

Lawrence Berkeley National Lab/  
UC Berkeley

HELI☀S

Energy Research Facility



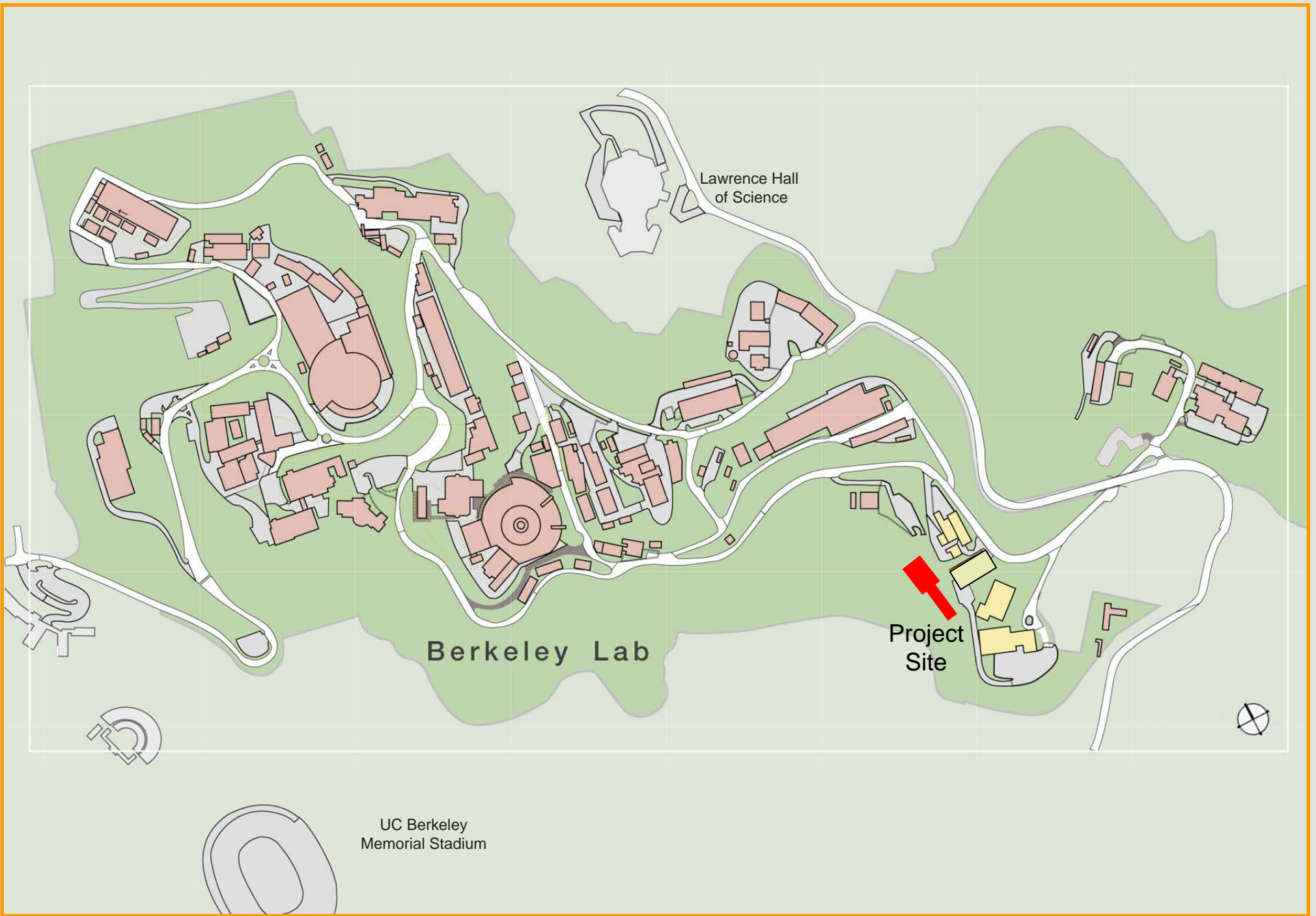
Committee on Grounds  
& Buildings  
May 13, 2008

