Policy Committee
Government Center Complex
Large Conference Room, Building A

Feb. 12, 2015 - 4 p.m.

1. **Roll Call**
2. **Minutes**
   a. January 15, 2015
3. **Old Business**
4. **New Business**
   a. FY 2016 Capital Improvements Program (CIP) Review (Memorandum) (Attachment 1 - Summary Spreadsheet) (Attachment 2 - CIP Ranking Criteria) (Attachment 3 - Criteria Weighting Sheet) (Attachment 4.1 - Planning-VDOT Match) (Attachment 4.2 - PR Gym) (Attachment 4.3 - General Services TMDL Implementation) (Attachment 4.4 - PR - CRP Shoreline)
5. **Adjournment**

Attachment 1	FY16 - CAPITAL IMPROVEMENT PROGRAM RANKING SPREADSHEET												
REVISED 1/28/15													
ID	**Applying Agency**	**Project Name:**	**Brief Project Description (see application narratives for more detail)**	**FY16 Requested $**	**FY17 Requested $**	**FY18 Requested $**	**FY19 Requested $**	**FY20 Requested $**	**Total Requested $**	**Agency Ranking**	**FY 16 PC Score:**	**Special Considerations**	**Priority**
Group I: New Projects with Funds Requested (projects not currently adopted for funding in FY15-FY19 CIP).													
A	Planning	Local Match for VDOT's Revenue Sharing Program	Creation of a fund to enable local funds to be leveraged to obtain more access to state and federal funding to complete transportation projects.	$0	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$20,000,000	1 of 1			
B	Parks & Rec	Warhill Community Gym	Construct a community gym/fieldhouse on the Warhill Tract	$0	$7,000,000	$0	$0	$0	$7,000,000	1 of 2			
Group II: Previously Funded Projects with Amendments (projects are currently in adopted FY15-FY19 CIP but require modifications)													
C	General Svcs.	TMDL Action Plan Implementation	Funding to accept grants and implement projects that provide credit to meet the Chesapeake Bay and Mill-Powhatan Bacteria TMDLs as required by JCC's MS4 permit.	$1,083,317	$0	$0	$0	$0	$1,083,317	1 of 1			
D	Parks & Rec	Chickahominy Riverfront Park Shoreline Stabilization	Continued implementation of the Shaping Our Shores Master Plan- Shoreline stabilization along the Chickahominy River which is continuing to erode creating a safety issue for park visitors.	$0	$0	$450,000	$634,000	$0	$1,084,000	2 of 2			

CAPITAL IMPROVEMENT PROGRAM RANKING CRITERIA
James City County Planning Commission

SUMMARY

The Capital Improvement Program ("CIP") is the process for evaluating, planning, scheduling, and implementing capital projects. The CIP supports the objectives of the Comprehensive Plan through the sizing, timing, and location of public facilities such as buildings, roads, schools, park and recreation facilities, water, and sewer facilities. While each capital project may meet a specific need identified in the Comprehensive Plan or other department or agency plan, all capital plans must compete with other projects for limited resources, receive funding in accordance with a priority rating system and be formally adopted as an integral part of the bi-annual budget. Set forth below are the steps related to the evaluation, ranking, and prioritization of capital projects.

A. DEFINITION

The CIP is a multi-year flexible plan outlining the goals and objectives regarding public capital improvements for James City County ("JCC" or the "County"). This plan includes the development, modernization, or replacement of physical infrastructure facilities, including those related to new technology. Generally a capital project such as roads, utilities, technology improvements, and county facilities is nonrecurring (though it may be paid for or implemented in stages over a period of years), provides long term benefit and is an addition to the County's fixed assets. Only those capital projects with a total project cost of $50,000 or more will be ranked. Capital maintenance and repair projects will be evaluated by departments and will not be ranked by the Policy Committee.

B. PURPOSE

The purpose of the CIP ranking system is to establish priorities for the 5-year CIP plan ("CIP plan"), which outlines the projected capital project needs. This CIP plan will include a summary of the projects, estimated costs, schedule and recommended source of funding for each project where appropriate. The CIP plan will prioritize the ranked projects in each year of the CIP plan. However, because the County's goals and resources are constantly changing, this CIP plan is designed to be re-assessed in full bi-annually, with only new projects evaluated in exception years, and to reprioritize the CIP plan annually.

C. RANKINGS

Capital projects, as defined in paragraph A, will be evaluated according to the CIP Ranking Criteria. A project's overall score will be determined by calculating its score against each criterion. The scores of all projects will then be compared in order to provide recommendations to the Board of Supervisors. The components of the criteria and scoring scale will be included with the recommendation.

D. FUNDING LIMITS

On an annual basis, funds for capital projects will be limited based on the County's financial resources including tax and other revenues, grants and debt limitations, and other principles set forth in the Board of Supervisors' Statement of Fiscal Goals:

- general obligation debt and lease revenue debt may not exceed 3% of the assessed valuation of property,

- debt service costs are not to exceed 10-12% of total operation revenues, including school revenue, and
- debt per capita income is not to exceed $2,000 and debt as a percentage of income is not to exceed 7.5%.

Such limits are subject to restatement by the Board of Supervisors at their discretion. Projects identified in the CIP plan will be evaluated for the source or sources of funding available, and to protect the County's credit rating to minimize the cost of borrowing.

E. SCHEDULING OF PROJECTS

The CIP plan schedules will be developed based on the available funding and project ranking and will determine where each project fits in the 5 year plan.

CIP RANKING CRITERIA
Project Ranking By Areas of Emphasis

1. Quality of Life (20%) - Quality of life is a characteristic that makes the County a desirable place to live and work. For example, public parks, water amenities, multi-use trails, open space, and preservation of community character enhance the quality of life for citizens. A County maintenance building is an example of a project that may not directly affect the citizen's quality of life. The score will be based on the considerations, such as:

A. Is the project in conformance with and supportive of the goals, strategies and actions set forth in the Comprehensive Plan?
B. Does the project support objectives addressed in a County sponsored service plans, master plans, or studies?
C. Does the project relate to the results of the citizen survey, Board of Supervisors policy, or appointed committee or board?
D. Does the project increase or enhance educational opportunities?
E. Does the project increase or enhance recreational opportunities and/or green space?
F. Will the project mitigate blight?
G. Does the project target the quality of life of all citizens or does it target one demographic? Is one population affected positively and another negatively?
H. Does the project preserve or improve the historical, archeological and/or natural heritage of the County? Is it consistent with established Community Character?
I. Does the project affect traffic positively or negatively?
J. Does the project improve, mitigate, and / or prevent degradation of environmental quality (e.g. water quality, protect endangered species, improve or reduce pollution including noise and/or light pollution)?

Scoring Scale:

1	2	3	4	5	6	7	8	9	10
The project does not affect or has a negative affect on the quality of life in JCC.				The project will have some positive impact on quality of life.					The project will have a large positive impact on the quality of life in JCC.

2. Infrastructure (20%) – This element relates to infrastructure needs such as schools, waterlines, sewer lines, waste water or storm water treatment, street and other transportation facilities, and County service facilities. High speed, broadband or wireless communication capabilities would also be included in this element. Constructing a facility in excess of facility or service standards would score low in this category. The score will be based on considerations such as:

A. Is the project in conformance with and supportive of the goals, strategies and actions set forth in the Comprehensive Plan?
B. Does the project support objectives addressed in a County sponsored service plan, master plan, or study?
C. Does the project relate to the results of a citizen survey, Board of Supervisors policy, or appointed committee or board?
D. Is there a facility being replaced that has exceeded its useful life and to what extent?
E. Do resources spent on maintenance of an existing facility justify replacement?
F. Does this replace an outdated system?

G. Does the facility/system represent new technology that will provide enhance service?
H. Does the project extend service for desired economic growth?

Scoring Scale:

1	2	3	4	5	6	7	8	9	10
The level of need is low				There is a moderate level of need					The level of need is high, existing facility is no longer functional, or there is no facility to serve the need

3. Economic Development (15%) – Economic development considerations relate to projects that foster the development, re-development, or expansion of a diversified business/industrial base that will provide quality jobs and generate a positive financial contribution to the County. Providing the needed infrastructure to encourage redevelopment of a shopping center would score high in this category. Reconstructing a storm drain line through a residential neighborhood would likely score low in the economic development category. The score will be based on considerations such as:

A. Is the project in conformance with and supportive of the goals, strategies and actions set forth in the Comprehensive Plan?
B. Does the project support objectives addressed in a County sponsored service plan, master plan, or study?
C. Does the project relate to the results of a citizen survey, Board of Supervisors policy, or appointed committee or board?
D. Does the project have the potential to promote economic development in areas where growth is desired?
E. Will the project continue to promote economic development in an already developed area?
F. Is the net impact of the project positive? (total projected tax revenues of economic development less costs of providing services)
G. Will the project produce desirable jobs in the County?
H. Will the project rejuvenate an area that needs assistance?

Scoring Scale:

1	2	3	4	5	6	7	8	9	10
Project will not aid economic development				Neutral or will have some aid to economic development					Project will have a positive impact on economic development

4. Health/Public Safety (15%) - Health/public safety includes fire service, police service, safe roads, safe drinking water, fire flow demand, sanitary sewer systems and flood control. A health clinic, fire station or police station would directly impact the health and safety of citizens, scoring high in this category. Adding concession stands to an existing facility would score low in this category. The score will be based on considerations such as:

A. Is the project in conformance with and supportive of the goals, strategies and actions set forth in the Comprehensive Plan?
B. Does the project support objectives addressed in a County sponsored service plan, master plan, or study?

C. Does the project relate to the results of a citizen survey, Board of Supervisors policy, or appointed committee or board?
D. Does the project directly reduce risks to people or property (i.e. flood control)?
E. Does the project directly promote improved health or safety?
F. Does the project mitigate an immediate risk?

Scoring Scale:

1	2	3	4	5	6	7	8	9	10
Project has no or minimal impact on health/safety				Project has some positive impact on health/safety					Project has a significant positive impact on health/safety

5. Impact on Operational Budget (10%) – Some projects may affect the operating budget for the next few years or for the life of the facility. A fire station must be staffed and supplied; therefore it has an impact on the operational budget for the life of the facility. Replacing a waterline will not require any additional resources from the operational budget. The score will be based on considerations such as:

A. Is the project in conformance with and supportive of the goals, strategies and actions set forth in the Comprehensive Plan?
B. Does the project support objectives addressed in a County sponsored service plan, master plan, or study?
C. Does the project relate to the results of a citizen survey, Board of Supervisors policy, or appointed committee or board?
D. Will the new facility require additional personnel to operate?
E. Will the project lead to a reduction in personnel or maintenance costs or increased productivity?
F. Will the new facility require significant annual maintenance?
G. Will the new facility require additional equipment not included in the project budget?
H. Will the new facility reduce time and resources of city staff maintaining current outdated systems? This would free up staff and resources, having a positive effect on the operational budget.
I. Will the efficiency of the project save money?
J. Is there a revenue generating opportunity (e.g. user fees)?
K. Does the project minimize life-cycle costs?

Scoring Scale:

1	2	3	4	5	6	7	8	9	10
Project will have a negative impact on budget				Project will have neutral impact on budget					Project will have positive impact on budget or life-cycle costs minimized

6. Regulatory Compliance (10%) – This criterion includes regulatory mandates such as sewer line capacity, fire flow/pressure demands, storm water/creek flooding problems, schools or prisons. The score will be based on considerations such as:

A. Does the project addresses a legislative, regulatory or court-ordered mandate? (0- 5 years)
B. Will the future project impact foreseeable regulatory issues? (5-10years)

C. Does the project promote long-term regulatory compliance (>10 years)
D. Will there be a serious negative impact on the county if compliance is not achieved?
E. Are there other ways to mitigate the regulatory concern?

Scoring Scale:

1	2	3	4	5	6	7	8	9	10
Project serves no regulatory need				Project serves some regulatory need or serves a long-term need					Project serves an immediate regulatory need

7. Timing/Location (10%) - Timing and location are important aspects of a project. If the project is not needed for many years it would score low in this category. If the project is close in proximity to many other projects and/or if a project may need to be completed before another one can be started it would score high in this category. The score will should be based on considerations such as:

A. Is the project in conformance with and supportive of the goals, strategies and actions set forth in the Comprehensive Plan?
B. Does the project support objectives addressed in a County sponsored service plan, master plan, or study?
C. Does the project relate to the results of a citizen survey, Board of Supervisors policy, or appointed committee or board?
D. When is the project needed?
E. Do other projects require this one to be completed first?
F. Does this project require others to be completed first? If so, what is magnitude of potential delays (acquisition of land, funding, and regulatory approvals)?
G. Can this project be done in conjunction with other projects? (E.g. waterline/sanitary sewer/paving improvements all within one street)
H. Will it be more economical to build multiple projects together (reduced construction costs)?
I. Will it help in reducing repeated neighborhood disruptions?
J. Will there be a negative impact of the construction and if so, can this be mitigated?
K. Will any populations be positively/negatively impacted, either by construction or the location (e.g. placement of garbage dump, jail)?
L. Are there inter-jurisdictional considerations?
M. Does the project conform to Primary Service Area policies?
N. Does the project use an existing County-owned or controlled site or facility?
O. Does the project preserve the only potentially available/most appropriate, non-County owned site or facility for project's future use?
P. Does the project use external funding or is a partnership where funds will be lost if not constructed.

Scoring Scale:

1	2	3	4	5	6	7	8	9	10
No critical timing or location issues				Project timing OR location is important					Both project timing AND location are important

8. Special Consideration (*no weighting- if one of the below categories applies, project should be given special funding priority*) – Some projects will have features that may require that the County undertake the project immediately or in the very near future. Special considerations may include the following (check all applicable statement(s)):

A.	Is there an immediate legislative, regulatory, or judicial mandate which, if unmet, will result in serious detriment to the County, and there is no alternative to the project?	
B.	Is the project required to protect against an immediate health, safety, or general welfare hazard/threat to the County?	
C.	Is there a significant external source of funding that can only be used for this project and/or which will be lost if not used immediately (examples are developer funding, grants through various federal or state initiatives, and private donations)?	

Attachment 3: CIP Criteria Weighting Sheet

(Electronic version of this spreadsheet to be provided by email)

Policy Committee Member's Name: _____

Please fill in your score for each project in each of the evaluation criteria. Enter number in the white boxes. Spreadsheet will automatically apply weighting to your score and total each project score both with (yellow column) and without (green column) the "operating budget" criteria.

Project line #	Quality of Life	weighted (20%)	Infrastructure	weighted (20%)	Economic Development	weighted (15%)	Health/Public Safety	weighted (15%)	Impact on Operational Budget	weighted (10%)	Regulatory Compliance	weighted (10%)	Timing/Location	weighted (10%)	Special Considerations	Project Score (excluding operating budget)	Total Project Score	NOTES:
A		0		0		0		0		0		0		0		0	0	
B		0		0		0		0		0		0		0		0	0	
C		0		0		0		0		0		0		0		0	0	
D		0		0		0		0		0		0		0		0	0	
		0		0		0		0		0		0		0		0	0	
		0		0		0		0		0		0		0		0	0	
		0		0		0		0		0		0		0		0	0	

CIP Project Request Form

For Internal Use

Project ID: A

Please reference the document titled "INSTRUCTIONS FOR COMPLETING CAPITAL IMPROVEMENTS PROJECTS (CIP) REQUESTS" for guidance on the application.

