CONTEXT SENSITIVE UTILITIES SUCCESS STORIES

PRESENTED BY:
DISTRICT 3: Joseph Plunk, Stewart Lich
&
DISTRICT 6: Nikki Boden
CONTEXT SENSITIVE UTILITIES
SUCCESS STORIES
• Telephone duct is completely inside KYTC Right of Way.
• Re-routing along Logansport Road was estimated at 18-24 months.
• Began exploring ways for the telephone duct to remain in place.
CONTEXT SENSITIVE UTILITIES
SUCCESS STORIES
CONTEXT SENSITIVE UTILITIES
SUCCESS STORIES
CON Text Sensitive Utilities
Success Stories
3-0200.00
WARREN COUNTY
INTERSECTION REALIGNMENT
OF BRISTOW ROAD &
MOORMAN LANE
AT US 31-W

CONTEXT SENSITIVE UTILITIES
SUCCESS STORIES
• Invited utility companies to PL&G (100% Attendance).
• Discussed what facilities were in the area and other complications that should be expected.
• Excellent opportunity to let utility companies know what is coming and coordinate potholing, etc.
UTILITY PROCESS USING DESIGN FUNDS

Planning
- Verification & Field Work
- Coordination Meetings

Preliminary Design
- Preliminary Utility Design
- Request Design Funds
- Execute Engineering Service Agreement

Final Design
- Finalize Utility Design
- Request Utility Funds
- Execute Construction Reimbursement Agreement

Streamlining the Utility Process
1. Utilize Roadway Designer in lieu of Utility Company Consultant
2. Create Standard Utility Bid Items for statewide use
3. Look for simple design revisions to avoid utilities
## Utilizing Roadway Designer

<table>
<thead>
<tr>
<th>PROS</th>
<th>CONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Improved communication &amp; coordination</td>
<td>• Requires Design Contract Modification</td>
</tr>
<tr>
<td>• Eliminates numerous steps of the utility process</td>
<td>• Requires additional coordination meetings</td>
</tr>
</tbody>
</table>

Streamlining the Utility Process
Utilizing Roadway Designer

Streamlining the Utility Process

Planning
- Verification & Field Work
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Preliminary Design
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Utilizing Roadway Designer

Design Production Units

<table>
<thead>
<tr>
<th>No.</th>
<th>ITEM</th>
<th>UNIT</th>
<th>AMOUNT</th>
<th>HRS/UNIT</th>
<th>HOURS</th>
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<tbody>
<tr>
<td>121</td>
<td>Prepare elevation developments</td>
<td>No.</td>
<td>2</td>
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<tr>
<td>140</td>
<td>Coordinate Plans with City of Newport/Future Development</td>
<td>LS</td>
<td>1</td>
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<tr>
<td>147</td>
<td>Utility Coordination Sheets</td>
<td>Sheet</td>
<td>23</td>
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<td>148</td>
<td>Watermain Design</td>
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<td>149</td>
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<td>150</td>
<td>Sanitary Design-Ovation</td>
<td>LS</td>
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**FINAL PLANS MISCELLANEOUS**

| Final Plans Total | 0 |

Streamlining the Utility Process
## Utilizing Roadway Designer

### PRODUCTION-HOUR WORKSHEET

<table>
<thead>
<tr>
<th>No.</th>
<th>ITEM</th>
<th>UNIT</th>
<th>AMOUNT</th>
<th>HRS/UNIT</th>
<th>HOURS</th>
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<tbody>
<tr>
<td>30</td>
<td>Research Existing Utility Records</td>
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<tr>
<td>31</td>
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<td>LS</td>
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<tr>
<td>32</td>
<td>Draft Basis of Design Memorandum</td>
<td>LS</td>
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<td>0</td>
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<tr>
<td>33</td>
<td>Preliminary design calculations</td>
<td>LS</td>
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<td>0</td>
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<tr>
<td>34</td>
<td>Preliminary Sequence of Construction</td>
<td>LS</td>
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<td>0</td>
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<tr>
<td>35</td>
<td>Draft Technical Specifications</td>
<td>LS</td>
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<tr>
<td>36</td>
<td>50% OPCC</td>
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<td>Submit 50% Design Deliverables</td>
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<td>TOTAL HOURS for 50%</td>
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Streamlining the Utility Process

[Logo: Kentucky Department of Transportation]
Standard Utility Bid Items
Water, Sanitary Sewer & Gas

1. Streamline Plan Submittal
2. Simplify Construction Billing
3. Encourage Inclusion of Utility Relocation into Roadway Contract
### Standard Utility Bid Items

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encasement</td>
<td>• 3 bid items with size ranges</td>
</tr>
<tr>
<td>Service Lines</td>
<td>• Short side vs. long side</td>
</tr>
<tr>
<td>Fittings/Bends</td>
<td>• All fittings incidental to pipe bid item</td>
</tr>
</tbody>
</table>
Streamlining the Utility Process

Design Revision Quick Wins

**Drainage Items**
- Roadside ditches
- Type B inlets vs. Type A inlets
- Fill/Cut slopes

**Entrances**
- Location
- Radius

**Geotech**
- Embankment Benching
- 1’ Working Platform

Kentucky
Streamlining the Utility Process