## 2023 EXHIBITION OF SCHOOL PLANNING & ARCHITECTURE NORTHEAST REGION

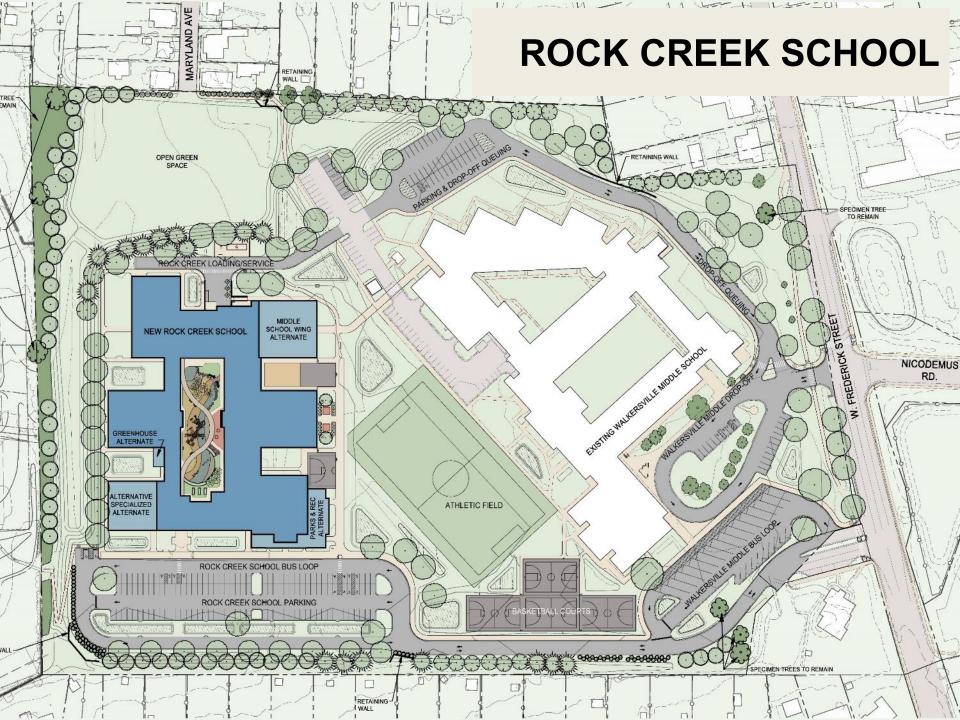
# ROCK CREEK SCHOOL

A SCHOOL FOR STUDENTS WITH DIVERSE EDUCATIONAL & MEDICAL NEEDS FREDERICK COUNTY PUBLIC SCHOOLS

Frederick, Maryland

## **ROCK CREEK SCHOOL**

ROCK CREEK SCHOOL



## **ROCK CREEK FAMILY**

#### **Community Environment**

Rock Creek School provides individualized special education programs for Frederick County students with severe intellectual, physical, emotional, hearing, visual and learning disabilities. Students range in age from age 3 through the school year they reach 21. Students may transition at age 18 to the SUCCESS program for further vocational training. Students who remain until age 21 receive a certificate of completion and are eligible to enter an adult day program.

The Rock Creek community is more of a family than a school. Staff and Administrators form close relationships with school families and together they nurture and develop the academic, physical, social and emotional growth of the Rock Creek children.

Staff is vital to the program's success. Special Education Instructional Assistants support students with their daily needs in the classroom. Specialized staff provide Occupational and Physical Therapy, Speech and Language, and Reading and Behavior Support. Special Education teachers as well as the Administrative team provide classroom instruction, and two registered nurses care for the varied medical needs of the students. Some students travel with and attend school utilizing private duty nurses.

Planning efforts for the replacement school were centered around meeting the unique needs of the Rock Creek family. The endgame was to provide an affordable, easily maintained, sustainable facility equal to other new schools in the district: A place that students are proud to attend and share with the community.







## FREDERICK COUNTY

#### **Community Environment**

Exhaustive time was spent finding the right site for the new school. The Team visited seven potential sites to gauge existing conditions, and met with local City, County, and Town planning departments. Over 3 review meetings, the Design Committee developed a rubric to identify selection criteria in the four categories identified below. Each site was then scored.