Capital Projects - New or Expansion ☑ Capital Maintenance – New Project ☐ Capital Maintenance - Projects that are neither New nor expanding ☐

Project Title: Local match for VDOT's Revenue Sharing Program

Location: See Attachment A

Date: December 1, 2014

Department: Planning

Employee Submitting Request: Paul Holt

Included in Board's Current Adopted CIP? Yes ☐ No ☑

Department Priority No.: 1

Out of how many submittals? 1

Proposed Schedule/Cost

Date Improvements Begin: July 1, 2017

Design/Engineering Cost: See Attachment A

Date Improvements Completed: 2022

Construction Cost: See Attachment A

Useful Life of Facility/Equipment: 20 years

Previous Funding:

Dollars in Thousands	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Proposed Capital Budget	$ 0.00	$ 5,000,000.00	$ 5,000,000.00	$ 5,000,000.00	$ 5,000,000.00	$ 20,000,000.00
Expected additional Annual Operating Budget expenses incurred to directly support the new facility/equipment:	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Expected new Annual Revenue generated from the new facility/equipment:	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00

Project Narrative

The purpose of the narrative is to explain the proposal and provide an understanding of the life cycle cost (which is the sum of all recurring and one-time costs over the full life span of the project). Please explain in detail. Submit additional material as needed, including copies of engineering or feasibility studies.

(a) Current condition/situation: n/a

(b) Requested change/project description: See Attachment A

(c) Need for the project, benefit, and why is this the optimal solution: See Attachment A

(d) Recurring and one-time costs and if there is any residual or salvage value at the end of ownership: n/a

Evaluation Questions for Capital Projects – Not Necessary for Capital Maintenance

Questions	Y	N	Comments/Supporting Details
In General			
A. Is the project in conformance with and supportive of the goals, strategies, and actions set forth in the Comprehensive Plan?	☑	☐	
B. Does the project support objectives addressed in a County sponsored service plans, master plans, or studies?	☑	☐	
C. Does the project relate to the results of the citizen survey, Board of Supervisors policy, or appointed committee or board?	☑	☐	
1. Quality of Life			
D. Does the project increase or enhance educational opportunities?	☐	☑	
E. Does the project increase or enhance recreational opportunities and/or green space?	☐	☑	
F. Will the project mitigate blight?	☐	☑	
G. Does the project target the quality of life of all citizens or does it target one demographic? Is one population affected positively and another negatively?	☑	☐	Targets the quality of life for all citizens
H. Does the project preserve or improve the historical, archeological and/or natural heritage of the County? Is it consistent with established Community Character?	☐	☑	
I. Does the project affect traffic positively or negatively?	☑	☐	Positively
J. Does the project improve, mitigate, and/or prevent degradation of environmental quality (e.g. water quality, protect endangered species, improve or reduce pollution including noise and/or light pollution)?	☑	☐	
2. Infrastructure			
D. Is there a facility being replaced that has exceeded its useful life and to what extent?	☑	☐	
E. Do resources spent on maintenance of an existing facility justify replacement?	☐	☐	N/A
F. Does this replace an outdated system?	☑	☐	
G. Does the facility/system represent new technology that will provide enhanced service?	☐	☐	N/A
H. Does the project extend service for desired economic growth?	☑	☐	

3. Economic Development			
D. Does the project have the potential to promote economic development in areas where growth is desired?	☑	☐	
E. Will the project continue to promote economic development in an already developed area?	☑	☐	
F. Is the net impact of the project positive? (total projected tax revenues of economic development less costs of providing services)	☐	☐	N/A
G. Will the project produce desirable jobs in the County?	☐	☑	
H. Will the project rejuvenate an area that needs assistance?	☐	☑	
4. Health/Public Safety			
D. Does the project directly reduce risks to people or property (i.e. flood control)?	☑	☐	
E. Does the project directly promote improved health or safety?	☑	☐	
F. Does the project mitigate an immediate risk?	☐	☐	N/A
6. Impact on Operational Budget			
D. Will the new facility require additional personnel to operate?	☐	☑	
E. Will the project lead to a reduction in personnel or maintenance costs or increased productivity?	☐	☐	N/A
F. Will the new facility require significant annual maintenance?	☐	☐	N/A - VDOT maintained
G. Will the new facility require additional equipment not included in the project budget?	☐	☐	N/A - VDOT maintained
H. Will the new facility reduce time and resources of County staff maintaining current outdated systems? This would free up staff and resources, having a positive effect on the operational budget.	☐	☐	N/A - VDOT maintained
I. Will the efficiency of the project save money?	☐	☐	N/A
J. Is there revenue generating opportunity (e.g. user fees)?	☐	☑	
K. Does the project minimize life-cycle costs?	☐	☑	

6. Regulatory Compliance			
A. Does the project address a legislative, regulatory, or court-ordered mandate? (0 - 5 years)	☐	☑	
B. Will the future project impact foreseeable regulatory issues? (5 - 10 years)	☐	☑	
C. Does the project promote long-term regulatory compliance? (> 10 years)	☐	☑	
D. Will there be a serious negative impact to the County if compliance is not achieved?	☑	☐	
E. Are there other ways to mitigate the regulatory concern?	☐	☑	
7. Timing/Location			
D. When is the project needed?	☐	☐	Immediate need for stated improvements
E. Do other projects require this one to be completed first?	☐	☑	
F. Does this project require others to be completed first? If so, what is magnitude of potential delays (acquisition of land, funding, and regulatory approvals)?	☐	☑	
G. Can this project be done in conjunction with other projects: (e.g. waterline/sanitary sewer/paving improvements all within one street).	☐	☑	
H. Will it be more economical to build multiple projects together (reduced construction costs)?	☐	☑	
I. Will it help in reducing repeated neighborhood disruptions?	☐	☑	
J. Will there be a negative impact of the construction and if so, can this be mitigated?	☑	☐	
K. Will any populations be positively/negatively impacted, either by construction or the location (e.g. placement of garbage dump, jail)?	☑	☐	
L. Are there inter-jurisdictional considerations?	☐	☑	
M. Does the project conform to Primary Service Area policies?	☑	☐	
N. Does the project use an existing County-owned or controlled site or facility?	☐	☑	
O. Does the project preserve the only potentially available/most appropriate, non-County owned site or facility for project's future use?	☐	☐	N/A
P. Does the project use external funding or is a partnership where funds will be lost if not constructed?	☑	☐	This VDOT program matches county funding 1 for 1

8. *Special Considerations*			
A. Is there an immediate legislative, regulatory, or judicial mandate which, if unmet, will result in serious detriment to the County, and there is no alternative to the project?	☐	☑	
B. Is the project required to protect against an immediate health, safety, or general welfare hazard/threat to the County?	☐	☑	
C. Is there a significant external source of funding that can only be used for this project and/or which will be lost if not used immediately (examples are developer funding, grants through various Federal or State initiatives, and private donations)?	☑	☐	This VDOT program matches county funding 1 for 1

Signatures

Department Director Signature

Department Director Printed Name

County Administrator or CEO Signature

County Administrator or CEO Printed Name

Local match account for transportation system improvements.

Each year, federal and state agencies, including the Virginia Department of Transportation (VDOT), invite localities to participate in various programs that provide additional funding for transportation improvement projects along the primary and secondary system. Improvements to the roadway and within the right of way are very costly and have become increasingly complex, while general funding to the localities has decreased over time.

VDOT's local programs, such as Revenue Sharing, Access Programs, the Transportation Alternatives Program, and programs such as Congestion Mitigation and Air Quality (CMAQ) and Regional Surface Transportation Program (RSTP), all provide funding for local roadway improvements, but may require a minimum 20-50% local match. Leveraging local dollars with programs that provide a one-to-one match or that provide a four-to-one match provides a way to access these state and federal funds for additional revenue with which to complete construction projects, reconstruction projects, improvement projects and/or maintenance projects.

Specific projects would be selected by the Board of Supervisors and staff recommends using this CIP project for the match funds beginning in FY17.

There are currently $189 million worth of programmed roadway improvements in JCC. Funding anticipated from Federal and State resources thru FY22 totals just over $58 million (i.e., Funding is only 30% of our need). At the present time, utilizing VDOT's RevShare program, and leveraging State funds on a 1 to 1 match, appears to be the most feasible way of being able to ever complete our needed road improvement projects.

Year 1 (FY17): Phase IA of Longhill Road
Year 2: Phase IB of Longhill Road
Year 3: Pocahontas Trail Multimodal Improvements
Year 4: Croaker Road Widening
Year 5: Hicks Island Road Bridge Replacement over Diascund

CIP Project Request Form

For Internal Use

Project ID: B

Please reference the document titled "INSTRUCTIONS FOR COMPLETING CAPITAL IMPROVEMENTS PROJECTS (CIP) REQUESTS" for guidance on the application.

Capital Projects - New or Expansion [✓] Capital Maintenance – New Project [ ] Capital Maintenance - Projects that are neither New nor expanding [ ]

Project Title: Community Gym

Location: Warhill Sports Complex

Date: December 5, 2014

Department: Parks and Recreation

Employee Submitting Request: Nancy Ellis

Included in Board's Current Adopted CIP? Yes [ ] No [✓]

Department Priority No.: 1

Out of how many submittals? 2

Proposed Schedule/Cost

Date Improvements Begin: July 1, 2016

Design/Engineering Cost: 133,000

Date Improvements Completed: June 30, 2018

Construction Cost: 6,815,000

Useful Life of Facility/Equipment: 25 years

Previous Funding: 0

Dollars in Thousands	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Proposed Capital Budget		$ 7,000,000.00				$ 7,000,000.00
Expected additional Annual Operating Budget expenses incurred to directly support the new facility/equipment:				$ 193,154.00		$ 193,154.00
Expected new Annual Revenue generated from the new facility/equipment:				$ 73,000.00		$ 73,000.00

Project Narrative

The purpose of the narrative is to explain the proposal and provide an understanding of the life cycle cost (which is the sum of all recurring and one-time costs over the full life span of the project). Please explain in detail. Submit additional material as needed, including copies of engineering or feasibility studies.

(a) Current condition/situation: Due to changes in VHSL regulations regarding athletic practices and a lack of available coaches during afterschool hours,

(b) Requested change/project description: Increase cost of construction and redesign based on current building codes and construction costs.

(c) Need for the project, benefit, and why is this the optimal solution: The Community gym will support the County's efforts in Sports Tourism by creating a venue

(d) Recurring and one-time costs and if there is any residual or salvage value at the end of ownership: Annual operation $193,154

Evaluation Questions for Capital Projects – Not Necessary for Capital Maintenance

Questions	Y	N	Comments/Supporting Details
In General			
A. Is the project in conformance with and supportive of the goals, strategies, and actions set forth in the Comprehensive Plan?	☑	☐	
B. Does the project support objectives addressed in a County sponsored service plans, master plans, or studies?	☑	☐	Warhill Master Plan and Parks & Recreation Master Plan
C. Does the project relate to the results of the citizen survey, Board of Supervisors policy, or appointed committee or board?	☑	☐	Citizen Surveys and requests from schools and partner groups for space
1. Quality of Life			
D. Does the project increase or enhance educational opportunities?	☑	☐	
E. Does the project increase or enhance recreational opportunities and/or green space?	☑	☐	
F. Will the project mitigate blight?	☐	☑	
G. Does the project target the quality of life of all citizens or does it target one demographic? Is one population affected positively and another negatively?	☑	☐	
H. Does the project preserve or improve the historical, archeological and/or natural heritage of the County? Is it consistent with established Community Character?	☑	☐	
I. Does the project affect traffic positively or negatively?	☐	☐	NA
J. Does the project improve, mitigate, and/or prevent degradation of environmental quality (e.g. water quality, protect endangered species, improve or reduce pollution including noise and/or light pollution)?	☐	☑	
2. Infrastructure			
D. Is there a facility being replaced that has exceeded its useful life and to what extent?	☐	☑	
E. Do resources spent on maintenance of an existing facility justify replacement?	☐	☐	NA
F. Does this replace an outdated system?	☐	☐	NA
G. Does the facility/system represent new technology that will provide enhanced service?	☐	☐	NA
H. Does the project extend service for desired economic growth?	☑	☐	

3. Economic Development			
D. Does the project have the potential to promote economic development in areas where growth is desired?	☑	☐	Sports Tourism
E. Will the project continue to promote economic development in an already developed area?	☑	☐	
F. Is the net impact of the project positive? (total projected tax revenues of economic development less costs of providing services)	☑	☐	
G. Will the project produce desirable jobs in the County?	☐	☑	
H. Will the project rejuvenate an area that needs assistance?	☐	☑	
4. Health/Public Safety			
D. Does the project directly reduce risks to people or property (i.e. flood control)?	☑	☐	
E. Does the project directly promote improved health or safety?	☑	☐	
F. Does the project mitigate an immediate risk?	☐	☑	
5. Impact on Operational Budget			
D. Will the new facility require additional personnel to operate?	☑	☐	seasonal staff and custodial support
E. Will the project lead to a reduction in personnel or maintenance costs or increased productivity?	☐	☑	
F. Will the new facility require significant annual maintenance?	☑	☐	
G. Will the new facility require additional equipment not included in the project budget?	☐	☑	
H. Will the new facility reduce time and resources of County staff maintaining current outdated systems? This would free up staff and resources, having a positive effect on the operational budget.	☑	☐	centralizing practices from schools throughout the county will provide a more efficient means of scheduling and monitoring of gym activities as well as reduce the needs for custodians in schools at night
I. Will the efficiency of the project save money?	☑	☐	
J. Is there revenue generating opportunity (e.g. user fees)?	☑	☐	Rental fees and program fees
K. Does the project minimize life-cycle costs?	☑	☐	

6. Regulatory Compliance			
A. Does the project address a legislative, regulatory, or court-ordered mandate? (0 - 5 years)	☐	☑	
B. Will the future project impact foreseeable regulatory issues? (5 - 10 years)	☐	☑	
C. Does the project promote long-term regulatory compliance? (> 10 years)	☐	☑	
D. Will there be a serious negative impact to the County if compliance is not achieved?	☐	☑	
E. Are there other ways to mitigate the regulatory concern?	☐	☑	
7. Timing/Location			
D. When is the project needed?	☐	☐	Project is requested to begin July 2016 and will take approx. 21-24 months t
E. Do other projects require this one to be completed first?	☐	☑	
F Does this project require others to be completed first? If so, what is magnitude of potential delays (acquisition of land, funding, and regulatory approvals)?	☐	☑	
G. Can this project be done in conjunction with other projects: (e.g. waterline/sanitary sewer/paving improvements all within one street).	☐	☑	
H. Will it be more economical to build multiple projects together (reduced construction costs)?	☐	☑	
I. Will it help in reducing repeated neighborhood disruptions?	☐	☐	NA
J. Will there be a negative impact of the construction and if so, can this be mitigated?	☑	☐	
K. Will any populations be positively/negatively impacted, either by construction or the location (e.g. placement of garbage dump, jail)?	☐	☑	
L. Are there inter-jurisdictional considerations?	☑	☐	potentially with schools and City of Williamsburg
M. Does the project conform to Primary Service Area policies?	☑	☐	
N. Does the project use an existing County-owned or controlled site or facility?	☑	☐	Warhill Sports Complex
O. Does the project preserve the only potentially available/most appropriate, non-County owned site or facility for project's future use?	☐	☐	NA
P. Does the project use external funding or is a partnership where funds will be lost if not constructed?	☐	☑	

8. Special Considerations			
A. Is there an immediate legislative, regulatory, or judicial mandate which, if unmet, will result in serious detriment to the County, and there is no alternative to the project?	☐	☑	
B. Is the project required to protect against an immediate health, safety, or general welfare hazard/threat to the County?	☐	☑	
C. Is there a significant external source of funding that can only be used for this project and/or which will be lost if not used immediately (examples are developer funding, grants through various Federal or State initiatives, and private donations)?	☐	☑	

Signatures

Department Director Signature

JOHN CARNIFAX

Department Director Printed Name

County Administrator or CEO Signature

BRYAN HILL

County Administrator or CEO Printed Name

Field house associated with public/private partnership.

