

EDUCATION CENTER REUSE

Schematic Design

David M. Brown Planetarium
AEC 1426 North Quincy Street

SCHOOL BOARD ACTION ITEM

FEBRUARY 21, 2019

STUDIOTWENTYSEVENARCHITECTURE



Proposed Schematic Design

- Staff presented the proposed schematic design as an information item at the February 7, 2019 School Board meeting.
- The content in Exhibits A through F to this presentation is consistent with what was shown in the information item with these exceptions:
 - Exhibit E – a new funding source is proposed for costs associated with the temporary transportation facility. Major construction bond funding is subsequently reduced and total funding available remains at \$37.0 million.
 - Exhibit F – the A/E estimate for enhanced site improvements alternate was mistakenly shown as \$0.62 million in the information presentation. The correct estimate of \$0.83 million is now shown.

Site Design - Base Scope

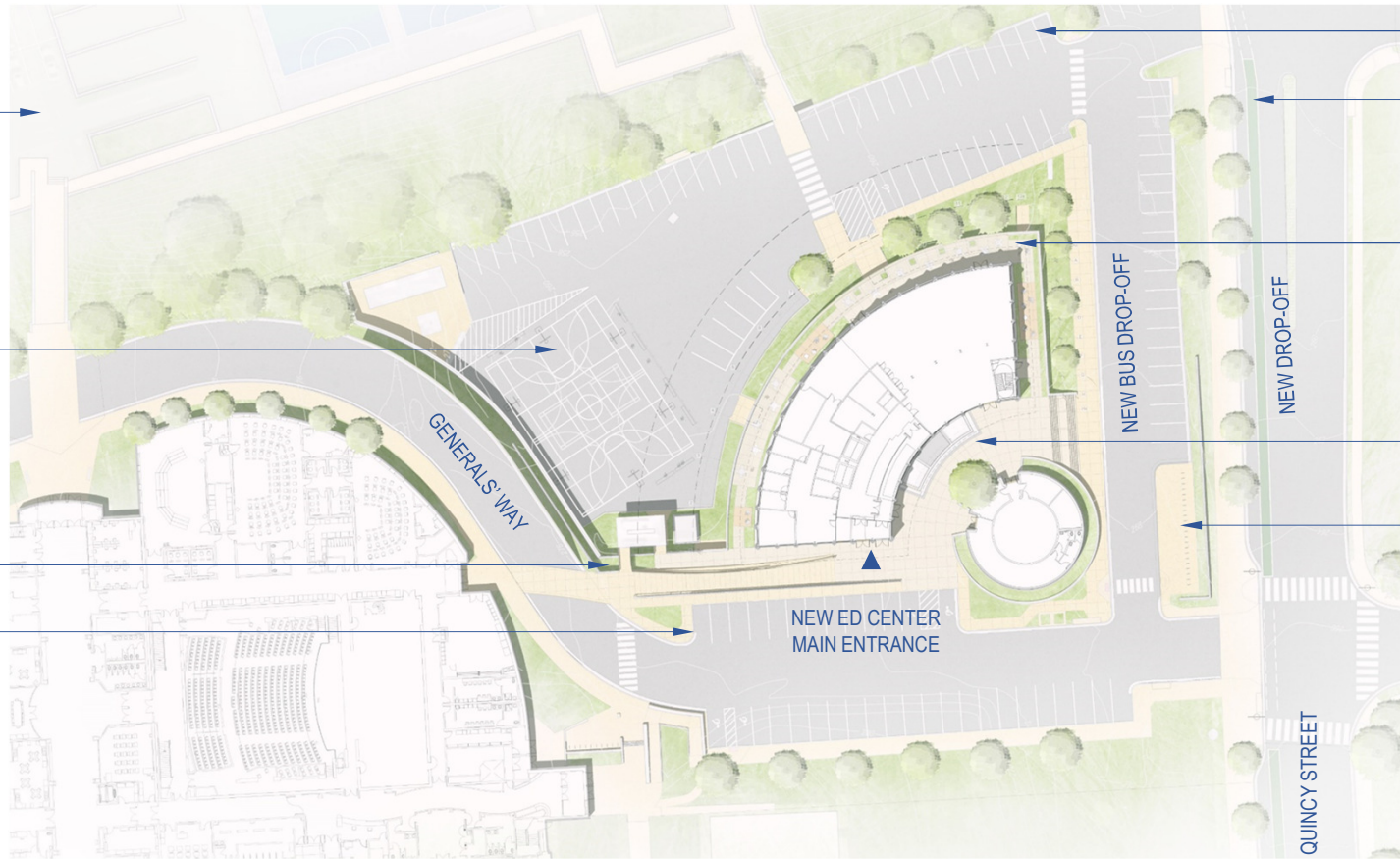
POSSIBLE COVERED BICYCLE PARKING IN EXISTING GARAGE, ~40 BIKE CAPACITY

NEW MULTI-USE COURT DIMENSIONS PAINTED ON EXISTING ASPHALT

NEW GROUND CONNECTION RAMP (SLOPE 1:12) AND FLUSH PAVING AT GENERALS' WAY. GRADE DROPS 6.5' BETWEEN ROAD CROSSING AND MAIN ENTRANCE

NEW "DO NOT ENTER" SIGNS

SITE PLAN INCORPORATES ALL RECOMMENDATIONS FROM THE MMTA



76 PARKING SPACES
MMTA-RECOMMENDED OFF-SITE IMPROVEMENTS (OPTION A)
TERRACE IMPROVEMENTS

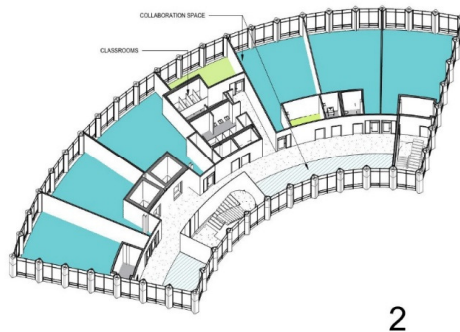
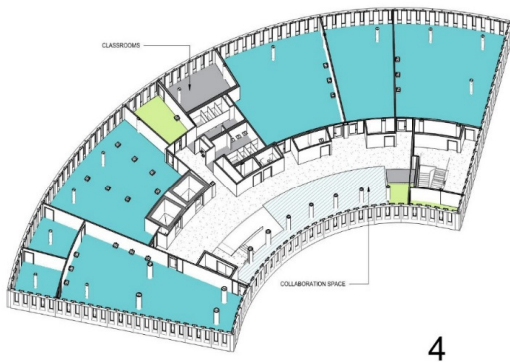
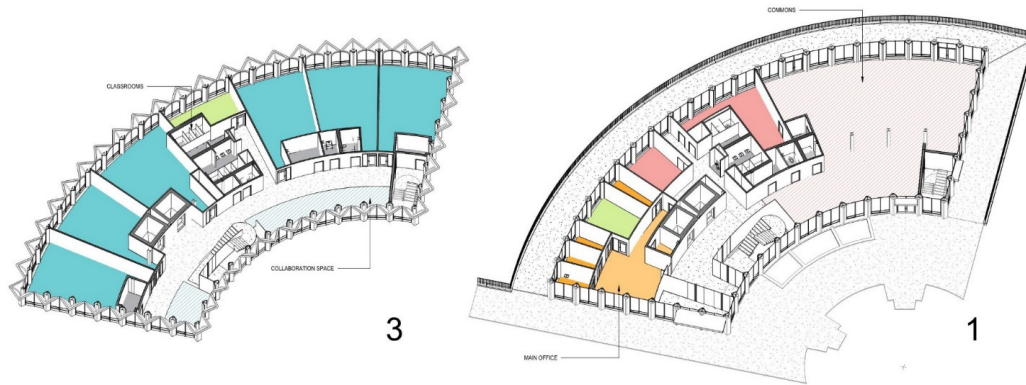
PLAZA IMPROVEMENTS

