RICHMOND COUNTY BOARD OF SUPERVISORS
November 9, 2017

MINUTES

At a regular meeting of the Board of Supervisors for Richmond County, Virginia, held on the 9th day of November, 2017, thereof in the Public Meeting Room of the County Office Building.

Present:
F. Lee Sanders, Chairman
Richard E. Thomas, Vice-Chairman
Robert B. Pemberton, Member
William C. Herbert, II, Member
J. David Parr, Member

Also Present:
R. Morgan Quicke, County Administrator
Hope D. Mothershead, Administrative Assistant
Kristie S. Brann, Treasurer
Stephan Smith, Sheriff
Stephen McKeever, VDOT
Carter White, VDOT
Randy Passagaluppi, Fire Chief
Greg Baker, Chief of Emergency Services
Dr. Greg Smith, Superintendent
John Brown, Chairman, School Board
Vanessa Livingstone, Department of Social Services
Clifton Brown, Federal Engineering
Approximately 7 others

CALL TO ORDER

Chairman Sanders called the meeting to order at 9:00 a.m., gave the invocation, and led in the Pledge of Allegiance.

RICHMOND COUNTY PUBLIC SCHOOLS

Dr. Smith addressed the Board with an update on the Veterans Day events scheduled throughout the school system. Dr. Smith was also excited to inform the Board of his trip to Germany with other school superintendents. The Richmond County Public Schools will be partnering with the Richmond County Sheriff's Office to begin a Crime-stoppers tip line at the High School. Dr. Smith invited the Board and other County employees to a holiday luncheon at the Northern Neck Technical Center on December 13th at 12:30 p.m.

VDOT

Mr. McKeever and Mr. White addressed the Board and advised that the preparation for snow arrival is complete with stocked salt building and enough equipment to service the area when the need arises. Mr. Thomas noted that he had visited the facility and was impressed by the storage area.

Mr. Quicke advised that several unpaved road projects were added as rural rustic projects to the six-year plan and resolutions are required for the addition of each roadway.

"On a motion made by Richard E. Thomas, the Board voted: F. Lee Sanders – aye; Richard E. Thomas – aye; William C. Herbert, II – aye; J. David Parr – aye; Robert B. Pemberton – aye: to adopt the following resolution."

RESOLUTION

RURAL RUSTIC ROAD PROJECT

ROUTE 610 – IVONDALE ROAD

WHEREAS, Section §33.2-332 of the Code of Virginia, permits the improvement and hard surfacing of certain unpaved roads deemed to qualify for designation as a **Rural Rustic Road**; and

WHEREAS, any such road must be located in a low-density development area and have no more than 1500 vpd; and

WHEREAS, the Board of Supervisors of Richmond County, Virginia ("Board") requests that Route 610, Ivondale Road, from Route 641 to the End of State Maintenance, be designated a Rural Rustic Road; and

WHEREAS, the Board is unaware of pending development that will significantly affect the existing traffic on this road; and

WHEREAS, this road is in the Board's six-year plan for improvements to the secondary system of state highways; and

WHEREAS, the general public and particularly those citizens who own land abutting this road have been made aware that this road may be paved with minimal improvements as is consistent with the development of a rural rustic road project; and

WHEREAS, the Board believes that this road should be so designated due to its qualifying characteristics; and

NOW, THEREFORE, BE IT RESOLVED, the Board hereby designates this road a Rural Rustic Road, and requests that the Residency Administrator for the Virginia Department of Transportation concur in this designation.

BE IT FURTHER RESOLVED, the Board requests that this road be hard surfaced and, to the fullest extent prudent, be improved within the existing right of way and ditch-lines to preserve as much as possible the adjacent trees, vegetation, side slopes, and rural rustic character along the road in their current state.

BE IT FURTHER RESOLVED, that a certified copy of this resolution be forwarded to the Residency Administrator for the Virginia Department of Transportation.

Recorded Vote		A Copy Teste:	
Moved By:	_____		
Seconded By:	_____	Signed	_____
Yeas:	_____	Printed Name	_____
Nays:	_____	Title	_____

"On a motion made by Robert B. Pemberton, the Board voted: F. Lee Sanders – aye; Richard E. Thomas – aye; William C. Herbert, II – aye; J. David Parr – aye; Robert B. Pemberton – aye: to adopt the following resolution."

RESOLUTION

RURAL RUSTIC ROAD PROJECT

ROUTE 696 – HEAGGANS ROAD

WHEREAS, Section §33.2-332 of the Code of Virginia, permits the improvement and hard surfacing of certain unpaved roads deemed to qualify for designation as a **Rural Rustic Road**; and

WHEREAS, any such road must be located in a low-density development area and have no more than 1500 vpd; and

WHEREAS, the Board of Supervisors of Richmond County, Virginia ("Board") requests that Route 696, Heaggans Road, from Route 3 to the End of State Maintenance, be designated a Rural Rustic Road; and

WHEREAS, the Board is unaware of pending development that will significantly affect the existing traffic on this road; and

WHEREAS, this road is in the Board's six-year plan for improvements to the secondary system of state highways; and

WHEREAS, the general public and particularly those citizens who own land abutting this road have been made aware that this road may be paved with minimal improvements as is consistent with the development of a rural rustic road project; and

WHEREAS, the Board believes that this road should be so designated due to its qualifying characteristics; and

NOW, THEREFORE, BE IT RESOLVED, the Board hereby designates this road a Rural Rustic Road, and requests that the Residency Administrator for the Virginia Department of Transportation concur in this designation.

BE IT FURTHER RESOLVED, the Board requests that this road be hard surfaced and, to the fullest extent prudent, be improved within the existing right of way and ditch-lines to preserve as much as possible the adjacent trees, vegetation, side slopes, and rural rustic character along the road in their current state.

BE IT FURTHER RESOLVED, that a certified copy of this resolution be forwarded to the Residency Administrator for the Virginia Department of Transportation.

Recorded Vote		A Copy Teste:	
Moved By:	_____		
Seconded By:	_____	Signed	_____
Yeas:	_____	Printed Name	_____
Nays:	_____	Title	_____

"On a motion made by William C. Herbert, II, the Board voted: F. Lee Sanders – aye; Richard E. Thomas – aye; William C. Herbert, II – aye; J. David Parr – aye; Robert B. Pemberton – aye: to adopt the following resolution."

