

Renaissance Academy

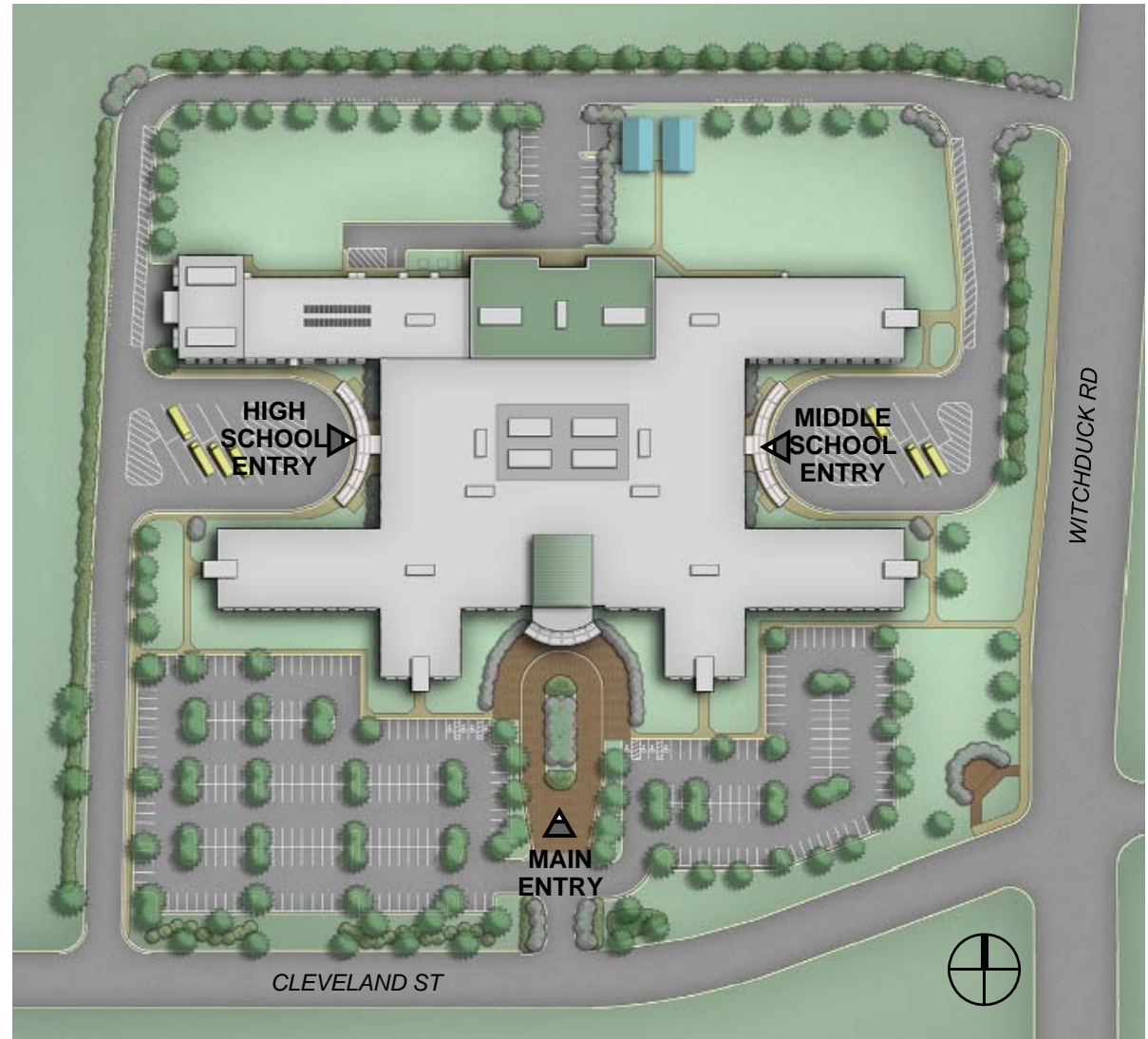
CIVIC PRESENCE It might appear more profitable to sell the highly valuable in-town property for remote location “green-field” development. However, the Virginia Beach City Public School Board made a decision to remediate its 26 acre site and provide the best facility it could. Knowing millions of dollars would be spent for hazardous material abatement, underground tank removal and unsuitable soils removal, the school board played a critical role as environmental steward and redevelopment catalyst by returning the property to a safe, desirable community asset.