## Helios Energy Research Facility

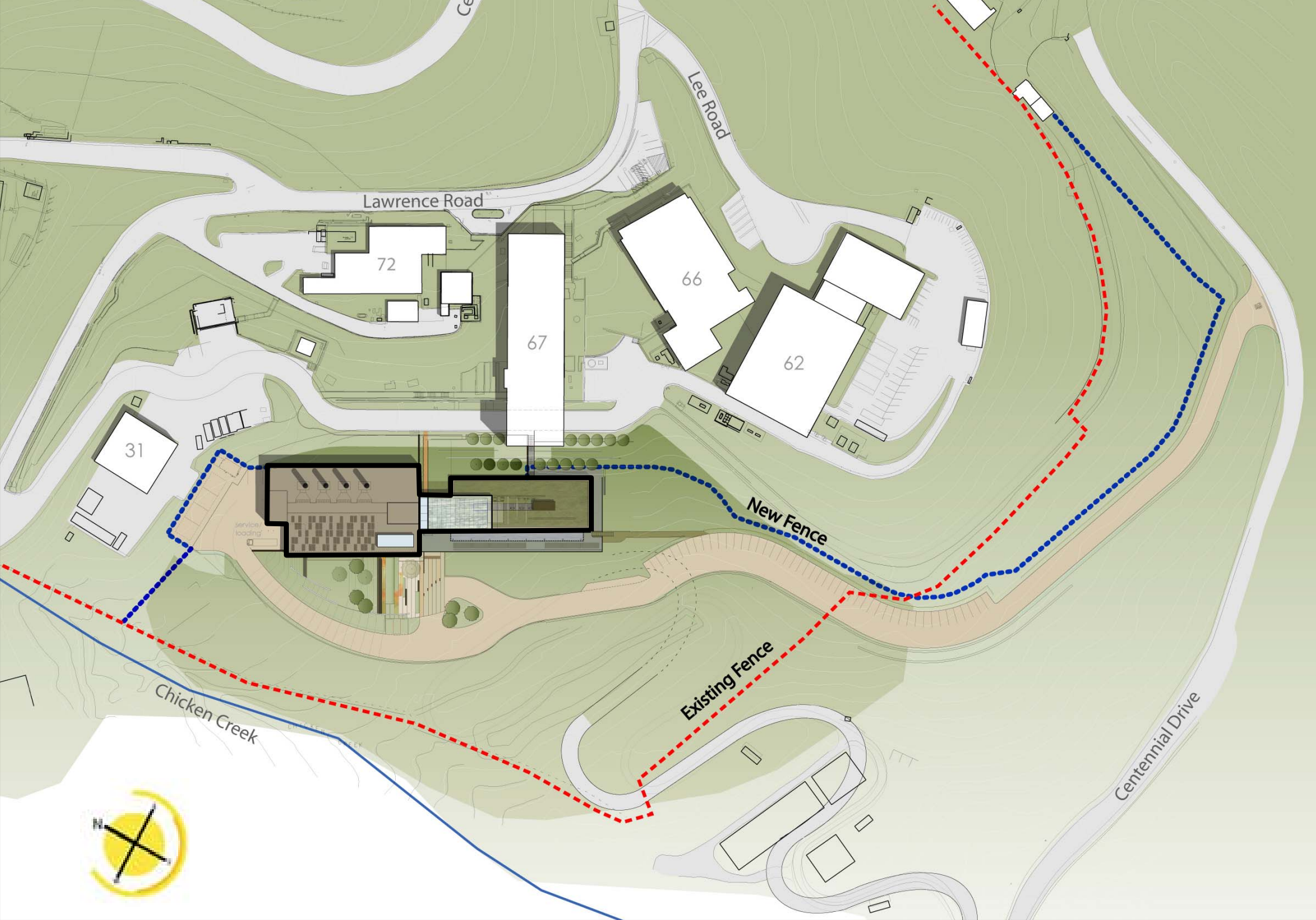
- 144,000 gsf/83,500 asf (0.58)
- Lab and office space for EBI and Nanostructures Programs
- Sustainable design – minimum LEED® Silver
- Proposed project budget: \$198,246,000
- Construction: July 2008 – Oct 2011
- Construction manager/General contractor delivery



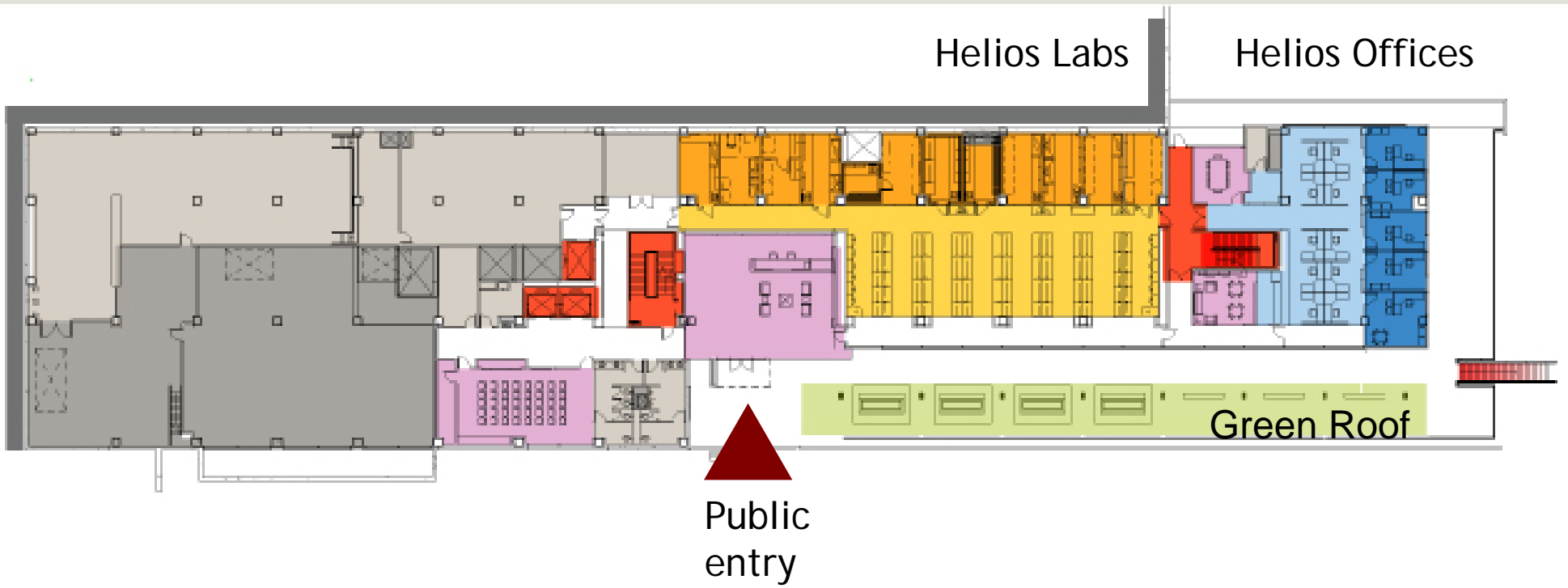
Helios Energy Research Facility: **Location Map**



