Prince George County Public Schools

Suitland High School & William Wirt Middle School

LARC240 Graphic Communication and Design Studio, Spring 2018

Design By: Marquis Barnes, Olivia Duley, Samuel Ehrlich, Allison Fields, Catherine Garcia, Rachel Greenhawk, Maria Harrington, Jovon Jackson, Evan Lipka, Mia Manning, Linda MacSorley, Jessica Meilman, Heyner Pajaro, Gregory Remesch, Abigail Smith, Evan-Claire Schaum, Audrey Wilke, Ryan Young

Instructed By: Professor Byoung-Suk Kweon, Ph.D., PLA, ASLA
ACKNOWLEDGEMENTS

Professor
Dr. Byoung-Suk Kweon, University of Maryland

Prince George's County Public Schools
Elizabeth Chaisson, CIP Officer
Ronald Skyles, Design Manager

Suitland High School
Danny Miller, Principal
Angelique Acevedo-Barron, Administrator
George McClure, Coordinator
John McDaniel, Classroom Teacher

William Wirt Middle School
Rhonda Simely, Principal
Gladys Rosario, Secretary

University of Maryland - College Park
Kimberly M. Fisher, PALS Manager
Uri Avin, Director and Research Professor
Jerah Smith, Graduate Student

Teaching Assistant
Keren Zhang
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History and Demographics

Introduction
Suitland High School, founded in 1951 as part the Prince George’s County Public School system, currently enrolls 2,157 students from all of Prince George’s County.

Notable Alumni
- Andrew Bayes - American football player
- NaVorro Bowman - Penn State and NFL football player
- George O. Gore II - actor, New York Undercover, My Wife and Kids
- Steny Hoyer - House Minority Whip, U.S. House of Representatives
- Lamont Jordan - University of Maryland and NFL football player
- Chad Scott - NFL football player
- Devin Tyler - Temple

Programs offered
- Electrical
- Carpentry
- Heating, Ventilation, and Air Conditioning (HVAC)
- Masonry
- Plumbing
- Business Management
- NAF Finance
- Barbering
- Cosmetology
- ProStart Cooking/Culinary Arts
- Health Professions in Nursing
- Homeland Security Sciences
- CISCO Networking Academy
- Military Science
- Automotive Body Repair
- Automotive Technician

Demographics

92.7% African American
5.1% Hispanic
1.1% One or more races
0.7% White
0.4% Asian

PARCC: Students who met or exceeded expectations in Math and English

Attendance
Permitted Uses

R-55: One-Family Detached Residential
- Usually subdivided into smaller lots
- High-density single-family residences
- On site: Majority of campus in this zone: The main school, the middle school, the technical academy, and the athletic facilities

R-18: Multifamily Medium Density Residential Apartment
- Single-family attached or detached
- On site: No part of campus is located in this zone. The two neighboring residential developments are R-18

R-18C: Multifamily Medium Density Residential Apartment
- Single-family attached or detached
- Must have condominium
- On site: The center for creating and performance arts is in this zone

C-O: Commercial Office (to south of site)
Within One Quarter Mile

- Dupont Heights Park: can be used for recreation by students
- Suitland Elementary School: can be used for high schoolers to tutor younger children
- Georgetown Emergency Room: possible internship/job opportunities
- Health Center: possible internship/job opportunities
- RAI Dialysis Care Center: possible internship/job opportunities
- Barber Services: students studying to be barbers can go here to learn/get jobs
- Gas station/Repair shop: students dealing with mechanics can work here
- U.S. Census Bureau: educational opportunity to learn about census
- NOAA Satellite Operations Facility: educational opportunities for students to tour facility to learn about satellite functionality
- Department of Human Services: potential job shadows/internship opportunities

Within One Mile

- Suitland Elementary School: can be used for high schoolers to tutor younger children
- Georgetown Emergency Room: possible internship/job opportunities
- Health Center: possible internship/job opportunities
- Barber Services: students studying to be barbers can go here to learn/get jobs
- Gas station/Repair shop: students dealing with mechanics can work here
- U.S. Census Bureau: educational opportunity to learn about census
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- Department of Human Services: potential job shadows/internship opportunities

Context

Having D.C. within the three-mile radius allows easy access to museums, facilities, and organizations.
The main site design area for this project lies within the Urban land-Sassafras complex soil zone. The composition of this soil is 80 percent Urban land, 15 percent Sassafras and similar soils, and 5 percent minor components.

