CAPITAL IMPROVEMENT PLAN



FISCAL YEARS 2023 THROUGH 2027

AMELIA COUNTY

BOARD OF SUPERVISORS

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A. TAYLOR HARVIE, III COUNTY ADMINISTRATOR

16360 Dunn Street, Suite 101
Post Office Box A
Amelia Court House, Virginia 23002

Telephone: (804) 561-3039 Facsimile: (804) 561-6039 Website: www.ameliacova.com

October 19, 2021

To: Department Supervisor – Animal Control

Building Inspections EDA Clerk of the Circuit Court Library

Commissioner of the Revenue Parks & Recreation
Commonwealth's Attorney Public Works
County Planner Registrar
County Administrator School Board

Finance

Emergency Management Sheriff

Environmental Services Social Services

Extension Services Treasurer

Board of Supervisors

Re: 2023-2027 Capital Improvement Program Request

As you are aware, the County's Capital Improvement Plan (CIP) offers a systematic approach to planning and financing major capital projects. It is intended to provide a strategic guide to growth and development of our county services.

Enclosed you will find a copy of last year's projects. Please review these projects and determine if they are still valid and the costs are correct. All projects that you wish to have reviewed for inclusion in this **year's plan must be submitted on a new form with full justification along with departmental priority of each project.** Please review and complete the request form in its entirety. If you need more space, attach it to your individual request form. If additional space is needed, state what block from the request form that your narrative is supporting. The more information that is made available to the committee, the stronger your request becomes.

For those departments submitting more than one request in a single year, identify each request with a priority number (#1 being your highest priority). **Remember, only one of these requests will be your number one priority.** Each project for the same year will have a different priority number assigned to it. If projects are not prioritized upon submittal, then the CIP committee will prioritize the projects on their own.

Like last year, all departments submitting projects will need to attend the Planning Commission CIP Committee meeting and present their projects to the committee. The date for this meeting will be sent at a later date.

Lastly, this plan is **not for vehicle replacements.** Vehicles replacements should be included in your annual budget requests. Only "new requirement" vehicles should be included in the CIP and complete justification must accompany the request.

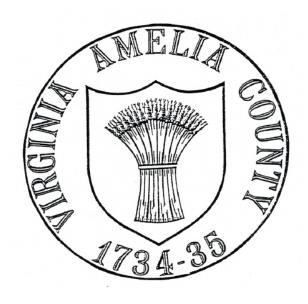
The Planning Commission's Capital Improvement Plan Committee will prioritize all requests into a list for review and action by the Board of Supervisors. The Board of Supervisors will make the final determination as to which project(s) will be funded as part of the County's budget process. All request forms are due back to my office no later than Tuesday, November 30, 2021. If you have any questions concerning this program, do not hesitate to call me at 561-3039.

Sincerely,

Holly Steele Director of Community Development

Attachments: Capital Improvement Plan Overview
Capital Project Request Form
2022-2026 Submissions

CAPITAL IMPROVEMENT PLAN OVERVIEW



FISCAL YEARS
2023
THROUGH
2027
AMELIA COUNTY

INTRODUCTION

Each day, the residents of Amelia County use the public systems of streets, roads, sewers, water lines, drains, libraries, sheriff's office, fire stations, schools, parks, recreation centers, Courthouse, and other capital facilities (collectively known as infrastructure) for their business, educational, and social activities. Providing for these essential facilities, which are so often taken for granted, is an expensive undertaking.

The Capital Improvement Plan (CIP) offers a systematic approach to planning and financing major public projects. It emphasizes the achievement of the County's long-range goals through the establishment of the infrastructure necessary to attain the local objectives as determined by the Comprehensive Plan and other planning documents.

The CIP is intended to provide a short-to-medium range strategic guide for planning, building, maintaining, and servicing capital projects to enhance the growth and redevelopment of the County over future years.

A five-year time frame is utilized to provide a flexible, yet workable, period for implementing the medium-term goals of the County.

ADVANTAGES OF A CAPITAL IMPROVEMENT PLAN

A capital planning document offers the County a number of advantages:

- 1. It serves as a management tool to assess programs and develop priorities based on current and future development patterns and needs.
- 2. The plan provides an investment strategy to ensure that resources are utilized for projects that maximize social benefit and within that context, return on expenditure.
- 3. The plan provides a basis for a balanced program between growth and replacement projects, and between economic and social concerns.
- 4. The plan attempts to anticipate capital projects ahead of actual need, thus permitting adequate time for planning, scheduling and financing these projects.
- 5. The capital plan can help secure intergovernmental assistance for identified community needs.
 - 6. A greater degree of interdepartmental cooperation is encouraged in the process of identifying and discussing the County's needs and programming solutions to those needs.
 - 7. The CIP promotes economic vitality by enabling developers and public utility companies to plan improvements in anticipation of future capital facilities.
 - 8. The CIP aids in developing public support for future capital expenditures.
 - 9. Allows coordination of private development and public facilities.

10. Allows phasing for larger projects.

CONSIDERATIONS IN PLAN DEVELOPMENT

In summary, this CIP is based on the goals and objectives of this County's Comprehensive Plan, but it also considers the following factors:

- 1. infrastructure master plans, e.g., transportation plan;
- 2. policy guidelines as established by the governing body;
- 3. local growth patterns;
- 4. regional growth trends;
- 5. economic and demographic trends;
- 6. housing patterns;
- 7. public needs as identified through forums, surveys, etc.;
- 8. fiscal constraints.

CAPITAL IMPROVEMENT PLAN - ISSUES AND OVERVIEW

Planning and prioritizing capital expenditures efficiently cannot be done on a spontaneous, short-term basis. Because of their high cost and long-range impact on a community, capital projects should be carefully planned, scheduled, financed, and constructed. The intent of this five-year plan is to provide a framework for evaluating Amelia County's needs against available revenue sources. This permits the Board of Supervisors to develop priorities within budgetary constraints. The document is intended to provide direction for growth and development, but it should be updated annually to reflect changing conditions.

ISSUES TO BE ADDRESSED

In developing the County's capital plan, a number of issues must be addressed:

- 1. How to allocate resources between the operating budget and the capital budget?
- 2. What type of capital projects should be funded, i.e., sewer, water, drains, streets, parks, etc.?
- 3. How to encourage selection of the most cost-effective projects?
- 4. When and where projects are built?

CAPITAL PLAN OBJECTIVES

The Capital Improvement Plan is intended to meet two primary objectives:

- 1) The plan should provide for the efficient use of the County's resources.
- 2) The program should distribute the benefits of the capital plan in an equitable manner based upon need.

CAPITAL IMPROVEMENT PLAN PROCEDURES AND POLICIES

This document provides recommendations and direction for future expenditures. Although specific projects are recommended, it is expected that project priorities will change, especially in the out years, as the County's needs change to reflect unanticipated problems or issues, as well as funding opportunities.

PROCEDURES:

The development of a draft capital plan is the responsibility of the Capital Improvement Plan Committee of the Planning Commission. This Committee is composed of the Chairman of the Planning Commission, four members of the Planning Commission, including the Board's representative, the County Administrator, and the County Planner. The CIP Committee reviews the proposed projects, examines project cost estimates, and provides a recommended five-year capital improvement program. The CIP is reviewed and approved by the County's Planning Commission and forwarded to the Board of Supervisors as a tool to be used during their budgeting process.

HIGHLIGHTS OF THE CAPITAL IMPROVEMENT PROGRAM

This document represents an annual revision to the Capital Improvement Plan. Each department and agency affiliated with the County is afforded the opportunity to submit projects for inclusion in this five-year program.

The Capital Improvement Plan provides an assessment of the County's public facilities and identifies projects to address needs over future years in a systematic fashion. This Capital Improvement Plan focuses on the role of local government's fiscal policy as a means of achieving the equitable delivery of services; establishes a pattern of routine maintenance of publicly-owned buildings and facilities; and guides the future development and economic vitality of the County.

LEGAL AUTHORITY FOR CAPITAL IMPROVEMENT PROGRAMMING

The development of a Capital Improvement Program is authorized by Section 15.2-2239 of the Code of Virginia, 1950, as amended. The enabling legislation is as follows:

A local (planning) commission may, and at the direction of the governing body shall, prepare and revise annually a capital improvements program based on the comprehensive plan of the county or municipality for a period not to exceed the ensuing five years. The commission shall submit the same annually to the governing body, or to the chief administrative officer or

other official charged with the preparation of the budget for the municipality or county, at such time as it or he shall direct. Such capital improvement program shall include the commission's recommendations and estimates of cost of such facilities and the means of financing them, to be undertaken in the ensuing fiscal year and in a period not to exceed the next four years, as the basis of the capital budget for the county or municipality. In the preparation of its capital budget recommendations, the commission shall consult with the chief of the county or municipality, the heads of departments and interested citizens and organizations, and shall hold such public hearings as it deems necessary unless otherwise required.

CAPITAL IMPROVEMENT PLAN PROJECT DETERMINATION

In general, capital improvements should fall into one of the following broad categories:

- 1. new construction;
- 2. major repairs, replacements, and/or additions;
- 3. land acquisition and/or rights-of-ways;
- 4. new major equipment;
- 5. feasibility studies, including planning and engineering costs.

Capital improvements generally are considered to be projects of large size, non-recurring, fixed in nature, and having a long usable life. New, additional, or replacement public facilities are also examples of such improvements. Other examples of capital improvements are as follows:

- 1. water mains, storm water lines, and sanitary sewers;
- 2. new road construction and programmed road repairs;
- 3. parks, playgrounds, and recreational centers;
- 4. public building construction and rehabilitation;
- 5. land acquisition; and
- 6. major equipment acquisitions.

PROJECT REVIEW CRITERIA

Each project request is evaluated individually on the basis of the following major criteria:

- 1. the relationship of the project to the approved comprehensive plan;
- 2. cost effectiveness of the new or renovated facility over existing facilities;
- 3. the relationship of the project to other project requests;

- 4. the need for the project to meet the mandates and objectives of the requesting agency;
- 5. the potential for encouraging investment and expanding the County's economic base;
- 6. a minimum total cost of \$15,000; and
- 7. having a working life span of at least three (3) years.

DIVISION OF PROJECT REQUESTS

As a part of the project evaluation process, each Department/Agency is asked to rank their requests in order of priority. Each request is subsequently evaluated by the Capital Improvement Plan Committee and compared to the aforementioned criteria.

