

Department Name: Fire, Rescue, & Emergency Services
Capital Improvement Project Requests
FY 16/17 - 20/21

No.	Project Title	Priority	Prior Appropriation	Totals	2016-17	2017-18	2018-19	2019-20	2020-21	Est Oper Costs
1	Ambulance Replacement Program	Urgent	\$ -	\$ 1,085,000	\$ 185,000	\$ 225,000	\$ 225,000	\$ 225,000	\$ 225,000	\$ -
2	Fire & Rescue Facilities	Urgent	\$ -	\$ 7,865,000	\$ 3,500,000	\$ 1,500,000	\$ 2,865,000	\$ -	\$ -	\$ 975,000
3	Replacement of Engine 21	Necessary	\$ -	\$ 625,000	\$ 625,000	\$ -	\$ -	\$ -	\$ -	\$ -
4	AED Replacement	Necessary	\$ -	\$ 88,000	\$ 88,000	\$ -	\$ -	\$ -	\$ -	\$ -
5	Diesel Exhaust Removal System	Urgent	\$ -	\$ 100,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -
Total Department Request			\$ -	\$ 9,763,000	\$ 4,498,000	\$ 1,725,000	\$ 3,090,000	\$ 225,000	\$ 225,000	\$ 975,000

KING GEORGE COUNTY
Capital Improvement Project Request

Request # 1

1. Department: **Fire, Rescue, & Emergency Services** 2. Date Requested: **3/14/2016**

3. Project Title: **Ambulance Replacement Program** 4. *Priority: **Urgent**

5. Project Description: Include Location, Size of project, Sq. footage, etc. (attach map)

This project is to replace one ambulance each year. The ambulances are stationed at Companies 1, 2, 3 and Station 2 throughout the County.

6. Reason for Request:

Regulatory Requirement:	<input checked="" type="checkbox"/>	Safety:	<input checked="" type="checkbox"/>	Obsolete:	<input type="checkbox"/>
Upgrade/ Replace/Renovate:	<input checked="" type="checkbox"/>	Growth:	<input type="checkbox"/>	Efficiency:	<input type="checkbox"/>

7. Project Justification: Reason the project is being requested/state regulatory agency if applicable, etc.

Currently King George County's Emergency Medical Services (EMS) are provided with six (6) primary ambulances and one (1) reserve (back-up) ambulance. These ambulances respond to various emergencies such as; medical, fire, hazardous materials, law enforcement stand-by, etc. Between all of these units they respond to over 3000 calls per year. These units are maintained with a weekly rotation schedule. This rotation is necessary in order for no one ambulance to receive very high mileage in a short time frame and to ensure preventive maintenance and repairs are completed. Most of the miles comes from transporting medical patients to Mary Washington Hospital, Spotsylvania Regional Hospital, and to Charles Regional Medical Center in Maryland. Most ambulances receive an average 25,000 to 30,000 miles annually with all six (6) totaling approximately 140,000 miles a year. Below is the current mileage and year(s) of our ambulances: Unit 1 - 2015 26,600, Unit 2 - 2011 111,000 Unit 3 - 2012 65,650, Unit 4 - 2008 143,500, Unit 5 - 2015 19,000, Unit 6 - 2008 137,000, and Unit 7 - 156,200. Operating cost for each ambulance will be approximately the same as our current ambulances, if not less. These costs include insurance, fuel, preventive maintenance, etc. However, no new additional costs would be added. This request follows the recommendations outlined in the VA Dept. of Fire Programs and VA Office of EMS State Study for King George, as endorsed by the Board of Supervisors.

8. Benefits if Request is approved:

With purchasing one (1) ambulance every year, this will prevent several ambulances from reaching there life expectancy all at the same time. Ambulances should be replaced approximately every six (6) years based on mileage and overall condition. The Fire & Rescue Study in 2001 stated "Budget planning should plan for the replacement of one ambulance per year". Currently an ambulance is replaced every 150,000 – 190,000 miles as needed. In the future as more people call for ambulance service, the sooner these miles will added.