NEW BICYCLE PARKING, 30 BIKE CAPACITY

Floor Plans

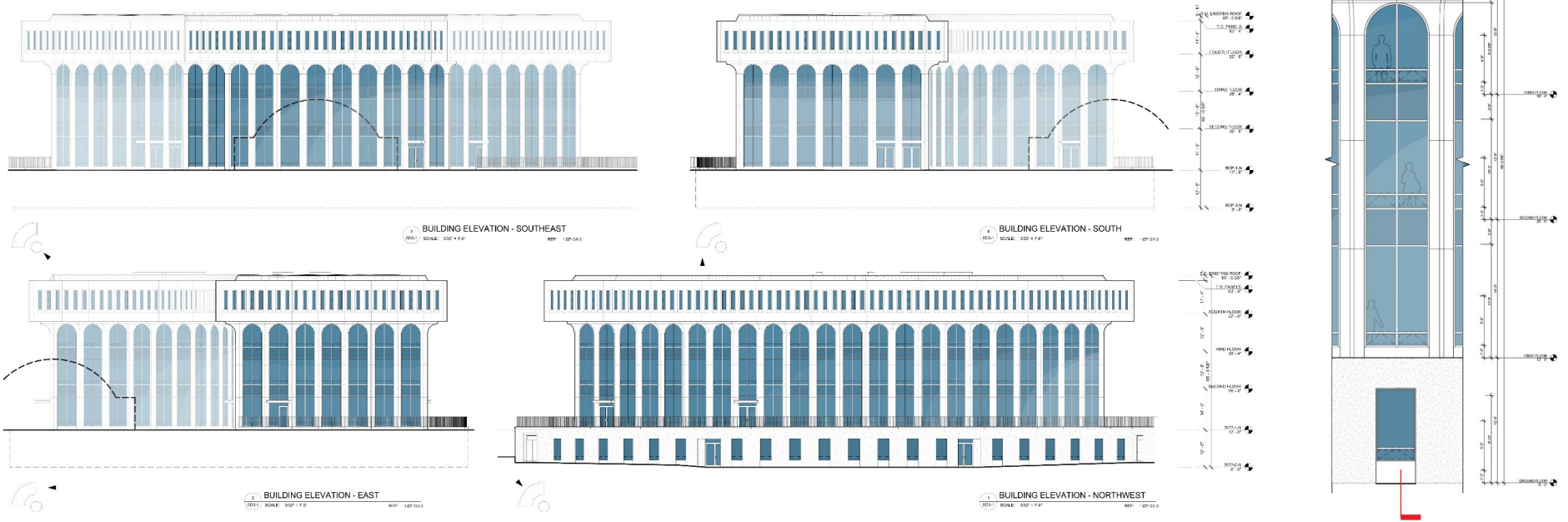
Legend

- Classrooms / Collaboration
- Commons / Support
- Instructional Support
- Administration
- Building Support



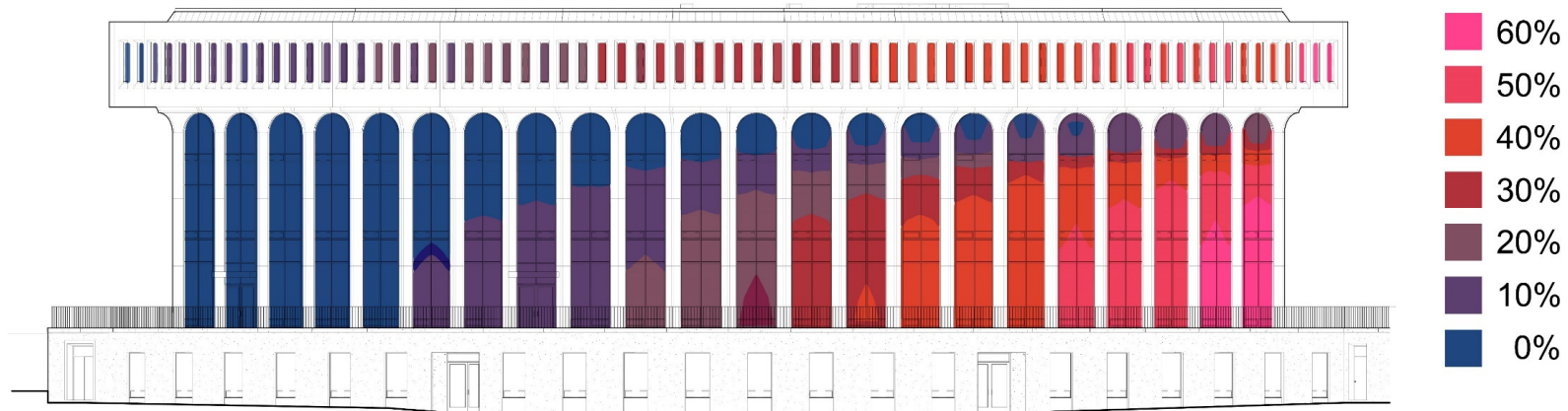
Elevations

- Proposed approach to window replacement balances respecting the historic character, improving energy performance, and required upgrades to support an educational environment (including operable windows).
- Ground Level windows enlarged to provide better daylight and views.



