MEMORANDUM

March 3, 2021

TO: Government Operations and Fiscal Policy (GO) Committee

FROM: Marlene Michaelson, Executive Director

Craig Howard, Deputy Director

Nicole Rodriguez-Hernandez, Legislative Analyst

Naeem Mia, Legislative Analyst

SUBJECT: Supplemental Appropriation to the County Government's FY21 Capital

Budget and Amendment to the FY21-26 Capital Improvements Program- \$92,000 for Council Office Building Renovation (11-member Council)

PURPOSE: Vote on recommendations for the Council's consideration

Expected Attendees:

- David Dise, Director, Department of General Services (DGS)
- Greg Ossont, Deputy Director, DGS
- Gary Nalven, Fiscal and Policy Analyst, Office of Management and Budget (OMB)

The Committee will hold a worksession on a FY21 supplemental appropriation and amendment to the FY21-26 Capital Improvements Program to provide \$92,000 for renovations to the Council Office Building (COB) to accommodate an 11-member Council. The County Executive transmitted the appropriation and amendment request on January 15 and it was introduced by the Council on January 26. The transmittal memorandum, draft resolution, and PDF is located on ©1-5.

The staff report provides a summary on the following related to the COB project and renovations:

- Supplemental appropriation and amendment;
- Renovations to accommodate an 11-member Council;
- Technology upgrades; and
- Update on current renovation projects.

A. Summary of Proposed Supplemental Appropriation and Amendment

Montgomery County voters approved a charter amendment (Question C) during the November 2020 election that expands the Council from 9 to 11 members by increasing the number of Council Districts from 5 to 7, while maintaining the 4 At-Large members. The new amendment will come into effect during the 2022 election cycle in which voters will have the opportunity to elect officials for both current and new Councilmember seats.

The current Council Office Building (COB) accommodations are not sufficient for an 11-member Council. Therefore, Council staff asked the Department of General Services (DGS) to begin looking at preliminary options for locating additional Councilmember suites and to identify an initial funding estimate. A detailed description of the renovation design is included in section B.

As a result of DGS' findings, the County Executive transmitted a supplemental appropriation and amendment to the FY21-26 Capital Improvements Program (CIP) for the COB Renovations project (Phase IV) for \$92,000 (source of funds: GO Bonds). Phase IV specifically focuses on addition of the two Councilmember suites (and relocation of impacted staff). DGS' initial funding estimate for this proposed project is \$500,000, which includes both planning and initial projected construction costs. The \$92,000 appropriation will supplement the project's existing \$408,000 in excess appropriation. A detailed description of the initial estimate is included in section B.

The Council introduced this supplemental and amendment on January 26 and held a public hearing on March 2. The public hearing had no speakers. Council action is tentatively scheduled for March 16.

B. Additional Renovation Work to Accommodate an 11-member Council

Council staff and DGS have jointly developed the following recommended approach for the new Councilmember suites.

Location of New Councilmember Offices. Based on its review, DGS recommends creating two new Councilmember suites on the 4th Floor of the COB, so when the Council expands to 11 members there will be nine Councilmembers on the 5th Floor (in the current suites) and two Councilmembers on the 4th Floor. Specifically:

- The 4th floor office space currently used for Legislative Information Services (LIS) staff and the adjoining workroom and copier room would be converted into two new Councilmember suites. These suites would have similar square footage as existing Councilmember suites located on the 5th floor.
- Councilmembers located on the 4th floor would reside behind the security door, with the additional option to make the entire floor a secure floor, similar to the 5th floor (e.g. specific badge access to enter the floor via elevator or stairwell).

• The current 6th floor Patuxent Conference room would be converted into the new LIS office and workroom. The LIS staff would utilize the 6th floor copier room. The 4th floor copier would be relocated in another location on the 4th floor. A proposed additional phase of this project would replace the conference space currently located as part of the cafeteria.

DGS did consider other alternatives, including trying to fit all 11 Councilmember suites on the 5th floor, putting more than two Councilmember offices on the 4th Floor, and using some or all of the current cafeteria space for Councilmember offices. Each of these options was found to be deficient due to cost, feasibility, timing, and disruption to current space and staff.

Funding. DGS' initial funding estimate for this proposed project is \$500,000, which includes both planning and initial projected construction costs. However, DGS will not have a final estimate of construction costs until after an architect/design firm is hired and it is possible that the final costs will be higher. To fund this new work, the Executive recommends using \$408,000 in previously appropriated funding for the COB renovation project and \$92,000 in new funding.

