Clarks Branch to Tunnel Mill Race Project

- Replace 9 bridges, repair 2 bridges
- $34.8 million
- Interstate 5
- Design-Build
- First project to use environmental programmatic permits
- Part of the Oregon Transportation Investment Act III bridge program
Oregon Transportation Investment Act III

Program
- Replace or repair 365 bridges
- $1.3 billion
- 8-10 years

• Status
- 2 years into program
- 22% design, 11% construction complete
Location Map
OTIA III Bridge Program Goals

1. Stimulate Oregon’s economy
2. Employ efficient and cost-effective delivery practices
3. Maintain freight mobility / keep traffic moving
4. Build projects sensitive to their communities and landscape
5. Capitalize on funding opportunities
Context Sensitive & Sustainable Solutions (CS³)

Context Sensitive Solutions

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Sustainability
Main CS³ Elements

- Economic Stimulus
- Diversity
- Cost-effectiveness
- Mobility
- Public Information/Involvement
- Environmental justice
- Environmental Program Management
- Sustainability
CS³ Approach

- Stakeholder participation in issue identification and resolution
- CS³ guidebook and mandatory training
- Early consideration of CS³ elements in projects
- CS³ Performance Measures
Compatibility with Natural Environment

- Environmental Needs: permitting and stewardship
- Major Issues: volume of work and timing
- Resolution Methodologies:
  - Stakeholder workshops
  - Environmental Baseline Reports
  - PARIT- Programmatic Agreements Reporting and Implementation Team
  - Environmental Performance Standards
  - Programmatic Permitting
Stakeholder Workshops

• Led by Wayne Kober - AASHTO CEE Technical Assistance Program
• Six days
  - NEPA and Context Sensitive Design
  - Natural Resources and Permits
  - Cultural Resources
• Participants
  - State and federal regulatory agencies
  - FHWA
  - Governor’s office
  - Construction contractors and A&E consultants
  - ODOT managers and staff
Environmental Baseline Reports

- Prepared for each bridge before design started
- Literature review and fieldwork
- Area of Potential Impact
  - Rural Interstate 1000 x 4000 ft
  - Rural non-interstate - 1000 x 2000 ft
  - All urban – 500 x 2000 ft
- Written reports and GIS layers
- Designers build-in avoidance
- Minimizes re-design
Stakeholder Involvement

- Workshops
- PARIT
  - Jointly developed performance standards and single permit application
  - Biweekly meetings to review projects and program
- Funding regulatory agency liaison positions
Environmental Performance Standards

– Single set of terms and conditions for the programmatic permits
– Guidance to achieve program goals and objectives
– Outcome oriented versus prescriptive measures
– Means to confine effect to that allowed in programmatic permits
Programmatic Environmental Permitting

- **Goals:**
  - Reduce bridge design and environmental permitting times
  - Reduce cost and schedule impacts from re-design
  - Maintain ODOT's strong commitment to environmental stewardship

- **Benefits**
  - coordinates the requirements of multiple agencies
  - eliminates the confusion and duplication
  - ensures comprehensive environmental protection
  - Permitting is cheaper and faster
  - Design effort is more efficient
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- First bridge to test the system
  - No programmatic permits had been processed by agency partners
- Replacement bridge, with significant in-water work
- Crossed major waterway, on major highway
- Design-build project
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- Design-builder met with ODOT for two two-hour meetings prior to submitting permit application to agencies
  - Calibrated application content and format understanding
  - Calibrated EPS intent and understanding
  - Calibrated submittal process understanding
- Extremely minimal coordination efforts for even standard permitting process
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- Design-builder submitted the application within a few weeks of notice to proceed
  - Example of minimal content necessary
  - Design was hardly at type, size, and location phase
  - No plan sheets or reports were available
- Uncertainty in design and construction – but not in permitting process/requirements
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- Design-builder invited agencies to the site during permit processing
  - Key design-build team members were present, including:
    - Project Manager
    - Design Manager
    - Construction Manager
  - Early coordination facilitated agency understanding
  - Q&A opportunity facilitates agency “comfort”
- Maintaining collaboration and communication
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- Authorizations received within 31 days of submittal
  - Standard process can exceed 135 days for one regulation
  - Minimal agency review questions because of EPS
  - Agencies pleased that enhancement and avoidance were driving design and construction practices
Accomplishments

• First bridge replaced
  – Complied with Environmental Performance Standards
  – Reduced permitting by 100+ days
  – Reduced cost by $1+ Million
  – Pleased Contractor, ODOT and Permitting Agencies
Challenges

- Requires substantial initial investment
  - Workshops
  - Development of performance standards & programmatic permits
  - Environmental Baseline Reports
  - Training for consultant & agency staff
- Requires commitment from agency leaders
- Requires trust between all parties
CSS Bottomline

- How were our actions different?
  - Environmental data gathered before design started
- How was our attitude different?
  - Worked cooperatively with resource agencies to save time and money and to get better environmental performance
- How was our decisionmaking different?
  - Designers considered environmental impacts from the beginning
- How did our customers respond as partners?
  - OUTSTANDING!
Contact Information

• For further Information please contact

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OTIA III Bridge Program
oregon.gov/ODOT/HWY/OTIA/bridge_delivery.shtml
or
OBDP.org