To: Dr. Charles Johns
Board of Education

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

Date: Monday, October 25, 2021

Re: Summer 2022 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 the following capital projects to be completed in the summer of 2022 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. For ease of viewing the facility plan, it is provided in the form of a separate document. Within the summary page and each facility's project list, the following categories have been assigned:

- **Summer 2022**
  The projects with cost estimates stated in this column represent those recommended for completion during the summer of 2022. Most recommended projects are for Glenbrook South, as the summer school program is hosted at Glenbrook North this summer.

- **Summer 2023**
  The projects with cost estimates stated in this column represent those projects anticipated to be recommended for completion during the summer of 2023. The majority of projects stated 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 projects anticipated to be recommended for completion during the summer of 2024. 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 narrowly defined, and the financial projection modified accordingly. Additionally, the list is intended to be fluid in nature, and items will be added, adjusted, and reprioritized as necessary.

Recommended Summer 2022 Capital Projects

The projects recommended for completion during the Summer of 2022 are summarized in Table 1 and presented in detail on the following pages.

Table 1

Summary of Summer 2022 Capital Projects by Category

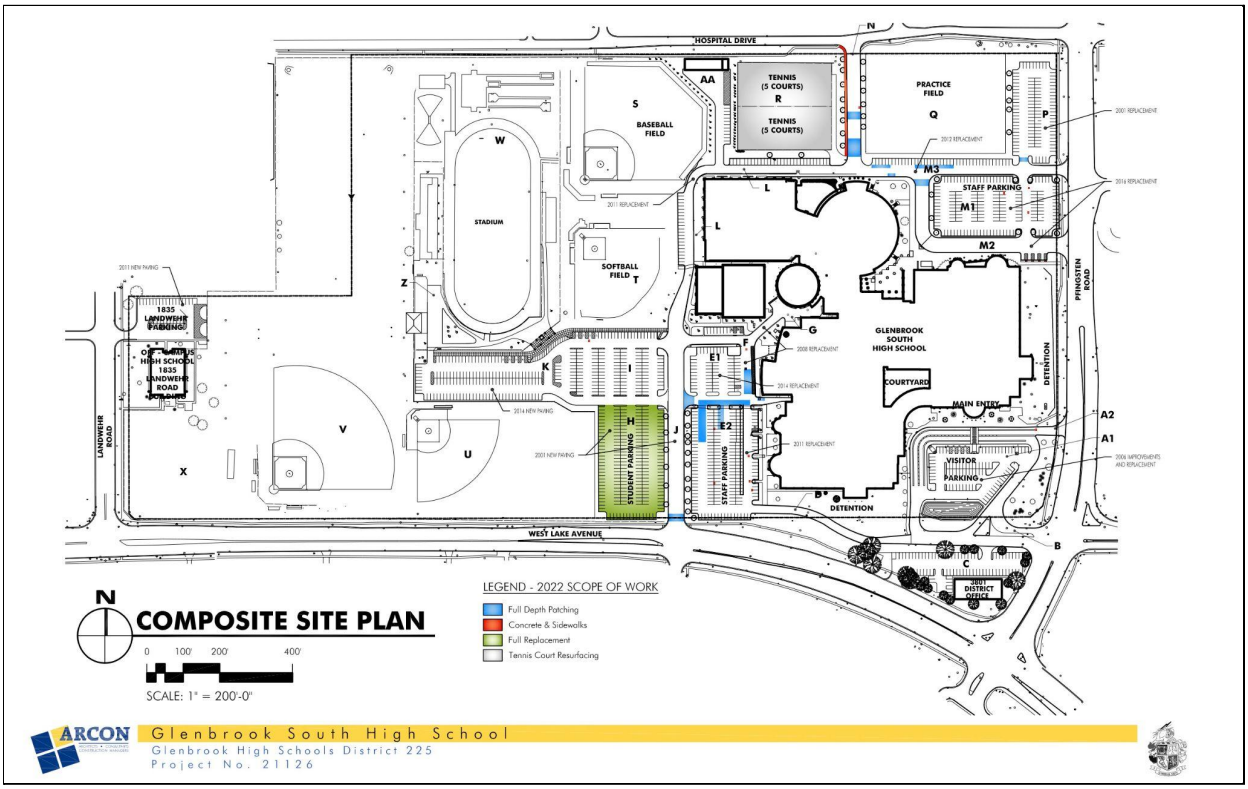
Category	Location(s)	Project Description	Financial Projection
Site Work	GBS	West Student Lot Replacement, Deep Patching, Tennis Court Resurfacing, Sidewalk Addition	$635,000
Roofing	GBS	Roof Replacement	$675,000
Architectural	GBS	Auditorium Rigging System Replacement	$440,000
Architectural	GBS	Auditorium Stage Drapery Replacement	$95,000
Architectural	GBN	East Pool Structural Repair	$130,000
		Subtotal	**$1,975,000**
		Architect Fee (7.5%)	$148,125
		Construction Management Fee (7.5%)	$148,125
		Contingency (2%)	$39,500
		Grand Total	**$2,310,750**

