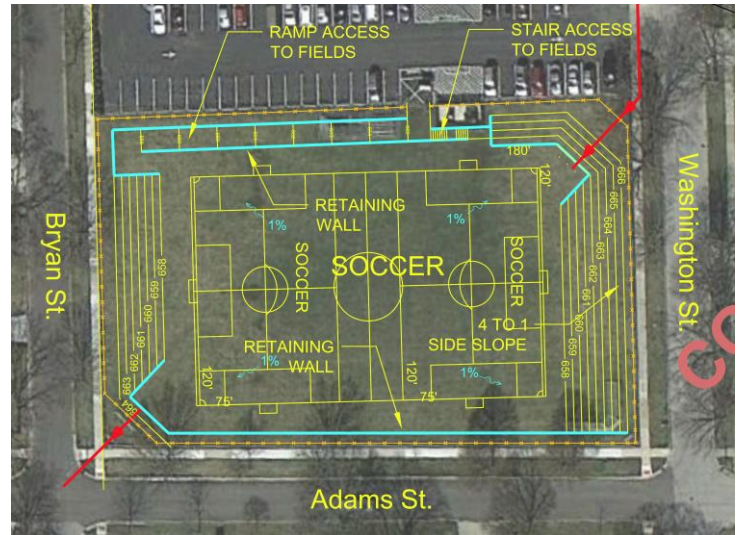


Madison Early Childhood Education Center Project Fact Sheet

Project Background

Following the widespread flooding that was experienced during the storm events of June and July 2010, and April 2013, Christopher B. Burke Engineering, Ltd. (CBBEL) was hired to develop a comprehensive flood plan for the City of Elmhurst (City). As part of the comprehensive flood plan, thirteen (13) flood-prone areas throughout the City were studied to determine proposed drainage improvements to alleviate the flooding in those areas.

The most cost-effective solution identified to reduce flooding is the creation of flood storage in open spaces within the City. Several open areas identified in the comprehensive flood plan involve property owned by the Elmhurst Community Unit School District 205, including the open space area adjacent to the Madison Early Childhood Education Center. The creation of flood storage at this site would benefit many homes in the southwest portion of the City.



Conceptual Solution

Project Details

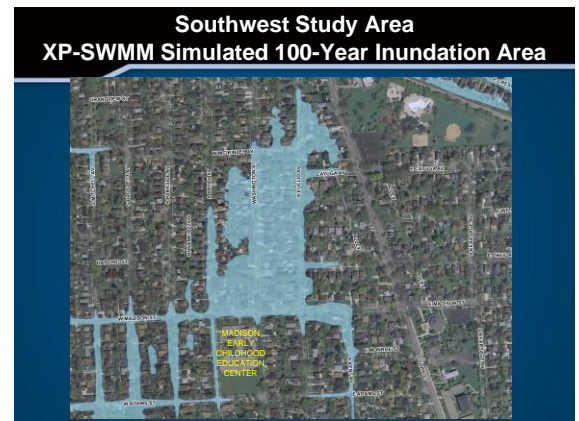
Creating flood storage in the open space area adjacent to the Madison Early Childhood Education Center would significantly reduce the risk of flooding for the Washington Street flood problem area in Southwest Elmhurst.

Key Benefits and Facts

This project would provide flood-reduction benefits to 63 homes in a 100-year design storm event. Approximately 5 acre-feet of flood storage can be provided in the open space area located at the south end of Madison Early Childhood Education Center site. The conceptual project cost is \$2.5 million and the construction timeline is estimated at approximately one year.

Project Description

The goal of this project is to provide a location to safely hold stormwater while maintaining the existing recreational uses of the school site. As seen in the picture at the top, conceptual facility improvement plans were developed with the intent of creating flood storage while maintaining the existing soccer field in this location. To maximize playability of the fields, stormwater would not be diverted into the site unless the capacity of the existing storm sewer system is exceeded. Less frequent, non-flood causing events would not impact the site, as stormwater would bypass the area.



Inundation Area

During significant storm events, pipes would divert water away from flood-prone areas and convey it into the Madison Early Childhood Education Center site. The facility would be designed to completely fill for the 100-year design storm event; stormwater would be held temporarily at the site and then drain by gravity to the existing storm sewer system. Period of inundation would be less than 24 hours. For storm events that exceed a 100-year frequency, an emergency overland flow route will be constructed that passes excess flows to the west. This maintains the current drainage patterns in this area and protects the homes that are located adjacent to the school.