Danielle Meyers Thesis Statement - Gerry Gast Terminal Studio 2010

BIG PICTURE: Vast amounts of urban property lie vacant across the United States landscape, all with a similar story. These properties are populated with vacant industrial buildings, once part of a thriving industry, enlivening and supporting their surrounding communities. While many industries moved out to less expensive land or closed due to financial hardship, the properties left behind await their demolition, or for visionaries to repurpose the area, bringing it to new heights and injecting it with life once again. My terminal project focuses on determining the feasibility of repurposing these buildings and districts for new industry, in particular, industries focused on renewable energies.

SITE SPECIFIC: Layers of industrial transition and progression expose themselves throughout my site of specific research, Pabst Brewery Hill in Milwaukee, WI. It is truly a site that captures time and releases its story to the explorers. The exposure of these layers prove the reasons for the company's success and provide a solid base, lending itself to the possibility of acquiring new layers of industry. Once one of the largest and most successful breweries in America, it currently lies vacant. A change of ownership in combination with financial hardship, caused Pabst to close its doors in 1996, and today remains a virtual brewery. This site holds a rich potential to showcase its story of industrial practices and success. In addition, it describes the history of the city of Milwaukee, social behavior, culture, climate, transportation, design, craft and construction. The brewery started in 1844 and encompasses 21 acres, 26 buildings and 1.3 million square feet of available space. The buildings range in style, from and program type although majority of the architecture is of the influence of the German Renassiance Rivval style, a popular style when the Best family immigrated over from Germany to start the Brewery. Building types include grain elevators, a painting building, bottling building, chemistry building, a great hall, church, storage buildings, shipping center, brewhouse and refrigeration and engine building. The buildings hold historical significance for Pabst and the city of Milwaukee.

Milwaukee and the state of Wisconsin have started creating goals towards developing a sustainable identity. A center is needed to house these progressive measures in renewable industries in order to kick start



Wisconsin's efforts. Due to limited funding, it would be optimal, and economical to use existing infrastructure. The Pabst Brewery Hill is an optimal site in location, size and integrity of its existing buildings for this initiative. A master plan of the Pabst Brewery Hill will explore a means of proposing new infrastructure and repurposing the existing for these new industries and their support matrix. In addition the master plan will establish a strong axial and visual connection with the surrounding city.

IMAGE: Pabst Brewery from west (I-43) looking east (Lake Michigan)

CLIENT IDENTITY: Within the master plan, a specific building and client will be designed to support the exploration of a means of repurposing existing industrial buildings for renewable industries. The existing refrigeration/engine building and its adjacent brew house will be designed to house the future expansion of the organization SWETRC. The Southeastern Wisconsin Energy Technology Research Center is a young organization that combines the three major universities in Milwaukee, MSOE, UWM and Marquette, with the United States Department of Energy National Energy Technology Lab and several regional industries and foundations in the area to work on seed projects regarding renewable energies. Together, this collaborative effort aims to gain a strong presence in the city, nation and internationally as well. Students, professors and professionals work on these seed projects in hopes of developing them to the level that they can be integrated into the industries' practices of production or into their marketable line of products. Their admirable efforts to strengthen the university/industry

partnership, train a workforce to become the next generation of leaders in renewable energy research and development deserve a home that will successfully support these initiatives.

EXISTING BUILDING IDENTITY: Currently the clients use spaces in their university and company buildings. As they continue to grow, SWETRC desires to work together under the same roof, in a flexible building to continue and strengthen their partnership, research, development and reputation. The brewhouse, refrigeration and engine buildings and an adjacent addition will house the SWETRC. The site is located on the central west side of Brewery Hill. The buildings are on the highest portion of the site, allowing for views of downtown, the Milwaukee River and Lake Michigan. The west side is exposed to the major freeway of the city, in which hundreds of thousands of cars pass by daily headed to and from downtown and to Madison and Chicago. They are adjacent to the shortest, oldest building on the site, a Presbyterian Church and one of the newest, tallest buildings, grain elevators. The original programs of the existing infrastructure required large volumes of space for equipment, which allows for ease of future flexibility in redesign. The existing buildings and new addition will incorporate these goals into a space that mixes education and research with experimentation to foster the growth of SWETRC and its surrounding community.



IMAGE:

Existing Refrigeration/Engine Building and Brew House. Expansion will be to open lot on backside. The brewhouse is to the far back and the refrigeration/engine building is attached and is to the front of the picture.

DESIGN CONCEPT: The existing brewhouse is a strong example of a cathedral of industry, an industry throughout the period of 100years, where hops were brewed by busy workers and the stained glass window of the beer god at the end its nave of copper kettles reminded them of their greater goal of successfully quenching the thirst of people throughout the world. The refrigeration and engine building shares walls with the brewhouse and serves to support its operations. The two buildings set up a servant and served role, a relationship that is apparent in many industrial practices.

When considering the identity of a cathedral, the definition labels it as a space for observation, reflection, learning, practicing and analyzing. The new addition, in the vacant west part of the building footprint, will house the new cathedral of industry and its support spaces, with a similar servant and served relationship. The historical and new cathedrals of industry will work together toward the ultimate goal of progression in industry. The historical cathedral will serve as a place for learning, observing, reflecting and light analysis. Its support spaces will include mostly offices. The new cathedral of industry will hold most of the practice spaces for analysis and testing. Its support spaces will be mostly mechanical and some office. The two cathedrals will be linked together by a central volume that will serve as the heart of the transition. Majority of the public spaces will take place in the central link, which will be the auditorium and other spaces such as the exhibition, demonstration, restaurant and café on the ground level.

While this organization is designed in plan, section, elevation and 3-dimensionally, it is important to consider the spatial, structural and material details at both a large and small scale to support the idea of these cathedrals of industry joining and the layers exposed throughout the process. The historical brewhouse and refrigeration and engine buildings have survived and been successful for over 100 years because they are adaptable to change and progression. As a result, as new buildings arose around them and new technologies and processes caused the buildings' physicality's to change, the buildings adapted by adding or subtracting stairs, skyways, levels, openings, etc. Along this pattern, the redevelopment will do the same to existing buildings, by adding more layers in some places and simplifying in others. The new buildings will additionally be flexible and form to expose the newest

technologies and practices in the renewable energy industry. It is important that these layers be exposed in order to tell the story of time in industry. The choices of structure, materials, adjacencies, and translucencies of the new infrastructure will be chosen to further depict this rich history and future.



IMAGE:

The parti process of the design, looking in plan of the two cathedrals of industry with their support volumes intersecting into their respective served volumes with the cathedrals linked together at the core. Following the plan parti, a series of three-dimensional studies lead towards the current layout of the design. The image at the end it a perspective section of the two cathedrals connected by the link.