Proposed Glass Treatment - Frit Pattern

- Frit is a pattern applied to the glass having several benefits:
 - Ability to control glare and solar heat gain;
 - Only visible up close, from exterior or interior;
 - Preserves views from within the classrooms to the outdoors; and
 - Provides a learning opportunity for students.
 - Helps avoid overuse of shades which would have greater visual perception and impact to views;
- The frit density varies in response to solar exposure at each facade: each color in the diagram below represents a different frit density. This diagram is not an illustration of the actual visual condition; it is a quantitative documentation of the variations of the frit density.



Project Funding

Project Funding (Millions) ¹		
Major Construction Bonds	\$	36.05
Other (Operating) ²	\$	0.75
Other (MCOMM) ³	\$	0.20
Total	\$	37.00

- Notes:
1. FY 2019-2028 CIP, Adopted by the School Board on June 21, 2018. Includes APS portion of Jointly Funded Items.
 2. Furniture and equipment that cannot be bond funded.
 3. Costs associated with temporary transportation facility will occur from Minor Construction / Major Maintenance account.

ATTACHMENT A: SCHOOL BOARD'S ADOPTED FY 2019-28 CIP

Project Description	OTHER FUNDING SOURCES					BOND FUNDING												TOTAL BOND FUNDING	TOTAL PROJECT COST
	Operating	MC/MM (not bonds)	Capital Reserve ⁴	Joint Fund		Previous Bond Funding	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028			
				APS	ArCo		Fall 2018	Fall 2019	Fall 2020	Fall 2021	Fall 2022	Fall 2023	Fall 2024	Fall 2025	Fall 2026	Fall 2027			
SEATS AVAILABLE IN																			
Stratford (1,000 seats in 2019) *	\$0.80		\$0.25	\$2.11	\$2.11	\$22.25	\$9.03										\$9.03	\$36.55	
Wilson (114 seats in 2019) *	\$1.90		\$7.00	\$3.00	\$3.00	\$82.90	\$3.00											\$3.00	\$100.80
Major Infrastructure Projects (bond-funded/MC/MM)							\$7.20	\$7.40	\$7.60	\$7.80	\$8.00	\$8.20	\$8.40	\$8.60	\$8.80	\$9.00	\$81.00	\$81.00	
Reed - Expanded (725 seats in 2021)	\$1.25		\$4.00	\$2.75	\$2.75		\$24.10	\$17.75	\$2.40	(725)							\$44.25	\$55.00	
Career City/Ar Tech (FY17-26 project; 250 seats in 2021)**	\$0.75					\$12.00	\$1.00	\$-	\$5.00	(250)							\$6.00	\$18.75	
Career Center Project - field and parking garage (2023); 800 seat Addition and performing arts facility project	\$1.30		\$31.00		\$6.00	\$2.80	\$3.10	\$19.90	\$21.00	\$34.00	\$60.40	\$5.20	(800)				\$146.40	\$184.70	
Education Center (600 HS seats in 2021)	\$0.75				\$4.00	\$16.00	\$14.10	\$2.15	(600)								\$32.25	\$37.00	
MS - Renovation & Addition Location TBD (500 seats in 2024)																			
New ES in Existing Building (725-750 seats in 2029)†	\$1.30		\$-									\$5.10	\$5.50	\$28.90	\$31.10		\$70.60	\$73.90	
Transportation Staff Facility Renovation			\$2.10														\$-	\$2.10	
Drew Model School refresh (summer 2019)			\$0.95														\$-	\$0.95	
Patrick Henry building refresh (summer 2019)			\$0.85														\$-	\$0.85	
Field conversions to synthetic turf (APS share)			\$1.97														\$-	\$1.97	
Turf field replacements (APS share)			\$2.89														\$-	\$2.89	
TOTAL PROJECTS	\$8.05	\$4.69	\$46.32	\$7.86	\$7.86	\$127.15	\$63.13	\$42.35	\$37.05	\$28.80	\$42.00	\$68.60	\$18.70	\$16.60	\$40.40	\$54.00	\$411.63	\$631.46	

