a vegetative buffer and screening from off-site sight-lines. It is staff's opinion that the subject application balances factors of need, location and design and that the proposed facility would not have an adverse visual impact on the character of the surrounding area. Staff believes that the proposal meets Plan guidelines to design telecommunications facilities to mitigate their visual presence and prominence in residential areas by concealing their intended purpose in a way that is consistent with the character of the surrounding area.

EXTENT: Impacts associated with the extent of the proposed bell tower were assessed, primarily, on the reach of the tower's visibility. The Comprehensive Plan does not require telecommunication facilities to be invisible. Rather, the Plan recommends that facilities be designed and located to provide the greatest opportunity to conceal the facilities and mitigate their visual impact. Photo simulations prepared by the applicant show, appropriately, a worst-case scenario of trees without foliage. While the bell tower would be visible by some residents east and south of the site, the extent of these visual impacts are not considered to be extensive, adverse, or detrimental to the character of the existing neighborhoods. Tree foliage will help buffer many views of the proposed tower for 6 or more months out of the year. The proposed configuration of the bell tower panels allows light to pass between the panels. This helps to break up the façade of the bell tower so that it does not appear as a continuous flat panel. Staff believes this proposed treatment helps mitigate visual impact.

As discussed previously, the applicant initially proposed a 140' bell tower structure. Upon staff expressing concern regarding the height and design of the originally proposed structure, the applicant revised their applications and reduced the height to 120' to accommodate up to four (4) carriers, as opposed to five (5) in their initial application, which staff believes meets the intent of Objective 43, Policy b. which states: "Design proposed telecommunication facilities that are *disguised and camouflaged to be of a bulk, mass and height typical of and similar to the feature selected.*" Additionally, staff believes this effort also meets the intent of Objective 42, Policy h. which states: "Ensure that the height of the proposed telecommunications facility is *no greater than necessary to allow for co-location on the telecommunication facility based on its service area requirements while still mitigating the visual impact of the facility.*"

The proposed telecommunications facility, and its associated equipment compound, will be placed at the rear of the application property, in a way that will preserve existing vegetation. The applicant also proposes additional plantings around the perimeter of the compound, and has committed through the special exception development conditions to provide additional plantings along the rear property boundary, and along Leesburg Pike, to further screen the request from view. Staff believes this effort meets the intent of Objective 43, Policy c. which states: "Use other new and existing structures and vegetation of comparable form and style to establish a grouping that complements a camouflaged telecommunication facility and supports its design, location and appearance."

Furthermore, staff believes the intent of Objective 44, Policy m. has been met which states: "Locate proposed telecommunication facilities to ensure the protection of historically significant landscapes and cultural resources. The views of and vistas from architecturally and/or historically significant structures should not be impaired or diminished by the placement of telecommunication facilities." Review by the County's Historic Preservation Planner indicates that the proposed structure will not result in an adverse visual impact on either the Andrew Chapel Church or the Vernon Leigh house, the two known historic properties in proximity to the proposed facility.

Staff believes that the applicant diligently performed numerous community outreach opportunities and amended their original request to address staff's concerns regarding the location, height, and visual impact of the proposed structure to the satisfaction of many Policy Plan Objectives as noted above. Therefore, in staff's opinion, the proposal meets Plan guidelines pertaining to the extent of proposed telecommunications facility.

CONCLUSIONS AND RECOMMENDATIONS

Staff concludes that the subject proposal by CWS VII, LLC & The Trustees of Andrew Chapel United Methodist Church, to construct a telecommunications facility on property owned and operated by The Trustees of Andrew Chapel United Methodist Church, 1301 Trap Road, Vienna, 22182, satisfies the criteria of location, character, and extent as specified in Section 15.2-2232, as amended, of the *Code of Virginia*. Staff therefore recommends that the Planning Commission find the subject Application **2232-D13-9** substantially in accord with provisions of the adopted Comprehensive Plan.

MRG:CBC

Attachments

Attachment A

COUNTY OF FAIRFAX, VIRGINIA
APPLICATION FOR DETERMINATION
PURSUANT TO VIRGINIA CODE SECTION 15.2-2232

**** This area to be completed by staff ****

APPLICATION NUMBER 2232-D13-9

Date application received 6/28/13 by DPZ

Date(s) Revised 2/25/14, 3/10/14

Date application accepted 3/10/14 by Debbie Pemberton

(Please Type or Clearly Print)

RECEIVED MAR 10 2014 DIRECTOR, PLANNING DIVISION DEPT. OF PLANNING & ZONING

PART I: APPLICATION SUMMARY

LOCATION OF PROPOSED USE

Address 1301 Trap Road

City/Town Vienna Zip Code 22182

Place Name (example: Dale High School) Andrew Chapel United Methodist Church

Tax Map I.D. Number(s) 0194 01 0047

Fairfax County Supervisor District Dranesville

APPLICANT(S)

Name (Company or Agency) CWS VII, LLC & The Trustees of Andrew Chapel United Methodist Church

Agent Name Edward L. Donohue, Donohue and Stearns

(Note: Failure to notify County of a change in agent may result in application processing delays)

Agent's Mailing Address 117 Oronoco Street

City/Town Alexandria State VA Zip Code 22314

Telephone Number (703) 549-1123 Fax (703) 549-5385

E-mail edonohue@donohuestearns.com

Secondary Contact Queli Campos, CWS VII, LLC

Telephone Number (703) 845-1971 E-mail queli.campos@sharedsites.com

BRIEF DESCRIPTION OF PROPOSED USE

Applicant is submitting this application to construct a telecommunication facility, housed within a 120 foot tall church bell tower, on the property located at 1301 Trap Road, Vienna, Virginia (the "Property"). The Property (7.0127 acres owned by the Andrew Chapel United Methodist Church) is used for religious and institutional purposes and is located at the intersection of Trap Road and Route 7 (Leesburg Pike), two miles west of Tysons Corner. The Property is located in the Dranesville District and is zoned R-1. The proposed telecommunication facility (more fully described on the attached drawing entitled "CWS 91 ACUMC-Bell Tower") consists of the 120 foot bell tower and related equipment sited in a 35 by 70 foot fenced equipment compound adjacent to the church parking lot.

Total Area of Subject Parcel(s) 7.0127 acres

Zoning District R-1

Applicant's previous Zoning Approvals for all uses on site (proffered conditions, special permits, special exceptions, variances, development plans)

N/A

PROPERTY OWNER(s) OF RECORD

Owner CHURCH METHODIST, ANDREW CHAPEL

Street Address 1301 Trap Road

City/Town Vienna State VA Zip Code 22182

Has property owner been contacted about this proposed use? ☑ YES ☐ NO

SIGNATURE

The undersigned acknowledges that additional Fairfax County land use review requirements may be identified during the review of this 2232 Review application and the fulfillment of such requirements is the responsibility of the applicant. The undersigned also acknowledges that all Fairfax County Zoning Ordinance requirements pertaining to this project shall be fulfilled.

In the event a new agent is assigned responsibility for this application, the applicant agrees to provide a letter to the Department of Planning and Zoning authorizing the transfer of responsibility for the application and providing all new contact information. In the event the applicant fails to notify County staff of a change in agent, the application may be subject to processing delays.

Signature of Applicant or Agent

Date 3/11/2014

Submit completed application to:

Chris Caperton, Chief, Facilities Planning Branch
Fairfax County Department of Planning and Zoning
12055 Government Center Parkway, Suite 730
Fairfax, Virginia 22035-5507
(703) 324-1380

PART II: STATEMENT OF JUSTIFICATION

RECEIVED
MAR 10 2014
DIRECTOR, PLANNING DIVISION
DEPT. OF PLANNING & ZONING

PART IV: TELECOMMUNICATION USES

(Do not submit for non-telecommunications public facility uses)

A. TYPE OF PROPOSED FACILITY Check the appropriate box(es) and provide the required information

	Yes	No
New monopole* or tower	☑	☐
Collocation on existing monopole or tower	☐	☑
Collocation on building facade or rooftop	☐	☑
Collocation on replacement light pole or utility pole	☐	☑
Located in utility or transportation easement and/or right-of-way	☐	☑
Modification to approved telecommunications facility	☐	☑
Collocation on other structure _____	☐	☑

**Including treepoles, flagpoles and other freestanding stealth structures.*

B. CALCULATION OF FACILITY MODIFICATIONS for modifications to an approved telecommunications facility, provide the following:

1. Application number(s) (456-, 2232-, FS-, FSA-) for all applicant's prior telecommunications uses on site:

N/A

2. Calculate the surface area, in square inches (height x width **or** height x diameter), of the applicant's antennas organized in the following categories:
   a. approved N/A
   b. existing N/A
   c. proposed N/A

3. Calculate the volume (height x width x depth) of the applicant's equipment cabinets (in cubic inches) and/or shelter (in cubic feet) organized in the following categories:
   a. approved N/A
   b. existing N/A
   c. proposed N/A

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C. ANTENNA(S) Provide a separate page for each provider listed as part of the application.

Provider Verizon and T-Mobile

Model # or name	Type Panel, Dish, Omni	Quantity	Height	Width	Diameter	Location height on the structure
Panel Antennas	Panels	up to 60	up to 102"	up to 24"		Between 80' and 120'

Existing structure color: N/A Antenna color: White

Is antenna painted to match existing structure? Yes ☐ No ☑

If No, please explain: Antennas will be totally screened behind the stealth panels.

Will the antennas be screened? Yes ☑ No ☐ If Yes, describe the screening to be provided:

The antennas will be hidden behind the radio transparent concealment panels

Will the antennas be flush-mounted to the structure on which they are located? Yes ☐ No ☑

If No, please explain: Antennas will be totally screened by concealment panels

Additional information:

N/A

D. EQUIPMENT* There will be a maximum of 4 shelters or a maximum of 16 cabinets or a combination of each.

Model # or name	Type cabinet or shelter	Quantity	Height	Width	Depth	Location
Equipment Cabinet	Cabinet	up to 16	up 8'	up to 10'	up to 10'	within compound
Equipment Shelter	Shelter	up to 4	up to 12'	up to 30'	up to 20'	within the compound

How will the equipment cabinet or shelter be screened? screened by an 8 foot tall board on board fence

Screen material: Wood Screen color: Natural Wood

Additional information:

Supplemented landscape will be planted on all sides of the proposed compound.

RECEIVED
FEB 25 2014
DIRECTOR, PLANNING DIVISION
DEPT. OF PLANNING & ZONING

PART II: STATEMENT OF JUSTIFICATION

A. DESCRIPTION OF PROPOSED USE

1. **Project description-** Applicants are submitting this application to construct a telecommunication facility, housed within a 120 foot tall church bell tower, on the property located at 1301 Trap Road, Vienna, Virginia (the "Property"). The Property (7.0127 acres owned by the Andrew Chapel United Methodist Church) is used for religious and institutional purposes and is located at the intersection of Trap Road and Route 7 (Leesburg Pike), two miles west of Tysons Corner. The Property is located in the Dranesville District and is zoned R-1. The proposed telecommunication facility (more fully described on the attached drawing entitled "CWS 91 ACUMC-Bell Tower") consists of the 120 foot bell tower and related equipment sited in a 35 by 70 foot fenced equipment compound adjacent to the church parking lot.
2. **Area to be served by proposed use-** The proposed facility will enhance wireless service to Fairfax County citizens, visitors, businesses and emergency personnel in and traveling through the area. Specifically it will improve service along heavily traveled Route 7 (Leesburg Pike), as well as in the residential neighborhoods and communities to the north of Wolf Trap and to the south of the Old Dominion Drive corridor. This facility will work in conjunction with other carrier facilities to the north, south, east and west to provide consistent, reliable wireless coverage in this area of Fairfax County.
3. **Maintenance requirements and frequency-** A service technician will visit the site approximately once or twice a month to perform routine maintenance. Emergency repairs will be performed as needed but typically are rare.
4. **Propagation maps (for telecommunications applications)** - Propagation maps have been provided by T-Mobile and Verizon Wireless, the two initial service providers to be located at the facility.

B. REQUIREMENT FOR PROPOSED USE

1. **Why the new or expanded facility is needed-**Verizon Wireless and T-Mobile require a facility in this location in order to address both network coverage and capacity requirements in the surrounding area. There are no existing tall structures (i.e. monopoles, utility structures, water towers, tall buildings, etc.) in this immediate area of Fairfax County suitable for the mounting of antennas that could be utilized to address the carrier technical requirements at this location. Other antenna support structures in the vicinity of the proposed facility are detailed on the enclosed "Wireless Infrastructure in the Vicinity of CWS Site 91".

   The closest support structure for telecommunications purposes is the Filene

Center at Wolf Trap, approximately one mile south of the proposed bell tower. Both T-Mobile and Verizon are currently installed here, and utilize these rooftop sites address the capacity needs of Wolf Trap, the Dulles Toll Road and the neighborhoods in closest proximity. Neither of the two initial carriers currently has adequate coverage to the north, along and near Route 7.

2. **Why the proposed location is the best location for the proposed use-** The Property offers an excellent land-use and visual solution. The parcel was selected because of its current non-residential use, large acreage and potential for screening from neighboring residential areas and the public roadways. A church property provides an excellent opportunity for disguising a telecommunication facility as a bell tower that is both in context with and complimentary to the existing use of the Property.

3. **Why the proposed location and type of facility is the least disruptive alternative-** The Property was selected based on its current use, size and existing screening from neighboring residential parcels. By using a stealth bell tower, the visual impact will be minimal. Although the upper sections of the bell tower will be visible from some nearby properties, its appearance is compatible and in context with the existing church use and will not create an adverse visual impact (refer to enclosed photo-simulations). The antennas will be hidden inside the bell tower, and the equipment compound will be surrounded by an 8 foot tall board on board fence and screened from view.

C. ANTICIPATED IMPACTS/MITIGATION

1. **Visual-** The location for the proposed facility is well screened by existing mature white pines planted along the property perimeter many years ago (refer to the enclosed aerial photos). The height of the stealth bell tower has been limited to 120 feet, and the design is in keeping with the primary use of the parcel (church).

2. **Noise and light-** The proposed facility is unmanned and will not produce any material noise or vibrations. The church bells will not be operational and there will be no lighting of the facility. There will be no new or additional glare or light generated by the proposed use.

3. **Air and water quality-** The proposed facility will not impact air or water quality.

4. **Environmental-** The proposed facility will have a limited footprint and area of disturbance and will not produce any adverse environmental impacts.

5. **Transportation (including trip generation)**-Traffic impact is negligible. The proposed facility is unmanned, and will be visited approximately one or two times per month by service technicians for routine maintenance. Emergency repairs will be performed as needed but emergency service requirements are rare.

6. **Mitigation measures as applicable for 1 through 5-** Mitigation is not required.

D. CONFORMANCE WITH THE COMPREHENSIVE PLAN AND OTHER STANDARDS

The property is located in the McLean Planning District, Wolf Trap Community Planning Sector (M7), in Planning Area II. This Planning Sector is planned for low-density residential use at 1-2 dwelling units per acre. The church property is shown on the Comprehensive Plan for residential use at 1-2 dwelling units per acre. The Andrew Chapel United Methodist Church is shown under the Inventory of Historic Sites McLean Planning District on page 9 of the District-Wide recommendations for the District.

The Applicants' proposed telecommunication facility use is consistent with the objectives under the policy plan element of the Comprehensive Plan regarding Mobile and Land Based Telecommunications Services.

Objective 42: In order to provide for the mobile and land based telecommunications network for wireless telecommunications systems licensed by the Federal Communications Commission, and to achieve opportunities for the collocation of related facilities and the reduction or elimination of their visual impact, locate the network's necessary support facilities which include antennas, support structures and equipment buildings or equipment boxes in accordance with the following policies.

Policy a. **Avoid the construction of new structures by locating proposed telecommunications facilities on available existing structures such as rooftops, telecommunication and broadcast support structures, electric utility poles and towers, and water storage facilities when the telecommunication facilities can be placed inconspicuously to blend with such existing structures.**

The Applicants searched for existing tall structures in the area as a first choice for the location of its communications facility. However this general area of the County is residential in nature and there are no suitable existing structures to support the proposed communications facility and provide coverage in the target area. Construction of a new facility is needed to provide the required services.

Policy b. **When existing structures are not available for co-location, or co-location is not appropriate because of adverse visual impacts or service needs, locate new structures that are required to support telecommunication antennas on properties that provide the greatest opportunity to conceal the telecommunication facilities and minimize their visual impact on surrounding areas.**

As there are no existing structures available for carrier co-location, Applicants are proposing to locate the communications facility on a vacant portion of the Property, away from the church and inside the mature white pines that line Route 7. Applicants are proposing a stealth bell tower that will blend with the church

property and minimize the facility's visual impact. Antennas and other appurtenances will be hidden behind stealth panels. Equipment shelters and cabinets will be located inside the fenced in compound, screened by an 8 foot tall wood fence and landscaping.

Policy c. **When new structures or co-locations are required to serve residential neighborhoods, consider minimizing visual impacts on the surrounding area by utilizing camouflage structure design and/or micro-cell technologies or similar miniaturization technologies, such as distributed antenna systems (DAS), if feasible.**

Applicants are proposing a stealth bell tower design to camouflage the use and minimize visual impact. DAS is not a cost effective solution and would not provide effective coverage to the surrounding neighborhoods.

Policy d. **When multiple sites provide similar or equal opportunity to minimize impacts, public lands shall be the preferred location.**

Within the Applicants' search area there are no public properties that meet the technical requirements and offer an equal or better opportunity to minimize visual impacts on the surrounding area. The nearest public parcels are detailed on Attachment 1.

Policy e. **Locate mobile and land-based telecommunication facilities on public property only after a lease agreement between the County, or related board or authority and the service provider has been established.**

The proposed facility will not be located on public property.