Capital Improvement Plan 2023 Requests

	Projects 2023	Dept	Cost	Priority
1	Wastewater System Inflow and Infiltration Study	Sanitary Dist.	\$50,000	HIGH
2	Courthouse Window Upgrade	Public Works	\$60,000	MEDIUM
3	Superior Way Extension	Admin. / EDA	\$975,000	MEDIUM
4	Hindle Building - Design & Renovation Prep	Hindle Comm	\$1,300,000	LOW
5	County Radio System Upgrade	Emergency Mgmt	\$2,896,950	HIGH
6	Phase I- New Animal Shelter	Animal Control	\$350,000	MEDIUM
7	ACHS Bathroom Renovation Planning	ACPS	\$205,000	MEDIUM
8	ACHS New Athletic Complex Planning	ACPS	\$1,395,000	LOW
9	ACHS Metal Wall Replacement	ACPS	\$30,000	MEDIUM
10	ACES Front Exterior Envelope	ACPS	\$40,000	MEDIUM
11	RGA HVAC Replacement	ACPS	\$90,000	HIGH
12	ACMS Gym\Locker Room Roof	ACPS	\$280,000	HIGH
13	ACES HVAC Replacement	ACPS	\$688,050	HIGH
14	Busshop Field Lighting	ACPS	\$399,000	LOW
15	Rec Gym Safety Upgrades - Bleachers	Parks and Rec	\$54,600	HIGH
16	Gym and Field Scoreboards	Parks and Rec	\$79,465	LOW
		TOTAL:	\$8,893,065	

	Projects 2024	Dept	Cost	Fundin	g Sourc	e	Fisca	l Year			Notes
				County	Grant	State	Other 2	3 24	25	26 2	7
1	Pridesville Rd WWTP Upgrade, Phase 2	Sanitary Dist.	\$160,000	X				X			Moved back from to allow more time for direction on expansio
2	County Park Fence Improvements	Public Works	\$50,000	X				X			
3	Jackson Building Basement Improvements	Public Works	\$35,000	X				X			
4	Hindle Building - Renovation	Hindle Comm	\$1,000,000	X		X		X			\$455,000 will be deducted from 1mil (Historic Tax Credits Sal
5	County Radio System Upgrade	Emergency Mgmt	\$2,896,950	X				X			Part 3 of overall County Radio System Upgrade. 50% of cost
6	ACMS Bathroom Renovations Planning	ACPS	\$180,000	X				X			
7	Storage Building 2 Renovation	ACPS	\$115,800.00	X				X			
8	ACHS HVAC RTU 1-2 Replacement	ACPS	\$683,000.00	X				X			
9	ACHS Bathroom Renovations	ACPS	\$1,350,000.00	X				X			
10	ACHS New Athletic Complex Phase 1	ACPS	\$9,300,000.00	X				X			
11	ACES\ACHS Paving	ACPS	\$200,000.00	X				X			
12	ACHS Plumbing Upgrade	ACPS	\$120,000.00	X				X			
13	Batting Cages	Parks and Rec	\$120,065.00	X				X			
14	Basketball Court Upgrades	Parks and Rec	\$75,600.00	X				X			
		TOTAL:	\$16,286,415								

	Projects 2025	Dept	Cost	Fundin	g Sourc	e	Fis	cal Y	<i>l</i> ear				Notes
				County	Grant	State	Other	23	24	25	26	27	
1	EOC/Hindle Building Parking Lot Upgrade	Administration	187,000	X						X			Moved back from 2023 to allow time to complete other phases
2	Water Well Exploration North of 360	Sanitary Dist.	\$150,000	X						X			Moved back from to allow more time for direction on expansion
3	ACHS HVAC RTU 4 – Cafe Replacement	ACPS	\$648,000	X						X			
4	ACMS Bathroom Renovations	ACPS	\$1,200,000	X						X			
5	ACMS HVAC Replacement Gym\8th Grade	ACPS	\$700,000	X						X			
6	Headstart Window Replacement	ACPS	\$135,000	X						X			
7	ACHS New Athletic Complex Phase 2 Planning	ACPS	\$615,000	X						X			
8	ACMS New Cafe Planning	ACPS	\$565,000	X						X			
		TOTAL:	\$4,200,000										

	Projects 2026	Dept	Cost	Funding	g Sourc	e	Fisc	cal Yea	ır			Notes
				County	Grant	State	Other	23 2	4	25	26 27	
1	Water Tank	Sanitary Dist.	\$1,634,500	X							X	Moved back from 2023 to allow more time for 360 expansion
2	Water Well Development North of 360	Sanitary Dist.	\$150,000	X							X	Moved back from 2024 to allow time to complete other phases
3	Storage Building 1 Renovation	ACPS	\$347,400	X							X	
4	ACHS New Athletic Complex Phase 2	ACPS	\$4,100,000	X							X	
5	ACMS New Cafe Build	ACPS	\$3,751,197	X							X	
6	ACHS New Facility Planning	ACPS	\$6,000,000	X							X	
7	ACMS Plumbing Upgrade	ACPS	\$200,000	X							X	
		TOTAL:	\$16,183,097									

	Projects 2027	Dept	Cost	Funding	g Sourc	e	Fisca	al Ye	ear			Notes
				County	Grant	State	Other	23	24	25	26 2	27
1	Smack's Creek Wastewater Treatment Plant	Sanitary Dist.	\$29,000,000	X							,	X Moved back from 2023 to allow more time for 360 expansion
2	New Library Construction	Library	\$9,000,000	X							,	X
3	ACHS Kitchen Hood, Equipmen/Light Replacement	ACPS	\$520,140	X							,	X
4	ACMS Bus Canopy Replacement	ACPS	\$157,810	X							,	X
5	ACES Hot Water Heater Replacement	ACPS	\$63,124	X							,	X
6	ACHS New High School	ACPS	\$40,000,000	X							,	X
7	Headstart Ceiling Replacement	ACPS	\$71,014	X							,	X
8	Headstart Toilet Renovations	ACPS	\$252,495	X							,	X
9	Headstart Roof\Ventilation\Restroom HVAC	ACPS	\$681,737	X							,	X
		TOTAL:	\$79,746,320									

ACPS 2023-2027 CIP Project Requests

ACHS Bathroom Renovation Planning	2023	1	\$205,000 (Mosley Architects)
ACHS New Athletic Complex Planning	2023	2	\$1,395,000 (Mosley Architects)
ACHS Metal Wall Replacement	2023	3	\$30,000 (Mosley Architects)
ACES Front Exterior Envelope	2023	4	\$40,000 (Mosley Architects, Deshazo Roofing)
RGA HVAC Replacement	2023	5	\$90,000 (Mosley Architects)
ACMS Gym\Locker Room Roof	2023	6	\$280,000 (Mosley Architects)
ACES HVAC Replacement	2023	7	\$688,050 (Mosley Architects)
Busshop Field Lighting	2023	8	\$399,000(Techline Sports Lighting)
ACMS Bathroom Renovations Planning	2024	1	\$180,000 (Mosley Architects)
Storage Building 2 Renovation	2024	2	\$115,800 (Mosley Architects)
ACHS HVAC RTU 1-2 Replacement	2024	3	\$683,000 (Mosley Architects)
ACHS Bathroom Renovations	2024	4	\$1,350,000 (Mosley Architects)
ACHS New Athletic Complex Phase 1	2024	5	\$9,300,000 (Mosley Architects)
ACES\ACHS Paving	2024	6	\$200,000 (Estimate)
ACHS Plumbing Upgrade	2024	7	\$120,000 (Mosley Architects)
ACHS HVAC RTU 4 – Cafe Replacement	2025	1	\$648,000 (Mosley Architects)
ACMS Bathroom Renovations	2025	2	\$1,200,000 (Mosley Architects)
ACMS HVAC Replacement Gym\8th Grade(Large Carrier VAV)	2025	3	\$700,000 (Mosley Architects)
Headstart Window Replacement	2025	4	\$135,000 (Mosley Architects)
ACHS New Athletic Complex Phase 2 Planning	2025	5	\$615,000 (Mosley Architects)
ACMS New Cafe Planning	2025	6	\$565,000 (Mosley Architects Architects)
Storage Building 1 Renovation	2026	1	\$347,400 (Mosley Architects)
ACHS New Athletic Complex Phase 2	2026	2	\$4,100,000 (Mosley Architects)
ACMS New Cafe Build	2026	3	\$3,751,197.79 (Mosley Architects)
ACHS New Facility Planning	2026	4	\$6,000,000 (Mosley Architects)
ACMS Plumbing Upgrade	2026	5	\$200,000 (Mosley Architects)
ACHS Kitchen Hood, Equipment Replacement, Light Renovation	2027	1	\$520,140 (Mosley Architects)
ACMS Bus Canopy Replacement	2027	2	\$157,810 (Mosley Architects)
ACES Hot Water Heater Replacement	2027	3	\$63,124 (Mosley Architects)
ACHS New High School	2027	4	\$40,000,000 (Estimate)
Headstart Ceiling Replacement	2027	5	\$71,014 (Mosley Architects)
Headstart Toilet Renovations	2027	6	\$252,495 (Mosley Architects)
Headstart Roof\Ventilation\Restroom HVAC	2027	7	\$681,737 (Mosley Architects)

(1) Office/Department		Planning
Animal Control		Commission
		Use
(2) Project Title		
New Animal Shelter (Initial year)		
	Project Priority 1	
	Year Required 2023	
(3) Project Description (Include sketches, a		
	eqaute size and function for the present and	
future needs of Amelia County. This initia		
soil testing (if Needed) and land acquisitio	n.	
Attachment # 1		
(4) Project Justification (Include ramification		
The existing animal shelter is to small and	. ,	
done an amazing job keeping the shelter o	, ,	
but with old poor condstruction and limite		
nor pass the annual/biannual state inspec	tions. This creates displeasure among the	
residents needing help and creats extra co	osts to the county.	
Attachment # 1		
(5) Cost (Include staffing needs, annual O8	RM requirements, planning/engineering,	
equipment/furniture, acquisition, c	onstruction)	
\$350,000		
	urc Shelter Planners Of America	
(6) Funding source(s)		
♦ Current Revenue	♦ Grant (Type)	
♦ Revenue Bond	♦ Loan (Type)	
♦ General Obligation Bond	♦ Special Assessment	
♦ Capital Reserve Fund	♦ Other	
	_	
RequestorBrian Wootton	Date11/20/2021	
	Planning Commission Meeting	
	Date	/Time
Planning Commission Comments:		

(1) Office/Department		Planning
Emergency Management		Commission
This project provides direct benefit to Amelia	Co. Sheriff's Office, Amelia Co. Volunteer	Use
Fire Department, Amelia Emergency Squad, A		
other county departments need radio commu	unications.	
(2) Project Title		
County Radio System Upgrade		
	Project Priority <u>1</u>	
	Year Required <u>2023</u>	
(2) Paris d Paradalia (tada da		
(3) Project Description (Include sketches, app	raisais, plans, etc.)	
See Attachment 1		
Attachment # 1		
(4) Project Justification (Include ramifications	if project is not implemented)	
See Attachment 2	in project is not implemented)	
See Attachment 2		
Attachment # 2		
(5) Cost (Include staffing needs, annual O&M	requirements, planning/engineering.	
equipment/furniture, acquisition, cons		
See Attachment 3	,	
	ce: CTA Consultants LLC	_
(6) Funding source(s)		
Current Revenue	• Grant (Type)	
Revenue Bond Revenue Bond	♦ Loan (Type)	
♦ General Obligation Bond	Special Assessment	
♦ Capital Reserve Fund	♦ Other	
Requestor Kent Emerson	_ Date _ <u>11/22/2021</u>	
	Planning Commission Meeting	
	Date	e/Time
Plantin Committee Committee		
Planning Commission Comments:		

(1) Office/Department		Planning
Emergency Management		Commission
This project provides direct benefit to Amelia	Co. Sheriff's Office, Amelia Co. Volunteer	Use
Fire Department, Amelia Emergency Squad, A	Amelia Co. Public Schools, as well as other	
other county departments need radio comm	unications.	
(2) Project Title		
County Radio System Upgrade		
	Project Priority1	
	Year Required _2024	
	·	
(3) Project Description (Include sketches, app	praisals, plans, etc.)	
See Attachment 1	,,	
Attachment # 1		
(4) Project Justification (Include ramifications	s if project is not implemented)	
See Attachment 2	on project is not implemented,	
See Attachment 2		
Attachment # 2		
(5) Cost (Include staffing needs, annual O&M	requirements planning/engineering	
equipment/furniture, acquisition, cons		
See Attachment 3	struction	
See Attachment 3		
Attachment # 3 Data Source	ce: CTA Consultants LLC	
(6) Funding source(s)	te. CTA Consultants LLC	1
(o) Fullding Source(s)		
A Current Boyonya	A Crant (Type)	
Current Revenue Revenue Rend	♦ Grant (Type)	
Revenue Bond Consul Obligation Bond	♦ Loan (Type)	
♦ General Obligation Bond	Special Assessment	
Capital Reserve Fund	♦ Other	
Requestor Kent Emerson	_ Date _ <u>11/22/2021</u>	
Negacitor _ Nerte Effection	_ 54(0	
	Planning Commission Meeting	
	Butc	,
Planning Commission Comments:		

Attachment # 1 - Project Description

This project is a multi-phase, multi-year project to upgrade the county-wide radio system, to include all public safety agencies, other county agencies, as well as the public school system.

Phase 1 was completed in 2021 for \$40,000. This phase completed a radio system needs assessment for Amelia County, including all public safety agencies, public school system, as well as other county departments with radio communications needs.