Although not central to the County, the Walkersville Middle School site was selected due to readily available access to public transportation, vocational and employment opportunities, and community services, all deemed critical to program success. Additionally, the adjacent Walkersville Middle School, and proximity of Walkersville Elementary and High School provided integration opportunities with varied grade level students.

#### EXISTING SITE FEATURES

#### **50 Total Points**

- Buildable Area Size & Quality
- Roadways/Traffic
- Vehicular Access Points & Sight Distance
- Pedestrian Access to and from adjacent sites
- Availability & Capacity of Public Utilities

#### ACCOMMODATE ED SPECS

#### **175 Total Points**

- Ed Spec Compliant and Optimized Building Footprint
- Bus Loop Capacity & Functionality
- Parking Capacity & Functionality
- Size & quality of Playgrounds, Outdoor Educational, and PE elements
- Ability to provide a meaningful connection to other buildings on site

#### ACCESS & EQUITY

#### 175 Total Points

- Proximity to appropriate peer and age group connections
- Proximity to Public
  Transportation
- Access to vocational and employment opportunities
- Adjacent to Community Services
- Central location in County
- Anticipated Ambulance response time

#### REGULATORY & FUNCTIONAL

#### **100 Total Points**

- Costs Construction
- Costs O&M Transportation
- Staging/Phasing/Access for Construction
- Maximizes LEED Site Credits
- Aligns with IAC Site Selection Criteria

## SUPPORTING LEARNING STYLES

At Rock Creek, every space provides a learning experience. Learning happens everywhere: Inside and outside, in classrooms & corridors!

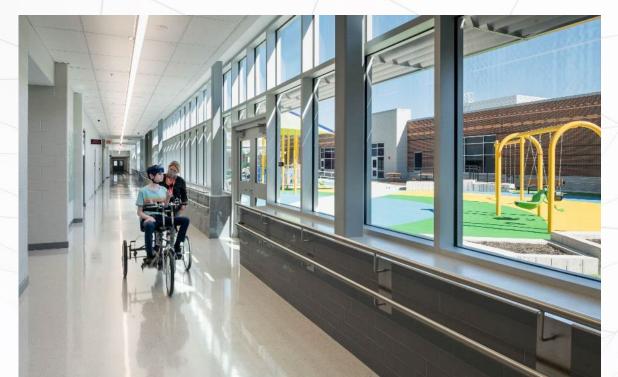
#### Learning Environment

The mission of Rock Creek School is to provide a safe, respectful, caring and enjoyable learning environment in which students can develop communication and independentliving skills to help them achieve their full potential.

Space design had to support 8 guiding principles:

- 1. Inclusive Opportunities
- 2. Communication
- 3. Student Engagement
- 4. Movement
- 5. Sensory
- 6. Independence
- 7. Responsiveness
- 8. Continuous Learning

At Rock Creek, students are taught to adapt to the environment. This philosophy is embodied in the school mascot, a chameleon, known for its ability to change and adapt.









## SUPPORTING LEARNING STYLES

#### Learning Environment

Student instructional needs are diverse. Learning styles and methods of delivering instruction are supported by classroom clusters, specialty classrooms, and support services off a main corridor surrounding an outdoor learning courtyard. Color-coded textured wall panels and floor accents adorn entrances to classroom clusters. High and low grab bars along the main corridor provide an indoor walking path used for physical therapy. The lobby and a small open breakout space provide spaces to rest, socialize, and collaborate. The Cafeteria, open to the main corridor allowing for views to the courtyard, provides social seating options and an area for large group instruction. Classrooms provide space for individual and small group instruction.

Specialty classrooms include a living skills kitchen, vocational skills room, technology lab, maker lab, music room, movement room, sensory rooms, adaptive gym, heated aqua therapy pool, and a library. These spaces support the mission and the 8 guiding principles.

An exterior walk/bicycle path circles the school providing opportunities for movement, independence, and integration. Along the path, students may rest on benches at the memorial garden. Bricks engraved with the names of prior students that have passed away were relocated from the original school and are now displayed in the garden. The site was also integrated to provide access and connection with the adjacent Middle School.