As all building and life safety bond proceeds have been exhausted, capital projects are funded on a “pay as you go” basis and built into the district’s operating budget. Within the current financial projection model, the school district allocates $1,500,000 annually to support capital projects. These funds are secured through developer impact fees, unrestricted revenue sources (e.g., The Glen Make-Whole Payment), and approved inter-fund transfers. Should the final expense of approved capital projects exceed $1,500,000, the school and district leadership team will need to identify additional budgetary reductions to provide for the cost.

Table 2
Site Work Projects

Location(s)	Project Description	Projection
GBS	**West Student Lot Replacement** 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 4 years. The planned summer of 2022 work includes replacing the west student lot, which was last replaced in 2001, and is well beyond its useful life and showing 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.	$335,000
GBS	**Deep Patching** As part of the annual parking lot inspection, several areas are recommended for full-depth patching, which involves saw cutting and removing the affected area and modifying the existing stone base to accept the specified asphalt pavement cross-section. This will lengthen the life of the parking lots.	$135,000
GBS	**Tennis Court Resurfacing** There are ten tennis courts at GBS that were last replaced in the summer of 2015. As part of an overall preventative maintenance program, a resurfacing procedure is recommended every 5-7 years to restore the court's playability factors and extend the life of the courts by preserving the integrity of the asphalt court base. This summer marks year seven, and the court is beginning to exhibit signs such as minor cracking, fading, discoloration, and ponding which are indicators they are due for resurfacing. Resurfacing includes filling all cracks, leveling low spots with sand-filled asphalt, and installing one coat of liquid resurfacer and two color coats. Additionally, fence posts are heaving due to the annual freezing/thawing process. Therefore, the raised edge of concrete surrounding the fence posts will be ground to give a smooth and uniform appearance. The sealant will be compatible with the liquid track surfacing and color coats. It should be noted that tennis courts are typically resurfaced twice in a lifetime.	$135,000
GBS	**Sidewalk Addition** Due to the limited parking capacity at GBS for students, the Glenview Ice Center sells approximately 90 parking permits to our students. In addition, there is currently a sidewalk owned and maintained by the Village that runs along hospital drive, used by students walking from the Ice Center to the GBS north entrance. However, there is currently no sidewalk connecting the Village sidewalk and the building entrance, resulting in the need for students to cut through the parking lot to enter the building. The proposed sidewalk is approximately 305 feet long and will run just east of the tennis courts, creating a safe student path.	$30,000
		$635,000

GBS Site Work Map



GBS Tennis Court Images

Table 3
Roofing Projects

Location(s)	Project Description	Projection
GBS	**Roof Replacement - Music (Records Room)** The music records room roof is the oldest roof at GBS. It is 1,000 sq. ft. and was installed in 1993. This summer, it will be 29 years old and has reached the end of its serviceable life, demonstrating several deficiencies typical for this roof system's age. The proposed new roof system will consist of roof insulation with an R-value of 30.0 minimum and a multi-ply modified bitumen built-up roof membrane with gravel surfacing. Thus, the life expectancy of the new roof is 30+ years.	$35,000
GBS	**Roof Replacement - Auditorium Stage** The Auditorium Stage roof was installed in 1995 and is 5,400 square feet. This summer, it will be 27 years old and is experiencing several deficiencies typical for this roof system's age. The proposed new roof system would consist of roof insulation with an R-value of 30.0 minimum and a multi-ply modified bitumen built-up roof membrane with gravel surfacing. The life expectancy of the new roof is 30+ years.	$180,000
GBS	**Roof Replacement - Auditorium House** The Auditorium House roof was installed in 1995 and is 13,800 square feet. This summer, it will be 27 years old and is experiencing several deficiencies typical for this roof system's age. The proposed new roof system would consist of roof insulation with an R-value of 30.0 minimum and a multi-ply modified bitumen built-up roof membrane with gravel surfacing. The life expectancy of the new roof is 30+ years.	$460,000
		$675,000

