School Without Walls at Francis Stevens

District of Columbia Department of General Services
District of Columbia Public Schools
NCPC PRELIMINARY SUBMISSION
July 29, 2022
acknowledgments

Thank you. This report is the result of a collaborative effort on the part of the District of Columbia Department of General Services, District of Columbia Public Schools, School Without Walls at Francis Stevens, MCN Build and Perkins Eastman DC. We thank all involved for their ideas, time, expertise, and passion.

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Perkins Eastman DC is very excited to be working with the District of Columbia Public Schools (DCPS), the District of Columbia Department of General Services (DGS), and the School Without Walls at Francis-Stevens community of students, parents, teachers, and administrators on this project. This report has been prepared for the NCPC Preliminary Review submission.

Our goal for the modernized School Without Walls at Francis-Stevens building and campus is to provide an inspiring facility that showcases the best of the historical elements of the original 1920s and 1930s architecture, while simultaneously providing both modernized and new learning spaces that complement the school’s educational and cultural goals. The design strives to be a model of true sustainability, value-engineering, and 1922 design can be gracefully integrated within a historic existing building, creating a 21st-century school that fosters and inspires the next generation of environmental stewards.

In preparation of making this submission, the Project Team has met with various stakeholders, and District and Federal agencies, to gain their insight into the existing property and receive feedback from them on the proposed interventions for the school and neighborhood. These meetings include:

- Meeting with School Without Walls at Francis-Stevens leadership and operations teams to understand the school’s daily operations, program structure, and the school leadership’s needs and goals for the modernized campus.
- Meeting with the School Improvement Team (SIT), a group comprised of School Without Walls administration and faculty, parents, students, as well as the track and field representatives.
- Meeting with National Park Service (US/NPS) representatives
- DC Zoning Office
- Staff level meeting with the Commission of Fine Arts, DC Historic Preservation Office, and National Capital Planning Commission

**executive summary**

**SWING SPACE**

- School moves to swing space: July 2022
- School moves back into building: August 2024

**BUILDING DESIGN**

- Concept Design / Final Report: April 26, 2023 / May 27, 2023
- Schematic Design: June 6, 2022
- 50% Design Development: July 29, 2022
- Design Development: August 20, 2022
- 50% Construction Documents: October 14, 2022
- Construction Documents: December 2, 2022

**AGENCY APPROVALS**

- Interior Demo Permit: Early May 2022
- CFA Concept / Final Approvals: July 9, 2022
- Selective Demolition Permit: July 2022
- NOC Review: July 2022
- Foundation to Grade Permit: July 2022
- SWM and DC Water Reviews: July 2022
- Building Permit: September 2022

**CONSTRUCTION MILESTONES**

- Demolition: Summer / Fall 2022
- Substantial Completion: July 2024

Modernization and addition to the existing School Without Walls at Francis-Stevens education campus will occur in one phase beginning summer 2022 and ending in summer 2024. To meet the fast-track schedule, the construction will be permitted through a series of early release packages which include Interior (“Soft”) Demolition and Renovation, Selective Demolition, Foundation to Grade, and potentially an Interior Out (Permit). Other required agency reviews, such as Storm Water Management (SWM) with the DC Department of Energy & Environment (DOEE) and the DC Water review will be timed so all sign-offs are attained or before the Foundation to Grade Permit approval is required. During construction, the School Without Walls students will remain in the existing Francis-Stevens Middle School building, located at 800 Eudgold Street NW, for the 2022-2023 and 2023-2024 school years.

The schedule compiled by the design-build team of MCX Built and Perkins Eastman DC is fast-tracked in order to maintain the Owner’s objectives of a July 2024 substantially complete deadline. The team looks forward to continuing to work with the Department of General Services (DGS) and the DC Public Schools’ project representatives on this exciting project.
A BRIEF HISTORY OF THE SCHOOL AND SITE

SWWFS occupies the Francis Junior High School building, located at 2425 N Street, NW, which has been in civic institution in DC’s West End neighborhood since the first portion of the building was completed in 1927. The building gained a north wing and a third floor on its existing two story wings a few years later, then got a sizable east wing addition in the 1950s to house a cafeteria and a more traditionally sized gymnasium. The school has remained in continuous use throughout its history.

Wrapping around the school to the north is Rock Creek Park, which became one of the United States’ first federally managed parks in 1890.¹ It is the oldest natural urban park in the National Park System and is on the National Register of Historic Places.² While the park is quite large and varied in landscape, the section backing up to the SWWFS site is flat and grassy, right next to the school property, but then becomes densely vegetated and slopes steeply down to the creek. The area in question is circled in purple on the map to the left.³

On the following pages, diagrams highlight different aspects of regional site context around the Francis Stevens building.

¹ https://www.nps.gov/rocr/learn/historyculture/index.htm
³ Map at left is from https://explorenaturalcommunities.org/parks-places/rock-creek-park/glance

The north side of the school property is essentially along the edge of the asphalt in the photo below. The grassy field, including the wooden bollards, east trees are all part of Rock Creek Park.

Above right - the grassy field runs up to a baseline that gives way to a more heavily vegetated demimonde that runs down to the creek. Informal walking trails run in this wooded area and also connect the northeast portion of the school property to trails further north and east of the school site (photo to left).
regional & neighborhood context
site neighborhood context
site neighborhood context
The building is situated such that the secondary facades receive the most direct sun. The 1955 addition receives the most direct light in the morning, providing some minor shading to the original building beyond it. The front facade receives consistent sun to the south, but is partially shaded by the tall buildings across the street. There is considerable exposure along the western facade occurring in the afternoon hours. Overhead sun provides daylighting into existing skylight courtyards.

The majority of on-site green space is situated on the western part of the property. Numerous trees have been removed to make room for auxiliary classrooms trailers. An informal pathway connects the primary play space with the street front. While there is limited green space on site, Rock Creek Park to the North includes an expansive open area currently used by the school.

The original Francis-Stevens Elementary school used a simple circulation pattern that was intended to facilitate expansion. Circulation follows three single-loaded corridors surrounding a central auditorium. This circulation pattern has been continued in previous additions and has proven to be an effective strategy.

Service entry is located between the 1955 addition and the original school building. Vehicles can only access this area through a driveway off of the rear parking lot. No on grade entrances or ramps are provided for this service access.
The abutting Rock Creek Park provides ample views from the classrooms along the north side of the building. This is noted as an important feature to preserve and enhance in additional building construction.

