March 4, 2014

cefpi where great schools begin Virginia Chapter

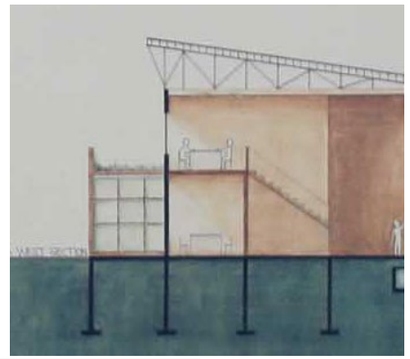
VEFP Virginia Educational Facility Planners

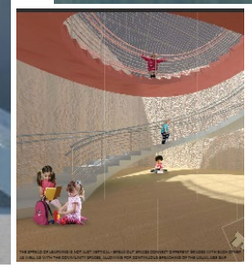
Virginia Chapter

The Council of Educational Facility Planners International

VirginiaTech

HAMPTON UNIVERSITY THE STANDARD OF EXCELLENCE





2013 Student Design Competition

Purpose of the Competition

- Expand the diversity of attendees at the annual conference by encouraging participation at the university level
- Student opportunities: educational facility planning, collaboration with design professionals, presentation skills, career development
- Add a “student perspective” component to the annual conference

Competition Overview

- Students at Virginia Tech and Hampton University competed independently
- 3 classes total – 2 classes at Virginia Tech and 1 class at Hampton University

Awards per Each Class

- First Place - $500 award + conference expenses (present design)
- Second Place - $200 award + conference expenses (present design)
- Two Honorable Mentions – certificate

Mentoring Teams

- **Virginia Tech** – Stafford County Public Schools, RRMM Architects, Grimm + Parker Architects
- **Hampton University** – Newport News Public Schools, RRMM Architects, Moseley Architects

Competition Overview

- Design a STEM Elementary School for 800 students
- Sites selected by Universities
- 3rd or 4th year architecture students, 6 weeks to complete
- Program organized around spaces that promote a holistically healthy student - Leadership, Nutrition, Fitness, and Discovery with formal and informal learning spaces

LEADERSHIP

NUTRITION

FITNESS

DISCOVERY

Judging Criteria

- Creativity
- Learning Enhancement Potential
- Educational Functionality
- Presentation Quality
- Sustainability

First Place – Carolyn Thoenen

Virginia Tech Class 1

Virginia Educational Facility Planners

where great schools begin

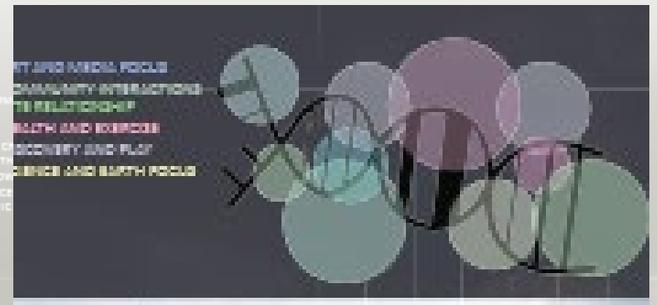
Virginia Chapter

First Place – Carolyn Thoenen

Virginia Tech Class 1

Jury Comments:

- good connectivity between the different learning environments
- promotes interaction between grade levels with dynamic building/site section



Virginia Educational Facility Planners

cefpi where great schools begin Virginia Chapter

VirginiaTech

HAMPTON UNIVERSITY THE STANDARD OF EXCELLENCE

Second Place– Brandon Holcombe

Virginia Tech Class 1

Learning From Water

To understand water is to understand cycles, natural forces, and to an extent, living organisms. Learning from water gives children the opportunity to see a broader scope of our world. Children begin to understand cycles that exist, but are not seen. They develop an awareness and understanding of natural forces that affect the world around them. Instead of seeing the rain, they understand why it is raining. Instead of seeing flowing water, they understand why the water is flowing that way. The children begin to understand that without water, life would cease to exist. As the children progress through the years of elementary school, they will experience their surroundings changing as the water provides life for plants and organisms. They will begin to understand the patterns that exist in nature. They will learn the various ways that we use water as a resource and how we can recycle it. They will understand that it is not something to take for granted and they will learn to celebrate water.

Virginia Educational Facility Planners

where great schools begin

Virginia Chapter

VirginiaTech

HAMPTON UNIVERSITY

THE STANDARD OF EXCELLENCE

Second Place– Brandon Holcombe

Virginia Tech Class 1

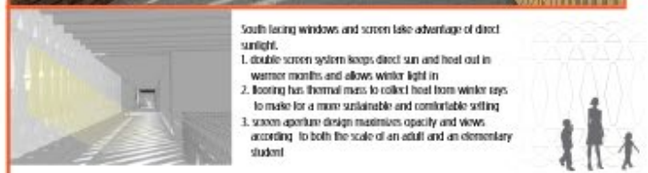
Jury Comments:

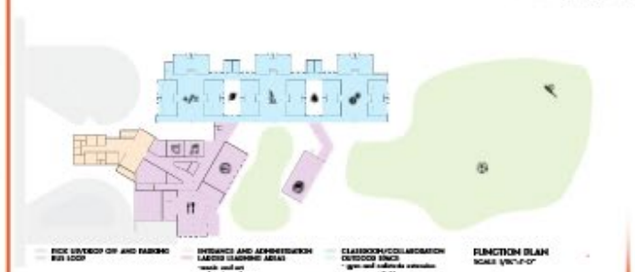
- the flow of storm water is clearly expressed as it illustrates life cycles and natural forces