Policy f. **Ensure that the use of public property by mobile and land-based telecommunication facilities does not interfere with the existing or planned operational requirements of the public use and complies with adopted policies and plans to protect natural resources.**

The proposed facility will not be located on public property.

Policy g. **Co-locate mobile and land-based telecommunication facilities operated by different service providers on single sites and/or structures whenever appropriate. Locate single-use structures on a property when a co-location structure for multiple service providers is not desirable or feasible due to technological differences, site limitations or visual impact concerns.**

The proposed structure is designed for the co-location of up to four service providers. The site and design of the structure can successfully accommodate co-location without creating visual impact concerns.

Policy h. **Ensure that height of the proposed telecommunication facility is no greater than necessary to allow for co-location on the telecommunication facility based on its service requirements while still mitigating the visual impact of the facility.**

A height of 120 feet is the minimum necessary to allow for the co-location of four service providers and to meet coverage requirements. The bell tower design mitigates the visual impacts.

Policy i. **When new structures, co-locations and/or technologies (such as distributed antenna systems, micro-cell technology or miniaturization technology) are necessary to meet the service area requirements for the nonresidential neighborhood(s), ensure that the height and mass of any appropriate co-location on the telecommunication facility is in character with the surrounding residential area and mitigates the visual impact of the facility on the surrounding residential area.**

The stealth bell tower is in keeping with the existing use of the property and character of the surrounding neighborhoods. The bell tower design is consistent and in context with the current place of worship, and there are several other churches in the surrounding area. Mature pines along Route 7 and Trap Road on the Property and in the surrounding area will screen and block views of the facility from surrounding vantage points (refer to the enclosed aerial photos).

Policy j. **Design, site and/or landscape proposed telecommunication facilities to minimize impacts on the character of the property and surrounding areas. Demonstrate the appropriateness of the design through facility schematics and plans which detail the type, location, height and material of the proposed structures and their relationship to other structures on the property and surrounding areas.**

The stealth bell tower design of the proposed facility minimizes impacts on the character of the property and surrounding area.

The enclosed site plan details the design of the structure and the surrounding equipment compound and their relationship to the site. Photo-simulations have also been provided to demonstrate the appropriateness of the bell tower design and its relationship to the surrounding area.

Policy k. **Demonstrate that the selected site for a new telecommunication facility provides the least visual impact on residential areas and the public way, as compared with alternate sites. Analyze the potential impacts from other vantage points in the area, especially from residential properties, to show how the selected site provides the best opportunity to minimize its visual impact on the area and on properties near the proposed site.**

The attached photo simulations provide an analysis of the visual impact of the proposed use from several vantage points throughout the nearby community. The proposed facility will be located adjacent to a church use immediately adjacent to a major arterial roadway (Leesburg Pike). The photo simulations demonstrate that while there are some views of the proposed structure from various vantage points, the views are mitigated by the structure's design, by existing vegetation on-site and in the overall surrounding area, and distance. There are no other sites in the search area that provide a greater potential camouflage solution consistent with the site and its existing use.

Policy l. **A key concept in assessing the telecommunication facilities is mitigation which is defined as actions taken to reduce or eliminate negative visual impacts.**

Applicants have followed the recommendations of this policy by:

1. Proposing a bell tower consistent and in context with the existing non-residential use and character of the property, and
2. Locating the proposed structure within an area of mature vegetation and tree cover.

Policy m. **Locate proposed telecommunication facilities to ensure the protection of historically significant landscapes and cultural resources. The views of and vistas from architecturally and/or historically significant structures should not be impaired or diminished by the placement of telecommunication facilities.**

The Andrew Chapel United Methodist Church is identified in the Comprehensive Plan under the Historic Sites Inventory for the McLean Planning District in Planning Area II. However, the site is not within a historic overlay district. The proposed facility and the bell tower design will not negatively impact the church property or other historically significant landscapes or cultural resources. Applicants will submit, prior to construction, a full engineering study showing compliance with all NEPA regulations, including Section 106 historic review.

Policy n. **Site proposed telecommunication facilities to avoid areas of environmental sensitivity, such as steep slopes, floodplains, wetlands, environmental quality corridors, and resource protection areas.**

The proposed facility will not have adverse impacts on areas of environmental quality or sensitivity. Applicants will submit, prior to construction, a full engineering study showing compliance with all NEPA regulations, including those dealing with areas of environmental sensitivity.

Policy o. **Site proposed telecommunication facilities to allow for future expansion and with corresponding levels of screening to accommodate expansion.**

The proposed structure and associated compound have been designed to accommodate up to four service providers.

Policy p. **Design and site proposed telecommunication facilities to preserve areas necessary for future right–of-way dedication and ancillary easements for construction of road improvements.**

The facility compound is located approximately 136 feet from the edge of the nearest Route 7 traffic lane, and will not impede upon any areas planned or reserved for future road right-of-way or improvement.

Policy q. **Locate and construct antennas used for purposes other than mobile and land based telecommunication services in accordance with the same guidelines established in this "Mobile and Land-based Telecommunications Services" section.**

The facility is a Mobile and Land-based Telecommunication use.

Objective 43: Design proposed telecommunication facilities to mitigate their visual presence and prominence, particularly when located in residential areas, by concealing their intended purpose in a way that is consistent with the character of the surrounding area.

Policy a. **Disguise or camouflage the appearance of proposed telecommunication facilities to resemble other man-made structures and natural features (such as flagpoles, bell towers, and trees) that are typically found in context and belong to the setting where placed.**

The proposed use will be designed as a bell tower and located adjacent to a church use to camouflage and disguise its appearance and reduce its prominence and visual presence. The bell tower design will conceal the intended purpose of the structure and be in context with the setting in which it is located.

Policy b. **Design proposed telecommunication facilities that are disguised and camouflaged to be of a bulk, mass and height typical of and similar to the feature selected.**

The design, bulk, mass, and height of the camouflaged structure is consistent with that of a bell tower on a church property and will appear in context with the portion of the church site on which it is located.

Policy c. **Use appropriately other new and existing structures and vegetation of comparable form and style to establish a grouping that complements a**

camouflaged telecommunications facility and supports it design, location and appearance.

The bell tower will be in proximity to the church building that will complement and reinforce its design. Existing mature vegetation on the property and throughout the nearby areas will serve to mitigate views of the proposed use.

E. ALTERNATIVE SITES CONSIDERED FOR THIS USE

An analysis of alternative sites is provided in Attachment 1.

CONCLUSIONS

In light of the foregoing and the reasons stated, Applicants submit that this proposal is in compliance and general conformance with the Fairfax County Comprehensive Plan and provisions of Virginia Code Section 15.2-2232 and respectfully requests that the 2232 Review Application be approved.

ATTACHMENT 1

ALTERNATIVE SITES CONSIDERED

Public:

Colvin Run Elementary School **1400 Trap Road**

This parcel is located too far south of the coverage objective.

Fire Station #42 **Route 7 and Beulah Road**

This parcel is located too far west of the coverage objective.

Other:

1. Covance Laboratories **9200 Leesburg Pike**

This large parcel which is residentially zoned has been approached by numerous carriers and tower developers (including T-Mobile in 2009/2010). The owners of this property are not interested in locating a telecommunications structure here due to security concerns. They are also planning to sell the parcel in the future and are not willing to enter into any long term commitments.

2. J. Byron Landscape **9034 Leesburg Pike**

The owner is not interested in a ground lease.

3. Mclean Bible Church **8925 Leesburg Pike**

The church is not interested in a ground lease.

4. Other Church Parcels (Baptist Bethel, Catholic Traditionalist, Saint Athanasius)

The proposed church parcel is the largest and provides the best opportunity for screening from nearby residential neighborhoods.

Attachment B

Pemberton, Debbie

From: Blank, Linda C.
Sent: Wednesday, January 08, 2014 1:55 PM
To: Pemberton, Debbie
Subject: FW: Invitation to Comment (EBI# 61132299)
Attachments: Andrew Chapel UMC.pdf

Debbie: Below is my Section 106 review on this. Attached is the inventory historic site report on parcel 57 for the church that is listed. You are correct the cemetery is not listed in the inventory. I will have no additional comments or issues to raise. But can write up a memo to address the 2232 application. Linda

---

From: Blank, Linda C.
Sent: Tuesday, May 28, 2013 9:47 AM
To: 'Becky Roman'; 'Alexis Godat'
Cc: Caperton, Chris B
Subject: RE: Invitation to Comment (EBI# 61132299)

Dear Ms. Roman:

Thank you for the opportunity to comment on the proposed telecommunications facility bell tower to be constructed to a height of approximately 120' at Andrew Chapel Methodist Church, 1301 Trap Road, county tax id# 19-4 ((1)) 47; EBI project #61132299.

There are two known historic properties within the APE of the undertaking that would potentially be effected by the proposed telecommunication facility. The properties are:

Andrew Chapel United Methodist Church		9201 Leesburg Pike Vienna	019-4 ((1)) 57	1855
Leigh, Vernon, House		9352 Mildred Court Vienna	019-4 ((1)) 63	1914/1915

Because the proposed telecommunications facility would be enclosed by a bell tower structure, it is believed that the effect on the two historic properties would not be adverse. Staff has no further comment on this proposal under Section 106 review.

Linda

Linda Cornish Blank
Historic Preservation Planner
Fairfax County Dept. of Planning & Zoning
Linda.blank@fairfaxcounty.gov
703 324-1241

From: Adam Crosbie [mailto:acrosbie@ebiconsulting.com]
Sent: Friday, May 10, 2013 8:28 AM
To: Blank, Linda C.
Subject: Invitation to Comment (EBI# 61132299)

Good afternoon,

Please find attached a copy of the "Invitation to Comment" (EBI# 61132299/Vienna, VA). EBI would like to inquire if you would be interested in commenting on this proposed project. SHould you have any further questions or require additional information, please do not hesitate to contact EBI at the email address or telephone number provided in attached letter.

Thank you for your assistance in this matter.

Respectfully,
Adam Crosbie

Fairfax County Inventory of Historic Sites Report

Andrew Chapel United Methodist Church

Location and Existing Information

Street Address / General Location: 9201 LEESBURG PI

Tax Map Numbers : 19-4((1))57

Acreage 1.00

Existing Use Church

Zoning R-1

Comprehensive Plan NA

Supervisor District DRANESVILLE

Planning District McLean

Photo: S. Hellman, 2006.

Preservation Status

REGISTRATION

- National Register
- Virginia Register
- County Historic District
- Standing Structure
- X County Inventory

029-5307; listed on Inventory 1971.

EASEMENT

- Open Space
- Preservation
- Conservation
- Other
- X No easements

OWNERSHIP

- X Private
- Public
- Both

ACCESSIBILITY

- Accessible, Unrestricted
- X Accessible, Restricted
- Inaccessible

Historic Information

Original Use Church

Original Owner Trustees

Date Constructed 1855(Approximate)

Historic Significance

Andrew Chapel is named after Bishop James O. Andrew. Bishop Andrew presided over the 1844 general conference of the Methodist Church, at which slavery was a divisive issue. This issue led to a separation of the Methodist Church into northern and southern branches; this division was not erased until the 1960s, with the development of the United Methodist Church. The one acre church lot was purchased by the Trustees of the Methodist Episcopal Church South from Hamilton Elgin in 1855 (Fairfax County Deed Book W-3, 31). By 1869, Andrew Chapel had the second largest Methodist congregation in Fairfax County.

Evidently, the building suffered during the Civil War. Union soldiers mistreated the building by destroying the furniture and fixtures, burning the floorboards, and defacing the plaster walls. In 1907, the church underwent an extensive renovation with the sanctuary expansion and the bell tower being the most obvious exterior alterations. In 1915, Andrew Chapel and Centreville Methodist Churches received appropriations from Congress for damages claimed through the Southern Claims Commission. Additional alterations continued in 1936 when the basement level was excavated. Later in 1964, a new church building for the congregation was constructed along Leesburg Pike, a few hundred feet southwest and within view of the chapel. Lastly in 1996-97 custom made stained glass windows were added which dramatically alter the interior feel of the room by changing the entering light.

Andrew Chapel United Methodist Church

Today, in 2006, the building is known as Saint Athanasius Church, and is used by a Catholic parish. The windows that were on the primary (northeast) elevation have been covered. [Archival research by Susan Hellman, DPZ, 2006.]

Significant People:

Significant Dates /Events:

1854 : though 1855; Hamilton Elgin sold one acre to the trustees of UMC
1862 : to 1863; Union soldiers severely damaged church
1889 : Second largest Methodist congregation in Fairfax County
1907 : Sanctuary expansion and addition of the bell tower
1964 : Currently used congregation building constructed across the street
1996 : Stained glass windows added to church
1994 : Saint Athanasius began worshipping here

Site / Structure Information

Condition Good

Integrity Significant Changes

Building Style Vernacular

Architect/Builder N/A

Site Features

1 Standing Structures

0 Landscape Features

0 Archaeological Features

1 Other Site Features
adjacent cemetery

Site Description:
The site is located on a bluff overlooking the Leesburg Pike to the northeast. The cemetery is situated west of the church on a rolling terrain with scattered mature trees. The property is located along a portion of the Leesburg Pike that is characteristically suburban and includes many recent subdivisions constructed within the last twenty years. Across Trap Road, south and east of the former Andrew Chapel, is the circa 1964 building with modern additions that presently houses the Andrew Chapel United Methodist Church congregation.

Architectural Description:
Andrew Chapel UMC is a wood frame, gable roofed structure. The overhanging boxed eaves contain dentils. There were initially windows in the primary facade (facing Leesburg Pike) which were glazed and tinted glass of several different colors, a large central pane being surrounded by smaller square panes. Those windows have been covered with siding. Windows on the side elevations are one-over-one double hung sash metal stained glass units with plain board surrounds. These windows were added in 1996-97. A six-over-six double-hung sash window is located on the southeast wall of the vestibule. A vestibule terminating in an open bell tower with pyramidal roof is located at the northeast corner of the structure. It was built in 1907. The main entrance is a double-leaf wood door located in the vestibule. The door is within a gable-front porch with two wood post supports. The bell tower and center gable are covered with fishscale shingles; the main block of the building is covered with asbestos shingles. All roofs are covered with composition shingles. The sanctuary was expanded by ten feet at the east end of the church when the tower was constructed in 1907. The gable ornamentation and window design of this addition were based on Antioch Christian Church on Beulah Road, also on the Inventory of Historic Sites. This addition contains a decorative truss in the gable end in the shape of a cross; however, the large ornamental window that was added in 1907 is obscured by exterior siding that was installed after a fire in 1961. The gable truss has also been greatly simplified. Extensive interior changes in 1907 include a recessed pulpit, removal of the gallery, plaster removal, ceilings reconfigured from flat to angled, chimneys moved, windows changed. The concrete staircase at the northeast corner next to the vestibule leads to a wood door in the basement, which was excavated in 1936. At that time six classrooms, two restrooms, a small kitchen, and a boiler room were added. In the summer of 1948 the bell was placed in the tower. The bell came from the Wiehle Church tower in Sunset Hills (the Wiehle Town Hall/Bowman Distillery, also listed on the Fairfax County Inventory of Historic Sites). It was retained by the Andrew Chapel Methodist Church, now located at 1301 Trap Road. A one-story wood-frame gable-front and shed-roof bay extends from the rear elevation of the church building. The current congregation renovated the altar around 1995. Note that the Antioch Christian Church on Beulah Road in Vienna, built in 1903, has an almost identical primary elevation, except that its entry/bell tower is located on the right side of the elevation instead of the left. Antioch Christian has retained its windows. The builders of the 1907 addition to Andrew Chapel specifically chose to duplicate Antioch Christian.

Attachment C

RECEIVED
APR 16 2014
DEPARTMENT OF PLANNING & ZONING
PLANNING DIVISION

PART II: STATEMENT OF JUSTIFICATION

A. DESCRIPTION OF PROPOSED USE

1. **Project description-** Applicants are submitting this application to construct a telecommunication facility, housed within a 120 foot tall church bell tower, on the property located at 1301 Trap Road, Vienna, Virginia (the "Property"). The Property (7.0127 acres owned by the Andrew Chapel United Methodist Church) is used for religious and institutional purposes and is located at the intersection of Trap Road and Route 7 (Leesburg Pike), two miles west of Tysons Corner. The Property is located in the Dranesville District and is zoned R-1. The proposed telecommunication facility (more fully described on the attached drawing entitled "CWS 91 ACUMC-Bell Tower") consists of the 120 foot bell tower and related equipment sited in a 35 by 70 foot fenced equipment compound adjacent to the church parking lot.
2. **Area to be served by proposed use-** The proposed facility will enhance wireless service to Fairfax County citizens, visitors, businesses and emergency personnel in and traveling through the area. Specifically it will improve service along heavily traveled Route 7 (Leesburg Pike), as well as in the residential neighborhoods and communities to the north of Wolf Trap and to the south of the Old Dominion Drive corridor. This facility will work in conjunction with other carrier facilities to the north, south, east and west to provide consistent, reliable wireless coverage in this area of Fairfax County.
3. **Maintenance requirements and frequency-** A service technician will visit the site approximately once or twice a month to perform routine maintenance. Emergency repairs will be performed as needed but typically are rare.
4. **Propagation maps (for telecommunications applications)** - Propagation maps have been provided by T-Mobile and Verizon Wireless, the two initial service providers to be located at the facility.

B. REQUIREMENT FOR PROPOSED USE

1. **Why the new or expanded facility is needed-** Verizon Wireless and T-Mobile require a facility in this location in order to address both network coverage and capacity requirements in the surrounding area. There are no existing tall structures (i.e. monopoles, utility structures, water towers, tall buildings, etc.) in this immediate area of Fairfax County suitable for the mounting of antennas that could be utilized to address the carrier technical requirements at this location. Other antenna support structures in the vicinity of the proposed facility are detailed on the enclosed "Wireless Infrastructure in the Vicinity of CWS Site 91".

