



exploratorium



The LIGO Science Education Center

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LIGO-G050257-00-G



LIGO SEC Functions

To fulfill our vision, we need to provide dedicated physical space:

- Exhibit interaction & display
- Teacher and student-teacher hands-on training
- School group interactive visits
- General public & adult ed interactive visits
- Operations base & meeting center for this program and other community EPO activities
- LIGO science-inspired art exhibit and display



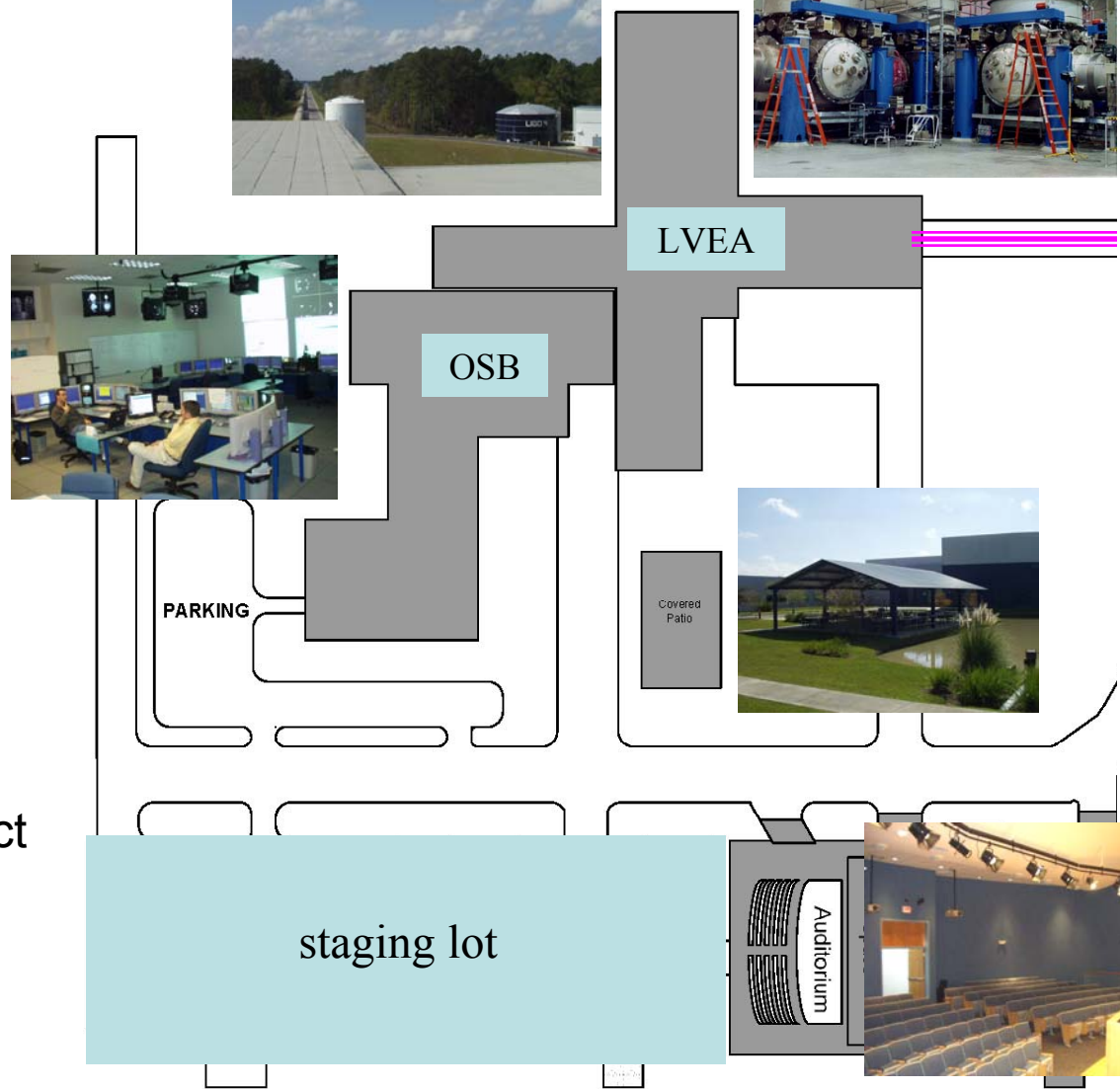
Constraints

- Physical footprint on existing land
- Cost: \$1,481k total (\$135k design)
- Interface and access to existing structure
- Compatibility with science operations
 - HEPI greatly improves immunity to vehicle traffic (e.g. large collaboration meeting was held at LLO during S4)



Site Plan

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Existing unpaved site adjacent to LLO conference facility

Erect new building with direct access to auditorium foyer



New spaces by function

- Exhibit hall
 - 3,050 ft² (approx. 50 exhibits at capacity)
 - Flexible utilities for new exhibits & arrangements
 - High ceilings, rollup forklift access
 - Space for BIG (immersive) exhibits
- Multipurpose Classroom
 - 860 ft² to seat 30+ in close workgroup configuration (4/table)
 - Higher capacity in “chalk & talk” setup (A/V provisions)
 - Provisions for hands-on demonstrations & activity development
- Reception lobby and information area
 - Bookshop
- Staff operations
 - Manager office
 - Staff/docent/trainee office



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Education Center Floorplan

Existing
auditorium

QuickTime™ and a
TIFF (LZW) decompressor
are needed to see this picture.