RESOLUTION

RURAL RUSTIC ROAD PROJECT

ROUTE 694 – BURNT HOUSE ROAD

WHEREAS, Section §33.2-332 of the Code of Virginia, permits the improvement and hard surfacing of certain unpaved roads deemed to qualify for designation as a **Rural Rustic Road**; and

WHEREAS, any such road must be located in a low-density development area and have no more than 1500 vpd; and

WHEREAS, the Board of Supervisors of Richmond County, Virginia ("Board") requests that Route 694, Burnt House Road, from Route 635 to the End of State Maintenance, be designated a Rural Rustic Road; and

WHEREAS, the Board is unaware of pending development that will significantly affect the existing traffic on this road; and

WHEREAS, this road is in the Board's six-year plan for improvements to the secondary system of state highways; and

WHEREAS, the general public and particularly those citizens who own land abutting this road have been made aware that this road may be paved with minimal improvements as is consistent with the development of a rural rustic road project; and

WHEREAS, the Board believes that this road should be so designated due to its qualifying characteristics; and

NOW, THEREFORE, BE IT RESOLVED, the Board hereby designates this road a Rural Rustic Road, and requests that the Residency Administrator for the Virginia Department of Transportation concur in this designation.

BE IT FURTHER RESOLVED, the Board requests that this road be hard surfaced and, to the fullest extent prudent, be improved within the existing right of way and ditch-lines to preserve as much as possible the adjacent trees, vegetation, side slopes, and rural rustic character along the road in their current state.

BE IT FURTHER RESOLVED, that a certified copy of this resolution be forwarded to the Residency Administrator for the Virginia Department of Transportation.

Recorded Vote		A Copy Teste:	
Moved By:	_____		
Seconded By:	_____	Signed	_____
Yeas:	_____	Printed Name	_____
Nays:	_____	Title	_____

SHERIFF

Sheriff Smith presented the following report for the month of October 2017: 739 calls for service; served 296 civil papers; 38 arrests with 49 warrants served; and served 66 traffic summons. The jail population for the week in Richmond County was 31. Animal Control: 22 calls for service, 2 dogs transferred to Westmoreland Animal Shelter.

Sheriff Smith reported that the department assisted with Warsaw Fest and Octoberfest and each event was successful. Members of the department also participated in the Newland Fire House Trunk or Treat and the Richmond County Crimestoppers Warsaw Trunk or Treat.

TREASURER

Kristie Brann, Treasurer, presented the Trial Balance Report for the month of October, 2017. Mrs. Brann noted that collections are going well and her office is looking forward to a very busy month.

EMERGENCY SERVICES

Greg Baker presented the following EMS report for the month of October: 101 calls in Richmond County; 3 calls for mutual aide into Richmond County; 5 calls for mutual aide to bordering counties and 5 fly outs. EMS Recovery amount for October, 2017 was $23,478.00. Mr. Baker advised that the delinquent collection was progressing well. Mr. Baker further

advised the Board members that after 10 years of leading the EMS organization, he would be retiring as of March 31, 2018. The Board thanked Mr. Baker for his years of service.

RICHMOND COUNTY VOLUNTEER FIRE DEPARTMENT

Randy Passagaluppi presented the following report for the month of October:

Warsaw: 13 total calls – 1 EMS Assist
Farnham: 2 total calls
Newland: 5 total calls – 2 EMS Assist

FONES CLIFF – UPDATE – ROB SMITH

Mr. Quicke advised that the Phase 2 documents for the Fones Cliff project have been partially submitted and upon final submission will be presented to the Planning Commission for further review.

PUBLIC COMMENT

Shari Faina addressed the Board to share her concern about the upcoming project of an animal shelter. She represents over 200 citizens who are concerned about the project and is in hopes that the project will continue to move forward. Mrs. Faina mentioned fundraising efforts and Chairman Sanders suggested that she speak directly with Sheriff Smith to coordinate any events.

OLD BUSINESS

WALNUT STREET DAYCARE PROPERTY

Mr. Quicke advised that the improvements needed on the Walnut Street Daycare property are primarily cosmetic (filling holes, cleaning floors, painting, etc.) and he hopes to have the building available January 1, 2018. Mr. Thomas asked about the possibility of transferring the subject property to the IDA. Mr. Quicke noted that the IDA has different rules that apply when renting, leasing, etc. Mr. Herbert added that discussing the process of the property transfer to IDA would be helpful and perhaps could be discussed during the December meeting.

"On a motion made by Richard E. Thomas, the Board voted: F. Lee Sanders – aye; Richard E. Thomas – aye; William C. Herbert, II – aye; J. David Parr – aye; Robert B. Pemberton – aye: to authorize Mr. Quicke to engage services necessary to make improvements on Walnut Street property prior to showing for rental bids."

VACO ORNAMENT SUBMISSION

Mr. Quicke noted that one entry had been received for the ornament submission program to VACO. The ornament was crafted by Ms. Ann Sanders.

"On a motion made by Richard E. Thomas, the Board voted: F. Lee Sanders – aye; Richard E. Thomas – aye; William C. Herbert, II – aye; J. David Parr – aye; Robert B. Pemberton – aye: to authorize Mr. Quicke to submit the ornament to VACO for display on the Christmas tree at the Governor's Mansion."

NEW BUSINESS

EMS BILLING RATES – JANUARY 1, 2018

Mr. Quicke advised that the maximum allowed reimbursement rate under Medicare for Emergency Medical Services and transport has increased. Therefore, he suggested that new rates be implemented effective January 1, 2018. These new rates could produce between $10,000 - $20,000 of additional revenue for the operations of the department.

"On a motion made by Richard E. Thomas, the Board voted: F. Lee Sanders – aye; Richard E. Thomas – aye; William C. Herbert, II – aye; J. David Parr – aye; Robert B. Pemberton – aye: to adopt the following rate schedule, effective January 1, 2018."

Type	Maximum Allowed Rate
BLS	$550
ALS1	$650
ALS2	$750
Transport (Loaded Mile)	$15

PERSONNEL POLICY AMENDMENTS – HYBRID DISABILITY PROGRAM

Denise Dunaway advised the Board of a necessary change in the personnel policy regarding Hybrid employees in the Virginia Retirement System.

"On a motion made by William C. Herbert, II, the Board voted: F. Lee Sanders – aye; Richard E. Thomas – aye; William C. Herbert, II – aye; J. David Parr – aye; Robert B. Pemberton – aye: to adopt the following additions to the Personnel Policy."