Urban land soil is most frequently found in moderate to cool climates, with average annual temperatures ranging from 45 to 64 degrees Fahrenheit. It has a very low water capacity and a highly variable composition, ranging from sandy to loamy, silty to clayey.

Sassafras soil is well-drained and also has a low water capacity. It consists of gravelly loam, a mixture of soil textures and particle sizes with a high level of organic matter.

Source: http://geologys.hol.es/types-of-soil-in-baltimore-maryland/
Source: USDA Web Soil Survey
• Suitland High School is in the Oxon Run Watershed, on the border of the Hensen Creek Watershed.

• Oxon Run Watershed flows into the Potomac River Watershed, which flows into the Chesapeake Bay Watershed.

• Water on-site drains generally to the north and northwest.

• The buildings are flat-roofed, with few visible exterior drains and gutters.

• Water pools in the center of the main courtyard when it rains.

• Water also pools in the recessed north side of the lot by the vocational studies building.

• Water from the main entrance and auditorium drain across the parking lot and to the west.

Hydrology

Introduction

Drainage

Hydrology

Water Flow

Pooling Water

Scupper (Rainwater Outlets)
Climate

Maryland hardiness zones

PG County Climate

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<thead>
<tr>
<th>Climate</th>
<th>Prince George's</th>
<th>United States</th>
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<tbody>
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<td>Average Rainfall</td>
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<td>39 in</td>
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<tr>
<td>Average Snowfall</td>
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<td>Precipitation Days</td>
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<td>Sunny Days</td>
<td>203 in</td>
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<td>Average July High</td>
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</tr>
<tr>
<td>Average January Low</td>
<td>25.9°F</td>
<td>22.6°F</td>
</tr>
</tbody>
</table>

Daily Sun/Shade

- Courtyard: Shade mainly around perimeter of space
- Auditorium Yard: Mainly full sun
- Vocational School Yard: Full sun all day

Temperature

Wind Rose

Catherine Garcia
View and Circulation

**Circulation**

- Pedestrian route goes mainly through the courtyard.
- Bus route goes from the campus entrance, around the main building and the technical studies building.
- Car route moves around the space on main roads including Silver Hill Avenue and Brooks Drive.

**Views**

The auditorium is the first building one encounters when entering the site.

- Entrance to Suitland HS: view of auditorium
- View of road from auditorium
- Entrance to courtyard
- View to the right
- View into children's playground

**Evan-Claire Schaum**
### Proposed Plants

#### Trees
- **Sun**
  - *Chionanthus virginicus*
    - White Fringetree
    - Mesic
    - Sun-Part Shade, 20-35’
  - *Betula nigra*
    - River Birch
    - Moist-Mesic
    - Sun-Part Shade, 50-75’
  - *Acer rubrum*
    - Red Maple
    - Moist-Mesic
    - Sun-Part Shade, 40-100’
- **Shade**
  - *Ilex opaca*
    - American Holly
    - Moist-Mesic
    - Sun-Shade, 15-50’
  - *Amelanchier canadensis*
    - Serviceberry
    - Moist-Mesic
    - Part Shade-Shade, 35-50’
  - *Magnolia virginiana*
    - Sweetbay Magnolia
    - Moist-Mesic
    - Sun-Shade, 12-30’

#### Shrubs
- **Sun**
  - *Ilex glabra*
    - Inkberry
    - Moist-Dry
    - Sun-Shade, 6-10’
  - *Cornus amomum*
    - Silky Dogwood
    - Moist-Mesic
    - Sun-Part Shade, 6-12’
  - *Itea virginica*
    - Virginia Sweetspire
    - Moist-Dry
    - Sun-Shade, 6-10’
  - *Lindera benzoin*
    - Spicebush
    - Moist-Mesic
    - Part Shade-Shade, 6-16’
  - *Cephalanthus occidentalis*
    - Buttonbush
    - Moist-Mesic
    - Sun-Shade, 5-12’
  - *Ilex verticillata*
    - Winterberry
    - Moist-Mesic
    - Sun-Shade, 6-12’
- **Shade**
  - *Lindera benzoin*
    - Foamflower
    - Mesic
    - Part Shade-Shade, 6-16’
  - *Tiarella cordifolia*
    - Foamflower
    - Mesic
    - Part Shade-Shade, 6-16’
  - *Phlox divaricata*
    - Woodland Phlox
    - Mesic
    - Part Shade-Shade, 1.5’
  - *Polygonatum biflorum*
    - Smooth Solomon’s Seal
    - Moist-Dry
    - Part Shade-Shade, 1.5-3.5’

