



Experience

ESS Group: 1998 to present

Years of Prior Related Experience: 4

Education

BS, Civil Engineering,
Lehigh University, 1994

Professional Registrations

Professional Engineer Licenses:

MA, No. 41706, 2001

RI, No. 8551, 2006

VA, No. 50185, 2012

NH, No. 14163, 2013

MD, No. 47100, 2015

ME, No. 14040, 2015

National Council of Examiners for Engineering and Surveying Record, No. 47445, 2011

Master Design Certificate for Low Impact Development, State of Rhode Island, No. 1106011, 2006

Affiliations

Boston Society of Civil Engineers Section of the American Society of Civil Engineers (BSCES)—Board of Government Member (1999-2000)

BSCES Waterways, Ports, Coastal & Ocean Technical Group—Chairman (1999-2000)

Environmental Business Council of New England Ocean and Coastal Resource Committee Chairman (2014-Present)

Qualifications

Mr. Whitney is a Professional Engineer with more than 25 years of experience as a Civil/Coastal Engineer and Project Manager in a wide range of public and private sector projects, including project design and management activities in civil/site engineering, coastal permitting/shoreline assessment, and the planning and permitting of electrical transmission projects. He specializes in planning, routing, surveying and installing High Voltage AC and DC submarine electric transmission cable systems, landfall transitions, and interconnections with local grid substations. Mr. Whitney has conducted submarine cable routing, constructability, and installation assessments and permitting along the eastern seaboard for some of the largest submarine cable system projects developed in the last 20 years. He is considered to be among the foremost submarine cable system planners in the industry with multiple successful projects under his leadership.

Mr. Whitney is recognized in the industry for his knowledge of navigation and how to assess a project's impacts to navigation. He has strong relationships with USCG waterways management personnel in multiple USCG Districts, USACE Navigation personnel in multiple Districts, as well as New England Harbor Pilots. Mr. Whitney was the lead author for the first Navigational Risk Assessment submitted in the United States for an offshore wind project.

Mr. Whitney is well versed in local, state, and federal environmental regulatory and land use permitting requirements and strategies, and has provided permitting services for projects in Massachusetts, Rhode Island, Connecticut, New York, New Jersey, New Hampshire, Maine, Delaware, Maryland, Virginia, and The Bahamas. He has particular expertise in permitting projects subject to Massachusetts Chapter 91 Waterways regulations.

Representative Project Experience

Projects with Navigational Safety Risk Assessments

Cape Wind Associates, LLC – Cape Wind Project, Nantucket Sound, MA. Provided services related to the siting and design of a proposed renewable electric generating facility involving installation of 130 offshore wind turbine generators with a potential to generate 454 MW. The wind park was proposed to be sited on Horseshoe Shoal to interconnect with the regional power grid through an AC submarine cable system between the wind park and the southern shore of Cape Cod. Prepared conceptual facility layouts and evaluating geologic conditions for a project baseline environmental impact and feasibility study. Planned and directed extensive marine geophysical and geotechnical field investigation programs, including hydrographic, sub-bottom profiling, side-scan sonar, and magnetometer

surveys, as well as sediment sampling to evaluate surface and shallow/deep subsurface sediment/geologic conditions in the area of the proposed offshore renewable electric generating facility and the submarine electric cable links to the mainland electric grid. Prepared a detailed Navigational Risk Assessment, which was the first such assessment for an offshore wind energy facility submitted to the US Coast Guard, and assessed the possibility for project impacts to marine vessel traffic and USCG search and rescue operations.

US Wind – Maryland Offshore Wind Energy Project – Outer Continental Shelf, MD & Indian River Bay, DE. Technical Expert for routing of the export cable for proposed development of a 750 MW offshore wind farm with electrical interconnection at the Indian River Substation. Performed initial desktop routing analyses to identify potential route alternatives, advanced conceptual design of the route with potential submarine cable vendors and installers, and planned and executed two marine reconnaissance surveys to ground-truth the desktop routes. The routing of the export cable in Indian River Bay was especially challenging due to very dated NOAA hydrographic information and the presence of shifting shoals. Also managing preparation of the Navigational Safety Risk Assessment for the Project that will be submitted to USCG District 5 and BOEM as part of the Construction and Operation Plan.

Projects with Navigational Conditions Reviews/Testimony

Confidential Clients – Navigation Expert Witness Services for Chapter 91 Appeal for Proposed Recreational Float – Lobster Cove, Gloucester, MA. Performed a technical review and developed written pre-filed direct expert witness testimony regarding navigational conditions associated with a proposed recreational float on behalf of two abutters. The work was performed to support an appeal by the abutters of a draft Chapter 91 Waterways License issued by MassDEP. As a result of the work performed, the parties agreed to settle the matter outside of the DEP appeals process.

Confidential Clients – Navigational Conditions Review Witness Services for Chapter 91 Appeal for Proposed Recreational Float – Eel Pond, Falmouth, MA. Performed a technical review and submitted written comments to MassDEP on behalf of abutters to a proposed recreational float in a man-made canal adjoining Eel Pond. The written comments pertained to both Chapter 91 regulatory requirements and potential effects to safe navigational ingress and egress to adjacent floats and navigation within the canal. Developed potential alternative float concept designs for discussions with the applicants. The matter is still ongoing.