   The closest support structure for telecommunications purposes is the Filene

Center at Wolf Trap, approximately one mile south of the proposed bell tower. Both T-Mobile and Verizon are currently installed here, and utilize these rooftop sites to address the capacity needs of Wolf Trap, the Dulles Toll Road and the neighborhoods in closest proximity. Neither of the two initial carriers currently has adequate coverage to the north, along and near Route 7.

2. **Why the proposed location is the best location for the proposed use**- The Property offers an excellent land-use and visual solution. The parcel was selected because of its current non-residential use, large acreage and potential for screening from neighboring residential areas and the public roadways. A church property provides an excellent opportunity for disguising a telecommunication facility as a bell tower that is both in context with and complimentary to the existing use of the Property.

3. **Why the proposed location and type of facility is the least disruptive alternative**- The Property was selected based on its current use, size and existing screening from neighboring residential parcels. By using a stealth bell tower, the visual impact will be minimal. Although the upper sections of the bell tower will be visible from some nearby properties, its appearance is compatible and in context with the existing church use and will not create an adverse visual impact (refer to enclosed photo-simulations). The antennas will be hidden inside the bell tower, and the equipment compound will be surrounded by an 8 foot tall board on board fence and screened from view.

C. ANTICIPATED IMPACTS/MITIGATION

1. **Visual**- The location for the proposed facility is well screened by existing mature white pines planted along the property perimeter many years ago (refer to the enclosed aerial photos). The height of the stealth bell tower has been limited to 120 feet, and the design is in keeping with the primary use of the parcel (church). Supplemental landscaping (to include a variety of trees and shrubs as recommended by the Urban Forester) will be planted on all sides of the proposed compound, as well as along Trap Road and Route 7, as shown on sheet Z-7A and Z-7B of the SE Plat entitled "CWS 91 ACUMC-Bell Tower" prepared by Entrex Communications Services, Inc., dated April 2, 2014.

2. **Noise and light**- The proposed facility is unmanned and will not produce any material noise or vibrations. The church bells will not be operational and there will be no lighting of the facility. There will be no new or additional glare or light generated by the proposed use.

3. **Air and water quality**- The proposed facility will not impact air or water quality.

4. **Environmental**- The proposed facility will have a limited footprint and area of disturbance and will not produce any adverse environmental impacts.

5. **Transportation (including trip generation)** - Traffic impact is negligible. The proposed facility is unmanned, and will be visited approximately one or two times per month by service technicians for routine maintenance. Emergency

repairs will be performed as needed but emergency service requirements are rare.

6. **Mitigation measures as applicable for 1 through 5**-Mitigation is not required.

D. CONFORMANCE WITH THE COMPREHENSIVE PLAN AND OTHER STANDARDS

The property is located in the McLean Planning District, Wolf Trap Community Planning Sector (M7), in Planning Area II. This Planning Sector is planned for low-density residential use at 1-2 dwelling units per acre. The church property is shown on the Comprehensive Plan for residential use at 1-2 dwelling units per acre. The Andrew Chapel United Methodist Church is shown under the Inventory of Historic Sites McLean Planning District on page 9 of the District-Wide recommendations for the District.

The Applicants' proposed telecommunication facility use is consistent with the objectives under the policy plan element of the Comprehensive Plan regarding Mobile and Land Based Telecommunications Services.

Objective 42: In order to provide for the mobile and land based telecommunications network for wireless telecommunications systems licensed by the Federal Communications Commission, and to achieve opportunities for the collocation of related facilities and the reduction or elimination of their visual impact, locate the network's necessary support facilities which include antennas, support structures and equipment buildings or equipment boxes in accordance with the following policies.

Policy a. **Avoid the construction of new structures by locating proposed telecommunications facilities on available existing structures such as rooftops, telecommunication and broadcast support structures, electric utility poles and towers, and water storage facilities when the telecommunication facilities can be placed inconspicuously to blend with such existing structures.**

The Applicants searched for existing tall structures in the area as a first choice for the location of its communications facility. However this general area of the County is residential in nature and there are no suitable existing structures to support the proposed communications facility and provide coverage in the target area. Construction of a new facility is needed to provide the required services.

Policy b. **When existing structures are not available for co-location, or co-location is not appropriate because of adverse visual impacts or service needs, locate new structures that are required to support telecommunication antennas on properties that provide the greatest opportunity to conceal the telecommunication facilities and minimize their visual impact on surrounding areas.**

As there are no existing structures available for carrier co-location, Applicants are proposing to locate the communications facility on a vacant portion of the Property, away from the church and inside the mature white pines that line Route 7. Applicants are proposing a stealth bell tower that will blend with the church property and minimize the facility's visual impact. Antennas and other appurtenances will be hidden behind stealth panels. Equipment shelters and cabinets will be located inside the fenced in compound, screened by an 8 foot tall wood fence and landscaping.

Policy c. **When new structures or co-locations are required to serve residential neighborhoods, consider minimizing visual impacts on the surrounding area by utilizing camouflage structure design and/or micro-cell technologies or similar miniaturization technologies, such as distributed antenna systems (DAS), if feasible.**

Applicants are proposing a stealth bell tower design to camouflage the use and minimize visual impact. DAS is not a cost effective solution and would not provide effective coverage to the surrounding neighborhoods.

Policy d. **When multiple sites provide similar or equal opportunity to minimize impacts, public lands shall be the preferred location.**

Within the Applicants' search area there are no public properties that meet the technical requirements and offer an equal or better opportunity to minimize visual impacts on the surrounding area. The nearest public parcels are detailed on Attachment 1.

Policy e. **Locate mobile and land-based telecommunication facilities on public property only after a lease agreement between the County, or related board or authority and the service provider has been established.**

The proposed facility will not be located on public property.

Policy f. **Ensure that the use of public property by mobile and land-based telecommunication facilities does not interfere with the existing or planned operational requirements of the public use and complies with adopted policies and plans to protect natural resources.**

The proposed facility will not be located on public property.

Policy g. **Co-locate mobile and land-based telecommunication facilities operated by different service providers on single sites and/or structures whenever appropriate. Locate single-use structures on a property when a co-location structure for multiple service providers is not desirable or feasible due to technological differences, site limitations or visual impact concerns.**

The proposed structure is designed for the co-location of up to four service providers. The site and design of the structure can successfully accommodate co-location without creating visual impact concerns.

Policy h. **Ensure that height of the proposed telecommunication facility is no greater than necessary to allow for co-location on the telecommunication facility based on its service requirements while still mitigating the visual impact of the facility.**

A height of 120 feet is the minimum necessary to allow for the co-location of four service providers and to meet coverage requirements. The bell tower design mitigates the visual impacts.

Policy i. **When new structures, co-locations and/or technologies (such as distributed antenna systems, micro-cell technology or miniaturization technology) are necessary to meet the service area requirements for the nonresidential neighborhood(s), ensure that the height and mass of any appropriate co-location on the telecommunication facility is in character with the surrounding residential area and mitigates the visual impact of the facility on the surrounding residential area.**

The stealth bell tower is in keeping with the existing use of the property and character of the surrounding neighborhoods. The bell tower design is consistent and in context with the current place of worship, and there are several other churches in the surrounding area. Mature pines along Route 7 and Trap Road on the Property and in the surrounding area will screen and block views of the facility from surrounding vantage points (refer to the enclosed aerial photos).

Policy j. **Design, site and/or landscape proposed telecommunication facilities to minimize impacts on the character of the property and surrounding areas. Demonstrate the appropriateness of the design through facility schematics and plans which detail the type, location, height and material of the proposed structures and their relationship to other structures on the property and surrounding areas.**

The stealth bell tower design of the proposed facility minimizes impacts on the character of the property and surrounding area. Existing tree cover on the Property and in the surrounding area will screen and obstruct views of the facility from surrounding vantage points. In addition, Applicants will install supplemental landscaping (as recommended by the Urban Forester) around the compound and the perimeter of the Property (refer to sheet Z-7A and Z-7B of the SE Plat entitled "CWS 91 ACUMC- Bell Tower" prepared by Entrex Communications Services, Inc., dated April 2, 2014).

The enclosed site plan details the design of the structure and the surrounding equipment compound and their relationship to the site. Photo-simulations have also been provided to demonstrate the appropriateness of the bell tower design and its relationship to the surrounding area.

Policy k. **Demonstrate that the selected site for a new telecommunication facility provides the least visual impact on residential areas and the public way, as compared with alternate sites. Analyze the potential impacts from other vantage points in the area, especially from residential properties, to show how the selected site provides the best opportunity to minimize its visual impact on the area and on properties near the proposed site.**

The attached photo simulations provide an analysis of the visual impact of the proposed use from several vantage points throughout the nearby community. The proposed facility will be located adjacent to a church use immediately adjacent to a major arterial roadway (Leesburg Pike). The photo simulations demonstrate that while there are some views of the proposed structure from various vantage points, the views are mitigated by the structure's design, by existing vegetation on-site and in the overall surroundingarea, and distance. There are no other sites in the search area that provide a greater potential camouflage solution consistent with the site and its existing use.

Policy l. **A key concept in assessing the telecommunication facilities is mitigation which is defined as actions taken to reduce or eliminate negative visual impacts.**

Applicants have followed the recommendations of this policy by:

1. Proposing a bell tower consistent and in context with the existing non-residential use and character of the property, and
2. Locating the proposed structure within an area of mature vegetation and tree cover.
3. Proposing supplemental landscaping around the fenced compound and along Trap Road and Route 7.

Policy m. **Locate proposed telecommunication facilities to ensure the protection of historically significant landscapes and cultural resources. The views of and vistas from architecturally and/or historically significant structures should not be impaired or diminished by the placement of telecommunication facilities.**

The Andrew Chapel United Methodist Church is identified in the Comprehensive Plan under the Historic Sites Inventory for the McLean Planning District in Planning Area II. However, the site is not within a historic overlay district. The proposed facility and the bell tower design will not negatively impact the church property or other historically significant landscapes or cultural resources.

Applicants submitted a full engineering study showing compliance with all NEPA regulations, including Section 106 historic review.

Policy n. **Site proposed telecommunication facilities to avoid areas of environmental sensitivity, such as steep slopes, floodplains, wetlands, environmental quality corridors, and resource protection areas.**

The proposed facility will not have adverse impacts on areas of environmental quality or sensitivity. Applicants submitted a full engineering study showing compliance with all NEPA regulations, including those dealing with areas of environmental sensitivity.

Policy o. **Site proposed telecommunication facilities to allow for future expansion and with corresponding levels of screening to accommodate expansion.**

The proposed structure and associated compound have been designed to accommodate up to four service providers.

Policy p. **Design and site proposed telecommunication facilities to preserve areas necessary for future right–of-way dedication and ancillary easements for construction of road improvements.**

The facility compound is located approximately 136 feet from the edge of the nearest Route 7 traffic lane, and will not impede upon any areas planned or reserved for future road right-of-way or improvement.

Policy q. **Locate and construct antennas used for purposes other than mobile and land based telecommunication services in accordance with the same guidelines established in this "Mobile and Land-based Telecommunications Services" section.**

The facility is a Mobile and Land-based Telecommunication use.

Objective 43: Design proposed telecommunication facilities to mitigate their visual presence and prominence, particularly when located in residential areas, by concealing their intended purpose in a way that is consistent with the character of the surrounding area.

Policy a. **Disguise or camouflage the appearance of proposed telecommunication facilities to resemble other man-made structures and natural features (such as flagpoles, bell towers, and trees) that are typically found in context and belong to the setting where placed.**

The proposed use will be designed as a bell tower and located adjacent to a church use to camouflage and disguise its appearance and reduce its prominence and visual presence. The bell tower design will conceal the

intended purpose of the structure and be in context with the setting in which it is located.

Policy b. **Design proposed telecommunication facilities that are disguised and camouflaged to be of a bulk, mass and height typical of and similar to the feature selected.**

The design, bulk, mass, and height of the camouflaged structure is consistent with that of a bell tower on a church property and will appear in context with the portion of the church site on which it is located.

Policy c. **Use appropriately other new and existing structures and vegetation of comparable form and style to establish a grouping that complements a camouflaged telecommunications facility and supports it design, location and appearance.**

The bell tower will be in proximity to the church building that will complement and reinforce its design. Existing mature vegetation on the property and throughout the nearby areas will serve to mitigate views of the proposed use.

E. ALTERNATIVE SITES CONSIDERED FOR THIS USE

An analysis of alternative sites is provided in Attachment 1.

CONCLUSIONS

In light of the foregoing and the reasons stated, Applicants submit that this proposal is in compliance and general conformancewith the Fairfax County Comprehensive Plan and provisions of Virginia Code Section 15.2-2232 and respectfully requests that the 2232 Review Application be approved.

COMMUNITY WIRELESS STRUCTURES

ACUMC Bell Tower

1301 Trap Road, Vienna, VA 22182

120ft. Bell Tower Simulation

View #2 from Windsor Meadows Lane approximately 680ft. west of site

GOULD DIGITAL IMAGING

120ft. Balloon Test
COMMUNITY
WIRELESS
STRUCTURES
CWS
ACUMC Bell Tower
1301 Trap Road, Vienna, VA 22182
120ft. Bell Tower
Simulation
View #3 from Colvin Run Elementary
approximately 1,050ft. southwest of site
GOULD DIGITAL IMAGING

120ft. Balloon Test
COMMUNITY
WIRELESS
STRUCTURES
CWS
ACUMC Bell Tower
1301 Trap Road, Vienna, VA 22182
120ft. Bell Tower
Simulation
View #9 from Shouse Village entrance
approx. 1,060ft. west-northwest of site
GOULD DIGITAL IMAGING

COMMUNITY WIRELESS STRUCTURES

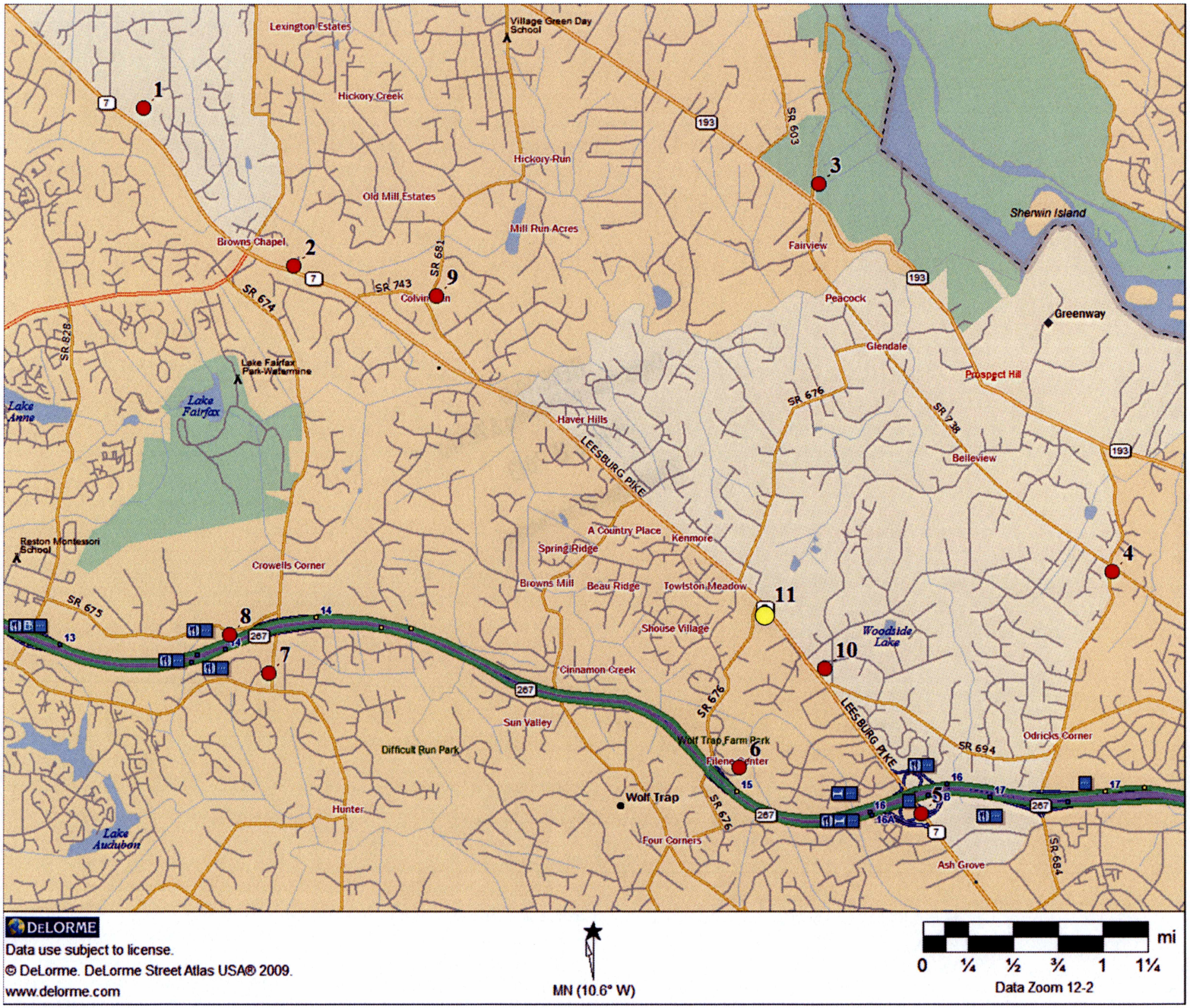
ACUMC Bell Tower

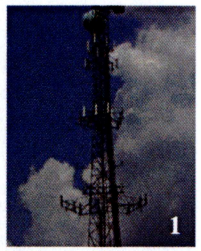
1301 Trap Road, Vienna, VA 22182

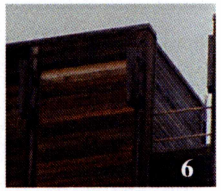
120ft. Bell Tower Simulation

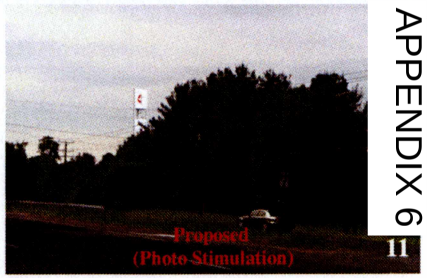
View #12 from Lucky Estates Drive approximately 830ft. south of site

