

COMMUNITY MEETING

OCTOBER 23, 2023



Falls Church High School
Renovation and Additions

Project Funding

- Planning/Design - 2017 School Bond
- Construction - 2021 School Bond
- Project Construction Contract Amount - \$133 Million

Project Timeline

- Construction Award and Start – Spring 2022
- Project Completion - Summer 2026

Team Introduction



Fairfax County Public School

- Vince Santmyer – Assistant Director
- Najib Hameed– Coordinator III
- Adam Roberts – Construction Manager
- Jim Wyne – Field Construction Supervisor



General Contractor

- Grunley Construction Company, Inc.

Consultant Team



- Perkins Eastman Architects – Architect of Record
- LandDesign – Civil Engineer
- Ehlert Bryan – Structural Engineer
- Strickler Associates – MEP Engineer
- Nyikos-Garcia – Food Service Engineer

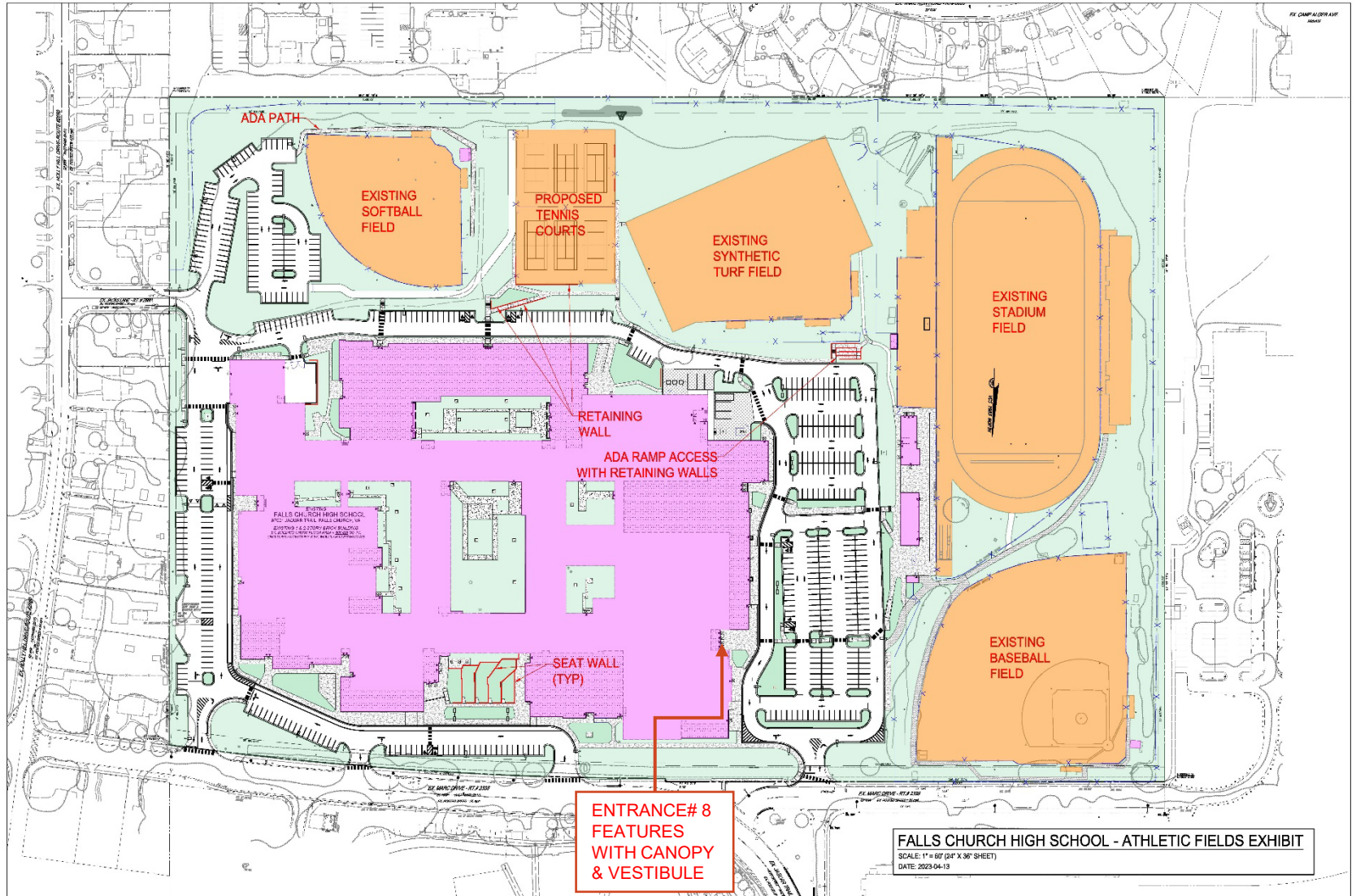
Prior to Construction



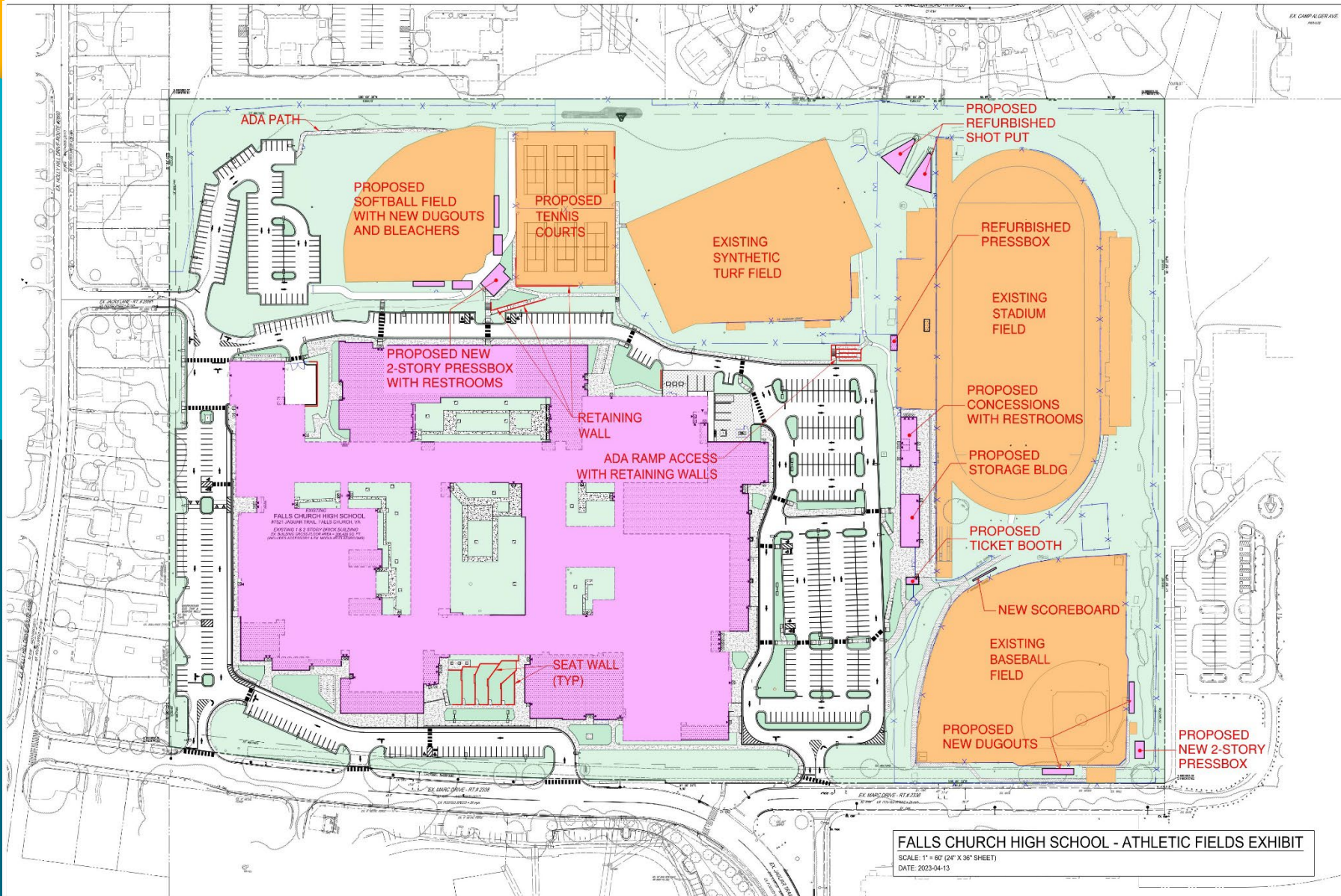
Project Scope

- Design Capacity: 2,500 Students – An increase from current program capacity of 1,957 students
- Sustainability & CHPS Designed
- Full renovation: new floor finishes, walls, ceilings, doors & windows
- New life safety systems: sprinkler, fire alarm, door access & sound systems
- New electrical, mechanical & plumbing systems; new lighting; new data and telephone systems
- 122,000SF Additions to the building (429,000SF Future Building)
- Additions include new entry, admin suite, library, music suite, lecture hall, science labs, classrooms, aux gym, main gym expansion & physical education rooms
- Cafeteria expansion
- CTE and Academy programs – Business & Information Technology, Family & Consumer Sciences, Health & Medical Sciences, Marketing Education, Technology & Engineering Education, Trade & Industrial Education, World Language
- Improved kiss & ride and bus drop-off/pick-up circulation
- Relocating and building new tennis courts, stadium concessions and restroom building, ticket booth, storage building

