

The Delta Advantage

Design Topics for Precasters

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Precast Seawall Cap - A Unique Application

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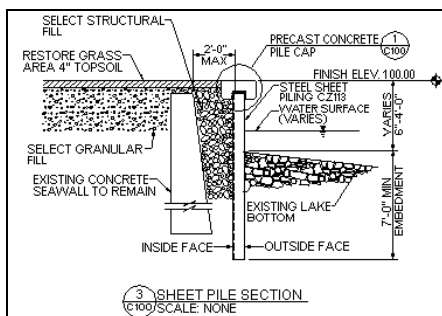
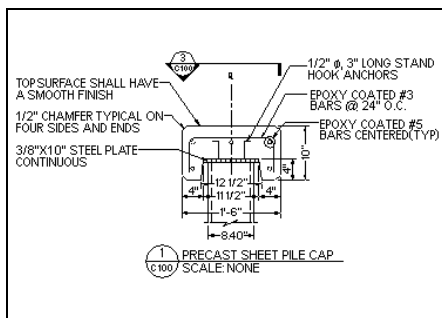
The Village of Cooperstown, NY hired Delta Engineers, P.C. to design the reconstruction of an existing 300 foot L-shaped seawall located at Lakefront Park on the shore of Otsego Lake in the Village of Cooperstown. The existing concrete wall was approximately 60 years old and was severely deteriorated. In addition to this, the wall elevation was too low, allowing for water to flood the park during different times of the year.

Delta Engineers worked with the Village of Cooperstown and the Friends of the Park Committee to design a wall that would last many years and be aesthetically pleasing. Delta Engineers hired a geotechnical consultant, performed a site survey, coordinated with the State Historic Preservation Office (SHPO), obtained a NYS DEC permit and designed the new seawall.

Once it was determined that the soils were favorable for a sheet piling wall system, Delta looked into three sheet pile options, including: aluminum, vinyl and steel. The Committee decided to go with steel, but there were concerns with the appearance of the sheet pile cap that would be most visible from the park. Delta Engineers looked into several options for the cap, such as; aluminum, steel, wood, vinyl and concrete. The committee decided that a concrete cap would be the most aesthetically pleasing and would last the longest. They were, however, concerned about the appearance of the cap if it were poured in place.

Delta Engineers developed and designed a precast concrete wall cap system that would meet the needs of the Committee (see previous details). A special connection detail was designed to fasten the cap to the steel sheet piles. A sample of the concrete cap was submitted to both the Village and the Committee to help them visualize what the cap would look like. Casting the cap in a precast plant allowed for much tighter quality control and a better end product to meet the needs of the Village and the Committee.

Special attention was given to the 90 degree L-shaped wall section to ensure a proper fit where it ties the two walls together (see photo below).



The Village of Cooperstown, The Friends of the Park Committee and the citizens of the community are very pleased with their newer looking park and seawall. The seawall will last for decades to come and will prevent the park from flooding as frequently. This unique, easy to build product can be used in many similar applications. Please contact us for further information.

Our Mission

Professionals dedicated to being a seamless extension of our clients' organizations by providing practical, responsive, and innovative engineering solutions.