9. Impact if Request is not approved:

Not replacing ambulances on a needed basis will have catastrophic consequences on the community. It is imperative to have reliable emergency apparatus such as ambulances. Patients that are critically ill or injured and that need immediate life saving treatment will be at risk.

10. Included in Master Plan: New: Prev Apprv: Expanded :

11. Effect on other Departments/Other Beneficiaries?

As more businesses move into the industrial park, as a result of easy access to natural gas, water and sewer usage will increase thereby requiring that adequate facilities be available.

Request # 1 continued

Department: **Fire, Rescue, & Emergency Services**
Proj. Continued: **Ambulance Replacement Program**

12. Project timeline: Beg/End Date: to

13. Additional Space Requirements:

14. Estimated Annual Costs:	Totals	2016-17	2017-18	2018-19	2019-20	2020-21
Land Acquisition	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

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Engineering/Architecture	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Equipment Purchases	\$ 1,085,000	\$ 185,000	\$ 225,000	\$ 225,000	\$ 225,000	\$ 225,000
Estimated Project Total:	\$ 1,085,000	\$ 185,000	\$ 225,000	\$ 225,000	\$ 225,000	\$ 225,000

15. **Estimated Annual Operating Costs upon Completion: MUST BE COMPLETED

	Totals	2016-17	2017-18	2018-19	2019-20	2020-21
Additional Staff Needed	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Utilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance agreements, etc.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other, Vehicles, etc.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Estimated Operating Costs:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

****Note: Must be including in Operating Budget.**

16. Attachments:

******Below Area to be completed by Finance Department Except #18 Grant Funding: ******

17. Prior Year Appropriations: \$ - Year

	Totals	2016-17	2017-18	2018-19	2019-20	2020-21
Cash/Local Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
***Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
***Capital Lease	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
State/Federal Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grant Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

*****Note: Must include Principal and Interest Payments in Operating Budget.**

19. County Administrator's Comments: **Recommend/Deny:**

20. Board of Supervisors Comments/Recommendations: **Recommend/Deny:**

21. Date Presented to Board:

22. Date Adopted by Board:

See #4 above * Urgent = Must be completed as soon as possible. Regulatory requirement, compliance, mandated. Start < 1 year.

Necessary = Should be done to ensure safety of employees/citizens, etc. Hazardous. Start < 3 years.

Future = No immediate need; Will improve facility, etc. May create savings/efficiencies.

Desirable = Revenue enhancing/Cost saving projects. Income/savings will cover expense of project.

KING GEORGE COUNTY
Capital Improvement Project Request

Request # 2

1. Department: **Fire, Rescue, & Emergency Services** 2. Date Requested: **3/14/2016**
3. Project Title: **Fire & Rescue Facilities** 4. *Priority: **Urgent**

5. Project Description: Include Location, Size of project, Sq. footage, etc. (attach map)

This project is to replace our current Company 2 and Station 2 in Dahlgren and to build a new Company 4 station in the Shiloh / Jersey district.

6. Reason for Request:

Regulatory Requirement:	<input checked="" type="checkbox"/>	Safety:	<input checked="" type="checkbox"/>	Obsolete:	<input checked="" type="checkbox"/>
Upgrade/ Replace/Renovate:	<input checked="" type="checkbox"/>	Growth:	<input checked="" type="checkbox"/>	Efficiency:	<input checked="" type="checkbox"/>

7. Project Justification: Reason the project is being requested/state regulatory agency if applicable, etc.

Company 2 (Dahlgren) Fire & Rescue Station:

Funds are being requested to design and build a fire & rescue station in the Dahlgren district. Currently the fire department and rescue squad functions are housed into two (2) separate facilities. Both buildings are older and require constant maintenance in order to stay in service. The Co.2 fire station was built and designed to have no bunking / sleeping areas for firefighters to stay overnight and to provided around-the-clock operations. The fire department had turned the upstairs office into a bunkroom, however this was only designed to be used temporarily. There is only one (1) shower in the station and it is located in the men's restroom. The Rescue Station 2 was built in 1954, and houses its office and training areas in a separate building than its ambulances. The ambulance bays do not have A/C, the problem that we face currently is that medications stored on these ambulances have to be temperature maintained, this is a regulation by State Board of Health. Storage in both the fire station and rescue squad has become a major issue. Both facilities were built and designed different than the needs for today.

We are requesting funding for land aquisition and for a new combination station that would meet present and future needs for fire & rescue operations. This facility would have fire and rescue apparatus storage bays, office area for filing and making reports, bunkrooms for both male and female overnight sleeping, small physical fitness area, kitchen, dayroom, etc. Also this facility would provide some shared office space for the Sheriff's Office. The operating costs for this proposed new station should be less that operating out of the two seperate facilities that are older and not energy efficient. There should not be any new operating costs with this new facility, however this would be determined by the site and design of the new facility (ex. county sewer or septic, etc.)

Company 4 (Shiloh) Fire & Rescue Station:

In order to better meet Department response criteria of responding to 90% of emergencies within 8 minutes we need to look at expanding our fire & rescue facilities to reduce response times in this area of the county. Currently the Shiloh / Jersey areas of the county are primarily served Company 1 and surrounding mutual aid resources. Company 1 has a primary response district of 113 square miles that extends on Route 3 from the Westmoreland County line to the Stafford County line. Emergency responses in this area of the county often lead to extended reponse times which can have unwanted outcomes with emergency medical calls (EMS) and for fires to be extinguished quickly. Many of the homes and business within this area of the county do not have sustainable fire hydrants for fire suppression abilities, which in turn requires faster delivery of fire and rescue services in order to combat fires. This station would house a pumper engine, ambulance and brush truck vehicle at minimum.

8. Benefits if Request is approved:

Company 2 (Dahlgren) Fire & Rescue Station:

The current Rescue Station 2 and Company 2 building could possibly be used for other County services or be sold to offset some of the cost for the new station. Also operating one (1) new modern combined station is more cost efficient than operating two (2) older seperate stations. This new station would provide modern and state of the art facility for fire, rescue and emergency services needs within the growing Dahlgren district.

Company 4 (Shiloh) Fire & Rescue Station:

Citizens, businesses, and visitors will receive a more efficient and faster delivery of emergency services when calling 911. A primary fire and rescue response would not have to come from our current Company 1 which would allow for quicker response times. Adding this station in the county would also reduce ISO ratings on buildings in this area.

9. Impact if Request is not approved:

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Company 2 (Dahlgren) Fire & Rescue Station: Not
funding this project would result in operating out of two outdated separate stations that are not conducive to around-the-clock fire & rescue operations. Also as these buildings continue to age they will require significant maintenance costs in the near future in order to stay in operation. Expanding or renovating the station could potentially be an option, however the primary problem that exists is not having enough land and having restrictions on building due to the adjacent wetlands. Company 4 (Shiloh) Fire & Rescue Station: If this station is not approved then this area of the county will continue to be serviced by Company 1 along with mutual aid resources and extended response times will continue.