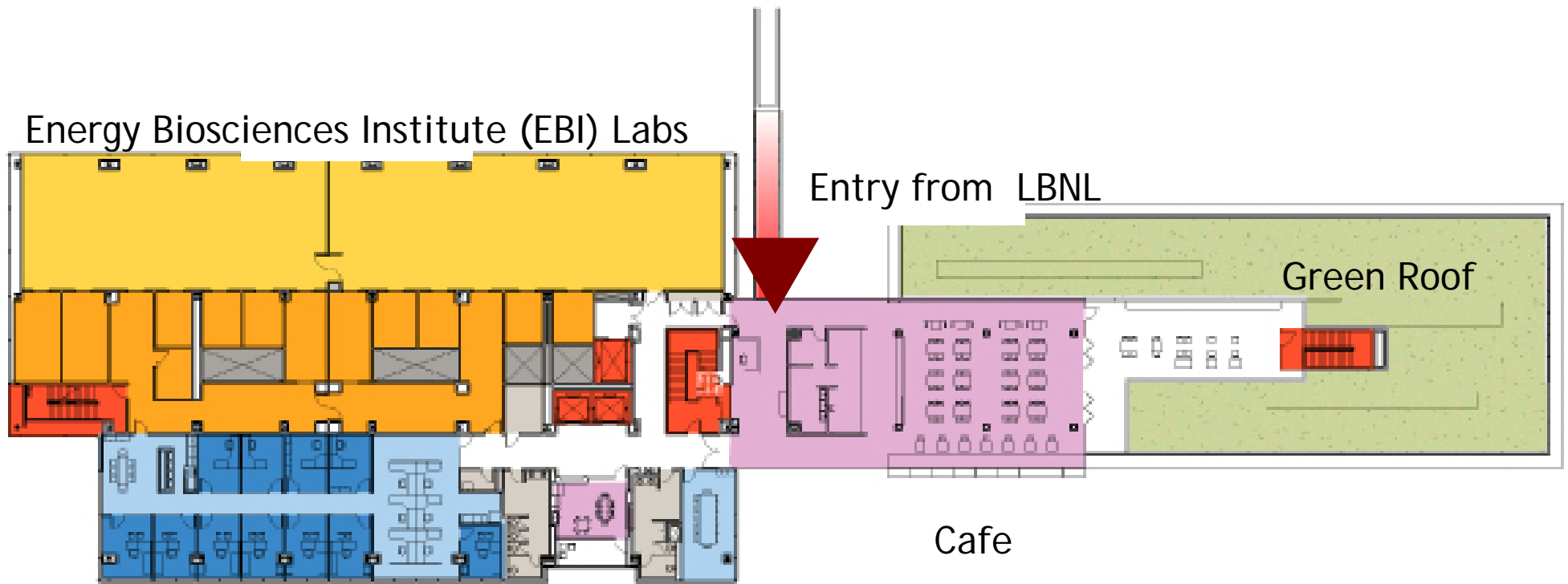
Helios Energy Research Facility: **Project Site**