Phase 2 is currently in process with a completion date of 2022 for a cost of \$84,593. This phase is the final "planning" phase of the project and will include the development of technical specifications for a new radio system, creation of a bid document, a competitive bid process, and selection of vendor for a new county radio system.

We are currently seeking funding for Phase 3 of this project which will be the first step of construction and installation of a new radio system. As we do not currently have the bids that will be completed during Phase 2 above, and will not have them until md-2022, the cost figures we are currently using are those estimates created during Phase 1 mentioned above (See Page 8 of the Executive Summary of the Radio System Assessment Report, Attachment # 3). The overall estimated cost of a new radio system is \$5,793,900. We are currently seeking 50% of this amount, or \$2,896,950.

We plan to seek the remainder of the cost in next year's CIP cycle. This is currently estimated to be \$2,896,950. However, as the bids for the new system will be known by next year, we do anticipate some final adjustments to next year's actual request.

Attachment # 2 - Project Justification

The current radio system(s) contain obsolete equipment and are disparate systems. New and repair equipment for the current radio system are becoming harder to find, and equipment that is purchased to work with the current system will not function when we are forced to move to a new system, thereby causing lost funding. The current system utilizes analog technology, which is being phased out by manufacturers. One of the new needs for radio system improvement is movement to digital technology. In addition to being forced forward into digital technology, we also need to increase our

radio system coverage into areas without current coverage, which cause a safety concern for our public safety personnel. And we need to work towards eliminating single points of failure in our system so that the entire system cannot be brought down by one problem. The new system will also enable better communication between agencies.

We have currently spent \$124,593 in funding for the proper planning activities in Phases 1 and 2. Failure to keep the overall project moving forward could result in having to spend future funds to update the work already completed. Technology changes rapidly, so a delay in moving the project forward could cost more just to get back to the point at which we are currently.

Attachment #3 - Cost

As mentioned in Attachment # 1 above, we are currently seeking an estimated 50% of what we believe the overall installation cost to be for the new radio system, or \$2,896,950. We plan to seek the additional funding next year. The following is the Executive Summary of the Radio System Assessment Report created by CTA Consultants LLC, as mentioned in Attachment # 1 above. Grant funding will be sought if available during the project.



Amelia County, Virginia

Executive Summary Radio System Assessment Report





Acknowledgements

CTA Consultants, LLC expresses their deepest appreciation to Kent Emmerson and also extends their gratitude for the support and participation of the following agency representatives for the time and effort they invested in this process. Their contributions have been integral to the successful completion of this effort.:

Ricky Walker Sheriff

Abe Redman Sheriff's Chief Deputy

Ranna Cope Sheriff's Office / E 911 Coordinator

Robert Sesterak President of the Fire Board Roy Easter Fire Chief Company 1

Shaun Weyant Fire Company 1, Board of Supervisors

Steve Binford Fire Chief Company 2
David Tolley Fire Chief Company 3
Don Shreffer Fire Chief Company 4

David Felts Fire Chief Company 5, Board of Supervisors

Melissa Watley Ameilia Emergency Squad Kimberly Smith Amelia Emergency Squad

Bo Lynch Amelia Schools
Daryl Gough Pulbic Works



Executive Summary

Amelia County contracted CTA Consultants LLC (CTA) to provide an assessment of their public safety and school communications operations and make recommendations for a future public safety radio communications system to serve the County Sheriff's Office and 9-1-1, Volunteer Fire Departments, Emergency Management, Emergency Squad, Public Schools, and other agencies such as Public Works and Department of Community Development. Amelia County is just southwest of the State Capital of Richmond, covering 360 square miles with a population of 13,000. Amelia County borders 6 counties operating communications systems in different frequency bands.

As part of the assessment, CTA interviewed Amelia County Emergency Management Services, the Sheriff's Department and Dispatch Supervisor, Amelia Emergency Squad, Amelia County Volunteer Fire Department, the County School Representative, and Public Works Department. CTA also surveyed the radio system site at Cheathams Road and the school system repeater site at the water tower on Goodes Bridge Road. All information gathered was used to evaluate the existing systems, determine future operational and technical requirements, and develop viable approaches to upgrade or replace the existing radio system.

Assessment

Amelia County agencies provide public safety services throughout the County and primarily use their radio system to communicate with Dispatch and to provide Mutual Aid to:

- Chesterfield County
- Powhatan County
- Cumberland County
- Nottoway County

- Town of Crewe
- Town of Blackstone
- Dinwiddie County
- Prince Edward County

Amelia County has a three channel, VHF, conventional, analog radio system. The three channels provide dispatch for the Sheriff's Office, Fire, and Emergency Squad, respectively. The system consists of one RF repeater site at Cheathams Road and a one remote satellite receiver site at the Tyson feed mill, located off Highway 360, just south of the Amelia / Nottoway County line in Nottoway County. Amelia Public Schools operate on a UHF Analog system between the buses and the bus garage.

CTA asked radio system users to identify coverage problem areas on a large map of the County. CTA digitally recreated the map showing the coverage problem areas as shown in Figure ES-1. All the Amelia County agencies share many of the same problems with the current radio system. The most common issues and concerns are:

- Lack of Redundancy—the current radio system lacks back up equipment and has a single repeater site, presenting a single point of failure.
- Coverage is lacking and/or weak around County borders.
- Equipment, both repeaters and the consolettes, are reaching the end of their useful life to safely provide communications for the County.
- Lack of Interoperability.
- Lack of Capacity—crowding and interference occur when more than once incident occurs simultaneously.

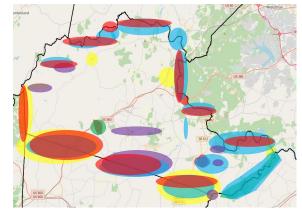


Figure ES-1: Coverage Problem Areas



System Alternatives

CTA worked with the County to identify the following potential alternatives to implement a public safety grade radio system that will provide reliable communications for Amelia County:

- Do Nothing
- Upgrade Existing Radio Systems
- 700/800 MHz DMR Radio System
- 700/800 MHz P25 Conventional Radio System
- 700/800 MHz P25 Phase 2 Trunked Simulcast Radio System
- Join Powhatan County's 800 MHz P25 Radio System
- Join a Neighboring 700/800 MHz P25 Trunked Radio System

CTA understands Redundancy is a major concern for all Amelia County radio users. Our analysis of each of the alternatives takes into account the necessary elements for system Redundancy. Additionally, CTA weighs coverage, capacity, and interoperability as overarching system considerations when developing our System Alternatives. The ability of a public safety communications system to meet the requirements of the users will rely heavily upon meeting these system considerations.

Coverage:

Coverage is one of the most important aspects of any public safety radio system, as radio system coverage determines whether first responders can communicate effectively in emergency situations.

Based upon preliminary coverage estimations, 4 sites may provide public safety grade (95%) portable outdoor coverage for the Amelia County service area in the 700/800 MHz band. 700/800 MHz frequencies provide good mobile and portable radio coverage in areas that do not have greatly varying terrain such as Amelia County.

Capacity:

Based upon preliminary capacity estimations a trunked DMR system will need 3 channels for each of the 4 sites, requiring a total of 12 channels; a P25 Phase 1 Conventional System will require 6 channels; and a P25 Phase 2 Trunked Simulcast system will require 4 channels.

Interoperability:

Interoperability for the local jurisdictions operating around Amelia County is critically important and must be considered as we look at potential system alternatives. CTA developed an interoperability chart as part of the interview process, which clearly shows the need for Law Enforcement, Fire, and EMS to be able to communicate directly with each other in emergency situations. It also reflects the need for users to communicate with other agencies outside of the local jurisdictions, and the ability to use dedicated channels to communicate directly with each other without overloading the primary dispatch channels.



Based upon our analyses and these considerations we evaluated the viability of each potential alternative:

Do Nothing Alternative

Amelia County may consider staying the course and continue to communicate using the existing radio systems. Under this course of action, significant costs will be incurred just to maintain today's communications with no improvements. Coverage will continue to be severely inadequate. Capacity will continue to be limited. Interoperability will remain fragmented both within and outside of Amelia County. Overall communications will not improve, there will continue to be lack of Redundancy, and Amelia County will be no closer to its goal of safe and reliable communications for its public safety users.

Upgrade Existing Radio Systems

Amelia County can upgrade their existing radio system, keeping the same general technical configuration used today with few operational changes and no change to the overall functionality of the radio systems. The first step must be replacement of equipment not supported by the vendor past 2021. An additional 1 to 2 tower sites may be needed to improve the coverage for the existing radio systems. Additionally, existing vehicular repeaters can be upgraded to improve the portable coverage. Without licensing additional frequencies, there may not be enough capacity on the existing systems to allow Amelia County's public safety personnel to communicate effectively. Upgrading the existing radio systems in Amelia County is not a sustainable alternative and does not provide public safety grade coverage, capacity, and interoperability for all public safety users in Amelia County.

700/800 MHz DMR Trunked Radio System

Amelia County can implement a DMR radio system, however this alternative still does not provide Amelia County a *sustainable* public safety grade system that will provide reliable mission critical communications for the next 15-20 years. There will be many other obstacles to overcome, not the least of which is the difficulty in achieving the desired level of interoperability with neighboring jurisdictions. Interoperability gateways and P25 control stations will be needed to be able to communicate with all surrounding jurisdictions, as DMR radios are not compatible with P25 radio systems or subscriber units. Amelia County dispatchers will need to patch channels/talk groups together, or the dispatchers can relay information from surrounding jurisdictions to Amelia County's public safety personnel for mutual aid scenarios.

700/800 MHz P25 Conventional Simulcast Radio System

Amelia County can implement a new 700/800 MHz Simulcast P25 Conventional Simulcast Radio System, which will provide a public safety grade, reliable, mission critical voice and data communications for all first responders in Amelia County. *This alternative moves all the County's public safety agencies to the 700/800 MHz frequency band.* The P25 standards facilitate interoperability by allowing any P25 certified radio subscriber to operate on any P25 system infrastructure regardless of the system vendor. This alternative will allow Amelia County to have dedicated channels for specific groups and users. Interoperability will be seamless for other surrounding Counties with P25 subscribers coming into Amelia County. This alternative will provide the needed public safety grade coverage and provide capacity for all users in Amelia County that desire to participate in the system.

700/800 MHz P25 Phase 2 Trunked Radio System

Amelia County can replace their existing systems with a new 700/800 MHz P25 Phase 2 Trunked Simulcast Radio System, which will provide a public safety grade, reliable, mission critical voice and data communications for all first responders. *This alternative moves all the County's public safety agencies to the 700/800 MHz frequency band.* In a Phase 2 Trunked Radio System, Amelia County will need multi-band band radios or control stations with patches to easily communicate with surrounding jurisdictions that do not have 700/800 MHz P25 systems. Multi-band radios are significantly more expensive than single band radios.



To achieve interoperability with mutual aid agencies coming into Amelia County, VHF and UHF control stations will need to be connected by interoperability gateways so Amelia County dispatchers can patch the UHF and 700/800 MHz channels together. However, this option provides seamless interoperability with surrounding jurisdictions who are also using 700/800 MHz P25 Trunked Radio Systems.

Join Powhatan County's 800 MHz P25 Trunked Radio System

Amelia County can connect their radio system equipment to the L3Harris 800 MHz P25 Phase 2 Trunked simulcast radio system that is currently being implemented in Powhatan County. This option will provide public safety grade, reliable, mission critical voice and data communications for all first responders in Amelia County. *This alternative moves all the County's public safety agencies to the 700/800 MHz frequency band*. We estimate 3 additional sites will be needed in Amelia County to meet coverage requirements. Amelia County will be required to sign a Memorandum of understanding (MOU) with Powhatan County and pay a percentage of the use and maintenance costs for any shared equipment. Powhatan is considering a TDMA control channel, which complicates interoperability for Amelia County and may require the County to purchase L3Harris' high tier portables and mobiles for all users, increasing costs. The interoperability issues caused by the L3Harris TDMA control channel will require additional infrastructure equipment to make Amelia County interoperable with all surrounding jurisdictions. This system can provide a reliable public safety grade system with improved coverage and increased capacity.