#### Herbaceous
- **Sun**
  - *Monarda didyma*
    - Beebalm
    - Moist-Mesic
    - Sun-Part Shade, 2-5’
  - *Lobelia cardinalis*
    - Cardinal Flower
    - Moist-Mesic
    - Sun-Part Shade, 2-4’
  - *Chelone glabra*
    - Turtlehead
    - Moist-Mesic
    - Sun-Part Shade, 1-3’
  - *Phlox divaricata*
    - Woodland Phlox
    - Mesic
    - Part Shade-Shade, 1.5’

#### Grasses and Ferns
- **Grasses**
  - *Andropogon virginicus*
    - Broomsedge
    - Moist-Dry
    - Sun, 1-3’
  - *Panicum Virgatum*
    - Switch Grass
    - Moist-Dry
    - Sun-Part Shade, 3-6’
  - *Carex stricta*
    - Tussock Sedge
    - Moist-Mesic
    - Sun, 1-3.5’

- **Ferns**
  - *Osmunda cinnamomea*
    - Cinnamon Fern
    - Moist-Mesic
    - Sun-Shade, 2-5’
  - *Osmunda regalis*
    - Royal Fern
    - Moist-Mesic
    - Sun-Shade, 1.5-6’
  - *Onoclea sensibilis*
    - Sensitive Fern
    - Moist-Mesic
    - Sun-Shade, 1.5-3.5’

Allison Fields
Design Alternative #1
Growing Excellence at Suitland High School

Master Plan

Goal
To use nature to cultivate academic excellence.

Legend
1. Excellence in education
2. Excellence in school pride
3. Excellence in productivity

Scale: 1" = 100'-0"
Courtyard

Site Plan

Goal
To foster interest and excitement for learning through an enriched learning environment.

Objectives
- maintain efficient traffic flow
- create an area of interest with a variety of learning opportunities
- create an area for students to gather and study outdoors

Legend
1. Study Area  
2. Seating Area  
3. Existing Building  
4. Planting Area  
5. Shade Trees  
6. Garden  
7. Meadow Area

Site Analysis

Functional Diagram
Perspectives

Inspiration

Plants
Courtyard

**Goal**

Promote education in horticulture, farming, and nutrition through hands-on and outdoor learning.

**Objectives**

- engage tech students in farm construction and maintenance
- create an outdoor education area
- provide access to free food for students during summer months
- create space for community activities and volunteer opportunities

**Legend**

1. Planting Table
2. Pavillion
3. Outdoor Classroom
4. Community Garden
5. Compost
6. Flower Garden
7. Teaching Garden
8. Shed
9. Cistern
10. Fruit Shrubs
11. Orchard

Scale: 1” = 40’-0”

Allison Fields
Technical Academy

Perspective

Section

Inspiration
Entrance

Site Analysis

Goal
Create a space that represents school pride while showcasing the theme of "Growing Excellence" through the use of planting beds.

Objectives
- Demonstrate school pride at the front of the school
- Implement stormwater management
- Bring students outdoors to learn

Legend
1 Ram Horn Plantings
2 Rain Gardens
3 Planting Beds
4 Wood Rain Garden
Walkway

Scale: 1"=20'-0"

Site Plan

Legend
1 Ram Horn Plantings
2 Rain Gardens
3 Planting Beds
4 Wood Rain Garden
Walkway

Goal
Create a space that represents school pride while showcasing the theme of "Growing Excellence" through the use of planting beds.

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Legend
1 Ram Horn Plantings
2 Rain Gardens
3 Planting Beds
4 Wood Rain Garden
Walkway

Scale: 1"=20'-0"
Design Alternative #2
Honey: A Green Solution for Different Learning

Master Plan

Goal
Use natural systems and their products for education and community engagement.

Objectives
- Provide hands-on experience
- Outreach
- Natural Systems
- Education
- Youth Achievement

Marquis Barnes, Mia Manning
Site Analysis

- Strong axial direction of existing pedestrian paths should be preserved.
- Maintain open overhead space to allow for sunlight infiltration.
- Place rain gardens where stormwater runoff is concentrated.
- Central rain garden centered to avoid shadows cast by building.

Proposed Plants

- Various plants are shown with different colors indicating their locations on the site analysis diagram.