5.4 Leave

B. Sick Leave, VRS Plan 1 and 2 Employee

C. Sickness and Disability, VRS Hybrid Employee

New hires or re-hires that begin employment after January 1, 2014 or persons that opt-in to the VRS Hybrid Retirement Plan will follow a sick leave policy under this section known as the Sickness and Disability Program. This program will credit full-time employees each year on January 1st with 64 hours of sick leave and 32 hours of family and personal leave. Employees hired between January 1st and June 30th will be credited with the entire annual sick and personal leave and employees hired after July 1st will receive 50% of the annual

sick and personal leave time. The sick leave and personal leave does not accrue and there is no carryover of leave within this section. Sick leave and personal leave balances are not paid out upon separation or termination of employment.

Upon a sickness, illness or disability that lasts more than seven (7) consecutive days: see the VACORP Hybrid Disability Plan Handbook.

Exempt from this section are those public safety employees that qualify under the Virginia Retirement System's definition of a Hazardous Duty Employee (i.e. Sheriff's Department Law Enforcement Officers). This exemption does not apply to the Sheriff's Department's Communications Dispatchers or the administration staff.

DEFINITION

Employee - a full-time employee who has been employed prior to January 1, 2014 and is considered a VRS Plan 1 or VRS Plan 2 member. This employee was offered the option to enroll in the VRS Hybrid Retirement during the opt-in period of January 1, 2014 through April 30, 2014 and chose not to.

Hybrid Employee - a full-time employee who was hired on or after January 1, 2014 and who is participating in the VRS Hybrid Retirement Plan or a VRS Plan 1 or 2 member who opted to switch to the VRS Hybrid Retirement Plan during the opt-in period.

ONGOING PROJECTS

FEDERAL ENGINEERING RADIO STUDY UPDATE

Mr. Clifton Brown from Federal Engineering addressed the Board with the final report from their recently completed study of the public safety radio system. Their study included a review and synopsis of the current icom system as well as recommendations for improvements to the system that could increase the efficiency.

Additionally, Federal Engineering reviewed the system being offered by King and Queen and Essex County, known as Middle Peninsula Regional Radio System (MPRRS), as an option for Richmond County moving forward. They believe it is a clear decision that the MPRRS should be the direction that the County takes moving forward based off of many conditions.

Attached as **Exhibit I** is final report presented.

Mr. Parr inquired if the proposed system would still be a repeater system. Mr. Brown noted that the new proposed system would be a repeater system but would have several sites used for transmission.

Mr. Baker added that the hospital would soon be switching over to this new system and there would be an encrypted channel for reporting patient status.

Mr. Quicke noted that additional information, including pricing, would be discussed at the December meeting.

CONSTRUCTION UPDATE – EMS/ANIMAL SHELTER

Mr. Quicke advised that a bid opening was held for the three proposed County projects on Thursday, October 26th. He was very pleased with the individual bid for the EMS facility at $1,460,000, which is within budget for the project. The low bidder for the EMS facility was Haley Builders from Ashland.

However, the bid for the Richmond County Animal Shelter came in at $649,000, some $400,000 above budget for the project. Mr. Quicke continued to note that at this time the Animal Shelter will need to be put on hold and reassessed in the coming months.

BOARD APPOINTMENTS

"On a motion made by Robert B. Pemberton, the Board voted: F. Lee Sanders – aye; Richard E. Thomas – aye; William C. Herbert, II – aye; J. David Parr – aye; Robert B. Pemberton – aye: to re-appoint Dave Cordes to the Social Services Board for a term ending December 31, 2021."

"On a motion made by William C. Herbert, II, the Board voted: F. Lee Sanders – aye; Richard E. Thomas – aye; William C. Herbert, II – aye; J. David Parr – aye; Robert B. Pemberton – aye: to re-appoint Nancy Finnegan to the Social Services Board for a term ending December 31, 2021."

MONTHLY APPROPRIATIONS – RICHMOND COUNTY DEPARTMENT OF SOCIAL SERVICES

"On a motion made by Robert B. Pemberton, the Board voted: F. Lee Sanders – aye; Richard E. Thomas – aye; William C. Herbert, II – aye; J. David Parr – aye; Robert B. Pemberton – aye: to appropriate $85,000.00 to the Richmond County Department of Social Services for the month of December, 2017."

MONTHLY APPROPRIATIONS – RICHMOND COUNTY PUBLIC SCHOOLS

"On a motion made by William C. Herbert, II, the Board voted: F. Lee Sanders – aye; Richard E. Thomas – aye; Robert B. Pemberton – aye; William C. Herbert, II – aye; J. David Parr - aye: to appropriate $1,339,971.00 to the Richmond County School Board for the month of December, 2017."

SUPPLEMENTAL APPROPRIATIONS

Mr. Quicke explained four (4) supplemental appropriations for the Board to consider:

"On a motion made by William C. Herbert, II, the Board voted: F. Lee Sanders – aye; Richard E. Thomas – aye; Robert B. Pemberton – aye; William C. Herbert, II – aye; J. David Parr - aye: to appropriate $19,866.00 to the General Fund (Planning/Zoning Dept.) for a Cash Bond Refund to Gregory Packett, wherein subject funds were held in a Bond Account."

"On a motion made by Robert B. Pemberton, the Board voted: F. Lee Sanders – aye; Richard E. Thomas – aye; Robert B. Pemberton – aye; William C. Herbert, II – aye; J. David Parr - aye: to appropriate $10,780.00 to the General Fund (Planning/Zoning Dept.) for a Cash Bond Refund to Atack Properties, wherein subject funds were held in a Bond Account."

"On a motion made by William C. Herbert, II, the Board voted: F. Lee Sanders – aye; Richard E. Thomas – aye; Robert B. Pemberton – aye; William C. Herbert, II – aye; J. David Parr - aye: to appropriate $1,768.00 to the General Fund (Clerk of Circuit Court) for the purchase of an Oyster Ground Plat Book, wherein a state grant was received in the amount of $1,768.00."

"On a motion made by William C. Herbert, II, the Board voted: F. Lee Sanders – aye; Richard E. Thomas – aye; Robert B. Pemberton – aye; William C. Herbert, II – aye; J. David Parr - aye: to appropriate $24,794.00 to the General Fund (Sheriff's Office) for a replacement of a wrecked police vehicle, wherein $18,855.00 was received from an insurance reimbursement and $5,939.00 is required from local general fund."

APPROVAL OF MINUTES – OCTOBER 12, 2017

"On a motion made by William C. Herbert, II, the Board voted: F. Lee Sanders – aye; Richard E. Thomas – aye; William C. Herbert, II – aye; J. David Parr – aye; Robert B. Pemberton – aye: to approve the minutes from the October 12, 2017 meeting, as amended."