Antenna Support Structures in the Vicinity of the Proposed CWS Site 91: ACUMC



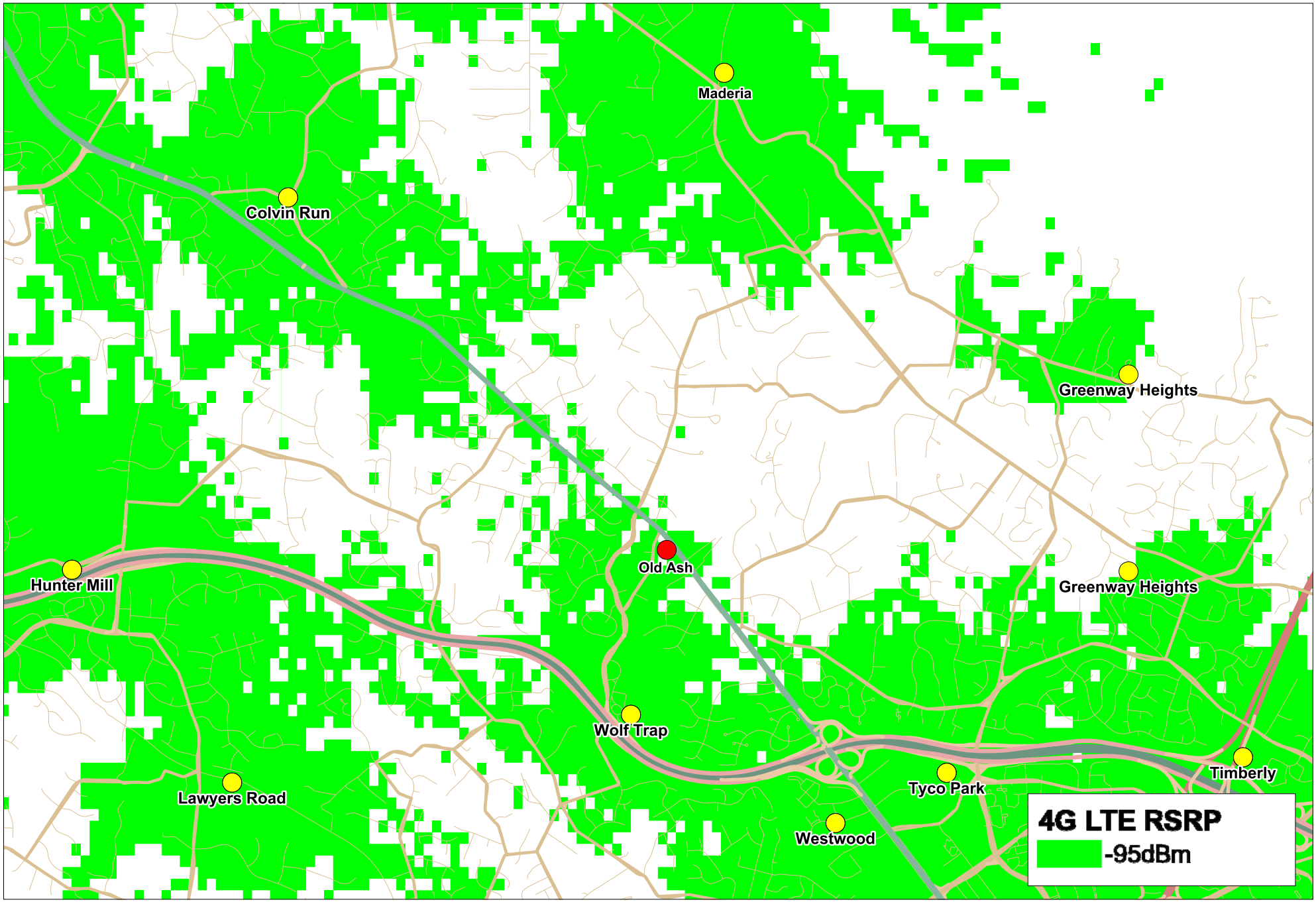




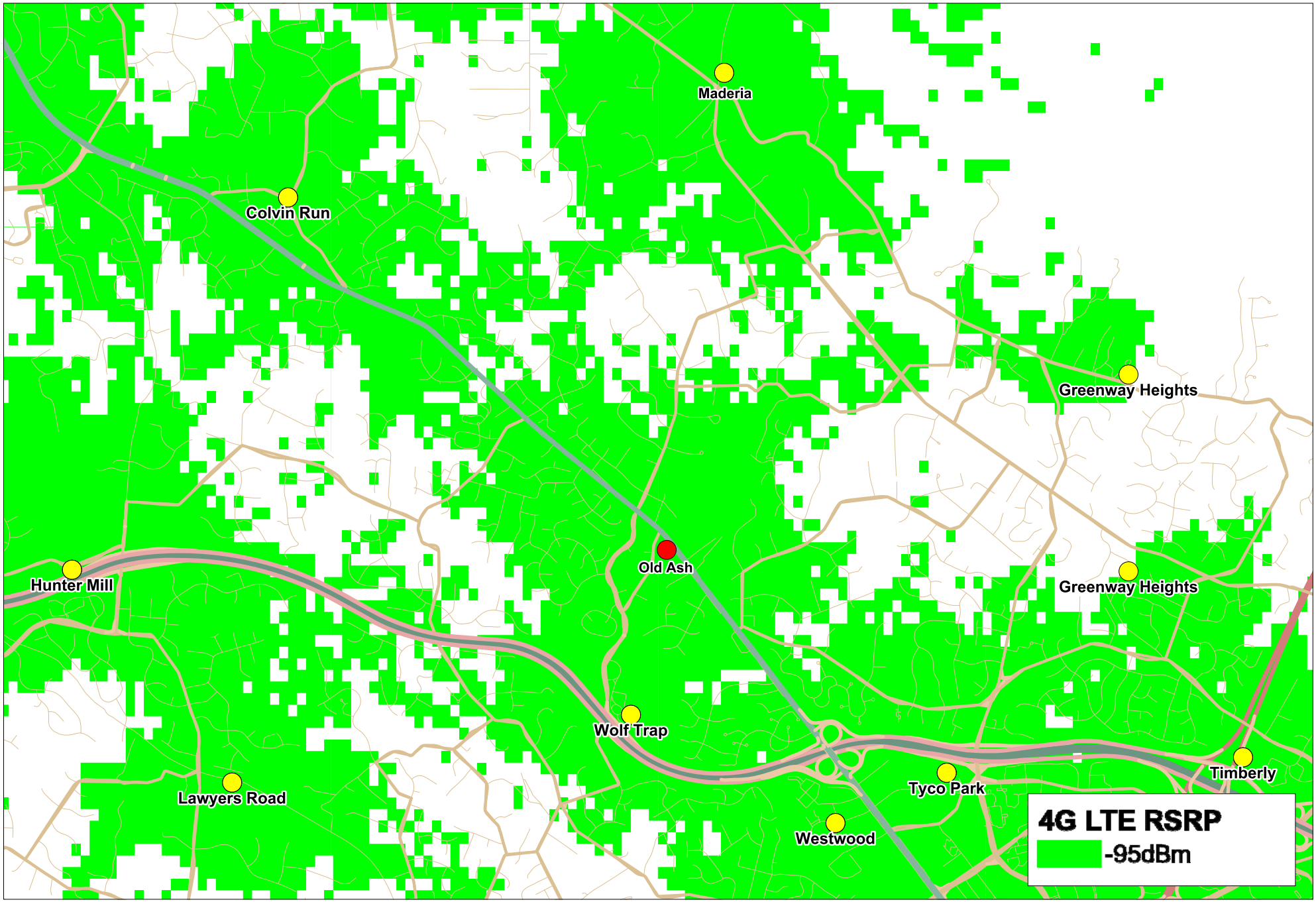


APPENDIX 6

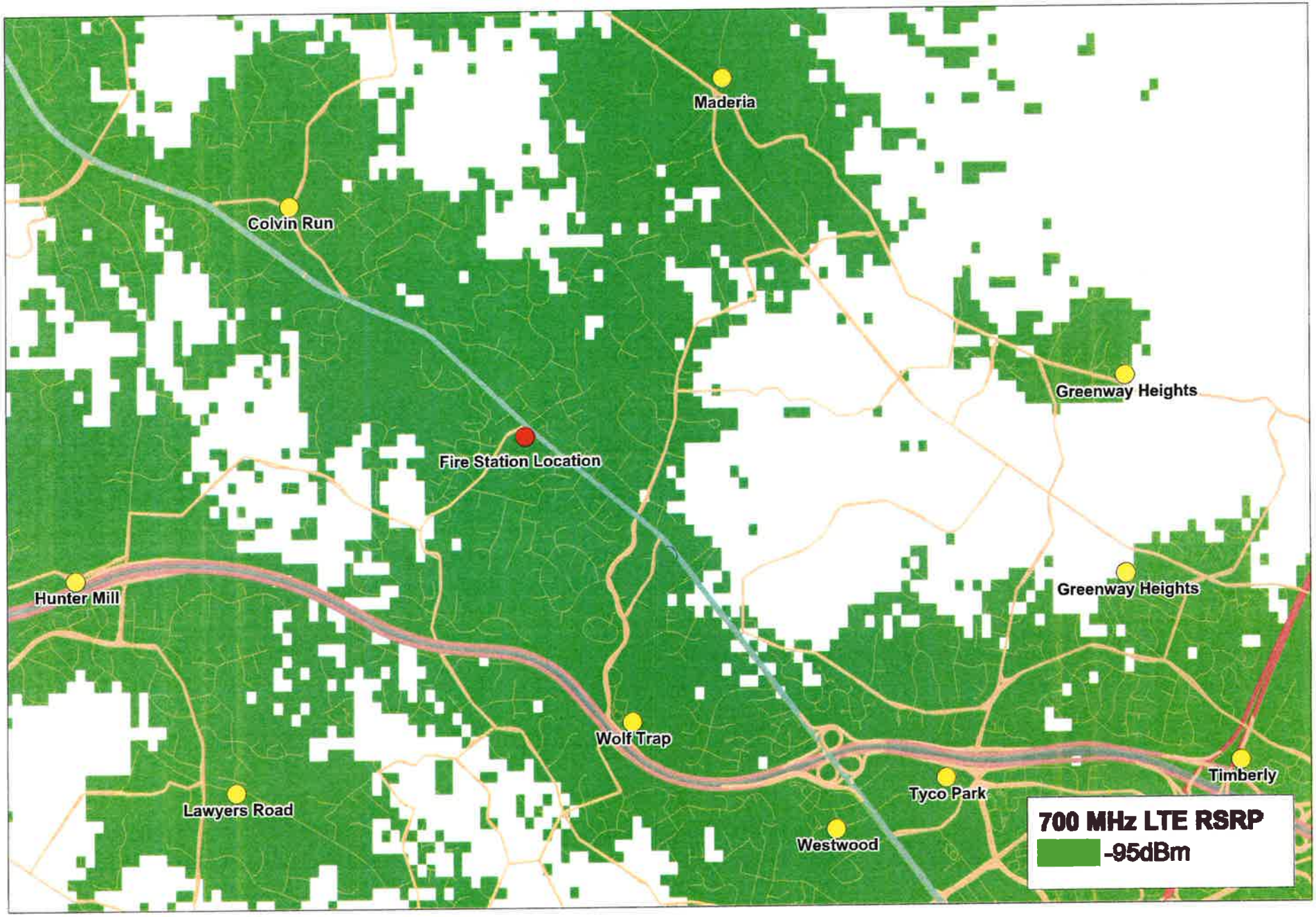
VZW - 4G LTE Coverage - With Out Old Ash Site



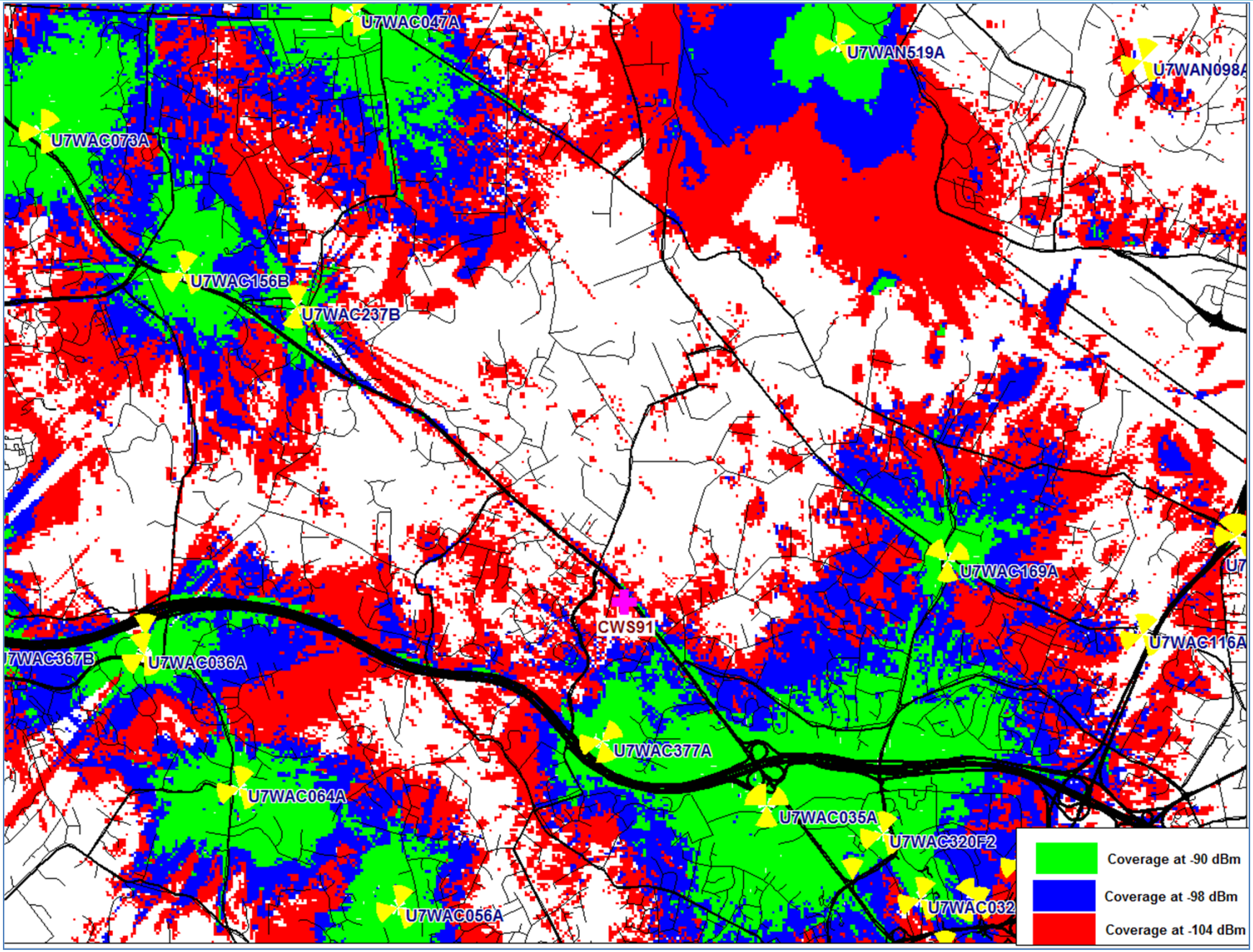
VZW - 4G LTE Coverage - With Old Ash Site



