Interlake Tunnel and Spillway Modification Projects

April 16, 2015

Pre-proposal Meeting
Agenda

• Welcome / Introductions
• Pre-proposal meeting instructions
• Project Information
  – Tunnel Project Introduction
  – Spillway Modification Introduction
  – Reservoir simulation modeling results
  – Project schedule
  – Capital cost budget
Agenda (cont.)

• RFP Requirements
• Selection Criteria
• Sample Contract Agreement
  – Compensation and payments
• RFP 10531 Preliminary Engineering Scope of Work
• RFP 10532 Environmental Compliance Scope of Work
• Exhibit B – Technical References
• Questions and Answers
PROJECT BACKGROUND, DESCRIPTION AND FUNCTION
Bob Antle

- Project champion
- Representing agriculture in Salinas Valley
- Desired tunnel to be built:
  - As fast
  - As inexpensive
  - As soon as possible
- Sought alternative means to conventional public project process.

Project team is honoring Bob’s legacy.
Existing Surface Water Supply for Salinas Valley properties

2 reservoirs, Salinas River, and Salinas River Diversion Facility

<table>
<thead>
<tr>
<th>Description</th>
<th>Average Annual Amounts (AFY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average annual controlled release from reservoirs (baseline)</td>
<td>200,000</td>
</tr>
<tr>
<td>Less Evapotranspiration &amp; Conveyance losses</td>
<td>-40,000</td>
</tr>
<tr>
<td>SRDF deliveries</td>
<td>-6,000</td>
</tr>
<tr>
<td>Ground water recharge</td>
<td>154,000</td>
</tr>
</tbody>
</table>

Provides flood control, minimum flows, and conservation releases
Tunnel has 37 year history from 1978

Report on waste spurs action on dam tunnel

About 126,000 acre-feet of water was wasted in required releases from Nacimiento Dam this year, much of which could have been saved with a water tunnel from Nacimiento to San Antonio Lake.

That revelation, made to the Salinas Valley Water Advisory Commission Monday night, played a part in the commission's decision to recommend continued study of a tunnel-power project at the lakes.

The commission also voted to recommend hiring a financial consultant to study whether it would pay to build the project with county resources rather than rely on financing by a power company.

Loran Bunte Jr., district engineer, said a tunnel would help protect the lakes from siltation.

But Willer said it might pay the district to finance the construction locally because of the expected dramatic rise in the price of power in the next 30 years.

With financing by a power buyer, the price would be frozen during that period, Willer said. But if the district finances it, the price could be raised, yielding dramatic increases in revenue.

Willer said the prevailing price of power is 2.7 cents per kilowatt-hour today, but is expected to rise to 10 cents by the year 2000 and 15 cents by 2010.

That would mean that the county could get $700,000 a year for its power in the first 10 years, $1.3 million a year for

Nacimiento Lake's capacity is 350,000 acre-feet, but the top 150,000 acre-feet is set aside for flood control, requiring releases when the level goes above 200,000 acre-feet during flood season.

Bunte said that 50,000 acre-feet could have been saved by releasing it into San Antonio with a gravity flow nine-foot diameter tunnel.
1991 Analysis
1991 tunnel studies
Reservoirs Features

Nacimiento fills 3X faster than San Antonio

<table>
<thead>
<tr>
<th>Item</th>
<th>Nacimiento Reservoir</th>
<th>San Antonio Reservoir</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watershed Area (square miles)</td>
<td>322</td>
<td>353</td>
</tr>
<tr>
<td>Normal Maximum Storage (acre-feet)</td>
<td>377,900</td>
<td>335,000</td>
</tr>
<tr>
<td>Spillway</td>
<td>Overflow Weir and Chute, Obermeyer Gate Control</td>
<td>Fixed Crest Overflow Weir and Chute</td>
</tr>
<tr>
<td>Spillway Crest Elevation (ft)</td>
<td>800.00 Gate “closed” 787.75 Gate “opened”</td>
<td>780.00</td>
</tr>
</tbody>
</table>
Ratio of Calculated Annual Inflow - Nacimiento over San Antonio
(Water Years 1967-2013)

