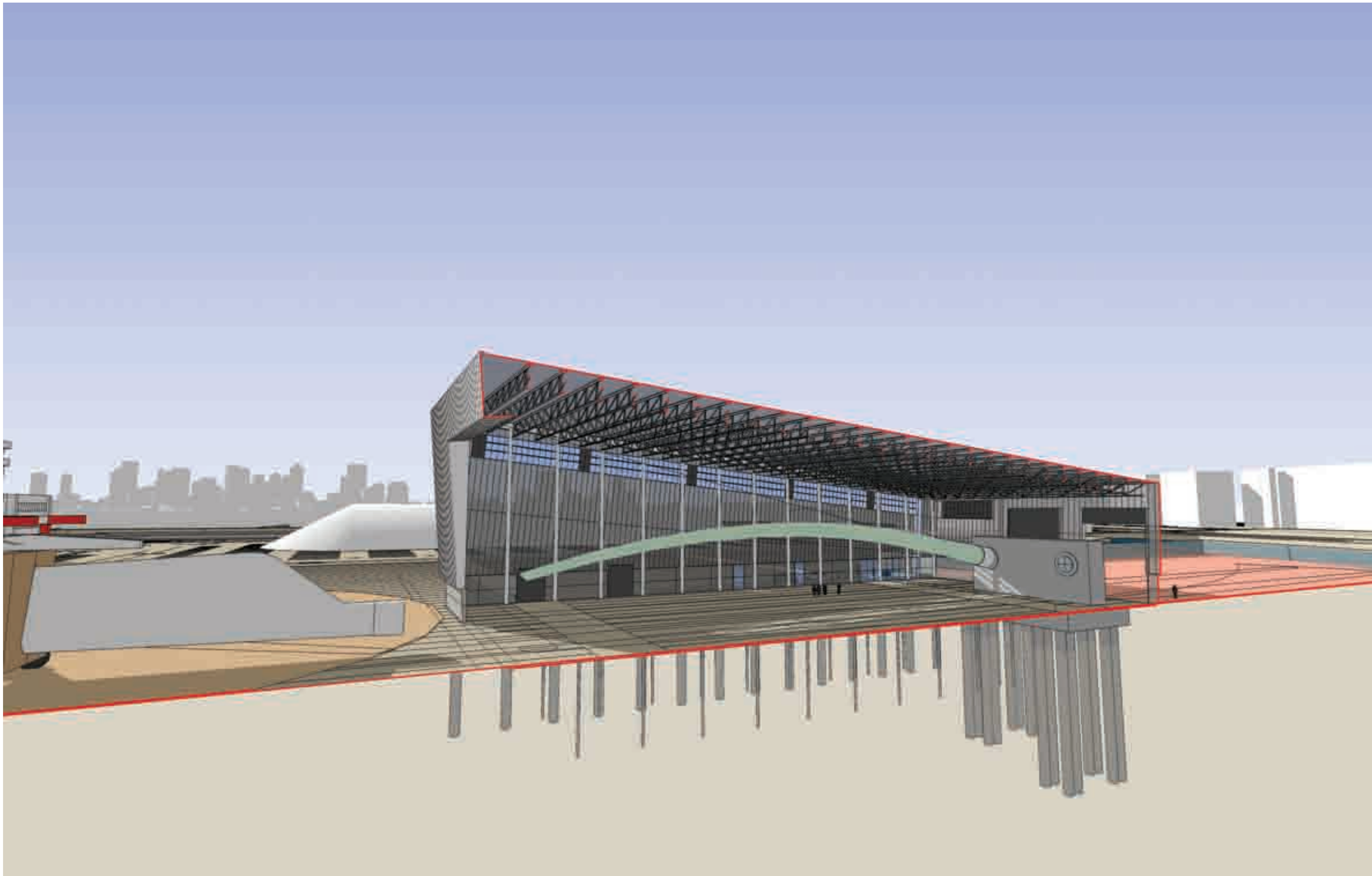


# Massachusetts-NREL Wind Technology Testing Center



Cross-sectional view showing interior and foundation sub-structure

## SPECIFICATIONS\*

Load Capacity	Maximum static bending moment 84-Mega Newton meter (MNm)
Blade Length	Up to 90-m blades dependent on test and specification
Blade Displacement	32-m maximum horizontal tip displacement 21-m peak-to-peak vertical tip displacement
Mounting Plates	5-m in diameter with center-to-center distance of 12 meters
Overhead Cranes	2 independent 50 and 30 ton bridge cranes
Blade Mounting Height	4.6 meters from floor to blade root center
Static Testing	84MNm max static root bending moment Test to ultimate failure Up to 9 electrical winches to apply test loads Bending moment tracking Strain distribution Stiffness calibration
Dynamic Testing	NREL's patented resonant test system technology 24-hour, fully-monitored fatigue testing 21-m tip-to-tip fatigue test tip displacement

\* Information subject to modification and refinements as facility design details are being finalized.