OTHER BUSINESS

Mr. Thomas thanked all the veterans for their service and thanked Dr. Smith for representing the school board and County on his trip to Germany. Mr. Thomas wished everyone a Happy Thanksgiving.

Mr. Parr thanked Mr. Greg Baker for his time with the EMS department and wished him the best in retirement.

Mr. Pemberton thanked everyone for turning out to vote on election day.

Mr. Quicke thanked Mr. Greg Baker for his work and noted that the department had come along way over the last 10 years.

CLOSED SESSION

"On a motion made by Robert B. Pemberton, the Board voted: F. Lee Sanders – aye; Richard E. Thomas – aye; William C. Herbert, II – aye; J. David Parr – aye; Robert B. Pemberton –

aye: as permitted by Virginia Code Section 2.2-3711(A)(3), a matter involving the condition of public property and a matter involving the acquisition of property for public purposes."

"On a motion made by Robert B. Pemberton, the Board voted: F. Lee Sanders – aye; Richard E. Thomas – aye; William C. Herbert, II – aye; J. David Parr – aye; Robert B. Pemberton – aye: as permitted by Virginia Code Section 2.2-3711(A)29, discussion of the award of a public contract involving the expenditure of public funds, including interviews of bidders or offerors, and discussion of the terms or scope of such contract, where discussion on an open session would adversely affect the bargaining position or negotiating strategy of the public body."

CERTIFICATION MOTION AFTER RECONVENING IN PUBLIC SESSION:

"On a motion made by Robert B. Pemberton, the Board voted by roll call: F. Lee Sanders – aye; Richard E. Thomas – aye; William C. Herbert, II – aye; J. David Parr – aye; Robert B. Pemberton – aye: that the Board certifies that, in the closed session just concluded, nothing was discussed except the matter or matters (1) specifically identified in the motion to convene in closed session and (2) lawfully permitted to be so discussed under the provisions of the Virginia Freedom of Information Act cited in that motion."

ACTION FROM CLOSED SESSION

There was no action taken by the Board of Supervisors resulting from the closed session.

RECESS

Chairman Sanders recessed the meeting until 7:00 p.m. for advertised Public Hearing.

RECONVENE MEETING ON NOVEMBER 9, 2017 AT 7:00 P.M. – PUBLIC HEARING

Present: F. Lee Sanders, Chairman
Richard E. Thomas, Vice-Chairman
Robert B. Pemberton, Member
William C. Herbert, II, Member
J. David Parr, Member

Also Present: R. Morgan Quicke, County Administrator
Hope Mothershead, Administrative Assistant
Barry Sanders, Director of Code Administration
Approximately 7 others

Chairman Sanders called the meeting back to order.

PUBLIC HEARING

In accordance with Section 15.2-2204 of the Code of Virginia, 1950 as amended and pursuant to Section 15.2-2285 of the Code of Virginia, 1950 as amended, the Richmond County Board of

Supervisors hereby gives notice that a Public Hearing will be held starting at 7:00 p.m., Thursday, November 9, 2017 in the Richmond County Public Meeting Room, 101 Court Circle, Warsaw, Virginia 22572.

The purpose of the Public Hearing is to receive public comment on proposed amendments to the Richmond County Zoning Ordinance in regards to hydraulic fracturing.

Mr. Quicke advised the Board that the members of the Planning Commission have been working diligently on amendments regarding fracking for the last six months.

Mr. Sanders reviewed the proposed changes and noted that the Planning Commission voted unanimously to adopt the changes in their October 10, 2017 meeting. The Planning Commission received advice from the Southern Environmental Law Center together with the County Attorney to develop the language prohibiting hydraulic fracturing within Richmond County.

Mr. Thomas inquired if the current gravel pits within the County would be permissible to continue without additional approval.

Mr. Sanders noted that any gravel mining activity that was taking place within the County, prior to the placement of the zoning ordinance, is considered a legal non-conforming use. Any expansion of the current activity area would require a special exception permission.

Chairman Sanders opened the floor to the public.

Ms. Anne Graziano, President of the Rappahannock Wildlife Refuge Friends Group addressed the Board and noted that the group supports the proposed amendments and thanked for Board for moving forward on the issue. Ms. Graziano read the following statement:

"Policy on Hydraulic Fracturing in the Taylorsville Basin
Executive Summary

Upon careful consideration, we the Friends of the Rappahannock River Valley National Wildlife Refuge (the Refuge) oppose the practice of "fracking" in our region.

The fracking process would consume millions of gallons of fresh water that could otherwise be used productively for public water supplies and crop irrigation, as well as providing clean water sources for the abundant surface waters and wildlife that are an economically beneficial recreational resource in the area of the Refuge.

Fracking constitutes essentially an industrial activity that is incompatible with the rural character of the area. It would bring heavy truck traffic and result in costly public expenditures to meet increased needs for transportation and public utilities. The use of government powers of eminent domain to take private property for routing pipelines is an example of the possible impacts of fracking operations on land use in our area.

Fracking has potentially harmful environmental impacts, such as waste water spills; ground water contamination with mercury, radioactivity, and salinity, and release of CO^2 and methane into the atmosphere."

Mr. Richard Moncure of the Friends of the Rappahannock, thanked the Planning Commission and Board of Supervisors for the research on hydraulic fracturing and thinks that it will set a high standard for other communities.

Mr. Francis Edwards thanked the Board for the research and efforts being done on the fracking topic as what happens within Richmond County will affect Lancaster County downstream.

Ms. Emily Frances from the Southern Environmental Law Center echoed the comments of the others opposing fracking and noted that she appreciated the effort and time expended on the topic.

With no further comments from the public, Chairman Sanders closed the public hearing.

"On a motion made by Robert B. Pemberton, the Board voted: F. Lee Sanders – aye; Richard E. Thomas – aye; William C. Herbert, II – aye; J. David Parr – aye; Robert B. Pemberton – aye: to accept the proposed amendments to the Richmond County Zoning Ordinance."

