APPROVED

NOV 2 2 2002

AS A BASIS FOR PREPARATION OF DETAILED PLANS

Conditionally Approved

Benchmark: Top nut of fire hydrant north side of Baugh Avenue and 400' east of 15th Street. Southwest corner of church property. Elev. 416.86

Existing Structure: S.N. 082-0151, four span 226'-0" bt. to bt. abutments, 58'-10" o. to o. R.C. slab on rolled steel beams supported on pile bent abutments and multi-column piers. Built as FAI Rte. 64, Section 82-1HB-1 at Sta. 75+85.50 in 1970. The contractor shall remove the existing structure as required, including the footings at Piers 2 & 3, and replace it with a four span wide flange superstructure on integral abutments and solid piers. The road shall be closed during construction and traffic detoured.

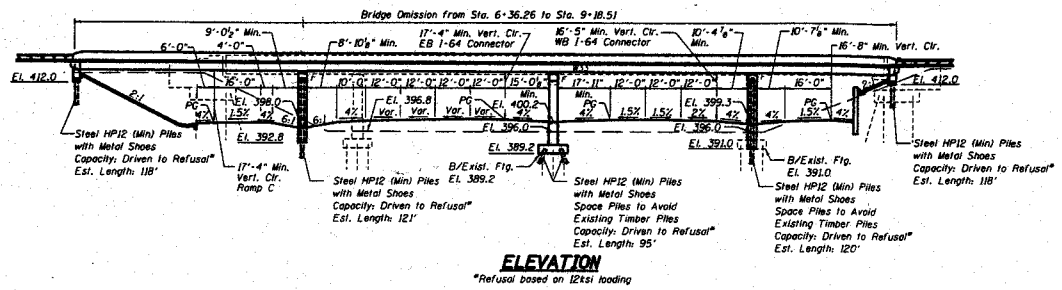
No Salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| F.A.I. 64 | * | ST. CLAIR | 2 | 1 |

