**Spring 2020 Planning Studio B: Green Infrastructure Project Description**

The Overbrook Environmental Education Center (OEEC) is a community based center dedicated to environmental education, conservation, public health, and personal enrichment, located in the Overbrook neighborhood of West Philadelphia. One of the center’s current projects is to promote the use of green stormwater infrastructure (GSI) throughout the surrounding community. GSI refers to a range of practices used to manage and mitigate stormwater runoff, typically through the use of vegetated or other “natural” approaches that manage the stormwater so that it either infiltrates into the groundwater or is held back from the sewer system until the initial storm surge has passed. This is contrasted with more traditional “grey” infrastructure approaches intended to increase the capacity of the existing sewer system. One of the primary drivers of interest in the green approach to stormwater management is the potential for GSI to provide community benefits above and beyond runoff reduction.

This project built on a research project developed by Dr. Heckert and collaborators from several other universities to design a planning process to optimize GSI planning for maximum community benefits. The goal was to use the OEEC catchment area as a test case for how to equitably plan for GSI that meets community needs while reducing stormwater runoff.

Ultimately, there were two components to the project:

1. The Community Benefits Component: Creating a process to determine co-benefits of different forms of GSI – particularly those such as aesthetic and amenity benefits that are more subjective in nature.

2. The Equity Component: Developing a process to determine need – this will build on an index that Dr. Heckert developed with Dr. Christina Rosan from Temple University.

Each team received a broad description of their objectives and began researching their topic (see below). Two community meetings were held at OEEC. At the first, one student was able to meet with community members to learn about their concerns for the community and to glean insights into topics that should be considered with regard to GSI benefits and equity.

Prior to the second meeting, each team prepared a process for collecting direct feedback from community residents on their desired GSI benefits and their interests as far as identifying areas most in need of GSI. Three students were able to attend and discuss our project and objectives directly with community members, who used both dot voting and drawing directly on maps of the community to provide feedback.

At this point, the COVID-19 pandemic forced a rapid shift to online instruction and the cancellation of one additional planned community meeting for final resident feedback. Both teams prepared detailed reports of their research and specific recommendations for Overbrook based on the feedback generated in the 2nd community meeting.

The two initial project descriptions were as follows:

1. Community Benefits Team: Green Stormwater Infrastructure is first and foremost intended to manage and reduce stormwater runoff. It is, however, understood to have a wide range of additional environmental, economic, and social benefits. One of the challenges of planning for GSI is to maximize benefits in response to community needs and desires. This is particularly true in the case of benefits that might be more subjective, such as improved aesthetics or providing amenities. Your task is threefold: first, to devise a means of soliciting community input on the relative aesthetic and amenity values of different forms of GSI; second, to design an application interface to enable planners, whether community members, water department staff, or others, to indicate the co-benefits they are most interested in achieving through GSI and, based on that input, to be told which forms of GSI will most effectively provide those benefits; and third, to solicit feedback from Overbrook residents and, based on that feedback, provide recommendations for the types of GSI they should look to install in their community.

2. Equity Team: With so much money and resources being put into GSI, and given the many positive benefits GSI is expected to confer on surrounding communities, it is important to consider how GSI is distributed. One goal of the planning process is to ensure an equitable distribution. But equity does not necessarily mean equality – it can also mean distribution according to need. The purpose of the equity index is to develop a measure of need for green infrastructure that can be responsive to communities. Among the readings for this team are two papers by Heckert and Rosan (2016 and 2018) detailing the initial development of an equity index for green infrastructure planning. Your job is threefold – first, to update the index from its initial construction with new data to reflect a wider range of factors; second, to solicit feedback from Overbrook residents on the importance they place on the index factors; and third, to prepare a planning report that details your work and provides recommendations to Overbrook based on the resident feedback.