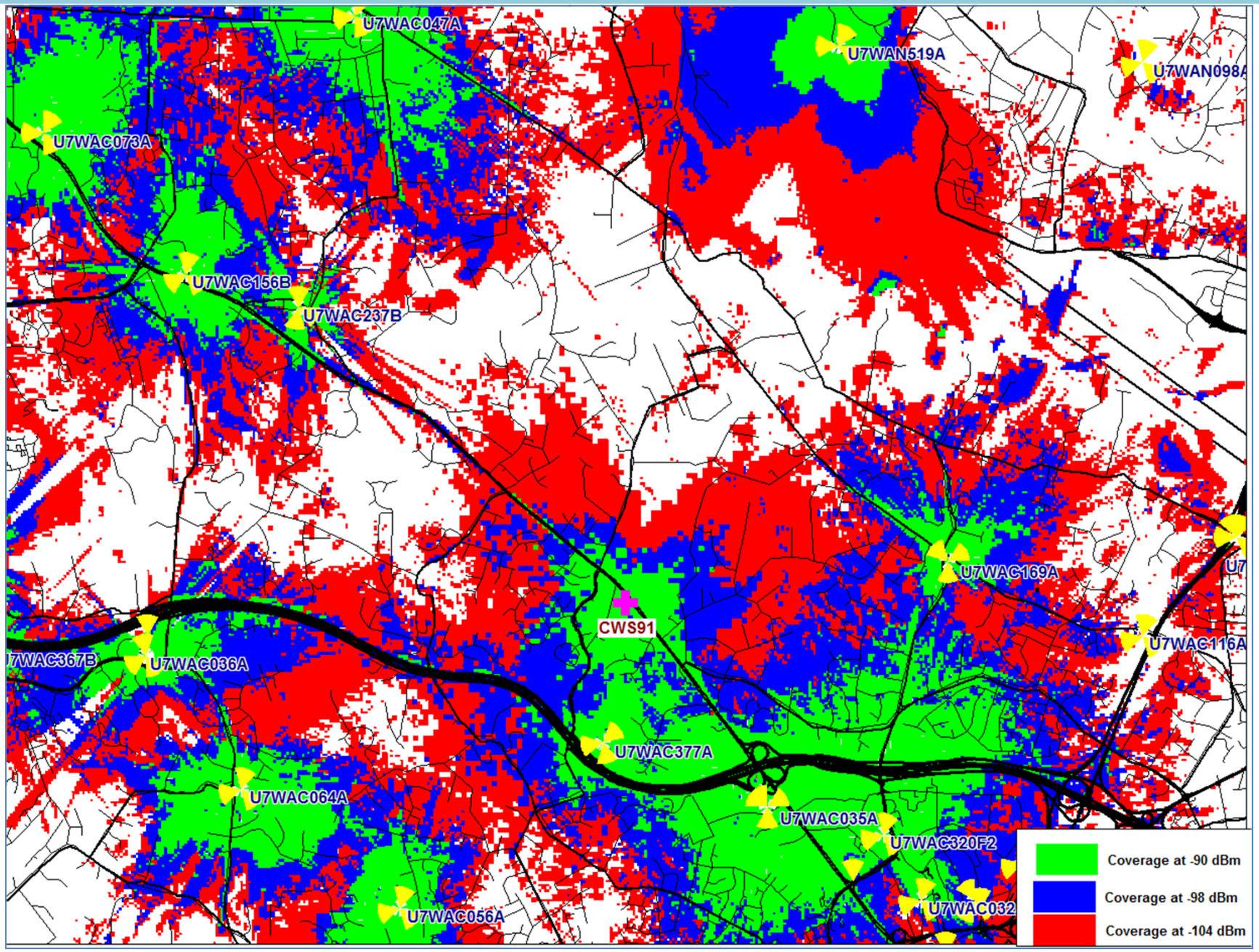
VZW - 4G LTE Coverage - With Fire Station Location



Composite Coverage without CWS91 Proposed Site



Composite Coverage with CWS91 Proposed Site (RC=105 ft)



MILLENNIUM ENGINEERING, P.C.
508 Ferncastle Drive
Downingtown, Pennsylvania 19335
Cell: 610-220-3820 Fax: 610-458-8612
www.millenniumengineering.net Email: pauldugan@comcast.net

October 7, 2014

Attn: Thomas A. Murray
Community Wireless Structure (CWS)
2800 Shirlington Road, Suite 716
Arlington, VA 22206

Re: Supplemental RF Information for Proposed Verizon Wireless Communications Facility
Site Name: Old Ash, Proposed 120' Bell Tower
Andrew Chapel Methodist Church, 1301 Trap Road, Vienna, VA 22182 (Fairfax County)

Dear Mr. Murray,

I am forwarding you some radiofrequency propagation plots with some additional information to supplement the above referenced application. I will be present at the Planning Commission hearing to give testimony and answer questions. My professional experience and academic credentials are attached.

The objective of the proposed communications facility is to provide continuous reliable wireless communication 4G LTE coverage and capacity relief to a northern portion of Fairfax County in an area known as Vienna. Due to dense population combined with heavy traffic in the area, a new facility is necessary at this location in order to serve the area that the proposed site will cover. The proposed facility will improve service and provide better handoff between the existing sites serving the heavily traveled Leesburg Pike (State Route 7)/Washington Dulles Access & Toll Road (State Route 267) junction (including the Hirst Brault Expressway), primarily those identified on the attached propagation plots as *Wolf Trap*, *Westwood* and *Tyco Park*. The facility will provide 0.5-1.0 mile of enhanced new 4G LTE service to the area including in-building coverage to the residences along heavily traveled portions of Leesburg Pike (State Route 7), Trap Road (State Route 676), Lewinsville Road (State Route 694), Towlston Road (State Route 676), Washington Dulles Access & Toll Road (State Route 267), the Hirst Brault Expressway, and other adjoining roads in the area. There are no other existing tall structures suitable for collocation in this target area which I have identified during my site visit. The proposed facility location is particularly suited to fulfill the objectives of providing new reliable 4G LTE coverage and capacity relief to the area in which it will serve.

The existing Verizon Wireless facilities in the area are identified on the propagation plots as follows:

Maderia – treepole at 9200 Old Dominion Drive, Great Falls, VA
Greenway Heights North – outdoor DAS node off Georgetown Pike, McLean, VA
Greenway Heights South – outdoor DAS node off Swinks Mill Road, McLean, VA
Tyco Park – building at 1410 Spring Hill Road, Vienna, VA
Westwood – building at 8661 Leesburg Pike, Vienna, VA
Wolf Trap – building at 1551 Trap Road, Vienna, VA
Hunter Mill – monopole at 10907 Sunset Hills Road, Reston, VA
Colvin Run – treepole at 1139 Walker Road, Great Falls, VA

Attached are five maps which consist of: 1) a zoomed-in Delorme map of the area identifying the proposed structure, any tall structures within 0.5 mile of the proposed facility location, and the roads in the area (the 0.25/0.5 mile radius black dashed circles are simply a distance reference), 2) a zoomed-out Delorme map of area identifying the existing surrounding adjacent Verizon Wireless base station facilities, 3) a propagation map depicting existing 4G LTE coverage, 4) a propagation map depicting proposed 4G LTE coverage at the Old Ash location, and 5) a propagation map depicting proposed 4G LTE coverage at the Fire Station alternate location.

The existing steeple (AT&T) at the Providence Baptist Church approximately 0.5 mile southeast of the Old Ash location is not suitable for Verizon Wireless since this structure is not tall enough and too far from the heart of the target area to fulfill the objectives of the proposed facility.

As shown from the propagation maps, the proposed facility at the Old Ash location provides continuous reliable wireless communications 4G LTE coverage to the target area while providing enough coverage overlap with the existing *Wolf Trap*, *Westwood* and *Tyco Park* facilities to offload wireless traffic from these surrounding adjacent sites (capacity relief). Although a proposed facility at the Fire Station alternate location is in consideration for an additional future facility, the Fire Station location does not fulfill the objectives of the Old Ash location. The proposed facility at the Fire Station alternate location does <u>not</u> fulfill the objectives of the proposed Old Ash facility since the afforded coverage would leave a 0.75 mile coverage gap on heavily traveled Leesburg Pike (State Route 7) including a number of residences to the east of the subject location. The proposed facility at this alternate location will also not provide enough coverage overlap with the existing *Wolf Trap*, *Westwood* and *Tyco Park* facilities to offload wireless traffic from these surrounding adjacent sites (capacity relief).

These plots represent a 700 MHz downlink target signal level design threshold of -95 dBm RSRP (all colored areas of plot) which is characterized as targeted "in-building" coverage for 700 MHz LTE (all white areas on plot do not meet the target signal level design threshold). However, this target signal level threshold is not strictly for "in-building" service as it is prudent to maintain the target signal level threshold for most conditions for high speed data among other wireless uses and applications. Reaching the target level where possible and where the users are using the devices is a critical design criteria even for most outdoor locations. The plots attached at the back of this report depict the same coverage areas at the same design threshold (-95 dBm RSRP) as the original plots submitted by CWS which depict existing and proposed coverage in the color "green". The plots attached at the back of this report simply break down the coverage into individual sectors from each facility in order to show which sector is covering each area of the community.

RSRP (reference signal received power) is generally the preferred signal measurement used for LTE networks whereas RSSI (received signal strength indicator) was the traditional signal measurement used for earlier technologies. The design thresholds contain a margin of safety (aka fade margin) that should be maintained in the design for a higher level of reliability under all reasonable conditions. Also, the connection and download speed of broadband wireless internet services degrades dramatically at or below this threshold.

The proposed structure location places the target design threshold on an area that spans approximately 0.5-1.0 mile. If the structure height is reduced below the proposed antenna height of 115', the coverage afforded by the facility is reduced, which will compromise service to the area for which the facility is intended to serve. The proposed antenna height of 115' will allow Verizon Wireless to meet target design objectives for reliable 4G LTE service to the area for which the facility will serve. More significantly, the proposed structure location would also provide service to a far wider area when also considering areas that would be served that do not necessarily meet the target threshold. The proposed structure location is "particularly suited" to provide the necessary reliable 4G LTE service to this area.

In response to the Verizon Wireless "Public Map" or "Marketing Map", these online maps are not an exact representation of coverage. Unlike propagation models and drive test data, Verizon Wireless' generalized "online" website marketing coverage maps are not intended or feasible for network engineering functions. Instead, coverage and network performance improvement needs are determined by a combination of real world

drive test data and computer modeling submitted in the Supplemental Analysis. Verizon Wireless' website displays generalized coverage maps for its nationwide network. In order to do this on a large national scale, the marketing department takes site location and antenna height information from the engineering group but uses generic propagation settings to simulate coverage and ensure map consistency independent of location. These maps are intended (industry standard) for use as a general guideline for customers to determine where they can expect certain levels of service (i.e. is 4G LTE available in a given area). The received signal strength levels for these maps is based on the minimum signal a mobile device can recognize given ideal RF conditions (i.e. no interference, outside (not in a vehicle or inside a building or home), and free of surrounding building or tree clutter).

This approach is contrary to engineering analysis and design coverage maps, which contain far more detail, account for real-world signal degrading effects like fast-moving mobile devices, devices located inside a vehicle, local terrain, vegetation, buildings, etc. The engineering propagation models are tailored to local environments and are fine-tuned based on comparison to (and adjustments derived from) billions of drive test data points across all RF environments (i.e. urban, dense residential, commercial/industrial, dense deciduous and non-deciduous trees, highway, rural mountainous, rural farmland, etc.). Engineering coverage maps always account for, at a minimum, the mobile device placed inside a moving vehicle (a moving device experiences continuous signal-fading effects that are not experienced by a non-moving device), whereas marketing maps assume coverage outside (i.e. free of signal attenuation associated with penetrating into vehicles) and stationary mobile devices.

Generalized marketing maps should in no way be relied upon as an accurate representation of localized coverage in a specific area or for designing a network. It is important to note that online marketing maps have an associated disclaimer below the maps confirming that the information should be used as a guideline and not a guarantee of coverage (http://www.verizonwireless.com/wcms/consumer/4g-lte.html):

"These Coverage Locator depictions apply to the following calling plans:
Share Everything, Nationwide Calling Plans, Mobile Broadband and Prepaid.

* Access the 4G LTE network within the Coverage Area.
** Access the 4G LTE network within the Verizon Extended Coverage Area; certain conditions may cause your service to connect to 3G in this Area.
*** Access the 4G LTE network within the Extended Coverage Area; Some of the Coverage Areas include networks run by other carriers, the coverage depicted is based on their information and public sources, and we cannot ensure its accuracy.

Roaming charges apply in Canada Broadband and Canada Enhanced Services areas.

These Coverage Locator maps depict predicted and approximate wireless coverage. The coverage areas shown do not guarantee service availability, and may include locations with limited or no coverage. Even within a coverage area, there are many factors, including customer's equipment, terrain, proximity to or inside buildings, foliage, and weather that may impact service. Some of the Coverage Areas include networks run by other carriers, the coverage depicted is based on their information and public sources, and we cannot ensure its accuracy."

In summary, upon consideration of the many factors discussed herein, it is my opinion that the proposed communications facility is particularly suited (both in location and minimum height required for Verizon Wireless) to provide reliable 4G LTE service to subscribers in a northern section of Fairfax County that currently suffer from a significant gap in reliable 4G LTE wireless service. I am not aware of any other more feasible alternatives of providing reliable wireless service is this area. The proposed

communications facility in this location is necessary for the efficient operation and provision of wireless services to the area for which it is proposed.

Respectfully,

Paul Dugan, P.E.
Registered Professional Engineer
Virginia License Number 036239

PAUL DUGAN, P.E.
508 Ferncastle Drive
Downingtown, Pennsylvania 19335

Cell: 610-220-3820
Fax: 610-458-8612
Email: pauldugan@comcast.net
Web Page: www.millenniumengineering.net

EDUCATION:

Widener University, Chester, Pennsylvania
Master of Business Administration, July 1991
Master of Science, Electrical Engineering, December 1988
Bachelor of Science, Electrical Engineering, May 1984

PROFESSIONAL ASSOCIATIONS:

Registered Professional Engineer in the following jurisdictions:

Pennsylvania, License Number PE-045711-E
New Jersey, License Number GE41731
Maryland, License Number 24211
Delaware, License Number 11797
Virginia, License Number 36239
Connecticut, License Number 22566
New York, License Number 079144
District of Columbia, License Number PE-900355
West Virginia, License Number 20258
Puerto Rico, License Number 18946

Full member of **The Association of Federal Communications Consulting Engineers** (www.afcce.org) January 1999 to Present
Elected to serve on the Board of Directors for 2006-2007

Full member of **The National Society of Professional Engineers** (www.nspe.org) and the **Pennsylvania Society of Professional Engineers** (www.pspe.org) June 2003 to Present
Currently serving as State Director on the Board of Directors of the Valley Forge Chapter and the South East Region Vice-Chair for the "Professional Engineers in Private Practice" Executive Committee

Actively participate in **Chester County ARES/RACES** (CCAR www.w3eoc.org) which prepares and provides emergency backup communications for Chester County Department of Emergency Services, March 2005 to Present

Full member of **The National Council of Examiners for Engineering** (www.ncees.org) May 2001 to Present

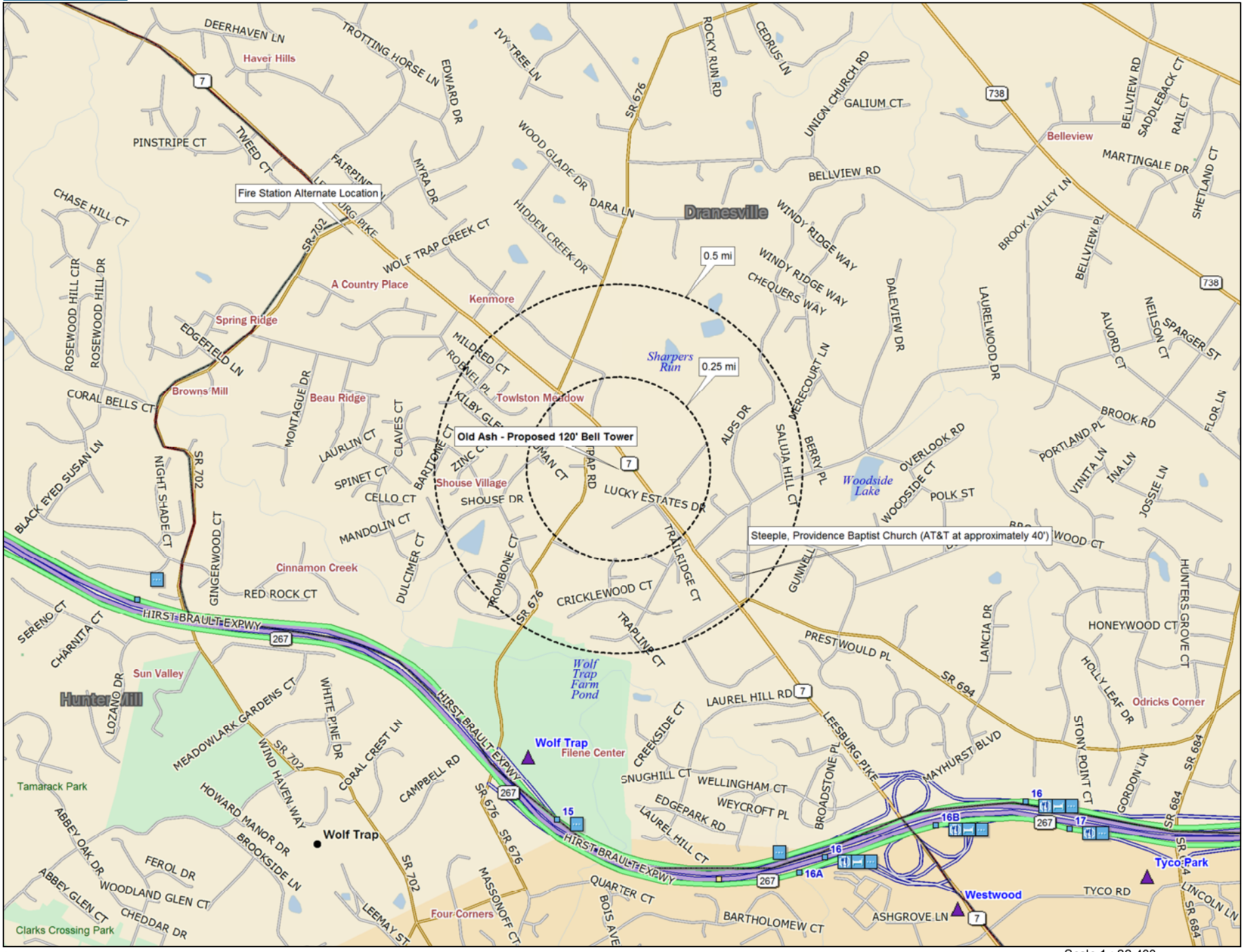
Full Member of **The Radio Club of America** (www.radio-club-of-america.org) December 2003 to present

PROFESSIONAL EXPERIENCE:

