To: Dr. Charles Johns
Board of Education

From Dr. Kim Ptak
Dr. R.J. Gravel

Date: Monday, November 14, 2022

Re: Summer 2023 Capital Projects and 3-Year Master Facility Plan

Recommendation

It is recommended that the Board of Education authorize the administration to work with Arcon Associates, the District architect, to develop bid specifications for capital projects to be completed in the summer of 2023 as presented.

Background

School and district leadership teams maintain a fluid 3-year facility master plan, including infrastructure and enhancement projects that directly impact the student experience. The facility plan is provided as a separate document for ease of viewing. Within the summary page and each facility's project list, the following categories have been assigned:

- **Summer 2023**
  The projects with cost estimates stated in this column represent those scheduled for the summer of 2023. Most recommended projects are for Glenbrook North, as the summer school program is hosted at Glenbrook South this summer.

- **Summer 2024**
  The projects with cost estimates stated in this column represent those anticipated for the summer of 2024. The majority of projects stated are for Glenbrook South, as the summer school program is hosted at Glenbrook North this summer.

- **Summer 2025**
  The projects with cost estimates stated in this column represent those anticipated for the summer of 2025. The majority of projects stated are for Glenbrook North, as the summer school program is hosted at Glenbrook South this summer.

- **Deferred**
  The projects with cost estimates stated in this column represent those that will not need to be completed during the next three summers. However, we anticipate they will need to be completed or addressed within the next ten years.

It is important to note that the plan includes cost estimates based on the initial assessment performed by the school district's architect and construction manager. As the architect reviews each project, the scope

will be more defined and cost estimates updated. Additionally, the list is intended to be fluid, with items added, adjusted, and reprioritized as necessary.

Recommended Summer 2023 Capital Projects

The projects recommended for completion during the Summer of 2023 are summarized in Table 1 and presented in detail on the following pages.

Table 1

Summary of Summer 2023 Capital Projects by Category

Category	Location(s)	Project Description	Financial Projection
Site Work	GBA GBN GBO GBS	• Perimeter Fence Replacement (GBN, GBS) • Crack Fill/Sealcoat Preventative Maintenance (GBN) • Parking Lot Replacement (GBA and GBO) • Sidewalk Addition (GBA)	$740,000
Roofing/Masonry	GBN GBS	• Roof Repair (GBN, GBS) • Masonry Joints Repair/Tuckpointing (GBN, GBS) • Exterior Wood Soffit Replacement (GBN)	$320,000
Architectural	GBN	• Corridor Ceiling and Lighting Replacement • Corridor HVAC	$360,000
Architectural	GBN GBS	• Boys/Girls Bathroom Renovation (GBN, GBS)	$625,000
Architectural	GBN	• Stage Floor Replacement • Stage Drapery Replacement • Rigging Replacement • Orchestra Acoustical Ceiling Replacement	$1,030,000
Architectural	GBN	• Fieldhouse Exterior Column Repair and Painting	$50,000
Architectural	GBS	• Lyceum Exterior Stucco Treatment	$45,000
		Subtotal	**$3,170,000**
		Architect Fee (7.5%)	$237,750
		Construction Management Fee (7.5%)	$237,750
		Contingency (2%)	$63,400
		Grand Total	**$3,708,900**

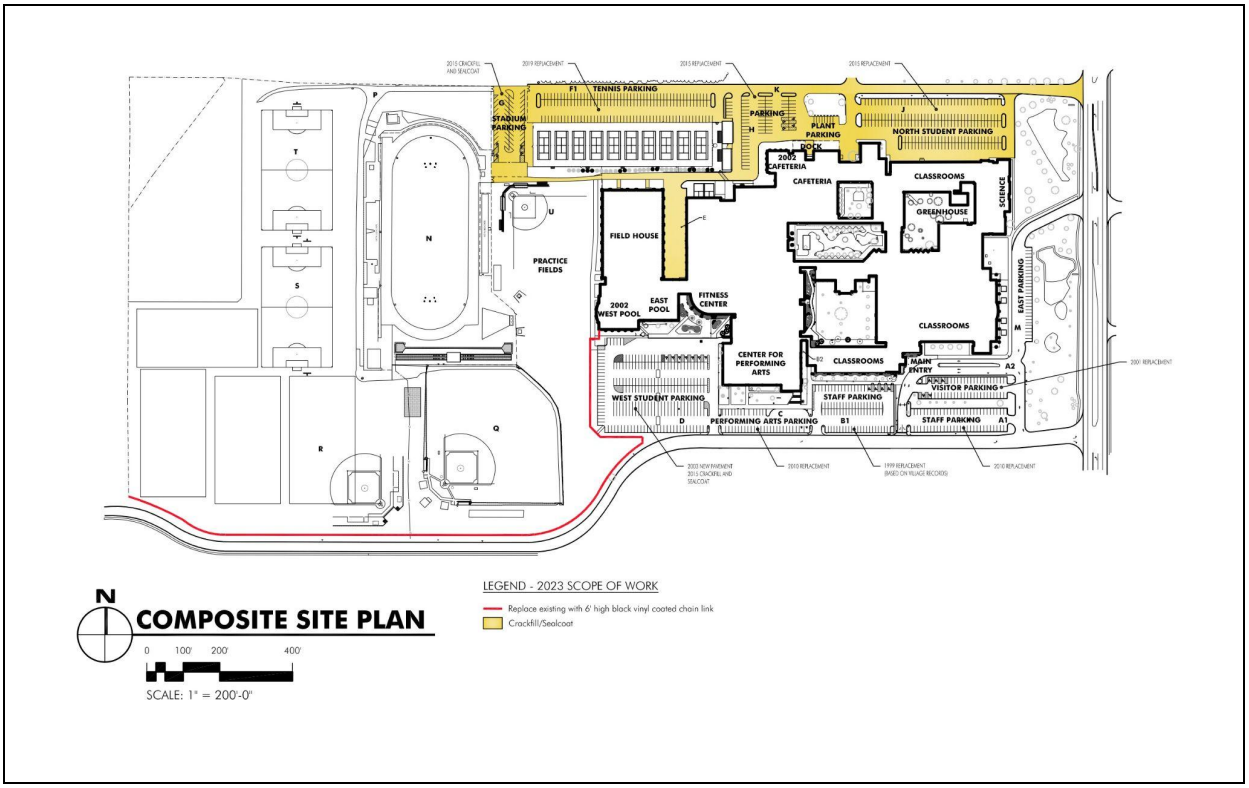
Capital projects are funded on a "pay as you go" basis and built into the district's operating budget. The school district's current financial projection model allocates $2,500,000 annually to support capital projects. These funds are secured through developer impact fees, unrestricted revenue sources, and approved inter-fund transfers. Should the final expense of approved capital projects exceed $2,500,000, the school and district leadership team will identify additional budgetary reductions or recommend the purposeful use of fund balance for one-time expenditures to provide for the cost.

