

MICROFILMED  
OCT 24 1984

# STATE OF OHIO DEPARTMENT OF TRANSPORTATION

## HOL-83-13.56 PRAIRIE TOWNSHIP HOLMES COUNTY

OHIO	1
FHWA REGION 5	13
BRF 44 (21)	
HOL-83-13.56	
FEDERAL PROJECT	

**DESIGN DESIGNATION**  
 Current A.D.T. --- 1980 = 4540  
 Design Year A.D.T. --- 2000 = 8792  
 D.H.V. --- = 1407  
 D --- = 60 %  
 T --- = 7 %  
 V --- = 50 m.p.h.

NOV 28 1989

BRF-44 (21)

**CONVENTIONAL SIGNS**

County Line	-----	Limited Access (only)	----- LA
Township Line	-----	Right of Way (only)	----- RW
Section Line	-----	Limited Access & Right of Way	----- LA & RW
Corporation Line	----- or -----	Existing Right of Way	----- E/RW
Fence Line (existing)	x-x-x-x-x-x	Property Line	----- (in existing fence) x-x-x-x
Fence Line (proposed)	x-x-x-x-x-x	Railroad	----- or -----
Center Line	352 353	Guardrail (existing)	----- (proposed) -----
Trees	⊙, ⊙, ⊙	Survey	-----
Stumps	⊙, ⊙, ⊙		
Utility Poles: Telephone	⊙, ⊙, ⊙		
Power	⊙, ⊙, ⊙		
Light	⊙, ⊙, ⊙		

**INDEX OF SHEETS**

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**LINE DATA**

Begin Project Sta. 189+02.23  
 End Project Sta. 190+48.52  
 Net Length of Project = 146.29 Lin. Ft. or 0.027 Mile

Begin Work Sta. 187+50  
 End Work Sta. 192+00  
 Net Length of Work 450 Lin. Ft. or 0.085 Mile

**UNDERGROUND UTILITIES**  
 48 HOURS  
**BEFORE YOU DIG**  
 Call 800-362-2764 (Toll free)  
 OHIO UTILITIES PROTECTION SERVICE  
 NON-MEMBERS  
 MUST BE CALLED DIRECTLY

Portion to be improved: \_\_\_\_\_  
 State & Federal Routes \_\_\_\_\_  
 Other Roads \_\_\_\_\_

**SCALES**

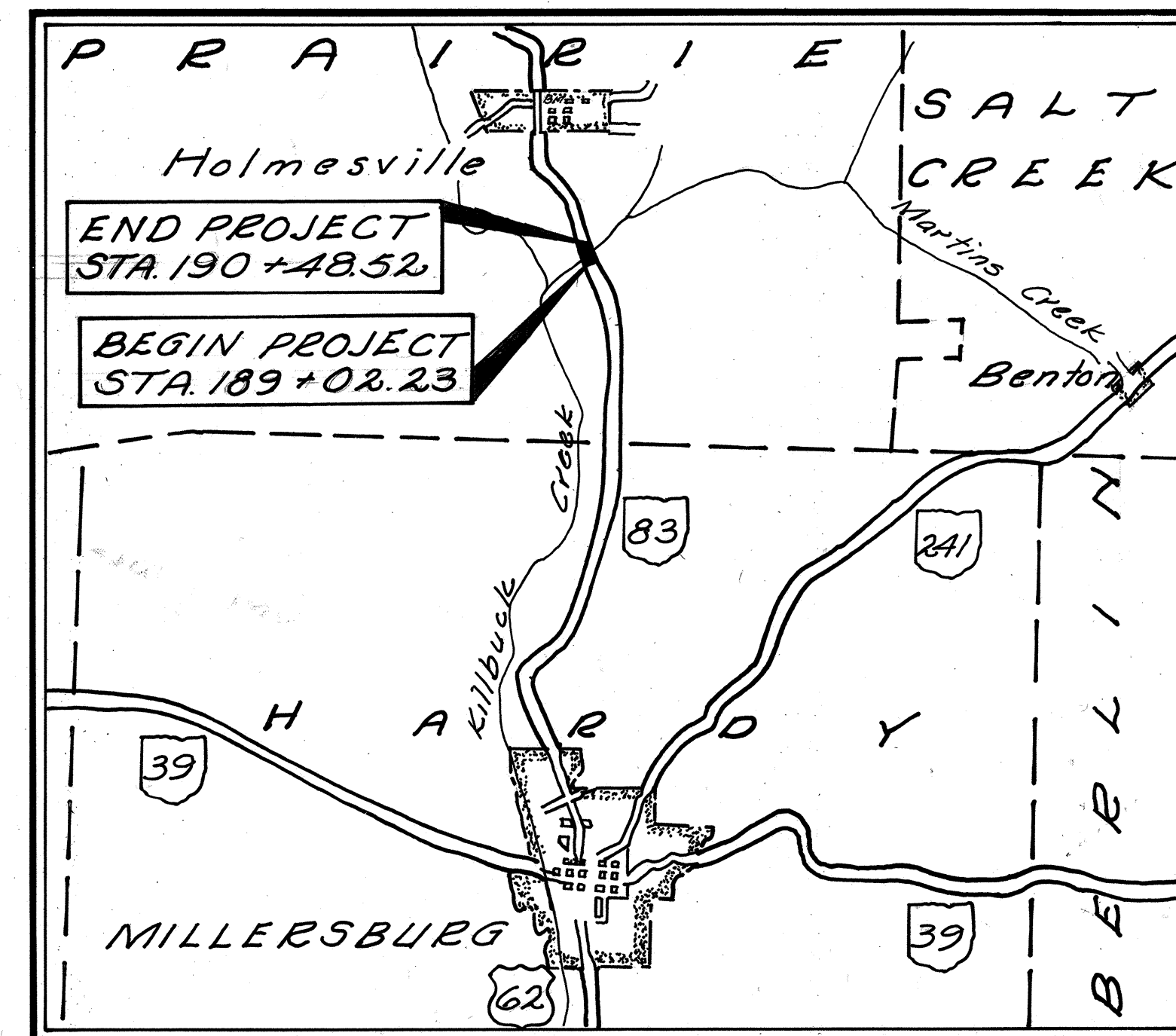
Plan: \_\_\_\_\_  
 Profile: Horizontal \_\_\_\_\_, Vertical \_\_\_\_\_  
 Cross Section: Horizontal \_\_\_\_\_, Vertical \_\_\_\_\_

SUPPLEMENTAL SPECIFICATIONS	
1001	1-3-77

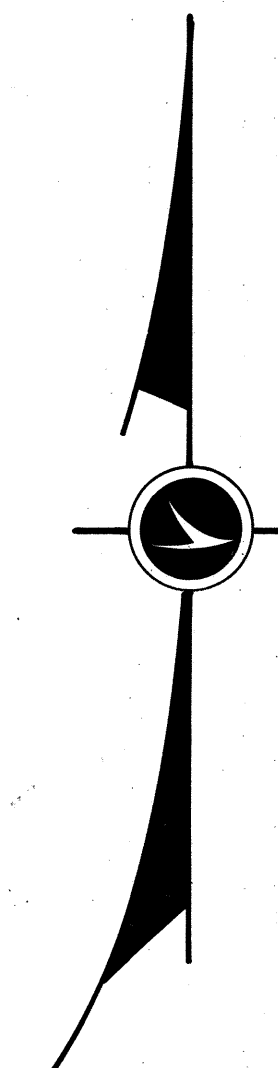
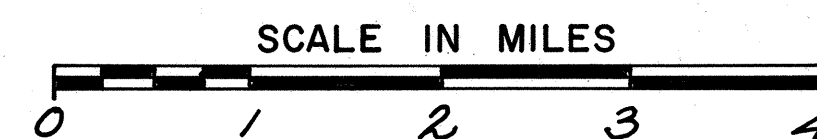
SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS			
BP-5	7-16-81	D.B.R. 2-73	4-10-73
BP-6	6-1-65		
GR-2B	2-5-82		
GR-3	2-5-82		
GR-4	2-5-82		
GR-4A	2-5-82		
GR-1	2-5-82		
MC-3	6-1-73		
CPA-2-73	4-10-73		
CPR-2-73	4-10-73		
CS-2-73	4-10-73		
AS-1-81	11-27-81		

Plan Prepared By: \_\_\_\_\_

SEAL



LOCATION MAP



**1981 SPECIFICATIONS**

The standard specifications of the State of Ohio, Department of Transportation, including changes and supplemental specifications listed in the proposal shall govern this improvement.

I hereby approve these plans and declare that the making of this improvement will not require the closing to traffic of the highway and that provisions for the maintenance and safety of traffic will be as set forth on these plans and estimates.

Approved: \_\_\_\_\_  
 Date 6-11-82 District Deputy Director of Transportation

Approved: \_\_\_\_\_  
 Date 6-23-82 Engineer, Bureau of Bridges and Structural Design

Approved: \_\_\_\_\_  
 Date 8-4-82 Chief Engineer, Planning and Design (Acting)

Approved: \_\_\_\_\_  
 Date 8-4-82 Director, Department of Transportation

DEPARTMENT OF TRANSPORTATION  
 FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR

DATE

Project: HOL-83-13.56  
 Date of Letting 19\_\_\_, Contract No. \_\_\_\_\_



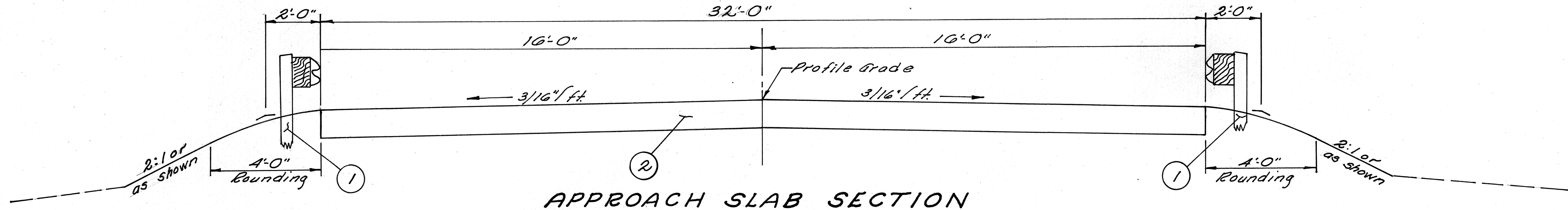
# TYPICAL SECTION

FHWA REGION	STATE	PROJECT
5	OHIO	

2  
13

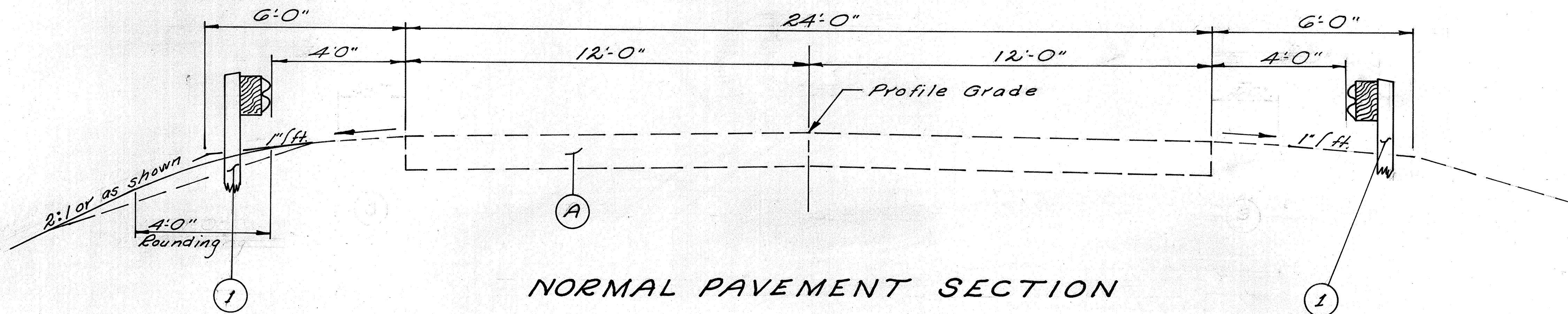
HOL-83-13.56

SCALE : 1/2" = 1'



APPROACH SLAB SECTION

Sta. 189+02.23 to Sta. 189+17.23 = 15 Lin. Ft.  
Sta. 190+33.52 to Sta. 190+48.52 = 15 Lin. Ft.



NORMAL PAVEMENT SECTION

- KEY -
- (A) --- Existing Asphalt Concrete Pavement
  - (1) --- Item 606 - Guardrail, Type 5
  - (2) --- Item 611 - Reinforced Concrete Approach Slab



# GENERAL NOTES

## MOBILIZATION AS PER PLAN:

The Contractor shall provide a suitable field office having a minimum of 300 sq. ft. of floor space which shall be in accordance with 619.01 and 619.02. Payment shall be included in the lump sum price bid for Item 624, Mobilization, as per plan.

## LOCATIONS OF GUARDRAIL:

The locations of guardrail runs, as shown in these plans are subject to adjustment prior to final acceptance. The Engineer shall be satisfied that all installations will afford maximum protection for Traffic.

## CONTINGENCY QUANTITIES:

The Contractor shall not order materials or perform work for plan items set up to be used as directed by the Engineer unless authorized by the Engineer. The actual work locations and quantities used at the Engineer's discretion shall be made a matter of record by incorporation into the final change order governing completion of this project.

## UTILITIES:

The Contractor shall notify at least seven (7) working days before breaking ground, all public service corporations, having wires, poles, pipes, conduit, manholes or other structures which are affected and not shown on these plans. He shall conduct his operations in such a manner as to avoid damages to any and all utilities. Any and all work required for public or private utilities will be done by and at the expense of their respective owners, unless otherwise noted on these plans. Following is a list of the owners of utilities known to be within the limits of construction.

OHIO POWER COMPANY  
301 CLEVELAND AVE. S.W.  
CANTON, OHIO 44701

UNITED TELEPHONE CO. OF OHIO  
215 NORTH MARKET ST.  
WOOSTER, OHIO 44691

MILLERSBURG COMMUNITY T.V.  
123 WEST JACKSON ST.  
MILLERSBURG, OHIO 44654

## UNDERGROUND UTILITIES:

The locations of the underground utilities shown on the plans have been obtained by diligent field checks and searches of available records. It is believed that they are essentially correct but the State of Ohio does not guarantee their accuracy or completeness.

## ITEM 407-TACK COAT:

The Tack Coat and Cover Aggregate Operation shall be determined as per Spec. 407.05. Plan quantities indicate average application rates of 0.1 gallons per square yard of Tack Coat and 7 pounds per square yard of Cover Aggregate for estimating purposes only.

703.06

## CLEARING AND GRUBBING

Although there are no trees and/or stumps specifically marked for removal within the limits of this project, a lump sum quantity has been included in the General Summary for Item 201, Clearing and Grubbing. All provisions as set forth in the specifications under this item shall be followed and all costs shall be included in the lump sum price bid for Item 201 Clearing and Grubbing.

## SEEDING:

Quantities for seeding are calculated for the soil areas between the work limits, as shown on the cross sections.

## ROUNDING OF CORNERS SHOWN ON CROSS SECTION:

The rounded corners shown on the Typical Section, apply to all cross sections even though otherwise shown on these plans.

## GUARDRAIL REMOVED FOR STORAGE, AS PER PLAN:

In addition to the requirements of 202.07 of the Specifications this item shall include the removal of designated Standard Type A Anchor Assemblies. The removal of the Standard Type A Anchor Assemblies shall include the complete removal of the guard rail elements, concrete encased posts, and concrete anchor.

Guardrail elements, standard terminals, blockouts, and miscellaneous hardware shall be stored at the site on the Right of Way as directed by the Engineer for removal by State Forces. All posts and concrete removed shall become the property of the contractor and be disposed of by him. Payment for the above shall be included in the unit price bid per Lin. Ft. of Item 202, Guardrail Removed for Storage, as per plan.

## STREAM CROSSINGS:

The temporary turnout and any other in-stream work shall be installed according to the guidelines established by Best Management Practice Guidance, Discharge of Dredged or Fill Materials, U.S. EPA, Office of Water Planning and Standards (EPA-440/3-C-83). Any culverts should be placed to allow the free migration of fish and other aquatic animals.

## MAINTAINING TRAFFIC:

The contractor shall maintain traffic at all times in accordance with the requirement of Item 614. Two way traffic shall be maintained at all times by use of the existing pavement. Item 615 Temporary Road using Class B pavement, Item 502 Temporary Structures or the completed pavement.