Millennium Engineering, P.C., Downingtown, Pennsylvania
Position: **President**, August 1999 to Present (www.millenniumengineering.net)

Verizon Wireless, Plymouth Meeting, Pennsylvania
Position: **Cellular RF System Design/Performance Engineer**, April 1990 to August 1999

Communications Test Design, Inc., West Chester, Pennsylvania
Position: **Electrical Engineer,** May 1984 to April 1990



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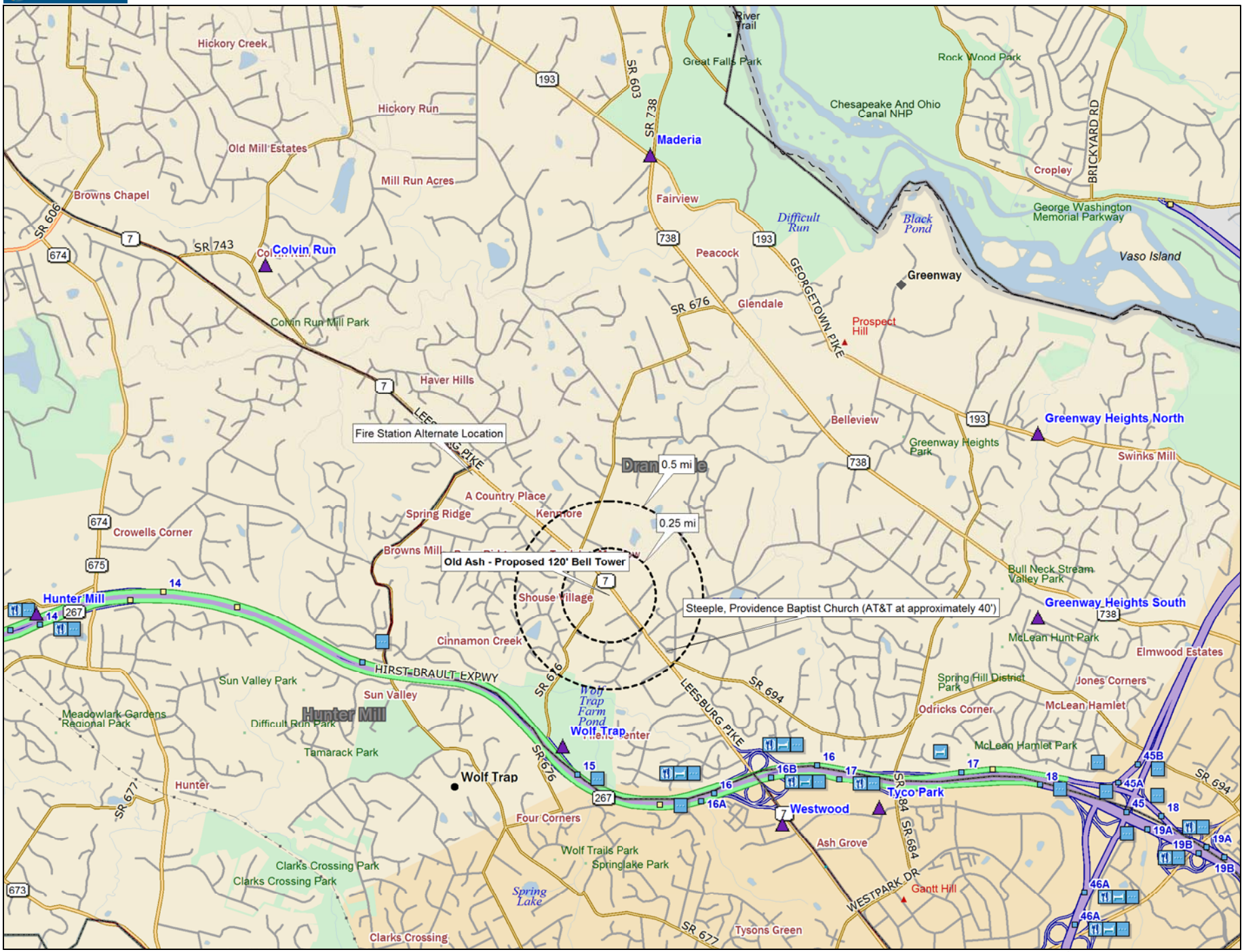
TN

MN (10.7°W)

Scale 1 : 22,400

1" = 1,866.7 ft

Data Zoom 13-2



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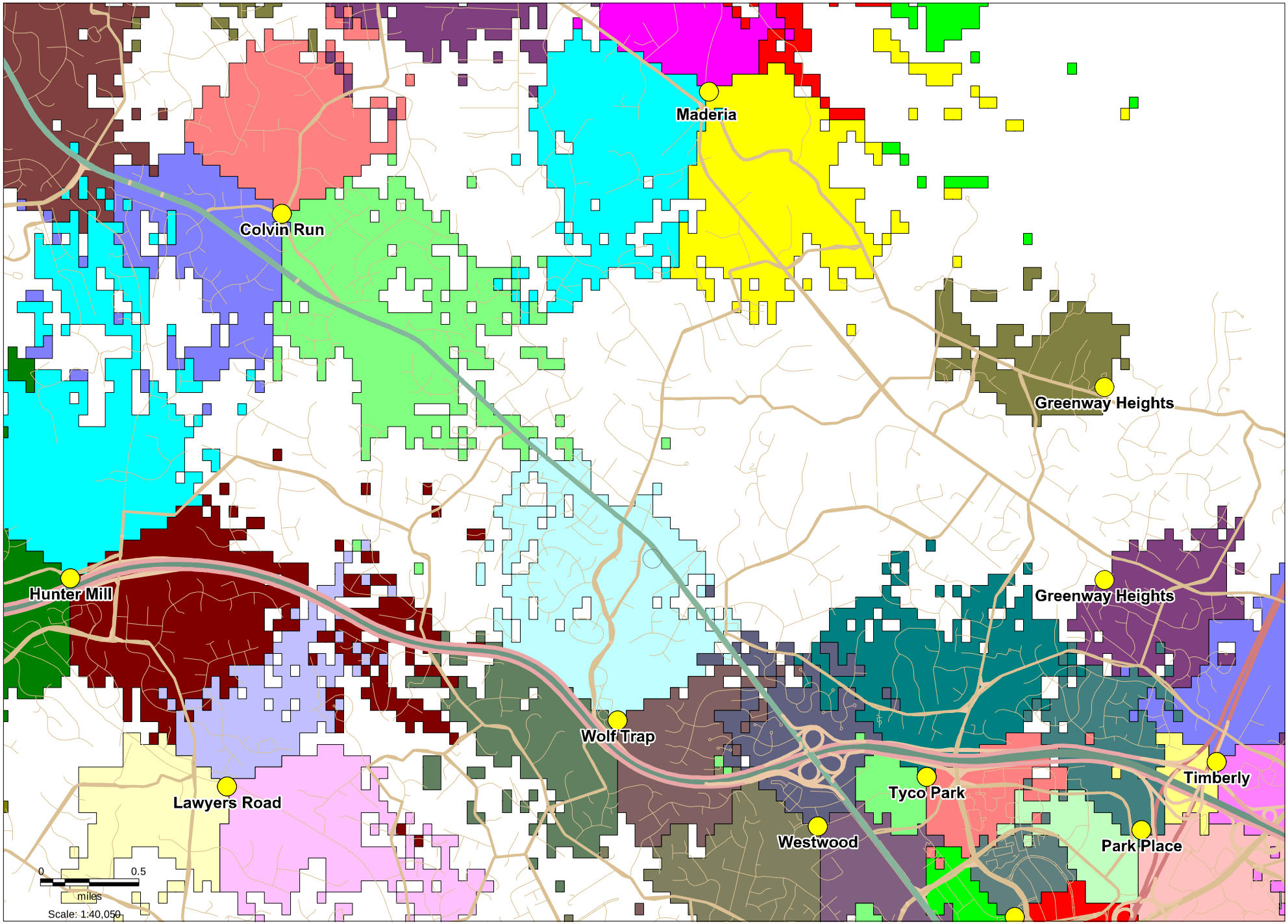
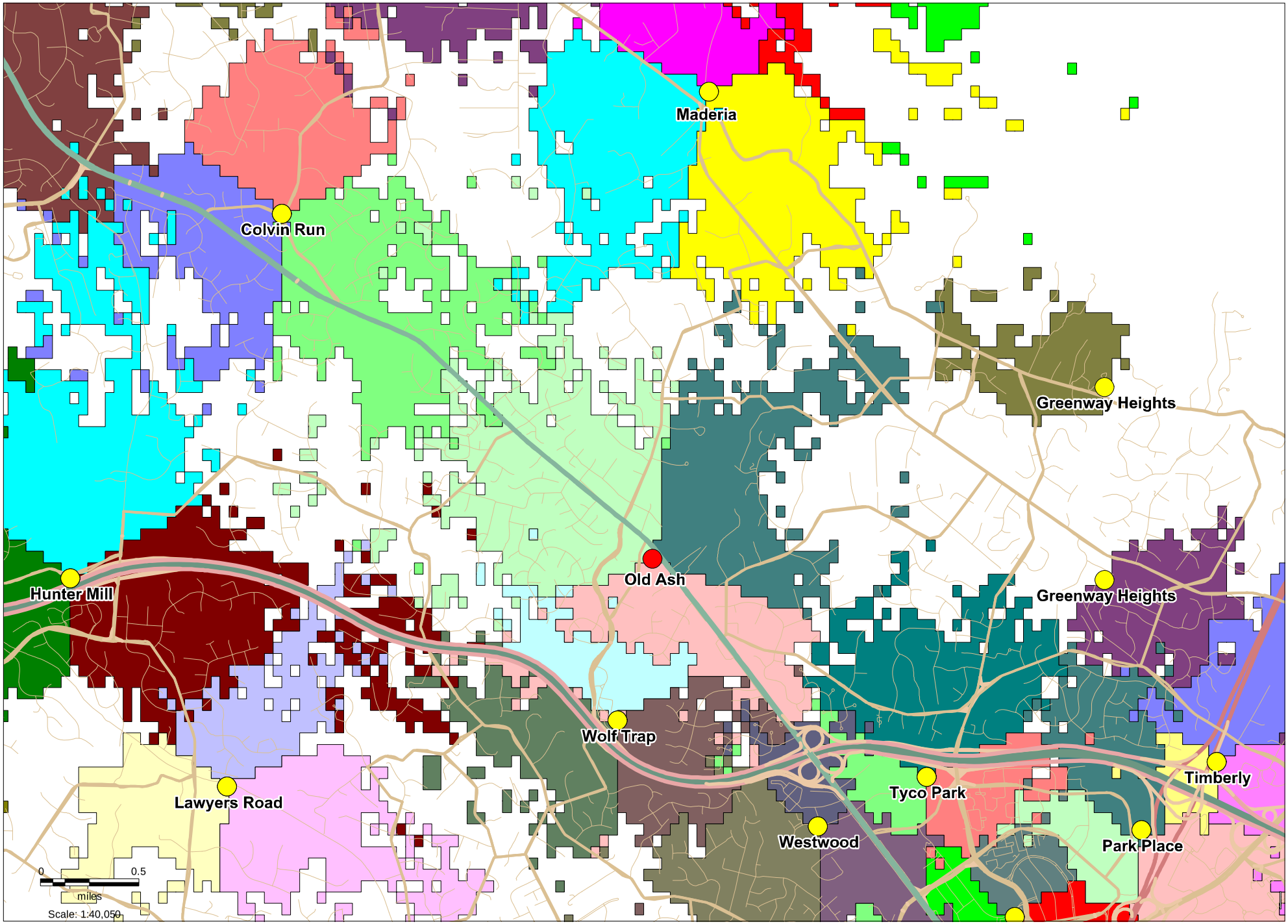
TN
MN (10.7°W)

Scale 1 : 43,750
1" = 3,645.8 ft
Data Zoom 12-2

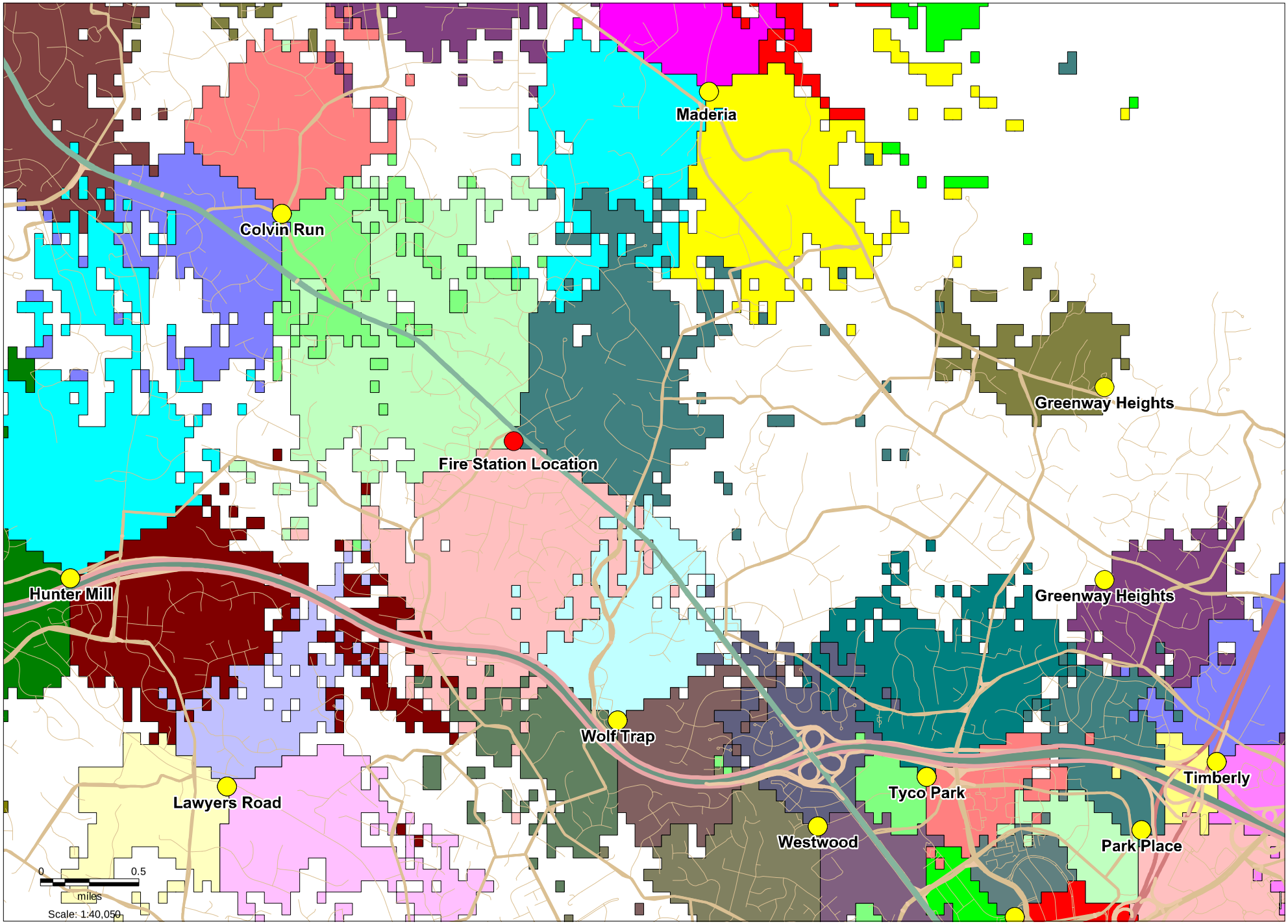
VZW - 4G LTE RSRP Coverage - Best Serving Sectors Plot At -95dBm



VZW - 4G LTE RSRP Coverage - Best Serving Sectors Plot At -95dBm



VZW - 4G LTE RSRP Coverage - Best Serving Sectors Plot At -95dBm



County of Fairfax, Virginia

MEMORANDUM

DATE: 30 May 2014

TO: Carmen Bishop, Planner, Zoning Evaluation Division

FROM: Linda Cornish Blank, Historic Preservation Planner LCB

SUBJECT: SE 2013-DR-019, 1301 Trap Road, Tax Map 19-4 ((1)) 47, to construct a 120' high stealth (bell tower) monopole for co-location of up to 5 carriers behind the concealment panels and associated equipment

Policy Plan: Fairfax County Comprehensive Plan, 2013 Edition, Policy Plan, Public Facilities, Amended through 3-34-2014, page 39:

"Policy m. Locate telecommunication facilities to ensure the protection of historically significant landscapes. The views of and vistas from architecturally and/or historically significant structures should not be impaired or diminished by the placement of telecommunication facilities."

Background: The subject parcel is not included within the boundaries of a Fairfax County Historic Overlay District, is not listed in the Fairfax County Inventory of Historic Sites or the National Register of Historic Places or documented in the historic structures survey file. There are no properties in the immediate vicinity of the subject property of this application that are within the boundaries of a Fairfax County Historic Overlay District, or listed in the National Register or documented in the historic structures survey file.

There are five properties in the immediate vicinity of the subject property of this application that are listed in the Fairfax County Inventory of Historic Sites. They are:

Andrew Chapel United Methodist Church		9201 Leesburg Pike Vienna	019-4 ((1)) 57	1855
Leigh, Vernon, House		9352 Mildred Court Vienna	019-4 ((1)) 63	1914/1915
Bethel Primitive Baptist Church		9101 Leesburg Pike Great Falls	019-4 ((1)) 45A	1912
Spring Glade		1442 Towlston Road Vienna	019-4 ((14)) 186A	c.1840
Andrew Chapel School		9325 Leesburg Pike Vienna	019-4 ((1)) 60	1914

These listed properties either would be or could potentially be affected by the proposed telecommunications facility. However, because the proposed telecommunications facility is to be enclosed by a bell tower structure, it is believed that the effect on the five properties listed in the inventory would not be adverse.

