

**AGENDA**  
**FLUVANNA COUNTY PLANNING COMMISSION**  
**Regular Meeting**  
**Circuit Court Room**  
**Fluvanna Courts Building**  
**November 28, 2012 at 7:00pm**

---

**1-CALL TO ORDER, PLEDGE OF ALLEGIANCE**

**2-DIRECTOR'S REPORT**

**Ms. Allyson Finchum, Planning Director** **M**

---

**3-PUBLIC COMMENTS #1 (3 minutes each)**

**4-APPROVAL OF MINUTES:**

**October 24, 2012** **Mc**

---

**5- PUBLIC HEARINGS:**

**SUP 12:01 – Clear Signal Towers, LLC (Kidds Store)** **N**

A request for a Special Use Permit (SUP) to allow for a 195-foot wireless communications tower with respect to 331.29 acres of Tax Map 39, Section A, Parcel 34. The property is zoned A-1 (Agricultural, General) and is located on the south side of West River Road (State Route 6) near its intersection with Rolling Road South (Route 620). The property is located in the Fork Union Election District and is within the Rural Preservation Planning Area. The property is part of the Kidds Store Agricultural and Forestal District (AFD).

**6-PRESENTATIONS (normally not to exceed 10-minute limitation)**

**Rivanna Snapshot and the Rivanna Watershed Action Plan** **O**

---

**7-SITE DEVELOPMENT PLANS:**

**8-SUBDIVISIONS:**

**9-UNFINISHED BUSINESS:**

**Capital Improvements Plan FY2014-2018** **P**

---

**10-NEW BUSINESS:**

**Cash Proffers** **Q**

**Fluvanna County Plant List** **R**

---

**11-PUBLIC COMMENT #2 (3 minutes each)**

**12-ADJOURN**

\*\*\*\*\*

**Pledge of Allegiance**

I pledge allegiance to the flag  
of the United States of America  
and to the Republic for which it stands,  
one nation, under God, indivisible,  
with liberty and justice for all.

\*\*\*\*\*

**ORDER**

1. It shall be the duty of the Chairman to maintain order and decorum at meetings. The Chairman shall speak to points of order in preference to all other members.
2. In maintaining decorum and propriety of conduct, the Chairman shall not be challenged and no debate shall be allowed until after the Chairman declares that order has been restored. In the event the Commission wishes to debate the matter of the disorder or the bringing of order; the regular business may be suspended by vote of the Commission to discuss the matter.
3. No member or citizen shall be allowed to use abusive language, excessive noise, or in any way incite persons to use such tactics. The Chairman and/or the County Planner shall be the judge of such breaches, however, the Commission may vote to overrule both.
4. When a person engages in such breaches, the Chairman shall order the person's removal from the building, or may order the person to stand silent, or may, if necessary, order the person removed from the County property.

\*\*\*\*\*

***FLUVANNA COUNTY PLANNING COMMISSION  
PUBLIC HEARING RULES OF PROCEDURE***

1. Purpose:  
The purpose of a public hearing is to receive testimony from the public on certain resolutions, ordinances or amendments prior to taking action. A hearing is not a dialog or debate. Its express purpose is to receive additional facts, comments and opinion on subject items.
2. Speakers:  
Speakers should approach the lectern so they may be visible and audible to the Commission.  
Each speaker should clearly state his/her name and address.  
All Comments should be directed to Commission.  
Each speaker is limited to three minutes and time may not be donated from other audience members.  
All questions should be directed to the Chairman. Members of the Commission are not expected to respond to questions, and response to questions shall be made at the Chairman's discretion. Speakers are encouraged to contact staff regarding unresolved concerns or to receive additional information.  
Speakers with questions are encouraged to contact County staff prior to the public hearing.  
Speakers should be brief and avoid repetition of previously presented comments.  
County residents and taxpayers may be given priority in speaking order.
3. Action:  
At the conclusion of the public hearing on each item, the Chairman will close the public hearing. The Commission will proceed with its deliberations and will act on or formally postpone action on such item prior to proceeding to other agenda items. Further public comment after the public hearing has been closed generally will not be permitted.



---

## COUNTY OF FLUVANNA

---

*"Responsive & Responsible Government"*

P.O. Box 540 Palmyra, VA 22963 (434) 591-1910 FAX (434) 591-1911 [www.co.fluvanna.va.us](http://www.co.fluvanna.va.us)

To: Fluvanna County Planning Commission  
From: Allyson Finchum, Director of Planning  
Date: November 28, 2012  
Re: Planning Director's Report

1. Board of Supervisors Actions:

November 7, 2012:

*None.*

November 20, 2012:

**U.S. Cellular – Tower and Ground Space Lease**

**Approved** (5-0) a Tower & Ground Space Lease Agreement between the Board of Supervisors of Fluvanna County, Virginia and USCOC of Virginia RSA #3, Inc. for the lease of certain Tower Space, Land Space and related easements, for the location and operation of radio communications equipment, antennas and appurtenances on the existing monopole tower located on Tax Map Parcel 19 A 39B adjacent to the Palmyra fire station. The lease has an initial term of 7 years, 9 months and 11 days, which shall be deemed to have commenced on May 19, 2012, and shall be automatically extended for 2 additional 5 year terms unless terminated by the lessee in accordance with the terms of the lease. The lease contains other terms and provisions as more fully set forth in the lease.

**SUP 12:02 – Clear Signal Towers, LLC (Hardware River)**

**Approved** (4-0, Kenney absent) a request for a Special Use Permit (SUP) to allow for a 175-foot wireless communications tower with respect to 71.46 acres of Tax Map 48, Section A, Parcel 94. The property is zoned A-1 (Agricultural, General) and is located on the north side of West River Road (State Route 6) 1.3 miles west of its intersection with Hardware Road (Route 646). The property is located in the Cunningham Election District and is within the Rural Residential Planning Area.

**SUP 12:03 – Clear Signal Towers, LLC (Weber City)**

**Approved** (4-0, Kenney absent) a request for a Special Use Permit (SUP) to allow for a 195-foot wireless communications tower with respect to 46.6 acres of Tax Map 59, Section A, Parcel 13B. The property is zoned A-1 (Agricultural, General) and is located on the east side of James Madison Highway (Route 15) 1.2 miles south of its intersection with Winnsville Drive (Route 612). The property is located in the Fork Union Election District and is within the Rural Residential Planning Area.

**SUP 12:04 – Clear Signal Towers, LLC (Cohasset)**

**Approved** (4-0, Kenney absent) a request for a Special Use Permit (SUP) to allow for a 195-foot wireless communications tower with respect to 97.7 acres of Tax Map 50, Section A, Parcel 3. The property is zoned A-1 (Agricultural, General) and is located on the west side of Mountain Hill Road (Route 650) approximately 500 feet south of its intersection with West River Road (State Route 6). The property is located in the Fork Union Election District and is within the Rural Preservation Planning Area.

**SUP 12:07 – National Communication Towers, LLC**

**Approved** (4-0, Kenney absent) a request for a Special Use Permit (SUP) to allow for a 195-foot wireless communications tower with respect to 12.7 acres of Tax Map 39, Section A, Parcel 29. The property is zoned A-1 (Agricultural, General) and is located on the north side of West River Road (State Route 6) 1 mile west of its intersection with Rolling Road (Route 620). The property is located in the Fork Union Election District and is within the Rural Preservation Planning Area.

**SUP 12:08 - Jennifer D. Miller**

**Approved** (4-0, Kenney absent) a request for a Special Use Permit (SUP) to allow for a Commercial Kennel with respect to 6.0+/- acres of Tax Map 19, Section A, Parcel 77A. The property is zoned A-1 (Agricultural, General) and is located on the west side of James Madison Highway (State Route 15) 0.65 miles north of its intersection with Salem Church Road (Route 644). The property is located in the Columbia Election District and is within the Rural Residential Planning Area.

**ZTA 12:03 – Fluvanna County**

**Approved** (4-0, Kenney absent) an amendment to the Fluvanna County Zoning Ordinance to create and modify definitions that describe landscaping-related businesses and the activities taking place at such operations, and to add each of the proposed definitions as a use permitted by-right or by special use permit in select districts (Chapter 22, Article 4: *Agricultural, General, District A-1*; Chapter 22, Article 9: *Business, General, District B-1*; Chapter 22, Article 10: *Business, Convenience, District B-C*; Chapter 22, Article 11: *Industrial, Limited, District I-1*; Chapter 22, Article 22: Definitions).

2. Board of Zoning Appeals Actions:

November 2, 2012:

*None.*

3. Technical Review Committee:

November 15, 2012:

*None.*



**FLUVANNA COUNTY BUILDING INSPECTIONS  
MONTHLY BUILDING INSPECTION REPORT  
OCTOBER 2012**

USE	Oct-11	VALUE	YTD 11	VALUE	Oct-12	VALUE	YTD 12	VALUE	Oct/Diff	VALUE	YTD	
											PERMITS	VALUE
New Homes	8	1,858,000	53	9,988,939	5	997,075	63	11,387,689	-3	(860,925)	10	1,398,750
Duplex	0	0	0	0	0	-	0	-	0	-	0	-
Single Family (Attached)	0	0	5	510,000	0	-	4	360,000	0	-	-1	(150,000)
Adds&Alterations	20	391,475	200	4,459,342	25	768,886	218	3,601,737	5	377,411	18	(857,605)
Garages & Carports	3	83,000	10	207,500	0	-	11	225,160	-3	(83,000)	1	17,660
Accessory Buildings	1	70,000	14	227,608	1	15,000	10	98,500	0	(55,000)	-4	(129,108)
Single Wide MH	0	0	2	53,500	0	-	1	500	0	-	-1	(53,000)
Swimming Pools	0	0	3	49,000	0	-	9	346,181	0	-	6	297,181
Recreational Bldgs	0	0	0	-	0	-	0	-	0	-	0	-
Business Bldgs	0	0	2	80,000	0	-	2	819,850	0	-	0	739,850
Industrial Bldgs	0	0	0	-	0	-	5	1,182,509	0	-	5	1,182,509
Other Buildings	0	0	6	15,820,001	0	-	8	620,219	0	-	2	(15,199,782)
<b>TOTALS</b>	<b>32</b>	<b>2,402,475</b>	<b>295</b>	<b>31,395,890</b>	<b>31</b>	<b>1,780,961</b>	<b>331</b>	<b>18,642,345</b>	<b>-1</b>	<b>(621,514)</b>	<b>36</b>	<b>(12,753,545)</b>
<b>FEES</b>	<b>Oct-11</b>	<b>PREV TOT</b>	<b>YTD 11</b>		<b>Oct-12</b>	<b>PREV TOT</b>	<b>YTD 12</b>		<b>DIFFERENCE</b>		<b>DIFFERENCE YTD</b>	
Building Permits	9,425.00	112,917.99	122,342.99		8,374.25	89,006.60	97,380.85		(1,050.75)		(24,962.14)	
Land Disturb Permits	3125.00	23,890.00	27,015.00		3,480.00	31,830.00	35,310.00		355.00		8,295.00	
Zoning Permits/Proffers					1,250.00	14,650.00	15,900.00					
<b>TOTALS</b>	<b>12550.00</b>	<b>136,807.99</b>	<b>149,357.99</b>		<b>13,104.25</b>	<b>135,486.60</b>	<b>148,590.85</b>		<b>-695.75</b>		<b>(16,667.14)</b>	
<b>INSPECTIONS</b>	<b>Oct-11</b>	<b>PREVIOUS</b>	<b>YTD 11</b>		<b>Oct-12</b>	<b>PREVIOUS</b>	<b>YTD 12</b>					
	136	1,369	1,505		173	1,398	1,571		37		66	

*Darius S. Lester*  
Building Official

( ) represents a negative

# *Monthly Approval Report for October 2012*

<i>District</i>	<i>Action</i>	<i>ID#</i>	<i>Description</i>	<i>Tax Map</i>	<i>Parcels</i>	<i>Total Acreage</i>	<i>Number of Lots</i>
<b>Columbia</b>							
	<i>Approved</i>						
		BSP 12-010	Easement	20	(A)11B, (14)2	0	
		BSP 12-012	Physical Survey	10	(A)32, 32A	0	
		SDP 12-013	Minor Site Plan - Child Day Care/Office Storage	5	(A)54	0	
<b>Cunningham</b>							
	<i>Approved</i>						
		BSP 12-014	Boundary Survey	36	(10)4, (A)81	0	
		BSP 12-015	Boundary Survey	17 & 28	(A)73, 74 & (A)61	0	
		SUB 12-010	Minor Subdivision	18	(A)36A, 37	0	2
<b>Fork Union</b>							
	<i>Approved</i>						
		BSP 12-013	Physical Survey	41	(A)56	0	
		SDP 12-008	Major Site Plan	18	(A)68A	26.66	
		SUB 12-019	Boundary Line Adjustment	42	(2)B1A, B2A & (3)D1	197.673	3

Wednesday, November 21, 2012

Page 1 of 1

<i>AFD - Agricultural Forestal District</i>	<i>BSP - Boundary Survey Plat</i>
<i>BZA - Board of Zoning Appeals (Variance)</i>	<i>CCE - Code Compliance Enforcement</i>
<i>CPA - Comprehensive Plan Amendment</i>	<i>SDP - Site Development Plan</i>
<i>SUB - Subdivisions</i>	<i>SUP - Special Use Permits</i>
<i>ZMP - Zoning Map Proposal (Rezoning)</i>	<i>ZTA - Zoning Text Amendment</i>

---

## Code Compliance Enforcement Activity for Director's Report

---

ID#	Tax Map Parcels	Reported Against	Type of Violation	Status	Status Date
<b>Cunningham</b>					
CCE 12-008	27 (A)18A	Rusty Lee Maupin	Auto	Warrant Obtained	9/18/2012
<b>Fork Union</b>					
CCE 12-001	51A (A)22	JWS Enterprises, LLC (James W. Sherrill	Misc.	1st Letter Sent	1/12/2012
<b>Palmyra</b>					
CCE 12-002	3 (A)-31, 32	JWS Enterprises, LLC (James W. Sherrill	Misc.	Awaiting Action	2/29/2012
CCE 10-013	10 (3)-2B	Eric D. Taylor	SUPs	Awaiting Action	5/8/2012

**FLUVANNA COUNTY PLANNING COMMISSION  
REGULAR MEETING MINUTES  
Circuit Courtroom  
Fluvanna County Courts  
October 24, 2012  
7:00 p.m.**

MEMBERS PRESENT: Barry Bibb, Chairman  
Donald Gaines, Vice-Chairman  
Samuel Babbitt  
Patricia Eager  
Carolyn Tinsley  
Joe Chesser, Board of Supervisors Representative

ALSO PRESENT: Frederick Payne, Fluvanna County Attorney  
Allyson Finchum, Planning Director  
Steve Tugwell, Senior Planner  
Andrew Pompei, Planner  
Lauren Ryalls, Senior Program Support Assistant

**CALL TO ORDER**

Chairman Bibb called the Planning Commission meeting of October 24, 2012 to order at 7:00 p.m. in the Circuit Court room of the Fluvanna County Courts Building in Palmyra, Virginia. After the meeting was called to order, the Pledge of Allegiance was recited.

**PLANNING DIRECTOR'S REPORT**

Ms. Allyson Finchum, Planning Director, gave the monthly report to the Planning Commission.

- **Board of Supervisors**
  - **October 3, 2012**
    - *None*
  - **October 17, 2012**
    - *None*
- **Board of Zoning Appeals Actions – *No October Meeting.***
- **Technical Review Committee**
  - **October 11, 2012**
    - **ZTA 12:03 – Fluvanna County**  
Amend the Fluvanna County Zoning Ordinance to create and modify definitions that describe landscaping-related businesses and the activities taking place at such operations, and to add each of the proposed definitions as a use permitted by-right or by special use permit in select districts (Chapter 22, Article 4: *Agricultural, General, District A-1*; Chapter 22, Article 9: *Business, General, District B-1*; Chapter 22, Article 10: *Business, Convenience, District B-C*; Chapter 22, Article 11: *Industrial, Limited, District I-1*; Chapter 22, Article 22: *Definitions*).

**PUBLIC COMMENTS #1**

Chairman Bibb opened the floor for the first section of public comments.

With no one wishing to speak, Chairman Bibb closed the first section of public comments.

**APPROVAL OF MINUTES**

**MOTION:**

Dr. Babbitt moved to **approve** the September 26, 2012 Planning Commission meeting minutes as presented.

Ms. Eager seconded. The motion carried with a vote of 5-0. AYES: Babbitt, Bibb, Eager, Gaines and Tinsley. NAYS: None.

**PUBLIC HEARINGS:**

**SUP 12:07 – National Communication Towers, LLC** – A request for a Special Use Permit (SUP) to allow for a 195-foot wireless communications tower with respect to 12.7 acres of Tax Map 39, Section A, Parcel 29. The property is zoned A-1 (Agricultural, General) and is located on the north side of West River Road (State Route 6) 1 mile west of its intersection with Rolling Road (Route 620). The property is located in the Fork Union Election District and is within the Rural Preservation Planning Area.

Mr. Tugwell, Senior Planner, presented the Special Use Permit request to allow for a 195-foot wireless communications tower with respect to 12.7 acres of Tax Map 39, Section A, Parcel 29 to the Planning Commission.

The Planning Commission questioned staff on whether or not this request falls in accordance with the Wireless Telecommunications Master Plan of Fluvanna County. Mr. Payne stated the ordinance encourages minimizing new towers and encourages the use of public land in accordance with Section 22-7-7 of the County Code.

Mr. Stephen Gallagher, Vice President of Construction at National Communication Towers, LLC, addressed the Planning Commission and gave a presentation on the telecommunications tower request.

Mr. Elliott Harrigan, owner of National Communication Towers, LLC, addressed the Planning Commission regarding the application for a Special Use Permit for a telecommunications tower.

Mr. Babbitt questioned where trees are going to be planted as screening at the tower site. Mr. Gallagher answered by stating that, if the tower became visible in the future, then they would plant screening and this would be part of a condition for approval.

Chairman Bibb opened the public hearing.

- Bill Hughes, Commander of VFW post where previous National Communication Towers, LLC tower was approved, spoke in support of the tower.
- Don Warham, Executive Director of Development at Fork Union Military Academy, spoke in support of the tower.

With no one else wishing to speak, Chairman Bibb closed the public hearing.

Mr. Tugwell, Senior Planner, advised the Planning Commission to review the revised conditions listed in the memo before them, and note the addition of two new conditions regarding construction completion within 18 months and posting a bond for removing any unfinished portions of the tower.

The Planning Commission discussed the removal of condition #16 in the staff memo, regarding posting a bond to remove any unfinished portions of the tower.

**MOTION:**

Mr. Gaines moved to **recommend approval** of SUP 12:07, a special use permit request to allow for a 195 foot monopole telecommunications tower, pursuant to Fluvanna County Code Section 22-27-1 with respect to 12.7 acres of Tax Map 39, Section A, Parcel 29, with the 15 conditions listed below.

1. The tower, including antennae, will not be higher than 199 ft. and will not be lit;

2. The applicant secures all necessary permits required, and submits structural design and certification by a Virginia Registered Professional Engineer that the proposed facility, as built, will comply with EIA/TIA 222-G for the wind zone for Fluvanna County, Virginia;
3. Prior to issuance of building permits, the applicant shall submit satisfactory SHPO and NEPA documentation;
4. The applicant shall secure the necessary permits required by Fluvanna County and VDOT;
5. The applicant shall provide space on the TASF for the County's Public Safety antennas and feed lines at the highest designed elevation. Space for ground level electronic equipment shall also be provided;
6. The facility, when completed, shall be accessible only to authorized personnel;
7. The tower shall be a monopole, and shall be engineered with breakpoint technology;
8. The facility shall install the necessary landscaping buffer as required by County Code Section 22-24-7;
9. The applicant shall install an emergency generator to ensure continuity of telecommunications operations in the event of a disaster or major power outage; and provisions for such generators shall include additional special treatments; for diesel, a fuel retaining area for propane, ignition separation requirements; and that generator testing shall occur only between 9:00 AM and 4:00 PM Monday through Friday; and the same shall be noted on the site development plan;
10. If the structures should no longer be needed, the applicant shall remove them, and restore the grounds to the prior condition in accordance with Section 22-27-5 of the County Code.
11. The support structure is to be sufficient to support antennas of a like design for at least six (6) wireless service providers;
12. The tower shall be constructed substantially as shown in the application;
13. Violation of any condition of this permit shall be grounds for revocation of this permit, and;
14. The Board of Supervisors, or their representative, has the right to inspect the property for compliance with these conditions at any time;
15. This cell tower must be constructed and have received a final inspection within eighteen (18) months.

Dr. Babbitt seconded. The motion carried with a vote of 5-0. AYES: Babbitt, Bibb, Eager, Gaines, and Tinsley. NAYS: None.

**SUP 12:08 – Jennifer D. Miller** – A request for a Special Use Permit (SUP) to allow for a commercial kennel and a retail specialty store with respect to six acres of Tax Map 19, Section A, Parcel 77A. The property is zoned A-1 (Agricultural, General) and is located on the west side of James Madison Highway (State Route 15) 0.65 miles north of its intersection with Salem Church Road (Route 644). The property is located in the Columbia Election District and is within the Rural Residential Planning Area.

Mr. Steve Tugwell, Senior Planner, presented the Special Use Permit request to allow for a commercial kennel and a retail specialty store with respect to Tax Map 19, Section A, Parcel 77A to the Planning Commission.

Ms. Jennifer Miller, applicant, addressed the Planning Commission regarding her request for a commercial kennel and retail specialty store. Ms. Miller addressed some of the concerns by the Planning Commission regarding the kennel waste disposal and the required sight distance from the road.

Chairman Bibb opened the public hearing.

- Mr. S.T. Elliott, neighbor, spoke in opposition of the kennel concerning the noise level, safety of the entrance on Route 15, and water runoff.
- Mr. Steven Dellinger, neighbor, spoke in support of the kennel and also submitted a letter to the Planning Department reflecting his views.

With no one else wishing to speak, Chairman Bibb closed the public hearing.

The Planning Commission discussed the main issues surrounding the kennel and decided to add four additional conditions to the six already listed in the staff report. These additional uses would permit access by either Route 15 or Route 644; limit the number of runs to 20; confine grooming within the runs; and the facility would be as described in the application.

**MOTION:**

Ms. Eager moved to **recommend approval** of SUP 12:08, a special use permit request to allow for a commercial kennel and retail specialty store with respect to six acres of Tax Map 19, Section A, Parcel 77A, with the ten conditions listed below.

1. Prior to development of the site, a site development plan that meets the requirements of the Fluvanna County Zoning Ordinance, must be submitted for review and approval;
2. The site must meet all Virginia Department of Transportation requirements;
3. The site must meet all requirements set forth by the Virginia Department of Health;
4. The property shall be maintained in a neat and orderly manner so that the visual appearance from the road and adjacent properties is acceptable to County officials;
5. The Board of Supervisors, or its representative, reserves the right to inspect the business for compliance with these conditions at any time;
6. Under Section 22-17-4 F (2) of the Fluvanna County Code, the Board of Supervisors has the authority to revoke a Special Use Permit if the property owner has substantially breached the conditions of the Special Use Permit;
7. Access to be allowed from Route 15 or Route 644 or both as permitted by Virginia Department of Transportation;
8. Number of runs to be limited to not more than 20;
9. Dog grooming is an ancillary use and all dogs beings groomed shall be confined within runs;
10. Facility shall be substantially as described in the application.

Dr. Babbitt seconded. The motion carried with a vote of 5-0. AYES: Babbitt, Bibb, Eager, Gaines, and Tinsley. NAYS: None.

**ZTA 12:03 – Fluvanna County** – An amendment to the Fluvanna County Zoning Ordinance to create and modify definitions that describe landscaping-related businesses and the activities taking place at such operations, and to add each of the proposed definitions as a use permitted by-right or by special use permit in select districts (Chapter 22, Article 4: *Agricultural, General, District A-1*; Chapter 22, Article 9: *Business, General, District B-1*; Chapter 22, Article 10: *Business, Convenience, District B-C*; Chapter 22, Article 11: *Industrial, Limited, District I-1*; Chapter 22, Article 22: *Definitions*).

Mr. Andrew Pompei, Planner, presented the Zoning Text Amendment request to the Planning Commission.

Chairman Bibb opened the public hearing.

With no one wishing to speak, Chairman Bibb closed the public hearing.

The Planning Commission discussed the proposed definitions and how a person could potentially have a nursery without it being classified as a commercial greenhouse.

**MOTION:**

Mr. Gaines moved to **recommend approval** of ZTA 12:03, a request to amend the Fluvanna County Zoning Ordinance to create and modify definitions that describe landscaping-related businesses and the activities taking place at such operations, and to add each of the proposed definitions as a use permitted by-right or by special use permit in select districts, as initiated by the Planning Commission by resolution on September 12, 2012.

Dr. Babbitt seconded. The motion carried with a vote of 5-0. AYES: Babbitt, Bibb, Eager, Gaines, and Tinsley. NAYS: None.

**PRESENTATIONS:**

*None*

**SITE DEVELOPMENT PLANS:**

*None*

**SUBDIVISIONS:**

*None*

**UNFINISHED BUSINESSS:**

*None*

**NEW BUSINESS:**

Ms. Allyson Finchum, Planning Director, will be presenting Rural Zoning Policies to the Board of Supervisors on November 7<sup>th</sup> at its regular meeting.

The Planning Commission will be taking a Tour of Traditional Neighborhood Developments in Albemarle County on Saturday, November 10<sup>th</sup> at 8:30 AM.

The Capital Improvements Plan for FY2014-FY2018 will be discussed by the Planning Commission during the next work session, scheduled for November 14<sup>th</sup>.

**PUBLIC COMMENTS #2**

Chairman Bibb opened the floor for the second section of public comments.

With no one wishing to speak, Chairman Bibb closed the second section of public comments.

**ADJOURN**

There being no further business, Chairman Bibb adjourned the Planning Commission meeting of October 24, 2012 at 9:32 p.m.

Minutes recorded by Lauren Ryalls.

---

Barry Bibb, Chairman  
Fluvanna County Planning Commission



---

# COUNTY OF FLUVANNA

---

*"Responsive & Responsible Government"*

P.O. Box 540 Palmyra, VA 22963 (434) 591-1910 FAX (434) 591-1911 [www.co.fluvanna.va.us](http://www.co.fluvanna.va.us)

## STAFF REPORT

**To:** Fluvanna County Planning Commission  
**Case Number:** SUP 12:01  
**Tax Map:** 39(A)34

**From:** Andrew Pompei  
**District:** Fork Union  
**Date:** November 28, 2012

*General Information:* This request is to be heard by the Planning Commission on Wednesday, November 28, 2012 at 7:00 pm in the Circuit Courtroom of the Fluvanna County Courts Building.

*Applicant:* Clear Signal Towers, LLC

*Requested Action:* A request for a Special Use Permit (SUP) to allow for a 195-foot wireless telecommunications tower with respect to 331.29 acres of Tax Map 39, Section A, Parcel 34 (Attachment A).

*Existing Zoning:* A-1, Agricultural, General

*Planning Area:* Rural Preservation

*Zoning Ordinance:* Article 27: *Regulation of Telecommunications Facilities*

*Location:* The affected property is located on the south side of West River Road (State Route 6) near its intersection with Rolling Road South (State Route 620) (Attachment B).

*Existing Land Use:* The property consists of a mix of woodlands and open fields. The proposed tower site is located within managed timberland. The property is currently enrolled within the Kidd's Store Agricultural and Forestal District (AFD).

*Adjacent Land Use:* The surrounding area is largely undeveloped, with scattered residences along existing roadways. A small convenience store (Kidd's Store) and a logging business (Tapscott Brothers Logging) are nearby.

*Zoning History:* AFD 99:13 Creation of Kidd's Store AFD  
SUB 00:33 Lot Consolidation  
39(A)34 combined with 39(A)33, 39(A)35,  
39(A)36, 39(A)37, and 39(A)54

## **Analysis**

The applicant has requested a Special Use Permit (SUP) to allow the construction of a 195-foot monopole-type telecommunications tower on Tax Map 39, Section A, Parcel 34. The tower will be constructed within a 10,000 square foot (100' x 100') compound that will also house the necessary ground equipment. Clear Signal Towers, LLC has a signed lease agreement with AT&T, which allows the carrier to locate on the proposed tower (Attachment C).

When evaluating a request for a Special Use Permit (SUP), two (2) general guidelines are used for evaluation, as set forth in the Fluvanna County Zoning Ordinance (Sec. 22-17-4D).

***First, the proposed use should not tend to change the character and established pattern of the area or community.***

### *Character of Surrounding Area*

The proposed tower is located near the crossroads at Kidd's Store, where State Route 6 (West River Road) and State Route 620 (Rolling Road South) meet. The surrounding area is largely undeveloped and retains its rural character. Scattered homes are located along existing roadways, and West River Meadows (originally known as Rosewood Manor), a rural cluster subdivision, is located immediately to the west. A small convenience store (Kidd's Store) and a logging operation (Tapscott Brothers Logging) are across Route 6 from the subject property.

### *State Route 6: Designated Virginia Byway*

The visual impacts to State Route 6 (West River Road) should be considered, since the road is a designated Virginia Byway. According to the Virginia Department of Transportation (VDOT), roads may be designated as Virginia Byways if they meet the following criteria:

- The route provides important scenic values and experiences;
- There is a diversity of experiences, as in transition from one landscape scene to another;
- The route links together or provides access to scenic, historic, recreational, cultural, natural and archeological elements;
- The route bypasses major roads or provides opportunities to leave high-speed routes for variety and leisure in motoring. Landscape control or management along the route is feasible;
- The route allows for additional features that will enhance the motorist's experience and improve safety; and
- The local government has initiated zoning or other land-use controls, so as to reasonably protect the aesthetic and cultural value of the highway.

Due to local topography and the curvature of State Route 6, a large portion of the proposed tower will be visible from State Route 6 (Attachment D). Since the tower compound is located in a heavily-wooded area approximately 200 feet from the right-of-way, the tower's base and

accompanying structures will not be visible (if the vegetation remains as-is). The tower's visibility may detract from the area's rural character.

#### *Relationship with Wireless Telecommunications Facilities Master Plan*

According to the *Wireless Telecommunications Facilities Master Plan*, there is one existing tower in the area (Attachment E). A 110-foot monopole-type tower is located at Cunningham Elementary School, approximately 0.88 miles from the proposed tower site. The *Wireless Telecommunications Facilities Master Plan* and Sec. 22-27-7 (Siting Hierarchy) of the Fluvanna County Zoning Ordinance both state that colocation on nearby existing towers, or the replacement of nearby existing towers, is preferable to building new, non-concealed facilities. CityScape Consultants has stated that a tower at Cunningham Elementary School would meet the network objectives of AT&T.<sup>1</sup> AT&T has submitted an explanation justifying the chosen location (Attachment F).

On November 20, 2012, the Board of Supervisors approved several towers along State Route 6 in southwestern Fluvanna County. A 195-foot monopole-type tower was approved approximately ½-mile west of the proposed site (SUP 12:07) (Attachment G). CityScape Consultants has not yet reviewed the relationship between the recently-approved site and this current proposal. Approving multiple towers in close proximity to one another would:

- Contradict the *Wireless Telecommunications Facilities Master Plan*, which aims to minimize the number of towers needed to provide adequate coverage; and
- Compromise scenic views from State Route 6 (West River Road), a designated Virginia Byway.

Based on the photosimulations provided by the applicant and submitted with the application of the recently-approved tower (SUP 12:07), both towers would be clearly visible from State Route 6 adjacent to Fluvanna Baptist Church.

The *Wireless Telecommunications Facilities Master Plan* does not designate this site as a proposed emergency service location (Attachment E).

The maps provided by the applicant show that the area surrounding the proposed tower has very limited cellular coverage (Attachment H).

***Second, the proposed use should be compatible with the uses permitted by-right in that zoning district and shall not adversely affect the use/or value of neighboring property.***

#### *Zoning*

The subject property and most of the surrounding parcels are zoned A-1 (Agricultural, General). The A-1 zoning district is intended to accommodate limited residential development, as well as small-scale commercial and industrial uses that are directly related to agriculture, forestry, and

---

<sup>1</sup> See report from CityScape Consultants (Richard L. Edwards) to Fluvanna County Planning Department (Steven Tugwell) dated September 13, 2012.

other traditionally rural activities. Non-concealed freestanding telecommunications antennas require a special use permit within the A-1 zoning district.

Some parcels surrounding the intersection of State Route 6 (West River Road) and State Route 620 (Rolling Road South) are zoned B-1 (Business, General). These properties include a small convenience store built in the late 1940s (Kidd's Store) and a logging operation (Tapscott Brothers Logging).

Sec. 22-27-7 of the Fluvanna County Zoning Ordinance establishes a preferred hierarchy for the siting of towers:

- The use of publicly-owned properties is preferential to the use of privately-owned properties for the installation of telecommunications facilities; and
- The co-location of telecommunications facilities on existing structures, and the visual concealment of such facilities, is preferential to the construction of freestanding, non-concealed antenna support facilities (e.g. monopoles, lattice towers, etc.).

In its report (September 13, 2012), CityScape Consultants stated that a tower at nearby Cunningham Elementary School would meet the network objectives of AT&T. The applicant provided a letter from AT&T justifying the company's decision to locate on private property instead of nearby public property (Attachment F).

If this request were approved, the applicant will be required to submit a site development plan for review, in accordance with Article 23: *Site Development Plans* of the Fluvanna County Zoning Ordinance (Attachment A).

#### *Relationship to Neighboring Properties*

A high-voltage power line, situated within a 150-foot easement, lies between the proposed tower and an existing residence located on Tax Map 39(A)33A. Additional screening may be required along the western boundary of the lease area, to reduce the visual impact of the tower compound on the adjacent parcel and residence. Existing vegetation effectively screens the tower compound from State Route 6.

The proposed tower is at least 500 feet from the nearest single-family residence, in accordance with Sec. 22-27-9.8B(2) of the Fluvanna County Zoning Ordinance (Attachment A: Sheet C-1).

#### *Agricultural and Forestal Districts*

The subject property has been part of the Kidds Store Agricultural and Forestal District (AFD) since its creation on December 15, 1999. Per state code (§15.2-4312), properties enrolled in the AFD program automatically qualify for agricultural or forestal use-value assessment. In exchange for this tax relief, landowners agree not to develop their properties to a more intensive use, without the prior approval of the Board of Supervisors (Fluvanna County Code: Sec. 3.1-8B). The construction of a wireless telecommunications tower would be considered a more intensive use, requiring the approval of the Board of Supervisors.

## **Comprehensive Plan**

According to the Comprehensive Plan, the subject property is designated as “Rural Preservation.” Rural preservation areas are intended to be the least developed areas of the County. These areas should be used primarily for agriculture and forestry, with very limited residential development (less than one unit per five acres). Viewsheds from roads and existing developments should be preserved (page 61).

The *Infrastructure* chapter of the Comprehensive Plan includes several recommendations regarding the siting and design of telecommunications facilities (page 110):

- Minimize the impacts of wireless communications facilities on surrounding areas;
- Encourage the location and co-location of wireless communication equipment on existing structures;
- Accommodate the growing need and demand for wireless communication services;
- Encourage coordination between communication providers;
- Establish consistent and balanced legal language governing wireless communications facilities that take into consideration the Comprehensive Plan and communications master plan; and
- Maintain compliance with applicable laws, including but not limited to the 1996 Telecommunications Act.

The *Community Design* chapter of the Comprehensive Plan also addresses the design and siting of telecommunications facilities. The plan encourages developers to use innovative design techniques to minimize the visual impact of new facilities. The co-location of wireless communication equipment on existing structures is encouraged, to improve the local communications network with minimal impact to the surrounding landscape (page 73).

## **Neighborhood Meeting**

The neighborhood meeting was held on May 9, 2012. There were no attendees present in regard to this request.

## **Technical Review Committee**

The Technical Review Committee (TRC) meeting was held on May 10, 2012. The following comments were made:

- Virginia Department of Transportation (VDOT):  
The proposed entrance on State Route 6 must conform to the design standards for a low-volume commercial entrance.
- Planning Commission:  
Members were interested in how the proposed site relates to the *Wireless Telecommunications Facilities Master Plan*, which will be described by CityScape

Consultants. They also asked the applicant to provide a vicinity map that better shows the site's relationship to the surrounding area.

- Fire Department:

The Fire Department was interested in how the proposed site relates to the *Wireless Telecommunications Facilities Master Plan*. The Fire Department would like to have the ability to locate equipment on proposed tower, if the need arises.

- Health Department:

The proposed tower will not impact existing buildings, water or sewage systems.

- Central Virginia Electric Cooperative (CVEC):

No power is currently located on-site. An underground line would have to be installed.

Some of the TRC comments are attached to this staff report (Attachment I).

### **Consultant's Recommendation**

CityScape Consultants has reviewed this request (Attachment J). The consultants stated that "there is a need for a new facility in the proposed general area." Based on propagation maps produced by CityScape Consultants, a tower at Cunningham Elementary School, a publicly-owned property, "would meet the network objectives of AT&T." Based on that, CityScape Consultants recommended "the Applicant produce cause as to why this proposed new facility with an antenna elevation of one hundred ninety-five (195) feet would not provide acceptable network development from the Cunningham School location in Fluvanna County."

CityScape Consultants has not yet reviewed the relationship between this proposal and a tower approved on November 20, 2012 that will be located ½-mile to the west.

### **Conclusion**

Per CityScape Consultant's preliminary review, this request **does not** adhere to the guidelines set forth within the *Wireless Telecommunications Facilities Master Plan* or within Article 27 (*Regulation of Telecommunications Facilities*) of the Fluvanna County Zoning Ordinance. The same general area served by the proposed tower could also be served by a tower located on nearby County-owned property (Cunningham Elementary School), which already contains a 110-foot monopole. The proposed location will have significant visual impacts on State Route 6 (West River Road), a designated Virginia Byway, and is approximately ½-mile from a recently-approved tower. A non-concealed monopole is one of the lowest design options on the established siting hierarchy (Sec. 22-27-7).

If approved, staff recommends that the following conditions be imposed:

1. The tower, including antennae, will not be higher than 199 feet and will not be lit;
2. The tower shall be constructed substantially as shown in the application;
3. The applicant confirms that the new support structure will be capable of supporting a total of six (6) antenna arrays, in compliance with EIA/TIA 222-G;

4. The proposed new tower shall accommodate no less than six (6) different wireless service providers' antenna arrays, all of the same general design, in accordance with Sec. 22-27-9.8(10) of the Fluvanna County Code;
5. The applicant shall expand the ground compound to accommodate up to six (6) different wireless service providers' ground-mounted electronic equipment;
6. The tower shall be available for co-location by other telecommunications companies, with Fluvanna County having the right of first refusal prior to the approval of each proposed co-location;
7. The applicant shall obtain all necessary County permits prior to any work on the site;
8. All access ports shall be sufficiently sealed to prevent infiltration or habitation by any type of wildlife;
9. The facility shall be protected from access from unauthorized personnel both during construction and during all periods of operation;
10. All feed lines shall be installed within the shell of the monopole and no lines will be exposed except at the antennas;
11. If the structures should no longer be needed, the applicant shall remove them, and restore the grounds to the prior condition in accordance with Sec. 22-27-5 of the Fluvanna County Code;
12. Violation of any condition of this permit shall be grounds for revocation of this permit;
13. The Board of Supervisors, or its representatives; has the right to inspect the property for compliance with these conditions at any time; and
14. The facility shall be constructed and receive final inspection from the Fluvanna County Department of Building Inspections within eighteen (18) months of the date of approval of the special use permit.

### **Suggested Motion**

I move that the Planning Commission recommend **approval/denial** of SUP 12:01, a special use permit request to allow the construction of a 195-foot monopole telecommunications tower with respect to 331.29 acres of Tax Map 39, Section A, Parcel 34 (if approved), subject to the conditions listed in the staff report.

## **Attachments**

- A. Application & Sketch Plan
- B. Aerial Vicinity Map
- C. Signature Page of Lease Agreement (Clear Signal Towers, LLC & New Cingular Wireless PCS, LLC)
- D. Applicant's Photosimulations
- E. Map of Existing Sites, Proposed Sites, and Projected Fill-In Locations  
(Figure 40: *Wireless Telecommunications Facilities Master Plan*)
- F. Siting Hierarchy Justification from AT&T
- G. Map of Recently-Proposed and Approved Telecommunications Facilities along State Route 6 West
- H. Applicant's Propagation Maps
- I. Technical Review Committee (TRC) Comments
- J. Report from CityScape Consultants

### Copy

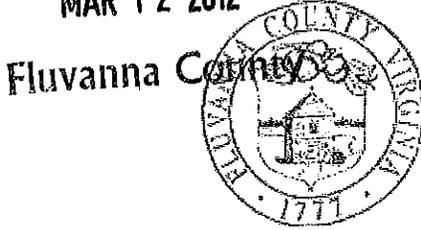
Owner: William & Ann Davis, P.O. Box 692, Scottsville, VA 24590  
Applicant: Clear Signal Towers, LLC, Dorothy Brunetti, 1801 Libbie Avenue, Suite 201, Richmond, VA 23226  
Consultant: CityScape Consultants, 7050 W. Palmetto Park Road #15-652, Boca Raton, FL 33433

Received

MAR 12 2012

Kidd's Store  
VA 9031 / CV 445

Attachment A



COMMONWEALTH OF VIRGINIA  
COUNTY OF FLUVANNA

Application for Special Use Permit (SUP)

Owner of Record: William & Ann Davis  
E911 Address: 6401 W. River Rd., Scottsville, VA  
Phone: \_\_\_\_\_ Fax: N/A  
Email: N/A

Applicant of Record: Clear Signal Towers, LLC  
E911 Address: 1801 Libbie Ave, Suite 201, Richmond  
Phone: 804-337-4470 Fax: 804-648-4809  
Email: dorothy@vacapital.com

Representative: Dorothy Brunetti  
E911 Address: 1801 Libbie Ave, Suite 201, Richmond  
Phone: 804-337-4470 Fax: 804-648-4809  
Email: dorothy@vacapital.com

Note: If applicant is anyone other than the owner of record, written authorization by the owner designating the applicant as the authorized agent for all matters concerning the request shall be filed with this application.

Tax Map and Parcel(s): 39-A-34  
Acreage: 331 Zoning: AFD

Is property in Agricultural Forestal District?  No  Yes  
If Yes, what district: Cunningham 04  
Deed Book Reference: 512 P. 988  
Deed Restrictions?  No  Yes (Attach copy)

Request for a SUP in order to: Construct a tower

Proposed use of Property: Wireless Telecom Facility

\*Two copies of a plan must be submitted, showing size and location of the lot, dimensions and location of the proposed building, structure or proposed use, and the dimensions and location of the existing structures on the lot.

By signing this application, the undersigned owner/applicant authorizes entry onto the property by County Employees, the Planning Commission, and the board of Supervisors during the normal discharge of their duties in regard to this request and acknowledges that county employees will make regular inspections of the site.

Date: 3/1/12 Signature of Owner/Applicant: [Signature]

Subscribed and sworn to before me this 1st day of MARCH, 2012 Register # 7223598

My commission expires: October 31, 2013 Notary Public: [Signature]

Certification: Date: \_\_\_\_\_ Zoning Administrator: Darren Coffey

All plats must be folded prior to submission to the Planning Department for review. Rolled plats will not be accepted.

OFFICE USE ONLY	
Date Received: <u>3-2-12</u>	Pre-Application Meeting: _____ PH Sign Deposit Received: _____ Application #: SUP <u>12-001</u>
\$800.00 fee plus mailing costs paid: _____	Mailing Costs: \$20.00 Adjacent Property Owner(APO) after 1st 15, Certified Mail
Amendment of Condition: \$400.00 fee plus mailing costs paid: _____	
Telecommunications Tower \$1,500.00 fee plus mailing costs paid: _____	\$5,500 w/Consultant Review paid: <u>CK# 2335</u>
Election District: <u>Fork Union</u>	Planning Area: <u>Rural Preservation</u>
Public Hearings	
Planning Commission	Board of Supervisors
Advertisement Dates: <u>June 14<sup>th</sup> + 21<sup>st</sup></u>	Advertisement Dates: <u>July 5<sup>th</sup> + 12<sup>th</sup></u>
APO Notification: <u>June 13<sup>th</sup></u>	APO Notification: <u>July 4<sup>th</sup></u>
Date of Hearing: <u>June 27<sup>th</sup></u>	Date of Hearing: <u>July 18<sup>th</sup></u>
Decision: _____	Decision: _____

Fluvanna County Department of Planning & Community Development \* Box 540 \* Palmyra, VA 22963 \* (434)591-1910 \* Fax (434)591-1911

This form is available on the Fluvanna County website: www.fluvannacounty.org

Received

MAR 12 2012

Fluvanna County Virginia

VA9031/CV445

Kidd's Store

Fluvanna County Communications Facility Application Checklist

Date Submitted: 11/6/11

APPLICANT'S NAME: Clear Signal Towers, LLC
Phone: 804-337-6470 FAX: 804-648-4809 E-mail: dorothy@vacapital.com
PROPERTY OWNER:
APPLICANT'S CONTACT: Dorothy Brunetti
Address: 1801 Libbie Ave, Suite 201, Richmond VA 23226
Phone: 804-337-6470 FAX: 804-648-4809 E-mail: dorothy@vacapital.com
Lessor/Licensor Contact Information:
Name: William & Anne C. Davis
Address: 6401 W. River Road, Scottsville VA 24590
Phone: FAX: E-mail:

Commercial Wireless Provider AT&T

New Structure: Yes [x] No [ ] Co-location: Yes [ ] No [x] Water Tower: Yes [ ] No [x]
Replace Existing Structure: Yes [ ] No [x] Replacement (upgrade) of existing antennas Yes [ ] No [x]
Stealth Attached Facility: Yes [ ] No [x] New Stealth Antenna Support Structure: Yes [ ] No [x]

FACILITY INFORMATION:

Site Address: Route 6, Palmyra, VA 22963
Latitude (NAD83): 37-47-55.3 Longitude (NAD83): 78-22-2.01
Ground Elevation (AMSL) (ft): 499' Total Height of Tower: (AGL) (ft) 195'
RAD Center (ft): 194'
TAX Parcel Identification Number: 39-A-34
Present Zoning of Property: AFD
Land Use and Description of Property: Agriculture
FCC Antenna Structure Registration Number (ASR) (if applicable): N/A

The following must be enclosed with this application:

- 1. A map (electronic preferable) of the same search ring submitted and used by the applicant's site locator;
2. A map (electronic preferable) indicating applicant's existing RF signal propagation;
3. A map (electronic preferable) indicating applicant's proposed new RF signal propagation;
4. A statement (electronic preferable) from a qualified individual that the applicant will comply with all FCC rules regarding human exposure to RF energy, along with the individual's qualifications;
5. A statement (electronic preferable) from the applicant that the applicant will comply with all applicable FCC rules regarding radio-frequency interference;
6. A statement (electronic preferable) that the submitted search ring is the same as utilized in the selection of the site;
7. Complete plans of the proposed facility to include a structural certification by a Registered Professional Engineer that the facility complies with applicable Federal, State and Buckingham County building codes.

