



MATRIX **NEW**WORLD

Engineering Progress

OFFSHORE WIND DEVELOPMENT SERVICES

Matrix brings renewable energy to market.

Matrix supports vanguards in the offshore wind development industry. Our aggregation of services supporting conventional marine, utility and public projects has been customized to meet the needs of offshore wind developers, utilities and public bodies.

Our professional service offerings support the entire development process, from feasibility through construction. In the project conception phase, Matrix supports due diligence and feasibility tasks that engage our engineering, surveying and environmental staff to evaluate project routes, shore-support facilities, regulatory strategies and interconnection opportunities.

Our expertise in the planning and design phases of projects is tailored to the uniqueness of the infrastructure, and focuses upon regulatory approvals (federal, state and local) and design of outside plant facilities including nearshore landings, manhole and conduit systems, sensitive habitat protection/mitigation, and waterbody crossings. Our construction administration experience in the marine and utility arenas is leveraged to meet the demands of similarly situated offshore wind construction activities.

Matrix specialty skill sets are particularly relevant to offshore wind project delivery. Our marine services group is experienced in port development, nearshore HDD landings, submerged utility design and marine structures. Likewise, our regulatory group supports large utility and maritime infrastructure projects with traditional permitting plus niche experience related to submerged aquatic vegetation (SAV), shellfish, coastal wetlands and riparian/tidelands rights.

Matrix maintains a large group of licensed site remediation professionals (LSRP) that are experienced in high voltage power distribution construction and site remediation. Our survey group delivers maritime-specific products including bathymetry, sub-bottom profiling, sidescan SAV/shellfish surveys, and right of way acquisition mapping.

Services provided

- Marine & Waterfront Engineering
- Regulatory Strategy & Permitting
- Bathymetric Surveying
- Submerged Aquatic Vegetation & Shellfish Habitat Mitigation
- Environmental Site Assessments & Investigations
- Licensed Site Remediation Professional (LSRP) Oversight
- Construction Support & Administration
- Civil/Geotechnical Engineering
- Public Outreach
- Horizontal Directional Drill Design
- Right of Way & Riparian Rights Acquisition

Contact

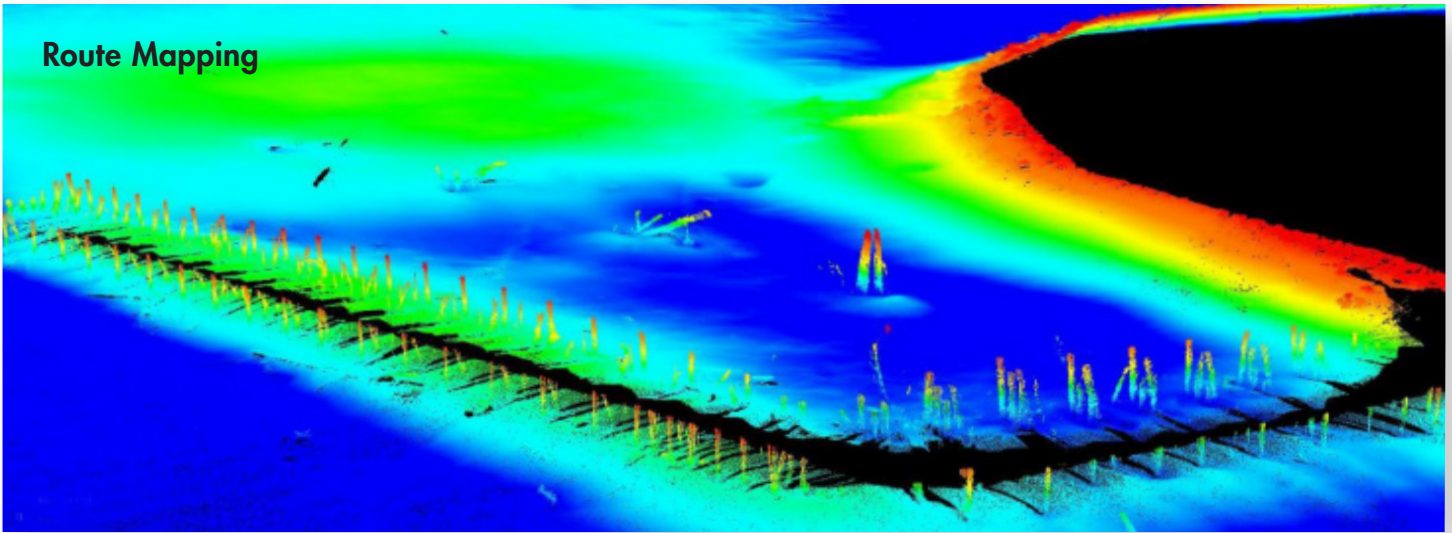
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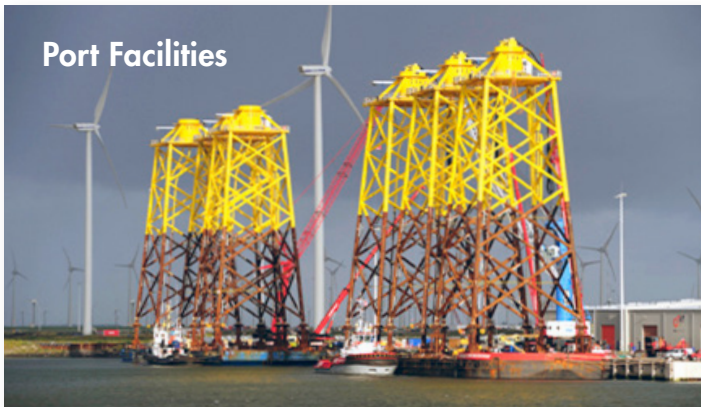
Route Mapping



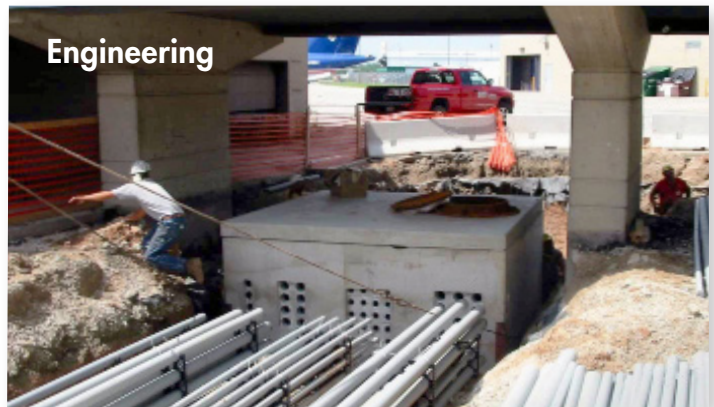
Cable Landings



Regulatory



Port Facilities



Engineering

Supporting the Offshore Wind Development Industry

Matrix's aggregation of services supporting conventional marine, utility and public projects has been customized to meet the needs of offshore wind developers, utilities and public bodies. We are involved in:

- Cable "landings" – from about 2,000 feet offshore of the shoreline and in toward land (beach, estuary, etc.)
- Route mapping – upland and underwater surveys, habitat mapping, etc.
- Port facilities – supporting the fabrication and maintenance of the wind components (turbines, cables, etc.)

- Power Distribution and Connections – laying high voltage cables, generally underground, and connecting to substations.
- Regulatory – principally aquatic habitats including wetlands, submerged aquatic vegetation, beaches, etc.
- Engineering – design of "manhole and conduit" systems, directional drill installations, etc.



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