# William Paterson University

Facilities Advisory Committee
April 26, 2023

## **Fiscal Year 2023 CPDC Projects**

### **Completed Projects**

- 1. Phase 2 Student Center Interior Renovation
- 2. Wayne Dining Hall Renovation
- 3. Interior Renovation and Upgrades to Residential Halls
- 4. Power Arts Roof & HVAC Replacement
- 5. White Hall Façade Restoration
- 6. Interior Renovation and Upgrades of Various University Office Space
- 7. 1600 Valley Road New Floor Tiles on Floors 1 through 4
- 8. 1600 Valley Road NJ-DOE Space Preparation

### **On-Going Projects**

- 1. Hobart Manor Façade Restoration
- 2. Locker & Training Facility
- 3. 1600 Valley Road Student Lounge 1016-1017
- 4. Morrison Hall Admissions & Registrar Office Improvements
- 5. American Chestnut Tree Project

### **Future Projects**

- 1. Phase 3 Student Center Interior Renovation
- 2. Carriage House Renovation Project
- 3. 1600 Valley Road New Floor Tiles on Ground Floor
- 4. New Exterior Stairs at Parking Lot 6
- 5. Raubinger Elevator Modernization
- 6. University Commons Lutron Lighting System

# **Completed Projects**

## **Phase 2 Student Commons Interior Renovations**

Existing granite wall panels were replaced with new a porcelain panel system; new flooring and wall finishes and new furniture was installed in the Ballroom and 2<sup>nd</sup> Floor Conference Rooms; and new furniture and wall finishes were installed in the Metro Lounge and the Ballroom Lounge.



**1st Floor Conference Rooms Lounge** 



1<sup>st</sup> Floor Conference Rooms



Metro Lounge new finishes & furniture



2<sup>nd</sup> Floor Ballroom Section A



2<sup>nd</sup> Floor Ballroom Lounge

2<sup>nd</sup> Floor Ballroom

# **Wayne Dining Hall Renovation**





**Dining Area** 



**Dining Room Exit and Dish Drop-off** 

**Servery** 



**Restored Dishwash Room & New Dishwasher** 

## **High Mountain East & West Projects**







**Restored Concrete Entry Steps** 

**Replaced Corridor Flooring w/LVT** 

**Installed (95) Shower Inserts** 



**PPO Constructed New Resident Director Office in HME Lobby** 

# **Power Arts Roof & HVAC Units Replacement**











New Energy-Efficient RTU's

# **New HVAC Units Replacements**



Morrison Hall Hi-Efficiency Boiler



<u>Shea Studios</u>Hi-Efficiency Heating& Cooling System



<u>Century Hall</u> Hi-Efficiency Boilers



Gaede Hall
Hi-Efficiency NG RTU

<u>Sustainability Goals</u>: new high efficient equipment uses less energy; and therefore, significantly reduces Physical Plant fuel, electrical consumption and operational costs.

## **White Hall Façade Improvements**

### **Scope of Work:**

Re-caulked 126 windows, replaced 146 damaged bricks, ground back and repointed steel lintels, and pressure washed entire façade. Applied water dispersed silane waterproofing material and washed all windows.



**West Facade** 



**East Facade** 



**North Facade** 

## **Interior Renovation Projects/Various Offices**



College Hall 104 Entry Foyer



**College Hall 104 IT Office** 



**College Hall 110 / AVP Administration Office** 

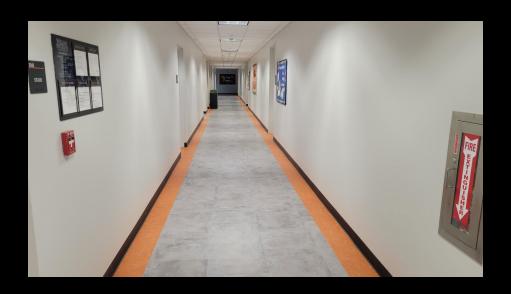


Raubinger 309 / New Academic Foundations & Student Services Office



Raubinger 309 / New Academic Foundations Computer Lab

## 1600 Valley Road New Flooring - Floors 1 through 4



## **Scope of Services:**

A total of 11,760sf of existing VCT tile was removed and replaced on floors 1, 2, 3 & 4



## 1600 Valley Road NJ – DOE Space Preparation



Suite 001 - 016



**Computer Room 1005** 



**Seminar Room 1009** 



**Ground Floor Copy Room G072** 



**Third Floor Faculty Lounge 3020** 

Scope of Work: Physical Plant Shops removed partitions, and furniture to make preliminary preparations for the New Jersey Department of Education to complete the space improvements for their lease. NJ DOE to lease rooms G001-G006, G072, 1005, 1009 and 3020.