10. Included in Master Plan: New: Prev Apprv: Expanded :

11. Effect on other Departments/Other Beneficiaries?

KING GEORGE COUNTY
Capital Improvement Project Request

Request # 2 continued

Department: Fire, Rescue, & Emergency Services
Proj. Continued: Fire & Rescue Facilities

12. Project timeline: Beg/End Date: to

13. Additional Space Requirements:

14. Estimated Annual Costs:	Totals	2016-17	2017-18	2018-19	2019-20	2020-21
Land Acquisition	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Engineering/Architecture	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	\$ 7,000,000	\$ 3,500,000	\$ 1,500,000	\$ 2,000,000	\$ -	\$ -
Equipment Purchases	\$ 865,000	\$ -	\$ -	\$ 865,000	\$ -	\$ -
Estimated Project Total:	\$ 7,865,000	\$ 3,500,000	\$ 1,500,000	\$ 2,865,000	\$ -	\$ -

15. **Estimated Annual Operating Costs upon Completion: MUST BE COMPLETED

	Totals	2016-17	2017-18	2018-19	2019-20	2020-21
Additional Staff Needed	\$ 975,000	\$ -	\$ -	\$ 975,000	\$ -	\$ -
Utilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance agreements, etc.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other, Vehicles, etc.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Estimated Operating Costs:	\$ 975,000	\$ -	\$ -	\$ 975,000	\$ -	\$ -

****Note: Must be including in Operating Budget.**

16. Attachments:

****Below Area to be completed by Finance Department Except #18 Grant Funding: ****

17. Prior Year Appropriations: \$ - Year

18. Estimated Funding Source:	Totals	2016-17	2017-18	2018-19	2019-20	2020-21
Cash/Local Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
***Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
***Capital Lease	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
State/Federal Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grant Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

*****Note: Must include Principal and Interest Payments in Operating Budget.**

19. County Administrator's Comments: Recommend/Deny:

20. Board of Supervisors Comments/Recommendations: Recommend/Deny:

21. Date Presented to Board: 22. Date Adopted by Board:

See #4 above * **Urgent** = Must be completed as soon as possible. Regulatory requirement, compliance, mandated. Start < 1 year.
Necessary = Should be done to ensure safety of employees/citizens, etc. Hazardous. Start < 3 years.
Future = No immediate need; Will improve facility, etc. May create savings/efficiencies.
Desirable = Revenue enhancing/Cost saving projects. Income/savings will cover expense of project.

KING GEORGE COUNTY
Capital Improvement Project Request

Request # 3

1. Department: **Fire, Rescue, & Emergency Services** 2. Date Requested: **3/14/2016**

3. Project Title: **Replacement of Engine 21** 4. *Priority: **Necessary**

5. Project Description: Include Location, Size of project, Sq. footage, etc. (attach map)

This project is to replace Engine 21 located at the Company 2 Fire & Rescue Station (Dahlgren)

6. Reason for Request:

Regulatory Requirement:	<input type="checkbox"/>	Safety:	<input type="checkbox"/>	Obsolete:	<input type="checkbox"/>
Upgrade/ Replace/Renovate:	<input type="checkbox"/>	Growth:	<input type="checkbox"/>	Efficiency:	<input type="checkbox"/>

7. Project Justification: Reason the project is being requested/state regulatory agency if applicable, etc.

Engine-21 serves as the primary fire suppression pumper at the Fire & Rescue - Company 2 station in Dahlgren. Engine 21 was built in 1995. By 2016 this Engine will have been in service for 22 years and will have served its life expectancy. Once a replacement truck is ordered it will take approximately 8 to 10 months to be built and delivered. Once Engine 21 is replaced it will be used to replace the Reserve Engine 1 and will be used in a reserve capacity. The replacement engine will be able to complete all of the essential functions that our current Engine-21 performs along with some additional rescue abilities to possibly include an aerial ladder. Operating cost for this apparatus will be approximately the same, if not less than our current Engine 11. These costs include insurance, fuel, preventive maintenance, etc. However no new additional costs would be added. This request follows the recommendations outlined in the VA Dept. of Fire Programs and VA Office of EMS State Study for King George, as endorsed by the Board of Supervisors.

8. Benefits if Request is approved:

With replacing this fire engine it will benefit the citizens, business and visitors of the County by helping to provide adequate fire protection, suppression and life safety. This engine will also help our department with maintaining a sufficient and safe fleet of fire apparatus to our volunteers and employees. The new truck will have additional rescue and fire suppression capabilities that will be needed as the Dahlgren district continues to grow.