Table 2
Site Work Projects

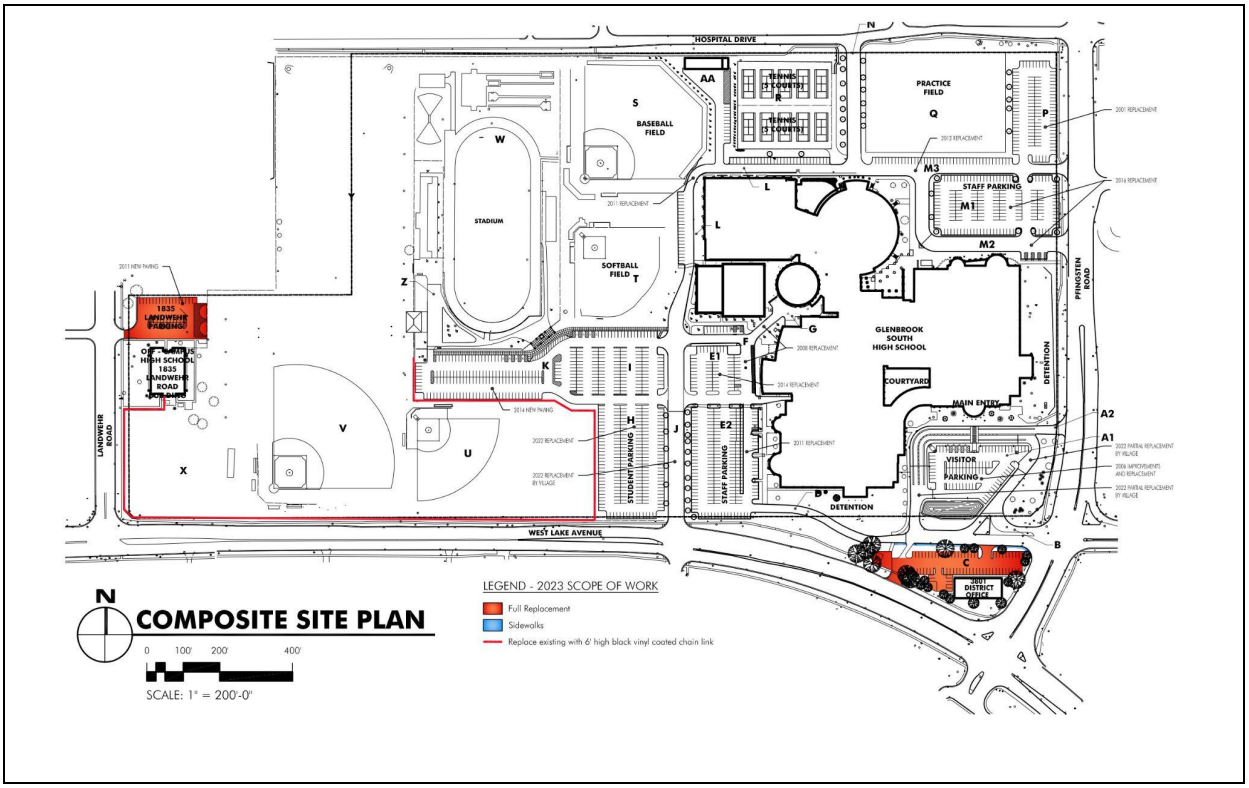
Location(s)	Project Description	Projection
GBN GBS	**Perimeter Fence Replacement** There are 2,000 linear feet of perimeter fencing along Sherman Drive at GBN and 2,650 linear feet running primarily along Lake Ave at GBS that requires replacement. The existing chain link fence is over 40 years old and rusted, and the concrete posts lift from the ground. A black vinyl-coated chain link fence is recommended. The vinyl coating helps protect the metal from scratches, rust, and corrosion and increases the fence's durability and appearance. The new fence is expected to last 20-25 years if properly maintained. As part of this process, entry points will be reviewed and modified as necessary in consultation with local public safety departments.	$380,000
GBN	**Crackfill and Sealcoat** The district maintains a master paving schedule that plans for parking lot replacement every 15+ years and general maintenance (crack-fill and seal coating) every four years. The scheduled summer maintenance includes the student parking lots on the north side of the building.	$75,000
GBA	**Parking Lot Replacement and Sidewalk Addition** Records indicate the parking lot at the Glenbrook Administration Building is original to the building and over 40 years old. It is well beyond its useful life and showing significant signs of deterioration, such as alligator cracks, potholes, and crumbling, consistent with a parking lot of this age. The scope of work is to remove the existing pavement surface and binder course, remove the existing stone base and retain it on-site for reinstallation. In addition, core samples are being conducted to determine the extent of new material needed to supplement the existing stone base. The curbs are also deteriorating and will be replaced with new curbing. Additionally, it is recommended that 320 feet of sidewalk be added along the north end of the parking lot. A high volume of students park or are dropped off east of the Pfingsten and West Lake Avenue intersection. The sidewalk will allow the students to safely walk to the GBS student entrance and avoid cutting through traffic.	$165,000

