HORSESHOE DESIGN-BUILD PROJECT
TEXAS DEPARTMENT OF TRANSPORTATION – DALLAS DISTRICT

TexITE Meeting
June 8, 2012
HORSESHOE DESIGN-BUILD PROJECT

OUTLINE

- Background: Project Pegasus
- Breakout Project: Horseshoe
  - Proposed Project
  - Purpose & Need
  - Project Challenges
  - Work Complete/Underway
  - Schedule
HORSESHOE DESIGN-BUILD PROJECT

BACKGROUND: PROJECT PEGASUS

- IH 30 from Sylvan Avenue to IH 45
- IH 35E from Empire Central Drive (North of SH 183) to 8th Street
Houston Street Viaduct’s Location in Mixmaster Interchange
HORSESHOE DESIGN-BUILD PROJECT
COMPONENTS OF PROJECT PEGASUS: LOWER STEMMONS
HORSESHOE DESIGN-BUILD PROJECT

COMPONENTS OF PROJECT PEGASUS: CANYON
HORSESHOE DESIGN-BUILD PROJECT
COMPONENTS OF PROJECT PEGASUS: HORSESHOE
Background: Project Pegasus

Breakout Project: Horseshoe

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HORSESHOE DESIGN-BUILD PROJECT
BREAKOUT PROJECT: HORSESHOE

PROJECT PEGASUS:
- Horseshoe Project
  (Horseshoe in dark red outline)
- Canyon
- Lower Stemmons

Calatrava I Bridge
HORSESHOE DESIGN-BUILD PROJECT

HORSESHOE: PROPOSED PROJECT

- Replace I-30 & I-35E bridges and connecting roadways that cross the Trinity River
- Upgrade outdated roadway geometry
- Construct additional lanes
- Margaret McDermott Bridges
HORSESHOE DESIGN-BUILD PROJECT
HORSESHOE: PROPOSED PROJECT
Background: Project Pegasus

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I-30 & I-35E carry over 460,000 vehicles per weekday
Rated in the top 20 most congested roadways in Texas
Outdated roadway geometry
Bridge deterioration
Increasing costs to maintain & repair
HORSESHOE DESIGN-BUILD PROJECT
2010 TEXAS TOP 20 CONGESTED ROADWAYS

12TH: I-35E
From SH 183 to I-30

29TH: I-30
From Hampton to I-35E

15TH: I-30
From I-35E to Loop 12

16TH: I-35E
From US 67 to I-30
Here are the worst "choke points" in the country, according to the American Association of State Highway and Transportation Officials:

- Boston, Interstate 93. The road's name comes from the elevated roadway that skirts downtown. It was built in the 1950s to carry 35,000 cars a day, but now it handles more than 90,000 cars each day. This stop-and-go traffic is projected to stretch to 2010.

- Dallas, Interstate 35 at Interstate 30. Known as the "Mix Master" by local motorists, these two highways merge and struggle to carry more than 200,000 vehicles a day from downtown through the steep hills of "The Canyon."
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I-30 AND I-35E: BRIDGE SUFFICIENCY RATINGS

![Graph showing sufficiency ratings for I-30 and I-35E over inspection years 2002 to 2010. The graph compares the sufficiency ratings for IH 30 WB, IH 30 EB, IH 35E SB, and IH 35E NB.]
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I-30 BRIDGE PICTURES
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HORSESHOE: PROJECT CHALLENGES

- Maintaining traffic during construction
- Construction of the Margaret McDermott Bridges
- Reconstruction of 2 major freeway interchanges
- Crossing of the Trinity River Levees
- Accommodating the future Trinity Lakes Project
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Houston Street Viaduct’s Location in Mixmaster Interchange

Jefferson Street Viaduct

IH 35E

Houston Street Viaduct

IH 30

Jefferson Street Viaduct

IH 35E
HORSESHOE DESIGN-BUILD PROJECT
HORSESHOE: Margaret McDermott Bridges

Frontage Road Bridges
HORSESHOE DESIGN-BUILD PROJECT
HORSESHOE: Margaret McDermott Bridges

- Hike/Bike facilities along the IH 30 eastbound and westbound frontage roads
- Designed and engineered to 100% by Santiago Calatrava, LLC
- Under contract with the City of Dallas
- Built by the Design-Build Contractor
HORSESHOE DESIGN-BUILD PROJECT
HORSESHOE: Margaret McDermott Bridges
HORSESHOE DESIGN-BUILD PROJECT
CROSSING THE TRINITY RIVER LEVEES
HORSESHOE DESIGN-BUILD PROJECT
ACCOMMODATING FUTURE TRINITY LAKES PROJECT
Background: Project Pegasus

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Pegasus FONSI complete July 2005
Horseshoe FONSI expected December 2012
I-30: 30% design complete
I-35E: 30% design complete
Commission approved funding
Commission approval to “Design-Build”
## HORSESHOE DESIGN-BUILD PROJECT
**WORK COMPLETE: APPROVED FUNDING**

### COST ESTIMATE

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Construction</td>
<td>$620 million</td>
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<tr>
<td>Calatrava II</td>
<td>$80 million</td>
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<td><strong>SUB-TOTAL</strong></td>
<td>$700 million</td>
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<tr>
<td>Design, Constr. Mgmt. &amp; Testing</td>
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<tr>
<td><strong>SUB-TOTAL</strong></td>
<td>$756 million</td>
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<tr>
<td>R.O.W. &amp; Utilities</td>
<td>$62 million</td>
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<td><strong>TOTAL</strong></td>
<td><strong>$818 million</strong></td>
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### DEDICATED FUNDING SOURCES

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<thead>
<tr>
<th>Source</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Federal Allocation</td>
<td>$181.4 million</td>
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<tr>
<td>IH-30 Proposition 12 Major Bridges</td>
<td>$136.5 million</td>
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<tr>
<td>IH-35E Proposition 12 Major Bridges</td>
<td>$79 million</td>
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<tr>
<td>SH 121 RTR</td>
<td>$72 million</td>
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<tr>
<td>Remainder Prop 12 V1 (MO 112473 for PE)</td>
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<td>Remainder Prop 14 (MO 111680 for PE)</td>
<td>$13.3 million</td>
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<td>I-345 &amp; Neches River Bridge Prop 12 V2 Major Bridges</td>
<td>$185 million</td>
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<td>Dallas District’s Prop 12 - V2 PE &amp; ROW*</td>
<td>$53.7 million</td>
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<td>NCTCOG-MPO Prop 12 V2 Metro Mobility</td>
<td>$87.1 million</td>
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<td><strong>TOTAL</strong></td>
<td><strong>$818 million</strong></td>
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*TxDOT graphic

* Pending TTI study and Commission approval.
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HORSESHOE: SCHEDULE

- Issued RFQ – December 9, 2011
- Shortlist Announced- March 29, 2012
- Draft RFP for Industry Review- April 26, 2012
- Final RFP- July 3, 2012
- Proposals Due- September 25, 2012
- Conditional Award- October 25, 2012
- USACE 408 permit Fall 2012 (estimated)
- Environmental Assessment – December 2012 (estimated)
- Design-Build Contract Executed- January 2013
- Begin Construction- Spring 2013