9. Impact if Request is not approved:

The citizens, businesses and visitors along with the departments volunteers and employees would be at risk with operating and relying on an outdated apparatus. In addition, maintenance costs will continue to increase due to meeting its life expectancy while using it as a primary apparatus. The trucks powertrain, fire pump, tank, valves, electronics, suspension, etc. will all require overhaul and significant maintenance costs. Also by not replacing this apparatus could affect our County's Insurance Services Office (ISO) rating. This rating directly effects the costs that homeowners and business pay for fire protection insurance premiums.

10. Included in Master Plan: **N/A** New: Prev Apprv: Expanded :

11. Effect on other Departments/Other Beneficiaries?

KING GEORGE COUNTY
Capital Improvement Project Request

Request # 3 continued

Department: Fire, Rescue, & Emergency Services
Proj. Continued: Replacement of Engine 21

12. Project timeline: Beg/End Date: to

13. Additional Space Requirements:

14. Estimated Annual Costs:	Totals	2016-17	2017-18	2018-19	2019-20	2020-21
Land Acquisition	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Engineering/Architecture	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Equipment Purchases	\$ 625,000	\$ 625,000	\$ -	\$ -	\$ -	\$ -
Estimated Project Total:	\$ 625,000	\$ 625,000	\$ -	\$ -	\$ -	\$ -

15. **Estimated Annual Operating Costs upon Completion: MUST BE COMPLETED

	Totals	2016-17	2017-18	2018-19	2019-20	2020-21
Additional Staff Needed	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Utilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance agreements, etc.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other, Vehicles, etc.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Estimated Operating Costs:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

****Note: Must be including in Operating Budget.**

16. Attachments:

****Below Area to be completed by Finance Department Except #18 Grant Funding: ****

17. Prior Year Appropriations: \$ - Year

18. Estimated Funding Source:	Totals	2016-17	2017-18	2018-19	2019-20	2020-21
Cash/Local Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
***Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
***Capital Lease	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
State/Federal Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grant Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

*****Note: Must include Principal and Interest Payments in Operating Budget.**

19. County Administrator's Comments: Recommend/Deny:

20. Board of Supervisors Comments/Recommendations: Recommend/Deny:

21. Date Presented to Board: 22. Date Adopted by Board:

See #4 above * **Urgent** = Must be completed as soon as possible. Regulatory requirement, compliance, mandated. Start < 1 year.
Necessary = Should be done to ensure safety of employees/citizens, etc. Hazardous. Start < 3 years.
Future = No immediate need; Will improve facility, etc. May create savings/efficiencies.
Desirable = Revenue enhancing/Cost saving projects. Income/savings will cover expense of project.

KING GEORGE COUNTY
Capital Improvement Project Request

Request # 4

1. Department: **Fire, Rescue, & Emergency Services** 2. Date Requested: **3/14/2016**
3. Project Title: **AED Replacement** 4. *Priority: **Necessary**

5. Project Description: Include Location, Size of project, Sq. footage, etc. (attach map)

This project is to purchase 42 AED's and would replace and provide additional AED's to the King George Sheriff's Office Deputies, Courthouse, Revercomb Administration Building, Parks & Recreation Citizens Center Building, Animal Shelter, and 911 Center.