The building is situated at the top of a hill rising up from Rock Creek, Rock Creek Parkway and Rock Creek Trail. The building is visible to pedestrians and motorists in these areas, especially during the winter months.

The character of the surrounding neighborhood is defined by several mid-rise residential and office buildings. The existing school façade maintains a presence along N street; however, the school defers to other buildings in terms of civic presence.

The smokestack, a residual construct used for heating the school in its early years, still remains as a visual indicator of the building’s history and identity. While not functional, this piece of the school’s architecture expresses the magnitude of the school’s evolution over the past 100 years.
site analysis

1925 BUILDING HISTORY
The original elementary school was constructed in 1925 during a period of extreme population growth in Washington DC. The original structure was not intended to be a final product, but a starting point for the building to grow in tandem with the neighborhood.

1928 BUILDING HISTORY
An additional level and classroom wing were added in 1928. Mechanical systems had already been factored into the original foundation for this addition.

1955 BUILDING HISTORY
In 1955, a new volume was added to the east to provide larger gym and cafeteria space.

2020 BUILDING HISTORY
Temporary trailers were added in 2020 to accommodate growth in student body.
the existing building

PLAN DIAGRAMS: SPATIAL ANALYSIS

In order to understand how the Ed Spec programming may fit into the existing building, a spatial analysis was conducted. As built, the existing building provides 53,530sf of program space and 40,230sf of gross up space for a total gross up percentage of 73%. Included in this gross up is the entrance lobby, circulation, restroms/mechanical/electrical/wall gross, and basement building services. This is almost 10,000sf more gross up space than the required 35,447sf of gross up space as determined by the 39% gross up allocated in the RFP Ed Spec. Further analysis of the built conditions of these spaces and the building’s structural system on the previous pages indicates that the vast majority of the gross up square footage cannot be reused as program space. Because of this, the existing building and a 17,000sf addition, as specified in the RFP, are insufficient for providing all of the Ed Spec spaces at their requested sizes while adhering to the budget. In the ensuing Concept Options section, Options 1, 2, and 3a all represent a renovation and addition that adhere to the total square footage restrictions as defined by the project budget. Options 3b and the Gym Expansion Alternate represent a renovation and addition that fulfills the full Ed Spec program square footage as requested, but does not adhere to the project budget.

![Unexcavated space](image1)
![Circulation space](image2)
![Program space](image3)

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<td>Percentage of Total</td>
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<td>Circulation space</td>
<td>0</td>
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<tr>
<td>Program space</td>
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Unexcavated space
Circulation space
Program space
the existing building

Compositionally, the Francis Stevens building has a simple circulation pattern as seen in the diagram below, which was intended to easily accept future additions over time. See section 4, Historical Considerations, for more information about the original school prototype.

The N Street facade is the most formal with a strong sense of symmetry and organized with a base-middle-top relationship. This is reinforced by the treatment of the windows themselves, which are punched openings, but at the upper floors, the windows are grouped into what reads as a two-story pairing. There is a regular rhythm of windows marching across this facade that folds around the corner on the west side, which then transitions to a slightly more modest materials, but still highly organized, facade treatment.

The original school prototype was designed with major corridors extending to the exterior wall, which made it easy to add on to over time.
ZONING CLASSIFICATION

ADDRESS: 2425 N Street NW
SQUARE / LOT: 0023 / 0803
WARD / ANC / SMD: 2 / 2B / 2B06
Zoning District: Unzoned, adjacent to RA-8 & MU-10

Design/Build team’s zoning attorney has confirmed that the parcel had previously been zoned as an RA-08 site and that the zoning maps will be revised to indicate that classification.

Requirements for RA-8 & MU-10 zoning are provided for context.

**RA-8**

- **FAR:** 1.8 3.0 (non-residential; currently ~ 1.3)
- **HEIGHT:** 90’ 90’
- **MECHANICAL PH HT:** 18’ 6” 20’
- **LOT OCCUPANCY:** 60% 75% (current bldg is about 46%)
- **REAR YARD:**
  - RA-8: 4”/FT, but not less than 15’
  - MU-10 - MIN OF 2.5”/ft of vertical height or not less than 12’
- **SIDE YARD:**
  - RA-8, if provided, 5’ min. If lot abuts public open space on one or more side lot line, a required side yard may be reduced/omitted
  - MU-10: n/a, but if provided, at least 2’ / 2’ / foot of bldg height, 5’ minimum

**MU-10**

- **GREEN AREA RATIO:** 0.40 0.20
- **PARKING:**
  - 0.25 spaces per 1000SF
  - 126,000SF * .25 = 32 spaces
- **BICYCLE PARKING**
  - Short Term (outside): 1/2000SF = ~ 82 spaces/41 racks
  - Long Term (inside): 1/7500SF = 22 spaces/11 racks

**RECENT WORK ON SITE**

- Auditorium/Cafeteria renovations, 2015
- Temporary School Trailers, October 2020
OUTREACH & COORDINATION
In 2022, DC Public Schools (DCPS) formed a School Improvement Team (SIT), which is a working group of 10-15 stakeholders that includes teachers, school administration, parents, and neighbors. SIT members also include community leaders (ANC, civic associations, City Council representatives, etc.). Their role is to SIT member (no less than 1) offer feedback, ideas, and concerns to the project team, gathered from their respective constituent groups, and (2) communicate major design decisions and construction logistics announcements to out these constituent groups. DCPS will work with the Department of General Services (DGS) and the design-build team to organize SIT Meetings that help move the project forward with transparency. Since last spring, DCPS has hosted five (5) SIT Meetings for this project.

In addition to the SIT Meetings, DCPS and DGS believe that there should be a broader method of engagement for a wider pool of stakeholders in addition to those named above. The following vehicles include:

- Modernization project webpage
- Biweekly community meetings
- Community meetings.

Community meeting dates are posted on the DCPS school modernization project page, shared calendars, and on flyers. DGS hosted one (1) Community Meeting since the project began in February 2022. The purpose of the Community Meetings is to announce and summarize the happenings of the last few SIT Meetings and to amplify key announcements. The meetings always feature a Q&A session in which community members/attendees also express their opinions and share feedback on what's been discussed and reviewed.

DOPS and DGS employ methods that they feel provide reasonable means of transparency and participation; however, at times, particular project groups may be missed.