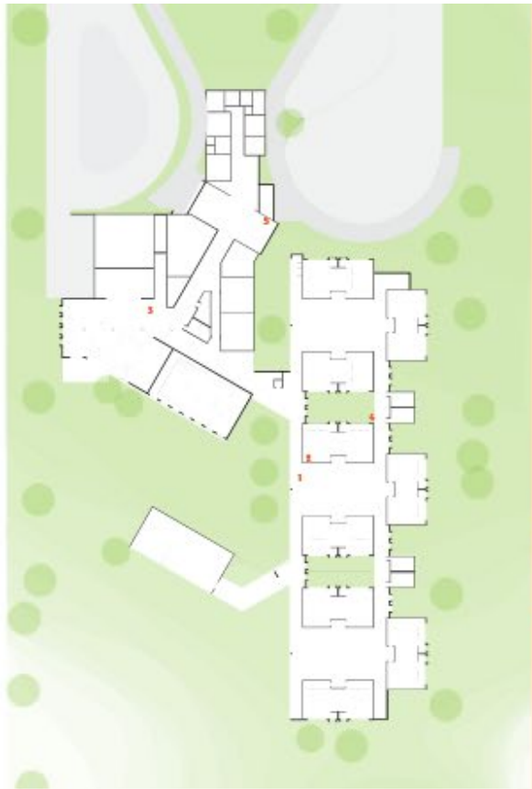
- water becomes a vehicle for learning throughout the school

Honorable Mention – Andres Jimenez Botero

Virginia Tech Class 1



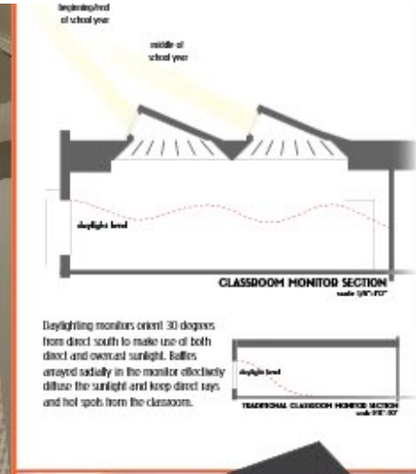




Jury Comments:

- with positive effects on vision, memory, and morale, daylighting is a design and learning tool

SITE + FIRST FLOOR PLAN
SCALE 1/48"=1'-0"



Honorable Mention – Allison Baker

Virginia Tech Class 1

WOODLAND ELEMENTARY SCHOOL

Jury Comments:

- the concepts of a school within a school, collaboration, and sustainability are developed in a series of learning “nests”

VEFP Virginia Educational Facility Planners

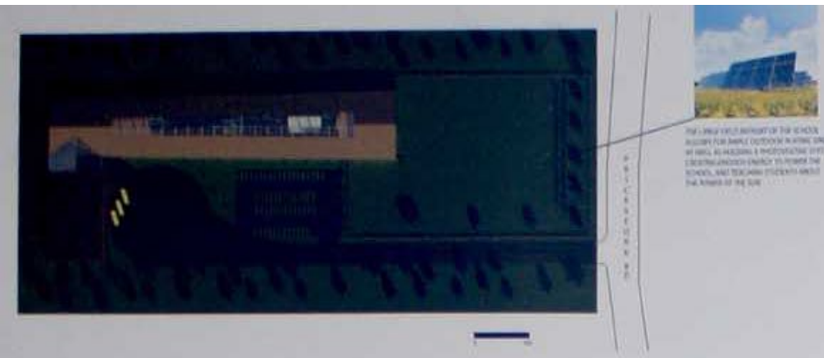
cefpi where great schools begin Virginia Chapter

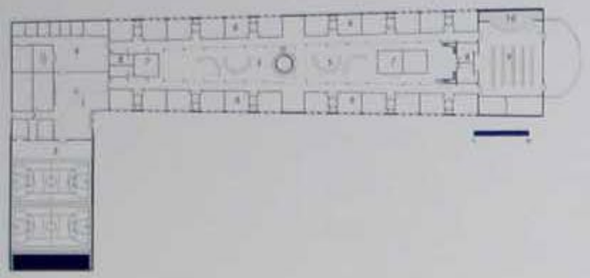
VirginiaTech

HAMPTON UNIVERSITY THE STANDARD OF EXCELLENCE

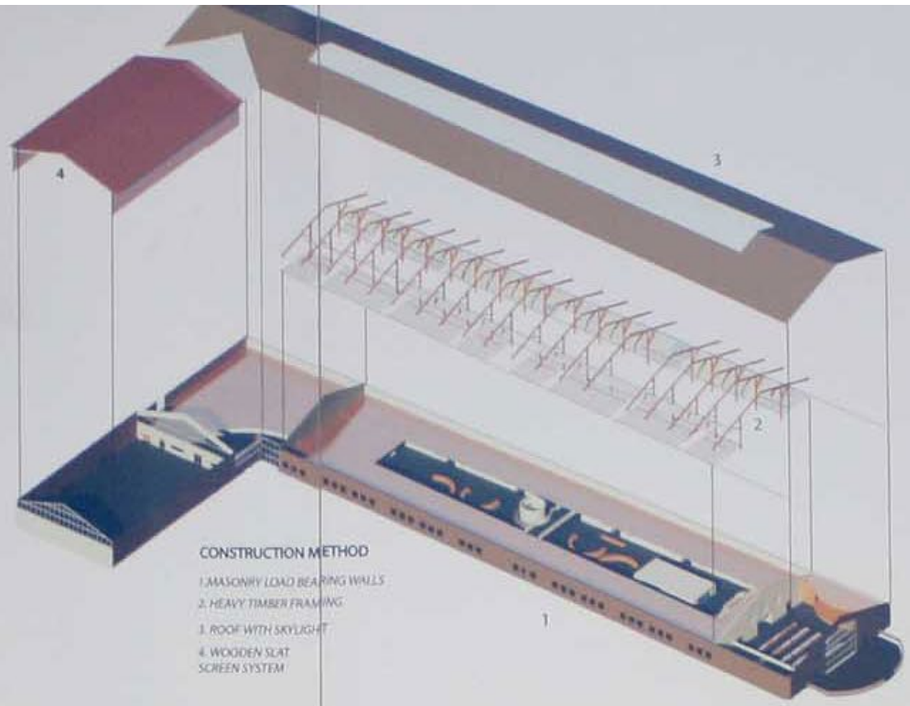
First Place – Connor Phiel

Virginia Tech Class 2





FIRST FLOOR PLAN
1. LOBBY
2. GYM FACILITIES
3. GYMNASIUM
4. ADMINISTRATION
5. LEARNING CORRIDOR
6. CLASSROOMS GRADE 3-5
7. L.C. SUPPORT ROOMS
8. RESTROOMS
9. CAFETERIA
10. STAGE