Functional Diagram

- The functional diagram includes key elements such as greenhouses, meadows, vehicular circulation, and runoff areas.
- The diagram is annotated with various labels and symbols indicating different functional areas of the site.

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Courtyard

Site Plan

Legend
1. Ian Dixon Reflection Plaza
2. Honeydrop Rain Garden
3. Study Coves
4. Outdoor Classroom
5. Resin Glass Archways
6. Collector Rain Garden
7. Remarkable Rams “Bulletin”
8. Teaching Garden
9. Outdoor Lunch Area
10. Rainwater conveyance system

Design Process

Section A-A'

Mia Manning
Technical Academy

Site Plan

Legend
1. Greenhouse
2. Pergola/Production & Packaging
3. Vegetable Crops
4. Meadow

Scale: 1"=50'-0"

Design Process

Inspiration

Marquis Barnes
Perspective
Design Alternative #3
Promoting Positivity

Master Plan

Concepts

Inspired by Suitland’s 4P’s motto, each of the three areas embody one of the ‘P’ words (Purposed, Productive, and Peaceful), with the overall goal of creating a positive learning environment.

Legend

1. Productive Courtyard
2. Purposed Plaza
3. Peaceful Park

Scale: 1" = 100'-0"
Entrance

Goal

Enrich Suitland’s school spirit by embracing the theme of “Purposed” to encourage students to find their purpose.

Objectives

- provide an outdoor space for students and visitors to stay and socialize
- solve circulation issues for those entering the school
- incorporate sustainable design to improve environmental health
- solve rainwater roof runoff problem with vegetative awning
- provide innovative seating options

Site Analysis

Functional Diagram

Legend

1. Redesigned parking spaces
2. Seating with vegetation in back
3. Red mosaic statue
4. Rain garden
5. Vegetative awning
6. Open plaza space
7. Seating
8. Scattered green space
9. “Enter to Learn” “Leave to Achieve”

Scale: 1” = 40’-0”
Perspectives
Perspective showing green spaces, stone seating areas, and pervious plaza space

Perspective showing focal point statues that provide places to learn and socialize, as well as a point of interest to draw walkers

Inspiration
Courtyard

Goal
Better use the central courtyard to create a ‘productive’ space that provides learning opportunities and engages students outside.

Objectives
- provide a space for outdoor learning
- solve flooding problem in the courtyard’s center
- supply local ecological benefits
- provide a space for students to gather and eat.
- create a school garden to be incorporated in school lunches
- accommodate heavy circulation between classes

Legend
1. Produce garden
2. Gathering area
3. Rain garden
4. Pathway
5. Outdoor learning space
6. Butterfly garden

Site Plan

Site Analysis

Design Process

Inspiration

Functional Diagram
Perspectives

Southeast View of Rain Garden and Outdoor Classroom

Northeast View of Secluded Native Species Garden

East View of Lunch Plaza with Greenhouse and Produce Garden
Technical Academy

Goal
To restore a neglected lot into a beautiful and ecologically friendly space for teachers and students to relax, gather, and learn.

Objectives
- provide a space for outdoor learning
- implement stormwater management
- supply local ecological benefits
- provide a space for students to gather and eat

Legend
1. Pavilion
2. Gathering area
3. Rain garden
4. Meadow

Scale: 1”=50’-0”

Site Plan

Site Analysis

Initial Concept

Functional Diagram

Catherine Garcia
William Wirt Middle School

Site Analysis
History and Demographics

School History

William Wirt Middle School was built in 1963, named for William Wirt, an American author and the 9th US attorney general.

It became a Title I school after the No Child Left Behind Act of 2001 (NCLB).

A Title I school works to ensure equal, fair, and significant opportunities for all students to acquire high quality education and “meet challenging state academic standards.”

Demographics

Compared to demographics in Riverdale and Maryland, the population at William Wirt Middle School is very different.

Most students at this school identify as Hispanic, 71.2 percent, compared to 35 percent in Riverdale and 14 percent in Maryland.

The second highest ethnicity in the school is Black, 23 percent of students, which is lower than the Riverdale and state averages.

Finally, remaining William Wirt students identify themselves as White, 2 percent, Asian, 2 percent, and American Indian and/or Pacific Islander, 1 percent.

Involvement of Students

In 2007, students from the Engaged University of UMCP worked alongside students from William Wirt Middle School to create a community mural.

