



# PLAN

(Existing Girders Shown Only)

# Existing plate to be removed— using the air-arc method and grind smooth all weld material remaining on the bottom flange. Balance Migually Migu

# BILL OF MATERIAL

	ITEM	UNIT	TOTAL	
**	Jack and Remove Existing Bearings	EACH	31	
	Structural Steel Removal	L SUM	0.55	
	Jacking Existing Superstructure	LSUM	0.45	
	Removal of Existing Bearings	EACH	30	

\*\* The total estimated weight for Structural Steel Removal is approximately 24,390 lbs.

- Remove existing anchor bolts flush with existing concrete surface. Grind existing anchor bolt smooth and seal with epoxy. Cost is included to "Jack and Remove Existing Bearings" or Removal of Existing Bearings".

# EXISTING BEARING REMOVAL DETAIL

#### JACK AND REMOVE EXISTING BEARING PROCEDURE

- The Contractor shall submit for approval by the Engineer, plans for lifting existing girders and installing new bearings prior to commencing any related work. This work shall be done after existing concrete deck is removed and prior to poring of the new concrete deck. The maximum dead load reaction per girder varies from 6 k to 259 k. The minimum jacking capacity capacity varies from 9 k to 289 k.
- 2. Prior to ordering any material, the Contractor shall verify steel extension and shim plate thickness required at each bearing.
- The bottom flange of the existing girder shall be cleaned and receive one coat primer as specified for Structural Steel.
- 4. The new bearings and steel extensions shall be in place and the jacks shall be lowered before the new concrete deck is poured.

### SUPERSTRUCTURE JACKING PROCEDURE

- The Contractor shall submit for approval by the Engineer, plans for jacking prior to commencing any work.
- 2. All work is to be performed under staged construction. See Stage Construction sheets 3 thru 5 for details.
- 3. Jacking Existing Superstructure shall be performed on the girders after deck removal, and before the new deck poured.
- 4. The following service dead loads (steel weights only) and jack capacities shall be applicable to each girder at:

N. Brg. C. Abutment 4.

Dead Loads = 5 k
Minimum Jack Capacity = 8 k

S. Brg. Pier 9

Dead Loads = 5 k
Minimum Jack Capacity = 8 k

N. Brg. Pier 9

Dead Loads = 16 k
Minimum Jack Capacity = 24 k

At Pier 8

Dead Loads = 15 k
Minimum Jack Capacity = 23 k

At Pier 10

Dead Loads = 52 k
Minimum Jack Capacity = 78 k

\*This is the weight of the steel with the deck removed to the limits as indicated on the plans.

\* Dead Loads = 140 k

Minimum Jack Capacity = 210 k

#### NOTE

At Pier 11

- The cost for the removal of the bearing plates, pintles and anchor bolts is included in "Jack & Remove Existing Bearings" or "Jacking Existing Superstructure".
- 2. The cost for removal of existing diaphragms and cross frames is included in "Structural Steel Removal".

# <u>LEGEND</u>

- → Jack and Remove Existing Bearings
- **⊞** Removal of Existing Bearings

Jacking Existing Superstructure

JACKING DETAILS STRUCTURE NO. 016-3240

TYLININTERNATIONAL

L	DESIGNED	-	DY, LS	REVISIONS	
	CHECKED	-	AMD, LS	NAME	DATE
	DRAWN		DY, LS		
	CHECKED	-	AMD, LS ,JN		
	DATE	_	03/25/2011		

SHEET NO. 54		F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		55	0711.2R & 1011.1BR	COOK	741	657
73	73 SHEETS			CONTRACT	NO. 60	999
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						

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