CONSTRUCTION METHOD
1. MASONRY LOAD BEARING WALLS
2. HEAVY TIMBER FRAMING
3. ROOF WITH SKYLIGHT
4. WOODEN SLAT SCREEN SYSTEM

SET TO THE REAR OF THE SITE, THE BUILDING'S LONG DRIVEWAY ALLOWS USERS TO EXPERIENCE THE ENTIRE SITE

LEARNING COORIDOR – THE HEART OF DISCOVERY & COLLABORATION WITHIN THE SCHO

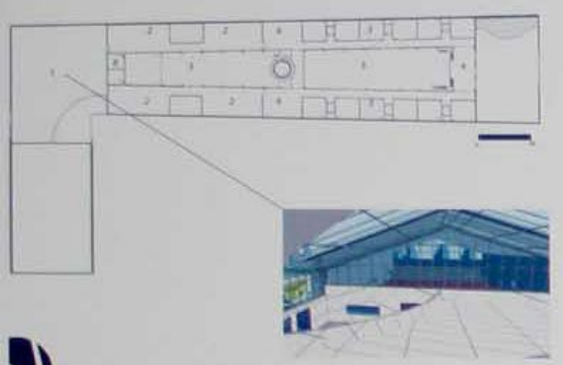
STEM SCHOOL

BLACKSBURG, VA

SCIENCE TECHNOLOGY ENGINEERING MATHEMATICS

STEM SCHOOL IS A PLACE WHERE TRADITIONAL METHODS OF TEACHING TAKE A BACK SEAT TO A MORE HOLLISTIC APPROACH TO LEARNING. IT IS A PLACE WHERE AWARENESS OF ONESELF, AND THEIR SURROUNDINGS MEET, TO BEGIN THE DEVELOPEMENT OF A LIFELONG DESIRE TO LEARN. THE LEARNING COORIDOR EMBODIES THE IDEA THAT SELF DISCOVERY AND COLLABORATION ARE BEST DEVELOPED THROUGH ACTIVITY AND COMMUNICATION. THE SPACE ALLOWS THE FLEXIBILITY TO EVOLVE AS NEW METHODS OF EDUCATION COME ABOUT. LARGE EXPANSES OF GLASS THROUGHOUT THE SPACE BRING THE OUTSIDE IN. ACTING AS A CONSTANT REMINDER TO THE STUDENTS THAT THE WEATHER, THE SEASONS, THE TIME OF DAY AND THE NATURAL BEAUTY THAT SURROUNDS THEM IS A PART OF THEIR EVERYDAY WORLD.

SECOND FLOOR PLAN
1. LIBRARY / MAIN MEDIA SPACE
2. KINDERGARDEN LEARNING CENTER
3. CLASSROOMS GRADE 1-2
4. SUPPORT SPACE
5. LEARNING CORRIDOR BELOW
6. RESTROOMS



VEFP Virginia Educational Facility Planners

cefpi where great schools begin Virginia Chapter

VirginiaTech

HAMPTON UNIVERSITY THE STANDARD OF EXCELLENCE

First Place – Connor Phiel

Virginia Tech Class 2

Jury Comments:

- the different grade levels have great sight lines to see and experience what the other grade levels are doing

- these learning environments are successfully integrated into a barn structure which relates back to the local vernacular