The project team aims to create a liveable environment as possible for all residents of the surrounding West End community, but also recognizes that as directly abutting neighbors to the construction, these organizations are in a unique position relative to the upcoming activities to the site.

As the design progresses through Design Development and the Construction Document phases, the project team will continue to meet with the SIT and hold Community Meetings. A key community meeting will occur the fall as the construction team gives up to begin selective demolition activities.

District of Columbia Public Schools | DC Department of General Services

School Without Walls @ Francis-Stevens

School Without Walls @ Francis-Stevens is a modernization project, which will transform the school into a world-class educational facility. The project includes a three-story addition that features state-of-the-art learning spaces, updated technology, and energy-efficient design. In addition to the educational enhancements, the project also includes a new pedestrian bridge connecting the school to the surrounding community. The project team is committed to engaging stakeholders throughout the design and construction phases, ensuring that the community's needs and perspectives are incorporated into the final design.

In addition to community outreach, DGPS and the Design/Build team have met with District agencies to review the agency requirements, site design, and permitting. These agencies include:

- US Commission on Fine Arts (CTA)
- National Park Service (NPS)
- National Capital Planning Commission
- NOAA
- DC Water
- DC Department of Transportation (DDOT)
- DC Office of Zoning (DOZ)
- DC District of Columbia Historic Preservation Office (DCHPO)
- District of Columbia Regulatory Authority (DCRA
- Department of the Environment (DOEE)
- Fine Arts Panel
- DC Department of School Facilities (DOCSF)
- DC Department of Public Works (DPW)
- National Park Service (NPS)
- DC Department of Education (DOE)
- DC Department of Forestry (DOF)
- DC Department of Transportation (DDOT)
- DC Office of Zoning (DOZ)
- DC Department of Public Works (DPW)
- DC Department of Education (DOE)
- DC Department of Public Safety

The project team is committed to working closely with the surrounding community to ensure that the final design meets the needs and perspectives of all stakeholders. The project is scheduled to be completed in Fall 2024, with ongoing community engagement throughout the construction phase.

Perkins Eastman DC

The project team is committed to working closely with the surrounding community to ensure that the final design meets the needs and perspectives of all stakeholders. The project is scheduled to be completed in Fall 2024, with ongoing community engagement throughout the construction phase.
During the public engagement process, the project team developed nine (9) Design Principles, which summarize all of the aspirations of the various stakeholders into unified goals for the project’s design. These Design Principles will continue to serve as guidelines for how to make the best decisions for the project and the community for future phases of the process.

For School Without Walls - Francis Stevens, the design principles outline what the project team hopes to achieve, with a focus on civic presence, sustainability, high-quality learning and working environments and—most importantly—creating/maintaining strong connections within and without the building. Ultimately, these principles will support the team’s overarching goal of creating a high-performance 21st-century learning environment.

1. Enhance and Celebrate Connections to the Outdoors
2. Reinforce the Relationship with Rock Creek Park
3. Provide a Place that Enhances the Sense of Community
4. Demonstrate a High-Performance, Healthy Learning Environment
5. Defer to the Civic Presence of the Historic Structures
6. Create Opportunities for Connections Between Grade
7. Put Learning on Display
8. Embrace Equitable Student-Centered Spaces
9. Create a Professional, Nurturing Environment that...
On June 7, 2022, the design-build team hosted a group of 7th and 8th grade SWWFS students and one of the SWWFS teachers in the PEDC office to discuss the architectural profession, the design concepts for their school modernization and hear student feedback on the concepts and their aspirations for the modernization.

Students shared their thoughts on circulation (wider stairs, trying to separate the oldest and youngest students), a need for hands-on learning spaces, creative surfaces and spaces to chill or be calm. In addition to sharing feedback about how their existing building could be improved, students reacted to precedent spaces by placing dots on images that they liked and commented about the use of outdoor recreational spaces and what happens during indoor recess.

The session closed with several students reading their essays about their preferred design concept with lots of evidence to support why they felt that particular option would be best for the modernization. The images on this page and the next show some of the activities and feedback from the session.
School Without Walls at Francis Stevens is located in the
West End neighborhood of DC, nestled back against Rock
Creek Park. Because the park disrupts the street grid, the
school only has street frontage along N Street NW. 23rd
Street dead ends into N Street near the east edge of the
property boundary.

The site is bordered by mid-rise multi-family residential
and commercial buildings along N Street as well as Francis
Park. A DPR outdoor swimming pool facility to the west.
Outdoor tennis courts and basketball courts are off of the site to
the northwest on the National Park Service land; these
facilities are in need of some maintenance. The north side
of the site abuts Rock Creek Park, and there is a flat grass
playing field adjacent to the school property with a more
heavily wooded area beyond where the grade drops down
significantly to the level of the creek.

The SWWFS property is dominated by impervious surfaces:
buildings, an asphalt service area, a driveway and a
parking lot dominate the east and north edges of the
building (see photo below). Vegetated areas are limited to
only a small section of land between the school and the
sidewalk, as well as a parcel of land on the west side of the
building (north of the tennis courts). Fortunately, the
school’s proximity to Rock Creek Park provides convenient
access to a flat grassy field just north of the building.

The school currently has two gardens that are actively used to
support the Food Prints instructional kitchen program. One
field is at the south side of the school (shown in photo at
right), but it’s not large enough to grow everything needed by
the Food Prints program, so there is a second, larger garden
to the west of the building north of the temporary classrooms.

After building, parking/service area and gardens are
undermined out of the site, not much space remains for
playgrounds or other amenities to support outdoor recreation
and physical activity. There is a single playground area
that serves the younger students, just inside left photo image
but nothing age-appropriate for the middle school students
of Francis Stevens.

There are no heritage trees on the SWWFS property, but the
Urban Forestry Department did identify a few special trees
that should be integrated into the renovation if possible.
There is a line of street trees in public space along N Street NW in front of the school,
and there are a few large trees at the SE and SW corners of the existing school
building that will remain. Along the back of the site, the treeline of Rock Creek Park is clearly
visible beyond the grassy portion of the park along the north side of the school.
The existing school is a 3-story brick and masonry building with an approximate footprint of 40,000 sf. The building main entrance is off N 24th Street NW, accessed by public sidewalk and a series of stairs. The accessible entrance is separated located to the west portion of the building by means of a ramp. There is little topography change across the site with mild slopes throughout the property and a small berm along the N 24th Street right of way.