Confidential Client – Navigational Conditions and Chapter 91 Technical Review for Proposed Marina Expansion – Manchester Harbor, Manchester-by-the-Sea, MA. Performed a technical review of the design and permit applications submitted by Crocker's Marine for a proposed marina expansion project on behalf of an abutter. The review included submitting written comments to MassDEP on both potential navigational impacts from the proposed marina expansion and Chapter 91 regulatory requirements. As a result of the work, Crocker's Marine adjusted their proposed design to reduce impact on adjacent navigational uses. The work also resulted in the Harbormaster adjusting mooring locations to better co-exist with the expanded marina footprint and our client's licensed dock. The client's concerns with the proposed marina project were addressed and the client supported the revised project design.

Waterfront and Port Facilities

Haskell/US Coast Guard – Recapitalize Buoy Tender Project, Newport, RI. Principal-in-Charge responsible for supervising environmental studies and regulatory permitting as part of a design-build project team led by Haskell to provide the site features necessary to support the operations of the USCG buoy tender vessels between Piers 1 and 2 at NAVSTA Newport. The project's waterfront improvements include dredging up to 5,000 cubic yards of material to facilitate buoy tender mooring; installing shore tie utilities, cleats, bollards, and fenders for three USCG cutters; paving along the waterfront; and extending the sheet pile wall to provide a longer mooring face. ESS services include preparing various environmental studies, conducting sediment sampling and benthic analysis to characterize dredge material, preparing state and federal permit applications, and negotiating permit conditions.



SAIC – Naval Station Newport, Security Barrier Environmental Planning Study, Newport, RI. Project engineer for Environmental Planning Study and Environmental Assessment to assess alternatives for a security barrier for the Naval War College on Coaster’s Harbor Island in Narragansett Bay. ESS served as a subcontractor to SAIC in Newport, Rhode Island to prepare the conceptual engineering design and environmental analyses for the Navy to consider potential alternatives to provide a security barrier in Narragansett Bay.

Stantec/U.S. Navy - Environmental Impact Assessment & Permitting for Dry Dock #1 Lifting and Handling Improvements, Portsmouth Naval Shipyard, Portsmouth, ME. Project Manager responsible for quality control and coordination of all ESS activities to support the third party NEPA review and to prepare Maine permit applications required for the proposed improvements at PNSY to increase the portal crane rail load carrying capacity by upgrading the existing structural system. Mr. Whitney was responsible for overseeing environmental studies and preparation of state and federal permits applications.

BOEM - Identification of Port Modifications and Their Environmental and Socioeconomic Consequences, Atlantic OCS. Project Manager for a study to identify the potential environmental and socioeconomic impacts and mitigation measures that would be associated with the expansion and use of port facilities along the US Atlantic Coast to support offshore wind energy developments. Mr. Whitney was responsible for overall project coordination, as well as providing technical expertise related to port facilities as well as dredging impacts and mitigation. The Study Report was published by BOEM in May 2016 (<https://www.boem.gov/ESPIS/5/5508.pdf>).

Starwood Tiverton LLC – Project Construction Support, The Villages on Mount Hope Bay, Tiverton, RI. Project manager for services beginning in Phase 3 of project construction, which involves mixed-use redevelopment of a 98-acre waterfront site formerly utilized as a bulk fuel oil storage facility. Prepared an evaluation of sand borrow volume requirements for a beach nourishment project to raise the native berm elevation and shift the native beach profile seaward to provide a recreational beach to support residential uses at the site. Supervised design of a dry standpipe system to provide fire protection on an existing pier. Responsible for completing flood hazard evaluations to support a request for a Conditional Letter of Map Revision prior to the development of the Villages on Mount Hope Bay. Responsible for supervising flood hazard analyses and evaluations to FEMA issuance of a Letter of Map Revision (LOMR) based on as-built conditions that officially revised the flood hazard zones on the project site. Supervised engineering services required to support continued regulatory permitting activities with the Coastal Resources Management Council.

Woods Hole, Martha's Vineyard, and Nantucket Steamship Authority – Technical Support and Engineering, Hyannis, MA. Provided technical support and engineering for preparation of final engineering designs, cost estimates, plans, and specifications for construction of the \$6 million Hyannis Ferry Terminal Reconstruction Project. The reconstruction project included approximately 18,000 cubic yards of dredging with upland disposal. Served as assistant project manager during the construction phase of the project and as point-of-contact for questions from the client, resident engineers, and contractors. Reviewed shop drawing submittals, responded to questions related to the project design, designed components of field design changes requested by the client, and coordinated subconsultant activities during the construction phase of this project. Responsible for coordination and submittal of subconsultant design information.



Publications

Use of Marine Remote Sensing Data for Submarine Cable Route Planning and Siting, Whitney, P.R.; Natale, C.J.; and Nash, J.P., Marine Technology Society/IEEE Oceans 2000 Conference, Providence, Rhode Island, September 2000.

The Critical Connection for Offshore Wind Integration, Whitney, P.R.; Gowell, E.T.; and Natale, C.J., North American WindPower, April 2011 issue.

Submarine Cable Embedment: Integrating Suspended Sediment Modeling and Monitoring into the Regulatory Permit Process, Whitney, P.R and Herz S.M.; 4TH Annual Marine Renewable Energy Conference, Warwick, Rhode Island, January 2013.

ESS Group, Inc. 2016. *The Identification of Port Modifications and the Environmental and Socioeconomic Consequences*. U.S. Department of the Interior, Bureau of Ocean Energy Management, Washington, DC. OCS Study BOEM 2016-034. 99 pp.