Cedar Rapids, Iowa
Flood Risk Management Project

Public Open House

Schedule of Events

12:00 – 1:00  Formal Presentation

1:00 – 2:00  Open House – Breakout time for individual alignment viewing and questions

City of Cedar Rapids
16 November 2011
US Army Corps of Engineers
Presentation Outline

- Purpose of Public Open House
- Project Status and Schedule Update
- Project Alignment
- Removable Flood Wall Options
- Closure Structures
- Models of Options
### Funding - Pre-construction Engineering and Design (PED)

<table>
<thead>
<tr>
<th></th>
<th>Total Need (DEC 2010 $$)</th>
<th>In hand</th>
<th>Obligated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fed Cash</td>
<td>$ 9,281,250</td>
<td>$ 2,820,000</td>
<td>$ 1,978,433</td>
</tr>
<tr>
<td>Non-Fed Cash</td>
<td>$ 3,093,750</td>
<td>$ 857,333</td>
<td>-</td>
</tr>
<tr>
<td>Project Total</td>
<td>$ 12,375,000</td>
<td>$ 3,677,333</td>
<td>$ 1,978,433</td>
</tr>
</tbody>
</table>

What does this mean for FY 2012?
## Total Project Estimate
(2010 Feasibility Report Price Level)

<table>
<thead>
<tr>
<th>Item</th>
<th>Total Costs($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relocations</td>
<td>12,080,000</td>
</tr>
<tr>
<td>Levees &amp; Floodwalls</td>
<td>53,939,000</td>
</tr>
<tr>
<td>Pumping Plant</td>
<td>2,722,000</td>
</tr>
<tr>
<td><strong>Construction Estimate</strong></td>
<td>68,741,000</td>
</tr>
<tr>
<td>Lands and Damages</td>
<td>11,700,000</td>
</tr>
<tr>
<td>Cultural Resources Preservation</td>
<td>687,000</td>
</tr>
<tr>
<td>Pre-Construction Engineering &amp; Design</td>
<td>12,375,000</td>
</tr>
<tr>
<td>Construction Management</td>
<td>5,500,000</td>
</tr>
<tr>
<td><strong>Project Cost Totals:</strong></td>
<td>99,004,000</td>
</tr>
</tbody>
</table>
## Project Construction Funding

After authorized and funded, the Corps Plan would be eligible for Federal cost-share participation:

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Federal share</td>
<td>(65%)</td>
<td>$64,353,000</td>
</tr>
<tr>
<td>Estimated Non-Federal/City share</td>
<td>(35%)</td>
<td>$34,651,000</td>
</tr>
<tr>
<td>Total Project Estimated Cost</td>
<td>(100%)</td>
<td>$99,004,000</td>
</tr>
</tbody>
</table>

Estimated increase in annual O&M costs: $18,000
### Project Schedule

- **Dec 2010**
  - Design Agreement

- **Jan 2011**
  - Pre-construction Engineering & Design (PED)

- **Jan 2011**
  - Final Chief’s Report

- **Jun 2011**
  - Chief's Report submitted to Congress

- **2011**
  - TBD

- **TOA***

- **TOA+1**

- **TOA+2**

- **TOA+3**

- **Jan 2011**
  - Congressional Authorization & Appropriation, Execute PPA

- **Contracting**
  - Award Contract

- **Construction**

* TOA = Time of Authorization for Construction
Short-Term Schedule

- November 2011 – Public Open House
- December 2011 – City Council review and approval of the 4C alignment
- March 2012 – 35% Agency Technical Review
Design Reaches
Removable Flood Walls

• Feasibility study estimate based on full height concrete flood walls

• Vision is to have removable flood walls throughout the downtown, project Reach 2

• Operational considerations and risks
Removable Floodwall – East Grand Forks, ND
Bulkhead & Column Installation
Schwiebert Park
Rock Island, IL
Folding Flood Wall
Bettendorf, IA
Folding Floodwall – Typical Sections
Double Swing Gate
Removable Flood Panel Closure
U.S. Army Corps of Engineers, Rock Island District
Project Points of Contact

Project Manager - Tom Heinold, (309) 794-5203
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Public Affairs - Ron Fournier, (309) 794-5274
Ronald.F.Fournier@usace.army.mil

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Schwiebert Park Bulkheads & Columns – Larry Sandhaas, Stanley Consultants
DEMFOOD by BAURER – IBS Demountable Flood Defense System
Bettendorf Folding Flood Wall – City of Bettendorf, Iowa