# **On-Going Projects**

## **Hobart Manor Façade Restoration**

## **Scope of Work:**

Rake and repoint existing mortar joints. Recast and install new cast concrete coping stones. Reseal all masonry.



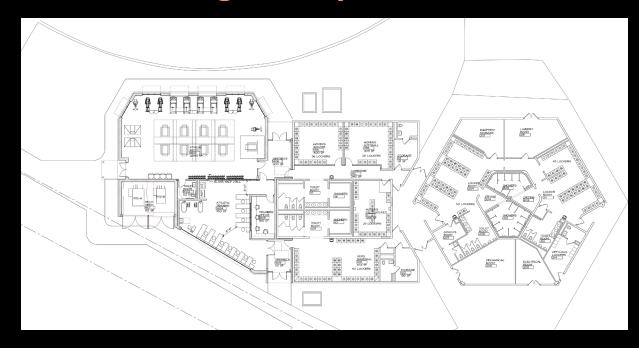




## **Locker & Training Facility**

## **Scope of Work:**

The project will include a 3,950sf addition and renovation of the existing Field House to meet Title IX requirements. The addition will provide a new 2,090 sf Fitness Room, 450sf Athletic Training Room and a 180sf Trainer's Office. The renovation work will provide new multi-sport men's and women's locker rooms and showers.







# **Locker & Training Facility**



Women's Room



**Athletic Training Room** 



**Weight Room** 

## 1600 Valley Road Student Lounge 1016-1017

### **Scope of Work:**

- 1. Install new LVT Floor Tile;
- 2. Paint all walls one wall to have an accent color;
- 3. Install new roller shades;
- 4. Reuse the Matelson Hall lounge furniture for all of the seating;
- 5. Install the existing Foosball Table, Connect Four Game and Pool Table;
- 6. Purchase and install a 10' long Charging Counter with 2 power modules & three new chairs;
- 7. Purchase and install a small table for the Connect Four Game.





**Existing Seminar Room 1016-1017** 

**Proposed Lounge Furniture Plan** 

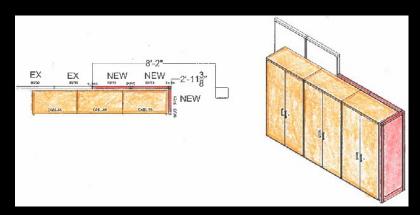
# **Hillside Hall New Shower Inserts**



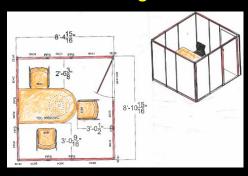


Install new Shower Inserts in Sixty-eight (68) Existing Student Suite Bathrooms

## **Morrison Admission & Registrar Improvements**



### **Three New Storage Cabinets**



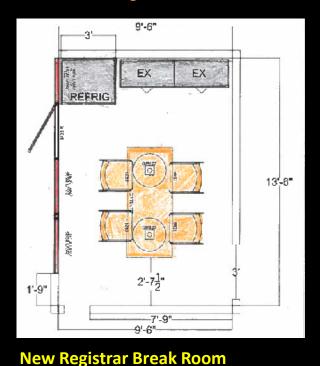


**New Lounge Furniture** 

### **New Advising Room**

### **Admissions Office:**

- 1. Remove three secretarial workstations
- 2. Install a new Coaching/Advising Room
- 3. Install three storage cabinets
- 4. Install lounge furniture



**Registrar Office:** 

- 1. New partition to create a staff Break Room
- 2. Install meeting table and four chairs
- 3. Install existing refrigerator
- 4. Install existing base cabinets for coffee machine and microwave oven