Unusual Site Considerations

- The existing project site included the first public African-American school in the region. The Princess Anne County Training School (P.A.C.T.), renamed Union Kempsville High School, was originally built in 1938 by the African-American community for the local African-American youth. When de-segregation brought all students together, the local school system closed the school and located various other facilities on the site.
- With little of the historic school intact, the school board decided to devote 1,860 SF within the new facility for the Union Kempsville Exhibit. The publicly accessible, museum-quality exhibit displays artifacts and stories telling the African-American education experience to future generations.

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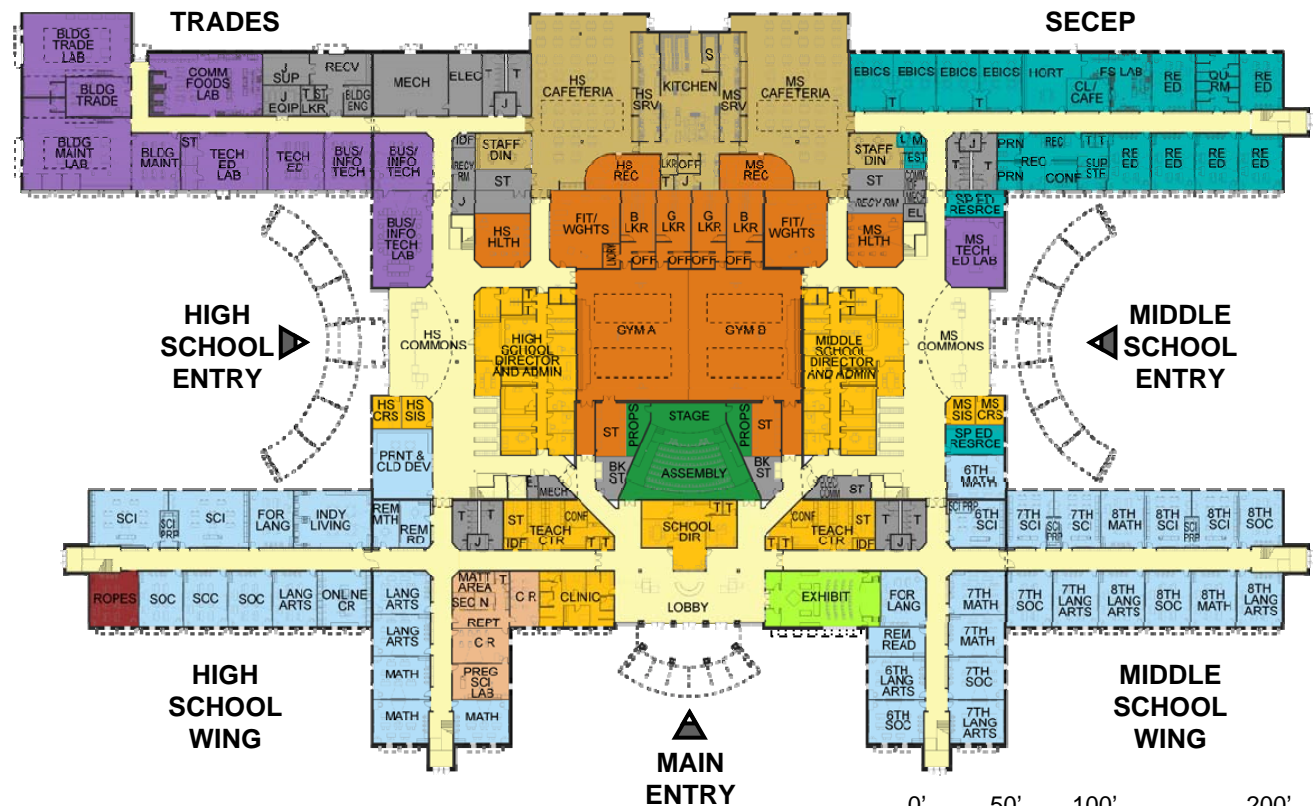


Site Plan

Educational Program Features

- A special place for kids that need help getting back into the educational mainstream.
- Main challenge: a small semi-urban site, 1 building, 6 main autonomous programs, multiple sub-programs – none of which have previously shared a facility.
- Renaissance Academy brings together programs that have, until now, been housed in scattered, less-than-desirable facilities:
 - Middle School for academically & behaviorally challenged students
 - High School for academically & behaviorally challenged students
 - Southeastern Cooperative Education Programs (SECEP) Students – a regional education program serving special needs students.
 - The Princess Anne School for Pregnant Teens