Community Gym Comments:

A. Due to changes in VHSL regulations regarding athletic practices and a lack of available coaches during afterschool hours, schools have expanded practice and playing time in gyms, thus reducing the amount of available time and space for community youth athletic organizations which are growing by 15-20% annually in participation.
B. Increase cost of construction and redesign based on current building codes and construction costs.
C. The Community gym will support the County's efforts in Sports Tourism by creating a venue that will bring visitors to our area during what is considered "off peak" times for hotel and restaurants and other attractions. A centralized facility that is located within a recognized sports tourism destination as well as savings from shared areas and resources makes this an optimal location and attraction. The ability to address the growing needs of our community athletic organizations demonstrates the County's commitment to provide safe, secure facilities which encourage the positive physical and mental health of our youth.
D. Annual operation $193,154

Operations for Gym at WSC						
Staffing Labor Day to Mem Day 41 wks	**Operating Hours**	**Staff hours**	**Hours**			
Monday	3pm-10pm	2:30-10:30pm	8			
Tuesday	3pm-10pm	2:30-10:30pm	8			
Wednesday	3pm-10pm	2:30-10:30pm	8			
Thursday	3pm-10pm	2:30-10:30pm	8			
Friday	3pm-10pm	2:30-10:30pm	8			
Set-ups		2:30-8:30pm	14			
Saturday	9am-5pm	8:30-5:30pm	9			
Sunday	12pm-7pm	11:30-7:30pm	8			
Additional Rental hours			5			
			76			
		X 41 weeks	3116			
Staffing Summer 11 wks	**Operating Hours**	**Staff hours**	**Hours**			
Monday	9am-5pm	8:30-5:30pm	8			
Tuesday	9am-5pm	8:30-5:30pm	8			
Wednesday	9am-5pm	8:30-5:30pm	8			
Thursday	9am-5pm	8:30-5:30pm	8			
Friday	9am-5pm	8:30-5:30pm	8			
Saturday	9am-5pm	8:30-5:30pm	9			
Sunday	Closed					
Additional Rental hours			5			
			54			
		X 11 weeks	594			
Park Attendant I		Total Hours PA I	3710	X $15 per hour=		55,650.00
General Services Costs	1.5 full time custodians		3120	x$15 per hour =		46,800.00
	Facilities Specialist Sr @ 10%					3,443.00
				Total		105,893.00
Operating Costs						
203 Contractual Services	$2,400.00	Security & Window Cleaning				
207 Utilities	$60,160.00	1.88 per Square foot per GS				
215 Equipment Maintenance	$8,500.00	Most under warranty but does not always include travel for repair calls, $8000 per GS $500 for P&R				
216 Building Maintenance	$2,500.00	$320 pest control, $1400 auto door openers, $200 fire extingushers GS & Misc.				
219 Telephone	$200.00	P&R & GS cell phones				
306 Housekeeping	$2,100.00	$1600 supplies, $500 deep clean floors, showers per GS				
316 Medical Supplies	$100.00	P&R				
318 Operating Supplies	$1,500.00	Sports equipment, balls, tools, misc. P&R				
319 Office Supplies	$400.00	P&R, $50 for GS				
325 Clothing	$450.00	shoes GS				
326 Uniform Rental	$1,450.00	custodian, GS				
420 Furntiture /Equipment	$5,000.00	Floor machine GS				
210 Insurance	$2,500.00	per VML				
	$87,260.00					
Total Budget	$193,153.00					
Projected Revenue	$72,500.00	$1500/day x 15 2 day tournaments, $8,000 in sports camps and hourly rentals, $75 per court per hour X 260 hours ($19,500)				
Net Funding	$120,653.00					

HOPKE & ASSOCIATES
ARCHITECTURE/PLANNING/INTERIORS

December 4, 2014

Shawn Gordon Project Coordinator
James City County Department of General Services
Tewning Road
Williamsburg, VA 23188
via: email

re: JCC Community Gymnasium
H&A #27040

Dear Shawn,

In follow up to our telephone conversation regarding the above referenced project, we and our consultant, Clough Harbour & Associates, have assembled estimates to assist you in proposing a reasonable budget for re-activating it. The Architectural and Engineering Services had been completed through Construction Documents, but had not been submitted for bids or permits, in 2009. The fees in the contract that remain unbilled (Bidding, Construction, and Closeout) amounted to:

$71,600

Construction Costs:

At that time, the A/E construction cost estimate was:

$5.7m: base bid
$5.6m: base bid less deductive alternates

Attached is a spreadsheet where that estimate has been updated by escalating the total amounts with an historical index factor (from RS Means) and a small allowance for increased costs due to the new code that is in force. The new amounts are:

$6.6m: base bid
$6.5m: base bid less deductive alternates

A/E Fees:

Additional A/E Fees would be required to review and update the drawings. There were fairly significant changes made in the most recent update of the building code, most notably in the new Virginia Energy Code. There were also significant changes to stormwater regulations and, since the site plan approval has expired, those will have to be incorporated. Finally, our overhead costs have risen since the contract was awarded in 2007, escalating our expenses for the remaining unbilled services. While it is difficult to know the precise impact on the re-design effort, a good faith estimate is as follows:

1156 Jamestown Road, Suite C
Williamsburg, VA 23185
p(757)229-1100
f(757)229-0869
www.hopke.com

Civil/Site	
Update Stormwater Mgt (New Regs)	$7,500
Re-approval Coordination	$2,000
Building Plans	
Review and identify changes for current code	
Architectural	$4,000
Structural	$2,000
Mechanical/Plumbing	$3,500
Electrical	$2,000
Modification of Plans	
All Disciplines	$24,000
Escalation of A/E Bidding&Construction Admin	
12% of original fee	$8,592
Total	**$53,592**

LEED Expenses:

Additionally the LEED evaluation system had a significant update, which will require a significant re-evaluation and additional registration fees. We have estimated those as follows:

Additional LEED expenses	
Re-registration (net increase of reg'n fee)	$2,500
Re-evaluate point strategy	$500
Amend Specifications for new requirements	$4,000
	$7,000

I hope these estimates will provide you the assistance you needed. Let me know if there is anything else you need. Thanks again,

Very truly yours,
HOPKE & ASSOCIATES, Inc.

John A. Hopke, RA
Principal

cc: Dave Barlow, CHA
Encl:

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JCC Community Gymnasium
H&A #27040
12/9/2009 with amendments on 2014-12-04

Budgetary Cost Estimate
Hard Costs

Item		Qty	Unit	Unit Price	Cost	Totals
General Items						
	Mobilization	1.0	ls	$ 5,000.00	$ 5,000	
	Traffic/Pedestrian Control	1.0	ls	$ 2,000.00	$ 2,000	
Sitework						
	Sitework	1.0	ls	$ 100,000.00	$ 100,000	
	Geothermal Wells	36,000.0	lf	$ 15.00	$ 540,000	
Building Items						
	Sitework and Earthwork					
	Grubbing	1,385.0	cy	$ 2.00	$ 2,770	
	Select Fill Material	2,770.0	cy	$ 10.00	$ 27,700	
	Fine Grade Pad	4,155.0	sy	$ 2.00	$ 8,310	
	Footing Excavation	880.0	cy	$ 6.00	$ 5,280	
	Haul Excess Material	625.0	cy	$ 5.00	$ 3,125	
	Concrete					
	Stairs	40.0	lfn	$ 50.00	$ 2,000	
	Stair Railings	16.0	lf	$ 50.00	$ 800	
	Column Footings	13.0	ea	$ 167.00	$ 2,171	
	Wall Footings	218.0	lf	$ 39.50	$ 8,611	
	Foundation CMU	1,620.0	sf	$ 12.50	$ 20,250	
	Perimeter Insulation	1,620.0	sf	$ 1.80	$ 2,916	
	Granular Base	31,400.0	sf	$ 0.60	$ 18,840	
	Vapor Barrier	31,400.0	sf	$ 0.20	$ 6,280	
	Concrete Slab	31,400.0	sf	$ 2.52	$ 79,128	
	Expansion Material	1,605.0	lf	$ 1.75	$ 2,809	
	Masonry					
	Cavity Veneer Wall	15,000.0	sf	$ 14.00	$ 210,000	
	CMU Insulation	6,700.0	sf	$ 1.75	$ 11,725	
	Cold Formed Framing Trusses	104.0	ea	$ 200.00	$ 20,800	
	Roof Sheathing	2,800.0	sf	$ 1.50	$ 4,200	
	Batt Insulation	28.0	sf	$ 1.25	$ 35	
	Envelope					
	Architectural Metal Roof	29,660.0	sf	$ 5.25	$ 155,715	
	Steel Framing	6.0	ton	$ 3,400.00	$ 20,400	
	Bar Joists	5.5	ton	$ 2,600.00	$ 14,300	
	Roof Deck	4,254.0	sf	$ 2.40	$ 10,210	
	Rigid Roof Insulation	4,254.0	ea	$ 1.18	$ 5,020	
	Roof Membrane	4,254.0	sf	$ 2.59	$ 11,018	
	Green Roof Material	3,340.0	sf	$ 30.00	$ 100,200	
	Metal Flashing	1,500.0	sf	$ 6.00	$ 9,000	
	Gutters	465.0	lf	$ 5.60	$ 2,604	
	Downspouts	371.0	lf	$ 3.58	$ 1,328	
	Storefront	1,416.0	sf	$ 43.15	$ 61,100	
	Dasher Board	52.0	ea	$ 162.94	$ 8,473	
	Single Doors & Frames	15.0	ea	$ 995.00	$ 14,925	
	Double Doors & Frames	23.0	ea	$ 2,033.00	$ 46,759	
	Finishes					
	Pedimat	90.0	sf	$ 3.89	$ 350	
	Carpet Flooring	245.0	sy	$ 30.03	$ 7,357	
	Resilient Base	580.0	lf	$ 2.22	$ 1,288	
	Epoxy Flooring	1,590.0	sf	$ 5.67	$ 9,015	
	Epoxy Integral Base	560.0	lf	$ 4.67	$ 2,615	
	HPC Wall	12,350.0	sf	$ 2.52	$ 31,122	

	Maple Flooring (Gym) including base	23,800.0 sf	$ 13.00	$ 309,400	
	Countertop	12.0 lf	$ 90.00	$ 1,080	
	Metal Bldg Liner Panels	2,356.0 sf	$ 3.28	$ 7,728	
	Metal Bldg Acoustical Lines Panels	52.0 ea	$ 168.94	$ 8,785	
	Polished Concrete	1,519.0 sf	$ 5.75	$ 8,734	
	Gypsum ceilings	3,852.0 sf	$ 2.64	$ 10,169	
	Glass Block	16.0 sf	$ 25.20	$ 403	
	ACT & Grid System	808.0 sf	$ 2.49	$ 2,012	
	Coffer Ceiling System	588.0 sf	$ 45.00	$ 26,460	
	Painting Ceilings	3,852.0 sf	$ 1.30	$ 5,008	
Specialties					
	Lockers	100.0 ea	$ 447.00	$ 44,700	
	Metal Building	23,800.0 sf	$ 21.00	$ 499,800	
	HUVCO Light Panels (Roof)	16.0 ea	$ 1,500.00	$ 24,000	
	Solatube Units	6.0 ea	$ 500.00	$ 3,000	
	Column Surrounds	13.0 ea	$ 500.00	$ 6,500	
	Snow Guards	2,188.0 ea	$ 4.08	$ 8,927	
	Trellis Steel Beam	178.0 lf	$ 25.00	$ 4,450	
	Trellis Members	1,229.0 lf	$ 20.00	$ 24,580	
	Backboard (manual)	6.0 ea	$ 11,500.00	$ 69,000	
	Wrestling Mat Hosit	1.0 ea	$ 16,000.00	$ 16,000	
	Divider Curtain	2.0 ea	$ 23,000.00	$ 46,000	
	Volleyball sleeves	6.0 ea	$ 1,000.00	$ 6,000	
	Tip -N-Roll Seating (5 rows)	20.0 ea	$ 2,400.00	$ 48,000	
	Scoreboard	6.0 ea	$ 5,090.00	$ 30,540	
	-Wireless transmitters	6.0 ea	$ 475.00	$ 2,850	
	-Wireless receivers	12.0 ea	$ 350.00	$ 4,200	
	Shot Clock	3.0 pr	$ 2,640.00	$ 7,920	
Systems					
	Plumbing	31,700.0 sf	$ 8.75	$ 277,375	
	HVAC	31,700.0 sf	$ 20.00	$ 634,000	
	Electrical	31,700.0 sf	$ 9.85	$ 312,245	
	Close-out	1.0 ls	$ 25,000.00	$ 25,000	
					$ 4,072,415
Mark-ups					$ 4,072,415
	Taxes on Building Materials, roughly			2.25%	$ 91,629
	Subtotal				$ 4,164,044
	Design Contingency			10.00%	$ 416,404
	General Contractor Overhead and Profit			25.00%	$ 1,145,112
	Total Base Bid				**$ 5,725,561**
Deductive Alternates					
	Alternate Green Roof	2,050.0 sf	$ 30.00	$ 61,500.00	
	Alternate Trellis System				
	-Trellis Steel Beam	75.0 lf	$ 25.00	$ 1,875.00	
	-Trellis Members	736.0 lf	$ 20	$ 14,720.00	
	-Column Surrounds	3.0 ea	$ 500.00	$ 1,500.00	
					$ 79,595.00
Mark-ups					$ 79,595.00
	Taxes on Building Materials, roughly			2.25%	$ 1,791
	Subtotal				$ 81,386
	Design Contingency			10.00%	$ 8,139
	General Contractor Overhead and Profit			25.00%	$ 22,381
	Total Alternate Deduct				$ 111,906
	Base Bid less Alternates				**$ 5,613,655**
Escalation for Update 2014-12-04					
	Historical Cost Index (RS Means):			112%	

Estimated Increase due to new Code	3%	
	115%	
Base Bid with Escalation:		**$6,605,088.04**
Base Bid less Alternates, with Escalation:		**$6,475,992.15**

James City County

Community Gymnasium

Supplemental Project Costs Not Covered in Architectural Estimate

Service	**Current Estimate**	**FY17 Estimate - 6%**
Air Barrier Inspections	$34,500.00	$36,570.00
Enhanced Commissioning Services	$24,500.00	$25,970.00
Special Inspections - Agent 1	$18,500.00	$19,610.00
Special Inspections - Agent 2	$35,000.00	$37,100.00
Third Party Roofing Inspections	$12,325.00	$13,064.50
Construction Photo Documentation	$10,875.00	$11,527.50
Utility Connection Fees		
JCSA - 2" WM, Water & Sewer	$54,615.00	$57,891.90
Dominion Power	$15,000.00	$15,900.00
Virginia Natural Gas	$7,500.00	$7,950.00
Cox Communication - Fiber	$15,000.00	$15,900.00
Telecommunications, Coax, Phone	$15,000.00	$15,900.00
Media Equipment	$30,000.00	$31,800.00
Door Access Controls	$20,000.00	$21,200.00
FFE - Basic	$30,000.00	$31,800.00
Total		**$342,183.90**

Community Gym Overall Project Estimate

HOPKE & Associates Estimate (Includes Escalation % Alternatives)		$6,605,088.04
Supplemental Project Costs		$342,183.90
Total		**$6,947,271.94**

CIP Project Request Form

For Internal Use
Project ID: C

Please reference the document titled "INSTRUCTIONS FOR COMPLETING CAPITAL IMPROVEMENTS PROJECTS (CIP) REQUESTS" for guidance on the application.