The County Executive transmitted a supplemental appropriation and amendment to the FY21-26 Capital Improvements Program (CIP) for the COB Renovations project (Phase IV) for \$92,000 (source of funds: GO Bonds). The Council introduced this supplemental on January 26 and held a public hearing on March 2. Council action is tentatively scheduled for March 16.

The available \$408,000 in the COB Renovations project was appropriated in FY21 as placeholder funding for Phase III of the project: the COB curtain wall/building envelope repair. On April 28, 2020, the Council voted to defer action on the curtain wall portion of the COB renovations project and to maintain the placeholder funding for a future decision ©6. Councilmembers have been presented with a range of options (both in scope and cost ©8-10) to address the curtain wall; however, DGS notes that the estimated costs have increased such that the available appropriation of \$408,000 is now not sufficient for even the least-expensive curtain wall option.

Due to the timing of when the new Councilmember suites will need to be ready, Council staff concurs with the Executive's recommendation to re-allocate the placeholder funding for the curtain wall to the new suites. The Council can certainly consider future supplemental appropriations for the curtain wall once options are re-evaluated. Additionally, by utilizing the existing funding for the new suites now, it alleviates some pressure on the existing FY21 G.O. bond funding constraints the County is currently facing.

Construction and Move-In Timeline. Upon approval of a supplemental appropriation, DGS staff would retain an architect/design firm to provide more detailed planning. Under the proposed plan, DGS anticipates being able to complete the two new suites no later than early October 2022.

Replacing Conference Space and Cafeteria/Kitchen. Prior to the pandemic, code compliance issues were identified at the COB kitchen upon detailed inspection and assessment. DGS estimates approximately \$1.0 million will be needed to bring the kitchen up to code. Funding for any renovation to the COB kitchen has yet to be considered by the Council.

Since the Council would lose conference space under the recommended renovation plan, another option would be a reevaluation of the COB kitchen and cafeteria space as a "next phase" (Phase IV-B) in addressing space needs for an 11-member Council.

For example, the current cafeteria areas could be converted to provide a 'grab and go' food and beverage option (potentially partnering with local restaurants or food vendors), a smaller seating area, and additional conference rooms as a replacement for the Patuxent Room. Costs and specific options for this type of work are currently unknown; more detailed planning and evaluation will need to be performed.

If supported by the Council, staff could begin preliminary discussions on that longer-term phase with DGS as soon as more immediate work on creating Councilmember suites is underway. The proposed supplemental appropriation does not include funding for cafeteria space renovations.

C. Technology Upgrades to Hearing and Conference Rooms

The 3rd floor hearing and conference rooms are currently undergoing a previously approved technology upgrade as the current systems were at the end of their useful life and no longer supported. In order to leverage the current work, Council staff has worked with the vendor to: 1) include sufficient technology so that the hearing room will support 11 Councilmembers going forward; and 2) make enhancements to the conference room to support usability and security. Specifically:

- The current dais in the 3rd floor hearing room seats 13 (9 Councilmembers and 4 staff). As part of the upgrade, it will be outfitted for 11 Councilmember seats and two staff seats. Once the new Council is elected, staff at the dais will be limited to the Executive Director and the Clerk/Council Attorney (who will share a seat and rotate as needed during a meeting).
- A new Clerk's table will be created to the side of the dais and will be outfitted with technology to allow the Clerk to control the timer for public hearings, call roll for votes, etc. The presenter's table will retain the current number of seats.
- The 3rd floor conference room will be outfitted with a wireless microphone system and moveable tables to create a more flexible space that can be set up differently depending on the meeting type.

Staff estimates that these changes will increase the cost of the previously approved technology enhancement by about \$80,000, but these additional costs can be covered within the Council's approved FY21 operating budget.

In addition, the Council also utilizes the 7th floor hearing room to conduct full session, if necessary. At this time, it is not configured for an 11-member Council. DGS recommends refurbishing the current 7th floor hearing room versus alternative options. A preliminary review notes the dais currently sits approximately 11 individuals, however configurations for the Executive Director and

Clerk/Council Attorney will need to be further evaluated (as well as any AV equipment). The proposed supplemental appropriation does not include funding for 7th floor hearing room improvements.