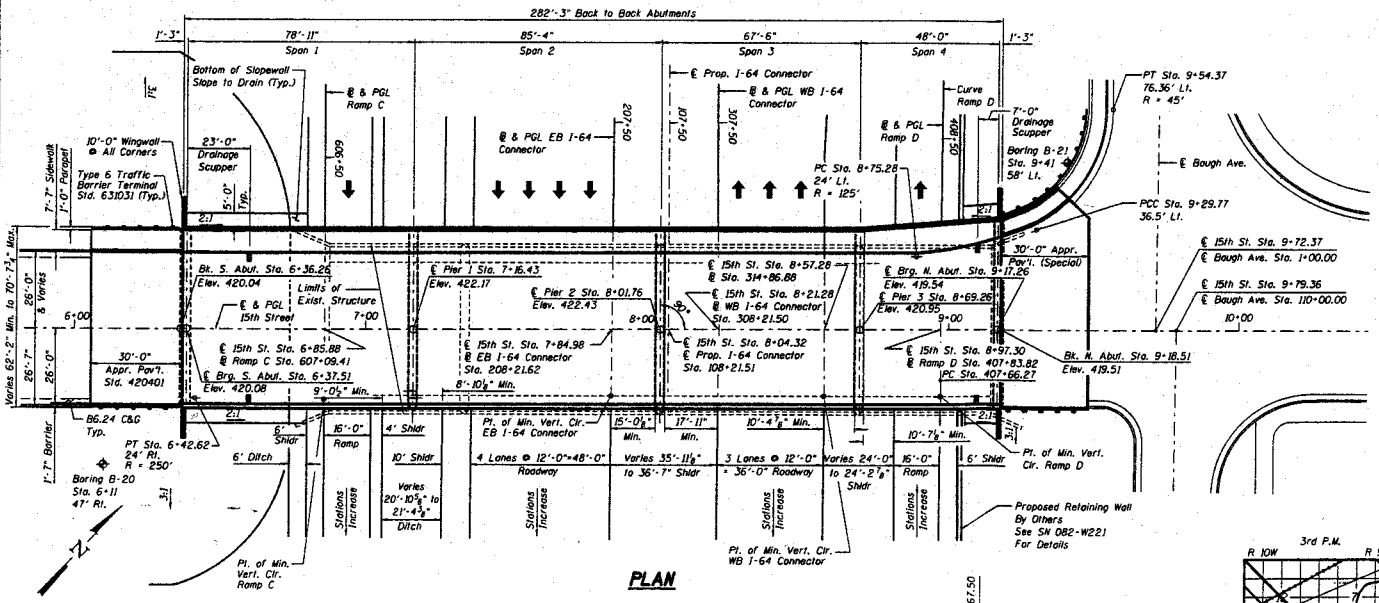
SHEET NO. 1
2 SHEETS

*(81-2, 82)R

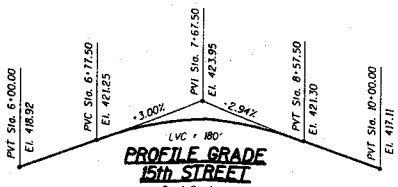



**ELEVATION**

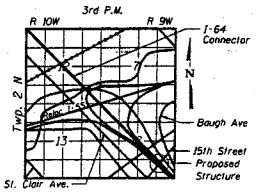
*Refusal based on 12ksi loading



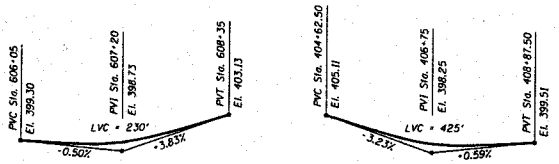

**PLAN**




**PROFILE GRADE 15th STREET**
℄ of Roadway



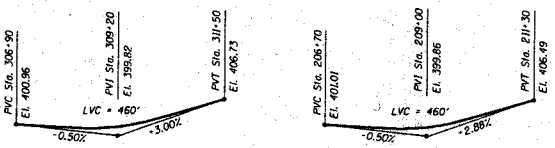

**LOCATION SKETCH**




**PROFILE GRADE RAMP C**
Outside Edge of Pavement




**PROFILE GRADE RAMP D**
Outside Edge of Pavement




**PROFILE GRADE WB I-64 CONNECTOR**
Median Edge of Pavement

**PROFILE GRADE EB I-64 CONNECTOR**
Median Edge of Pavement

**HIGHWAY CLASSIFICATION**

| | 15th St. | I-64 Connector | Ramp C | Ramp D |
|---|---|---|---|---|
| Class | Urban Minor Arterial | Interstate | Ramp | Ramp |
| DHV (2020) | 1,099 | 7,760 | 330 | 220 |
| ADT (2000) | NA | NA | NA | NA |
| ADT (2020) | 13,140 | 95,560 | 4,125 | 2,750 |
| ADTT (2000) | NA | NA | NA | NA |
| ADTT (2020) | 1,374 | 9,556 | 412 | 275 |
| Design Speed | 30 mph | 60 mph | 50 mph | 50 mph |

**CURVE DATA RAMP D**

Δ = 2° 02' 46.38" (LT)
D = 1° 00' 00"
R = 5,729.58'
T = 102.32'
L = 204.62'
E = 0.91'
PC Sta. 407+66.27
PT Sta. 409+70.89
SE = 1.5%
PI Sta. 408+68.59

**LOADING HS20-44**
Allow 50 psf for future wearing surface

**DESIGN SPECIFICATIONS**
1996 AASHTO w/1997, 1998, 1999, 2000 & 2002 Interims

**DESIGN STRESSES**

**FIELD UNITS**

$f'_c$ = 3,500 psi
$f_y$ = 60,000 psi (reinforcement)
$f_y$ = 50,000 psi (W270 Grade 50)