Please Note: Supplemental information may be requested for purposes of clarity or confirmation.



# KIDD'S STORE VA9031

OFF STATE ROUTE 6  
PALMYRA, VA 22963

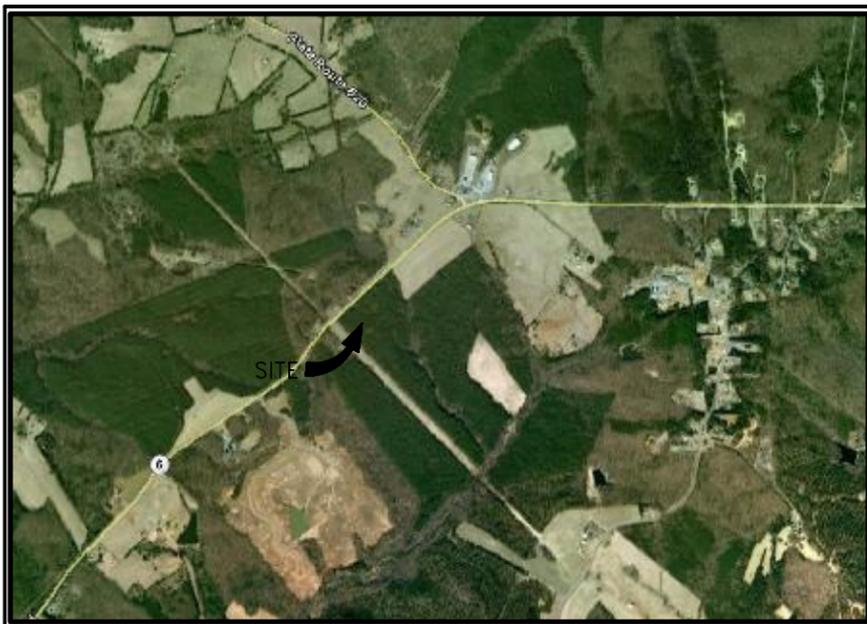
PROJECT DESCRIPTION:

## INSTALLATION AND OPERATION OF ANTENNAS AND ASSOCIATED EQUIPMENT



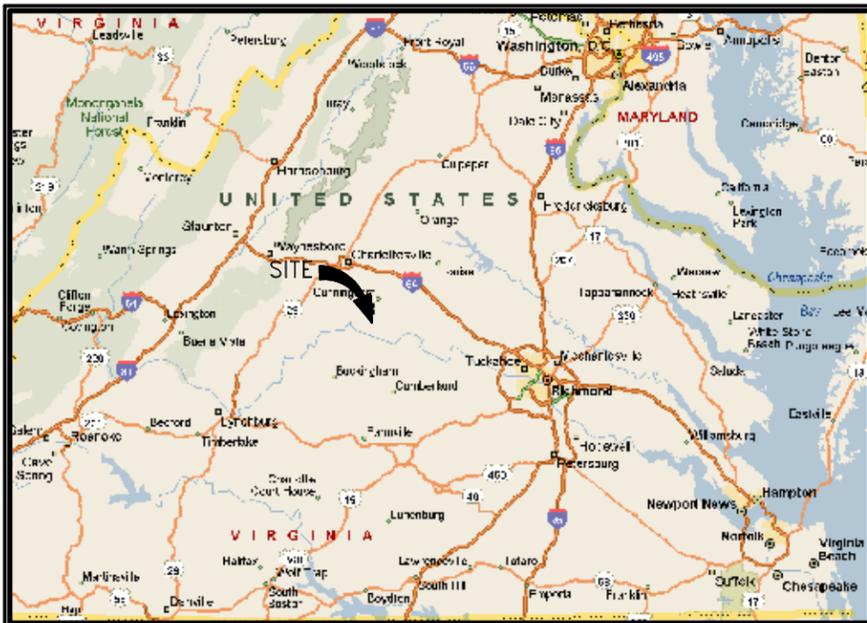
**DIRECTIONS TO SITE:**

FROM RICHMOND:  
TAKE I-64 W TO EXIT 167 AND TURN RIGHT ONTO US-250. TURN LEFT ONTO FAIRGROUND RD AND THEN LEFT ONTO US-522. TURN RIGHT ONTO SR-6 AND FOLLOW FOR APPROXIMATELY 25 MILES. TURN LEFT ONTO ACCESS ROAD AT POWER LINES AND FOLLOW TO SITE.



LOCAL MAP

NOT TO SCALE



VICINITY MAP

NOT TO SCALE

APPROVAL					
SITE ACQUISITION:	SIGNATURE	DATE	AT&T REGULATORY	SIGNATURE	DATE
ZONING:	SIGNATURE	DATE	AT&T RF:	SIGNATURE	DATE
CONSTRUCTION:	SIGNATURE	DATE	AT&T CONSTRUCTION:	SIGNATURE	DATE

REV. NO.	DESCRIPTION	BY	DATE	REV. NO.	DESCRIPTION	BY	DATE
1	ZONING DRAWINGS	OWW	07/25/11				
2	REVISED ZONING DRAWINGS	OWW	11/19/12				

CONSULTING TEAM	
<b>ARCHITECTURE AND ENGINEERING:</b> WARREN WILLIAMS & ASSOCIATES 736 CARNEROS CIRCLE HIGH POINT, NC 27265 PROJECT MANAGER: TELEPHONE:	WARREN WILLIAMS, P.E. (757) 450-2288
<b>SURVEY:</b> HAYDEN FRYE AND ASSOCIATES 333 KELLAM ROAD, SUITE 200 VIRGINIA BEACH, VA 23462 CONTACT: TELEPHONE: FAX:	HAYDEN FRYE, LS (757) 491-7228 (757) 491-7229
<b>SOIL ENGINEER:</b> GEOENVIRONMENTAL RESOURCES, INC. (GER) CONTACT: TELEPHONE:	CHARLES CRAWLEY, PE (757) 463-3200
<b>STRUCTURAL ENGINEERING:</b> WARREN WILLIAMS & ASSOCIATES 736 CARNEROS CIRCLE HIGH POINT, NC 27265 CONTACT: TELEPHONE:	JASON CANFIELD, P.E. (757) 450-2288
<b>UTILITIES:</b> <b>POWER COMPANY:</b> DOMINION VIRGINIA POWER CONTACT: TELEPHONE:	CUSTOMER SERVICE 1-888-667-3000
<b>TELEPHONE COMPANY:</b> VERIZON CONTACT: CONTACT: TELEPHONE:	CUSTOMER SERVICE 1-800-826-2355

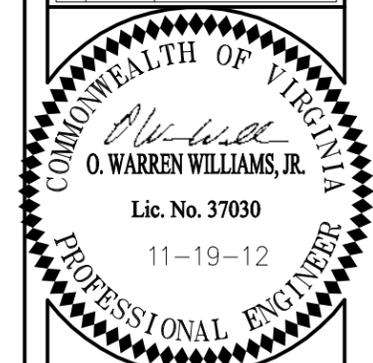
PROJECT SUMMARY	
<b>SITE INFORMATION:</b> VA9031 KIDD'S STORE OFF STATE ROUTE 6 PALMYRA, VA 22963	
<b>LANDLORD INFORMATION:</b> WILLIAM & ANNE C. DAVIS 6401 W RIVER ROAD SCOTTSVILLE, VA 24590	
<b>APPLICANT INFORMATION:</b> CLEAR SIGNAL TOWERS 1801 LIBBIE AVENUE SUITE 201 RICHMOND, VA 23226	
<b>PROJECT DATA:</b> ZONING: AFD JURISDICTION: FLUVANNA COUNTY TAX MAP NO.: 39-A-34 SITE TYPE: RAW LAND TOWER TYPE: MONOPOLE TOWER HEIGHT: 195' LEASE AREA: 100'X100' AREA OF LAND DISTURBANCE: 3600 SF	
<b>(2C) GEOGRAPHIC COORDINATES:</b> LATITUDE: 37° 47' 56.33" N LONGITUDE: 78° 22' 00.64" W GROUND ELEV. (AMSL): 497'	
<b>DECLINATION:</b> 9° 40' W CHANGING BY 0' 1' W PER YEAR	
<b>ADA COMPLIANCE:</b> FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. SITE WILL NOT BE SERVED BY CITY SEWER OR WATER.	

SHEET INDEX	
<b>SHEET:</b>	<b>DESCRIPTION:</b>
T-1	TITLE SHEET
T-2	LEGEND AND ABBREVIATIONS
N-1	GENERAL NOTES
C-1	SURVEY AND SITE PLAN
C-2	ENLARGED SITE PLAN
C-3	GRADING AND EROSION CONTROL PLAN
C-4	ELEVATION VIEW
C-5	FENCE NOTES AND DETAILS
C-6	CIVIL DETAILS
<b>SHEET TOTAL:</b>	
<b>9</b>	

**Clear Signal Towers, LLC**  
CLEAR SIGNAL TOWERS, LLC  
1801 LIBBIE AVENUE  
SUITE 201  
RICHMOND, VA 23226  
TEL (804)951-9694  
FAX (804)648-4809

**WW&A**  
warren williams & associates  
736 CARNEROS CIRCLE  
HIGH POINT  
NORTH CAROLINA  
27265  
(757) 450-2288

NO.	DATE	DESCRIPTION
1	07/26/11	ZONING DRAWINGS
	BY: KMB	CHK: OWW APP'D: OWW
2	11/19/12	REVISED ZONING DRAWINGS
	BY: KMB	CHK: OWW APP'D: OWW
3		
4		
5		
6		



VA9031  
KIDD'S STORE  
RAWLAND  
MONOPOLE  
OFF SR 6  
PALMYRA, VA  
22963  
FLUVANNA COUNTY

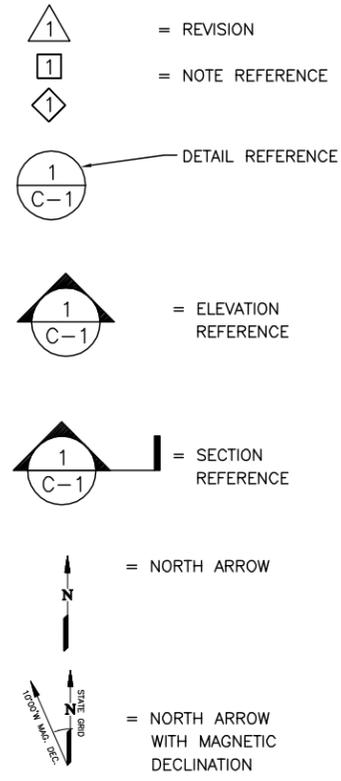
DRAWN BY:	KMB
CHECKED BY:	OWW
TTV DATE:	NA
COMM NO:	VA9031

SHEET TITLE:  
**TITLE SHEET**

SHEET NUMBER:  
**T-1**

**ABBREVIATIONS & SYMBOLS LIST**

1P, 2P, & 3P	SINGLE POLE, TWO POLE, & THREE POLES	NEUT	NEUTRAL
A/C	AIR CONDITIONING	N	NORTH
ADJ	ADJUSTABLE	NA	NOT APPLICABLE
AFF	ABOVE FINISH FLOOR	NIC	NOT IN CONTRACT
AGL	ABOVE GROUND LEVEL	NTS	NOT TO SCALE
APPROX	APPROXIMATELY	OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	OC	ON CENTER
AWG	AMERICAN WIRE GAUGE	OD	OUTSIDE DIAMETER
A OR AMP	AMPERE	OPNG	OPENING
BLDG	BUILDING	OPP	OPPOSITE
BLK	BLOCK	OHT/OHP	OVERHEAD TELEPHONE/OVERHEAD POWER
BMR	BASE MOBILE RADIO	OHP	OVERHEAD POWER
B/S	BUILDING STANDARD	OHT	OVERHEAD TELEPHONE
CU	COPPER	OZ	OUNCE
CO	CLEAN OUT	PG	PAGE
C	CONDUIT SIZE AS NOTED	PIN(F)	PIN FOUND
CB	CIRCUIT BREAKER	PIN(S)	PIN SET
CKT	CIRCUIT	PJF	POLYVINYL JOINT FILLER
CLG	CEILING	PLYWD	PLYWOOD
CLR	CLEAR	PR	PAIR
CONC	CONCRETE	PROJ	PROJECT
CONST	CONSTRUCTION	PROP	PROPERTY
CONT	CONTINUOUS	PSI	PER SQUARE INCH
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED	PSF	PER SQUARE FOOT
DB	DEED BOOK	PT	PRESSURE TREATED
DBL	DOUBLE	PVC	SCHEDULE 40 PLASTIC CONDUIT.
DIA, Ø	DIAMETER	RAD	RADIATION
DIAG	DIAGONAL	RECEPT	RECEPTACLE
DIM	DIMENSION	REQ'D	REQUIRED
DN	DOWN	RM	ROOM
DET, DETL	DETAIL	RO	ROUGH OPENING
DWG	DRAWING	S	SOUTH
DEF	DUAL ELEMENT FUSES	SW	SWITCH
E	EAST	SCH	SCHEDULE
EA	EACH	SHT	SHEET
EL, ELEV	ELEVATION	SIM	SIMILAR
ELECT	ELECTRICAL	SPEC	SPECIFICATION
EQ	EQUAL	SQ	SQUARE
EQUIP	EQUIPMENT	SS	STAINLESS STEEL
EW	EACH WAY	STL	STEEL
EXIST/EX	EXISTING	STRUCT	STRUCTURAL
EXT	EXTERIOR	SUSP	SUSPENDED
EMT	ELECTRICAL METALLIC TUBING	THRD	THREADED
EC	EMPTY CONDUIT	THRU	THROUGH
FIN	FINISH	TM	TAX MAP
FLUOR	FLUORESCENT	TNND	TINNED
FLR	FLOOR	TOC	TOP OF CONCRETE
FT	FOOT	TYP	TYPICAL
GRS	GALVANIZED STEEL CONDUIT	UNLESS OTHERWISE NOTED	UNLESS OTHERWISE NOTED
G OR GRD	GROUND	UG	UNDERGROUND
GA	GAUGE	VERT	VERTICAL
GALV	GALVANIZE(D)	VIF	VERIFY IN FIELD
GC	GENERAL CONTRACTOR	VT	VINYL TILE
GPS	GLOBAL POSITIONING SYSTEM	W/	WITH
GWB	GYPSPUM WALL BOARD	WDW	WINDOW
HARD'WD	HARDWOOD	W	WEST
HEC	HIGH STRENGTH	W/O	WITHOUT
HORIZ	HORIZONTAL	W	WATTS
HR	HOUR	WP	WEATHERPROOF
HT	HEIGHT	XFRM	TRANSFORMER
HVAC	HEATING, VENTILATION AND AIR CONDITIONING		
ID	INSIDE DIA.	∠	ANGLE
IN	INCH	&	AND
INFO	INFORMATION	℄	CENTER LINE
INS	INSULATION	℞	PROPERTY LINE, PLATE
KW	KILOWATTS	@	AT
LB(S)	POUND(S)	#	NUMBER
LG	LONG		
MAX	MAXIMUM		
MECH	MECHANICAL		
MTL	METAL		
MFR	MANUFACTURER		
MGR	MANAGER		
MIN	MINIMUM		
MISC	MISCELLANEOUS		
MPH	MILES PER HOUR		
MTD	MOUNTED		



**LEGEND**

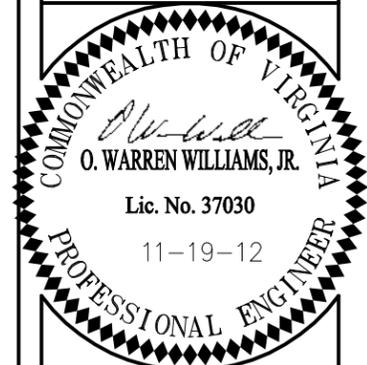
EXISTING	NEW	
		CONCRETE
		PROPERTY LINE
		LEASE AREA
		EASEMENT
		BUILDING (FOOTPRINT)
		POWER POLE
		TELEPHONE/FIBEROPTIC PEDESTAL
		ASPHALT
		FENCE
		TEMPORARY BENCHMARK
		TREELINE
		CONTOURS
		SPOT ELEVATION
		SILT FENCE
		ITEMS TO BE REMOVED

**Clear Signal Towers, LLC**

**CLEAR SIGNAL TOWERS, LLC**  
 1801 LIBBIE AVENUE  
 SUITE 201  
 RICHMOND, VA 23226  
 TEL (804)951-9694  
 FAX (804)648-4809



NO.	DATE	DESCRIPTION
1	07/26/11	ZONING DRAWINGS
	BY: KMB	CHK: OWW APP'D: OWW
2	11/19/12	REVISED ZONING DRAWINGS
	BY: KMB	CHK: OWW APP'D: OWW
3		
4		
5		
6		



**VA9031**  
**KIDD'S STORE**  
**RAWLAND**  
**MONOPOLE**  
 OFF SR 6  
 PALMYRA, VA  
 22963  
 FLUVANNA COUNTY

DRAWN BY:	KMB
CHECKED BY:	OWW
TTV DATE:	NA
COMM NO:	VA9031

SHEET TITLE:  
**LEGEND AND ABBREVIATIONS**

SHEET NUMBER:  
**T-2**

SITE WORK GENERAL NOTES:

NOTES:

1. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING & EXCAVATION.
3. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
4. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
5. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, OWNER AND/OR LOCAL UTILITIES.
6. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION.
7. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE CINGULAR SPECIFICATION FOR SITE SIGNAGE.
8. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
9. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
10. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
11. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION.
12. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL JURISDICTION'S GUIDELINES FOR EROSION AND SEDIMENT CONTROL.

STRUCTURAL STEEL NOTES:

NOTES:

1. ALL STEEL WORK SHALL BE PAINTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND IN ACCORDANCE WITH ASTM A36 UNLESS OTHERWISE NOTED.
2. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION". PAINTED SURFACES SHALL BE TOUCHED UP.
3. BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE (3/4"Ø) CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
4. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. ASTM A 307 BOLTS UNLESS NOTED OTHERWISE.
5. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS.
6. ALL EXPANSION/WEDGE ANCHORS SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED. THE ANCHOR BOLT DOWEL AND ROD SHALL BE STAINLESS STEEL WITH STAINLESS STEEL WASHERS.

CONCRETE AND REINFORCING STEEL NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE.
3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:  
 CONCRETE CAST AGAINST EARTH.....3 IN.  
 CONCRETE EXPOSED TO EARTH OR WEATHER:  
 #6 AND LARGER .....2 IN.  
 #5 AND SMALLER & WWF.....1 1/2 IN.  
 CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:  
 SLAB AND WALL .....3/4 IN.  
 BEAMS AND COLUMNS.....1 1/2 IN.
5. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
6. CONCRETE/EXPANSION ANCHORS SHALL BE STAINLESS STEEL. INSTALLATION, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE. EXPANSION BOLTS SHALL BE PROVIDED BY RAMSET/REDHEAD OR APPROVED EQUAL.

GENERAL NOTES

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:  
 CONTRACTOR – CLEAR SIGNAL TOWERS  
 SUBCONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)  
 OWNER – CLEAR SIGNAL TOWERS  
 OEM – ORIGINAL EQUIPMENT MANUFACTURE
2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.  
  
 ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
4. DRAWINGS PROVIDED HERE ARE NOT TO SCALE AND ARE INTENDED TO SHOW OUTLINE ONLY.
5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
6. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
7. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.
8. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING.
9. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
10. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
11. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
12. CONSTRUCTION SHALL COMPLY WITH SPECIFICATION 24782-000-3APS-AOOZ-00002, "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF AT&T GSM SITES."

SOIL COMPACTION NOTES  
FOR SLAB ON GRADE

NOTES:

1. EXCAVATE AS REQUIRED TO REMOVE VEGETATION & TOPSOIL EXPOSE UNDISTURBED NATURAL SUBGRADE AND PLACE CRUSHED STONE AS REQUIRED.
2. COMPACTION CERTIFICATION: AN INSPECTION AND WRITTEN CERTIFICATION BY A QUALIFIED GEOTECHNICAL TECHNICIAN OR ENGINEER IS ACCEPTABLE.
3. AS AN ALTERNATIVE TO INSPECTION AND WRITTEN CERTIFICATION, THE "UNDISTURBED SOIL" BASE SHALL BE COMPACTED WITH "COMPACTION EQUIPMENT", LISTED BELOW, TO AT LEAST 90% MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM D 1557 METHOD C.
4. COMPACTED SUBBASE SHALL BE UNIFORM & LEVELED. PROVIDE 6" MINIMUM CRUSHED STONE OR GRAVEL COMPACTED IN 3" LIFTS ABOVE COMPACTED SOIL. GRAVEL SHALL BE NATURAL OR CRUSHED WITH 100 % PASSING 1" SLEEVE.

COMPACTION EQUIPMENT:

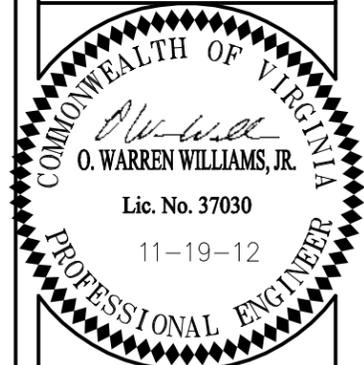
HAND OPERATED DOUBLE DRUM, VIBRATORY ROLLER, VIBRATORY PLATE COMPACTOR OR JUMPING COMPACTOR.

Clear Signal Towers, LLC

**CLEAR SIGNAL TOWERS, LLC**  
 1801 LIBBIE AVENUE  
 SUITE 201  
 RICHMOND, VA 23226  
 TEL (804)951-9694  
 FAX (804)648-4809

**WW&A**  
 warren williams & associates  
 736 CARNEROS CIRCLE  
 HIGH POINT  
 NORTH CAROLINA  
 27265  
 (757) 450-2288

NO.	DATE	DESCRIPTION
1	07/26/11	ZONING DRAWINGS
	BY: KMB	CHK: OWW APP'D: OWW
2	11/19/12	REVISED ZONING DRAWINGS
	BY: KMB	CHK: OWW APP'D: OWW
3		
4		
5		
6		



VA9031  
 KIDD'S STORE  
 RAWLAND  
 MONOPOLE  
  
 OFF SR 6  
 PALMYRA, VA  
 22963  
 FLUVANNA COUNTY

DRAWN BY: KMB  
 CHECKED BY: OWW  
 TTV DATE: NA  
 COMM NO: VA9031

SHEET TITLE:  
**GENERAL NOTES**

SHEET NUMBER:  
**N-1**

State Route 6  
110' R/W  
D.B. 561 P. 321

Tax Map 39-A-33A  
NOW OR FORMERLY  
BIRKHEAD, ROGER D. &  
AMS J.  
7886 W RIVER RD  
SCOTTSVILLE, VA 24590  
DB. 171 P. 72  
Zoned: A-1

Tax Map 39-A-32  
NOW OR FORMERLY  
JOHN. E. JR. & MARY F.  
RUECKERT  
588 HIDDEN VALLEY RD  
PALMYRA, VA 22963  
DB. 512 P. 996  
Zoned: A-1

Tax Map 39-A-34  
NOW OR FORMERLY  
DAVIS, WILLIAM & ANNE C.  
PO BOX 692  
SCOTTSVILLE, VA 24590  
DB. 512 P. 988  
Zoned: AFD

Tax Map 39-A-50  
NOW OR FORMERLY  
WOOD LIVING TRUST  
202 CUNNINGHAM RD  
SCOTTSVILLE, VA 24590  
DB. 775 P. 973  
Zoned: A-1

Tax Map 39-A-49  
NOW OR FORMERLY  
WOOD LIVING TRUST  
202 CUNNINGHAM RD  
SCOTTSVILLE, VA 24590  
DB. 775 P. 976  
Zoned: A-1

Tax Map 39-A-52  
NOW OR FORMERLY  
JIM MICHAEL  
STARKEY  
382 CUNNINGHAM RD  
SCOTTSVILLE, VA 24590  
DB. 393 P. 743  
Zoned: A-1

Tax Map 39-5-4  
NOW OR FORMERLY  
JAMES M. & LINDA A.  
STARKEY  
382 CUNNINGHAM RD  
SCOTTSVILLE, VA 24590  
DB. 393 P. 746  
Zoned: A-1

Tax Map 39-9-16  
NOW OR FORMERLY  
DANIEL R. & SANDRA G.  
SKEEN  
47 OLD FORK LN  
PALMYRA, VA 22963  
DB. 174 P. 233  
Zoned: A-1

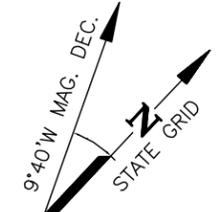
Tax Map 39-5-2  
NOW OR FORMERLY  
JIM MICHAEL  
STARKEY  
382 CUNNINGHAM RD  
SCOTTSVILLE, VA 24590  
DB. 164 P. 574  
Zoned: A-1

Tax Map 39-5-1  
NOW OR FORMERLY  
JIM MICHAEL  
STARKEY  
382 CUNNINGHAM RD  
SCOTTSVILLE, VA 24590  
DB. 132 P. 364  
Zoned: A-1

Tax Map 49-A-1  
NOW OR FORMERLY  
NEW FORESTRY LLC  
3715 NORTHSIDE PKWY,  
SUITE 2-500  
ATLANTA, GA 30327  
DB. 370 P. 317  
Zoned: A-1

Tax Map 39-A-55  
NOW OR FORMERLY  
PAUL A., JR. & SR.  
LOWE  
438 SHORES RD  
PALMYRA, VA 22963  
DB. 777 P. 256  
Zoned: A-1

Tax Map 39-5-3  
NOW OR FORMERLY  
JUDIE MARIE  
STARKEY  
496 CUNNINGHAM RD  
PALMYRA, VA 22963  
DB. 132 P. 364  
Zoned: A-1



**SURVEY NOTES**

- TOPOGRAPHIC INFORMATION WAS TAKEN FROM A TOPOGRAPHIC SURVEY PERFORMED BY HAYDEN FRYE AND ASSOCIATES, VIRGINIA BEACH, VA ON JULY 20, 2011. NO BOUNDARY SURVEY WAS PERFORMED BY HAYDEN FRYE AND ASSOCIATES.
- THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE SEARCH/REPORT AND MAY NOT SHOW ANY/ALL EASEMENTS AND RESTRICTIONS OF RECORD THAT MAY AFFECT THE SUBJECT PROPERTY.
- PROPERTY IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
- FLOOD ZONE DETERMINATION IS BASED ON THE FLOOD INSURANCE RATE MAPS AND DOES NOT IMPLY THAT THE PROPERTY WILL OR WILL NOT BE FREE FROM FLOODING OR DAMAGE.
- THIS PROPERTY APPEARS TO BE LOCATED IN THE F.I.R.M. ZONE "X" AS SHOWN ON COMMUNITY PANEL NUMBER 51065C0175C DATED MAY 16, 2008.
- NO SUBSURFACE INVESTIGATION WAS PERFORMED BY CAUSEWAY CONSULTANTS.
- MERIDIAN SOURCE FOR THIS SURVEY IS BASED UPON GRID NORTH. MAGNETIC DECLINATION IS COMPUTED AND NOT OBSERVED.
- NO WETLAND AREAS HAVE BEEN DELINEATED.
- ALL PHYSICAL EVIDENCE OF UTILITIES SHOWN ON THIS SURVEY IS FROM SURFACE EVIDENCE.
- THE TEMPORARY BENCHMARK IS AN IRON PIN. ELEVATION = 500.09'.
- BASED ON THIS SURVEY, PERFORMED BY HAYDEN FRYE AND ASSOCIATES ON JULY 20, 2011, THE NEW MONOPOLE TOWER HAS BEEN CERTIFIED BY CAUSEWAY CONSULTANTS THAT THE COORDINATE LOCATION OF THE REFERENCED TOWER AT THE REFERENCED SITE IS ACCURATE WITHIN 15'± HORIZONTALLY AND THE ELEVATION IS ACCURATE WITHIN 3'± VERTICALLY. THE HORIZONTAL DATUM (COORDINATES) ARE IN TERMS OF THE NORTH AMERICAN DATUM OF 1983 (NAD 83) AND ARE EXPRESSED AS DEGREES, MINUTES, AND SECONDS. THE VERTICAL DATUM (ELEVATIONS) ARE IN TERMS AS DEFINED BELOW AND ARE DETERMINED TO THE NEAREST TENTH OF A FOOT.

PROPOSED 195' MONOPOLE TOWER  
NAD 1983  
LATITUDE: 37° 47' 56.33" N  
LONGITUDE: 78° 22' 00.64" W  
NAVD 88 ELEVATION: 497' AMSL

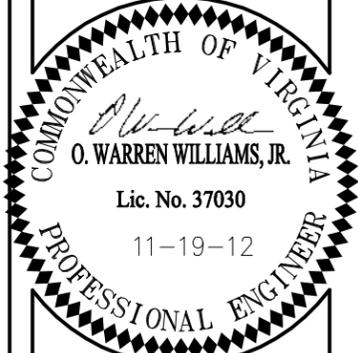
**CONSTRUCTION NOTES**

- NEW 100'X100' CLEAR SIGNAL TOWERS LEASE AREA.
- NEW CLEAR SIGNAL TOWERS 195' MONOPOLE TOWER INSIDE NEW 60'X60' FENCED COMPOUND. SEE SHEET C-2 FOR ENLARGED SITE PLAN.
- NEW 20' WIDE CLEAR SIGNAL TOWERS ACCESS/UTILITY EASEMENT & 12' GRAVEL ACCESS ROAD (APPROXIMATELY 387').
- FLUVANNA REQUIRED 120% TOWER SETBACK
- FLUVANNA REQUIRED 500' RESIDENTIAL SETBACK

Clear Signal Towers, LLC  
**CLEAR SIGNAL TOWERS, LLC**  
1801 LIBBIE AVENUE  
SUITE 201  
RICHMOND, VA 23226  
TEL (804)951-9694  
FAX (804)648-4809

**WW&A**  
warren williams & associates  
736 CARNEROS CIRCLE  
HIGH POINT  
NORTH CAROLINA  
27265  
(757) 450-2288

NO.	DATE	DESCRIPTION
1	07/26/11	ZONING DRAWINGS
	BY: KMB	CHK: OWW APP'D: OWW
2	11/19/12	REVISED ZONING DRAWINGS
	BY: KMB	CHK: OWW APP'D: OWW
3		
4		
5		
6		



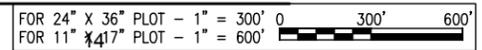
VA9031  
**KIDD'S STORE  
RAWLAND  
MONOPOLE**  
OFF SR 6  
PALMYRA, VA  
22963  
FLUVANNA COUNTY

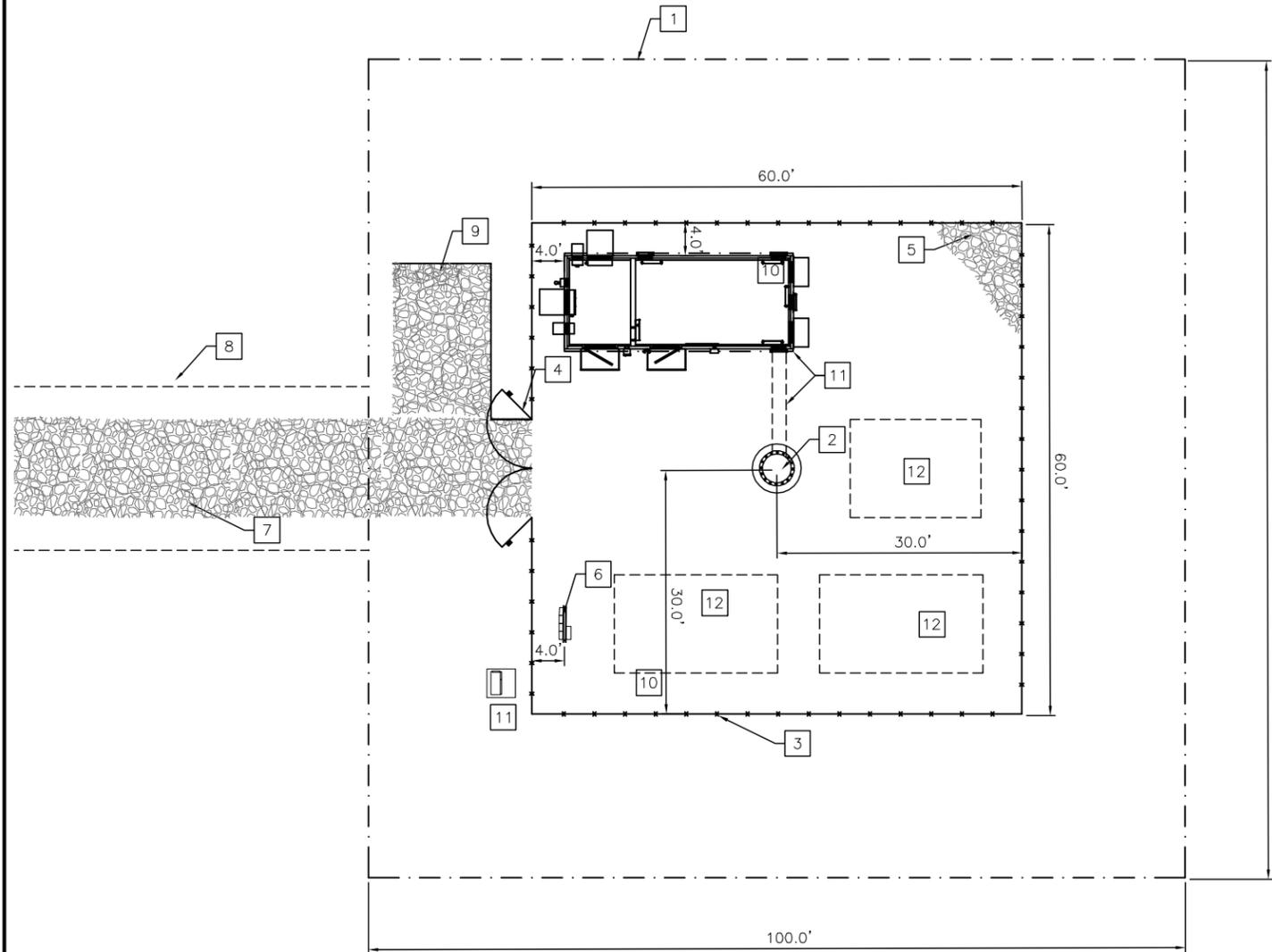
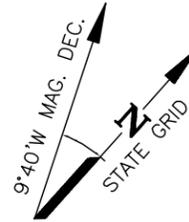
DRAWN BY:	KMB
CHECKED BY:	OWW
TTV DATE:	NA
COMM NO:	VA9031

SHEET TITLE:  
**SURVEY AND SITE  
PLAN**

SHEET NUMBER:  
**C-1**

**1 SURVEY AND SITE PLAN**  
C-1





**SITE NOTES**

1. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITY OF LOCATING ANY UNDERGROUND UTILITIES (PUBLIC OR PRIVATE) THAT MAY EXIST AND CROSS THROUGH THE AREA OF CONSTRUCTION THAT ARE NOT SHOWN ON THESE PLANS. BEFORE YOU DIG, CALL "MISS UTILITY" AT 1-800-552-7001. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING, AT HIS EXPENSE, ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.
2. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AT THE FIRST PHASE OF CONSTRUCTION AND CHECKED PERIODICALLY TO ENSURE THEY ARE FUNCTIONING AS INDICATED.
3. THE STOCKPILING OF EXCESS MATERIAL ON SITE WILL NOT BE ALLOWED.
4. ANY VEGETATED AREA DISTURBED BY CONSTRUCTION SHALL BE TOPSOILED AND SEEDED TO RESTORE A PERMANENT VEGETATIVE COVER.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WITH MATCHING MATERIALS ANY PAVEMENT, DRIVEWAYS, WALKS, CURBS, ETC. THAT MAY BE CUT, OR THAT ARE DAMAGED DURING CONSTRUCTION.
6. THE INDICATED DIRECTION OF NORTH WILL HAVE TO BE VERIFIED IN THE FIELD. THE MAGNETIC DECLINATION INDICATED IS CALCULATED BASED ON THE LATITUDINAL AND LONGITUDINAL COORDINATE GIVEN BY CAUSEWAY CONSULTANTS, PC.

**CONSTRUCTION NOTES**

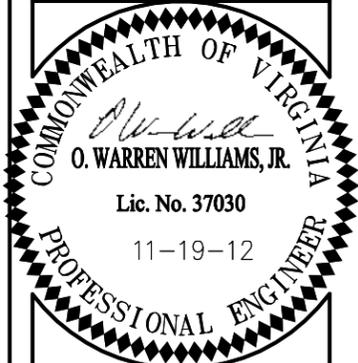
- 1 NEW CLEAR SIGNAL TOWERS 100'X100' LEASE AREA.
- 2 NEW CLEAR SIGNAL TOWERS 195' MONOPOLE TOWER. SEE ELEVATION VIEW, SHEET C-4.
- 3 NEW CLEAR SIGNAL TOWERS 60'X60' FENCED COMPOUND. SEE SHEET C-5 FOR DETAIL.
- 4 NEW CLEAR SIGNAL TOWERS 12' WIDE DOUBLE GATE. SEE SHEET C-5 FOR DETAIL.
- 5 INSTALL NEW GRAVEL WITHIN COMPOUND AS NEEDED. SEE SHEET C-6 FOR DETAIL.
- 6 NEW CLEAR SIGNAL TOWERS UTILITY SERVICE STAND.
- 7 NEW 12' GRAVEL ACCESS ROAD. SEE SHEET C-6 FOR DETAILS.
- 8 NEW 20' WIDE CLEAR SIGNAL TOWERS ACCESS/UTILITY EASEMENT (APPROXIMATELY 387' IN LENGTH)
- 9 NEW GRAVEL PARKING/TURNAROUND. SEE SHEET C-6 FOR DETAILS.
- 10 CLEAR TREES AS NECESSARY TO ACCOMODATE NEW COMPOUND.
- 11 FUTURE AT&T EQUIPMENT SHELTER, ICE BRIDGE, FIBER PAD (BY OTHERS).
- 12 FUTURE CARRIERS.

Clear Signal Towers, LLC

**CLEAR SIGNAL TOWERS, LLC**  
 1801 LIBBIE AVENUE  
 SUITE 201  
 RICHMOND, VA 23226  
 TEL (804)951-9694  
 FAX (804)648-4809

**WW&A**  
 warren williams & associates  
 736 CARNEROS CIRCLE  
 HIGH POINT  
 NORTH CAROLINA  
 27265  
 (757) 450-2288

NO.	DATE	DESCRIPTION
1	07/26/11	ZONING DRAWINGS
	BY: KMB	CHK: OWW APP'D: OWW
2	11/19/12	REVISED ZONING DRAWINGS
	BY: KMB	CHK: OWW APP'D: OWW
3		
4		
5		
6		



**VA9031**  
**KIDD'S STORE**  
**RAWLAND**  
**MONOPOLE**  
 OFF SR 6  
 PALMYRA, VA  
 22963  
 FLUVANNA COUNTY

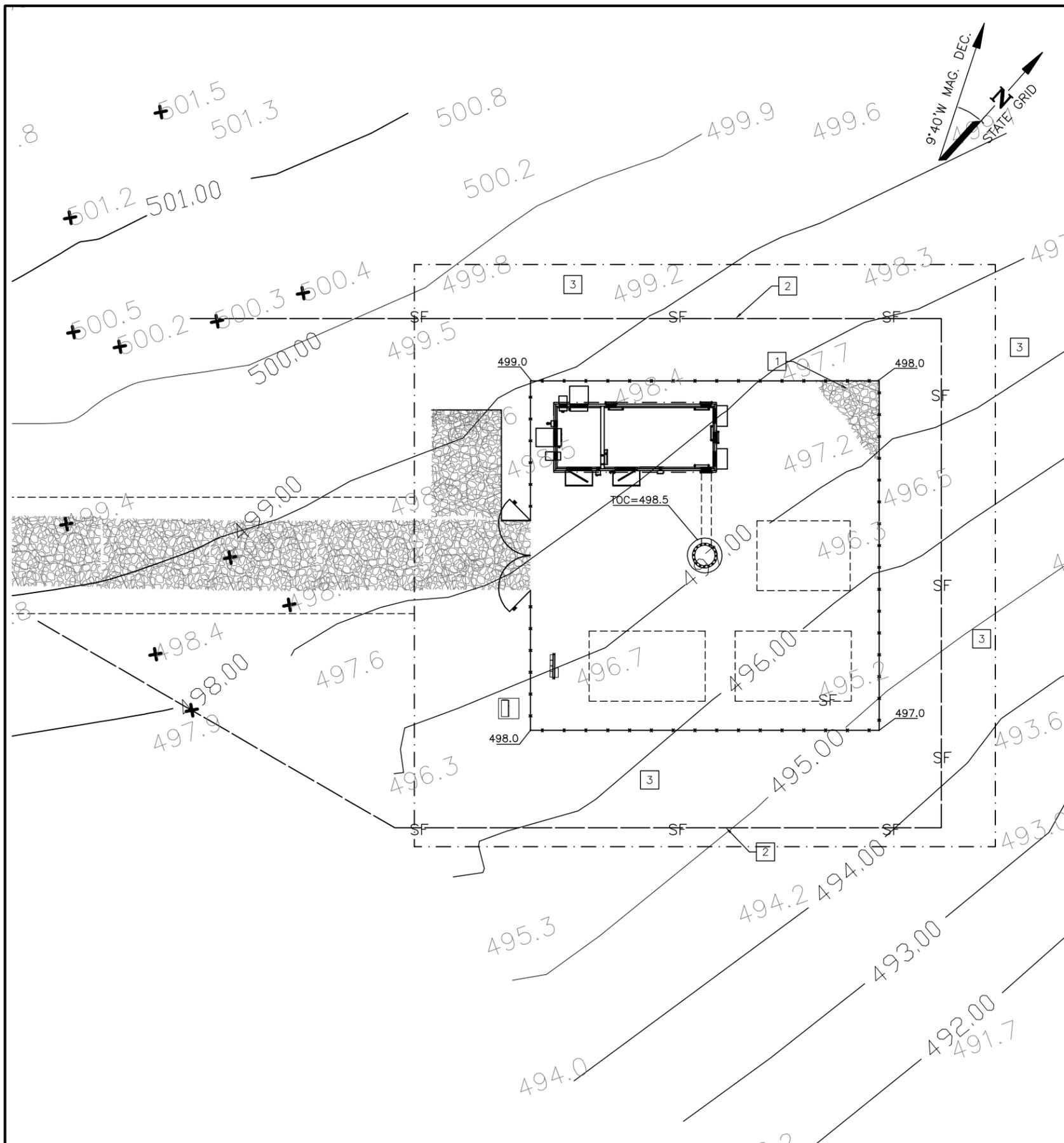
DRAWN BY:	KMB
CHECKED BY:	OWW
TTV DATE:	NA
COMM NO:	VA9031

SHEET TITLE:  
**ENLARGED SITE PLAN**

SHEET NUMBER:  
**C-2**

**1**  
**C-2**  
**ENLARGED SITE PLAN**

FOR 24" X 36" PLOT - 1" = 10'  
 FOR 11" X 17" PLOT - 1" = 20'



**EROSION & SEDIMENT CONTROL NOTES:**

1. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (3RD EDITION, 1992).
2. THE CONTRACTOR MUST CONTACT THE PLANNING/CIVIL INSPECTIONS OFFICE FOR A PRE-CONSTRUCTION MEETING BEFORE ANY CONSTRUCTION ACTIVITY BEGINS.
3. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CONSTRUCTION.
4. THE CONTRACTOR SHALL APPLY PERMANENT OR TEMPORARY SOIL STABILIZATION TO ALL DENUDED OR DISTURBED AREAS WITHIN 7 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. SOIL STABILIZATION MUST ALSO BE APPLIED TO DENUDED AREAS WHICH MAY NOT BE AT FINAL GRADE BUT WHICH WILL REMAIN UNDISTURBED FOR LONGER THAN 30 DAYS. SOIL STABILIZATION MEASURES INCLUDE VEGETATIVE ESTABLISHMENT, MULCHING AND THE EARLY APPLICATION OF GRAVEL BASE MATERIAL ON AREAS TO BE PAVED.
5. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES DAILY AND AFTER EACH RUNOFF PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES AND CLEANUP OF SEDIMENTATION ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE MADE IMMEDIATELY.
6. THE CONTRACTOR SHALL LIMIT SITE ACCESS BY CONSTRUCTION VEHICLES TO ENTRANCES PROTECTED BY A STONE CONSTRUCTION ENTRANCE (VESCH STD. & SPEC. 3.02) OR AN APPROVED COMPARABLE CONTROL MEASURE. SEDIMENT SHALL BE REMOVED FROM PAVED AREAS ON A DAILY BASIS (SEE DETAIL 2, SHEET C-9).
7. STOCK PILES OF SOIL AND OTHER ERODIBLE MATERIAL SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION FOR STOCKPILES ON SITE AS WELL AS FOR MATERIALS TRANSPORTED FROM THE PROJECT SITE.
8. THE CONTRACTOR SHALL MONITOR AND TAKE PRECAUTIONS TO CONTROL DUST INCLUDING (BUT NOT LIMITED TO) USE OF WATER, MULCH OR CHEMICAL DUST ADHESIVES AND CONTROL OF CONSTRUCTION SITE TRAFFIC.
9. EFFLUENT FROM DE-WATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND CHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT ADJACENT PROPERTIES, WETLANDS, WATERWAYS OR THE STORM DRAINAGE SYSTEM.
10. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF ANY ADDITIONAL CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED NECESSARY BY THE PLAN APPROVING AUTHORITY.
11. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE NOT TO BE REMOVED WITHOUT APPROVAL OF THE DIRECTOR OF COMMUNITY DEVELOPMENT OR HIS DESIGNEE WHEN ALL DISTURBED AREAS ARE STABILIZED. ONCE APPROVED, ALL MEASURES SHALL BE REMOVED WITHIN 30 DAYS. TRAPPED SEDIMENT SHALL BE SPREAD AND SEEDED.