Access for the residence drive Right of Sta. 188+90 shall be maintained by the use of the temporary drive shown on sheet N<sup>o</sup> 647.

Traffic shall be maintained in accordance with Plate C-24 of the Ohio Manual of Uniform Traffic Control Devices For Streets and Highways, Current Edition, Latest Revision.

Payment for all of the above except Item 615 and Item 502 shall be included in the Price bid for Item 614 Maintaining Traffic.

## ELEVATION DATUM:

All elevations are based on U.S.G.S. Datum.

## U.S.G.S. BENCH MARK:

Bench Mark N<sup>o</sup> 843 (A U.S.G.S. Disk) set in the top of the Wing Wall at the N.E. Corner of an Existing 100' ± Bridge over Martin's Creek, Bridge #HOL-83-1356 will be destroyed by construction.

Therefore, the Contractor will be required to establish temporary bench marks outside construction work limits.

The District Office will furnish a new disk which shall be placed as directed by the Engineer in the new northeast abutment. The Contractor shall accurately establish the elevation of the new bench mark and report to the District Location & Design Office on special forms to be furnished. The old disk shall be returned with the report to the District Office. Payment for the above shall be included in the Lump Sum price bid for Item 623, Construction Layout Stakes.

## GAS TRANSMISSION LINE:

The Contractor's attention is directed to the G.T.P. Gas Transmission Line located to the West of the Project and the part located within the existing Right of Way. The limits of the work necessary for the construction of the temporary run-around is approximately 20 Ft. east of the Gas Line as shown by the construction limits.

The Contractor shall exercise extreme caution when working in the area of the gas line and confine his work within these limits. Any damage to the gas line as a result of the Contractor exceeding these limits shall be his responsibility and repaired at his expense.

## TEMPORARY STREAM CROSSING FORDS:

Where stream crossing fords are required for equipment crossings, the following shall apply to the contractor's operations:

The crossing shall consist of clean non-toxic granular or rock material, properly maintained to prevent erosion with provisions for conveyance of anticipated high flows.

Furthermore, it shall follow Part 323.4-3 Specific Categories of Discharges - Nationally Permitted, paragraph (3) Minor Road Crossing Fills - of the Federal Register - Corps of Engineers Final Regulations published July 19, 1977.

## WATERING PERMANENT SEEDING AREAS:

The following estimated quantity is to be used as directed by the Engineer to promote growth and to care for the permanent seeded areas, as per 659.09:

650 Water 2 M Gals.



614 TEMPORARY PAVEMENT MARKINGS

GENERAL

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, AND WHEN NECESSARY, REMOVE, TEMPORARY RETROREFLECTIVE PAVEMENT MARKINGS ON EXISTING, RECONSTRUCTED, RESURFACED OR TEMPORARY ROADS WITHIN THE WORK LIMITS, IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS.

THE MARKINGS SHALL BE MAINTAINED IN GOOD CONDITION DURING THE REQUIRED SERVICE PERIOD TO PROVIDE DAY AND NIGHT VISIBILITY. THE MARKINGS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER TO MAINTAIN REQUIRED VISIBILITY AT NO ADDITIONAL COST TO THE STATE.

MATERIALS

UNLESS OTHERWISE INDICATED ON THE PLANS, TEMPORARY PAVEMENT MARKINGS MAY BE OF PAINT OR PAVEMENT MARKING TAPE.

A. PAINT

PAINT SHALL COMPLY WITH 708.14 AND SHALL BE APPLIED IN ACCORDANCE WITH 621 EXCEPT AS MODIFIED HEREIN.

B. PAVEMENT MARKING TAPE

FLEXIBLE RETROREFLECTIVE PREFORMED PRESSURE SENSITIVE TAPE SHALL HAVE STRAIGHT EDGES AND BE FREE OF CRACKS. THE TAPE SHALL CONSIST OF PIGMENT AND FILLERS WITH SUFFICIENT BINDER AND PLASTICIZER TO RETAIN GLASS BEADS HAVING A REFRACTIVE INDEX MEETING THE MINIMUM REFLECTIVE INTENSITY STANDARD STATED IN THE MANUFACTURER'S INFORMATION. THE TAPE SHALL BE FLEXOLITE "WET REFLECTIVE", 3M "SCOTCHLANE", OR AN APPROVED EQUAL.

THE GLASS BEADS SHALL BE DISTRIBUTED UNIFORMLY THROUGHOUT THE TAPE WITH SUFFICIENT SURFACE BEADS TO PROVIDE OPTIMUM REFLECTORIZATION AT ALL TIMES.

PAVEMENT MARKING TAPE SHALL COMPLY WITH THE COLOR REQUIREMENTS OF 703.14.

THE TAPE SHALL HAVE A PRECOATED ADHESIVE LAYER FOR PAVEMENT APPLICATION WITHOUT THE USE OF HEAT, SOLVENTS OR ADDITIONAL ADHESIVES. THE ADHESIVE SHALL BE SUFFICIENT TO RETAIN COMPLETE MARKINGS ON THE PAVEMENT SURFACE THROUGHOUT THE USEFUL LIFE OF THE MARKINGS.

IN ADDITION TO THE FOREGOING, ALL TEMPERATURE APPLICATION REQUIREMENTS AND OTHER APPLICABLE MANUFACTURER'S MATERIAL AND APPLICATION INSTRUCTIONS SHALL BE FOLLOWED.

LAYOUT

THE TEMPORARY MARKINGS SHALL BE ACCURATELY LAID OUT IN CONFORMANCE WITH 621.05 AND SHALL BE LOCATED IN A TRUE LINE ON THE CENTER LINE, LANE LINE, EDGE LINE, OR CHANNELIZING LINE WHERE PERMANENT MARKINGS WOULD BE UNLESS OTHERWISE SPECIFIED IN THE PLANS.

PLACEMENT

TEMPORARY MARKINGS SHALL BE PLACED IN ACCORDANCE WITH (LAYOUTS ON SHEETS) AND THE FOLLOWING REQUIREMENTS, UNLESS OTHERWISE SPECIFIED IN THE PLANS.

TEMPORARY MARKINGS SHALL BE COMPLETE AND IN PLACE ON ALL PAVEMENT PRIOR TO EXPOSING IT TO TRAFFIC. WHEN TEMPORARY MARKINGS ARE NO LONGER NEEDED, THEY SHALL BE REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH 621.134 AND NECESSARY PAVEMENT MARKINGS INSTALLED BEFORE THE FLOW OF TRAFFIC IS CHANGED TO THE NEXT PHASE OR RETURNED TO ITS NORMAL CHANNEL.

WHERE PAVEMENT MARKINGS ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL FURNISH AND PLACE THE PERMANENT MARKINGS WITHIN 30 CALENDAR DAYS FOLLOWING COMPLETION OF ALL SURFACE COURSES IN A SINGLE ROADWAY OR PRIOR TO THE END OF THE CONSTRUCTION SEASON, WHICHEVER COMES FIRST. PERMANENT MARKINGS SHALL NOT BE PLACED OVER ANY CLASS I, TAPE MARKINGS.

A. CLASS I MARKINGS

CLASS I MARKINGS SHALL BE AS DEFINED IN 621, EXCEPT AS FOLLOWS:

- 1) LANE LINES SHALL BE 4-INCHES IN WIDTH.
- 2) TRANSVERSE LINES SHALL BE 8-INCHES IN WIDTH.
- 3) STOP LINES SHALL BE 12-INCHES IN WIDTH.
- 4) CROSS WALK LINES SHALL BE 8-INCHES IN WIDTH.

GORE MARKINGS SHALL CONSIST OF TWO CHANNELIZING LINES PLACED AT THE THEORETICAL OR TEMPORARY GORE OF RAMPS AND DIVERGING OR CONVERGING ROADWAYS.

THE PAINT APPLICATION RATE SHALL BE NOT LESS THAN 16 GALLONS PER MILE FOR SOLID 4-INCH LINES, 24 GALLONS PER MILE FOR SOLID 6-INCH LINES, 48 GALLONS PER MILE FOR SOLID 12-INCH LINES, AND 4 GALLONS PER MILE FOR 4-INCH DASHED LINES.

B. CLASS II MARKINGS

CENTER LINES SHALL CONSIST OF SINGLE, YELLOW 12-INCH BY 4-INCH DASHES SPACED AT A MAXIMUM OF 40-FOOT INTERVALS.

LANE LINES SHALL CONSIST OF WHITE 12-INCH BY 4-INCH DASHES SPACED AT A MAXIMUM OF 40-FOOT INTERVALS.

CHANNELIZING LINES SHALL CONSIST OF WHITE 12-INCH BY 4-INCH DASHES SPACED AT A MAXIMUM OF 20-FOOT INTERVALS.

GORE MARKINGS SHALL BE TWO CONTINUOUS, WHITE 30-FOOT BY 4-INCH LINES PLACED AT THE THEORETICAL GORE OF AN EXIT RAMP OR DIVERGING ROADWAYS.

THE PAINT APPLICATION RATE SHALL BE NOT LESS THAN 16 GALLONS PER MILE FOR GORE MARKINGS, 0.8 GALLONS PER MILE FOR CHANNELIZING LINE, AND 0.4 GALLONS PER MILE FOR LANE LINE AND CENTER LINE.

CONFLICTING MARKINGS

THE CONTRACTOR SHALL, PRIOR TO PLACING TEMPORARY MARKINGS, REMOVE ALL EXISTING CONFLICTING MARKINGS VISIBLE TO THE TRAVELING PUBLIC DURING DAYLIGHT OR NIGHTTIME HOURS IN ACCORDANCE WITH 621.134. THE COST FOR REMOVAL OF CONFLICTING MARKINGS SHALL BE INCIDENTAL TO THE VARIOUS PAY ITEMS.

METHOD OF MEASUREMENT

TEMPORARY PAVEMENT MARKINGS WILL BE MEASURED COMPLETE IN PLACE, BY CLASS AND MATERIAL, IN THE UNITS DESIGNATED. DASHED LINE QUANTITIES WILL BE THE LENGTH OF THE COMPLETED STRIPE, INCLUDING GAPS, INTERSECTIONS, AND OTHER SECTIONS OF PAVEMENT NOT NORMALLY MARKED, IN ACCORDANCE WITH 621.15.

TEMPORARY PAVEMENT MARKINGS WILL INCLUDE THE LAYOUT, APPLICATION AND REMOVAL OF THE MARKINGS, WHEN REQUIRED.

BASIS OF PAYMENT

PAYMENT FOR ACCEPTED QUANTITIES COMPLETE IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR PLACEMENT, MAINTENANCE AND NECESSARY REMOVAL OF THE MARKINGS.

QUANTITIES	
Calc. Date	Chk'd Date
D.A.E. 5/3/82	M.T.D. 5/3/82

FHWA	STATE	PROJECT
5	OHIO	

4/13

HOL-83-13.56

ITEM	UNIT	DESCRIPTION
614	sq. yd.	TEMPORARY LANE LINES, CLASS I (PAINT OR TAPE)
614 .05	sq. yd.	TEMPORARY CENTER LINES, CLASS II (Project Centerline) (PAINT OR TAPE)
614 .09	sq. yd.	TEMPORARY CENTER LINES, CLASS I (Temporary Runaround) (PAINT OR TAPE)
614 .18	sq. yd.	TEMPORARY EDGE LINES, CLASS I (Temporary Runaround) (PAINT OR TAPE)
614	sq. yd.	TEMPORARY GORE MARKING, CLASS I (PAINT OR TAPE)
614	sq. yd.	TEMPORARY STOP LINES, CLASS I (PAINT OR TAPE)
614	sq. yd.	TEMPORARY CROSSWALK LINES, CLASS I (PAINT OR TAPE)
614	sq. yd.	TEMPORARY LANE ARROWS, CLASS I (PAINT OR TAPE)
614	sq. yd.	TEMPORARY WALKWAYS, CLASS I (PAINT OR TAPE)
614	sq. yd.	TEMPORARY TRANSVERSE LINES, CLASS I (PAINT OR TAPE)



### CALCULATIONS

ITEM 404 - Asphalt Concrete

Sta. 188+77.23 to Sta. 189+02.23 = 25 Ft.  
 Sta. 190+48.52 to Sta. 190+73.52 = 25 Ft.  
 50 Ft.

Thickness 0" to 1" for Calculations - use 3/4" Avg.  
 $24' \times 50' \times 3/4" (0.0625) \div 27 = 2.78$  Use 3.0 Cu.Yd.

ITEM 407 - Tack Coat (Rate: 0.10 Gal. per Sq.Yd.)

Length from 404,  $50' \times 24' \div 9 = 133.33$  134 Sq.Yd.  
 $134 \times 0.1 = 13.3$  14 Gals.

ITEM 407 - Cover Aggregate (Rate: 7lbs per Sq.Yd.)

$134 \times 7 \div 2000 = 0.47$  Ton Use 0.5 Ton

ITEM 410 - Traffic Compacted Surface Course Type C

(For Maintaining Temporary Drive Bl. 10' Width)  
 Length  $75' \times 10' \times 6" (0.5) \div 27 = 13.89$  14 Cu.Yd.

ITEM 203 - Subgrade Compaction For Approach Slab

$32' \times 15' \times 2' \div 9 = 106.66$  107 Sq.Yd.

ITEM 615 - Temporary Pavement, Class B

Total Plan. Area  $5328 \text{ sq. ft.} \div 9 = 592$   
 Sta. 187+75 to 189+40 =  $2664 \text{ sq. ft.} \div 9 = 298$  Sq.Yd.  
 Sta. 190+20 to 191+85 =  $2644 \text{ sq. ft.} \div 9 = 294$  Sq.Yd.  
 Total 592 Sq.Yd.

ITEM 203 - EARTHWORK & ITEM 659 SEEDING

Sheet No.	Station	Excavation Cu. Yds.	Embankment Cu. Yds.	Seeding Sq. Yds.
B	From Earthwork Summary	189	230	1801
TOTAL		189	230	1801

ITEM 659 Fertilizer

From Seeding  $1801 \times 9 \div 1000 \times 20 = 0.16$  Ton

ITEM 659 Agricultural Liming

From Seeding  $1801 \times 9 \div 1000 \times 100 = 0.81$  Ton

ITEM 601 Rock Channel Protection (Without Bedding)

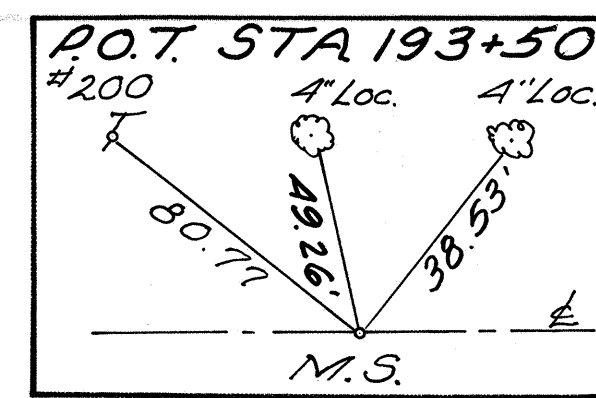
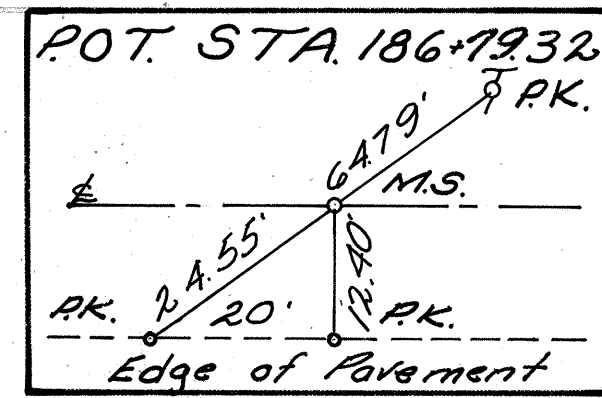
From Bridge Plan  
 Rear Abut.  $40.5' \times 11.0' \times 1.5' \div 27 = 24.75$  Cu. Yd.  
 Forward Abut.  $40.5' \times 5.5' \times 1.5' \div 27 = 12.22$  Cu. Yd.  
 Use 37 Cu. Yd.