## **CLASSROOM CORRIDORS**

#### **Physical Environment**

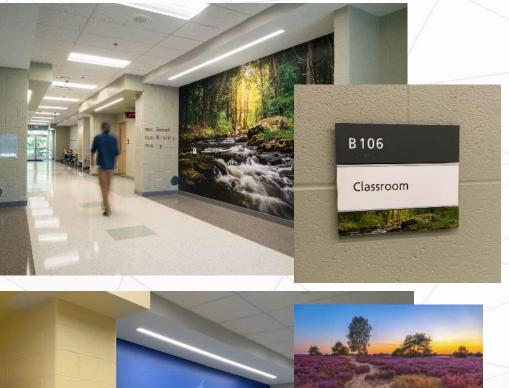
Wayfinding is accomplished throughout the building via color and themes. The Design Committee selected Creek Ecosystems as the school theme and designated a color for each.

Paw Prints | Purple Foliage | Green Sun & Flowers | Yellow Butterflies | Orange

Large thematic graphic panels at the entrance of classroom corridors help students find their place in the building. Specialty classrooms are designated in Blue.

Wide classroom corridors accommodate 2 wheelchairs passing side-by-side. Equipment parking areas provided along the corridor are designated by a darker tile color. Color-coded accent blocks run along the center of corridor floors, and accent paint on protruding soffits designate classroom entrances. The themes are also expressed in room signage.

Finish materials were selected by the custodial staff based on familiarity and maintainability.





## **CLASSROOMS**

#### Physical Environment

A large storage room and student cubbies are located at the classroom entrance. Classrooms are sized to accommodate specialized equipment and furniture, and an open floor area for mats.

In the typical classroom the instructional wall is at the front of the room. A changing station is located along the back wall with table, custom corner supply cabinet, lift, and privacy curtain. Additionally, a curtain extends the full width of the classroom to provide a private area for specialized instruction and medical examinations. Fixed casework and a sink are located along the back wall, painted in an accent color unique to the wing. Paint colors are muted to maintain a sense of calm. The toilet room is located off the back of the room. The toilet room layout provides accessibility exceeding ADA requirements to meet program requirements for individual student supply cubbies, lifts, grab bars, and space for staff to assist users.

Classroom design decisions were driven by the need to not only satisfy the program but to help lessen the physical demands placed on the staff.





## **SITE VISITS & MEETINGS**

#### **Planning Process**

Planning began with the site selection process, followed by meetings to review the educational specifications with staff. The Design Team included a special needs architect, knowledgeable of the distinctive requirements of the Rock Creek community. Staff identified deficiencies in the existing building and assisted in defining improvements for the new facility. Tours were also conducted of other similar facilities to give staff and administrators ideas. The process culminated in meetings to review the building layout on the selected site.

The Design Team conducted bimonthly meetings with the District's Design Committee to discuss building requirements and review plans, elevations, and finish materials. Special meetings were held specific to mechanical, electrical, plumbing, and security and technology systems.

The Design Team included a playground specialist to develop the adaptive outdoor learning courtyard.

The original design included add alternates for a middle school wing, a learning commons in each classroom wing, a specialized alternative instruction wing, a greenhouse, and additions for an expanded parks and recreation gymnasium.





## **RENDERINGS & MEETINGS**

#### **Planning Process**

The Design Team utilized Building Information Modeling (BIM) and rendering software to aid the Design Committee in visualizing layouts, determining scale, and understanding building features. This software was especially useful in illustrating color schemes and proposed graphics, ex. theme walls in the corridors, inspirational wall text in the library, acoustic panels in the lobby.

The Design Team met with Authorities Having Jurisdiction to ensure compliance with their requirements. Several meetings were held with the Rock Creek families and Walkersville Community to provide project updates, answer questions, and address concerns.







## LIBERATED LEARNERS

#### Students

The New Rock Creek School provides limitless opportunities for students and staff. Budget constraints did not permit construction of the greenhouse and middle school and specialized alternative wings, and to accommodate the general population the shared learning common in each wing was converted to a classroom. Nonetheless, the design meets the overall program requirements and the 8 guiding principals. The New Rock Creek School accommodates...

...purposeful inclusive opportunities for meaningful engagement with age-appropriate peers.

...opportunities for communication integrated throughout the school day.

...student engagement in daily life with opportunities for self-expression and individual choice.

...freedom and ease of movement in personal and public spaces.

...multi-sensory, flexible environments offering individual control and access to sensory engagement in learning.

...maximum independence in authentic activities of daily living and education.

...individual learner abilities and needs via a flexible, adaptable learning environment.

...continuous learning opportunities for family support and collaboration.







## LIBERATED LEARNERS

#### Staff and Community

The New Rock Creek School design meets the needs of the staff and enhances community use opportunities.