GBO	**Parking Lot Replacement** The parking lot at the Glenbrook Off Campus building was last replaced in 2011. However, it has not held up to the heavy bus traffic. In 2011, it was replaced with "standard duty" paving (1.5" binder and 1.5" surface). It is recommended that the lot be replaced with "heavy duty" paving (3" binder and 1.5" surface) to support the regular use by full-size school buses. The lot has significant deterioration, including alligator cracks, potholes, and crumbling. The scope of work is to remove the existing pavement surface and binder course, remove the existing stone base and retain it on-site for reinstallation.	$120,000
		$740,000

GBN Site Work Map



GBA, GBO, and GBS Site Work Map



Site Work Images

Image 1 - Existing Perimeter Fencing Along Lake (GBS)

Image 2 - Existing Perimeter Fencing Along Sherman (GBN)

Image 3 - Existing Perimeter Fencing Along Sherman (GBN)

Image 4 - Proposed Black Coated Vinyl Perimeter Fencing

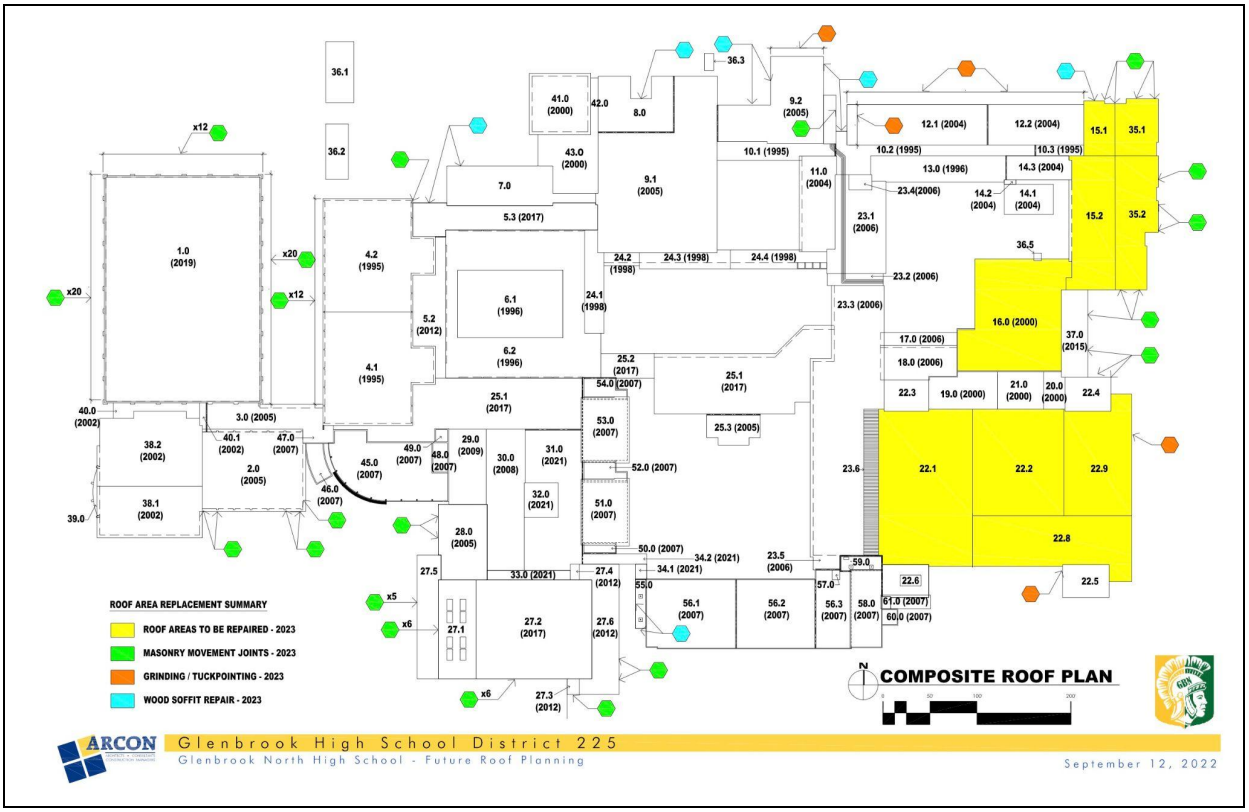
Image 5 - GBA Parking Lot

Image 6 - GBO Parking Lot

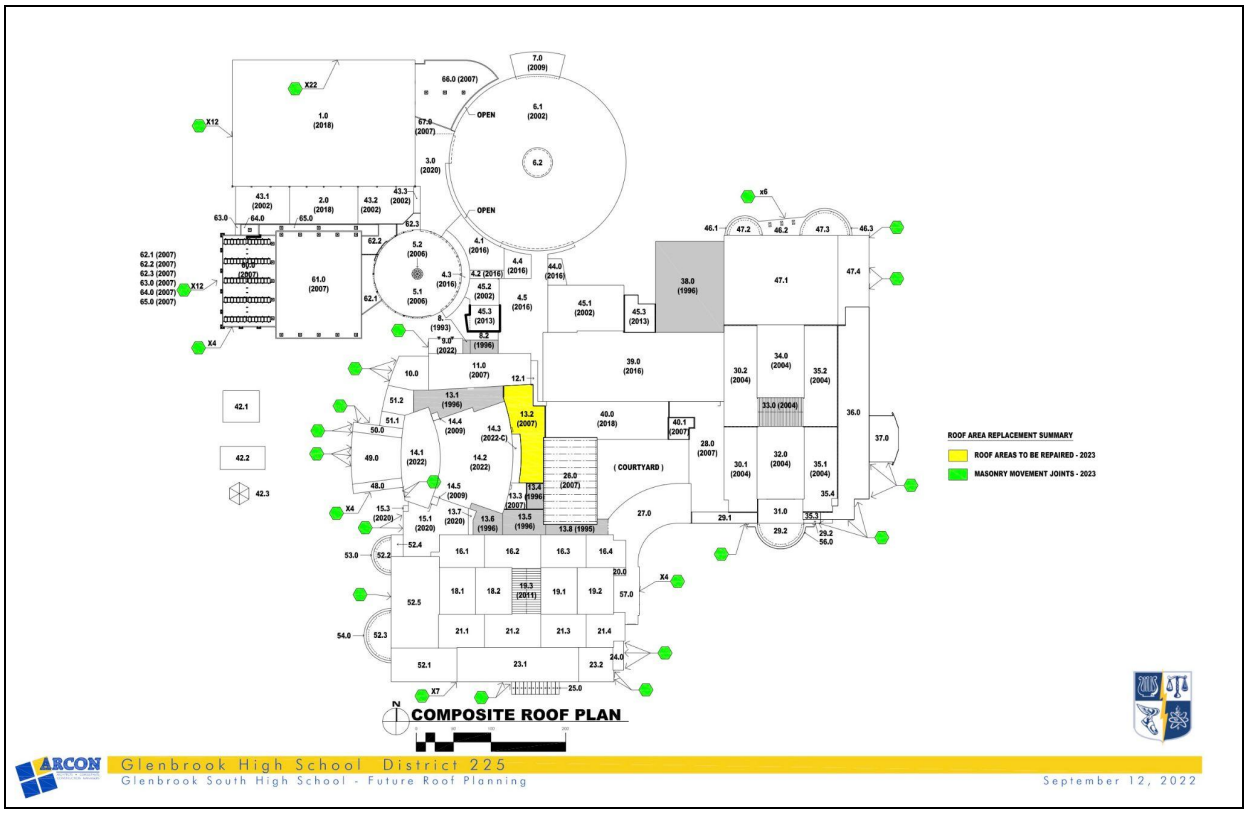
Table 3
Roofing and Masonry Projects

Location(s)	Project Description	Projection
GBN GBS	**Roof Repair Work** **GBN: CTE Wing, Science Wing, "A" Building** **GBS: Auditorium Corridor** There are nine roof areas in the CTE wing, science wing and the "A" building at GBN and one roof area in the auditorium corridor of GBS that are between 22-26 years old, and are experiencing intermittent leaks. These areas require preventative maintenance to the perimeter roof flashing systems and the roof projection flashings. These roofs are in sound condition and do not require replacement. The recommended work will address the leaks and extend the service life of the existing roof systems by an estimated 7+ years.	$100,000
GBN GBS	**Masonry Movement Joints** Masonry movement joints are joints built into or cut into a masonry (brick) wall to accommodate expansion and contraction movement in a wall system. These movement joints are then filled with a foam joint backer rod and sealant. The sealant in most of the masonry movement joints around the school's perimeter is in deteriorated condition and requires a new sealant. This work will keep the water out of the building and the wall system. This preventative maintenance is typically completed every 15-20 years.	$110,000
GBN	**Grinding and Tuckpointing** The joints in the masonry wall are deteriorated and are cracking between the mortar and the brick. The cracking between the mortar and the brick can allow water to enter the wall system and lead to overall wall deterioration. The mortar joints in the identified areas should be removed to a depth of ¾" and filled with new mortar to match the color of the existing mortar. This work will keep the water out of the building and the wall system.	$75,000
GBN	**Wood Soffit Repair** There are several areas around the school's perimeter where painted wood soffits are present. Numerous sections of these soffits are in deteriorated condition and require repair and painting. Painting of the wood is a repetitive maintenance item. The wood soffits will be covered with prefinished metal to improve the condition, eliminate repetitive maintenance, and improve the overall aesthetics of the building.	$35,000
		$320,000