Capital Projects - New or Expansion ☐ Capital Maintenance – New Project ☐ Capital Maintenance - Projects that are neither New nor expanding ☐

Project Title: TMDL Action Plan Implementation

Location: Clara Byrd Baker ES & James River ES Stormwater Upgrades & Jamestown Rd, Essex Ct, Winston Terr & Yarmouth Tribs Stream Rest.

Date: 12/5/14

Department: General Services

Employee Submitting Request: Frances Geissler

Included in Board's Current Adopted CIP? Yes ☑ No ☐

Department Priority No.: 1

Out of how many submittals? 2

Proposed Schedule/Cost

Date Improvements Begin: 7/1/15

Design/Engineering Cost: $209,661

Date Improvements Completed: 10/2016

Construction Cost: $873,656

Useful Life of Facility/Equipment: 20 years

Previous Funding: $300,000 in approved FY16 for TMDL Impl

Dollars in Thousands	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Proposed Capital Budget	$ 1,083,317.00					$ 1,083,317.00
Expected additional Annual Operating Budget expenses incurred to directly support the new facility/equipment:	$ 0.00					$ 0.00
Expected new Annual Revenue generated from the new facility/equipment:	$ 0.00					$ 0.00

Project Narrative

The purpose of the narrative is to explain the proposal and provide an understanding of the life cycle cost (which is the sum of all recurring and one-time costs over the full life span of the project). Please explain in detail. Submit additional material as needed, including copies of engineering or feasibility studies.

(a) Current condition/situation: Outdated, failed stormwater facilities at school sites, eroding stream channels - sites contribute pollution to CO waterways.
(b) Requested change/project description: This funding is for 6 projects that will continue implementation of the Chesapeake Bay TMDL.
(c) Need for the project, benefit, and why is this the optimal solution: Projects were selected based on ability to reduce pollution and meet permit goals
(d) Recurring and one-time costs and if there is any residual or salvage value at the end of ownership: 0

Evaluation Questions for Capital Projects – Not Necessary for Capital Maintenance

Questions	Y	N	Comments/Supporting Details
In General			
A. Is the project in conformance with and supportive of the goals, strategies, and actions set forth in the Comprehensive Plan?	☑	☐	Project supports ENV1.1.2; env 1.1.9; env1.3.1; env1.16
B. Does the project support objectives addressed in a County sponsored service plans, master plans, or studies?	☑	☐	Ches Bay TMDL; Powhatan, Mill & Yarmouth WS Mgmt Plans; Mill -Powhatan TMDL
C. Does the project relate to the results of the citizen survey, Board of Supervisors policy, or appointed committee or board?	☑	☐	Approved by Board appointed Stormwater Program Advisory Com 9/24/13
1. Quality of Life			
D Does the project increase or enhance educational opportunities?	☑	☐	Interpretive signs at school sites and in residential neighborhoods
E Does the project increase or enhance recreational opportunities and/or green space?	☑	☐	Will improve water quality in County waterways & Chesapeake Bay
F Will the project mitigate blight?	☑	☐	will improve & repurpose an area used for illegal trash dumping
G Does the project target the quality of life of all citizens or does it target one demographic? Is one population affected positively and another negatively?	☑	☐	Improves conditions for residents and all other who boat, fish or recreate along County creeks. There are no negative impacts
H Does the project preserve or improve the historical, archeological and/or natural heritage of the County? Is it consistent with established Community Character?	☑	☐	Restores the County's Clean Water Heritage by restoring habitat and water q
I. Does the project affect traffic positively or negatively?	☐	☑	no impact
J Does the project improve, mitigate, and/or prevent degradation of environmental quality (e g water quality, protect endangered species, improve or reduce pollution including noise and/or light pollution)?	☑	☐	Will improve water quality in 4 local streams & the Chesapeake Bay which do not currently meet state water quality standards for contact recreation or fishing
2. Infrastructure			
D. Is there a facility being replaced that has exceeded its useful life and to what extent?	☑	☐	Antiquated and failed stormwater facilities at Clara Byrd Baker and James River ESs - System will be upgraded rather than just replaced
E. Do resources spent on maintenance of an existing facility justify replacement?	☑	☐	Existing facilities are undersized and inadequately managing runoff
F. Does this replace an outdated system?	☑	☐	Existing facilities are undersized and inadequately managing runoff
G. Does the facility/system represent new technology that will provide enhanced service?	☑	☐	Replacement will be state of the art design
H. Does the project extend service for desired economic growth?	☑	☐	Will provide adequate treatment to meet future redevelopment needs

3. Economic Development			
D. Does the project have the potential to promote economic development in areas where growth is desired?	☑	☐	Will provide adequate treatment to meet future redevelopment needs
E. Will the project continue to promote economic development in an already developed area?	☑	☐	Will provide adequate treatment to meet future redevelopment needs
F. Is the net impact of the project positive? (total projected tax revenues of economic development less costs of providing services)	☑	☐	Will provide adequate treatment to meet future redevelopment needs
G. Will the project produce desirable jobs in the County?	☐	☑	no impact
H. Will the project rejuvenate an area that needs assistance?	☑	☐	Will improve neighborhood reputations and reduce trash dumping
4. Health/Public Safety			
D. Does the project directly reduce risks to people or property (i.e. flood control)?	☑	☐	Sediment scour is damaging downstream properties
E. Does the project directly promote improved health or safety?	☑	☐	Improved water quality so less chance of illness for boaters and swimmers
F. Does the project mitigate an immediate risk?	☑	☐	Sediment scour damaging properties, Improved water quality -less illness fo
5. Impact on Operational Budget			
D. Will the new facility require additional personnel to operate?	☐	☑	
E Will the project lead to a reduction in personnel or maintenance costs or increased productivity?	☐	☑	
F Will the new facility require significant annual maintenance?	☐	☑	
G Will the new facility require additional equipment not included in the project budget?	☐	☑	
H. Will the new facility reduce time and resources of County staff maintaining current outdated systems? This would free up staff and resources, having a positive effect on the operational budget.	☑	☐	Fewer citizen complaints re uncontrolled runoff
I Will the efficiency of the project save money?	☑	☐	Projects have a low cost-per-pound pollutant reduced and grant funding
J. Is there revenue generating opportunity (e.g user fees)?	☐	☑	
K. Does the project minimize life-cycle costs?	☑	☐	low maintenance solutions will be installed

6. *Regulatory Compliance*			
A. Does the project address a legislative, regulatory, or court-ordered mandate? (0 - 5 years)	☑	☐	MS4 Permit VAR040037, Special Conditions 2 & 3 for TMDLs
B. Will the future project impact foreseeable regulatory issues? (5 - 10 years)	☑	☐	Reduce implementation costs in MS4 permit cycle beginning 7/1/2018
C. Does the project promote long-term regulatory compliance? (> 10 years)	☑	☐	Implements the Ches Bay TMDL
D. Will there be a serious negative impact to the County if compliance is not achieved?	☑	☐	Increased future obligations and potential fines - re MS4 permit
E. Are there other ways to mitigate the regulatory concern?	☐	☑	
7. *Timing/Location*			
D. When is the project needed?	☑	☐	Would like to start engineering as soon as possible
E. Do other projects require this one to be completed first?	☐	☑	
F. Does this project require others to be completed first? If so, what is magnitude of potential delays (acquisition of land, funding, and regulatory approvals)?	☐	☑	
G. Can this project be done in conjunction with other projects. (e.g. waterline/sanitary sewer/paving improvements all within one street)	☑	☐	Every effort will be made to combine efforts at each site
H. Will it be more economical to build multiple projects together (reduced construction costs)?	☑	☐	Possibly for 2 of the 6 sites
I. Will it help in reducing repeated neighborhood disruptions?	☑	☐	less localized flooding
J. Will there be a negative impact of the construction and if so, can this be mitigated?	☑	☐	we will work with schools and the neighborhoods to identify concerns early
K. Will any populations be positively/negatively impacted, either by construction or the location (e.g. placement of garbage dump, jail)?	☐	☑	
L. Are there inter-jurisdictional considerations?	☐	☑	
M. Does the project conform to Primary Service Area policies?	☑	☐	
N. Does the project use an existing County-owned or controlled site or facility?	☑	☐	
O. Does the project preserve the only potentially available/most appropriate, non-County owned site or facility for project's future use?	☐	☑	Do not understand question
P. Does the project use external funding or is a partnership where funds will be lost if not constructed?	☑	☐	Stormwater Local Assistance Funds (SLAF) have been requested

B. Special Considerations			
A. Is there an immediate legislative, regulatory, or judicial mandate which, if unmet, will result in serious detriment to the County, and there is no alternative to the project?	☑	☐	MS4 Permit VAR040037, Special Conditions 2 & 3 for TMDLs - we either implement now or later but we will need to do it
B. Is the project required to protect against an immediate health, safety, or general welfare hazard/threat to the County?	☑	☐	localized flooding, erosion of property
C. Is there a significant external source of funding that can only be used for this project and/or which will be lost if not used immediately (examples are developer funding, grants through various Federal or State initiatives, and private donations)?	☑	☐	Expect SLAF grant award in early 2015

Signatures

Department Director Signature

JOHN TP HORNE

Department Director Printed Name

County Administrator or CEO Signature

County Administrator or CEO Printed Name

FY16 CIP Project Request Backup – TMDL Action Plan Implementation

The purpose of this request is to ensure adequate funding to accept grant funds and implement projects that provide credit to meet the Chesapeake Bay and Mill-Powhatan Bacteria TMDLs as required by the County's MS4 Permit. Specific projects were listed in the original FY15-16 CIP request. This request is for adequate funding to bring those projects to completion. This request also provides funding to begin development of future projects to meet the increasing permit requirements regarding pollution reductions.

The Commonwealth of Virginia, on behalf of the Chesapeake Bay TMDL and other TMDLs, has committed to a 5% reduction in pollutants from urban areas by June 2018. By June 2023, the Commonwealth is committed to a 40% reduction. These reductions are, and will be, written into the County's 5-year MS4 Permits. While this request does not include funding beyond FY16, The County's Chesapeake Bay TMDL Action Plan will be completed by June 2015 and will provide a roadmap of projects needed for the period of FY17-21. The FY17-18 CIP request will be based on the Chesapeake Bay TMDL Action Plan as well as anticipated projects to meet the Mill-Powhatan Creeks Bacteria TMDL Action Plan.

Current Permit Project Implementation: The FY15 capital budget included $989,000 for water quality projects and $511,000 for upgrades to public facilities to meet the pollution prevention requirements of the County's MS4 Permit. Of the $989,000, $655,000 is state funds committed through the VA Department of Environmental Quality (DEQ) Stormwater Local Assistance Fund (SLAF). The SLAF grant requires a 50% match so the actual value of the funded projects exceeds $1,300,000. The new County funds, $334,000, do not cover the County's share of the grant funded projects. As the grant projects have moved forward in design and development it has become clear that some project costs exceed the original estimates and available funds are inadequate to complete the committed projects.

On October 31, 2014, the Stormwater Division submitted a second application to the SLAF for $1,083,317 to fund TMDL implementation projects worth $2,166,634. Notification of grant commitments is expected in January. As of today, we only have adequate funds to begin design on the projects submitted in the second application. We can reallocate some funds needed to complete the current SLAF projects to keep the new projects moving forward but we will need to replace those funds in order to complete the current SLAF projects.

The FY16 capital budget approved in May 2014 includes $726,000 for water quality projects, of which $400,000 is anticipated state SLAF funding. The $326,000 of new County funds combined with the $300,000 in TMDL funds will not be enough for the County's share of the SLAF projects ($1,083,317). Without additional capital funds in FY16, the County runs the risk of not being able to meet grant conditions.

Future Project Development: Given the escalating pollution reduction requirements in the County's MS4 Permit, the County needs to have a steady flow of water quality implementation projects in the project pipeline. Beginning in FY15, there are inadequate funds to begin development of future TMDL implementation projects. At this time, all available funds for water quality, required site upgrades and TMDL implementation are allocated to existing projects. In order to be in a position to meet the 40% reduction by 2023, the County must be developing appropriate projects now since it typically takes at least two years to bring a water quality project to fruition.

Stormwater Loans

Stormwater Local Assistance Fund (SLAF)

Phase 2 Local Stormwater Program Development Grant

Virginia Department of Environmental Quality
P.O. Box 1105
Richmond, VA 23218

Contact Us:
1-(804) 698-4000
1-800-592-5482 (Toll Free in VA)

View Department of Environmental Quality Expenses

Stormwater Local Assistance Fund (SLAF)

The Department of Environmental Quality (DEQ) is pleased to announce the grants authorized for the Stormwater Local Assistance Fund (SLAF). Grants totaled about $21.5 million and cover 64 projects in 25 localities. Here is the list of the projects selected.