Sound Control





Sound Control





Lighting Control



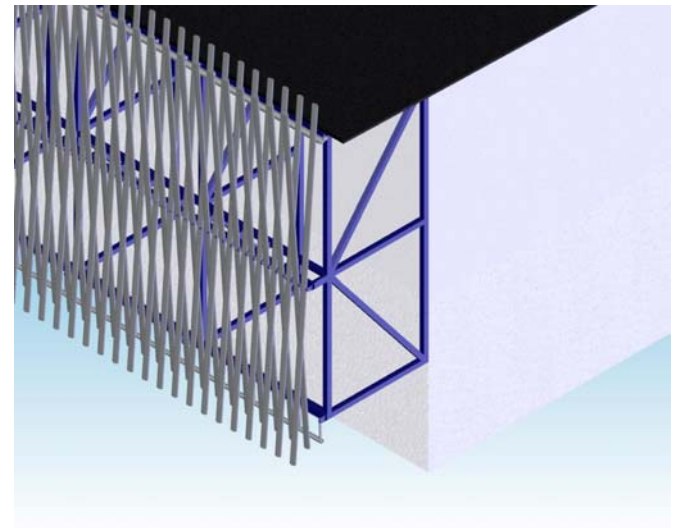
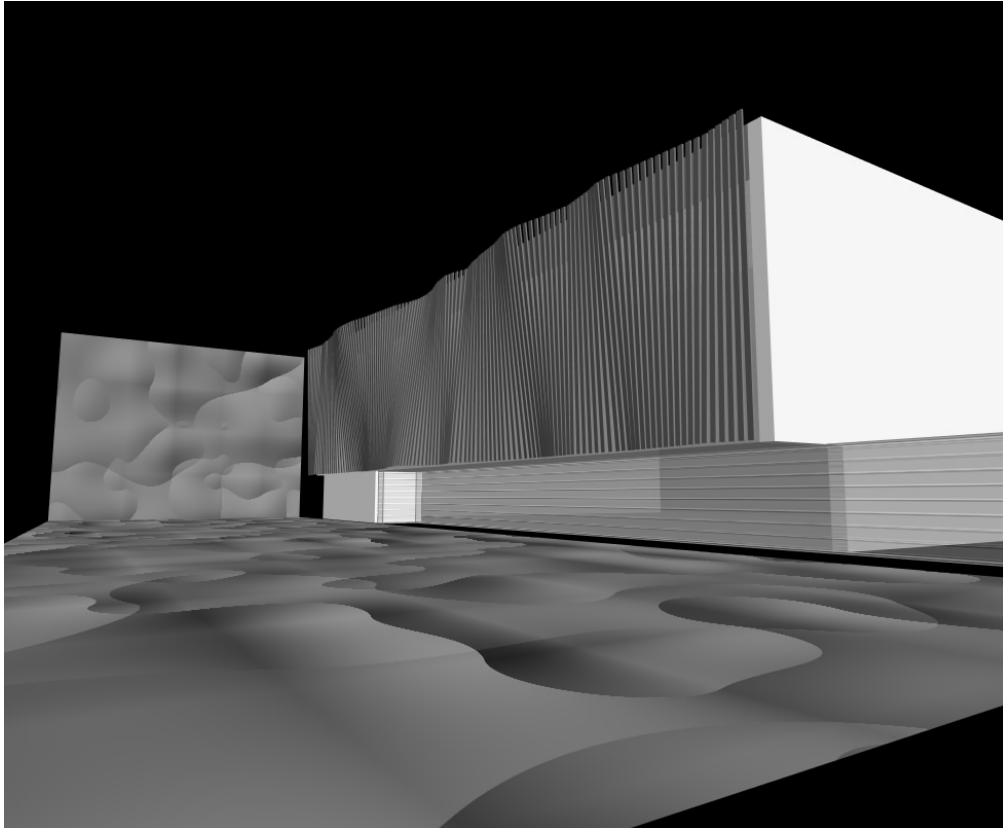


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Exterior Exhibit Concept

Kinetic wind-driven pendulum-wave sculpture covering South façade
135 magnetically-coupled 28' masts, pivoting near C.G.

Team design on a theme by explOratorium's Peter Richards and Thomas Humphries, inspired by LIGO physics





Pendulum test 3/26





SEC Construction Timeline

- 11/03 - Proposal Panel Review at NSF ✓
- 4/04 - NSF approves funding ✓
- 9/04 - Architects selected through two-phase competition ✓
 - Eskew + Dumez + Ripple (New Orleans, LA)
 - National firm with museum, nature center, education credits
- 4/05 - 50% Design Review ✓
- 6/05 - Final Design Review
- 8/05 - Construction Start
- 7/06 - Substantial Completion
- 8/06 - Exhibit Installation
- 9/06 - Public Opening!