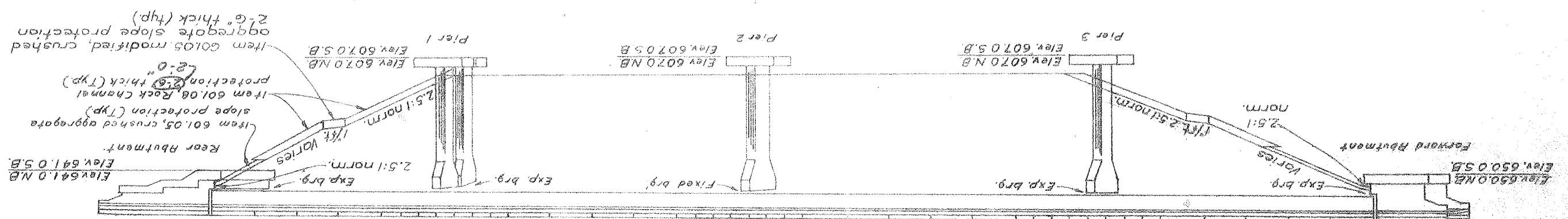


- NOTES**
- Measured normal to U.S. 33 N.B. of Sta. 753+84.00.
 - For sign truss support details see sheets 49/54 & 50/54.
 - Scupper spacings shown are c/c along face of curb unless otherwise shown. Scupper spacings may be changed slightly from that shown in order to maintain a clear from crossframes.
 - For limits and elevations of Drainage Dam see sheet 48/54.
 - Light pole arm to be radial to W.B. Stimson Ave.
 - Light pole arm to be radial to U.S. 33 N.B.
 - 8'-0" bench, crushed aggregate slope protection modified, 2'-6" thick.
 - For scupper details see sheet 50/54.
 - For end dam details of parapet or curb see sheet 50/54.

All rolling dimensions are measured along the top of the parapet.

Panel 2	Panel 1	Panel 2	Panel 1	Panel 2	Panel 1	Panel 2	Panel 1
5 spa @ 15'-0" = 75'-0"	8 spa @ 6'-6" = 52'-0"	5 spa @ 15'-0" = 75'-0"	8 spa @ 6'-6" = 52'-0"	5 spa @ 15'-0" = 75'-0"	8 spa @ 6'-6" = 52'-0"	5 spa @ 15'-0" = 75'-0"	8 spa @ 6'-6" = 52'-0"
5 spa @ 15'-3" = 76'-3"	8 spa @ 6'-6" = 52'-0"	5 spa @ 15'-3" = 76'-3"	8 spa @ 6'-6" = 52'-0"	5 spa @ 15'-3" = 76'-3"	8 spa @ 6'-6" = 52'-0"	5 spa @ 15'-3" = 76'-3"	8 spa @ 6'-6" = 52'-0"
5 spa @ 15'-7" = 77'-11"	8 spa @ 6'-6" = 52'-0"	5 spa @ 15'-7" = 77'-11"	8 spa @ 6'-6" = 52'-0"	5 spa @ 15'-7" = 77'-11"	8 spa @ 6'-6" = 52'-0"	5 spa @ 15'-7" = 77'-11"	8 spa @ 6'-6" = 52'-0"
5 spa @ 15'-7 1/2" = 78'-0 1/2"	8 spa @ 6'-6" = 52'-0"	5 spa @ 15'-7 1/2" = 78'-0 1/2"	8 spa @ 6'-6" = 52'-0"	5 spa @ 15'-7 1/2" = 78'-0 1/2"	8 spa @ 6'-6" = 52'-0"	5 spa @ 15'-7 1/2" = 78'-0 1/2"	8 spa @ 6'-6" = 52'-0"
4 spa @ 6'-6" = 26'-0"	7 spa @ 6'-6" = 45'-6"	4 spa @ 6'-6" = 26'-0"	7 spa @ 6'-6" = 45'-6"	4 spa @ 6'-6" = 26'-0"	7 spa @ 6'-6" = 45'-6"	4 spa @ 6'-6" = 26'-0"	7 spa @ 6'-6" = 45'-6"
4 spa @ 15'-2 1/2" = 38'-0"	4 spa @ 15'-0" = 60'-0"	4 spa @ 15'-2 1/2" = 38'-0"	4 spa @ 15'-0" = 60'-0"	4 spa @ 15'-2 1/2" = 38'-0"	4 spa @ 15'-0" = 60'-0"	4 spa @ 15'-2 1/2" = 38'-0"	4 spa @ 15'-0" = 60'-0"
4 spa @ 15'-3 1/2" = 61'-2 1/2"	7 spa @ 6'-6" = 45'-6"	4 spa @ 15'-3 1/2" = 61'-2 1/2"	7 spa @ 6'-6" = 45'-6"	4 spa @ 15'-3 1/2" = 61'-2 1/2"	7 spa @ 6'-6" = 45'-6"	4 spa @ 15'-3 1/2" = 61'-2 1/2"	7 spa @ 6'-6" = 45'-6"
4 spa @ 15'-4 1/2" = 61'-0"	7 spa @ 6'-6" = 45'-6"	4 spa @ 15'-4 1/2" = 61'-0"	7 spa @ 6'-6" = 45'-6"	4 spa @ 15'-4 1/2" = 61'-0"	7 spa @ 6'-6" = 45'-6"	4 spa @ 15'-4 1/2" = 61'-0"	7 spa @ 6'-6" = 45'-6"
4 spa @ 15'-4 1/2" = 61'-0"	7 spa @ 6'-6" = 45'-6"	4 spa @ 15'-4 1/2" = 61'-0"	7 spa @ 6'-6" = 45'-6"	4 spa @ 15'-4 1/2" = 61'-0"	7 spa @ 6'-6" = 45'-6"	4 spa @ 15'-4 1/2" = 61'-0"	7 spa @ 6'-6" = 45'-6"
4 spa @ 15'-7 1/2" = 62'-5"	9 spa @ 6'-6" = 58'-6"	4 spa @ 15'-7 1/2" = 62'-5"	9 spa @ 6'-6" = 58'-6"	4 spa @ 15'-7 1/2" = 62'-5"	9 spa @ 6'-6" = 58'-6"	4 spa @ 15'-7 1/2" = 62'-5"	9 spa @ 6'-6" = 58'-6"
4 spa @ 15'-7 1/2" = 62'-5"	9 spa @ 6'-6" = 58'-6"	4 spa @ 15'-7 1/2" = 62'-5"	9 spa @ 6'-6" = 58'-6"	4 spa @ 15'-7 1/2" = 62'-5"	9 spa @ 6'-6" = 58'-6"	4 spa @ 15'-7 1/2" = 62'-5"	9 spa @ 6'-6" = 58'-6"
4 spa @ 15'-6 1/2" = 58'-6"	9 spa @ 6'-6" = 58'-6"	4 spa @ 15'-6 1/2" = 58'-6"	9 spa @ 6'-6" = 58'-6"	4 spa @ 15'-6 1/2" = 58'-6"	9 spa @ 6'-6" = 58'-6"	4 spa @ 15'-6 1/2" = 58'-6"	9 spa @ 6'-6" = 58'-6"
4 spa @ 15'-6 1/2" = 58'-6"	9 spa @ 6'-6" = 58'-6"	4 spa @ 15'-6 1/2" = 58'-6"	9 spa @ 6'-6" = 58'-6"	4 spa @ 15'-6 1/2" = 58'-6"	9 spa @ 6'-6" = 58'-6"	4 spa @ 15'-6 1/2" = 58'-6"	9 spa @ 6'-6" = 58'-6"



ELEVATION
Piles not shown

COLUMBUS ENGINEERING CONSULTANTS, LTD.
Consulting Civil Engineers
SUCCESSION TO
ATKINS MERCE UNDERWOOD, LTD.
Columbus, Ohio

DATE RECEIVED: 6/20/70
DESIGNER: JP RWF
CHECKED: FTJ
DATE: 5/14/70

GENERAL ELEVATION
BRIDGE N° ATH-39-15.62 L&R
U.S. 39 OVER REDUCED HOCKING RIVER
ATHENS COUNTY
STN. 758+42.50 NB.
STN. 758+21.94 NB.

4/54

GENERAL NOTES (CONTINUED)

PROCEDURE: North embankment constructed with
ATH-33-12.95. South embankment shall be constructed
to the level of the subgrade for a minimum distance of
200 feet back of the abutments. The rate of loading
for this embankment is to be a maximum of 6 feet
per week up to 18 feet in height and a maximum
of 4 feet per week above 18 feet in height. There
shall be a minimum waiting period of 120 days
between completion of the embankments to subgrade
elevation and the starting of the abutments and
piers land 3 construction.
Settlement hubs shall be placed in both embankments
of the direction of the Engineer. The Engineer shall
make periodic observations of the hubs to determine
when a sufficient percentage of the ultimate
settlement has occurred so as to allow construct-
ion of the abutments and piers.