DGS staff can provide an update at the worksession on an initial assessment and a potential cost estimate for the necessary improvements to the 7th floor hearing room.

D. COB Renovations Update on Other Projects

The COB Renovations project scope was originally divided into three phases. Phase I was completed in 2009. DGS is currently finalizing Phase II of the project which includes significant code compliance, HVAC, and interior renovations throughout the building.

Below is a table of the current outstanding items and the expected completion dates. It is important to note that funding for the items have already been allocated from the existing appropriation (with the exception of the stairwell renovation) and will not be affected by the utilization of the placeholder excess appropriation.

Location/Item	Status	Est. Completion
Auditorium (DGS)	Audiovisual System pending minor re-work	Feb-21
2nd Floor Hearing Room		
(DGS)	Renovation in progress	May-21
OZAH/BOA/Ethics		
Offices (DGS)	Renovation in progress	May-21
1st and 2nd Floor Lobbies	Refresh designed. Holding construction until other	
(DGS)	work is complete	Dec-21
Stairwells (DGS)	Design in progress. Construction to begin Summer 2021	Dec-21
Lobby Displays		
(DGS/PIO)	Coordinating with PIO on content	Dec-21
Network Activities (DTS)	1st floor (MSPB) installation in progress	Jun-21
Notycoula Activities (DTS)	2nd floor (OZAH/BOA/Ethics) installation in	
Network Activities (DTS)	progress	Jun-21
Network Activities (DTS)	1st floor (Auditorium) on hold	TBD
Network Activities (DTS)	2nd floor (OCP) on hold	TBD
Elevator Refresh	On hold until all other activities completed	TBD

Stairwell Renovations Update. The original project scope included basic interior renovations of stairwells located in the COB. Unfortunately, the stairwells require extensive code compliance remediations that were unknown during the original appropriation request for Phase II. DGS is currently finalizing the costs for the code compliance remediations and the basic interior refresh (painting and cleaning).

E. Proposed and Potential Funding Summary

As stated previously, the proposed supplemental appropriation provides funding for the addition of two Councilmember suites and reconfiguration of the new 6th floor LIS office and workroom. The table below summarizes the funding status of various aspects highlighted previously.

Location/Item	Funding Estimate
4 th and 6 th Floor Renovations	\$500,000 (preliminary estimate)
3 rd Floor Hearing/Conference Room Technology Upgrades	+\$80,000 (FY21 operating budget)
Kitchen/Cafeteria Renovations	Estimate TBD (not funded-Phase IV-B)
7 th Floor Hearing Room Enhancements	Estimate TBD (not funded)
Stairwell Code Compliance	Estimate TBD (may need supplemental)

F. Staff Recommendations for Committee Consideration

- Amend the Council Office Building Renovations project scope to include text on the 7th floor hearing room and cafeteria space/conference room renovations, if necessary.
- Approve the \$92,000 FY21 supplemental appropriation and amendment to the FY21-26 CIP with amendments.

This packet contains:	Circle Page #
County Executive Recommendation, Draft Resolution, PDF	©1-5
April 28, 2020 Staff Report on COB Renovation Project	©6
July 22, 2019 Memorandum on Curtain Wall Windows	©8-10



Marc Elrich
County Executive

MEMORANDUM

January 15, 2021

TO: Tom Hucker, President, County Council

FROM: Marc Elrich, County Executive Man El

SUBJECT: Amendment to the FY21-26 Capital Improvements Program and

Supplemental Appropriation #16-S21-CMCG-8 to the FY21 Capital Budget

Montgomery County Government Department of General Services

Council Office Building Renovations (No. P010100), \$92,000

I am recommending a supplemental appropriation to the FY21 Capital Budget and amendment to the FY21-26 Capital Improvements Program in the amount of \$92,000 for Council Office Building Renovations (No. P010100). Appropriation for this project will fund additional interior modifications to provide two new councilmember suites and ancillary spaces.

This increase is needed because further renovations to the Council Office Building are required to accommodate two additional councilmembers following the recent amendment of the County Charter.

I recommend that the County Council approve this supplemental appropriation and amendment to the FY21-26 Capital Improvements Program in the amount of \$92,000 and specify the source of funds as GO Bonds. Project cost increases are \$500,000, but prior excess appropriation will cover \$408,000 of these costs.