Helios Energy Research Facility  
Berkeley and LBNL



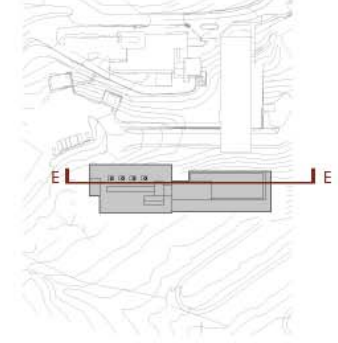
Plan - Level 1



EBI Offices



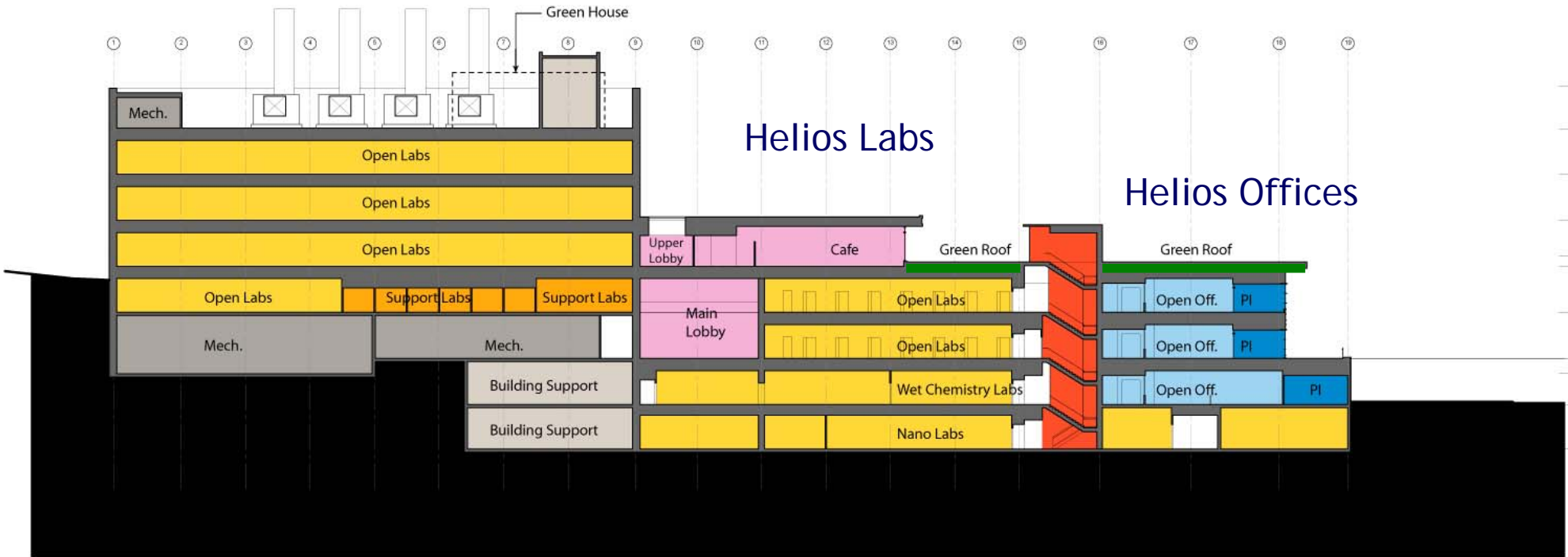
Plan - Level 3



## EBI Labs

## Helios Labs

## Helios Offices







Helios Energy Research Facility  
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Day lighting