A field test survey has been completed by Bowman to assess boundary topography and utility for the site. The survey is the basis of the design documents and the initial concept phase. The survey has been shared with the architect and design team and appears on the next spread of this report. The selected design concept reflects the use of the 1050sf existing addition with a similar addition on the west side. The site improvements will expand outdoor program and amenity spaces while implementing rain gardens for stormwater management control. It is yet to be determined if the school will work with DPC to enhance the existing field located behind the school building, which is outside the school’s property but often used by the community as recreational space.

UTILITIES

The site is currently served by water, sewer, and storm drain connections to the public right of way, DC Water records indicate that there is no existing foundation water services, one existing 4” fire hydrant and one existing 3” line both of which connect to an existing 8” ductile iron main in N 24th Street. The project team will develop a plan to connect DC Water with the existing 8” ductile iron main. Water for the project is expected to be provided by a booster pump with a capacity of 400 gpm. The booster pump will be located off site and connected to the nearest DC Water hydrant. The existing site will connect to the District of Columbia Water and Sewer Authority (DC Water) at the nearest hydrant. The project team will develop a plan to connect DC Water with the existing 8” ductile iron main. Water for the project is expected to be provided by a booster pump with a capacity of 400 gpm. The booster pump will be located off site and connected to the nearest DC Water hydrant.

EROSION & SEDIMENT CONTROL:
The building permit process requires Erosion and Sediment Control (ESC) approval during any ground disturbance. Building demolition, earthwork, and the access from public space requires ESC approval from DOEE. Traditionally, secondary measures such as catch basin, inlet protection, tree protection and dust control are for builders of multi-family or larger single family buildings. During the development of the project, the team meets with DC Water to obtain the necessary ESC documentation and ensure compliance. The ESC documentation and plans are reviewed by DOEE to ensure compliance with current ESC requirements.

The proposed ESC documentation and plans are reviewed by DOEE and approved. The plans include a plan for erosion control at all points where soil is disturbed and an escrow account for any additional costs that may be incurred.

SITE ACCESS AND PUBLIC SPACE:
The public space along the building includes the street and sidewalk in N 24th Street NW. The existing N 24th Street streetscape consists of approximately 4.5 ft wide toes and approximately 9 ft wide sidewalks. Pedestrian access to the site is via means of the public sidewalk which connects to a east side and includes the main entrance. There is large landscaped area in public space, located between the lots of sidewalks and existing building. The sidewalk is lined with trees ranging from good to excellent condition, ranging in size from 2” to 6” caliper. These existing street trees are expected to remain and be protected during construction.

VEHICULAR ACCESS:
Vehicular access to the site is located at the intersection of N 24th Street NW and 25th Street NW, with a shared driveway also used by the neighboring property to the east. The existing driveway will be reviewed and assessed for current compliance with DDOE’s standards and also further examined to ensure it meets the future demand of the school’s size and program for faculty, staff parking.

Collection and loading spaces. The project team should note that is not common for a building to have a driveway entrance located within an intersection, however the design team has already met with DDOT to discuss this driveway location and received positive feedback with regards to location. The project team is currently in discussions with DDOT and the current traffic study being conducted by the transportation engineer. There are also a few legal documents discovered that outline the terms of use and conditions of the shared-use driveway for the neighboring properties.

The project team will work with DDOT to ensure that the driveway location and access is safe and as consistent with the needs of the neighboring properties. The project team will work with DDOT to ensure that the driveway location and access is safe and as consistent with the needs of the neighboring properties.
The existing sidewalks and curbs are in fair condition. The existing ADA curb ramps and crosswalk striping at the intersection of N Street NW and 24th Street NW are currently compliant with ADA access. The ultimate design and public space improvements to landscape and hardscape areas will be discussed with DDOT review staff and Public Space Committee.

The streetlights are pole-mounted cobra heads. DDOT streetlight division may ask for these existing fixtures to be upgraded to current LED standards. A conversation with DGS, DDOT, and DDOT to address improvements to the public space is recommended at a DDOT PDRM early in the process.

Left: ADA access into the front of the school is currently provided at a secondary entrance. Per discussions with HPO, the project will explore opportunities to make the main school entrance accessible.
The renovation expands the building area of Francis Stevens by about 30%. Some of this additional space comes from an extension of the existing east wing and the enclosure of what is now a service courtyard between the 1930s wing and the 1920s building, but the bulk of the new space is being added in a new 3-story academic wing on the west side of the existing building. Connecting corridors are provided to improve circulation throughout the expanded building footprint.

There is essentially no change to the existing basement, which has been the traditional location for building service equipment and distribution. On the first floor, the 1930s wing will house the Kitchen, non-core classrooms, and the Health Suite. Loading and building services are concentrated in the SE corner of the 1930s wing. The former service courtyard will be infilled and enclosed with an expanded Student Dining space that will serve as a large multipurpose space. Glazing at the north end of this space and skylights will maintain accessibility to natural light.

In the 1930s building, the layout will remain quite similar to the existing layout with some shuffling of classrooms and support spaces to group the Early Childhood classrooms around the new west courtyard. Site access will be improved with more accessible entry points into the building as well as with better visual access to Rock Creek Park to the north.

Major elements of historical significance will be retained. These include: the main entrance lobby, a portion of the former space to the west of the lobby, the east-west corridor between the lobby and the Auditorium and the Auditorium itself. Along the north facade, the existing exit doors with pediments will be retained.

On the Second Floor, the expanded 1930s wing is dominated by the larger Gym and other Physical Education programs. The Library moves up to the former Girls’ Gym at the back of the building, which is a great double-height space with historic balconies that will be retained and infilled.

Classrooms will be laid out in a manner similar to the First Floor, with larger classrooms along exterior walls and support spaces along interior corridors.

At the Third Floor, the east wing does not include any program space, just the upper portion of the Gym and some mechanical space at the north end. Classrooms will be laid out in a manner similar to the Second Floor, with a fair amount of the space being taken up by the upper portion of double-height spaces such as the Auditorium and the new Library.
This modernization project includes restoration of the existing 1920s and 1950s wings, which are traditional masonry facades with punched window openings. The existing facades were studied extensively to gain a thorough understanding of the proportions and relationships so that they could inform the design of the new additions onto the school. The design is also informed by principles about maintaining civic presence, establishing strong connections to the outdoors and Rock Creek Park, and the desire to create high performance learning environments in a Net Zero Energy building.