## **Morrison Hall Branding**







## **Exterior Signage/Graphics**







**Interior Signage/Graphics** 

# **Future Projects**

## **Phase 3 Student Commons Interior Renovations**



Lower Level Café & Game Room



First Floor Multi-purpose Space & Lounge



2<sup>nd</sup> Floor Conference 202 Room & Corridor



3<sup>rd</sup> Floor Corridor



**Lower Level Café** 



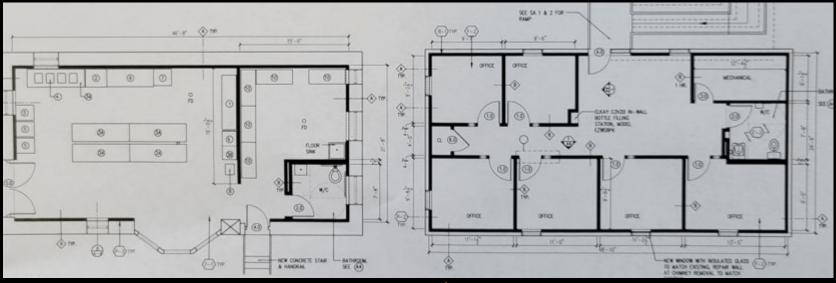
**Lower Level Game Room** 

# **Carriage House Renovation Project**









1<sup>st</sup> Floor Warming Kitchen

**2**<sup>nd</sup> Floor Offices

## **1600 Valley Road New Flooring – Ground Floor**



Ground Floor Corridor & Servery Ground Floor Entry Foyer



**Existing Tile - Ground Floor Servery** 

**Existing Tile - Ground Floor Corridors** 

## **New Exterior Stairs at Parking Lot 6**



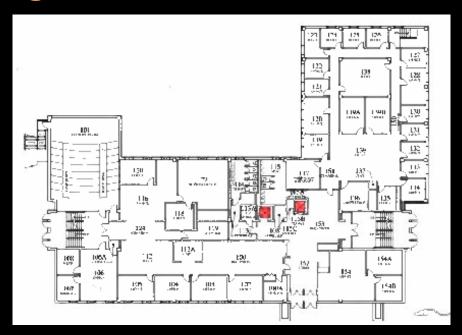
## **Scope of Work:**

Remove and replace eight flights of existing concrete stairs. Work to be done in phases over a three year period.





## **Raubinger Elevator Modernation Project**







# **University Commons Lutron Lighting System Project**





**Electrical Closets** 

# Four Year Annual Capital Projects - Page 1

Project Name	Projected	FY24	FY25	FY26	Funding
	Budget	Proposed	Proposed	Proposed	Source
General Operations:					
Campus Wide Security Improvements: Cameras & Locks	\$650,000	\$200,000	\$225,000	\$225,000	University
Campus Wide Replace Server Controls	\$450,000	\$150,000	\$150,000	\$150,000	University
Campus Wide Coil Replacement	\$250,000	\$250,000	\$0	\$0	University
HVAC Upgrades - Miscellaneous Locations	\$80,000	\$80,000	\$0	\$0	University
Speert Hall Aerco Boiler	\$500,000	\$0	\$250,000	\$250,000	University
Specition Actor bone	3300,000	30	\$230,000	\$230,000	Oniversity
Speert Hall McQuay Chiller	\$350,000	\$0	\$0	\$350,000	University
High Mountain West Chiller	\$275,000	\$0	\$275,000	\$0	University
Landscaping/Site Improvements	\$150,000	\$50,000	\$50,000	\$50,000	University
Roadway & Sidewalk Repair	\$300,000	\$100,000	\$100,000	\$100,000	University
Annual Academic Interior and Classroom Improvements	\$300,000	\$100,000	\$100,000	\$100,000	University
No.	4475.000	to.	£47F.000	**	H-lands.
Main Sewer Pump	\$175,000	\$0	\$175,000	\$0	University
Operations Pump Station: replace Backup Generator	\$125,000	\$0	\$0	\$125,000	University
Lot 6 Stairway Replacement	\$300,000	\$150,000	\$150,000	\$0	University
Cheng Library Lighting Upgrade	\$300,000	\$0	\$0	\$300,000	University
1600 Valley Road Ground Floor flooring replacement	\$100,000	\$100,000	\$0	\$0	University
1600 Valley Road Elevator Modernization	\$200,000	\$0	\$0	\$200,000	University
1600 Valley Road Lighting Upgrades	\$300,000	\$0	\$0	\$300,000	University
1600 Valley Road Liebert A/C Units	\$165,500	\$0	\$83,000	\$82,500	University
Raubinger Hall Elevator Modernization	\$600,000	\$300,000	\$300,000	\$0	University
Science West Chiller Replacement	\$300,000	\$0	\$300,000	\$0	University
suche wex unier replacement	\$300,000	Şυ	\$300,000	ψ	University
Century Hall & Hillside Hall Entrance Security	\$75,000	\$0	\$75,000	\$0	University
Century Hall & Hillside Hall Lounge Kitchenettes	\$125,000	\$0	\$125,000	\$0	University
Student Center & Ballroom Lutron Lighting Upgrade System	\$95,000	\$95,000	\$0	\$0	University
Total General Operat	tions \$6,165,500	\$1,575,000	\$2,358,000	\$2,232,500	University