GBN Roofing Map



GBS Roofing Map



Roofing/Building Envelope Images

Image 1 - GBN Masonry Movement Joints

Image 2 - GBN Masonry Movement Joints

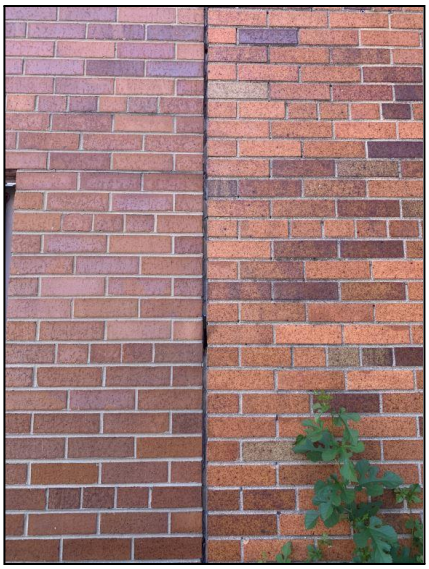


Image 3 - GBS Masonry Movement Joints

Image 4 - GBN Grinding/Tuckpointed

Image 5 - GBN Wood Soffit Repair

Image 6 - GBN Wood Soffit Repair

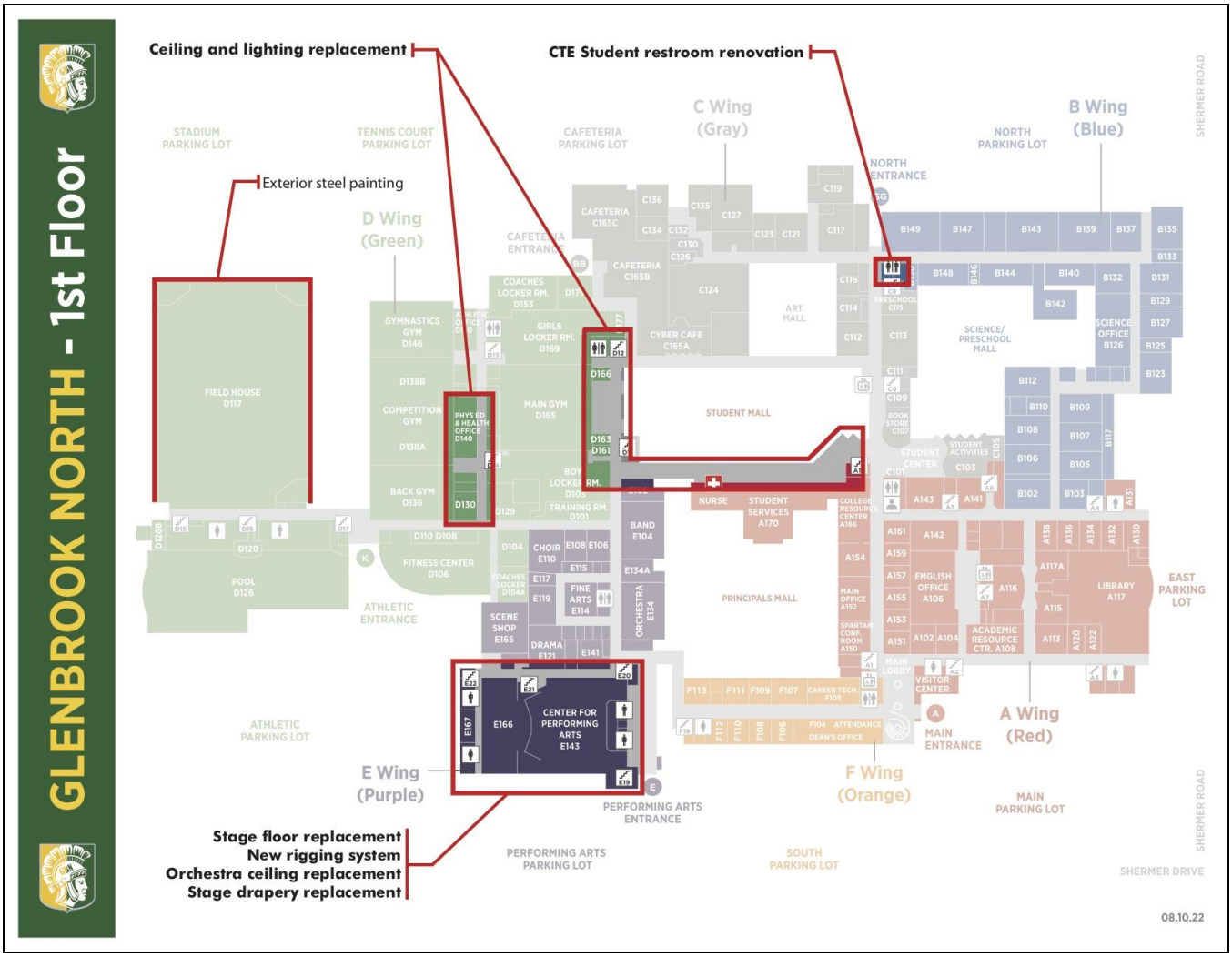
Table 4
Architectural Projects

Location(s)	Project Description	Projection
GBN	**Corridor Ceiling, Lighting, and HVAC Work** There are three corridors at GBN with a spline ceiling application. This is an older ceiling application that conceals the grid system using a method of interlocking panels and small strips of metal "splines." This application requires suspended lighting and makes it challenging to remove panels to gain access without damaging the installation. Unlike a ceiling grid system, this application also doesn't lend itself to LED lighting retrofits and makes it difficult to swap out damaged pieces. The three areas at GBN with this type of ceiling are the Student Activity Corridor, the Main Gym Corridor, and the Back Gym Corridor. These ceilings are recommended to be replaced with a drop grid ceiling system and LED lighting, consistent with the rest of the building. Additionally, the Student Activity Corridor is currently only heated with steam fin tubes along the exterior wall, and there is no cooling or fresh air ventilation. The proposed solution is to add a new Variable Refrigerant Flow (VRF) system with a single condensing unit on the roof with six small ceiling-mounted fan units placed down the hall to provide cooling and heating to the space. A recovery ventilator will be installed in an adjacent area to provide outdoor air ventilation. Controls will be added to the steam fin tubes to work with the new VRF during the heating season. As the bid specifications are being written, this solution will continue to be vetted.	$360,000
GBN GBS	**Student Bathroom Renovation,** The majority of student bathrooms are original to the respective school and have not been renovated. It is recommended that a set of student bathrooms (girls/boys) be renovated at each building and a process be followed to create a district-wide standard for fixtures, tile, and lighting, balancing the overall maintenance and practicality. At GBN, the student bathrooms in the CTE wing are in the worst condition and are not presently ADA-compatible. At GBS, the bathrooms in the athletic wing are heavily used and need several updates. The remaining student bathrooms will be addressed as part of the Master Facility Plan.	$625,000
GBN	**Stage Rigging System Replacement** GBN has a manual, counterweight rigging system that is original to the auditorium (1978). This system can lower and raise pipe battens by counterbalancing the load with an arbor loaded with counterweight (steel plates). There are (47) 71-foot-long pipe battens that run across the stage's	$520,000