Inflow ratios from WY 1977 and WY 1990 were omitted from the average ratio as outliers due to inconsistency with the long term trend. WY 1977 and WY 1990 were the lowest inflow years on record at San Antonio and do not represent typical inflow ratios.
Current Situation at Reservoirs

- Nacimiento fills 3x faster than San Antonio
- San Antonio has unused storage
- Excess water spilled to ocean
Tunnel Project Fundamentals

Increases net storage of reservoirs
provides flood control and reduces flood spills
Water supply sustainability

Release water at opportune timing to:
1) Recharge groundwater aquifers
2) Supply suite of future projects
3) Augment deliveries to SRDF

Additional water available for:
- Supply to future projects
- Recharge groundwater
Interlake Tunnel

- Monterey County
- San Luis Obispo County
- Lake San Antonio
- Lake Nacimiento
- Proposed tunnel alignment
  - ~12,000 feet
  - 10’ diameter
  - Concrete lined
  - Gravity flow tunnel
Portals and Tunnel Profile
(Conceptual)

Ground surface

600'

Tunnel

Nacimiento portal

Portal Invert Elevation (~745’)
Spillway elevation ~ 800’

San Antonio portal

Portal Invert Elevation (~695’)
Spillway elevation ~ 780’
Sample geologic profile

Upper Cretaceous and lower Tertiary Rocks – Monterey Formation
Nacimiento proposed intake

- Proposed Site for Nacimiento Intake Facility
- North Shore Access Ramp & Parking
- Nacimiento Water Project Intake Facility
- Dam
- Spillway
- Road G14

Nacimiento Lake
Nacimiento intake structure concept
San Antonio Hydraulic Structures

- Proposed San Antonio Energy Dissipator
- Proposed San Antonio Outlet Valve Facility
- San Antonio Lake
- Dam
- Spillway
San Antonio outlet concept
Conceptual design criteria

- Technical Life of Tunnel > 100 years
- Length ~ 12,000 ft
- Diameter – 10’ ID
- Slope: 0.004 ft/ft
- Friction Loss Function: Darcy-Weisbach
  – Concrete lined
- Gravity full-flow pipe with a 15’ minimum head at Nacimiento.
Tunnel concept

Nacimiento Reservoir

Tunnel

San Antonio Reservoir

Nacimiento Intake Structure

San Antonio Valve Facility

San Antonio Energy Dissipator

12,000’

10’

Tunnel maximum flow capacity ~ 1,700 CFS
Hydraulics Operation Concepts

• Invert elevation: 745.0 ft
  – Selected as potential “sweet spot” to optimize water transfer.

• Preliminary Engineer to perform detailed water surface profile (HGL) computation to verify hydraulics, slopes and elevations
Hydraulics Operation Concepts

• Flow Control: downstream control allows tunnel to flow full

Concept is downstream spherical valve
Tunnel rating curve

Tunnel Rating Curve: D = 10. ft, L = 11,605 ft, w/s InVEl = 745.00 d/s InVEl = 698.58 Slope = 0.00400 ft/ft

OCF = Open Channel Flow
HWEL = Headwater Elevation (Nacimiento)
WSEL = Water Surface Elevation
TWEL = Tailwater Elevation (San Antonio)

Technical Memorandum HC.02, REV00 (DRAFT)
Figure 13. Revised Interlake Tunnel Rating Curve

Tunnel Hydraulics and Rating Curve Analysis - REV02
FEASIBILITY AND HYDRAULIC MODELING
Hydrologic model fundamentals

Water rights limitations:
• Each reservoir is operated within its water rights.
• Nacimiento has 17,500 afy consumptive demands

Water supply requirements:
• Minimum Flow Requirements are met from each reservoir.
• Reservoir Balancing to meet Salinas River Diversion Facility (SRDF) demands is achieved through:
  • releases from Nacimiento up to capacity of hydroelectric plant
  • remaining releases, if required, are made from San Antonio Reservoir.
• Block flows are released when called for per SVWP
Hydrologic model fundamentals

Each reservoir is operated within its water rights. Water rights limitations and water supply requirements are met.

