

MICROFILMED  
FEB 41982

PK.in 10" Box Elder  
PK.in 24" Box Elder  
PK.in 12" Box Elder  
P.C. Sta. 435+83.75

PROP. CURVE  
R=249.11'  
L=338.84'  
T=201.49'  
E=71.29'  
D=23°00'  
Δ=77°56' Lt.

P.T. Sta. 439+22.59  
P.K.in 24" Syc.  
P.K.in 20" Box Elder

| FED. RD. DIVISION | STATE | PROJECT | 20 |
|-------------------|-------|---------|----|
| 2                 | OHIO  | State   | 31 |

BROWN COUNTY  
BR-763-8.21

9.4 miles N. of Aberdeen

Stony Lonesome Rd. T-19

Remove abutment and dress slope  
+6152  
EARTHWORK limits shown are approximate.  
Actual slopes shall conform to roadway cross-sections.

DUMPED ROCK FILL  
Type A, 3' thick, w/o bed mat'l

Transition 2:1 to roadway slopes at all four corners.

Ex. S.R. 763

P.C.=435+83.75

End Approach Slab  
Sta. 436+16.72

Bench 3.25'

(TYP) 2:1

15°

Elev. 607.0±

Elev. 608.2±

Bridge Limits = 104.10'

Design Discharge  
Q<sub>25</sub> = 4,000 c.f.s.  
Q<sub>100</sub> = 5,200 c.f.s.  
Drainage Area = 7.8 sq. mi.

Velocity  
9.0 f.p.s.  
10.6 f.p.s.

Design Traffic  
1993 ADT = 340

### EXISTING BRIDGE DATA

|                 |                    |
|-----------------|--------------------|
| Bridge No.      | BR-763-0827        |
| Loading         | 5.76               |
| Type            | Low Steel Truss    |
| Span            | 70'                |
| Roadway         | 14'-8 1/2"         |
| Condition       | Poor               |
| Skew            | 0°-00'             |
| Abuts           | Stone - Conc. Cap. |
| Wearing Surface | 2 1/2" Bit         |
| L.L. Reduction  | 20%                |
| Suff. Rating    | 61                 |

### PROPOSED STRUCTURE

Type: Continuous reinforced concrete slab with reinforced concrete substructure  
SPANS: 31.0'-39.75'-31.0'  
ROADWAY: 36'-0" f/f guardrail  
LOADING: HS 20-44 & Interstate Alternate  
SKEW: 15° L.F.  
WEARING SURFACE: 2 1/2" Asphalt Concrete  
APPROACH SLABS: A3-I-72 (25' long)  
ALIGNMENT: 23° Curve left  
SUPERELEVATION: Varies

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
BUREAU OF BRIDGES

### SITE PLAN

BRIDGE No. BR-763-0827  
OVER SUCK RUN  
BROWN COUNTY S.R. 763  
Sta. 436+16.72  
437+20.82

| PRESENT TOPOGRAPHY           | PROPOSED WORK                            | SCALE    |
|------------------------------|------------------------------------------|----------|
| SURVEYED<br>AERIAL<br>SURVEY | DRAWN<br>DESIGNED<br>CHECKED<br>REVIEWED | 1" = 20' |
| JM                           | JM RLE D.H.S.                            |          |