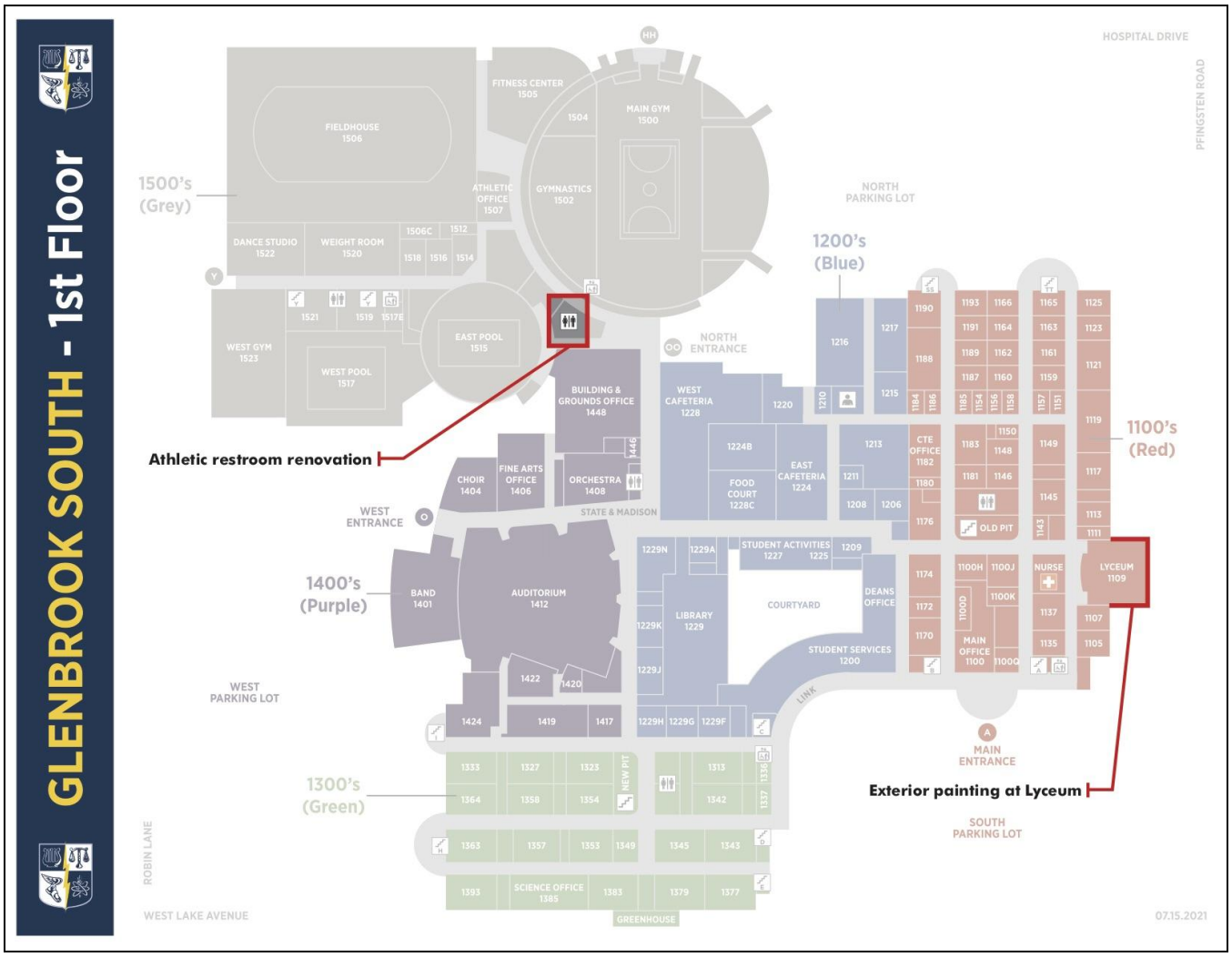
	ceiling and are used to raise and lower theater equipment during a production. Breakout of the 47 battens: ● 4 acoustic drapes ● 2 dead hung backstage masking tracks ● 3 full stage drapes ● 1 black scrim ● 1 cyclorama ● 3 Orchestra shells ● 3 Permanent electrics ● 9 pairs of legs and borders ● 21 Open pipes for scenery/moving light electrics/sound/electrics It is recommended that the system be replaced with a newer counterweight system similar to what was installed in 2022 at GBS. The grillage will remain, but the overall number of battens will be reduced to 40, 5 of which will be motorized (3 for the orchestra ceiling panels, 1 for the main curtain, and 1 for lighting). Similar to GBS, safety locking mechanisms will be added.	
GBN	**Stage Drape Replacement** The stage curtains are original to the CPA and are of cotton construction. The drapes require cleaning and re-treating with flame retardants every five years. Over time, the fabric becomes more difficult and expensive to treat and needs to be replaced. It is recommended that the drapes be replaced with a more contemporary polyester drapery which is inherently flame retardant and does not require re-treating. All of the stage drapes and tracks are included in this scope: ● Main Valance ○ (1) Curtain panel ● Main Curtain ○ (2) Curtain panels ● Traveler ○ (2) Curtain panels ● Tormentors ○ (2) Curtain panels ● Borders ○ (5) Curtain panels ● Legs ○ (10) Curtain panels ● Side Masking Curtains ○ (4) Curtain panels ● Scrim ○ (2) Curtain panels	$190,000
GBN	**Stage Orchestra Ceiling Shell Replacement**	$180,000

	The current orchestra acoustical ceiling is original to the CPA and consists of three suspended panels. The panels are lowered to form a "ceiling" above the orchestra to reflect the sound. The panels are heavy and show signs of age, such as failing hardware. Since the rigging system supports the ceiling panels, it is recommended that they be replaced. An added benefit of the newer acoustical ceilings is the panels carry their own LED lighting.	
GBN	**Stage Floor Replacement** The existing hardwood stage floor is 4,800 square feet, is original to the auditorium and has worn from the various stage sets screwed into the base over time. There are numerous weak spots and a great deal of deflection underfoot. Additionally, there is significant splintering, shearing, and the potential for failure under heavy loads. The floor sits on a sleeper system which will be replaced as part of the project. The existing floor is recommended to be replaced with the plyron flooring system used at GBS this past summer. Plyron is constructed with a hardboard face that is laminated to a plywood substrate and is available in 4'x8' panels. It is a popular application for stage floors that require a hard, durable surface and enables set pieces to be secured to the floor without damaging the surface. After installation, this product is painted black and can be repainted as needed. The product has a 20+ year life expectancy.	$140,000
GBN	**Fieldhouse Steel Column Painting** The steel columns and metal bases around the exterior of the fieldhouse are crumbling and require repair. It is recommended that prefinished metal flashing be installed at the bases and the steel columns be prepped and painted.	$50,000
GBS	**Lyceum Repair Work** The exterior wall finish of the Lyceum is in deteriorated condition and requires repair. A Direct Applied Finish System is recommended for the exterior of the Lyceum. The application is a ready-mix, acrylic-based exterior textured wall finish. This system will not require regular maintenance of painting.	$45,000
		$2,110,000

