



**Project:** Jamestown Boat Livery

**Client:** Pennsylvania Department of Conservation and Natural Resources

**Engineer:** Pennsylvania Department of Conservation and Natural Resources



Located in Jamestown, Pennsylvania on the shores of the Pymatuning Reservoir, the Jamestown Boat Livery had fallen into disrepair. Dissen & Juhn Company was awarded a state contract to refurbish and expand the facility.

The scope of work included removing and disposing of the existing floating docks and replacing them with new, dredging the boat basin, and installing a stone revetment along the basin's perimeter.

The new marina consisted of 228 floating slips ranging in length from 20' to 35'. More than 21,000 square feet of floating docks were installed. The docks were manufactured by Sullivan Flotation Systems, Warwick, NY, and constructed of plastic flotation units, galvanized steel frames, and timber decking. They were anchored by 75 steel pipe piles, most of which were grouted into the rocky lake bottom.

During the process, a 20' diameter steel casing was first driven down through a 8-10' of muck and gravel into a firm clay layer below. A hydraulic-powered auger, suspended from a barge-mounted crane, then augured through the casing and clay, and through 10' of soft shale. Once the fines were evacuated from the hole, 12 3/4" diameter x 55' long pipe piles were inserted into the hole and grouted into place. In all, more than 385 LF of 18" diameter hole was augured into the lake bottom.

In addition to the pile driving and dock installation, the job included dredging 19,000 CY of silt from the boat basin and the installation of 4,700 tons of rip rap.