Bond Referenda Amounts

Year	Amount
2018	\$103.00
2020	\$58.10
2022	\$114.00
2024	\$32.80
2026	\$109.66

Debt Service Ratio Target ≤9.8%

FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	Total
2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
9.28%	9.57%	9.78%	9.56%	9.35%	9.45%	9.93%	9.38%	9.47%	8.84%	

Annual Bond Issuance

FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	Total
2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
\$63.13	\$42.35	\$37.05	\$28.80	\$42.00	\$68.60	\$18.70	\$16.60	\$40.40	\$54.00	\$411.63

Annual APS Debt Service Increase

FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	Total
2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
\$1.98	\$2.10	(\$0.06)	\$0.01	\$2.13	\$4.84	(\$2.44)	\$2.13	(\$3.15)	\$7.53	

SCHOOL BOARD'S ADOPTED FY 2019-28 CAPITAL IMPROVEMENT PLAN 7

Total Project Cost Estimate and Alternates

Base Scope - Estimated Cost (Millions)		
	A/E	CMR
Construction Costs	\$ 28.13	\$ 27.59
Owner (Soft) Costs ¹	\$ 8.80	\$ 8.80
Total	\$ 36.93	\$ 36.39
Note:		
1. Owner costs include design, project management, and other professional services fees, utility/permitting fees, furniture, equipment, and project contingencies.		

Abbreviations:

A/E – Architecture/Engineering Team
 CMR – Construction Manager at-Risk

Alternate recommended to **continue to pursue** in the design development phase.

Alternates - Estimated Cost (Millions)		
	A/E	CMR
Replace 4th Floor Windows	\$ 0.31	\$ 0.37

Alternates recommended to **no longer pursue** in the design development phase.

Alternates - Estimated Cost (Millions)		
	A/E	CMR
Enhanced Site Improvements	\$ 0.83	\$ 0.62
Bridge Connection between Buildings	\$1.64 to \$4.77	\$2.96 to \$5.66
Canopy Connection between Buildings	\$ 1.35	\$ 1.08

School Board Motion

The Arlington School Board's adopted FY 2019-2028 Capital Improvement Plan (CIP) addressed, in part, the continued increase in enrollment throughout Arlington County by including a project to renovate the Education Center building at 1426 N. Quincy St. to create 500 to 600 additional high school seats. There have been five (5) meetings with the Building Level Planning Committee (BLPC), Public Facilities Review Committee (PFRC), members of adjacent civic associations, and other project stakeholders. The School Board previously approved the project's Educational Specifications on December 20, 2018. The proposed schematic design was presented to the School Board by APS staff on February 7, 2019.

Having carefully reviewed the extensive input from the BLPC, PFRC, civic association leaders and other stakeholders, and the Superintendent's recommendation, I move that the School Board approve the schematic design as generally described in Exhibits A through F in the presentation made at the February 21, 2019 School Board meeting.

School Board Motion, continued

By approving Exhibits A through F the School Board approves the following aspects of the schematic design:

- Reaffirm basic project criteria to create 500 to 600 new high school seats, to be completed in time for start of school September 2021;
- Schematic site plan showing general location of features, with the understanding that further refinement of the site plan, including additional exploration of proposed off-site improvements, is expected during the Use Permit review/approval process;
- General layout of program spaces within the building;
- General approach to existing window replacement; and
- Maximum total project funding of \$37 million, with strong direction to find opportunities to reduce costs. It should be noted that the FY 2019-2028 CIP funding for the project included \$36.05 million funded by bonds, all of which has received voter approval.

School Board Motion, continued

With this approval, the School Board also provides the following direction to staff:

- Proceed to the design development phase, including preparation of the Use Permit application;
- Begin discussions with Arlington County Government (ACG) staff on identifying APS/ACG jointly funded items;
- Continue its investigation of replacement of 4th floor windows, as described on Exhibit F; and
- Pursue various cost savings measures using every effort to complete the project for less than the maximum available funding.

Views