Reservoir Balancing to meet Salinas River Diversion Facility (SRDF) demands:

1. releases from Nacimiento up to capacity of hydroelectric plant
2. remaining releases, if required, are made from San Antonio Reservoir.

17,500 afy consumptive demands Minimum flow requirements met from each reservoir
Proposed tunnel operating concepts

• Operate on head relationships between inflow and outflow in a pressure flow mode.

• Water conveyance through the tunnel when the Nacimiento surface water elevation is above 760 feet during flood events.

• No water conveyance through the tunnel when San Antonio is spilling.
Hydrologic Modeling

OASIS Computer Operational Simulation Model Schematic
Combined Nacimiento and San Antonio Inflow by Water Year Type
(Water Years 1967 - 2013)

- Wet: 15
- Normal: 19
- Dry: 13

Count of Water Year Types

Water Year 1967 - 2013

Combined inflow (acre-feet)
Tunnel Transfers Storage from Nacimiento to San Antonio

Without tunnel, spill occurs at Nacimiento

Nacimiento capacity

San Antonio capacity

Nacimiento lake elevation

~ 795

795

~ 786

786

~ 775

775

~ 764

764

~ 750

750

~ 733

733

~ 710

710

0

50000

100000

150000

200000

250000

300000

350000

400000

Nacimiento

Nacimiento with tunnel

San Antonio

San Antonio with tunnel

10/1/95
11/1/95
12/1/95
1/1/96
2/1/96
3/1/96
4/1/96
5/1/96
6/1/96
7/1/96
8/1/96
9/1/96
10/1/96

Storage (Acre Feet)
Hydrograph Explanation
Flow/Storage Over Time

Nacimiento maximum capacity (AF)

Volume of storage in Nacimiento (AF)

Release of water from Nacimiento (AF)

Flow, cfs

Storage, Acre-Feet


Nacimiento Hydro Release  Nacimiento Storage  Nacimiento Max Storage  ~ Nacimiento lake elevation

795 786 775 764 750 733 710
Hydrograph Explanation
Flow/Storage Over Time

San Antonio maximum capacity (AF)

Volume of storage in San Antonio (AF)

Release of water from San Antonio (AF)
Hydrograph Explanation
Combined Flow/Storage Over Time

- Nacimiento maximum capacity (AF)
- San Antonio maximum capacity (AF)
- Volume of storage in Nacimiento (AF)
- Volume of storage in San Antonio (AF)
- Release of water from Nacimiento (AF)
- Release of water from San Antonio (AF)
- Total volume of released water

Graph showing flow rates, storage volumes, and releases over time.
2011 – Baseline Operations

Baseline Operations – 2011

Nacimiento spills

Nacimiento lake elevation

Flow, cfs

Storage, Acre-Feet

Graph showing flow and storage data for 2011, with specific emphasis on Nacimiento spills and lake elevation.
2011 – Tunnel Operations

Tunnel transfers water to San Antonio

Baseline Operations with Tunnel – 2011

Project Operations - 2011

Nacimiento lake elevation
Flood Control Benefit

<table>
<thead>
<tr>
<th>Flood Spills</th>
<th>Number of years flood spill occurs</th>
<th>Average flood volume (AFY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>15</td>
<td>42,000</td>
</tr>
<tr>
<td>Tunnel</td>
<td>6</td>
<td>25,000</td>
</tr>
<tr>
<td>Tunnel &amp; SA Raise</td>
<td>5</td>
<td>20,000</td>
</tr>
</tbody>
</table>

60% reduction 40% reduction

67% reduction 52% reduction
Additional Storage Opportunity

Opportunity to increase storage capacity in San Antonio reservoir 59,000 acre feet (18%)
Additional Reservoir Storage

Modifying the spillway with a crest control device provides the effect of “raising the dam” up 10 feet.