Site Plan – Current Project



Site Plan – Exterior Work



Methodology

- \$9 million savings to the current construction contract including
 - Invasive species: Overgrown grass and weeds to be removed by a separate contract at a better price
 - Expanded Landscape: Reduced concrete elements in courtyards to be replaced with green space; Better for environment, not to spec, lower cost
 - Schedule: Contractor proposed revised phasing to shorten the schedule and save “general conditions” which a contractor charges to manage a project
 - Procurement methods: \$10 million value of equipment direct purchased by FCPS to benefit from ~\$600,000 tax savings

Value Engineering Changes Explained and Reassessed

Details on the FCHS VE document:

1. General Conditions and Tax Savings on Owner Purchases \$ (1,130,000)

Several cost reductions are captured in this line item including: the contractor's plan to accelerate some of the phasing, the removal of requirement for some subcontractor bonds, and the removal of furniture from the contractor's scope of work and their associated mark-up of the cost.

Cost Savings:

Accelerated Phasing

- Fewer cycles and duration of construction activities allowed for project savings.

Reassigning Furniture

- FCPS found savings on mark-ups by making direct purchases in lieu of the contractor. FCPS was also able to purchase tax-free resulting in further savings

- These savings did not impact project scope.

Value Engineering Changes Explained and Reassessed

2. General Requirements Savings \$ (524,000)

This removed the invasive species remediation from the contractor's scope. Removed lead paint abatement from contract (FCPS OFM staff remove instead). Removed the furniture relocation (classroom moves) from the contractor's scope.

Cost Savings:

Invasive Species Removal

- FCPS found savings on mark-ups by performing work directly lieu of the contractor.

Lead Paint Removal

- FCPS found savings on mark-ups by performing work directly lieu of the contractor.

- These savings did not impact project scope.

Value Engineering Changes Explained and Reassessed

3. Allowance for Renovations to the current Aux. Gym / design revisions Included in VE Total \$90,000

This is associated with line items 4 and 5 below. Retaining the existing Auxiliary Gym and reprogramming it as a multi-purpose room requires some investment in new finishes, windows, and HVAC to bring it up to a standard comparable to the rest of the modernization effort.

Cost Savings:

Accelerated Phasing

- See Item 4 (Deletion of Courtyard 6). Shortening the duration of construction activities allowed for project savings.

Reassigning Spaces

- Provides an Auxiliary Gym in lieu of the courtyard.

- Gym function retained, no longer multi-purpose room per code.

Value Engineering Changes Explained and Reassessed

4. Delete new Courtyard 6 \$ (796,000)

The original plan to demolish the existing auxiliary gym to create a new courtyard required the installation of sizable new stormwater systems to remove rainwater from the new courtyard. These systems had to be run under the existing building that would require structural support of the building during installation that added cost to this effort. This line item also removes the construction of new paving and landscape within the courtyard.

Cost Savings

Accelerated Phasing

- Building the Auxiliary Gym in lieu of courtyard avoids underpinning existing foundations and potential risks with unforeseen soil conditions commonly found with this work.
- The Ed Specs are still met for providing outdoor space.
- The school will gain the Auxiliary Gym and the final design will have six courtyards

Material/Labor Deletion

- Building the Auxiliary Gym yields savings with less excavation work, stormwater piping, etc., and better for the environment with reducing the amount of concrete and steel

Value Engineering Changes Explained and Reassessed

5. Delete new Aux. Gym \$ -

This line item is associated with line items 3 and 4 and involves the retention of the existing auxiliary gym. Originally slated to be demolished, the existing auxiliary gym is instead being retained and repurposed as a multi-purpose room. This line item reduces the cost of construction associated with the demolition.

Cost Savings

- The new Auxiliary Gym is retained in scope.
- Please refer to items 3 & 4 on previous slides. This item was addressed as part of assessing 3 & 4.

Value Engineering Changes Explained and Reassessed

6. Allowance for new insulation solution at the Concession/Restroom and Ticket Booth Buildings Included in VE Total \$ 50,000

This line item is targeted at savings associated with simplifying the building envelope for several small buildings serving the sports fields.

Cost Savings

- CMU (concrete masonry units) are used in lieu of brick finish to site building, the larger size CMU allows for an easier installation and better pricing on installation
- CMU and brick are both masonry products and CMU has the same weather-resistant durability.
- Durability and performance requirements are met per the FCPS Master Specifications
- Other FCPS High Schools has the used the same material during their renovation such as Herndon HS and Robinson HS Painted CMU and Madison has split face CMU

Value Engineering Changes Explained and Reassessed

7. Delete Cafeteria Bridge \$ (221,000)

This line item removes a circulation “bridge” above the cafeteria that connected two hallways on the second floor of the building. With some revisions, the bridge was not necessary for egress and its deletion resulted in significant savings associated with reduced structural scope.

