



Ayers Saint Gross
1040 Hull Street, Suite 100
Baltimore, Maryland 21230
410 347 8500

60 E. Rio Salado Pkwy, Suite 701
Tempe, Arizona 85281
480 921 1515

1100 First Street NE, Suite 800
Washington, DC 20002
202 628 1033

www.asg-architects.com

Project Name: University of Pittsburgh Master Plan

ASG Project #: 21735

Subject: Infrastructure

Date: Friday, September 29, 2017

*Note: **Bold text** denotes a reoccurring comment*

Strengths

- PWSA stormwater plan/green infrastructure plan (the Pitt campus is one of the top 6 areas of focus)
- Shared infrastructure w/UPMC + CMU
- Energy center – monitoring + controlling each individual building
- Implementing standards across all projects and using software to improve energy (report issues and correct them)
- Tracking improvements
- South facing hillside

Weaknesses/Disadvantages

- City water lines; water getting to the buildings

Opportunities

- Line up multiple projects with similar green infrastructure improvements
- Utilize open space + streetscape
- Share basement flooding issues w/PWSA
- Water storage and reuse
- Rethink sizes of pipes
- Smart reader being installed by PWSA at Panther Hollow Lake
- Working towards dashboards to promote energy efficiency and consumption in each building
- Do a better job of communicating with the public on energy improvements and conservation efforts
- Micro-grid/small array (public safety/facilities management)
- Hydro power
- South facing hillside
- More public exposure to energy consumption
- Competitions
- Create goals + metrics
- Master plan as a platform
- Connection to Climate Action Plan of the city
- “Show off” new chiller plant
- Combined heating/cooling
- Consolidation of building types
- ICT plan/virtualization
- Reduction of desktop computing but still many programs that need desktop units
- More green roofs
- Listen to the students’ ideas
- Leverage relationship w/City



Threats/Challenges

- Need coordination with other entities
- Impact of water interruption
- Return of Investment (ROI)
- Parking
- Changing infrastructure needs