## No PID STATE OF OHIO I-480-3 (4) 153 CONVENTIONAL SIGNS C No. 780059 NOTE: Project Designation LOR-80-18.62 DEPARTMENT OF TRANSPORTATION appearing thru-out this plan shall be understood to read LOR-480-0.00 Existing Sewer Center Line Proposed Sewer Existing R/W "LIMITED ACCESS Existing Manhole A SAN WALLET Proposed Manhole Limited Access Line -LA-1 JUL 12 12 LOR480-0.00 Temporary R/W Existing Catch Basin PAPERTURE MAROS Work Agreement Line ----Proposed Catch Basin of The Revised Code of Ohio. Manhole Abandoned Original Lot Line-01.79 MICROVILMED 1977 SPECIFICATIONS Catch Basin Abandoned 🕱 LORAIN COUNTY Existing Guard Rail Water Line JUL 18 1993 Water Valve Proposed Guard Rail Water Hydrant CUYAHOGA COUNTY Gas Line Existing Retaining Wall ====== Gas Valve Railroad Telephone Underground-T-Existing Trees Removed County Line CITY OF NORTH OLMSTED Electric Underground ---- E ---Power Pole Light Pole as set forth on the plans and estimates. SHEETS DELETED FROM THIS PLAN CITY OF NORTH RIDGEVILLE Telephone Pole Sht. Nos. 22, 210-217, 243 , 266 £ 355 SHEETS ADDED TO THIS PLAN Sht. Nos. 20A, 24A, 24B, 241A, 241B, 241G N INDEX OF SHEETS 366A. 367A . 240A Begin Project Pavement Details\_\_ Sta. 975 + 50 Sta. 100+00 Schematic Plan\_ 2-3 Storm Sewer Profiles\_ S.L.M. 0.00 Typical Sections\_ 4-8 Culvert & Ditch Details\_ 9-13 EB I-480 & EB U.S. 20 Cross Sections\_\_\_\_\_ General Summary\_ 14-17 W.B. I-480 & W.B.U.S. 20 Cross Sections\_\_\_\_\_ Povement Colculations\_\_\_ IB 20A EB & W.B. I-480 Cross Sections\_\_\_\_\_ 21248 SR 10 Interchange, Ramps Cross Sections\_\_\_ Sercial Details Horizontal Control Data\_\_ 2526 SR IO (Lorain Road) Cross Sections\_\_\_\_\_ Superelevation Tables\_ 2728 Water Work Plans\_\_\_\_ EBI-4808 EBUS 20 Plan & Profile \_29.39 Traffic Control Plans\_\_ WB 1480 & WB US 20 Plan & Profile\_ \_40 49 Lighting Plan\_ EB 8 WB 1-480 Plan & Profile 50 53 Structures Over 20 Length\_ S.R-IO interchange, Flamps Plan & Profile\_\_\_5458 Right-of-Way Plans\_ SR-10 (Lorgin Rd) Plan & Profile GR-5 GR-6 Sheets 274 6 275 revised 5.11.79 EBL LINE DATA MC-6 MC-7 MC-8 MC-10 MH-1 Begin Project ~ Sta. 975+50.00 to Sta. 998+0301 (Bk) & [-480 E.B. = 2,253.01 L.F. Sta. 0+30.17(Ah.) to Sta. 32+31.00 (Toll Plaza) & [-480 E.B. = 3,200.83 L.F. Sta. 37+31.00(Toll Plaza) to Sta. 74+11.39 & I-480 E.B. = 3,680.39 L.F. Sta. 74+11.39 to Sta. 100+00.00 & I-480 End Project = 2,588.61 L.F. LENGTH OF PROJECT = 11,722.84 LF or 2.220 MILES PLANS PREPARED BY ADD FOR WORK ALDEN E. STILSON & ASSOCIATES 1970 A.D.T.= AS-1-72 BR-1-67 RB-1-55 Lorain Rd. (S.R.10) CONSULTING ENGINEERS SUPPLEMENTAL Sta. 1137+30.00 to Sta. 1153+80.00 = 1.650.00 L.F. 75 PUBLIC SQUARE CLEVELAND OHIO SPECIFICATIONS 50-1-69 6-30-61 DATE Sta. 973+35,00 to Sta. 975+50.00 4-25-77 Sta. 100+25.34 to Sta. 105+37.00 = 511.66 L.F. Portion To Be Improved LENGTH OF ADDITIONAL WORK = 2.376.66 L.F. 9-6-73 State Routes = 11,722.84 L.F. ADD PROJECT LENGTH U.S. Routes 7-27-73 Interstate Routes LENGTH OF WORK = 14,099.50 L.F. or 2.670 MILES 9-6-73 City Streets 3-22-77 **SCALES** 1-21-76 APPROVED: 4-25-77 PLAN