I appreciate your prompt consideration of this action.

ME:gn

Attachment: Amendment to the FY21-26 Capital Improvements Program and Supplemental

Appropriation #16-S21-CMCG-8

c: David Dise, Director, Department of General Services
Jennifer Bryant, Acting Director, Office of Management and Budget

Resolution:	
Introduced:	
Adopted:	

COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND

By: Council President at the Request of the County Executive

SUBJECT: Amendment to the FY21-26 Capital Improvements Program and

Supplemental Appropriation #16-S21-CMCG-8 to the FY21 Capital Budget

Montgomery County Government
Department of General Services

Council Office Building Renovations (No. P010100), \$92,000

Background

- 1. Section 307 of the Montgomery County Charter provides that any supplemental appropriation shall be recommended by the County Executive who shall specify the source of funds to finance it. The Council shall hold a public hearing on each proposed supplemental appropriation after at least one week's notice. A supplemental appropriation that would comply with, avail the County of, or put into effect a grant or a Federal, State or County law or regulation, or one that is approved after January 1 of any fiscal year, requires an affirmative vote of five Councilmembers. A supplemental appropriation for any other purpose that is approved before January 1 of any fiscal year requires an affirmative vote of six Councilmembers. The Council may, in a single action, approve more than one supplemental appropriation. The Executive may disapprove or reduce a supplemental appropriation, and the Council may reapprove the appropriation, as if it were an item in the annual budget.
- 2. Section 302 of the Montgomery County Charter provides that the Council may amend an approved capital improvements program at any time by an affirmative vote of no fewer than six members of the Council.
- 3. The County Executive recommends the following capital project appropriation increases:

Renovations

Amendment to the FY21-26 Capital Improvements Program and Supplemental Appropriation #16-S21-CMCG-8
Page Two

- 4. This increase is needed because further renovations to the Council Office Building are required to accommodate two additional councilmembers following the recent amendment of the County Charter.
- 5. The County Executive recommends an amendment to the FY21-26 Capital Improvements Program and a supplemental appropriation in the amount of \$92,000 for Council Office Building Renovations (No. P010100) and specifies that the source of funds will be GO Bonds. Project cost increases are \$500,000, but prior excess appropriation will cover \$408,000 of these costs.
- 6. Notice of public hearing was given and a public hearing was held.

Project

Project

Action

The County Council for Montgomery County, Maryland, approves the following action:

The FY21-26 Capital Improvements Program of the Montgomery County Government is amended as reflected on the attached project description form and a supplemental appropriation is approved as follows:

Cost

<u>Name</u>	<u>Number</u>	<u>Element</u>	<u>Amount</u>	of Funds
Council Office Bu	ilding P010100	Construction	\$92,000	GO Bonds
Renovations				
This is a correct copy of	of Council action.			
Selena Mendy Singleto	n, Esq.			
Clerk of the Council				

Source



Council Office Building Renovations (P010100)

Category General Government
SubCategory County Offices and Other Improvements
Planning Area Rockville

Date Last Modified Administering Agency Status 01/09/20 General Services Under Construction

	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
		EXPEND	TURE S	CHEDU	LE (\$00	00s)					
Planning, Design and Supervision	2,757	1,374	1,183	200	200	-	-	-	-	-	
Land	4	4	-	-	-	-	-	-	-	-	
Site Improvements and Utilities	2	2	-	-	-	-	-	-	-	-	
Construction	41,801	31,909	8,139	1,753	1,753	-	-	-	-	-	-
Other	1,580	616	964	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	46,144	33,905	10,286	1,953	1,953	-	-	-	-	-	

FUNDING SCHEDULE (\$000s)

Current Revenue: Cable TV	1,052	900	152	-	-	-	-	-	-	-	-
G.O. Bonds	40,928	28,841	10,134	1,953	1,953	-	-	-	-	-	-
Long-Term Financing	4,000	4,000	-	-	-	-	-	-	-	-	-
PAYGO	164	164	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	46,144	33,905	10,286	1,953	1,953	-	-	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 21 Request	-	Year First Appropriation	FY05
Appropriation FY 22 Request	- I	Last FY's Cost Estimate	45,644
Supplemental Appropriation Request	92		
Cumulative Appropriation	45,991		
Expenditure / Encumbrances	39,207		
Unencumbered Balance	6,784		