WELDS on non-stress-carrying members are shown thus:



Item	Bridge Unit	Description	URBAN (NO CITY PARTICIPATION)	URBAN (CITY PARTICIPATION)	BRIDGE SUBTOTALS
503	Lump Sum	Cofferdams, Crib and Sheeting	712	1498	2210
506	Lump Sum	First Pile Test Load	83% Lump	83% Lump	83% Lump
506	Lump Sum	Each Subsequent Pile Test Load	5010	6524	11534
509	849087 Lb	Reinforcing Steel	44,326	225,175	269,501
511	1911 C.Y.	Class "C" Concrete, Superstructure	1911	1911	3822
511	1035 C.Y.	Class "C" Concrete, Piers above Footings	1035	1035	2070
511	651 C.Y.	Class "C" Concrete, Abutments above Footings	478	173	651
511	924 C.Y.	Class "C" Concrete, Footings	244	572	816
512	86 L.F.	Premolded Sealing Strip	86	86	172
513	1963500 Lb	Structural Steel	1963500	1963500	3927000
514	1963500 Lb	Field Painting of Structural Steel	1963500	1963500	3927000
516	90 Sq Ft	1" Pre-formed Exp Joint Filler	90	90	180
518	427 C.Y.	Porous Backfill	306	121	427
518	46 Each	Scuppers including Supports	46	46	92
518	331 Lin Ft	6" Perforated, Helical corrugated Metal	234	97	331
518	191 Lin Ft	6" Non-perforated Helical Corrugated Metal Pipe, 707.01	103	88	191
601*	445 Sq Yd	Crushed Aggregate Slope Protection	445	445	890
601	1342 Sq Yd	Crushed Aggregate Slope Protection	1342	1342	2684
601	445 Cu Yd	Rock Channel Protection, Type B	445	445	890
625		See Sheet 58 for Lighting Sub-Summary			
808	1911 Units	Chemical Admixture for Concrete, Type B	1911	1911	3822

ESTIMATED QUANTITIES (TWO BRIDGES)

* Modified (As per plan)

DESIGN SPECIFICATIONS: This structure conforms to "Standard Specifications for Highway Bridges" adopted by the American Association of State Highway Officials, 1963, including the Ohio "Supplement" to these specifications.

DESIGN DATA: Design Loading: HS-20-44

Concrete Class C: Unit stress 1200 psi. for superstructure
Unit stress 1333 psi. for substructure

Reinforcing steel, ASTM A615, Grade 60, Deformed, Intermediate or Hard Grade.

Unit stress 20,000 psi.

Piles shall be driven with a hammer of not less than 11,000 ft/lb. per blow to firm contact with bedrock. If the length of penetration is approximately equal to the depth to bedrock according to the bridge foundation investigation report, the firm contact shall be considered as obtained when the capacity according to the formula in 507.05 is not less than the following value for a pile hammer of the indicated energy rating.

Location	Formula	Capacity
Rear Abutment	40 tons	35 tons
Piers 1A & 1B, N.B. & S.B.	70 tons	60 tons
Piers 2 & 3, S.B.	65 tons	40 tons
Piers 2 & 3, N.B.	45 tons	35 tons
Forward Abutment	15,000 ft/lb. or greater hammer	35 tons

If the energy rating of the hammer is between the ratings as shown above, the required formula capacity shall be determined by interpolation. The design load is 35 tons per pile for the abutment and pier piles.

PILE TEST LOAD shall be according to 506 except that the maximum load required shall be 105 tons.

REFERENCES

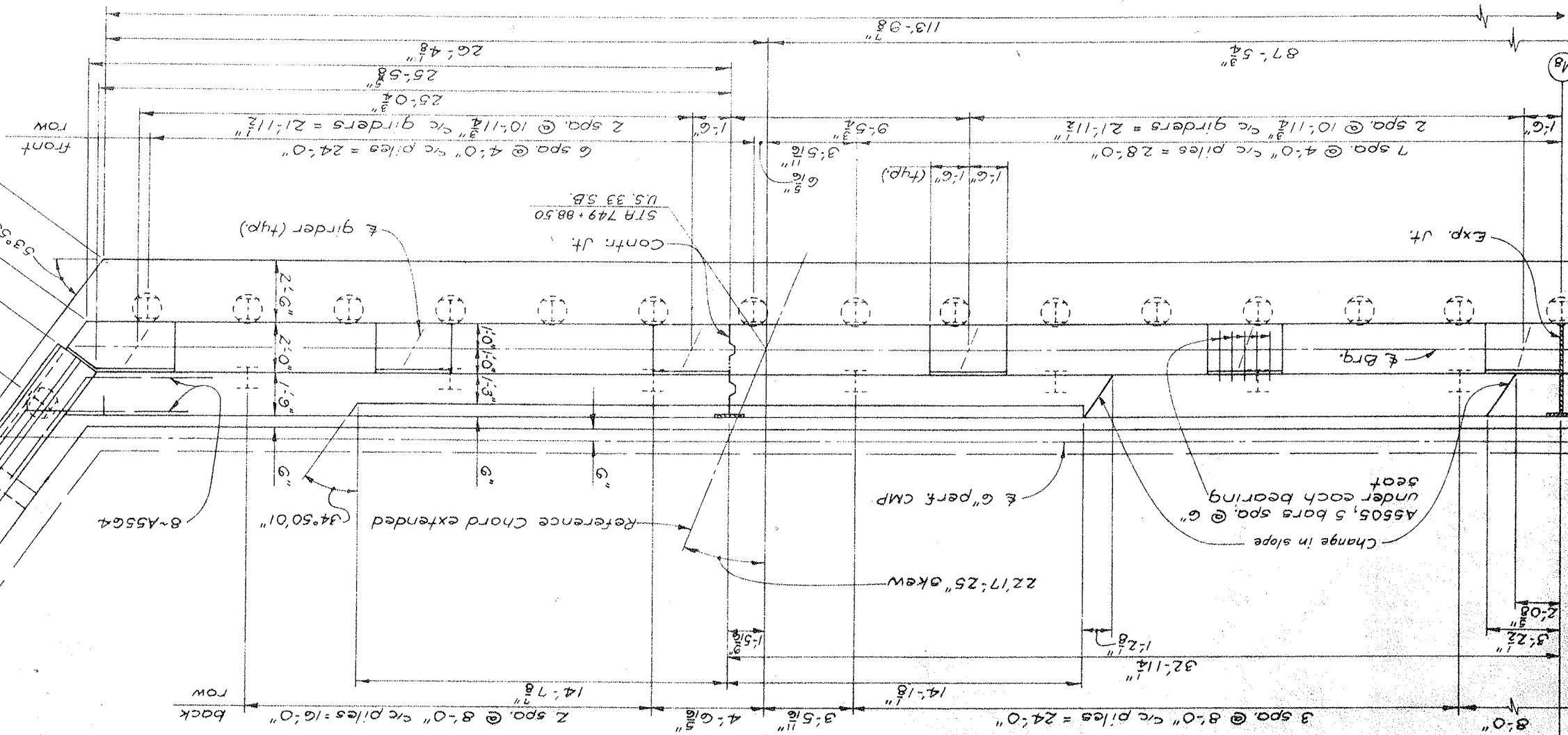
- Standard Drawings: 50-1-63
- Superstructure Details: BR-1-67
- Railing: BR-1-67
- Rockers and Bolsters: R8-1-55
- Approach Slabs: AS-1-67
- Highway Lighting: HL-4
- Supplemental Specifications: 808 Dated 11-14-63
- Chemical Admixture for Concrete: 811 Revised 1-1-63
- Examination of Welds, Parts I and II: 836 Dated 6-11-63
- Concrete Curing and protection: 836 Dated 6-11-63
- Bridge Lighting Details: 836 Dated 6-11-63
- Conduit through abutment and Light Pole support and Bridge Raceway: 836 Dated 6-11-63

COLUMBUS ENGINEERING CONSULTANTS, LTD.
SUCCESSION TO
ATKINS MERCHER UNDERWOOD, LTD.
Columbus, Ohio

DESIGNED BY: J.P. R.W.
CHECKED BY: F.T.J.
DATE: 5/14/70

ATHENS COUNTY
ATH-33-15.62
BRIDGE NO. 127
5TH 752+21.94 NB
5TH 756+42.50 NB

PARTIAL PLAN



DESIGNED BY	DATE	REVIEWED	DATE
JP GTR	5/14/70	FTJ	7/20
CHECKED		DATE	
PROJECT	ATHENS COUNTY		
STATE	OHIO		
DIVISION	2		
REP. NO.	127		

REAR ABUTMENT S.B.
 BRIDGE N° ATH-33-1584 L
 U.S. 33 OVER RELOCATED HOCKING RIVER
 ATHENS COUNTY
 STA. 752+21.94 N.B.
 STA. 756+42.50 N.B.

COLUMBUS ENGINEERING CONSULTANTS, LTD.
 Consulting Civil Engineers
 1800 N. High Street
 Columbus, Ohio

7/54

Match Line see sheet G/54

Notes
 For additional notes see sheet 16/54.
 For additional details see sheets 6, 8, 9, 10, 11/54.

ATHENS COUNTY
 ATH-33-15.62

Limit of porous backfill (typ.)

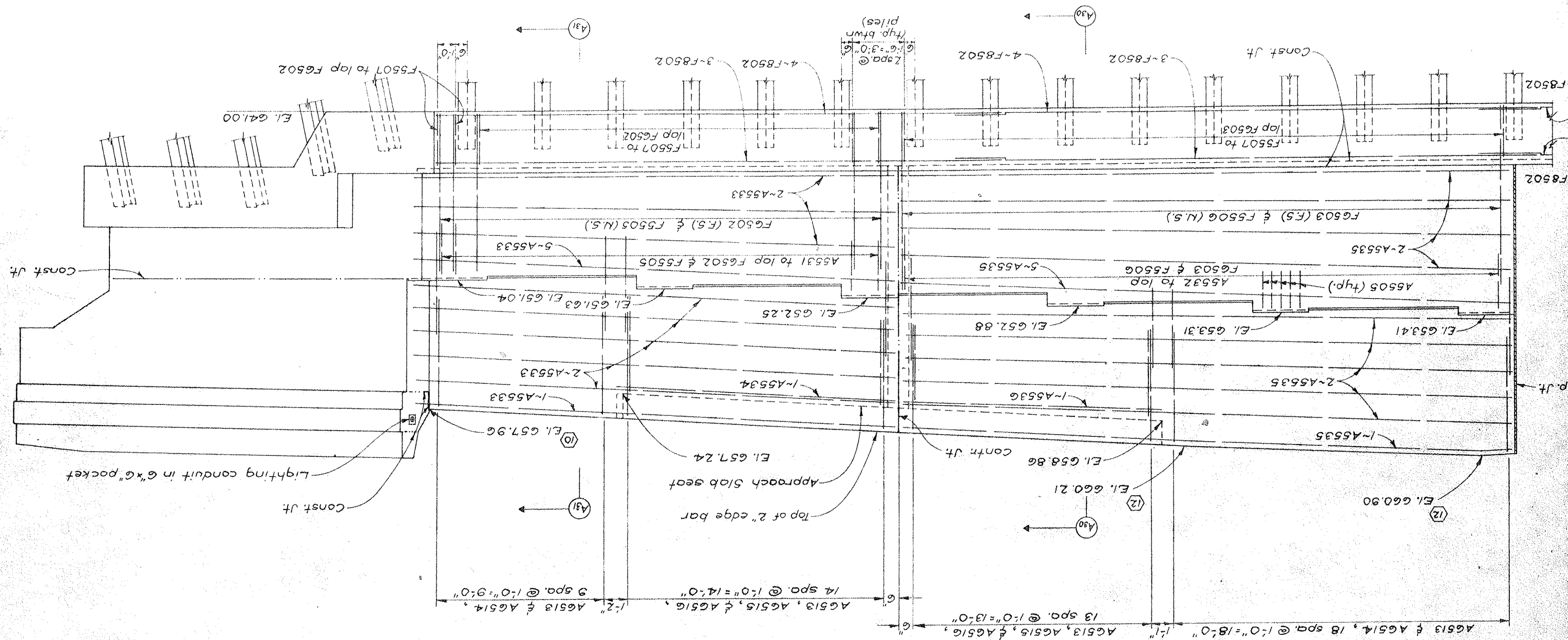
Terminate 6" non-perf. CMP in front slope, for details see sheet 18/54.



