This design studio will address the potential of industrial ecology concepts to developing, both economically and environmentally, the “iron triangle” at Willets Point, Queens. This 48+ acre tract has been coined “little Calcutta” ¹ and has defied development plans for fifty years. It is at the head of Robert Moses’ Flushing Bay Meadows Corona Park and adjacent to the Mets Stadium, which was the subject of a redevelopment plan tied to the failed 2012 Olympic Bid.¹ In November 2004, the New York City Economic Development Corporation put out Request for Expression of Interest (RFEI) for this area, and received 13 proposals, most of which were for shopping malls, hotels, and housing and then again in May 2011 receiving almost 70 responses. In contrast, the objective of our Studio will be to build upon the activities of the original occupants (re-use and recycling of used products, etc.) and bring in new programs and businesses that will result in synergies, such as the use of products and residues of some businesses as services and feedstocks of others. By considering industrial ecology strategies within an economic, architectural, urban, and landscape design framework on this site, this studio hopes to bring new ideas and a fresh approach to New York’s waterfront development and waste management plan.

Site History
The Matinecock Indians, and the European settlers who eventually supplanted them, harvested salt hay, fish, crabs, clams, oysters, and waterfowl from the bay and surrounding wetlands. By the 1920s, the 1,200-acre Flushing Meadows had been turned into a gigantic ash dump. F. Scott Fitzgerald described the scene in The Great Gatsby: a “valley of ashes . . . bounded on one side by a small foul river . . . a fantastic farm where ashes grow like wheat into ridges and hills and grotesque gardens.” The wetlands, as well as the creek that flowed from Flushing Bay, were filled to facilitate the site’s use as a dump. At one point, the Brooklyn Ash Removal Company was unloading 110 railroad carloads of garbage a day to be burned.² Today, the site needs a fresh look and a new identity to organize and drive redevelopment, and could become a prototype for how contemporary cities handle waste.

**Program**
Eco-industrial parks (EIP) are communities of manufacturing and service businesses located on a common property. Member businesses seek enhanced environmental, economic, and social performance through collaboration in managing environmental and resource issues. The EIP goal is to improve the economic performance of the participating companies while minimizing their environmental impacts. By working together, the collective benefits is greater than the sum of the parts. This approach includes green design of park infrastructure and plants (new or retrofitted); cleaner production, pollution prevention; energy efficiency; and inter-company partnering. An EIP also seeks benefits for neighboring communities to assure that the net impact of its development is positive. Students may address a range of potential programs: for example, a metals processing plant where the non-reusable parts of cars go and where various metals are separated while the combustibles (Automobile Shredder Residue) go to a Waste-to-Energy facility along with other solid wastes; also, new waterfront access and a design for the tip of Flushing Meadows-Corona Park. Students may also choose to develop aspects of the park corridor, or explore concrete proposals for physical design of the new North Shore Marine Transfer Station and waterfront access. Students are encouraged to bring ideas and programs they have interest in pursuing at this site.

**Site**
We will explore strategies for the design of these programs and their physical integration with our site: waterfront parcels along the North Shore of Queens and Flushing Meadows Park. The studio will investigate the design of materials recovery, recycling, and sorting stations, Waste to Energy facilities, Marine Transfer stations in parallel with creating jobs for local residents and infrastructural and landscape-based site strategies for these programs that allow community waterfront access. Students may choose to do a detailed design of a piece of the park, the MTS, or an aspect of the Eco-industrial park ‘master plan’ submittal. Each student will be asked to explore a dimension of public-ness, whether in drop-off/recycling interface, the visualization of processes, or through related programs such as ferry terminals, parks, wetlands, recreational programs, etc.

**Studio Process**
The initial weeks of the studio will focus on research and analysis of the site and into IWM processes. Students will work in teams to research an aspect of IWM, and then develop a site strategy for a waterfront facility or facilities that, together with a public interface component and reconsideration of community access, addresses issues of ecology, transport, connection, and permeability. Our aspiration is, at the beginning of the semester, to work in small groups to develop several clear ‘master plan’ strategies for the sites. Students will then work individually or in groups to develop specific aspects of one scheme with attention to the programmatic and physical integration of these systems into the architecture, surrounding urban landscape and community.

**Interdisciplinary Collaboration**
The studio will have discussions with invited experts on systems and issues to inform our working process.

**Travel**
The studio will travel to Copenhagen and Berlin March 5-9.