LOCALITY	PROJECT	AMOUNT AUTHORIZED	TOTAL PER LOCALITY
Alexandria, City of	Ben Brenman Park/Cameron Station Pond Retrofit	$1,750,000	$1,750,000
Charlottesville, City of	Azalea Park Stream Restoration	$475,000	$475,000
Chesapeake, City of	Yadkin Road Wetlands Bench	$74,500	
	22nd Street Wet Pond 1	$337,500	$412,000
Chesterfield County	Pocoshock Creek Stream Restoration	$1,104,150	
	Proctor's Creek WWTP BMP Retrofits	$237,500	
	James River H. S. BMP Retrofits	$300,000	$1,641,650
Fairfax County	Accotink 9210 Stream Restoration	$1,375,000	
	Flatlick Phase 1 Stream Restoration	$1,275,000	
	Accotink 9232 Stream Restoration	$484,500	
	Paul Spring Stream Restoration	$341,500	
	Colony Park Pond Retrofit	$294,000	
	Accotink Tributary at Daventry Stream Restoration	$290,000	
	Oakton Estates Stream Restoration	$170,000	
	Turkeycock Run Stream Restoration/Pinecrest Golf Course	$207,500	
	Inverchapel Stream Restoration	$98,000	$4,535,500
Fairfax, City of	Stream Restoration of Unnamed Trib to Accotink Creek	$650,000	$650,000
Falls Church, City of	Great Falls & Little Falls Contech StormFilter with ZPG Media	$82,500	
	West End Park Bioretention Level 1	$17,835	
	W. Westmoreland Road Bioretention Level 2	$14,324	
	Cavalier Trail Park Bioretention Level 2	$4,170	$118,829
Hampton, City of	Paul Burbank E. S. Stormwater Management Facilities	$201,500	$201,500
Hanover Co. DPW	Henderson Hall Stream Channel Improvement	$407,968	$407,968
Harrisonburg, City of	Market Street Dry Swale, Regenerative Stormwater Conveyance Channel (RSC)& extending RSC	$303,198	$303,198
Isle of Wight County	Windsor H. S. Bioretention 2 (6 projects)	$220,500	
	Heritage Park Bioretention 2 (3 projects)	$108,900	
	Westside E. S. curb & drop inlet (?)	$33,468	
	Rushmere Vol Fire Dept curb & drop inlet (?)	$30,250	$393,118
James City County	Jamestown Road Stream Restoration	$258,750	
	Winston Terrace Stream Restoration	$172,500	
	Yarmouth Creek Headwaters Stream Restoration	$170,125	
	Essex Court Stream Restoration	$91,800	
	James River E. S. Stormwater Upgrades	$195,815	
	Clara Byrd Baker E. S. Stormwater Upgrades	$194,327	$1,083,317
Loudoun County	Loudoun Valley Estates III Constructed Wetlands	$277,000	$277,000

Lynchburg, City of	Burton Creek Stream Restoration	$1,018,525	
	Blackwater Creek Stream Restoration (plans to combine with constructed wetlands)	$379,750	
	Blackwater Creek Constructed Wetlands (plans to combine w/ stream restoration)	$199,000	
	Laurel School Bioretention 2	$57,850	
	Sheffield E. S. Bioretention 2	$50,150	$1,705,275
Newport News, City of	Thalia & Sadler Drives Stream Restoration	$636,250	
	Hampton Avenue Stream Restoration; Phase 1 Constructed Wetlands	$167,500	$803,750
Norfolk, City of	Lake Taylor Retention Pond Retrofit	$843,500	
	Roberts Road Retention Pond Retrofit	$136,500	
	Hague Retention Pond Construction	$263,976	
	Templar Boulevard Stream Restoration	$71,000	
	Bluebird Park Stormwater Wetland Construction	$84,500	
	Central Business Park Retention Pond Retrofit	$82,000	
	Dune Street Wet Swale Retrofit	$67,000	$1,548,476
Petersburg, City of	Lieutenant Run Stream Restoration	$367,000	$367,000
Poquoson, City of	Improvement Area A Constructed Wetlands	$84,441	
	Improvement Area C Wet Pond 1	$46,900	$131,341
Prince William County	Reach 5/Pond 489 Stream Restoration/ Stabilization & Pond Retrofit	$552,500	
	Dewey's Creek Phase I Stream Restoration	$322,500	
	Hylbrook Park Stream Restoration/ Stabilization	$292,500	
	East Longview Stream Restoration	$215,105	$1,382,605
Richmond, City of	Reedy Creek Stream Restoration & Constructed Wetlands	$635,000	
	Rattlesnake Creek Stream Restoration	$552,000	
	Goode's Creek Stream Restoration & Constructed Wetlands	$716,000	$1,903,000
Stafford County	Stafford County Government Center BMP Retrofits	$110,000	$110,000
Staunton, City of	Lake Tams Wet Pond retrofit	$200,000	$200,000
Vienna, Town of	Wolftrap Creek Stream Restoration	$445,000	$445,000
Wytheville, Town of	Cedar Run (Town Creek) Stream Restoration	$268,250	$268,250
York County	Greensprings Subdivision Stream Restoration	$375,000	$375,000
64 Projects		$ 21,488,776	$ 21,488,776

DEQ is using a new e-mail communication tool to improve communication, efficiency and timeliness. In order to receive future notifications on the funding opportunities available through the Clean Water Financing and Assistance Program, sign up here.

Virginia Department of Environmental Quality
P.O. Box 1105
Richmond, VA 23218
(804)698-4000

CIP Project Request Form

For Internal Use

Project ID: _____

Please reference the document titled "INSTRUCTIONS FOR COMPLETING CAPITAL IMPROVEMENTS PROJECTS (CIP) REQUESTS" for guidance on the application.

Capital Projects - New or Expansion [✓] Capital Maintenance -- New Project [ ] Capital Maintenance - Projects that are neither New nor expanding [ ]

Project Title: Chickahominy Riverfront Park Shoreline Stabilization

Location: 1350 John Tyler Highway

Date: December 5, 2014

Department: Parks and Recreation/Stormwater

Employee Submitting Request: Nancy Ellis

Included in Board's Current Adopted CIP? Yes [✓] No [ ]

Department Priority No.: 2

Out of how many submittals? 2

Proposed Schedule/Cost

Date Improvements Begin: July 1, 2017

Design/Engineering Cost: 108,000

Date Improvements Completed: December 2018

Construction Cost: 976,000

Useful Life of Facility/Equipment: _____

Previous Funding: 450,000 in FY 18 CIP

Dollars in Thousands	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Proposed Capital Budget			$ 450,000.00	$ 634,000.00		$ 1,084,000.00
Expected additional Annual Operating Budget expenses incurred to directly support the new facility/equipment:			$ 0.00	$ 0.00		$ 0.00
Expected new Annual Revenue generated from the new facility/equipment:			$ 0.00	$ 0.00		$ 0.00

Project Narrative

The purpose of the narrative is to explain the proposal and provide an understanding of the life cycle cost (which is the sum of all recurring and one-time costs over the full life span of the project). Please explain in detail. Submit additional material as needed, including copies of engineering or feasibility studies.

(a) Current condition/situation: Funds represent continued implementation of the Shaping or Shores Master Plan- Shoreline stabilization along the

(b) Requested change/project description: Based on updated design and ability to increase nutrient reduction a two phase construction plan is proposed

(c) Need for the project, benefit, and why is this the optimal solution: The need to improve the shorelines was identified during the development of the Master Plan

(d) Recurring and one-time costs and if there is any residual or salvage value at the end of ownership: NA

Evaluation Questions for Capital Projects – Not Necessary for Capital Maintenance

Questions	Y	N	Comments/Supporting Details
In General			
A. Is the project in conformance with and supportive of the goals, strategies, and actions set forth in the Comprehensive Plan?	☑	☐	
B. Does the project support objectives addressed in a County sponsored service plans, master plans, or studies?	☑	☐	Shaping our Shores Master Plan, Parks and Recreation Master Plan
C. Does the project relate to the results of the citizen survey, Board of Supervisors policy, or appointed committee or board?	☑	☐	Citizen surveys, Master Plan public meeting input
1. Quality of Life			
D. Does the project increase or enhance educational opportunities?	☑	☐	
E. Does the project increase or enhance recreational opportunities and/or green space?	☑	☐	
F Will the project mitigate blight?	☑	☐	
G. Does the project target the quality of life of all citizens or does it target one demographic? Is one population affected positively and another negatively?	☑	☐	
H. Does the project preserve or improve the historical, archeological and/or natural heritage of the County? Is it consistent with established Community Character?	☑	☐	
I. Does the project affect traffic positively or negatively?	☐	☐	NA
J. Does the project improve, mitigate, and/or prevent degradation of environmental quality (e.g. water quality, protect endangered species, improve or reduce pollution including noise and/or light pollution)?	☑	☐	
2. Infrastructure			
D. Is there a facility being replaced that has exceeded its useful life and to what extent?	☐	☑	
E. Do resources spent on maintenance of an existing facility justify replacement?	☑	☐	
F Does this replace an outdated system?	☐	☑	
G. Does the facility/system represent new technology that will provide enhanced service?	☐	☑	
H. Does the project extend service for desired economic growth?	☑	☐	restoration of shoreline and addition of pocket beaches provides additional

3. Economic Development			
D. Does the project have the potential to promote economic development in areas where growth is desired?	☑	☐	
E. Will the project continue to promote economic development in an already developed area?	☑	☐	
F Is the net impact of the project positive? (total projected tax revenues of economic development less costs of providing services)	☑	☐	
G. Will the project produce desirable jobs in the County?	☐	☑	
H. Will the project rejuvenate an area that needs assistance?	☑	☐	
4. Health/Public Safety			
D. Does the project directly reduce risks to people or property (i.e. flood control)?	☑	☐	
E. Does the project directly promote improved health or safety?	☑	☐	
F Does the project mitigate an immediate risk?	☑	☐	
5. Impact on Operational Budget			
D. Will the new facility require additional personnel to operate?	☐	☑	
E. Will the project lead to a reduction in personnel or maintenance costs or increased productivity?	☐	☑	
F Will the new facility require significant annual maintenance?	☐	☑	
G. Will the new facility require additional equipment not included in the project budget?	☐	☑	
H. Will the new facility reduce time and resources of County staff maintaining current outdated systems? This would free up staff and resources, having a positive effect on the operational budget.	☐	☑	
I. Will the efficiency of the project save money?	☑	☐	
J. Is there revenue generating opportunity (e.g. user fees)?	☑	☐	improved waterfront sites will generate additional revenue
K. Does the project minimize life-cycle costs?	☐	☐	NA

6. Regulatory Compliance			
A. Does the project address a legislative, regulatory, or court-ordered mandate? (0 - 5 years)	☑	☐	Chesapeake Bay TMDL
B. Will the future project impact foreseeable regulatory issues? (5 - 10 years)	☑	☐	
C. Does the project promote long-term regulatory compliance? (> 10 years)	☑	☐	
D. Will there be a serious negative impact to the County if compliance is not achieved?	☑	☐	
E. Are there other ways to mitigate the regulatory concern?	☑	☐	
7. Timing/Location			
D. When is the project needed?	☐	☐	Funds are requested in FY 18 and FY 19 to complete entire shoreline
E. Do other projects require this one to be completed first?	☐	☑	
F Does this project require others to be completed first? If so, what is magnitude of potential delays (acquisition of land, funding, and regulatory approvals)?	☐	☑	
G. Can this project be done in conjunction with other projects: (e.g. waterline/sanitary sewer/paving improvements all within one street).	☐	☐	NA
H. Will it be more economical to build multiple projects together (reduced construction costs)?	☐	☐	NA
I. Will it help in reducing repeated neighborhood disruptions?	☐	☐	NA
J. Will there be a negative impact of the construction and if so, can this be mitigated?	☑	☐	some camping areas will have to close during construction
K. Will any populations be positively/negatively impacted, either by construction or the location (e.g. placement of garbage dump, jail)?	☐	☑	
L. Are there inter-jurisdictional considerations?	☐	☑	
M. Does the project conform to Primary Service Area policies?	☐	☐	NA
N. Does the project use an existing County-owned or controlled site or facility?	☑	☐	
O. Does the project preserve the only potentially available/most appropriate, non-County owned site or facility for project's future use?	☐	☐	NA
P Does the project use external funding or is a partnership where funds will be lost if not constructed?	☐	☐	not at this time, grant assistance is anticipated

8. Special Considerations			
A. Is there an immediate legislative, regulatory, or judicial mandate which, if unmet, will result in serious detriment to the County, and there is no alternative to the project?	☐	☑	
B. Is the project required to protect against an immediate health, safety, or general welfare hazard/threat to the County?	☑	☐	
C. Is there a significant external source of funding that can only be used for this project and/or which will be lost if not used immediately (examples are developer funding, grants through various Federal or State initiatives, and private donations)?	☐	☑	

Signatures

Department Director Signature

JOHN CARNIFAX
Department Director Printed Name

County Administrator or CEO Signature

BRAD HILL
County Administrator or CEO Printed Name

Chickahominy Riverfront Park Shoreline Stabilization Comments:

A. Funds represent continued implementation of the Shaping or Shores Master Plan- Shoreline stabilization along the Chickahominy River which is continuing to erode creating a safety issue for park visitors. Additionally, effective shoreline stabilization practices reduce the amount of sediment and nutrients entering the Chesapeake Bay which will assist in meeting the requirements of the Chesapeake Bay TMDL.
B. Based on updated design and ability to increase nutrient reduction a two phase construction plan is proposed
C. The need to improve the shorelines was identified during the development of the Master Plan for the park to protect further erosion, safety of park users and generate additional park visitors by improved facilities. Additionally, shoreline stabilization will assist the County in meeting requirements of the Chesapeake Bay TMDL.
D. NA

November 13, 2014
File: 203400296

Attention: Ms. Fran Geissler
James City County, General Services Department
5320 Palmer Lane, Suite 2A
Williamsburg, VA 23188

Dear Ms. Geissler,

Reference: Chickahominy Riverfront Park – Shoreline Assessment

Stantec Consulting Services Inc. (Stantec) is pleased to provide James City County with the following design alternatives related to the Chickahominy Riverfront Park Shoreline Assessment. The alternatives were developed per county guidance and were tailored to site conditions found during the initial field visit. The designs show different recommendations for shoreline stabilization on both the Chickahominy River and Gordon Creek.

The estimated nutrient reduction quantities and preliminary costs associated with each alternative have been provided for initial decision making assistance. Preliminary costs were developed using estimated material and earthwork quantities along with typical unit costs observed on past projects of similar scale. The nutrient reduction quantities were based on findings from the draft document *Recommendations of the Expert Panel to Define Removal Rates for Shoreline Management Projects*. This document was created to define the use of shoreline stabilization practices in reducing the amount of sediment and nutrients entering the Chesapeake Bay, as it was found that localities were seldom taking credit for nutrient reduction for shoreline stabilization practices. In response, the panel reviewed the available research and developed a four step process (Protocols 1 through 4) to define shoreline management nutrient reduction. These protocols, which go into detail about how to calculate reduction values for total suspended solids (TSS), total nitrogen (TN), and total phosphorus (TP), are defined as follows:

1. Prevented Sediment
2. Denitrification
3. Sedimentation
4. Marsh Redfield Ratio

The computed reduction values for each of the discussed nutrients, per each protocol, were summed to generate a total nutrient reduction for each alternative. The alternatives are described below and the accompanying plan set shows the locations of the proposed stabilization practices.