Join a Neighboring 700/800 MHz P25 Trunked Radio System

Amelia County can potentially use one of the neighboring jurisdictions' tower sites if the location is close to the border of both Counties. There is a possibility of two counties sharing a radio system, and potentially using each other's Dispatch Centers as a backup in the event that their primary Dispatch Center becomes non-operational. There is a potential for some cost savings by sharing tower sites and the P25 system core. However, we do not see a significant opportunity to share sites that would provide coverage into Amelia County. Therefore, we do not believe there will be a significant cost savings by joining a neighboring P25 radio system. Amelia County may be required to use the same radio manufacturer for subscribers as the system they are joining, which may limit Amelia County's available subscriber features to those features already purchased for the neighboring system.

Ranking

CTA uses an impact analysis process to help evaluate the system alternatives in combination with of all the information gathered during this needs assessment. The results help narrow down the alternative(s) that best fit your needs by reflecting how well each alternative meets the needs and requirements of Amelia County's users. Part of this process is evaluating the rough order of magnitude (ROM) costs for each alternative. The totals are summarized below.



		ALTERNA	ATIVES SUMMARY			
	DMR 700/800 MHz Trunked Radio System	700 MHz P25 Conventional System	700 MHz P25 Phase 2 Trunked System	Join Powhatan ** 800 MHz P25 Trunked System	Join a Neighboring 700/800 MHz P25 Trunked System	
System Functionality / System Reliability	Not Public Safety Grade	Public Safety P25	Public Safety P25	Public Safety P25	Public Safety P25	
Coverage / Sites	4	4	4	5 (2 Powhatan & 3 Amelia)	4	
Capacity / Frequency Pairs Needed	12	6 (Plus additional TAC channels)	4	4	4	
Operability	All users on same system	All users on same system	All users on same system	All users on same system	All users on same system	
Operational Control Full Full		Full	Limited	Limited		
Features	Significantly Limited Features Available	Limited Features Available	All Features Available	Limited to Core System Features Implemented	Limited to Core System Features Implemented	
Interoperability	Gateways/Manual Patch: Cumberland, Chesterfield, Dirwiddie, Nottoway, Prince Edward, and Powhatan.	Seamless inside of County: Chesterfield, Dinwiddie, and Powhatan Gateways/Manual Patch Inside of County: Cumberland, Nottoway, and Prince Edward Seamless Outside of County: Cumberland, Nottoway, and Prince Edward Gateways/Manual Patch Outside of County: Chesterfield, Dinwiddie, and Powhatan	Seamless inside of County: Chesterfield, Dinwiddie, and Powhatan Gateways/Manual Patch Inside of County: Cumberland, Nottoway, and Prince Edward Seamless Outside of County: Chesterfield, Cumberland, Dinwiddie, Nottoway, and Prince Edward Gateways/Manual Patch Outside of County: Powhatan	Seamless inside of County: Powhatan Gateways/Manual Patch Inside of County: Chesterfield, Cumberland, Dinwiddie, Nottoway, and Prince Edward Seamless Outside of County: Cumberland, Chesterfield, Dinwiddie, Nottoway, Powhatan, and Prince Edward	Seamless inside of County: Chesterfield, Dinwiddie, and Powhatan Gateways/Manual Patch Inside of County: Cumberland, Nottoway, and Prince Edward Seamless Outside of County: Chesterfield, Cumberland, Dinwiddie, Nottoway, and Prince Edward Gateways/Manual Patch Outside of County: Powhatan	
ROM Costs	\$ 4,850,000.00	\$ 6,650,000.00	\$ 7,325,000.00	\$ 7,500,000.00	\$ 8,250,000.00	
Alternatives Score	409.6	455.6	509.4	463.7	449.6	
Alternatives Ranking	5	3	1	2	4	

^{**} Powhatan considering migrating to TDMA control channel, which may lead to interoperability concerns and increased costs.

Table ES-1 Alternative Summary

When comparing the results of each alternative, it is clear that the options related to moving all users to a single radio system in the 700/800 MHz frequency band are the highest ranked alternatives for Amelia County. The overall highest ranked alternative is a standalone Amelia County 700/800 MHz P25 Phase 2 trunked simulcast radio system.

Upgrading the existing systems within Amelia County will provide the needed public safety grade coverage, capacity, and interoperability for all current public safety and non-public safety radio users within the County for the next 15+ years. In CTA's opinion, a standalone 700/800 MHz P25 Phase 2 trunked simulcast radio system is the BEST FIT for Amelia County.

Basis of Best Fit

- Coverage
- Interoperability
- Long Term Costs
- Cost Effectiveness
- Competitive Procurement
- Dispatch Operational Concept
- Flexibility in channel/talk group structure



Conceptual Design

The new configuration will operate in the 700/800 MHz public safety band and use new licensed 700/800 MHz frequencies. The design also links the Dispatch Center into the system with a Microwave link. The design includes improvements for important auxiliary systems, such as the existing paging system, consoles, and fixed control stations, and will provide adequate radio coverage for Amelia County. This new system will provide reliable public safety grade service for the next 15-20 years. This architecture may be procured turnkey, or via separate procurements using an open and competitive Request for Proposals (RFP) from a variety of system vendors.

This conceptual design addresses the following overarching technical concerns:

- Aging, support-limited radio system, subscriber units, and dispatch consoles
- Lack of capacity causing interference from users talking over each other
- Countywide coverage issues
- Portable outdoor coverage issues
- Portable in-building coverage issues

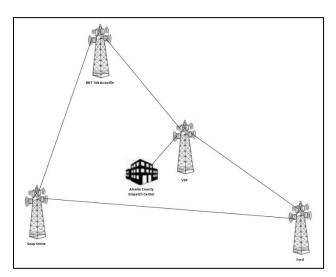


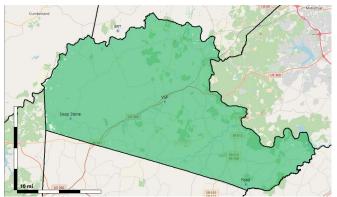
Figure ES-2 Conceptual Design Block Diagram

Coverage

We performed an analysis of the potential coverage a 700/800 MHz P25 Phase 2 trunked system can provide. Our goal is to evaluate the total coverage that can be delivered by using existing tower sites which are locality owned, existing state-owned sites, or existing commercial sites. We individually studied the existing towers sites and nearby potential towers.

After analyzing the coverage advantages and disadvantages of the various tower sites considered above, we concluded the base configuration that best meets the County's stakeholder needs is 4 RF sites in a P25 trunked simulcast site design. We tried to avoid using greenfield tower sites; however, our conceptual design includes one greenfield site on County-owned property, as there are no existing towers to fill the coverage gaps.

Figures ES-3 – ES-4 illustrate the performance of this configuration at the two coverage levels needed by County agencies: mobile, and portable outdoor.



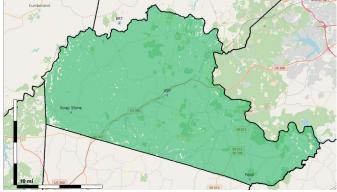


Figure ES-3 P25 Mobile Conceptual Coverage

Figure ES-4 P25 Portable Outdoors Balanced Conceptual Coverage

Indoor coverage issues were identified by public safety agencies. There are several approaches to improving indoor coverage. Our recommended approach is to install bidirectional amplifiers (BDAs) in specific buildings that have inadequate coverage according to the coverage testing results.

Interoperability

The new infrastructure will include interoperability gateway equipment so the Dispatch Center can continue to communicate to the identified regional agencies.

Redundancy

The new Amelia County radio system will feature redundancy in both simulcast control equipment, and the system core equipment. The communications center and one additional transmit tower site will house a redundant set of equipment. Our conceptual design arbitrarily houses the redundant core equipment and simulcast control at the VSP tower site, as the location is easily accessible even in severe weather emergencies. The forthcoming RFP can offer one or both locations.

Connectivity

Utilizing a microwave network is a common way to ensure highly reliable radio system connectivity. To function reliably, the radio system requires a highly reliable telecommunications backbone to connect the radio system tower sites and the Amelia Dispatch Center. Reliability is a function of equipment and path redundancy, as well as path dependability. This reliability is most often provided by a dedicated digital microwave system. For the Amelia County radio system, there will be a public safety grade microwave network configured in a ring topology, or with Monitored Hot Stand-By (MHSB) equipment for microwave spur links.

Opinion of Probable Costs

The opinion of probable cost represents the conceptual system design operating in the 700/800 MHz frequency band and using mostly existing sites. The system includes the radio infrastructure, any upgrades to the physical facilities, upgrades to the paging system, a microwave system, dispatch consoles, subscriber equipment, vendor services, consulting, and contingency funds.

Amelia County, VA 700 MHz P25 Phase 2 Radio System

100	 12 1 20 1 1140		700 Mil 2 1 201 Hage 2 Radio Gystem									
Cost	List		Negotiated	(Competitive	MULTI-VENDOR						
Elements	Estimate		Estimate		Estimate		ESTIMATE					
RADIO INFRASTRUCTURE	\$ 2,060,000	\$	1,998,200	\$	1,957,000	\$	1,957,000					
COMMUNICATIONS CENTER	\$ 325,500	\$	325,500	\$	315,700	\$	315,700					
MICROWAVE SYSTEM	\$ 582,300	\$	582,300	\$	582,300	\$	465,800					
PHYSICAL FACILITIES	\$ 1,304,500	\$	1,304,500	\$	1,304,500	\$	847,900					
SUBSCRIBERS	\$ 2,151,800	\$	1,829,000	\$	1,613,900	\$	1,570,800					
VENDOR SERVICES	\$ 991,600	\$	942,000	\$	922,200	\$	775,000					
DISCOUNT	\$ _	\$	(792,700)	\$	(1,562,100)	\$	(1,302,400)					
SPARES - SUBSCRIBERS	\$ 40,600	\$	34,500	\$	30,500	\$	25,200					
SPARES - FIXED NETWORK	\$ 132,000	\$	132,000	\$	125,400	\$	125,400					
CONSULTING	\$ 240,000	\$	240,000	\$	240,000	\$	312,000					
CONTINGENCY (5%)	\$ 379,400	\$	317,800	\$	264,500	\$	239,000					
RADIO SYSTEM TOTAL	\$ 8,207,700	\$	6,913,100	\$	5,793,900	\$	5,331,400					
MAINTENANCE (After 1 year warranty)	\$ 260,100	\$	260,100	\$	260,100	\$	208,100					

Table ES-2 Opinion of Probable Cost – 700/800 MHz P25 Phase 2 Trunked Simulcast Radio System

Recommendations

Amelia County urgently needs to upgrade the existing public safety communications system to protect your public safety users. Your current systems have reached the end of their usable life and their ability to be supported. Spare parts are becoming scarce, which will lead to potentially dangerous system issues.

Public Safety radio communications within the County are characterized by poor portable coverage in some areas, both in-buildings and outdoors, as well as aging equipment. These major deficiencies, plus other operational and technical concerns, currently inhibit public safety personnel from operating at full capacity and efficiency. Mutual aid between the surrounding Counties and Amelia County routinely occurs, and without the ability to communicate with all public safety personnel in these jurisdictions, users will find themselves in potentially dangerous conditions.

As recently as the last ice storm in February 2021, major communications system outages caused your public safety users to implement extraordinary measures to communicate at the most basic levels.

The public safety personnel in the County have made valiant efforts to provide necessary services to your citizens using the communications resources made available to them. We believe the County recognizes the potential advantages of designing and implementing a Public Safety Radio System that will address the needs of the Sheriff's Office, Fire, EMS, and Schools.



CTA recommends Amelia County procure and install a 700/800 MHz P25 Phase 2 Trunked Simulcast Radio System consisting of 4 RF sites and 4 channels.