## Four Year Annual Capital Projects - Page 2

Projected	FY24	FY25	FY26	Funding
Budget	Proposed	Proposed	Proposed	Source
\$1,050,000	\$350,000	\$350,000	\$350,000	Auxillary
\$2,140,000	\$0	\$1,070,000	\$1,070,000	Auxillary
\$3,190,000	\$350,000	\$1,420,000	\$1,420,000	
Projected	FY24	FY25		Funding
Budget	Proposed	Proposed		Source
\$3,500,000	\$3,500,000	\$0	\$0	Bonded
\$3,500,000	\$3,500,000	<u>\$0</u>	<u>\$0</u>	
Projected	FY24	FY25	FY26	Funding
Budget	Proposed	Proposed	Proposed	Source
\$1,250,000	\$0	\$1,250,000	\$0	University
		-	\$0	University
\$4,630,000	\$3,380,000	\$1,250,000	<u>\$0</u>	
\$17,485,500	\$8,805,000	\$5,028,000	\$3,652,500	All
	\$1,050,000 \$2,140,000 \$2,140,000 Projected Budget \$3,500,000 Projected Budget \$1,250,000 \$3,380,000 \$4,630,000	Budget         Proposed           \$1,050,000         \$350,000           \$2,140,000         \$0           \$3,190,000         \$350,000           Projected         FY24           Budget         Proposed           \$3,500,000         \$3,500,000           Projected         FY24           Budget         Proposed           \$1,250,000         \$0           \$3,380,000         \$3,380,000           \$4,630,000         \$3,380,000	Budget         Proposed         Proposed           \$1,050,000         \$350,000         \$350,000           \$2,140,000         \$0         \$1,070,000           \$3,190,000         \$350,000         \$1,420,000           Projected         FY24         FY25           Budget         Proposed         Proposed           \$3,500,000         \$3,500,000         \$0           \$3,500,000         \$3,500,000         \$0           Projected         FY24         FY25           Budget         Proposed         Proposed           \$1,250,000         \$0         \$1,250,000           \$3,380,000         \$3,380,000         \$0           \$4,630,000         \$3,380,000         \$1,250,000	Budget         Proposed         Proposed         Proposed           \$1,050,000         \$350,000         \$350,000         \$350,000           \$2,140,000         \$0         \$1,070,000         \$1,070,000           \$3,190,000         \$350,000         \$1,420,000         \$1,420,000           Projected         FY24         FY25         FY25           Budget         Proposed         Proposed         \$0           \$3,500,000         \$3,500,000         \$0         \$0           \$3,500,000         \$3,500,000         \$0         \$0           Projected         FY24         FY25         FY26           Budget         Proposed         Proposed         Proposed           \$1,250,000         \$0         \$1,250,000         \$0           \$3,380,000         \$3,380,000         \$1,250,000         \$0



# William Paterson University Commitment towards Creating a Sustainable Campus



#### **OVERVIEW**

William Paterson University is committed to being an energy-efficient, sustainable, and environmentally friendly institution. Our dedication to sustainability, which extends back more than a decade, was reaffirmed as part of the University's Strategic Plan 2012-22. The University has been determined to become a "green" campus by substantially increasing recycling and energy efficiency programs.

The University initiatives include:

- The establishment of a campus-wide Green Team to guide sustainability initiatives on campus that reflect best practices in sustainability, energy conservation, green design, waste reduction, and the use of renewable technologies.
- 2. Reducing greenhouse gas emissions by 31% since 2007;
- Installing one of the largest solar panel installations on a U.S. campus.
- 4. Installing fifteen Electric Vehicle (EV) Charging Stations.
- Increasing recycling participation on campus to 20% and approximately 12% in the residence halls; and establishing a single-stream recycling program.
- Upgrading all interior and exterior lighting with highefficiency LED lighting.
- Replacing existing building HVAC systems with new High-efficiency HVAC systems.
- Developing Sustainable Landscape strategies by creating naturalized landscape zones, and planting drought resistive plants.