The Main Office is accessed through a secure vestibule at the bus loop. Once checked in, visitors enter a warm and welcoming lobby which serves as a socialization and collaboration space for students, staff, visitors, and parents. The Health Suite, crucial to school operations is located directly off the lobby and accommodates easy daily access and quick medical emergency response. Offices for specialized and itinerant staff and specialized instruction spaces are located along the corridor loop, along with resource and professional learning and planning rooms, a teacher lounge, and staff bathrooms. Accessible public restrooms are conveniently located adjacent large gathering and public spaces, with a lift provided at each restroom. An adaptive aguatic area and Parks and Rec gymnasium accommodate the larger community.

Rock Creek students and staff are proud to show off their new school. Students are thriving in a facility where educational opportunities abound!



Students are thriving in a facility where educational opportunities abound!





## **PROJECT DETAILS**

	SUBMITTING FIRM	Becker Morgan Group, Inc.	
	PROJECT ROLE	Design Architect	
	PROJECT CONTACT	Brad A. Hastings, AIA, LEED AP	
	TITLE	Vice-President	
	ADDRESS	312 West Main Street, Suite 300	
X	CITY, STATE, COUNTRY	Salisbury, Maryland, USA	
	PHONE	410.546.9100	
	JOINT PARTNER	Proffitt & Associates Architects	
	PROJECT ROLE	Architect of Record	
	PROJECT CONTACT	Kori Purdum Matheis, AIA, NCARB, LEED AP BD+C	
	TITLE	Principal	
	ADDRESS	49 South Carroll Street	X
	CITY, STATE, COUNTRY	Frederick, Maryland, USA	
	PHONE	301.662.8532	
	PLANNER ON RECORD	Frederick County Public Schools	X
	NAME	Elizabeth Pasierb, Supervisor of Facilities Planning, ALEP	
	ADDRESS	191 East Street	
	CITY, STATE, COUNTRY	Frederick, Maryland, USA	
	PHONE	301.644.5023	
	EMAIL	beth.pasierb@fcps.org	
		12 OS 314 16.2	
	CONSTRUCTION FIRM	Dustin Construction	
	PROJECT ROLE	Construction Manager	
	PROJECT CONTACT	Amy Gorman	
	TITLE	Project Manager	
	ADDRESS	2510 Urbana Pike, Suite 201	
	CITY, STATE, COUNTRY	ljamsville, Maryland, USA	
	PHONE	301.810.4320	
		1	

## **PROJECT DETAILS**

PROJECT NAME	Rock Creek School	
CITY	Walkersville	
STATE	Maryland	
DISTRICT NAME	Frederick County Public Schools	
SUPT / PRESIDENT	Dr. Cheryl L. Dyson	
OCCUPANCY DATE	September 2019	
GRADES HOUSED	Pre-Kindergarten through High School	
CAPACITY (STUDENTS)	120	
SITE SIZE (ACRES)	13 acres buildable area on shared site	
GROSS AREA (SQ FT)	81,100	
PER OCCUPANT (PUPIL)	676 sf per student	
GROSS / NET	GROSS / NET	
DESIGN AND BUILD?		
IF YES, TOTAL COST		
INCLUDES		
IF NO,		
SITE DEVELOPMENT	\$12,291,565.00	
BUILDING CONSTRUCTION	\$29,691,547.00	
FIXED EQUIPMENT	N.A.	
OTHER		
TOTAL	\$41,983,112.00	

## **GYMNASIUM**

The gymnasium provides a space for students to engage in physical activity: instruction, sports, and play. The Gym was expanded to accommodate a shared after-hours Parks and Recreation facility with a larger gym and support spaces. In partnership with the County, the New Rock Creek school provides an adapted Parks and Rec program for the community. Parks and Rec support spaces include an activities room, storage room, office, and toilet facilities to include a family room with changing table and lift. The overall space was designed to accommodate and separate shared from non-shared use functions. Parks and Rec spaces can be accessed from the school or from a separate after-hours entrance near the Parks and Rec office.

High translucent glazing provides natural light and minimizes glare. In keeping with previously established standards, the gym is the only place in the school where the official school color is used: **Red**.

The gym floor is resilient athletic flooring with special striping and shapes to support games and activities. The ceiling is exposed acoustic steel deck. Wall-mounted acoustic panels also help to control sound.