**CONSTRUCTION NOTES:**

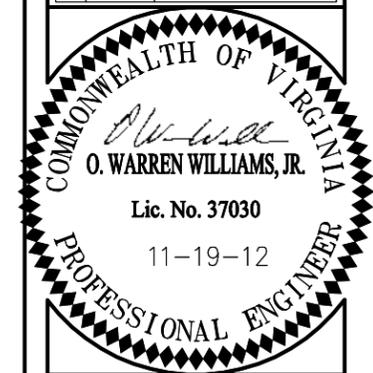
1. INSTALL NEW GRAVEL WITHIN COMPOUND AS NEEDED, SEE DETAIL, SHEET C-6.
2. NEW SILT FENCE, SEE DETAIL, SHEET C-6.
3. INSTALL TREE PROTECTION AS NECESSARY, SEE DETAIL, SHEET C-6.

Clear Signal Towers, LLC

**CLEAR SIGNAL TOWERS, LLC**  
 1801 LIBBIE AVENUE  
 SUITE 201  
 RICHMOND, VA 23226  
 TEL (804)951-9694  
 FAX (804)648-4809

**WW&A**  
 warren williams & associates  
 736 CARNEROS CIRCLE  
 HIGH POINT  
 NORTH CAROLINA  
 27265  
 (757) 450-2288

NO.	DATE	DESCRIPTION
1	07/26/11	ZONING DRAWINGS
	BY: KMB	CHK: OWW APP'D: OWW
2	11/19/12	REVISED ZONING DRAWINGS
	BY: KMB	CHK: OWW APP'D: OWW
3		
4		
5		
6		



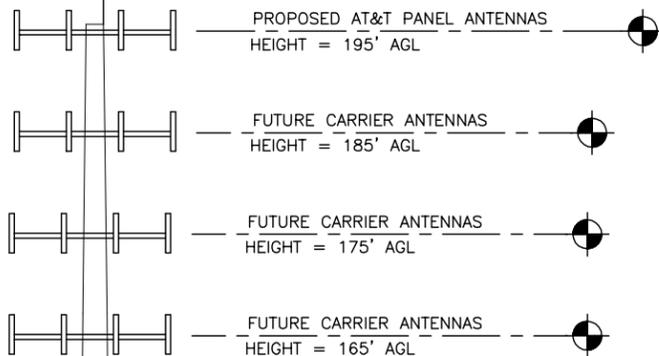
VA9031  
**KIDD'S STORE**  
**RAWLAND**  
**MONOPOLE**  
 OFF SR 6  
 PALMYRA, VA  
 22963  
 FLUVANNA COUNTY

DRAWN BY:	KMB
CHECKED BY:	OWW
TTV DATE:	NA
COMM NO:	VA9031

SHEET TITLE:  
**GRADING & EROSION CONTROL PLAN**

SHEET NUMBER:  
**C-3**

TOP OF NEW LIGHTNING ROD  
HEIGHT = 199' AGL



NEW 195' MONOPOLE

NOTE:  
TOWER IS TO BE DESIGNED AND BUILT TO CONFORM TO THE LATEST EDITION OF THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE. ALL LOADS WILL MEET THE MINIMUM REQUIREMENTS FOR THE COUNTY. THE TOWER IS TO REACH THE HEIGHT INDICATED AND SUPPORT THE NUMBER OF FUTURE CARRIERS INDICATED TO BE INSTALLED.

NEW AT&T 12'X28' LEASE AREA WITHIN CLEAR SIGNAL TOWERS 60'X60' FENCED COMPOUND

FINISHED GRADE

**TOWER ELEVATION**

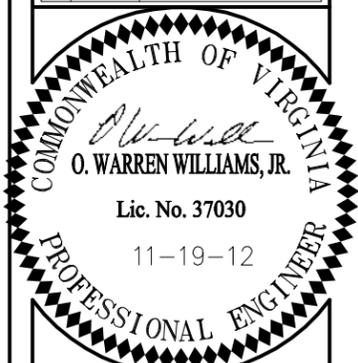
NOT TO SCALE

Clear Signal Towers, LLC

**CLEAR SIGNAL TOWERS, LLC**  
1801 LIBBIE AVENUE  
SUITE 201  
RICHMOND, VA 23226  
TEL (804)951-9694  
FAX (804)648-4809

**WW&A**  
warren williams & associates  
736 CARNEROS CIRCLE  
HIGH POINT  
NORTH CAROLINA  
27265  
(757) 450-2288

NO.		
1	07/26/11	ZONING DRAWINGS BY: KMB CHK: OWW APP'D: OWW
2	11/19/12	REVISED ZONING DRAWINGS BY: KMB CHK: OWW APP'D: OWW
3		
4		
5		
6		

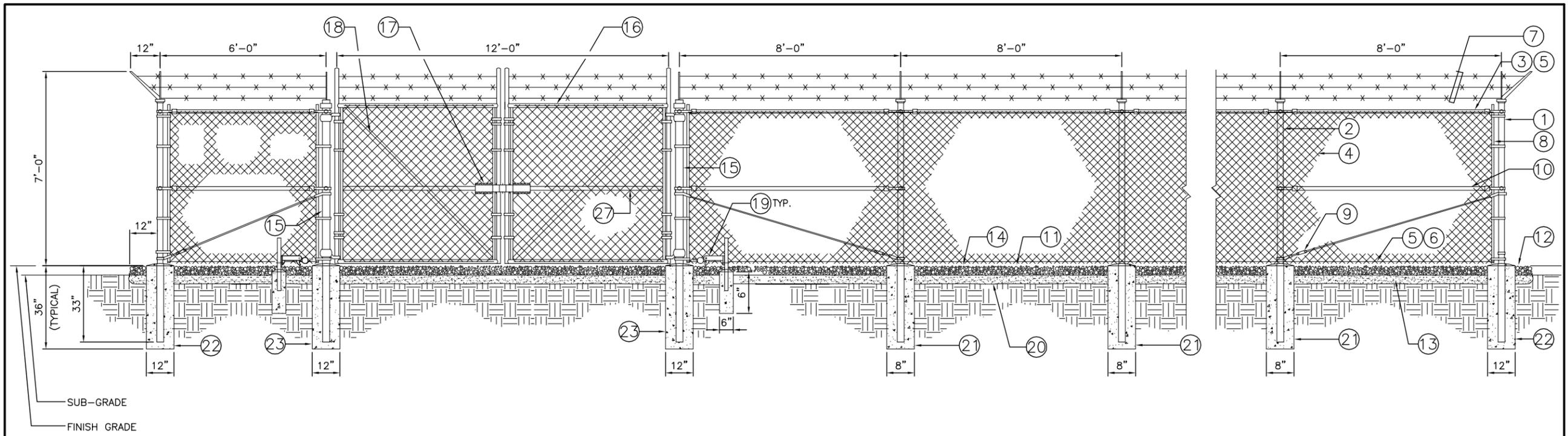


VA9031  
KIDD'S STORE  
RAWLAND  
MONOPOLE  
OFF SR 6  
PALMYRA, VA  
22963  
FLUVANNA COUNTY

DRAWN BY:	KMB
CHECKED BY:	OWW
TTV DATE:	NA
COMM NO:	VA9031

SHEET TITLE:  
**ELEVATION VIEW**

SHEET NUMBER:  
**C-4**



**1 COMPOUND FENCE DETAIL**  
C-5 NOT TO SCALE

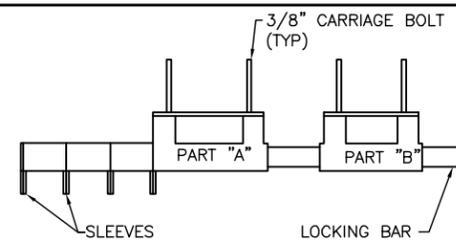
**REFERENCE NOTES:**

- ① CORNER, END OR PULL POST 3" OD SCHEDULE 40 PIPE.
- ② LINE POST: 2 1/2" OD SCHEDULE 40 PIPE, PER ASTM-F1083. LINE POSTS SHALL BE EQUALLY SPACED AT MAXIMUM 10'-0" OC
- ③ TOP RAIL & BRACE RAIL: 1 5/8" OD PIPE, PER ASTM-F1083.
- ④ FABRIC: 9 GA WIRE SIZE 2" MESH.
- ⑤ TIE WIRE: MINIMUM 9 GA ALUMINUM AT POSTS AND RAILS A SINGLE WRAP OF FABRIC TIE AND AT TENSION WIRE BY HOG RINGS SPACED MAX. 24" INTERVALS.
- ⑥ TENSION WIRE: 7 GA GALVANIZED STEEL.
- ⑦ BARBED WIRE: DOUBLE STRAND 12-1/2" TWISTED WIRE TO MATCH WITH FABRIC 14 GA, 4 POINT BARBS SPACED ON APPROXIMATELY 5" CENTERS.
- ⑧ STRETCHER BAR.
- ⑨ 3/8" DIAGONAL ROD WITH GALVANIZED STEEL TURNBUCKLE OR DIAGONAL THREADED ROD.
- ⑩ FENCE CORNER POST BRACE: 1 5/8" OD EACH CORNER EACH WAY.
- ⑪ 1 1/2" MAXIMUM CLEARANCE FROM GRADE.
- ⑫ 4" FINISH OR AS DETERMINED BY CONSTRUCTION MANAGER DURING BID WALK.
- ⑬ 6" COMPACTED 95% BASE MATERIAL OR AS DETERMINED BY CONSTRUCTION MANAGER DURING BID WALK.
- ⑭ FINISH GRADE SHALL BE UNIFORM AND LEVEL.
- ⑮ GATE POST 4". SCHEDULE 40 PIPE, FOR GATE WIDTHS UP THRU 7 FEET OR 14 FEET FOR DOUBLE SWING GATE, PER ASTM-F1083.
- ⑯ GATE FRAME: PIPE, PER ASTM-F1083.
- ⑰ STYMILOCK MULTI TENANT LOCKING DEVICE, PATENT # 5868015 SEE CONTACT INFORMATION ON THIS SHEET

- ⑱ 1 PAIR INDUSTRIAL PIN HINGE
- ⑲ NOT USED
- ⑳ GEOTEXTILE FABRIC
- ㉑ LINE POST: CONCRETE FOUNDATION (2000 PSI)
- ㉒ CORNER POST: CONCRETE FOUNDATION (2000 PSI)
- ㉓ GATE POST: CONCRETE FOUNDATION (2000 PSI)

**GENERAL NOTES:**

- 1. INSTALL FENCING PER ASTM F-567
- 2. INSTALL SWING GATES PER ASTM F- 900
- 3. LOCAL ORDINANCE OF BARBED WIRE PERMIT REQUIREMENT SHALL BE COMPLIED IF REQUIRED.
- 4. POST & GATE PIPE SIZES ARE INDUSTRY STANDARDS. ALL PIPE TO BE GALV. (HOT DIP, ASTM A120 GRADE "A" STEEL). ALL GATE FRAMES SHALL BE WELDED. ALL WELDING SHALL BE COATED WITH (3) COATS OF COLD GALV. (OR EQUAL).
- 5. ALL OPEN POSTS SHALL HAVE END-CAPS.
- 6. USE GALVANIZED HOG-RING WIRE TO MOUNT ALL SIGNS.
- 7. ALL SIGNS MUST BE MOUNTED ON INSIDE OF FENCE FABRIC.



1. DRILL 3/8" HOLES IN THE GATE LEAF USING THE GATE DIMENSIONS PROVIDED.
2. SLIDE THE CARRIAGE BOLTS IN THE SLOTS ON THE BACK OF PART "B" AND PUSH THE BOLTS THROUGH THE HOLES DRILLED INTO THE GATE LEAF. PUT THE NUT AND THE LOCKNUT ON AND TIGHTEN AND CUT THE EXCESS BOLT OFF. DO THE SAME WITH PART "A".
3. ADD THE NUMBER OF SLEEVES NEEDED FOR THE NUMBER OF LOCKS AND SLIDE THE LOCKING BAR INTO PLACE THROUGH BOTH PART "A" AND PART "B". NOW INSTALL THE LOCKS.

\*IF THE GATE HAS NO CENTER BAR IN THE GATE LEAF YOU MAY NEED TO MOUNT THE STYMILOCK VERTICALLY USING THE SAME DIMENSIONS GIVEN ON THE GATE FACE.

\*VERTICAL APPLICATION MAY ALSO BE USED ON SLIDING GATES WITH MULTIPLE LOCKS.

**STYMILOCK INSTALLATION**

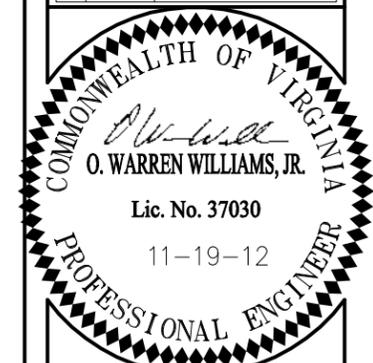


STYMILOCK CONTACT INFORMATION:  
PATENT #5868015  
PO BOX 1228 PINEVILLE, NC 28134  
16248 MARVIN ROAD CHARLOTTE, NC 28277

Clear Signal Towers, LLC  
**CLEAR SIGNAL TOWERS, LLC**  
1801 LIBBIE AVENUE  
SUITE 201  
RICHMOND, VA 23226  
TEL (804)951-9694  
FAX (804)648-4809

**WW&A**  
warren williams & associates  
736 CARNEROS CIRCLE  
HIGH POINT  
NORTH CAROLINA  
27265  
(757) 450-2288

NO.	DATE	DESCRIPTION
1	07/26/11	ZONING DRAWINGS
	BY: KMB	CHK: OWW APP'D: OWW
2	11/19/12	REVISED ZONING DRAWINGS
	BY: KMB	CHK: OWW APP'D: OWW
3		
4		
5		
6		

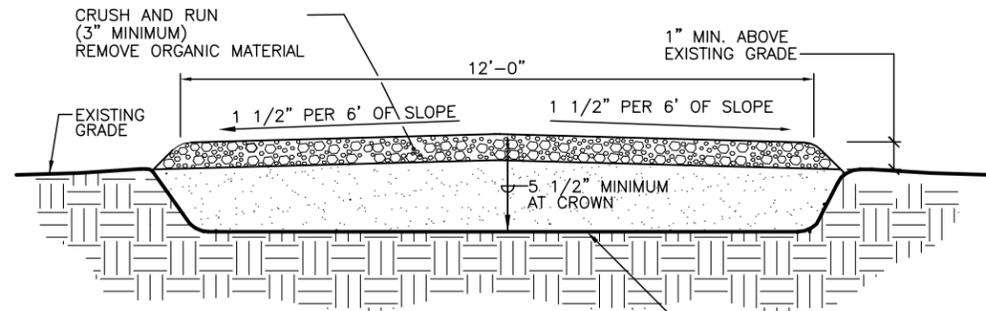


VA9031  
KIDD'S STORE  
RAWLAND  
MONOPOLE  
OFF SR 6  
PALMYRA, VA  
22963  
FLUVANNA COUNTY

DRAWN BY:	KMB
CHECKED BY:	OWW
TTV DATE:	NA
COMM NO:	VA9031

SHEET TITLE:  
**FENCE NOTES AND DETAILS**

SHEET NUMBER:  
**C-5**

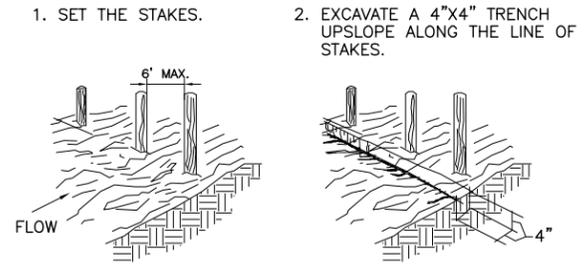


**EARTH WORK SUBGRADE COMPACTION & SELECT GRANULAR FILL**

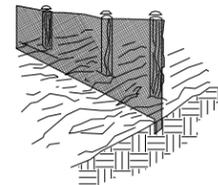
- (A) CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING & GRUBBING THE CONSTRUCTION SITE AND ROADWAY AREAS. THE CONTRACTOR SHALL COMPLY WITH THE RECOMMENDATIONS CONTAINED WITHIN THE GEOTECHNICAL REPORT WHEN NECESSARY PREPARED FOR THIS SITE FOR SITE WORK PREPARATION & FOUNDATION WORK. AS A MINIMUM THE TOP 3" OF GRADE SHALL BE REMOVED. THE EXPOSED SUBGRADE COMPACTED, GEOTEXTILE FABRIC AS REQUIRED FOR UNSTABLE SOIL CONDITION.
- (B) ALL SELECT GRANULAR FILL SHALL BE COMPACTED TO A 95% COMPACTION AT A MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557 OR WITHIN PLUS OR MINUS 3% OF OPTIMUM MOISTURE CONTENT.

**1 TYPICAL ACCESS ROAD CROSS SECTION**  
C-6 NOT TO SCALE

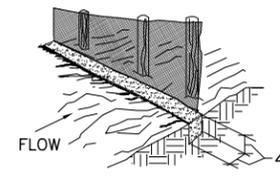
**CONSTRUCTION OF A SILT FENCE (WITHOUT WIRE SUPPORT)**



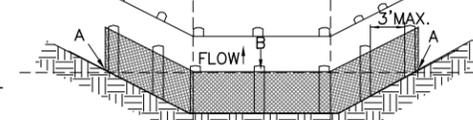
3. STAPLE FILTER MATERIAL TO STAKES AND EXTEND IT INTO THE TRENCH.



4. BACKFILL AND COMPACT THE EXCAVATED SOIL.

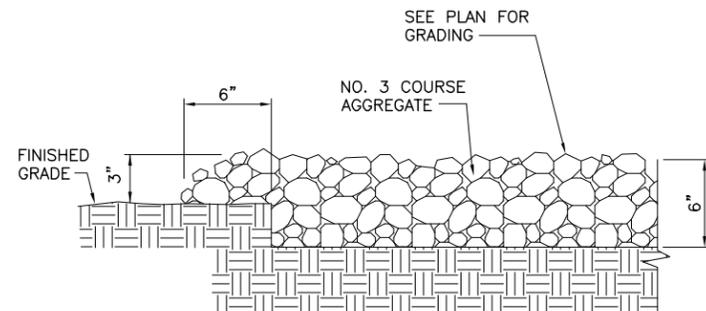


**SHEET FLOW INSTALLATION (PERSPECTIVE VIEW)**

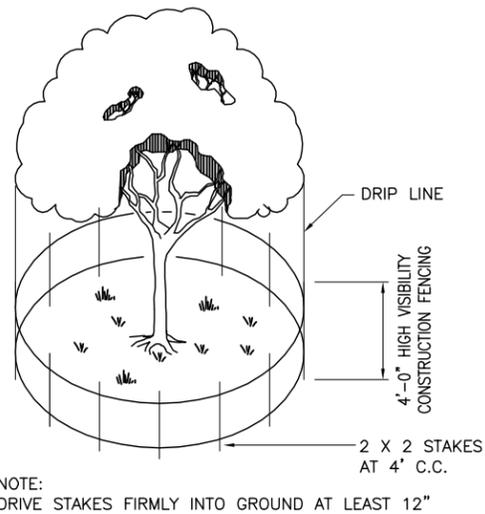


POINTS A SHOULD BE HIGHER THAN POINT B DRAINAGEWAY INSTALLATION (FRONT ELEVATION)

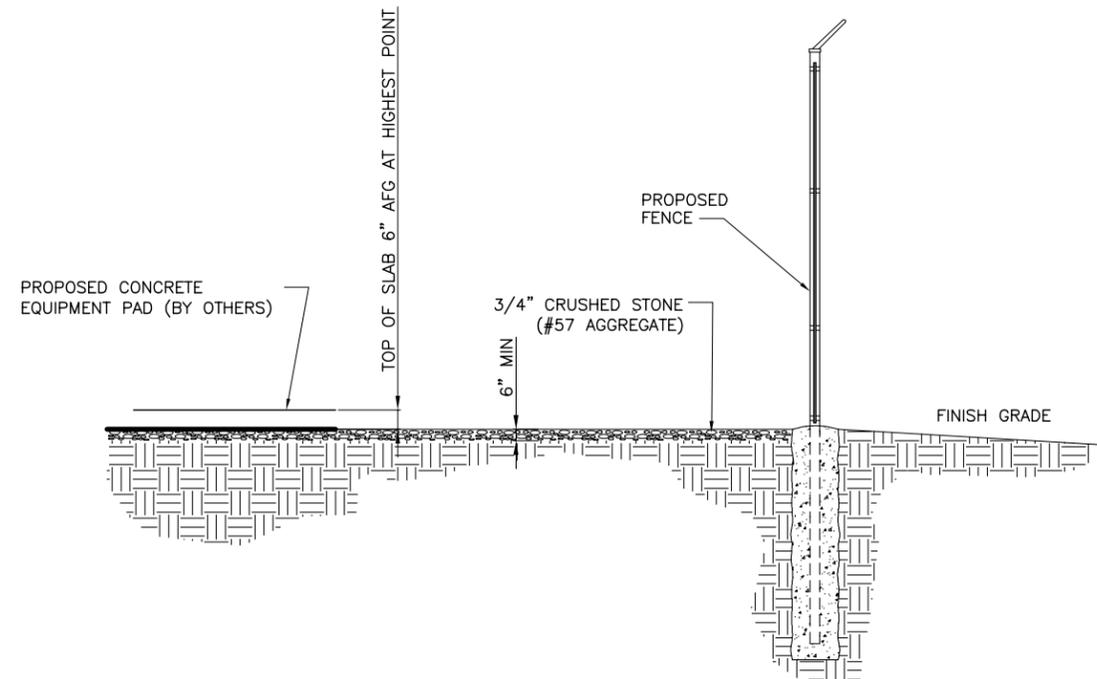
**2 SILT FENCE**  
C-6 NOT TO SCALE



**3 SECTION - GRAVEL PARKING/TURN AROUND (OUTSIDE OF FENCED COMPOUND)**  
C-6 NOT TO SCALE



**4 TREE PROTECTION**  
C-6 NOT TO SCALE



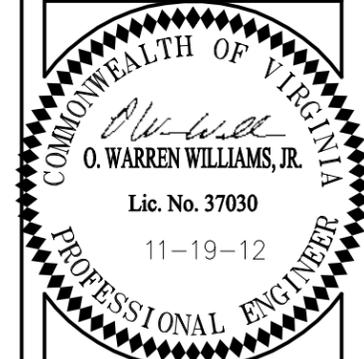
**5 TYPICAL SITE COMPOUND CROSS SECTION**  
C-6 NOT TO SCALE

Clear Signal Towers, LLC

**CLEAR SIGNAL TOWERS, LLC**  
1801 LIBBIE AVENUE  
SUITE 201  
RICHMOND, VA 23226  
TEL (804)951-9694  
FAX (804)648-4809

**WW&A**  
warren williams & associates  
736 CARNEROS CIRCLE  
HIGH POINT  
NORTH CAROLINA  
27265  
(757) 450-2288

NO.	DATE	DESCRIPTION
1	07/26/11	ZONING DRAWINGS
	BY: KMB	CHK: OWW APP'D: OWW
2	11/19/12	REVISED ZONING DRAWINGS
	BY: KMB	CHK: OWW APP'D: OWW
3		
4		
5		
6		



**VA9031**  
**KIDD'S STORE**  
**RAWLAND**  
**MONOPOLE**  
  
OFF SR 6  
PALMYRA, VA  
22963  
FLUVANNA COUNTY

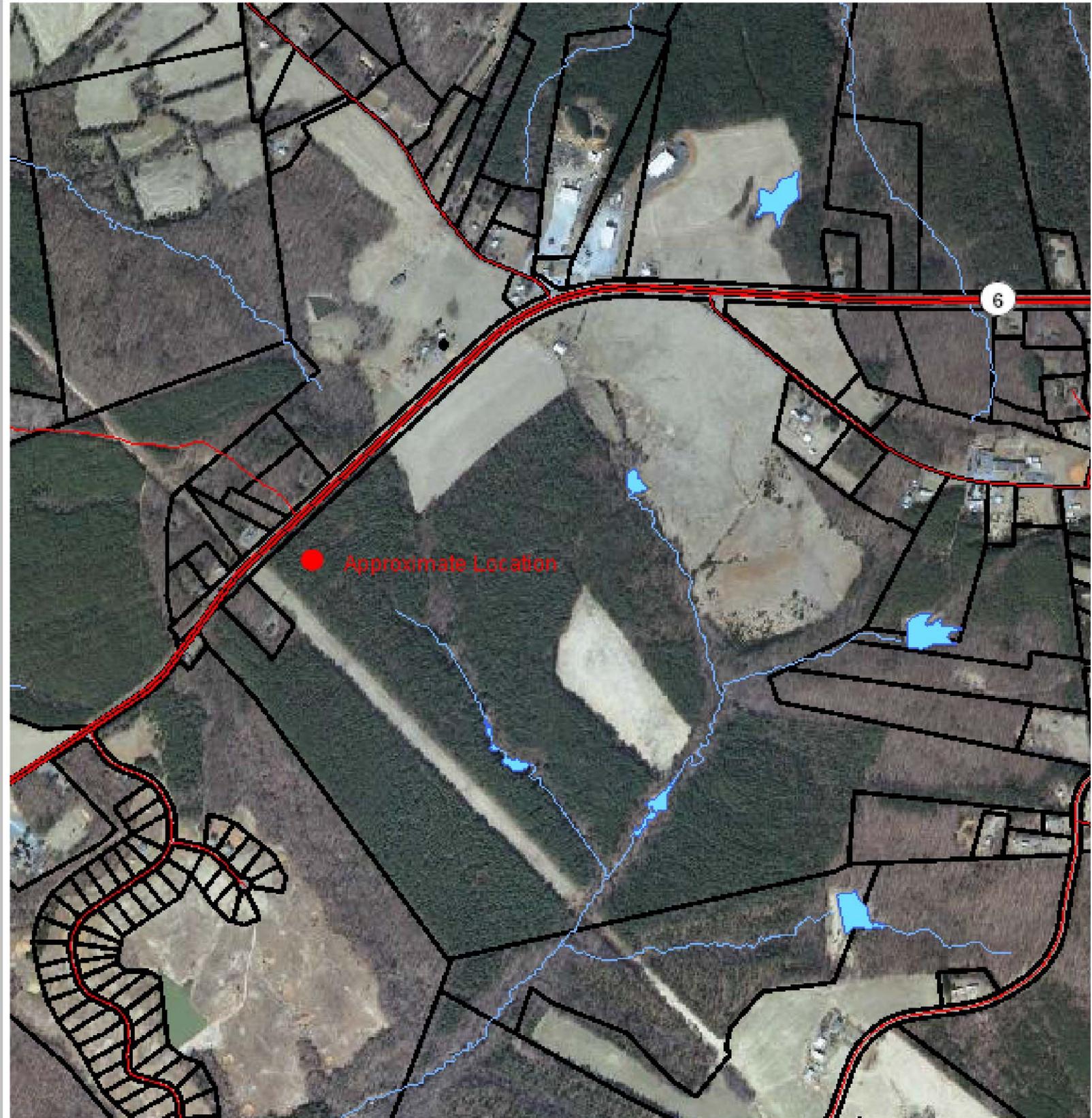
DRAWN BY:	KMB
CHECKED BY:	OWW
TTV DATE:	NA
COMM NO:	VA9031

SHEET TITLE:  
**CIVIL DETAILS**

SHEET NUMBER:  
**C-6**



Proposed Kidds Store Telecommunications Facility



Scale: 1:18055.954822	Date: 06/19/2012	Printed By: Andrew J. Pompei
-----------------------	------------------	------------------------------

Under Virginia State Law, these real estate assessment records are public information. Display of this property information on the internet is specifically authorized by the Code of Virginia §58.1-3122.2(as amended).

SITE LEASE AGREEMENT DATED 8/30, 2011  
BETWEEN CLEAR SIGNAL TOWERS, LLC and NEW CINGULAR WIRELESS PCS, LLC  
SIGNATURE PAGE

Owner:

CLEAR SIGNAL TOWERS, LLC

By: [Signature] (SEAL)

Name: Dorothy Brunetti \_\_\_\_\_

Title: CEO \_\_\_\_\_

Date: 8/30/11

Tenant:

NEW CINGULAR WIRELESS PCS, LLC

By: AT&T Mobility Corporation,  
Its: Manager

By: [Signature]

Name: David C. Tuck  
Manager,

Title: Real Estate and Construction

Date: 8/23/11

The following Exhibits are attached to and made a part of this Agreement: Exhibits A (Property Location), A-1 (Tower Site Plan), B (Site Access and Information), C (Prime Lease, if applicable) and D (Memorandum of Lease).





Proposed 195'  
Monopole

## View from Rosewood Dr

VA9031 Kidd's Store, Off State Route 6, Palmyra, VA



Clear Signal Towers, LLC



Proposed 195'  
Monopole

View from Kidd's Store (Rolling Rd)  
VA9031 Kidd's Store, Off State Route 6, Palmyra, VA





Proposed 195'  
Monopole

View from 8265 W River Rd

VA9031 Kidd's Store, Off State Route 6, Palmyra, VA



Clear Signal Towers, LLC



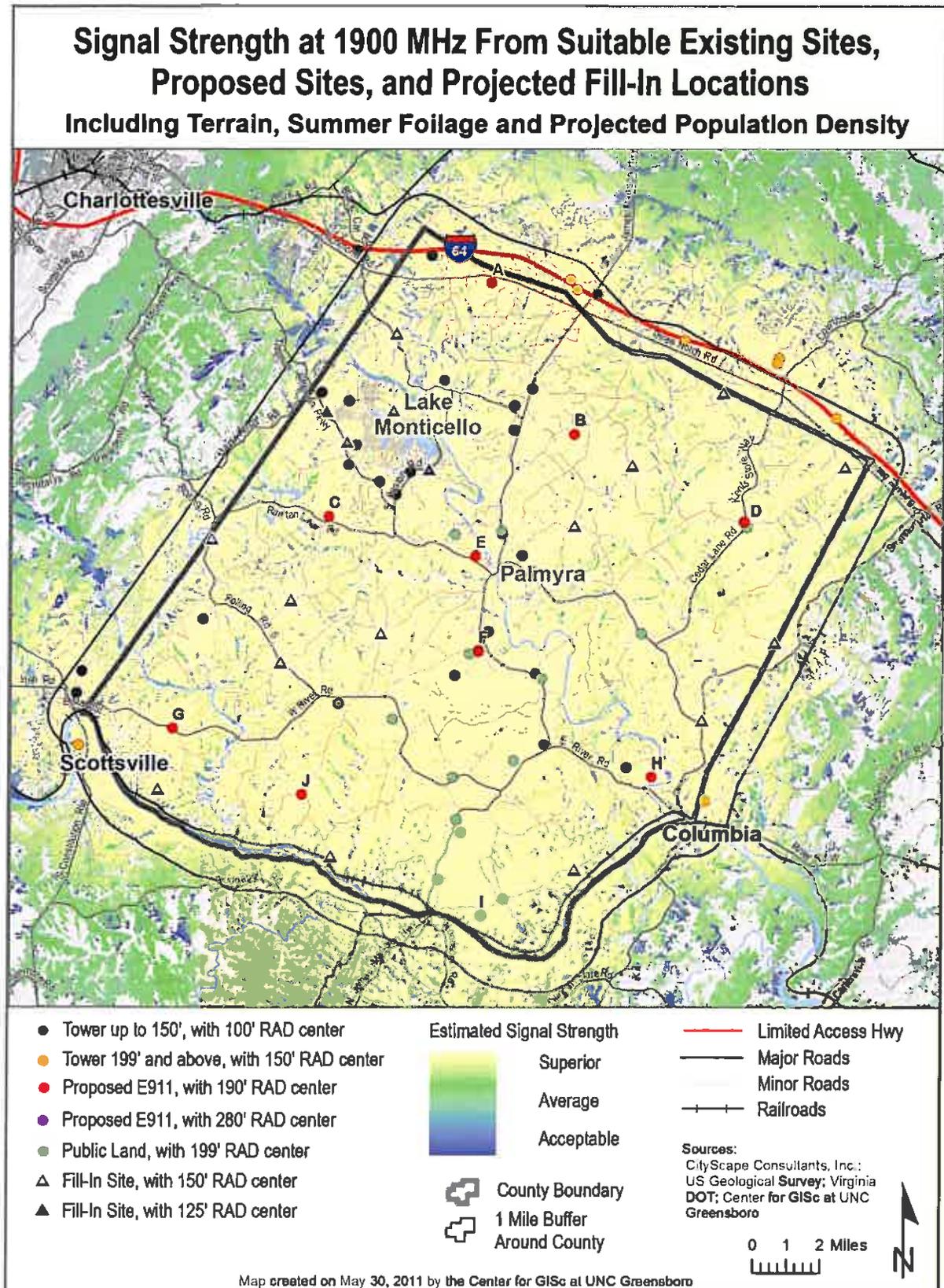


Figure 40: Projected new infrastructure infill sites



June 15, 2012

**Subject: AT& T Proposed Site – Communications Tower located on Route 6 (Tax Map 39-A-34) ~ Palmyra, VA: New Site Justification for Chosen Location – Site (CV445/VA9031) “Kidd’s Store”**

I am writing this letter on behalf of AT&T in an effort to explain why our design team chose the Clear Signal Candidate for development of its network and why the Cunningham School Tower was rejected. I have also attached propagation maps and a street map to try and illustrate the points.

- On the street map, I have denoted the original search ring coordinates for the site CV445 in question. The search ring in this area was ½ mile which I believe to be common with most carriers. The Clear Signal proposed site fits well within the search ring area. The county school site does not fit within the search ring as is approximately ½ mile outside of the original search area.
- Attached are also propagation maps produced by AT&T development software that shows the Clear Signal site propagates evenly along the Route 6 corridor. The school propagation listed as the “C” candidate shows a potential for dropped calls the west of the site (yellow means dropped calls).
- The site that will serve as the connecting site (CV444) to the West on Route 6 has been reduced in height by 25 feet to help and maintain the aesthetics in the county and surrounding property. Reducing the height of the adjoining site will weaken the signal the proposed site in question and increase the chances of dropped calls.
- The Clear Signal Site is situated in mature tree growth and is across the street from a power substation. AT&T feels that the proposed site is need for complete network coverage but will have minimal impact on the surround property and aesthetics.
- Cunningham School Site could and may be a future area for development, in addition to the Clear Signal Site, as technology advances and AT&T rolls out their complete 4G network plans slated for completion by 2014.

AT&T respectfully request that the county supports the proposed Clear Signal Tower for development based on the points listed above and as part of our on-going efforts to provide the best network in Fluvanna County.

Please do not hesitate to contact me with any questions or concerns regarding this project.

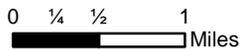
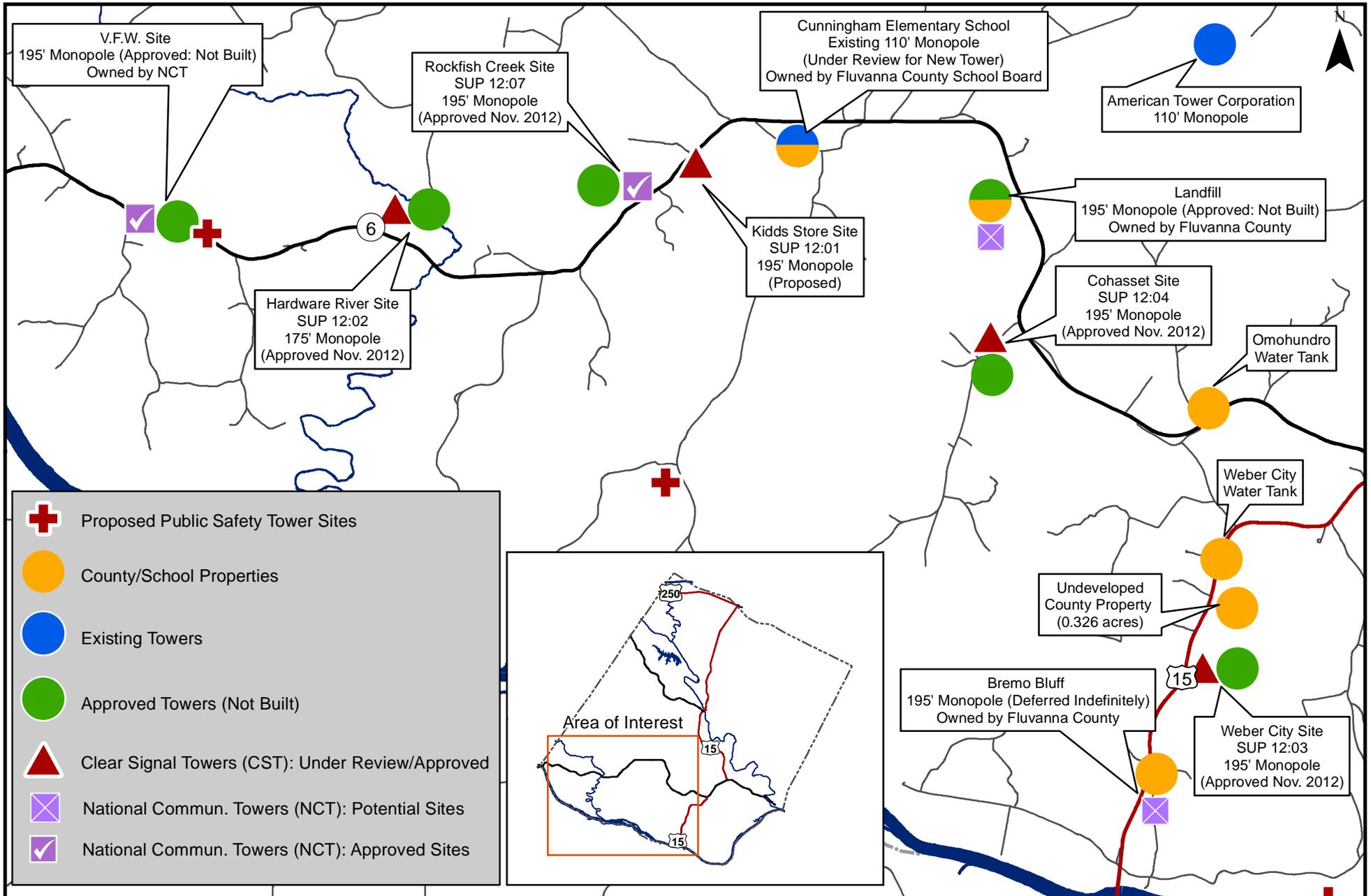
Sincerely,

*Samuel J. Schroll*

Samuel J. Schroll  
RF Engineer  
Solutelia /AT&T Mobility  
4801 Cox Road, Suite 300  
Glen Allen, Va. 23060  
804-928-5571

# Proposed Telecommunications Facilities

Southwestern Fluvanna County: Scottsville to Breomo Bluff  
Fall 2012



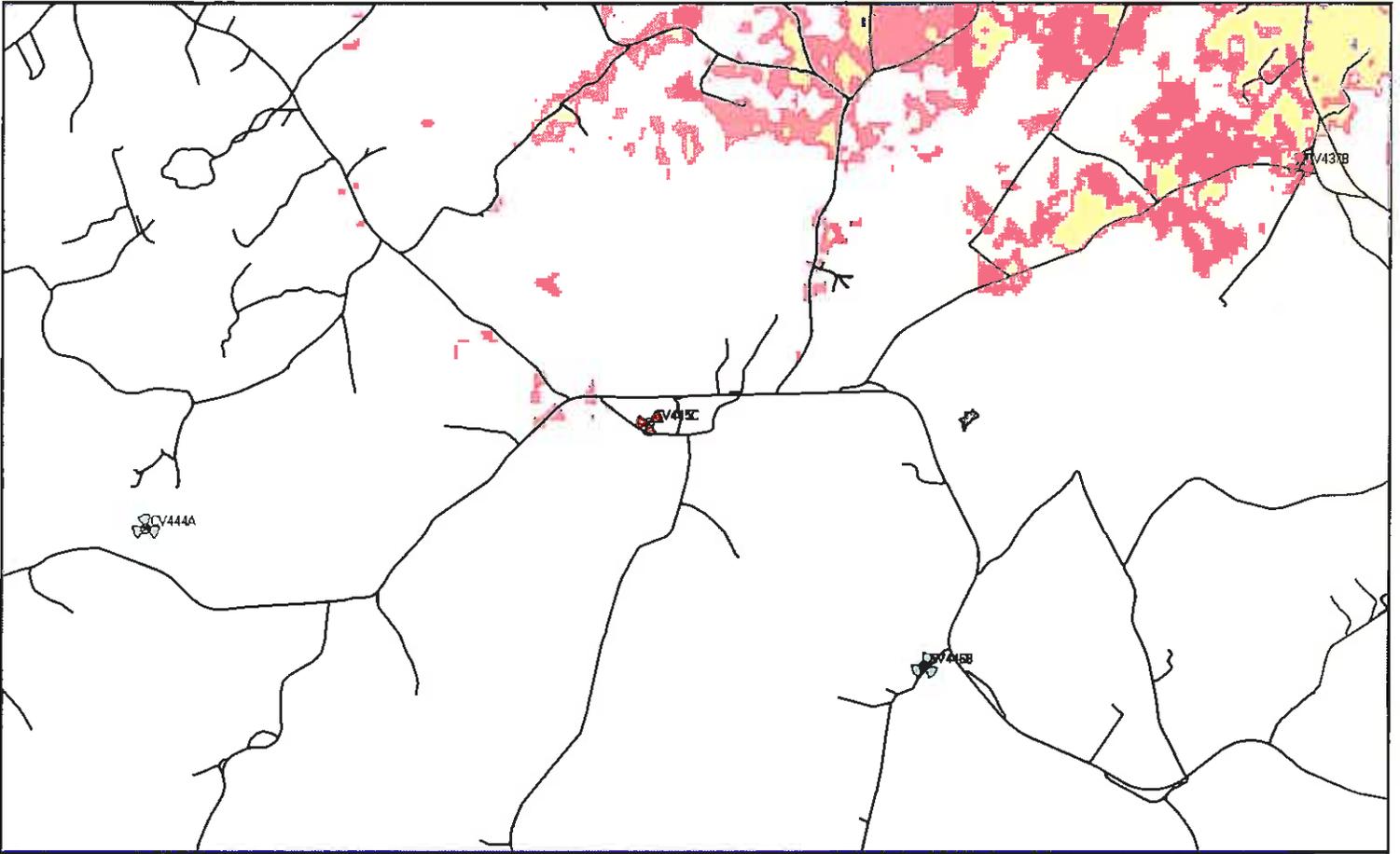


Existing Coverage

Received

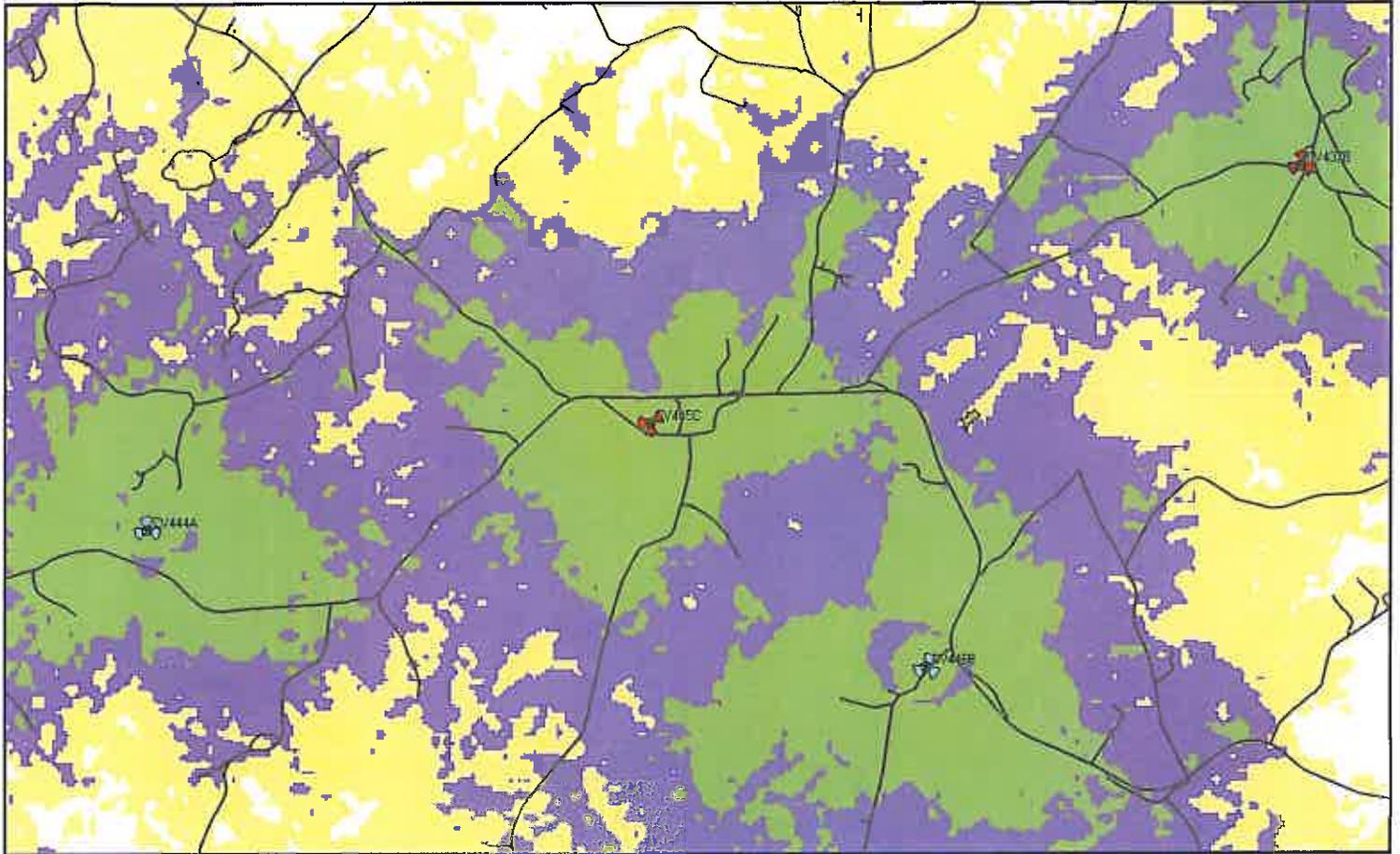
MAR 12 2012

Fluvanna County



CV On-air

-  Best Signal Level (dBm)  $\geq -74$
-  Best Signal Level (dBm)  $\geq -82$
-  Best Signal Level (dBm)  $\geq -92$
-  Best Signal Level (dBm)  $\geq -104$
-  Best Signal Level (dBm)  $\geq -140$



Scale: 1:69,814

0 1 2 miles

**Three colors plots**

-  In-building coverage (dBm)  $\geq -76$
-  In-car coverage (dBm)  $\geq -86$
-  On-street coverage (dBm)  $\geq -96$
-  Poor coverage (dBm)  $\geq -104$

## MEMORANDUM

To: County of Fluvanna, Office of Planning and Community Development  
From: Fluvanna County Health Department, Environmental Health  
Date: May 10, 2012

SDP 12:09 – Triangle Realtors – Property located on right side of Turkey Sag off of Rt. 53 in existing shopping center. Probable connection to Lake Monticello water & sewer.