Potential added storage increases the benefits of the tunnel by providing additional storage for flood control and conservation releases.
San Antonio Spillway Modification steps to evaluate

- Conceptual design of spillway modification structures
- Probable Maximum Flood (PMF) and Hydrologic Model analysis (HMR58)
- Stability analysis
- Hydraulic capacity analysis
- Evaluation of modifications by DSOD
## Interlake Tunnel and Spillway Modification Operational Modeling Results

*(for water years 1967 - 2013)*

*(Average Acre Feet/Year)*

<table>
<thead>
<tr>
<th></th>
<th>Reduction in Spills</th>
<th>Potential Increase in Total Controlled Releases</th>
<th>Tunnel Transfers</th>
</tr>
</thead>
<tbody>
<tr>
<td>10’ Tunnel</td>
<td>17,132</td>
<td>16,327</td>
<td>46,527</td>
</tr>
<tr>
<td>10’ Tunnel &amp; SA spillway mod*</td>
<td>22,198</td>
<td>20,686</td>
<td>50,179</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flood Spills</th>
<th>Number of years flood spill occurs</th>
<th>Average flood volume (AFY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tunnel</td>
<td>60% reduction</td>
<td>40% reduction</td>
</tr>
<tr>
<td>Tunnel &amp; SA spillway mod</td>
<td>67% reduction</td>
<td>52% reduction</td>
</tr>
</tbody>
</table>

* (adds 60,000 AF of reservoir storage to San Antonio)
Tunnel Project Benefits
Water Supply Sustainability

• Significant increase in flood control storage, thus a reduction in flood damage downstream
• Additional surface water available to serve current and future suite of infrastructure projects
• Provides a supply of surface water to help sustain ground water supply by offsetting pumping
• Provides environmental benefits through increased flows in the Salinas River
Plan for additional modeling

Salinas Valley Water Coalition requested public collaboration on model specifics:

• Conduct technical evaluation of tunnel and reservoir simulation model to confirm reasonableness of downstream demands.
• Evaluate model to accommodate SRDF design capacity demands.
• In coordination with MCWRA Reservoir Operations, agree on implementation of the tunnel and spillway modification project and operation of the new infrastructure.

Monterey County modeling:

• Surface/ground water interaction simulation model
ENVIRONMENTAL CLEARANCE AND PERMITTING
Preliminary environmental impacts

- **Surface impacts**: minimal grading at portal sites, intake structure at Lake Nacimiento, and headwall tunnel portal structure at Lake San Antonio. Tunnel muck disposed at site near San Antonio Dam.

- **Noise impacts**: Minimal at receptors adjacent to the tunnel construction portal at Lake San Antonio and the intake structure at Lake Nacimiento.

- **Biological impacts**: TBD. Related to water diversion from Lake Nacimiento to Lake San Antonio.
Preliminary environmental impacts

- **Paleontological impacts**: TBD. Impact zone at tunnel portals only.

- **Geologic/Seismic Hazards**: TBD

- **Water resources/Flooding impacts**: TBD. All water rights and water discharge agreements will not be affected. Project assists with flood control.

- **Recreational /Public Facilities impacts**: TBD
No impacts expected relative to:

• Aesthetics/visual resources
• Agricultural resources
• Air Quality
• Cultural resources
• Energy
• Fire Protection
• Hazardous materials
• Historic resources
Preliminary biological impacts

- White bass – predator sport fish prohibited from export (alive) from Lake Nacimiento
- Quagga and Zebra Mussels transfer from Nacimiento to San Antonio
- Mercury in Lake Nacimiento sediment
- Downstream releases to maintain steelhead migration (NOAA Fisheries)
DEVELOPMENT SCHEDULE
**Project Development Schedule**