The Department of Business and Economic Development granted the project $8,000, which was used for materials and as a commission for the students involved.

Students worked together once a week for 14 weeks as part of an after-school, Art Club program. The mural itself is designed to “promote equality and acceptance of diverse cultures.”
Zoning
Prince George's County Zoning Map

Legend
- Residential
- Commercial
- Industrial
- Recreational
- Conservation
- Agricultural
- Open Space

Aviation Policy Area

ZONE R-55

Linda MacSorley
Zoning, William Wirt Middle School and Surroundings

- **R-O-S** Reserved Open Space
  - Minimum lot size 20 acres
  - Maximum dwelling units per net acre 0.5

- **R-30C** Multifamily Low Density Residential-Condo
  - Garden apartments 14,000 square feet
  - Two-family dwellings 1,500 square feet

- **R-55** One-Family Detached Residential
  - Permits small-lot residential subdivisions; promotes high density, single-family detached dwellings.
  - Maximum dwelling units per net acre 6.70
  - Estimated average dwelling units per acre 4.2

**Councilmanic District 3: Prince George’s County**

1. C-M to C-S-C
2. C-M to C-S-C
3. R-18 to R-10
4. R-55 to R-30C
5. R-55 to R-0-3
6. R-Rto R-T
7. C-S-C, C-O to M-X-T
8. R-30, C-S-C, C-M, C-O to M-X-T
9. C-O to O-S
10. C-M to C-S-C
11a. R-55, R-10, C-O, C-M, C-S-C, to M-X-T
11b. C-S-C to M-X-T
11c. C-O, C-S-C to M-X-T

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**Legend**

- **COUNCILMANIC DISTRICT 1**
- **COUNCILMANIC DISTRICT 2**
- **COUNCILMANIC DISTRICT 3**
- **COUNCILMANIC DISTRICT 4**
- **COUNCILMANIC DISTRICT 5**

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**Linda Macsorley**

University of Maryland Department of Landscape Architecture | LARC240 Graphic Communication and Design Studio, Spring 2018 Professor Byoung Suk Kwon, Ph.D., PLA, ASLA | Design Team: Marquis Barnes, Olivia Duley, Samuel Ehrlich, Allison Fields, Catherine Garcia, Rachel Greenhawk, Maria Harrington, Jovon Jackson, Evan Lipka, Mia Manning, Linda Macsorley, Jessica Meliman, Heyner Pajaro, Gregory Remesch, Abigail Smith, Evan-Claire Schaum, Audrey Wilke, Ryan Young
Context

Community Context (.5 mile)
1. Calvert Road Park Disc Golf
2. Maryland National Capital Park and Planning Commission
3. Riverdale Hills Neighborhood Park
4. Field of Greens Community Garden
5. Sheridan Street Community Garden
6. Serjio Trail

Community Context (1 mile)
7. Riverdale Community Park
8. Riverdale Recreation Center
9. Rinaldi’s Riverdale Bowl
10. Herbert Wells Ice Rink
11. Ellen E Linson Swimming Pool
12. Greenbelt Park
13. Greenbelt Campground

Rachel Greenhawk
Soil Map

Soil Classification

SnB—Sassafras-Urban land complex
0 to 5 percent slopes
Description of Sassafras:
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Hydrologic Soil Group: B

Description of Urban Land:
Hydrologic Soil Group: D

CdD—Christiana-Downer-Urban land complex
5 to 15 percent slopes
Description of Christiana:
Natural drainage class: Moderately well drained
Runoff class: High
Depth to water table: About 20 to 40 inches
Hydrologic Soil Group: D

Description of Downer:
Natural drainage class: Well drained
Depth to water table: More than 80 inches
Runoff class: Low

RuB—Russett-Christiana-Urban land complex
0 to 5 percent slopes
Description of Christiana:
Natural drainage class: Moderately well drained
Runoff class: Medium
Depth to water table: About 20 to 40 inches
Hydrologic Soil Group: D

Description of Urban Land:
Hydrologic Soil Group: D

Paved Area

Audrey Wilke
William Wirt Middle School borders Brier Ditch to the north. The school site is in the Anacostia River Watershed, flowing into the Potomac, then the Chesapeake Bay.
Climate

Introduction

- William Wirt Middle School is in USDA Climate Zone 7a.
- It has average low temperatures between 0°F and 5°F.
- It is on the east side of the fall line and therefore part of the Atlantic Coastal Plain.
- Characterized as a humid subtropical climate, with humid hot summers and mild to cold winters.
- The hot season lasts for 3.5 months, May through September, and the cold season lasts 3.2 months, November through March.
- Riverdale experiences mild seasonal cloud coverage variation throughout the year.

