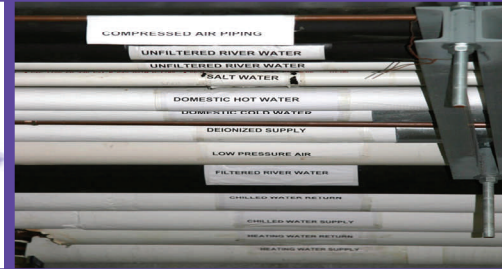


William & Mary Virginia Institute of Marine Science Gloucester Point, VA

Structural:

Live loads: 300 psf
Wind lateral loads: 23.8 psf
Foundation: shallow spread concrete footings
Steel structure with W-shape and Hollow Steel Section columns



Mechanical:

Outdoor Design Conditions Summer: 92 FDB 72 FWB
Winter: 14 FDB
One AHU supplying heating and cooling to office and dry lab
One AHU supplying heating and cooling to BSL 3 lab
Both AHU's supply 100% outdoor air
Ducted supply and exhaust
Cooling source is two 105 ton chillers
Heating source is two propane fired boilers supplying 1760 MBTUH each

Architecture:

Face brick facade
1 Story (31 ft.) tall
44580 sq. ft.
Flat 4-ply built-up roofing
Precast concrete parapet cap

Electrical:

Main Switchboard 2000 Amps
10 480Y/277 V 3 phase 4 wire panel boards
Nine dry type transformers serving the 208Y/120 V loads
Lighting load: 43 KVA
Receptacle loads: 129 KVA
HVAC loads: 959 KVA
Aquatic Equipment loads: 203 KVA
Lab Equipment loads: 89 KVA
Lighting is T-8 lamp fixtures with a minimum CRI of 75
Emergency 350kW diesel generator—480Y/277V

Construction Management:

Building Cost: \$6.5 million
All utilities existing except natural gas
Site demolition of four existing buildings
Delivery: Design-Bid-Build

Architects & Engineers

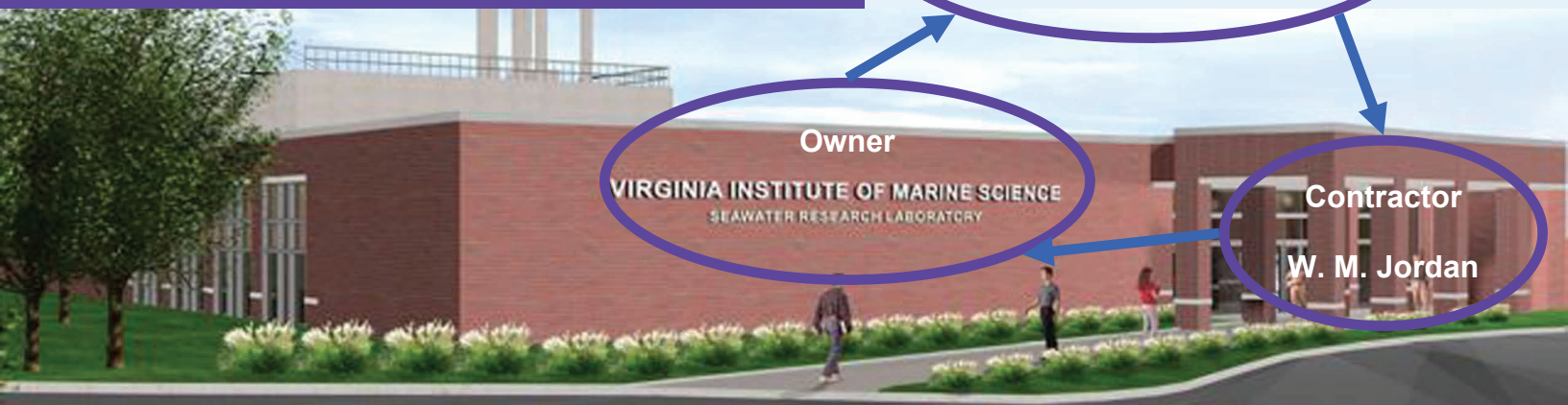
Clark Nexsen

Owner

VIRGINIA INSTITUTE OF MARINE SCIENCE
SEAWATER RESEARCH LABORATORY

Contractor

W. M. Jordan



Daniel DiCriscio
Mechanical

<http://www.arche.psu.edu/thesis/eportfolio/2007/portfolios/DSD149>