The original building was designed with a stately, 3-story facade, which will still be the predominant element along N Street. The addition will maintain the current building height, which is lower than the neighboring mid-rise buildings. See Section 5, Environmental, for more information about how this renovation sits within the public realm. The existing school sign along N Street will be replaced with the current DCPS standard sign type.

New facades will relate back to the existing building via the introduction of a base material, use of masonry and non-masonry proportions. The additions will be respectful of the original design but will not strive to imitate it. Along with masonry, major facade materials and elements will likely include: curtain wall, lightweight rainscreen panels or metal panels, skylights, and perforated metal. Vignette sketches of the new facades appear on the next few pages.

New building additions will likely feature masonry, lightweight metal or fiber cement panels, perforated metal andcurtain wall.

facade design

west addition - south entry
west addition - west facade

west addition - north facade
east gym extension - north side

east gym extension - east side
HISTORICAL CONSIDERATIONS

Photo: National Archives Record Group 70-S.7
FRANCIS & STEVENS, THE NAMESAKES

DR. JOHN R. FRANCIS (1856-1913)

John Francis was a distinguished educator and medical practitioner. Born free in Washington, DC in 1856, his father, Richard Francis (or Uncle Dick), owned multiple properties and was one of the wealthiest African Americans in the area. Outside his attendance at post-secondary institutions in Massachusetts and Michigan, Francis lived his entire life in Washington, D.C. Because of his high social status, he received a good education and in 1878 graduated in medicine with high honors from the University of Michigan.

Throughout his life, Francis strove to uplift the living conditions of African Americans in his community by helping them get a quality education. John was taught from a young age to be aware of the needs of others and to help develop the community in which he lived.

Dr. Francis served on the District of Columbia school board and as a professor of clinical obstetrics at Howard University. He also implemented a nursing program at the Freedman College where African American nurses were trained. Later in life, Francis established the Francis Sanatorium at his former home on Pennsylvania Avenue, where he offered free services to poor African Americans who lived in unsanitary conditions.

Francis served as a member of the Board of Education for the DC Public School System.

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https://www.encyclopedia.com/african-american-focus/news-wires-white-papers-and-books/francis-john-r
https://sites.google.com/a/dc.gov/francis-stevens/home/about-us
https://digitalcollections.nypl.org/items/510d47da-70cb-a3d9-e040-e00a18064a99

THADDEUS STEVENS (1792-1868)

Thaddeus Stevens was a Pennsylvania congressman and U.S. representative who was a well-known abolitionist. He was first elected in 1848 and was a constant opponent of extending slavery or appeasing the South. Stevens worked his entire life to reduce the distinctions between the rich and the poor, as well as between blacks and whites. He pushed to end slavery in the District of Columbia and was a champion of “free schools” for all. In his final declaration for equality, Stevens arranged to be buried in a remote cemetery where both whites and blacks were buried.

Stevens was born with a club foot and walked with a limp his entire life. As a young boy, he was taunted by his classmates for his disability, which may have spurred him to become a “willful, headstrong” leader with “an overwhelming desire to secure an education.” Born in Vermont, he later moved to Pennsylvania to join the faculty of the York Academy.

W.E.B. Du Bois called Stevens “a leader of the common people” and “a stern believer in democracy, both in politics and in industry.”

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https://sites.google.com/a/dc.gov/francis-stevens/home/about-us
https://en.wikipedia.org/wiki/Thaddeus_Stevens

Image Credit:
[Public Domain], https://commons.wikimedia.org/w/index.php?curid=11800979

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A HISTORY OF TWO PROGRAMS

Francis Junior High School and Stevens Elementary School were both historic schools in the District of Columbia. The Francis School was located at 2425 N Street, NW, was built in 1927 to serve poor Black students whose families lived in the swampy area of the District known as Foggy Bottom, as well as Black students from Georgetown. With the exception of the addition of a gymnasium in the 1950s, the Francis school today is the same as it was in the 1920s. After promoting its last class of 9th graders at the close of the 2006-2007 school year, Francis became a middle school as DC Public Schools decided to move all 9th graders out of junior highs to the senior highs.

Both Francis and Stevens can easily boast graduating many fine citizens of the District of Columbia. The schools have a history of serving generations of families with students coming from all four quadrants of the District. The two schools successfully consolidated during the 2008-2009 school year to become Francis-Stevens Education Campus (EC), which serves students from Pre-Kindergarten through 8th grade.

Two years later, for the School Without Walls (3) students. Then in school year 2014-15, Francis-Stevens EC merged leadership with School Without Walls HS to become School Without Walls at Francis-Stevens EC.
Replacing these doors with period-compatible elements can also be a "mitigating" action to propose for HPO review. Wood paneling at the side doors appear to be from the period and are in need of some repair, painting.

9. Wood plastacyln columns are in need of repair.

10. Existing windows, not original, to be completely replaced with aluminum window similar in profile to those installed to meet project requirements. Through-the-wall air conditioning units will be removed.

OBservations and approach

The historic preservation team has performed general conditions surveys, documented, and thereafter established a list of testing and investigations to be performed. While a detailed survey of existing conditions is planned to identify quality and quantities of items to be restored and/or replaced, the preliminary results of exterior surveys identified as follows:

1. Brick at various locations needs holes filled, and/or repointing; however, further surveys and investigations are required as the project develops. Masonry is generally in good condition. Loose and/or reset, replaced brick (brick and mortar colors) will need to match existing brick and mortar colors. The extent of removed reset brick will need to be determined in order to establish the validity of using salvaged brick or seeking new matching brick.

2. Exterior facade will be power washed with appropriate restoration cleaners.

3. Currently, the roof drains do not have overflow drain capacity as per current code.

4. Wood/Metal cornice trim, rear wood door surrounds, column elements are in fair condition, but specific elements need restoration or replacement. All will need to be repaired.

5. The wood shutters at rear doors appear to be original, however various panel elements have been replaced with new simpler, contemporary trim elements. These should be replaced with period matching details that can be cited as "mitigating" elements to offset some of the proposed window work such as the balcony enclosure areas at the Auditorium.

6. Roof elements/appurtenances are all "original" galvanized metal (chocks/brackets/gutters) and might not be used in the modernization. The design team is assuming these are not salvageable, there is reasonable ability to remove them. Visual roof inspection has determined the roof, parapets and stone coping are all in good repair. Roof top appurtenances, if retained, need to be painted and rust treated.