### GENERAL SUMMARY

Sheet Number				Item	Quantity	Unit	DESCRIPTION
3	4	5	6				
							<b>ROADWAY</b>
Lump				201	Lump	Lump	Clearing and Grubbing
			227	202	227	Lin. Ft.	Guardrail Removed for Storage, as per plan
		189		203	189	Cu. Yd.	Excavation, not including Embankment Construction
		230		203	230	Cu. Yd.	Embankment
		107		203	107	Sq. Yd.	Subgrade Compaction
			317.42	606	317.42	Lin. Ft.	Guardrail, Type 5
			1	606	1	Each	Anchor Assembly, Standard Type T
			2	606	2	Each	Anchor Assembly, Standard Type A
			4	606	4	Each	Bridge Terminal Assembly, Standard Type B
Lump				615	Lump	Lump	Temporary Road
		14		410	14	Cu. Yd.	Traffic Compacted Surface, Type C
		592		615	592	Sq. Yd.	Temporary Pavement, Class B / EROSION CONTROL
		37		601	37	Cu. Yd.	Rock Channel Protection, Type B Without Bedding
		1801		659	1801	Sq. Yd.	Seeding and Mulching
		0.16		659	0.16	Ton	Commercial Fertilizer
		0.81		659	0.81	Ton	Agricultural Liming
2				659	2	M Gals.	Water
							<b>PAVEMENT</b>
			20	304	2	Cu. Yd.	Aggregate Base
		3		404	3	Cu. Yd.	Asphalt Concrete, AC-20
		14		407	14	Gals.	Tack Coat
		0.5		407	0.5	Tons	Cover Aggregate
			1	404	1	Cu. Yd.	Asphalt Concrete, AC-20 (Driveways)
			107	611	107	Sq. Yds.	Reinforced Concrete Approach Slabs (T=12")
							<b>TRAFFIC CONTROL</b>
		.05		614	0.05	Miles	Temporary Center Lines, Class II
		.09		614	0.09	Miles	Temporary Center Lines, Class I
		.18		614	0.18	Miles	Temporary Edge Lines, Class I
Lump				614	Lump	Lump	Maintaining Traffic
Lump				623	Lump	Lump	Construction Layout Stakes
Lump				624	Lump	Lump	Mobilization, as per plan
							For Bridge Quantities See Sheet No. 10



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OCT 24 1984



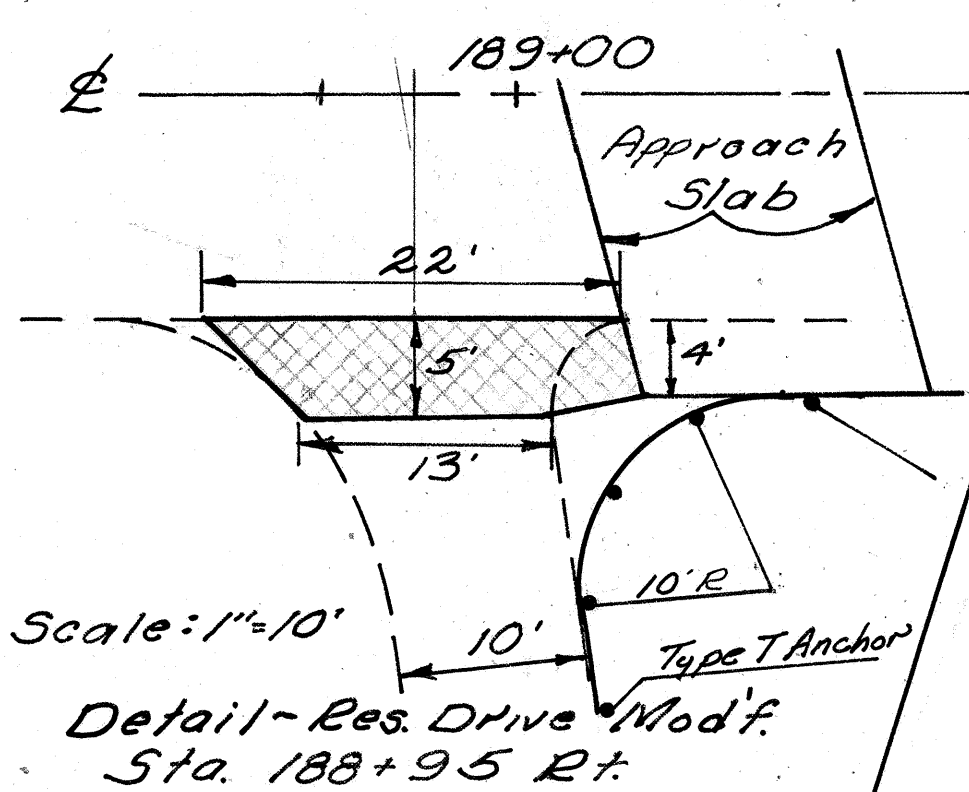
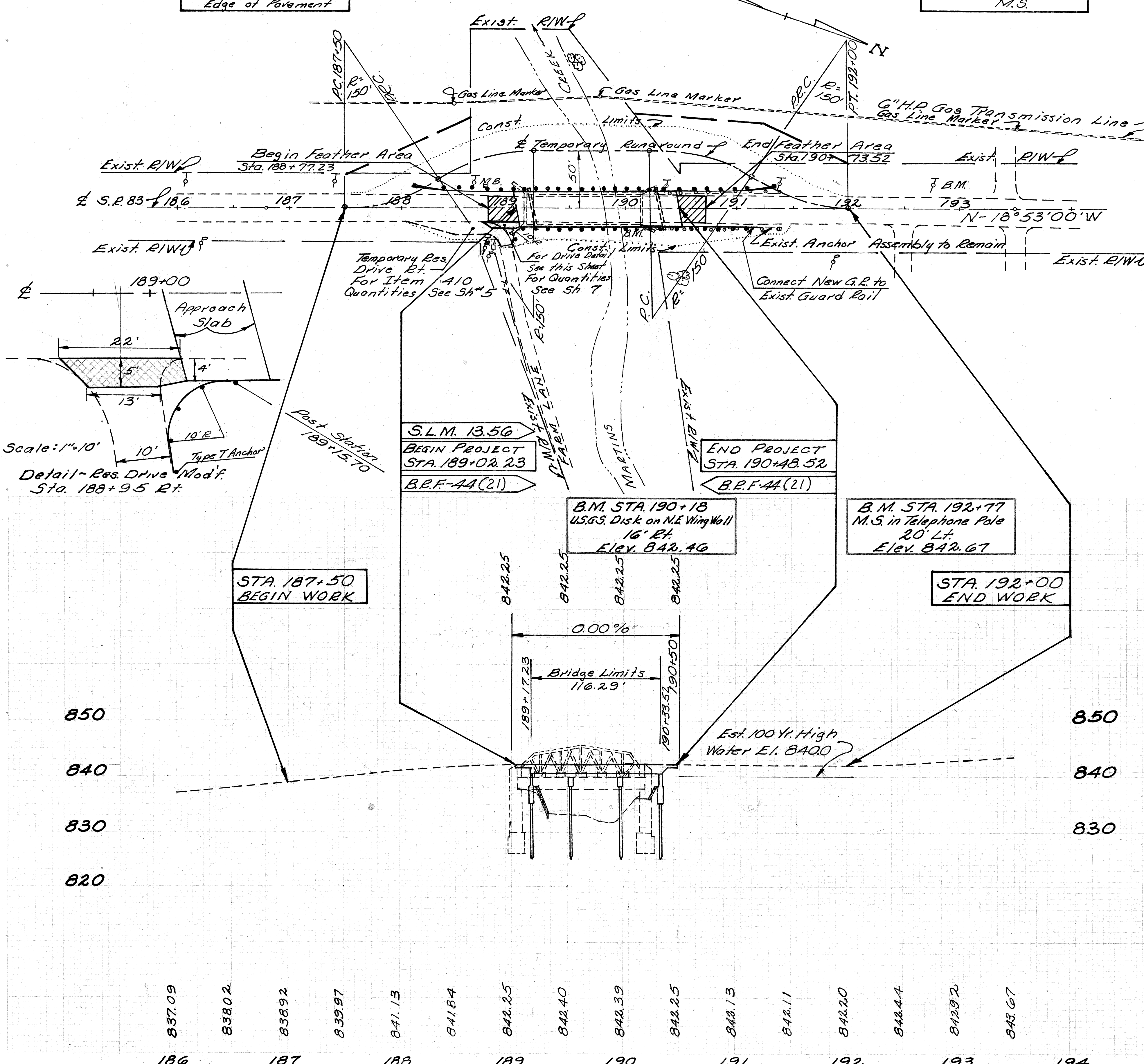
**QUANTITIES**  
Calc. R.E.M. CH'ed. DAE  
Date 5-7-82 Date 5-10-82

FHWA STATE PROJECT  
5 OHIO  
HOL-83-13.56

6  
13

**EXISTING STRUCTURE**  
TYPE: Pony Truss  
LENGTH: 1 Span, 105'  
ROADWAY: 23'-0" f/f Curbs  
ALIGNMENT: Tan  
SKEW: 0°  
SUFF. RATING: 17.9 S.D.  
To Be Removed

**PROPOSED STRUCTURE**  
Type: Continuous reinforced concrete slab with capped pile substructure  
Spans: 35'-0", 43'-9", 35'-0"  
Roadway 32'-0" f/f Guardrail 1% Deck  
Loading: HS20-44 & the Alternate Military Loading  
Skew: 10°00' R.F.  
Wearing Surface: 1" Monolithic Concrete  
Approach Slab: A5-1-81 (15'-0" Long)  
Alignment: Tangent



STATION		Side	ITEM 606			ITEM 202
From	To		Guardrail Type 5 ds per plan Lin. Ft.	Anchor Assembly Type A Each	Bridge Terminal Assembly Type B Each	
188+10.06	191+35.06	Lt.	208.71 *	2	2	
189+03	191+15.70	Rt.	108.71 *	0	2	1
190+14	191+37.5	Lt.				124
190+13	191+15.7	Rt.				103
<b>TOTAL</b>			317.42	2	4	1

\* Bridge Railing 116.29'

Station		Calculations	Item 611 Rein. Conc. Appr. Slabs (7'-12") Sq. Yds.
From	To		
189+02.23	189+17.23	15x32 ÷ 9	53.33
190+33.52	190+48.52	15x32 ÷ 9	53.33
<b>TOTAL</b>			106.66

USE 107

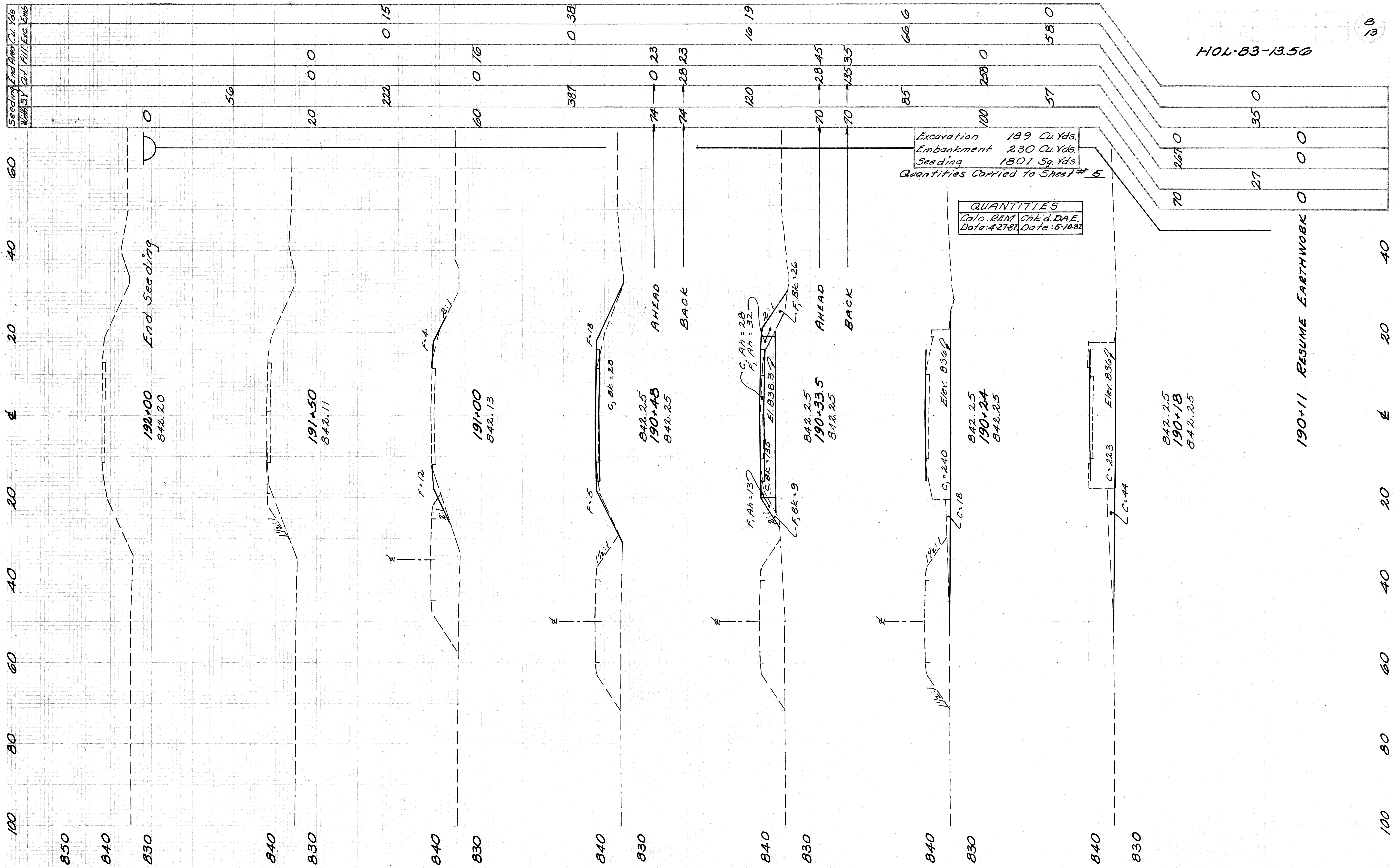
Station	Side	See Sheet	Item 304 6" Aggregate Base Cu. Yds.	Item 404 2" Asphalt Concrete Cu. Yds.
188+95	Rt.	7	2.0	1.0
<b>TOTAL</b>			2.0	1.0