SUP 12:01 – Clear Signal Towers, LLC - Tax Map 39-A-34, property belonging to William Davis. 331.29 acres directly across from Kidd's Store, southside of Rt. 6. Property does not contain any existing buildings, water or sewage systems.

SUP 12:02 – Clear Signal Towers, LLC – Tax Map 48-A-94, property belonging to Michael Gray. 71.46 acres on north side of Rt. 6 past Hardware River. Property does not contain any existing buildings, water or sewage systems.

SUP 12:03 – Clear Signal Towers, LLC – Tax Map 59-A-13B, property belonging to Richard White. 46.6 acres on East side of Rt. 15 before Bremo Bluff. The health department issued a permit for an agricultural well which was installed on June 10, 2009. There is a barn on the property but no septic systems.

SUP 12:04 Clear signal Towers, LLC – Tax Map 50-A-3, property belonging to Margaret Snoddy. 97.7 acres on Rt. 650, south of Rt. 6. Property does not contain any existing buildings, water or sewage systems.

ZTA 12:01 & ZTA 12:02 – Amendments to Zoning and Subdivision Ordinances. No apparent impact on health department regulations.



Consultants, Inc.

7050 W. Palmetto Park Road #15-652

Boca Raton, FL 33433-3483

Phone: 877-438-2851 • Fax: 877-220-4593

## Telecommunications Site Review Virginia New Structure

September 13, 2012

Mr. Steven Tugwell  
Planning and Zoning  
Fluvanna County  
132 Main Street  
Palmyra, Virginia 22963

### RE: Clear Signal Towers, LLC and AT&T Mobility (“Applicant”) Kidd’s Store (CV455/VA9031)

Dear Mr. Tugwell,

At your request on behalf of Fluvanna County, Virginia, CityScape Consultants Inc., in its capacity as telecommunications consultant for the County has considered the merits of an application submitted by Clear Signal Towers, LLC (“Clear Signal”) and AT&T Wireless (“AT&T”), to construct a new one hundred ninety-five (195) foot monopole type tower as an antenna support structure. AT&T, along with other carriers such as Verizon and nTelos, is actively upgrading their facilities throughout the State of Virginia and other areas in the southeast United States. Other carriers such as Verizon, U.S. Cellular, T-Mobile and Verizon are actively making similar type upgrades. This proposed new construction will allow AT&T to improve service along US-60. The new facility will expedite AT&T to bring new Third Generation (3G) and Fourth Generation (4G) electronic communication capabilities. Currently many wireless service providers are very limited with facilities in Central Virginia. The proposed support structure is to be owned by Clear Signal Towers and is located on property owned by William and Anne Davis. The proposed new facility will be located just off State Route 6 near Palmyra in Fluvanna County, Virginia, see *figure 1*.

AT&T is proposing to mount antennas at the top available space at one hundred ninety-five (195)-foot level using a single coaxial cable for each antenna. AT&T plans to install a new prefabricated shelter on a new concrete foundation near the base of the tower, see *figure 2*. The Applicant has stated that the facility will be constructed to accommodate a total of four (4) antenna arrays. Fluvanna County code requires towers with this height to have six (6) antenna arrays. A new tower of this height must accommodate six (6) antenna arrays, see *figure 3*.

A reasonable search area location is a key element in assuring that a site is justified. Generally new wireless communication facilities are equally spaced with respect to existing sites. However, terrain, network capacity and other issues may necessitate a facility that it is *not* equally spaced with respect to existing sites. Typically the wireless provider is asked to provide a frequency grid or coverage predictions to indicate that a site is properly located. *Figure 4* represents the current service for AT&T at this location. *Figure 5a* indicates the Applicant’s predicted new service for this phase of Network deployment in Fluvanna County, and *figure 5b* is the predicted new service from a possible County owned site.

**Telecommunications Site Review**

CityScape Consultants has reviewed the Applicant's location in reference to the current available facilities and in conjunction to Fluvanna County's Wireless Telecommunications Facilities Master Plan. It was determined that the chosen location was within reasonable distance to an existing Fluvanna County Public School, see *figure 6*. Considering CityScape had not been provided assurance that County school property would be allowed for use as telecommunications facilities, CityScape attended the July public meeting of the Fluvanna County School Board to discuss using school property for telecommunications facilities. Following a discussion and input from County planning staff, the School Board determined that school property would be made available for such use. CityScape asked the Applicant to show cause as to why the site could not be situated on property known as Cunningham School (479 Cunningham Road).

In support of the request to the Applicant for requiring further documentation, CityScape provided propagation mapping showing the Cunningham School site in use as a telecommunication hand-off candidate. Clearly the Cunningham School location would meet network objectives of AT&T. The Applicant's next step in the process would be to determine if there is an option of leasing the County property.

The Applicant supplied letters of compliance with all Federal Communications Commission (FCC) standards regarding human exposure to Radio Frequency energy and with all aspects of FCC rules regarding interference, see *figure 7*. CityScape is aware that this facility will operate in both the 800-megahertz and 1900-megahertz spectrum and could be an interference concern to Public Safety operations.

In summary, in order to meet the federal mandate required of all wireless service providers, there is a need for a new facility in the proposed general area. The location selected by the Applicant is within reasonable proximity to available County property that would provide reasonable hand-off potential to other planned telecommunications facilities; therefore the County can anticipate further discussions toward the development of a new telecommunications facility.

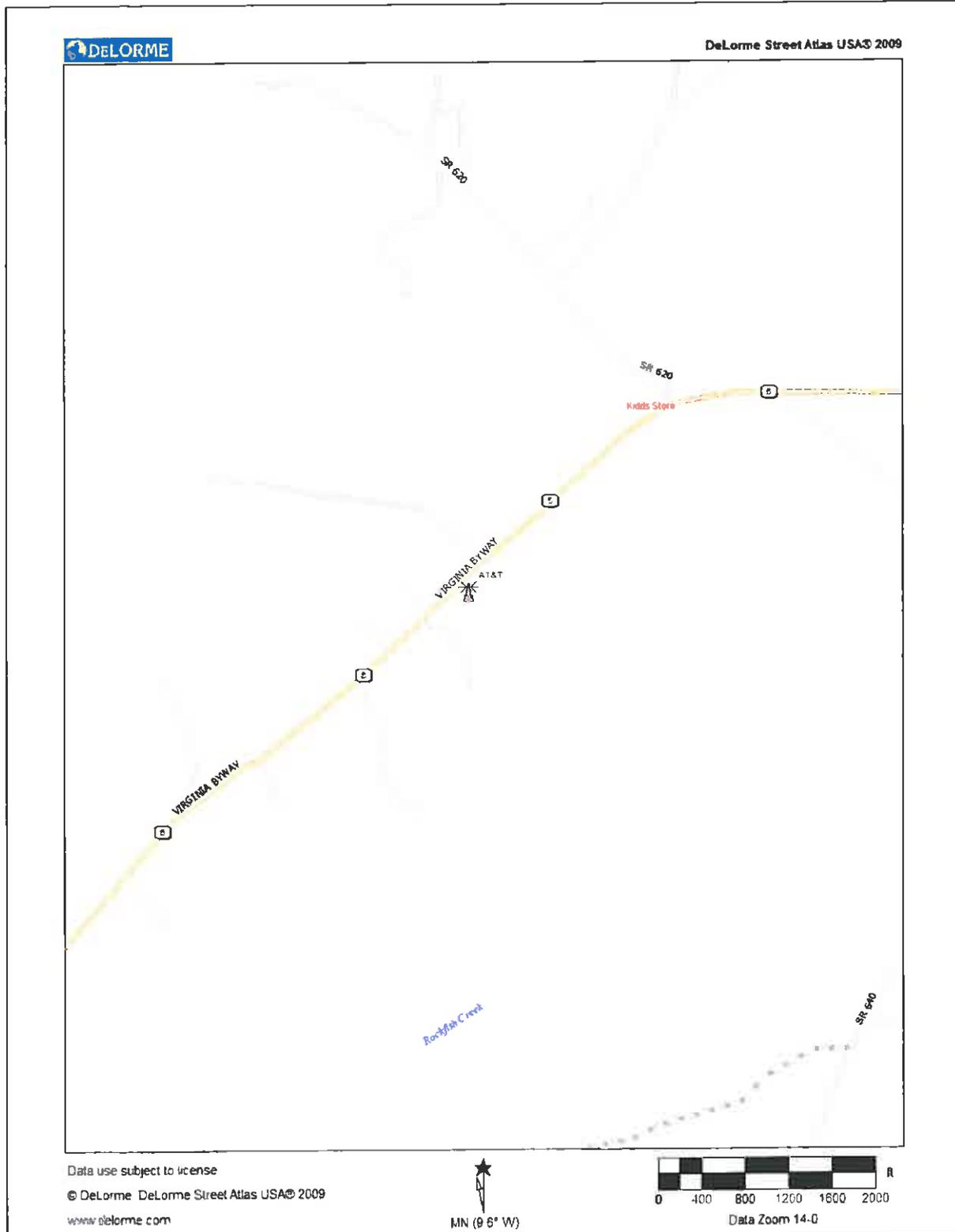
Upon review and discussions with the Applicant, CityScape confirms that a new support structure will be required in the general vicinity not only for AT&T equipment, but will be needed for additional wireless carriers in the near future. Therefore, CityScape recommends the Applicant produce cause as to why this proposed new facility with an antenna elevation of one hundred ninety-five (195) feet would not provide acceptable network development from the Cunningham School location in Fluvanna County.

Respectfully submitted,



Richard L. Edwards  
FCC Licensed  
PCIA Certified  
CityScape Consultants, Inc.

**Telecommunications Site Review**



**Figure 1. Site Location**

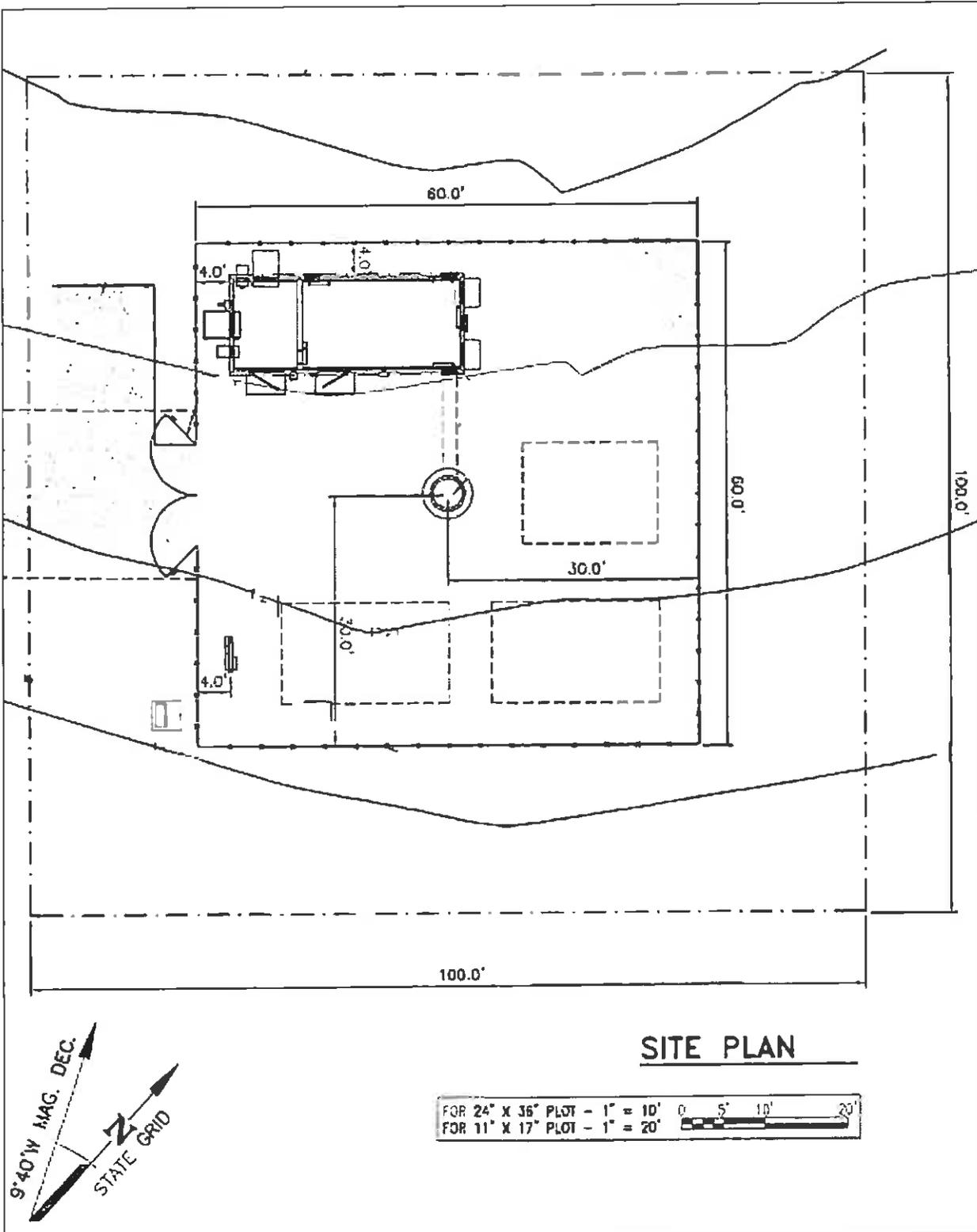
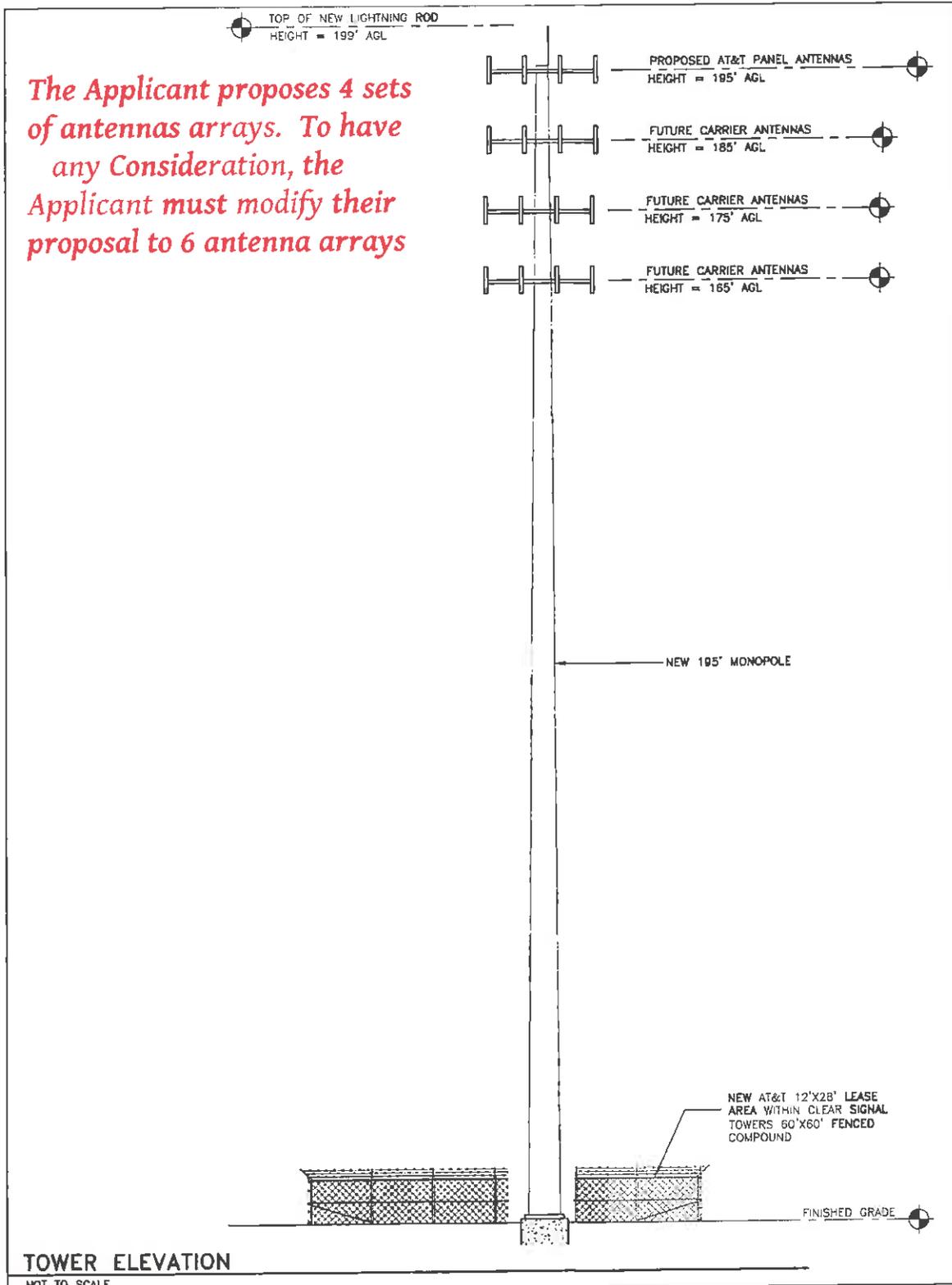


Figure 2. Proposed Ground Compound

**Telecommunications Site Review**



**Figure 3. Proposed Tower Elevation**

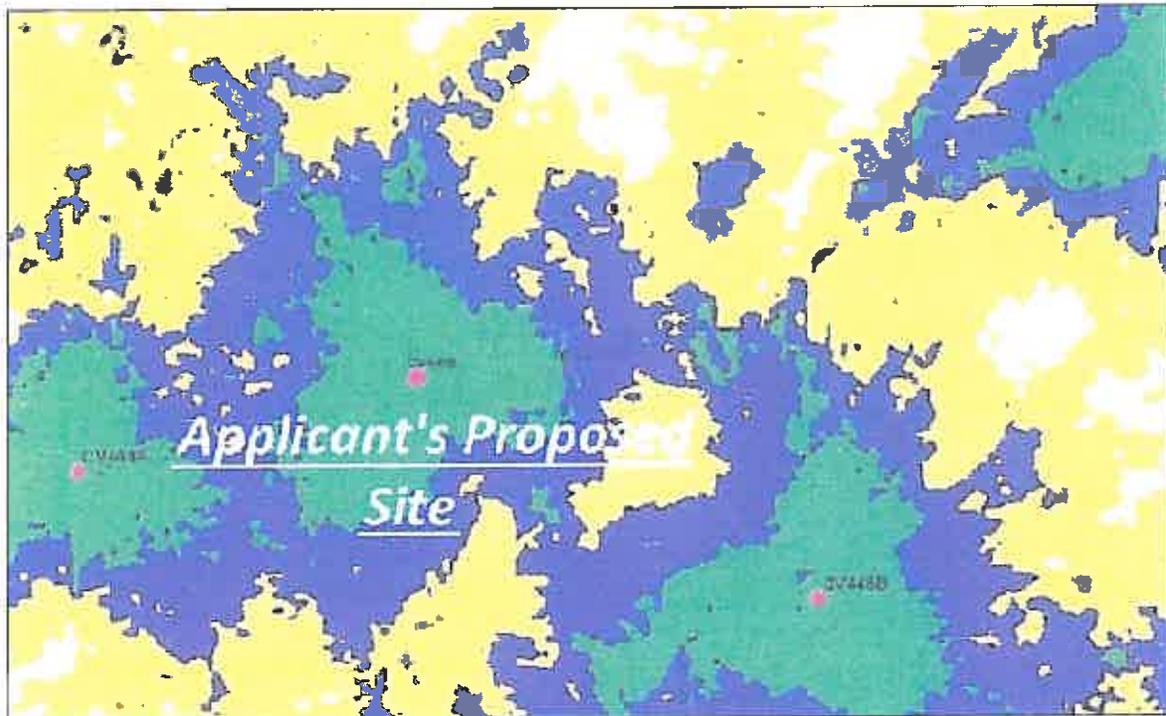


Existing Coverage

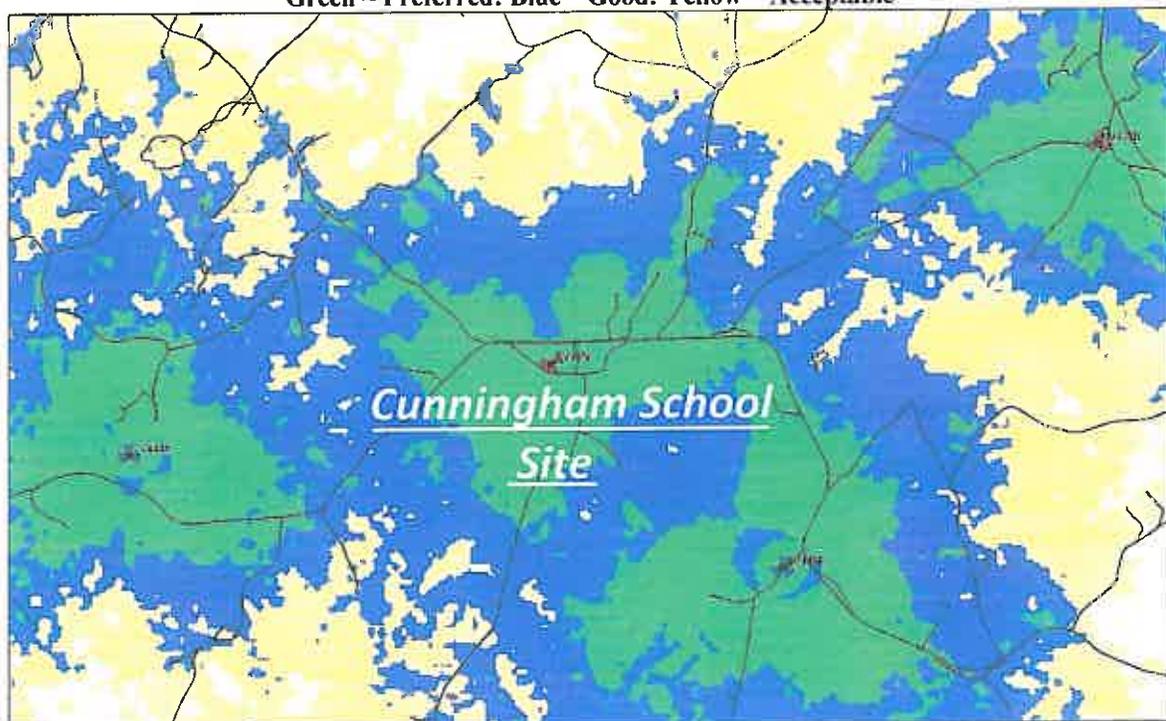


- CV On-air
- Best Signal Level (dBm)  $\geq -74$
  - Best Signal Level (dBm)  $\geq -82$
  - Best Signal Level (dBm)  $\geq -92$
  - Best Signal Level (dBm)  $\geq -104$
  - Best Signal Level (dBm)  $\geq -140$

**Figure 4. Current Service (Gray Indicates Target Area)**



**Figure 5a. Applicant Site Projected New Service**  
Green ~ Preferred: Blue ~ Good: Yellow ~ Acceptable



**Figure 5b. County Site Projected New Service**  
Green ~ Preferred: Blue ~ Good: Yellow ~ Acceptable





November 7, 2011

**Subject: AT& T Proposed Site – Communications Tower located on Route 6  
(Tax Map 39-A-34) ~ Palmyra, VA: FCC Compliance Letter – Site  
(CV445/VA9031) “Kidd’s Store”**

AT&T will comply with all FCC rules regarding interference to other radio services and  
AT&T will comply with all FCC rules regarding human exposure to radio frequency  
energy.

Please do not hesitate to contact me with any questions or concerns regarding this project.

Sincerely,  
Samuel J. Schroll

Samuel J. Schroll  
RF Engineer  
Solutelia /AT&T Mobility  
4801 Cox Road, Suite 300  
Glen Allen, Va. 23060  
804-928-5571

**Figure 7. Human Exposure and Interference Compliance Statement**



# Rivanna River Basin Commission

A CONFLUENCE OF INTERESTS

November 19, 2012

## MEMORANDUM

To: Mr. Shaun Kenney, Chair, Fluvanna Board of Supervisors  
Mr. Barry Bibb, Chair, Fluvanna County Planning Commission

From: Leslie Middleton, Executive Director, RRBC

Re: Rivanna Snapshot and Watershed Action Plan

8801 W. MAIN STREET  
SUITE 202  
CHARLOTTESVILLE, VA 22903  
(434) 971-7722  
(973) 201-7722 (FAX)  
www.rivannariverbasin.org

The Rivanna River Basin Commission (RRBC) is producing a snapshot report of the status of the Rivanna River watershed. This will be the first assessment of the Rivanna River basin since the 1998 TJPDC *State of the Basin* report.

ALBEMARLE COUNTY  
Dennis Rooker  
Duane Snow  
Liz Palmer

The 2012 Rivanna Snapshot provides general information on the Rivanna watershed; status of the health of the watershed; land use related to healthy waters; and current actions and commitments. RRBC has been supported in this effort over the last three months by the Center for Watershed Protection.

CITY OF CHARLOTTESVILLE  
Dave Norris  
Dede Smith  
Keith Lancaster

The 2012 Rivanna Snapshot is the first step in developing the Rivanna Watershed Action Plan. The Action Plan will pull together existing plans including local total maximum daily load (TMDL) studies (such as the one for the Rivanna River) and the Chesapeake Bay TMDL. It also will pull together local comprehensive plans as well as other local reports into one planning document to provide a roadmap for localities and partners to use moving forward.

FLUVANNA COUNTY  
Joe Chesser  
Bob Ullenbrucht  
Marvin Moss, *Chair*

Specifically, the Rivanna Watershed Action Plan will:

GREENE COUNTY  
Jim Frydl, *Vice Chair*  
Eddie Dean  
Carl Schmitt

- Identify priority healthy streams, landscapes, and sub-watersheds and outline mechanisms for providing additional protection for these areas;
- Formulate procedures for evaluating proposed stormwater offsets and trading of nutrient credits in the context of MS4 permitting and other regulatory mechanisms;
- Provide available data on water resources to evaluate beneficial instream flows in the entire Rivanna watershed; work with DEQ to assess water resources on the Rivanna watershed level.
- Correlate Bay TMDL requirements with local plans clean-up plans for local waters.
- Satisfy EPA requirements for watershed planning to facilitate funding for localities for local implementation of the Bay TMDL.

CULPEPER SWCD  
J. Robert Brame, III, *Treasurer*

THOMAS JEFFERSON SWCD  
Lonnie Murray

The 2012 Rivanna Snapshot will be unveiled publicly in Charlottesville, VA on December 7, 2012, at CitySpace from 4:00 p.m. to 7:00 p.m. All members the Fluvanna Board of Supervisors and Planning Commission and staff are cordially invited to attend. In order to provide more opportunities for local engagements, additional events are planned in 2013 for Fluvanna and the other localities that are members of the RRBC.

EXECUTIVE DIRECTOR  
Leslie Middleton

PROGRAM MANAGER  
COORDINATOR  
Jessica Lassetter

The RRBC will work with member localities to collect pertinent data and information for the Watershed Action Plan in the winter of 2012-2013 and plans to provide a draft Action Plan in spring of 2013.

I look forward to sharing more information about these projects with the Board of Supervisors on December 5, 2012, and the Planning Commission on November 28, 2012.



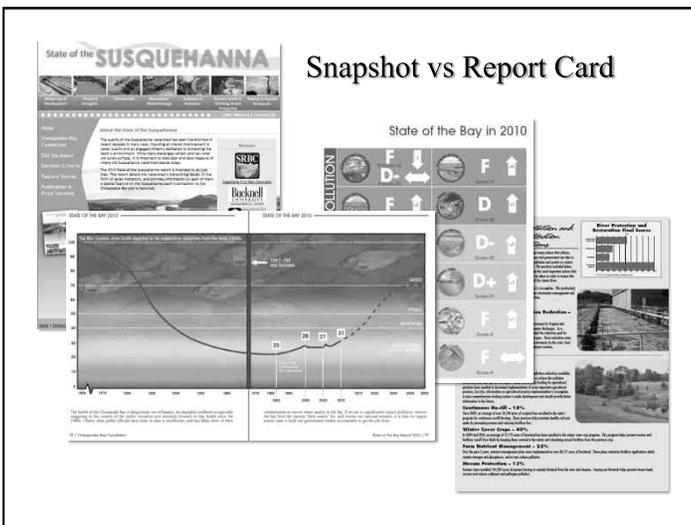
**Rivanna River Basin Commission**  
PROTECTING THE RIVANNA  
THROUGH A CONFLUENCE OF INTERESTS

## Rivanna Snapshot and the Rivanna Watershed Action Plan

Fluvanna County Board of Supervisors  
November 20, 2012  
Fluvanna County Planning Commission  
November 28, 2012

## Presentation

- The Rivanna Snapshot
- The Rivanna Watershed Action Plan
- Project timeline
- Relationship to planning activities in the Rivanna watershed



### Snapshot vs Report Card

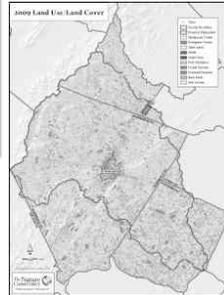
The image shows a complex dashboard with multiple sections. On the left, there's a 'State of the Bay' report card with a grid of indicators (F, D, F, D, D+, F, F) and a 'SUSQUEHANNA' header. In the center, there's a line graph showing a trend over time. On the right, there are smaller charts and text boxes, including one titled 'Water Protection and Assessment Water Quality' and another 'Water Quality'.

## Snapshot Overview

- General information on the Rivanna River watershed (size of watershed; localities in watershed; population of the Rivanna)
- Public access/recreation)
- Watershed health (impairments; TMDLs (pollution budget); implementation plans (clean-up plans)
- Land use related to healthy waters (altered hydrology; changing weather patterns; impervious surfaces; forest land)
- Describe our current commitments: BMPs, buffers, policies, conservation lands and easements

### Acres of watershed in each locality

County or City	Acres of Watershed in Locality	% Watershed within Locality
Charlottesville	6,589	1%
Albemarle County	316,022	64%
Greene County	59,569	12%
Fluvanna County	95,021	19%
Louisa	9,065	2%
Orange	4,608	1%
Nelson	382	Less than 1%



52% of Fluvanna County is in the Rivanna watershed

### Watershed Population and Land Use

166,638 = 2010 Rivanna watershed population

Category	%	Acres
Deciduous Forest	57.8	284,083
Evergreen Forest	9.5	46,721
Open Land	22.3	109,858
Water	1.1	5,339
Impervious	3.2	15,868
Pine Plantation	4.3	21,280
Forest Harvest	0.6	3,049
Orchard/ Vineyard	0.4	1,975
Bare Earth	0.5	2,242
Golf Course	0.2	1,200
<b>TOTAL</b>		<b>491,615</b>

### Public Access and Recreation

- **Public river landings:** fishing, paddling, swimming
- **Public access:** trails
- **Fishing:** significant aquatic living resources



VCU Healthy Waters Assessment for significant aquatic living resources

### Watershed Health

Impairment	Rivanna Stream Miles Impaired	Fluvanna Impaired Waterbodies	Fluvanna Stream Miles Impaired
Benthic-Macroinvertebrates (aquatic life standard)	135.4	Carys Creek from the headwaters downstream to the confluence with the Rivanna River.	1.7
		X-trib to Boston Creek from the headwaters downstream to its confluence with Boston Creek. (Lake Monticello)	1.7
		Middle Fork Cunningham Creek from its confluence with an unnamed tributary originating near Antioch downstream to its confluence with Cunningham Creek.	3.1
		X-trib to the Rivanna River from the headwaters downstream to its confluence with the Rivanna River.	1
		X-trib to North Fork Cunningham Creek from the headwaters downstream to its confluence with the North Fork Cunningham Creek.	0.6
		North Creek from headwaters to the first unnamed tributary confluence.	
E. Coli or Fecal coliform (bacteria or recreational contact standard)	123.3	Middle Fork Cunningham Creek and tributary from the headwaters downstream to its confluence with Cunningham Creek	6.8
		Middle Fork Cunningham Creek X-trib from the headwaters downstream to its confluence with the Middle Fork Cunningham Creek.	3.6
DO <sup>+</sup> (N. Fork Moormans - possible anomaly)	11		
pH	5.2	Fluvanna Ruritan Lake - atmospheric deposition	51 acres

911 linear miles in the Rivanna Basin  
 222 (49%) "impaired" miles  
 230 (51%) "good" miles  
 460 "unknown" (not assessed) miles

Note: Some stream miles are impaired by more than one impairment.

### Water Resources

*water quality is related to water quantity*

Blue = Baseline  
 Green = After discharges and withdrawals  
*EXAMPLE above at confluence of N. and S Fork Rivanna*  
*per Robert Burgholzer, DEQ*

### Urban Stormwater BMPs

*mitigating the effects of altered hydrologic flows*

- Based on locality records
- Showcase examples and explain how they work

### Agriculture BMPs\*

2002 – 2012 data

- 106.6 miles of stream fencing
- 643 acres of stream buffer, assuming a 35 ft stream buffer and including CREP\*

\* Conservation Reserve Enhancement Program = forested buffers

### Riparian Buffers

Land Acres	# Acres of Forest Acres within 100 ft Buffers*	% in 100 ft Forest Buffers	# Acres of Forest Not in Buffers	% Not within 100 ft Buffers
58,533	44,865	77%	13,668	23%



*StreamWatch*  
*Stream health follows land use*

- Rural landscapes with lots of forest have healthy streams. Urban areas with lots of paved surfaces have unhealthy streams.
- **We can predict stream health based on amount of forest and development nearby.**
- Most of the Rivanna basin is semi-rural or “exurban.” Forest cover averages about 70%, and there are 17 acres for every house.
- **More than 50% of exurban streams fail the biological standard.**

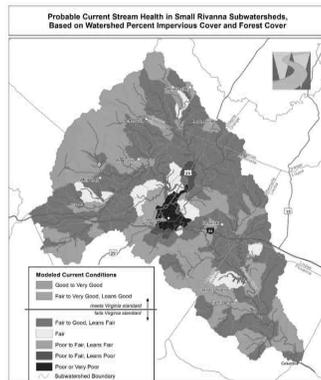
*Stream Health Follows Land Use (2011)*

*StreamWatch*  
*Stream health follows land use*

- Rural and exurban streams decline rapidly with increased development or deforestation.
- Urban streams are already in poor condition and do not respond dramatically to additional development.
- Based on land use, StreamWatch estimates that 70% of Rivanna streams fail the VA aquatic standard.
- Within 20 years, increased development in non-urban areas could reduce the number of healthy streams by on-third (see handout).

*Stream Health Follows Land Use (2011)*

Probable current stream health in small Rivanna watersheds based on % impervious cover and forest cover



Stream Health Follows Land Use (2011)

The Snapshot sets the stage for watershed-wide planning process (the Rivanna Action Plan)



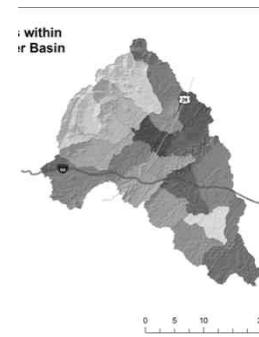
Rivanna Watershed Action Plan

The Action Plan **will bring together existing plans:**

- TMDL (water “clean up”) implementation plans
- Chesapeake Bay TMDL local submissions (2012)
- TNC’s Rivanna Conservation Area Plan (2003/2011)
- StreamWatch’s *Stream Health Follows Land Use* (2011)
- Four local comprehensive plans
- Numerous local reports that recommend specific watershed protection measures in the Rivanna.

Watershed planning process will be done on a sub-watershed basis

- Identifies priority healthy streams, landscapes, and sub-watersheds
- Identifies existing and recommended conservation, restoration, and protection measures
- Involves the RRBC and its Technical Advisory Committee (local govt. staff)
- Includes stakeholder conversations and input



## Rivanna Watershed Action Plan

Planning document *plus toolkit* for implementation

- Identifies priority healthy streams, landscapes, and sub-watersheds and outlines mechanisms for providing additional protection for these areas.
- Accounting procedures for evaluating proposed stormwater offsets and nutrient trading
- Accounting of best available data on water resources to evaluate beneficial instream flows in the Rivanna
- Satisfies EPA requirements for watershed planning to facilitate funding for localities
- Identifies who is doing what in the Rivanna watershed

## Rivanna Snapshot and Action Plan Timeline

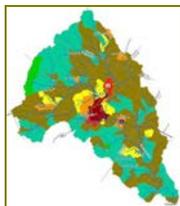
- Summer 2012 Identify and assemble stakeholder advisory team
- Oct-Nov 2012** Presentations to PC's and Boards/Council in watershed
- Nov 30 2012** Publish Rivanna Snapshot
- December 7** Public presentation of Rivanna Snapshot (First Friday event)
- January 2013** Road show visioning: Albemarle, Greene, **Fluvanna**, SWCDs
- Jan – Apr 2013** Gather data for Rivanna Watershed Action Plan and integrate with other planning efforts
- Apr– Jun 2013** Draft Action Plan
- Jun – Aug 2013** Review and publish Action Plan

## Stream Health Follows Land Use

### Key findings from StreamWatch's study of the Rivanna basin

Beginning in spring 2007, StreamWatch set out to study relationships between land use, stream habitat, and stream biology in the Rivanna River basin. For more than two years, we collected stream organisms and habitat data at 51 sites. We then compared these data with land use. Here is what we found:

- Most streams we studied failed Virginia's biological standard. This standard tells us whether streams support a variety of life forms. Streams with more life have better water quality, and can provide better services to humans. Such services include water supply, recreation, and aesthetic enjoyment.
- Stream health is closely related to land use. Rural landscapes with lots of forest have healthy streams. Urban areas with lots of paved surfaces have unhealthy streams. In between, health declines predictably as land use intensifies. The relationship is so strong that we can estimate stream health based on the amount of forest and development in the surrounding area.
- Most of the Rivanna basin is semi-rural (exurban). In this exurban landscape, forest cover averages about 70%, and there are 17 acres for every house. This amount of disturbance may seem mild, yet more than half of exurban streams failed the biological standard.
- Rural and exurban streams decline rapidly with increased development or deforestation. In urban areas, stream health is already poor. Therefore, urban streams do not respond dramatically to additional development.
- Unlike development and deforestation, cattle operations, quantified at the watershed scale, did not have a big impact on stream health. However, we did not study the effects of cattle located close to streams.
- Based on land use, we estimate that 70% of Rivanna streams fail the Virginia standard. Fortunately, only 5% to 10% of streams are severely degraded. Most streams sit near the pass/fail cusp and might meet the standard with better care.
- Within 20 years, increased development in non-urban areas could reduce the number of healthy streams by about a third (see maps on following pages).
- Unstable banks and excess sediment appear to affect the health of many Rivanna streams.
- Forested buffers alongside streams can protect and improve stream health.



