Repairing an Icon: Atascadero City Hall
Atascadero, CA

Presentation by
Pfeiffer Partners Architects, Inc

March 12, 2009
2003 San Simeon Earthquake

- December 22, 2003
- Magnitude 6.5
- 29 Miles from Atascadero City Hall
What Happened? – Building Assessment: Significant Areas of Damage
Earthquake Induced Differential Settlement

Floor Slope
-7”± on Low Side
+0”± on High Side
Building Assessment: Interior Damage – Upper Rotunda

Atascadero City Hall
Atascadero, CA
Plaster Damage – More Than Meets the Eye
Building Assessment: Systems Damage

Atascadero City Hall
Atascadero, CA
What Does All This Mean & Who’s Paying For It?

**Funding Sources**

1. FEMA – Repair
2. FEMA – Hazard Mitigation
3. California Cultural Heritage Endowment (CCHE) Grant
4. Other (City, Donor, Etc.)
1. Remember…FEMA pays for the approved scope of work regardless of where the actual bids come in for repair work.

2. Cost estimates for repair work are to be taken with a grain of salt…it’s all about the approved scope of work!

3. Hazard Mitigation funds are capped, the project needs to have as much approved as “repair” rather than “hazard mitigation”.
FEMA Funded: Upper Rotunda Reconstruction & Repairs (Partial Funding)
FEMA Funded: Upper Rotunda Reconstruction (Partial Funding)

Step 1: Deconstruct
- Remove & Salvage all Materials (Down to Structural Members)
- Number all Items for Reinstallation
- Store in Secure Location

Step 2: Repair Structure
- Add Structural Steel
- Rebuild Masonry Walls with Fiber Reinforced Polymer Backing
- Add Roof Diaphragm(s)

Step 3: Rebuild
- Recreate Interior Finishes (Plaster, Interior Dome, Mezzanine)
- Reroof
  (Use Original Salvaged Materials)

Overall Goal:
Make Building Appear as Though Nothing Ever happened…
FEMA Funded: Interior Damage – Upper Rotunda
FEMA Funded: Interior Finishes (Repair & Hazard Mitigation)
FEMA Funded: Building Base Repairs (Partial Funding)
**FEMA Funded: Building Base (Repair & Hazard Mitigation)**

**Step 1: Remove Interior Finishes as Needed**
- Strip Interior of Exterior Walls to Exposed Masonry
- Remove Finishes Within 4’ of Exterior Walls
- Remove all Damaged & Delaminated Plaster

**Step 2: Repair Structure**
- Add Shotcrete to Inside Face of Perimeter Walls
- Connect Shotcrete Walls at all Levels to Create 4 Story Wall

**Step 3: Repair**
- Recreate Interior Finishes (Plaster, Flooring, Ceilings)

**Overall Goal:**
Make Building Appear as Though Nothing Ever Happened…
FEMA Non-Responsive: Mold & Pigeon Guano Abatement

Atascadero City Hall
Atascadero, CA
FEMA - Denied

Settlement

HVAC

Code Upgrades

Atascadero City Hall
Atascadero, CA
### Construction Costs

<table>
<thead>
<tr>
<th>Item</th>
<th>Best Case</th>
<th>Alternate Case</th>
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<tbody>
<tr>
<td>Repairs &amp; Code Upgrade</td>
<td>$20,920,000</td>
<td>$20,920,000</td>
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<tr>
<td>Building Safety Improvements</td>
<td>1,700,000</td>
<td>1,700,000</td>
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<tr>
<td>Deferred Maintenance</td>
<td>3,300,000*</td>
<td>0*</td>
</tr>
<tr>
<td>Historical Restoration</td>
<td>600,000*</td>
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<tr>
<td>Project Costs</td>
<td>6,630,000</td>
<td>5,655,000</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$33,150,000</strong></td>
<td><strong>$28,275,000</strong></td>
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(*) = Contains optional scope, not required

### Funding

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<tr>
<td>FEMA</td>
<td>$16,000,000</td>
<td>$16,000,000</td>
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<tr>
<td>CCHE</td>
<td>2,000,000</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$18,000,000</strong></td>
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### Appeal