A well designed, implemented, and tested radio system will provide the public safety users in Amelia County:

- <u>Simplified communications</u> removing the dispatch communications relay barriers and differences in equipment and capabilities from agency to agency.
- The ability to communicate as needed within the guidelines of organizational structure, users can push to talk with those they need to. Equipment is no longer a barrier, and with cooperative agreements, political boundaries are less of a barrier. The tools are in place for true interoperable communications.
- <u>Consistently dependable system</u> uniform design, deployment, operation, and maintenance of the system
 means robust equipment will be designed for the task, placed where it is needed, and users will be able to
 depend on reliable service every day.

Go Forward Plan of Action

- 1. Initiate planning and budgeting for a new 700/800 MHz P25 Phase 2 Trunked System.
- 2. Identify and submit grants to support the cost of the system.
- 3. Review and approve the upgraded radio communications conceptual design contained in this report. Work with CTA to complete any adjustments in preparation for specifications development.
- 4. Any new replacement subscriber radios, whose lifecycle is anticipated to span into new upgraded P25 infrastructure, should be P25 capable.
- 5. Adopt Project 25 (P25) technology as the interoperability standard for Amelia County. This will help maintain interoperability with some surrounding jurisdictions operating on P25 systems.
- 6. Prepare a set of functional specifications, scope of work, and terms and conditions in preparation for issuance of Request for Proposals. Construct the RFP package targeting a competitive multi-vendor procurement. We recommend the specifications allow the following to be examined and evaluated for each proposal:
 - Overall viability of the configuration
 - Communications throughput and performance, matched to consider present and future voice needs
 - Guaranteed (95%) coverage over the Amelia County service area
 - Redundancy and Backup Failure Modes
- Fifteen-year life cycle costs, including keeping the number of tower sites as low as possible while retaining the requisite coverage for mobile and portable units, both outdoors and inside buildings
- Degree to which the system requirements are addressed
- 7. Implement a digital microwave network as a stand-alone, fault tolerant, dedicated emergency system to provide long-term cost savings and improved reliability.



- 8. Retain CTA to provide implementation oversight for the following items:
 - Project Kickoff Meeting
 - System Design
 - Frequency Licensing
 - Physical Facilities Site Upgrades
 - Detailed Design Review
 - Radio System Staging Test
 - Microwave System Staging Test
 - Radio System Installation
 - Microwave System Installation
 - Site Inspections
 - Physical Facilities Completion
 - o Equipment Installation Completion
 - o Final Acceptance

- Field Acceptance Testing
 - o Radio System Testing
 - o Subscriber Radio Testing
 - Microwave Network Testing
 - o Coverage Testing
- Fleet Mapping Workshop
- Training
 - o Radio User Training
 - o System Administrator Training
 - Console User Training
 - Maintenance Training
- System Cutover
- Final Documentation/ System As-builts Review
- Final Acceptance

(1) Office	/Department			
Public W	orks, Administration, H	indle Building C	ommittee	
(2) Projec	ct Title			
Hindle Bเ	uilding Renovation to Co	ommunity Cente	er	
Construct	tion Completion and Sa	le of tax credits		
Phase 3			Project Priority	_ 1
		`	Year Required	_ 2024
(3) Projec	ct Description (Include s	ketches, apprais	als, plans, etc.)	
Phase 3 v	will complete the renov	ation constrution	on and clear the wa	ay for selling historical
tax credit	ts			
Attachme				
	ct Justification (Include r	•	•	· ·
	e third and final step in	•	•	•
consisten	nt with the results of the	e of the attache	d feasibility study	and the
reccomer	ndation of the Hindle B	uilding Committ	:ee	
Attachme				
(5) Cost (Include staffing needs, a	annual O&M req	uirements, plannir	ng/engineering,
eq	uipment/furniture, acqu	uisition, constru	ction)	
\$	1M			
\$	-455,000	Historic tax cr	edit sale	
A + +	t. #	Data Carriage	F : - : : : : :	. C
Attachme		Data Source:	Feasibility	Study
(6) Fundir	ng source(s)			
A Curror	at Povonuo	^ (Grant (Typo)	
	nt Revenue		Grant (Type)	
	ue Bond		_oan (Type)	
	l Obligation Bond		Special Assessment	
O Capital	Reserve Fund	◊ (Other	
Poguesto	or Daryl Gough, Directo	r of Bublic Worl	ks Date:	11/29/2021
Nequesto	Jay Griles, Chair, Hine			11/29/2021
	Jay Gilles, Chair, Hill	•		Manting
		РІа	nning Commission	-
		Ріа	nning Commission	Da ⁻
Dlanning	Commission Commonts			Dar
Planning	Commission Comments			Dar
Planning (Commission Comments			Dar
Planning	Commission Comments			Dar

(1) Office/Department		Planning
James L. Hamner Library		Commission Use
(2) Project Title		
Library Construction	Year Required <u>2027</u>	
(3) Project Description (Include sketches,	appraisals, plans, etc.)	
Construct new library to meet needs of the	he community. Conceptual Deisgn attached.	
Attachment # 1		
(4) Project Justification (Include ramificati	ons if project is not implemented)	
Needs Study conducted last year determine the current library is estimated to be conflimitations with current property. Land is Board would like to begin evaluating pot Attachment # 1 (5) Cost (Include staffing needs, annual Ose equipment/furniture, acquisition, construction in the staffing needs is a sequipment for the staffi		
Requestor Jennifer L. Harris Library Board Chairman Planning Commission Comments:	Date: <u>11/30/2021</u> Planning Commission Meeting	Date/Time

Amelia County Parks and Recreation (ACPR)

Capital Improvement Plan (CIP) 2022-2023 Fiscal Year (Year:2023) Submitted November 30, 2021

PRIORITY	YEAR REQUIRED	Project Title	PROJECT DESCRIPTION	Project Justification	Cost
1	2023	GYM SAFETY UPGRADES BLEACHER Replacement (ACPR Gym)	Gym Bleachers. Replace original Parks and Rec Bleachers with telescopic, retractable bleachers including motorize retraction, steps for access to upper seating with all-access safety rails at various entry points, and a handicap area for handicap accessibility.	Safety Issue. GYM-Replace Bleachers in Parks and Rec Gym. Total replacement is required for compliance of public handicap accessibility and safety standards. Currently, there is no accommodation for handicap spectators. There are no handrails to reach upper seating areas except at the far ends of the bleachers. There are no steps to navigate up the bleachers; fans must step over the bleacher rows, which presents a hazardous slip/fall risk. The gap in the bleacher flooring areas is large enough to present a slip/fall risk, and also for trash/liquid disposal which falls directly to the treated gym floor which could potentially ruin the flooring. The current bleachers are no longer easily retractable, extremely difficult to handle by staff/players. Bleachers are 200-250 lbs. per section. They roll back crooked and jump off track. A replacement is required to meet safety and handicap accessible standards.	Replacement (New) \$54,600 7-row retractable bleachers including installation (290 seats) Source: TJ Distributors

Amelia County Parks and Recreation (ACPR)

Capital Improvement Plan (CIP) 2022-2023 Fiscal Year (Year: 2023) Submitted November 30, 2021

PRIORITY	YEAR REQUIRED	PROJECT TITLE	PROJECT DESCRIPTION	PROJECT JUSTIFICATION	Cost
				program and conducted an adult volleyball tournament. (2) FIELD. (2a) Add bleachers to fields that currently do not have any seating. Fields are used by the School, ACPR and external groups for league games and practices which are attended by visiting counties and during tournaments. These fields include: 1@Hindle (Soccer, Football, various groups), 3@Elementary fields (Softball, Soccer, various groups), 1@Bus shop (Soccer, Softball, School Soccer and PR/SCH Football) Total required:5. (2b) Install Football Pole Padding at the Joe Paulette Memorial Park Football Field. For safety issues, three (3) 80-foot wooden light poles on the inside of the playing field need pad protection. The wooden poles are exposed and are located within 5-7 feet of the playing field.	
2	2023	Gym and Field SCOREBOARDS New and Upgraded Included. in Phase 2&3 ACPR Sports Complex CIP 2022-2023	Add scoreboards to fields that have no scoreboard, and upgrade the current timeclock in the Parks and Rec Gym which is 20 years old. Games are played on all fields between youth, school, adult teams and external groups playing with visiting counties or league/tournament play.	1) Currently these fields do not have scoreboards for Parks/Rec (PR), School (SCH), and external groups (GP) league games with other counties and tournaments: 5 Locations High school track: Soccer:PR/SCH, Track:SCH, Bus Shop: Soccer:PR,SCH, Softball:PR,SCH, Football:PR/SCH, Hindle: Soccer:PR,SCH,GP, Football:PR, Elementary: Softball:PR,GP, Soccer:PR, Field behind head start/library (once it is developed): Soccer:PR, Football:PR. The only fields with clocks are in Joe Paulette Park Football/	Total Request: 12 Scoreboards Package Complete \$79,465 BSN

Amelia County Parks and Recreation (ACPR)

Capital Improvement Plan (CIP) 2022-2023 Fiscal Year (Year: 2023) Submitted November 30, 2021

PRIORITY	YEAR REQUIRED	Project Title	PROJECT DESCRIPTION	Project Justification	Cost
				Baseball field and the County Lot Softball	
				Field (2) Gym clocks are 20-years old, well	
				past their useful life. Updated scoreboards	
				use high efficiency LED lights and operate	
				with reduced power consumption.	
				Scoreboard Totals: 2 Basketball, 5	
				Softball/Baseball, 5 Multipurpose=12	
				Scoreboard Total Package including	
				controllers and mounting trusses	
	2023		\$173,246		

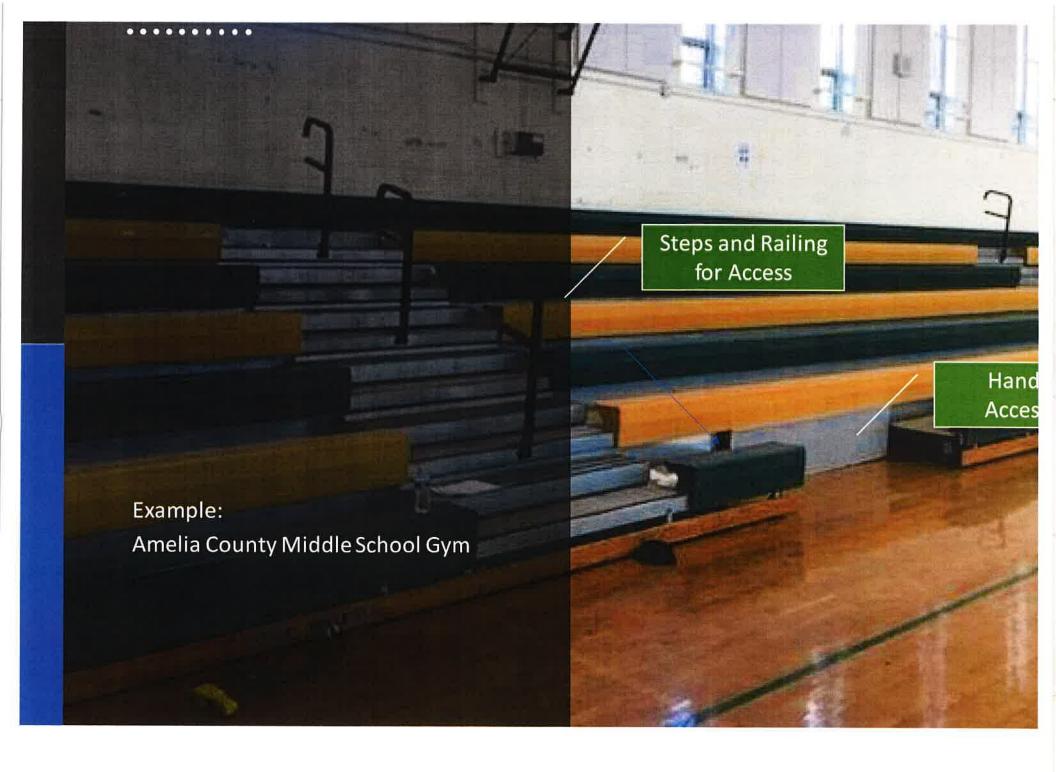
Amelia County Parks and Recreation (ACPR)

