NON-TRADITIONAL UTILITY COORDINATION on KYTC Projects

KYTC Partnering Conference
September 9, 2014
Non-Traditional Utility Coordination Agenda

- Traditional Approach
  - Recognizing a Need for a New Tool in the Toolbox
- Non-Traditional Utility Coordination Approaches
- Project Overviews
- Q/A and what's next
Traditional Approach

Design

Utilities

KYTC Manages Utility Coordination

Construction
Recognizing a Need

- Schedule
- Project Logistics
- Mitigation opportunities
- Efficiency
- In house staffing issues

- New Tool:
  - Incorporate the use of outside services to perform utility coordination as needed
## Non-Traditional Approaches

<table>
<thead>
<tr>
<th>Project Development Approach</th>
<th>Design Consultant manages Utility Coordination in Design Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Delivery Approach</td>
<td>Contractor manages Utility Relocation Coordination in Construction Phase with KYTC and/or Consultant overview</td>
</tr>
<tr>
<td>Design Build</td>
<td>Contractor and DBT manages Utility Coordination from beginning to end of project</td>
</tr>
</tbody>
</table>
Project Development Approach

- Design
- Utilities
- Construction

Roadway Design Consultant Manages Utility Coordination
Project Delivery Approach

- **Design**
  - Utility Coordination
    - KYTC or Design Consultant manages Utility Coordination

- **Utility Relocation**
  - Contractor manages Utility Relocation

- **Construction**
Design Build Approach

KYTC or Design Consultant Manages Preliminary Utility Coordination

Design 30%

Utilities

RFP

BID

Design-Build Phase

Design

Utilities

Construction

DBT Manages Utility Relocation and Coordination
# Project Development Approach

Ohio River Bridges Project

<table>
<thead>
<tr>
<th>Entity</th>
<th>Preliminary Utility Coordination</th>
<th>Conflict Identification</th>
<th>Final Utility Coordination</th>
<th>Relocation Construction Oversight</th>
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<tbody>
<tr>
<td>KYTC</td>
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<td>Leads</td>
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Project Development Approach

Design
Utilities

Roadway Design Consultant
Manages Utility Coordination

Construction
Project Development Approach

Consultant Scope Items

- Existing data collection
- 3-D utilities model
- Coordination with Utilities
- Subsurface Verification
- Coordination with Roadway Designers
- Cost determination
- Right of Way needs and layout
- Critical Schedule needs
- Data sharing
# Project Development Approach

Ohio River Bridges Project

## Benefits

### Schedule
- Early Coordination
- Right of Way and easement needs
- Utility Relocations can start early

### Costs
- Utility conflicts identified early and a detailed cost estimate prepared.
- Cost of relocations are positively impacted

### Other
- KYTC staff coordination is reduced
- Accurate Plans
Project Development Approach
Ohio River Bridges Project

**Challenges**

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<tr>
<th>Schedule</th>
<th>Cost</th>
<th>Other</th>
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<tbody>
<tr>
<td>• Utilities may resist approach</td>
<td>• Coordination cost may be higher</td>
<td>• Roadway plans still changing</td>
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# Project Delivery Approach

KY 61 Sections 1&2, Bullitt County

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*KYTC Consultant lead in the end, KYTC lead for most of the project  
**Consultant lead final effort to collect information only plans, and PS&E
Project Delivery Approach

- **Design**: KYTC or Design Consultant manages Utility Coordination
- **Utility Coordination**: BID
- **Utility Relocation**: Contractor manages Utility Relocation
- **Construction**
Project Delivery Approach

Consultant Scope Items

- Create Utility Agreements
- Coordinate Utilities relocation and necessary Meetings
- Create PS&E
- Create Information Only Plans

- Develop Construction Notes
- Finalize Cost Estimate for relocations
- Define right of way impacts
- Utility Adjustments manager
## Project Delivery Approach

**KY 61 Sections 1&2, Bullitt County**

### Benefits

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<tr>
<th>Schedule</th>
<th>Costs</th>
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<tr>
<td>• Project Timeline achieved</td>
<td>• Cost Efficiencies – One contractor</td>
<td>• KYTC staff coordination is reduced</td>
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<td></td>
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<td>• Information Only Plans provided</td>
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## Project Delivery Approach

KY 61 Sections 1&2, Bullitt County

### Challenges

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<td>• Utilities may not cooperate</td>
<td>• Risk can be elevated if Plans are not clear</td>
<td>• Utility plans are not final</td>
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## Design Build Approach

**KY 914, Pulaski County**

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<td>Leads</td>
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*KYTC or KYTC Consultant can sometimes lead from the beginning
Design Build Approach

KYTC or Design Consultant Manages Preliminary Utility Coordination

Utilities

Design 30%

KYTC

RFP

BID

Design-Build Phase

Design

Utilities

Construction

DBT Manages Utility Relocation and Coordination

DBT
Design Build Approach

Consultant Scope Items

- Create Utility Agreements
- Coordinate Utilities relocation
- Create PS&E
- Create Information Only Plans
- Develop Construction Notes
- Finalize Cost Estimate for relocations
- Define right of way impacts
- Utility Adjustments manager
Design Build Approach
KY 914, Pulaski County

**Benefits**

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<td>• Decreases project delivery duration</td>
<td>• Are defined as portion of the lump sum fee of the DBT</td>
<td>• KYTC staff coordination is reduced</td>
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<td>• Risk transferred to the Contractor</td>
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Design Build Approach
KY 914, Pulaski County

**Challenges**

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<tr>
<td>• Right of Way/easement needs can still impact schedule</td>
<td>• Typically lump sum not keep cost</td>
<td>• Depending on DBT for agreements and coordination</td>
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<td></td>
<td>• Payment procedure are conducted by DBT</td>
<td></td>
</tr>
<tr>
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<td>• Utilities 100% reimbursable</td>
<td></td>
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What’s Next?

- We need feedback
- Evaluate performance of existing efforts
- Improve on process with current efforts