**SEISMIC DATA**

Seismic Performance Category (SPC) = B
Bedrock Acceleration Coefficient (A) = 0.12g
Site Coefficient (S) = 1.5

GENERAL PLAN
15th STREET OVER PROPOSED I-64 CONNECTOR
FAI-64
SECTION 81-2, 82 R
ST. CLAIR COUNTY
STA. 8+04.32
STRUCTURE NO. 082-0377

BRANCO & ZROKA ENGINEERING, P.C.

| | |
|---|---|
| DESIGNED | LAS |
| CHECKED | DAZ |
| DRAWN | SAW |
| CHECKED | LAS |

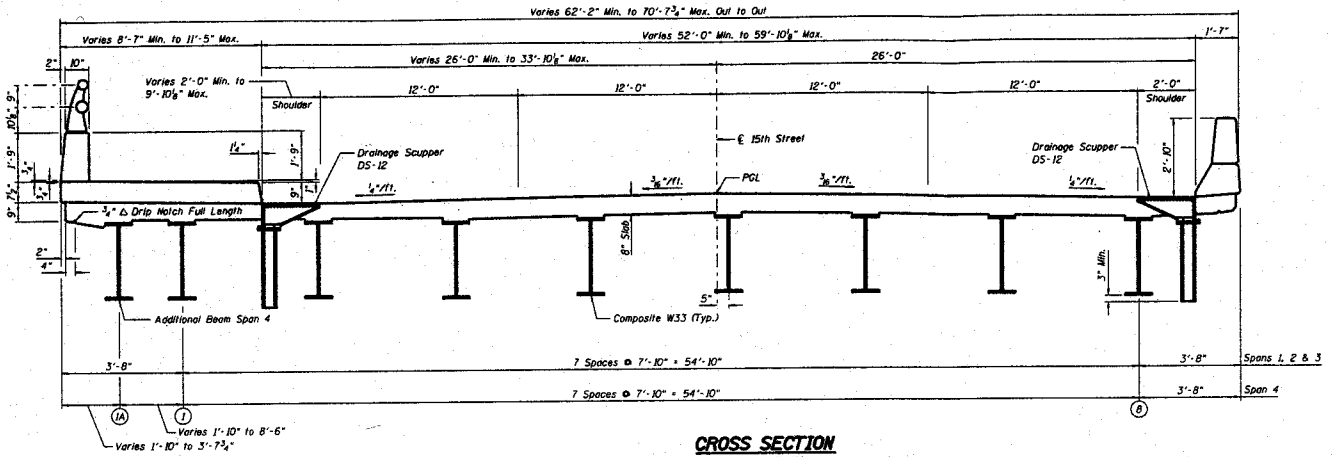
September 2002

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

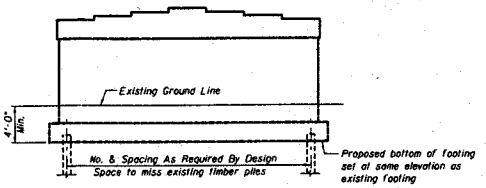
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| F.A.I. P.A.L.SH | * | ST.CLAIR | 2 | 2 |
| FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT D-75-(3)-(7)-(3)-(7) | | |