6. Reason for Request:

Regulatory Requirement:	<input type="checkbox"/>	Safety:	<input checked="" type="checkbox"/>	Obsolete:	<input type="checkbox"/>
Upgrade/ Replace/Renovate:	<input checked="" type="checkbox"/>	Growth:	<input type="checkbox"/>	Efficiency:	<input checked="" type="checkbox"/>

7. Project Justification: Reason the project is being requested/state regulatory agency if applicable, etc.

The Department of Fire, Rescue, & Emergency services maintains the AED's that are carried by the King George Sheriff's Office Deputies and eight (8) public access AED's throughout the County. Studies have proven that people suffering from sudden cardiac arrest greatly benefit and increase their chances of survival by early AED intervention. Many of our existing AED's were purchased in 2004 under a VDH Rural Access AED grant and are now over 12 years old. The current AED's use an older monophasic defibrillation technology and are primarily intended for use on older children and adults but not younger children. Some of our existing AED's are starting to have some ongoing maintenance and reliability concerns since they are getting older and many batteries will have to be replaced in the near future.

8. Benefits if Request is approved:

New AED's would allow for the latest technology and would ensure better reliability. The requested AED's are designed with a newer bi-phasic defibrillation technology and can be used on infants and children.

9. Impact if Request is not approved:

If the AED's are not eventually replaced we will have to reduce our coverage of AED's by the Sheriff's Office and in the public county facilities. This would reduce the ability to ensure early AED intervention during a sudden cardiac arrest event.

10. Included in Master Plan: **N/A** New: Prev Apprv: Expanded :

11. Effect on other Departments/Other Beneficiaries?

Due to the nature and broad scope of this project, this would affect the King George Sheriff's Office response to medical emergencies

KING GEORGE COUNTY
Capital Improvement Project Request

Request # 4 continued

Department: Fire, Rescue, & Emergency Services
Proj. Continued: AED Replacement

12. Project timeline: Beg/End Date: to

13. Additional Space Requirements:

14. Estimated Annual Costs:	Totals	2016-17	2017-18	2018-19	2019-20	2020-21
Land Acquisition	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Engineering/Architecture	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Equipment Purchases	\$ 88,000	\$ 88,000	\$ -	\$ -	\$ -	\$ -
Estimated Project Total:	\$ 88,000	\$ 88,000	\$ -	\$ -	\$ -	\$ -

15. **Estimated Annual Operating Costs upon Completion: MUST BE COMPLETED

	Totals	2016-17	2017-18	2018-19	2019-20	2020-21
Additional Staff Needed	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Utilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance agreements, etc.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other, Vehicles, etc.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Estimated Operating Costs:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

****Note: Must be including in Operating Budget.**

16. Attachments:

****Below Area to be completed by Finance Department Except #18 Grant Funding: ****

17. Prior Year Appropriations: \$ - Year

18. Estimated Funding Source:	Totals	2016-17	2017-18	2018-19	2019-20	2020-21
Cash/Local Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
***Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
***Capital Lease	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
State/Federal Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grant Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

*****Note: Must include Principal and Interest Payments in Operating Budget.**

19. County Administrator's Comments: Recommend/Deny:

20. Board of Supervisors Comments/Recommendations: Recommend/Deny:

21. Date Presented to Board: 22. Date Adopted by Board:

See #4 above * **Urgent** = Must be completed as soon as possible. Regulatory requirement, compliance, mandated. Start < 1 year.
Necessary = Should be done to ensure safety of employees/citizens, etc. Hazardous. Start < 3 years.
Future = No immediate need; Will improve facility, etc. May create savings/efficiencies.
Desirable = Revenue enhancing/Cost saving projects. Income/savings will cover expense of project.

KING GEORGE COUNTY
Capital Improvement Project Request

Request # 5

1. Department: **Fire, Rescue, & Emergency Services** 2. Date Requested: **3/14/2016**
3. Project Title: **Diesel Exhaust Removal System** 4. *Priority: **Urgent**

5. Project Description: Include Location, Size of project, Sq. footage, etc. (attach map)

This project is to add a diesel exhaust removal system at our Company 1 Fire & Rescue Headquarters station for both the east and west apparatus bays.