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First Floor Plan

 CLASSROOM / SCIENCE	 ALTERNATIVE EDUCATION	 SPECIAL EDUCATION
 ADMINISTRATION / CLINIC / GUIDANCE	 KITCHEN / DINING	 ART
 TOILETS / MECHANICAL / ELECTRICAL / STORAGE	 PHYSICAL EDUCATION	 MEDIA CENTER
 ROPES THERAPY	 UNION KEMPSVILLE EXHIBIT	 ISAEP
 TRADES LAB	 AUDITORIUM / MUSIC	

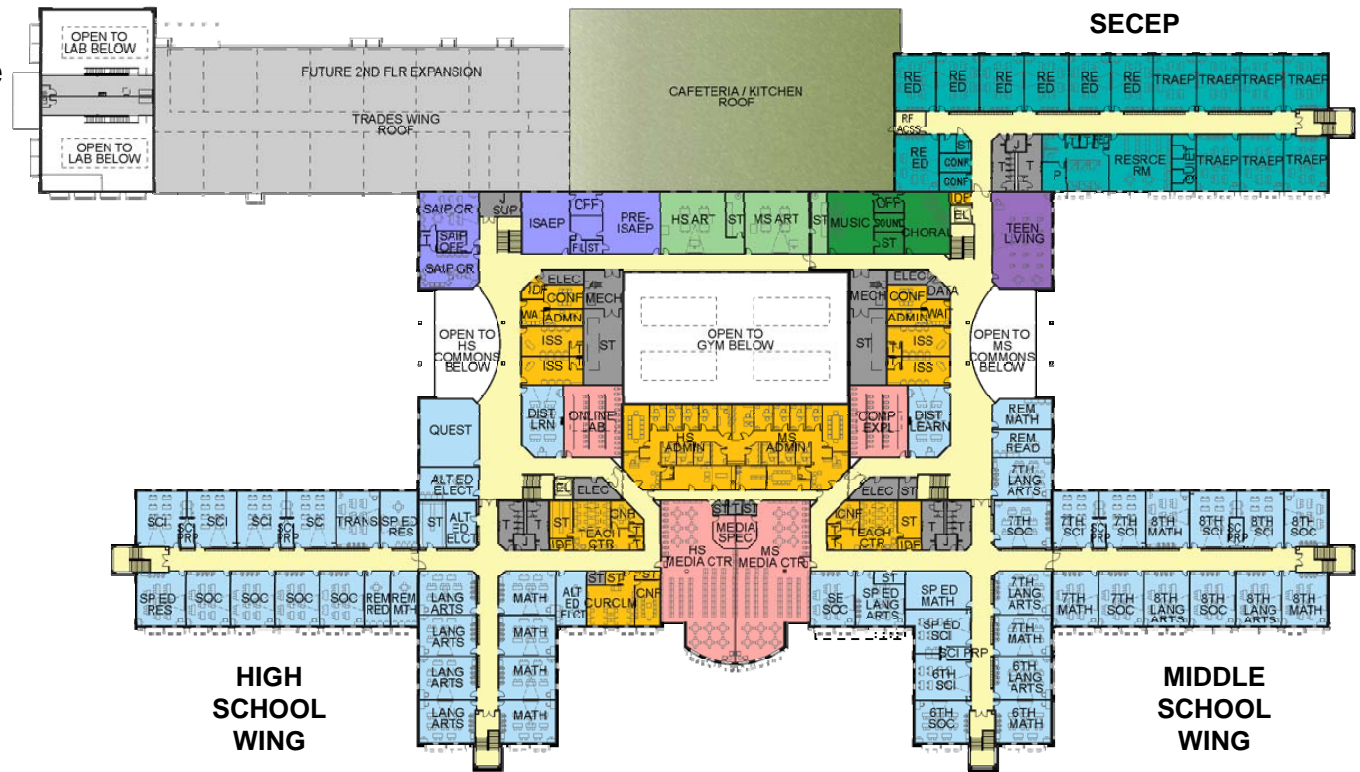
Educational Program Features

- The two story "H" design effectively provides each program with its own building while the core provides for the needs common to all three. Each of the main programs provide separate administration spaces and collaboration/work space for instructors with "Teacher Centers".



Exposing building systems, such as clear pipe rain leaders shown above, provide an example of using the building as a teaching tool.

