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### DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges

1995 F.H.W.A. Seismic Retrofitting Manual for Highway Bridges

2006 F.H.W.A. Seismic Retrofitting Manual for Highway Structures Part 1-Bridges (Reference Only)

## SEISMIC DATA

Seismic Performance Category (SPC) = B Bedrock Acceleration Coefficient (A) = 0.075 g Site Coefficient = 1.0

# DESIGN STRESSES

#### New Construction

f'c = 3,500 psi fy = 60,000 psi (Reinforcement) 50,000 psi (Structural Steel)

# (AASHTO M270 Grade 50)

#### Existing Structure

f'c = 3500 psi fy = 40,000 psi (Sub) (Reinforcement) (Abutments, Pier No. 1, Pier No. 4

& footings)

33,000 psi (Structural Steel) fy = 60,000 psi (Pier No. 2 & Pier No. 3)

(Reinforcement)

# LOADING HS20-44 & ALT.

No Future Wearing Surface

GENERAL PLAN F.A.I. ROUTE 70 AND F.A.I ROUTE 57 INTERCHANGE RAMP "F" OVER SOUTHBOUND F.A.I. ROUTE 57 STATION 6F+84.16

STRUCTURE NO. 025-0018

SHEET NO. 1 36 SHEETS

-Project

Location

TOTAL SHEET F.A.I. RTE. COUNTY SECTION SHEETS NO. (25-3HB)I-3 EFFINGHAM 1416 1382 57 SN 025-0018 CONTRACT NO. 74296 FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT

DESIGNED B.B. CHECKED C.J.F. W.J.S.

2'-1" Bk. Abut. to €

Brg. Along Beams

49'-034"

Along Beams

Span

APPROVED FOR STRUCTURAL ADEQUACY ONLY

49'-12'

Along Chord

Span 2

Relph E ay duse (170) ENGINEER OF BRIDGES AND STRUCTURES

\*\*\*\* Skew angle measured to tangent at intersection of @ roadway & @ substructure.

46'-238"

Along Chord

Span 4

For Sections A-A, B-B, C-C, D-D, E-E and F-F see Sheet 3 of 36.

45'-10<sup>5</sup>16"

Along Beams

Span 5

BERNARDIN ASSOCIATES, INC.

LOCHMUELLER &

LOCATION SKETCH

Illinois Design Firm Number 184.001670

2'-7" Bk. Abut. to € Brg. Along Beams

60'-3<sup>5</sup>8"

Span 3

PLAN

258'-107<sub>16</sub>" Back to Back along L.C.

Chodwith of treety 4/29/2010

CHECKED C.J.F. & B.B.

DRAWN