STA 186+00 TO STA 191+00





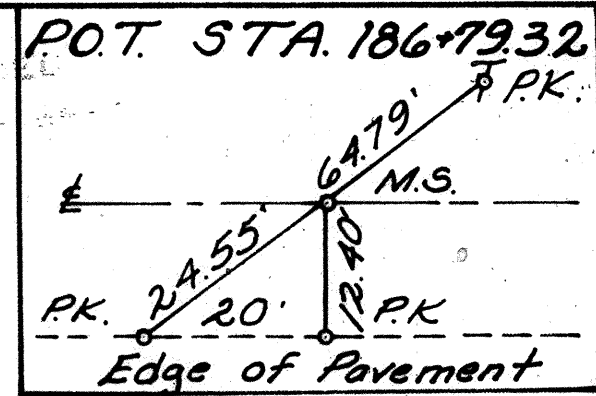




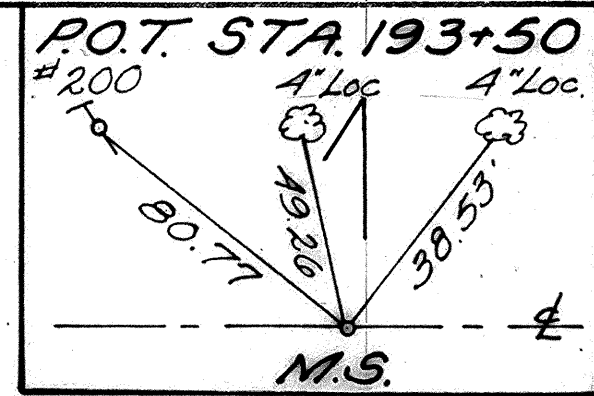
H04-83-13.50

STA. 190+18 TO 192+00





B.M. STA. 190+18' ±  
U.S.G.S. Disk on N.E. Wing Wall  
10' Lt.  
Elev. 842.46

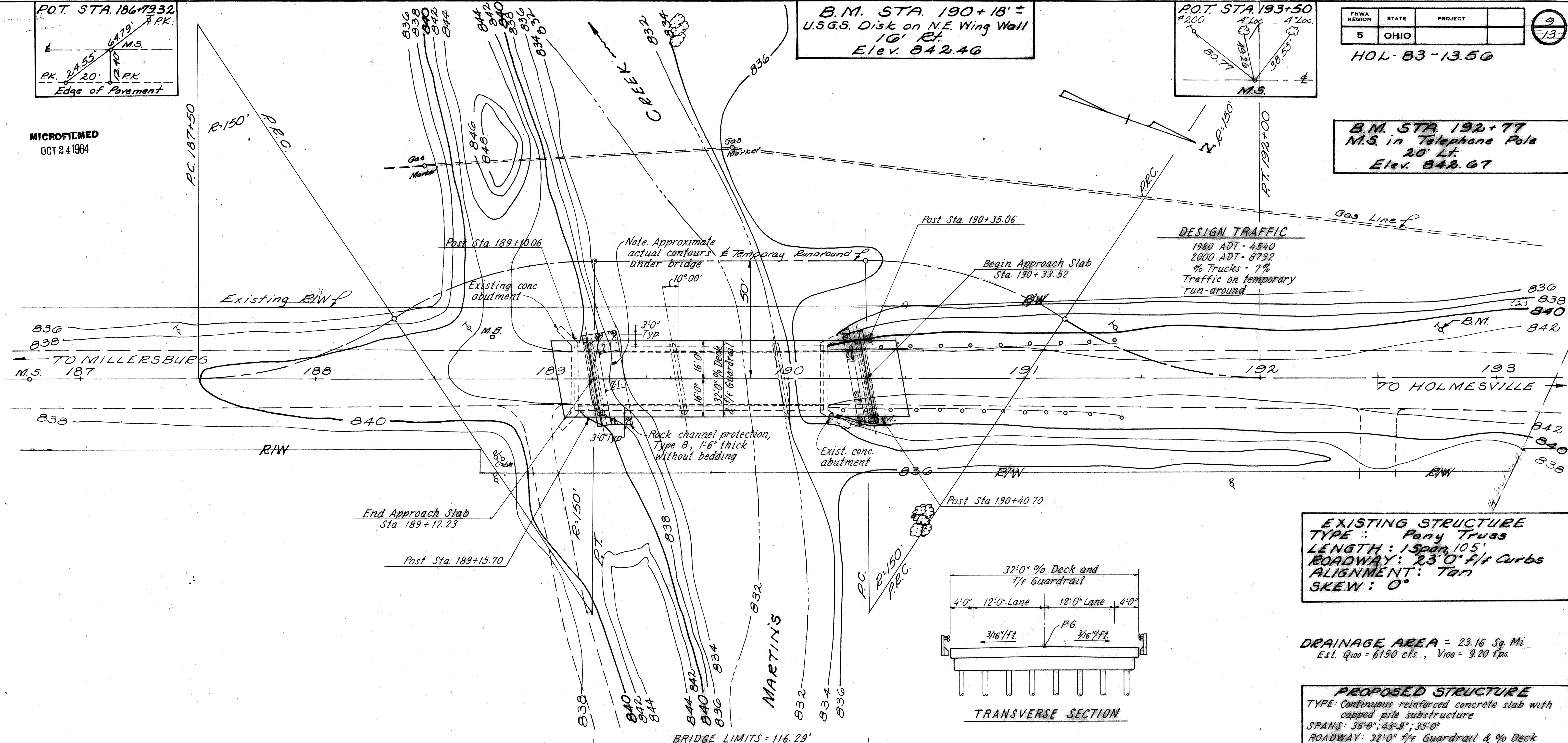


FHWA REGION	STATE	PROJECT
5	OHIO	

HOL-83-1356

B.M. STA. 192+77  
M.S. in Telephone Pole  
20' Lt.  
Elev. 842.67

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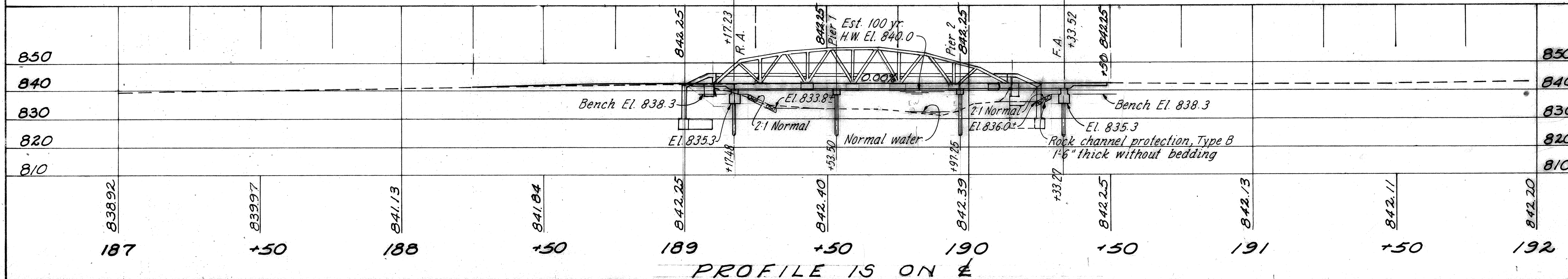
**EXISTING STRUCTURE**  
TYPE: Pony Truss  
LENGTH: 1 Span, 105'  
ROADWAY: 23'-0" f/f Curbs  
ALIGNMENT: Tan  
SKEW: 0°

DRAINAGE AREA = 23.16 Sq. Mi.  
Est. Q<sub>100</sub> = 6150 cfs, V<sub>100</sub> = 9.20 fps

**PROPOSED STRUCTURE**  
TYPE: Continuous reinforced concrete slab with capped pile substructure.  
SPANS: 35'-0"; 43'-9"; 35'-0"  
ROADWAY: 32'-0" f/f Guardrail & % Deck  
LOADING: HS20-44 & the Alternate Military Loading  
SKEW: 10° 00' R.F.  
WEARING SURFACE: 1" Monolithic concrete  
APPROACH SLAB: AS-1-81 (15'-0" long)  
ALIGNMENT: Tangent  
DECK PROTECTION: 2 1/2" cover and epoxy coated top reinforcing steel.

STATE OF OHIO  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF BRIDGES

**SITE PLAN**  
BRIDGE NO. HOL-83-1356  
OVER  
MARTIN'S CREEK  
HOLMES COUNTY S.R. 83  
SCALE: 1" = 20'



PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
DIST. 11	DIST. 11	RDN	-GPS	RHU	DAF



MICROFILMED  
OCT 24 1984

MICROFILMED

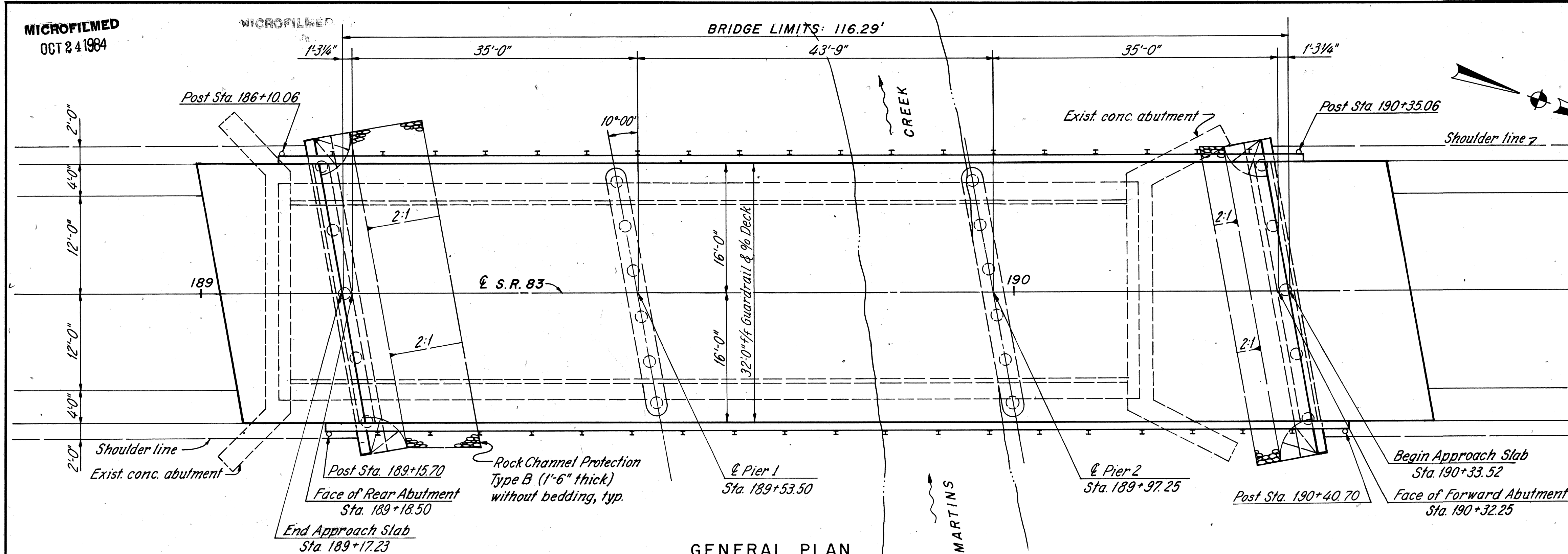
BRIDGE LIMITS: 116.29'

QUANTITIES	
CALCULATED	JCS 5/82
CHECKED	JPS 5/82

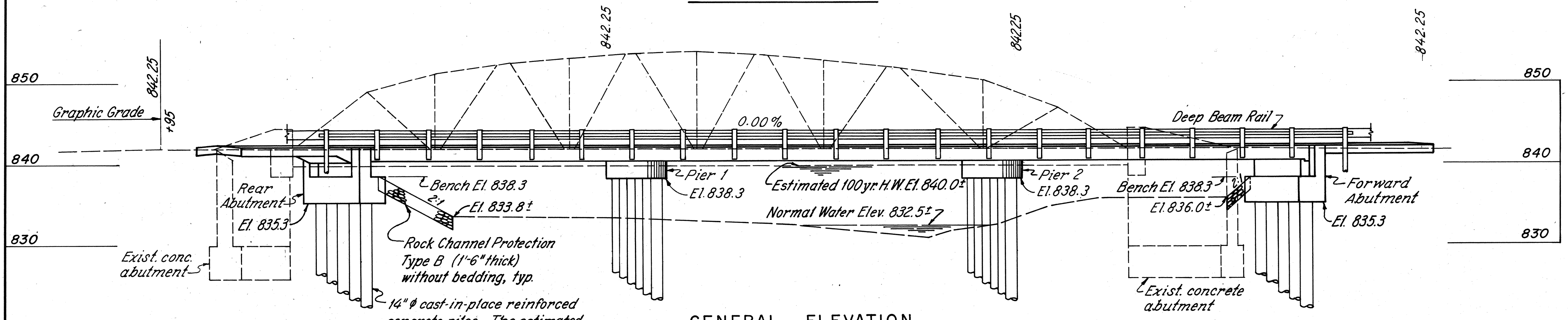
FHWA REGION	STATE	PROJECT
5	OHIO	

10  
13

HOL - 83 - 13.56



GENERAL PLAN



GENERAL ELEVATION

DRAINAGE AREA = 23.16 Sq. Mi.  
Est. Q<sub>100</sub> = 6150 c.f.s., V<sub>100</sub> = 9.20 f.p.s.

GENERAL NOTES

**REFERENCE** shall be made to Standard Drawings:  
 CPA-2-73, dated 4-10-73  
 CPP-2-73, dated 4-10-73  
 CS-2-73, sheets 1 and 2 of 2, dated 4-10-73  
 AS-1-81, sheets 1 thru 3 of 3, dated 11-27-81  
 DBR-2-73, dated 4-10-73

**DESIGN SPECIFICATIONS:** This structure conforms to "Standard Specifications for Highway Bridges" adopted by the American Association of State Highway Officials, 1977, including the 1978, 1979, 1980 and 1981 Interim Specifications and the Ohio "Supplement" to these specifications.

**DESIGN DATA:** Design Loading - HS20-44 and the Alternate Military Loading  
 Concrete Class S - f'<sub>c</sub> = 4500 p.s.i. for superstructure  
 Concrete Class C - f'<sub>c</sub> = 4000 p.s.i. for substructure  
 Reinforcing Steel - ASTM A615, A616 or A617 - F<sub>y</sub> = 60,000 p.s.i.  
 Splices indicated are for Grade 60 steel  
 Deck Protection Method - Epoxy coated reinforcing steel.

**EMBANKMENT CONSTRUCTION:** The embankments shall be constructed to the level of the subgrade. Excavation shall then be made for the abutments, for the benches and piles driven.

**UTILITY LINES:** All expense involved in relocating the affected utility lines shall be borne by the Owners. The Contractor and Owners are requested to cooperate by arranging their work in such a manner that inconvenience to either will be held to a minimum.

**REINFORCING STEEL:** 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 structures by the additional steel, spliced in accordance with 509.08.

**PILES** shall be driven to a minimum bearing capacity of 45 tons per pile for the abutments and 50 tons per pile for the piers.

**REMOVAL OF EXISTING STRUCTURE:** The existing structure shall be removed in accordance with Item 202 Specifications.

**PRECAST, PRESTRESSED CONCRETE PILES:** 14"  $\phi$  precast, prestressed concrete piles may be substituted for the 14"  $\phi$  cast-in-place reinforced concrete piles. The method of measurement and basis of payment shall be the same as for the cast-in-place reinforced concrete piles, as per Item 507.

ESTIMATED QUANTITIES						
ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUTS.	PIERS
202	Lump	Sum	Structure removed			
502	Lump	Sum	Temporary bridge			
503	84	Cu. Yd.	Unclassified excavation		84	
523	3	Hours	Dynamic pile tests			3
505	Lump	Sum	Test pile			Lump
507	830	Lin. Ft.	14" $\phi$ cast-in-place reinforced concrete piles		350	480
509	26,716	Lbs.	Reinforcing steel, grade 60	19,945	5150	1621
511	232	Cu. Yd.	Class S concrete, superstructure	232		
511	12	Cu. Yd.	Class C concrete, piers			12
511	41	Cu. Yd.	Class C concrete, abutments		41	
512	19	Sq. Yd.	Type A waterproofing	12	7	
517	232.6	Lin. Ft.	Railing (deep beam w/stl. tubular back-up, stl. posts & bolts)	232.6		
518	13	Cu. Yd.	Porous backfill		13	
Special	14,439	Lbs.	Epoxy coated reinforcing steel, Grade 60 (see proposal note)	13,068		1371

EXISTING STRUCTURE	
TYPE:	Pony Truss
SPAN:	105' (Clear)
ROADWAY:	23'-0" f/f Curbs
ALIGNMENT:	Tangent
SKEW:	0°

PROPOSED STRUCTURE	
TYPE:	Continuous reinforced concrete slab with capped pile substructure.
SPANS:	35'-0", 43'-9", 35'-0"
ROADWAY:	32'-0" f/f Guardrail & % Deck
LOADING:	HS20-44 & the Alternate Military Loading
SKEW:	10°-00' R.F.
WEARING SURFACE:	1" Monolithic concrete
APPROACH SLAB:	AS-1-81 (15'-0" long)
ALIGNMENT:	Tangent
DECK PROTECTION:	2 1/2" cover and epoxy coated top reinforcing steel.

DESIGN TRAFFIC  
 1980 ADT = 4540  
 2000 ADT = 8792  
 % Trucks = 7%  
 Traffic on temporary run-around.