DESIGNED	DATE	REVIEWED	DATE	REVISIONS
JP GTR	FTJ 7/20 5/14/70			
REAR ABUTMENT S.B. BRIDGE NO ATH-33-1584 L U.S. 33 OVER RELOCATED HOCKING RIVER ATHENS COUNTY STA. 752+21.94 N.B. STA. 756+42.50 N.B.				
COLUMBUS ENGINEERING CONSULTANTS, LTD. CONSULTING CIVIL ENGINEERS COLUMBUS, OHIO				
9/54				

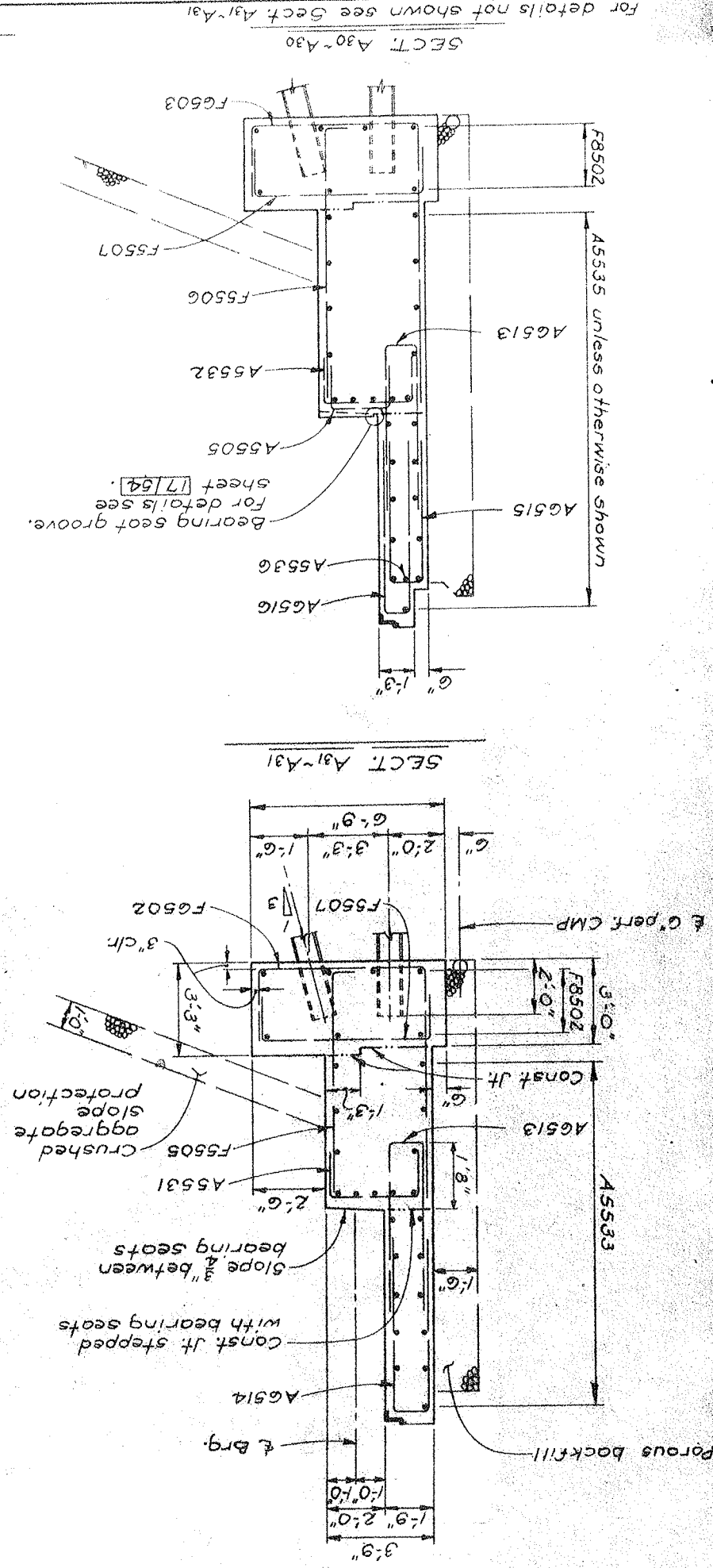
Notes
 For additional notes see sheet 16/54.
 For additional details see sheets 6, 7, 8, 10, 11/54.

PARTIAL ELEVATION



ATHENS COUNTY
 ATH-33-1562

80	127
FED. RM.	STATE
2	OHIO
PROJECT	



For details not shown see Sect. A31-A31

Bearing seat groove. For details see sheet 17/54.

Crushed aggregate slope protection

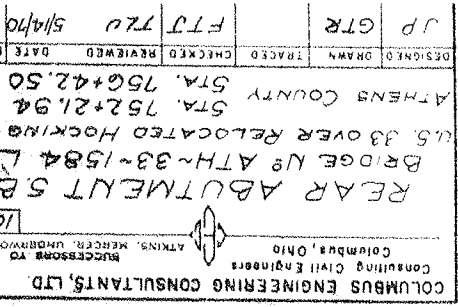
Const. Jt. stepped with bearing seats

Porous backfill

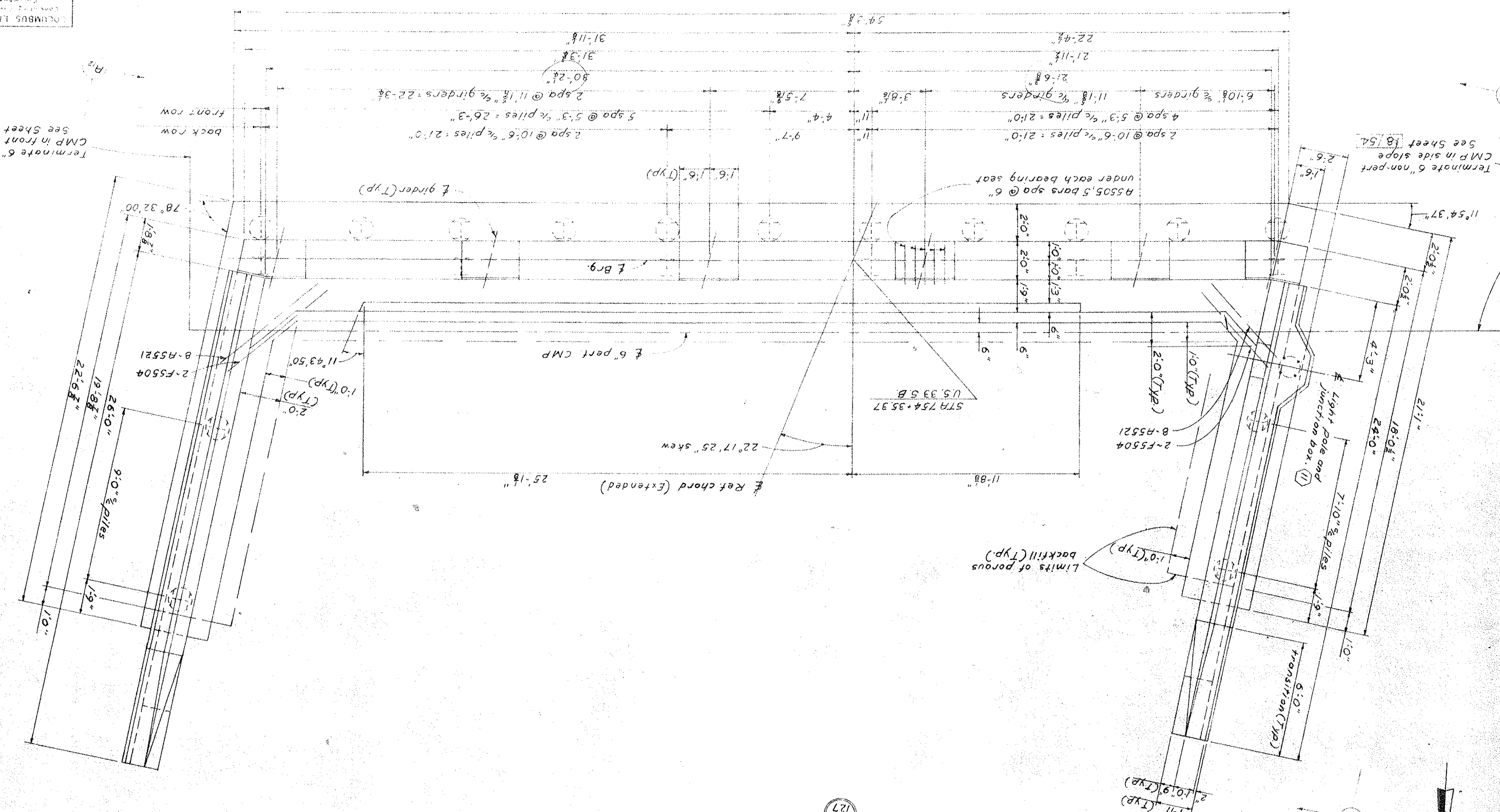
Notes
For additional details see sheets 6, 7, 8, 9, 11, 14
For additional notes see sheet 16/54