<table>
<thead>
<tr>
<th>Phase 1 - Consultant contract award</th>
<th>2015/2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase 2 - EIR and Permitting</strong></td>
<td>8/3/15</td>
<td>2/10/17</td>
<td></td>
</tr>
<tr>
<td><strong>Phase 3 - Geotechnical and final design</strong></td>
<td>8/3/15</td>
<td>6/2/17</td>
<td></td>
</tr>
<tr>
<td><strong>Phase 4 - ROW acquisition and water rights permit application</strong></td>
<td>9/28/15</td>
<td>3/11/16</td>
<td></td>
</tr>
<tr>
<td><strong>Phase 5 - Financing</strong></td>
<td>8/4/15</td>
<td>5/5/17</td>
<td></td>
</tr>
<tr>
<td><strong>Phase 6 - Construction</strong></td>
<td>6/5/17</td>
<td>7/27/18</td>
<td></td>
</tr>
</tbody>
</table>

Consultant contract award
July 2015
Preliminary Engineering schedule

Phase 3 - geotechnical and final design
8/3/15 - 6/2/17
- Geotechnical investigation and reports: 8/3/15 - 9/25/15
- Final project design - structural, mechanical: 8/3/15 - 9/11/15
- Survey work to support design: 8/3/15 - 9/11/15
- Preparation of construction contract documents: 1/18/16 - 2/12/16
- Preparation of cost estimates: 1/25/16 - 2/12/16
- Prepare Engineers Report: 2/15/16 - 9/23/16

Phase 4 - ROW acquisition and water rights permit application
9/28/15 - 3/11/16
- Construction procurement: 2/13/17 - 6/2/17
Critical Development Path

- **Phase 2** - permit applications (75% environmental complete)
- **Phase 3** - geotechnical and final design (75% design)
- **Phase 5** - financing

<table>
<thead>
<tr>
<th>Phase 2 - EIR and Permitting</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/3/15</td>
<td></td>
<td>2/10/17</td>
</tr>
<tr>
<td>8/3/15</td>
<td></td>
<td>6/2/17</td>
</tr>
<tr>
<td>Geotechnical investigation and reports</td>
<td>9/25/15</td>
<td></td>
</tr>
<tr>
<td>8/3/15</td>
<td></td>
<td>1/15/16</td>
</tr>
<tr>
<td>Final project design - structural, mechanical,</td>
<td>1/15/16</td>
<td></td>
</tr>
<tr>
<td>Survey work to support design</td>
<td>9/11/15</td>
<td></td>
</tr>
<tr>
<td>Preparation of construction contract documents</td>
<td>2/12/16</td>
<td>9/23/16</td>
</tr>
<tr>
<td>Preparation of cost estimates</td>
<td>2/12/16</td>
<td></td>
</tr>
<tr>
<td>Prepare Engineers Report</td>
<td>9/23/16</td>
<td></td>
</tr>
<tr>
<td>Phase 4 - ROW acquisition and water rights permit application</td>
<td>3/11/16</td>
<td>5/5/17</td>
</tr>
<tr>
<td>8/4/15</td>
<td></td>
<td>5/5/17</td>
</tr>
<tr>
<td>2/15/16</td>
<td>218 Proposition implementation</td>
<td></td>
</tr>
</tbody>
</table>
COST AND FINANCING PLAN
## Interlake Tunnel & San Antonio Spillway Modification

### Cost Estimate (Dec 2014) ($000)

<table>
<thead>
<tr>
<th>Phase Description</th>
<th>Estimate ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1 - preliminary engineering</td>
<td>$315</td>
</tr>
<tr>
<td>Phase 2 - permit applications</td>
<td>$1,198</td>
</tr>
<tr>
<td>Phase 3 - geotechnical and final design</td>
<td>$1,311</td>
</tr>
<tr>
<td>Phase 4 - ROW acquisition and water rights verification</td>
<td>$244</td>
</tr>
<tr>
<td>Phase 5 - financing</td>
<td>$342</td>
</tr>
<tr>
<td>Phase 6 - construction</td>
<td>$32,206</td>
</tr>
<tr>
<td>Program Management</td>
<td>$1,387</td>
</tr>
<tr>
<td>Construction Management</td>
<td>$1,200</td>
</tr>
<tr>
<td>Expenses</td>
<td>$300</td>
</tr>
<tr>
<td>Contingency</td>
<td>$9,500</td>
</tr>
<tr>
<td><strong>Subtotal Tunnel</strong></td>
<td>$48,003</td>
</tr>
<tr>
<td><strong>San Antonio Spillway Modification</strong></td>
<td>$15,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$63,003</td>
</tr>
</tbody>
</table>