**RE** RICHLAND ENGINEERING LIMITED  
 MANSFIELD, OHIO

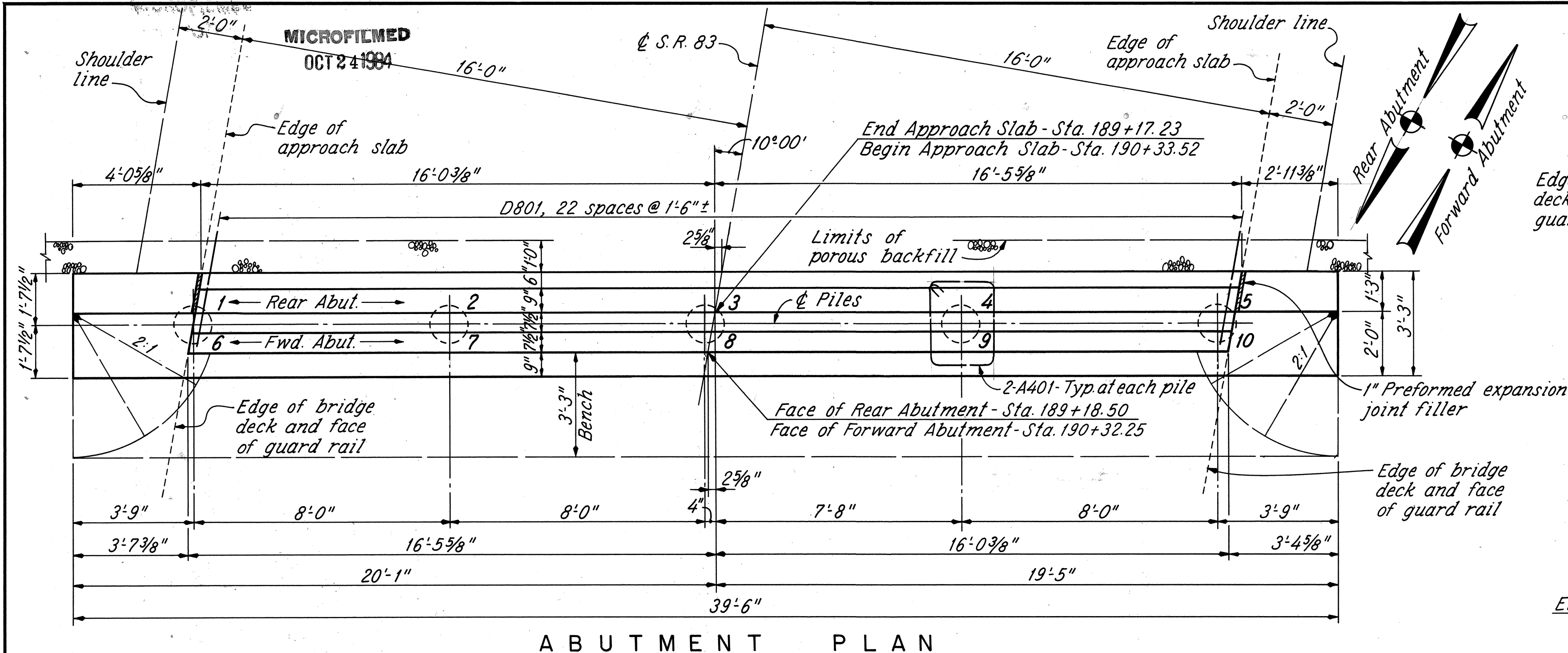
**GENERAL PLAN, GENERAL NOTES AND ESTIMATED QUANTITIES**

BRIDGE NO. HOL - 83 - 1356  
 OVER MARTINS CREEK

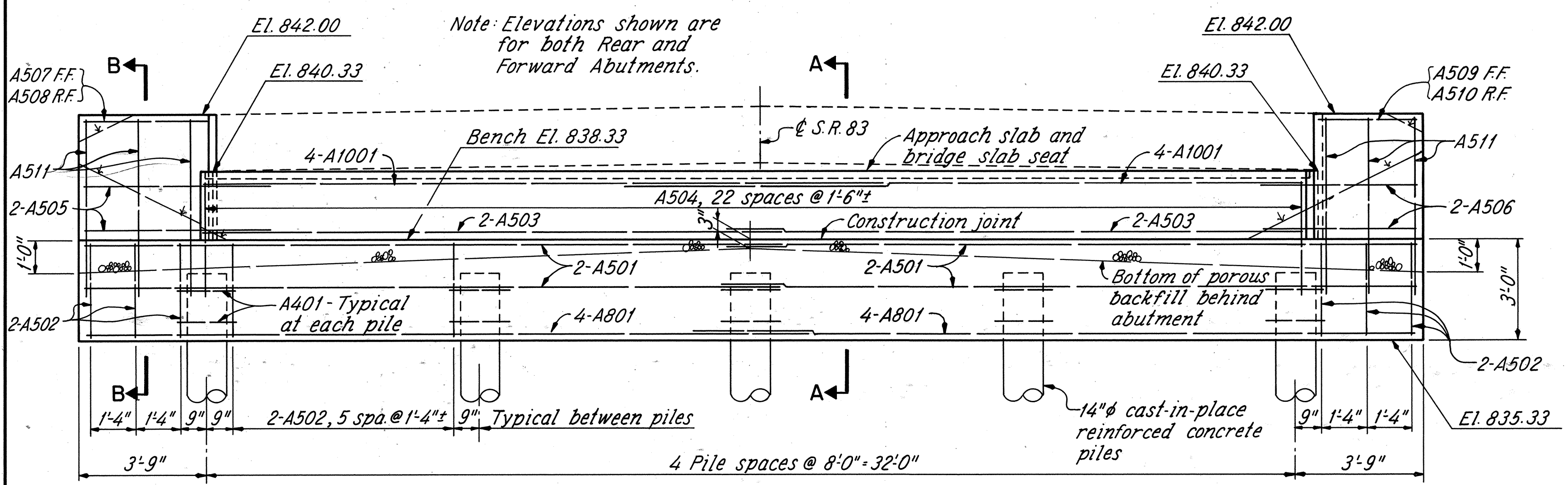
HOLMES COUNTY  
 DESIGNED: RDN DRAWN: BKU TRACED: BKU CHECKED: RHU REVIEWED: DAP DATE: 5/28/82

MANSFIELD, OHIO S.R. 83

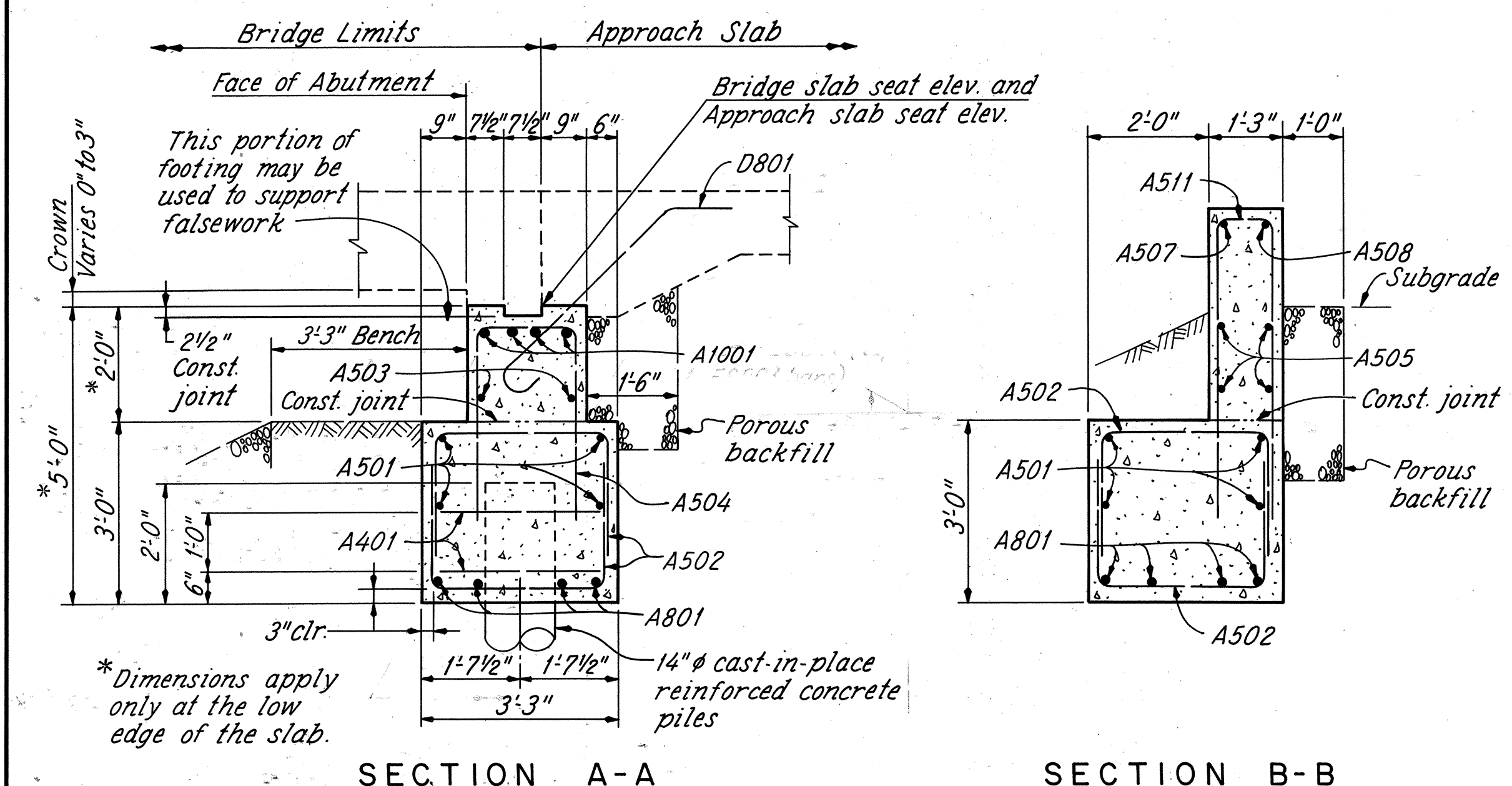




ABUTMENT PLAN



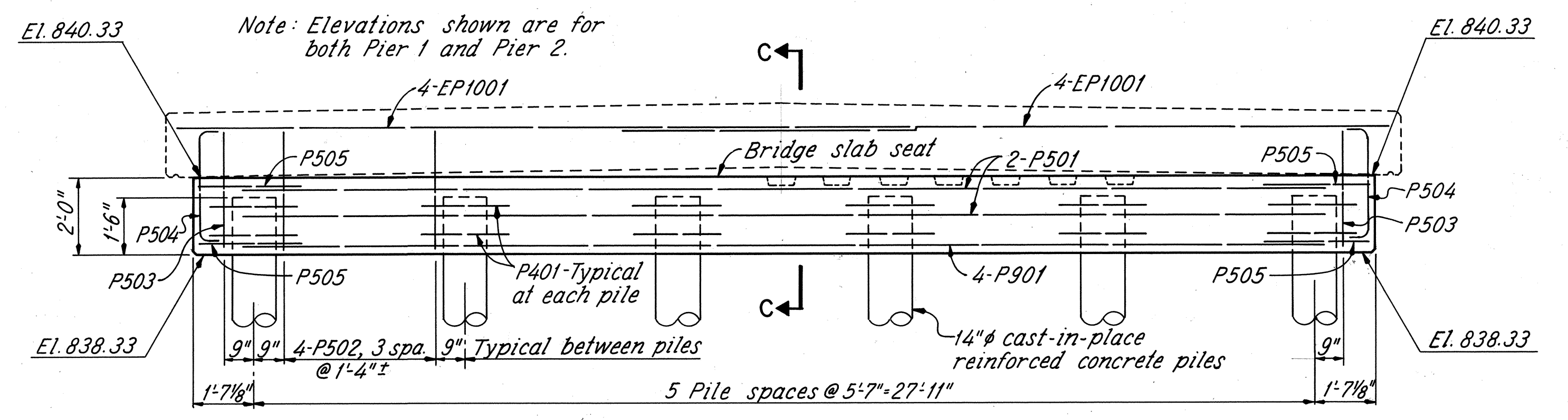
ABUTMENT ELEVATION



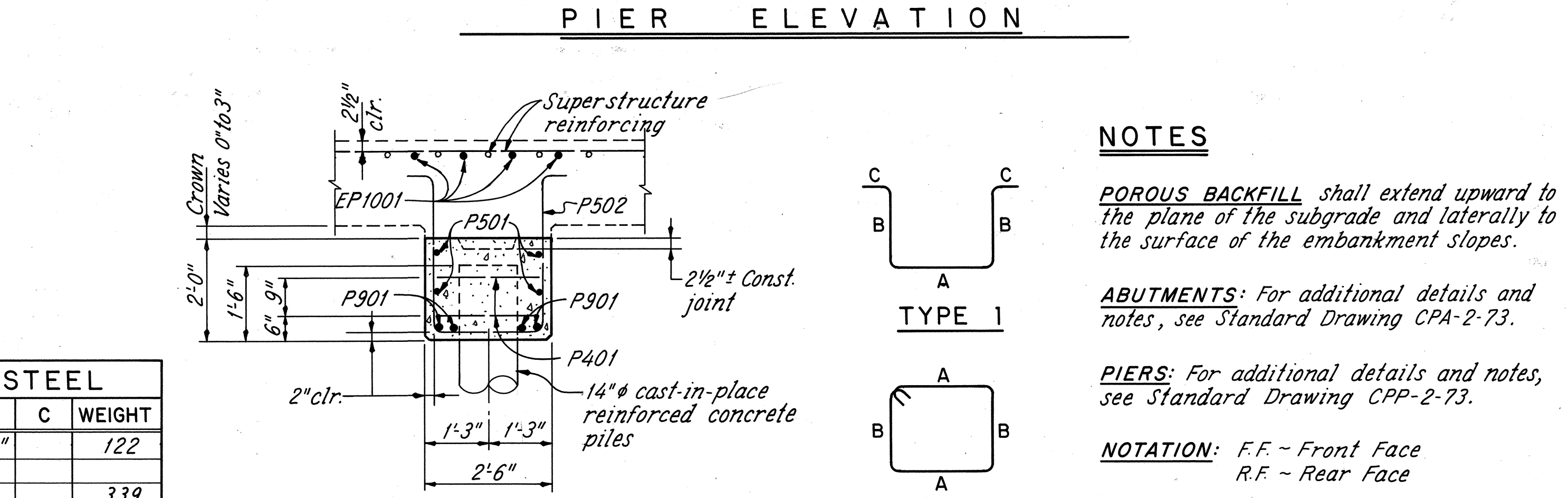
SECTION A-A

SECTION B-B

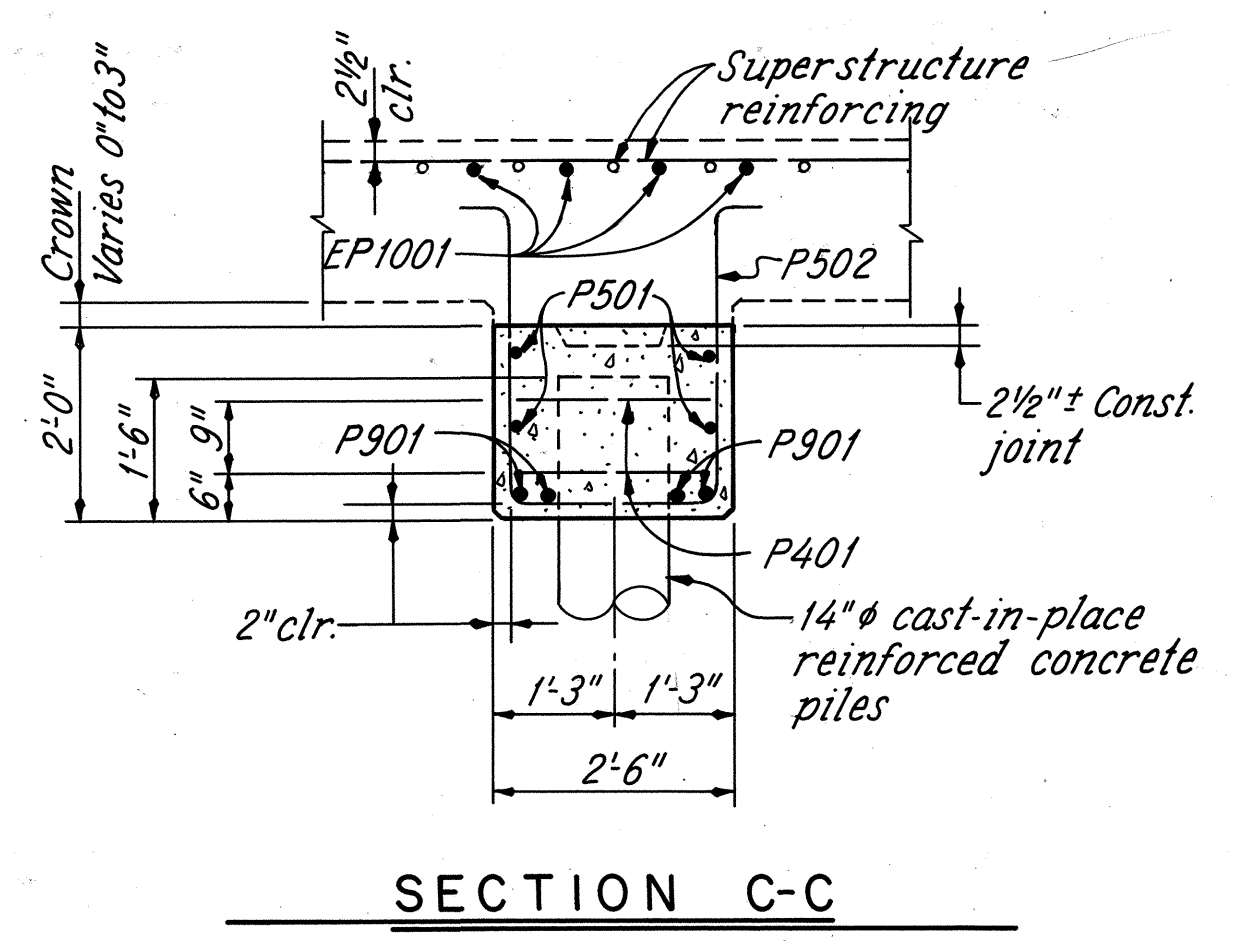
ABUTMENT REINFORCING STEEL									
MARK	REAR	FWD.	NO.	LENGTH	TYPE	A	B	C	WEIGHT
A401	10	10	20	9'-2"	2	2'-7 3/4"	1'-9"		122
A501	8	8	16	20'-4"	Str.				339
A502	60	60	120	6'-10"	1	2'-9"	2'-2"	0	855
A503	4	4	8	16'-11"	Str.				141
A504	23	23	46	8'-1"	1	1'-8"	3'-4"	0	388
A505	4	4	8	5'-6"	Str.				46
A506	4	4	8	4'-6"	Str.				38
A507	1	1	2	3'-6"	Str.				7
A508	1	1	2	3'-8"	Str.				8
A509	1	1	2	2'-9"	Str.				6
A510	1	1	2	2'-7"	Str.				5
A511	6	6	12	11'-0"	1	11"	5'-2"	0	138
A801	8	8	16	21'-3"	Str.				908
A1001	8	8	16	19'-11"	Str.				1371
D801	23	23	46	6'-4"	3	4'-0"			778
TOTAL WEIGHT									5150