Helios Energy Research Facility  
Berkeley and LBNL

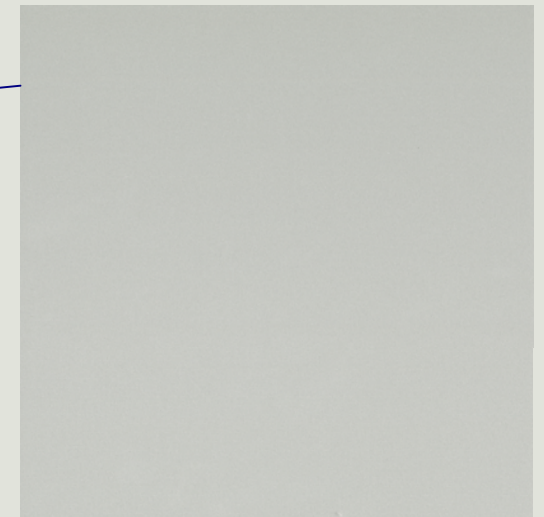


Metal panel



Accent Metal

Metal panel



Concrete,  
architectural finish

# Materials

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Berkeley and LBNL



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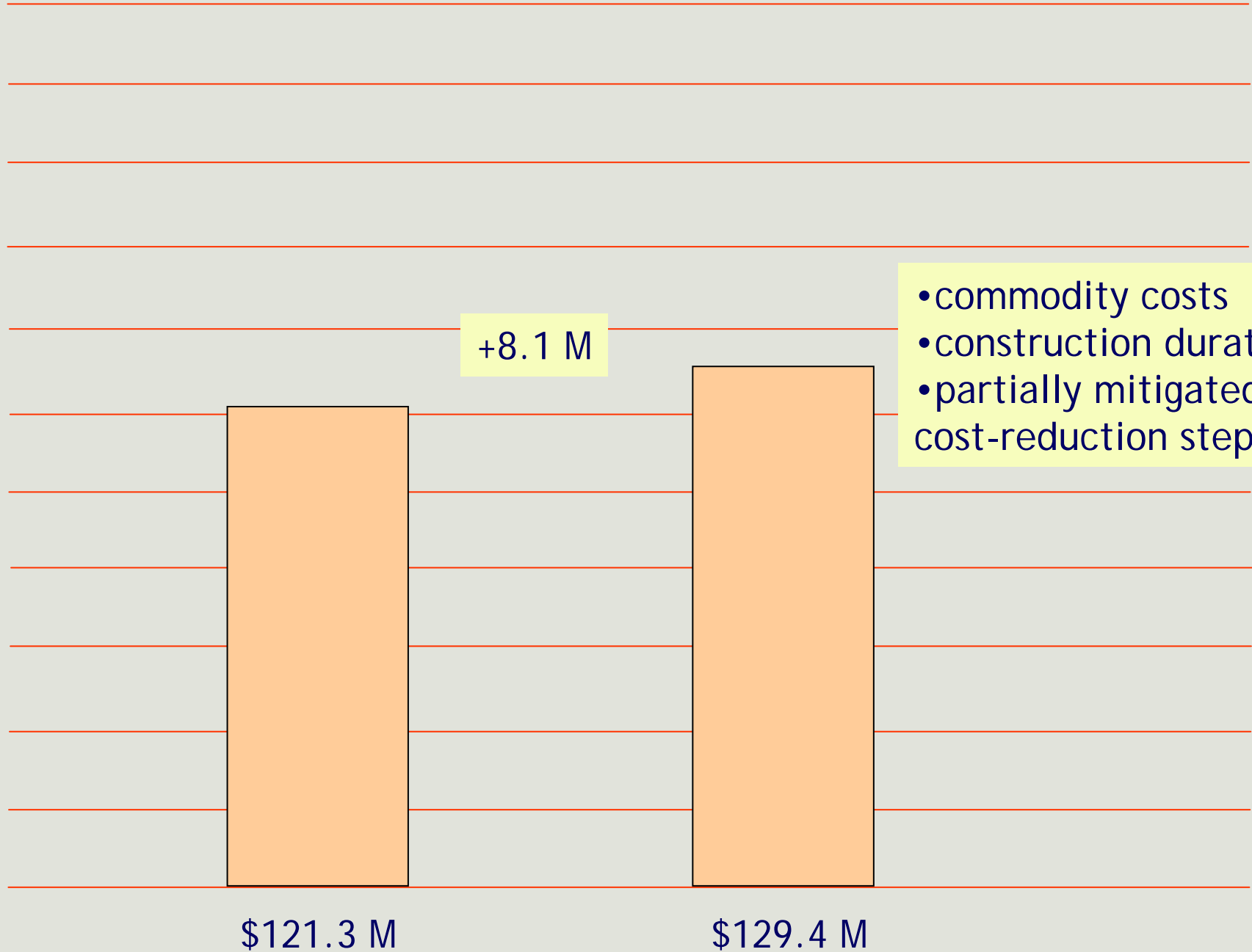