Cost Savings

Accelerated Phasing

- Removing the bridge allowed for more simple constructability and phasing

Material / Labor Deletion

- Removing the bridge yielded savings on steel, flooring, etc. needed for construction

- The Ed Specs are still met and the design was reconfigured to have working circulation that meets all requirements and codes

Value Engineering Changes Explained and Reassessed

8. Delete the Baseball, Softball, Press Box, and Sports Lighting work \$ (3,105,000)

This line item removed the reconstruction of the sports fields and associated elements noted above resulting in significant savings. These site elements, being discrete from the building, can be modernized later.

Cost Savings

- Work was removed from the Bond-funded scope but will still be performed. This is now funded through the Office of Facilities Management budget.
- Finding alternative funding did not impact project scope.
- See “Exterior Work Status” slide for more information regarding timeline. All exterior work will be completed by 2026.

Value Engineering Changes Explained and Reassessed

9. Delete the Courtyard work \$ (479,000)

Some design elements of the courtyards within the building footprint were be simplified or removed reducing the cost of site work. These elements included paving and seating.

Cost Savings

Accelerated Phasing

- A more straightforward and natural design allows for more efficient construction and labor
- The Ed Specs are still met for providing outdoor space the final design will have six courtyards

Material / Labor Deletion

- Savings on concrete work. This is more environmentally friendly considering carbon emissions during construction, and better long-term, especially with stormwater run-off

Value Engineering Changes Explained and Reassessed

10. Material and Product Substitutions \$ (1,328,000)

Some of the proposed finishes in the building were substituted with durable, but more cost-effective materials resulting in the projected savings. These include alternative ceiling materials in select spaces, revisions to the drywall layers in certain wall types, alternative materials for some tile, and an alternative wood floor for the gym.

Cost Savings

Material substitution

- Direct one for one substitution materials. In many cases, a review of materials ended up with upgrading, selecting more durable and maintenance-friendly options with off-shelf available product and single product to be used in multiple location
- The overall project scope and materials were substituted for comparable products, not deleted
- Performance requirements of the FCPS Master Specifications are still met. In many cases, such as ceramic tile, the same exact manufacturer was still provided. Just a more readily available style.

Value Engineering Changes Explained and Reassessed

11. Miscellaneous Scope Deletions \$ (648,000)

This line item includes cost reductions associated with refinishing the existing auditorium seating in lieu of purchasing new seating, the retention of the stage floor, the deletion of some canopies at building entrances, and the removal of exterior shading devices above windows.

Cost Savings

Accelerated Phasing

- Refinishing existing elements allows for more efficient construction and labor

Material Deletion

- Material savings are gained by refinishing existing seating over purchasing new.

- The overall project scope and materials were substituted for comparable products or refinished where appropriate, not deleted. West Springfield HS had their auditorium seating refurbished during their renovation.

Value Engineering Changes Explained and Reassessed

12. Additional Mechanical and Plumbing VEs and scope revisions \$ (460,000)

This line item includes cost saving associated with a change in the filter specification for air handling units, the removal of the solar hot water heating system, and the accelerated sequencing of construction of specific HVAC units associated with Phase 2 construction.

Cost Savings

Accelerated Phasing

- Fewer cycles and duration of construction activities allowed for project savings.

Material Deletion

- Savings on deletion of solar hot water systems and filter changes. The new system was also used at other High Schools such as Herndon and Oakton

- The overall project scope has not changed and Ed Specs are still met
- Performance requirements of the FCPS Master Specifications are still met

Value Engineering Changes Explained and Reassessed

13. Additional Electrical and Low Voltage VEs and scope revisions \$(449,000)

This line item includes the removal of electrical requirements associated with the scope reductions above, the removal of redundant projector locations in classrooms, and the removal of the proposed reconfiguration of the existing athletic field lighting.

Cost Savings Explained

Accelerated Phasing

- Redundant work removed and scope deletion, accelerating schedule.
- Providing infrastructure for one projector has been implemented at other schools such as Justice and is a new standard. It is currently being designed this way for Centerville's design.
- Performance requirements of the FCPS Master Specifications are still met

Additional Scope items not covered in Value Engineering Addressed:

Stadium Restrooms

- Currently the Stadium Plaza (Concessions/Restrooms, Storage, Ticket Booth) is in Phase 3

Science Wing Restrooms

- FCPS is working with consultant team on feasibility study plan for additional restroom