Department of Planning and Zoning
Planning Division
12055 Government Center Parkway, Suite730
Fairfax, Virginia 22035-5509
Phone 703-324-1380
Fax 703-324-3056
www.fairfaxcounty.gov/dpz/

The applicant has complied with Section 106 of the National Historic Preservation Act of 1966. As a local government, Fairfax County was afforded an opportunity to provide comment as required under Section 106. On July 22, 2013, the local government was notified that the Lead State Historic Preservation Office concurred with the following filing:

Direct Effect: No Historic Properties in Area of Potential Effects (APE)
Visual Effect: No Historic Properties in Area of Potential Effects (APE)

Heritage Resources staff findings:

1. Staff finds the proposal in-keeping with the Policy Plan text cited above and finds that no known historic properties will be adversely affected by the project.

County of Fairfax, Virginia

MEMORANDUM

DATE: March 30, 2014

TO: Barbara Berlin, Director
Zoning Evaluation Division
Department of Planning and Zoning

FROM: Michael A. Davis, Acting Chief
Site Analysis Section
Department of Transportation

FILE: 3-5 (SE 2013-DR-019)

SUBJECT: Transportation Impact

REFERENCE: SE 2013-DR-019 CWS VII, LLC (Thomas A Murray & Queli Campos)
Andrew Chapel United Methodist Church
Traffic Zone: 1625
Land Identification Map: 19-4 ((1)) 47

Transmitted herewith are the comments from the Department of Transportation with respect to the referenced application. These comments are based on plats made available to this office dated May 29, 2013, and revised through March 12, 2014. The applicant is requesting approval for the construction of a telecommunications facility housed within a 140-foot tall church bell tower with a 35-foot by 50-foot fenced equipment compound on the property owned by the church.

This Department has no transportation issues with this application.

MAD/LAH/lah

Fairfax County Department of Transportation
4050 Legato Road, Suite 400
Fairfax, VA 22033-2895
Phone: (703) 877-5600 TTY: 711
Fax: (703) 877 5723
www.fairfaxcounty.gov/fcdot

FCDOT
Serving Fairfax County for 25 Years and More

County of Fairfax, Virginia

MEMORANDUM

DATE: February 25, 2014

TO: Barbara Berlin, Director
Zoning Evaluation Division, DPZ

FROM: Pamela G. Nee, Chief PGN
Environment and Development Review Branch, DPZ

SUBJECT: Environmental Assessment: SE 2013-DR-019
Andrew Chapel and Community Wireless Structures

This memorandum, prepared by Mary Ann Welton, includes citations from the Comprehensive Plan that list and explain environmental policies for this property. Plan citations are followed by a discussion of concerns including a description of potential impacts that may result from the proposed development as depicted on the revised special exception plat dated February 10, 2014. Possible solutions to remedy identified issues are suggested. Other solutions may be acceptable, provided that they achieve the desired degree of mitigation and are in harmony with Plan policies.

COMPREHENSIVE PLAN CITATIONS:

The Comprehensive Plan is the basis for the evaluation of this application. The assessment of the proposal for conformity with the environmental recommendations of the Comprehensive Plan is guided by the following citations from the Plan:

Fairfax County Comprehensive Plan, 2013 Edition, Policy Plan, Environment, as amended through February 12, 2013, on pages 7 and 8 states:

"Objective 2: **Prevent and reduce pollution of surface and groundwater resources. Protect and restore the ecological integrity of streams in Fairfax County.**

Policy a. Maintain a best management practices (BMP) program for Fairfax County and ensure that new development and redevelopment complies with the County's best management practice (BMP) requirements. . . .

Policy k. For new development and redevelopment, apply better site design and low impact development (LID) techniques… and pursue commitments to reduce stormwater runoff volumes and peak flows, to increase groundwater recharge, and to increase preservation of undisturbed areas…."

Fairfax County Comprehensive Plan, 2013 Edition, Policy Plan, Environment, as amended through February 12, 2013, on page 10 states:

"Objective 3: Protect the Potomac Estuary and the Chesapeake Bay from the avoidable impacts of land use activities in Fairfax County.

Policy a. Ensure that new development and redevelopment complies with the County's Chesapeake Bay Preservation Ordinance. . . ."

The Fairfax County Comprehensive Plan Policy Plan, 2013 Edition, Environment section as amended through February 12, 2013, on page 12, states:

Fairfax County Comprehensive Plan, 2013 Edition, Policy Plan, Environment, as amended through February 12, 2013, on page 18 states:

"Objective 10: Conserve and restore tree cover on developed and developing sites. Provide tree cover on sites where it is absent prior to development.

Policy a: Protect or restore the maximum amount of tree cover on developed and developing sites consistent with planned land use and good silvicultural practices. . . ."

ENVIRONMENTAL ANALYSIS

This section characterizes the environmental concerns raised by an evaluation of this site and the proposed development. Solutions are suggested to remedy the concerns that have been identified by staff. There may be other acceptable solutions. Particular emphasis is given to opportunities provided by this application to conserve the county's remaining natural amenities. This application by Community Wireless Structures and Andrew Chapel United Methodist Church seeks approval to construct a telecommunications facility on the grounds of the church property. No other changes are proposed at this time.

Stormwater Management /Adequate Outfall: The application property is located on the southwest side of Leesburg Pike within the Difficult Run Watershed. The proposed telecommunications facility includes a 120' tall bell tower within a fenced 35'by 70'compound or 2,450 square feet. In addition to the compound, a proposed access road measuring approximately 48'x7' (336 square feet.) will be constructed off the church parking lot to the facility. The

proposed new impervious surface on this site is approximately 2,786 square feet. The applicant indicates that 3,923 square feet of total area will be disturbed for the construction of the new telecommunications facility as shown on Sheet Z-2 of the special exception plat .

The stormwater narrative states that an existing stormwater management pond located approximately two hundred feet south of the proposed facility will meet all the water quality and quantity control requirements generated by the proposed new impervious surface. However, staff recommends that the applicant consider some type of stormwater management or low impact development techniques to address water quality and quantity control requirements in the event additional measures may be required. SWM/BMP facilities and outfall adequacy are subject to review and approval by the Department of Public Works and Environmental Services (DPWES).

On May 24, 2011, the Virginia Soil and Water Conservation Board adopted Final Stormwater Regulations, which became effective September 13, 2011. The regulations require all local governments in Virginia to adopt and enforce new stormwater management requirements. In support of this legislation, the Fairfax County Board of Supervisors adopted the Stormwater Management Ordinance as an amendment to the Code of Fairfax County on January 28, 2014. Staff from the DPWES will administer the stormwater management ordinance, effective July 1, 2014. The applicant will be required to comply with the new ordinance for this development, if the applicant has not, prior to July 1, 2014, obtained VSMP permit coverage under the Virginia Stormwater Management Program General Permit for Discharges of Stormwater from Construction Activities. This proposed development will not be grandfathered from the new ordinance as a result of approval of this zoning application. The applicant should, therefore, design the proposed stormwater management system consistent with new stormwater management requirements. A link to the recently adopted ordinance is below.
http://www.fairfaxcounty.gov/dpwes/stormwaterordinance/chapter_124.pdf

Tree Preservation: The original proposal would have resulted in tree loss. The current revised configuration seeks to minimize impacts to the existing trees. Staff commends the applicant for revising the plan to protect the existing trees and the respective root systems and further encourages that care be taken to avoid negative impacts to trees during the construction of the facility.

COUNTYWIDE TRAILS MAP:

The Countywide Trails Plan Map depicts a major paved trail defined as asphalt or concrete 8 feet or more in width on the southwest side of Leesburg Pike immediately adjacent to the subject property.

PGN/MAW

County of Fairfax, Virginia

MEMORANDUM

DATE: April 16, 2014

TO: Carmen J. Bishop, Staff Coordinator
Zoning Evaluation Division
Department of Planning and Zoning

FROM: Aileen M. Santiago, P.E., Senior Engineer III A. Stgo
North Branch
Site Development and Inspections Division (SDID)
Department of Public Works and Environmental Services

SUBJECT: Special Exception Application # SE 2013-DR-019; CWS VII, LLC

We have reviewed the subject application and offer the following stormwater management comments.

1. Chesapeake Bay Preservation Ordinance (CBPO)
   There is no Resource Protection Area (RPA) on this site. Water quality control is required for this redevelopment (PFM 6-0401.2B). Applicant intends to satisfy water quality control requirements with the use of an existing on-site SWM/BMP pond. When construction plan (minor site plan) is submitted, the applicant needs to demonstrate with computations that required water quality control requirement for this site is satisfied with existing SWM/BMP pond.

2. Floodplain
   There are no regulated floodplains on the property.

3. Stormwater Detention
   Stormwater detention is required, if not waived (PFM 6-0301.3). Applicant indicates that existing detention requirements are met with existing on-site SWM/BMP pond.

4. Site Outfall
   An outfall narrative has been provided. The PFM 06-0203 adequate outfall requirements of the extent of review and analysis shall be addressed during final site plan submission.

Department of Public Works and Environmental Services
Land Development Services, Site Development and Inspection Division
12055 Government Center Parkway, Suite 535
Fairfax, Virginia 22035-5503
Phone 703-324-1720 • TTY 711 • FAX 703-324-8359

Additional Comment

The future Site Plan(s) or Minor Site Plan(s) for this application may be subject to the revised PFM and Stormwater Management Ordinance as approved by the Board of Supervisors (BOS) on January 28, 2014 and effective on July 1, 2014.

Please contact me at 703-324-1720 if you require additional information.

AS/

cc: Don Demetrius, Chief, Watershed Projects Evaluation Branch, SPD, DPWES
Shahab Baig, Chief, North Branch, SDID, DPWES
Greg McLaughlin, Senior Engineer III, North Branch, SDID, DPWES
Zoning Application File

County of Fairfax, Virginia

MEMORANDUM

DATE: March 31, 2014

TO: Carmen Bishop, Staff Coordinator
Zoning Evaluation Division, DPZ

FROM: Craig Herwig, Urban Forester III
Forest Conservation Branch, DPWES

SUBJECT: Andrew Chapel United Methodist Church; SE 2013-DR-019

This review is based on the Special Exception plat stamped as "Received, Department of Planning and Zoning, March 14, 2014."

General Comment: Comments on the previously submitted SE Application and plat were provided to you in my memo dated February 25, 2014. The following comments and recommendations are based on additional information provided regarding the landscape and screening in this most recent Special Permit plat.

1. **Comment:** The Applicant has provided a landscape screening plan for the compound. Three Southern magnolia trees and six spicebush understory trees are proposed to be planted within the dripline of the existing trees located adjacent to the parking lot.

   Recommendation: The Applicant should consider adjusting the location of the three Southern magnolia trees outside of the dripline of the existing trees. The spicebush should be relocated closer to the edge of the dripline of the existing trees.

2. **Comment:** The Applicant has provided an Existing Landscaping Enhancement Plan that proposes planting 10 white pine trees along the eastern and western property boundaries. UFMD has no objection to planting additional trees on this site; however white pines trees are not recommended as they are overplanted in Fairfax County, and are susceptible to disease and environmental stress.

   Recommendation: The applicant should consider using a mix of Category III and IV evergreen trees such as atlas cedar, Norway spruce and 'Green Giant' arborvitae to supplement the existing landscape trees on the east and west side of the property.

Please feel free to contact me with any questions or concerns.

CSH/

UFMDID #: 187200

cc: DPZ File

Department of Public Works and Environmental Services
Urban Forest Management Division
12055 Government Center Parkway, Suite 518
Fairfax, Virginia 22035-5503
Phone 703-324-1770, TTY: 703-324-1877, Fax: 703-803-7769
www.fairfaxcounty.gov/dpwes

9-006 General Standards

In addition to the specific standards set forth hereinafter with regard to particular special exception uses, all such uses shall satisfy the following general standards:

1. The proposed use at the specified location shall be in harmony with the adopted comprehensive plan.

2. The proposed use shall be in harmony with the general purpose and intent of the applicable zoning district regulations.

3. The proposed use shall be such that it will be harmonious with and will not adversely affect the use or development of neighboring properties in accordance with the applicable zoning district regulations and the adopted comprehensive plan. The location, size and height of buildings, structures, walls and fences, and the nature and extent of screening, buffering and landscaping shall be such that the use will not hinder or discourage the appropriate development and use of adjacent or nearby land and/or buildings or impair the value thereof.

4. The proposed use shall be such that pedestrian and vehicular traffic associated with such use will not be hazardous or conflict with the existing and anticipated traffic in the neighborhood.

5. In addition to the standards which may be set forth in this Article for a particular category or use, the Board shall require landscaping and screening in accordance with the provisions of Article 13.

6. Open space shall be provided in an amount equivalent to that specified for the zoning district in which the proposed use is located.

7. Adequate utility, drainage, parking, loading and other necessary facilities to serve the proposed use shall be provided. Parking and loading requirements shall be in accordance with the provisions of Article 11.

8. Signs shall be regulated by the provisions of Article 12; however, the Board may impose more strict requirements for a given use than those set forth in this Ordinance.

9-104 Standards for all Category 1 Uses

In addition to the general standards set forth in Sect. 006 above, all Category 1 special exception uses shall satisfy the following standards:

1. Category 1 special exception uses shall not have to comply with the lot size requirements or the bulk regulations set forth for the zoning district in which located.

2. No land or building in any district other than the I-5 and I-6 District shall be used for the storage of materials or equipment, or for the repair or servicing of vehicles or equipment, or for the parking of vehicles except those needed by employees connected with the operation of the immediate facility.

3. If the proposed location of a Category 1 use is in an R district, there shall be a finding that there is no alternative site available for such use in a C or I district within 500 feet of the proposed location; except that in the case of electric transformer stations and telecommunication central offices, there shall be a finding that there is no alternative site available in a C or I district within a distance of one (1) mile, unless there is a substantial showing that it is impossible for satisfactory service to be rendered from an available location in such C or I district.

4. Before establishment, all uses, including modifications or alterations to existing uses, shall be subject to the provisions of Article 17, Site Plans.

9-105 Additional Standards for Mobile and Land Based Telecommunication Facilities

1. Except for antennas completely enclosed within a structure, all antennas and their supporting mounts shall be of a material or color that closely matches and blends with the structure on which it is mounted.

2. Except for a flag mounted on a flagpole as permitted under the provisions of Par. 2 of Sect. 12-203, no commercial advertising or signs shall be allowed on any monopole, tower, antenna, antenna support structure, or related equipment cabinet or structure.

3. If any additions, changes or modifications are to be made to monopoles or towers, the Director shall have the authority to require proof, through the submission of engineering and structural data, that the addition, change, or modifications conforms to structural wind load and all other requirements of the Virginia Uniform Statewide Building Code.

4. No signals, lights or illumination shall be permitted on an antenna unless required by the Federal Communications Commission, the Federal Aviation

Administration or the County, provided, however, that on all antenna structures which exceed 100 feet in height, a steady red marker light shall be installed and operated at all times, unless the Zoning Administrator waives the red marker light requirement upon a determination by the Police Department that such marker light is not necessary for flight safety requirements for police and emergency helicopter operations. All such lights shall be shielded to prevent the downward transmission of light.

5. All antennas and related equipment cabinets or structures shall be removed within 120 days after such antennas or related equipment cabinets or structures are no longer in use.

9-304 Standards for all Category 3 Uses

In addition to the general standards set forth in Sect. 006 above, all Category 3 special exception uses shall satisfy the following standards:

1. For public uses, it shall be concluded that the proposed location of the special exception use is necessary for the rendering of efficient governmental services to residents of properties within the general area of the location.

2. Except as may be qualified in the following Sections, all uses shall comply with the lot size requirements of the zoning district in which located.

3. Except as may be qualified in the following Sections, all uses shall comply with the bulk regulations of the zoning district in which located; however, subject to the provisions of Sect. 9-607, the maximum building height for a Category 3 use may be increased.

4. All uses shall comply with the performance standards specified for the zoning district in which located, including the submission of a sports illumination plan as may be required by Part 9 of Article 14.

5. Before establishment, all uses, including modifications or alterations to existing uses, shall be subject to the provisions of Article 17, Site Plans.

9-309 Additional Standards for Child Care Centers and Nursery Schools

1. In addition to complying with the minimum lot size requirements of the zoning district in which located, the minimum lot area shall be of such size that 100 square feet of usable outdoor recreation area shall be provided for each child that may use the space at any one time. Such area shall be delineated on a plat submitted at the time the application is filed.

For the purpose of this provision, usable outdoor recreation area shall be limited to:

A. That area not covered by buildings or required off-street parking spaces.

B. That area outside the limits of the minimum required front yard, unless specifically approved by the Board in commercial and industrial districts only.

C. Only that area which is developable for active outdoor recreation purposes.

D. An area which occupies no more than eighty (80) percent of the combined total areas of the required rear and side yards.

2. All such uses shall be located so as to have direct access to an existing or programmed public street of sufficient right-of-way and cross-section width to accommodate pedestrian and vehicular traffic to and from the use as determined by the Director. To assist in making this determination, each applicant, at the time of application, shall provide an estimate of the maximum expected trip generation, the distribution of these trips by mode and time of day, and the expected service area of the facility. As a general guideline, the size of the use in relation to the appropriate street type should be as follows, subject to whatever modification and conditions the Board deems to be necessary or advisable:

Number of Persons	**Street Type**
1-75	Local
76-660	Collector
660 more	Arterial

3. All such uses shall be located so as to permit the pick-up and delivery of all persons on the site.

4. Such use shall be subject to the regulations of Chapter 30 of The Code or Title63.2, Chapter 17 of the Code of Virginia.