Alternative 1:

The first alternative displays the initial concept graphic for the project. It involves the implementation of breakwaters along the Chickahominy River, on the south-west side of the project. The beach in this area would be maximized, with a minimum width of 50 feet, and bank grading would occur to soften the vertical

Reference: Chickahominy Riverfront Park – Shoreline Assessment

banks to a more stable 2:1 (H:V) slope. On Gordon Creek, west of the existing boat ramp, the banks will be graded in a similar manner to the Chickahominy bank grading and a coir log marsh toe will be installed along the existing established marsh towards the mouth of the creek. East of the existing boat ramp, a coir log marsh toe will be installed without any adjustments to the bank grades. The estimated cost for this option is approximately $914,000 and the nutrient reduction values are shown below in Table 1.

Table 1: Alternative 1 Nutrient Reduction Values

PROTOCOL	TSS REMOVED (LBS/YR)	TN REMOVED (LBS/YR)	TP REMOVED (LBS/YR)
PROTOCOL 1: PREVENTED SEDIMENT	92.44	156.36	112.47
PROTOCOL 2: DENITRIFCIATION	-	0.00	-
PROTOCOL 3: SEDIMENTATION	0.00	-	0.00
PROTOCOL 4: MARSH REDFIELD RATIO	-	0.00	0.00
TOTAL	**92.44**	**156.36**	**112.47**

Alternative 2:

Alternative 2 uses the initial concept graphic and the information obtained during the field visit to create a hybrid design. The breakwater sizing and spacing were adjusted to be consistent with engineering guidance while still providing the shoreline protection and increased beach area per the original concept graphic. This design involves the implementation of breakwaters along the Chickahominy River on the west side of the project. The three southern most breakwaters would have maximized beach areas, minimum width of 50 feet, as these are the areas that are proposed for recreational use. The four northern most breakwaters, where recreation is less of a focus, would have a beach width of approximately 30 feet which was optimized based on the slope of the river bottom. Bank grading is proposed in these areas to soften the vertical banks. On Gordon Creek, west of the boat ramp, bank grading and a rock toe are proposed. To the east of the existing boat ramp, a rock toe will be installed without any adjustments to the bank grades. This alternative utilizes rock toe protection in lieu of the coir log as it provides stability more in line with the erosion issues seen in the field. The estimated cost for this option is approximately $1,084,000 and the approximate nutrient reduction values are shown below in Table 2.

Table 2: Alternative 2 Nutrient Reduction Values

PROTOCOL	TSS REMOVED (LBS/YR)	TN REMOVED (LBS/YR)	TP REMOVED (LBS/YR)
PROTOCOL 1: PREVENTED SEDIMENT	107.57	181.94	130.87
PROTOCOL 2: DENITRIFCIATION	-	32.88	-
PROTOCOL 3: SEDIMENTATION	1.35	-	2.05
PROTOCOL 4: MARSH REDFIELD RATIO	-	2.64	0.12
TOTAL	**108.92**	**217.47**	**133.03**

Reference: Chickahominy Riverfront Park – Shoreline Assessment

Alternative 3A:

Alternative 3A is an optimized stabilization design based on the field visit that attempts to reduce cost while keeping in mind the site specific concerns. Engineering guidance was used to protect the shoreline and increase beach area in select locations. Alternative 3A involves the implementation of breakwaters along the Chickahominy River on the south-west side of the project. The beach in this area would be a minimum of 50 feet wide and bank grading would occur to soften the vertical banks to a more stable 2:1 (H:V) slope. A shallower gapped marsh toe would be located offshore, north of the breakwaters, to act as a marsh sill. Near the confluence of the two water bodies, two more breakwater structures would be installed with smaller, approximately 30 feet wide beaches. On Gordon Creek, a coir log marsh toe will be installed parallel to the established marsh and select fill material will be used to extend the existing marsh out to the proposed coir log toe. East of the coir log marsh expansion, bank grading and a rock toe are proposed. East of the boat ramp, a coir log marsh sill will be installed without bank grading due to its anticipated effects on the RV sites. Rock toe protection was replaced by coir logs in strategic areas in this option as a cost saving measure. However, the coir logs provide less of a safety factor when compared to the rock toe. The estimated cost for this option is approximately $979,000 and the approximate nutrient reduction values are shown below in Table 3A.

Table 3: Alternative 3A Nutrient Reduction Values

PROTOCOL	TSS REMOVED (LBS/YR)	TN REMOVED (LBS/YR)	TP REMOVED (LBS/YR)
PROTOCOL 1: PREVENTED SEDIMENT	107.57	181.94	130.87
PROTOCOL 2: DENITRIFCIATION	-	48.98	-
PROTOCOL 3: SEDIMENTATION	2.00	-	3.05
PROTOCOL 4: MARSH REDFIELD RATIO	-	3.94	0.17
TOTAL	**109.58**	**234.86**	**134.09**

Alternative 3B:

Alternative 3B was designed as a cost saving alternative to Alternative 3A. This alternative would employ all of the same stabilization measures as Alternative 3A with the exception of the bank grading. The cost savings of this option needs to be scrutinized, as the nutrient reduction per Protocol 1 is decreased by 50% when bank grading is not included. The bank grading also provides the project with long term stability, and the effects of the grading on the existing camp sites would need to be explored. The estimated cost for this option is $801,000 and the approximate nutrient reduction values are shown below in Table 3B.

Table 3B: Alternative 3B Nutrient Reduction Values

PROTOCOL	TSS REMOVED (LBS/YR)	TN REMOVED (LBS/YR)	TP REMOVED (LBS/YR)
PROTOCOL 1: PREVENTED SEDIMENT	53.79	90.97	65.44
PROTOCOL 2: DENITRIFCIATION	-	48.98	-
PROTOCOL 3: SEDIMENTATION	2.00	-	3.05
PROTOCOL 4: MARSH REDFIELD RATIO	-	3.94	0.17
TOTAL	**55.79**	**143.89**	**68.66**

Reference: Chickahominy Riverfront Park – Shoreline Assessment

Alternative 4:

Alternative 4 was developed based on client response to the draft alternatives memorandum. This alternative shows a hybrid combination of Alternatives 2 and 3A. The design involves the implementation of breakwaters and beach nourishment along the Chickahominy River on the west side of the project, but not the segment of marsh creation associated with Alternative 3A. On Gordon Creek, marsh creation and stabilization will be achieved through the use of coir logs and marsh sills, optimized based on hydrodynamic conditions similar to Alternative 3A. The approximate nutrient reduction values are shown in Table 4.

Table 4: Alternative 4 Nutrient Reduction Values

PROTOCOL	TSS REMOVED (TON/YR)	TN REMOVED (LBS/YR)	TP REMOVED (LBS/YR)
PROTOCOL 1: PREVENTED SEDIMENT	107.57	181.94	130.87
PROTOCOL 2: DENITRIFCIATION	-	32.88	-
PROTOCOL 3: SEDIMENTATION	1.35	-	2.05
PROTOCOL 4: MARSH REDFIELD RATIO	-	2.64	0.12
TOTAL	**108.92**	**217.47**	**133.03**

For Alternative 4, the side slopes associated with the bank grading were analyzed per client direction. It was brought to the attention of the design team that the client would prefer 3:1 side slopes to provide a safer slope for maintenance activities. In the Alternative 4 graphic and revised cross sections, the approximate land loss associated with both the 2:1 and 3:1 side slopes are shown. The 3:1 boundary shows increased upland disturbance and loss of camp site space. The estimated cost for this alternative was calculated for both side slope situations as the 3:1 scenario requires increased earthworks. The estimated cost for the 2:1 scenario is $1,084,000 and the estimated cost for the 3:1 scenario is $1,251,000.

Nutrient Removal Summary:

To further analyze the proposed alternatives, the cost of each was compared to the calculated nutrient removal as presented in each of the preceding tables. Alternative 4 was analyzed for both bank grading side slope scenarios. This preliminary alternatives analysis provides insight into the complexities and issues associated with the project, while detailing the advantages and disadvantages of the different stabilization alternatives. A summary table is provided below.

Reference: Chickahominy Riverfront Park – Shoreline Assessment

Table 5: Cost per Pound of Nutrient Removal

ALTERNATIVE	COST	NUTRIENT	NUTRIENT REMOVAL (LBS/YR)*	COST PER POUND OF REMVOAL ($/LBS)*
1	$914,000	TSS	92.44	$9,900
		TN	156.36	$5,800
		TP	112.47	$8,100
2	$1,084,000	TSS	108.92	$10,000
		TN	217.47	$5,000
		TP	133.03	$8,100
3A	$979,000	TSS	109.53	$8,900
		TN	233.62	$4,200
		TP	134.02	$7,300
3B	$801,000	TSS	55.31	$14,500
		TN	131.26	$6,100
		TP	67.89	$11,800
4 (2:1 SS)	$1,084,000	TSS	108.92	$10,000
		TN	217.47	$5,000
		TP	133.03	$8,100
4 (3:1 SS)	$1,251,000	TSS	108.92	$11,500
		TN	217.47	$5,800
		TP	133.03	$9,400

*TSS Values are in units of TON/YR and $/TON respectively

From these preliminary findings, Alternative 3A shows the highest levels of nutrient reduction and the best ratio of cost per pound removal. However, nutrient reduction is not the only driving factor for this particular project. Overall management plans for the park, along with financial constraints and maintenance considerations will play a large role in which option is ultimately chosen. Stantec hopes that this study will assist James City County in choosing the stabilization options that best suits their needs and looks forward to working with them in the future.

Regards,

STANTEC CONSULTING SERVICES INC.

Daniel Proctor

Daniel Proctor, P.E.
Senior Engineer
Phone: (757) 220-6869
Fax: (757) 229-4507
daniel.proctor@stantec.com

CC: Darryl Cook, James City County

EXISTING TOPOGRAPHY (GIS)

EXISTING TOPOGRAPHY (APPROXIMATE BATHYMETRY)

EXISTING RPA

PROPOSED BREAKWATER

PROPOSED BANK GRADING

PROPOSED BEACH

PROPOSED COIR LOG MARSH SILL

PHOTO LOCATIONS (SEE APPENDIX)

N

0 100 200

APPROXIMATE SCALE (FEET)

NARRATIVE ALTERNATIVE 1:

THE FIRST ALTERNATIVE DISPLAYS THE INITIAL CONCEPT GRAPHIC FOR THE PROJECT. IT INVOLVES THE IMPLEMENTATION OF THREE BREAKWATERS ALONG THE CHICKAHOMINY RIVER, ON THE SOUTH-WEST SIDE OF THE PROJECT. THE BEACH IN THIS AREA WOULD BE MAXIMIZED, WITH A MINIMUM WIDTH OF 50 FEET, AND BANK GRADING WOULD OCCUR TO SOFTEN THE VERTICAL BANKS TO A MORE STABLE 2:1 (H:V) SLOPE. ON GORDON CREEK, WEST OF THE EXISTING BOAT RAMP, THE BANKS WILL BE GRADED IN A SIMILAR MANNER TO THE CHICKAHOMINY BANK GRADING AND A COIR LOG MARSH TOE WILL BE INSTALLED ALONG THE EXISTING ESTABLISHED MARSH TOWARDS THE MOUTH OF THE CREEK. EAST OF THE EXISTING BOAT RAMP, A COIR LOG MARSH TOE WILL BE INSTALLED WITHOUT ANY ADJUSTMENTS TO THE BANK GRADES. THE ESTIMATED COST FOR THIS OPTION IS $914,000.

PROTOCOL	TSS REMOVED (TON/YR)	TN REMOVED (LBS/YR)	TP REMOVED (LBS/YR)
PROTOCOL 1: PREVENTED SEDIMENT	92	156	112
PROTOCOL 2: DENITRIFCIATION	-	0	-
PROTOCOL 3: SEDIMENTATION	0	-	0
PROTOCOL 4: MARSH REDFIELD RATIO	-	0	0
TOTAL	**92**	**156**	**112**

PREPARED BY:
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FOR:
CHICKAHOMINY RIVERFRONT PARK
1350 JOHN TYLER MEMORIAL HIGHWAY
WILLIAMSBURG, VIRGINIA

TITLE:
SHORELINE STABILIZATION ALTERNATIVE - 1

DRAWN BY: JTJ	DESIGNED BY: JTJ/DAP
CHECKED BY: DAP	APPROVED BY: CR/DAP
PROJECT NUMBER: 203400296	SCALE: AS SHOWN
DATE: 08/08/2014	FILE PATH: U:/203400296

SHEET:
1 OF 6

EXISTING TOPOGRAPHY (GIS)

EXISTING TOPOGRAPHY (APPROXIMATE BATHYMETRY)

EXISTING RPA

PROPOSED BREAKWATER

PROPOSED BANK GRADING

PROPOSED SANDY BEACH

PROPOSED VEGETATED BEACH

PROPOSED ROCK MARSH SILL

PHOTO LOCATIONS (SEE APPENDIX)

N

0 100 200

APPROXIMATE SCALE (FEET)

NARRATIVE ALTERNATIVE 2:

ALTERNATIVE 2 USES THE INITIAL CONCEPT GRAPHIC AND THE INFORMATION OBTAINED DURING THE FIELD VISIT TO CREATE A HYBRID DESIGN, PHOTOS FROM THE FIELD VISIT CAN BE SEEN IN APPENDIX 1 AND THE CORRESPONDING LOCATIONS ARE SHOWN ON THE DESIGN ALTERNATIVE GRAPHICS. THE BREAKWATER SIZING AND SPACING WERE ADJUSTED TO BE CONSISTENT WITH ENGINEERING GUIDANCE WHILE STILL PROVIDING THE SHORELINE PROTECTION AND INCREASED BEACH AREA PER THE ORIGINAL CONCEPT GRAPHIC. THIS DESIGN INVOLVES THE IMPLEMENTATION OF BREAKWATERS ALONG THE CHICKAHOMINY RIVER ON THE WEST SIDE OF THE PROJECT. THE THREE SOUTHERN MOST BREAKWATERS WOULD HAVE MAXIMIZED BEACH AREAS, MINIMUM WIDTH OF 50 FEET, AS THESE ARE THE AREAS THAT ARE PROPOSED FOR RECREATIONAL USE. THE FOUR NORTHERN MOST BREAKWATERS, WHERE RECREATION IS LESS OF A FOCUS, WOULD HAVE A BEACH WIDTH OF APPROXIMATELY 30 FEET, WHICH WAS OPTIMIZED BASED ON THE SLOPE OF THE RIVER BOTTOM. BANK GRADING IS PROPOSED IN THESE AREAS TO SOFTEN THE VERTICAL BANKS. ON GORDON CREEK, WEST OF THE BOAT RAMP, BANK GRADING AND A ROCK TOE ARE PROPOSED. TO THE EAST OF THE EXISTING BOAT RAMP, A ROCK TOE WILL BE INSTALLED WITHOUT ANY ADJUSTMENTS TO THE BANK GRADES. THIS ALTERNATIVE UTILIZES ROCK TOE PROTECTION IN LIEU OF THE COIR LOG AS IT PROVIDES STABILITY MORE IN LINE WITH THE EROSION ISSUES SEEN IN THE FIELD. THE ESTIMATED COST FOR THIS OPTION IS BETWEEN $1,084,000.