DESIGNED	DATE	REVISION
FTJ	7/20	5/14/70
CHECKED	DATE	REVISION
FTJ	7/20	5/14/70
TRACED	DATE	REVISION
FTJ	7/20	5/14/70
DATE	REVISION	
5/14/70		

J.P. GTR
 ATHENS COUNTY
 STA. 752+21.94 N.B.
 U.S. 33 OVER RELOCATED HOCKING RIVER
 BRIDGE No ATH-33-1584 L
 REAR ABUTMENT 5B
 CONSULTING CIVIL ENGINEERS
 COLUMBUS ENGINEERING CONSULTANTS, LTD.
 COLUMBUS, OHIO
 SUCCESSORS TO
 ATKINS, MERRILL, UNDERWOOD, LTD.
 10/54



PLAN



Terminate 6" non-pert
 CMP in front slope
 See Sheet 18/54
 back row
 front row

Terminate 6" non-pert
 CMP in side slope
 See Sheet 18/54

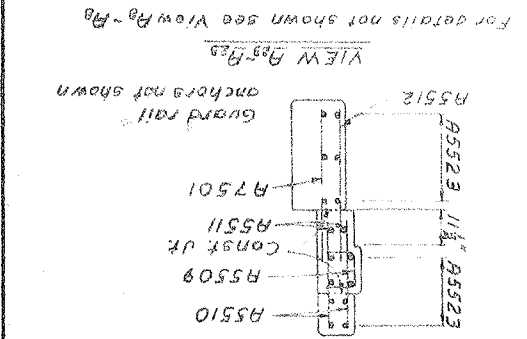
Limits of porous backfill (Typ.)

Notes:
 For additional notes see sheet 16/54.
 For additional abutment details see sheets 13, 14/54.
 For details of light pole support and reinforcing, junction box, drain, and ground wire see sheet 127.

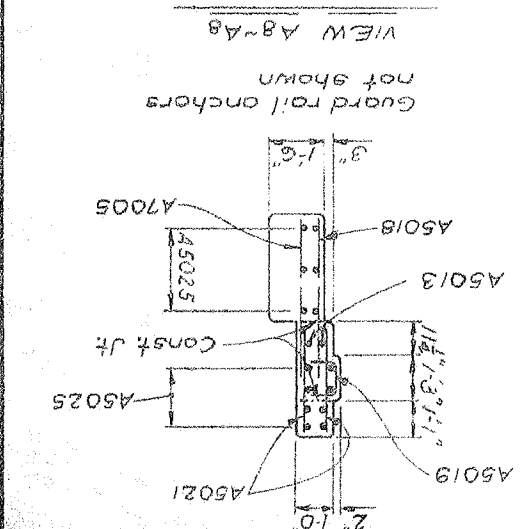
ATHENS COUNTY
 ATH-33-15.62

127	PROJECT	2	OHIO
	DIVISION		
	STATE		
	FED. RD.		

FORWARD ABUTMENT N.B. & S.B.
 BRIDGE N^o ATH-33-1584 L&R
 U.S. 33 OVER RELOCATED HOCKING RIVER
 ATHENS COUNTY STA. 752+21.94 N.B.
 STA. 756+42.50 S.B.
 DATE 5/14/70
 FTJ RW
 C.D. GTR
 14/52

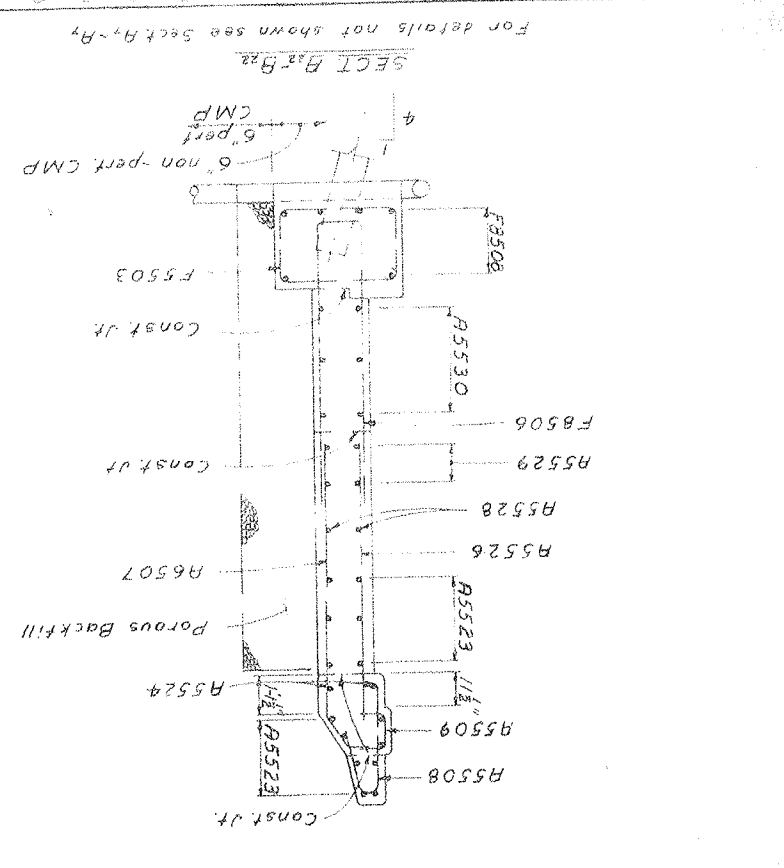
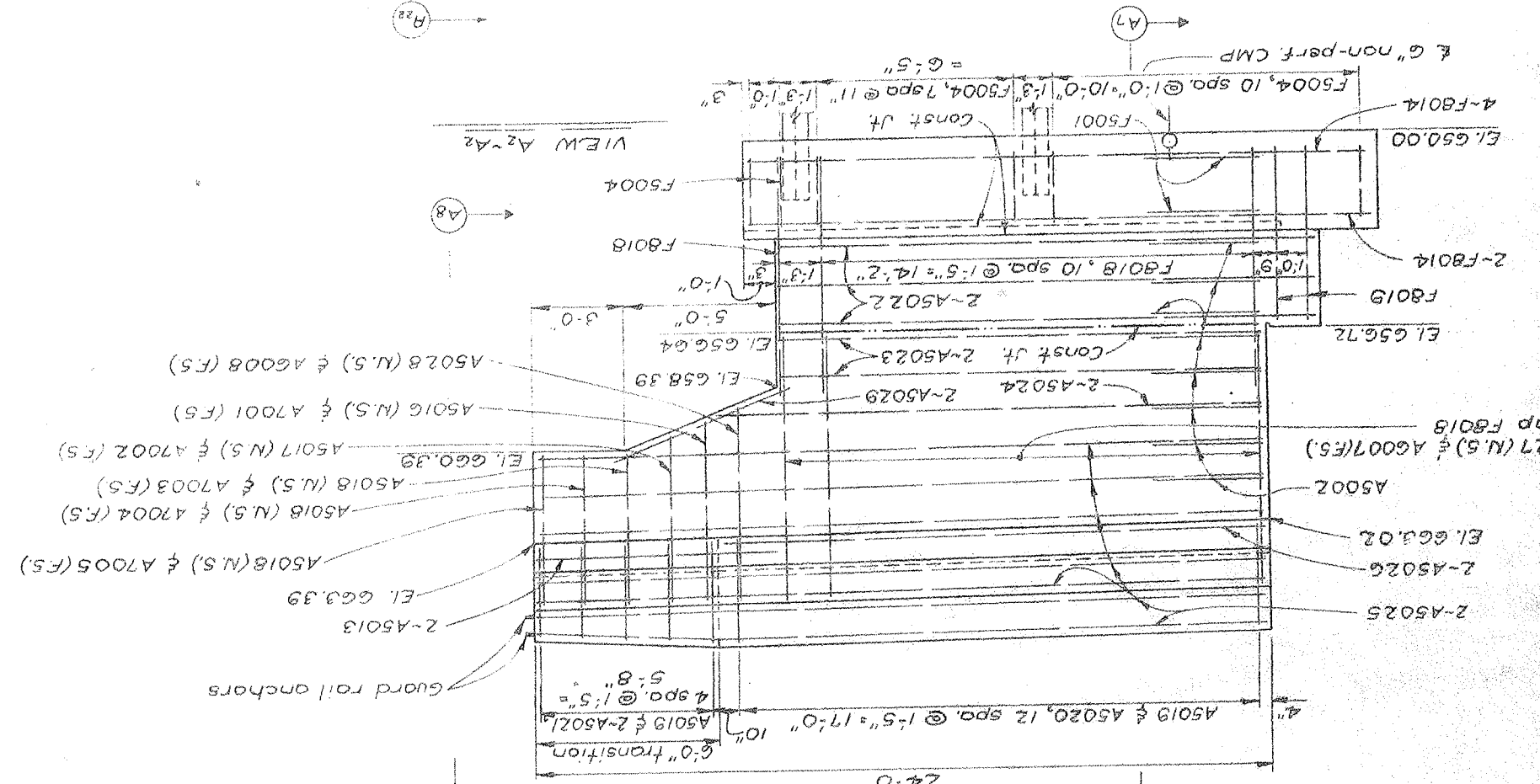
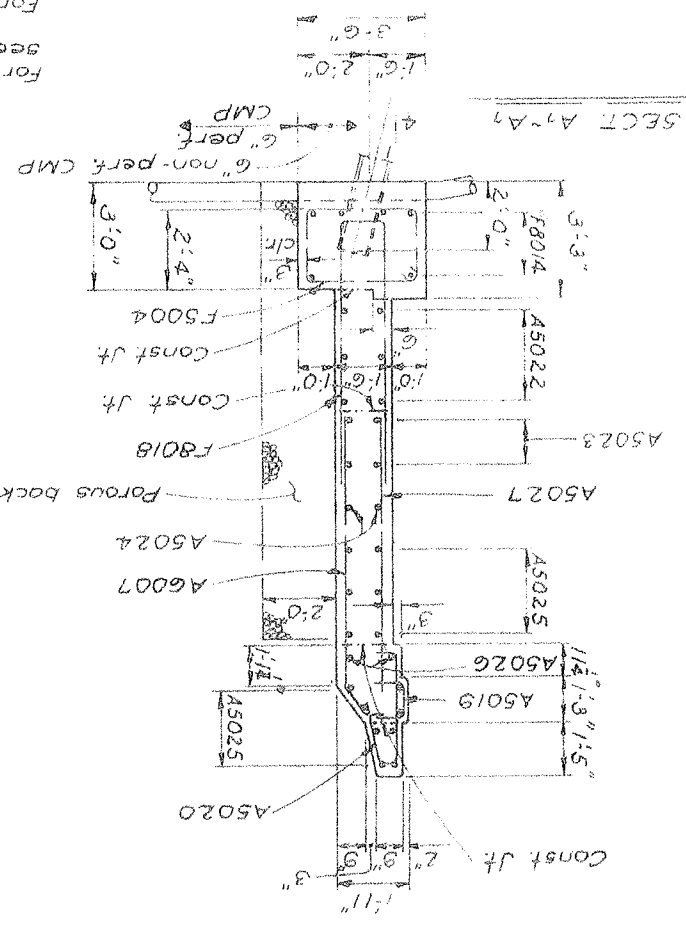
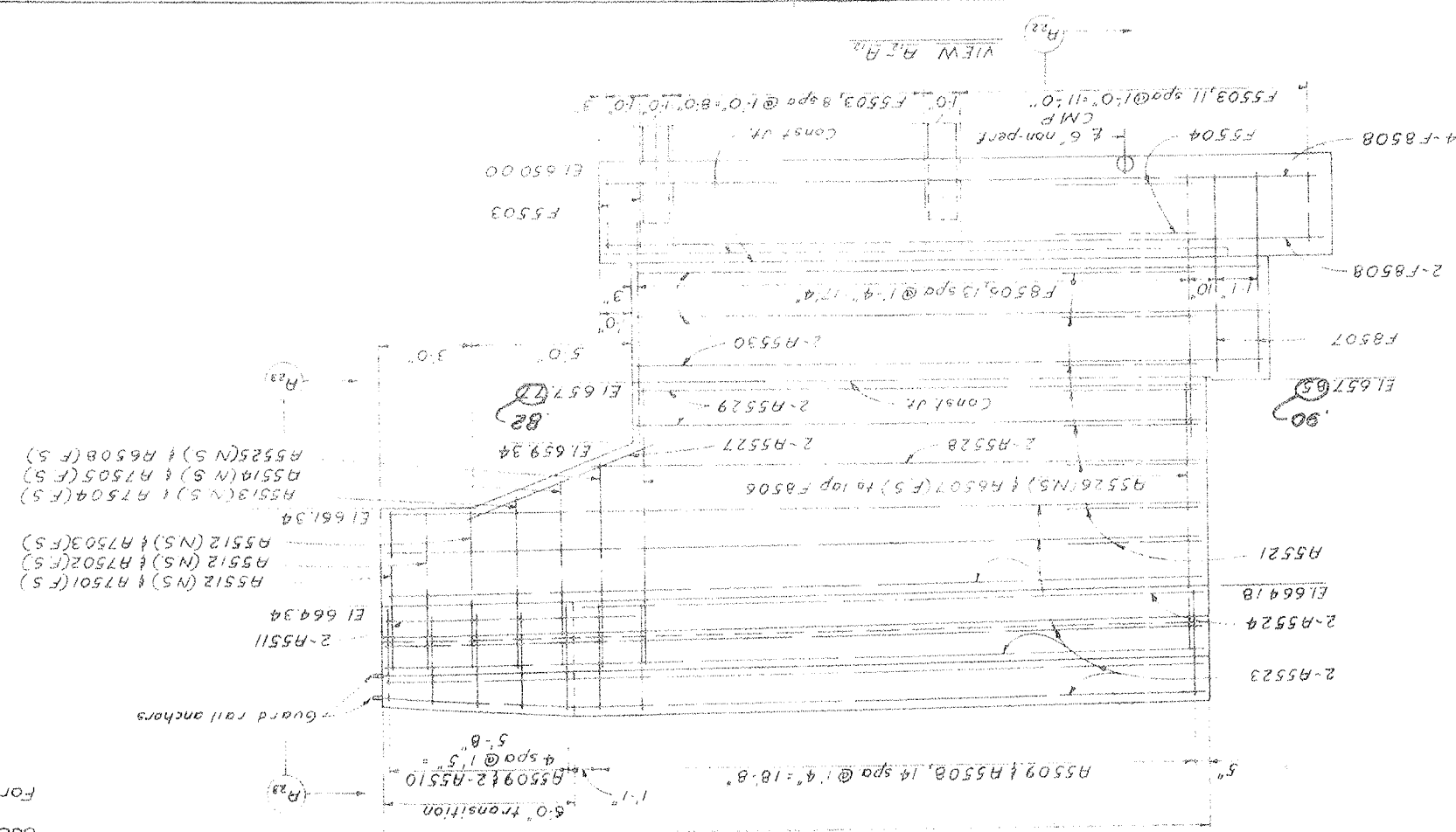


