THE MISSION COLLEGE GILLMOR ACADEMIC CENTER:
TRANSFORMATIONAL CHANGE THROUGH
A SUSTAINABLE COMMITMENT

ARCHITECTURE  ENGINEERING  PLANNING  INTERIORS  SUSTAINABILITY  ACCESS COMPLIANCE
Mission College Existing Campus
The Gillmor Center
The Gillmor Center Exterior
The Gillmor Center Classroom
A Balanced Sustainable Approach
Sustainability Pyramid

- Solar
- Wind
- High Efficiency HVAC
- User Control / Operational Performance
- Daylighting and Energy Avoidance
- Building Orientation and Envelope Design
WHY GEOTHERMAL?

• Desire for an efficient, simple and user-controllable HVAC system.
• Availability of vertical and horizontal land for installation.
• Ideal soil conditions.
• Long-term cost savings: 20-30% electricity use reduction.
• Positive LEED Gold certification impacts.
How Does Geothermal Work?
Main Building Replacement Site Plan

Phase II

Gillmor Center

Geothermal System
Updated Mission College Master Plan: September 2013

Sequence I
INITIAL-TERM REPLACEMENT PROJECTS
1-A: U.S. Bldg
1-B: Hospitality Management Reconstruction
1-C: Childcare Facility
1-D: 2nd Floor Replacement Building (Wilbur Center)
1-E: Dedicated Civil Habitat
   Technology / Electrical Services / Storm Drainage / Sanitary Sewer System Upgrade / Fire Alarm / Security Systems Design / O&M HVAC Alternatives

Sequence II
NEAR-TERM REPLACEMENT PROJECTS
2-A: Facilities Building / Corporation Yard
2-B: Wellness Center
2-C: 1st/2nd Floor Replacement Building (Student Engagement Bldg) / Southeast Faculty Parking
2-D: Front Entry Redesign
2-E: Demolition of Existing Main Building / Main Plaza Rough Grade
2-F: MI Replacement Building / Southwest Parking
2-G: Main Plaza Landscape
   Pedestrian / Vegetation / Wayfinding Modifications (partial scope)
   Civil Mitigation / Leases Negotiations / DRR Impacts (partial scope)

Sequence III
CAMPUS COMPLETION PROJECTS
3-A: Performing Arts Building / South Parking
3-B: Technology Classroom Building
3-C: Soccer Field and Sheds
   Pedestrian / Vegetation / Wayfinding Modifications (partial scope)
   Civil Mitigation / Leases Negotiations / DRR Impacts (partial scope)

Community Partnership Opportunities
4-A: Mixed Use Development / Faculty Housing
4-B: Parking Garage / Retail Development

EXISTING BUILDINGS
1: Learning Resource Center
2: ART Building
3: Child Development Center
4: Campus Center
5: Hospitality Management
6: Science Building
7: Gym and Locker Building
Resulting Geothermal System
LESSONS LEARNED

• Up-front communication with all applicable agencies.

• Use a Mechanical Engineer with proven Geothermal System experience.

• Use a qualified Geothermal consultant

• Confirm site conditions with a minimum of four (4) test bores
LESSONS LEARNED

• Prequalify Geothermal contractors to assure capacity and ability to perform.

• Ensure scope of work is clearly defined in contract documents, as installation is typically done by specialty contractors.

• Importance of construction sequencing.
Mission College Main Building Replacement Phase 2
Mission College Main Building Replacement Phase 2 Exterior
Mission College Main Building Replacement Phase 2 Interior
Mission College Main Building Replacement Phase 2 Interior