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<td>$11,700,000</td>
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**Total Funded**

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<th>Amount</th>
<th>Best Case</th>
<th>Alternate Case</th>
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<tbody>
<tr>
<td><strong>$29,700,000</strong></td>
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**Shortfall**

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<th>Alternate Case</th>
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<tbody>
<tr>
<td><strong>$3,450,000</strong></td>
<td><strong>$10,275,000</strong></td>
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### Project Methodology

#### Step 1: Building Investigation & Damage Assessment
- Exterior Envelope
- Structural
- Architectural Impacts of all of the Above

#### Step 2: Schematic Design (3 Months)
- Additional Building Investigation
- Preliminary Drawings and Outline Specifications
- Test Options Based on FEMA Funding

#### Step 3: Design Development (5 Months)
- Preliminary Detail Drawings & Specifications
- Additional Documentation – Interior Elevations, etc.
- Ongoing Infrastructure Coordination/Architectural Impacts

#### Step 4: Construction Documents (7 Months)
- Details, Details, Details
- Early Demolition Review

#### Step 5: Bid/Permit (Up to 3 Months)

#### Step 6: Construction Administration (18 Months)
- Site Visits & Daily Communication with Contractor
The Inevitable Question: Why Not Tear it Down & Rebuild?
1977 - Building Placed on National Register of Historic Places (#77000336)

National Park Service
U.S. Department of the Interior

History & Culture

Laws, Executive Orders & Regulations

The laws and regulations that govern the preservation of the nation's cultural heritage developed over the course of the 20th century, beginning with the protection of cultural sites on federal lands. Today, many aspects of the nation's cultural heritage are recognized, protected, and interpreted in national parks, other public lands, and in communities. Many of these laws are broadly applicable – the Antiquities Act and the National Historic Preservation Act – while others are specific to particular lands or resource types.
1984 - California Registered Historical Landmark #958

Any modification to the building falls under the California Environmental Quality Act (CEQA) and is required to be reviewed by the State Office of Historic Preservation (SHPO).
CEQA Chapter 2.6: General

§ 21080. Division application to discretionary projects; nonapplication; negative declarations; environmental impact report preparation:

(a) Except as otherwise provided in this division, this division shall apply to discretionary projects proposed to be carried out or approved by public agencies, including, but not limited to, the enactment and amendment of zoning ordinances, the issuance of zoning variances, the issuance of conditional use permits, and the approval of tentative subdivision maps unless the project is exempt from this division.

(b) This division does not apply to any of the following activities:

(1) Ministerial projects proposed to be carried out or approved by public agencies.
(2) Emergency repairs to public service facilities necessary to maintain service.
(3) Projects undertaken, carried out, or approved by a public agency to maintain, repair, restore, demolish, or replace property or facilities damaged or destroyed as a result of a disaster in a disaster-stricken area in which a state of emergency has been proclaimed by the Governor pursuant to Chapter 7 (commencing with Section 8550) of Division 1 of Title 2 of the Government Code.
Programmatic Historic Preservation Agreement for California:

The Programmatic Agreement between FEMA, the California State Historic Preservation Office (SHPO), the California Governor's Office of Emergency Services, and the Advisory Council on Historic Preservation (ACHP) helps expedite the review of projects proposed for FEMA funding that could affect historic properties, such as those involving the repair, restoration and replacement of public infrastructure.

Historical Resources and Natural Disasters

Section 5028 provides that no structure listed in the National Register of Historic Places, the California Register, or a local register that has been damaged as a result of a natural disaster is to be demolished, destroyed, or significantly altered (except for alterations to preserve or enhance historic value) unless:

(1) the structure represents "an imminent threat to the public of bodily harm or of damage to adjacent property," or (2) the action is approved by the SHPO. That section further establishes the procedure for review of proposed actions by the SHPO.

In the wake of an earthquake, flood, fire, or other natural disaster the local agency may only demolish or destroy those structures which are an "imminent threat." In all other cases, the local agency must notify and consult with SHPO immediately if there are damaged historical resources which may require demolition, destruction, or significant alterations.
Goal

Restore the Building to December 22, 2003

Make it Appear as Though Nothing Ever Happened...