GBS Roofing Map

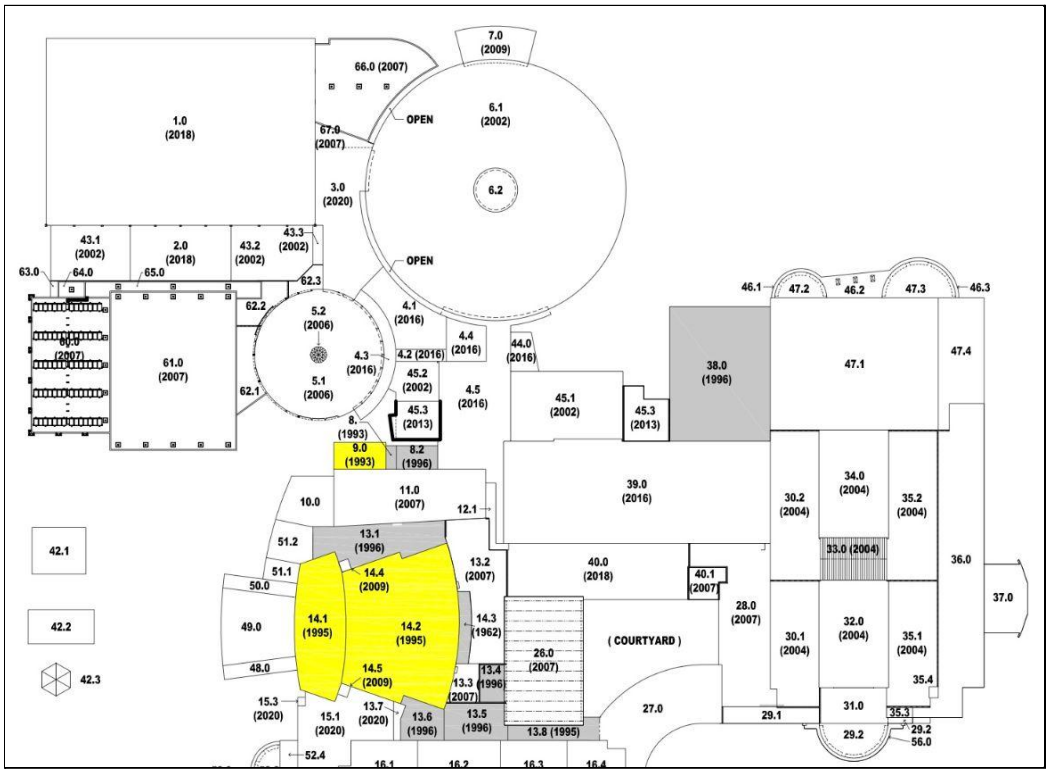


Table 4
Architectural Projects

Location(s)	Project Description	Projection
GBS	**Auditorium Rigging System Replacement** GBS has a manual, counterweight rigging system that is original to the auditorium (1961). This system provides the ability to lower and raise pipe battens by counterbalancing the load with an arbor loaded with counterweight (steel plates). There are 25, 76-foot long pipe battens that run across the stage's ceiling and are used to raise and lower theater equipment during a production. ***Breakdown of 25 pipe battens*** 1 - Main Curtain batten 14 - General Purpose or Utility batten (scenery, special lighting) 4 - Legs (tall curtains on the side used to mask the sides of the stage 3 - Lighting 2 - Travelers (full black curtains used as a backdrop for concerts etc.) 1 - Cyc (white curtain at the back of the stage used to project video or color) ***Recommendations*** Twenty-three pipe battens are guided by a large grillage "Arbor Guide Wall" built on stage left and have a payload capacity of approximately 1,300 pounds per line set. It is recommended that these be replaced with a newer counterweight system. The grillage will remain. Two of the battens (Main Curtain and General Purpose) have counterweights on the opposite side of the stage. These counterweights are guided by free-strung wires, which do not comply with the newest ANSI standards and exceed the recommended travel distance. Due to the necessary placement of these line sets, they cannot be incorporated into the counterweight system on stage left. There