PROFILE: HORIZ.

CROSS SECTIONS

PAVEMENT DETAILS

VERT.

LORAIN COUNTY

DATE OF LETTING

CONTRACT NUMBER\_

LOR- 480-0.00

5 OHIO I-480-3(4)153

LORAIN COUNTY LOR.+ 480-0.00

This improvement is especially designed for thru traffic and has been declared a Limited Access Highway or Freeway by action of the Director of Transportation, in accordance with the provisions of Sec 5511.02

The Standard Specifications of the State of Ohio, Department of Trans portation . including changes and supplemental specifications listed in the proposal, shall govern this improvement.

The Right of Way for this improvement will be provided by the State

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

Date 1-30-76 District Deputy Director of Transportation  Approved Robert B. Cfeefe	100
Approved Robert B Cfeefer	
	<u>.</u> .
Date 12-21-77 Engineer, Bureau of Bridges and Structural Design	n.
Approved K. E. Gattie	
Dcts 12-22-77 Chief Engineer, Planning and Design	
Approved Amid & Wein	
Date 12-22-77 Director, Department of Transportation	

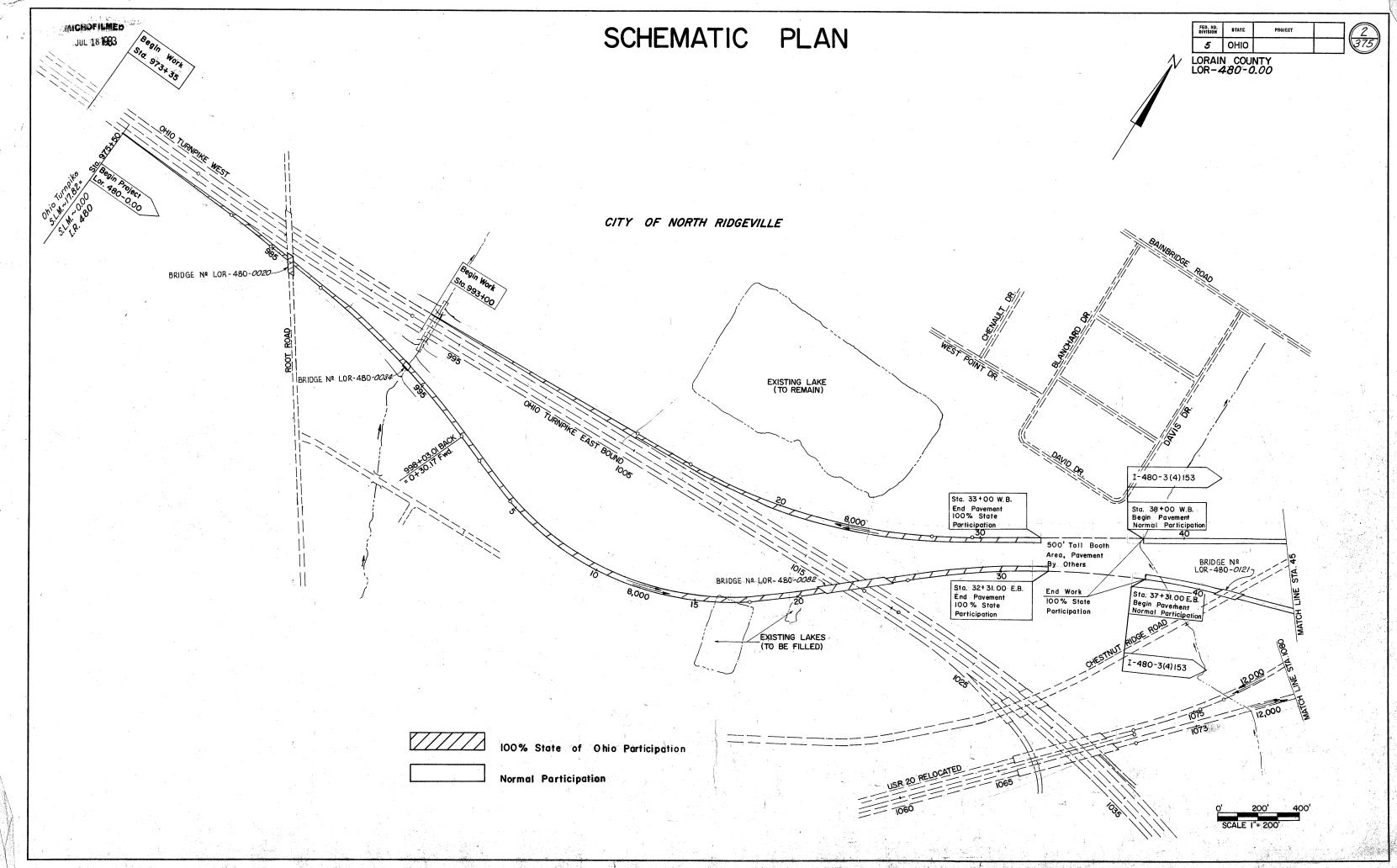
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		TC-41.10	8-19-77		
TC-22.20	8-19-77	TC-41.20	4-7-77	TC-71.10	12-1-75
TC-7.65	10-1-74	TC-41.50	4-1-77	TC-72.20	8-29-77
TC-12.30	10-1-74	TC-42.10	8-19-77	Linguis Landing and a state of the	escape in a serie de la company de la compan
TC-21.10	10-1-74	TC-42.20	4-1-77	and the second s	إنداد مح الباد
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TC-31.21	8-27-76	TC-52.10	4-1-77	africa communication of the second	
TC-32.10	8-27-76	TC-52.20	4-1-77		and the second of the second second second
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DESIGN DESIGNATION D. (directional distribution) 67%
T. (percent BBC trucks) 5%
V. (design speed) 60 MPH.