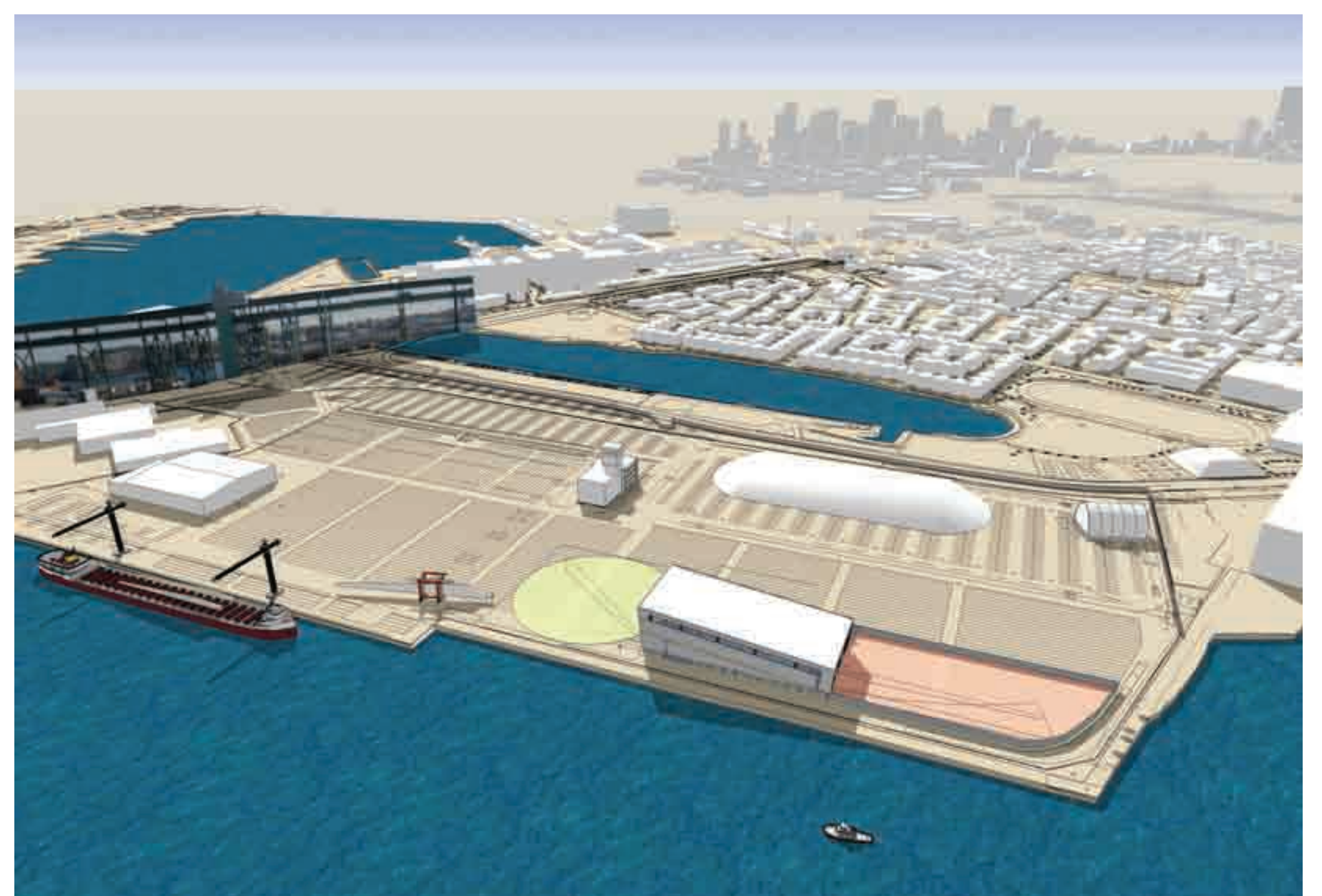
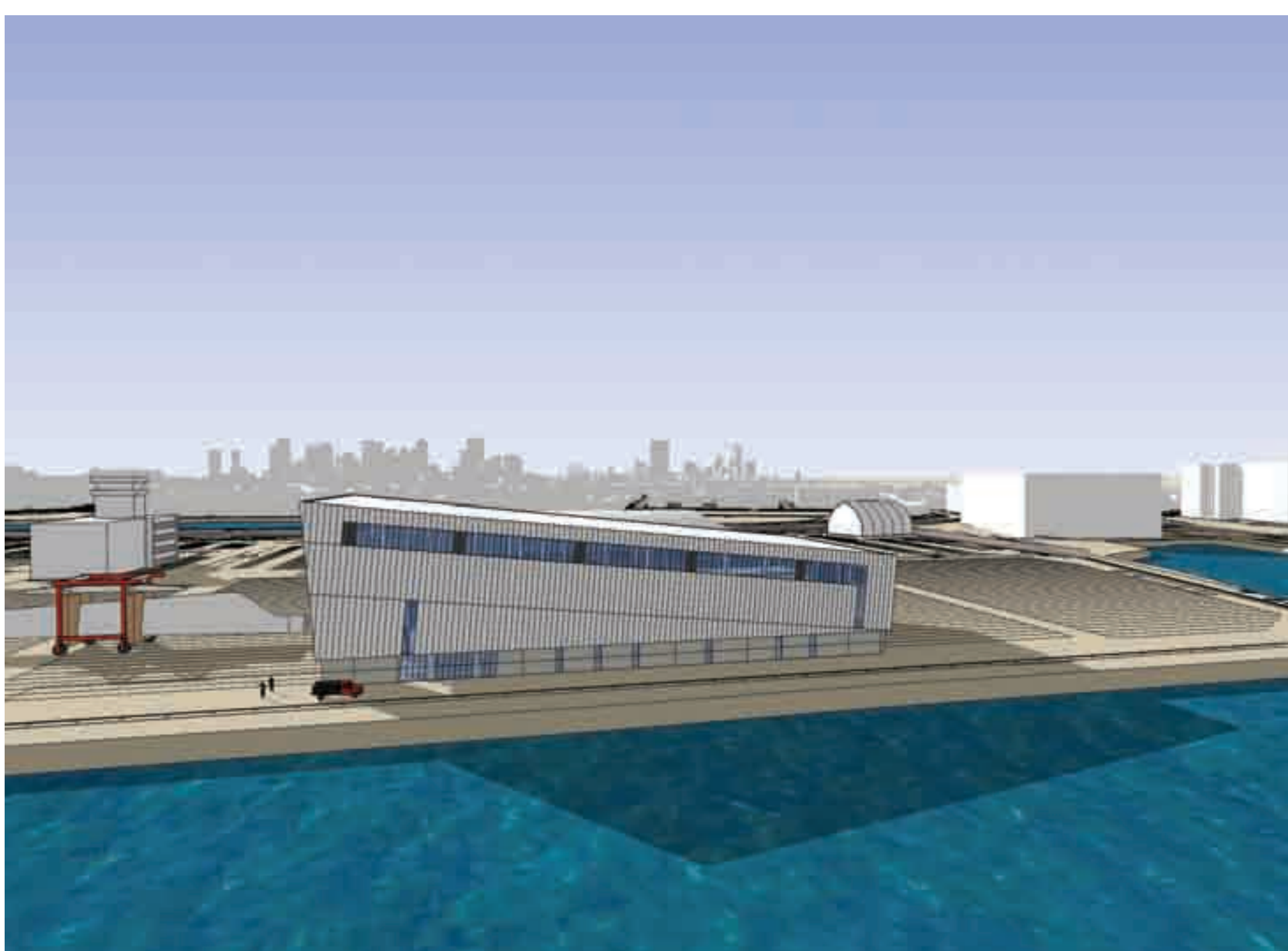


View from outside the large front door showing a horizontal static test

## Capabilities\*

- Two (provisions built-in for three) stands and 80 tons overhead bridge crane capacity
- Full suite of static and fatigue tests per IEC 61400-23 standard
- Blade material testing
- Dual axis static or fatigue testing
- Lightning protection testing
- R&D testing, quality testing, tooling inspection
- Prototype development and blade repair capabilities
- Research and development partnerships
- Hands-on workforce training
- Strong commitment to client intellectual property protection

\* Information subject to modification and refinements as facility design details are being finalized.



Test center site layout showing proximity to Boston and potential acreage for expansion