AGRICULTURAL GENERAL, DISTRICT A-1

2-2 DISTRICT REGULATIONS, AGRICULTURAL GENERAL, DISTRICT A-1

2-2-2A SPECIAL EXCEPTION USES

1. Bed and Breakfast establishments.

2. Retirement home or home nursing facility.

3. Commercial animal kennels and veterinary facility *(including animal cemeteries and animal crematoriums). (Amended January 13, 2005)*

4. Sand and gravel mining activities. ~~Mining activities including removal of sand and gravel.~~

INDUSTRIAL GENERAL, DISTRICT M-1

2-7 DISTRICT REGULATIONS - INDUSTRIAL DISTRICT, M-1

2-7-2 PERMITTED USES

All freestanding industrially utilized lots of record at the time of adoption of this Ordinance shall be included in the Industrial District as conditionally zoned for the use occurring at that time. New areas may be zoned Industrial, conditionally for the use intended, as the need may arise. A change in use for any industrial site may be accomplished by means of conditional rezoning for the individual property. Extraction of

oil or gas, including by means of hydraulic fracturing, is not permitted in the M-1 zoning district.

4-8 EROSION AND SEDIMENT CONTROL

4-8-3 GENERAL REQUIREMENTS

B. Exemptions

The following land disturbing activities are exempt from the provisions of this section.

(1) Minor land disturbing activities such as home gardens and individual landscaping, repairs and maintenance work.
(2) Individual service connections.
(3) Installation, maintenance or repair of any underground public utility lines when such activity occurs on an existing hard-surfaced road, street or sidewalk provided the land-disturbing activity is confined to the area of the road, street or sidewalk which is hard-surfaced.
(4) Permitted surface or deep mining ~~activities.~~ operations and projects.
(5) Permitted oil or gas operations and projects conducted pursuant to Title 45.1 of the Virginia Code. ~~Exploration or drilling for oil and/or gas, including the well site, roads, feeder lines and off-site disposal areas.~~

5-3 DEFINITIONS

Land-Disturbing Activity: Any land change which may result in soil erosion from water or wind and the movement of sediments into state waters or onto lands in the Commonwealth, including but not limited to, clearing, grading, excavating, transporting and filling of land, except that the term shall not include:

1) Minor land disturbing activities such as home gardens and individual landscaping, repairs and maintenance work;

2) Individual service connections;

3) Installation, maintenance or repair of any underground public utility lines when such activity occurs on an existing hard surfaced road, street or sidewalk provided the land-disturbing activity is confined to the area of the road, street or sidewalk which is hard surfaced;

4) Permitted surface or deep mining operations and projects;

5) Permitted oil or gas operations and projects conducted pursuant to Title 45.1 of the Virginia Code; ~~Exploration or drilling for oil and/or gas including the well site, roads, feeder lines and off-site disposal areas;~~

ADJOURNMENT

After no further business, Chairman Sanders adjourned the meeting.

F. Lee Sanders, Chairman
Richmond County Board of Supervisors

Exhibit I

Richmond County Radio System Recommendations

November 2, 2017

Prepared by

Federal Engineering, Inc.
10600 Arrowhead Dr., Suite 160
Fairfax, VA 22030
703-359-8200

Executive Summary

Richmond County, VA, has been offered an opportunity to join the Middle Peninsula Regional Radio System (MPRRS). Federal Engineering (*FE*) is tasked by Richmond County, VA, (County) to evaluate their current radio system and the MPRRS to ascertain which of the two systems would be most effective in meeting the needs and requirements of Richmond County. The two systems are not equal in their operational status. The current County system manufactured by Icom® is not fully operational due to leased-service broadband internet and maintenance issues and the MPRRS is in the final stages of implementation. For this report, *FE* addressed these issues by evaluating the systems as if they were completed and maintenance issues resolved. By making this assumption, the systems could be more accurately compared using their capabilities rather than their present condition. Once a system is chosen, it will be brought to full factory, licensed specifications.

FE considered many factors in our evaluation such as coverage, interoperability, capacity, public safety approvals, ability to function on multiple vendors systems and system capabilities. Cost is also a major issue in the decision process. The County wishes to get the best system for the money spent.

Further investment in the current Icom® system, even with repairs, will not result in significant improvements to what the County has now. Radio coverage will improve in the areas where the satellite receivers are now located but only for talk-in, that is radio user to system. Talk-out, system to radio users, will remain the same. The Very-High-Frequency (VHF) spectrum that the Icom® system uses is prone to interference, which degrades system performance. Even if the interference is not heard, the fact that it is present degrades performance. Also, the Icom® system is proprietary, which prevents the County from purchasing equipment from other vendors.

The MPRRS system has three repeaters in Essex County that would provide radio coverage to Richmond County. These repeaters are configured in a simulcast mode when transmitting, that is all three sites transmit at the same time on the same frequency, thus expanding the radio coverage area for each transmission. Supporting this are three pre-amplified receivers at the same three sites which are voted when receiving. The receive and transmit links are balanced so talk-out and talk-in have virtually the same performance. The MPRRS uses spectrum that is coordinated and does offer protection.

The MPRRS system uses the approved Association of Public-Safety Communications Officials (APCO) P25 standard and allows the County to purchase compatible equipment from multiple vendors at various price points.

The infrastructure used by the MPRRS system is a new multi-million-dollar implementation with no single points of failure. The system is protected by the original warranty plus extended service and upgrade contracts. The County would have to purchase user radios, any consoles, and connectivity to the host-system (to connect the consoles). The County would also be required to share in the cost of host-system maintenance (estimated at $30 per unit per month) but, apart from initial programing, that covers most of the host-system operating/maintenance/upgrade costs.

In the opinion of *FE*, we believe that the MPRRS system offering is a unique opportunity to update the County's current system to a modern public safety system that will provide first responders the needed tools to enhance their safety and do their job more efficiently at a reasonable cost.

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1. Evaluation Approach

Following discussions with Richmond County, there were two system alternatives to be evaluated. The first was an evaluation of the existing Icom® radio system, and the second was an evaluation of the new King and Queen / Essex UHF P25 system that is near completion of implementation.

FE's approach to the evaluation consists of analysis of the radio coverage provided by the existing Icom® system, which assumes that the equipment in place is operating properly, and that there is reliable backhaul from the two remote voting receiver sites. Radio coverage within the County was predicted, and percentages of geographic coverage were derived. Based on the radio coverage predicted, a determination of how this coverage meets Richmond County's needs was developed.

For the MPRRS P25 system, the evaluation consists of obtaining guarantees from Harris, the system vendor, on the levels of radio coverage provided to the County from existing sites within the MPRRS system. As above, a determination of how the coverage meets the County's needs was developed.

As part of the evaluations an estimated cost for joining the MPRRS system was also developed. This estimated cost includes both capital and operating costs.