GLOSSARY

This Glossary is provided to assist the public in understanding
the staff evaluation and analysis of development proposals.
It should not be construed as representing legal definitions.
Refer to the Fairfax County Zoning Ordinance, Comprehensive Plan
or Public Facilities Manual for additional information.

ABANDONMENT: Refers to road or street abandonment, an action taken by the Board of Supervisors, usually through the public hearing process, to abolish the public's right-of-passage over a road or road right-of way. Upon abandonment, the right-of-way automatically reverts to the underlying fee owners. If the fee to the owner is unknown, Virginia law presumes that fee to the roadbed rests with the adjacent property owners if there is no evidence to the contrary.

ACCESSORY DWELLING UNIT (OR APARTMENT): A secondary dwelling unit established in conjunction with and clearly subordinate to a single family detached dwelling unit. An accessory dwelling unit may be allowed if a special permit is granted by the Board of Zoning Appeals (BZA). Refer to Sect. 8-918 of the Zoning Ordinance.

AFFORDABLE DWELLING UNIT (ADU) DEVELOPMENT: Residential development to assist in the provision of affordable housing for persons of low and moderate income in accordance with the affordable dwelling unit program and in accordance with Zoning Ordinance regulations. Residential development which provides affordable dwelling units may result in a density bonus (see below) permitting the construction of additional housing units. See Part 8 of Article 2 of the Zoning Ordinance.

AGRICULTURAL AND FORESTAL DISTRICTS: A land use classification created under Chapter 114 or 115 of the Fairfax County Code for the purpose of qualifying landowners who wish to retain their property for agricultural or forestal use for use/value taxation pursuant to Chapter 58 of the Fairfax County Code.

BARRIER: A wall, fence, earthen berm, or plant materials which may be used to provide a physical separation between land uses. Refer to Article 13 of the Zoning Ordinance for specific barrier requirements.

BEST MANAGEMENT PRACTICES (BMPs): Stormwater management techniques or land use practices that are determined to be the most effective, practicable means of preventing and/or reducing the amount of pollution generated by nonpoint sources in order to improve water quality.

BUFFER: Graduated mix of land uses, building heights or intensities designed to mitigate potential conflicts between different types or intensities of land uses; may also provide for a transition between uses. A landscaped buffer may be an area of open, undeveloped land and may include a combination of fences, walls, berms, open space and/or landscape plantings. A buffer is not necessarily coincident with transitional screening.

CHESAPEAKE BAY PRESERVATION ORDINANCE: Regulations which the State has mandated must be adopted to protect the Chesapeake Bay and its tributaries. These regulations must be incorporated into the comprehensive plans, zoning ordinances and subdivision ordinances of the affected localities. Refer to Chesapeake Bay Preservation Act, Va. Code Section 10.1-2100 et seq and VR 173-02-01, Chesapeake Bay Preservation Area Designation and Management Regulations.

CLUSTER DEVELOPMENT: Residential development in which the lots are clustered on a portion of a site so that significant environmental/historical/cultural resources may be preserved or recreational amenities provided. While smaller lot sizes are permitted in a cluster subdivision to preserve open space, the overall density cannot exceed that permitted by the applicable zoning district. See Sect. 2-421 and Sect. 9-615 of the Zoning Ordinance.

COUNTY 2232 REVIEW PROCESS: A public hearing process pursuant to Sect. 15.2-2232 (Formerly Sect. 15.1-456) of the Virginia Code which is used to determine if a proposed public facility not shown on the adopted Comprehensive Plan is in substantial accord with the plan. Specifically, this process is used to determine if the general or approximate location, character and extent of a proposed facility is in substantial accord with the Plan.

dBA: The momentary magnitude of sound weighted to approximate the sensitivity of the human ear to certain frequencies; the dBA value describes a sound at a given instant, a maximum sound level or a steady state value. See also Ldn.

DENSITY: Number of dwelling units (du) divided by the gross acreage (ac) of a site being developed in residential use; or, the number of dwelling units per acre (du/ac) except in the PRC District when density refers to the number of persons per acre.

DENSITY BONUS: An increase in the density otherwise allowed in a given zoning district which may be granted under specific provisions of the Zoning Ordinance when a developer provides excess open space, recreation facilities, or affordable dwelling units (ADUs), etc.

DEVELOPMENT CONDITIONS: Terms or conditions imposed on a development by the Board of Supervisors (BOS) or the Board of Zoning Appeals (BZA) in connection with approval of a special exception, special permit or variance application or rezoning application in a "P" district. Conditions may be imposed to mitigate adverse impacts associated with a development as well as secure compliance with the Zoning Ordinance and/or conformance with the Comprehensive Plan. For example, development conditions may regulate hours of operation, number of employees, height of buildings, and intensity of development.

DEVELOPMENT PLAN: A graphic representation which depicts the nature and character of the development proposed for a specific land area: information such as topography, location and size of proposed structures, location of streets trails, utilities, and storm drainage are generally included on a development plan. A development plan is s submission requirement for rezoning to the PRC District. A GENERALIZED DEVELOPMENT PLAN (GDP) is a submission requirement for a rezoning application for all conventional zoning districts other than a P District. A development plan submitted in connection with a special exception (SE) or special permit (SP) is generally referred to as an SE or SP plat. A CONCEPTUAL DEVELOPMENT PLAN (CDP) is a submission requirement when filing a rezoning application for a P District other than the PRC District; a CDP characterizes in a general way the planned development of the site. A FINAL DEVELOPMENT PLAN (FDP) is a submission requirement following the approval of a conceptual development plan and rezoning application for a P District other than the PRC District; an FDP further details the planned development of the site. See Article 16 of the Zoning Ordinance.

EASEMENT: A right to or interest in property owned by another for a specific and limited purpose. Examples: access easement, utility easement, construction easement, etc. Easements may be for public or private purposes.

ENVIRONMENTAL QUALITY CORRIDORS (EQCs): An open space system designed to link and preserve natural resource areas, provide passive recreation and protect wildlife habitat. The system includes stream valleys, steep slopes and wetlands. For a complete definition of EQCs, refer to the Environmental section of the Policy Plan for Fairfax County contained in Vol. 1 of the Comprehensive Plan.

ERODIBLE SOILS: Soils that wash away easily, especially under conditions where stormwater runoff is inadequately controlled. Silt and sediment are washed into nearby streams, thereby degrading water quality.

FLOODPLAIN: Those land areas in and adjacent to streams and watercourses subject to periodic flooding; usually associated with environmental quality corridors. The 100 year floodplain drains 70 acres or more of land and has a one percent chance of flood occurrence in any given year.

FLOOR AREA RATIO (FAR): An expression of the amount of development intensity (typically, non-residential uses) on a specific parcel of land. FAR is determined by dividing the total square footage of gross floor area of buildings on a site by the total square footage of the site itself.

FUNCTIONAL CLASSIFICATION: A system for classifying roads in terms of the character of service that individual facilities are providing or are intended to provide, ranging from travel mobility to land access. Roadway system functional classification elements include Freeways or Expressways which are limited access highways, Other Principal (or Major) Arterials, Minor Arterials, Collector Streets, and Local Streets. Principal arterials are designed to accommodate travel; access to adjacent properties is discouraged. Minor arterials are designed to serve both through traffic and local trips. Collector roads and streets link local streets and properties with the arterial network. Local streets provide access to adjacent properties.

GEOTECHNICAL REVIEW: An engineering study of the geology and soils of a site which is submitted to determine the suitability of a site for development and recommends construction techniques designed to overcome development on problem soils, e.g., marine clay soils.

HYDROCARBON RUNOFF: Petroleum products, such as motor oil, gasoline or transmission fluid deposited by motor vehicles which are carried into the local storm sewer system with the stormwater runoff, and ultimately, into receiving streams; a major source of non-point source pollution. An oil-grit separator is a common hydrocarbon runoff reduction method.

IMPERVIOUS SURFACE: Any land area covered by buildings or paved with a hard surface such that water cannot seep through the surface into the ground.

INFILL: Development on vacant or underutilized sites within an area which is already mostly developed in an established development pattern or neighborhood.

INTENSITY: The magnitude of development usually measured in such terms as density, floor area ratio, building height, percentage of impervious surface, traffic generation, etc. Intensity is also based on a comparison of the development proposal against environmental constraints or other conditions which determine the carrying capacity of a specific land area to accommodate development without adverse impacts.

Ldn: Day night average sound level. It is the twenty-four hour average sound level expressed in A-weighted decibels; the measurement assigns a "penalty" to night time noise to account for night time sensitivity. Ldn represents the total noise environment which varies over time and correlates with the effects of noise on the public health, safety and welfare.

LEVEL OF SERVICE (LOS): An estimate of the effectiveness of a roadway to carry traffic, usually under anticipated peak traffic conditions. Level of Service efficiency is generally characterized by the letters A through F, with LOS-A describing free flow traffic conditions and LOS-F describing jammed or grid-lock conditions.

MARINE CLAY SOILS: Soils that occur in widespread areas of the County generally east of Interstate 95. Because of the abundance of shrink-swell clays in these soils, they tend to be highly unstable. Many areas of slope failure are evident on natural slopes. Construction on these soils may initiate or accelerate slope movement or slope failure. The shrink-swell soils can cause movement in structures, even in areas of flat topography, from dry to wet seasons resulting in cracked foundations, etc. Also known as slippage soils.

OPEN SPACE: That portion of a site which generally is not covered by buildings, streets, or parking areas. Open space is intended to provide light and air; open space may be function as a buffer between land uses or for scenic, environmental, or recreational purposes.

OPEN SPACE EASEMENT: An easement usually granted to the Board of Supervisors which preserves a tract of land in open space for some public benefit in perpetuity or for a specified period of time. Open space easements may be accepted by the Board of Supervisors, upon request of the land owner, after evaluation under criteria established by the Board. See Open Space Land Act, Code of Virginia, Sections 10.1-1700, et seq.

P DISTRICT: A "P" district refers to land that is planned and/or developed as a Planned Development Housing (PDH) District, a Planned Development Commercial (PDC) District or a Planned Residential Community (PRC) District. The PDH, PDC and PRC Zoning Districts are established to encourage innovative and creative design for land development; to provide ample and efficient use of open space; to promote a balance in the mix of land uses, housing types, and intensity of development; and to allow maximum flexibility in order to achieve excellence in physical, social and economic planning and development of a site. Refer to Articles 6 and 16 of the Zoning Ordinance.

PROFFER: A written condition, which, when offered voluntarily by a property owner and accepted by the Board of Supervisors in a rezoning action, becomes a legally binding condition which is in addition to the zoning district regulations applicable to a specific property. Proffers are submitted and signed by an owner prior to the Board of Supervisors public hearing on a rezoning application and run with the land. Once accepted by the Board, proffers may be modified only by a proffered condition amendment (PCA) application or other zoning action of the Board and the hearing process required for a rezoning application applies. See Sect. 15.2-2303 (formerly 15.1-491) of the Code of Virginia.

PUBLIC FACILITIES MANUAL (PFM): A technical text approved by the Board of Supervisors containing guidelines and standards which govern the design and construction of site improvements incorporating applicable Federal, State and County Codes, specific standards of the Virginia Department of Transportation and the County's Department of Public Works and Environmental Services.

RESOURCE MANAGEMENT AREA (RMA): That component of the Chesapeake Bay Preservation Area comprised of lands that, if improperly used or developed, have a potential for causing significant water quality degradation or for diminishing the functional value of the Resource Protection Area. See Fairfax County Code, Ch. 118, Chesapeake Bay Preservation Ordinance.

RESOURCE PROTECTION AREA (RPA): That component of the Chesapeake Bay Preservation Area comprised of lands at or near the shoreline or water's edge that have an intrinsic water quality value due to the ecological and biological processes they perform or are sensitive to impacts which may result in significant degradation of the quality of state waters. In their natural condition, these lands provide for the removal, reduction or assimilation of sediments from runoff entering the Bay and its tributaries, and minimize the adverse effects of human activities on state waters and aquatic resources. New development is generally discouraged in an RPA. See Fairfax County Code, Ch. 118, Chesapeake Bay Preservation Ordinance.

SITE PLAN: A detailed engineering plan, to scale, depicting the development of a parcel of land and containing all information required by Article 17 of the Zoning Ordinance. Generally, submission of a site plan to DPWES for review and approval is required for all residential, commercial and industrial development except for development of single family detached dwellings. The site plan is required to assure that development complies with the Zoning Ordinance.

SPECIAL EXCEPTION (SE) / SPECIAL PERMIT (SP): Uses, which by their nature, can have an undue impact upon or can be incompatible with other land uses and therefore need a site specific review. After review, such uses may be allowed to locate within given designated zoning districts if appropriate and only under special controls, limitations, and regulations. A special exception is subject to public hearings by the Planning Commission and Board of Supervisors with approval by the Board of Supervisors; a special permit requires a public hearing and approval by the Board of Zoning Appeals. Unlike proffers which are voluntary, the Board of Supervisors or BZA may impose reasonable conditions to assure, for example, compatibility and safety. See Article 8, Special Permits and Article 9, Special Exceptions, of the Zoning Ordinance.

STORMWATER MANAGEMENT: Engineering practices that are incorporated into the design of a development in order to mitigate or abate adverse water quantity and water quality impacts resulting from development. Stormwater management systems are designed to slow down or retain runoff to re-create, as nearly as possible, the pre-development flow conditions.

SUBDIVISION PLAT: The engineering plan for a subdivision of land submitted to DPWES for review and approved pursuant to Chapter 101 of the County Code.

TRANSPORTATION DEMAND MANAGEMENT (TDM): Actions taken to reduce single occupant vehicle automobile trips or actions taken to manage or reduce overall transportation demand in a particular area.

TRANSPORTATION SYSTEM MANAGEMENT (TSM) PROGRAMS: This term is used to describe a full spectrum of actions that may be applied to improve the overall efficiency of the transportation network. TSM programs usually consist of low-cost alternatives to major capital expenditures, and may include parking management measures, ridesharing programs, flexible or staggared work hours, transit promotion or operational improvements to the existing roadway system. TSM includes Transportation Demand Management (TDM) measures as well as H.O.V. use and other strategies associated with the operation of the street and transit systems.

URBAN DESIGN: An aspect of urban or suburban planning that focuses on creating a desirable environment in which to live, work and play. A well-designed urban or suburban environment demonstrates the four generally accepted principles of design: clearly identifiable function for the area; easily understood order; distinctive identity; and visual appeal.

VACATION: Refers to vacation of street or road as an action taken by the Board of Supervisors in order to abolish the public's right-of-passage over a road or road right-of-way dedicated by a plat of subdivision. Upon vacation, title to the road right-of-way transfers by operation of law to the owner(s) of the adjacent properties within the subdivision from whence the road/road right-of-way originated.

VARIANCE: An application to the Board of Zoning Appeals which seeks relief from a specific zoning regulation such as lot width, building height, or minimum yard requirements, among others. A variance may only be granted by the Board of Zoning Appeals through the public hearing process and upon a finding by the BZA that the variance application meets the required Standards for a Variance set forth in Sect. 18-404 of the Zoning Ordinance.

WETLANDS: Land characterized by wetness for a portion of the growing season. Wetlands are generally delineated on the basis of physical characteristics such as soil properties indicative of wetness, the presence of vegetation with an affinity for water, and the presence or evidence of surface wetness or soil saturation. Wetland environments provide water quality improvement benefits and are ecologically valuable. Development activity in wetlands is subject to permitting processes administered by the U.S. Army Corps of Engineers

TIDAL WETLANDS: Vegetated and nonvegetated wetlands as defined in Chapter 116 Wetlands Ordinance of the Fairfax County Code: includes tidal shores and tidally influenced embayments, creeks, and tributaries to the Occoquan and Potomac Rivers. Development activity in tidal wetlands may require approval from the Fairfax County Wetlands Board.

Abbreviations Commonly Used in Staff Reports

A&F	Agricultural & Forestal District
ADU	Affordable Dwelling Unit
ARB	Architectural Review Board
BMP	Best Management Practices
BOS	Board of Supervisors
BZA	Board of Zoning Appeals
COG	Council of Governments
CBC	Community Business Center
CDP	Conceptual Development Plan
CRD	Commercial Revitalization District
DOT	Department of Transportation
DP	Development Plan
DPWES	Department of Public Works and Environmental Services
DPZ	Department of Planning and Zoning
DU/AC	Dwelling Units Per Acre
EQC	Environmental Quality Corridor
FAR	Floor Area Ratio
FDP	Final Development Plan
GDP	Generalized Development Plan
GFA	Gross Floor Area
HC	Highway Corridor Overlay District
HCD	Housing and Community Development
LOS	Level of Service
Non-RUP	Non-Residential Use Permit
OSDS	Office of Site Development Services, DPWES
PCA	Proffered Condition Amendment
PD	Planning Division
PDC	Planned Development Commercial
PDH	Planned Development Housing
PFM	Public Facilities Manual
PRC	Planned Residential Community
RC	Residential-Conservation
RE	Residential Estate
RMA	Resource Management Area
RPA	Resource Protection Area
RUP	Residential Use Permit
RZ	Rezoning
SE	Special Exception
SEA	Special Exception Amendment
SP	Special Permit
TDM	Transportation Demand Management
TMA	Transportation Management Association
TSA	Transit Station Area
TSM	Transportation System Management
UP & DD	Utilities Planning and Design Division, DPWES
VC	Variance
VDOT	Virginia Dept. of Transportation
VPD	Vehicles Per Day
VPH	Vehicles per Hour
WMATA	Washington Metropolitan Area Transit Authority
WS	Water Supply Protection Overlay District
ZAD	Zoning Administration Division, DPZ
ZED	Zoning Evaluation Division, DPZ
ZPRB	Zoning Permit Review Branch