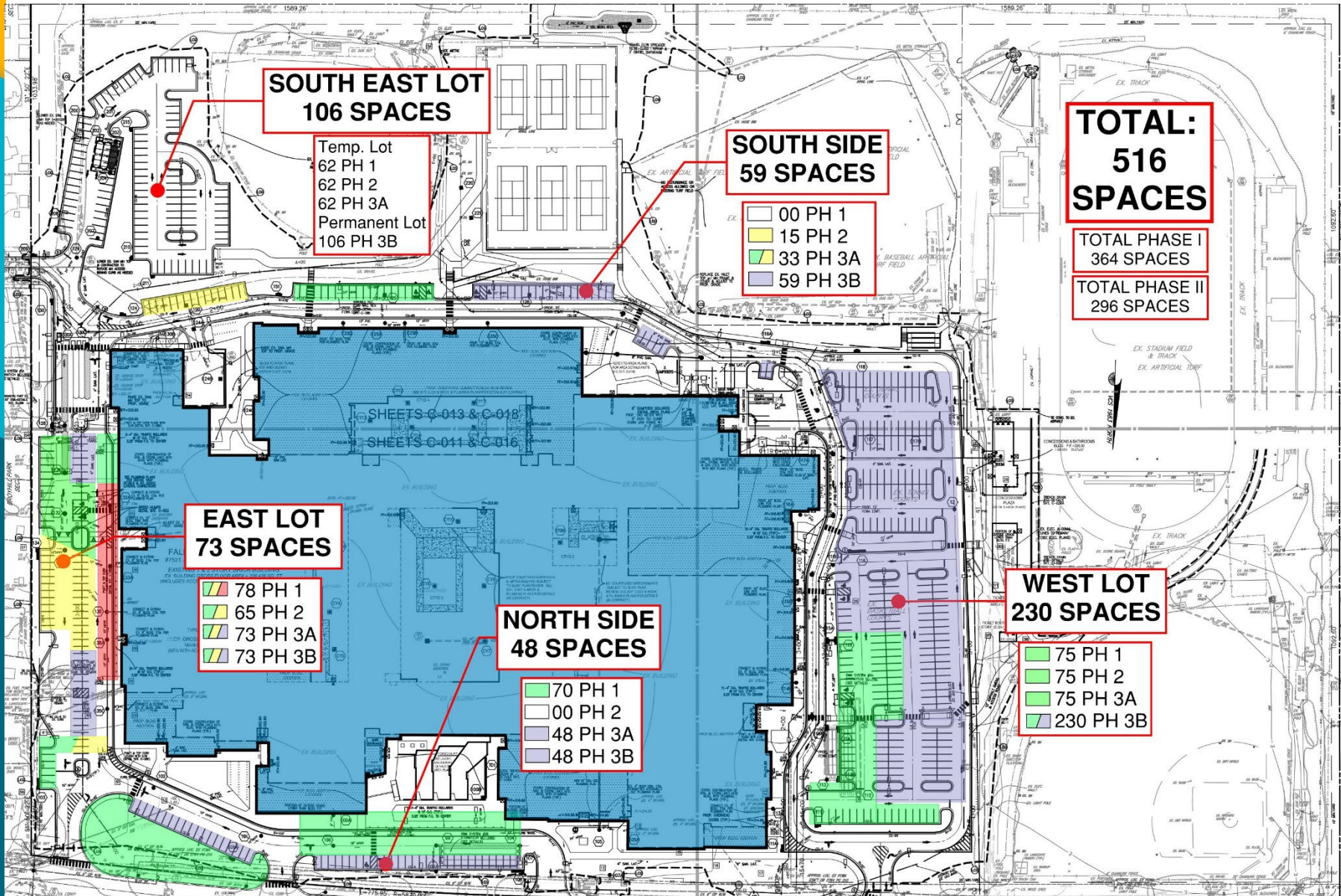
Canopy at Door 8

- The final renovation includes a covered canopy at Door 8
- A weather vestibule is also included in the renovation scope

Concept Design “cube”

- This feature was an early conceptual idea that was later determined difficult from a constructability standpoint and later eliminated to simplify the design

Parking Exhibit



Exterior Work Status

Item	Description	Status	Target Date
Baseball			
Scoreboard	N/A	Complete	Complete
Press Box, Dugouts; Backstop;	New two story CMU Pressbox. New one story wood frame dugouts.	Included in renovation	Before Spring 2026
Baseball ADA Access		Complete	Complete
Stadium			
Entrance Gate to Stadium (Concessions/Restrooms, Storage, Ticket Booth)	Stadium plaza entrance with ornate metal fencing and gates which includes: new concessions stand with restrooms; new ticket booth; new field equipment storage building.	Included in renovation	By Fall 2025
Press Box updates		Complete	Complete
Gate panel to former ADA ramp		Complete	Complete
Drainage under Bleachers		Complete	Complete
Field Replacement		Complete	Complete
Softball			
Dugouts	New one story wood framed dugouts.	Included in renovation	Before Spring 2026
Field Rotation	Field rotated 90 degrees for improved connection with the main building.	Included in renovation	Before Spring 2026
Pressbox	New two story CMU pressbox with restrooms.	Included in renovation	Before Spring 2026
Scoreboard	New state of the art score board.	Included in renovation	Before Spring 2026
Other			
Lighting - All Fields	Complete replacement (poles and electrical) with LED lamping.	Included in renovation	Before Spring 2026
Bleachers - Bball & Sball	New aluminum bleachers.	Included in renovation	Before Spring 2026
Parking - near student trailers		Complete	Complete-Temp
Parking - site layout		Complete	Complete - Temp