6. Reason for Request:

Regulatory Requirement:	<input type="checkbox"/>	Safety:	<input checked="" type="checkbox"/>	Obsolete:	<input type="checkbox"/>
Upgrade/ Replace/Renovate:	<input type="checkbox"/>	Growth:	<input type="checkbox"/>	Efficiency:	<input type="checkbox"/>

7. Project Justification: Reason the project is being requested/state regulatory agency if applicable, etc.

It is a proven fact that diesel exhaust includes toxic smoke and carcinogens and there is many reports supporting these facts by the American Cancer Society, EPA, NIH, IAFF, IAFC, etc. The risk of long term exposure to diesel exhaust is much greater for firefighters. Diesel exhaust is a complex mixture of both gaseous and particulate substances, including carbon monoxide, oxides of sulfur and nitrogen and hydrocarbons. Diesel exhaust particulates are respirable, or small enough to be easily inhaled and deposit in the lungs and lower respiratory system. This small size also allows diesel particulates to remain suspended in the air for long periods of time. Firefighters are at high risk of exposure to diesel exhaust, particularly inside fire stations where diesel fire apparatus release diesel exhaust that disperses to areas where fire fighters eat, work and sleep. As such, studies now conclusively show that firefighters have an increased risk of developing a variety of cancers than that of the general population. This indicates that these cancers are directly the result of the occupation. Currently Company 1 is the only fire station in the County that does not have a diesel exhaust removal system.

8. Benefits if Request is approved:

Having this exhaust removal system in place would greatly reduce the exposure of our personnel to the harmful effects of diesel exhaust thus helping the fight in reducing our firefighters from developing cancers and respiratory illnesses.

9. Impact if Request is not approved:

If not approved the diesel exhaust will continue to plague our firefighters and members. Exhaust will continue to build up in closed spaces, will contaminate our firefighter PPE gear, will continue to encroach into the living spaces and our personnel will continue to be exposed. This long term exposure could lead to personnel developing cancer and lead to disability or even death.

10. Included in Master Plan: N/A New: Prev Apprv: Expanded :

11. Effect on other Departments/Other Beneficiaries?

KING GEORGE COUNTY
Capital Improvement Project Request

Request # 5 continued

Department: Fire, Rescue, & Emergency Services
Proj. Continued: Diesel Exhaust Removal System

12. Project timeline: Beg/End Date: to

13. Additional Space Requirements:

14. Estimated Annual Costs:	Totals	2016-17	2017-18	2018-19	2019-20	2020-21
Land Acquisition	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Engineering/Architecture	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Equipment Purchases	\$ 100,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -
Estimated Project Total:	\$ 100,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -

15. **Estimated Annual Operating Costs upon Completion: MUST BE COMPLETED

	Totals	2016-17	2017-18	2018-19	2019-20	2020-21
Additional Staff Needed	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Utilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance agreements, etc.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other, Vehicles, etc.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Estimated Operating Costs:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

****Note: Must be including in Operating Budget.**

[Quote for Plymovent - Exhaust Removal System](#)

16. Attachments:

****Below Area to be completed by Finance Department **Except #18 Grant Funding:** ****

17. Prior Year Appropriations: \$ - Year

18. Estimated Funding Source:	Totals	2016-17	2017-18	2018-19	2019-20	2020-21
Cash/Local Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
***Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
***Capital Lease	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
State/Federal Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grant Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

*****Note: Must include Principal and Interest Payments in Operating Budget.**

19. County Administrator's Comments: Recommend/Deny:

20. Board of Supervisors Comments/Recommendations: Recommend/Deny:

21. Date Presented to Board: 22. Date Adopted by Board:

See #4 above * **Urgent** = Must be completed as soon as possible. Regulatory requirement, compliance, mandated. Start < 1 year.
Necessary = Should be done to ensure safety of employees/citizens, etc. Hazardous. Start < 3 years.
Future = No immediate need; Will improve facility, etc. May create savings/efficiencies.
Desirable = Revenue enhancing/Cost saving projects. Income/savings will cover expense of project.