PROJECT DESCRIPTION

This project is in four phases. The first phase, completed in 2009, renovated the hearing room, conference room, and anteroom on the third floor of the Council Office Building (COB) which had not been renovated in at least twenty-five years. Phase II replaces the HVAC system, the lighting systems, windows in the rest of the COB, upgrades restrooms to ADA standards, renovates the auditorium on the first floor, provides improved signage inside and outside the buildings, refreshes common areas, and reconfigures space on the fourth, fifth, and sixth floors for the Council Office and the Office of Legislative Oversight (OLO) staff. Phase III provides code compliance renovations and building envelope corrections. Phase IV will include limited interior modifications to provide two new councilmember suites and ancillary spaces.

ESTIMATED SCHEDULE

The project is expected to be finished in Fall 2021.

COST CHANGE

Increase due to change in project scope to add Phase IV in response to recent changes in the County Charter.

PROJECT JUSTIFICATION

Heating, ventilation, and air conditioning in the COB function poorly and most of the restrooms are not compliant with updated ADA standards or high performance building standards. The Council Office and OLO have far outgrown their space since it was last reconfigured more than 25 years ago. The 1st Floor Auditorium, which is used regularly for County Government staff training and as a meeting place by civic organizations, is extremely substandard.

FISCAL NOTE

The second phase of the project is partially funded with a \$184,000 unencumbered balance from the first phase and a FY15 transfer of \$2,993,000 in G.O. Bonds from the Montgomery County Government Complex (360901). A FY15 supplemental of \$296,000 in G.O. Bonds was approved. An audit by Energy Service Company (ESCO) has been conducted, and it has determined that \$4 million in savings can be anticipated from this project. An Energy Savings Performance Contract (ESPC) will allow for third-party funding to cover this portion of the contract, so that G.O. Bonds are not required for funding. A financing mechanism is in place to cover the cost of the contract and the repayment of debt is guaranteed through the energy savings. A FY17 transfer of \$700,000 in long-term financing from Energy Systems Modernization was approved. FY21 supplemental in G.O. Bonds for the amount of \$92,000.

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DISCLOSURES

A pedestrian impact analysis has been completed for this project.

COORDINATION

County Council, Department of General Services, Department of Technology Services, Legislative Branch Office, Office of Consumer Protection, and Department of Housing and Community Affairs. Special Capital Projects Legislation was enacted on June 23, 2015 and signed into law on July 6, 2015 (Bill No. 27-15).

COUNTY EXECUTIVE'S RECOMMENDED FY21-26 CIP

Council Office Building (COB) Renovation ©1

The GO committee and subsequently the Council has not yet reviewed or held a straw vote on this project. The County Executive did not transmit any amendments for this project.

FY21-26 (\$000s)	6-YR	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26
FY19-24	\$9,729	\$6,776	\$1,500	\$1,453		-			
Approved		li							
FY21-26 CE Rec	\$1,453			\$1,453					
Difference	(\$8,276)			\$0					

Source of Funds: \$1.453 million in G.O. Bonds

Budget Highlights

• The Executive recommends <u>no change</u> in funding for FY21. The approved FY19-24 CIP and recommended FY21-26 CIP do not include funding past FY21 as current renovations are expected to be completed by the end of the 2020 calendar year.

Overview & Updates

The COB project is divided into three phases. The first phase was completed in 2009 and focused on renovating the third-floor hearing room and anteroom. The second phase is currently underway and is expected to be completed by the end of summer 2020. The third phase would renovate the curtain wall windows in the southern end of the building.

The current health crisis has had minimal impacts on phase II construction/renovation. Work is still being completed on the stairwells and the 2nd and 3rd floors. The auditorium and ESCo (Energy Service Companies) work are finished. The health crisis has delayed the return of the Office of Consumer Protection and the Board of Appeals (previous tenants in the COB). A new move-in date has not yet been decided.

In July 2019, Council Staff submitted a memo to the Council describing the four available options ranging from \$420,000 to \$2.9 million to address phase three of the renovation: the curtain wall. The memo is attached on ©2-5.

Recently, DGS leadership has explored a fifth option with the firm Onyx for a solar glass curtain wall. Cost estimates and technical feasibility are still being analyzed. In addition, the cost estimates for the original four options are outdated and need to be refined. All options should include operating budget impacts. Currently, \$400,000 is set-aside for this phase of the project.