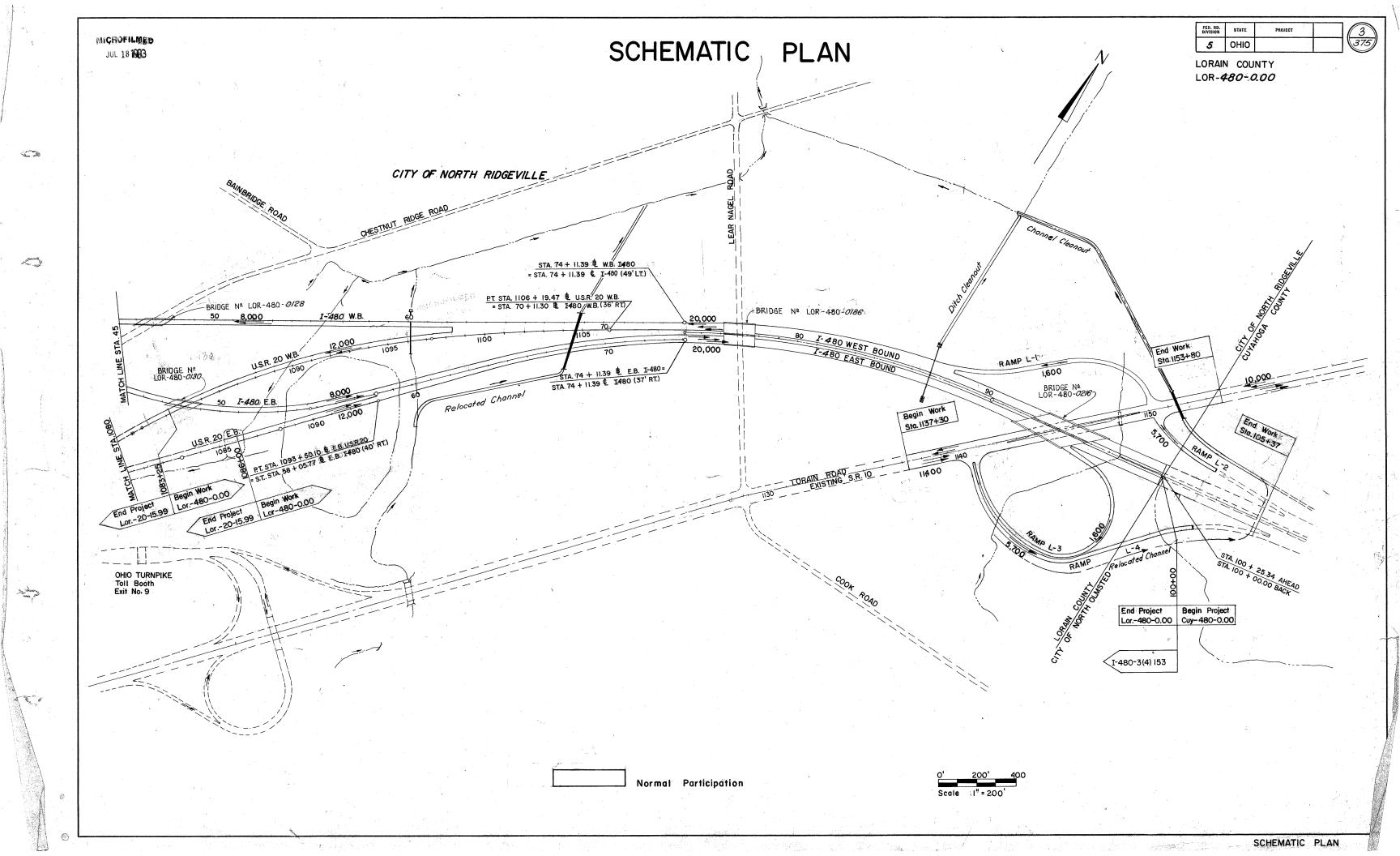
DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION

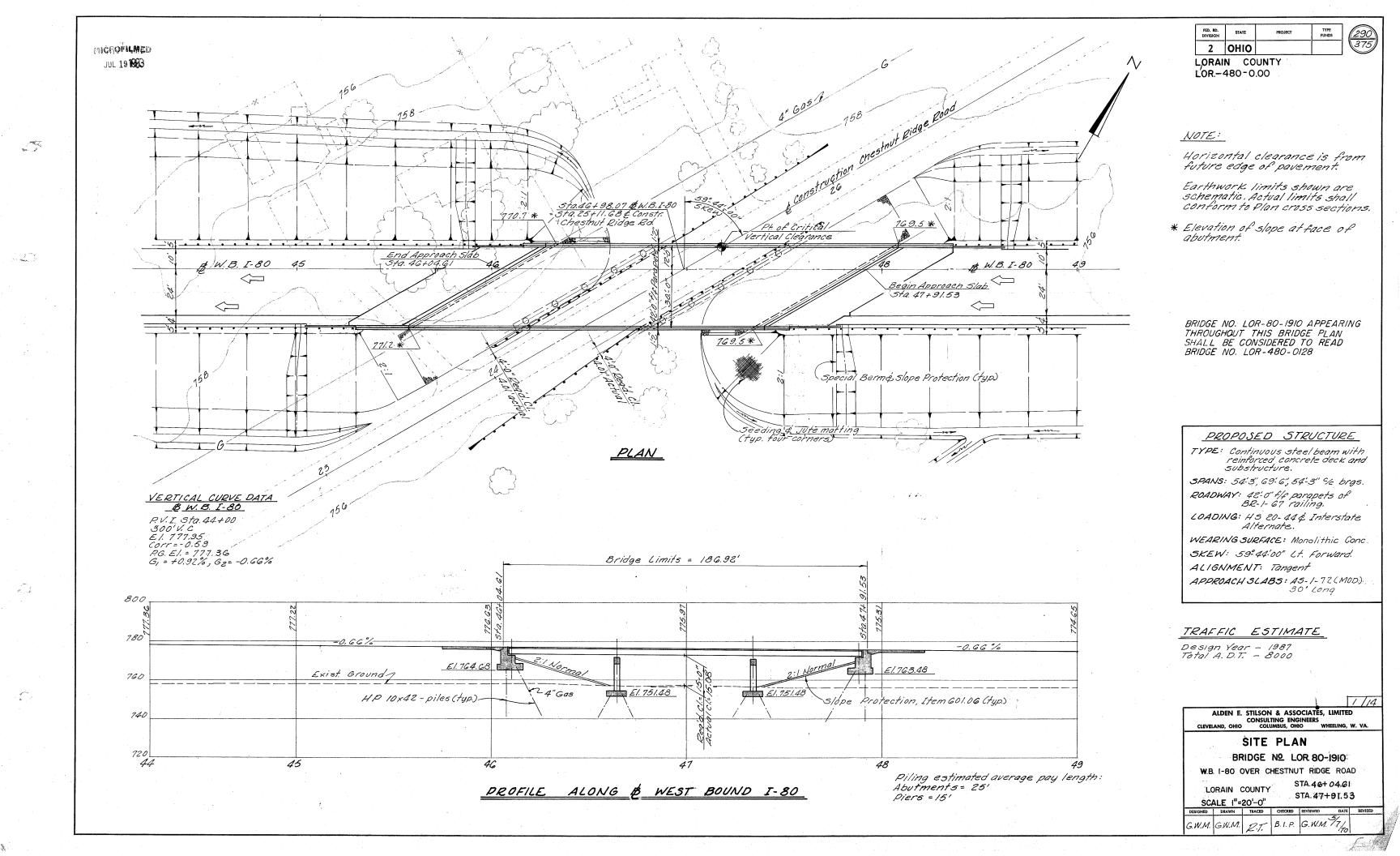
DIVISION ADMINISTRATOR

DATE:



and the same





MICHOFILMED 

FED. RD. DIVISION STATE 2 OHIO

LORAIN COUNTY LOR-480-0.00

SUPPLEMENTAL SPECIFICATION REFERENCES - CON'T DESCRIPTION DATE PAINTING FOR NEW 4-25-77 846 STRUCTURAL STEEL INORGANIC ZINC 950 4-25-77 SILICATE PAINT BLUE - GREEN 951 4-25-77 VINYL PAINT

STANDARD DRAWING REFERENCES DESCRIPTION DWG. NO. SHT. END DAM AND END CROSSFRAME SD-1-69 1-2 6-12-69 CURB PLATES SD-1-69 2 6-12-69 SD-1-69 SCUPPERS 6-12-69 MOMENT PLATES 50-1-69 6-12-69 3 BOLTED SPLICES 6-12-69 SD-1-69 4 BRIDGE ROADWAY RAILING BR-1-67 10-15-71 R 1 ROCKERS AND BOLSTERS RB-1-55 2- 2-59 R RB-1-55 AS-1-72 (MOD.)\* G-30-72 41-7 /-21-76 APPROACH SLABS

(R INDICATES REVISED DATE)