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Second Floor Plan

 CLASSROOM / SCIENCE	 ALTERNATIVE EDUCATION	 SPECIAL EDUCATION
 ADMINISTRATION / CLINIC / GUIDANCE	 KITCHEN / DINING	 ART
 TOILETS / MECHANICAL / ELECTRICAL / STORAGE	 PHYSICAL EDUCATION	 MEDIA CENTER
 ROPES THERAPY	 UNION KEMPSVILLE EXHIBIT	 ISAEP
 TRADES LAB	 AUDITORIUM / MUSIC	

Sustainable Design

- Vegetated (Green) Roof – Red in Winter & green in Summer. Insulates building, filters & holds stormwater & is a pleasant sight from the second story rooms
- 19 Light tubes pipe sunlight into interior spaces
- Light Shelves reflect daylight deeper into classrooms
- Light Monitors in interior large spaces allow electric lights to automatically dim or turn off
- Ground Coupled Heat Pump (geothermal) HVAC – 522 wells, 400 feet deep each
- Daylit spaces, supplemented with dimming ballast electric lighting with photosensor and occupancy sensor controls
- Rainwater collection used for toilet flushing.
- Siphonic roof drain system – less drains, smaller pipe diameter, level pipe runs.
- No-water urinals

Virginia Educational Facility Planners' 2010 Architectural Exhibit

Renaissance Academy



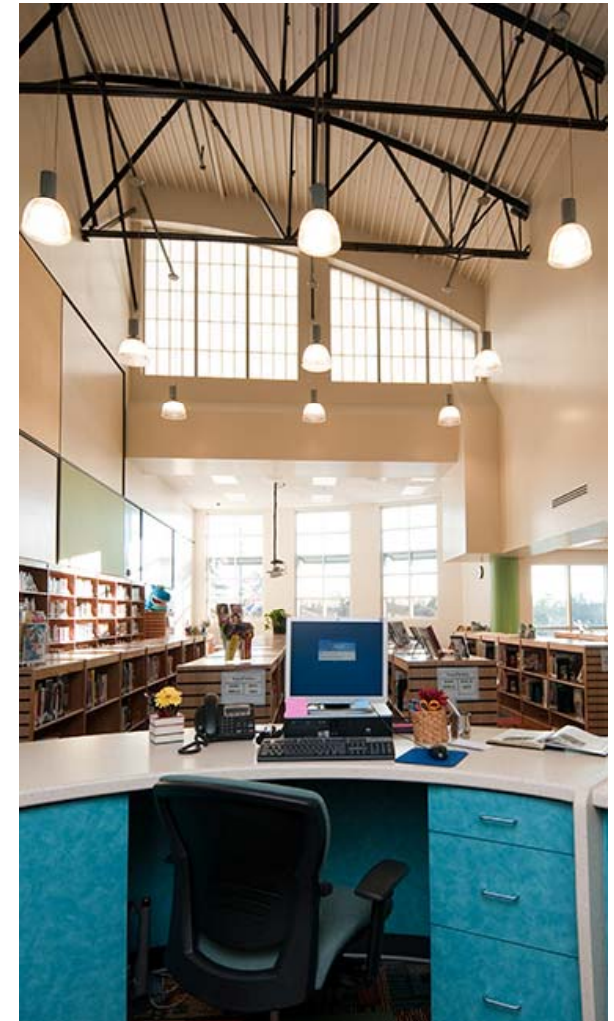
Clockwise From Top Left: Vegetated Roof, Light Tube, Light Shelves, Light Monitors

- Photovoltaic power production
- Solar thermal heating of kitchen process water
- Geothermal-tied kitchen refrigeration
- Post-developed site increases site permeability by 30% over pre-developed site
- Bio-swale treatment of stormwater run-off

Learning Ambience

- Entire school is served by both hard-wired and wireless communication.
- Classrooms are designed with wireless lap-top computer use and ceiling projection
- Building Systems Data Public Display – publicly accessible, interactive, real-time displays of building energy use and production, water use and collection, carbon emissions, dollars saved, air quality, etc.