Capital Improvement Plan (CIP) 2022-2023 Fiscal Year (Year: 2023) Submitted November 30, 2021

	ovement I lan		Piscar Tear (Tear.2023) 57		
PRIORITY	YEAR	PROJECT'	PROJECT	PROJECT JUSTIFICATION	COST
الحريثات السائم	REQUIRED	TITLE	DESCRIPTION		
1	2024	BATTING	Enclose or cover two	Batting cages provide athletic conditioning	BATTING CAGES
	1	CAGES	(2) existing batting	for game warm-up and preventing injury.	\$1,825 each Baseball, BSN
			cages currently located	This additional equipment would allow	\$1,725 each Softball, BSN
		Additions and	in the County Lot	athletes to perform skills training when the	,
		Improvements	(softball) and Baseball	fields are too wet to practice as part of our	METAL STRUCTURE
		Softball/Baseball	Field (baseball) with a	program and athlete training program. The	Single 1 cage Double 2 cages
		Fields Included. in	metal building, add a	protective metal building would allow	CL/Softball CL/Softball
		Phase 2 ACPR	second batting cage,	continued use during inclement weather and	\$39,9731 \$54,6751
		Sports Complex CIP 2022-2023	add concrete pads.	provide a year-round offering.	BB/Baseball BB/Baseball
		CIP 2022-2023	Add batting cages to	_	\$42,2981 \$58,389.671
			fields that currently do		² Armstrong
			not have any: 3		8
			Softball (Bus Shop,		Subtotal Batting Cages (double):
			Elementary, Russell		\$120,065
			Grove), and 1		φ120,003
			Baseball (Middle		
			School).		
2	2024	BASKETBALL	Total replacement for	The current supports are 50-years old and	TOTAL REQUEST:
		BACKBOARD	all goals and backboard	have no motorized system. When the gym is	\$75,600 BSN SPORTS
		100	supports.	used for other non-athletic activities (such as	7.0,000 2011 01 OILIO
		AND GOALS		banquets, weddings), there is no way to	
				raise/lower the goals. Further, the main goal	
				backboard has a crack in the support system	
				and needs replaced to address this safety and	
				structural issue. This problem needs to be	
				addressed within the next two years; if it isn't	
				addressed, it will get worse. This also would	
				allow us to run two courts for practice at the	
				same time.	
*	2024		TOTAL CI	P REQUEST Parks and Recreation	\$195,665

- Christmas Mother's Annual Use of the Gym
- Access to upper levels is a safety concern







PO Box 660176 Dallas, Tx 75266-0176 Phone: 800-527-7510 Fax: 800-899-0149 Visit us at www.bsnsports.com

intact Your Rep

ıvid Caravati Email:dcaravati@bsnsports.com | Phone:804-387-6979

old to 137893 WELIA COUNTY PARK & RECREATIO 1330 DUNN ST WELIA COURT HOUSE VA 23002 Ship To 1037893 AMELIA COUNTY PARK & RECREATIO 16330 DUNN ST AMELIA COURT HOUSE VA 23002 USA Payer 1037893 AMELIA COUNTY PARK & RECREATIO 16330 DUNN ST AMELIA COURT HOUSE VA 23002 USA

\$72,700.00

\$75,600.00

Quote

Quote #: 21258777

Purchase Order #: All Retractable Spalding

Quote Date: 02/12/2021 **Quote Valid-to:** 03/31/2021

Cart Name:

Payment Terms: NT30 Ship Via: Ordered By:

m Description	Qty	Unit Price	Totai
palding Basketball Systems m # - NSPHG	1 EA	\$ 44,700.00	\$ 44,700.00
istallation(Non Union/Prevailing Wages) em # - NSPINSTALL	1 EA	\$ 28,000.00	\$ 28,000.00

Other: \$0.00
Spalding Equipement Freight: \$2,900.00
Sales Tax: \$0.00
6-Slam-Dunk® Pro Goal w/Universal Mounting Pattern - Easy Glide Order Total: \$75,600.00
2-SuperGlass# Collegiatesb Backboard 72" x 42" Payment/Credit Applied: \$0.00

Subtotal:

Order Total:

4-Fiberglasssb Backboard 72" x 42"

2-E-Z Bolt Padding For 72" Glass Backboards, COLOR TBD

3-Spalding Helix# for 42x72 rectangular backboards - pair

6-All-Purpose Ceiling Mast - 19'-22' Ceiling Height

2-Bank Extension Package for SuperGlass# Collegiate Backboards

6-7' Jack Knife Pkg

6-LynRus QR4000 Electric Winch

6-LynRus Aut-O-Loc 2 Safety Belt

20-Sandwich Clamp - 20"

4-Cradle Pipe Wall Assy

6-3" Support Pipe 12'

8-4-TRUSS BRIDGE 15' PTD.

2-Saddle/Pipe Clamp - 6 Pack

4382 LBS

Installation of Above

Installation of Above

6 Retractable Goals

Height Adjusters al Goals

Public Works 2023 CIP List

Project	Department	Request	Priority	Notes
Existing				
Elementary Field Lighting	Maintenance	\$ 50,000		Complete
Wellhead Protection Study	Water	\$ 170,000		Is underway
Beopple Building Improve.	Maintenance	\$ 47,000		On hold pending building study
Library Field Grading & Lights	Maintenance	\$ 60,000		Materials have been ordered
Hindle Field Lights	Maintenance	\$ 40,000		Complete
WWTP UV Upgrade	Sanitary Dist.	\$ 307,000		On hold pending direction from 360 expansion study
Fire Station Pavement Improvements, Phase V	Maintenance	\$ 226,000		99% Complete
Evaluation 360 Sewer & Water	Sanitary Dist.	\$ 90,000		On hold pending direction from BOS
P&R Generator Install	Maintenance	\$ 92,000		Material has been ordered
War Memorial Building Evaluation	Maintenance	\$ 25,000	1	New project
Fire Station Pavement Improvements, Phase VI	Maintenance	\$ 166,000	2	Plan to bid in January 2022
		\$ 1,273,000		
2023				
Wastewater System Inflow and Infiltration Study	Sanitary Dist.	\$ 50,000	1	New project
Courthouse Window Upgrade	Public Works	\$ 60,000	1	New Project
Superior Way Extension	Admin. / EDA	\$ 975,000	1	New Project
2024				
Pridesville Rd WWTP Upgrade, Phase 2	Sanitary Dist.	\$ 160,000	1	Moved back from to allow more time for direction on expansion
County Park Fence Improvements	Public Works	\$ 50,000	1	New Project
Jackson Building Basement Improvements	Public Works	\$ 35,000	2	New Project
2025				
EOC/Hindle Building Parking Lot Upgrade	Administration	\$ 187,000	1	Moved back from 2023 to allow time to complete other phases
Water Well Exploration North of 360	Sanitary Dist.	\$ 150,000	1	Moved back from to allow more time for direction on expansion
2026				
Water Tank	Sanitary Dist.	\$ 1,634,500	1	Moved back from 2023 to allow more time for 360 expansion
Water Well Development North of 360	Sanitary Dist.	\$ 150,000	2	Moved back from 2024 to allow time to complete other phases
2027	-			·
Smack's Creek Wastewater Treatment Plant	Sanitary Dist.	\$ 29,000,000	1	Moved back from 2023 to allow more time for 360 expansion

(1) Office/Department		Planning
Public Works, Buildings & Grounds		Commission
		Use
(2) Project Title		
Countly are a Miller day of the second	•	
Courthouse Window Upgrade	Draiget Drievitus 4	
	Project Priority: 1 Year Required: 2023	
(3) Project Description (Include sketches	appraisals, plans, etc.)	
	ngle pane windows in the Circuit Court Building.	
, , , , , , , , , , , , , , , , , , ,		
Attachment #		
(4) Project Justification (Include ramifica	tions if project is not implemented)	
The project will replace the existing sing	gle pane windows with double pane insulated glass	
	maintain the architectural integrity of the building.	
_	n a combination of vinyl and aluminum for low	
maintenance.		
Attachment #		
-	D&M requirements, planning/engineering,	
equipment/furniture, acquisition,	·	
\$ 55,000.00 Windows and Glass Work		
\$ 5,000.00 Painting & Misc. Work		
\$ 60,000.00 Total Request		
Attachment Da	ata Source: Verbal Queto	
(6) Funding source(s)	ata Source: Verbal Quote	
(b) Fulluling Source(s)		
♦ Current Revenue	♦ Grant (Type)	
♦ Revenue Bond	♦ Loan (Type)	
♦ General Obligation Bond	♦ Special Assessment	
♦ Capital Reserve Fund	♦ Other	
·		
Requestor: Daryl L. Gough, Director of P	Public Works 11/30/2021	
	Planning Commission Meeting	
	Date/	Time
Planning Commission Comments:		
		

(1) Office/Department		Planning
Amelia County Sanitary District		Commission
		Use
(2) Project Title		
Wastewater I & I Study	-	
	Project Priority: 1	
	Year Required: 2023	
(3) Project Description (Include sketches, a	nnraicals nlans etc)	
	on) Study will identify areas where rain water	
	eters will be temporarily installed in various	
-	or flows during rain events. A visual inspection	
will be conducted on each of the system's	-	
	n specific problem areas. The final report will	
include recommendations to correct probl		
Attachment #		
(4) Project Justification (Include ramificatio	ns If project is not implemented)	
Inflow & Infiltration uses capacity of the W	Vastewater system. Capacity regained through the	
elimination of I&I can be used to add custo	omers to the system. The elimination of I&I is the	
	city in the Wastewater system. Over time I&I can	***************************************
cause damage to piping and manholes. Thi	is project will identify problem areas and help	
developed a plan for correction.		
Attachment #		
(5) Cost (include staffing needs, annual O&	M requirements, planning/engineering,	
equipment/furniture, acquisition, co	instruction)	

\$ 50,000.00 Total Request		
Attachment Data	Source: B&B Consultants	
(6) Funding source(s)	300100. 2000 001130100113	
♦ Current Revenue	♦ Grant (Type)	
♦ Revenue Bond	♦ Loan (Type)	
♦ General Obligation Bond	Special Assessment	
♦ Capital Reserve Fund	• Other	
Requestor: Daryl L. Gough, Director of Pub	lic Works 11/30/2021	
	Disputing Commission 8 deaths	
	Planning Commission MeetingDate,	/Time
Planning Commission Comments:		
	- The Depth of the Committee of the Comm	
was a subminister over the resolvent that a second subminister of the		



Bid Date: 11/19/2021 **Project: Amelia County**

KOHLER POWER SYSTEM

Model: KL80TSX

kW: 72

Voltage: 120/208 Phase: 3 277/480

Wire: 4 Hertz: 60

Standby

65Kw

Prime

Fuel: Diesel

Cooling:

Radiator

Configuration:

Outdoor

- · Deep Sea Controller with digital display of voltage, amperes, frequency, accumulated run time, oil pressure and water
- Sound Attenuated outdoor weather housing, designed to reduce ambient noise level too approximately 69 dba at 7
- Engine Block Heater
- Racor filters
- Battery rack and cables
- DOT rated trailer equipped 3"Pintle ring, triple axle trailer, LED lights, weather grip on fenders
- 92-gallon fuel tank (Diesel) 28 hour run time @ 75% load, 4 gl DEF Tank, 110% spill containment
- Voltage Selection Switch 120/240 1ph, 277/480 and 120/208 3ph
- Lug strip connections
- LED lights in enclosure
- Battery Charger
- · Steel skid base with end caps and lube oil drain extension
- Lube Oil and Anti-Freeze
- Operations and Maintenance Manual
- Job Site Delivery Off loading by Others (crane)
- Initial Startup on generator
- Customer Demonstration and Training (2) Hours On Site
- Warranty: 1-Year on Engine, all other components 2-Year

NOTES AND COMMENTS:

- -No fuel, no anchor bolts, no mechanical or electrical installation, no infra-red testing.
- -No third-party testing of any kind.