SUPPLEMENTAL SPECIFICATION REFERENCES DESCRIPTION DATE CHEMICAL ADMIXTURE FOR CONCRETE, 1- 1-71 TYPE A, B OR D CONCRETE CURING AND PROTECTIVE 836 3-12-75 MEMBRANE SPECIAL PILE TESTS *83*8 1-13-77

COMMON DETAIL REFERENCES CONTRACTION JOINTS & ENDTDAMS SHEET 354

DESIGN SPECIFICATIONS

STRUCTURE GROUNDING

THIS STRUCTURE CONFORMS TO THE 'STANDARD SPECI-FICATIONS FOR HIGHWAY BRIDGES' ADOPTED BY THE AMERI-CAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1969. INCLUDING THE OHIO 'SUPPLEMENT' TO THESE SPECIFICA-TIONS.

DESIGN DATA

DESIGN LOADING - HS20-44 AND THE INTERSTATE ALTERNATE LOADING

CONCRETE CLASS C - UNIT STRESS 1200 PSI FOR SUPERSTRUCTURE

UNIT STRESS 1333 PSI FOR SUBSTRUCTURE

STRUCTURAL STEEL - ASTM A36 - UNIT STRESS 20000 PSI REINFORCING STEEL - ASTM A615, A616 OR A617 - UNIT STRESS 20000 PSI.