Virginia Educational Facility Planners

where great schools begin

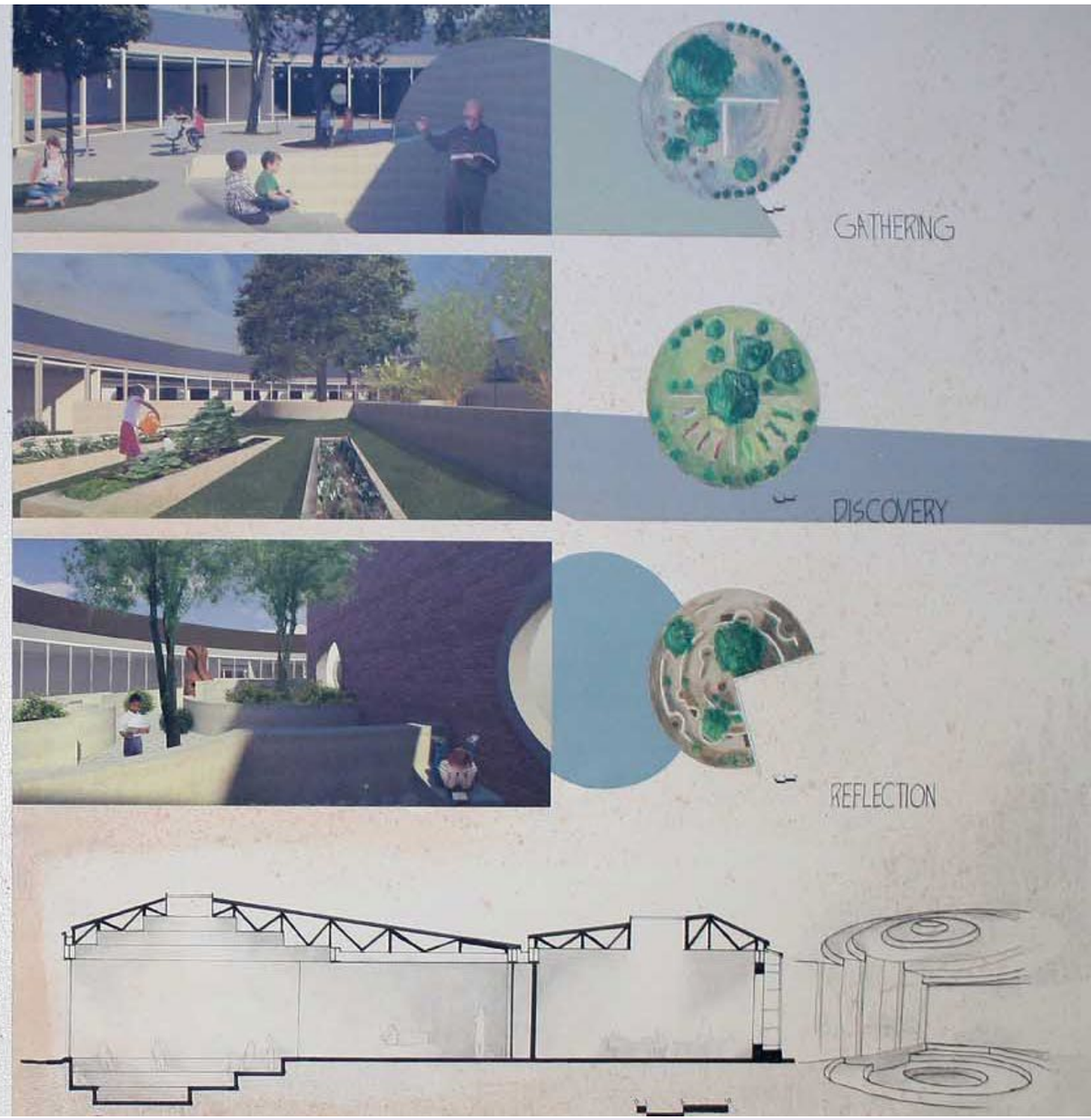
Virginia Tech

HAMPTON UNIVERSITY

THE STANDARD OF EXCELLENCE

Second Place – Kelly McCarthy

Virginia Tech Class 2



Virginia Educational Facility Planners

cefpi where great schools begin Virginia Chapter

VirginiaTech

HAMPTON UNIVERSITY THE STANDARD OF EXCELLENCE

Second Place – Kelly McCarthy

Virginia Tech Class 2

Jury Comments:

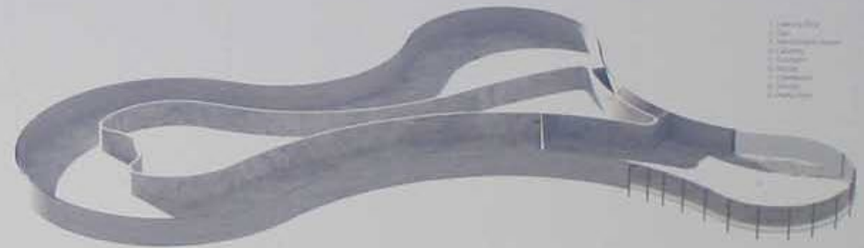
- a variety of learning spaces ranging from classrooms to collaborative spaces to unique outdoor courtyards that encourage students to gather, discover, and reflect on the natural environment

- skylights provide a dynamic daylighting effect, while changes in the floor level direct movement and create learning spaces

Honorable Mention – Min Choe

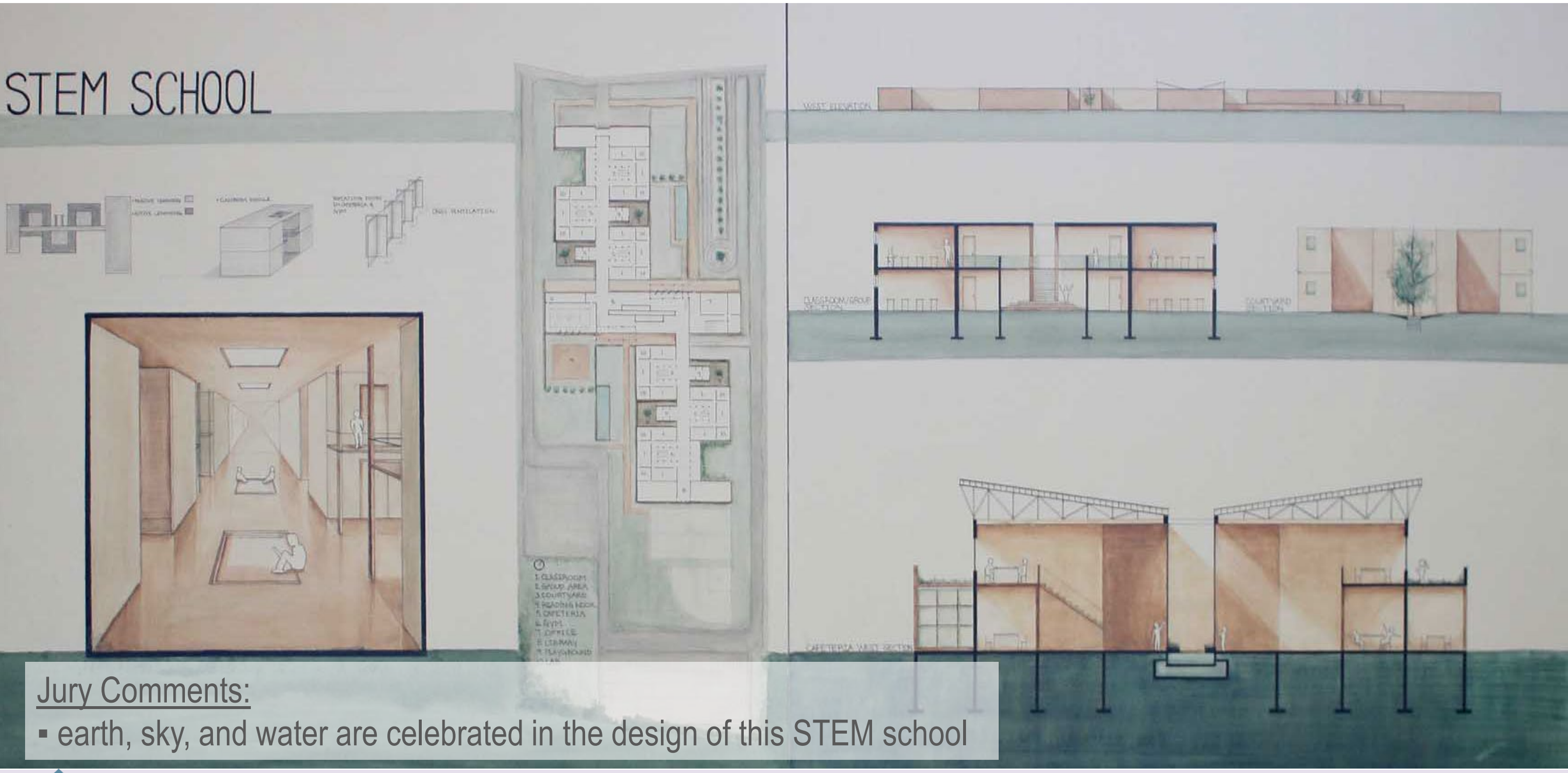
Jury Comments:

- niches and other child-inspired spaces illustrate the thought that was given to how students would experience the building



Honorable Mention – Seema Sumadre

Virginia Tech Class 2



Jury Comments:

- earth, sky, and water are celebrated in the design of this STEM school

Virginia Educational Facility Planners

where great schools begin

Virginia Chapter

VirginiaTech

HAMPTON UNIVERSITY

THE STANDARD OF EXCELLENCE

First Place – Chase Kea

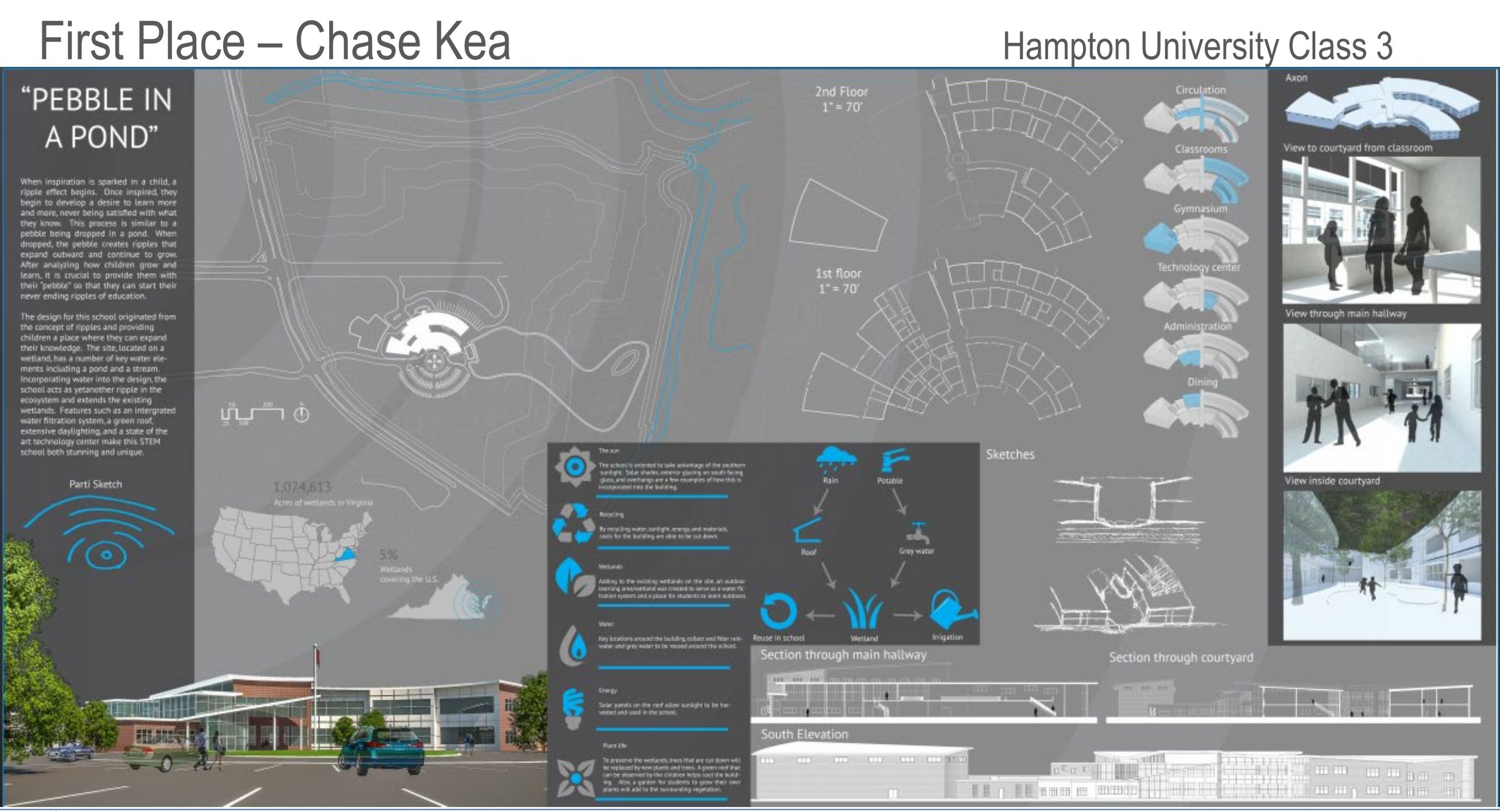
Hampton University Class 3

"PEBBLE IN A POND"

When inspiration is sparked in a child, a ripple effect begins. Once inspired, they begin to develop a desire to learn more and more, never being satisfied with what they know. This process is similar to a pebble being dropped in a pond. When dropped, the pebble creates ripples that expand outward and continue to grow. After analyzing how children grow and learn, it is crucial to provide them with their "pebble" so that they can start their never ending ripples of education.

