Environmental Services

Susan Moberg has 16 years of professional experience with VHB, and leads VHB's Providence, Rhode Island Environmental Services Group. Ms. Moberg's experience with VHB includes wetland delineation, the preparation of associated State and Federal permit applications for projects in Rhode Island, Connecticut, and Massachusetts, as well as numerous environmental site assessments and remedial actions in Rhode Island, and Massachusetts. In her role as a wetland specialist, she has expertise in delineation, mapping, and functional analysis of wetlands. Ms. Moberg has expertise in preparing erosion and sedimentation control plans, identifying appropriate stormwater best management practices, and monitoring construction activities to ensure compliance with environmental regulations and permit conditions. Ms. Moberg's project

Rhode Island Reliability Project

experience includes:

Ms. Moberg manages VHB's licensing, permitting and engineering contract with National Grid on the Rhode Island Reliability Project, which is a 24 mile portion of the New England East-West Solution transmission improvement project. The project spans five Rhode Island municipalities and involves reconstruction of existing facilities within the right of way, which include an existing 345 kV line and two 115 kV transmission lines, and construction of a new 345 kV transmission line. Improvements to West Farnum Substation and Kent County Substation are also planned. Susan has overseen the preparation of the Energy Facility Siting Board (EFSB) Environmental Report, state and federal wetland permit applications, various plans and graphics to support local planning and zoning applications, state and local traffic permit applications and maintenance and protection of traffic plans, and local stormwater/erosion control applications. Applications were filed in the Fall of 2008. Construction is anticipated to begin in 2010.

Southern Rhode Island Transmission Project

Susan managed VHB permitting team for the Southern Rhode Island (SRI) Transmission Project. The SRI Project involved the rehabilitation of existing 115kv transmission line over approximately 12 miles of right of way, construction of approximately 12 miles of new transmission line, expansion of an existing substation, and construction of a new substation. For this project, VHB prepared the EFSB Environmental Report, state and federal wetland permit application, developed stormwater best management plans, prepared state and local traffic permit applications and maintenance and protection of traffic plans, and provided construction monitoring and coordination with state and local regulators. Ms. Moberg provided expert witness testimony during the EFSB hearings. Project challenges included relocation of several Osprey nest sites and coordination with the Narragansett Indian Tribe. The project is anticipated to be complete in 2008.

Narragansett Electric

Ms. Moberg manages VHB's on-call services contract with the Narragansett Electric Company in Providence, Rhode Island. Services rendered under this contract include wetland delineations at substation and transmission line sites; freshwater wetland permitting for Spill Prevention Control and Countermeasures projects at several substations in Rhode Island; coastal permitting at substation sites; preparation of evaluations and Best Management Practice Plans for maintenance work conducted under the utility exemption of the Rhode Island Freshwater Wetlands Regulations; and providing construction/compliance monitoring at both permitted and exempt construction activity sites.

Ms. Moberg leads Vanasse
Hangen Brustlin, Inc.'s Rhode
Island Environmental Services
Group and serves as VHB's
Program Manager for National
Grid projects. She has
expertise in environmental
permitting and licensing,
stormwater management and
erosion control, site
assessment, wetland
delineation, and soil analysis

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E-183 Transmission Line Relocation Project

Susan has assisted Narragansett Electric in the preparation of permit applications for the relocation of 6,200 linear feet of 115 kV transmission line through Providence and East Providence, Rhode Island. Permitting efforts included Coastal Resources Management Council, Army Corps of Engineers, and Rhode Island Energy Facility Siting Board applications. This highly controversial project included the design of a wetland restoration plan for the bank of a tidally influenced river, and expert testimony at a series of EFSB hearings spanning a 12-month timeframe. Additional services provided included topographic survey and photosimulation. The project was completed in 2006.

Point Street Substation Expansion Project

Ms. Moberg assisted Narragansett Electric with the environmental permitting of the Point Street Substation Expansion project in Providence, Rhode Island. Required permits included a Coastal Resources Management Council Category A Assent and a Rhode Island Department of Environmental Management Order of Approval to Discharge Treated Dewatering Effluent to waters of the State. Permits were received in March 2004, and construction is underway. VHB also provided construction monitoring and compliance sampling.

