# SR 57 vs the White River June 2008

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Road School 2016





- I. In June 2008 Indiana experienced numerous events of extraordinary rainfall.
- 2. There was high water & damage in numerous areas of the White River watershed, including Edinburgh, Columbus, Franklin, and Martinsville.
- 3. USGS estimated Young's Creek flow in Franklin at a 0.2 % AEP (500 year flow).





- 1. On the White River at Newberry, the gage indicated 1% AEP depth, though it was partially due to a farmer's illegal levee.
- 2. Historical river profiles indicate that the White River would leave its watershed upstream of Newberry at ~2% AEP depth, which would send flow to a 20' x 8' 3-sided box under SR-57 north of Newberry.

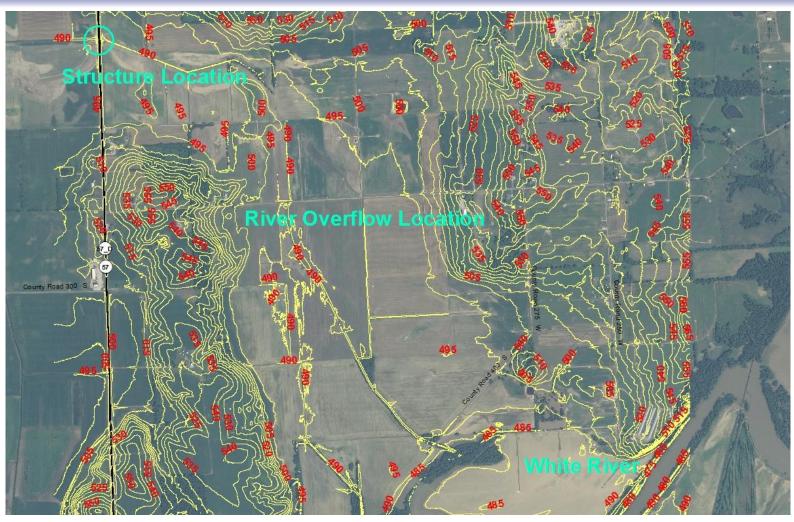




- 1. 20' x 8' 3-sided box was designed for a watershed of ~ 238 ac.
- 2. Per 1930s survey, SR-57 had a dip in the road which may have been designed due to the 1913 floods. The road would go before the structure.
- It was removed some time later, maybe due to institutional amnesia.