2. Coverage Analyses of the Current Icom® Radio System

The radio coverage supplied by the existing Richmond County Icom® system is somewhat difficult to predict in its current state, as the receive sites are connected via leased internet broadband connections that are not reliable. However, if the system is configured with reliable connectivity to/from the receive sites, the current system design provides good mobile coverage throughout the County, but poor portable coverage both on-street and in-building. *FE*'s predicted coverage is based on both talk-in and talk-out traffic. If either one is insufficient then the system cannot deliver reliable round-trip traffic. While adding a satellite receiver to a specific area will increase the ability of the system to receive talk-in traffic in that area, the talk-out transmitter coverage of the system remains the same. The VHF spectrum that the system operates on is very susceptible to interference from other users both local and, in some cases, from hundreds of miles away. Unlike the other spectrums, there is generally no coordination of users' licensed frequencies to prevent interference.

The Icom® system is a proprietary digital system and not considered a public safety grade radio system. It is interoperable, in its native mode, but only with other Icom® systems. The Icom® subscriber units can be programed for operation in the VHF analog mode allowing the users to communicate with other VHF analog users.

The following maps depict the predicted coverage of the VHF Icom® system, both talk-in and talk-out, when the system is operating properly (all sites operational, voting enabled, and reliable backhaul in place).

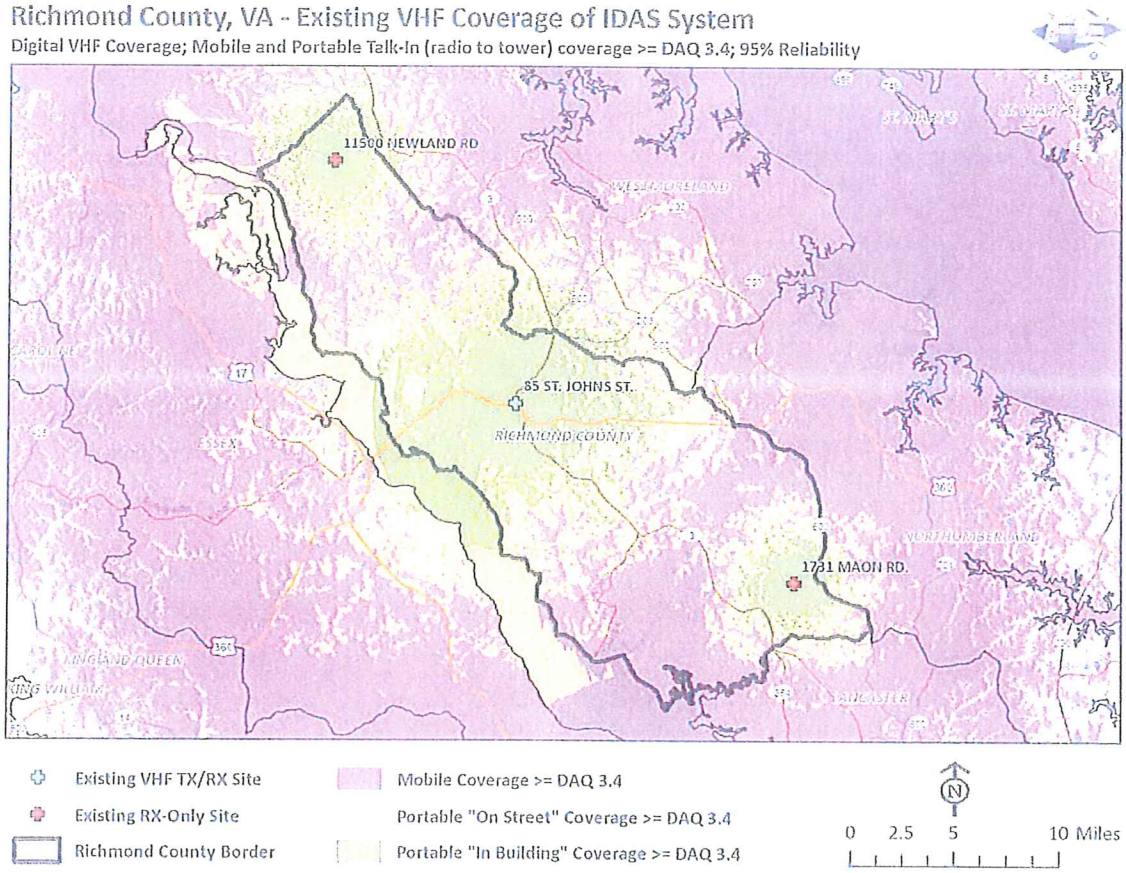

Figure 1 - Talk in Coverage

Table 1 shows the percentages of predicted coverage provided by the current system, provided the system is operating properly. As can be seen, the existing system talk-in provides for good mobile radio coverage. However, the portable on-street talk-in coverage is only 58% of the County, and this is the limiting factor based on the current design.