Council staff recommends deferring a decision on the COB curtain wall. Council Staff concurs with the Executive's recommendation.

The Council's March 10 Preliminary Decisions

• The Council concurred with the Executive on the following projects:

ADA Compliance	HVAC/Elec Replacement	Red Brick Courthouse Structural Repairs
Asbestos Abatement	Life Safety Systems: MCG	Rockville Core- Grey Courthouse
Energy Conservation: MCG	Resurfacing Parking Lots: MCG	Old Blair Auditorium Reuse
Energy Systems Modernization	Roof Replacement	Advanced Land Acquisition Revolving Fund
Environmental Compliance: MCG	Council Office Building Garage	Facilities Site Selection
Building Envelope Repair	EOB HVAC Renovation	Facility Planning

• The Council voted to add \$600,000 in G.O. bonds per fiscal year to the Planned Lifecycle Asset Replacement project.



MONTGOMERY COUNTY COUNCIL ROCKVILLE, MARYLAND

MEMORANDUM

July 22, 2019

TO: Councilmembers

FROM: Linda Price, Legislative Analyst

SUBJECT: Curtainwall Windows

On May 23, the Council approved the FY20 Capital Budget and amendments to the FY19-24 Capital Improvements Program. The reconciled budget reduced the funding in the Council Office Building (COB) Renovations project by \$600,000 in FY21. This reduced the placeholder funds for addressing the curtainwall issue from \$1 million to \$400,000, the minimum that will be needed to implement one of the 4 options identified by Department of General Services' contractor.

The Council approved the placeholder funds to allow DGS to conduct further analysis on the 4 options to repair or replace the curtainwall windows in the southern end of the COB. The funds were added with the understanding that upon completion of the study, the Council may decide to choose a more extensive option funded through a supplemental appropriation and CIP amendment.

The curtainwall windows are the windows on the southern end of the Maryland Avenue wing of the building. The window system runs up the entire height of the building. These windows were due to be replaced within the scope of the project as the current system is vulnerable to water and pest infiltration, solar heat gain, and thermal comfort issues. A number of issues became apparent to the design/build contractors that complicated a simple replacement of the windows. Some of the issues included:

- The entire window system would need to be replaced from the 1st through 6th floors for each vertical section;
- One to two months would be needed to replace each section;
- Temporary barriers would need to be built, which would be both expensive, inconvenient for building occupants, and very complex to install and take down; and
- Periods of rain pose significant risk to the building, especially for the Data Center on the 3rd floor. Upon further study, it was determined that the Data Center would be unaffected.

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Initial options estimated the cost of the refurbishment/replacement to be between \$400,000 and \$2.5 million for each of the 4 options. The following table provides updated information on the components of the 4 options, including costs, benefits, energy savings, and the estimated time to payback each option. The full table is also provided as an attachment, providing additional details on construction time and added thermal benefits.

Option	Description	Added Thermal Benefit	Air/Water infiltration	Preliminary Costs	Potential Life Span Increase of Curtain- wall	Estimated Energy Savings	Estimated (Payback Years)
A1	Clean and reuse existing single pane glass. Add a new Low-e film. Replace gaskets, pressure plates, sealants and exterior snap covers.	Rating of 1	Rating of 2	\$420,000 - \$570,000	5 – 10 years	\$18,973	21.08
A2	Replace existing 1/4" single pane glass. Replace gaskets, pressure plates, seafants and exterior snap covers.	Rating of 2	Rating of 2	\$630,000	5 – 10 years	\$21,892	28.32
В	Replace existing curtainwall with a traditional stick fabricated exterior glazed curtainwall system and high-performance Low E glass. Re-caulk all precast joints surrounding curtainwall, with a redundant row of backer rod and sealant.	Rating of 5	Rating of 5	\$2,450,000 - \$2,700,000	25 – 40 years	\$32,838	70.65
С	Replace existing curtainwall with a traditional stick fabricated exterior glazed curtainwall system and high-performance single pane glass. Wrap existing precast surround at curtainwall with insulated metal panels.	Rating of 5	Rating of 5	\$2,625,000 - \$2,875,000	25 – 40 years	\$32,838	76.13

*Rating 1-5 are provided with 1 having the least benefit and 5 having the greatest benefit

The Current curtainwall window has reached the end of its useful life. Therefore, if the Council were to implement options A1 or A2, full replacement would still need to occur down the road. Implementation of options A1 and A2 would defer the expense, but the County incurring the full replacement cost is inevitable.