SPIRAL REINFORCEMENT MAY BE PLAIN BARS ASTM A82, OR A615.

EMBANKMENT CONSTRUCTION

THE EMBANKMENTS SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENTS. EXCAVATION SHALL THEN BE MADE FOR THE ABUTMENTS AND PIERS.

PILES

PILES SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF-

35 TONS PER PILE FOR THE ABUTMENTS AND WINGWALLS 35 TONS PER PILE FOR THE PIERS

UTILITY LINES

ALL EXPENSE INVOLVED IN RELOCATING THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE OWNERS. THE CON-ENCE TO EITHER WOULD BE HELD TO A MINIMUM.

MAINTENANCE OF TRAFFIC

TWO LANES OF TRAFFIC WITH A MINIMUM HORIZONTAL WIDTH OF 20'-0 AND A MINIMUM VERTICAL CLEARANCE OF 13'-6 SHALL BE MAINTAINED ON CHESTNUT RIDGE ROAD AT ALL TIMES.

LAPS MINIMUM BAR LAP SHALL BE 30 DIAMETERS

\* Std. Dwg. A5-1-72 shall be modified to provide 3" Clearance to the top re-bars instead of the 2" shown and jacking holes shall be omitted.

							•		<u> </u>	***
ITEM		UNIT	DESCRIPTION	ABUTS	PIERS	SUPER	GENERAL			
503		SUM	COFFERDAMS, CRIBS AND SHEETING			-	LUMP			
503	684	C.Y.	UNCLASSIFIED EXCAVATION	460	224					
505	LUMP	SUM	TEST PILE				LUMP			
507	1730	L.F.	STEEL PILES, HP10X42	950	780					
						**************************************				
509	87096	LB	REINFORCING STEEL	22,889	33238	30969				
					,					
51,1	249		CLASS C CONCRETE, SUPERSTRUCTURE (SEE PROPOSAL NOTE)			249				
511	192	C.Y.	CLASS C CONCRETE, ABUTMENTS ABOVE FOOTINGS	192						
511	106	C.Y.	CLASS C CONCRETE, PIER CAPS AND COLUMNS		106					
511	219	C.Y.	CLASS C CONCRETE, FOOTINGS	143	76			·		
512	15	L.F.	PREMOLDED SEALING STRIP	15	·					
		-1.32°	Burney Commence of the State of				. ,			
513	208600	LB	STRUCTURAL STEEL , PRIMER PER 846 (SEE PROPOSAL NOTES)			208600				
846	208600	LB	FIELD PAINTING OF STRUCTURAL STEEL			208600				
			AND THE RESIDENCE OF THE PROPERTY OF THE PROPE							
516	98	S.F.	1/2 INCH PREFORMED EXPANSION JOINT FILLER				98			
518	103	C.Y.	PORDUS BACKFILL	103						
518	7		SCUPPERS INCLUDING SUPPORTS			7				
518			6 INCH PERFORATED, HELICAL CSP, 707.01	84						
518			6 INCH NON-PERFORATED, HELICAL CSP, INCLUDING	148						
- 010	140	L *1 *	SPECIALS, 707.01	140						
			OLECTALO, 101.01							
601	252	e v	CONCRETE SLOPE PROTECTION				757			
901	707	0.1.	CONCRETE SLUFE FRUTECTION				757			
808	249	LIALT T	CHEMICOL DOMINTHDE FOR CONCRETE TYPE O D OR O							
			CHEMICAL ADMIXTURE FOR CONCRETE, TYPE A, B OR D			249				
838	3	HR.	SPECIAL PILE TESTS				3			
0050141	25005		EPOXY COATED REINFORCING STEEL			0.10=				
SPECIAL	35896	LB.		- 1491		34405				
			(SEE PROPOSAL NOTE)							
		·								
		***************************************								
	,									
				-						

MONOLITHIC WEARING SURFACE THICKNESS IS ASSUMED TO BE I" DECK PROTECTION METHOD: EPOXY COATED REINFORCING STEEL, TOP MAT ONLY.

