











## Design 101, Renovation 101 and Living Lab Teams

Students possess an inherent curiosity about our built environment, STEM careers in design and construction and our collective impact on our shared natural world. Leveraging our school campuses and buildings as 3D textbooks, students serve as their school community's local experts on how a new school will impact instructional strategies and our shared ecosystem, all the while learning first-hand how to prepare for a career in design and construction.

### Why?

-  Acquaint students with green STEM architectural and engineering career pathways
-  Provide authentic engagement in artistic, collaborative, regulatory, fiscal, health and environmental elements from project concept to completion
-  Offer hands-on experience with design tools and technology
-  Train students as ambassadors to their school community on design and construction updates
-  Familiarize students with elements of a high performing, sustainable school building
-  Connect classroom teaching with real-world applications
-  Empower students to offer insight and feedback on discretionary design features

### Who?

-  Program Facilitator (FCPS Sustainability)
-  Volunteer architects and engineers
-  25 Student Leaders

### How?

#### Design 101

Meet with volunteer architects and engineers quarterly to discuss STEM professions and data-driven design elements such as energy efficiency, life cycle analysis, architectural plans, design documents, daylighting, stormwater mitigation, HVAC/lighting design, building orientation, life cycle analysis, local/state/federal code compliance and building/construction materials, environmental and fiscal benefits of high performing buildings

#### Renovation 101 & Living Lab

Meet with volunteer architects, engineers and General Contractor to get a glimpse of construction-in-action through guided Hard Hat Tours and develop *Construction In Progress* presentations for school community audiences (parents, classmates, faculty/staff)