#### **GREEN TEAM**

The mission of the University GREEN TEAM/Sustainability Committee is to engage students, faculty, and staff in the assessment and refinement of University operations and programs to reflect best practices in sustainability, energy conservation, green design, waste reduction, and the use of renewable technologies. The Committee advises the President and senior administration in guiding the University towards its commitment to become a fully green Institution.

### Initiatives for 2023:

- Institutionalize annual greenhouse gas (GHG) reporting as required by our Climate Leadership Network carbon commitment.
- Increase recycling participation on campus—currently just under 20% on campus and approximately 12% in the residence halls—towards an aspirational goal of 40% solid waste recycling.
- Improve and expand communication related to University sustainability efforts.
- Coordinate and promote the annual Green A-Fair

Green Team: Kevin Garvey, Jim Shelley, Karl Pettit, Nicole Davi, Mike DaSilva, Brian Fanning



*Solar Power: Campus* Map showing the locations of the existing Solar Panel arrays.

### SOLAR POWER

William Paterson University's solar panel installation, dedicated in 2010, continues to rank as among the largest solar arrays on a college or university campus in the United States. The installation provides 3.3 megawatts and supplies 15 to 20 percent of the institution's energy needs while lowering costs. Our campus-wide solar project generates 3.3 megawatts of energy for a savings of approximately \$300,000 each year, and \$1.5 million since 2010.

The installation includes arrays covering some parking areas and photovoltaic cells on the roofs of some of the University's buildings. Elevated solar arrays are located in Lot 1, Lot 6, a portion of Lot 5, the Power Art Center parking lot, and the extended parking lot at 1600 Valley Road. Solar panels are located on the Power Art Center, the upper roof of the Recreation Center, Speert Hall, University Commons Ballroom, and University Hall.



#### EV RECHARGING STATIONS

Fifteen electric vehicle (EV) charging stations available throughout campus. The initial seven charging stations were provided through a program administered by PSEG and were installed to help supplement the University's commitment to reducing carbon emissions and the ongoing commitment to sustainability. The charging stations provide free electricity in these dedicated parking spaces for electric vehicles operated by University faculty, staff, and students

Currently, all the electric charging stations on campus are considered a shared resource. Faculty, staff, and students wishing to use one of the stations on campus must first register for an electric vehicle charging permit.



### **ENERGY CONSERVATION**

William Paterson has reduced greenhouse gas emissions 31 percent since 2007 and aims to achieve a 50 percent reduction by 2025. Energy efficiency technologies have helped the University reduce electrical consumption by over 30 percent and natural gas consumption by nearly 50 percent since 2000, and we continue to pursue further reductions.

More than 25 percent of the University's energy purchases come from renewable sources and arecently completed energy audit of 26 buildings has provided recommendations for further improvements to building efficiency. William Paterson has also committed to further energy reductions through a campus-wide LED lighting retrofit program. The multi-year program, which began the summer of 2016, is designed to transition all University buildings and parking lots to LED lighting. When complete, energy consumption for lighting will be reduced by more than 80 percent and the University's overall energy consumption will be reduced by 30 percent, resulting in more than \$1 million in savings per year.

### Specific examples of energy conservation initiatives include:

- · LED lighting installations
- Cooperative energy purchasing
- · Metered fuel-dispensing pumps
- · Occupancy-based controls
- · Enhanced recycling
- · LEED-focused building design construction
- · Solar panel installation
- · LED parking lot light conversions
- High-efficiency HVAC systems



Morrison Hall Hi-Efficiency Boilers

Gaede Hall New Hi-Efficiency RTUs

Century Hall Hi-Efficiency Boilers

### RECYCLING

To further conserve natural resources, significantly reduce greenhouse gas emissions, and reduce cost of trash hauling, the university's Department of Physical Plant Operations instituted a single-stream recycling program. With single-stream recycling, virtually any grade and volume of recyclable paper, plastic, glass, and metal are able to be processed. Single-stream recycling allows all recyclables, such as fiber (newspaper, magazines, office paper, phone books, flattened cardboard, junk mail, brown paper bags, paper cardboard, and juice containers) and non-fiber (plastic bottles, glass bottles and jars, steel and aluminum cans, aluminum foil and pie tins, and tin and steel cans) to be placed into a single container for collection.