PIER PLAN

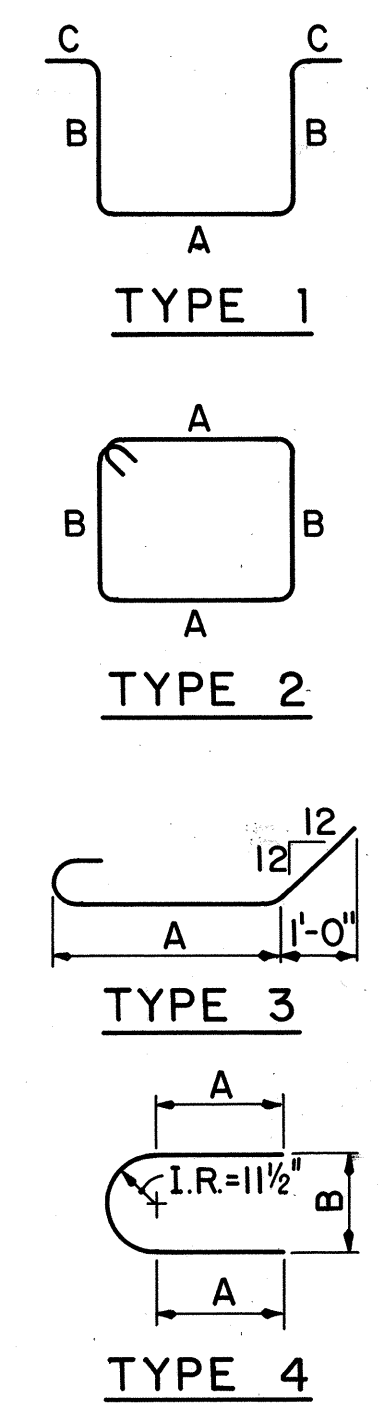


PIER ELEVATION



SECTION C-C

PIER REINFORCING STEEL									
MARK	P-1	P-2	NO.	LENGTH	TYPE	A	B	C	WEIGHT
P401	12	12	24	8'-0"	2	2'-0 1/4"	1'-9"		128
P501	4	4	8	28'-8"	Str.				239
P502	20	20	40	8'-10"	1	2'-2"	3'-1"	6"	369
P503	2	2	4	8'-8"	1	2'-0"	3'-1"	6"	36
P504	2	2	4	3'-10"	1	3'-1"	6"	0	16
P505	4	4	8	6'-4"	4	1'-7"	2'-0 1/4"		53
P901	4	4	8	28'-8"	Str.				780
TOTAL WEIGHT									1621
EPOXY COATED BARS									
EP1001	8	8	16	19'-11"	Str.				1371
TOTAL WEIGHT									1371



BENDING DIAGRAMS

**NOTES**

**POROUS BACKFILL** shall extend upward to the plane of the subgrade and laterally to the surface of the embankment slopes.

**ABUTMENTS:** For additional details and notes, see Standard Drawing CPA-2-73.

**PIERS:** For additional details and notes, see Standard Drawing CPP-2-73.

**NOTATION:** F.F. - Front Face  
R.F. - Rear Face

**REINFORCING SPLICE LENGTHS** shall be 1'-8" for #5 bars, 3'-5" for #8 bars and 7'-8" for #10 bars.

**RELAND ENGINEERING LIMITED**  
MANSFIELD, OHIO

**SUBSTRUCTURE**  
BRIDGE NO. HOL - 83 - 1356  
OVER MARTINS CREEK

HOLMES COUNTY S.R. 83

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RDN	GPS	JPS	RHU	DAP	5/28/82	

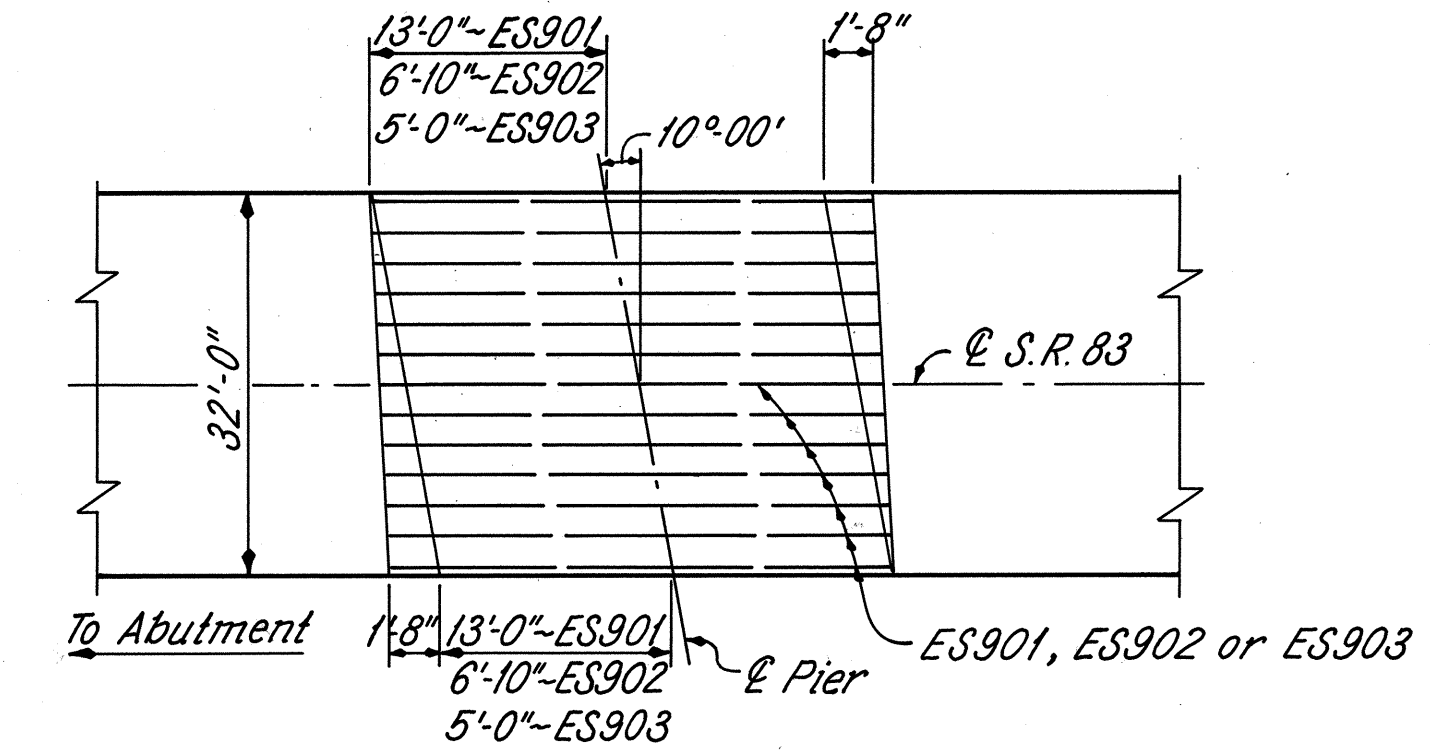
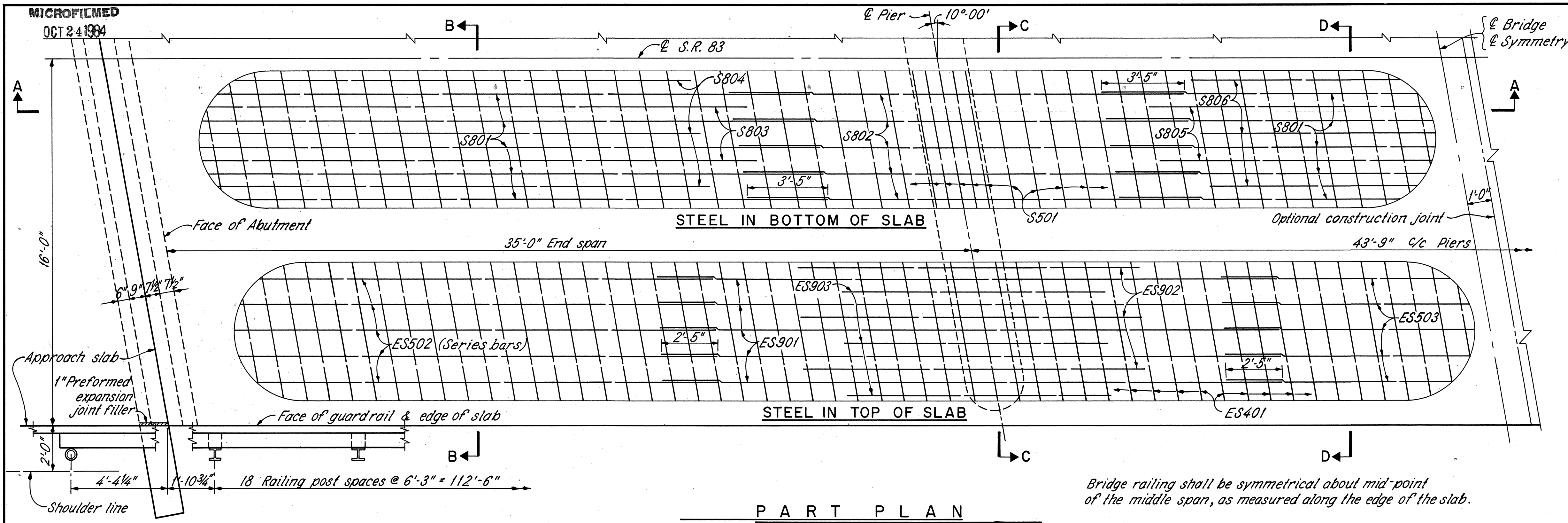


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FHWA REGION	STATE	PROJECT	
5	OHIO		

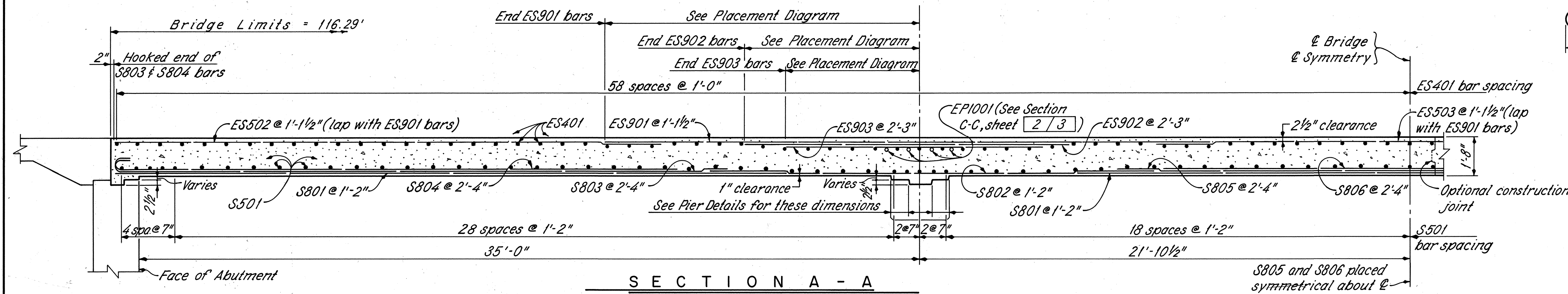
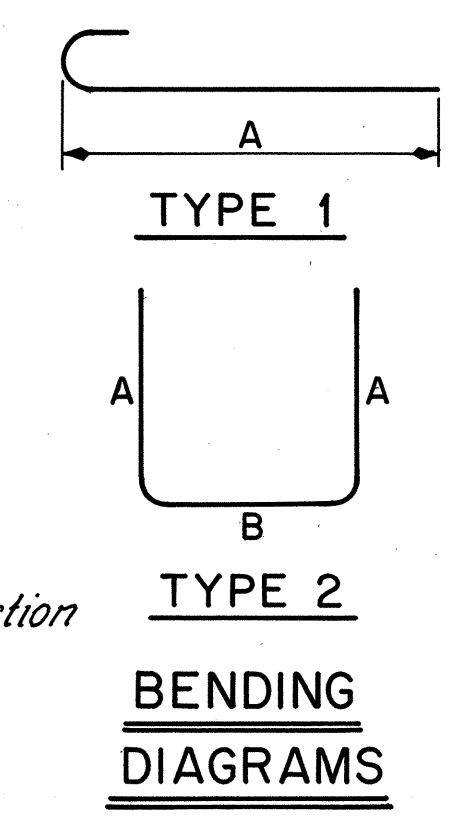
12  
13