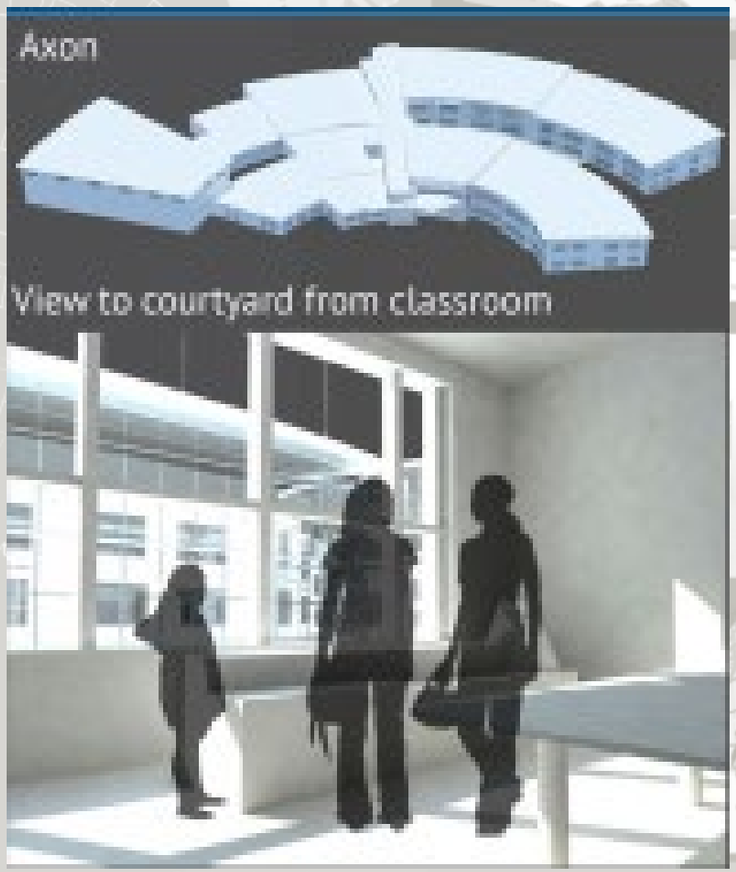
The design for this school originated from the concept of ripples and providing children a place where they can expand their knowledge. The site, located on a wetland, has a number of key water elements including a pond and a stream. Incorporating water into the design, the school acts as yetanother ripple in the ecosystem and extends the existing wetlands. Features such as an intergrated water filtration system, a green roof, extensive daylighting, and a state of the art technology center make this STEM school both stunning and unique.

Parti Sketch



First Place – Chase Kea

Hampton University Class 3



Section through courtyard

Jury Comments:

- well researched, well documented, programmatic areas are well zoned
- demonstrated a good understanding of the outdoors - very good connection between the outdoors and the indoors by relating the marsh to the building

Second Place – William Parks

Hampton University Class 3

THE ILLUMINATED WETLAND

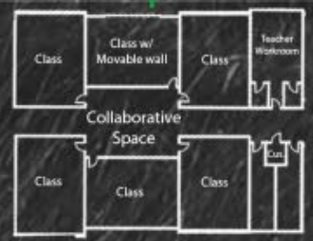
Light is defined as the form of energy that allows us to see things. Not only does light help us see, it also effects our mood and inspires creativity. Much like the wetlands are saturated with water this school is saturated by sunlight creating an "Illuminated Wetland." The spaces that require extra creativity, such as the collaborative spaces and art, recieve the most sunlight. Organizationally the building was broken into three modules, rperesenting the three different types of wetlands. Each module is composed of smaller modules that can be taken out and implemented into other projects. Circulation through the module is through the collaborative spaces offering the opportunity for the older kids to mentor and help the younger ones. The "Illuminated Wetland," like a real wetland, is a diverse ecosystem of teachers, students, and faculty, working together to reach a higher goal. Wetlands provide nutrient rich food for wildlife like schools provide knowledge for children to grow.

Light Diagram

Axes Diagram

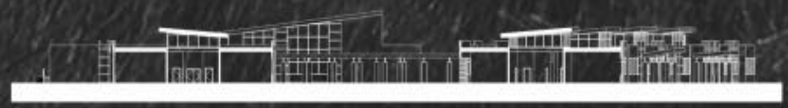
Entry Elevation

Pod Callout



This learning module is home to 6 classrooms. The entry to the classrooms are accessed via the collaborative space in the center of the module. The restrooms and teacher support spaces are also attached the to module. One classroom in each pod that borders the courtyard features a moveable wall allowing for outdoor learning.

South and West Side Perspective



Section A-A

VEFP Virginia Educational Facility Planners

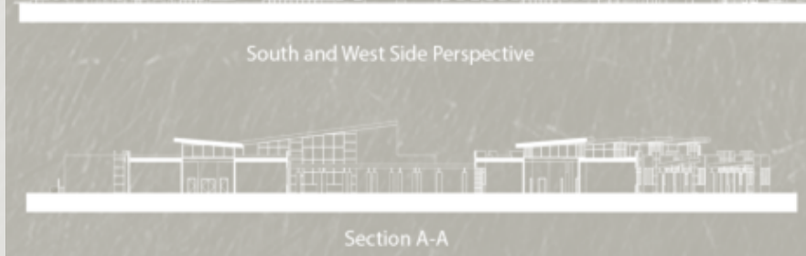
cefpi where great schools begin Virginia Chapter

