

memo



gai consultants

Date: February 7, 2014

Project No.: Wekiva Parkway Section 6
FPID 238275-7

To: Kevin Moss, FDOT Project Manager

From: Steve Boylan (GAI)

cc: Hannah Hernandez (FDOT), Robert Robertson (FDOT), Linda Figg (Figg), Tom Roberts (E-Sciences), Lloyd Gurr (GAI)

Subject: Wekiva River Crossing - Two Bridge vs. Three Bridge Analysis

As a result of comments received during Bridge Charette #1 in December, 2013, GAI performed an analysis of a two-bridge typical section alternative to determine applicable bridge widths. These findings were presented at Bridge Charette #2 (held on January 28th, 2014) and are memorialized here.

When evaluating a two-bridge alternative, the following issues were identified:

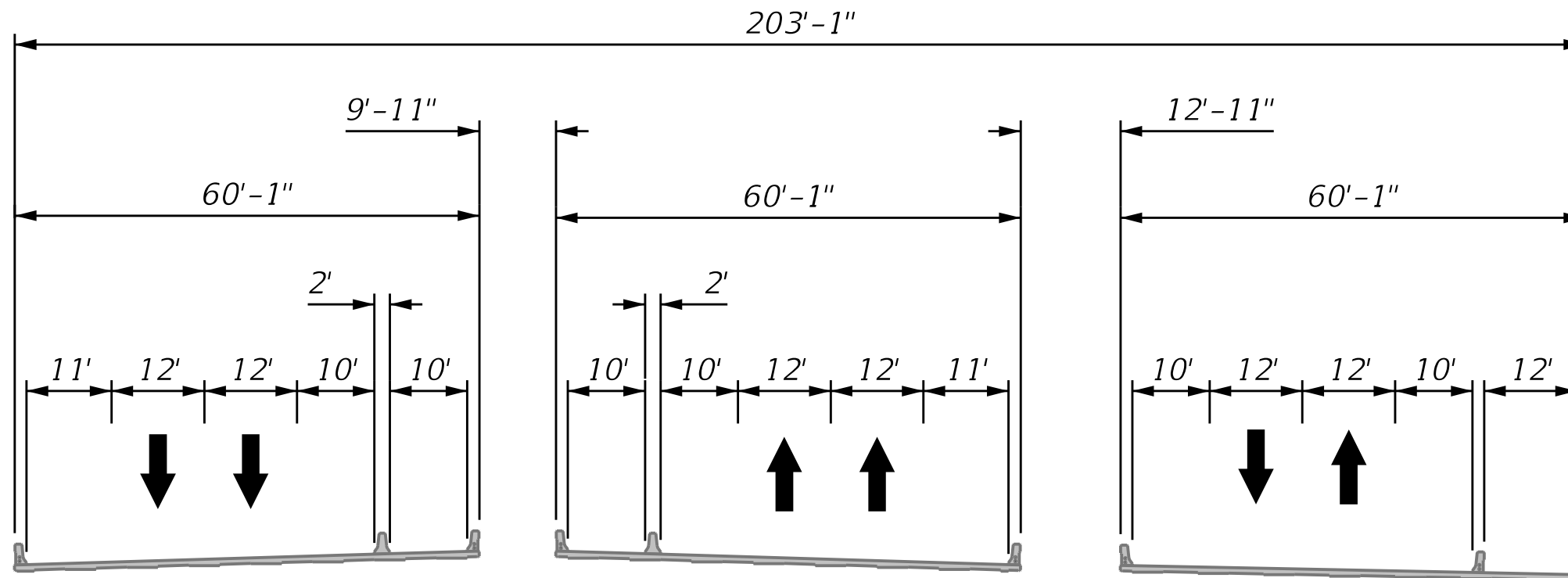
- Barrier wall separation between the service roadway and parkway is needed:
 - If traffic were to share through lanes, the weave created by the additional movements would impede operations and degrade safety;
 - The ability to provide a fair and equitable tolling scenario could be affected;
 - Adding additional access points is not in line with previous commitments to minimize access locations to enter the parkway;
- Complex geometry to accommodate necessary at-grade intersection would be required, increasing Right-of-Way needs and wetland impacts

As shown in the attached exhibit, consolidating the service roadway and parkway onto two structures provides virtually no benefit:

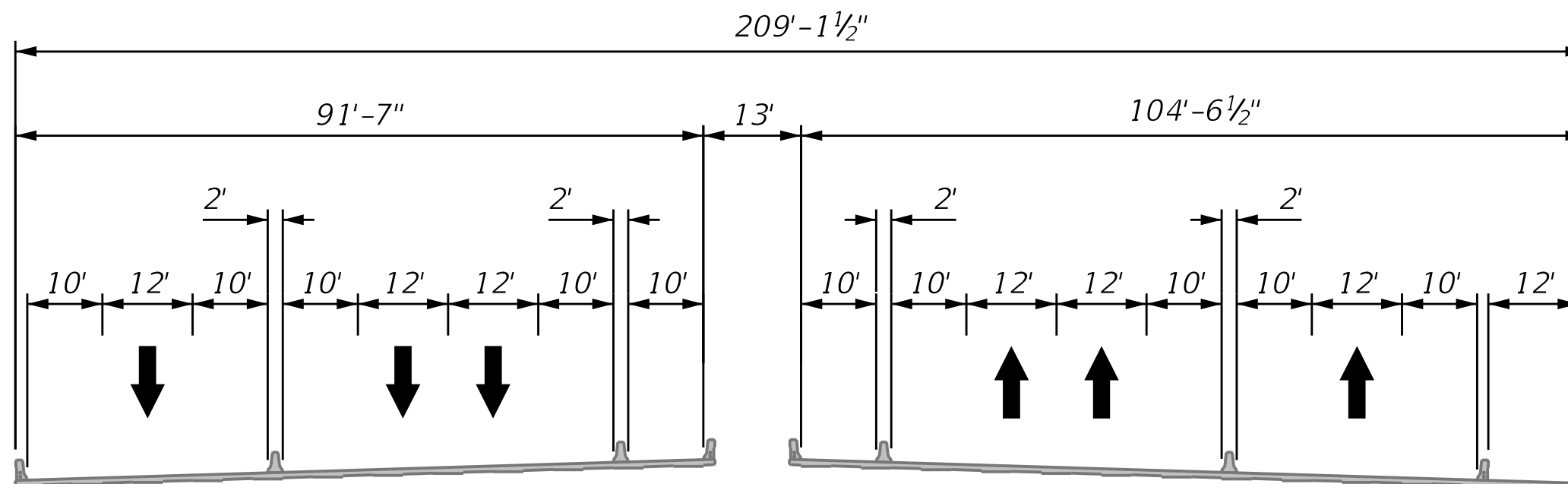
- Total width of bridge envelope is 6' greater than established three bridge alternative;
- Only one 13' light "portal" provided in two bridge option ;
- Increases island overhang from established three bridge alternative;
- Additional bridge does not allow for future mainline capacity (different profile);
- Change to project configuration could add significant delays to the project as a result of re-evaluation by FHWA.

For these reasons, we recommend keeping the originally proposed three-bridge section as previously approved by the Department, stakeholders, and FHWA.

END OF MEMORANDUM



**DESIGN PER PD&E AND
LINE AND GRADE**



TWO BRIDGE ALTERNATE