*Placeholder estimate. Costs have not been calculated*
Proposed Financing Plan

• 218 Proposition – benefit assessment

• Similar in plan and structure to Prop 218 financing for the Salinas Valley Water Project – Zone 2C

• Assessment formulas based on proportional weighting of:
  – Active / Passive land use factors
  – Special benefits from project
RFP REQUIREMENTS
RFP Requirements

1.0 INTENT

2.0 QUALIFICATION REQUIREMENTS

4.0 CALENDAR OF EVENTS

Deadline for Written Questions: Friday May 1, 2015
Proposal Submittal Deadline: Friday June 5, 2015
Estimated Notification of Selection: June 2015
Estimated AGREEMENT Date: July 2015

Potential interviews of shortlisted teams: Week of July 6, 2015
# RFP Requirements

## 5.0 COUNTY POINT OF CONTACT

Michael R. Derr  
Contracts/Purchasing Officer

## 7.0 PROPOSAL PACKAGE REQUIREMENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Proposal Package Layout; Organize and Number Sections as Follows:</th>
</tr>
</thead>
</table>
| Section 1 | COVER LETTER (INCLUDING CONTACT INFO)  
SIGNATURE PAGE  
RECEIPT OF SIGNED ADDENDA (IF ANY)  
TABLE OF CONTENTS |
| Section 2 | APPROACH TO WORK |
| Section 3 | SPECIALIZED EXPERIENCE |
| Section 4 | REFERENCES |
| Section 5 | ATTACHMENTS |
| Section 6 | EXCEPTIONS |
| Section 7 | APPENDIX |
## Proposal Attachments

<table>
<thead>
<tr>
<th>Attachment</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attachment-A</td>
<td>RFP Signature Page</td>
</tr>
<tr>
<td>Attachment-B</td>
<td>Any applicable Signed Addenda</td>
</tr>
<tr>
<td>Attachment-C</td>
<td>General Firm Information</td>
</tr>
<tr>
<td>Attachment-D</td>
<td>Project Experience Information</td>
</tr>
<tr>
<td>Attachment-E</td>
<td>Organizational Chart of Proposed Team</td>
</tr>
<tr>
<td>Attachment-F</td>
<td>Resumes of Key Personnel for this Project</td>
</tr>
<tr>
<td>Attachment-G</td>
<td>Project Management Approach</td>
</tr>
<tr>
<td>Attachment-H</td>
<td>Schedule Management Approach</td>
</tr>
<tr>
<td>Attachment-I</td>
<td>Environmentally-Friendly Business Practices including Green Business Certifications (one (1) Page Limit)</td>
</tr>
<tr>
<td>Attachment-J (Engineering)</td>
<td><strong>Sealed Submittal of Lump Sum Proposal</strong> (this form must be submitted and sealed in a separate envelope and will not be opened until a tentative selection has been made by MCWRA).</td>
</tr>
<tr>
<td>(Environmental)</td>
<td><strong>Sealed Submittal Not To Exceed Proposal organized by task</strong></td>
</tr>
</tbody>
</table>

**SIGNATURE PAGE**
# RFP Requirements

## 8.0 SUBMITTAL INSTRUCTIONS & CONDITIONS

## 9.0 SELECTION CRITERIA

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Team Qualifications and Resume (s)</td>
<td>0 - 20</td>
</tr>
<tr>
<td>Project Experience</td>
<td>0 - 30</td>
</tr>
<tr>
<td>Quality of Project Management Approach</td>
<td>0 - 15</td>
</tr>
<tr>
<td>Quality of Schedule Management Approach</td>
<td>0 - 10</td>
</tr>
<tr>
<td>Quality of Cost Management Approach</td>
<td>0 - 20</td>
</tr>
<tr>
<td>Environmentally Friendly Business Practices</td>
<td>0 - 5</td>
</tr>
</tbody>
</table>
RFP Requirements

10.0 CONTRACT AWARD

SAMPLE AGREEMENT BETWEEN MCWRA AND CONTRACTOR
ENVIRONMENTAL SCOPE OF WORK
Objectives

• Prepare a complete and legally defensible Environmental Impact Report in compliance with CEQA and the CEQA Guidelines.