HOL - 83 - 13.56

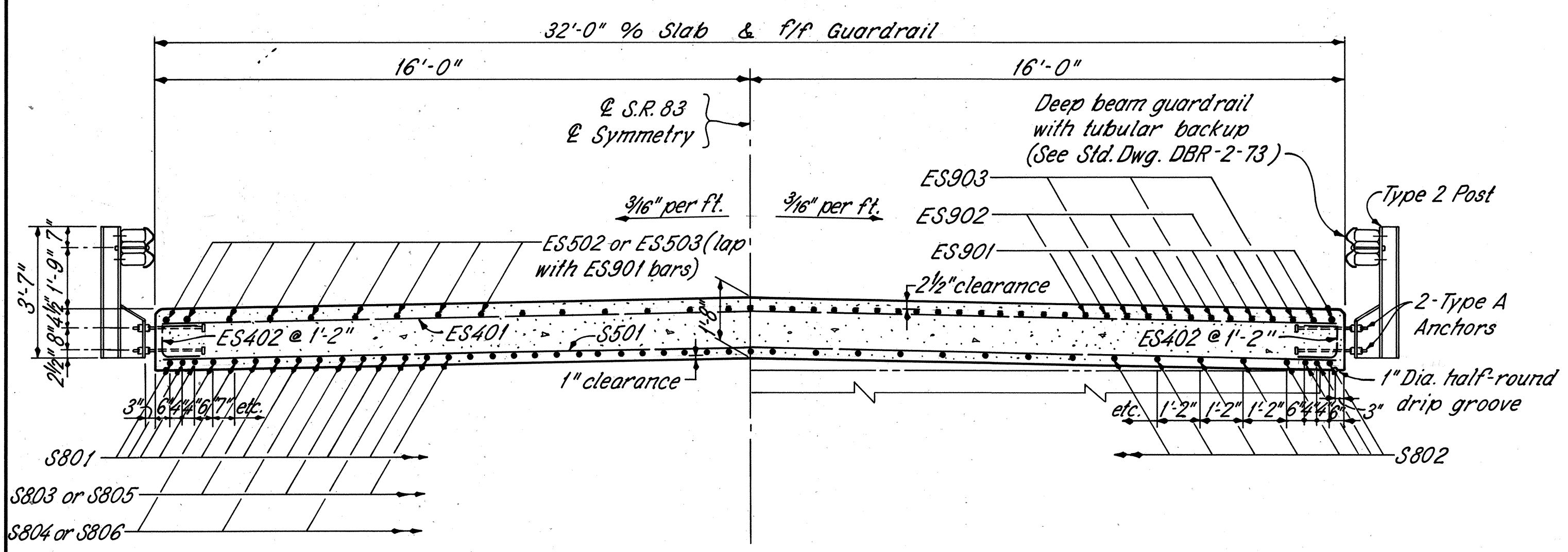


PLACEMENT DIAGRAM FOR ES901, ES902 AND ES903 BARS

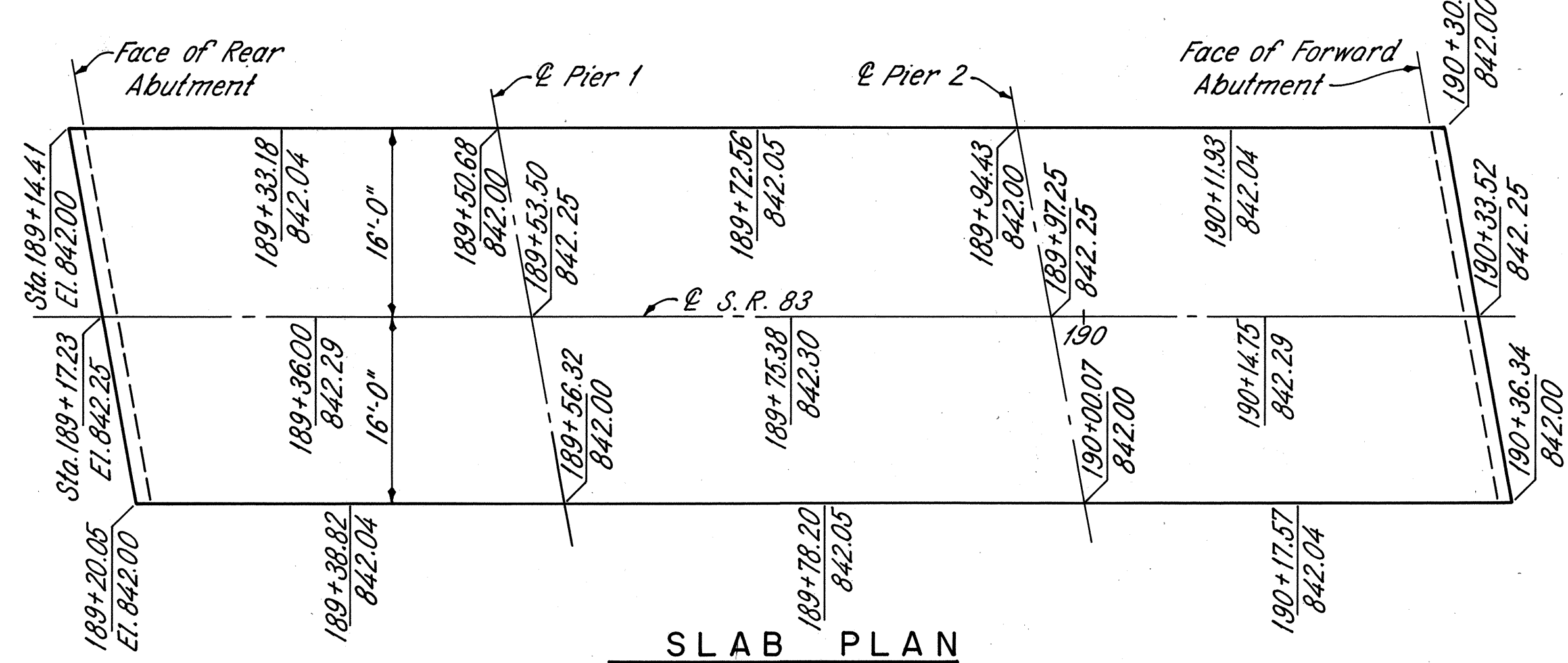
REINFORCING STEEL						
MARK	NO.	LENGTH	TYPE	A	B	WEIGHT
S501	109	32'-1"	Str.			3647
S801	96	30'-0"	Str.			7690
S802	64	19'-10"	Str.			3389
S803	24	28'-4"	1	27'-5"		1815
S804	26	26'-1"	1	25'-2"		1810
S805	12	26'-0"	Str.			833
S806	13	21'-11"	Str.			761
TOTAL WEIGHT						19,945
EPOXY COATED BARS						
ES401	117	32'-1"	Str.			2508
ES402	202	3'-1"	2	1'-0"	1'-3/2"	416
ES502	30	23'-10"	Str.			1544
ES503	30	22'-5"	Str.			702
ES901	60	26'-11"	Str.			5492
ES902	26	14'-10"	Str.			1311
ES903	28	11'-6"	Str.			1095
TOTAL WEIGHT						13,068



SECTION A - A



SECTION B-B AND D-D



SLAB PLAN

Elevations shown are for top of slab before slab concrete is placed and includes midspan camber of 1/2" in end spans and 3/8" in middle span for concrete deflection.

① Varies by 3/4" increments

**NOTE**  
FOR ADDITIONAL DETAILS AND NOTES: See Std. Dwg. CS-2-73, sheets 1 and 2 of 2 and Std. Dwg. DBR-2-73

**RE** RICHLAND ENGINEERING LIMITED  
MANSFIELD, OHIO

**SUPERSTRUCTURE**  
BRIDGE NO. HOL - 83 - 1356  
OVER MARTINS CREEK

HOLMES COUNTY S.R.83

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RDN	TWH	TWH	RHU	DAP	5/28/82	



PROPERTY PLAN  
SCALE IN FEET  
0 660 1320

HOLMES COUNTY, PRAIRIE TWP. SEC. 10-T13N-R13W

FEDERAL PROJECT NO.	FHWA REGION	STATE	STATE PROJECT NO.
BRF-44( )	5	OHIO	11502(0)

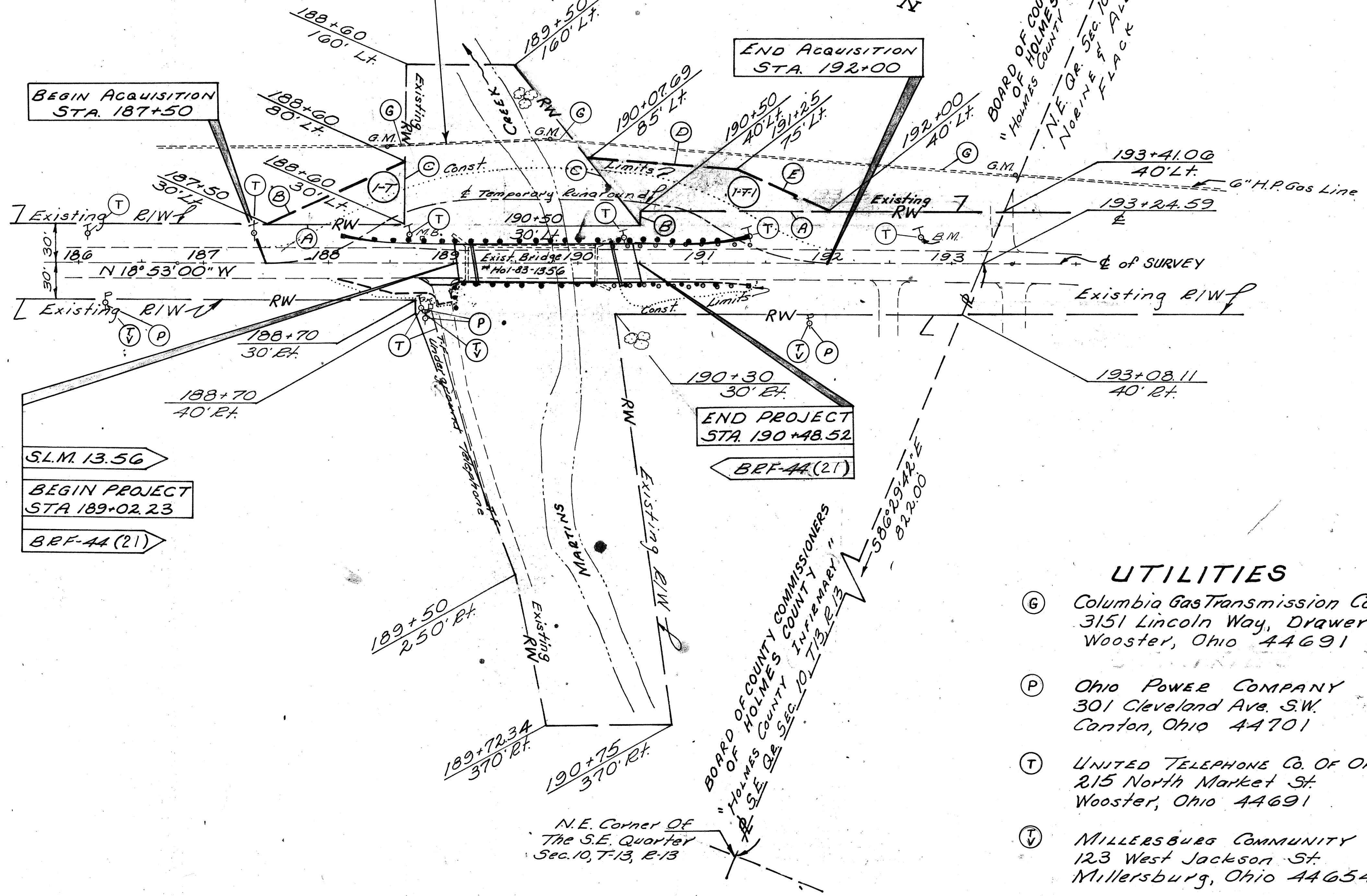
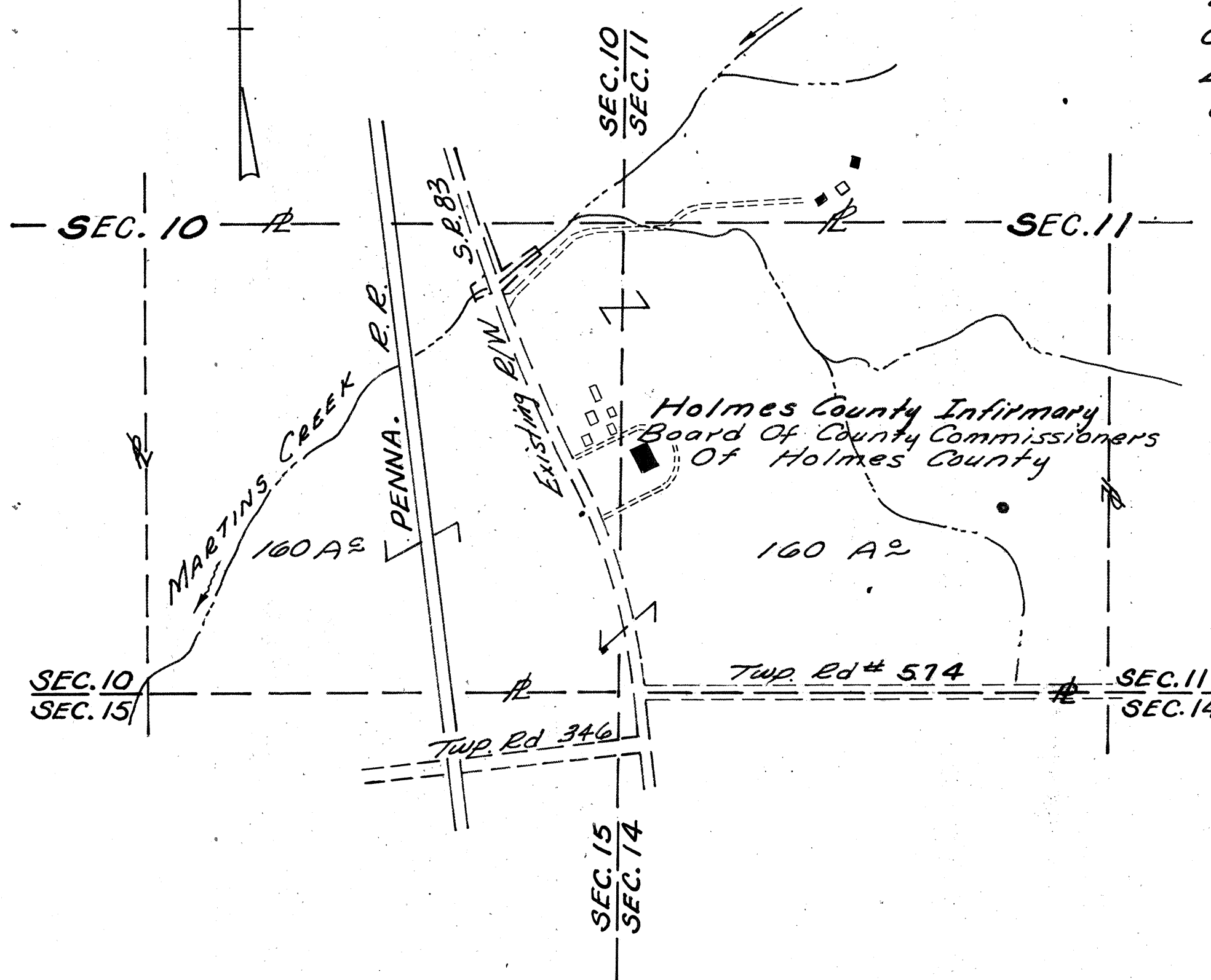
13  
13  
1  
1

Note: Existing Right of Way Easements are recorded in Holmes County Highway Easement Record Book No. 1, Page 77 of the County Recorder's Office.

SCALE IN FEET  
0 50 100

Do Not Disturb Gas Line  
See Gas Transmission Line Note on General Notes Sheet of the Construction Plan, Sheet No. 3.

HOL-83-13.56  
RIGHT OF WAY PLAN



PARCEL 1-T		
A	S 18°53'00"E	110.00'
B	N 43°19'38"W	120.83'
C	N 71°07'00"E	50.00'

PARCEL 1-T-1		
A	S 18°53'00"E	150.00'
B	N 71°07'00"E	10.00'
C	S 33°32'53"W	69.39'
D	N 14°00'39"W	117.73'
E	N 6°08'01"E	82.76'

Note: Record Area after Outsales minus Total P.R.O. minus Net Take equals Net Residue.

- UTILITIES**
- (G) Columbia Gas Transmission Corp.  
3151 Lincoln Way, Drawer C  
Wooster, Ohio 44691
  - (P) Ohio Power Company  
301 Cleveland Ave. S.W.  
Canton, Ohio 44701
  - (T) UNITED TELEPHONE Co. OF OHIO  
215 North Market St.  
Wooster, Ohio 44691
  - (V) MILLERSBURG COMMUNITY T.V.  
123 West Jackson St.  
Millersburg, Ohio 44654

SUMMARY OF ADDITIONAL RIGHT OF WAY REQUIRED											COMPLETION DATE 5-21-82			
TOTAL NO OWNERS											Revision	Description	Date	
PARCEL NO	OWNER	DEED VOLUME	DEED PAGE	DEED DATE	DEED AREA	TOTAL P.R.O.	TOTAL TAKE	P.R.O. IN TAKE	NET TAKE	NET RES. LT.	NET RES. RT.	SHEET NO	REMARKS	TYPE FUNDS
1-T	BOARD OF COUNTY COMMISSIONERS OF HOLMES COUNTY	28	226	1-20-1866	320 A±	7.02 A±	0.063 A±	0	0.063 A±	139.62 A±	173.36 A±	1	To Construct Temporary Bypass	STATE
1-T-1							0.121 A±	0	0.121 A±			1	To Construct Temporary Bypass	STATE



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OCT 24 1984

FEDERAL NO. BRF-44(21)

**GEOLOGY OF THE SITE**

THE STRUCTURE SITE IS LOCATED IN THE HIGHLY DISSECTED GLACIATED PORTION OF THE ALLEGHENY PLATEAU REGION, ON THE BROAD FLOODPLAIN OF KILLBUCK CREEK AND OVER MARTINS CREEK, IN AN AREA WHERE DEEP GLACIAL AND ALLUVIAL DEPOSITS OVERLIE BEDROCK, OF MISSISSIPPIAN AGE.