See inside for maps  
of current and future  
watershed conditions

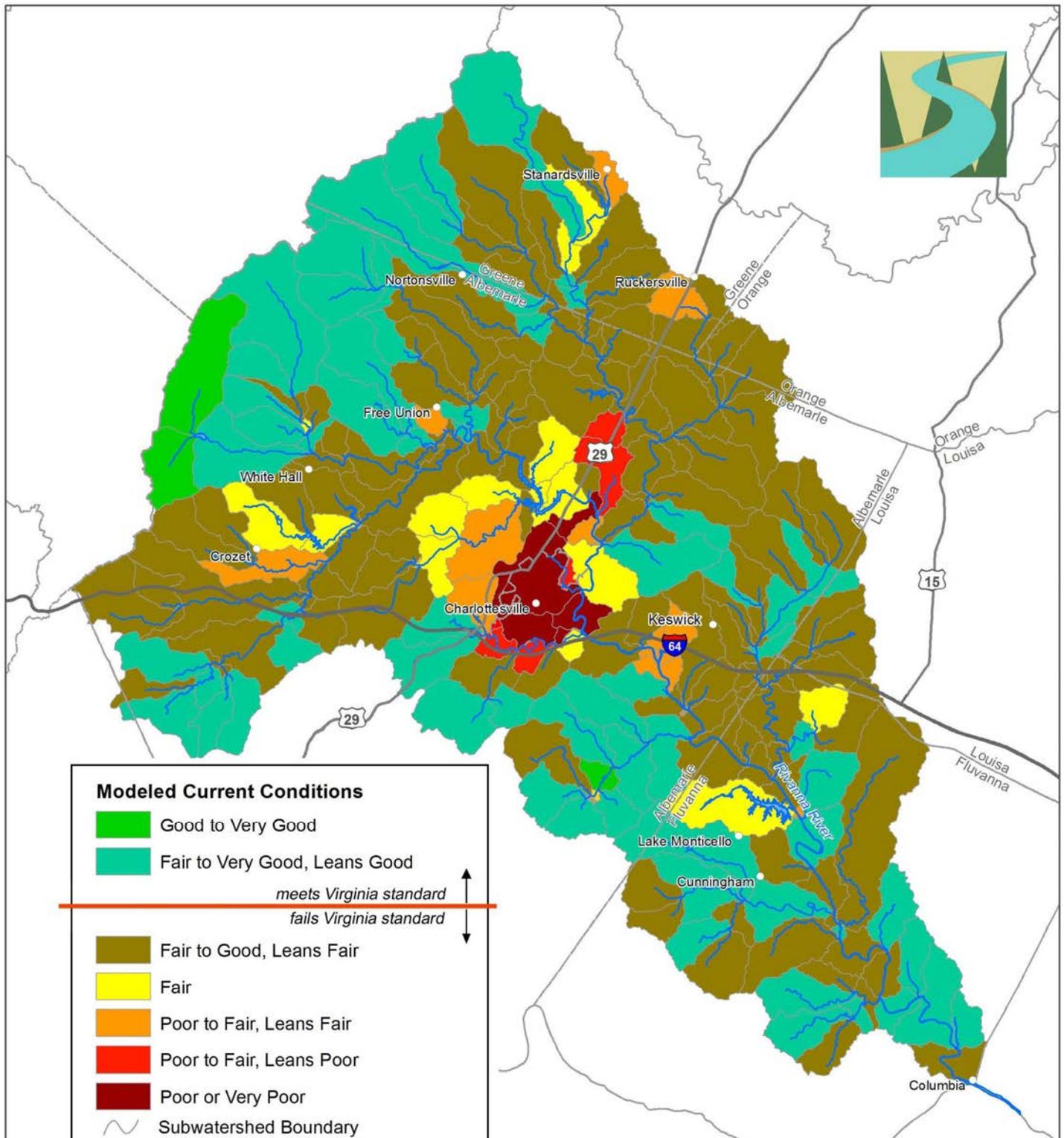
*StreamWatch monitors and assesses Rivanna basin streams and rivers to help the community maintain and restore healthy waterways.*

*www.streamwatch.org  
P.O. Box 681, Charlottesville, VA  
434-962-3527*

*To learn more about the StreamWatch Land Use Study, visit [www.streamwatch.org/lus](http://www.streamwatch.org/lus)*

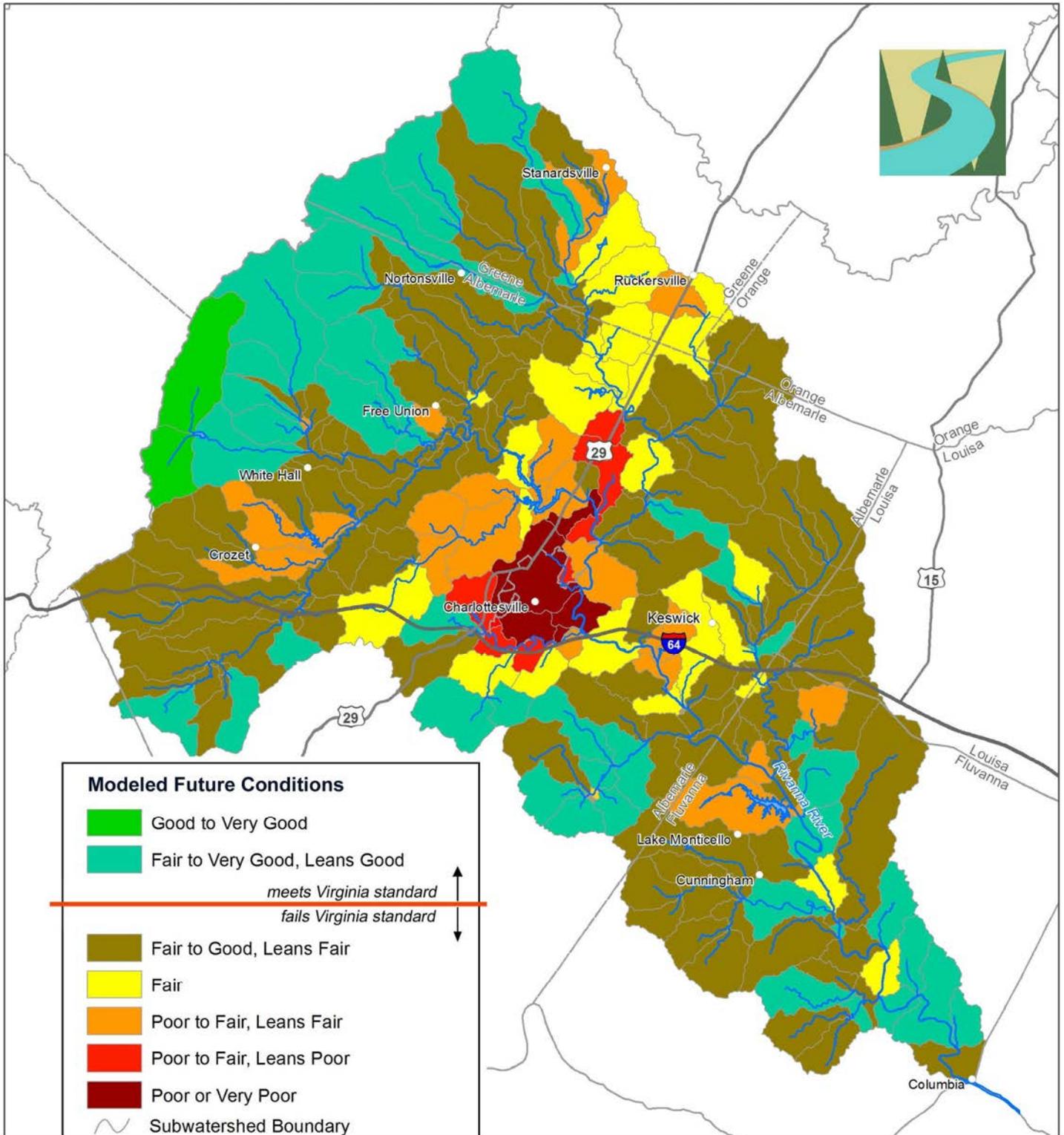
## Likely Current Health of Streams in Small Rivanna Watersheds

Colors below indicate modeled stream health in small watersheds throughout the Rivanna, based on land use. Per our model, we estimate that 70% of Rivanna streams fail the Virginia biological standard. Fortunately, only 5% to 10% of streams are likely to be severely degraded. Most streams sit near the pass/fail cusp and might meet the standard with better care.



## Possible Health of Rivanna Streams in 20 Years

In 20 years, increased development could reduce the number of healthy streams by about a third. We based this projection on a simple, speculative scenario: We increased impervious cover (roads, parking lots, buildings, etc.) and decreased forest cover to levels that could occur in 20 years, based on current population growth. We distributed growth evenly throughout non-urban areas of the basin, then calculated stream health based on the projected land use conditions.



## Acknowledgments

This study reflects the work of scores of individuals and thousands of hours of donated time. We are deeply grateful to the following individuals, organizations, and funders. This study would not have been possible without their generosity.

### StreamWatch Partners

Albemarle County / City of Charlottesville / Fluvanna County / The Nature Conservancy / Rivanna Conservation Society  
Rivanna River Basin Commission / Rivanna Water and Sewer Authority / Thomas Jefferson Planning District Commission  
Thomas Jefferson Soil and Water Conservation District

### Science Collaborators

For guidance with study design, assistance with modeling, and review of analytical methods, we extend our special thanks to Karen McGlathery and Todd Scanlon of University of Virginia's Department of Environmental Sciences. For contributing research on stream sedimentation, we extend our special thanks to Christine May of James Madison University's Department of Biology.

### Technical Support

For development and management of GIS-based information about the Rivanna basin, we extend our special thanks to Chris Bruce of The Nature Conservancy, Chesapeake Bay Funders Network, Rick Odom, and WorldView Solutions, Inc.

For general guidance and review, we thank StreamWatch's Technical Advisory Committee:

Samuel Austin, U.S. Geological Survey / Greg Harper, Albemarle County / David Hirschman, Center for Watershed Protection / John Kauffman, Virginia Department of Game and Inland Fisheries / Karen McGlathery, University of Virginia Rick Odom, Ecologist, GIS specialist / Brian Richter, The Nature Conservancy / Todd Scanlon, University of Virginia William Van Wart, Virginia Department of Environmental Quality

### Volunteers and Interns

Our profound and heartfelt gratitude goes out to the many volunteers and interns who assisted with data collection and data management. We could not have completed this study without your hard work. *Thank you!*

#### Volunteers

Jennifer Alexander / Michael Baker / Dav Banks / Cameron Beers / Calvin Biesecker / Steve Botts / Kelly Bowman / Rachel Bush  
Nora Byrd / David Carr / Tina Colom / Gus Colom / Cristina Cornell / Erin Cornell / Nancy Cornell / Aaron Cross / Vince Dish  
Laura Dollard / Sharon Ellison / Terri Ellison / Brendan Ferreri-Hamberry / Jane Fisher / Nancy Ford / Ned Foss / Doug Fraser  
Nancy Friend / Diane Frisbee / James Gano / Kathy Gerber / Nancy Gercke / Repp Glaettli / Helen Gordon / Sean Grzegorzczuk  
Shane Grzegorzczuk / Deb Hackett / Elise Hackett / Ralph Hall / Shirley Halladay / Allen Hard / Bob Henricks / Tana Herndon  
Joel Howard / John Ince / Stefan Jirka / Karen Joyner / Jim Kabat / Terri Keffer / Aidan Keith-Hynes / Bronwyn Keith-Hynes  
Patrick Keith-Hynes / Frances Lee-Vandell / Vera Leone / Keggie Mallett / Ann McLeod-Lambert / Vicki Metcalf / Susan Meyer  
Jill Meyer / Leslie Middleton / Janet Miller / Becky Minor / Maggie Murphy / Sarah Murphy / Rose Sgarlat Myers / Jim Nix  
Marianne O'Brien / Cindy O'Connell / Killian O'Connell / James Peacock / Frank Persico / Art Petty / Kristin Pickering / Elena Prien  
Patrick Punch / Anne Rasmussen / Nicola (Nicky) Roberts / Pat Schnatterly / Steve Schnatterly / Marjorie Siegel / Susan Sleight  
Hugo Spaulding / Will Spaulding / Edward Strickler Jr. / Ida Swenson / Roger Temples / Pat Temples / Michelle Thompson  
Rob Tilghman / Dorothy Tompkins / Rachel Vigour / John Walsh / Tom Walsh / Phyllis White / Frank Wilczek / Pat Wilczek  
Steve Sylvan Willig / James Winsett / Laurel Woodworth

#### Interns

Aaron Bloch / Will Devault-Weaver / Kelsey Ducklow / Alissa Gador / Erin Gallagher / Benjamin Hines / Aryn Hoge / Margaret Jarosz  
Sarah Kang / Katie Layman / Andrew Moore / Robert Noffsinger / Scott Osborne / Catherine Pham Eleanor Preston / Peter Swigert  
Brian Walton / Megan Wood

### Funders

Albemarle County / Chesapeake Bay Restoration Fund / City of Charlottesville / Fluvanna County / J & E Berkley Foundation  
Rivanna Water and Sewer Authority / Virginia Environmental Endowment



---

# COUNTY OF FLUVANNA

---

*"Responsive & Responsible Government"*

P.O. Box 540  
Palmyra, VA 22963  
Ph: (434) 591-1910  
Fax: (434) 591-1911  
www.fluvannacounty.org

## MEMORANDUM

**Date:** November 21, 2012  
**From:** Andrew J. Pompei (Planner)  
**To:** Fluvanna County Planning Commission  
**Subject:** FY2014 – FY2018 Capital Improvement Plan (CIP): Update #1

---

### INTRODUCTION

A proposed Capital Improvement Plan (CIP) for fiscal years 2014 through 2018 (FY2014 – FY 2018) has been prepared by County Staff (County Administration, Parks & Recreation, Public Schools, Public Works, Sheriff's Office, Fire & Rescue, etc.). The proposal has been forwarded to the Planning Commission for review, in accordance with Virginia Code §15.2-2239.

### CAPITAL IMPROVEMENT PLAN: UPDATE

On November 14, 2012, the Planning Commission discussed the proposed FY2014 – FY2018 CIP with various departments and agencies. Since the Planning Commission's initial review, several projects have been added (Table 1), while others have been revised (Table 2: Following Page).

**Table 1: New Projects Added to the Proposed FY2014 – FY2018 CIP since November 14, 2012**

<b>Project</b>	<b>Department/Agency</b>
County Signage	Public Works
County Fleet: Vehicle Replacement	Public Works
Sheriff's Office: Vehicle Replacement	Public Safety: Sheriff's Office
Multigenerational Center*	Community Services: Parks & Recreation

\*Note: This project was discussed on November 14, 2012, but was not included in the master spreadsheet of the proposed FY2014 – FY2018 Capital Improvement Plan (CIP).

**Table 2: Projects within the Proposed FY2014 – FY2018 CIP Revised since November 14, 2012**

<b>Project</b>	<b>Revisions since November 14, 2012</b>
Pleasant Grove: Farm Museum	A higher proportion of the project's total cost will be funded through grants. As revised, grants will cover \$100,000 of the total project cost of \$110,000 (Original Grant Funding: \$55,000).
Pleasant Grove: Outdoor Pool/Pool House	The proposed outdoor pool and pool house at Pleasant Grove Park have been combined into a single project. The overall cost has remained the same; however, the cost of the pool house will be funded through alternative sources, instead of cash as originally proposed.
Roof Replacement: Carysbrook	This project has been expanded to include the replacement of the roof of the gymnasium AND the main portion of the building occupied by the Department of Social Services. An additional cost of \$55,000 is expected in FY2016.
Fire & Rescue: Apparatus Replacement	The total cost for this project (FY2014 – FY2018) was reduced \$665,000, with reductions of requested cash spending in FY2014 (\$500,000) and FY2018 (\$165,000).
Capital Reserve for School Buses	This project was moved from the <i>Governmental</i> section of the CIP to the <i>Schools</i> section. Additional funding for school buses, in excess of the amount allocated as part of the Fluvanna County Public Schools Capital Reserve, has been requested.
Capital Reserve for Sheriff's Vehicles	This project was moved from the <i>Governmental</i> section of the CIP to the <i>Public Safety: Sheriff</i> section. Additional funding for vehicles for the Sheriff's Office, in excess of the amount allocated as part of the Fluvanna County Capital Reserve, has been requested.

Time for a brief discussion of the proposed FY2014 – FY2018 CIP has been allotted at the Planning Commission's regular meeting on November 28, 2012. More detailed discussion will occur at the work session on December 12, 2012.

**NEXT STEPS**

The Planning Commission will continue to review the proposed CIP in late November and December. At its regular meeting in December, the Planning Commission will forward a recommendation to the Board of Supervisors. In previous years, the Planning Commission has listed its top priorities with its recommendation. The tentative schedule for review will be as follows:

- December 12, 2012                      Planning Commission Work Session: CIP Review #2
- December 17, 2012                      Planning Commission Public Hearing:  
Recommendation Forwarded to Board of Supervisors
- January 2013 – April 2013              Board of Supervisors Review of FY2014 Budget and  
FY2014 – FY2018 CIP
- May 1, 2013                                Adoption of FY2014 Budget and FY2014 – FY2018 CIP





**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Fluvanna County Public Schools Capital Reserve - Maintenance  
**Agency/Department:** Fluvanna Co. Admin    **Contact Person: (Print Name)** Steven M. Nichols    **Order in Rank #:** 1

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding <input checked="" type="checkbox"/> Existing FY13 -17 <input type="checkbox"/> New Project FY14 -18	<p>Each year the Capital Improvement Plan receives requests for building system replacements, routine building up keep items, replacement of equipment and vehicles that are greater than \$20,000. These items have a service life after their useful life has been met; but systems need to be repaired, replaced, or routine up keep needs to be done. At times, these repairs or replacements can end up costing more if they are not addressed during the current fiscal year. At times the useful life is exceeded and funds are not put aside to recognize these replacements and up keeps. The County would like to establish a Capital Reserve based on 20% of the depreciation of the buildings and equipment for when these requests are made in the Capital Improvement Plan. This would allow for funds to be available to draw upon to cover the cost of replacements and up keep, so they are not put off until they become an emergency. As of fiscal year end 2011, Fluvanna Counties depreciation is \$780,130.</p>

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash		169,748.00	169,748.00	169,748.00	169,748.00	169,748.00	848,740.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		169,748.00	169,748.00	169,748.00	169,748.00	169,748.00	848,740.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction							0.00
Equipment							0.00
Other		169,748.00	169,748.00	169,748.00	169,748.00	169,748.00	848,740.00
<b>Totals</b>		169,748.00	169,748.00	169,748.00	169,748.00	169,748.00	848,740.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA**  
**FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**  
**PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Fluvanna County Public Schools Capital Reserve - Maintenance

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

Ch. 4 - Infrastructure

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Fluvanna County Capital Reserve - Maintenance  
**Agency/Department:** Fluvanna Co. Admin    **Contact Person: (Print Name)** Steve M. Nichols    **Order in Rank #:** 1

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding <input checked="" type="checkbox"/> Existing FY13 -17 <input type="checkbox"/> New Project FY14 -18	<p>Each year the Capital Improvement Plan receives requests for building system replacements, routine building up keep items, replacement of equipment and vehicles that are greater than \$20,000. These items have a service life after their useful life has been met; but systems need to be repaired, replaced, or routine up keep needs to be done. At times, these repairs or replacements can end up costing more if they are not addressed during the current fiscal year. At times the useful life is exceeded and funds are not put aside to recognize these replacements and up keeps. The County would like to establish a Capital Reserve based on 20% of the depreciation of the buildings and equipment for when these requests are made in the Capital Improvement Plan. This would allow for funds to be available to draw upon to cover the cost of replacements and up keep, so they are not put off until they become an emergency. As of fiscal year end 2011, Fluvanna Counties depreciation is \$780,130.</p>

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash		156,026.00	156,026.00	156,026.00	156,026.00	156,026.00	780,130.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		156,026.00	156,026.00	156,026.00	156,026.00	156,026.00	780,130.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction							0.00
Equipment							0.00
Other		156,026.00	156,026.00	156,026.00	156,026.00	156,026.00	780,130.00
<b>Totals</b>		156,026.00	156,026.00	156,026.00	156,026.00	156,026.00	780,130.00

For Office Use Only:

County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Fluvanna County Capital Reserve - Maintenance

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

Ch. 4 - Infrastructure

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Pleasant Grove Athletic Field Project  
**Agency/Department:** Parks & Recreation      **Contact Person: (Print Name)** Jason Smith      **Order in Rank #:** 1

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding <input checked="" type="checkbox"/> Existing FY13 -17 <input type="checkbox"/> New Project FY14 -18	<p>The CIP funding request project is to install athletic field fencing for the construction of 1 baseball and 1 softball ball field at Pleasant Grove Park. The Fluvanna County Board of Supervisors approved the development of this project on November 2, 2011. The construction of these new ball fields will address two major objectives in the Board approved Pleasant Grove Active Park Master Plan; 1) The completion of a four field sports complex and 2) to address the challenges we face with meeting the increased needs of providing appropriate field space for our youth sports program participants. The County worked with the school system to have the earthwork stockpile from the new High School construction project transported to the new ball field locations at Pleasant Grove. This was done over a several week period in July, 2012 and cost the county \$0. We are approximately 12,000 yards short of dirt to complete this project before the next phase of fencing and seeding the ball fields can take place. The County did save approximately \$100,000 by having the available earthwork on site.</p>

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash		105,000.00					105,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		105,000.00	0.00	0.00	0.00	0.00	105,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction							0.00
Equipment		57,000.00					57,000.00
Other <b>Earthwork</b>		48,000.00					48,000.00
<b>Totals</b>		105,000.00	0.00	0.00	0.00	0.00	105,000.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Pleasant Grove Athletic Field Project

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

This project aligns with Chapter 8, Parks and Recreation, Page 192, Goal 1, Implementation Strategies 4, Section B.

**Additional Narrative, Description or Special Explanations:**

Project Breakdown:

Description	Quantity	Unit	Unit Cost	Estimated Cost
20' x 9' Dugout:	4	each	\$6,000	\$24,000
Backstop Fencing	2	each	\$4,500	\$9,000
4' High Chain Link Fencing	2,200	link	\$11.00	\$24,200
Total Project Cost:				\$57,000



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Pleasant Grove Amphitheater  
**Agency/Department:** Parks & Recreation      **Contact Person: (Print Name)** Jason Smith      **Order in Rank #:** 3

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	<p>The County has made a major capital investment in terms of projects at Pleasant Grove to include the Pleasant Grove House, Summer Kitchen Museum, Western Trailhead Development and various infrastructure improvements. The Parks and Recreation Chapter, in the adopted Comprehensive Plan, states there are four park classifications for recreation facilities within the county: Regional Park, Community Park, Neighborhood Park and Special Use Facilities. These four park classifications are based upon minimum standards of the National Recreation and Park Association and the 2007 Virginia Outdoor Plan. A Regional park typically provides a wide variety of activities for the greater community, as well as presenting opportunities for non-traditional recreation. The Pleasant Grove Master Plan recommends the construction of an Outdoor Amphitheater to be located within the historic preservation area. This capital improvement project amenity supports the park classification category of a special use facility that serves the needs of the entire community. This outdoor venue has great opportunity to provide the Parks and Recreation Department with a new revenue source by offering a series of educational, cultural, musical concerts, along with public rentals.</p>
<input checked="" type="checkbox"/> Existing FY13 -17	
<input type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash			36,000.00				36,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant			15,000.00				15,000.00
Other							0.00
<b>Totals</b>		0.00	51,000.00	0.00	0.00	0.00	51,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)			5,000.00				5,000.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction			46,000.00				46,000.00
Equipment							0.00
Other							0.00
<b>Totals</b>		0.00	51,000.00	0.00	0.00	0.00	51,000.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Pleasant Grove Amphitheater

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

In chapter 8 of the comprehensive plan, a park should be balanced for both active and passive recreational activities. Pleasant Grove is classified as a Regional Park in our park classification system. The capital project funding request will address the recreational needs of our County residents.

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Pleasant Grove Public Restroom Building  
**Agency/Department:** Parks & Recreation      **Contact Person: (Print Name)** Jason Smith      **Order in Rank #:** 2

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding <input checked="" type="checkbox"/> Existing FY13 -17 <input type="checkbox"/> New Project FY14 -18	Based on the Virginia Outdoor Plan, recommended minimum facility standards along with a forty-five percent response rate from the Pleasant Grove Active Park survey results, indicate that a public rest room structure is a necessary site amenity for this regional park as classified in the Comprehensive Plan. The CIP project funding provides the construction of a 600 square foot building along with construction of an additional water well this facility will need to have.

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash		100,000.00					100,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other		113,000.00					113,000.00
<b>Totals</b>		213,000.00	0.00	0.00	0.00	0.00	213,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)		9,000.00					9,000.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction		91,000.00					91,000.00
Equipment							0.00
Other <b>sewer and well</b>		113,000.00					113,000.00
<b>Totals</b>		213,000.00	0.00	0.00	0.00	0.00	213,000.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Pleasant Grove Public Restroom Building

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	10,000.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	5,000.00
Other						0.00
						0.00
<b>Total Operational Costs</b>	<b>3,000.00</b>	<b>3,000.00</b>	<b>3,000.00</b>	<b>3,000.00</b>	<b>3,000.00</b>	<b>15,000.00</b>
<b>Total Anticipated Operational Revenues</b>						<b>0.00</b>

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

This project aligns with the Parks and Recreation, Chapter 8, Page 181, Facility Standards that states, "A Regional Park typically provides a wide variety of developed areas for active recreation and supporting infrastructure. Typical infrastructure will include a rest room facility". Page 193, Goal 2, Implementation Strategies #8.

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Pleasant Grove Multi-purpose Pavilion  
**Agency/Department:** Parks & Recreation      **Contact Person: (Print Name)** Jason Smith      **Order in Rank #:** 4

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	Pleasant Grove Active Recreation Park Master Plan document a multi-purpose structure is an important site amenity needed in the next five years. The development of this 63 x 70 wooden structure is designed to serve as a permanent site for the Fluvanna Farmers Market, increase programs in agricultural as well as providing an additional pavilion for park rentals. The CIP project funding of 100,000 will provide well construction.
<input checked="" type="checkbox"/> Existing FY13 -17	
<input type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash							0.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant			157,300.00				157,300.00
Other							0.00
<b>Totals</b>		0.00	157,300.00	0.00	0.00	0.00	157,300.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)			25,000.00				25,000.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction			132,300.00				132,300.00
Equipment							0.00
Other							0.00
<b>Totals</b>		0.00	157,300.00	0.00	0.00	0.00	157,300.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Pleasant Grove Multi-purpose Pavilion

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other Property Insurance						0.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

This project aligns with the Parks and Recreation, Chapter 8, page 183, Facility Standards. The new structure also addresses the "Facility Standards in the Virginia Outdoor Plan".

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Crofton Trail Park Development  
**Agency/Department:** Parks & Recreation      **Contact Person: (Print Name)** Jason Smith      **Order in Rank #:** 5

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	The Fluvanna Board of Supervisors voted to authorize the acceptance of parcels 9-A-2, 18-A-1D (portion of) and 18-A-1E into County ownership on December 10, 2010 . This park development project is in general compliance with the Comprehensive Plan that supports the preservation of natural environments, alternative transportation options, as well as historic preservation. The new land acquisition creates a two-part park classification system as a stand alone greenway park and alternative transportation connectivity to the Heritage Trails at Pleasant Grove Park. This project has the potential to receive funding from a variety of grant sources as well as public/private partnerships.
<input checked="" type="checkbox"/> Existing FY13 -17	
<input type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash			110,000.00				110,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant			110,000.00				110,000.00
Other							0.00
<b>Totals</b>		0.00	220,000.00	0.00	0.00	0.00	220,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)			20,000.00				20,000.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction			200,000.00				200,000.00
Equipment							0.00
Other							0.00
<b>Totals</b>		0.00	220,000.00	0.00	0.00	0.00	220,000.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Crofton Trail Park Development

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
Total Operational Costs	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

This project aligns with Chapter 2, Land Use, Page 65, Goal 5, Implementation Strategies #3; Chapter 5, Page 133, Goal 3, Implementation Strategies #1; and Chapter 8, Parks and Recreation, Page 193, Goal 2, Implementation Strategies #3. It addresses the need to provide "alternative, non motorized transportation routes as an integral part of housing and business developments. Trails are interconnected for walking and biking between adjacent communities and business areas, particularly within the community planning areas. Parks and open space are an integral part of these trail networks and provide recreational opportunities for new developments."

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Pleasant Grove Park Playground Expansion  
**Agency/Department:** Parks & Recreation      **Contact Person: (Print Name)** Jason Smith      **Order in Rank #:** 7

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	Based on guideline standards of the National Playground Safety Institute has identified five areas of safety concerns in a public playground environment. The five critical areas are: Supervision, ADA Accessibility, Age Appropriate Design, Fall Surfacing and Equipment and Surfacing Maintenance. A public playground should create a structured environment where children can play on equipment that is designed for their development needs and abilities that tap into a child's creativity, foster their social growth, and provide a positive outlet through interactive playtime. The playground structure at Pleasant Grove Park does not meet these objectives for children in the following age groups, pre-school/toddlers; 5-12 and especially children with special needs children that require a social outlet for their socialization and development growth. This playground expansion project will address these key elements for a public playground environment.
<input checked="" type="checkbox"/> Existing FY13 -17	
<input type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash				39,500.00			39,500.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant				10,000.00			10,000.00
Other							0.00
<b>Totals</b>		0.00	0.00	49,500.00	0.00	0.00	49,500.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)				4,500.00			4,500.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction				45,000.00			45,000.00
Equipment							0.00
Other							0.00
<b>Totals</b>		0.00	0.00	49,500.00	0.00	0.00	49,500.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA**  
**FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**  
**PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Pleasant Grove Park Playground Expansion

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other <b>Mulch</b>			500.00	500.00	500.00	1,500.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	500.00	500.00	500.00	1,500.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

This project aligns with the Parks and Recreation Chapter 8 page 181 Facility Standards. A Regional Park serves a wide variety of community interests and including intensively developed areas for active recreation. Typical active recreational amenities include playgrounds". Page 192 Goal 1 Implementation Strategies #5.

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA**  
**FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Pleasant Grove Farm Museum  
**Agency/Department:** Parks & Recreation      **Contact Person: (Print Name)** Jason Smith      **Order in Rank #:** 6

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	Through a partnership with the Historical Society and the Fluvanna Extension Office, this project will construct a 100 x 60 enclosed Farm Museum building that will house and display a variety of farm equipment that may have been used on a family farm such as Pleasant Grove. This new facility museum attraction would increase tourism in Fluvanna County along with the walking tours of the Pleasant Grove Manor House, Summer Kitchen Museum, as well as the many other recreational hiking, biking, and equestrian trails. The museum structure will adhere to the Pleasant Grove guideline standards.
<input checked="" type="checkbox"/> Existing FY13 -17	
<input type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash				10,000.00			10,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant				100,000.00			100,000.00
Other							0.00
<b>Totals</b>		0.00	0.00	110,000.00	0.00	0.00	110,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)				10,000.00			10,000.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction				100,000.00			100,000.00
Equipment							0.00
Other							0.00
<b>Totals</b>		0.00	0.00	110,000.00	0.00	0.00	110,000.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Pleasant Grove Farm Museum

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities			2,000.00	2,000.00	2,000.00	6,000.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs			1,000.00	1,000.00	1,000.00	3,000.00
Other						0.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	3,000.00	3,000.00	3,000.00	9,000.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

This project aligns with Chapter 6, Economic Development, Page 150, Piedmont Crossroads Visitors Center; Page 154, Goal 3, Implementation Strategies #2; Chapter 8, Parks and Recreation, Page 184, Historic Sites.

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Pleasant Grove Athletic Field Lighting  
**Agency/Department:** Parks & Recreation      **Contact Person: (Print Name)** Jason Smith      **Order in Rank #:** 8

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding <input checked="" type="checkbox"/> Existing FY13 -17 <input type="checkbox"/> New Project FY14 -18	<p>There is a need to expand on athletic fields in order to accommodate the needs of recreational leagues within the county. The results of a public survey for the Pleasant Grove Active Park Master Plan identified having lights installed on our current athletic fields at Pleasant Grove Park as a high priority to meet the growing needs of the counties youth sports programs. Each year, the Parks and Recreation Department struggles to find space with the shortage of lighted sports fields to operate our sports programs in the County. The Carysbrook sports complex is currently the only lighted facility that is available to schedule over 500 youth in 6 different sports programs. The programs have experienced a rapid growth of new participation of children each year. This has become a challenging task to provide the necessary practice times to teach the children the basic fundamentals of their respective sport. The funding request will install lights on 1 baseball field and 1 soccer field.</p>

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash					321,000.00		321,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		0.00	0.00	0.00	321,000.00	0.00	321,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction							0.00
Equipment					321,000.00		321,000.00
Other							0.00
<b>Totals</b>		0.00	0.00	0.00	321,000.00	0.00	321,000.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Pleasant Grove Athletic Field Lighting

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities				2,400.00	2,400.00	4,800.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	0.00	2,400.00	2,400.00	4,800.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

This project aligns with Chapter 8, Parks and Recreation, Page 193, Goal 2, Implementation Strategies #4.

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Pleasant Grove Outdoor Swimming Pool & Pool House Building  
**Agency/Department:** Parks & Recreation      **Contact Person: (Print Name)** Jason Smith      **Order in Rank #:** 9

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding <input checked="" type="checkbox"/> Existing FY13 -17 <input type="checkbox"/> New Project FY14 -18	<p>The County continues to experience a population growth and demand to provide all of our residents with the opportunity to participant in a variety of aquatic programs. The results of the Active Parks and Recreation Master Plan survey identify three major indicators; 1) a strong desire for a county swimming pool and spray-ground at the park, 2) 90% of the survey responses indicated that having access to outdoor recreation opportunities at Pleasant Grove was very important or important to their family, and 3) a public aquatics facility was highly rated as a new capital investment by the County. It is our department's mission to address our undeveloped community base recreation programs in the area of aquatics. It is no longer practical for Parks and Recreation or our community partners to provide substantial revenue income for the private sector or other municipalities. This capital project is for the construction of a rectangular shaped 75' x 150' meter pool with a zero depth entry and a 30' x 65' children pool. Amenities include a 20 ft. slide, diving blocks for swim team meets, lane lines, and deck furniture as well as shade structures. This facility would enable Parks and Recreation to offer a wide range of aquatic programs and activities for county residents along with bringing additional revenue in from pool rentals, county/regional swim meets, specific water aerobic classes, learn to swim classes, recreational swim, and many others. Additional funding options for this project will come from grants and community partnerships. *The swimming pools can be built in 2 phases*.</p>

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash							0.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant					320,000.00		320,000.00
Other					563,100.00		563,100.00
Totals		0.00	0.00	0.00	883,100.00	0.00	883,100.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)					79,600.00		79,600.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction					796,000.00		796,000.00
Equipment					7,500.00		7,500.00
Other					0.00		0.00
Totals		0.00	0.00	0.00	883,100.00	0.00	883,100.00

For Office Use Only:

County Administrator Recommendation:	
Planning Commission-Recommendation:	
Department Head Signature	

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Pleasant Grove Outdoor Swimming Pool & Pool House Building

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary				46,000.00	46,000.00	92,000.00
VRS	12.85%			4,369.00	4,369.00	8,738.00
FICA	7.65%			3,519.00	3,519.00	7,038.00
Group Life	1.19%			405.00	405.00	810.00
Health Insurance				6,144.00	6,144.00	12,288.00
Worker's Comp				1,035.00	1,035.00	2,070.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities				12,000.00	12,000.00	24,000.00
Furniture and Fixtures				8,000.00		8,000.00
Equipment						0.00
Contractual Costs						0.00
Other Pool Chemicals				10,000.00	10,000.00	20,000.00
HVAC				1,000.00	1,000.00	2,000.00
Total Operational Costs	0.00	0.00	0.00	92,472.00	84,472.00	176,944.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

This project aligns with the Parks and Recreation, Chapter 8, page 181, Facility Standards which states: " Four park classifications identify the type of recreation facilities within the County," Page 183, Special Use Facilities: "Outdoor swimming pools are included in the special use facility category," as well as Page 194, Goal 5: Implementation Strategies #4.

\*\*\*The swimming pool operations will have a positive cash flow on the department's general fund revenue source. It is anticipated that annual operations will cover 1/3 of our annual operational expenses. Revenues will consist of pool memberships, rental agreements with swim team meets, a variety of aquatic classes, as well as daily admission fees.

**Additional Narrative, Description or Special Explanations:**

Pool House Building: This capital project request is for the construction of a 2,600 sq. ft. building to support the swimming pool operations for our patrons. The facility will include separate men's, women's and family rest room/changing stations that will include locker areas. The pool mechanical/ equipment room, staff office space, along with the entrance for member/guest check in will be located in this facility. In addition to servicing as a pool house, the building is designed to function as a small scale community center with a large multi-purpose room that is needed in the active park area of Pleasant Grove. By including this layout design feature, the facility can also be used year round as an additional revenue opportunity to host birthday parties, sports banquets/meetings, and other rentals as needed.



**COUNTY OF FLUVANNA, VA**  
**FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Pleasant Grove Spray Ground  
**Agency/Department:** Parks & Recreation      **Contact Person: (Print Name)** Jason Smith      **Order in Rank #:** 9

<b>Select One Category:</b> <input type="checkbox"/> FY13 Proj - add'l funding <input checked="" type="checkbox"/> Existing FY13 -17 <input type="checkbox"/> New Project FY14 -18	<b>Project Description, Justification &amp; Location:</b> The proposed project consists of the construction of a 2,000 sq. ft. water spray ground with a 1,000 sq. ft. child's play sand area. This area will provide an additional recreational pool for youth along with an additional revenue attraction for patrons that will help support the annual operating aquatic budget.
---	--

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash					150,000.00		150,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		0.00	0.00	0.00	150,000.00	0.00	150,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)					15,000.00		15,000.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction					135,000.00		135,000.00
Equipment							0.00
Other							0.00
<b>Totals</b>		0.00	0.00	0.00	150,000.00	0.00	150,000.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
Department Head Signature	

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Pleasant Grove Spray Ground

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities				2,000.00	2,000.00	4,000.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
Pool Chemicals				4,000.00	4,000.00	8,000.00
Total Operational Costs	0.00	0.00	0.00	6,000.00	6,000.00	12,000.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

This project aligns with the Parks and Recreation, Chapter 8, page 183, Facility Standards."Special Use Facilities have various types of water interaction play equipment in the special use facility category".

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Fluvanna County Multigenerational Center  
**Agency/Department:** Parks & Recreation      **Contact Person: (Print Name)** Jason Smith      **Order in Rank #:** 9

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	<p>An Intergenerational Center in Fluvanna County will create an experience for families and people of all ages to come together in a community setting. The vision is a center which could build on community partnerships, promote families spending more time together, and provide both early intervention and prevention programming. Locating the Intergenerational Center in the Fluvanna County Public Center would provide proximity to both the Library and the Sheriff's Department.</p> <p>Programs currently offered in the Library would be supported by the Intergenerational Center, as would programs supporting community policing sponsored by the Sheriff's Department. The possibility for partnerships beyond these two sections would also be enhanced. Individuals working outside of the county often stay outside of the county to use facilities in those counties as opposed to returning to Fluvanna for recreational opportunities. An Intergenerational Center would give the community an option of visiting their local recreation facility rather than attending another facility outside of the county. The Center would serve pre-school through seniors, and would provide a wide-array of programs to serve all age groups. An Intergenerational Center in Fluvanna County would provide structure, activities, supervision and the opportunity for youth as well as adults to be exposed to more local programming and activities.</p>
<input checked="" type="checkbox"/> Existing FY13 -17	
<input type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash						875,000.00	875,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant						875,000.00	875,000.00
Other						875,000.00	875,000.00
<b>Totals</b>		0.00	0.00	0.00	0.00	2,625,000.00	2,625,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction						2,625,000.00	2,625,000.00
Equipment							0.00
Other							0.00
<b>Totals</b>		0.00	0.00	0.00	0.00	2,625,000.00	2,625,000.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA**  
**FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**  
**PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Fluvanna County Multigenerational Center

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary					48,000.00	48,000.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities					26,000.00	26,000.00
Furniture and Fixtures					15,000.00	15,000.00
Equipment					10,000.00	10,000.00
Contractual Costs					6,000.00	6,000.00
Other						0.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	0.00	0.00	105,000.00	105,000.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

This project aligns with Chapter 8, Parks and Recreation, Page183, Special Use Facility, "a recreation center to provide a variety of activities to serve the needs of the entire community".

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Public Safety Building - Battery replacement for 3 Phase Temporary Back-up Power Supply.  
**Agency/Department:** Public Works/Sheriff    **Contact Person: (Print Name)** Wayne Stephens    **Order in Rank #:** 1

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	<p>The Public Safety Building utilizes a diesel generator and a "Static Uninterruptible Power Supply" as its back-up electrical power source. This helps assure there is no interruption of electrical service to the building. The 3-Phase UPS is comprised of a total of 120 large deep-cycle batteries. The Quarterly Battery Maintenance Report provided on October 15, 2012, by Emerson Network Power, as part of their system maintenance service, states the following: "Batteries have reached the end of useful service life. Replacement recommended. The battery type in your cabinets typically last 4-6 years. These are now 10 years. Several battery readings are showing failing readings". Given the critical importance of maintaining uninterrupted power to the communication's center at the Public Safety Building, it is imperative that the battery array be replaced in the immediate future.</p>
<input type="checkbox"/> Existing FY13 -17	
<input checked="" type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash		30,000.00					30,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		30,000.00	0.00	0.00	0.00	0.00	30,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction							0.00
Equipment	120 Batteries w/Install	30,000.00					30,000.00
Other							0.00
<b>Totals</b>		30,000.00	0.00	0.00	0.00	0.00	30,000.00

For Office Use Only:

County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Public Safety Building - Battery replacement for 3 Phase Temporary Back-up Power Supply.

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
<b>R&amp;R Budget</b>		3,000.00	3,090.00	3,185.00	3,280.00	12,555.00
<b>Total Operational Costs</b>	0.00	3,000.00	3,090.00	3,185.00	3,280.00	12,555.00
<b>Total Anticipated Operational Revenues</b>	0.00	0.00	0.00	0.00	0.00	0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

Maintenance of the Public Safety Building, including replacement/renewal of obsolete/failing components in the building's power system, is a critical component in providing Public Safety personnel with the tools they need to meet the requirements of Chapter 12 - "Public Safety" in the County's Comprehensive Plan.

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Countywide Sign Standard and Signage Plan  
**Agency/Department:** Public Works      **Contact Person: (Print Name)** Wayne Stephens      **Order in Rank #:** 1

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	<p>This is for the development standards for acceptable color schemes and basic design elements which are to be included in future signage (identification, directional and informational) for County-owned buildings and facilities; and for the construction of new signs at the entrance to Pleasant Grove Park.</p> <p>As budget permits, additional building identification and directional signs will be designed and constructed in Palmyra (specifically at the Courthouse, Treasurer and Administration Buildings), as well as at the Carysbrook complex and Fork union Community Center.</p>
<input type="checkbox"/> Existing FY13 -17	
<input checked="" type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash		20,000.00					20,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		20,000.00	0.00	0.00	0.00	0.00	20,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction		20,000.00					20,000.00
Equipment							0.00
Other							0.00
<b>Totals</b>		20,000.00	0.00	0.00	0.00	0.00	20,000.00

For Office Use Only:

County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Countywide Sign Standard and Signage Plan

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
Total Operational Costs	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

Maintaining uniform signage around the County ties into Ch. 3 Community Design. The signage ties into the uniformity of Community Plans and provides for aesthetic Gateways and Corridors in the County.

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Phase 1 Hydrogeologic Study  
**Agency/Department:** Public Works      **Contact Person: (Print Name)** Wayne Stephens      **Order in Rank #:** 1

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding <input type="checkbox"/> Existing FY13 -17 <input checked="" type="checkbox"/> New Project FY14 -18	<p>This project involves contracting with a Hydrogeologist to perform Phase I Hydrogeologic Assessments in order to evaluate the overall availability of groundwater resources in various study areas throughout the County. Tasks associated with the Phase 1 Assessment include Remote Sensing Analysis; Geologic Field Mapping; Evaluation of Bedrock Geology; Bedrock Fracture Fabric Analysis; Groundwater Recharge Analysis; Contaminant Threat Review; Collection &amp; Review of Available Data on Existing Wells; Identification of Favorable Groundwater Development Zones; Preparation of a base Map Showing Favorable Zones. The goal of the Phase I Assessment is to identify suitable locations where Phase II Studies (Geophysical Surveys) should be carried out. A complete Scope and budget for Phase II Studies is dependent upon the number and locations of favorable zones identified during Phase I Assessment. An appropriate program for Phase II Hydrogeologic Study will be added to the CIP following completion of the Phase I work.</p> <p>The study areas targeted for Phase I Assessment are: Carysbrook/Thomasville, Fork Union, Palmyra and Zion Crossroads.</p>

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash		50,000.00					50,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		50,000.00	0.00	0.00	0.00	0.00	50,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)		50,000.00					50,000.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction							0.00
Equipment							0.00
Other							0.00
<b>Totals</b>		50,000.00	0.00	0.00	0.00	0.00	50,000.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** \_\_\_\_\_

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

Chapter 4 of the County's Comprehensive Plan (Infrastructure) includes the following in its "Vision" Section: "Water and sewer infrastructure is critical to the long-term viability of communities in terms of cost-effectiveness and efficiency."

Where available in sufficient sustainable quantities, groundwater resources are the most cost-effective means of providing drinking water for public water supplies. This project is the first step in fully and scientifically analyzing the potential for supplying the current and future public water supply needs of the County via groundwater. Its results will also help define the limitations on the use of groundwater in Fluvanna County and allow us to more accurately program the timing for the development of large-scale surface water resources.

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Roof Replacement/Other Improvements for MACAA Building  
**Agency/Department:** Public Works      **Contact Person: (Print Name)** Wayne Stephens      **Order in Rank #:** 1

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	<p>Similarly to other buildings at Carysbrook, the roof of the MACAA building has reached the end of its useful life. It is in the current CIP for replacement in FY2015. It is recommended that the project be moved forward to FY2014.</p> <p>Additionally, this building has several other major issues which contribute to it being inefficient to operate. These include deteriorating metal-framed, single-pane windows; an aging and inefficient HVAC system which does not include central air-conditioning; outdated electrical service wiring; and an almost complete lack of building insulation. Funds have been added to the FY2015 CIP for a project to correct the aforementioned deficiencies at the MACCA building.</p>
<input checked="" type="checkbox"/> Existing FY13 -17	
<input checked="" type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash		50,000.00	75,000.00				125,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		50,000.00	75,000.00	0.00	0.00	0.00	125,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)			5,000.00				5,000.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction		50,000.00	35,000.00				85,000.00
Equipment			30,000.00				30,000.00
Other			5,000.00				5,000.00
<b>Totals</b>		50,000.00	75,000.00	0.00	0.00	0.00	125,000.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** \_\_\_\_\_

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
Total Operational Costs	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

This project is an important part of managing the County's facilities in a manner consistent with Chapter 4 of the Comprehensive Plan.

The "Local Government Facilities" Section of that Chapter states: "...any effective and efficient local government is going to... ..manage its own facilities well. This requires planning and budgeting for periodic renovations, major capital repairs..."