7. Existing roof drain system has some detached "beehive" sections. Selected downspouts may need to be replaced and new round copper or like metal downspouts installed as needed. There are no overflow drains at the flat roof areas.

8. The front door will be replaced with a historically compatible (HPO approved) paneled metal door. Side doors are replacement doors with transoms.

Replacements proposed:

11. Metal fasteners to be removed and holes filled with an minimal damage to surrounding masonry as possible.

12. The stone steps and landing at the west (main) entrance need to be cleaned and re-grouted and, in some places, reused. Stone bases at exterior walls need to be cleaned and re-painted. Crack repair is required in various areas.

13. Stairs at the rear do not match. Steel railings are not historic.

14. Chimney Repair: Significant cracking at the chimney needs to be repaired and open joints pointed. Masonry repair all around the exterior seems to have been removed and reset with the stone coping reinstalled. The coping stones appear aligned and are tested for lead.

item 8 - wood trim at the surround for an exterior door on the west side of the building

item 5 - pediments and trim at rear doors on the north side appear to be largely original
The West End

NEIGHBORHOOD CONTEXT
School Without Walls at Francis Stevens is located in the West End neighborhood of Washington, DC, just north of Foggy Bottom, west of Dupont Circle, and South East of Rock Creek Park. It was the westernmost area of the original L'Enfant Plan, before the annexation of Georgetown, which is why it is known as the West End.

Just south of West End is Foggy Bottom, which received its name due to its low-lying, mainly location near the Potomac River, making susceptible to concentrations of fog. During the mid-1800s, several industrial buildings were located here, drawing an influx of immigrants, mainly German and Irish. When slavery was abolished in DC in 1862, this also added to the population surge with an influx of African American families.

This area was mostly African-American and one of the poorest areas of Washington in the early 1900s. In the 1902 McMillan Commission report, this area was described as “unattractive by the verge of criminal.” Plans were discussed to relocate this area as an urban park, as an extension of the plans for Rock Creek Parkway, but these plans were never fully realized. According to the Records of the Columbia Historical Society, Francis Junior High School was dedicated on March 20, 1909, and the “New swimming pool for colored at 24th and N” was opened on July 14, 1908.

As shown in this 1972 map to the right, the West End neighborhood is defined by K Street on the southwest, Rock Creek Park on the west, and New Hampshire Avenue on the east. This map was part of a report for an urban renewal program to redevelop the West End into a “desirable residential community.” This area is now home to the embassies of Spain and Qatar, and has hundreds of luxury condominiums being developed.

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PERKINS EASTMAN DC

https://www.friendsoffrancisfield.org/History.html
https://www.friendsfrancisfielddc.org/history/?s=Search
The School Without Walls at Francis-Stevens (SWAFTS) School is eligible for DC landmark status under the Multiple Property Listing for Public Schools. The property appears to meet DC designation Criteria C as an example of a particular type and era of public schools, the “vernacular” school of the late 1800s to mid-1900s. As such, it is eligible for designation under the multiple property criterion. Public School Buildings of Washington, D.C. (1982-2000) and is therefore subject to historic preservation review guidelines. The building and sites are adjacent to the Georgetown historic district and the site appears to be included in the HPO Bight Creek and Potomac Parkway “Cluster” which is listed on the NPS’ National Register of Historic Places. As such, visits to, and in many cases, work within the viewedet of listed area would be within NPS and/or Old Georgetown Review Board (OGRB) purview (one of many things). The OGRB map includes the building and site north to 14th Street as part of the Black Creek Potomac Parkway “Cluster.” This building itself currently does not appear to be a DC landmarked structure. The Shippers-Luce Act does not include the SWAFTS building, but other cases are included in the purview of the Act, including the area identified for the proposed addition. The property line location and area of land that is under NPS jurisdiction is currently being researched by this team. Based on the Shippers-Luce Act, the Georgetown Review Board appears to have review jurisdiction over major construction on this site. See excerpt below.

SHIPPERS-LUCE ACT (PUBLIC LAW 233-T) – Public Law 233.732 Congress S.4300 - 40 U.S.C. 122, 46 Stat. 265 (1909) All Act to regulate the height, exterior design, and construction of private and semipublic buildings in certain areas of the National Capital. [...].To this end, thereafter when application is made for permit for the erection or alteration of any building, any portion of which is to be built upon the grounds of the [...].Rock Creek Park, the Zoological Park, the Rock Creek and Potomac Parkway, Potomac Park, and public buildings adjacent thereto, or upon or upon any altered, fortifying any of said grounds or parks, the plans therefor, so far as they relate to height and appearance, color, and texture of the materials of exterior construction, shall be submitted to the Commission of the District of Columbia to the Commission of NFL or NPS. Without the written consent of the Commission of NFL or NPS, no building or improvements shall be erected or constructed. Interior construction shall be submitted to the Commission of NFL or NPS only if it is an alteration, repair, or addition of the building. Generally, the exterior is intact and existing elements will be repaired and/or restored as necessary. The existing metal windows are not the original windows, and their replacement will be accomplished as part of the project scope. Projects are repeated the work will be coordinated with the DC Historic Preservation Office. Door does and the hand rail and front porches and their railings are original, the rear doors are not. The roof and front cornice are intact and need minor repairs. The existing brickwork and stone front elements are also in good condition, requiring spot repairs, pointing, and clearing. The Design Build Team will document the building and character defining historic elements, including current conditions and provide the HPO/OGRB with a framework to judge the proposed work. Any additions and new work will leave the existing cornices and gutters unaltered and cover only back-of-the-house elements of the existing building fabric. The front and rear entry ways will be left intact and the interior stair and corridors will retain much of their original configuration and materiality, subject to potential removal due to severe HAZMAT contamination.

historical assessment

District of Columbia Public Schools | DC Department of General Services

School Without Walls - Francis Stevens | NCPC Preliminary Submission

PERKINS EASTMAN DC

DC HISTORIC PRESERVATION DISTRICT MAP - EXCERPT
site sun & wind patterns
As climate change begins to affect Washington DC, an increase in heat stress and a decrease in cold stress can be seen over time, leading to much warmer temperatures. While currently the Washington, DC climate can be considered hot 4.9% of the time, by 2080 heat stress will be increased to 22.3%, and significant cooling will be needed to increase thermal comfort. This further supports the recommendation for passive cooling strategies, and passive architectural design strategies, combined with a highly efficient ventilation and air conditioning equipment in order to reduce extreme heat temperatures and maintain thermal comfort.
There are several factors that influence thermal comfort, and architecture can play a significant role. The way in which the building is laid out can impact elements such as wind speeds, mean radiant temperature, dry bulb temperature, and the overall thermal sensation of the environment. In a micro-climate urban map, like the one at B Innerwee, 1°F temperature differentials can have a considerable impact in the thermal comfort of an occupant, and affect the way in which he or she perceives that space throughout the year. It will be important to study options during schematic design for optimizing outdoor and indoor thermal comfort levels during the year to improve the use of the outdoor spaces.

