



**SPECIAL PROVISIONS  
FOR  
ACCELBRIDGE DECK COMPRESSION**

**Jackson County  
BRFN-052-1(97)--39-49**

**Effective Date  
July 18, 2017**

**THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.**

**150284.01 DESCRIPTION.**

- A.** AccelBridge is a U.S. patented technology that provides the necessary longitudinal deck compression force for full depth precast concrete deck panel bridges without the use of internal longitudinal post-tensioning strands and ducts. A complete description and overview of AccelBridge can be found at [www.AccelBridge.com](http://www.AccelBridge.com).
- B.** This specification describes AccelBridge deck compression system to be used in conjunction with full depth precast deck panels. This item includes all labor, material, equipment, tools and incidentals necessary to achieve the longitudinal deck compression force as specified in the plans.
- C. Submittals.**
1. Provide submittals to the Office of Bridges and Structures in electronic format, in accordance with Article 1105.03 of the Standard Specifications.
  2. The submittals requiring written approval from the Engineer are as follows:
    - Deck compression procedures.
    - Locations and details of bearings for jacking devices. Where jacking locations deviate from those shown on the plans, submit plans to the Bridge Engineer for review and acceptance. The plans shall be signed and sealed by a registered Civil Engineer in the state of Iowa.
    - Quality control / quality assurance procedures to ensure uniform application of deck compression forces to the entire bridge deck cross section.

**150284.02 MATERIALS.**

All material required by the AccelBridge deck compression shall be in accordance with the plans and the current edition of the Standard Specifications.

**150284.03 CONSTRUCTION.**

- A. Construction shall be in accordance with the plans and the Standard Specifications.
- B. Requirements for deck jacking: Deck jacking force shall be applied incrementally with a minimum of six steps, corresponding to 20%, 40%, 60%, 80%, 90% and 100% of specified force. At each load step, the jacking force shall be held for at least 3 minutes and the jacking gap opening shall be measured at the beginning and end of the 3 minute holding period. Increase jacking force only after the system stabilizes in the previous load step. After reaching the final jacking load, the contractor shall shut the hydraulic valve and monitor the jacking force for 15 minutes. The jacking force can't drop by more than 5% of the specified force.
- C. An erection booklet can be made available to the contractor at his or her request to assist in using AccelBridge and it shall be considered "For Informational Purposes Only." Call 312-952-3071 or visit [www.Accelbridge.com](http://www.Accelbridge.com) for further information.

**150284.04 METHOD OF MEASUREMENT.**

Measurement of AccelBridge deck compression shall include all items necessary to achieve the longitudinal deck compression force as specified in the plans. Measurement of the AccelBridge system(s) shall be per lump sum.

**150284.05 BASIS OF PAYMENT.**

- A. Payment for AccelBridge shall be paid for at the lump sum contract price and shall include all labor, material, equipment, tools and incidentals necessary to complete the work.
- B. Iowa DOT has obtained the license to apply AccelBridge to this project. The contractor does not need to pay any license fees.