



DEPARTMENT OF BUDGET & MANAGEMENT
Capital Budget Information System (C.B.I.S.)
DBM Worksheet For
Recommended Capital Projects

Printed on
 1/9/2021
 4:54:05PM
 Data as of
 01/06/2021
 10:47:59 am

Agency: Department of Planning
Sub-Agency: Jefferson Patterson Park and Museum
Institution:
Project Title: Maryland Archaeological Conservation Laboratory Expansion and Renovation

FOR EXAMPLE PURPOSES ONLY - DATES DO NOT REFLECT ACTUAL PROJECT

Project Description: Description starts with a verb

Construct a 4,260 NSF/4,692 GSF addition and renovate 13,262 NSF/14,566 GSF of the Maryland Archaeological Conservation (MAC) Laboratory, creating a 17,522 NSF/19,258 GSF facility. The MAC Lab, at the Jefferson Patterson Park and Museum in Calvert County, provides collections care and storage for the State's archaeological collections and records. This project will expand the storage capacity by adding more compactable shelving and increasing the footprint of the collections storage area. This project also includes improvements related to health and safety, disaster preparedness, and improved movement and treatment of artifacts. For example, the project will create a new space for the Isolation Room, install new equipment, and construct a loading dock. Due to the normal growth of the collection and the deposit of several unanticipated large collections, the facility is nearing its storage capacity. Without the needed expansion, important collections will have to be turned away, resulting in the real possibility of the loss of valuable Maryland artifacts. This project will ensure that the Lab can continue to accept new collections and to serve as the designated repository for the State's archaeological collections. **The FY 2023 budget includes funding to complete the design of this project.**

Estimated Project Cost and Recommended Funding:

Uses	Prior Appropriations	Current Request	Current Recommended	Future Estimated	Estimated Totals
Planning	668,000	173,000	215,000	0	883,000
Construction	0	4,399,000	0	9,285,000	9,285,000
Equipment	0	25,000	0	57,000	57,000
TOTAL	668,000	4,597,000	215,000	9,342,000	10,225,000
Sources					
GO Bonds	668,000	4,597,000	215,000	9,342,000	10,225,000
TOTAL:	668,000	4,597,000	215,000	9,342,000	10,225,000

Estimated Totals match totals on CEW

Source(s) of Non-Budgeted Funds **Amount**

TOTAL

Once a project has an A/E estimate, the requested construction funding should match the cash flow. Here, no construction funds are needed.

Totals match

Last sentence tells reader what the current year funds will be used for

Funding aligns with project schedule in CEW - design will complete in FY 2023, so remaining design funds are provided. Construction will begin in FY 2024, so no construction or equipment funds are needed.

Agency: Department of Planning
Sub-Agency: Jefferson Patterson Park and Museum
Institution:
Project Title: Maryland Archaeological Conservation Laboratory Expansion and Renovation

Source of Estimate: DGS Cost Center

Project Detail:

Net Sq. Foot: 17,522 **Gross Sq. Foot:** 19,258 **Percent Efficiency:** 91.0 %
Capacity: 0 **Unit Cost:** 0

Status: Under Review

Program Approval Part 1: 12/10/2018

Program Approval Part 2:

Design Start Date: 03/2022

Design Time: 12

Construction Start Date: 07/2023

Construction Time: 12

Completion Date: 07/2024

Schedule indicates that funds will be used in requested fiscal year

Schedule matches CEW

Cost and Schedule in last CIP:

FY2023 Planned: \$4,699,000 (PCE) GO. The DBM recommended amount of \$215,000 (P) GO is \$4,484,000 less than the amount planned in the CIP, and will complete the design of this project. Planned FY2023 funding originally included funds to begin construction and equipping of the project, however schedule changes due to the delay associated with facilities renewal work and scope changes has forced the deferral of construction to FY 2024.

Difference section explains why request differs from the prior year

Proposed NSF:

Area	Net Square Footage
Collections Shed Addition	3,670
Isolation Room and Loading Dock	590
Archival Storage/Materials Storage	510
Field Processing Rooms	320
Collections Storage Room	7,648
Pretreatment/Lab Area	4,784
TOTAL:	17,522

"Proposed NSF" total matches NSF total under "Project Detail" above, in Project Description and Justification, and in CEW

If this project was funded in the prior fiscal year, delete first line of last year's recommended Supporting Comments. Then update for the FY 2023 request. These comments have already been approved by DBM, so no need to start from scratch!

Cost Per Square Foot:

Structural Cost: 391 /GSF (excludes sitework/utilities)
Total Contract Cost: 482 /GSF (includes sitework/utilities)

Supporting Comments for Recommendation:

FUND: DBM recommends \$215,000 (P) in GO bonds to complete the design of the Maryland Archaeological Conservation (MAC) Laboratory Expansion and Renovation. The MAC Lab at Jefferson Patterson Park and Museum provides collections care and storage for the State's archaeological collections and records. State and federal historic preservation laws require governmental entities to consider the effects of their projects on historic and archaeological resources through a consultation process known as "Section 106" review. These laws obligate the State to permanently curate and care for archaeological artifacts and field records retrieved by State action. The MAC Lab serves as the designated repository for the State's archaeological collections.