Multiple passive design strategies can have a significant impact in the thermal comfort feeling both inside and outside the building, and might also represent saving in terms of cooling and heating loads.

Although mechanical heating and cooling will still be needed to maintain indoor thermal comfort in this climate, passive design strategies can be employed to reduce the amount of mechanical cooling necessary. While passive cooling strategies such as evaporative cooling, thermal mass and night ventilation, and the use of fans can reduce mechanical cooling needs, the climate predominantly requires heating, so focusing on passive heating strategies can have more impact on energy performance. Passive heating strategies such as utilizing a well-insulated and airtight building envelope to capture internal heat gains can provide added comfort for 28% of the year, significantly reducing the need for mechanical heating.
Any high performance building requires careful consideration of how the design affects energy use and thermal comfort. This includes a wide range of topics like building orientation, wall construction, window size and quality, HVAC system type, electric and natural lighting, appliance use, and many more. Since most of the SWF’s building footprint is existing, certain updates will likely be needed to make the existing walls perform as well as a modern building enclosure.

Options that are being considered are replacing windows, adding insulation to the interior of walls, upgrading HVAC and lighting. Initial analysis suggests that the existing windows may need to be upgraded, and at least R-15 insulation may be added to the existing walls. This will help reduce the energy lost during the winter to the outside, and will also create a more comfortable interior environment for students and staff.

In addition to energy, the design team will seek to maximize the amount of natural daylight available to classrooms, while minimizing unwanted glare.

Daylight availability

The renovation of the SWF’s building will include the enclosure of an existing service yard between the 1920s building and the 1950s east wing (area within purple box). The design team is doing daylight analysis of this specific area to ensure that existing spaces with exterior windows that allow this space will retain adequate access to natural light. The image to the left is an output of the analysis of the current design, which features a west-facing skylight along the east side of the dining area (along the bottom of the purple box) and a mix of circular skylights near the classrooms in the existing 1920s building. The colored rectangle towards the bottom of the box shows the dining area, where the red indicates a significant amount of glare during lunch hours.

The smaller rectangle above the circular skylights (just above the top of the purple box) is a classroom on the 2nd floor of the existing 1920s building. While the green zone near the existing exterior wall indicates an adequate amount of daylight, the portion of the classroom closer to the corridor is not getting much natural light.

Daylight analysis tools will help the design team refine the shape and functionality of the skylights in this zone to optimize access to daylight while avoiding glare.
**LEED for BE+C: Schools**

**Project Checklist**

**LEED scorecard**

- **Project Name:** SWW @ Francis Stevens
- **Date:** 3-Jun-22

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### LEED v4 for BD+C: Schools

**Project Checklist SWW @ Francis Stevens**

- **3-Jun-22**
- **Y ? N**
- **1 Credit**
- **9 4 17 15 4 4 5 13**

#### Minimum Indoor Air Quality Performance

1. **Location and Transportation**
   - **Integrative Process**
   - **2**

2. **Strategies and Priorities**
   - **Emissions and Resources**
     - **Preliminary**
       - **2**
       - **2**
       - **2**

3. **Green Power and Carbon Offsets**
   - **Credit**

4. **Green Vehicles**
   - **Credit**

5. **Energy and Atmosphere**
   - **Credit**

6. **Water Efficiency**
   - **Credit**

7. **Indoor Environmental Quality**
   - **Credit**

8. **Innovation**
   - **Credit**

### Energy and Atmosphere

- **0**

#### Minimum Energy Performance

1. **Fundamental Commissioning**
   - **Certified**

2. **Fundamental Energy Management**
   - **Certified**

3. **Energy Productivity**
   - **Certified**

### Indoor Environmental Quality

1. **Indoor Environmental Quality**
   - **Certified**

#### Innovation

1. **Innovation**
   - **Certified**

### Energy and Atmosphere

1. **Energy and Atmosphere**
   - **Certified**

**Preliminary Energy Model Example**

**PV Production Analysis**

**Perkins Eastman DC**

**Minimum Energy Performance (NZE)**

The design team has been studying how to best meet the Net Zero Energy goal of the project. Studies include evaluating how much PV potential exists on the existing and new roofs, running preliminary energy models to compare different massing options to each other, and running analyses on the effect of different envelops improvements like adding insulation to walls and improving windows. Preliminary analyses suggest that the NZE will be difficult but possible, and will require a combination of efficient systems (like geothermal), improving the existing walls and windows, and adding PV panels somewhere on the site. All options will be evaluated for their impact on cost, energy use, and other performance characteristics. Given the building size and area available for PV panels, the current EU target is less than 22 kWh/M^2/yr to have a good chance at NZE certification.

Blower door tests have been performed on the existing Swiffs building, and preliminary results indicate that improving the performance of the existing windows will provide significant reduction in heat loss in winter—saving energy and improving comfort. It would also be advantageous to add insulation to the existing, un insulated wall assemblies. Estimated electrical loads and renewable energy opportunities are summarized in the Appendix; note that the latter does not include additional PV that could be placed on the roof of an addition to the existing building.
net positive education & WELL

The activities taking place in a thriving school can consume tremendous amounts of energy (electric, gas, and other sources) if an energy-conscious, integrated approach is not taken in architectural and building systems design. This is why the design team has been focused on project leadership to achieve a truly sustainable, high-performance learning environment targeting Net Zero Energy (NZE).

Beyond striving to reach the Owner’s goal of Net Zero Energy, LEED Gold and WELL certification for this project, we are looking to maximize the quality of the indoor and outdoor spaces and leverage their high-performance aspects to achieve what we call “Net Positive Education” - the creation of a high-performance learning environment that will positively support the health and education of all School Without Walls Francis Stevens students, teachers, and staff.

Although this project is still in the concept design phase, we’ve outlined the current status of how these concepts support our specific sustainability targets and Net Positive Education in this section.