- The growing season in Riverdale Park is typically 7 months (214 days), from approximately April 4 to November 3, rarely starting before March 16 or after April 22, and rarely ending before October 15 or after November 25.
- The wind is most often from the north for 2.0 weeks, from March 8 to March 22.
- The wind is most often from the west for 1.3 months, from March 22 to May 1 for 3.4 weeks, from June 29 to July 23; and for 4.9 months, from October 12 to March 8.
- The wind is most often from the south for 1.9 months, from May 1 to June 29 and for 2.6 months, from July 23 to October 12.

Abby Smith

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<thead>
<tr>
<th>Climate Data</th>
<th>Riverdale Park, Maryland</th>
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<td>Snowfall (in.)</td>
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<tr>
<td>Sunny Days</td>
<td>207</td>
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<td>Avg. July High</td>
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<td>Elevation ft.</td>
<td>44</td>
<td>1,443</td>
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</table>
William Wirt Middle School is located near a few major roads—Kenilworth Avenue, Riverdale Road, and the Baltimore Washington Parkway.

Three roads lead to the school—62nd Place, 63rd Avenue, and 63rd Place. The school is also near Brier Ditch, which separates the middle school from Parkdale High School.

The Serlio Trail cuts across Brier Ditch not too far from the school. Also, there are the M-NCPPC and the Riverdale Hills Neighborhood Parks not too far away.
**Proposed Plants**

**Grasses/Herbaceous: Up to 4 ft**
- **Andropogon virginicus**
  - Zone: 5-8
  - Sun: FS/PS
  - Soil: Dry
  - Benefits: Seeds for wildlife

- **Carex stricta**
  - Zone: 3-8
  - Sun: FS/PS
  - Soil: w/m
  - Benefits: Easy to Grow

- **Rudbeckia hirta**
  - Zone: 3-7
  - Sun: FS/PS
  - Soil: m/d
  - Benefits: Seeds for wildlife

- **Lobelia cardinalis**
  - Zone: 3-9
  - Sun: FS/PS
  - Soil: w/m
  - Benefits: Pollinator Plant

**Small Shrubs: About 5 ft**
- **Viburnum acerifolium**
  - Zone: 3-8
  - Sun: FS/PS
  - Soil: m/d
  - Benefits: Great for wildlife

- **Euonymus americanus**
  - Zone: 6-9
  - Sun: PS
  - Soil: Moist
  - Benefits: Fruit/Seeds for wildlife

- **Gaylussacia baccata**
  - Zone: 3-7
  - Sun: PS/SH
  - Soil: m/d
  - Benefits: Important for wildlife

- **Spiraea latifolia**
  - Zone: 3-7
  - Sun: FS
  - Soil: Mois t
  - Benefits: Persistent Fruit

**Medium/Large Shrubs: 5-15 ft**
- **Ilex verticillata**
  - Zone: 3-9
  - Sun: FS/PS
  - Soil: w/m
  - Benefits: Important for wildlife

- **Viburnum dentatum**
  - Zone: 2-8
  - Sun: FS/PS
  - Soil: m/d
  - Benefits: N/A

- **Rhus typhina**
  - Zone: 3-8
  - Sun: FS
  - Soil: Dry
  - Benefits: Good for wildlife

- **Lindera benzoin**
  - Zone: 4-9
  - Sun: PS
  - Soil: m/d
  - Benefits: Deer resistant

**Trees: 50 ft or more**
- **Nyssa sylvatica**
  - Zone: 3-9
  - Sun: FS/PS
  - Soil: All
  - Benefits: Attractive

- **Quercus alba**
  - Zone: 3-9
  - Sun: FS
  - Soil: Moist
  - Benefits: Habitat/State tree

- **Prunus serotina**
  - Zone: 3-9
  - Sun: FS
  - Soil: Moist
  - Benefits: Showy flowers

- **Quercus marilandica**
  - Zone: 6-9
  - Sun: PS
  - Soil: Dry
  - Benefits: Clay Soils
Design Alternative #1
William Wirt Middle School

Objectives
Create an outdoor space with varied functions including education, recreation, and environmental remediation, while dealing with parking congestion and bus movement.