PROTOCOL	TSS REMOVED (TON/YR)	TN REMOVED (LBS/YR)	TP REMOVED (LBS/YR)
PROTOCOL 1: PREVENTED SEDIMENT	108	182	131
PROTOCOL 2: DENITRIFCIATION	-	33	-
PROTOCOL 3: SEDIMENTATION	1	-	2
PROTOCOL 4: MARSH REDFIELD RATIO	-	3	0
TOTAL	**109**	**217**	**133**

PREPARED BY:
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FOR:
CHICKAHOMINY RIVERFRONT PARK
1350 JOHN TYLER MEMORIAL HIGHWAY
WILLIAMSBURG, VIRGINIA

TITLE:
SHORELINE STABILIZATION ALTERNATIVE - 2

DRAWN BY: JTJ	DESIGNED BY: JTJ/DAP
CHECKED BY: DAP	APPROVED BY: CR/DAP
PROJECT NUMBER: 203400296	SCALE: AS SHOWN
DATE: 08/08/2014	FILE PATH: U:/203400296

SHEET:
2 OF 6

EXISTING TOPOGRAPHY (GIS)

EXISTING TOPOGRAPHY (APPROXIMATE BATHYMETRY)

EXISTING RPA

PROPOSED BREAKWATER

PROPOSED BANK GRADING

PROPOSED SANDY BEACH

PROPOSED VEGETATED BEACH

PROPOSED COIR LOG MARSH SILL

PROPOSED ROCK MARSH SILL

PROPOSED GAPPED MARSH TOE

PROPOSED MARSH

PHOTO LOCATIONS (SEE APPENDIX)

N

0 100 200

APPROXIMATE SCALE (FEET)

NARRATIVE ALTERNATIVE 3A:

ALTERNATIVE 3A IS AN OPTIMIZED STABILIZATION DESIGN BASED ON THE FIELD VISIT THAT ATTEMPTS TO REDUCE COST WHILE KEEPING IN MIND THE SITE-SPECIFIC CONCERNS. ENGINEERING GUIDANCE WAS USED TO PROTECT THE SHORELINE AND INCREASE BEACH AREA IN SELECT LOCATIONS. ALTERNATIVE 3A INVOLVES THE IMPLEMENTATION OF BREAKWATERS ALONG THE CHICKAHOMINY RIVER ON THE SOUTH-WEST SIDE OF THE PROJECT. THE BEACH IN THIS AREA WOULD BE A MINIMUM OF 50 FEET WIDE AND BANK GRADING WOULD OCCUR TO SOFTEN THE VERTICAL BANKS TO A MORE STABLE 2:1 (H:V) SLOPE. A SHALLOWER GAPPED MARSH TOE WOULD BE LOCATED OFFSHORE, NORTH OF THE BREAKWATERS, TO ACT AS A MARSH SILL. NEAR THE CONFLUENCE OF THE TWO WATER BODIES, TWO MORE BREAKWATER STRUCTURES WOULD BE INSTALLED WITH SMALLER, APPROXIMATELY 30 FEET WIDE BEACHES. ON GORDON CREEK, A COIR LOG MARSH TOE WILL BE INSTALLED WHERE THE EXISTING STABLE MARSH IS LOCATED. EAST OF THE COIR LOG MARSH EXPANSION, BANK GRADING AND A ROCK TOE ARE PROPOSED. EAST OF THE BOAT RAMP, A COIR LOG MARSH SILL WILL BE INSTALLED WITHOUT BANK GRADING. ROCK TOE PROTECTION WAS REPLACED BY COIR LOGS IN STRATEGIC AREAS IN THIS OPTION AS A COST SAVING MEASURE. HOWEVER, THE COIR LOGS PROVIDE LESS OF A SAFETY FACTOR WHEN COMPARED TO THE ROCK TOE. THE ESTIMATED COST FOR THIS OPTION IS $979,000.

PROTOCOL	TSS REMOVED (TON/YR)	TN REMOVED (LBS/YR)	TP REMOVED (LBS/YR)
PROTOCOL 1: PREVENTED SEDIMENT	108	182	131
PROTOCOL 2: DENITRIFICIATION	-	49	-
PROTOCOL 3: SEDIMENTATION	2	-	3
PROTOCOL 4: MARSH REDFIELD RATIO	-	4	0
TOTAL	**110**	**235**	**134**

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1350 JOHN TYLER MEMORIAL HIGHWAY
WILLIAMSBURG, VIRGINIA

TITLE:
SHORELINE STABILIZATION ALTERNATIVE - 3A

DRAWN BY: JTJ	DESIGNED BY: JTJ/DAP
CHECKED BY: DAP	APPROVED BY: CR/DAP
PROJECT NUMBER: 203400296	SCALE: AS SHOWN
DATE: 08/08/2014	FILE PATH: U:/203400296

SHEET:
3 OF 6

EXISTING TOPOGRAPHY (GIS)

EXISTING TOPOGRAPHY (APPROXIMATE BATHYMETRY)

EXISTING RPA

PROPOSED BREAKWATER

PROPOSED SANDY BEACH

PROPOSED VEGETATED BEACH

PROPOSED COIR LOG MARSH TOE

PROPOSED ROCK MARSH SILL

PROPOSED GAPPED MARSH TOE

PROPOSED MARSH

PHOTO LOCATIONS (SEE APPENDIX)

N

0 100 200

APPROXIMATE SCALE (FEET)

NARRATIVE ALTERNATIVE 3B:

ALTERNATIVE 3B WAS DESIGNED AS A COST SAVING OPTION TO ALTERNATIVE 3A. THIS ALTERNATIVE WOULD EMPLOY ALL OF THE SAME STABILIZATION MEASURES AS ALTERNATIVE 3A, WITH THE EXCEPTION OF THE BANK GRADING. THE COST SAVINGS OF THIS OPTION NEEDS TO BE SCRUTINIZED, AS THE NUTRIENT REDUCTION PER PROTOCOL 1 IS DECREASED BY 50% WHEN BANK GRADING IS NOT INCLUDED. THE BANK GRADING PROVIDES THE PROJECT WITH LONG TERM STABILITY, BUT THE EFFECTS OF THE GRADING ON THE EXISTING CAMP SITES WOULD NEED TO BE EXPLORED. SIMILARLY, THE PROPOSED BANK GRADING REMOVAL COULD BE INCORPORATED INTO ANY OF THE OTHER ALTERNATIVES AS WELL (ALT 1 OR 2).THE ESTIMATED COST FOR THIS OPTION IS $801,000.

PROTOCOL	TSS REMOVED (TON/YR)	TN REMOVED (LBS/YR)	TP REMOVED (LBS/YR)
PROTOCOL 1: PREVENTED SEDIMENT	54	91	65
PROTOCOL 2: DENITRIFCIATION	-	49	-
PROTOCOL 3: SEDIMENTATION	2	-	3
PROTOCOL 4: MARSH REDFIELD RATIO	-	4	0
TOTAL	**56**	**144**	**69**

PREPARED BY:
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FOR:
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1350 JOHN TYLER MEMORIAL HIGHWAY
WILLIAMSBURG, VIRGINIA

TITLE:
SHORELINE STABILIZATION ALTERNATIVE - 3B

DRAWN BY: JTJ	DESIGNED BY: JTJ/DAP
CHECKED BY: DAP	APPROVED BY: CR/DAP
PROJECT NUMBER: 203400296	SCALE: AS SHOWN
DATE: 08/08/2014	FILE PATH: U:/203400296

SHEET:
4 OF 6

EXISTING TOPOGRAPHY (GIS)

EXISTING TOPOGRAPHY (APPROXIMATE BATHYMETRY)

EXISTING RPA

PROPOSED BREAKWATER

PROPOSED BANK GRADING (2:1 SIDE SLOPES)

PROPOSED BANK GRADING (3:1 SIDE SLOPES)

PROPOSED SANDY BEACH

PROPOSED VEGETATED BEACH

PROPOSED ROCK MARSH SILL

PHOTO LOCATIONS (SEE APPENDIX)

N

0 100 200

APPROXIMATE SCALE (FEET)

NARRATIVE ALTERNATIVE 4:

ALTERNATIVE 4 WAS DEVELOPED BASED ON CLIENT RESPONSE TO THE DRAFT ALTERNATIVES MEMORANDUM. THIS ALTERNATIVE SHOWS A HYBRID COMBINATION OF ALTERNATIVES 2 AND 3A. THE DESIGN INVOLVES THE IMPLEMENTATION OF BREAKWATERS AND BEACH NOURISHMENT ALONG THE CHICKAHOMINY RIVER ON THE WEST SIDE OF THE PROJECT, BUT NOT THE SEGMENT OF MARSH CREATION ASSOCIATED WITH ALTERNATIVE 3A. ON GORDON CREEK, MARSH CREATION AND STABILIZATION WILL BE ACHIEVED THROUGH THE USE OF COIR LOGS AND MARSH SILLS, OPTIMIZED BASED ON HYDRODYNAMIC CONDITIONS SIMILAR TO ALTERNATIVE 3A . THE ESTIMATED COST FOR THIS ALTERNATIVE WAS CALCULATED FOR BOTH SIDE SLOPE SITUATIONS. THE ESTIMATED COST FOR THE 2:1 SCENARIO IS $1,084,000 AND THE ESTIMATED COST FOR THE 3:1 SCENARIO IS $1,251,0000.

PROTOCOL	TSS REMOVED (TON/YR)	TN REMOVED (LBS/YR)	TP REMOVED (LBS/YR)
PROTOCOL 1: PREVENTED SEDIMENT	108	182	131
PROTOCOL 2: DENITRIFCIATION	-	33	-
PROTOCOL 3: SEDIMENTATION	1	-	2
PROTOCOL 4: MARSH REDFIELD RATIO	-	3	0
TOTAL	**109**	**217**	**133**

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FOR:
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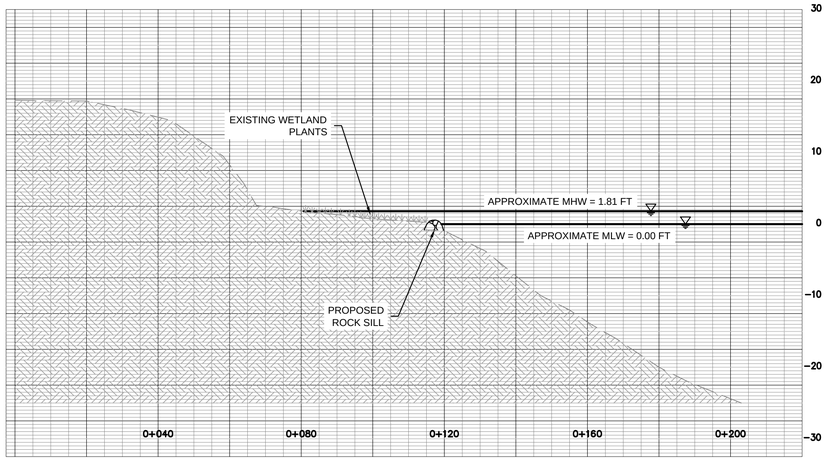
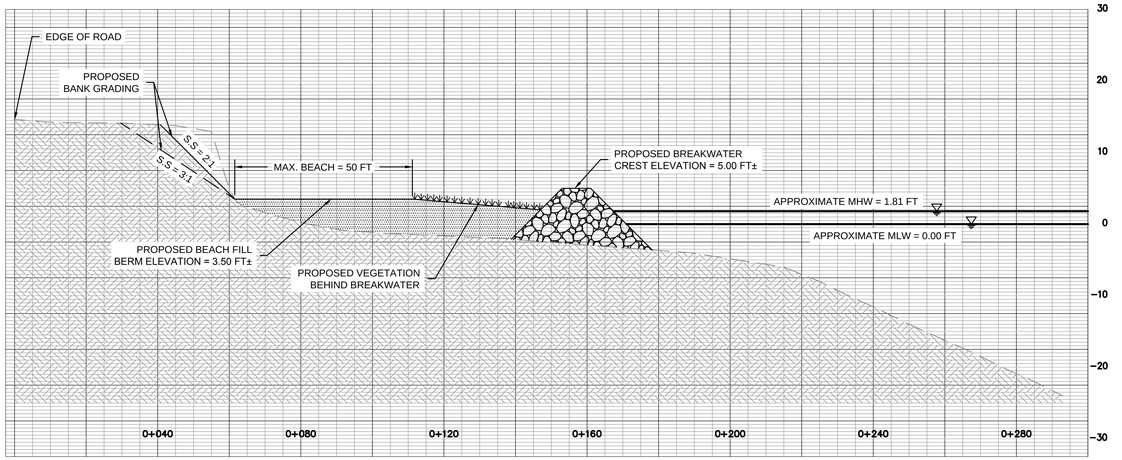
1350 JOHN TYLER MEMORIAL HIGHWAY
WILLIAMSBURG, VIRGINIA

TITLE:
SHORELINE STABILIZATION ALTERNATIVE 4

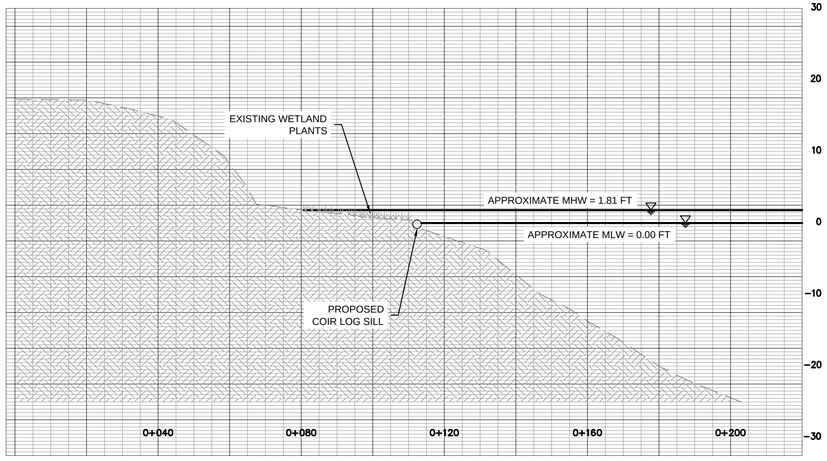
DRAWN BY: JTJ	DESIGNED BY: JTJ/DAP
CHECKED BY: DAP	APPROVED BY: CR/DAP
PROJECT NUMBER: 203400296	SCALE: AS SHOWN
DATE: 11/03/2014	FILE PATH: U:/203400296



