Existing Structure: S.N. 010-0128 Built in 1963 as F.A.I. Route 57, Section 10-32HB. The existing structure is a 4 span wide flange structure with pins & links in the two end spans supporting a RC slab on hammerhead piers & spill thru abutments. The abutments are on concrete piles & piers are on spread footings. The structure has an overall length of 238'-0'' back to back of abutments and a width of 33'-8'' out to out of deck. The contractor will remove and replace the existing superstructure and abutments. Traffic to be maintained during stage construction.

No salvage

GENERAL PLAN & ELEVATION
F.A.S. Rte. 531 (MONTICELLO ROAD)
OVER I-57
F.A.S. RTE. 531 - SEC. 10-32HBR
CHAMPAIGN COUNTY
STATION 39+80.40
STRUCTURE NO. 010-0188

DEPARTMENTS OF TRANSPORTATION
STATE OF ILLINOIS

REVISED
P.G.
DECK - 3 2 '-0 ''
= CHAMPAIGN COUNTY
'''/'
2'-7''

No salvage

Overall length of 218'-0'' back to back of abutments and a width of 33'-8'' out to out of deck. The contractor will remove and replace the existing superstructure and abutments. Traffic to be maintained during stage construction.

No salvage

ELEVATION

LOADING HL 93
Allow 50#/sq. ft. for future wearing surface.

SEISMIC DATA
Seismic Performance Zone (SPZ) = A
Design Spectral Acceleration at 1.0 sec. (S ) = 0.055g
Design Spectral Acceleration at 0.2 sec. (S ) = 0.13g

F.A.S. Rte. 531                     Monticello Int.
Function Class: Interstate
ASD, 600 (2000), 400 (2010)

Fluorine Class: Asphalt

Design Spectral Acceleration at 1.0 sec. (S ) = 0.055g
Design Spectral Acceleration at 0.2 sec. (S ) = 0.13g

Existent Pier:
Seismic Performance Category (SPC) = A
Horizontal Bedrock Acceleration Coefficient = 0.045g

DESIGN SPECIFICATIONS
Existing Construction:
300 AASHO LRBD Bridge Design Specifications

New Construction:
1995 FEMA Seismic Retrofitting Manual for Highway Bridges

DESIGN STRESSES
FIELD UNITS (New Construction)

Existent Pier:
Seismic Performance Category (SPC) = A
Horizontal Bedrock Acceleration Coefficient = 0.045g
Site Class A - 1

F.A.S. Rte. 531 - I-57
Filled Joint Int.

Pipe drainage

Geotechnical Fabric for

Pipe drainage

Geocomposite

Drainage Aggregate

4'' } Perforated

Porous Granular

8'' } Perforated

Approach Slab

Barrier (typ.)

Temp. Conc.

Approach Slab

Temp. Conc.

Approach Slab

Temp. Conc.

Pipe drainage

Geocomposite

Drainage Aggregate

4'' } Perforated

Porous Granular

8'' } Perforated

Approach Slab

Temp. Conc.

Approach Slab

Temp. Conc.

Pipe drainage

Geocomposite

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