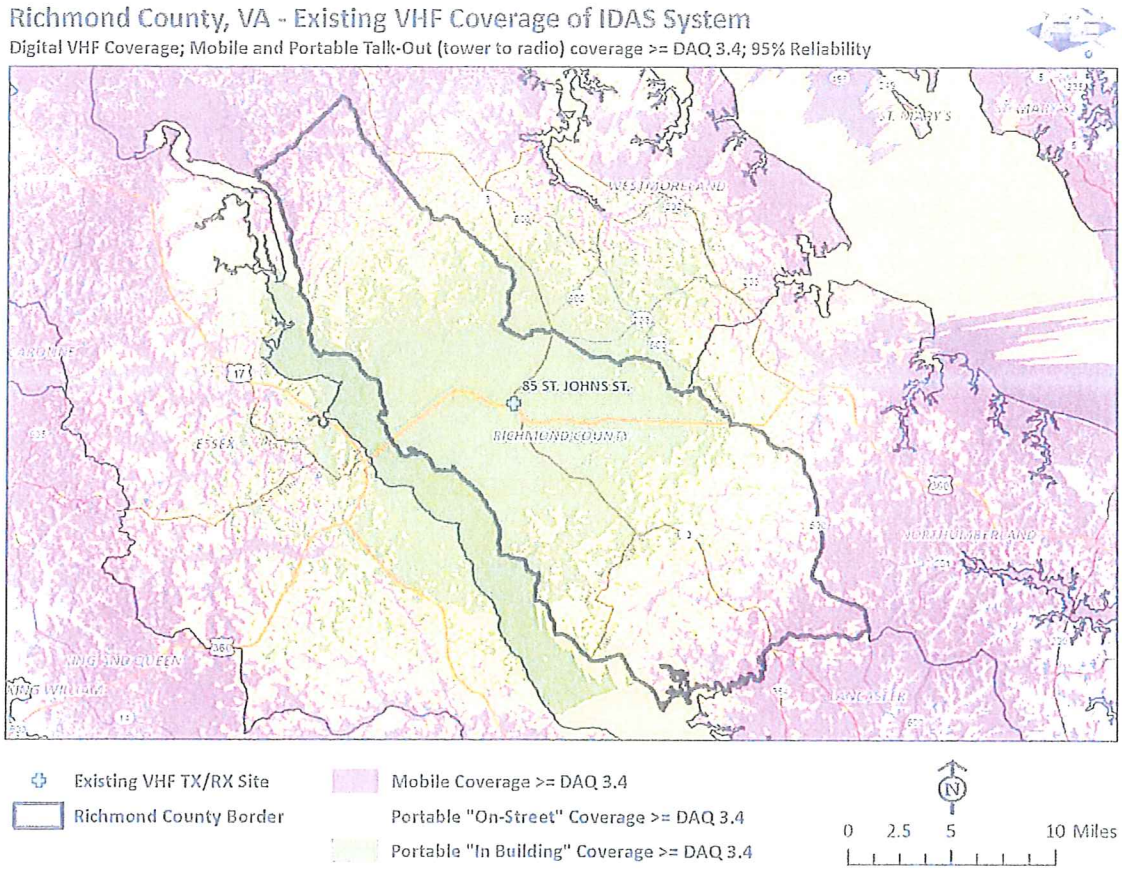

Figure 2 - Talk Out Coverage

As can be seen, the existing system talk-out provides for good mobile radio coverage. However, since portable on-street talk-out portable coverage is 84%, portables will be able to hear dispatch or other users through the repeater, but will often find themselves not able to communicate back to dispatch or other users.

Portable in-building coverage is also talk-back limited at only 34% of the County area

Table 1 – Coverage Overview

Talk Path	# of Sites	% Coverage of Richmond County
Mobile Talk-Out	1	>99
Portable Talk-Out (on-street)	1	84
Portable Talk-Out (in light/residential buildings)	1	52
Mobile Talk-In	3	>99

Talk Path	# of Sites	% Coverage of Richmond County
Portable Talk-In (on-street)	3	66
Portable Talk-In (in light/residential buildings)	3	34

Table 2 shows some of the major differences between the MPRRS and existing County Icom® system.

Table 2 – Systems Comparison

System Features	MPRRS	Icom®	Remarks
Frequency Band	UHF	VHF	VHF band is much more susceptible to interference and "skip"
Digital System	Yes	Yes	
Proprietary	No	Yes	
Can subscribers operate in analog mode?	Yes	Yes	
Trunked	Yes	No	
Simulcast	Yes	No	
Voted receivers	Yes	Yes	Icom® satellite receivers not currently operational
Number of repeated talkpaths	6	2	
Number of single points of failure	0	Multiple	
Technology available from multiple vendors	Yes	No	
Console required	Yes	No	Consoles will be required for full functionality, not for basic operation

2.1 Existing Icom® VHF System Suitability Evaluation

The existing Icom® VHF system, after full evaluation, was found to not meet the needs of the County for a public safety radio system.

Current system radio propagation is predicted to be well below public safety industry standards of 95% geographic coverage. The predicted levels of radio coverage as noted above include portable on-street talk-out of 84%, and talk-in of 66%. In discussions with the County, this confirms the radio coverage deficiencies noted in daily use of the system.

The current system is predicted to provide portable in-building radio coverage of 52% talk-out, and 34% talk-in.

The Icom® technology in use is proprietary, limiting the expansion of the system to the current vendor.

Most importantly, the technology and system currently in use is considered public-safety-grade by the industry.

While the current system could be expanded through the addition of more sites to achieve the radio coverage needed (at additional cost), the system would still be prone to the interference experienced in the VHF band. Also, the current system limits interoperability with adjacent and surrounding mutual aid partners due the frequency band and technology in use. Interoperability is possible, but limited to analog channel use, provided the agencies requiring interoperability have radios in the VHF band.

3. Coverage Analysis of the MPRRS within Richmond County

The MPRRS is currently constructed in Essex County and King and Queen County along the entire Southwestern border of Richmond County. The sites, primarily three in Essex County, provide radio coverage to Richmond County.

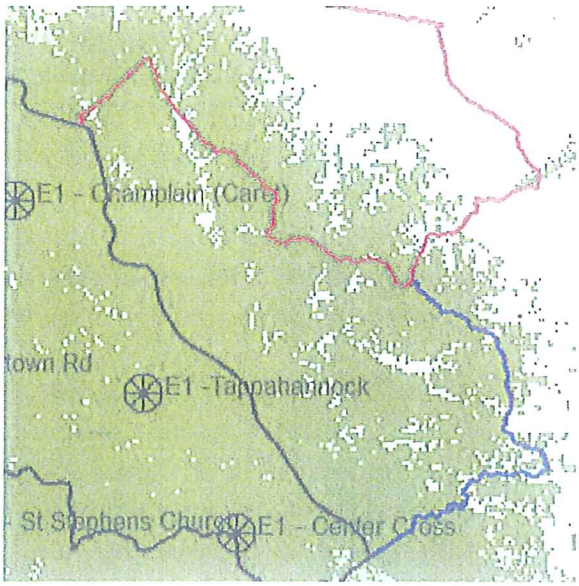

Figure 3 - MPRRS Portable Coverage

The MPRRS system is unique in that Harris will guarantee the following system coverage in Richmond County:

- Mobile DAQ 3.4: 97%
- Mobile DAQ 3.0: 98%
- Portable on-the street, DAQ 3.4: 93%
- Portable on-the street, DAQ 3.0: 95%

The MPRRS system is a public safety grade Ultra-High-Frequency (UHF) P25 Phase 2 design. This system, with proper programming, is compatible with all P25 systems operating on the UHF spectrum. The system employs trunking and voted receivers at all sites. All critical systems are fully redundant with no single points of failure. The backhaul system is implemented using a loop configuration that will accommodate any single path failure without causing a loss of backhaul information at any site within Essex/King and Queen County. The system is controlled by central computer systems which have been

expanded to include dual geographically separated cores. Either core can operate the entire system should one completely fail or lose connectivity

3.1 MPRRS Suitability Evaluation

The MPRRS system, after full evaluation, was determined to meet the requirements of Richmond County for a public safety radio system. The system will provide more coverage than the County's current Icom® system and that coverage will be highly reliable, especially during times of severe weather. The P25 Phase 2 system is the current public safety standard for first responders which conforms to the federal grant requirements. The regional systems also are generally more apt to receive grants than stand-alone systems.