VirginiaTech

HAMPTON UNIVERSITY THE STANDARD OF EXCELLENCE

Second Place – William Parks

Hampton University Class 3

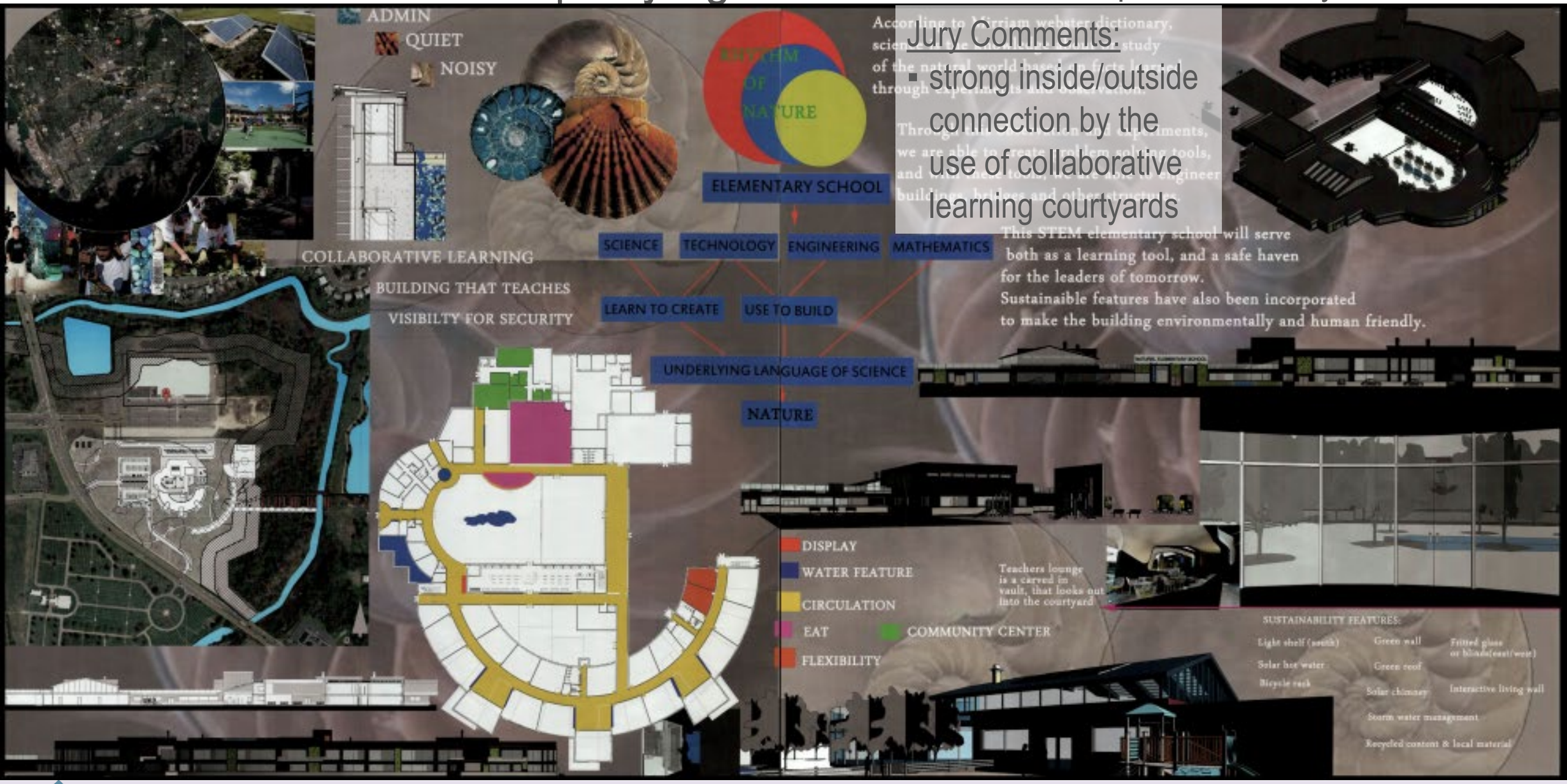


Jury Comments:

- the elevations are colorful and bold, very refreshing, and friendly to elementary school age kids - this is what an elementary school is supposed to look like

Honorable Mention – Philpatsy Agwu

Hampton University Class 3



Jury Comments:

- strong inside/outside connection by the use of collaborative learning courtyards

VEFP Virginia Educational Facility Planners

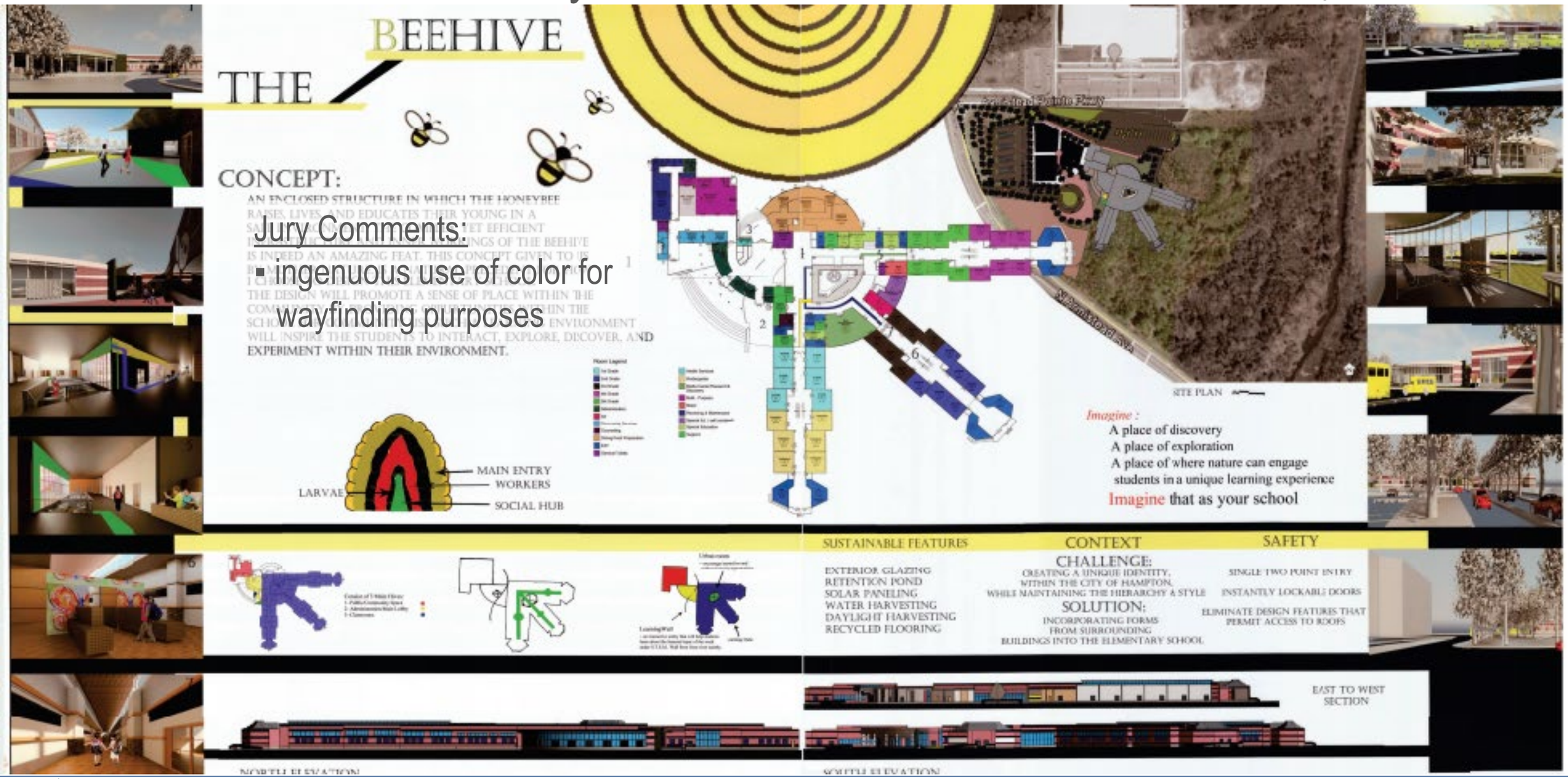
cefpi where great schools begin Virginia Chapter