**EXPLORATION**

THE EXPLORATION CONSISTED OF TWO DRIVE SAMPLE BORINGS MADE BY MEANS OF A MECHANICALLY-POWERED HOLLOW STEM AUGER MOUNTED ON A MOBILE PLATFORM, PERFORMED ON MARCH 30, 1982.

**INVESTIGATIONAL FINDINGS AND OBSERVATIONS**

THE BORINGS ENCOUNTERED INTERVALS OF LOOSE TO EXTREMELY BENSE UNSTRATIFIED BASIC SILTS, SAND AND GRAVEL MODIFIED WITH CLAY AND VARYING AMOUNTS OF EACH OTHER THAT RAPIDLY INCREASE (ERRATIC AT TIMES) IN DENSITY WITH INCREASE IN DEPTH. BORING B-1 (IN THE VICINITY OF THE REAR ABUTMENT) PENETRATED TO A DEPTH OF 41.5 FEET, ELEVATION 800.5 FEET, AND WAS TERMINATED AFTER PENETRATING IN EXCESS OF 16.5 FEET OF MATERIAL REQUIRING IN EXCESS OF 30 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST. BORING B-2 (IN THE VICINITY OF THE FORWARD ABUTMENT) ENCOUNTERED MATERIAL BEARING A TRACE OF ORGANIC AT 10.0 AND 15.0-FOOT DEPTHS, ELEVATIONS 831.9 AND 826.9 FEET, RESPECTIVELY. BORING B-2 PENETRATED TO A DEPTH OF 41.5 FEET, ELEVATION 800.4 FEET AND WAS TERMINATED AFTER PENETRATING IN EXCESS OF 21.5 FEET OF MATERIAL REQUIRING IN EXCESS OF 30 BLOWS PER FOOT IN THE STANDARD PENETRATION TEST.

BEDROCK SURFACE WAS NOT ENCOUNTERED IN EITHER OF THE TEST BORINGS PERFORMED.

NO FREE WATER OBSERVATIONS WERE MADE DURING OR AT THE CONCLUSION OF DRILLING OPERATIONS.

- Auger Boring Location - Plan View.
- Press and / or Drive Sample and / or Core Boring Location - Plan View.
- Drive Rod Penetration Resistance Sounding Location - Plan View.
- Capped Pile
- Footing
- Footing on Pile
- Top of Rock

- Coal
- Weathered Mudstone or Claystone
- Mudstone or Claystone
- Weathered Shale
- Shale
- Weathered Siltstone
- Siltstone

**LEGEND**

- Horizontal Bar on Boring Log Indicates the Depth the Sample Was Taken.
- Figures Beside the Boring Log in Profile Indicate the Number of Blows for Standard Penetration Test.  
X = Number of Blows for First 6 inches.  
Y = Number of Blows for Second 6 inches.  
Z = Number of Blows for Third 6 inches.
- Drive Rod Penetration Resistance Sounding Log - Profile
- Casing
- Resistance "R" < 10,000 lbs.
- Resistance "R" > 10,000 lbs.
- Z Indicates Final Measurement of Penetration, in Inches.
- W Indicates Free Water Elevation.
- Indicates Static Water Elevation.

**SYMBOLS OF ROCK TYPES**

- Weathered Sandstone
- Sandstone
- Leached Dolomite
- Dolomite
- Leached Limestone
- Limestone
- Boulders or Cobbles

**LOG OF BORING**

Date Started 3-30-82 Sampler Type SS Dia. 1 3/8" Water Elev. \_\_\_\_\_  
 Date Completed 3-30-82 Casing Length \_\_\_\_\_ Dia. \_\_\_\_\_  
 Boring No. B-1 Station & Offset 99+35, 20' RT. (REAR ABUTMENT) Surface Elev. 842.0'

Elev.	Depth	Std. Pen. (N)	Rec. Loss ft.	Description	Sample No.	Physical Characteristics										SHTL Class.				
						% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.							
842.0	0																			
	2			BROWN SAND AND GRAVEL (DRILLER'S DESCRIPTION)																VISUAL
837.0	4																			
	6	3/6/9		BROWN SILTY SANDY GRAVEL	1	49	22	18	4	7	NP	NP	6	A-1-B						
832.0	10																			
	12	10/14/16		BROWN SILTY SANDY GRAVEL	2	42	21	18	9	10	NP	NP	14	A-1-B						
827.0	14																			
	16	11/11/11		BROWN SILTY SANDY GRAVEL	3	53	17	12	10	8	NP	NP	14	A-1-A						
822.0	20																			
	22	6/8/14		BROWN SILTY GRAVELLY SAND	4	40	33	13	6	8	NP	NP	13	A-1-B						
817.0	26																			
	28	30/38/50		BROWN SILTY SANDY GRAVEL	5	48	20	13	12	7	NP	NP	12	A-1-B						
812.0	30																			
	32	7/10/24		BROWN SILTY SAND	6	4	31	49	4	12	NP	NP	21	A-3A						
807.0	34																			
	36	33/49/63		BROWN SILTY SAND	7	0	41	48	0	11	NP	NP	27	A-3A						
802.0	40																			
800.5		21/33/48		BROWN SILTY GRAVELLY SAND	8	29	30	25	7	9	NP	NP	12	A-1-B						

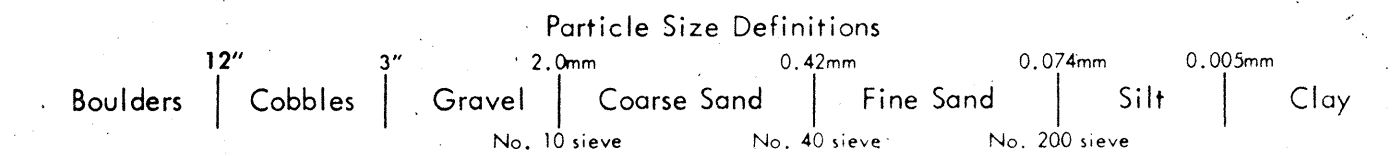
BOTTOM OF BORING →

**LOG OF BORING**

Date Started 3-30-82 Sampler Type SS Dia. 1 3/8" Water Elev. \_\_\_\_\_  
 Date Completed 3-30-82 Casing Length \_\_\_\_\_ Dia. \_\_\_\_\_  
 Boring No. B-2 Station & Offset 100+55, 6' LT. (FORWARD ABUTMENT) Surface Elev. 841.9'

Elev.	Depth	Std. Pen. (N)	Rec. Loss ft.	Description	Sample No.	Physical Characteristics										SHTL Class.				
						% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.							
841.9	0			ASPHALT PAVEMENT																
841.1	2																			
	4			BROWN SILT AND GRAVEL (DRILLER'S DESCRIPTION)																VISUAL
836.9	6																			
	8	3/8/10		BROWN SILTY SANDY GRAVEL	1	34	12	21	19	14	NP	NP	14	A-2-4						
831.9	10																			
	12	3/2/3		GRAY SANDY SILT, TRACE OF ORGANIC	2	4	3	46	30	17	NP	NP	28	A-4A						
826.9	14																			
	16	3/5/3		BROWN AND GRAY GRAVELLY SANDY SILT, TRACE OF ORGANIC	3	17	14	29	26	14	NP	NP	27	A-4A						
821.9	20																			
	22	35/48/63		BROWN SILTY GRAVELLY SAND	4	35	46	7	5	7	NP	NP	16	A-1-B						
816.9	24																			
	26	34/48/66		BROWN SILTY SANDY GRAVEL	5	50	19	12	11	8	NP	NP	9	A-1-B						
811.9	30																			
	32	13/30/41		BROWN SILTY GRAVELLY SAND	6	26	32	24	6	12	NP	NP	14	A-1-B						
806.9	34																			
	36	35/56/79		BROWN SILTY SAND	7	8	49	31	3	9	NP	NP	17	A-1-B						
801.9	40																			
800.4		30/51/66		BROWN SILTY GRAVELLY SAND	8	29	30	26	7	8	NP	NP	13	A-1-B						

BOTTOM OF BORING →



NOTE - ALL AVAILABLE SOIL AND BEDROCK INFORMATION WHICH CAN BE CONVENIENTLY SHOWN ON THE STRUCTURE FOUNDATION INVESTIGATION SHEETS HAS BEEN SO REPORTED. ADDITIONAL SUBSURFACE INVESTIGATIONS MAY HAVE BEEN MADE TO STUDY SOME SPECIAL ASPECT OF THE PROJECT. COPIES OF THIS DATA, IF ANY, MAY BE INSPECTED IN THE DISTRICT DEPUTY DIRECTOR'S OFFICE, THE BUREAU OF TESTS AT 1600 WEST BROAD STREET, THE PAVEMENT AND SOILS SECTION OF THE BUREAU OF LOCATION AND DESIGN OR IN THE BRIDGE BUREAU AT 25 SOUTH FRONT STREET.

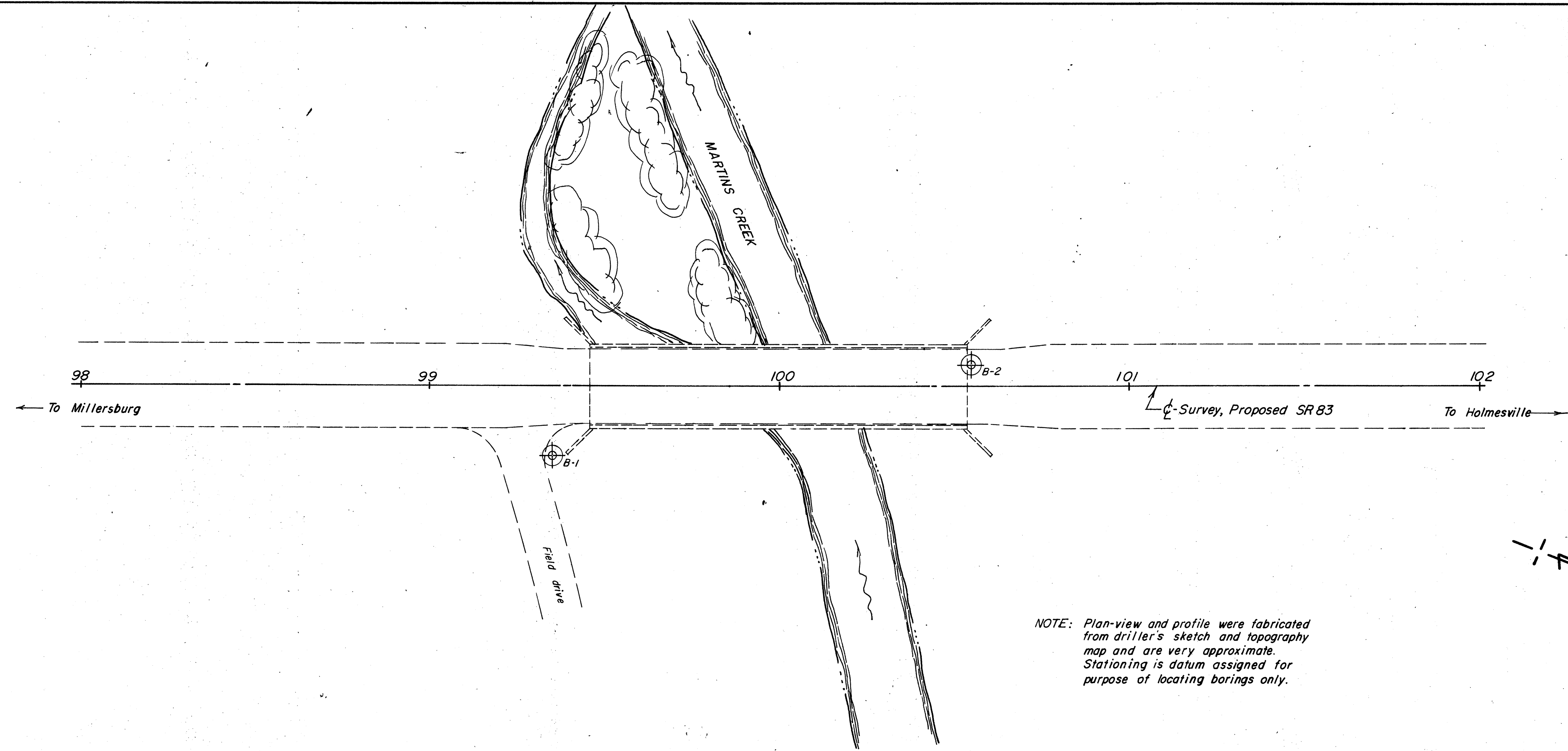
OHIO DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS - TESTING LABORATORY  
 1600 WEST BROAD STREET, COLUMBUS, OHIO 43223

STRUCTURE FOUNDATION INVESTIGATION  
 BRIDGE NO. HOL-83-1356  
 OVER MARTINS CREEK  
 SEC. HOL-83-13.56

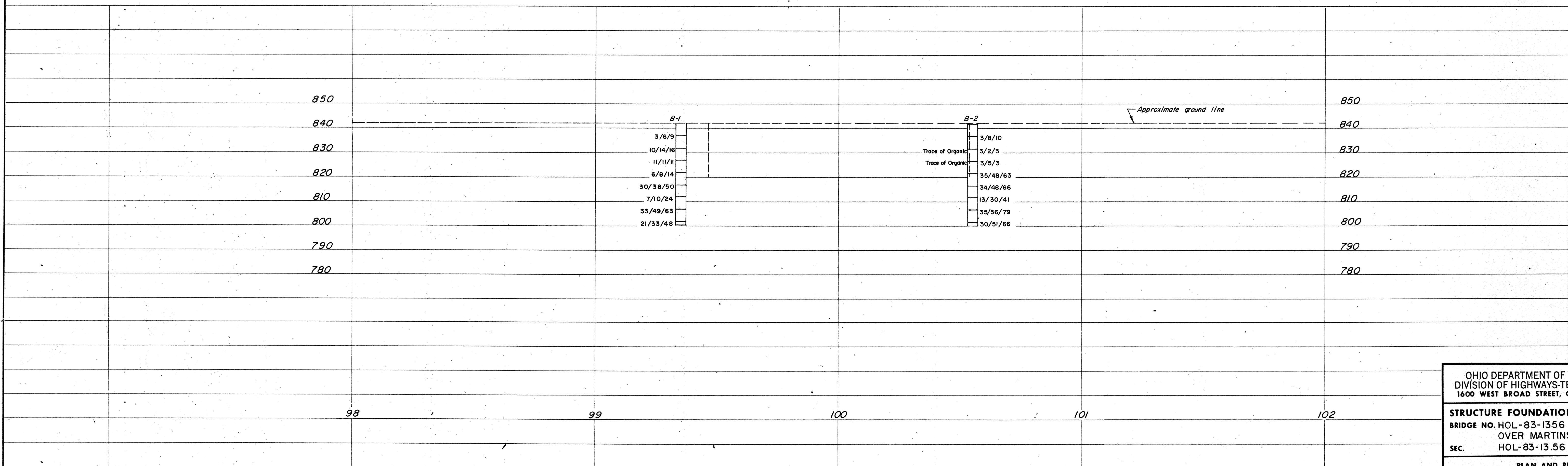
CHECKED BY L. N. L. REVIEWED BY R. D. R. DATE 5/18/82



MICROFILMED  
OCT 24 1984



NOTE: Plan-view and profile were fabricated from driller's sketch and topography map and are very approximate. Stationing is datum assigned for purpose of locating borings only.



OHIO DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS-TESTING LABORATORY  
1600 WEST BROAD STREET, COLUMBUS, OHIO 43223

**STRUCTURE FOUNDATION INVESTIGATION**  
BRIDGE NO. HOL-83-1356  
OVER MARTINS CREEK  
SEC. HOL-83-13.56

PLAN AND PROFILE

DRAWN BY A. F.	CHECKED BY L. N. L.	REVIEWED BY R. D. R.	DATE 5/18/82
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SCALE: 1" = 20'