



## Gold Coast Marina

### PROJECT PROFILE



Completed Yacht Basin

Apex Engineering & Management, Inc. was retained by the architect of record, Cornerstone Architects, to provide complete structural engineering services for the permitting, bidding and construction phases for this project.

Gold Coast Marina is a multi-phase project consisting of boardwalk and dock replacement, the Quarterdeck building and the Yacht Basin Building.

The Quarterdeck building is a support building for marina users with showers, bathrooms and meeting facilities. The Yacht Basin is a (6) unit high end condominium. All buildings on this site will be supported with reinforced concrete pile cap and grade beams and grouted auger cast pilings. This complex foundation system is required due to poor upper strata soil bearing conditions. Above grade construction consists of reinforced masonry bearing walls and pre-engineered wood trusses.

The dock system is an innovative, vertically adjustable dock and ramp system that allows dock "fingers" to be moved up and down with the changing water elevation. Wood and steel piling, along with a steel reinforced sub-structure provided excellent stability and tie off points for large vessels.

Project:	Gold Coast Marina Yacht Basin – Phase I
Location:	Frankfort, MI
Architect:	Cornerstone Architects
Contractor:	45 <sup>th</sup> Parallel CM Traverse City, MI
Project Type:	Multi-family
Structural System:	CMU bearing walls Auger cast piling PC plank floor framing Wood roof trusses
Building size:	Multiple Buildings, Docks & Major Site Work
Completion date:	August 2008



Building under construction



Installation of auger cast piling