VirginiaTech

HAMPTON UNIVERSITY THE STANDARD OF EXCELLENCE

Honorable Mention – Darryl Alexander

Hampton University Class 3



Jury Comments:

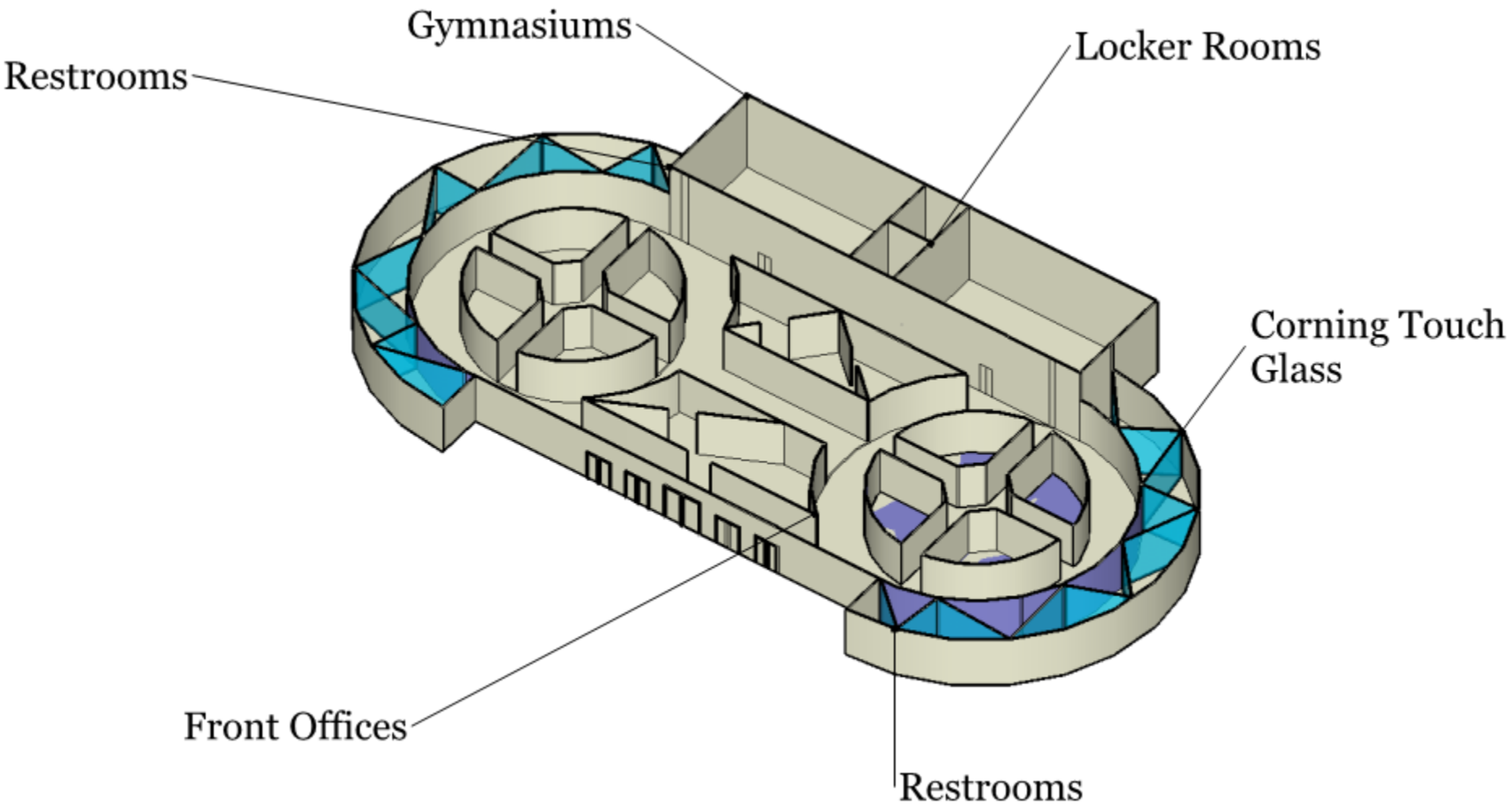
- ingenuous use of color for wayfinding purposes

Award – Katie DiFrancisco, Chris Padgett, Wade Gallagher, Spencer Parker

School of the Future Competition

"It's not the strongest of the species that survives, nor the most intelligent, but the one most responsive to change." Charles Darwin

This quote represents the basis of education; that students should learn to be adaptive and go into the world to bring the change that is necessary – **this design reflects a pedagogical change in education.**



Final Jury Comments

- Diagrams are Important to Explain an Idea
- Develop the Concept at Different Scales
- Entourage Helps the Viewer to Understand the Spaces
- Provide Clarity of Concept
  - Include a Legend of Spaces
  - Emphasize What's Important
- Overall…. Very Impressive!!! Thank you!!!

Special Thanks to…

- Virginia Tech
  - Professor Elizabeth Grant
  - Professor Mario Cortes
- Hampton University
  - Professor Robert Easter
  - Professor Paul Battaglia
- School of the Future
  - Mike Ulderich