Pricing Policy: The equipment and services listed in this quotation constitute the only items being offered and are our interpretation of the specifications and application requirements. No other items or accessories are included or implied. Fidelity Engineering is quoting this project as a material supplier only and is therefore exempt from provisions in the contract documents, if any, pertaining to subcontractor performance and

Note: This quotation expires in 10 days unless extended by Fidelity Engineering.

Sales Tax: This quotation does not include any applicable sales or use taxes.

TOTAL SYSTEM PRICE: \$64,475.00

Thank you for the opportunity to provide this quotation - Lee Crenshaw Please feel free to contact me with any further inquiries 804 677 8925



KL80TSX

Prime - 65 kW Standby - 72 kW

ENERMAX SERIES



TecnoGen's Enermax Series generator is built for reliability and is ideal for continuous heavy duty applications.

This series ranges in size from 25 kW to 1000kW and is equipped with market leading engines - Volvo, FPT, Kohler. Standard features include Deep Sea controller, camlocks, block heater, battery charger and external fuel connect.

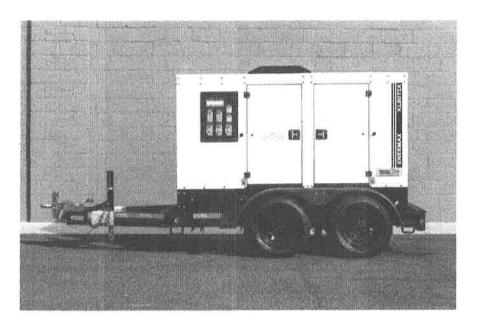


100 Paper Place New Castle, DE 19720 www.TecnoGenUSA.com (855) 303-7900 Fax (302) 231-1162 sales@ftgequipment.com



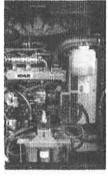
KL80TSX SPECIFICATIONS

GENERATOR SPECS	
PRIME (KW)	65
STANDBY (KW)	72
A CONTRACTOR	1800
VOLTAGE 1PH	240/120V
VOLTAGE RPH	480/277V
VULIAGE SER	208/120V
FREQUENCY (Hz)	60
CONTROLLER BRAND	Deep Sea
CONTROLLER MODEL	DSE7310
ALTERNATOR MAKE	Leroy Some
ALTERNATOR MODEL	LSA 44.353
SYSTEM VOLTAGE	12V
SOUND LEVEL @ 29 FEET	69
AMPS	
SINGLE PHASE 120V zz (P.F. 0,8)	217 X 2 zz
SINGLE PHASE 240V (P.F. 0,0)	217
THREE PHASE 208V (P.F. 0,8)	226
THREE PHASE 240V (P.F. 0,8)	195
THREE PHASE 480V (P.F. 0.8)	98
ENGINE SPECS	
MAKE	Kohler
MODEL	KDI3404TCR
epa level	Tler 4F
CYLINDERS	4
GROSS MP	100
EXTERNAL FUEL VALVE	YES
FUEL CONTAINMENT	110%
FUEL CONSUMPTION	
FUEL CAPACITY (Gallons)	92
75%	3.28 gal/h
RUN TIME @ 75%	28
DEF	
DEF TANK CAPACITY (Gallons)	4.23
WEIGHTS AND DIMENSIONS	
SKID W/O TRAILER	
Dry Weight (ibs.)	3950
there are no to the product to the first of	
Wet WEIGHT (Ibc.)	4531
Wet WEIGHT (lbs.) I FNGTH (in.)	100
Wet WEIGHT (lbs.) LENGTH (in.) WIDTH (in.)	100



TecnoGen's 80kVA generator uses the Kohler engine coupled to an industry standard Leroy Somer alternator producing 65kW of prime power. Standard features include camlocks, block heater and battery charger. The Deep Sea controller makes retrieving vital stats like fuel levels, run time and start logs easy and the sealed doors and 2" thick insulation throughout gives this gen a 69 dBA rating.

The internal fuel capacity is 92 gallons allowing for a run time of up to 28 hours @ 75% load. The convenient external fuel hookup allows for quick connect to an additional fuel cell if needed. The TecnoGen Enermax series is built for reliability and is ideal for continuous heavy-duty applications. Available on trailer or skid mounted.







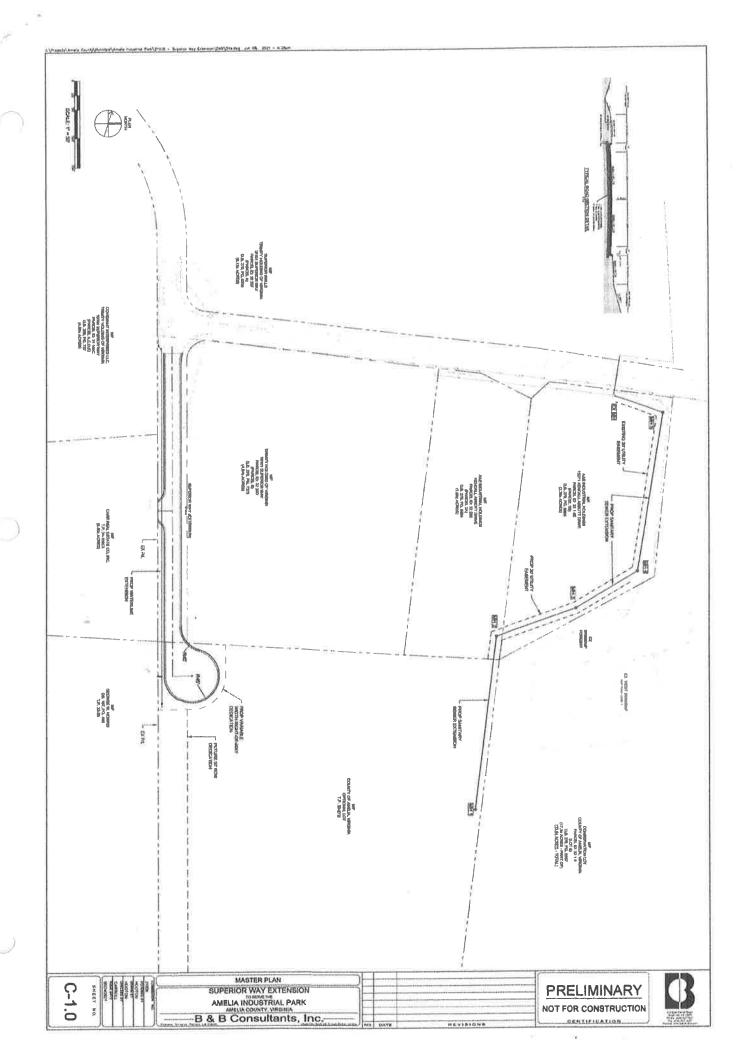




100 Paper Place New Castle, DE 19720 www.TecnoGenUSA.com

(1) Office/Department		Planning
Public Works, Buildings & Grounds		Commission
		Use
(2) Project Title		
Courthouse Window Upgrade		
	Project Priority: 2	
	Year Required: 2023	
	-	
(3) Project Description (Include sketches, appraisa	als, plans, etc.)	
The project will upgrade the existing single pane	windows in the Circuit Court Building.	
Attachment #		
(4) Project Justification (Include ramifications if pr		
The project will replace the existing single pane		
windows. The new windows / glass will maintain		
The existing frames will retrofitted with a combine maintenance.	nation of vinyl and aluminum for low	
Attachment #		
(5) Cost (Include staffing needs, annual O&M requ	dramants planting (angle angle	
equipment/furniture, acquisition, construct		
\$ 55,000.00 Windows and Glass Work	1011)	
\$ 5,000.00 Painting & Misc. Work		
\$ 60,000.00 Total Request	1	
-		
Attachment Data Source	e: Verbal Quote	
(6) Funding source(s)		A STATE OF THE STA
	♦ Grant (Type)	
	◇ Loan (Type)	
	Special Assessment	
♦ Capital Reserve Fund	O Other	
		A THE WHOLE WILLIAM TO THE
Requestor: Daryl L. Gough, Director of Public Woo	rks 11/30/2021	
	Planning Commission Mosting	
· ·	Planning Commission Meeting Date/	
	Valey	inic
Planning Commission Comments:		

(1) Office/Department		Planning
1		Commission
County Administration / Economic C	Development Committee	Use
(2) Project Title		
Superior Way Extension		
	Project Priority: 1	
	Year Required: 2023	
(3) Project Description (Include sketc	hes, appraisals, plans, etc.)	
This project will extend Superior Wa	y into the remaining undeveloped land in the EDA Park.	
Attachments, 1	Data Source: B&B Consultants, Inc.	
(4) Project Justification (Include ramil	fications if project is not implemented)	<u> </u>
1	ss, storm sewer and utilities to approximately 13 acres	
Attachment #		
(5) Cost (Include staffing needs, annu equipment/furniture, acquisition	al O&M requirements, planning/engineering, on, construction)	
\$975,000.00		
Attachments, 2	Data Source: B&B Consultants, Inc.	
(6) Funding source(s)		
♦ Current Revenue	♦ Grant (Type)	
Revenue Bond	♦ Loan (Type)	
♦ General Obligation Bond	♦ Special Assessment	
Capital Reserve Fund	♦ Other	
Requestor: Daryl L. Gough, Director o	of Public Works Date: 11/30/21	
	Planning Commission Meeting	
	Date/	
Planning Commission Comments:		
		



Cost Estimate Superior Way Extension

(From Kendall Abbot extending south 616 ft)

Amelia County, Virginia November 15th, 2021

item	Quantity	Unit	Cost/Unit Cost	
Roadway				
Earthworks	1	LS	\$40,000	\$40,000
Fine Grading	1,815	SQYD	\$6	\$10,890
Curb & Gutter	1,240	LFT	\$50	\$62,000
Stone base (8" VDOT 21-B)	820	TON	\$50	\$41,000
Asphalt Base (5" BM-25)	500	TON	\$200	\$100,000
Asphalt Intermediate (2" IM-19)	200	TON	\$200	\$40,000
Asphalt Surface (2" SM-12.5)	200	TON	\$200	\$40,000
VDOT MH	2	EA	\$7,500	\$15,000
VDOT DI-3C, 8' Throat	2	EA	\$10,000	\$20,000
36" - RCP Storm sewer	340	LFT	\$375	\$127,500
24" - RCP Storm sewer	4	LFT	\$325	\$1,300
18" - RCP Storm sewer	38	LFT	\$275	\$10,450
			Total	\$508,140
Water				M-441111-00-14-14-1
12" Waterline	644	LFT	\$100	\$64,400
Connection to existing line	1	LS	\$5,000	\$5,000
Fire Hydrant	1	EA	\$6,500	\$6,500
12" Gate Valve	1	EA	\$5,000	\$5,000
12" Plug	1	EA	\$1,500	\$1,500
12" Fitting	2	EA	\$1,500	\$3,000
			Total	\$85,400
Sewer				
8" PVC Gravity Sewer	887	LFT	\$115	\$102,005
8" DIP Gravity Sewer	40	LFT	\$150	\$6,000
Manhole	5	EA	\$8,800	\$44,000
Connection to existing manhole	1	LS	\$5,000	\$5,000
			Total	\$157,005
Misc.				
Mobilization	1	LS	\$30,000	\$30,000
E&S Controls	1	LS	\$15,000	\$15,000
Seeding & Restoration	1	LS	\$5,000	\$5,000
Construction Stakeout	1	LS	\$7,000	\$7,000
			Total	\$57,000
Construction Cost Sub Total				\$807,545
Contingencies (10%) (Construction)				\$80,800
Engineering Bidding & Construction Admin. (6.0%)				\$48,500
Part Time Inspection (4.0%)				\$32,400
Geotechnical Testing Allowance				\$5,000
		To	tal Activity	\$974,245