NOTES
 For additional N.B. Forward Abutment details see sheets 21, 22, 54.
 For additional S.B. Forward Abutment details see sheets 2, 13, 54.
 For additional notes see sheet 10, 54.



ATHENS COUNTY
 ATH-33-15.62

85	127
2	OHIO
PROJECT	

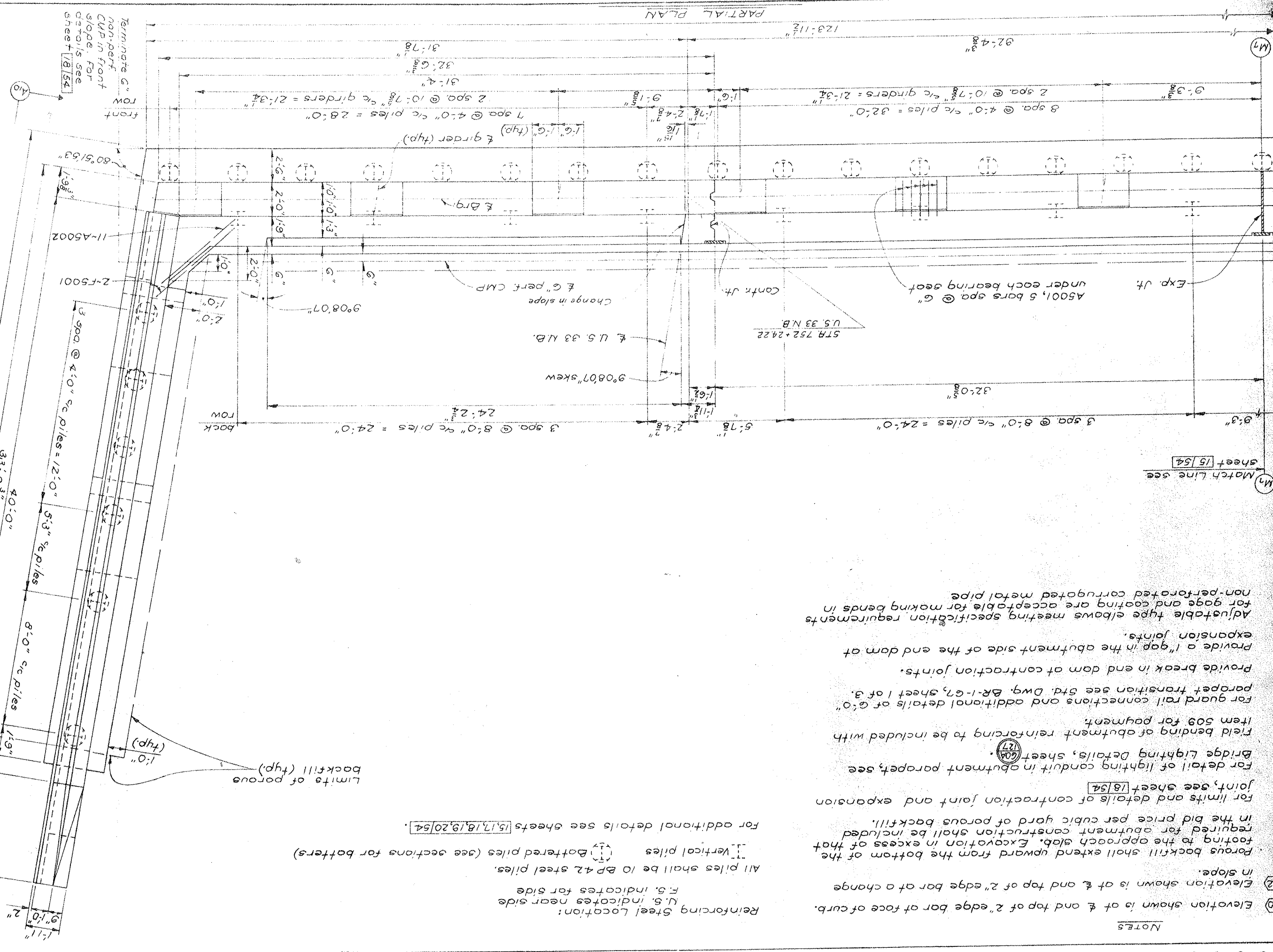


For details not shown see Sect A1-A1

COLUMBUS ENGINEERING CONSULTANTS, LTD.
 CONSULTING CIVIL ENGINEERS
 10000 WOODLAND AVENUE
 COLUMBUS, OHIO 43240
 PROJECT NO. 127
 STATE OHIO
 COUNTY ATHENS COUNTY
 PROJECT ATH~33~15.62
 SHEET 127/87

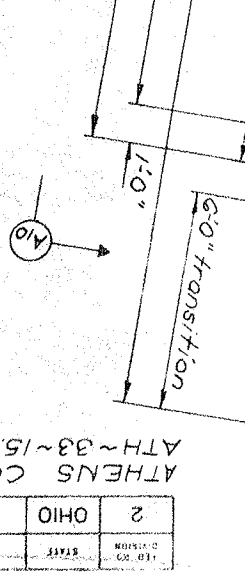
REAR ABUTMENT N.B.
 BRIDGE N° ATH~33~1584 R
 U.S. 33 OVER RELOCATED HOCKING RIVER
 ATHENS COUNTY STA. 752+21.94 N.B.
 STA. 756+42.50 N.B.