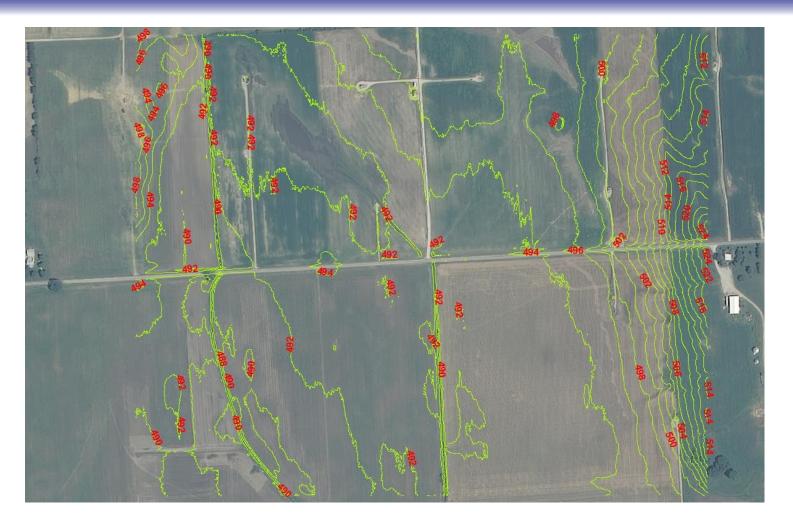




### 2008 NAIP Aerial Photo w/5 ft contour overlay



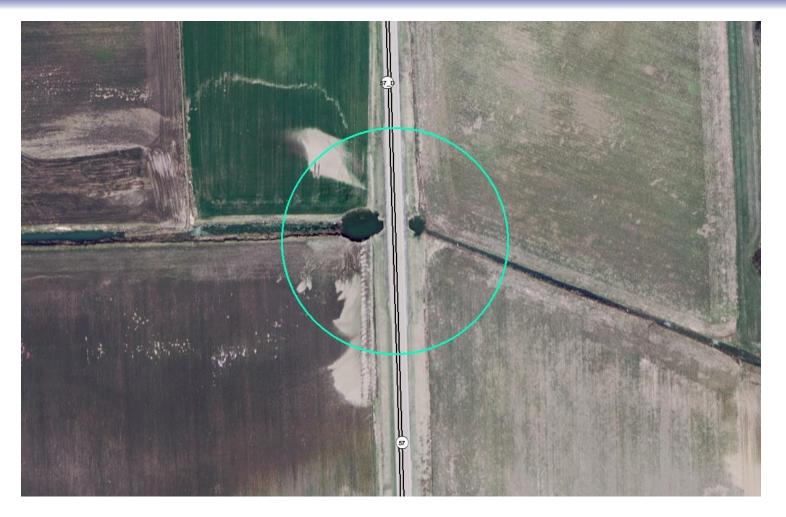




### **2008 NAIP Aerial Photo w/2 ft contour overlay**







#### **2005 NAIP Aerial Photo of site**







### **2008 NAIP Aerial Photo of site**







#### 2008 site photo, overflow upper right







#### 2008 site photo, contraction scour







#### 2008 site photo, structure damage







#### 2008 site photo, structure damage

























### 2008 site photo, structure damage & scour





### 2008 site photo, structure damage & scour







### **2008 NAIP Aerial Photo of site**









#### 2008 site photo, structure damage & scour











#### 2008 site photo, view from downstream









### 2008 site photo, outlet and scour hole

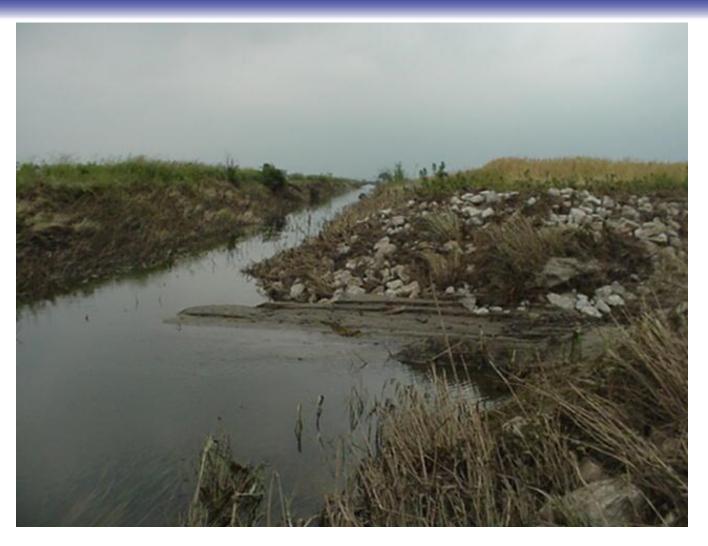




#### 2008 site photo, outlet and scour hole









#### 2008 site photo, downstream channel





### 2008 NAIP, flow pattern-embankment reclamation



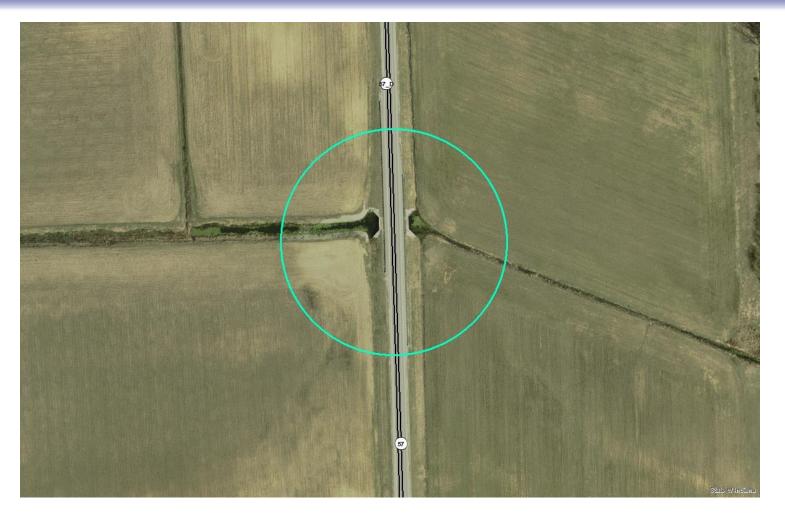




#### **2005 NAIP Aerial Prior Scour Issue**







### 2011/2013 Indiana Map Aerial







2011/2013 Indiana Map Aerial – no scour visible Per aerial measurement, 26 ft. span.







### The End

### **Any Questions?**