• Develop and implement a permit strategy that will result in the timely receipt of approvals from any/all Lead, Responsible, Cooperating, Trustee, and/or Reviewing Agencies.
Scope summary

• Outline the permitting strategy for the project
• Prepare timeline to complete all necessary permit processes
• Prepare not to exceed cost estimate to perform the scope of work
  – schedule of values tied to milestones and deliverables
• develop the strategy and environmental compliance plan necessary for successful processing (both draft and final versions of the EIR)
Work tasks

• Project Management and Team Coordination
• Initial Study and Notice of Preparation (NOP)
• Probable Environmental Effects
• Prepare Administrative Draft EIR (ADEIR)
• Prepare Draft Responses to Comments
• Prepare Administrative Draft Final EIR
• Prepare Final EIR
Work tasks (cont.)

• Prepare Findings, Statements of Overriding Considerations Notice of Determination, and Mitigation Monitoring & Reporting Plan
• Final EIR Certification / Public Outreach
• Public Meetings
• Public Outreach
• Permitting
Probable Environmental Effects

- Drainage, Erosion and Sedimentation
- Geology, Seismicity, and Soils
- Hydrology and Water Quality
- Terrestrial and Aquatic Biological Resources
- Noise
- Cultural and Paleontological Resources
- Air Quality
- Visual and Aesthetic Resources
Probable Environmental Effects (cont.)

- Recreational Resources
- Public Services and Utilities
- Transportation and Circulation
- Land Use and Planning
- Socioeconomic Resources
PRELIMINARY ENGINEERING
SCOPE OF WORK
Objectives

1. Design the Projects within the capital cost constraints established for each project
2. Preliminary engineering design services necessary to achieve a 95% confidence of probable construction and operating costs
3. Preparation of an Engineer’s Report to support a Proposition 218 benefit assessment financing program
4. Preparation of Design-Build procurement documents for Interlake Tunnel
5. Preparation of 100% design and construction bid documents for the Spillway Modification Project
Scope of Work Summary

1. Preparation of contract documents for Design-Build services for the Interlake Tunnel Project in accordance with the requirements of AB 155.

Scope of Work Summary

3. Preparation of technical documents to support the draft and final EIR environmental and regulatory approval for both Projects.

4. Preparation of an Engineer’s Report and detailed capital and operating cost estimates for the Projects to achieve 95% confidence of probable costs

Prepare lump sum cost estimate to perform the scope of work

– schedule of values tied to milestones and deliverables
Work tasks

• Project Management and Team Coordination
• Development of the Engineer’s Report for Proposition 218 benefit assessment financing
• Support MCWRA as a liaison of the Proposition 218 process
• Support the environmental consultants with the impact and alternatives analyses
Tunnel preliminary engineering

• Constructible within the project cost budget
• Perform site survey
• Prepare Geotechnical Baseline Report
• Coordinate development of new operating criteria
• ROW acquisition support
• PE deliverables at 30%, 60% and 90%
• DB contract document submittals at 50%, 75% and 100%
• Coordinate “plan check” reviews
• Support MCWRA during DB RFP phase
Design-Bid-Build San Antonio Spillway Modification Project

- Preliminary and final design
- Prepare 100% DBB contract documents
- Identify equipment procurement packages
- Perform site survey work
- Geotechnical – GDR and GIR
- VE study on 30-percent design
- Physically model hydraulic energy loss capabilities of dissipating structures
- Deliverables at 30%, 60%, and 90% design
- Assist MCWRA in coordination with DSOD
- Assist MCWRA in plan check coordination and bidding phase
Closing

Thank you

Questions and Answers

Optional Site Tour