Before & After: Main Entry

Before



After



New Materials: Brick & Masonry Units, Metal Panels, and Glass

Proposed Elevation | Forecourt



Interior Perspectives

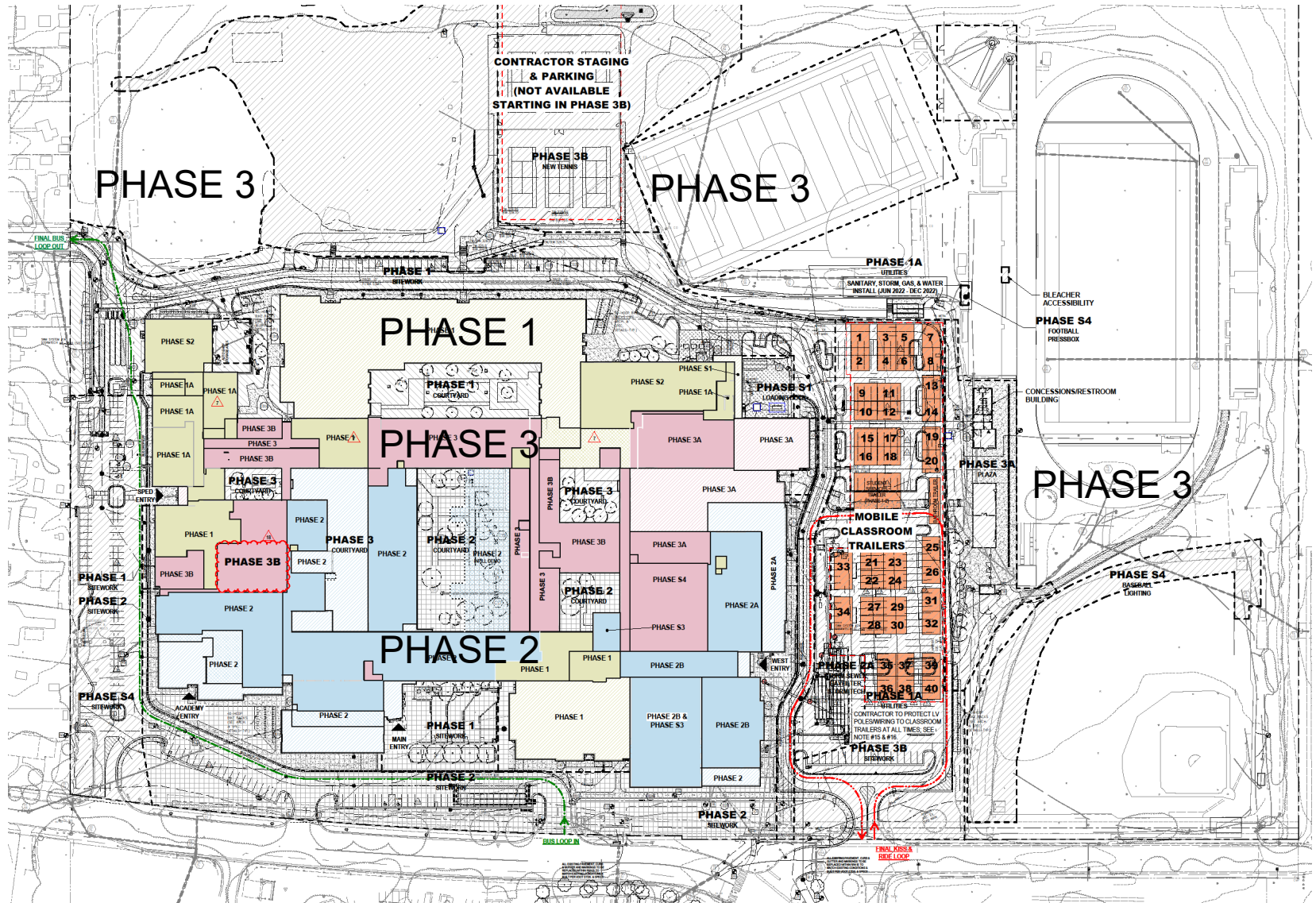