Design Goals
• Create separate loops for bus and car drop off
• Add seating and an amphitheater into hill to limit cut and fill
• Promote outdoor activity with a performance stage, sports fields, and outdoor learning center
• Locate place-based education directly in wetland for student engagement
• Add multi-functional stormwater remediation

Legend
1. Wetland
2. Outdoor Classrooms
3. Sport Fields
4. Bleacher Seating
5. Amphitheater
6. Parking
7. Car Drop Off
8. Bioswale
9. Bus Loop

Site Plan

Site Analysis

Functional Diagram

Rachel Greenhawk, Evan Lipka, Heyner Pajaro
Outdoor Education Wetland

Perspective-Wetland

Inspiration

Rachel Greenhawk
Perspective-Wetland
Parking/Bus Loop

Bioswale

Inspiration

Existing Parking

Evan Lipka
Amphitheater/Fields

Amphitheater

Inspiration

Heyner Pajaro
Field

Existing Field Conditions
Design Alternative #2
Outdoor Education

Goal
Create a safe and interactive outdoor learning space for the students and the community.

Legend
1 Parking Lot
2 School
3 Bus Area
4 Soccer Field
5 Sports Field
6 Concession Stand
7 Chesapeake Rain garden
8 Garden Plot
9 Amphitheater
10 Natural Seating
11 Relaxing/Viewing Area

Site Analysis
use slopes for seating (red) and garden (orange)
add rain gardens and wetland to retain and guide water on site

existing circulation
proposed circulation

Legend:
- Bus
- Vehicle
- Pedestrian
Inspiration

Proposal Plants

Clethra alnifolia
Summersweet

Asclepias tuberosa
Butterfly weed

Anemone canadensis
Meadow anemone

Lobelia siphilitica
Blue cardinal flower

Andropogon virginicus
Broomegrass
Outdoor Learning

A: Educational Garden Plots and Stream
Parking

Section B-B'

Linda MacSorley
Design Alternative #3
Beyond the Classroom

Goal
Create an inspiring campus for the students, that is motivating for the teachers and attentive to the surrounding native habitat.

Legend
1. Amphitheater
2. Vegetated Buffer
3. Swale Trial
4. Greenhouse
5. Soccer Field/Dry Detention Basin
6. Water Plaza
7. Sunken Garden
8. Native Meadow
9. Car Drop Off
10. Bus Drop Off

Scale: 1"=200'-0"
Site Analysis

The northern border of the site is the heart of Brier Ditch Watershed, a few miles south of Greenbelt Park. Bordering the west and south by houses, a source of runoff for the site. The site’s topography provides sections of significant grade change, where modification is suggested, and vegetated buffers should be installed.

Proposed Hydrology

The greatest design challenge is the volume of water, both on and off site, that moves toward Brier Ditch. Using best management practices, this design directs, filters, and retains runoff. These practices reduce erosion, sedimentation, and pollution that create damage downstream in the Anacostia River.
Vegetation is recommended based on its propensity to thrive in the existing site conditions.
Education Amenities

Perspective: Amphitheater

A space to teach, learn, meditate or recreate that can handle and drain high volumes of water and provide a space for the community and school to gather in a natural setting.

Greenhouse

Swale Trail
The Plaza is an enclosed garden space, planted with water-loving grasses and orderly evergreens. The swales bordering the parking lot flow into the two enclosed retention gardens.

Inspiration
Education Amenities: Elevations

Amphitheater Elevation

Soccer Field/Dry Detention Elevation

Baseball Field Elevation
Parking

Baseball Field Elevation

Car Drop Off/Parking Lot Elevation

<table>
<thead>
<tr>
<th>Street</th>
<th>Vegetation</th>
<th>Parking</th>
<th>Path</th>
<th>Parking</th>
<th>Handicap Parking</th>
<th>Drop Off Lane</th>
<th>School Entrance Plaza</th>
</tr>
</thead>
</table>

Scale: 1"=30'-0"
Suitland High School & William Wirt Middle School

LARC240 Graphic Communication and Design Studio, Spring 2018

Design By: Marquis Barnes, Olivia Duley, Samuel Ehrlich, Allison Fields, Catherine Garcia, Rachel Greenhawk, Maria Harrington, Jovon Jackson, Evan Lipka, Mia Manning, Linda MacSorley, Jessica Meilman, Heyner Pajaro, Gregory Remesch, Abigail Smith, Evan-Claire Schaum, Audrey Wilke, Ryan Young