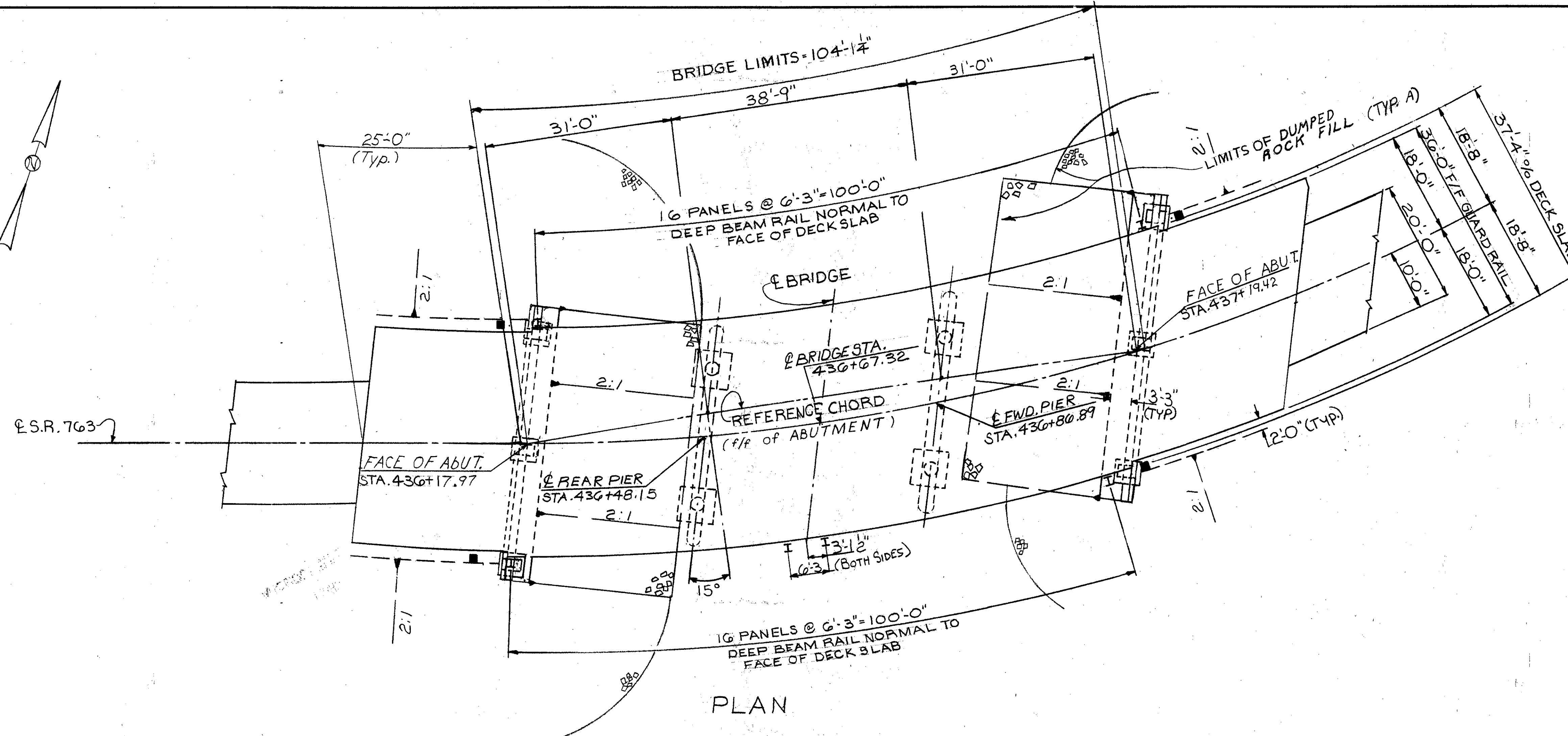
BFG 7-3-75

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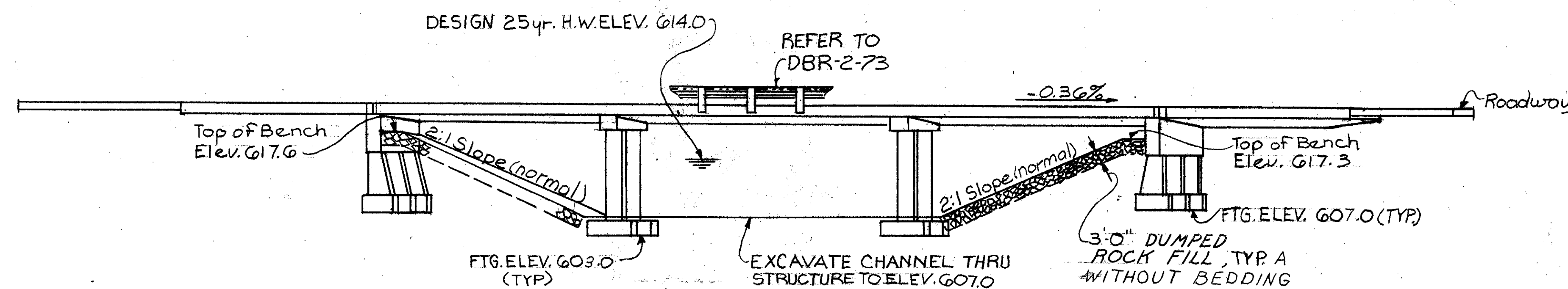


PLAN

CURVE DATA

300' V.C.  
V.P.I. 618.95  
Elev. 622.74  
Sta. 434+50

-13.92%    -0.36%



ELEVATION

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DIVISION OF DESIGN AND CONSTRUCTION  
BUREAU OF BRIDGES

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GENERAL PLAN & ELEVATION  
Bridge No. BRO-763-0827  
Over Suck Run

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE   | REVISED |
|----------|-------|--------|---------|----------|--------|---------|
| HAS      | GEJ   |        | JGS     | BFG      | 7-3-75 |         |