Front Entry

Interior Perspectives



Site Phasing

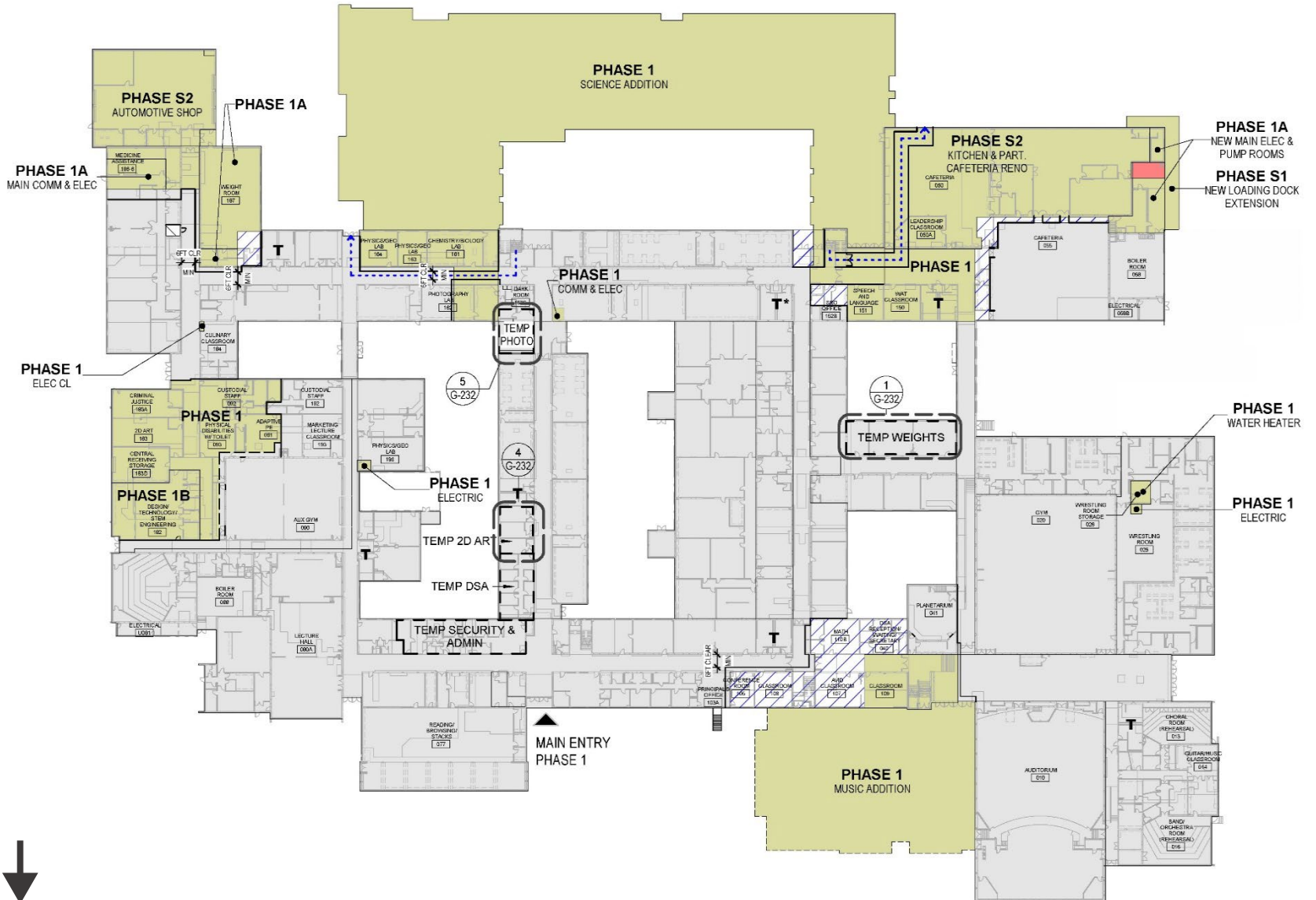


- Phase 1 – Spring 2022 – Winter 2023/24
- Phase 2 – Winter 2023/24 – Winter 2024/25
- Phase 3 – Winter 2024/25 – Summer 2026