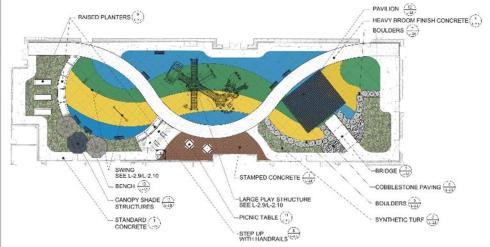
## ACCESSIBLE PLAYGROUND

Although not included in the original educational specification, the Design Committee chose to feature an accessible playground inside a central outdoor learning courtyard. Equipment includes play structures, swings, canopy shade structures, and pavilion. Picnic tables and benches are provided at strategic locations. All amenities are connected via ramps and stairs, walk paths, and bridges. An accessible concrete walk follows the perimeter of the courtyard. Raised planting beds are also provided. For textural variation, flooring materials include standard, stamped, and heavy broom finish concrete, synthetic turf, and cobblestone paving.

The courtyard is accessible from the Lobby, Library, Cafeteria, OT/PT Office, Movement Room, Maker Lab and at multiple location along the Main Corridor loop.







## **SENSORY ROOM**

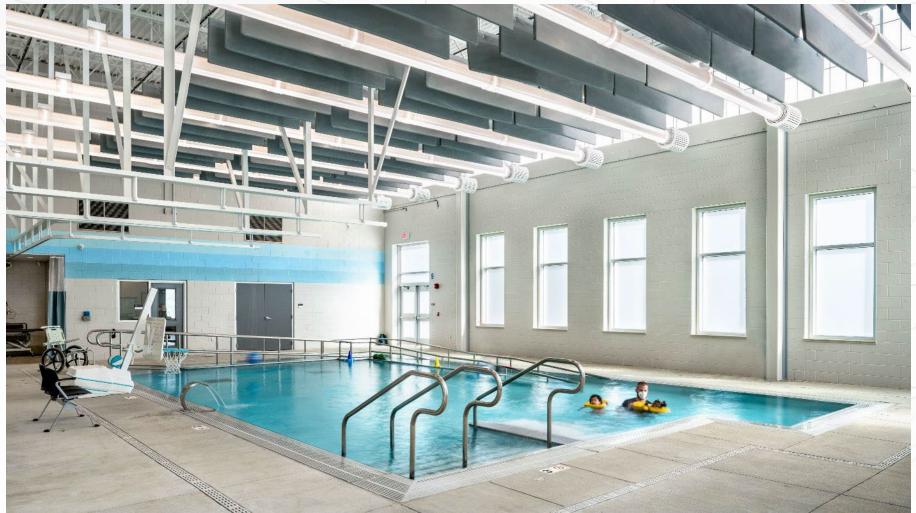
Individuals with multiple disabilities often have sensory impairments. Controlling sensory input can eliminate distractions and assist students in attending to specific objects that may help them make sense of their external environment. In this room sensory equipment is utilized to create a controlled sensory-focused environment, allowing sensory experiences to be individually tailored to the specific needs of the student. The amount and intensity of the sensory experience is monitored and controlled by the staff to prevent overstimulation and stress and provide sensory integration therapy to students with sensory processing challenges. This designed space serves students, facilitators, teachers, and parents. Staff reports this is everyone's favorite space!







## **THERAPY POOL / AQUATICS AREA**



The therapy pool provides opportunities for students to work on mobility skills, aided by an instructor for one on one or small group instruction. The pool's location on the North section of the facility allows for ample natural lighting providing for a bright cheerful space.

Features of the Aquatic Area include a ramp, wheelchair parking area, wide decks on 2 sides of the pool, 3 changing areas along the pool deck, perimeter trench drain, adjacent locker rooms, storage rooms, and steel support for 4 overhead lifts. Special attention as given to acoustics, with acoustical decking and ceiling hung acoustic baffles.

## LIBRARY

The old Rock Creek School had a small Library, often used as a conference space. To alleviate confusion with changed terminology, the staff opted to maintain that name in the new building rather than change it to Media Center or Learning Commons. The color scheme in the Library is a combination of all building colors. Natural wood accent ceilings compliment the warm wood furnishings. The space includes an instruction area with lift, computer area, office/workroom room, and direct access to the outdoor learning courtyard.



### CREATE INSPIRE EXPLORE ACHIEVE CONNECT