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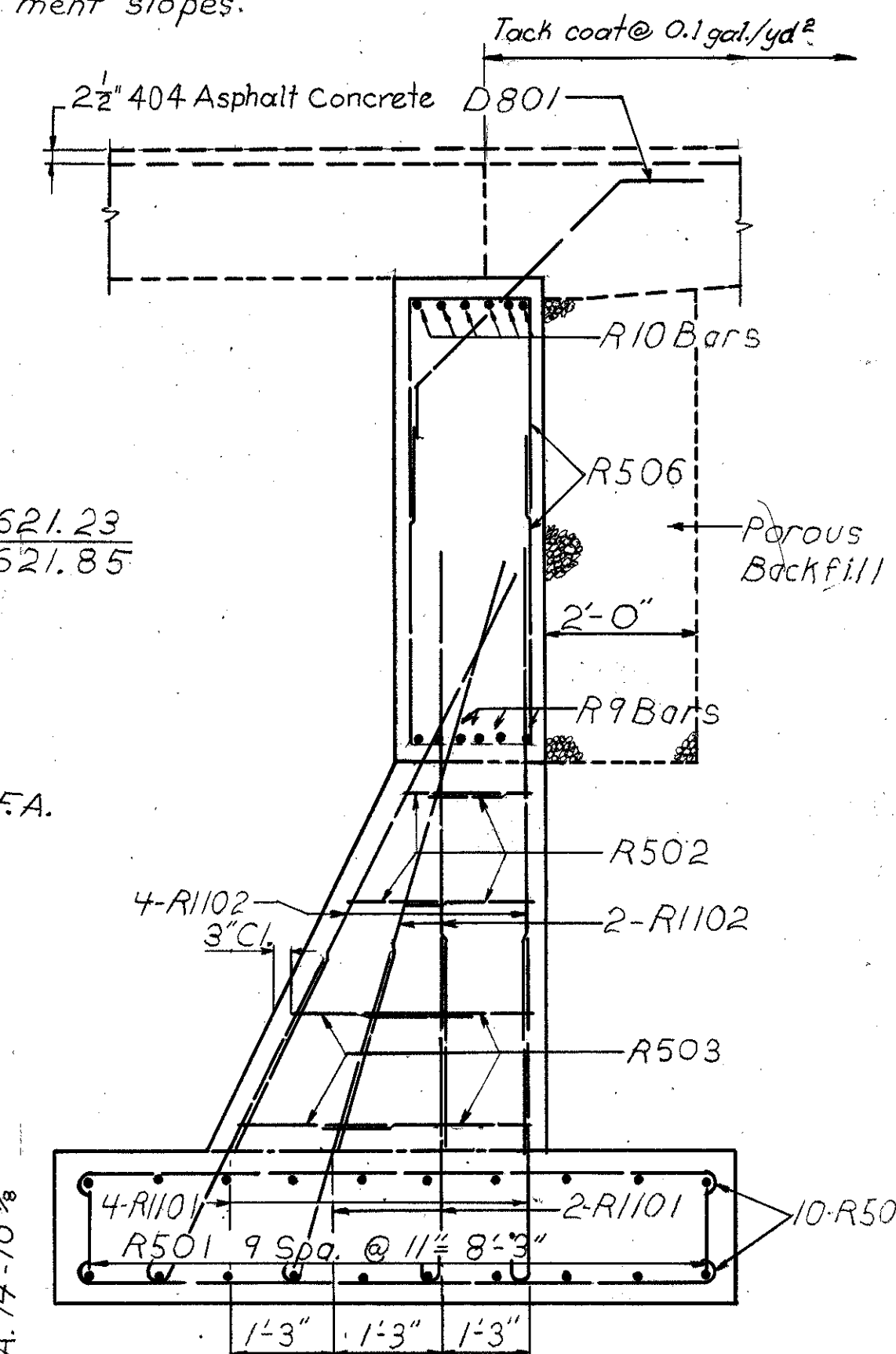
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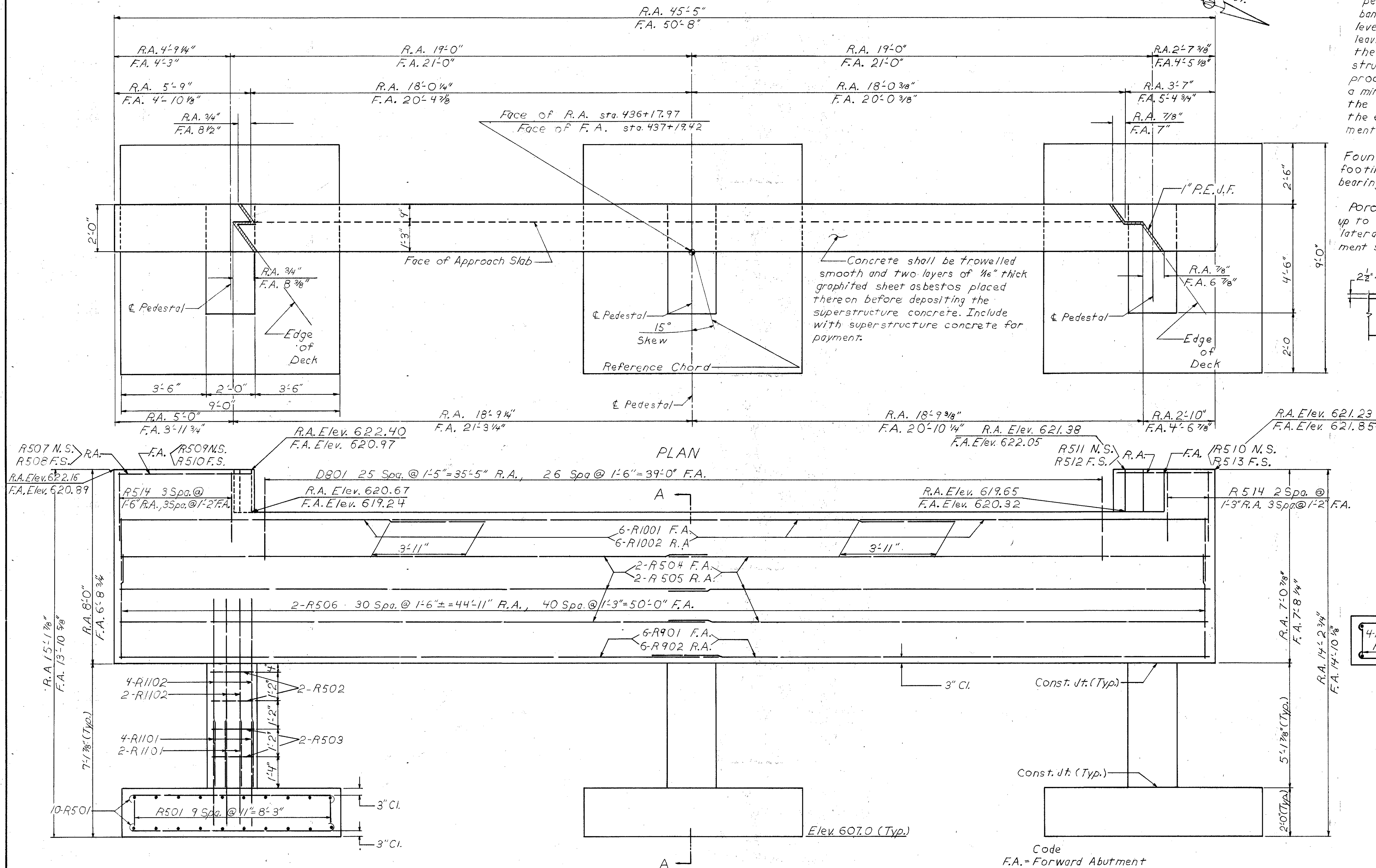
**Embankment Construction:** After the pedestals have been built the embankments shall be constructed to the level of the top of the pedestals leaving room for the construction of the abutment crossbeams. The construction of the embankment shall then proceed to the level of the subgrade for a minimum distance of 200 ft. back of the abutments or to within 10 ft. of the edge of the existing road. The abutment crossbeams shall then be constructed.