ATTACHMENT OF GUARDRAIL TO CONCRETE PARAPETS: CONCRETE INSERT ANCHOR ASSEMBLIES PER STANDARD CONSTRUCTION BRAWINGS GR-3 AND GR-1 SHALL BE PLACED DURING PARAPET CONSTRUCTION.

2/14

STA. 47 + 91.53

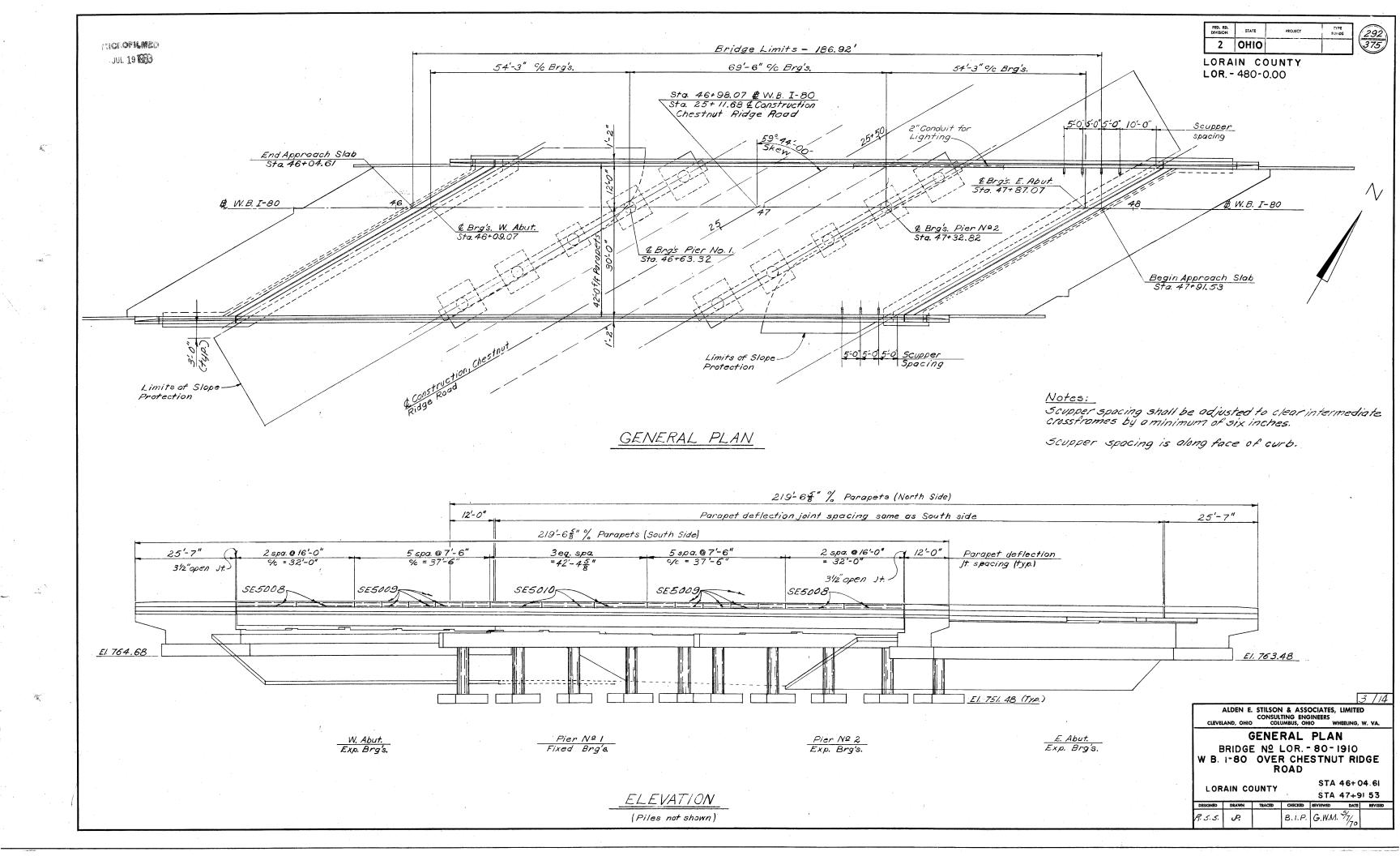
ALDEN E. STILSON & ASSOCIATES, LIMITED CONSULTING ENGINEERS
CLEVELAND, OHIO COLUMBUS, OHIO WHEELING, W. VA.