Agency: Department of Planning
Sub-Agency: Jefferson Patterson Park and Museum
Institution:
Project Title: Maryland Archaeological Conservation Laboratory Expansion and Renovation

The original requested amount for this project included funds for construction and equipping the facility, however this did not accurately reflect the project schedule according to DGS Cost Estimates, and has not been included. The Part I program for this project was approved December 10, 2018. Planned FY 2023 funding originally included funds to begin construction and equipping of the project, however schedule changes due to the delay associated scope changes has forced the deferral of construction to FY 2024.

Project Justification

Provide updates, such as changes to schedule or scope

When the MAC Lab was completed in 1998, its storage capacity was projected to accommodate 15 years of collections intake. Today, 23 years later, the storage space of the lab is more than 86% full due to the normal growth of the collections from excavations (averaging 190 boxes per year) and the deposit of several large, unanticipated collections. Current storage space for 10,352 boxes will be full within the next two years based on average annual accessions and the likelihood that several large collections will be turned over to the lab within that time frame. (The MAC Lab staff periodically becomes aware of collections that are in the process of being prepared for eventual transmittal.)

Quantitative data to justify project!

This request is meant to alleviate the problem of insufficient space at the MAC Lab through the construction and renovation of six existing spaces and construction of 4,260 NSF of additional space, including a loading dock. The project will expand the storage capacity by adding more compactable shelving and increasing the footprint of the collections storage area. Other alterations to the facility include health, safety and disaster preparedness improvements such as additional fume extractors in the Range and Collections Workroom, a lift for moving collections to the second floor of Collections Storage, a loading dock off Shipping and Receiving, relocation of the artifact Isolation Room, and changes to the Field Processing and Material Science rooms. A stand-alone chiller will be added to the freeze dryer system, as well. Insulation of ceiling and walls will be upgraded and additional weatherization added. Mechanical systems, as well as sprinkler systems and the building enclosure, will be modified in some areas to accommodate the expansion, for health and safety reasons, and for energy savings.

Summarize scope

Several critical findings from a building condition assessment performed by MS Engineers, Inc. in June 2016 resulted in funding in FY 2019 for four projects including a mechanical system upgrade, metal roof replacement, foundation replacement and waterproofing, and siding replacement through the Facility Renewal program. Due to budget constraints, not all of the recommended maintenance and renovations could be funded in FY 2019. Therefore, this request is amended to include additional critical maintenance including installation of another chiller and sprinkler head repair/replacement projects.

With the increased development of properties in Maryland and legally mandated cultural resource management guidelines, the intake of collections at the MAC Lab has in some years exceeded past projections. Without the needed expansion, important collections will have to be turned away, resulting in the possibility that valuable Maryland artifacts will be lost. Agencies like State Highway Administration, which must comply with State law regarding the recovery of archaeological artifacts before proceeding with road and other construction projects, would have to store these artifacts at other facilities at an additional cost to the State. Moreover, without the necessary system and facility changes related to health and safety, MAC Lab staff and volunteers will not have a safe environment in which to work.

Consequences of not doing the project

The newly expanded square footage will result in the MAC Lab being able to accept important new collections for storage and analysis while providing access to professionals for research opportunities. The proposed expansion and renovation will provide for another 40 years of collection growth: shelf space for 7,350 boxes, 90 storage cabinets, and 300 square feet of oversized storage floor space. The health and safety issues currently identified will be resolved. The State will be able to operate a lower cost facility if energy saving alterations and repairs are completed and mechanical systems throughout the building are updated.

Outcomes and benefits of the project

More justification!

Agency: Department of Planning
Sub-Agency: Jefferson Patterson Park and Museum
Institution:
Project Title: Maryland Archaeological Conservation Laboratory Expansion and Renovation

Attachment(s) : 0

Related Project Information:

Budget ID : DW0108

Agency Priority: 0 of 1

Subdivision: Calvert

Analyst : Ted Walsh

Legislative District: 27C

DLR : 01/06/2021



DEPARTMENT OF BUDGET & MANAGEMENT
Capital Budget Information System (C.B.I.S.)
DEPARTMENT OF GENERAL SERVICES
COST ESTIMATE WORKSHEET (CEW)

Printed on
1/9/2021
4:54:05PM

Project Number	HT-009-200-001	Escalation set at 4.00% for 2021, 4.00% for 2022, 4.00% for 2023, 4.00% for 2024, 4.00% for succeeding calendar years
CEW Title	MAC Lab Expansion & Renovation FY 2023	
Project Title	Maryland Archaeological Conservation Laboratory Expansion and Renovation	
Agency	Department of Planning	Date Estimate Completed 4-Nov-19
SubAgency	Jefferson Patterson Park and Museum	Estimate Reference Point Jan-21
Location	Jefferson Patterson Park and Museum Calvert County	Source of Estimate DGS Cost Center
Prepared By	Joe Pitruzzella	Recommended By Joe Pitruzzella