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# Sustainability

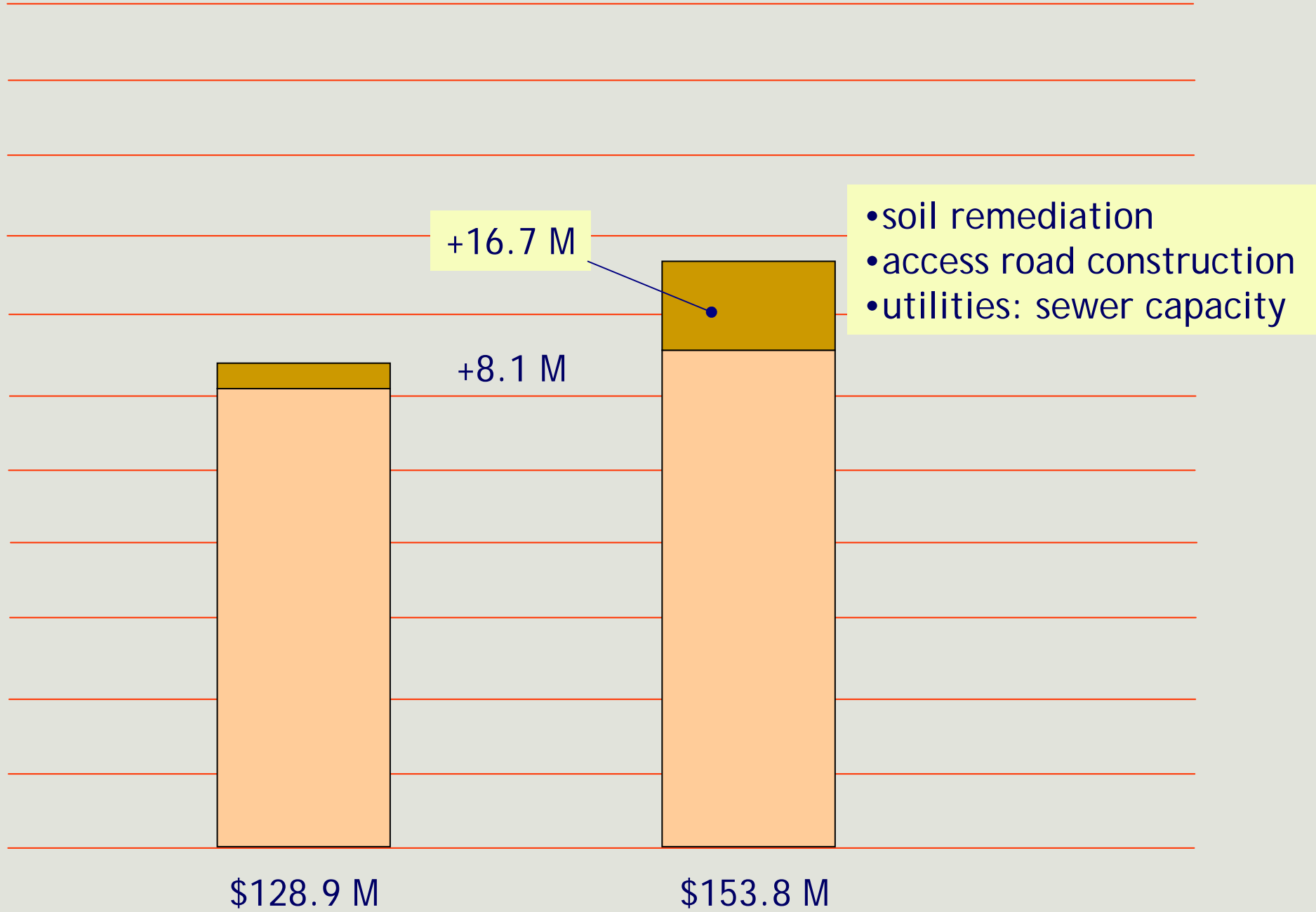
- LEED® Silver minimum
- Energy efficiency is key
  - At least 35% less energy than ASHREA 90.1
  - Leverage the Berkeley climate
  - System right-sizing
  - Day lighting and sun shading
  - Efficient lab equipment
  - Green roofs
- Sustainable operations
  - Recycling, transportation, water conservation