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Develop Additional Drinking Water Source for the Fork Union Water System (FUSD)  
**Agency/Department:** Public Works      **Contact Person: (Print Name)** Wayne Stephens      **Order in Rank #:** 1

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	<p>This project involves hydrogeologic investigation; well drilling, sampling, testing &amp; development; and design and construction of treatment &amp; pumping facilities to provide additional drinking water source capacity for the Fork Union Water System in the Fork Union Sanitary District. The system is currently consistently operating at or near its functional capacity. There is little to no capacity available for new connections, and system viability is endangered by having even one of the existing wells out of service for even a short period of time.</p> <p>Additionally, the two largest wells are in need of rehabilitation, which requires having them temporarily off-line. Rehabilitation of the Morris &amp; Omohundro Wells cannot begin until sufficient additional source capacity is on-line to provide water to the system while these wells are out of service.</p> <p>The project is anticipated to span at least two years, with hydrogeologic investigation, drilling, testing, sampling and development of at least one drinking water well occurring in Year 1, and design and construction of a water treatment and pumping facility being completed in Year 2.</p>
<input type="checkbox"/> Existing FY13 -17	
<input checked="" type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash							0.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other		150,000.00	375,000.00				525,000.00
<b>Totals</b>		150,000.00	375,000.00	0.00	0.00	0.00	525,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)		25,000.00	35,000.00				60,000.00
Land Acquisition (estimate \$15k per acre)		15,000.00	15,000.00				30,000.00
Construction		100,000.00	315,000.00				415,000.00
Equipment							0.00
Other		10,000.00	10,000.00				20,000.00
<b>Totals</b>		150,000.00	375,000.00	0.00	0.00	0.00	525,000.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA**  
**FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**  
**PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Develop Additional Drinking Water Source for the Fork Union Water System (FUSD)

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities		12,000.00	12,360.00	12,730.00	13,115.00	50,205.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs		2,000.00	2,060.00	2,125.00	2,185.00	8,370.00
Other		5,000.00	5,150.00	5,300.00	5,465.00	20,915.00
						0.00
<b>Total Operational Costs</b>	0.00	19,000.00	19,570.00	20,155.00	20,765.00	79,490.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

Chapter 4 of the County's Comprehensive Plan (Infrastructure) includes the following in its "Vision" Section: "Water and sewer infrastructure is critical to the long-term viability of communities in terms of cost-effectiveness and efficiency. These systems are carefully managed... ..with particular attention to future operation and maintenance needs."

The "Water Systems" Section of Chapter 4 says this about the Fork Union Water System: "In 2007, the system enhanced its volume and pressure by replacing two ground-level standpipe storage tanks with two elevated storage tanks. While this increased pressure was a positive step for the system, it highlighted the fact that the remaining infrastructure was aging."

This project will address the goal of improving the aging infrastructure in the Fork Union Water System, as well as helping to secure the long-term viability of the community by maintaining a carefully managed, well-maintained public water system in Fork Union.

**Additional Narrative, Description or Special Explanations:**

This project is primarily needed to provide system capacity needed to meet redundancy requirements and to allow for proper maintenance of all wells on the system. However, it is possible that some capacity for additional water connections will be available upon completion of the new well(s). Since it is not known how much additional capacity, if any, will be available for new connections, no attempt was made to develop revenue projections for this project.



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Construction of Water & Sewer System for Zion Crossroads Development Area  
**Agency/Department:** Public Works      **Contact Person: (Print Name)** Wayne Stephens      **Order in Rank #:** 1

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	<p>This is a multi-year CIP Project which entails design and construction of a drinking water distribution system, and a sewage collection and conveyance system, in the Zion Crossroads development area.</p> <p>The project includes a water booster station, elevated water storage tank and sufficient water mains to provide a basic distribution system. It also includes the sewage force-mains needed to provide a low-pressure force main collection and conveyance system.</p> <p>The project assumes treated drinking water, and treatment of sewage will be provided by the Department of Corrections at their prevailing rate. Total system capacities resulting from this project will be 150,000 gallons per day, which will be sufficient for approximately 10 years of growth at currently planned growth rates.</p>
<input type="checkbox"/> Existing FY13 -17	
<input checked="" type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash		575,000.00	3,100,000.00	975,000.00			4,650,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		575,000.00	3,100,000.00	975,000.00	0.00	0.00	4,650,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)		300,000.00	100,000.00	60,000.00			460,000.00
Land Acquisition (estimate \$15k per acre)		75,000.00					75,000.00
Construction			2,000,000.00	500,000.00			2,500,000.00
Equipment			1,000,000.00	415,000.00			1,415,000.00
Other		200,000.00					200,000.00
<b>Totals</b>		575,000.00	3,100,000.00	975,000.00	0.00	0.00	4,650,000.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** \_\_\_\_\_

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
Total Operational Costs	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

Chapter 4 of the County's Comprehensive Plan (Infrastructure) includes the following in its "Vision" Section: "Water and sewer infrastructure is critical to the long-term viability of communities in terms of cost-effectiveness and efficiency."

This project is the first step in providing public water and sewer service to one of the largest of the County's planned areas for economic growth, and as such, it comports quite well with the goals of the County's Comprehensive Plan.

**Additional Narrative, Description or Special Explanations:**

While the design and construction of the Zion Crossroads Water & Sewer Systems are proposed to be initially funded by the County, the life-cycle cost/revenue plan for the project is designed so that the system will not only be self-supporting via connection fees and user fees, but up-front funding will be repaid to the County.



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Countywide Building Assessments  
**Agency/Department:** Public Works      **Contact Person: (Print Name)** Wayne Stephens      **Order in Rank #:** 1

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	This project involves issuing an RFP, and hiring a structural, mechanical, electric and plumbing engineering firm to thoroughly inspect and assess County-owned buildings and provide recommendations on needed repairs, upgrades and/or replacements of building structures & roofs, as well as mechanical, electrical and plumbing systems. Multi-year funding is recommended, with assessments being prioritized and then completed as each year's funding permits.
<input type="checkbox"/> Existing FY13 -17	
<input checked="" type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash		25,000.00	25,000.00	25,000.00			75,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		25,000.00	25,000.00	25,000.00	0.00	0.00	75,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)		25,000.00	25,000.00	25,000.00			75,000.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction							0.00
Equipment							0.00
Other							0.00
<b>Totals</b>		25,000.00	25,000.00	25,000.00	0.00	0.00	75,000.00

<b>For Office Use Only:</b>	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Countywide Building Assessments

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
Total Operational Costs	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

Chapter 4 (Infrastructure) of the County's Comprehensive Plan states the following in the "Local Government Facilities" Section: "...any effective and efficient local government is going to... .. manage its own facilities well. This requires planning and budgeting for periodic renovations [and] major capital repairs..."

This project will provide an essential tool for assuring the proper management and care of the County's fundamentally sound, but aging, buildings and structures.

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Multi-Year Vehicle Fleet Replacement Plan  
**Agency/Department:** Public Works      **Contact Person: (Print Name)** Wayne Stephens      **Order in Rank #:** 1

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	<p>This plan involves the implementation of a fleet replacement plan for the vehicles in the County's fleet (exclusive of fire/rescue, police, social services and school vehicles). The replacement criteria used to program this five-year purchase plan are: 10 years or 175,000 miles for sedans, 12 years or 200,000 miles for work trucks and vans, 15 years or 250,000 miles for large trucks. These criteria extend vehicle "life" well beyond industry recommended fleet replacement ages/mileages. As the replacement of the oldest and least reliable County vehicles is achieved over the next few years, it is anticipated that adjustments will be made to allow for optimization of average vehicle life-cycle costs.</p>
<input type="checkbox"/> Existing FY13 -17	
<input checked="" type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash		157,000.00	190,000.00	166,000.00	122,000.00		635,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		157,000.00	190,000.00	166,000.00	122,000.00	0.00	635,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction							0.00
Equipment		157,000.00	190,000.00	166,000.00	122,000.00		635,000.00
Other							0.00
<b>Totals</b>		157,000.00	190,000.00	166,000.00	122,000.00	0.00	635,000.00

<b>For Office Use Only:</b>	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA**  
**FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**  
**PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Multi-Year Vehicle Fleet Replacement Plan

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
Total Operational Costs	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

The "Infrastructure" portion of the County's Comprehensive Plan states the following: "Just as it is important to take care of one's home first, any effective and efficient local government is going to also manage its own facilities well. This requires planning and budgeting for periodic renovations, major capital repairs, asset replacement (vehicles, HVAC systems, and so on), and new facilities. Many of these items can be planned for well in advance..."

The development and implementation of a Vehicle Fleet Replacement Plan is an integral part of planning ahead for replacement of critical assets.

**Additional Narrative, Description or Special Explanations:**

Vehicle purchases are proposed as follows:

FY2014 - 1, Passenger Van; 1, 3/4 Ton Pickup Truck; 1, HD Dump Truck; 1, 1-Ton Utility Truck.  
FY2015 - 1, 1/2 Ton Pickup Truck; 2, 1-Ton Utility Trucks; 1, HD Dump Truck; 1, 1/2 Ton Pickup Truck  
FY2016 - 3, 3/4-Ton Pickup Trucks; 2, 4-Door Sedans; 1, 3/4-Ton Utility Truck  
FY2017 - 2, 4-Door Sedans; 2, 1/2 Ton Pickup Trucks; 1, Crew Cab Pickup Truck  
FY2018 - No Vehicle Purchases Anticipated



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Major Electrical & Mechanical Upgrades for Treasurer's / Commissioner of Revenue Building  
**Agency/Department:** Public Works      **Contact Person: (Print Name)** Wayne Stephens      **Order in Rank #:** 1

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	<p>A large portion of the Treasurer's Building (which also houses the Commissioner of Revenue) is served by a 50 Amp electrical service with fuses. Electrical wiring throughout most of the building is undersized, 2-wire, cloth-covered copper wire with no ground. Additionally, the HVAC systems are antiquated and unable to provide adequate and efficient climate control for the building.</p> <p>This project involves the design and construction of a new main electrical service and modern electrical wiring for those portions of the building which are served by the inadequate electrical service &amp; wiring; and design &amp; construction of new HVAC systems for the entire building. It is anticipated that this project will span two fiscal years. It is proposed to complete the design phase, and begin the construction phase, during FY2015, and to complete the construction phase during FY2016.</p>
<input type="checkbox"/> Existing FY13 -17	
<input checked="" type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash	General Fund		500,000.00	500,000.00			1,000,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		0.00	500,000.00	500,000.00	0.00	0.00	1,000,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction			500,000.00	500,000.00			1,000,000.00
Equipment							0.00
Other							0.00
<b>Totals</b>		0.00	500,000.00	500,000.00	0.00	0.00	1,000,000.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** \_\_\_\_\_

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

Chapter 4 (Infrastructure) of the County's Comprehensive Plan states the following in the "Local Government Facilities" Section: "Just as it is important to take care of one's home first, any effective and efficient local government is going to also manage its own facilities well. This requires planning and budgeting for periodic renovations, major capital repairs, asset replacement (vehicles, HVAC systems, and so on), and new facilities."

These upgrades to the Treasurer's Building in Palmyra are an important part of managing the County's facilities, as well as planning and budgeting for periodic renovations and major capital repairs.

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Roof Replacements for Buildings at Carysbrook (Gym & DSS)  
**Agency/Department:** Public Works      **Contact Person: (Print Name)** Wayne Stephens      **Order in Rank #:** 1

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	<p>This project involves the replacement of the membrane roofs on the Carysbrook Gymnasium building in FY2015, and the two-story (main) portion of the Department of Social Services building. The gymnasium roof has lasted well beyond its expected life, but has recently developed several leaks. There are also issues with the interface between the roofing material and the four large powered vents in place on the roof. Part of the project will involve fixing this issue so as to better protect the integrity of the building.</p> <p>The roof on the DSS building is also well past its expected life, and is need of replacement, but is still leak-free at this time.</p>
<input checked="" type="checkbox"/> Existing FY13 -17	
<input checked="" type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash			55,000.00	55,000.00			110,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		0.00	55,000.00	55,000.00	0.00	0.00	110,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction			55,000.00	55,000.00			110,000.00
Equipment							0.00
Other							0.00
<b>Totals</b>		0.00	55,000.00	55,000.00	0.00	0.00	110,000.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Roof Replacements for Buildings at Carysbrook (Gym & DSS)

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
Total Operational Costs	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

Chapter 4 (Infrastructure) of the County's Comprehensive Plan states the following in the "Local Government Facilities" Section: "Just as it is important to take care of one's home first, any effective and efficient local government is going to also manage its own facilities well. This requires planning and budgeting for periodic renovations, major capital repairs, asset replacement (vehicles, HVAC systems, and so on), and new facilities."

This project is an essential part of properly managing the County's buildings, specifically the Carysbrook Gymnasium & the Social Services Building, and providing for periodic renovations and major capital repairs to County facilities.

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Fluvanna County Capital Reserve - Sheriff Vehicles  
**Agency/Department:** Fluvanna Co. Admin    **Contact Person: (Print Name)** Steven M. Nichols    **Order in Rank #:** 1

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding <input checked="" type="checkbox"/> Existing FY13 -17 <input type="checkbox"/> New Project FY14 -18	<p>Each year the Capital Improvement Plan receives requests for replacement of equipment and vehicles that are greater than \$20,000. These items have a service life after their useful life has been met; but systems need to be repaired, replaced, or routine up keep needs to be done. At times, these repairs or replacements can end up costing more if they are not addressed during the current fiscal year. At times the useful life is exceeded and funds are not put aside to recognize these replacements and up keeps. This Capital Reserve of \$125,000 would be allocated for County Sheriff Vehicle replacement.</p>

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash		125,000.00	125,000.00	125,000.00	125,000.00	125,000.00	625,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		125,000.00	125,000.00	125,000.00	125,000.00	125,000.00	625,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction							0.00
Equipment		125,000.00	125,000.00	125,000.00	125,000.00	125,000.00	625,000.00
Other							0.00
<b>Totals</b>		125,000.00	125,000.00	125,000.00	125,000.00	125,000.00	625,000.00

<b>For Office Use Only:</b>	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA**  
**FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**  
**PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Fluvanna County Public Schools Capital Reserve - Sheriff Vehicles

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

Ch. 12, Public Safety, Goal 1

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Patrol Vehicle Replacement  
**Agency/Department:** Sheriff's Office      **Contact Person: (Print Name)** R.L. Washington      **Order in Rank #:** 1

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	In FY 2014 the FCSO will need to purchase 7 vehicles and equipment for a total of \$226,000. For FY 2015 it is projected that we will need to purchase 7 vehicles and equipment for a total of \$216,000. For FY 2016 it is projected that we will need to purchase 7 vehicles and equipment for a total of \$220,000. For FY 2017 it is projected that we will need to purchase 7 vehicles and equipment for a total of \$256,000. For FY 2018 it is projected that we will need to purchase 7 vehicles and equipment for a total of \$280,000.
<input checked="" type="checkbox"/> Existing FY13 -17	
<input type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash		226,000.00	216,000.00	226,000.00	256,000.00	280,000.00	1,204,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other Vehicles							0.00
<b>Totals</b>		226,000.00	216,000.00	226,000.00	256,000.00	280,000.00	1,204,000.00
Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction							0.00
Equipment		60,000.00	45,000.00	50,000.00	56,000.00	80,000.00	291,000.00
Other Vehicles		166,000.00	171,000.00	176,000.00	200,000.00	200,000.00	913,000.00
<b>Totals</b>		226,000.00	216,000.00	226,000.00	256,000.00	280,000.00	1,204,000.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Patrol Vehicle Replacement

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

The projected need for new vehicles and equipment for FY 14 thru FY 18, are for the replacement of older vehicles and equipment, that will have exceeded the mileage limits, to safely operate an emergency response vehicle. Note; the Virginia State Police use 130,000 miles for patrol vehicle replacement, state vehicles are driven mostly on the interstates not rural roadways. As equipment becomes older, it is more cost efficient to purchase new equipment, rather than pay for repairs and additional reinstallation charges. The Sheriff's Office needs safe and reliable vehicles to respond to calls for service, the transportation of prisoners and mental health patients. (ECO and TDO's) The Sheriff's Office goal, is to purchase the safest most economical vehicles and equip them with the most reliable, state of the art equipment. The Sheriffs Office will continue to follow the Comprehensive Plans, Goals and Strategies, to improve public safety infrastructure and operability in order to provide excellent service and protection to county residents. Under the Comprehensive Plan, Chapter 12, Public Safety, Goal 1, the Sheriff's Office in FY14 utilized the following implementation strategies. 1. Radios that were purchased have narrow-band technology components. 5. Only the best most modern, reliable and technological advanced equipment was purchased for replacement in the new vehicles. 6. We planned and replaced the vehicles and equipment by following the counties Capital Improvements Plan.

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** 911 Phone Equipment Replacement  
**Agency/Department:** Emergency Comm Ctr **Contact Person: (Print Name)** Andrea Gaines **Order-in Rank #:** 1

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding <input checked="" type="checkbox"/> Existing FY13 -17 <input type="checkbox"/> New Project FY14 -18	Replacement of primary 911 phone equipment. The primary 911 phone equipment will reach its "end of life" as of Jan. 25, 2015 and will no longer be supported by the vendor, therefore requiring a replacement. If the equipment is not replaced, the equipment may still continue to function. However, there would not be any spare parts available if a breakdown occurs, and we would have to make an unplanned replacement in order to continue 911 services for the county. Making an unplanned replacement order could result in a loss of 911 call abilities for an extended period of time until the new equipment can be purchased, and an increase in cost of equipment. Purchasing new equipment will also help move the center towards "Next Generation 911 Services", which will include functions such as receiving text and video messages. Location: Emergency Communications Center.

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash		97,100.00					97,100.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant	911 Services Board	150,000.00					150,000.00
Other							0.00
<b>Totals</b>		247,100.00	0.00	0.00	0.00	0.00	247,100.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction							0.00
Equipment		247,100.00					247,100.00
Other							0.00
<b>Totals</b>		247,100.00	0.00	0.00	0.00	0.00	247,100.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** 911 Phone Equipment Replacement

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other Operational	17,926.80					17,926.80
						0.00
<b>Total Operational Costs</b>	<b>17,926.80</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>17,926.80</b>
<b>Total Anticipated Operational Revenues</b>						<b>0.00</b>

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

This project aligns with the Public Safety chapter under Course of Action Goal 1, line 2 "Maintain E-911 call center equipment and software". This project will seek to fulfill this goal by replacing outdated equipment with the latest and most current equipment.

Century Link recommends purchasing a 36 - month contract for system maintenance(as opposed to an annual contract) because it will allow for significant savings. It is projected that costs may rise 2% - 3% per year for maintenance, so if the contract is purchased for 36 months, it will lock it the current rate. The system will be a new purchase, so it is guaranteed to need maintenance for a minimum of 36 months. Purchasing the 36 month contract will actually cover a four year period (36 months + 12 month warranty).

**Additional Narrative, Description or Special Explanations:**

A breakdown of costs for equipment and maintenance is attached on an Excel Spreadsheet. The operational cost is the difference between the 36 month cost of maintenance and the amount we have currently budgeted for maintenance (\$30,000).



JCW Pricing Tool 5.25

Quote Number# 12-048524

Account Manager: Kelly Curd

**Centurion Maintenance**

Coverage: Extended  
 Contract Term: 36

<b>Customer Legal Name:</b> E911 Fluvanna County 911 <b>Customer Billing Name:</b> E911 Fluvanna County 911 <b>Customer Address:</b> WIRELINE BILLING PO BOX 113 , PALMYRA, VA 22963-0113 <b>Date Prepared:</b> October 29, 2012 <b>Quote Expires:</b> December 28, 2012 <b>Quote Number:</b> 12-048524							
<b>QTY</b>	<b>Item</b>	<b>Total Non-Recurring Price</b>	<b>Annual Price - Year 1</b>	<b>Annual Price - Year 2+</b>	<b>Total Annual Price - Y1</b>	<b>Total Annual Price - Y2+</b>	<b>Total Term Price</b>
	CPE - (Includes Shipping and Misc costs)	\$ 191,184.08			\$ 15,975.60	\$ 31,951.20	\$ 47,926.80
	Labor	\$ 29,280.40					
	On-Site Tech		\$ -	\$ -			
	Vendor Support	\$ 26,577.12	\$ -	\$ -			
<b>Total Prices</b>		<b>\$ 247,041.60</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 15,975.60</b>	<b>\$ 31,951.20</b>	<b>\$ 47,926.80</b>

Prices shown on this page represent recurring and nonrecurring charges for items as described. These prices do not include recurring or nonrecurring charges for taxes, duties, tariffs, or telecommunication services.



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Fluvanna Fire and Rescue Personal Protective Equipment Replacement  
**Agency/Department:** Fire and Rescue      **Contact Person: (Print Name)** Scott Carpenter      **Order in Rank #:** 1

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	<p>The basic mission of the Fire and Rescue is to continually seek opportunities to serve the community through fire prevention, emergency operations, patient care, and excellent customer service. To successfully accomplish this mission, the departments must strive for the following:</p> <ul style="list-style-type: none"> <li>• Quality of working environment</li> <li>• Professionalism</li> <li>• Infrastructure</li> <li>• Operational improvement</li> <li>• Public confidence</li> </ul>
<input type="checkbox"/> Existing FY13 -17	
<input checked="" type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash		70,000.00	70,000.00	71,750.00			211,750.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		70,000.00	70,000.00	71,750.00	0.00	0.00	211,750.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction							0.00
Equipment		70,000.00	70,000.00	71,750.00			211,750.00
Other							0.00
<b>Totals</b>		70,000.00	70,000.00	71,750.00	0.00	0.00	211,750.00

<b>For Office Use Only:</b>	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA**  
**FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**  
**PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Fire and Rescue Personal Protective Equipment Replacement

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

This project directly reflects Implementation Strategy five (5) in goal one (1) of the comprehensive plan under emergency services.

Goal 1: To improve public safety infrastructure and operability in order to provide excellent service and protection to county residents.

Implementation strategy 5: Provide police, fire, rescue and water rescue personnel with state of the art equipment.

**Additional Narrative, Description or Special Explanations:**

The National Fire Protection Agency (NFPA) Standard 1851: Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2008 Edition defines the life of a Firefighters personal protective gear (PPE) to be ten (10) years. After 10 years the PPE is to be retired and no longer used for structural or proximity firefighting. Better than half of the PPE in the county is over this life expectancy or fast approaching it, 27% is new to five years old, 45% of the PPE is between six to ten years old and 28% is greater than ten years old. The fire and rescue association has worked with the county to apply for a federal grant to obtain this request; however should the grant not be obtained we still have to address the need. The bulk of the PPE cost is in the coat and pants costing on an average of 1,500.00 to 2,000.00 for the pair. The Federal grant would replace all 121 sets of PPE in the county and allowing those units that were less than Ten (10) years of age to be placed in reserve status to be used for new members and or if a coat or pant needs to be taken out of service due to damage or contamination. The cost for the grant was figured at \$1,580.00 per coat and pant set. The request for the FY14 CIP uses a figure of 1,750.00 per set to account for increase in cost due to materials or standard changes that would impact the total cost. Physical years 15 and 16 show the additional funding to obtain total count of 121.

Key notes:  
PPE is traditionally built by order and vendors carry very few "Stock" sizes in inventory, because of this the turnaround is 90 days.  
Some manufactures offer financing that would allow the realization of the total amount of sets but spread the cost of them over time.





**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Fluvanna Fire and Rescue Apparatus Replacement  
**Agency/Department:** Fire and Rescue      **Contact Person: (Print Name)** Scott Carpenter      **Order in Rank #:** 2

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	<p>The basic mission of the Fire and Rescue is to continually seek opportunities to serve the community through fire prevention, emergency operations, patient care, and excellent customer service. To successfully accomplish this mission, the departments must strive for the following:</p> <ul style="list-style-type: none"> <li>• Quality of working environment</li> <li>• Professionalism</li> <li>• Infrastructure</li> <li>• Operational improvement</li> <li>• Public confidence</li> </ul>
<input checked="" type="checkbox"/> Existing FY13 -17	
<input type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash		340,000.00	650,000.00	100,000.00	315,000.00	100,000.00	1,505,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		340,000.00	650,000.00	100,000.00	315,000.00	100,000.00	1,505,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction							0.00
Equipment		340,000.00	650,000.00	100,000.00	315,000.00	100,000.00	1,505,000.00
Other							0.00
<b>Totals</b>		340,000.00	650,000.00	100,000.00	315,000.00	100,000.00	1,505,000.00

<b>For Office Use Only:</b>	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Fire and Rescue Apparatus Replacement

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
Total Operational Costs	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

This project addresses goal one of the County's comprehensive plan in chapter 12, by assuring that the county fire and rescue units operate apparatus that utilize the most current and state-of-the-art technology. It is imperative that the county supply apparatus that not only maximize specific operations applicable to the service provided but also with the most current and technological advances in safety to protect our first responders while in transit. This project also addresses the need of a defined replacement schedule insuring that first responders operate safely and effectively through the capital improvements process.

**Additional Narrative, Description or Special Explanations:**

The Fire and Rescue Association request for FY2013—2017 Capital Improvement Plan incorporates funding for a replacement schedule for fire and rescue emergency vehicles. The fire and rescue association defined the replacement of fire apparatus to be when the unit reaches twenty years of age. The replacement of the ambulances is on a set schedule but different than the fire apparatus. The Ambulance replacement schedule is built on an eight year replacement with a re-chassis of the unit to be performed in year four, with that said at year four of a ambulance's life it will be re-chassed and have a new chassis placed under the original ambulance box, at year eight the entire unit would be replaced with a completely new unit.

The Fire and Rescue CIP request for FY14 shows the re-chasse (100,000) schedule for ambulances for the county rescue squad and the replacement for Squad 10 (Palmyra) built in 1994 (240,000). FY15 shows the replacement of an ambulance (150,000) and the replacement of Engine 10 (Palmyra) built in 1995 (500,000). FY16 shows a re-chasse for an ambulance (100,000). FY17 shows a replacement for an ambulance (150,000) and the replacement of Brush 10 (Palmyra) built in 1997 (165,000). FY18 shows a re-chasses of an ambulance (100,000)



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Central Virginia Regional Jail Expansion  
**Agency/Department:** Care of Prisoners      **Contact Person: (Print Name)** Mr. Glen Aylor      **Order in Rank #:** 1

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	At the 10/5/11 Board of Supervisors meeting, the board was presented a plan by Mr. Glen Aylor, Superintendent of the Central Virginia Regional Jail (CVRJ), for expanding the existing the regional jail. Phase one of the expansion project plans to add a new larger kitchen and 200 beds. Phase two will renovate the existing kitchen area, making it a booking and receiving area. The total cost for the project is estimated to cost \$17,000,000. The State of Virginia will reimburse 50% of the approved cost, estimated at \$8,500,000. The capital reserve fund of the CVRJ authority provides \$6,000,000 towards the project. The remaining cost to participating jurisdictions is \$2,914,700. Of this amount, the share for Fluvanna County would be \$459,100. Thus, in recognizing the County's cost, this project's cost is split between FY14 and FY15 CIP to start the savings to pay cash when payment is due. This follows suit with the Board of Supervisors adoption of resolution dated 10/19/11.
<input checked="" type="checkbox"/> Existing FY13 -17	
<input type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash		229,550.00	229,550.00				459,100.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		229,550.00	229,550.00	0.00	0.00	0.00	459,100.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction		229,550.00	229,550.00				459,100.00
Equipment							0.00
Other							0.00
<b>Totals</b>		229,550.00	229,550.00	0.00	0.00	0.00	459,100.00

For Office Use Only:	
County Administrator Recommendation:	Department Head Signature
Planning Commission-Recommendation:	

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Central Virginia Regional Jail Expansion

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

This project addresses Ch. 12 - Public Safety, Goal 1.

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Fluvanna County Public Schools Capital Reserve - Buses  
**Agency/Department:** Fluvanna Co. Admin    **Contact Person: (Print Name)** Steven M. Nichols    **Order in Rank #:** 1

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding <input checked="" type="checkbox"/> Existing FY13 -17 <input type="checkbox"/> New Project FY14 -18	<p>Each year the Capital Improvement Plan receives requests for replacement of equipment and vehicles that are greater than \$20,000. These items have a service life after their useful life has been met; but systems need to be repaired, replaced, or routine up keep needs to be done. At times, these repairs or replacements can end up costing more if they are not addressed during the current fiscal year. At times the useful life is exceeded and funds are not put aside to recognize these replacements and up keeps. This Capital Reserve of \$150,000 would be allocated for Schools Bus replacement.</p>

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash		150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	750,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	750,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction							0.00
Equipment		150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	750,000.00
Other							0.00
<b>Totals</b>		150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	750,000.00

<b>For Office Use Only:</b>	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA**  
**FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**  
**PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Fluvanna County Public Schools Capital Reserve - Buses

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

Ch. 11 - Education, Goal 4, #1

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** School Buses  
**Agency/Department:** Fluvanna Co. Schools **Contact Person: (Print Name)** Chuck Winkler **Order in Rank #:** 1

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	<p>Four New School Buses Per Fiscal Year (2014-2018)            Two 65 passenger \$82,613 each            Two 77 passenger \$85,938 each            The Governor of Virginia and the Virginia Dept. of Education recommend a 15-year replacement cycle for school buses in the Commonwealth of Virginia. Fluvanna currently has 45 buses that are fifteen or more years old. 22 of these are over twenty years old.            We recommend that we start immediately replacing the oldest of these buses at the rate of four/year. This will not get us caught up but will get us started on a maintainable cycle that can be adjusted as the bus needs change over the ensuing years.            Pricing was obtained in September 2012 for new buses with options deemed necessary by the Transportation Department</p>
<input checked="" type="checkbox"/> Existing FY13 -17	
<input type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash		337,102.00	337,102.00	337,102.00	337,102.00	337,102.00	1,685,510.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		<b>337,102.00</b>	<b>337,102.00</b>	<b>337,102.00</b>	<b>337,102.00</b>	<b>337,102.00</b>	<b>1,685,510.00</b>

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction							0.00
Equipment		337,102.00	337,102.00	337,102.00	337,102.00	337,102.00	1,685,510.00
Other							0.00
<b>Totals</b>		<b>337,102.00</b>	<b>337,102.00</b>	<b>337,102.00</b>	<b>337,102.00</b>	<b>337,102.00</b>	<b>1,685,510.00</b>

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** School Buses

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

This request relates to Chapter 11, Goal 4, Item 1 of the Comprehensive Plan.

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Recoat Middle School/Central Waste Water Treatment Plant  
**Agency/Department:** Fluvanna Co. Schools **Contact Person: (Print Name)** Chuck Winkler **Order in Rank #:** 2

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding <input checked="" type="checkbox"/> Existing FY13 -17 <input type="checkbox"/> New Project FY14 -18	<p>The cost upgrades to the Waste Water Treatment Plants that serve the schools exceeded the projections provided by Crabtree &amp; Rohrbaugh by approximately 20%. Consequently, recoating the plant that serves the Middle School and Central Elementary was not possible with the allocated funds. Recoating this plant should extend the life of the plant by at least 20 years. The lowest bid received in 2012 was \$70,000.</p>

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash		70,000.00					70,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		70,000.00	0.00	0.00	0.00	0.00	70,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction		70,000.00					70,000.00
Equipment							0.00
Other							0.00
<b>Totals</b>		70,000.00	0.00	0.00	0.00	0.00	70,000.00

For Office Use Only:

County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA**  
**FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**  
**PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Convert Former Middle School to Upper (Carysbrook) Elementary School

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses		FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary							0.00
VRS	12.85%						0.00
FICA	7.65%						0.00
Group Life	1.19%						0.00
Health Insurance							0.00
Worker's Comp							0.00
Vehicle							0.00
Vehicle Insurance							0.00
Utilities							0.00
Furniture and Fixtures							0.00
Equipment							0.00
Contractual Costs							0.00
Other							0.00
							0.00
Total Operational Costs		0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>							0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**  
 request relates to Chapter 11, Goal 4, Item 2 of the Comprehensive Plan.

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Convert Former Middle School to Upper (Carysbrook) Elementary School  
**Agency/Department:** Fluvanna Co. Schools **Contact Person: (Print Name)** Chuck Winkler **Order in Rank #:** 3

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	<p>The original Domino Plan estimate for this conversion was \$2,315,000. The recent Facilities Study estimate is \$4,627,084. The big difference is in the installation of a new HVAC system. As the existing system is less than ten years old and is working fine according to the administration, we don't feel that there is a need to replace it at this time. The 2011-2012 recommended cost was the result of removing the HVAC and site work portions from the facilities study. The 2012-2013 Committee further determined additional prior requests that are not required for the facility to function as an elementary school. This leaves the following recommended changes to convert the building to an upper elementary school. The gymnasium floor is a rubber sheet product installed in 1991. Seams and cracked areas are splitting, resulting in potential tripping hazards, and boundary lines have faded resulting in annual re-painting. Additional restroom facilities are requested. There are a total of 4 urinals and 5 commodes in the boys' restrooms and 9 commodes in the girls' restrooms with a student enrollment of 577. Replacement of chalkboards and old marker boards are requested for instruction and use of technology available in the building.</p> <ul style="list-style-type: none"> <li>• Replace gym floor and bleachers \$130,000</li> <li>• ADA improvements / Toilet upgrades Handicapped Access adequate? Convert shower rooms in locker rooms to gang toilets. \$105,000</li> <li>• New marker / chalkboards. 38 each, \$945 each, \$35,910</li> </ul>
<input checked="" type="checkbox"/> Existing FY13 -17	
<input type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash		270,910.00					270,910.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		270,910.00	0.00	0.00	0.00	0.00	270,910.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction		270,910.00					270,910.00
Equipment							0.00
Other							0.00
<b>Totals</b>		270,910.00	0.00	0.00	0.00	0.00	270,910.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA**  
**FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**  
**PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Convert Former Middle School to Upper (Carysbrook) Elementary School

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**  
 request relates to Chapter 11, Goal 4, Item 4 of the Comprehensive Plan.

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Fluvanna Middle School (former High School) HVAC  
**Agency/Department:** Fluvanna Co. Schools **Contact Person: (Print Name)** Chuck Winkler **Order in Rank #:** 4

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	<p>The HVAC in the renovated space at the high school and the HVAC in the original building currently operate on two separate systems. The original HVAC was installed in 1976 to accommodate 800 students. The heating in the original building is provided by using hot water from three oil-fired water boilers. The three boilers are located in the mechanical equipment room. The boilers are also used to provide the majority of domestic hot water. Each boiler is sized to handle 35 percent of the heating load and to distribute heating water to coils throughout the building via two base-mounted centrifugal pumps. One pump is for duty service and one pump is for standby. The central cooling source for the original building has two air-cooled, outdoor package chillers located in a mechanical yard outside of the mechanical room. The chillers are sized for a diversified cooling load, and distribute chilled water to the air handler cooling coils via base-mounted pumps. Each chiller has two compressors. One compressor is out of service, with a replacement cost of \$21,000. Our maintenance department has removed parts from this unit to continue operation of the primary chiller. The building distribution pump is outfitted with a variable frequency drive. Rooms in the original building have individual thermostats to control space temperature. Many of these thermostats are no longer in working order. Heating and ventilating units serve primarily shop-type areas that have a requirement for large amounts of outside air. The original equipment has a median service life of 20 years. This equipment is now over 35 years old and is ready for replacement and merging with the HVAC system in the renovated space. There are eight rooftop units that are part of the 1976 system. Central heating appears to be in fair condition. All primary controls for the heating, ventilation, and air conditioning equipment is through a pneumatic control system. This type of control system has become outdated in recent years and most systems of this type have been replaced with direct digital control systems. The renovated space currently operates with a direct digital control system.</p>
<input checked="" type="checkbox"/> Existing FY13 -17	
<input type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash		2,999,638.00					2,999,638.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		2,999,638.00	0.00	0.00	0.00	0.00	2,999,638.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction		2,999,638.00					2,999,638.00
Equipment							0.00
Other							0.00
<b>Totals</b>		2,999,638.00	0.00	0.00	0.00	0.00	2,999,638.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Fluvanna Middle School (former High School) HVAC

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

This request relates to Chapter 11, Goal 4, Items 2 and 3 of the Comprehensive Plan.

**Additional Narrative, Description or Special Explanations:**

The original Domino Plan estimate for this work was \$3,415,000. The recent facilities study estimate conducted in 2011 by Crabtree, Rohrbaugh & Associates for the scope of work required is \$2,999,638. Fixtures, rewiring, and ceiling replacement will be needed due to the removal of overhead and roof-mounted HVAC equipment.

- New four pipe VAV HVAC System \$1,593,000
- Electrical & power modifications related to HVAC \$295,000
- Replace light fixtures \$354,000
- Low voltage associated rewiring \$118,000
- Ceiling replacement \$112,500
- Demolition \$59,000
- Contingency and additional contract costs \$468,138



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Middle (former High School) Main Gym and Locker Rooms  
**Agency/Department:** Fluvanna Co. Schools **Contact Person: (Print Name)** Chuck Winkler **Order in Rank #:** 3

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	Renovation will provide new public restroom fixtures, stalls with doors and finishes, and the gym flooring will be refinished. The scope of this work would include complete interior and systems (HVAC and electrical) demolition and replacement as well as reconfiguration of space to provide appropriate accessibility and function. New plumbing will be provided to meet current needs. The cost of this was calculated in September 2011 by Crabtree, Rohrbaugh & Associates as part of the facilities study. Fixtures, rewiring, and ceiling replacement will be needed due to the removal of overhead and roof-mounted HVAC equipment.
<input checked="" type="checkbox"/> Existing FY13 -17	
<input type="checkbox"/> New Project FY14 -18	
	<ul style="list-style-type: none"> <li>• New four pipe VAV HVAC system \$414,450</li> <li>• Electrical &amp; power modifications related to HVAC \$38,375</li> <li>• Replace light fixtures \$61,400</li> <li>• Low voltage associated rewiring \$15,350</li> <li>• Demolition \$15,350</li> <li>• Plumbing \$122,800</li> <li>• Electrical wiring/devices \$191,875</li> <li>• New partitions \$30,700</li> <li>• Finishes \$92,100</li> <li>• Repair/refinish wood gym floor \$59,100</li> <li>• Fixtures and accessories \$15,000</li> <li>• Contingency and additional contract costs \$297,987</li> </ul>

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash			1,354,486.00				1,354,486.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		0.00	1,354,486.00	0.00	0.00	0.00	1,354,486.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction			1,354,486.00				1,354,486.00
Equipment							0.00
Other							0.00
<b>Totals</b>		0.00	1,354,486.00	0.00	0.00	0.00	1,354,486.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Middle (former High School) Main Gym and Locker Rooms

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

This request relates to Chapter 11, Goal 4, Items 2 and 3 of the Comprehensive Plan.

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Elementary School Playground Upgrades  
**Agency/Department:** Fluvanna Co. Schools **Contact Person: (Print Name)** Chuck Winkler **Order in Rank #:** 2

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	Elementary school playground upgrades and maintenance have historically been the responsibility of the individual schools through activity funds, PTO contributions, or donations. Ground cover, in the form of mulch, is often replaced annually due to run-off. Building retaining walls and back-filling the areas will reduce the annual replacement costs. In addition, Carysbrook currently has no elementary playground equipment
<input type="checkbox"/> Existing FY13 -17	
<input checked="" type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash			100,000.00				100,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		0.00	100,000.00	0.00	0.00	0.00	100,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction			100,000.00				100,000.00
Equipment							0.00
Other							0.00
<b>Totals</b>		0.00	100,000.00	0.00	0.00	0.00	100,000.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Elementary School Playground Upgrades

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

This request relates to Chapter 11, Goal 4, Item 2 of the Comprehensive Plan.

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Carpet Replacement  
**Agency/Department:** Fluvanna Co. Schools    **Contact Person: (Print Name)** Chuck Winkler    **Order in Rank #:** 2

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	Wide scale carpet replacement has not been necessary in recent years. Evaluation of carpet versus tile or linoleum in the elementary schools will be a topic of conversation. Carpet seams are splitting and carpet tape is currently being used to repair these areas.
<input type="checkbox"/> Existing FY13 -17	
<input checked="" type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash				100,000.00			100,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		0.00	0.00	100,000.00	0.00	0.00	100,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction							0.00
Equipment							0.00
Other				100,000.00			100,000.00
<b>Totals</b>		0.00	0.00	100,000.00	0.00	0.00	100,000.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Carpet Replacement

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

This request relates to Chapter 11, Goal 4, Item 2 of the Comprehensive Plan.

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Middle (former High School) School Annex Gym HVAC  
**Agency/Department:** Fluvanna Co. Schools **Contact Person: (Print Name)** Chuck Winkler **Order in Rank #:** 2

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	<p>The 12,000 square foot Abrams gym was built in the 1960s as part of the Abrams School, which educated African Americans during segregation. It later became a junior high school from the late 19602 until 1989. It became part of the high school complex after Fluvanna Middle School was built on Route 15. The annex gym was shared by the High School and Central Elementary until a gym was built at Central. The gym seats approximately 450 people and was heated by a blower in the gym and blowers in the locker rooms. Currently the gym is utilized by the High School and the Parks and Recreation Department. Installing HVAC in this structure would include connecting the gym to the current Trane-Summit system installed in the high school addition. These figures are directly from the new facilities study, which are somewhat greater than the \$363,000 in the original estimate. Fixtures, rewiring, and ceiling replacement will be needed due to the removal of overhead and roof-mounted HVAC equipment.</p> <ul style="list-style-type: none"> <li>• New four pipe VAV HVAC system \$306,342</li> <li>• Electrical &amp; power modifications related to HVAC \$28,365</li> <li>• Replace light fixtures \$48,221</li> <li>• Low voltage associated rewiring \$14,183</li> <li>• Demolition \$11,386</li> <li>• Contingency and additional contract costs \$75,533</li> </ul>
<input checked="" type="checkbox"/> Existing FY13 -17	
<input type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash					483,991.00		483,991.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		0.00	0.00	0.00	483,991.00	0.00	483,991.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction					483,991.00		483,991.00
Equipment							0.00
Other							0.00
<b>Totals</b>		0.00	0.00	0.00	483,991.00	0.00	483,991.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Middle (former High School) School Annex Gym HVAC

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary						0.00
VRS	12.85%					0.00
FICA	7.65%					0.00
Group Life	1.19%					0.00
Health Insurance						0.00
Worker's Comp						0.00
Vehicle						0.00
Vehicle Insurance						0.00
Utilities						0.00
Furniture and Fixtures						0.00
Equipment						0.00
Contractual Costs						0.00
Other						0.00
						0.00
<b>Total Operational Costs</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>						0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

This request relates to Chapter 11, Goal 4, Items 2 and 3 of the Comprehensive Plan.

**Additional Narrative, Description or Special Explanations:**



**COUNTY OF FLUVANNA, VA  
FY 2014-2018 CAPITAL IMPROVEMENTS PLAN**

**Project Title:** Renovation of the Abrams Building  
**Agency/Department:** Fluvanna Co. Schools **Contact Person: (Print Name)** Chuck Winkler **Order in Rank #:** 3

<b>Select One Category:</b>	<b>Project Description, Justification &amp; Location:</b>
<input type="checkbox"/> FY13 Proj - add'l funding	Renovating this building would increase the capacity of the Middle School by 200 students. The building currently houses the Abrams Academy, the school division's alternative education program. The renovation will include the cost of asbestos abatement. The scope of proposed improvements is general in nature with a major focus on complete HVAC and electrical upgrades. The project would include a new roof and replacement flooring in classrooms. The cost would include basic architectural, civil, structural, mechanical, electrical, and plumbing engineering, and allowances for independent inspections. Surveys for boundary, topography, existing underground and concealed elements on the site will be completed. This is still the original Domino Plan cost estimate as we have not received an update.
<input checked="" type="checkbox"/> Existing FY13 -17	
<input type="checkbox"/> New Project FY14 -18	

Revenues (all figures in \$)	Proposed Source (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Borrowing - <i>Indicate annual debt service &amp; first year</i>							0.00
Cash					2,800,000.00		2,800,000.00
Revenue Bonds- <i>Indicate source of revenue</i>							0.00
Grant							0.00
Other							0.00
<b>Totals</b>		0.00	0.00	0.00	2,800,000.00	0.00	2,800,000.00

Expenditures (all figures in \$)	Prospective Vendor(s) (if known)	FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Engineering & Planning (10% of project costs)							0.00
Land Acquisition (estimate \$15k per acre)							0.00
Construction					2,800,000.00		2,800,000.00
Equipment							0.00
Other							0.00
<b>Totals</b>		0.00	0.00	0.00	2,800,000.00	0.00	2,800,000.00

For Office Use Only:	
County Administrator Recommendation:	
Planning Commission-Recommendation:	
	Department Head Signature

**COUNTY OF FLUVANNA, VA  
 FY 2014-2018 CAPITAL IMPROVEMENTS PLAN  
 PROJECTED OPERATIONAL COSTS AND REVENUES**

**Project Title:** Renovation of the Abrams Building

**Instructions:** Enter the anticipated additional operational costs for the project beginning with the projected year of completion. If additional staff will be needed, indicate the number of positions planned. Also enter any anticipated operational revenue for the projected project.

Additional Anticipated Operational Expenses		FY2014	FY2015	FY2016	FY2017	FY2018	Total FY 14 - FY 18
Additional Staff Salary							0.00
VRS	12.85%						0.00
FICA	7.65%						0.00
Group Life	1.19%						0.00
Health Insurance							0.00
Worker's Comp							0.00
Vehicle							0.00
Vehicle Insurance							0.00
Utilities							0.00
Furniture and Fixtures							0.00
Equipment							0.00
Contractual Costs							0.00
Other							0.00
							0.00
<b>Total Operational Costs</b>		0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Anticipated Operational Revenues</b>							0.00

**How does this project relate to or address the future goals outlined in the Comprehensive Plan? Be Specific in description and reference comp plan chapter.**

This request relates to Chapter 11, Goal 4, Item 5 of the Comprehensive Plan.

