



WEST ELEVATION PIER A42

BEARING REACTION TABLE - PIER A42

Load*	Girder A1	Girder A2
R _D (k)	431	431
R _L (k)	104	104
Impact (k)	16	16
Total (k)	551	551

*Service loads
Minimum Jack Size: 500 Tons

BILL OF MATERIAL - PIER A42

SUBSTRUCTURE			
ITEM	UNIT	QUANTITY	
Seismic isolation bearing assembly, Type A	Ea.	2	
Jack and remove existing bearings	Ea.	2	

ISOLATION BEARING NOTES - PIER A42

- Each bearing shall be capable of sustaining service gravity load of 550 kips min.
- Each bearing shall have elastic lateral load capacity of at least 40 kips, but not greater than 45 kips.
- Each bearing shall have post yield stiffness between 5 kips/in. and 10 kips/in.
- Each bearing shall be centered on existing bearing stiffener.
- Each bearing shall be capable of sustaining a minimum of 3 inch lateral deformation between top and bottom plates.
- Contractor is responsible for designing, furnishing and installing bearings and all related connections, shims, pedestals and any other elements necessary to achieve performance specifications outlined above. All such elements shall be capable of sustaining the demands associated with specified bearing deformation.

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DESIGNED	VARIOUS
CHECKED	JEL/HH
DRAWN	CLK
CHECKED	JEL

REVISIONS	
NAME	DATE

PIER ELEVATIONS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
REHABILITATION AND RETROFIT REPAIRS
FAI ROUTE TO
POPLAR STREET BRIDGE APPROACHES
ST. CLAIR COUNTY
STRUCTURE NO. 082-0141 (ROADWAY A)
SCALE: N.T.S.
DATE: 02/01/2007