In 2021, the University recycled over 200 tons of aluminum, cardboard/paper, concrete, scrap metals, plastics, glass, and wood.

#### Did you know?

- Recycling approximately one ton of newspapers saves 17 trees, 6,953 gallons of water, and 463 gallons of oil, 587 pounds of air pollution, 3.06 cubic yard of landfill space, and 4077 kilowatt hours of energy;
- 2. Recycling one aluminum can saves enough electricity to run a laptop computer for four hours;
- 3. The United States throws away 2.5 million plastic bottles an hour:
- 4. An aluminum soda can takes 200 to 500 years to degrade in a landfill and a plastic jug takes one million years to degrade.

## **American Chestnut Tree Project**

## **WPU Chestnut Tree Project**

A team of Environmental Science majors have been working with the NY Chapter of SUNY-ESF's American Chestnut Research & Restoration Program in caring for (11) young American Chestnut trees on Campus. In approximately seven years, these "mother trees" will be pollinated with blight-resistive pollen to produce blight-resistive chestnuts that will be reintroduced into native forests.

This fall, SUNY-ESF will provide the University with (3) Darling 58 blight-resistive Chestnut trees that will be planted in a small protected orchard on campus just west of the Science West Building. In approximately eight years these trees will start producing numerous blight-resistive chestnuts that will also be reintroduced into native forests.



**Setting up the Worm Factory** 





**Digging the Hole** 



**Tree being watered with Compost Tea** 

**Deer Fence Installed** 





## Restoring the American Chestnut Tree at

## William Paterson University

Tim Termini<sup>1</sup>, Adriana Del Grosso<sup>2</sup>, Dayanara Magallanes<sup>3</sup>, Morgan Vogel<sup>3</sup>, Matt Young<sup>3</sup>, Kay Gardiner<sup>3</sup>, Tyler Fishman<sup>3</sup>, Mike DaSilva<sup>3</sup>, Karl Pettit<sup>4</sup>, Kevin Garvev<sup>4</sup>, & Nicole Davi<sup>3</sup>





Figure 4. Location of the pure American chestnuts planted on campus, if they live to reproductive age the seeds and pollen will support genetic diversity of the species.

### **ABSTRACT**

The NY Chapter of the American Chestnut Tree Foundation, SUNY ESF, The Department of Environmental Science, and WP Facilities are working with students to bring back the American chestnut tree.

Between 1904 and 1940 some 3.5 billion chestnut trees in the northeast US succumbed to an Asian fungal blight.

Our students are engaged in planting trees on campus, making special composts and teas, nurturing the trees to grow so that we can begin bringing back this tree to its former glory.

Over the next year, we will start an American chestnut tree orchard on campus to support large-scale restoration efforts.



Figure 1. American Chestnut native range. In about 50 years the blight spread killing about 4 billion chestnut trees. Source: Del Grosso, SUNY ESF



Figure 2. A stand of dead chestnuts from the blight. Source Del Grosso SUNY NSF.

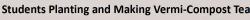
### Background

- · The American chestnut was the giant of the eastern U.S. forests
- There were once billions of them and their range stretched from
- blight (Cryphonectria parasitica) swept through our Eastern forests.
- science existed to document its role in the ecosystem.
- In 1983, the American Chestnut Foundation was established to develop a blight-resistive American chestnut, and to reintroduce it
- · The blight-resistant tree was created by inserting a gene from wheat called oxalate oxidase (OxO).
- · This tree is called the Darling 58 and will be planted on campus once approved by the USDA.

https://www.usda.gov/media/blog/2019/04/29/what-it-takes-bring-back-near-mythical-american-chestnut-tree

- New England to Georgia, and Alabama to Michigan.
- · At the beginning of the 20th century a disease called chestnut
- In less than 40-years, the majestic tree was gone before forest
- Mature American chestnuts have been virtually extinct for
- in its native range.













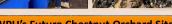




Figure 5. The future WP Campus location of the Darlina 58 American chestnut tree orchard. Collaborators from WPU, ACF





# End