**Additional Narrative, Description or Special Explanations:**



---

# COUNTY OF FLUVANNA

---

“Responsive & Responsible Government”

P.O. Box 540  
Palmyra, VA 22963  
Ph: (434) 591-1910  
Fax: (434) 591-1911  
www.fluvannacounty.org

## MEMORANDUM

**Date:** November 21, 2012  
**From:** Andrew J. Pompei (Planner)  
**To:** Fluvanna County Planning Commission  
**Subject:** Cash Proffer Policy

---

### INTRODUCTION TO PROFFERS

In general, Virginia law prohibits localities from imposing conditions as part of a rezoning request. Rezoning applicants may voluntarily offer, in writing, conditions that will become binding if the rezoning request is approved. To be considered, these voluntary conditions, known as *proffers*, must be submitted in writing prior to a public hearing held by the governing body.<sup>1</sup>

Proffers are conditions intended to mitigate the negative impacts a rezoning may have on the surrounding community. A rezoning applicant may submit proffers that:

- Restrict the uses permitted on the subject property;
- Donate property for public use;
- Require the applicant to construct public improvements (roads, public facilities, utilities, etc.); and/or
- Require the applicant to submit a certain amount of cash to the locality for public improvements.

If proffers are submitted, the rezoning is referred to as a *conditional rezoning*. Proffers cannot be assessed for by-right development.

### HISTORY OF CASH PROFFER POLICY IN FLUVANNA COUNTY

Since 2005, Fluvanna County has considered developing a cash proffer policy, which would guide decision-makers as they review rezoning requests.<sup>2</sup> Several draft cash proffer policies have been prepared since 2008. The latest draft was presented to the Planning Commission at its meeting on May 26, 2010; the draft policy included cost computations for FY 2010 - 2011. Developing a cash proffer policy was on the Planning Commission’s annual work plan for 2011 and 2012.

The draft cash proffer policy for FY 2010 – 2011 established a maximum acceptable cash proffer amount of \$6,577 (Attachment A). The maximum acceptable cash proffer amount is based upon the capital improvement costs associated with parks, libraries, schools, and fire and rescue facilities countywide.

---

<sup>1</sup> See the Code of Virginia: §15.2-2297, §15.2-2298, §15.2-2303, §15.2-2303.1:1, §15.2-2303.2. In Fluvanna County, the governing body is the Board of Supervisors.

<sup>2</sup> See the minutes from the Fluvanna County Planning Commission (July 25, 2005) and the Fluvanna County Board of Supervisors (August 3, 2005).

## 2009 Comprehensive Plan

The following strategies listed within the 2009 Comprehensive Plan relate to the implementation of a cash proffers policy:

- Develop either a cash proffer ordinance, impact fee ordinance, level-of services standards, or all three, in accordance with state code to fairly assess the fiscal impact of development on public services and infrastructure (*Land Use*: Goal 2, Strategy 5).
- Examine the merit of collecting cash proffers or impact fees with the approval of the final plat as opposed to the building permit application process (*Land Use*: Goal 2, Strategy 6).
- Adopt a system of cash proffers, impact fees, level-of-service standards, or some combination thereof, and collect at the earliest possible time while allowing for feasible implementation of the project (*Infrastructure*: Goal 7, Strategy 4).
- Accept proffers of road right-of-way and widening from developers whose projects will significantly increase traffic on secondary roads (*Transportation*: Goal 2 Strategy 8).
- Encourage proffers that achieve a target of 20 percent affordable units for developments with residential housing (*Housing*: Goal 3, Strategy 3).
- Align the CIP with level-of-services standards and impact fee/proffer programs so that the development helps to finance public services and improvements that it will require, resulting in a revenue neutral or positive impact to the county (*Financial Sustainability*: Goal 1, Strategy 2).
- Develop a comprehensive policy with guidelines regarding proffers (cash or otherwise) and/or impact fees to mitigate capital and services costs, as appropriate, to minimize the impact on county resources (*Financial Sustainability*: Goal 2, Strategy 2).

Developing a cash proffers policy would be consistent with the goals and implementation strategies outlined within the 2009 Comprehensive Plan.

### **PREVIOUSLY-OFFERED CASH PROFFERS**

Proffers have been offered in connection with several rezoning requests. Once approved, these proffers are binding and can only be changed by the Board of Supervisors as part of a rezoning request. Even if the original developer that requested the rezoning sells the property, the proffers remain; the new property owner is responsible for adhering to the proffered conditions.

On the following page are some of the *cash* proffers associated with approved projects (Table 1).

**Table 1: Cash Proffers Associated with Approved Rezoning Requests**

<b>Project Name</b>	<b>Case Number/ Proffer Number</b>	<b>Cash Proffers</b>
Sycamore Square: Phase I Villas	ZMP 07:10 Proffer #1	\$3,000 per attached residential unit (Total: \$114,000) Funds to be used for a new library or may be redirected to any project within the CIP.
Sycamore Square: Single-Family Resid.	ZMP 07:10 Proffer #3	\$1,000 per detached residential unit Funds to be used for any project within the CIP related to Fluvanna County Public Schools. Note: Amendment of ZMP 02:01 (Proffer #13)
Sycamore Square: Phase II Villas	ZMP 09:03 Proffer #1	\$3,000 per attached residential unit (Total: \$84,000) Funds to be used for educational or athletic improvements within the CIP or may be redirected to any other project within the CIP.
Stonehenge Estates (Former Rivanna Resort)	ZMP 09:02 Proffer #4	\$5,000 per residential unit Funds to be used to offset any additional expenses the rezoning will cost Fluvanna County Public Schools, or may be directed to development of the Pleasant Grove Community Center.
	ZMP 09:02 Proffer #5	\$1,000 per residential unit (in addition to Proffer #4) Funds to be used by the Fluvanna/Louisa Housing Foundation to make emergency repairs to the homes of lower-income Fluvanna County residents.
	ZMP 09:02 Proffer #7	\$50,000 Funds to be used to construct a traffic signal at the intersection of U.S. Route 15/State Route 644.
Rivanna Village	ZMP 06:05 Proffer #3	\$2,000 per townhome unit Funds to be used for the development of Pleasant Grove.
Nahor Village	ZMP 04:04 Proffer #13	\$50,000 (to Virginia Dept. of Transportation) Funds to be used to construct a traffic signal at State Route 53 and Turkeysag Trail.
Village Oaks	ZMP 04:02 Proffer #18	\$5,000 (to Virginia Dept. of Transportation) Funds to be used for future traffic improvement design in the Lake Monticello area.

Proffers have been submitted to Fluvanna County by the developers of Sycamore Square, since that project has been under development for several years. No other cash proffers have been submitted to date; no residential or commercial buildings have yet been constructed within Rivanna Village, Stonehenge Estates, or Village Oaks.

**PROFFERS POLICIES OF OTHER VIRGINIA LOCALITIES**

Many localities throughout Virginia have adopted a cash proffer policy (Table 2). The suggested cash proffers vary from locality to locality.

**Table 2: Cash Proffer Policies in Select Virginia Localities**

<b>County</b>	<b>Proffer Amount</b>	<b>Adoption Date</b>
Albemarle	Single-Family Detached: \$17,500 Single-Family Attached/Townhouse: \$11,900 Multi-Family: \$12,400	10/10/2007
Amelia	\$1,490 (Note: This is a Cash Proffer Policy to <u>offset school capital costs</u> )	6/23/2003
Chesterfield	\$18,966	Last Updated 7/2/2012
Fauquier	Single-Family Detached: \$28,613 Single-Family Attached: \$20,597 Multi-Family: \$13,158	10/21/2002 Last Updated 11/13/2008
Goochland	\$14,292 per dwelling unit	6/2/2009
Greene	\$5,771 per residential unit	9/12/2006
James City	Single-Family Detached: \$17,115 Single-Family Attached: \$4,870 Multi-Family: \$15,166 (Note: This is the Cash Proffer Policy for <u>Schools</u> )	7/24/2007
Loudoun	“Capital Intensity Factors” developed for different planning areas.  Single-Family Detached: \$45,923 - \$59,470 Single-family Attached: \$30,716 - \$40,385 Multi-Family: \$17,837 - \$23,758	Last Updated 7/21/2009
Louisa	\$4,362 per lot	1/16/2007
Middlesex	\$4,980 per dwelling unit	9/19/2006
Orange	Single-Family Units: \$28,972 Townhouse Units: \$19,042 Multi-Family Units: \$14,989	9/23/2008
Powhatan	\$13,094 per residential unit	Developed in 1993 Annual Recomputation (Last in 2010)
Spotsylvania	Single-Family Detached Units: \$33,285 Single-Family Attached Units: \$24,088 Multi-Family: \$11,539 Age-Restricted Units Single-Family Detached: \$14,867 Single-Family Attached: \$11,387 Multi-Family: \$8,067	5/25/2010
Sussex	Single-Family Detached: \$8,569 All Other Housing Units: \$8,939	11/15/2007

## **NEXT STEPS**

The Planning Commission may decide to:

- Pursue the development of a cash proffer policy;
- Choose not to develop a cash proffer policy at this time; OR
- Direct the Planning Department to conduct more research on the issue.

If the Planning Commission decides to pursue the development of a cash proffer policy, there will be several months of research, discussion and review before the policy could be formally considered by the Board of Supervisors.

## **ATTACHMENTS**

- A. Cash Proffer Policy: Drafted for Planning Commission (May 11, 2010)

# COUNTY OF FLUVANNA

## CASH PROFFER POLICY

**Adopted by Board of Supervisors on \_\_\_\_\_**

## 1-11 Cash Proffers Policy

---

---

Table of Contents .....	2
1-11.1 Introduction .....	3
1-11.2 Legislative basis .....	3
1-11.3 General guidelines .....	3
1-11.4 Proffer terms .....	5
1-11.5 Methodology.....	6
Appendix.....	8
Cash proffer summary.....	9
Demographic data .....	10
Schedule of rates and credits.....	11
Fire Stations	
Building area and site size .....	12
Capital costs.....	13
Land cost per acre .....	14
Future fire stations capital improvement projects.....	15
Equipment cost.....	16
Net costs.....	17
Parks	
Acres of land.....	18
Land cost per acre .....	19
Parks improvements.....	20
Net costs.....	21
Library	
Area and size.....	22
Capital improvement projects .....	23
Net costs.....	24
School	
Building area and site size .....	25
Land cost per acre .....	26
Future school capital improvement projects .....	27
Capital costs.....	28
Net costs.....	29

## 1-11 Cash Proffers Policy

### 1-11.1 Introduction

This policy is intended to guide applicants in the submission of proffers under the County of Fluvanna's Conditional Zoning process. Nothing herein is intended or shall be construed to limit the Board of Supervisor's (the "Board") authority to accept proffers under the appropriate law. As used herein, the term "CIP cash proffers" is intended to only refer to cash proffered to address features, facilities, roads, and projects included in the County's Capital Improvement Plan. It is anticipated that cash proffers beyond the CIP cash proffers will be made in most cases to address impacts to features, facilities, roads, and projects not contained within the CIP. The intent is to off set some of the development costs associated with public health, safety, and welfare.

### 1-11.1 Legislative basis

The State enabled legislation where localities including Fluvanna with population growth rate in excess of five percent between the years of 1990 to 2000 can accept voluntary proffers. According to the legislation, basic requirements that must be met to accept the voluntary proffering of reasonable conditions in the zoning ordinance:

- No proffer can be accepted unless the County has adopted a Capital Improvement Program (CIP) pursuant to Section 15.2-2239 of the Code.
- Proffered property shall not transfer and payment of cash shall not be made until the facilities for which such property is dedicated or cash is tendered are included in the CIP.
- Proffered conditions shall provide for the disposition of such property or cash payment in the event the property or cash payment is not used for the purpose for which proffered.

Also noted within Section 15.2-2298 are the following provisions concerning the term reasonable conditions.

- The rezoning itself gives rise to the need for the conditions;
- Such conditions have a reasonable relation to the rezoning; and
- All such conditions are in conformity with the comprehensive plan.

### 1-11.2 General guidelines

1-11.3.1 Pursuant to this policy, staff will

- (i) calculate the annual net cost of public facilities
- (ii) calculate the fiscal impact of a rezoning request that permits residential uses; and
- (iii) administer the collection and expenditure of proffered funds.

The Board will accept cash proffers for rezoning requests that permit residential uses in accordance with this policy. However, whether or not the subject of the proffer is included in the CIP, the Board may also accept cash, land, or in-kind improvements in accordance with County and State law.

1-11.3.2 Any cash proffer must meet "reasonableness" or a proportionality test, which requires the Board to determine in each zoning case whether the amount proffered is related both in nature and extent to the projected impact of the proposed development on public facilities. Through this policy, staff will be able to recommend a proffer in each case that meets this test of reasonableness.

1-11.3.3 Staff determines the cost of public facilities generated by new growth by relying on the assumption that any revenue derived from growth (residential real estate taxes, other taxes,

## 1-11 Cash Proffers Policy

fees, etc.) will pay all or a significant portion of the normal operating costs for services to new developments with no funds remaining to pay for the cost of public facilities needed to serve these developments.

- 1-11.3.4 In determining the net cost per dwelling unit of a public facility within the CIP, staff relies on countywide averages, where possible. In addition, staff will consider the five components described below (1-11.5 Methodology), as well as any other circumstances of which staff is aware, related to an individual zoning case.
- 1-11.3.5 To determine how and where a proffer will be spent, the County is considered a whole with no geographic or service districts. Facilities are considered Countywide including all projects for roads, parks, libraries, fire and rescue, and schools.
- 1-11.3.6 The following public facilities will be funded by CIP cash proffers:
  - Schools;
  - Parks;
  - Libraries;
  - Fire and rescue; and
  - Roads.

The County does not currently accept cash proffers to fund public facilities including jails, landfills/convenience centers, and other government facilities.

- 1-11.3.7 These general guidelines shall not be applicable to cases involving the minimal incremental effects on community facilities of residential developments consisting of one additional lot.
- 1-11.3.8 In general the revenue generated by commercial and industrial development is expected to cover the capital costs of fire protection and emergency medical services. Each proposed development will be reviewed to identify any unusual or excessive services that may be needed. No contribution for schools, parks or libraries is expected for commercial and industrial applications. The County's policy with respect to cash proffers in commercial and industrial rezoning shall be interpreted liberally in order to promote desirable economic development.

Each proposed development will be reviewed to determine the need for road improvements. Ultimate development anticipated in the comprehensive plan and the proportionate cost of improvements needed to implement the Major Thoroughfare Plan to accommodate that development will provide the basis for consideration of proffers related to road dedication and construction. Road right-of-way dedications to provide for construction in accordance with the Major Thoroughfare Plan are generally needed in order to address the impact of proposed development on planned road corridors. Completion of specific road improvement projects or proportionate contributions to those projects beyond the CIP cash proffer may also be needed to provide for the safe and efficient movement of traffic within, through, or to and from proposed developments. Commercial and industrial development will be expected to (1) identify anticipated road impacts from the development during the zoning process and (2) dedicate right-of-way and construct improvements needed to fully address those impacts. Proffers of completion of road projects may be submitted in order to address comprehensive plan standards for road improvements.

## 1-11 Cash Proffers Policy

- 1-11.3.9 A development proposal's impact on capital facilities will be evaluated based on the gross number of proposed dwelling units. When calculating the gross number of dwelling units, staff will:
- use the lesser of average actual recorded lot yields and the number of dwelling units proffered by the applicant and,
  - not give credits for those dwelling units permitted under existing conditions of zoning or agricultural lots, and will not consider the transferring of allowable units from other properties.

The Board may consider development proposals that include substantial upgrades to current design/development standards and ordinance requirements as justification for accepting reduced cash proffer payments for the pre-existing lot yield. Pre-existing lot yields will be calculated using average actual recorded lot yields provided the applicant has not otherwise submitted documentation indicating higher lot yields in conformance with existing ordinances and reflective of site specific physical features.

- 1-11.3.10 A development proposal's fiscal impact on capital facilities shall be established under the Boards' cash proffer policy that is in effect at the time the application is submitted; however, if the Board changes the cash proffer policy while the application is still pending, the revised cash proffer policy shall be applied to the development proposal.

## 1-11.4 Proffer terms

### 1-11.4.1 Clear and concise language

To facilitate the subsequent review of site and subdivision plans, the proffer statement should be written in clear and concise language with consideration toward future interpretation. The performance detail of a proffered condition should be defined. More specifically, the proffer text should include information pertaining to not only what is being proffered, but also when the action will occur and who is involved in performance of the action.

The County Attorney will assist the Planning Department in reviewing proffer language. Applicants seeking assistance with drafting specific proffer language are encouraged to contact the Planning Department.

### 1-11.4.2 Time frame for obligation

Each proffer should state the time frame within which the proffered obligation will be performed. In the absence of explicit language indicating when performance is to occur, the County will generally request demonstration of performance of the proffered obligation with the preliminary or first final site or subdivision plan affecting the rezoned property. Actual performance is expected at the time of development subject to approved plans and issuance of permits.

Examples of preferred collection dates for cash proffers generally are listed below:

- Final plan approval
- Lump sum with the issuance of a land disturbance permit
- Lump sum with the first building permit for a particular type of unit
- Per lot or unit amount with every building permit for a particular type of unit

### 1-11.4.3 Adjustments for time value of money

## 1-11 Cash Proffers Policy

- 1-11.4.3.1 Adjustments in the CIP cash proffer amount will be considered annually. Staff will recompute net costs based on the current methodology and recommend adjustments. Any adjustments would be effective upon adoption, and apply to pending and future applications.
- 1-11.4.3.2 The cumulative percentage increase (decrease) in the Marshall & Swift Building Cost Index, for the most recently published twelve months, shall be added to (or subtracted from) the amount proffered, in the year following the rezoning, and added to (or subtracted from) the recalculated amount for each subsequent year. CIP cash proffer amounts, recalculated due to the index provided above, shall be effective the next year on the date of the Board's adoption of annual adjustments, or July 1, whichever comes first, for payments made through such date. Any CIP cash proffer made in accordance with this policy shall be increased (or decreased) automatically in accordance with this method.

## 1-11.5 Methodology

- 1-11.5.1 There are five "components" involved in calculating what a new dwelling unit will cost the County in terms of providing public facilities for schools, parks, libraries, and fire and rescue. The components are as follows:
  - 1-11.5.1a Demand generators – Staff uses the weighted average of single family persons per household (2.57 for 7/1/2009) and an average number of students per household (0.366 for fall school year 2010 - 2011) to calculate demand generators (number of people and number of students) associated with a new dwelling unit.
  - 1-11.5.1b Service levels – Staff calculates existing service levels for each type of facility for which a cash proffer will be accepted. Examples of service levels are: 0.03669 acres of park land per 1,000 people, 1.98 library books per person, and 65.512 square feet of space per elementary school child. (Service levels are calculated annually)
  - 1-11.5.1c Gross cost of public facilities – Staff calculates the gross cost of public facilities. The term gross cost is used because a credit (described in (d) below) for anticipated future revenues from a new dwelling unit will be applied against the gross cost.
  - 1-11.5.1d Credits – Staff calculates a credit to apply against the gross cost for each public facility. Fluvanna has issued and plans to continue to issue general obligation bonds to finance the construction of public facilities. Residents of new developments will pay real estate taxes to the County and a portion of these taxes will go to help retire this debt. So that new dwelling units are not paying twice (once through payment of a cash proffer and again through real estate taxes) a credit is computed.
  - 1-11.5.1e Net cost – Staff calculates the net cost per public facility or maximum cash proffer. This is the gross cost [(1-11.5.1c) per public facility minus the applicable credit [1-11.5.1d] per public facility.
- 1-11.5.2 There must be a relationship between the rezoning itself and the need for a public facility. Since parks, roads, libraries, fire and rescue, and schools serve the entire County; the roads for these facilities are determined to be Countywide. Rezoning requests can be analyzed on a

## 1-11 Cash Proffers Policy

countywide basis to determine their impact on these facilities and proffers may be spent to fund these facilities Countywide.

- 1-11.5.3 In some instances, a rezoning applicant may wish to mitigate the calculated impact on public facilities by dedicating property or doing in-kind improvements in lieu of all or a portion of the cash proffer. The value of donated land generally will be based on the current assessed value of the property, not to exceed the cost per acre used in the calculation of the proffer. The value of improvements shall be the estimated cost if constructed by a government entity. If the dedication or in-kind improvement does not fully mitigate the calculated impact on public facilities, then the dedication and/or improvement value may be applied as a credit against the calculated impact on the applicable public facility. The credit cannot exceed the calculated impact on the applicable public facility.
- 1-11.5.4 The County will continue to consider any circumstances about a proposed development that:
- (i) mitigate the development's projected impact on public facilities; and
  - (ii) create a demonstrable reduction in capital facility needs.
- Either the County, the zoning applicant, or any other person may identify such mitigating circumstances.
- 1-11.5.5 Cash proffer payments shall be used to fund schools, roads, parks, libraries, and fire station capital facilities. Payments shall be expended in accordance with State law.
- 1-11.5.6 The suggested cash proffer that the Board will accept from residential rezoning is \$6,577 per dwelling unit. Cash proffer computation is presented in the Appendix of this policy.

# APPENDIX

**County of Fluvanna, VA  
Cash Proffer Summary  
FY 2010 - 2011**

<u>Facilities</u>		<u>Net Cost per Household</u>
Firestations	\$	339
Libraries	\$	216
Parks	\$	370
Schools	\$	5,652
<b>Maximum acceptable cash proffer:</b>	<b>\$</b>	<b>6,577</b>

**County of Fluvanna, VA  
Demographic Data  
FY 2010 - 2011 Worksheet**

**Population**

County population as of:      *June 2009*                      **26,652**

**Total Housing Units**

	Units	% of total
Single Family	10,370	100%
Multi Family	-	0%
<b>Total</b>	<b>10,370</b>	<b>100%</b>

**Persons Per Household**

Single Family	2.57
Multi Family	-
<b>Weighted Average</b>	<b>2.57</b>

**Assessed Values**

Single Family	\$	337,267
Multi Family	\$	-
<b>Weighted Average</b>	<b>\$</b>	<b>337,267</b>

**Sources:**

- Population - Weldon Cooper Center
- Persons per household - Factfinder, U.S. Census Bureau
- Assessed values for 2009 single family units constructed and sold - Commissioner of Revenue



**County of Fluvanna, VA**  
**Fire Stations: Building Area and Site Size**  
**FY 2010 - 2011 Worksheet**

<u>Company</u>	<u>Location</u>	<u>Area (Sq. Ft.)</u>	<u>Acreage</u>
1	Palmyra	11,488	3.736
2	Fork Union	4,405	0.268
3	Kent Store	2,624	0.858
<b>Total</b>		<b>18,517</b>	<b>4.862</b>
<b>Square Feet Per Capita</b>			<b>0.695</b>
<b>Acres Per Capita</b>			<b>0.000182</b>

**County of Fluvanna, VA  
Fire Stations: Capital Costs  
FY 2010 - 2011 Worksheet**

<u>Station</u>	<u>Year</u>	<u>CPI Index</u>	<u>Capital Cost</u>	<u>Capital Cost 2010 \$</u>	<u>Square Footage</u>	<u>Capital Cost Per Square Footage</u>
Palmyra	2007	208.352	\$ 2,114,117	\$ 2,208,270	11,488	\$ 192
Fork Union	1958	28.900	\$ 10,796	\$ 81,299	4,405	\$ 18
Kent Store	1960	29.600	\$ 9,734	\$ 71,568	2,624	\$ 27
<b>Average cost per sq ft</b>						<b>\$ 79</b>

CPI March 2010: 217.631

**County of Fluvanna, VA  
Fire Stations: Land Cost Per Acre  
FY 2010 - 2011 Worksheet**

<u>Station</u>	<u>Year</u>	<u>CPI Index</u>	<u>Original Land Price</u>	<u>Capital Cost 2010 \$</u>	<u>Acreage</u>	<u>Land Cost Per Acre</u>
Palmyra	1997	160.300	\$ 11,202	\$ 15,208	3.736	\$ 4,071
Fork Union	1968	34.700	\$ 100	\$ 627	0.268	\$ 2,340
Kent Store	1980	82.700	\$ 5,000	\$ 13,158	0.858	\$ 15,336
<b>Average cost per acre</b>						<b>\$ 7,249</b>

CPI March 2010: 217.631

**County of Fluvanna, VA  
 Future Firestations Capital Improvement Projects  
 FY 2010 - 2011 Worksheet**

<u>Project</u>	<u>Completion Year</u>	<u>Capital Cost</u>	<u>Cost per Household</u>
Kent Store	2011	\$ 1,128,065	\$ 109
Fork Union	2011	\$ 1,769,425	\$ 171
<b>Average cost per household</b>			<b>\$ 280</b>

**County of Fluvanna, VA  
Fire Stations: Equipment Cost  
FY 2010 - 2011 Worksheet**

<u>Item</u>	<u>Cost</u>
2001 Ford Attack	\$ 150,000
1999 Freightliner Truck	190,000
1998 Ford Attack	50,000
1998 Ford Expedition	20,000
1997 United Trailer	2,500
1967 Dodge Truck	3,000
1983 Chevy Tanker	45,000
1996 Pierce Pumper	226,000
1995 Ford Brush	62,000
1993 Darley Pumper	214,000
1992 Darley Pumper	174,521
1993 Ford Explorer	10,600
1996 Chevy Caprice	5,000
1998 Ford Crown Victoria	20,000
Monopole @ Kents Store	49,200
Mobile Commend Trailer	62,722
1998 Ford Explorer	5,000
1994 Ford Squad Truck	60,000
2003 Pierce Freightliner Tanker	223,925
2002 Pierce Kenworth Tanker	235,774
2007 Pierce Pumper Truck	412,000
2009 Ford F150 XL 8964	23,582
2009 Pierce Pumper Truck	<u>472,075</u>
<b>Total</b>	<b>\$ 2,716,899</b>
<b>Equipment cost per capita</b>	<b>\$ 102</b>

**County of Fluvanna, VA  
Firestations Net Costs  
FY 2010 - 2011 Worksheet**

**Costs:**

Square feet per capita		0.695
Capital cost per square foot	\$	79
Acres per capita		0.000182
Cost per acre	\$	7,249
Improvements per capita	\$	280
Equipment cost per capita	\$	102

**Gross costs** **\$ 410**

**Credits:**

2009 Weighted average assessed value \$ 337,267

<u>Year</u>	<u>Amount</u>
1	\$ 11.63
2	\$ 11.98
3	\$ 12.34
4	\$ 12.71
5	\$ 13.09
6	\$ 13.48
7	\$ 13.88
Total	\$ 89.11
NPV	\$71.00

<b>Net Cost</b>	<b>\$ 339</b>
-----------------	---------------

**County of Fluvanna, VA  
Parks: Acres of Land  
FY 2010 - 2011 Worksheet**

<u>Site</u>	<u>Type</u>	<u>Acreage</u>
Pleasant Grove	Community	822.13
Carysbrook	Community	9.10
Fork Union	Community	100.00
<b>Total Acreage</b>		<b>931.23</b>
<b>Acres Per Capita</b>		<b>0.036691</b>

**County of Fluvanna, VA  
Parks: Land Cost Per Acre  
FY 2010 - 2011 Worksheet**

<u>Site</u>	<u>Year</u>	<u>CPI</u>	<u>Original Land Price</u>	<u>Cost 2010 \$</u>	<u>Acres</u>	<u>Land Cost Per Acre</u>
Pleasant Grove	1995	152.50	\$ 745,296	\$ 1,063,603	822.13	\$ 1,294
Carysbrook	1985	107.6	\$ 30,000	\$ 60,678	9.10	\$ 6,668
Fork Union	1986	109.5	\$ 135,000	\$ 268,312	100.00	\$ 2,683
<b>Average Cost Per Acre</b>						<b>\$ 3,134</b>

CPI March 2010: 217.631

**County of Fluvanna, VA  
Parks Improvements  
FY 2010 - 2011 Worksheet**

<u>Type</u>	<u>Improvement Cost</u>
Pleasant Grove Heritage Trail	\$ 536,085
<b>Total Acreage</b>	<b>704</b>
<b>Average Cost to Improv Per Acre</b>	<b>\$ 761</b>

}  
}

**County of Fluvanna, VA  
Parks & Recreation Net Costs  
FY 2010 - 2011 Worksheet**

**Costs:**

Acres per capita		0.03669
Cost per acre	\$	3,134
Improvement cost per acre	\$	761

**Gross costs** \$ **370**

**Credits:**

2009 Weighted average assessed value \$ 337,267

<u>Year</u>	<u>Amount</u>
1	-
2	-
3	-
4	-
5	-
6	-
7	-
Total	-
NPV	\$0.00

<b>Net Cost</b>	<b>\$ 370</b>
-----------------	---------------

**County of Fluvanna, VA  
Library: Area and Size  
FY 2010 - 2011 Worksheet**

<u>Library</u>	<u>Area (Sq Ft)</u>
Pleasants Grove	17,500
Sq ft per Capita	0.6570
Volumes in the system*	52,817
Volumes per person	1.98
Total cost of volumes	938,829
Weighted average cost per volume	17.78

\*Including non-book items

**County of Fluvanna, VA  
Fire Stations: Capital Costs  
FY 2010 - 2011 Worksheet**

<u>Library</u>	<u>Year</u>	<u>CPI Index</u>	<u>Capital Cost</u>	<u>Capital Cost 2010 \$</u>	<u>Square Footage</u>	<u>Capital Cost Per Square Footage</u>
Pleasant Grove	2008	212.425	\$ 2,988,995	\$ 3,062,248	17,500	\$ 175

**Average cost per sq ft      \$              175**

CPI March 2010:                      217.631

**County of Fluvanna, VA  
Library Net Costs  
FY 2010 - 2011 Worksheet**

Persons per household	2.57
Square foot per person	0.66

**Costs:**

Square feet per capita	0.657
Building cost per sq ft	175.000
Volumes per capita	1.980
Weighted cost per volume	17.780

<b>Gross costs</b>	<b>\$ 389</b>
--------------------	---------------

**Credits:**

2009 Weighted average assessed value	\$ 337,267
--------------------------------------	------------

<u>Year</u>	<u>Amount</u>
1	\$ 29.76
2	\$ 30.21
3	\$ 30.66
4	\$ 31.12
5	\$ 31.59
6	\$ 32.06
7	\$ 32.54

Total	\$ 217.94
NPV	\$173.00

<b>Net Cost</b>	<b>\$ 216</b>
-----------------	---------------

**County of Fluvanna, VA**  
**School Facilities: Building Area and Site Size**  
**FY 2010 - 2011 Worksheet**

	<u>Year</u> <u>Constructed</u>	<u>Area (Sq Ft)</u>	<u>Acreage</u>
<b><u>Elementary</u></b>			
Palmyra	1936	20,264	7.619
Cunningham	1949	15,520	10.000
Central	1957	64,260	31.100
Columbia	1966	14,668	7.600
<b>Total</b>		<b>114,712</b>	<b>56.319</b>

<b><u>Middle School</u></b>			
Fluvanna Middle School	1990	79,760	40.727
<b>Total</b>		<b>79,760</b>	<b>40.727</b>

<b><u>High School</u></b>			
Fluvanna High School	1975	165,045	46.000
Abrams	1936	17,404	0.560
<b>Total</b>		<b>182,449</b>	<b>46.560</b>

**County of Fluvanna, VA**  
**School: Land Cost Per Acre**  
**FY 2010 - 2011 Worksheet**

<u>Site</u>	<u>Year</u>	<u>CPI</u>	<u>Original Land Cost</u>	<u>Cost 2010 \$</u>	<u>Acres</u>	<u>Land Cost Per Acre</u>
<b>Elementary</b>						
Palmyra	1950	23.800	5,000	\$ 45,721	7.619	\$ 6,001
Cunningham	1950	23.800	5,000	\$ 45,721	10.000	\$ 4,572
Central	1957	28.100	40,000	\$ 309,795	31.100	\$ 9,961
Columbia	1966	32.400	5,000	\$ 33,585	7.600	\$ 4,419
<b>Average Cost Per Acre</b>						<b>\$ 6,238</b>
<b>Middle</b>						
Fluvanna Middle School	1991	136.000	5,000	\$ 8,001	40.727	\$ 196
<b>Average Cost Per Acre</b>						<b>\$ 196</b>
<b>High School</b>						
Fluvanna High School	1975	53.600	32,859	\$ 133,417	46.000	\$ 2,900
Abrams	1940	14.100	1,500	\$ 23,152	0.560	\$ 41,343
New H S at Pleasant Grove	2005	194.500	183,705	\$ 205,552	165.000	\$ 1,246
<b>Average Cost Per Acre</b>						<b>\$ 15,163</b>

CPI March 2010: 217.631

**County of Fluvanna, VA  
 Future School Capital Improvement Projects  
 FY 2010 - 2011 Worksheet**

<u>Project</u>	<u>Completion Year</u>	<u>Capital Cost</u>	<u>Cost per Student</u>	<u>Cost per Household</u>
High School Construction	2011	\$ 71,158,952	\$ 59,848	\$ 6,883

**County of Fluvanna, VA  
School: Capital Costs  
FY 2010 - 2011 Worksheet**

	<u>Year</u>	<u>CPI</u>	<u>Original Capital Cost</u>	<u>Cost 2010 \$</u>	<u>Square Footage</u>	<u>Capital Cost per Sq Ft</u>
<b>Elementary</b>						
Palmyra	1936	13.80	\$ 17,339	\$ 273,442	20,264	13.4940
Cunningham	1949	23.90	\$ 66,479	\$ 605,351	15,520	39.0050
Cunningham	1978	65.20	\$ 436,272	\$ 1,456,232	15,520	93.8290
Central	1957	28.10	\$ 221,429	\$ 1,714,940	64,260	26.6880
Central	1988	118.00	\$ 2,000,000	\$ 3,688,661	64,260	57.4020
Central	2001	178.00	\$ 7,911,518	\$ 9,672,986	64,260	150.5290
Columbia	1966	32.40	\$ 259,057	\$ 1,740,087	14,668	118.6320

<b>Average Cost per Sq Ft</b>	<b>71.3680</b>
-------------------------------	----------------

**Middle School**

Fluvanna Middle School	1990	129.90	\$ 4,500,000	\$ 7,539,180	79,760	94.5230
Fluvanna Middle School	1996	156.70	\$ 1,000,000	\$ 1,388,839	79,760	17.4130

<b>Average Cost per Sq Ft</b>	<b>55.9680</b>
-------------------------------	----------------

**High School**

Abrams	1936	13.80	\$ 77,444	\$ 1,221,320	17,404	70.1750
Fluvanna High School	1975	53.60	\$ 3,070,716	\$ 12,467,966	165,045	75.5430
Fluvanna High School	2006	202.90	\$ 7,482,555	\$ 8,025,805	165,045	48.6280

<b>Average Cost per Sq Ft</b>	<b>64.7820</b>
-------------------------------	----------------

CPI March 2010: 217.631

**County of Fluvanna, VA  
Schools Net Costs  
FY 2010 - 2011 Worksheet**

	<u>Elementary</u>	<u>Middle</u>	<u>High</u>	<u>All Grades</u>
Students	1,751	846	1,189	3,786
Students per household	0.169	0.082	0.115	0.366

**Costs:**

Standards:

Acres per student	0.0321640	0.0481410	0.0391590	
Cost per acre	6,238	196	15,163	
Sq ft per student	65.5120	94.2790	153.4470	
Capital cost per sq ft	71.3680	55.9680	64.7820	
Future capital improvements per household	-	-	6,883	

<b>Gross Cost</b>	<b>824</b>	<b>433</b>	<b>8,094</b>	<b>9,351</b>
-------------------	------------	------------	--------------	--------------

**Credits:**

2009 Weighted average assessed value

\$ 337,267

<u>Year</u>	<u>Amount</u>
1	635.57
2	645.10
3	654.78
4	664.60
5	674.57
6	684.69
7	694.96

Total	\$ 4,654.27
NPV	\$3,699.00

<b>Net Cost</b>	<b>\$ 5,652</b>
-----------------	-----------------



# COUNTY OF FLUVANNA

*"Responsive & Responsible Government"*

P.O. Box 540  
Palmyra, VA 22963  
(434) 591-1910  
FAX (434) 591-1911  
www.co.fluvanna.va.us

## MEMORANDUM

Date: November 21, 2012  
From: Andrew J. Pompei, Planner  
To: Fluvanna County Planning Commission  
Re: Fluvanna County Plant List

---

### BACKGROUND

The Board of Supervisors recently approved changes to Fluvanna County's landscaping regulations. As part of a related project, the Planning Department has been creating a new plant list, which:

- Includes a variety of native species;
- Is comparable with neighboring localities;
- Includes species that are appropriate for Fluvanna County's unique climate, soils, and hydrology;
- Provides additional information regarding the growth habits of the plants listed; and
- Removes species that have been deemed invasive.

Sec. 22-24-5(B) of the newly-adopted landscaping regulations requires applicants to utilize species listed within the Fluvanna County Plant List; additional species may be used with the approval of the zoning administrator.

A previous draft of the proposed plant list was presented to the Planning Commission at its work session on September 12, 2012. Based on input received from the Planning Commission, a new draft was prepared, based on the plant list used in Albemarle County.

Over the past few months, input has been received from local Master Gardeners, a landscape architect, a local forester, and planning staff from nearby localities. The proposed plant list was also distributed to local landscaping-related businesses; no response was received from those businesses.

### NEXT STEPS

The Planning Commission may review the plant list and provide additional input to staff.

If the Planning Commission is comfortable, it may choose to adopt the list as formal county policy.

### ATTACHMENTS

- A: Proposed Plant List
- B: Existing Plant List
- C: Comparison of Plant List with Other Localities



## FLUVANNA COUNTY, VIRGINIA

### PLANT LIST

November 2012

The following list includes trees and shrubs that are generally suitable for use in Fluvanna County. The species listed are divided into five (5) different categories, as defined within the Fluvanna County Zoning Ordinance:

- Large Shade Trees
- Medium Shade Trees
- Ornamental Trees
- Evergreen Shade Trees
- Shrubs

Each category is divided into two (2) subcategories:

- Species Native to the Virginia Piedmont
- Non-Native Species

Species that are not native to the Virginia Piedmont, but are native to other parts of Virginia, are denoted with an asterisk (\*).

Not every plant listed is appropriate for use in every situation. Plant species chosen should be well-suited to the site. Choosing the right plants for each specific site will result in a functional, healthier landscape that will last for years to come. Properly-placed plants require less maintenance and will be healthier than plants ill-suited for their location.

### Choosing the Appropriate Plant Species

The following factors should be considered when selecting the appropriate plant species:

#### *Available Space for Plant Growth*

Choose plant species that, at maturity, will grow properly in the selected space. Plants should have enough space above ground and below ground. Plants should be located so that their roots and foliage will not negatively impact structures or utility lines (above ground or below ground).

#### *Soil Conditions*

Each species has different preferences for soil moisture, drainage, fertility, and acidity.

- *Moisture/Drainage*

Each species prefers different amounts of soil moisture. Some plants do best in well-drained soils, while others prefer moist soils. Species that thrive in wet and/or poorly-drained soils may do well in bioretention areas. Choosing drought-tolerant species will reduce long-term maintenance costs and requirements.

- *Compaction*

Highly-compacted soils limit water infiltration, root growth, and air and nutrient exchange. Only certain species can tolerate compacted soils.

- *Fertility*

Each species has different nutrient needs. Too few nutrients can hinder growth, while excessive amounts of certain nutrients may be toxic to some plants.

- *pH (Acidity/Alkalinity)*

Soil chemistry can affect plant growth. Some plants can tolerate acidic soils, while other cannot.

*Local Climatic Conditions*

Fluvanna County is within USDA Hardiness Zone 7a. All of the plants listed are suitable for planting within Zone 7a; however, when selecting plant species, consider the surrounding microclimate. For example, a parking lot will be warmer than the surrounding area, due to heat radiating from the asphalt. Areas on the southern and western sides of a building will be warmer than areas on the northern and eastern sides. Each species requires different amounts of sun exposure; some prefer sunny locations, while others thrive in the shade.

*Resistance to Pests*

To ensure the long-term integrity of the landscape and reduce maintenance costs, choose plants that are resistant to pests and disease. In some areas, it may be necessary to choose deer-resistant species.

*Plant Function*

Plants can be selected to serve different functions and purposes. Not all plant species are appropriate for every function or use.

- *Architectural Interest*  
Plants may be selected for their foliage, flowers, form, and/or how they may relate to nearby structures.
- *Wind Reduction*  
Plants may be chosen as a windbreak, reducing wind speed and its impacts on locations downwind.
- *Erosion Control*  
Plants may be effective at controlling erosion on slopes, especially those with dense, spreading foliage and/or deep root systems. Some species may be appropriate for streambank restoration or wetlands plantings.

- *Noise Abatement*  
Groupings of plants may be effective at reducing noise.
- *Climate Control*  
Shading the south or west sides of a structure can moderate interior temperatures, resulting in lower energy costs. Plantings can reduce glare and the amount of heat reflected from certain surfaces.
- *Wildlife Habitat*  
Plants can provide food and shelter for local wildlife.
- *Food*  
Certain fruit-bearing trees and shrubs can be used to create an “edible landscape.”

*Cost & Availability*

Each species varies in cost. Some species are easily found at most nurseries, while others are only available from specialized growers.

**Additional Resources**

*Fluvanna County Landscaping & Tree Protection Regulations*

Article 24 of the Fluvanna County Zoning Ordinance establishes landscaping and tree protection regulations for new development. These regulations can be found online at [www.fluvannacounty.org](http://www.fluvannacounty.org).

*Native Species*

Piedmont Virginia is home to hundreds of native plant species. The use of native plants is encouraged, as these species are uniquely adapted to local conditions. Many native species are hardier and more resistant to drought, insects and disease than their non-native counterparts.

More information on native plants is available from the Virginia Department of Conservation & Recreation (DCR). Native plant lists and brochures, as well as a native plant database, can be accessed at [http://www.dcr.virginia.gov/natural\\_heritage/nativeplants.shtml](http://www.dcr.virginia.gov/natural_heritage/nativeplants.shtml).

Albemarle County, which has similar climatic and physiographic conditions to Fluvanna County, has developed its own database of native plants. This database can be found at [www.albemarle.org/nativeplants/](http://www.albemarle.org/nativeplants/).

#### *Invasive Species*

Invasive species are non-native plants that displace native plant species, reduce wildlife habitat, and alter ecosystem processes. The Fluvanna County Zoning Ordinance prohibits the use of species identified on the Invasive Alien Plant Species of Virginia list (Sec. 22-24-5.F). This list is available at [http://www.dcr.virginia.gov/natural\\_heritage/invspdflist.shtml](http://www.dcr.virginia.gov/natural_heritage/invspdflist.shtml).

#### *Deer-Resistant Species*

Researchers with Rutgers Cooperative Research & Extension (New Jersey) have rated different plant species according to their resistance to deer damage. This list is available online at <http://njaes.rutgers.edu/deerresistance/>.

**LARGE SHADE TREES**

*Large shade trees* are deciduous trees planted primarily for overhead canopy, which attain a mature height of at least forty feet (40’).

**Species Native to the Virginia Piedmont**

<i>Acer rubrum</i>	Red Maple
<i>Acer saccharum</i>	Sugar Maple
<i>Aesculus flava</i>	Yellow Buckeye
<i>Betula nigra</i>	River Birch
<i>Carya glabra</i>	Pignut Hickory
<i>Celtis occidentalis</i>	Hackberry
<i>Fagus grandifolia</i>	American Beech
<i>Liquidambar styraciflua</i> (non-gumball cultivar)	Sweetgum
<i>Liriodendron tulipifera</i>	Tulip Poplar
<i>Nyssa silvatica</i>	Black Gum
<i>Quercus alba</i>	White Oak
<i>Quercus coccinea</i>	Scarlet Oak
<i>Quercus falcata</i>	Southern Red Oak
<i>Quercus palustris</i>	Pin Oak
<i>Quercus phellos</i>	Willow Oak
<i>Quercus prinus</i>	Chestnut Oak
<i>Quercus rubra</i>	Northern Red Oak
<i>Tilia americana</i>	Basswood

**Non-Native Species**

<i>Acer nigrum</i>	Black Maple
<i>Aesculus hippocastanum</i>	Common Horsechestnut
<i>Carpinus betulus</i>	European Hornbeam
<i>Cercidiphyllum japonicum</i>	Katsuratree
<i>Corylus colurna</i>	Turkish Filbert
<i>Fagus sylvatica</i>	European Beech
<i>Gleditsia triacanthos inermis</i>	Thornless Honeylocust
<i>Ginkgo biloba</i> (known male)	Ginkgo
<i>Gymnocladus dioica</i>	Kentucky Coffeetree
<i>Magnolia acuminata*</i>	Cucumbertree Magnolia
<i>Platanus x acerifolia</i>	London Planetree
<i>Quercus bicolor</i>	Swamp White Oak
<i>Quercus imbricaria</i>	Shingle Oak
<i>Quercus robur</i>	English Oak
<i>Quercus shumardii</i>	Shumard Oak
<i>Styphnolobium japonicum</i>	Japanese Pagodatree
<i>Taxodium distichum*</i>	Bald Cypress
<i>Tilia cordata</i>	Littleleaf Linden
<i>Tilia tomentosa</i>	Silver Linden
<i>Ulmus parvifolia</i>	Chinese Elm/Lacebark Elm
<i>Zelkova serrata</i>	Japanese Zelkova

**MEDIUM SHADE TREES**

*Medium shade trees* are deciduous trees planted primarily for overhead canopy, which attain a mature height of twenty-five to forty feet (25' – 40').