**Foundation Bearing Pressure:** Abutment footings are designed for a maximum bearing pressure of 3.5 tons per sq. ft.

Porous Backfill, 2 ft. thick, shall extend up to the plane of the subgrade and laterally to the surface of the embankment slopes.



SECTION A-A



ELEVATION

Code  
F.A. = Forward Abutment  
R.A. = Rear Abutment  
N.S. = Near Side  
F.S. = Far Side  
P.E.J.F. = Preformed Expansion Joint Filler

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|-----------------------------------------------------------------------------------------------------|-------|--------|---------|----------|--------|
| ABUTMENT DETAILS                                                                                    |       |        |         |          |        |
| BRIDGE NO. BRO-763-0827<br>OVER SUCK RUN                                                            |       |        |         |          |        |
| DESIGNED                                                                                            | DRAWN | TRACED | CHECKED | REVIEWED | DATE   |
| HAS                                                                                                 | HAS   |        | JGS     | BFG      | 7-3-75 |

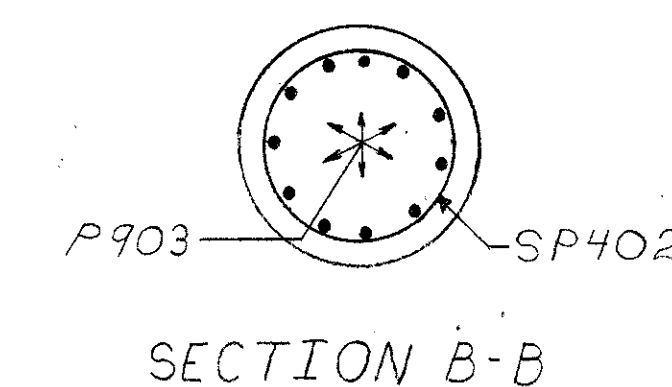
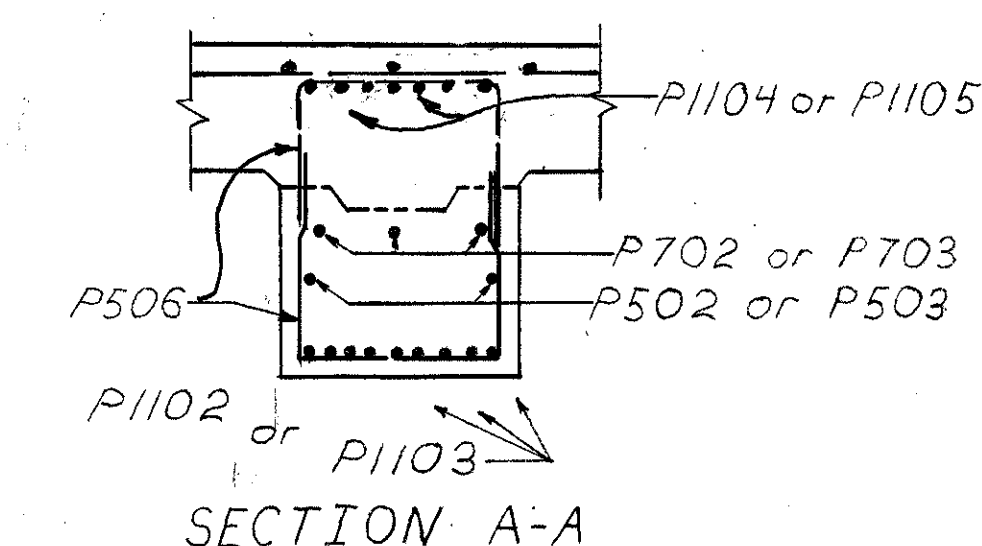
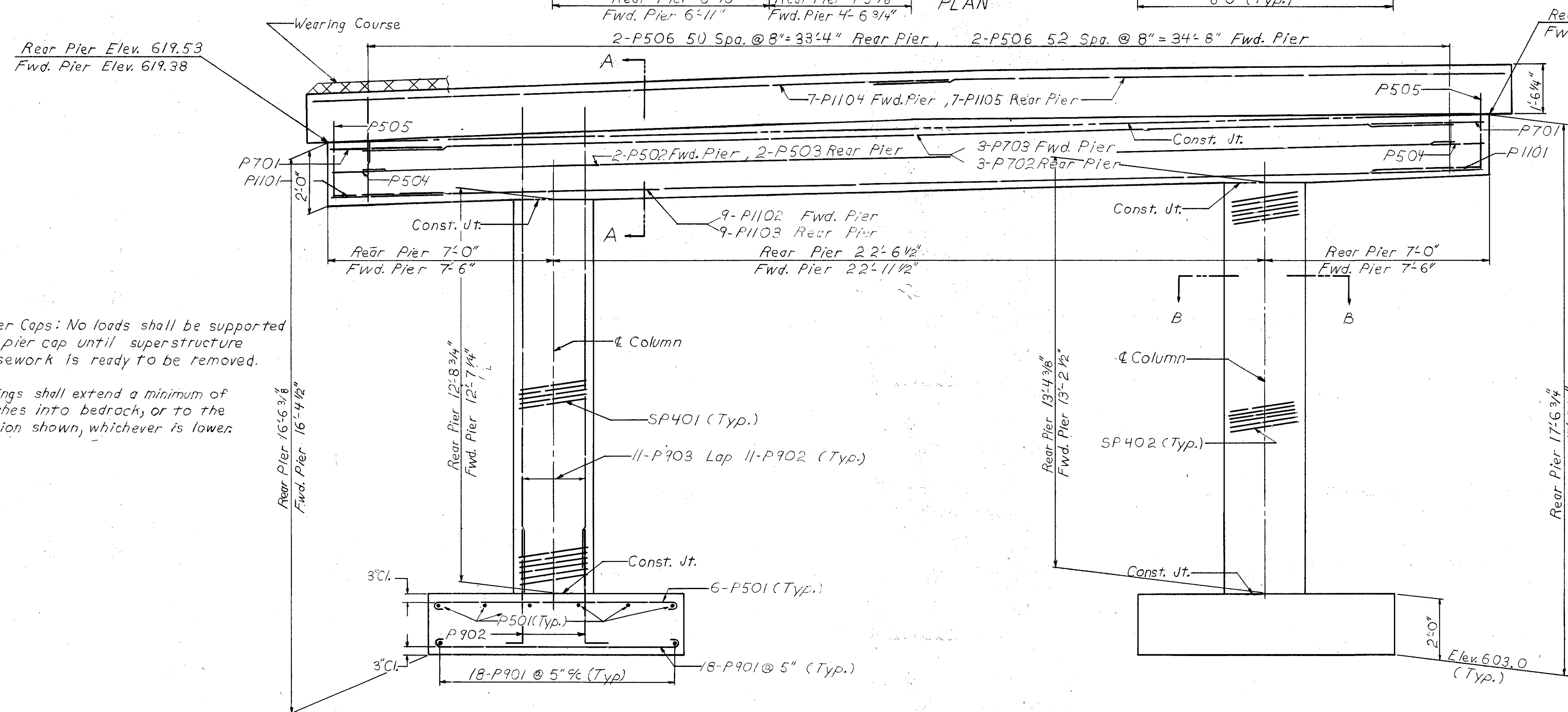
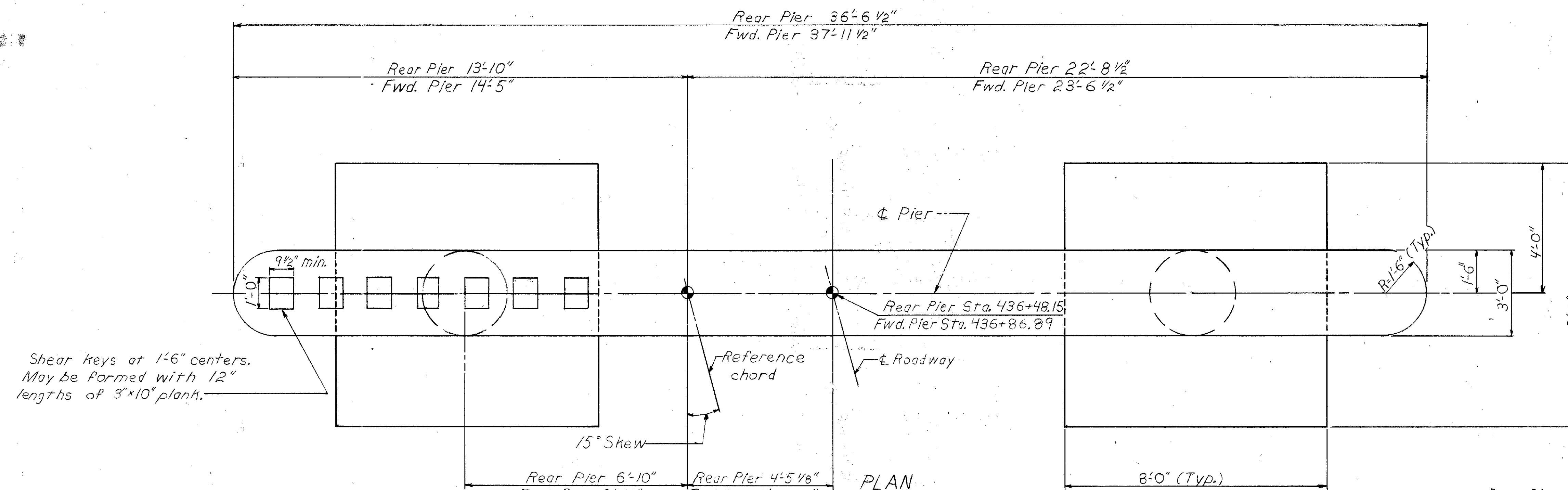
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**Note:**  
Shoring and formwork for pier caps shall be of sufficient strength to support the superstructure formwork and deck concrete at time of placing. The pier cap shoring and forms shall not be removed until the deck concrete has cured.