3305 Distribution Line Re-Energization and Rehabilitation Project

Susan has acted as VHB Project Manager for the 3305 Distribution Line Re-energization and Rehabilitation project. The project consists of an approximately one mile segment of existing distribution line along existing right-of-way extending through the Great Swamp from West Kingston Substation to Kenyon Substation. VHB worked with Narragansett's engineers to ensure that the proposed design would be compatible with the Rhode Island Department of Environmental Management Freshwater Wetlands Regulations exemption for utility and maintenance projects. VHB coordinated with the Rhode Island Natural Heritage Program regarding the presence of rare, threatened and endangered species present along the ROW, which included one state-listed species of dragonfly known as the Ringed Bog Hunter. For the protection of the Ringed Bog Hunter, certain work activities had to be scheduled around anticipated emergence, perching and basking periods. Additional coordination with the RIDEM Fish and Wildlife Program and the US Fish and Wildlife Service Migratory Bird Program was needed due to the presence of osprey nests on two of the structures proposed to be maintained. Additional activities included RIDEM wetlands permitting for an extension of the 3305 Line north along existing roadway, and coordination, survey and permitting of an Amtrak ROW crossing.

Jamestown Electrical Supply Study

Susan has acted as VHB project manager for the Jamestown Electrical Supply Study in Jamestown, Rhode Island. The project involves the installation of a new submarine electrical distribution cable to provide more dependable electricity to residents on Conanicut Island. This project included an initial due diligence assessment of three alternative routes for the cable alignment, and preparation of permit applications for the preferred alignment. VHB coordinated with National Grid personnel, as well as state and federal regulators, local officials and other technical experts. The cable was successfully installed in 2003. VHB has recently finalized easement plans for the land portion of the cable at Fort Adams in Newport, Rhode Island.

New England Electric System

Susan served as VHB Project Manager supervising the preparation of environmental assessments of approximately 21 miles of underground electric transmission cables located in Rhode Island and Massachusetts. The purpose of the investigations was to provide an understanding of environmental conditions in the vicinity of each cable system and to identify potentially sensitive receptors, prior to emergency repairs,

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scheduled maintenance, or planned improvements of the facilities. These assessments were needed by NEES as part of contingency plans for each cable system.

Regulatory Opinions, Various Rhode Island Sites

Susan is routinely consulted by National Grid personnel to review proposed projects for permitting requirements. These tasks involve meeting on-site with National Grid personnel to review proposed activities and evaluate environmental conditions at the site, then providing a letter report describing the state and federal permits needed to complete the project. If appropriate, these opinion letters include suggested project revisions which would qualify the project as Exempt under Rhode Island Department of Environmental Management Regulations, thereby decreasing permitting costs and associated project delays.

E-183/F-184 Maintenance and Rehabilitation Project

Ms. Moberg served as project manager for the environmental permitting effort to facilitate the maintenance and rehabilitation of approximately five miles of transmission line through coastal marsh in Warren, Rhode Island. Required permits included a Coastal Resources Management Council Category A Assent, an Army Corps of Engineers Category 2 Programmatic General Permit, and Rhode Island Natural Heritage Program authorization. VHB reviewed the project alignment for several state-listed rare species, selected sites for three osprey nesting platforms, and resolved a notice of violation issued after a site inspection was conducted by CRMC during construction. The project was completed during winter 2004.

H17/G185-N Transmission Reconductoring

Susan worked with National Grid USA Service Company engineers to prepare a Notice of Intent for submission to the Energy Facility Siting Board for two reconductoring projects in Rhode Island. The Notice of Intent evaluated potential environmental and socioeconomic impacts of the project. Sue provided expert testimony at EFSB hearings for the project, which was approved without conditions.

Education B.S. University of Rhode Island, Soil and Water Resource Science, May 1993

Specialized Training Erosion and Sediment Control Site Plan and Site Inspection

> Workshop, Soil and Water Conservation Society, 1994 OSHA Hazardous Waste Operations and Emergency Response

(HAZWOPER) Training (29CFR1910.120)

Registrations/ Professional Soil Scientist, Society of Soil Scientists of Southern Certifications

New England

Registered Associate Wetland Scientist, Rhode Island

Association of Wetland Scientists

Licensed Class IV Soil Evaluator, Rhode Island Department of

Environmental Management

Professional Wetland Scientist, Society of Wetland Scientists

Affiliations Society of Soil Scientists of Southern New England

Rhode Island Association of Wetland Scientists

RIDEM Wetlands Taskforce Society of Wetland Scientists

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