SHEET NO. 2
2 SHEETS

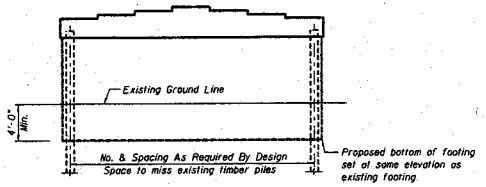
*(81-2,82)R



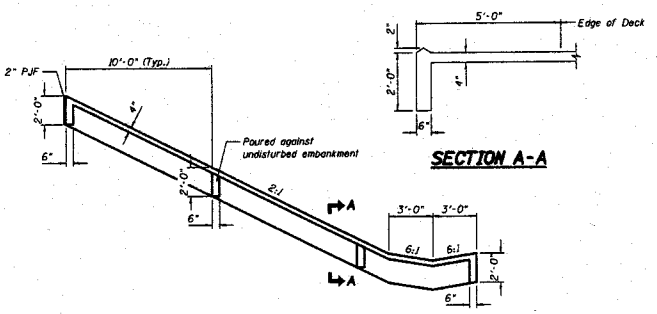

## CROSS SECTION
(Looking North)




## PIER 2 SKETCH



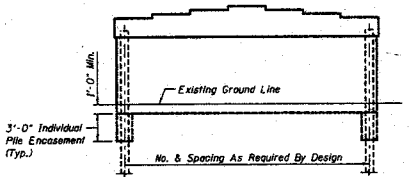

## PIER 3 SKETCH



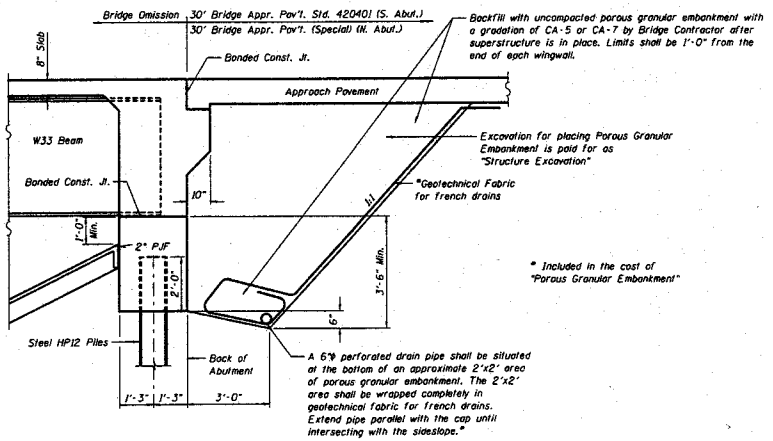

## SECTION THRU SLOPEWALL
(South Abutment)



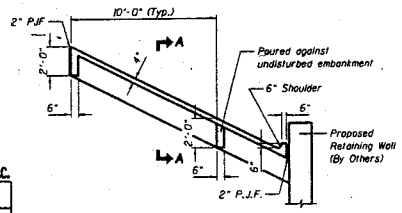

## SECTION A-A



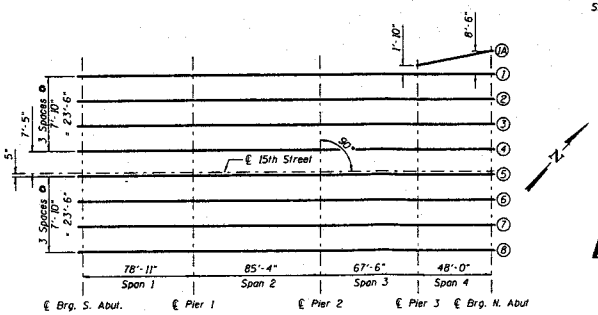

## PIER 1 SKETCH




## SECTION THRU ABUTMENT




## SECTION THRU SLOPEWALL
(North Abutment)




## FRAMING PLAN
Note: Dimensions are preliminary and will be finalized during design

| BRANCO & ZROKA ENGINEERING, P.C. | |
|---|---|
| DESIGNED | LAS |
| CHECKED | DAZ |
| DRAWN | SAW |
| CHECKED | LAS |

September 2002

APPROVED
NOV 2 2 2002

SECTIONS AND DETAILS
15th STREET OVER PROPOSED I-64 CONNECTOR
FAI-64
SECTION 81-2, 82 R
ST. CLAIR COUNTY
STA. 8+04.32
STRUCTURE NO. 082-0377

AS A BASIS FOR
PREPARATION OF DETAILED PLANS

SL(15thStBridge)Sht2.dgn Oct. 01, 2002 17:18:33