**Species Native to the Virginia Piedmont**

<i>Carpinus caroliniana</i>	American Hornbeam
<i>Cladrastis kentuckea</i>	Yellowwood
<i>Crataegus viridis</i>	Green Hawthorn
<i>Diospyros virginiana</i>	Persimmon
<i>Ostrya virginiana</i>	American Hophornbeam
<i>Oxydendrum arboreum</i>	Sourwood

**Non-Native Species**

<i>Acer buergeranum</i>	Trident Maple
<i>Acer campestre</i>	Hedge Maple
<i>Acer griseum</i>	Paperbark Maple
<i>Acer triflorum</i>	Three-Flower Maple
<i>Acer truncatum</i>	Purpleblow Maple
<i>Catalpa bignonioides</i>	Southern Catalpa
<i>Crataegus crusgalli var. inermis</i>	Thornless Cockspur Hawthorn
<i>Crataegus phaenopyrum*</i>	Washington Hawthorn
<i>Koelreuteria paniculata</i>	Goldenraintree
<i>Maackia amurensis</i>	Amur Maackia
<i>Pistachia chinensis</i>	Chinese Pistache
<i>Tetradium daniellii</i>	Bee Bee Tree

**ORNAMENTAL TREES**

*Ornamental trees* are single-stemmed or multi-stemmed trees noted for their flowers, leaves, bark, form, shape, and/or other aesthetic characteristics. Ornamental trees attain a mature height of ten to thirty feet (10' – 30').

**Species Native to the Virginia Piedmont**

<i>Amelanchier arborea</i>	Downy Serviceberry
<i>Amelanchier canadensis</i>	Shadblow Serviceberry
<i>Asimina triloba</i>	Paw Paw
<i>Cercis canadensis</i>	Eastern Redbud
<i>Chionanthus virginicus</i>	Fringetree
<i>Cornus florida</i>	Flowering Dogwood
<i>Crataegus viridis</i>	Green Hawthorn
<i>Hammelis virginiana</i>	Common Witchhazel
<i>Magnolia virginiana</i>	Sweetbay Magnolia

**Non-Native Species**

<i>Acer palmatum</i>	Japanese Maple
<i>Amelanchier laevis*</i>	Allegheny Serviceberry
<i>Amelanchier x grandiflora</i>	Serviceberry
<i>Chionanthus retusus</i>	Chinese Fringetree
<i>Cornus</i> hybrids	Dogwood (Stellar Hybrids)
<i>Cornus kousa</i>	Kousa Dogwood
<i>Cornus mas</i>	Corneliancherry Dogwood
<i>Cotinus coggygria</i>	Smoketree
<i>Franklinia altamaha</i>	Franklinia
<i>Halesia carolina</i>	Carolina Silverbell
<i>Halesia diptera</i>	Two-Winged Silverbell
<i>Lagerstroemia indica</i>	Crape Myrtle
<i>Magnolia liliflora</i>	Lily Magnolia
<i>Magnolia x loebneri</i>	Loebner Magnolia
<i>Magnolia x soulangiana</i>	Saucer Magnolia
<i>Magnolia stellata</i>	Star Magnolia
<i>Malus sargentii</i>	Sargent Crabapple
<i>Parrotia persica</i>	Persian Parrotia
<i>Stewartia koreana</i>	Korean Stewartia
<i>Stewartia ovata</i>	Mountain Stewartia
<i>Stewartia pseudocamellia</i>	Japanese Stewartia
<i>Syringa reticulata</i>	Japanese Tree Lilac

**EVERGREEN TREES**

*Evergreen trees* retain their foliage year-round, and are planted primarily for screening or ornamental purposes. Evergreen trees attain a mature height of at least fifteen feet (15').

**Species Native to the Virginia Piedmont**

<i>Ilex opaca</i>	American Holly
<i>Juniperus virginiana</i>	Eastern Red Cedar
<i>Pinus echinata</i>	Shortleaf Pine
<i>Pinus taeda</i>	Loblolly Pine
<i>Tsuga canadensis</i>	Eastern Hemlock
<i>Tsuga caroliniana</i>	Carolina Hemlock

**Non-Native Species**

<i>Abies concolor</i>	White Fir/Concolor Fir
<i>Cedrus atlantica</i>	Atlas Cedar/Blue Atlas Cedar
<i>Cedrus deodara</i>	Deodar Cedar
<i>Cedrus libani</i>	Cedar of Lebanon
<i>Cryptomeria japonica</i>	Cryptomeria
<i>Ilex x attenuate 'Fosteri'</i>	Foster's Holly
<i>Ilex x 'Nellie R. Stevens'</i>	Nellie Stevens Holly
<i>Magnolia grandiflora</i>	Southern Magnolia
<i>Picea abies</i>	Norway Spruce
<i>Picea glauca</i>	White Spruce
<i>Picea orientalis</i>	Oriental Spruce
<i>Picea omorika</i>	Serbian Spruce
<i>Picea pungens</i>	Colorado Blue Spruce
<i>Pinus bungeana</i>	Lacebark Pine
<i>Pinus cembra</i>	Swiss Stone Pine
<i>Pinus densiflora</i>	Japanese Red Pine
<i>Pinus flexilis</i>	Limber Pine
<i>Pinus parviflora</i>	Japanese White Pine
<i>Pinus sylvestris</i>	Scotch Pine
<i>Pinus thunbergiana</i>	Japanese Black Pine
<i>Taxus baccata</i>	English Yew
<i>Thuja occidentalis*</i>	Eastern Arborvitae
<i>Thuja orientalis</i>	Oriental Arborvitae

**EVERGREEN SHRUBS**

*Evergreen shrubs* are low, woody plants with multiple shoots or stems from the base, which retain their foliage year-round and attain a mature height of less than fifteen feet (15').

**Species Native to the Virginia Piedmont**

<i>Ilex glabra</i>	Inkberry
<i>Kalmia latifolia</i>	Mountain Laurel
<i>Rhododendron catawabiense</i>	Catawba Rhododendron
<i>Rhododendron maximum</i>	Rosebay Rhododendron

**Non-Native Species**

<i>Aucuba japonica</i>	Japanese Aucuba
<i>Berberis julianae</i>	Wintergreen Barberry
<i>Berberis verruculosa</i>	Warty Barberry
<i>Berberis x gladwynensis 'William Penn'</i>	"William Penn" Barberry
<i>Buxus microphylla</i>	Littleleaf Box
<i>Buxus sempervirens</i>	Common Box/Boxwood
<i>Cotoneaster dammeri</i>	Bearberry Cotoneaster
<i>Cotoneaster salicifolius</i>	Willowleaf Cotoneaster
<i>Daphne cneorum</i>	Rose Daphne
<i>Daphne odora</i>	Fragrant Daphne
<i>Daphne x burkwoodii</i>	Burkwood Daphne
<i>Ilex cornuta</i>	Chinese Holly
<i>Ilex cornuta 'Burfordii'</i>	Burford Holly
<i>Ilex cornuta 'Carissa'</i>	Carissa Holly
<i>Ilex crenata</i>	Japanese Holly
<i>Ilex vomitoria*</i>	Yaupon Holly
<i>Ilex x aquipernyi 'Dragon Lady'</i>	"Dragon Lady" Holly
<i>Ilex x meserveae</i>	Meserve Holly
<i>Juniperus chinensis</i>	Chinese Juniper
<i>Juniperus scopulorum</i>	Rocky Mountain Juniper
<i>Leucothoe axillaris*</i>	Coast Leucothoe

**Non-Native Species (continued)**

<i>Leucothoe fontanesiana</i>	Drooping Leucothoe
<i>Ligustrum japonicum</i>	Japanese Privet
<i>Myrica cerifera*</i>	Southern Wax Myrtle
<i>Myrica pensylvanica</i>	Northern Bayberry
<i>Nandina domestica</i>	Nandina/Heavenly Bamboo
<i>Osmanthus heterophyllus</i>	Holly Osmanthus
<i>Osmanthus x fortunei</i>	Fortune's Osmanthus
<i>Picea abies 'Little Gem'</i>	Dwarf Norway Spruce
<i>Picea abies 'Nidiformis'</i>	Birds Nest Spruce
<i>Pieris floribunda*</i>	Mountain Pieris
<i>Pieris japonica</i>	Japanese Pieris
<i>Pinus mugo</i>	Mugo Pine
<i>Prunus laurocerasus</i>	Cherry Laurel
<i>Pyracantha coccinea</i>	Scarlet Firethorn
<i>Pyracantha x cvs.</i>	Firethorn
<i>Rhododendron spp.</i>	Rhododendron
<i>Rhododendron spp.</i>	Azalea
<i>Sarcococca hookerana var. humilis</i>	Sarcococca/Sweetbox
<i>Skimmia japonica</i>	Japanese Skimmia
<i>Taxus baccata 'Repandens'</i>	English Spreading Yew
<i>Taxus cupidata</i>	Japanese Yew
<i>Taxus x media</i>	Anglojap Yew
<i>Viburnum x burkwoodii</i>	Burkwood Viburnum
<i>Viburnum x pragense</i>	Prague Viburnum
<i>Viburnum x rhytidophylloides</i>	Lantanaphyllum Viburnum
<i>Viburnum utile</i>	Service Viburnum

Draft: November 21, 2012

**DECIDUOUS SHRUBS**

*Deciduous shrubs* are low, woody plants with multiple shoots or stems from the base, which do not retain their foliage year-round and attain a mature height of less than fifteen feet (15’).

**Species Native to the Virginia Piedmont**

<i>Aronia arbutifolia</i>	Red Chokeberry
<i>Aronia melanocarpa</i>	Black Chokeberry
<i>Calycanthus floridus</i>	Common Sweetshrub
<i>Cephalanthus occidentalis</i>	Buttonbush
<i>Clethra alnifolia</i>	Summersweet Clethra
<i>Hammelis virginiana</i>	Common Witchazel
<i>Ilex decidua</i>	Possumhaw
<i>Ilex verticillata</i>	Common Winterberry
<i>Lindera benzoin</i>	Spicebush
<i>Physocarpus opulifolius</i>	Common Ninebark
<i>Sambucus canadensis</i>	Elderberry
<i>Rhododendron periclymenoides</i>	Pinxterbloom Azalea
<i>Rhododendron prinophyllum</i>	Rose Azalea
<i>Rhododendron viscosum</i>	Swamp Azalea
<i>Rhus aromatica</i>	Fragrant Sumac
<i>Rhus copallinum</i>	Flameleaf Sumac
<i>Rhus glabra</i>	Smooth Sumac
<i>Rosa palustris</i>	Swamp Rose
<i>Rosa virginiana</i>	Virginia Rose
<i>Vaccinium corymbosum</i>	Highbush Blueberry
<i>Viburnum nudum</i>	Possumhaw Viburnum
<i>Viburnum prunifolium</i>	Blackhaw Viburnum

**Non-Native Species**

<i>Aesculus parviflora</i>	Bottlebrush Buckeye
<i>Abelia x grandiflora</i>	Glossy Abelia
<i>Buddleia davidii</i>	Butterfly Bush
<i>Caryopteris x clandonensis</i>	Blue Mist Shrub/Bluebeard
<i>Callicarpa americana*</i>	American Beautyberry
<i>Callicarpa dichotoma</i>	Purple Beautyberry
<i>Callicarpa japonica</i>	Japanese Beautyberry
<i>Chaenomelea speciosa</i>	Common Flowering Quince
<i>Cornus racemosa*</i>	Gray Dogwood
<i>Cornus sericea*</i>	Redtwig Dogwood
<i>Cotoneaster apiculata</i>	Cranberry Cotoneaster
<i>Cotoneaster divaricatus</i>	Spreading Cotoneaster
<i>Cotoneaster horizontalis</i>	Rockspray Cotoneaster
<i>Deutzia gracillis</i>	Slender Deutzia
<i>Forsythia x intermedia</i>	Border Forsythia
<i>Fothergilla gardenii</i>	Dwarf Fothergilla
<i>Fothergilla major</i>	Large Fothergilla
<i>Hammelis mollis</i>	Chinese Witchazel
<i>Hammelis x intermedia</i>	Witchazel
<i>Hammelis vernalis</i>	Vernal Witchazel
<i>Hydrangea macrophylla</i>	Bigleaf Hydrangea
<i>Hydrangea quercifolia</i>	Oakleaf Hydrangea
<i>Hypericum x 'Hidcote'</i>	Hidcote St. John's

**Non-Native Species** (Deciduous Shrubs: Continued)

<i>Itea virginica</i> *	Virginia Sweetspire
<i>Kerria japonica</i>	Japanese Kerria
<i>Philadelphus x virginalis</i>	Virginal Mockorange
<i>Spirea nipponica</i>	Nippon Spirea
<i>Spirea x bumalda</i>	Bumald Spirea
<i>Spirea x Vanhouttei</i>	Vanhoutte Spirea
<i>Syringa x chinensis</i>	Chinese Lilac
<i>Syringa meyeri</i>	Meyer Lilac
<i>Syringa patula "Miss Kim"</i>	"Miss Kim" Manchurian Lilac
<i>Viburnum carlessii</i>	Korean Spice Viburnum
<i>Viburnum dentatum</i>	Arrowwood Viburnum
<i>Viburnum lantana</i>	Wayfaringtree Viburnum
<i>Viburnum lentago</i>	Nannyberry Viburnum
<i>Viburnum opulus</i>	European Cranberrybush Viburnum
<i>Viburnum plicatum</i>	Snowball Viburnum
<i>Viburnum plicatum var. tomentosum</i>	Doublefile Viburnum
<i>Viburnum trilobum</i>	American Cranberrybush Viburnum
<i>Viburnum x carlcephalum</i>	Fragrant Viburnum
<i>Viburnum x 'Juddii'</i>	Judd Viburnum
<i>Weigela florida</i>	Old-Fashioned Weigela

## PLANT LIST-FLUVANNA COUNTY

### Native Species

#### Large Shade Trees

- Acer Rubrum – (Red Maple)
- Acer Saccharum – (Sugar Maple)
- Aesculus Glabra – (Ohio Buckeye)
- Celtis Occidentalis – (Common Hackberry)
- Cercidiphyllum Japonicum – (Katsuratree)
- Fagus Grandifolia – (American Beech)
- Fraxinum Americana – (White Ash)
- Quercus Alba – (White Oak)
- Quercus Imbricaria – (Laurel Oak)
- Quercus Palustris – (Pine Oak)
- Quercus Phellos – (Willow Oak)
- Quercus Rubra – (Red Oak)
- Tilia Americana – (American Linden)

#### Medium Shade Trees

- Betula Nigra – (River Birch)
- Carpinus Caroliniana – (American Hornbeam)
- Fraxinus Pennsylvanica – (Green Ash)
- Platanus Occidentalis – (American Planetree)

#### Ornamental Shade Trees

- Catalpa Bignonioides – (Southern Catalpa)
- Cercis Canadensis – (Eastern Redbud)
- Cornus Florida – (Flowering Dogwood)
- Gleditsia Triacanthos – (Locust-numerous cultivars)
- Magnolia Grandiflora – (Southern Magnolia)
- Malus – (Flowering Carabapple-many cultivars)
- Ostrya Virginiana – (American Hophornbeam)

#### Large Evergreen Trees

- Pinus Strobes – (Eastern White Pine)
- Thuja Occidentalis – (Eastern Arborvitae)
- Tsuga Canadensis – (Eastern Hemlock)
- Tsuga Caroliniana – (Carolina Hemlock)

#### Medium Evergreen Trees

- Juniperus Virginiana – (Eastern Red Cedar)

#### Large Evergreen Shrubs

- Ilex Opaca – (American Holly)
- Kalmia Latifolia – (Mountain Laurel)

#### Medium Evergreen Shrubs

- Chamaecyparis Thyoides – (Atlantic White Cedar-numerous cultivars)
- Ilex Glabra – (Inkberry)
- Ilex Opaca – (American Holly-numerous varieties)
- Rhododendrons and Azaleas (numerous species and cultivars)

### **Small Evergreen Shrubs**

- Leucothoe axillaries – (Coast Leucothoe)
- Mahonia Azquifolium – (Oregon Grapeholly)
- Rhododendron and Azalea – (numerous varieties)

### **Large Deciduous Shrubs**

- Amelanchier canadensis – (Shadblow Serviceberry)
- Azalea – (Azalea-numerous deciduous cultivars)
- Hamamelis Virginiana – (Common Witchhazel)

### **Medium Deciduous Shrubs**

- Aronia Arbutifolia – (Red Chokeberry)
- Azalea – (Azalea-numerous varieties)
- Calycanthus Floridas – (Common Sweetshrub)
- Clethra Alnifolia (Summersweet Clethra)
- Corylus Americana – (American Filbert)
- Ilex Verticillata – (Common Winterberry)
- Lindera Benzoin – (Spicebush)

### **Small Deciduous Shrubs**

- Azalea – (Azalea-numerous cultivars)
- Cephalanthus Occidentalis – (Buttonbush)
- Clethra Alnifolia (Summersweet Clethra-numerous cultivars)
- Hypericum Prolificum – (Shrubby St. Johnswort)
- Rhus Aromatica – (Fragrant Sumac)

### **Groundcovers and Vines**

- Campsis Radicans – (Trumpet Vine)
- Clematis – (Clematis-numerous cultivars)
- Gelsemium Sempervirens – (Carolina Yellow Jessamine)
- Hypericum x 'Hidcote' – (Hidcote St. Johnswort)
- Parthenocissus Quinquefolia – (Virginia Creeper)
- Wisteria Frutescens – (American Wisteria)

### **Assimilated Non-Native Species**

#### **Large Shade Trees**

- Platanus x Acerifolia – (London Planetree)
- Tilia Tomentosa – (Silver Linden)
- Acer Platanoides – (Norway Maple)

#### **Medium Shade Trees**

- Acer Buergeranum – (Trident Maple)
- Acer Campestre – (Hedge Maple)
- Acer Carpinifolium – (Hornbeam Maple)
- Acer Griseum – (Paperbark Maple)
- Cladrastis Kentukea – (American Yellow wood)
- Prunus Sargentii – (Sargent Cherry)
- Prunus Serrulata – (Japanese Flowering Cherry-numerous cultivars)
- Ulmus parvifolia – (Lacebark Elm)
- Zelkova Serrata – (Japanese Zelkova)

### **Ornamental Shade Trees**

- Acer Ginnala – (Amur Maple)
- Acer Palmatum – (Japanese Maple)
- Gleditsia Triacanthos var. inermis – (Thornless Common Honeylocust)
- Koelreuteria Paniculata – (Panicled Goldenraintree)
- Magnolia x Loebneri – (Loebner Magnolia)
- Magnolia Stellata – (Star Magnolia)
- Malus – (Flowering Crabapple-many cultivars)
- Prunus Cerasifera – (Cherry Plum-numerous cultivars)
- Prunus x Yedoensis – (Yoshino Flowering Cherry)

### **Large Evergreen Trees**

- Picea Abies – (Norway Spruce)
- Pinus Nigra – (Austrian Pine)
- Picea Pungens – (Colorado Spruce)
- Picea Pungens var. glauca – (Colorado Blue Spruce)
- Pinus Resinosa – (Red Pine)
- Pinus Sylvestris – (Scotch Pine)

### **Medium Evergreen Trees**

- Abies Concolor – (White Fir)
- Magnolia x Soulangeana – (Saucer Magnolia-numerous cultivars)
- Picea Omorika – (Serbian Spruce)
- Picea Pungens – (Colorado Spruce-some cultivars)

### **Small Evergreen Trees**

- Photinia x Fraseri – (Fraser Photinia)
- Magnolia Stellata – (Star Magnolia)

### **Large Evergreen Shrubs**

- Buxus Sempervirens – (Common Box)
- Ilex – (Holly-numerous varieties)
- Ilex x Meserveae – (Meserve Hybrid Hollies-numerous cultivars)
- Pieris Japonica – (Japanese Pieris)
- Pyracantha Coccinea – (Scarlet Firethorn-numerous cultivars)
- Pyracantha Koidzumii – (Formosa Firethorn-numerous cultivars)
- Taxus Baccata – (Common Yew)
- Viburnum Dentatum – (Arrow Wood Viburnum)
- Viburnum x Juddii – (Judd Viburnum)

### **Medium Evergreen Shrubs**

- Berberis Julianae – (Winterberry Barberry)
- Berberis Vulgaris – (Common Barberry)
- Berberis x Mentorensis – (Mentor Barberry)
- Buxus Sempervirens – (Common Box-numerous cultivars)
- Chamaecyparis – (Cypress-numerous cultivars)
- Ilex x Attenuata – (Foster Holly-some cultivars)
- Ilex Cornuta – (Buford Holly-numerous Cultivars)
- Ilex Crenata – (Japanese Holly)
- Juniperus Chinensis – (Chinese Juniper-numerous cultivars)
- Nandina Domestica – (Nandina)

## Existing Fluvanna County Plant List

- Rhododendrons and Azaleas – (numerous species and cultivars)
- Taxus – (Yew-numerous species)
- Taxus Cuspidate – (Japanese Yew-numerous cultivars)
- Taxus x Media – (Anglojap Yew-numerous cultivars)
- Viburnum x Burkwoodii – (Burkwood Viburnum)
- Viburnum x Juddii – (Judd Viburnum)
- Viburnum Lantana – (Wayfaringtree Viburnum)
- Viburnum x Rhytidophylloides – (Lantanaphyllum Viburnum)

### **Small Evergreen Shrubs**

- Berberis Candidula – (Paleleaf Barberry)
- Buxus microphylla – (Littleleaf Box)
- Berberis Thunbergii – Japanese Barberry)
- Berberis Verruculosa – (Warty Barberry)
- Caryopteris x Clandonensis – (Blue Mist Shrub)
- Ilex x Attenuata – (Foster Holly-numerous cultivars)
- Juniperus Chinensis – (Chinese Juniper-numerous cultivars)
- Nandina Domestica – (Nandina-some cultivars)
- Picea Abies “Nidiformis” – (Bird’s Nest Spruce)
- Rhododendron and Azalea – (numerous species and cultivars)
- Skimmia Japonica – (Japanese Skimmia)
- Viburnum Carlesii – (Koreanspice Viburnum)

### **Large Deciduous Shrubs**

- Azalea – (Azalea-numerous deciduous species and cultivars)
- Buddleia Davidii – (Butterfly Bush)
- Euonymus Alatus – (Winged Euonymus)
- Lonicera Maackii – (Amur Honeysuckle)
- Philadelphus x Virginalis – (Mockorange-numerous cultivars)
- Syringa Vulgaris – (Common Lilac)

### **Medium Deciduous Shrubs**

- Abelia x Grandiflora – (Glossy Abelia)
- Azalea – (Azalea-numerous varieties)
- Callicarpa Japonica – (Japanese Beautyberry)
- Chaenomeles Speciosa – (Common Floweringquince)
- Cotoneaster Divaricatus – (Spreading Cotoneaster)
- Cotoneaster Horizontalis – (Rockspray Cotoneaster)
- Forsythia x Intermedia – (Border Forsythia)
- Hydrangea Macrophylla – (Bigleaf Hydrangea-numerous cultivars)
- Kerria Japonica – (Japanese Kerria)
- Lonicera Tatarica – (Tartarian Honeysuckle)\* USE AS MEDIUM SHURB
- Prunus Laurocerasus – (Common Cherry Laurel)
- Pyracantha coccinea – (Scarlet Firethorn)
- Spiraea x Vanhouttei – (Vanhoutte Spirea)
- Syringa Meyeri – (Meyer Lilac)
- Weigela Florida – (Old Fashioned Weigela)

### **Small Deciduous Shrubs**

- Azalea – (Azalea-numerous species and cultivars)
- Berberis Thunbergii – (Japanese Barberry)

## Existing Fluvanna County Plant List

- Buxus Microphylla – (Boxwood)
- Deutzia Gracillis – (Deutzia)
- Spiraea x Bumalda – (Bumald Spirea)
- Spiraea Japonica – (Japanese Spirea – numerous cultivars)
- Spiraea Nipponica – (Nippon Spirea)

### **Groundcovers and Vines**

- Cotoneaster Horizontalis – (Rockspray Cotoneaster)
- Euonymus Fortunei – (Wintercreeper Euonymus)
- Forsythia x Intermedia – (Border Forsythia)
- Hedera Helix – (English Ivy)
- Juniperus Conferta – (Shore Juniper)
- Juniperus Horizontalis – (Creeping Juniper)
- Liriope Muscari – (Liriope)
- Lonicera Maackii – (Amur Honeysuckle)
- Pachysandra Terminalis – (Japanese pachysandra)
- Vinca Minor – (Common Periwinkle)
- Wisteria Floribunda – (Japanese Wisteria)

### **Exotic Species**

- Acer Campestre – (Hedge Maple)
- Acer Ginnala – (Amur Maple)
- Acer Palmatum – (Japanese Maple)
- Chionanthus Retusus – (Chinese Fringetree)
- Euonymus Alatus – (Winged Euonymus)
- Picea Pungens var. glauca – (Colorado Blue Spruce)
- Prunus x Yedoensis – (Yoshino Flowering Cherry)
- Wisteria Floribunda – (Japanese Wisteria)

### **Invasive Species**

- Ailanthus Altissima – (Tree of Heaven)\*
- Elaeagnus Angustifolia – (Russian Olive)\*\*
- Elaeagnus Umbellate – (Autumn Olive)\*
- Lonicera Japonica – (Japanese Honeysuckle)\*
- Melia Azedarach – (Mimosa)\*
- Paulownia Tomentosa – (Princess Tree)\*
- Pueraria Lobata – (Kudzu Vine)\*
- Rosa Multiflora – (Multiflora Rose)\*
- Spiraea Japonica – (Japanese Spirea)\*\*
- Ulmus Pumila – (Siberian Elm)\*\*

\* Not to be planted under any condition!

\*\* To be planted only in contained plantings beds with best management practices.

**Proposed Fluvanna County Plant List**  
Comparison with Other Localities

Species	Existing Fluvanna County Plant List	Albemarle County Plant List	Albemarle County Unofficial ARB List	City of Charlottesville Plant List
<b>Large Shade Trees (Native)</b>				
<i>Acer rubrum</i> Red Maple	X	X	X	X
<i>Acer saccharum</i> Sugar Maple	X	X	X	X
<i>Aesculus flava</i> Yellow Buckeye			X	
<i>Betula nigra</i> River Birch	X	X	X	X
<i>Carya glabra</i> Pignut Hickory		X	X	X
<i>Celtis occidentalis</i> Hackberry		X	X	X
<i>Fagus grandifolia</i> American Beech	X	X	X	X
<i>Liquidambar styraciflua</i> (non-gumball) Sweetgum		X	X	X
<i>Liriodendron tulipifera</i> Tulip Poplar		X	X	X
<i>Nyssa silvatica</i> Black Gum		X	X	X
<i>Quercus alba</i> White Oak	X	X	X	X
<i>Quercus coccinea</i> Scarlet Oak		X	X	X
<i>Quercus falcata</i> Southern Red Oak		X	X	X
<i>Quercus palustris</i> Pin Oak	X	X	X	
<i>Quercus phellos</i> Willow Oak	X	X	X	X
<i>Quercus prinus</i> Chestnut Oak		X	X	X
<i>Quercus rubra</i> Red Oak	X	X	X	X
<i>Tilia americana</i> Basswood	X	X		X

Species	Existing Fluvanna County Plant List	Albemarle County Plant List	Albemarle County Unofficial ARB List	City of Charlottesville Plant List
<b>Medium Shade Trees (Native)</b>				
<i>Carpinus caroliniana</i> American Hornbeam	X	X	X	X
<i>Cladrastis kentuckea</i> Yellowwood		X	X	X
<i>Crataegus viridis</i> Green Hawthorn		X	X	X
<i>Diospyros virginiana</i> Persimmon			X	
<i>Ostrya virginiana</i> American Hophornbeam	X	X	X	X
<i>Oxydendrum arboretum</i> Sourwood		X	X	X
<b>Ornamental Trees (Native)</b>				
<i>Amelanchier arborea</i> Downy Serviceberry				
<i>Amelanchier canadensis</i> Shadblow Serviceberry		X	X	X
<i>Asimina triloba</i> Paw Paw			X	
<i>Cercis Canadensis</i> Eastern Redbud	X	X	X	X
<i>Chionanthus virginicus</i> Fringetree		X	X	X
<i>Cornus florida</i> Flowering Dogwood	X	X	X	X
<i>Crataegus viridis</i> Green Hawthorn		X		X
<i>Hammelis virginiana</i> Common Witchazel		X	X	X
<i>Magnolia virginiana</i> Sweetbay Magnolia		X	X	X
<b>Evergreen Trees (Native)</b>				
<i>Ilex opaca</i> American Holly	X	X	X	X
<i>Juniperus Virginiana</i> Eastern Red Cedar	X	X	X	X
<i>Pinus echinata</i> Shortleaf Pine			X	
<i>Pinus taeda</i> Loblolly Pine		X	X	X
<i>Tsuga Canadensis</i> Eastern Hemlock	X		X	
<i>Tsuga Caroliniana</i> Carolina Hemlock	X		X	X

Species	Existing Fluvanna County Plant List	Albemarle County Plant List	Albemarle County Unofficial ARB List	City of Charlottesville Plant List
<b>Deciduous Shrubs (Native)</b>				
<i>Aronia arbutifolia</i> Red Chokeberry	X	X	X	X
<i>Aronia melanocarpa</i> Black Chokeberry			X	
<i>Calycanthus floridus</i> Common Sweetshrub	X	X	X	X
<i>Clethra alnifolia</i> Summersweet Clethra		X	X	X
<i>Cephalanthus occidentalis</i> Buttonbush	X	X	X	X
<i>Hammelis virginiana</i> Common Witchazel			X	
<i>Ilex verticillata</i> Common Winterberry	X	X	X	X
<i>Lindera benzoin</i> Spicebush	X	X	X	X
<i>Physocarpus opulifolius</i> Common Ninebark		X	X	X
<i>Sambucus Canadensis</i> Elderberry			X	
<i>Rhododendron periclymenoides</i> Pinxterbloom Azalea			X	
<i>Rhododendron prinophyllum</i> Rose Azalea			X	
<i>Rhododendron viscosum</i> Swamp Azalea			X	
<i>Rhus aromatica</i> Fragrant Sumac	X	X	X	X
<i>Rhus copallinum</i> Flameleaf Sumac		X	X	X
<i>Rhus glabra</i> Smooth Sumac		X	X	X
<i>Rosa palustris</i> Swamp Rose			X	
<i>Rosa virginiana</i> Virginia Rose			X	
<i>Vaccinium corymbosum</i> Highbush Blueberry			X	
<i>Viburnum nudum</i> Possumhaw Viburnum		X	X	X
<i>Viburnum prunifolium</i> Blackhaw Viburnum		X	X	X
<i>Rosa virginiana</i> Virginia Rose			X	
<i>Vaccinium corymbosum</i> Highbush Blueberry			X	

Species	Existing Fluvanna County Plant List	Albemarle County Plant List	Albemarle County Unofficial ARB List	City of Charlottesville Plant List
<b>Evergreen Shrubs (Native)</b>				
<i>Ilex glabra</i> Inkberry	X	X	X	X
<i>Kalmia Latifolia</i> Mountain Laurel	X	X	X	X
<i>Rhododendron catawabiense</i> Catawba Rhododendron	X	X	X	X
<i>Rhododendron maximum</i> Rosebay Rhododendron	X	X	X	X

Species	Existing Fluvanna County Plant List	Albemarle County Plant List	Albemarle County Unofficial ARB List	City of Charlottesville Plant List
<b>Large Shade Trees (Non-Native)</b>				
<i>Acer nigrum</i> Black Maple		X		X
<i>Aesculus hippocastanum</i> Common Horsechestnut		X		X
<i>Carpinus betulus</i> European Hornbeam			X	
<i>Cercidiphyllum japonicum</i> Katsuratree			X	
<i>Corylus colurna</i> Turkish Filbert/Hazelnut				
<i>Fagus sylvatica</i> European Beech		X	X	X
<i>Gleditsia triacanthos inermis</i> Thornless Honeylocust		X		X
<i>Ginkgo biloba</i> <sup>†</sup> (known male) Gingko		X	X	X
<i>Gymnocladus dioica</i> Kentucky Coffeetree		X		X
<i>Magnolia acuminata</i> Cucumbertree Magnolia		X		X
<i>Platanus x Acerifolia</i> London Planetree	X	X	X	X
<i>Quercus bicolor</i> Swamp White Oak		X		X
<i>Quercus imbricaria</i> Shingle Oak		X		X
<i>Quercus robur</i> English Oak		X		X
<i>Quercus shumardii</i> Shumard Oak		X		X
<i>Styphnolobium japonicum</i> Japanese Pagodatree				
<i>Taxodium distichum</i> <sup>*</sup> Bald Cypress		X		X
<i>Tilia cordata</i> Littleleaf Linden		X		X
<i>Tilia tomentosa</i> Silver Linden	X	X	X	X
<i>Ulmus parvifolia</i> Chinese Elm/Lacebark Elm		X		X
<i>Zelkova serrata</i> Japanese Zelkova		X		X

Species	Existing Fluvanna County Plant List	Albemarle County Plant List	Albemarle County Unofficial ARB List	City of Charlottesville Plant List
<b>Medium Shade Trees (Non-Native)</b>				
<i>Acer Buergeranum</i> Trident Maple	X	X	X	X
<i>Acer campestre</i> Hedge Maple		X		X
<i>Acer Griseum</i> Paperbark Maple	X	X		X
<i>Acer triflorum</i> Three-Flower Maple				
<i>Acer truncatum</i> Purpleblow Maple		X		X
<i>Catalpa bignonioides</i> Southern Catalpa		X		X
<i>Crataegus crusgalli var. inermis</i> Thornless Cockspur Hawthorn		X		X
<i>Crataegus phaenopyrum</i> Washington Hawthorn		X		
<i>Koelreuteria paniculata</i> Goldenraintree		X		X
<i>Maackia amurensis</i> Amur Maackia		X		X
<i>Pistachia chinensis</i> Chinese Pistachio		X	X	X
<i>Tetradium daniellii</i> Bee-Bee Tree				

Species	Existing Fluvanna County Plant List	Albemarle County Plant List	Albemarle County Unofficial ARB List	City of Charlottesville Plant List
<b>Ornamental Trees (Non-Native)</b>				
<i>Acer palmatum</i> Japanese Maple		X		X
<i>Amelanchier laevis</i> Allegheny Serviceberry		X		X
<i>Amelanchier x grandiflora</i> Serviceberry		X		X
<i>Chionanthus retusus</i> Chinese Fringetree		X		X
<i>Cornus</i> hybrids Dogwood (Stellar Hybrids)		X		X
<i>Cornus kousa</i> Kousa Dogwood		X	X	X
<i>Cornus mas</i> Corneliancherry Dogwood		X	X	X
<i>Cotinus coggygria</i> Smoketree		X	X	X
<i>Franklinia altamaha</i> Franklinia		X		X
<i>Halesia carolina</i> Carolina Silverbell		X		X
<i>Halesia diptera</i> Two-Winged Silverbell		X		X
<i>Lagerstroemia indica</i> Crape Myrtle		X		X
<i>Magnolia liliflora</i> Lily Magnolia		X	X	X
<i>Magnolia x loebneri</i> Loebner Magnolia	X	X	X	X
<i>Magnolia x soulangiana</i> Saucer Magnolia		X	X	X
<i>Magnolia stellata</i> Star Magnolia		X	X	X
<i>Malus sargentii</i> Sargent Crabapple		X	X	X
<i>Parrotia persica</i> Persian Parrotia		X	X	X
<i>Stewartia koreana</i> Korean Stewartia		X		X
<i>Stewartia ovata</i> Mountain Stewartia		X		X
<i>Stewartia pseudocamellia</i> Japanese Stewartia		X	X	X
<i>Syringa reticulata</i> Japanese Tree Lilac		X	X	X

Species	Existing Fluvanna County Plant List	Albemarle County Plant List	Albemarle County Unofficial ARB List	City of Charlottesville Plant List
<b>Evergreen Trees (Non-Native)</b>				
<i>Abies concolor</i> White Fir/Concolor Fir		X		X
<i>Cedrus atlantica</i> Atlas Cedar/Blue Atlas Cedar		X		X
<i>Cedrus deodara</i> Deodar Cedar		X	X	X
<i>Cedrus libani</i> Cedar of Lebanon		X		X
<i>Cryptomeria japonica</i> Cryptomeria		X		X
<i>Ilex x attenuate 'Fosteri'</i> Foster's Holly	X	X	X	X
<i>Ilex x 'Nellie R. Stevens'</i> Nellie Stevens Holly	X	X	X	X
<i>Magnolia grandiflora</i> Southern Magnolia	X	X	X	X
<i>Picea abies</i> Norway Spruce		X		X
<i>Picea glauca</i> White Spruce		X		X
<i>Picea orientalis</i> Oriental Spruce		X		X
<i>Picea omorika</i> Serbian Spruce		X		X
<i>Picea pungens</i> Colorado Blue Spruce		X		X
<i>Pinus bungeana</i> Lacebark Pine		X	X	X
<i>Pinus cembra</i> Swiss Stone Pine		X	X	X
<i>Pinus densiflora</i> Japanese Red Pine		X	X	X
<i>Pinus flexilis</i> Limber Pine		X	X	X
<i>Pinus parviflora</i> Japanese White Pine		X	X	X
<i>Pinus sylvestris</i> Scotch Pine		X	X	X
<i>Pinus thunbergiana</i> Japanese Black Pine		X	X	X
<i>Taxus baccata</i> English Yew		X		X
<i>Thuja occidentalis*</i> Eastern Arborvitae	X	X	X	X
<i>Thuja orientalis</i> Oriental Arborvitae		X	X	X

Species	Existing Fluvanna County Plant List	Albemarle County Plant List	Albemarle County Unofficial ARB List	City of Charlottesville Plant List
<b>Deciduous Shrubs (Non-Native)</b>				
<i>Aesculus parviflora</i> Bottlebush Buckeye		X		X
<i>Abelia x grandiflora</i> Glossy Abelia	X	X	X	X
<i>Buddleia davidii</i> Butterfly Bush		X		X
<i>Caryopteris x clandonensis</i> Blue Mist Shrub/Bluebeard		X	X	X
<i>Callicarpa americana</i> * Purple Beautberry			X	
<i>Callicarpa dichotoma</i> Purple Beautyberry		X		X
<i>Callicarpa japonica</i> Japanese Beautberry	X	X		X
<i>Chaenomelea speciosa</i> Common Flowering Quince	X		X	
<i>Cornus racemosa</i> * Gray Dogwood		X		X
<i>Cornus sericea</i> * Redtwig Dogwood		X		X
<i>Cotoneaster apiculata</i> Cranberry Cotoneaster		X	X	X
<i>Cotoneaster divaricatus</i> Spreading Cotoneaster	X		X	
<i>Cotoneaster horizontalis</i> Rockspray Cotoneaster	X	X	X	X
<i>Deutzia gracillis</i> Slender Deutzia	X	X		X
<i>Forsythia x intermedia</i> Border Forsythia	X	X	X	X
<i>Fothergilla gardenii</i> Dwarf Fothergilla		X		X
<i>Fothergilla major</i> Large Fothergilla		X		X
<i>Hammelis mollis</i> Chinese Witchazel		X	X	X
<i>Hammelis x intermedia</i> Witchazel		X	X	X
<i>Hammelis vernalis</i> Vernal Witchazel		X		X
<i>Hydrangea macrophylla</i> Bigleaf Hydrangea	X			
<i>Hydrangea quercifolia</i> Oakleaf Hydrangea		X		X
<i>Hypericum x 'Hidcote'</i> Hidcote St. John's		X		X
<i>Itea virginica</i> Virginia Sweetpire		X		X
<i>Kerria japonica</i> Japanese Kerria	X	X	X	X
<i>Philadelphus x virginalis</i> Virginal Mockorange	X			

Species	Existing Fluvanna County Plant List	Albemarle County Plant List	Albemarle County Unofficial ARB List	City of Charlottesville Plant List
<b>Deciduous Shrubs (Non-Native) (cont.)</b>				
<i>Spirea nipponica</i> Nippon Spirea	X	X		X
<i>Spirea x bumalda</i> Bumald Spirea		X	X	X
<i>Spiraea x Vanhouttei</i> Vanhoutte Spirea	X	X	X	X
<i>Syringa x chinensis</i> Chinese Lilac		X		X
<i>Syringa meyeri</i> Meyer Lilac	X	X	X	X
<i>Syringa patula</i> 'Miss Kim' "Miss Kim" Manchurian Lilac		X		X
<i>Viburnum carlesii</i> Koreanspice Viburnum				
<i>Viburnum dentatum</i> Arrowwood Viburnum		X		X
<i>Viburnum lantana</i> Wayfaringtree Viburnum		X	X	X
<i>Viburnum lentago</i> Nannyberry Viburnum		X		X
<i>Viburnum opulus</i> European Cranberrybush Viburnum		X	X	X
<i>Viburnum plicatum</i> Snowball Viburnum		X	X	X
<i>Viburnum plicatum</i> var. <i>tomentosum</i> Doublefile Viburnum		X	X	X
<i>Viburnum trilobum</i> American Cranberry Viburnum		X		X
<i>Viburnum x carlcephalum</i> Fragrant Viburnum		X	X	X
<i>Viburnum x 'Juddii'</i> Judd Viburnum		X	X	X
<i>Weigela florida</i> Old-Fashioned Weigela	X		X	

Species	Existing Fluvanna County Plant List	Albemarle County Plant List	Albemarle County Unofficial ARB List	City of Charlottesville Plant List
<b>Evergreen Shrubs (Non-Native)</b>				
<i>Aucuba japonica</i> Japanese Aucuba		X		X
<i>Berberis julianae</i> Wintergreen Barberry		X		X
<i>Berberis verruculosa</i> Warty Barberry		X		X
<i>Berberis x gladwynensis</i> 'Wm. Penn' "William Penn" Barberry		X		X
<i>Buxus microphylla</i> Littleleaf Box	X	X	X	X
<i>Buxus sempervirens</i> Common Boxwood	X	X	X	X
<i>Cotoneaster dammeri</i> Bearberry Cotoneaster		X		X
<i>Cotoneaster salicifolius</i> Willowleaf Cotoneaster		X		X
<i>Daphne cneorum</i> Rose Daphne		X	X	X
<i>Daphne odora</i> Fragrant Daphne		X	X	X
<i>Daphne x burkwoodii</i> Burkwood Daphne		X		X
<i>Ilex cornuta</i> Chinese Holly		X	X	X
<i>Ilex cornuta</i> 'Bufordii' Burford Holly		X	X	X
<i>Ilex cornuta</i> 'Carissa' Carissa Holly		X	X	X
<i>Ilex crenata</i> Japanese Holly		X		X
<i>Ilex vomitoria</i> Yaupon Holly		X	X	X
<i>Ilex x aquipernyi</i> 'Dragon Lady' "Dragon Lady" Holly		X		X
<i>Ilex x meserveae</i> Meserve Holly		X	X	X
<i>Juniperus chinensis</i> Chinese Juniper		X	X	X
<i>Juniperus scopulorum</i> Rocky Mountain Juniper		X		X
<i>Leucothoe axillaris</i> Coast Leucothoe		X		X
<i>Leucothoe fontanesiana</i> Drooping Leucothoe		X	X	X
<i>Ligustrum japonicum</i> Japanese Privet		X		X
<i>Myrica cerifera</i> * Southern Waxmyrtle		X		X
<i>Myrica pensylvanica</i> Northern Bayberry		X		X
<i>Nandina domestica</i> Nandina/Heavenly Bamboo		X	X	X

Species	Existing Fluvanna County Plant List	Albemarle County Plant List	Albemarle County Unofficial ARB List	City of Charlottesville Plant List
<b>Evergreen Shrubs (Non-Native) (cont.)</b>				
<i>Osmanthus heterophyllus</i> Holly Osmanthus		X	X	X
<i>Osmanthus x fortunei</i> Fortune's Osmanthus		X		X
<i>Picea abies</i> 'Little Gem' Dwarf Norway Spruce		X		X
<i>Picea abies</i> 'Nidiformis' Birds Nest Spruce		X		X
<i>Pieris floribunda</i> Mountain Pieris		X	X	X
<i>Pieris japonica</i> Japanese Pieris		X	X	X
<i>Pinus mugo</i> Mugo Pine		X	X	X
<i>Prunus laurocerasus</i> Cherry Laurel/English Laurel		X	X	X
<i>Pyracantha coccinea</i> Scarlet Firethorn		X	X	X
<i>Pyracantha x cvs.</i> Firethorn		X	X	X
<i>Rhododendron spp.</i> Rhododendron		X		X
<i>Rhododendron spp.</i> Azalea		X		X
<i>Sarcococca hookerana var. humilis</i> Sarcococca/Sweetbox		X	X	X
<i>Skimmia japonica</i> Japanese Skimmia		X	X	X
<i>Taxus baccata</i> 'Repandens' English Spreading Yew		X	X	X
<i>Taxus cuspidata</i> Japanese Yew		X		X
<i>Taxus x media</i> Anglojap Yew		X	X	X
<i>Viburnum x burkwoodii</i> Burkwood Viburnum	X	X	X	X
<i>Viburnum x pragense</i> Prague Viburnum		X	X	X
<i>Viburnum x rhytidophylloides</i> Lantanaphyllum Viburnum	X	X	X	X
<i>Viburnum utile</i> Service Viburnum		X		X

	Existing Fluvanna County Plant List	Proposed Fluvanna County Plant List	Albemarle County Plant List	Albemarle County Unofficial ARB List	City of Charlottesville Plant List
Number of Species Listed	178 (53 Native to VA)	233 (65 Native to VA Piedmont)	290 (Native species not identified)	252 (138 Native to VA)	309 (Native species not identified)