1. Design Phase Budget	2. Project Type
3. Design Period Mar-22 Mar-23 12months	4. Est. Bid Date Apr-22
5. Construction Period Jul-23 Jul-24 12months	6. Est. Mid-Point Date Feb-23 37 months from reference point

Update for current year until there is a construction contract

7. Area	GSF	NSF/NASF	Eff. Factor	% Efficiency	
a1. New Collections Shed Addition	4,032	3,670	1.10	91.0%	
a2. New Isolation room & Loading C	660	590	1.12	89.4%	
TOTAL NEW	4,692	4,260	1.10	90.8%	
b1. Renovation Archival storage/material s	575	510	1.13	88.7%	
b2. Renovation Field Processing Rooms	330	320	1.03	97.0%	
b3. Renovation Collections Storage Room	8,404	7,648	1.10	91.0%	
b4. Renovation Pretreatment/treatment lab	5,257	4,784	1.10	91.0%	
TOTAL REN	14,566	13,262	1.10	91.0%	

Total GSF	19,258
Total NSF	17,522

When you update Estimate Reference Point, increase cost per square foot by prior year's escalation. For FY 2023, this will be 4.0%

8. Structure	GSF	\$/SF	Amount		Amount
a1. Basic: New Collections Shed	4,032 x	415	1,673,280	12a. Total Construction Contingency	5.0% 414,192
a2. Basic: New Isolation room &	660 x	250	165,000	b. Green Building Premium	2.0% 165,677
b1. Basic: Ren. Archival storage	575 x	105	60,375	c. CM Cost Construction Share	0.0% 0
b2. Basic: Ren. Field Processing	330 x	145	47,850	d. Public Art Premium	0.5% 41,419
b3. Basic: Ren. Collections Stor	8,404 x	145	1,218,580	13. Inspection and Testing	3.2% 265,083
b4. Basic: Ren. Pretreatment/tre	5,257 x	105	551,985	14. CPM Schedule	50,000
c. 2nd Chiller			950,000	15a. Existing collections protection	65,000
d. Built-in Equipment			1,500,000	16. A/E Basic Services	7.5% 652,352
e. Sprinkler repair/replace			185,000	17. A/E Special Services	1.5% 130,470
f. Information Technology		+	50,000		
g. Subtotal			6,402,070		
h. Subtotal with RCF	g. x 1.00		6,402,070		
i. Escalation to Mid-Pt	h. x 17.63%	+	1,128,685		
j. Structure Subtotal			7,530,755		

9. Site	
a. General Site Work 5% of Structure Subtotal	320,104
b. None	+
c. Subtotal	320,104
d. Subtotal with RCF c. x 1.00	320,104
e. Escalation to Mid-Pt d. x 17.63%	+
f. Site Subtotal	376,538
18a. Bldg. Equip. Commissioning	1.0% 75,000
b. CM Pre-Construction Fees	0.0% 0
c. Archeological, etc	25,000
19a. Movable Equipment	32,000
b. Information Technology Equipment	25,000
20. Acquisitions	0

10. Utilities	
a. General Utility Work 5.0% of Structure Subtotal	320,104
b. None	+
c. Subtotal	320,104
d. Subtotal with RCF c. x 1.00	320,104
e. Escalation to Mid-Pt d. x 17.63%	+
f. Utility Subtotal	376,538

11. Subtotal from Sections 8, 9, and 10 8,283,830

Project Number	HT-009-200-001	Escalation set at 4.00% for 2021, 4.00% for 2022, 4.00% for 2023, 4.00% for 2024, 4.00% for succeeding calendar years
CEW Title	MAC Lab Expansion & Renovation FY 2023	
Project Title	Maryland Archaeological Conservation Laboratory Expansion and Renovation	
Agency	Department of Planning	Date Estimate Completed 4-Nov-19
SubAgency	Jefferson Patterson Park and Museum	Estimate Reference Point Jan-21
Location	Jefferson Patterson Park and Museum Calvert County	Source of Estimate DGS Cost Center
Prepared By	Joe Pitruzzella	Recommended By Joe Pitruzzella

21. **TOTAL PROJECT COSTS**

a. Acquisitions	0
b. Total Design Funds and Related Costs	883,000
b1. Prior Design Funds	668,000
b2. New Design Funds Required	215,000
c. Total Construction and Related Costs	9,285,000
c1. Prior Construction Funds	0
c2. New Construction Funds Required	9,285,000
d. Total Equipment 19a + 19b	57,000
Total Project Cost	10,225,000
Structural Cost at Mid-Pt	\$391/GSF
Building, Structure, and Utilities Cost at Mid-Pt	\$430/GSF
Total Cost	\$482/GSF

Total Design, Construction, Equipment, and Total Project Cost should match worksheet (pg. 1).

CEW Notes This CEW is base on the part I & II capital facility program dated March 2018; part 1 was approved by DBM on December 10, 2018 and the part II is currently being reviewed by DGS.

↑
Include CEW note to explain every variation from standard formulas outlined in the CBIS manual, and to provide any other useful information that may help your OCB analyst understand the basis of the cost estimate