(1) Office/Department		Planning
Amelia County Sanitary District		Commission
The state of the s		Use
(2) Project Title		
Pridesville Rd Wastewater Treatment P	lant PLC Upgrade	
Fildesallie tra agreement themselves	Project Priority 1	
	Year Required 2024	
(3) Project Description (Include sketches	s, appraisals, plans, etc.)	
Upgrades to the Pridesville Rd WWTP E	quipment Controls.	
Attachment #	a) 16 1- ab 1- a ab 1 a far-ambad)	
(4) Project Justification (Include ramifica	ations it project is not implemented)	
This project consist of upgrading the ex	disting PLC from analog system to a digital system.	
The existing PLC is out of date and part	s are pecoming obsolete.	
The PLC controls are automated function	ons of the WWTP plant. Without the PLC the	
	d which causes personnel to be onsite 24 hours per	
day.		
Attachment #	O&M requirements, planning/engineering,	
equipment/furniture, acquisition	, construction,	
\$ 160,000.00		
Attachment #	Data Source: Verbal from Kruger Systems	
(6) Funding source(s)		
♦ Current Revenue	♦ Grant (Type)	
♦ Revenue Bond	♦ Loan (Type)	
♦ General Obligation Bond	Special Assessment	- i
♦ Capital Reserve Fund	♦ Other	
Requestor Daryl Gough. Director	of Public Works Date 11/30/202:	ı
Treducator Park Gongin Pileare.		
	Planning Commission Meeting	
		Date/Time
Planning Commission Comments:		

1) Office/Department		Planning
Public Works, Buildings & Grounds		Commission
APHE Around, penianigs or an anima		Use
2) Project Title		
Lauren Bauls Fance Broloct		
County Park Fence Project	Project Priority: 1	
	Year Required: 2024	
(3) Project Description (Include sketc	hes, appraisals, plans, etc.)	
installation of new perimeter fencion	g at the Football/Baseball Field at the County Park.	
Attachment #	ifications if project is not implemented)	
4) Project Justification (Include ram	ifications if project is not implemented) chain-link fence with new 6' chain-link fencing with	
The project will replace the existing	ong the existing fence will be cleared and reseeded as	
privacy slats as needed. The area ar part of the project.	out the evicent letter the same and the	
part of the project.		
Attachment #	the standard ordinating	
(5) Cost (Include staffing needs, ann	ual O&M requirements, planning/engineering,	
equipment/furniture, acquisit	tion, construction)	
A TO GOO DO THE DOWNER		
\$ 50,000.00 Total Request		
Attachments, 1	Data Source: Quote Horizon Fence	
(6) Funding source(s)		
A. Comment Boyonus	♦ Grant (Type)	
♦ Current Revenue ♦ Revenue Bond	♦ Loan (Type)	
♦ General Obligation Bond	♦ Special Assessment	
♦ Capital Reserve Fund	♦ Other	
Maria de la companya		
Requestor: Daryl L. Gough, Directo	r of Public Works 11/30/2021	
	Planning Commission MeetingDat	te/Time
Planning Commission Comments:		

Horizon Fence

1194 Fletcher Chapel Road Kenbridge, Virginia 23944 (434) 917-2782 (mobile)

Quote No. 2844 Date 11/5/2021

Name County of Amelia

Address PO BOX A

Amelia Va 23002

Description of Work		Amount
Labor and material to install chain link fence around football a	nd	
baseball field. Fence to have (1) 4'w gate and (2) 12'w gates		
		and a resolve operation
Option#1: 6'h fence		\$33,500.00
Option#2: 8h fence		\$39,800.00
Option#3: Use 6'h cantilever gates instead of double leaf	Add	\$4,000.00
Option#4: Use 8'h cantilever gates instead of double leaf	Add	\$5,100.00
Option#5: Install 6'h privacy slats in fence	Add	\$16,250.00
Option#6: Removal of existing fence		\$5,000.00
Note: 8'h privacy slats are not available at this time		
		M
		<u> </u>
TO.	TAL DUE:	

(1) Office/Department	Planning
Public Works, Buildings & Grounds	Commission
	Use
(2) Project Title	
Jackson Building Basement Improvements	
Project Priority:	2
	2024
Teat hegalited	
(3) Project Description (Include sketches, appraisals, plans, etc.)	
Improvements to the Jackson Bullding basement to create usable space for	the Historical
Society.	
Attachment # (4) Project Justification (Include ramifications if project is not implemented)	
The project consist of waterproofing, painting, and HVAC replacement.	
The project consist of waterproofing, painting, and from the replacement	
Attachment #	
(5) Cost (Include staffing needs, annual O&M requirements, planning/engine	ering,
equipment/furniture, acquisition, construction)	
\$ 35,000.00 Total Request	
Attachments, Data Source: Past Projects	
(6) Funding source(s)	
♦ Current Revenue ♦ Grant (Type)	
Revenue Bond O Loan (Type)	
♦ General Obligation Bond ♦ Special Assessment	
♦ Capital Reserve Fund ♦ Other	
Requestor: Daryl L. Gough, Director of Public Works 11,	/30/2021
Planning Commission Mee	
	Date/Time
Planning Commission Comments:	
Planning Commission Comments:	

(1) Office/Department	Planning
Amelia County Sanitary District	Commission
	Use
(2) Project Title	
Water Well Exploration, North of 360	
1	
Project Priority 1	
Year Required 2025	
(3) Project Description (Include sketches, appraisals, plans, etc.)	
The project is the first step in developing water resources North of 360. Currently all of	
county's water production wells are located in the village area South of 360. The project	
consist of identifying groundwater development zones and drilling exploratory wells	
to determine volume and water quality, North of 360.	
Attachment #	
(4) Project Justification (Include ramifications if project is not implemented)	
This will begin developing water resources, North of 360 to expand capacity for future	
industry and growth.	
ALL COMPANY	
Attachment #	****
(5) Cost (Include staffing needs, annual O&M requirements, planning/engineering, equipment/furniture, acquisition, construction)	
equipment/turniture, acquisition, construction)	
\$ 150,000.00	
,	
Attachment # Data Source: Proposal from Emery and Garrett	
(6) Funding source(s)	
♦ Current Revenue ♦ Grant (Type)	
♦ Revenue Bond ♦ Loan (Type)	
♦ General Obligation Bond ♦ Special Assessment	
♦ Capital Reserve Fund ♦ Other	
Requestor Daryl Gough, Public Works Director Date 11/30/2021	
Planning Commission Meeting	
Date/	Time
Planning Commission Comments:	
	* 5 to 11 10 to 10
	1100000
	9-15-1-16-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1

(1) Office/Department		Planning
		Commission
Public Works, Administration		Use
(2) Project Title		
Emergency Operations Center and	d Hindle Building	
Parking Lot Upgrades	Project Priority: 1	
	Year Required: 2025	
(3) Project Description (Include sk	etches, appraisals, plans, etc.)	
This project will complete the par	rking lot that serves the Emergency Operations Center	
and Hindle Building		
Attachments, 1	Data Source: B&B Consultants, Inc.	
(4) Project Justification (Include ra	amifications if project is not implemented)	
	a decine on a substant of cidowalks to some the hullding	
This project will provide adequat	e drainage, paving and sidewalks to serve the building ed to be completed after the renovations to the	
Emergency Operations Center an	d Hindle Build are completed.	
Attachment #	d fillidle balla at a completon.	
	nnual O&M requirements, planning/engineering,	
equipment/furniture, acqu		
	,	
\$187,000.00		
Attachment	Data Source: B&B Consultants, Inc.	
(6) Funding source(s)		
	A	
♦ Current Revenue	♦ Grant (Type)	
Revenue Bond	♦ Loan (Type)	
© General Obligation Bond		
♦ Capital Reserve Fund	♦ Other	And the second s
Requestor: Daryl L. Gough, Direct	tor of Public Works 11/30/2021	
Annual Control of the		
	Planning Commission Meeting	
	Da	te/Time
Planning Commission Comments:		And the latest and the state of

1) Office/Department	The second secon	Commission
		Use
melia County Sanitary District		036
2) Project Title		
	ł	
Vater Storage Tank	- 1 . n / // 4	
	Project Priority: 1	
	Year Required: 2026	
3) Project Description (Include sketches, app	raisals, plans, etc.)	
his project will add a second 500,000 gallon	water storage tank to the water distribution	
ystem.		
yatem		
11 - 16 A		
attachment # 4) Project Justification (Include ramifications	if project is not implemented)	
s recommended by the Potable Water Stor	age Study completed by B&B Consultants Inc.	
Leasand Water Storage Tank will need to be	a added to the water distribution system.	
this will crosts redundancy to allow the exis	it storage tank to be taken out of service with ho	
-to-motion in service. Under current condit	ions only "minimum service" can be provided	
while the existing storage tank is offline. Mil	nimum service means only a limited amount of	
vater would be available for customers and	fire protection.	
ARTEL MODIO DE BARNODIC LOS CARACTES COM	,	
Attachment #	landing/engineering	
5) Cost (Include staffing needs, annual O&M	requirements, planning/engineering/	
equipment/furniture, acquisition, con	struction	
\$1,634,500.00		
Attachment # 1 Data	Source: B&B Consultants, Inc.	
(6) Funding source(s)		
A. Giverant Bayanto	♦ Grant (Type)	
Current Revenue Revenue Rond	♦ Loan (Type)	
Revenue Bond Conoral Obligation Bond	♦ Special Assessment	
♦ General Obligation Bond ♦ Capital Reserve Fund	♦ Other	
v Capital Reserve Fund		<u></u>
n II o I ni a continu	ic Works Date: 11/30/21	
Requestor: Daryl L. Gough, Director of Publi	TO THE WALLES	
	Planning Commission Meeting	
	Dat	e/Time
Planning Commission Comments:		

1) Office/Department		Planning
melia County Sanitary District,	Water Department	Commission
mena dounty dumary over y		Use
2) Project Title		
	-6260	
Nater Well Development, North	Project Priority 2	
	Year Required 2026	
	rear Required	
3) Project Description (Include sl	ketches, appraisals, plans, etc.)	
the project is the second step in	developing water resources North of 360. The	
project is the second step in	ploratory wells into permitted production wells.	
noject control of control of	·	
Attachment #	remissentions if project is not implemented)	
(4) Project Justification (Include r	ramifications if project is not implemented)	
This will expand our water capa	city to allow for future industry and growth.	
1.0		
Attachment #		
(5) Cost (Include staffing needs,	annual O&M requirements, planning/engineering,	
equipment/furniture, acq	uisition, construction)	
\$ 150,000.00		
A.A	Data Source: Proposal from Emery and Garrett	
Attachment # (6) Funding source(s)	Data Source.	
(0) Fatiality source(s)		
♦ Current Revenue	♦ Grant (Type)	
Revenue Bond	♦ Loan (Type)	
♦ General Obligation Bond	A A	
♦ Capital Reserve Fund		
v capital heselve i alla		
	100,0004	
Requestor Daryl Gough, Public	Works Director Date 11/30/2021	-
	Planning Commission Meeting	
	Da	te/Time
Planning Commission Comment	rs:	
Heining Commission Commission		

(1) Office/Department		المستورد البريد البريد		Planning
Amelia County Sanitary District				Commission
Amena County Sanitary District				Use
(2) Project Title				
(2) Project fine				
Wastewater Treatment Plant	- Constitution of the Cons			
	Proj	ect Priority	1	
	Year	Required	2027	
(3) Project Description (Include	sketches, appraisals,	plans, etc.)		
Construction of a 1MGD expan	dable wastewater tro	eatment facility		
Attachment #	variations to munic	act is not impleme	ented)	
(4) Project Justification (include		ct is not impleme		
To meet future capacity needs				
Attachment #			/in-cales	
(5) Cost (Include staffing needs	, annual O&M require	ements, planning/	rengineering,	
equipment/furniture, ac	quisition, constructio	n)		
		\$29,000,00		
Attachment #	Data Source:	B & B Consu	irtants	
(6) Funding source(s)				
♦ Current Revenue	♦ Gra	nt (Type)		
♦ Revenue Bond		n (Type)		
♦ General Obligation Bond	♦ Spe	cial Assessment _		
♦ Capital Reserve Fund		er		

Requestor Daryl Gough. Direct	tor of Public Works	Date	11/30/2021	_
		t	Acating	
	Plann	ing Commission is	Aeeting	Date/Time
Planning Commission Commer	nts:			