is not proper height in this location to use a manual counterweight system. It is recommended that these be replaced with motorized battens. Rather than raising and lowering the battens through manual counterweights, these battens would be automated.	$440,000
GBS	**Auditorium Stage Drape Replacement** The stage curtains are original to the auditorium and are of cotton construction. As such, the drapes require cleaning and re-treating with flame retardants every five years. The GBS drapes were last treated four years ago. 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 are included in this scope.	$95,000
GBN	**East Pool Structural Repair** The east pool at GBN is the smaller, original pool and has structural issues needing to be addressed. The foundation wall near the southeast corner of the pool requires repair and structural reinforcement for a length of about 25 feet. The concrete is spalling, which exposes the rebar/reinforcement and causing corrosion. The repair will consist of the removal of all loose and damaged concrete and sandblasting of exposed rebar. In addition, a new 6" deep, reinforced concrete wall will be poured behind the existing wall. Additionally, the pool gutter piping near the southeast corner of the pool is	$130,000

	corroding and showing signs of potential failure. It is recommended that these be replaced at the time the foundational repairs occur.	
		$665,000

GBS Auditorium Rigging System

Image 1 ***Image 2*** ***Image 3***

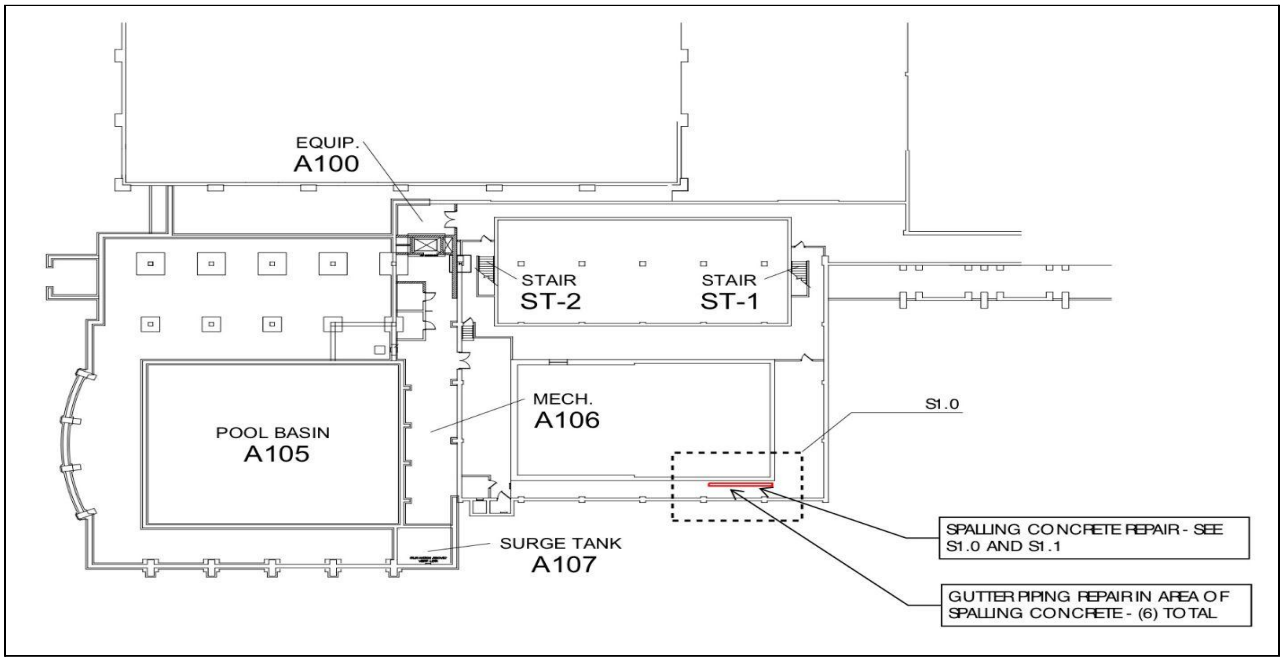


Image 1
Twenty-five pipe battens spanning the length of the stage ceiling.