DATE 5/14/70
 REVIEWED FTJ TLU
 CHECKED GTR
 DESIGNED J.P. GTR



- NOTES**
- ⑩ Elevation shown is of \bar{E} and top of 2" edge bar of face of curb.
 - ⑪ Elevation shown is of \bar{E} and top of 2" edge bar of a change in slope.
 - ⑫ Porous backfill shall extend upward from the bottom of the footing to the approach slab. Excavation in excess of that required for abutment construction shall be included in the bid price per cubic yard of porous backfill.
 - ⑬ For limits and details of contraction joint and expansion joint, see sheet 18/54.
 - ⑭ For detail of lighting conduit in abutment parapet, see Bridge Lighting Details, sheet 27/100.
 - ⑮ Field bending of abutment reinforcing to be included with item 509 for payment.
 - ⑯ For guard rail connections and additional details of 6'-0" parapet transition see Std. Dwg. BR-1-67, sheet 1 of 3.
 - ⑰ Provide break in end dam of contraction joints.
 - ⑱ Provide a 1" gap in the abutment side of the end dam of expansion joints.
 - ⑲ Adjustable type elbows meeting specification requirements for gage and coating are acceptable for making bends in non-perforated corrugated metal pipe.

Reinforcing Steel Location:
 U.S. indicates near side
 F.5. indicates far side
 All piles shall be 10 BP 42 steel piles.
 Vertical piles (see sections for batters)
 Battered piles (see sections for batters)
 For additional details see sheets 15, 17, 18, 19, 20/54.



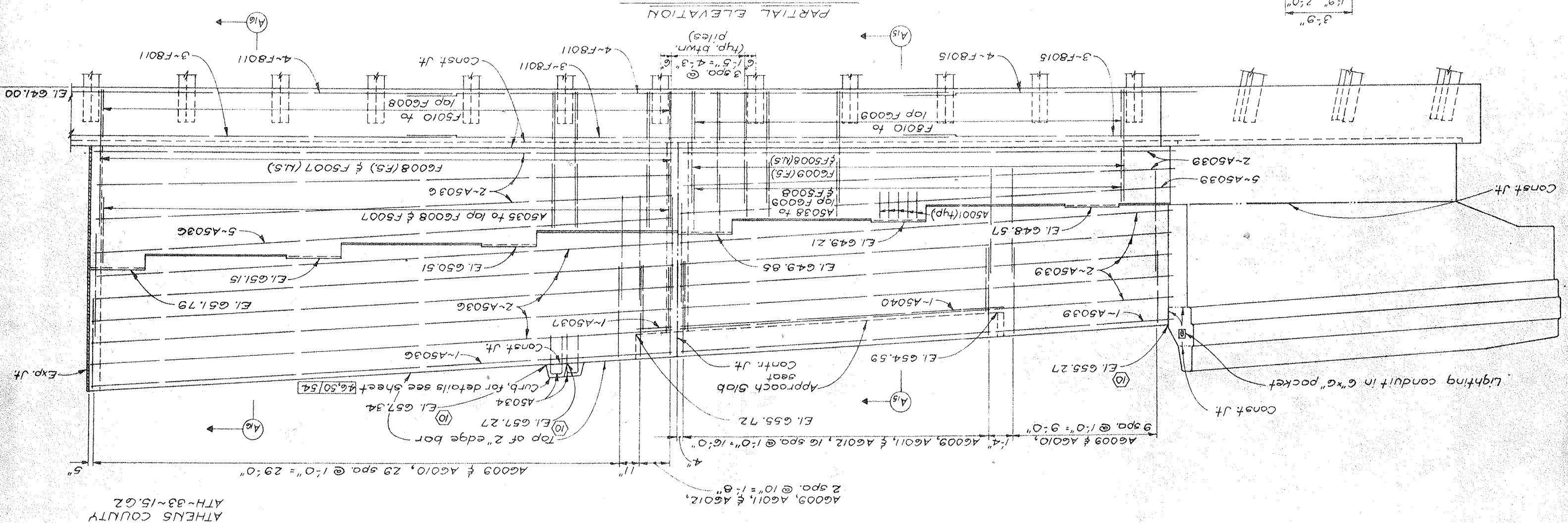
Match Line see sheet 15/54

PARTIAL PLAN

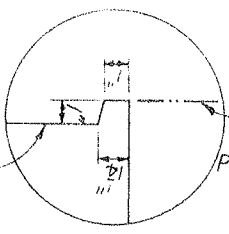
DATE	REVISION	BY	CHKD	DATE
5/14/70		FTJ	720	5/14/70
J.P. GTR COLUMBUS ENGINEERING CONSULTANTS, LTD. CONSULTING CIVIL ENGINEERS 3000 WOODLAND AVENUE COLUMBUS, OHIO 43260 1754				
REAR ABUTMENT N.B. BRIDGE N° ATH-33-1584 R U.S. 33 OVER RELOCATED HOCKING RIVER ATHENS COUNTY STA. 750+42.50 N.B. STA. 752+21.94 N.B.				

ATHENS COUNTY
ATH-33-15.02

PERM. NO. 2
OHIO
DIVISION PROJECT

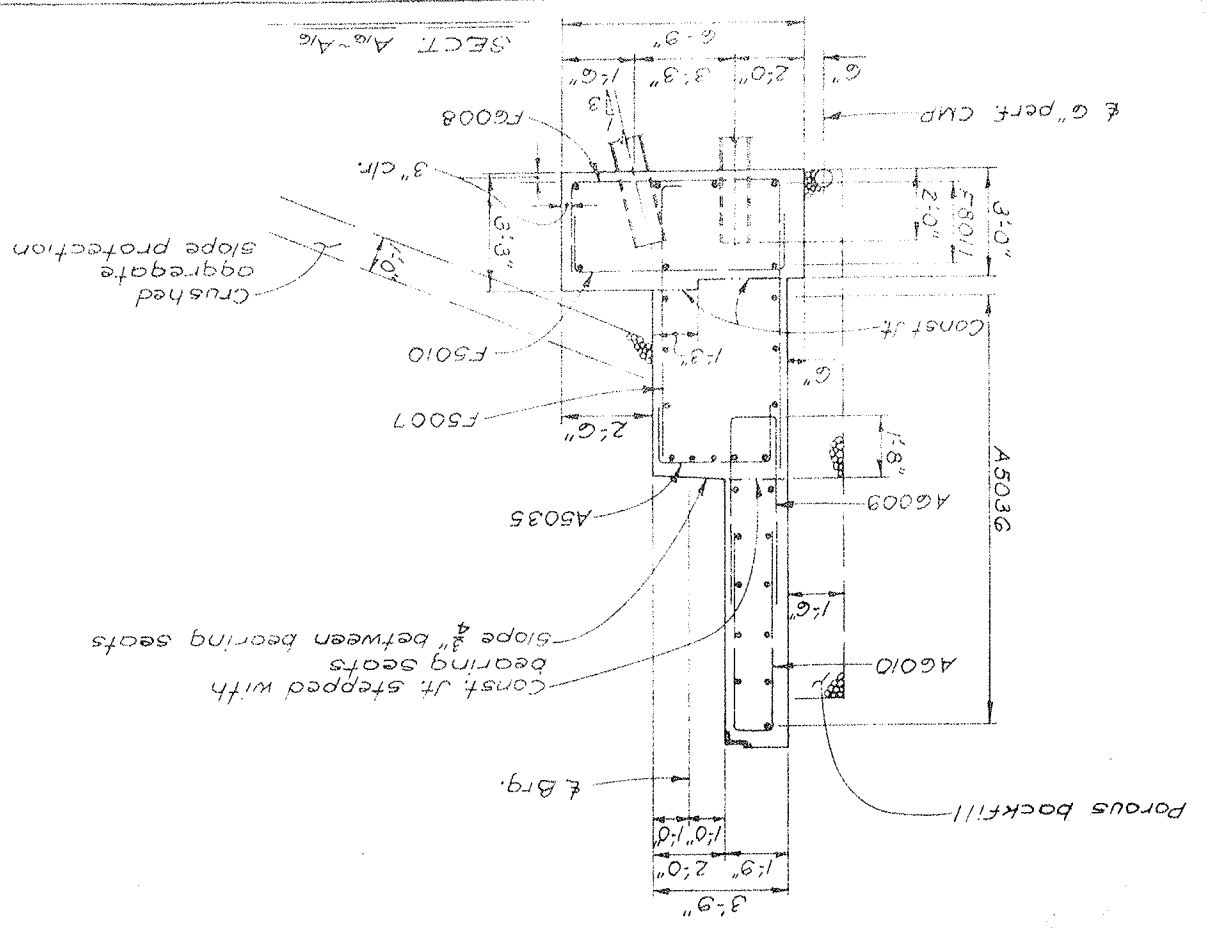
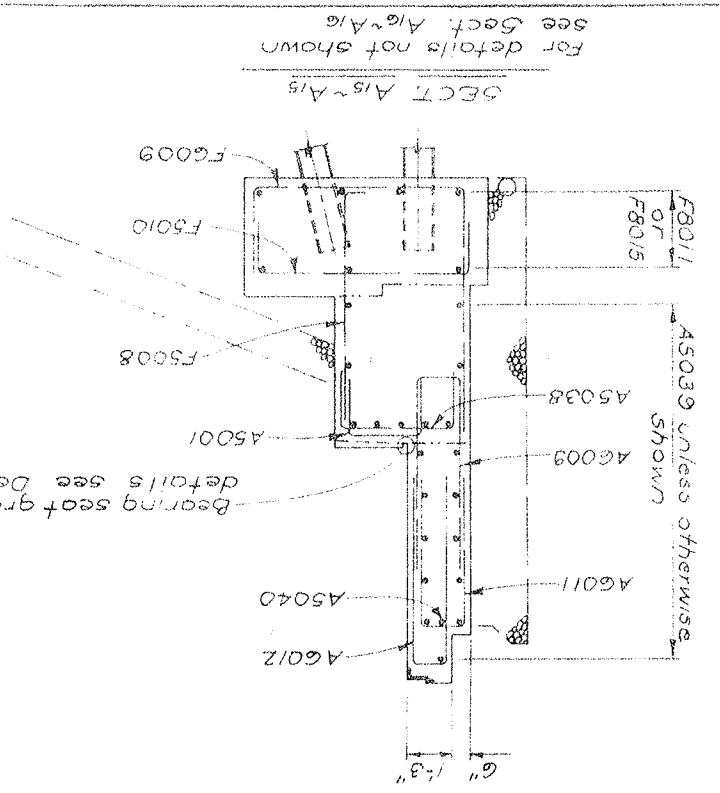