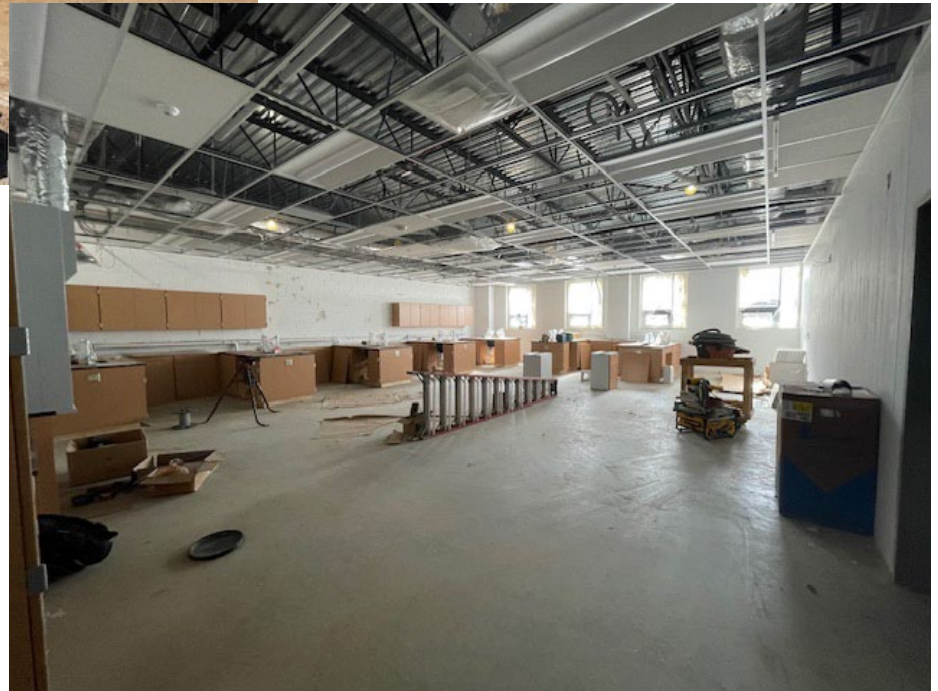


NORTH

Phasing Plan – Phase 1 – Building



Phase 1 Science Addition Construction



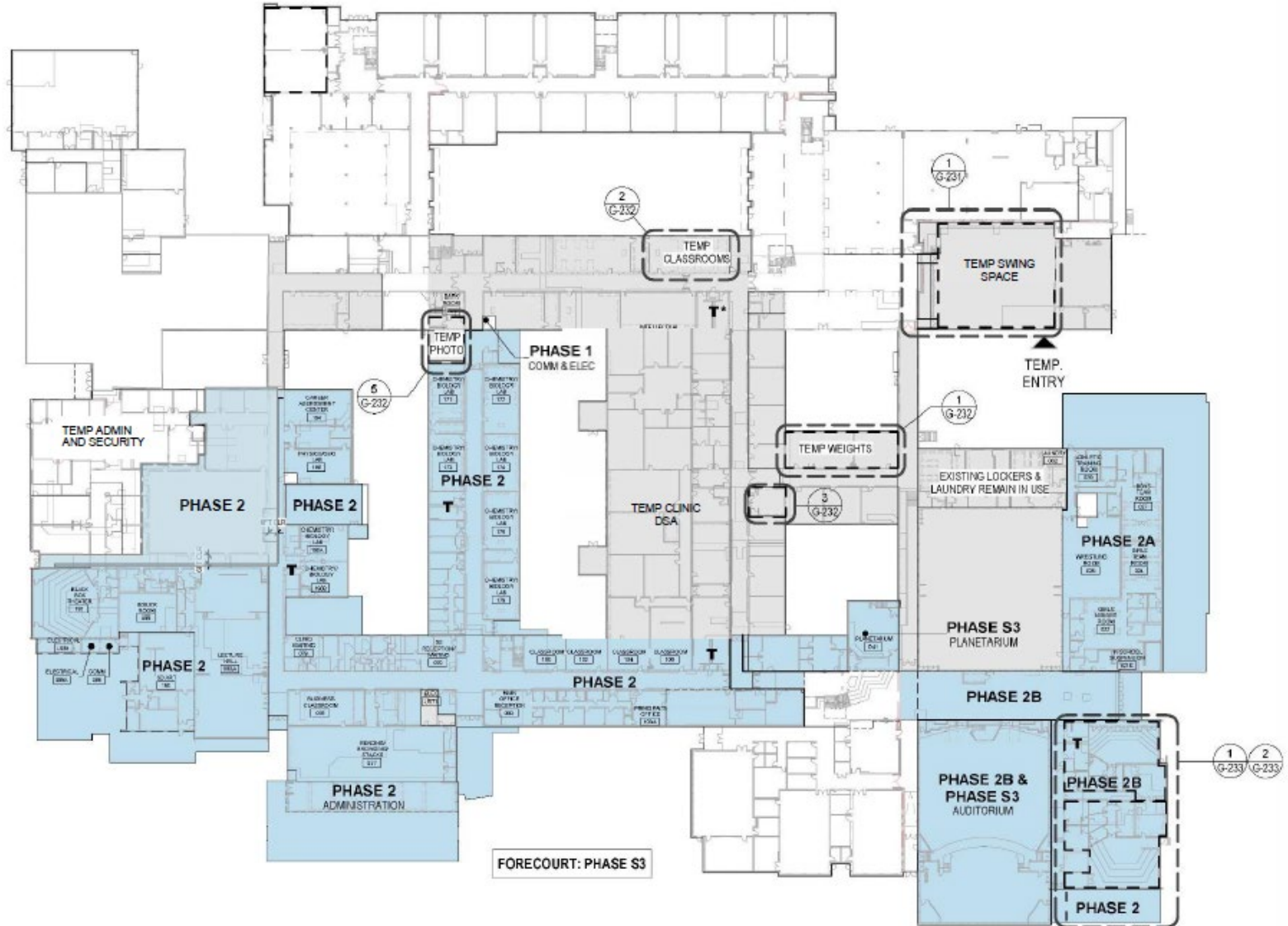
Phase 1 Music Addition Construction



Kitchen and Auto Shop – Complete



Phasing Plan – Phase 2 - Building



Phasing Plan – Phase 3 - Building



THANK YOU!

FOR MORE INFORMATION, GO TO www.fcps.edu and
SEARCH FOR FALLS CHURCH HIGH SCHOOL CAPITAL PROJECT

OR

<https://www.fcps.edu/falls-church-high-capital-project>



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