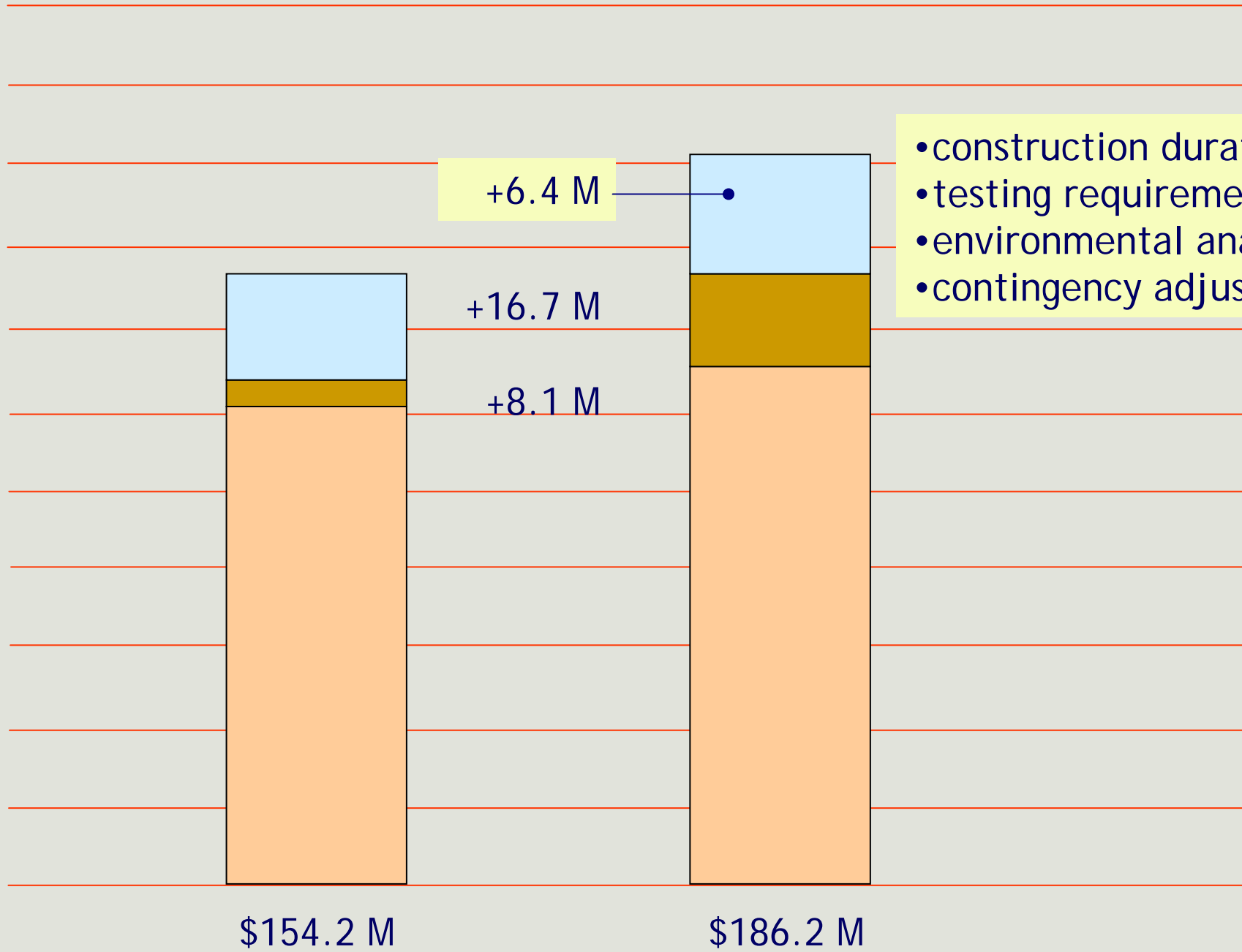
sub-1 building construction





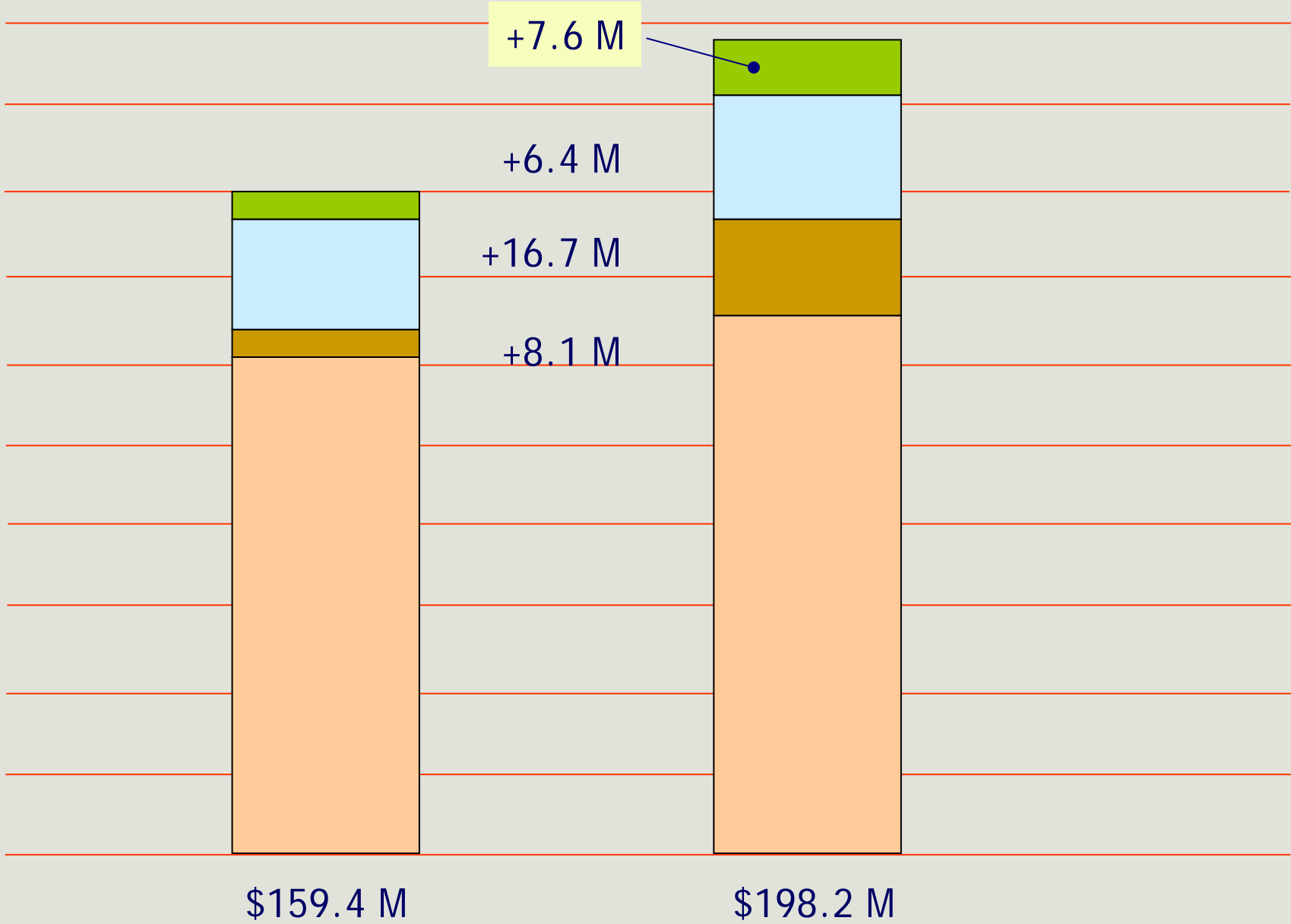
sub-0, 2, 4: site & utilities

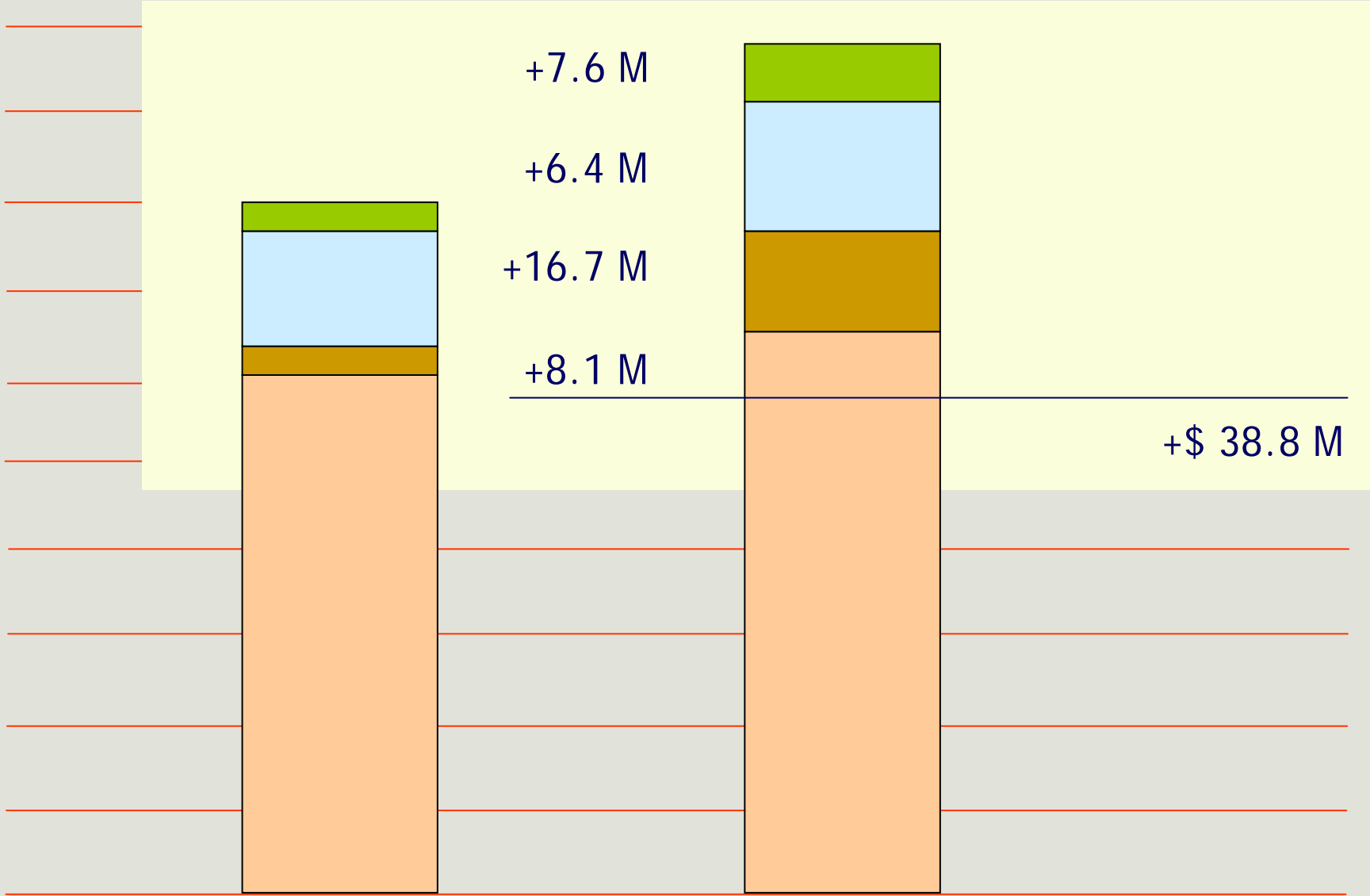




- construction duration
- testing requirements
- environmental analysis
- contingency adjustment

interest during construction







**Helios Energy Research Facility**  
Berkeley and LBNL

## Environmental Review

- Within Berkeley Lab's 1987 and 2006 LRDP
- Focused, stand alone EIR prepared
- Completed 74 day public review
- Consultation with City of Berkeley
- Received and responded to 32 comment letters
- Alternative road alignment to minimize tree removal
- Significant and unavoidable impacts in:
  - aesthetics
  - air quality
  - transportation