DETAIL A21
BEARING SEAT GROOVE

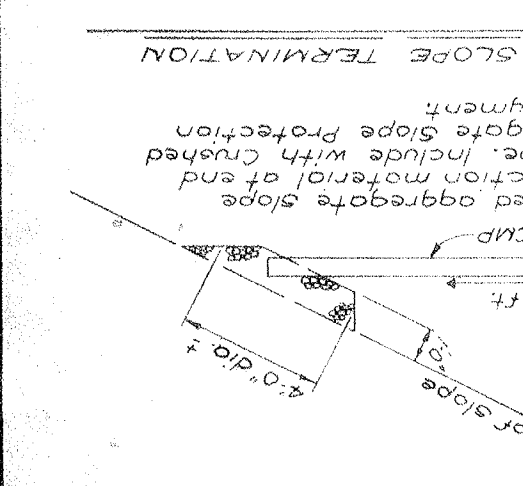


NOTES
 For additional details see sheets
 15, 16, 18, 19, 20, 54.
 For additional notes see sheet 16/54.

Bearing seat groove, for details see Detail A21

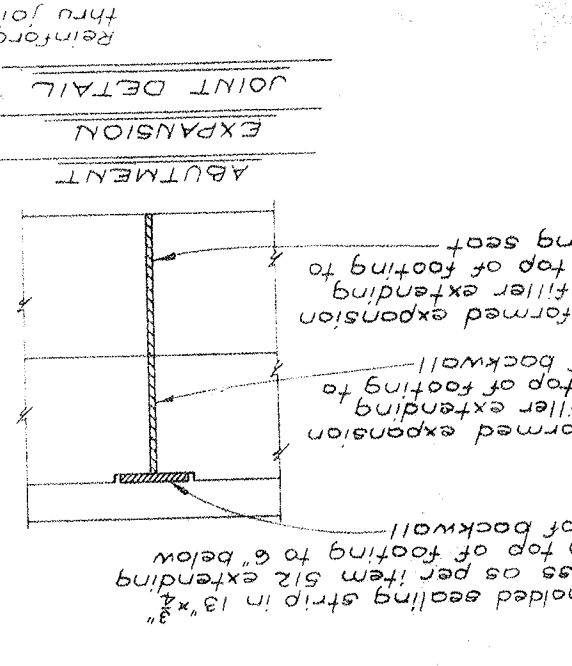
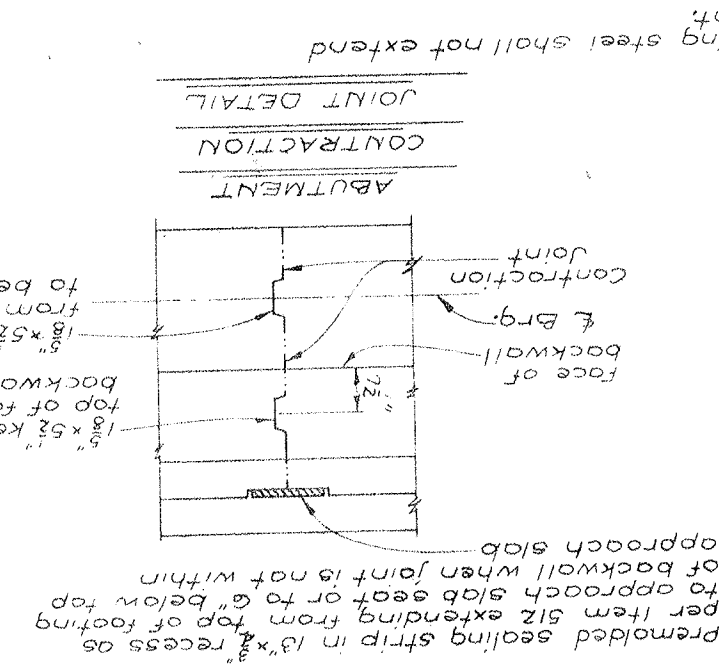
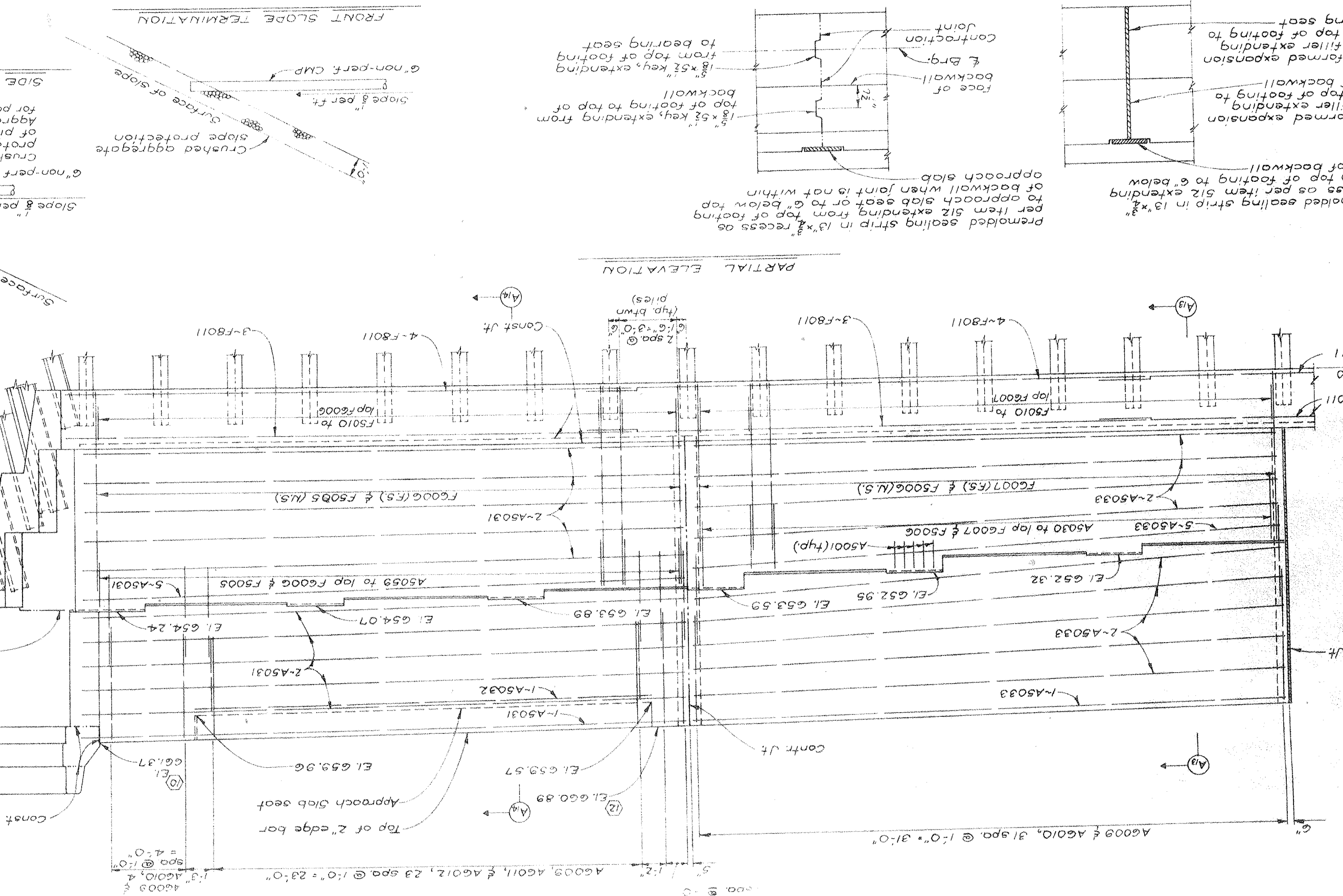


JP GTR
 FTJ 710 5/14/70
 DATE REVISION
 ATHENS COUNTY STA. 752+21.94 N.B.
 STA. 756+42.50 N.B.
 U.S. 33 OVER RELOCATED Hocking River
 BRIDGE N° ATH-33-1584 R
 REAR ABUTMENT N.B.
 1/8/54
 SEEBURG ENGINEERING CONSULTANTS, LTD.
 10000 W. 12th St., Independence, Mo. 64630
 PHONE 336-1234