Image 2
Arbor Guide Wall with manual counterweight system controlling 23 of the 25 battens on Stage Left.

Image 3
Antiquated counterweight system controlling 2 of the 25 pipe battens on Stage Right.

GBN Pool Map



GBN Pool Images

Image 1

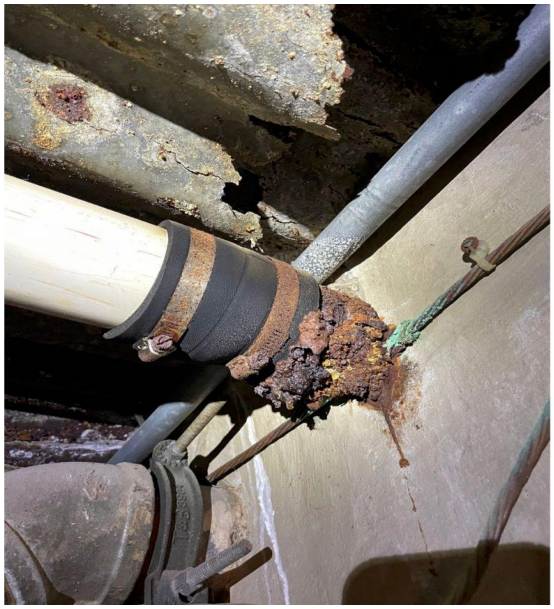
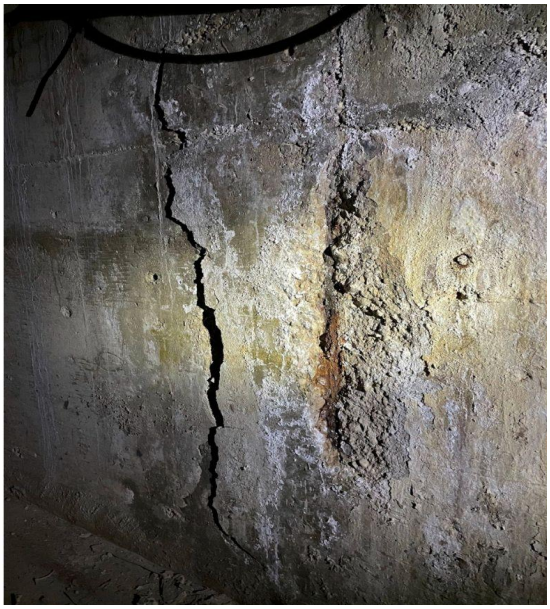


Image 2



Timeline

Typically project specifications are sent to bidders in January and are due back in February. Results are then reviewed with the Facility Committee in mid-February and awarded during a March Board meeting.

Unfortunately, the pandemic has resulted in unprecedented material lead times, especially for roof insulation estimated to be five months. As a result, the administration has asked Arcon to move forward with the bid specification for the roof replacement. Bid package requests were sent to prospective bidders on October 8, 2021, and are due on October 26, 2021. Bids will be brought to the Board for consideration in November.

This updated timeline allows for work to be completed this summer. Additionally, rigging equipment is estimated to have a 14-week lead-time for fabrication. Therefore, the rigging system and other recommended projects are following an accelerated timeline and will be released to bidders on November 30, 2021, and due on December 21, 2021. Table 5 details the proposed timeline.

Table 5
Bidding Timeline

Task	Roof Replacement Projects	Paving and Architectural Projects
Project out to Bid	October 8, 2021	November 30, 2021
Bids Opened	October 26, 2021	December 21, 2021
Facility Committee Meeting	Email results	January 5, 2022
Board Meeting - Discussion	November 8, 2021	January 10, 2022
Board Meeting - Award	November 22, 2021	January 24, 2022