Councilmembers July 22, 2019 Page 3

DGS is requesting input, based on preliminary data, on which option the Council would like to pursue. Please let me know your preference on how you would like to move forward by Monday, July 29. Feel free to contact either myself at x77922 or Glenn Orlin at x77936 if you have any questions.

cc: Marlene Michaelson Glenn Orlin Montgomery County Council Building = Curtainwall Repair or Replacement Options Updated July 15, 2019

Comparing the Options - Additional Information

Option	Description	Added Thermal Benefit: Vision glass only (U-value indicates the rate of heat flow due to conduction, convection, and radiation through a window as a result of a temperature difference between the inside and outside. The higher the U-factor the more heat is transferred (lost) through the window in winter. Rating 1-5 with 1 least benefit and 5 greatest benefit)	Air and water inflitration Rating 1-5 1 least benefit and 5 greatest benefit.	Preliminary cost estimate	Construction Schedule	Potential Life Span Increase of curtainwall
Option A1	Clean and reuse existing 1/4" single pane glass. Add a new Low-e film. Replace gaskets, pressure plates, sealants and exterior snap covers.	Reuse of existing 1/4" single pane glass has a U value of approximately 1.22. = high U value, high heating or cooling loss. (Equivalent R value approximately .81) Rating of 1	Improvements limited to Curtainwail Suggest testing after Install is complete to confirm penetrations are sealed. Rating of Z	\$420,000- 570,000 + (+ to be determined based on construction phasing)	10 -14 months Very labor intensive.	5-10 years
Option A2	Replace existing 1/4" single pane glass with either Energy Advantage Low E Coating or tempered tinted glass. Replace gaskets, pressure plates, sealants and exterior snap covers.	Replacing the existing 1/4" single pane glass with a new Low E 1/4" single pane having a U value of 1.02-1.04. represents a 1.2 times improvement of heat transfer over the existing glasing but still has a high U valuehigh heating or cooling loss. (Equivalent R value approximately .98) Rating of 2	Suggest testing after install is complete to confirm penetrations are sealed. Rating of 2	\$630,000 – 800,000+ (+ to be determined based on construction phasing)	10-14 months Very labor intensive.	S-1D years
Option B	Replace existing curtainwall with a traditional stick fabricated exterior glazed curtain wall system similar to the 1500 LR Wall by Kawneer with fiberglass pressure plates and high-performance Low E glass such as Viracon UNE1-63, Guardian SNX 62/27 or Solarban 70XL. Re-caulk all precast joints surrounding curtain wall, with a redundant row of backer rod and sealant.	Replacing the existing 1/4" single pane glass with a new double pane insulated glazing unit having a U value of 0.29 represents a 4.2 times improvement reducing heat transfer over the existing glazing and has a low U value-low heating or cooling loss. (Equivalent R value approximately 3.44) Rating of 5	Suggest testing after install is complete to confirm penetrations are sealed. Reting of 5	\$2,450,000- 2,700,000 + {+ to be determined based on construction phasing and additional structural requirements}	7-10 months Depending on construction phasing and additional structural requirements for curtainwall support	25-40 years
Option C	Replace existing curtainwall with a traditional stick fabricated exterior glazed curtainwall system similar to the 1600 LR Wall by Kawneer with fiberglass pressure plates and high-performance Low E glass such as Viracon UNE1-63, Guardian SNX 62/27 or Solarban 70XL. Wrap existing precast surround at curtainwall with insulated metal panels, such as Alucobond metal panels.	Replacing the existing 1/4" single pane glass with a new double pane insulated glazing unit having a U value of 0.29 represents a 4.2 times improvement reducing heat transfer over the existing glazing and has a fow U value-low heating or cooling loss. (Equivalent R value approximately 3.44) Rating of 5	Suggest testing after install is complete to confirm penetrations are sealed. Rating of S	\$2,625,000- + 2,875,000+ (+ to be determined based on construction phasing and additional structural requirements)	7 -10 months Depending on construction phasing and additional structural requirements for curtainwall support	25-40 years

Resources-

- https://www.guardianglass.com/mx/en/products/brands/sunguard/snx/52-27
 https://www.wbdg.ore/resources/windows-and-glazing



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