Richmond County could join the MPRRS system by acquiring the appropriate mobile and portable radios then programming the system and subscribers. At that point, the County would have a usable, operating system; however, consoles for dispatch would still have to be addressed as not all the P25 features can be used until a full console is installed.

Installing a console capable of supporting all the P25 features, requires a direct connection to the core. That connection requires a microwave or fiber connection between the Northern Neck Electric Coop tower and the Tappahannock tower. Some of the hardware necessary to perform this function may be available from among the used equipment removed from the King and Queen system as part of an upgrade on their system. Another option would be to use control stations to access the system, either connected to the current consoles or as a desktop unit next to the dispatchers' current consoles.

Some of the P25 features cannot be utilized without the implementation of a P25 console, as noted below. While the system will provide basic communications services without a console, which can be added later, *FE* recommends the County consider purchasing consoles as soon as possible.

The correct consoles in a P25 system allow the dispatchers to perform many functions:

- Dispatcher preempt capability (dispatchers are able to preempt user radios in a conversation, and seize the talkgroup for transmitting)
- Emergency call handling
- Simul select and patching
- Ability to access interoperable radio equipment within the MPRRS
- Encoding for pagers
- Alias display

- Recent call display
- Instant call playback
- Call director telephone interface

3.2 Estimated Cost of Expanded MPRRS Harris Radio System Based on the Coverage Design

The estimated costs below reflect costs as determined by Richmond Count discussions with King and Queen County and Harris.

3.2.1 Subscriber Equipment

Table 3 – Subscriber Equipment Costs

Subscribers by Agency	Quantity	Unit Price	Total	
Sheriff's Office				
Mobile radio - Tait 9477 or 9485 Encrypted	19	$2,803	$53,257	
Portable - Tait 9471 or 9485 come with encryption speaker mic and charger of choice either desktop or vehicle drop in	20	$2,142	$42,840	
			Sub Total	$96,097
EMS				
Mobile radio - fully loaded Tait 9477 or 9485	6	$2,803	$16,818	
Portable radios Tait 9471 or 9485 without encryption, does have speaker mic and charger of choice either desktop or vehicle drop in	8	$2,142	$17,136	
			Sub Total	$33,954
R.C.V.F.D				
Mobile radio - fully loaded Tait 9477 or 9485	10	$1,960	$19,600	
Portable radios Tait 9471 or 9485 come without encryption does have speaker mic and charger of choice either desktop or vehicle drop- in	12	$1,892	$22,074	
			Sub Total	$42,304
Admin				
Mobile radio - fully loaded Tait 9477 or 9485	1	$2,803	$2,803	

Subscribers by Agency	Quantity	Unit Price	Total	
Portable radios Tait 9471 or 9485 without encryption, does have speaker mic and charger of choice either desktop or vehicle drop in	4	$2,142	$8,568	
			Sub Total	$11,371
			Grand Total	$183,726

3.2.2 Dispatch Equipment and Equipment Installation

The following reflects the estimated costs for dispatch equipment and equipment installations. The dispatch equipment consists of control stations with antennas and transmission lines.

Table 4 – Dispatch Equipment Estimated Cost

Dispatch	Quantity	Unit Price	Total	
Sheriff's Office				
Dispatch	1	$14,366	$14,366	
			Total	$14,366

Table 5 – Equipment Installation Estimated Cost

Installation	Quantity	Unit Price	Total	
Installation of equipment and radios				
Installation	Lot	$12,000	$12,000	
			Total	$12,000

3.2.3 Operating Costs

Discussions between the County and King and Queen County have identified an ongoing cost for use of the network, which covers ongoing maintenance and upgrades to the King and Queen / Essex system of $30 per month per user radio (portables and mobiles).

King and Queen County also noted during these discussions that Richmond County can also place smartphones on the network operating the Harris BeOn® application for $30 per month per smartphone.

Talkgroup fees were quoted at $150 per talkgroup per year, for each unique Richmond County talkgroup. Common talkgroups were quoted at no-cost.

Console fees were quoted at $30 per month per IP console.

3.3 Symphony Console and Microwave Estimated Costs

In the event the County desires to implement full consoles, which provide access to additional P25 features as noted above, it will necessary to interconnect the consoles to the King and Queen system via a dedicated microwave (or fiber) link. For budgetary purposes we have included the estimate costs for a dedicated, licensed microwave link.

Table 6 – Console and Microwave Estimated Costs

Symphony Console and Microwave Link	Quantity	Unit Price	Total	
Console				
Symphony Console	2	$41,000	$82,000	
Installation and services * (at 33%)	2	$13,530	$27,060	
			Sub Total	$109,060
Microwave				
Microwave equipment (from King and Queen County) **	1	$0	$0	
Antenna, transmission lines	2	$7,600	$15,200	
Installation and services	2	$6,000	$12,000	
			Sub Total	$27,200
			Total	$136,260

* Services include engineering, project management, and training
** For purposes of this report the microwave from King and Queen County is estimated at no-cost. Actual cost will need to be negotiated with King and Queen County. Also, microwave path engineering and path analysis will need to be performed to verify that the existing microwave can provide a reliable path between Counties.

3.4 Implementation Schedule

As the MPRRS system is in the final testing stages, it is expected the system will be put into operation approximately the end of December 2017, or early January 2018. However, since the system is not currently in operation, the scheduled completion date is a forecast, which may change. Richmond County will need to monitor the status of the MPRRS system, and will be able to use the system when it is placed into service.

Depending on the time required for Harris to have the radios manufactured and delivered, then installed, it would be reasonable to order user radios at this time, should the County elect to partner with King and Queen and Essex Counties.

4. Next Steps

Richmond County should consider the following next steps.

If the County elects to join the MPRRS system the first step would be to formalize the agreement between the County and Essex/King and Queen County. This agreement would provide governance for the County's use of the MPRRS system, as well as state the responsibilities of each party, including all costs.

Following the above, or at the same time, the County should identify the timeframes for equipment manufacture, delivery, and installation of mobile units. Based on this information, subscriber radios should be ordered.

The County should identify and define the dispatch access to the MPRRS, and order appropriate radio equipment.

Planning for Symphony consoles and microwave equipment should be initiated.