GBN Composite Map



GBS Composite Map



GBN Corridor Spline Ceiling

Image 1 - Back Gym Hallway

Image 2 - Main Gym Hallway

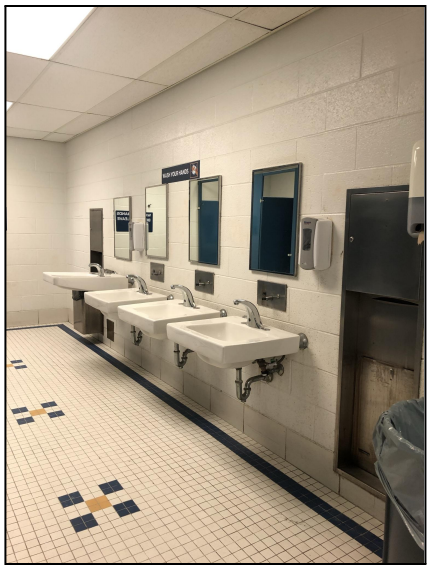
Image 3 - Student Activity Hallway

GBN and GBS Student Bathrooms

Image 1 - CTE Bathroom (GBN)

Image 2 - CTE Bathroom (GBN)

Image 3 - Athletic Bathroom (GBS)



GBN Center for the Performing Arts

Image 1 - Main Curtain

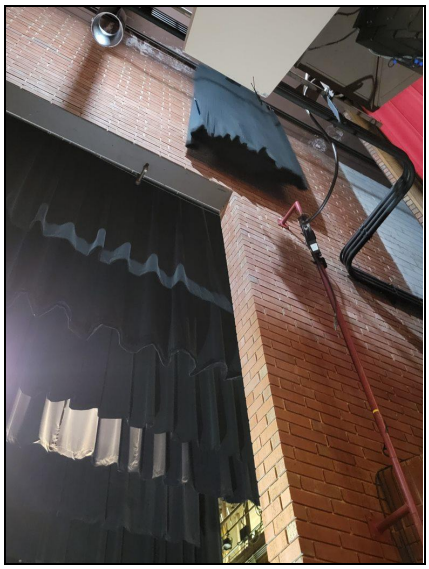


Image 2 - 71' Battens

Image 3 - Counter Weight System

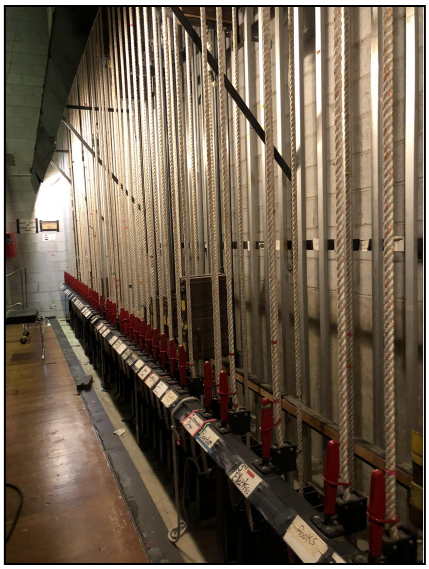


Image 4 - Orchestra Ceiling Panels

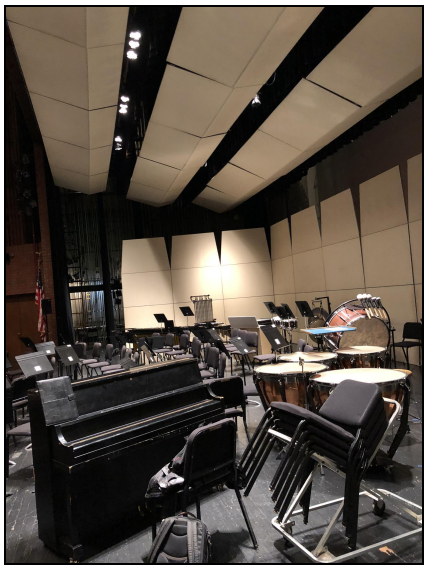
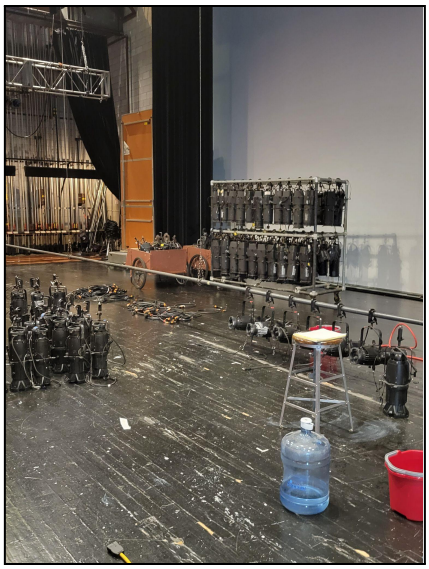


Image 5 - Proposed Orchestra Ceiling

Image 3 - Stage Floor



GBN Fieldhouse Columns and GBS Lyceum

Image 1 - Fieldhouse Columns (GBN)

Image 2 - Lyceum Exterior (GBS)

Image 3 - Lyceum Exterior (GBS)

Timeline

Project specifications will be sent to bidders in January 2023 and will be due back early February. Results are then reviewed with the Facility Committee in mid-February and awarded during a March Board meeting. Table 5 details the proposed timeline.

Table 5
Bidding Timeline

Task	Date
Project out to Bid	Thursday, December 15, 2022
Bids Opened	Tuesday, January 10, 2023
Facility Committee Meeting	Tuesday, January 17, 2023
Board Meeting - Discussion	Monday, January 23, 2023
Board Meeting - Award	Monday, February 13, 2023