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|-----------------------------------------------------------------------------------------------------|-------|--------|---------|----------|--------|---------|
| DESIGNED                                                                                            | DRAWN | TRACED | CHECKED | REVIEWED | DATE   | REVISED |
| HAS                                                                                                 | HAS   |        | JCS     | BFG      | 7-3-75 |         |

PIER DETAILS  
BRIDGE NO. BR0-763-0827  
OVER SUCK RUN

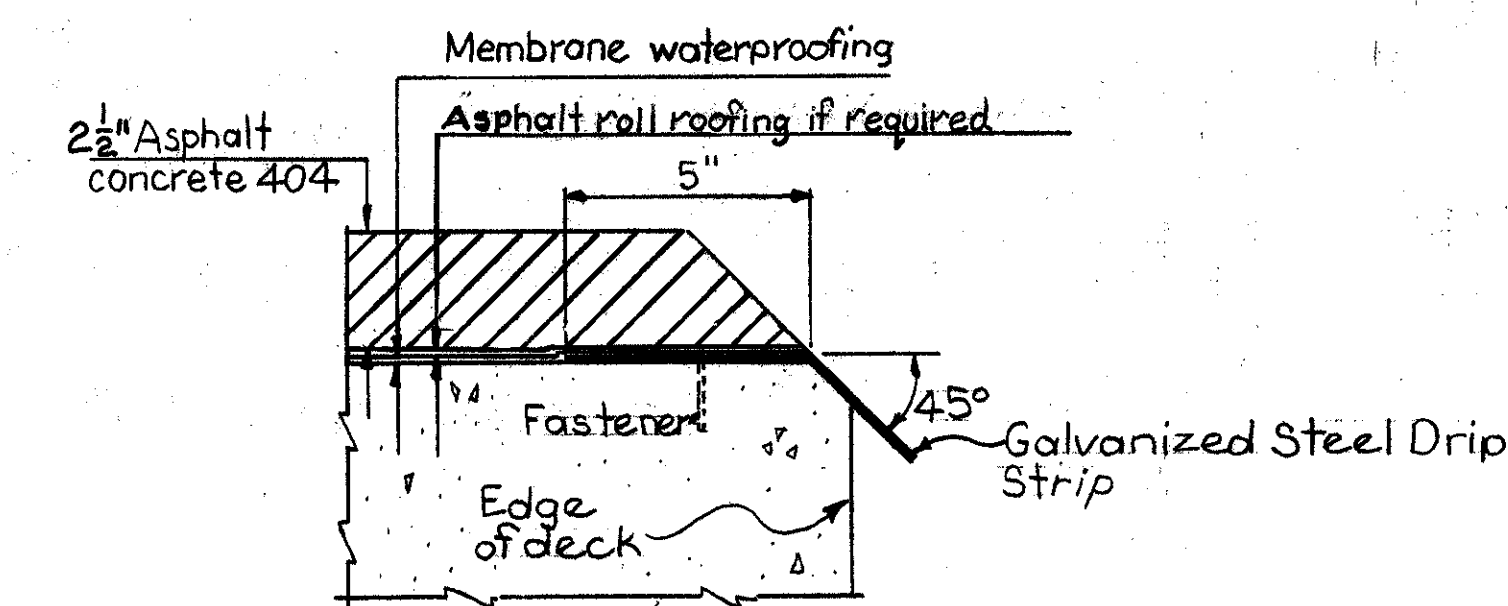
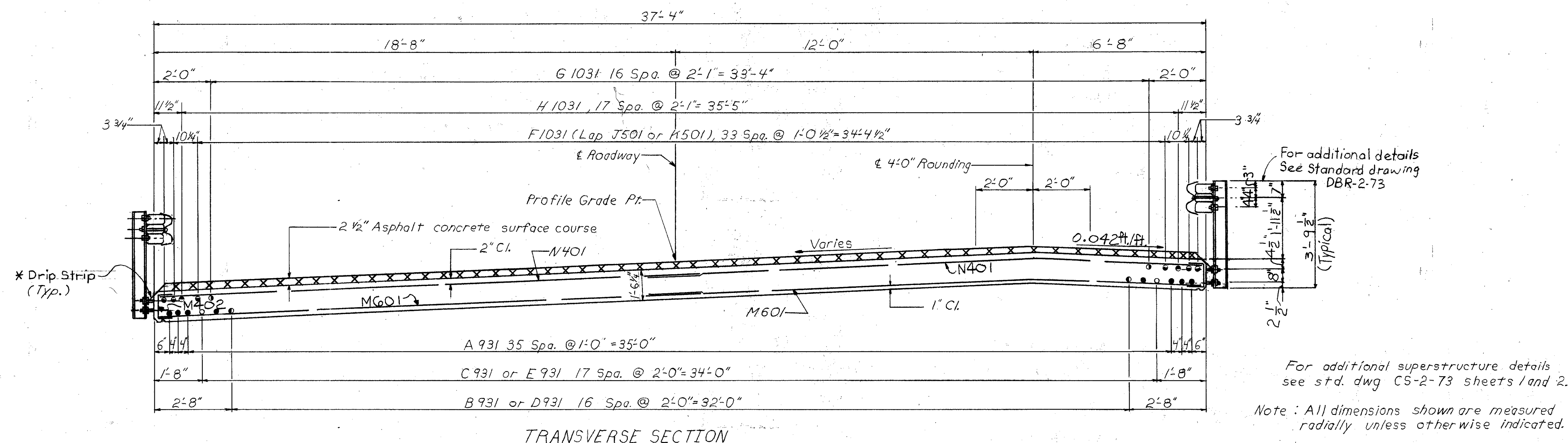
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Transverse reinforcing steel shall be placed parallel with the substructure units.  
Longitudinal reinforcing steel, see bar list notes.