NOTES
 For additional details see sheets 15, 16, 17, 19, 20, 54
 For additional notes see sheet 16, 54

127	89	2	OHIO

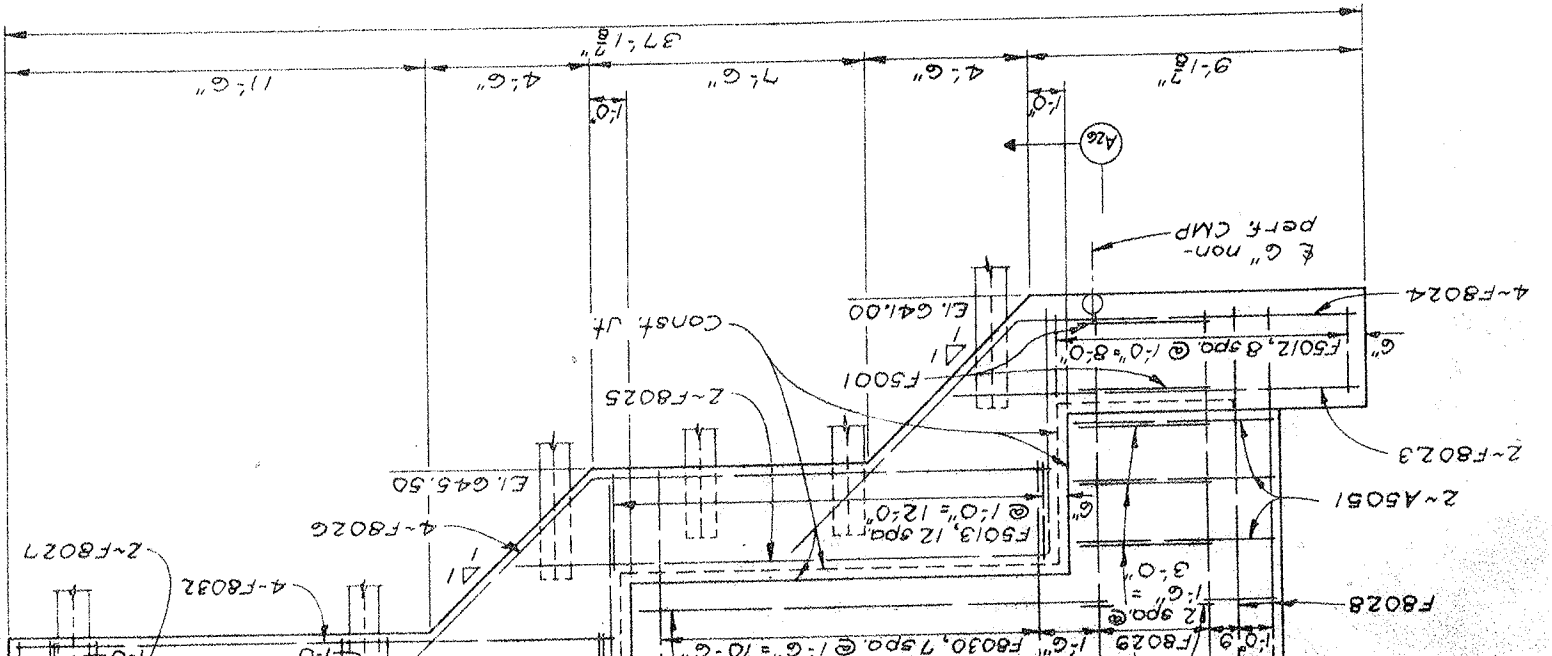
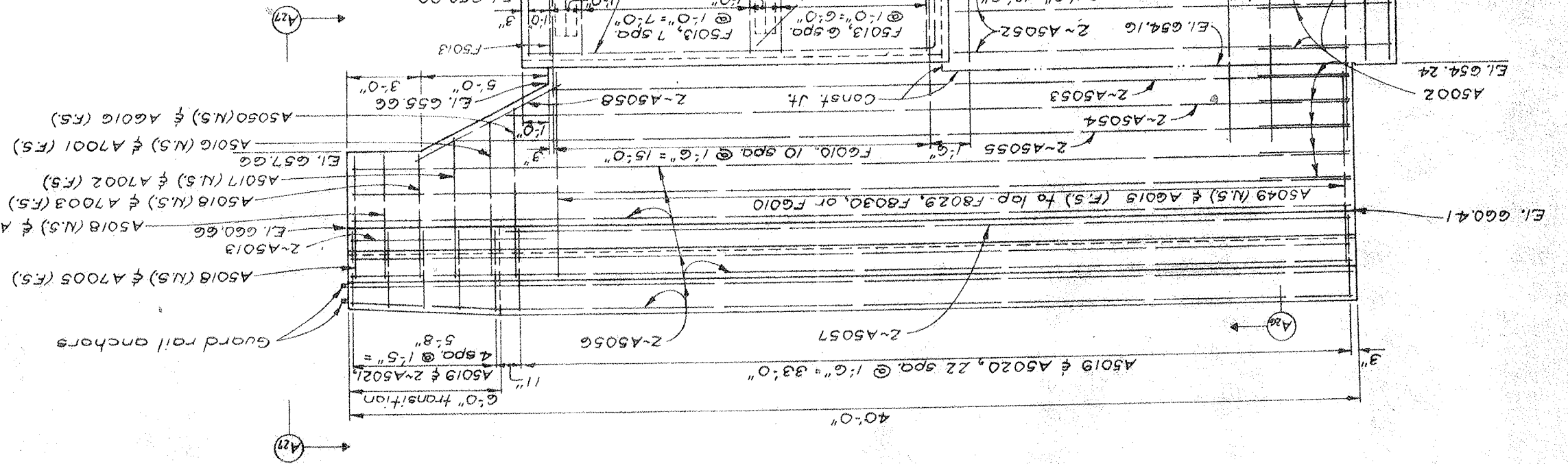
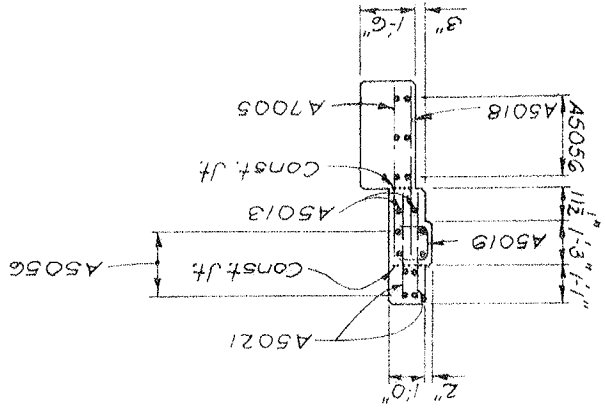
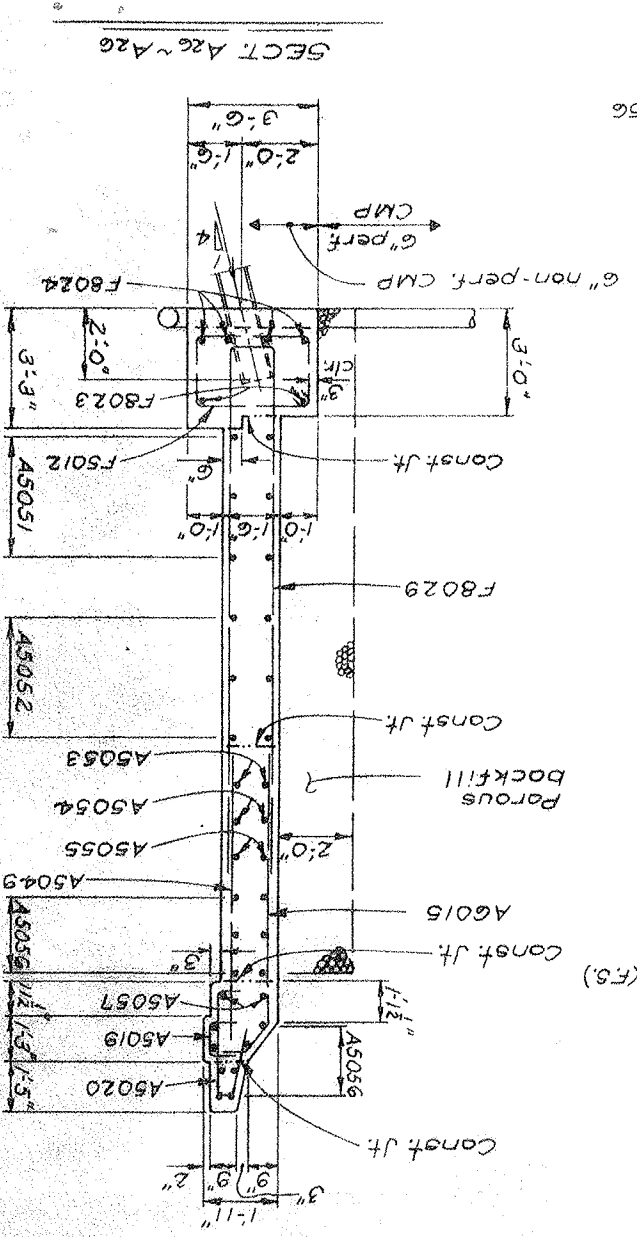


DATE RECEIVED	DATE REVIEWED	DATE CHECKED	DATE	BY	PROJECT
	5/14/70	5/14/70		J.P. GTR	ATHENS COUNTY

REAR ABUTMENT N.B.
 BRIDGE N° ATH-33-1584 R
 STA. 752+21.94 N.B.
 STA. 756+42.50 U.B.
 U.S. 33 OVER RELOCATED HOCKING RIVER
 ATHENS COUNTY
 COLUMBUS ENGINEERING CONSULTANTS, LTD.
 20/54

91	127
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ATHENS COUNTY
 ATH-33-15.62



For additional details see sheets 15, 16, 17, 18, 19, 54.
 For additional notes see sheet 10, 54.

NOTES

Guard rail anchors not shown