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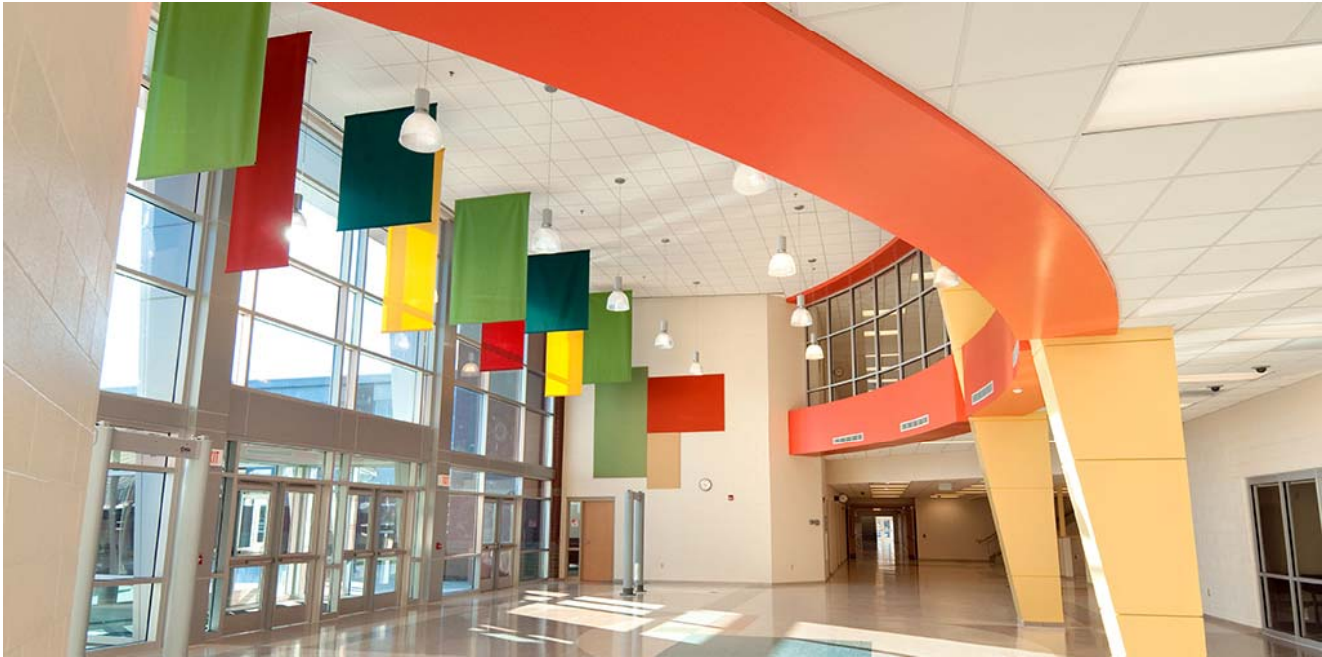


Clockwise From Top Left: Signage & Real Time Display of Building Systems Data, Media Center, Lab, Educational Signage at Mechanical Room

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Subtle Security

- Building security has been considered through the strategic placement of Administration Areas with views to corridors.
- Centrally controlled proximity-reader door control & extensive digital CCTV camera surveillance, covering the interior of the building as well as the Academy grounds.



Clockwise From Top: Middle School Lobby, High School Lobby, Security Office, High School Reception

Multi-Functionality

- Renaissance's City-Center location makes it ideal for shared community use.
- The school is designed to share assembly Gym & Cafeteria spaces with public.
- The "Building & Technical Trades" Wing is designed & will be shared with adult education programs in partnership with community business.
- One story wing is designed & build to accommodate future second story addition
- The P.A.C.T. Museum located in the school is run by the city with public hours each day.

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Clockwise From Top: Media Center, Gymnasium, Auditorium, Food Court
Style Cafeteria

Virginia Educational Facility Planners' 2010 Architectural Exhibit

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Size of Site	16 Acres
Student Capacity	1,600
Area of Building	289,000 SF
Total Project Cost	\$55,687,860
Cost per Square Feet	\$193 / SF
Cost per Student	\$34,805
Space per Student	180 SF / Student



Renaissance Academy

Name & Location of Project **Renaissance Academy, Virginia Beach, VA**

Owner **Virginia Beach City Public Schools**
Dr. James G. Merrill, Superintendent

Design Firm **RRMM Architects**
Principal In Charge Duane Harver, Architect
Project Designer Rob Berz, Architect
Construction Administrator Randy Brauner

Consultants
Civil McKim & Creed
Structural Stroud Pence & Associates
Plumbing, Mechanical, Electrical Thompson Consulting Engineers
Education Planner RRMM Architects
Landscape Architect WPL

Contractor WM Jordan

Photographer Steve Budman Photography



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