#### \*DRIP STRIP FOR BRIDGE WITHOUT CURBS

Galvanized Steel Drip Strip: Prior to applying deck membrane waterproofing a bent galvanized steel drip strip, 3"x0.105" shall be installed along the edges of the deck as shown. The strips shall be fastened at 3'-0" maximum with power driven pins or #10 galvanized expansion screws, subject to the approval of the Engineer. The strips shall be placed the full length of the deck. Where splices are required a 3" (min.) lap shall be used with a fastener through the lap. Steel shall meet the requirements of ASTM A568 and galvanizing shall be in accordance with 711.02. Payment shall be at the contract price bid for Item Special, Sq. Ft., Galvanized steel drip strip, which shall include all materials, labor, tools and incidentals necessary to complete the item.

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|-----------------------------------------------------------------------------------------------------|-------|--------|---------|----------|--------|---------|
| DESIGNED                                                                                            | DRAWN | TRACED | CHECKED | REVIEWED | DATE   | REVISED |
| H.A.S.                                                                                              | GFJ   |        | JGS     | BFG      | 7-3-75 |         |

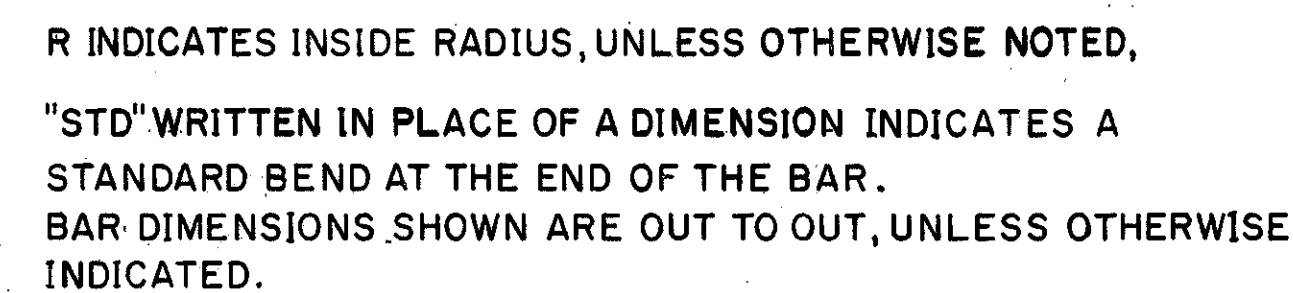
SUPERSTRUCTURE DETAILS  
BRIDGE NO. BR0-763-0827  
Over Suck Run

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### REINFORCING STEEL LIST

BR0-763-8.21

### BENDING DIAGRAMS



## GENERAL NOTES

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1975 INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA: (CONTINUED)

REINFORCING STEEL - ASTM A615, A616 OR A617.

SPIRAL REINFORCEMENT MAY BE PLAIN BARS A82 OR A615

SUBSTRUCTURE UNIT STRESS 20,000 PSI.

SUBSTRUCTURE MINIMUM YIELD STRENGTH 40,000 P.S.I.

REMOVAL OF EXISTING STRUCTURE: WHEN NO LONGER NEEDED  
TO MAINTAIN TRAFFIC THE EXISTING STRUCTURE SHALL BE  
REMOVED.

FOUNDATION BEARING PRESSURE: ALL FOOTINGS ARE DESIGNED  
FOR A MAXIMUM BEARING PRESSURE OF 3.5 TONS PER SQ.FT.

REFER TO CMS SECTIONS 106.03, 700, 709.01 THRU 709.05 AND  
709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE  
PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPLACED  
IN THE STRUCTURE BY THE ADDITIONAL STEEL, SPLICED IN  
ACCORDANCE WITH 509.08.

APPROACH SLABS SHALL BE AS SHOWN ON STANDARD DRAWING  
AS-1-72 EXCEPT JACKING HOLES SHALL BE OMITTED AND TOP  
STEEL SHALL HAVE A 3" MINIMUM COVER INSTEAD OF 2".

STATE OF OHIO  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 BUREAU OF BRIDGES

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## GENERAL NOTES, ESTIMATED QUANTITIES, REINFORCING STEEL LIST

BRIDGE NO. BRO-763-0827

OVER SUCK RUN

| DESIGNED | DRAWN | TRACED | CHECKED       | REVIEWED | DATE   | REVISED |
|----------|-------|--------|---------------|----------|--------|---------|
| HAS      |       | GFJ    | 7/9/75<br>JGS | BFG      | 7-3-75 |         |