The school will pursue WELL Certification, which focuses on evidence-based design and operation responses to support human health and well-being in buildings. Certification requires tracking of certain information, coordination with building operations and staff, and use of certain sustainable design strategies.

There are multiple pathways to WELL certification, which will be discussed in schematic design with the relevant parties. The example shown on the next page is a preliminary glimpse at credits that could be considered for SWWFS, based on recent similar projects.
storm water management

STORM DRAINAGE & STORMWATER MANAGEMENT

The project will fall under two requirements for stormwater management: Major Substantial Improvement and Major Land Disturbance, as described in the 2020 DOEE SWM Guidelines. The renovated building footprint is categorized as Major Substantial Improvement and is required to address 2/3rds the requirement of new construction (0.8 inch rainfall, 80% percentile event). The project area that includes building footprint addition and general site improvements outside of the building, will have to meet the full requirements for stormwater management retention (1.2 inch rainfall, 90% percentile event).

In addition to the retention volume treated on site, the project development has a separate stormwater detention requirement to control the peak discharge rate. The stormwater project - peak discharge rate must be addressed to the 2-year pre-development rate and the 15-year post-development rate. Land disturbances within the Public Right of Way will be mitigated following DOEE guidelines for the "maximum extent practicable" (MEP).

Stormwater solutions for the site will be explored that best work with the existing building and school program. Low Impact Development (LID) techniques and green infrastructure solutions will be the first choice. These include green (irrigated) roofs, rain gardens, groundwater infiltration, and rainwater harvesting. These best management practices depend on existing building conditions, proposed program space and drainage divides. For example, green roof may be viable if the existing structure can support a vegetated roof without additional cost or challenges. Infiltration is dependent on the soils and geology of the site. Rain gardens and rainwater harvesting are viable if the program has space and a need for either irrigation or mechanical water. The final design solution is likely to be a combination of these design elements to address building, landscape, and vehicular access. The project goal is to meet 100% of the District’s SWM requirements on-site.

public realm and view sheds

As the renovation of the Francis Stevens building is maintaining its current three-story height, it will remain a smaller mass than its existing neighbors to the south and east, and the new west wing will just provide a little lift to further define the streetscape along Street Hill. To the north of the site, Rock Creek Park creates a natural buffer that limits the long view from areas north of the site. Existing street trees along 11th Street and the two larger trees to the SE and SW of the school building will be maintained.

Street view from the east along 11th Street approaching the intersection of N & 24th Streets. The school building (right) is much smaller than the office building across the street.

Street view from the west along 18th Street shows some of the initial view of the school in the warmer months.

PERKINS EASTMAN DC
The existing landscape of SWWFS, located at 2425 N St NW, is devoid of programming apart from an aged playground, a basketball half-court (on NPS land), and access to open lawn area (also on NPS property), which is used informally for sports. The school has an active food security program, and several existing raised planters.

There are a few trees west of the building that provide shade for picnic tables used by students and staff alike. The SWWFS property is dominated by impervious surfaces: buildings, an asphalt service area, a driveway, and a large parking lot. Impervious areas are limited to only a small section of land between the school and the sidewalk, as well as the area on the west side of the building (north of the temporary track).

Fortunately, the property abuts National Park Service (NPS) Rock Creek Park land, including a Bel Air gravel north of the building, which the school currently uses for recreation and sports (below). This open space is flanked by a forest in the north of the school and the west side of the stream valley slope. A footprint on the other side of this forest provides public access to Rock Creek Park (right).

The redesign of the campus provides a unique opportunity to enable students to create connections with each other, their academic pursuits, and their community. Incorporating ‘living classrooms’ is a creative and functional way to provide students on urban campuses. The Urban Forestry Department has confirmed that there are no Heritage trees on site and will allow removal of any of the existing trees, but requests that we manage as many as possible should be preserved, particularly trees at the front of the school and at the site of the future school.

OUTDOOR LEARNING SPACES THAT REINFORCE A CONNECTION TO ITS NEIGHBOR, ROCK CREEK PARK. Traditionally, our schoolyards have been places for recess and sports. On the SWWFS campus, however, the school hasn’t yet provided many opportunities for education. Students will be able to learn throughout the campus and beyond in outdoor classrooms, directly from natural systems (both in the property and those that aren’t part of it) and from newly generated ecosystems on site. A grove of trees can allow students to discover the park, learn about the forest island effect and energy savings. A robust and beautiful bioshield will be filled with native flowers and grasses. Pollinators and birds unique to our area will seek out this refuge. The Early Childhood Education (ECD) courtyard surfaced with natural play elements and story circles will promote cooperation and social emotional growth.

ACHIEVE ZERO ENERGY & A NET-POSITIVE EDUCATION. Often when we think of “Net-Zero” we are referring to energy savings and not using more energy than we “use.” Our argument is that a naturalized learning and physical wellness-based landscape embodies both the principles of Net-Positive Education & Net-Zero Energy. A naturalized landscape is regenerative and minimizes maintenance requirements or additional inputs. A well designed, aesthetically pleasing outdoor space enhances the body, mind and spirit just by the act of being in the space.

ROCK CREEK WATERSHED. SWWFS is located within the Rock Creek watershed, Rock Creek directly north of the campus. The Rock Creek watershed is contained within the Potomac River watershed, which, in turn, is part of the Chesapeake Bay watershed.

The landscape concept drawn upon natural plant communities found within Rock Creek Park to inspire a plant palette that abuts across the forest communities, waters, and meadows that naturally occur in the park. By bringing focus on natural systems back into the SWWFS landscape, students and teachers can explore these rich micro-ecosystems, and take the importance of wetlands, biotopes, wildlife habitat, and the role of pollinators in their curriculum. The increased number and density of native trees will lower the heat island effect, provide shade, enhance functional ecosystems, and provide biodiversity in the region.

LANDSCAPE DESIGN MISSION STATEMENT: We believe every landscape should be educational. Every landscape should reflect its natural and cultural history. It should embrace the natural world, restore ecosystems, and provide wildlife habitat. Every landscape should be a place of learning, engagement, and community buildings with opportunities to observe and learn from natural systems. In addition, SWWFS can take advantage of this proximity to Rock Creek Park by studying Rock Creek’s intact upstream and riparian ecosystems. The landscape design will enhance dynamic cooperative relationships, engage the community, encourage environmental stewardship, and promote emotional and social well-being for staff and students alike.