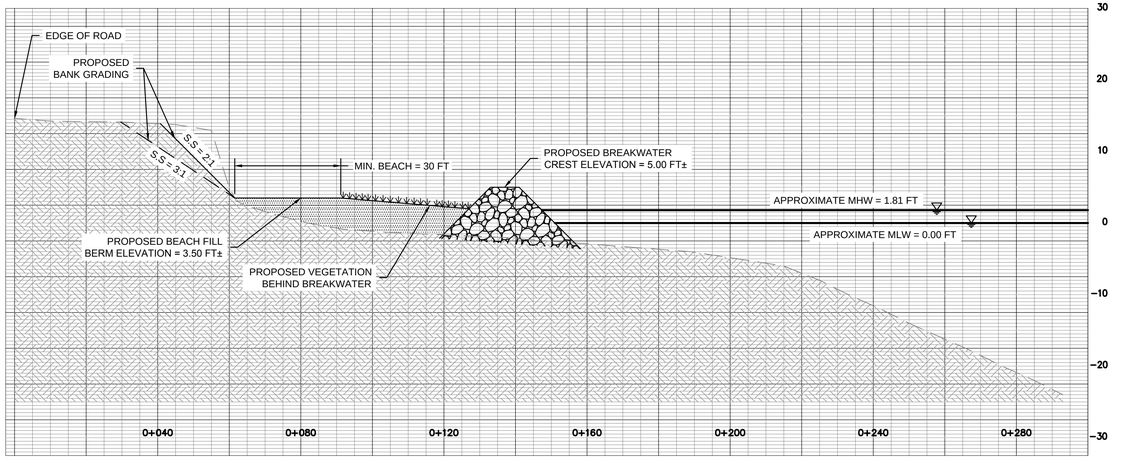
PROPOSED ROCK MARSH SILL TRANSECT



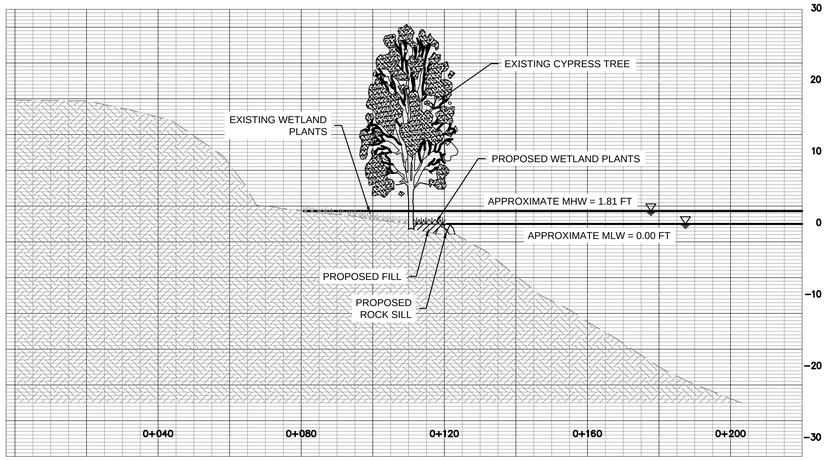
PROPOSED BREAKWATER TRANSECT – SANDY BEACH



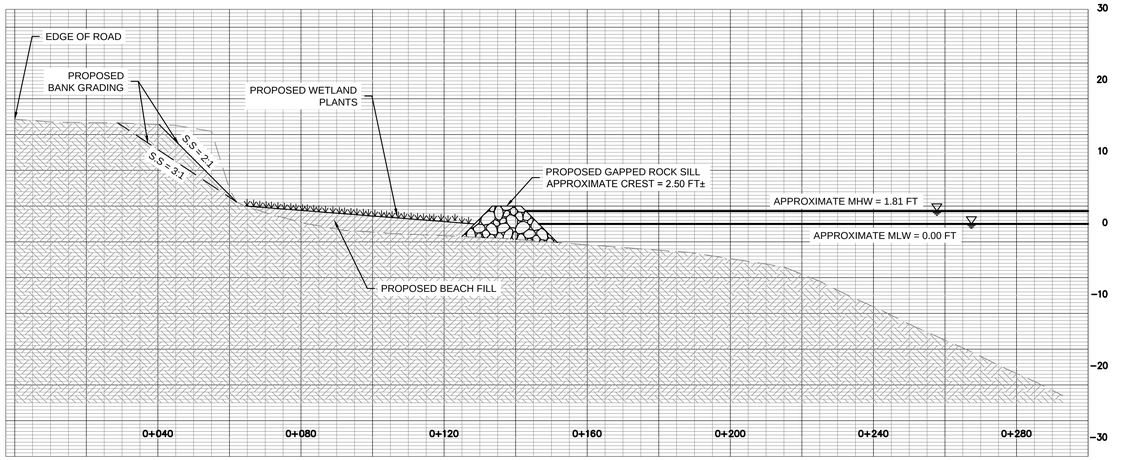
PROPOSED COIR LOG MARSH SILL TRANSECT



PROPOSED BREAKWATER TRANSECT – VEGETATED BEACH



PROPOSED ROCK MARSH AT CYPRESS TREE TRANSECT



PROPOSED GAPPED ROCK SILL TRANSECT

PREPARED BY:

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PHONE: (757) 220-6869 FAX: (757) 229-4507

FOR:

CHICKAHOMINY RIVERFRONT PARK
1350 JOHN TYLER MEMORIAL HIGHWAY
WILLIAMSBURG, VIRGINIA

TITLE:

SHORELINE STABILIZATION
REPRESENTATIVE CROSS-SECTIONS

DRAWN BY: JTJ	DESIGNED BY: JTJ/DAP
CHECKED BY: DAP	APPROVED BY: CR/DAP
PROJECT NUMBER: 203400296	SCALE: AS SHOWN
DATE: 08/08/2014	FILE PATH: U:203400296

DAP/CR

MEMORANDUM

DATE: February 3, 2015

TO: Members of the Policy Committee

FROM: Jose Ribeiro, Senior Planner II
Leanne Pollock, Senior Planner II

SUBJECT: FY 2016 Capital Improvements Program (CIP) Review

The Policy Committee annually reviews Capital Improvements Program (CIP) requests submitted by various County agencies. The purpose of this review is to provide guidance and a list of prioritized projects to the Board of Supervisors for their consideration during the budget process.

In Attachment 1, the CIP project requests from County agencies are summarized and grouped into the following general funding categories:

- *Group I:* New Projects with funds requested (projects not adopted for funding in previous CIP cycles), and
- *Group II:* Amendments to previously funded applications.

Staff anticipates receiving applications from Williamsburg-James City County Schools near the end of the month and will provide an amended project summary sheet along with the applications when they are available.

Please note that this is an exception year in the two-year budget cycle and so few new projects or modifications were submitted. For further reference regarding projects that are currently included in the Board of Supervisor's adopted FY15-FY19 CIP, please visit Section D of the FY15-16 budget here: http://www.jamescitycountyva.gov/fms/Adopted-Budget/budget-2015-2016-adopted.html.

It will be the responsibility of the Policy Committee members during the CIP review process to evaluate how each CIP request relates to the Comprehensive Plan. As described in the Code of Virginia, the CIP is one of the methods of implementing the Comprehensive Plan, of equal importance to methods like the zoning and subdivision ordinances, official maps, and transportation plans. To facilitate this task, the Policy Committee adopted a uniform method for evaluating projects (Attachment 2).

Staff has developed an Excel spreadsheet that automatically calculates the weighting and totals for each project (Attachment 3). **Please use this ranking criteria work sheet to complete evaluations of each of the projects in the FY16-FY20 Capital Improvement Program Ranking Spreadsheet prior to the Committee's first meeting to the best of your ability.** If your

rankings are completed in advance of the meeting, please forward staff an electronic copy to leanne.pollock@jamescitycountyva.gov to facilitate preparation for meeting discussion.

The Policy Committee is scheduled to meet on the days and times below. All meetings will be held in the Building A large conference room.

- **Thursday, February 12 at 4 p.m.**
  - Representatives from FMS, Parks and Recreation, Planning and General Services/Stormwater will be present at this meeting to answer any questions. Policy Committee members can also submit project scores in advance of this meeting if there are no questions.
- **Wednesday, March 4 at 4 p.m.**
  - Representatives from WJCC Schools will be present at this meeting to answer any questions. This meeting is also for any follow-up necessary from the February 12 meeting and Policy Committee members can also submit project scores in advance of the meeting if there are no questions.
- **Thursday, March 12 at 4 p.m.**
  - Meeting is to address any remaining questions and to finalize the Policy Committee's rankings and recommendations for all CIP requests. Members should submit all outstanding project scores to staff by Monday, March 9th.

Ultimately, the Policy Committee will prepare a ranking recommendation to present to the Planning Commission at a special meeting and public hearing in the middle of March. Recommendations will be forwarded to the Board of Supervisors for consideration during the ongoing budget discussions and public hearings in April.

If you have any questions, please do not hesitate to contact Leanne Pollock at 253-6876 or Jose Ribeiro at 253-6890.

Attachments:

1. FY16-FY20 Capital Improvement Program Summary Spreadsheet
2. Capital Improvements Program Ranking Criteria
3. CIP Criteria Weighting Sheet
4. CIP applications (4 applications plus supporting documents)

POLICY COMMITTEE MEETING
January 15, 2015
3:00 p.m.
County Government Center, Building F

1.) Roll Call

Present	**Staff Present**	**Others Present**
Ms. Robin Bledsoe	Mr. Paul Holt	Ms. Julia Hillegass, HRPDC
Mr. Rich Krapf	Ms. Tammy Rosario	
Mr. John Wright	Mr. José Ribeiro	
	Mr. Scott Whyte	
	Ms. Beth Klapper	

Absent
Mr. Tim O'Connor

Mrs. Robin Bledsoe stated that she had agreed to chair the meeting in Mr. O'Connor's absence.

Ms. Bledsoe called the meeting to order at 3:00 p.m.

2.) Minutes
a. December 1, 2014

Mr. Krapf stated that since he did not attend the December 1 meeting, he would abstain from voting on the minutes.

Mr. Wright moved to approve the December 1, 2014 minutes.

In a unanimous voice vote, the minutes were approved as submitted (2-0-1, Mr. Krapf abstaining and Mr. O'Connor being absent).

3.) Old Business

There was no old business to discuss.

4.) New Business

a. *Envisioning Hampton Roads* – a Community-based Strategic Plan for Hampton Roads

Ms. Julia Hillegass, representing the Hampton Roads Planning District Commission (HRPDC), gave a presentation on the efforts by the HRPDC to develop Hampton Roads' first Community-based Regional Strategic Plan.

Ms. Hillegass stated that feedback from the initial stakeholder meetings indicated that citizens value a comfortable, safe place to live; the diversity of our people; our natural environment; the areas military presence; and our rich history. As a region we aspire to be bold and forward thinking; be proactive in addressing challenges and opportunities; and to think more regionally.

As a region, leaders should address transportation challenges; create the very best public education resources; bring jobs to the region; and replace “brain drain” with “brain gain.”

Ms. Hillegass stated that the HRPDC is looking to localities to provide their top five achievements for the region by 2035.

Mr. Krapf stated that he believes it is necessary to develop a new revenue stream by becoming a hub for science, technology, engineering and mathematics or medical.

Mr. Holt noted that the region should leverage existing entities such as Jefferson Lab, NASA and VIMS.

Ms. Bledsoe stated that the region needs to develop high speed or light rail to be competitive.

Mr. Krapf noted that, while roadway improvements are necessary, focusing on that alone could destroy what makes the region special with its scenery and natural resources.

Ms. Bledsoe suggested that one of the achievements could be diversification of transportation modes to include infrastructure for both long and short trip modes.

Mr. Wright stated that the region should have a safe living environment.

Ms. Bledsoe stated that the region should develop ways to maintain the workforce educated in the region by providing attractive employment opportunities.

Mr. Ribeiro inquired whether that should be coupled with providing social, cultural, and recreational opportunities.

Mr. Wright stated that having a reputation for big breakthroughs in science, technology and medicine would energize the region.

Ms. Bledsoe stated that is necessary to broaden the perception of the region as being attractive to a wider age demographic.

Mr. Krapf stated that in developing a regional identity there needs to be a focus on competitive salaries, safety, affordable living, recreational activities and education.

Ms. Bledsoe stated for branding the region should focus on its advanced education system, technology, military preparedness and diverse recreational advantages.

Mr. Krapf proposed a goal of using the area’s wineries, farms and fisheries to develop an agri-economy or agri-business.

Ms. Bledsoe suggested that another achievement could be that by 2035 the region recognizes the value of the area’s natural resources. Ms. Bledsoe noted that this might be more closely related to the area’s water resources.

Mr. Krapf inquired whether the goal of this process is that by 2035 the area attracts more visitors as opposed to changing the demographics of the area.

Ms. Hillegass stated that that discussion would occur in the next phase of the process.

Mr. José Ribeiro asked the Committee for their thoughts on education in the region.

Ms. Bledsoe stated that Mr. O'Connor had suggested that the region needs to look toward creating a well-qualified workforce through the local colleges.

Mr. Wright summarized that the region should look toward being superior in providing educational opportunities.

Ms. Bledsoe asked for clarification on whether this was looking at K-12 education alone or included higher education.

Mr. Ribeiro responded that it was education in general.

Mr. Wright stated that it is necessary to include the colleges and community colleges.

Ms. Bledsoe stated that the United States lags behind European nations in that graduates are not competitive in the global market because they do not have the science and technical skills.

Mr. Scott Whyte stated that this also goes back to branding the region as an area for educational attainment similar to the Blacksburg "Technology Corridor."

Mr. Ribeiro summarized that the Committee's suggested achievements.

The Committee and staff discussed and refined thoughts what the regional educational system needs to be and to accomplish.

The Committee recommended that the region's achievements should be:

- By 2035, the region has successfully created brand recognition that promotes the unique features of the region as a desirable location to live, work and play.

- By 2035, the region is better connected and connected to other large metropolitan areas by various modes of transportation including high speed and light rail and safe uncongested roadways.

- By 2035, the region has a diversified economy sustained by diverse resources.

- By 2035, the region has a superior educational system that generates a workforce that is competitive in the global market and retains highly educated people to live and work in the region.

Mr. Krapf inquired about next steps.

Mr. Holt stated that staff would send out the summarized achievement to the Committee for review and that they would be presented to the Planning Commission in February as part of the Policy Committee Report.

Mr. Whyte inquired what the HRPDC will do with the information.

Ms. Hillegass stated that the Steering Committee would review the proposed achievements and would develop one vision which would include a number of elements.

Mr. Ribeiro inquired if the HRPDC was hearing similar recommendations from other localities.

Ms. Hillegass confirmed that there were similar themes.

5.) Adjournment

Mr. Wright made a motion to adjourn.

The meeting was adjourned at approximately 3:49 p.m.

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Robin Bledsoe