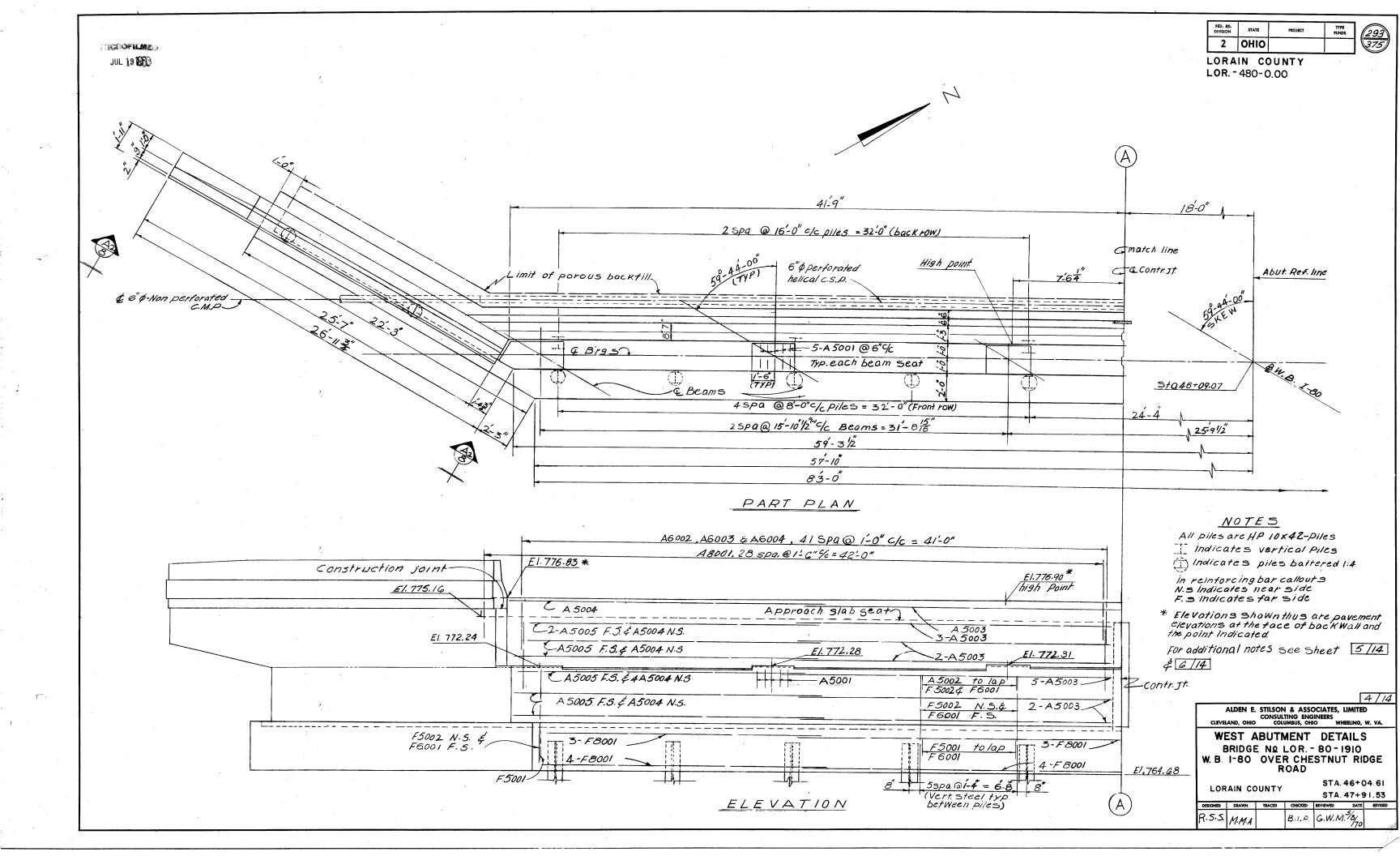
> GENERAL NOTES AND ESTIMATED QUANTITIES

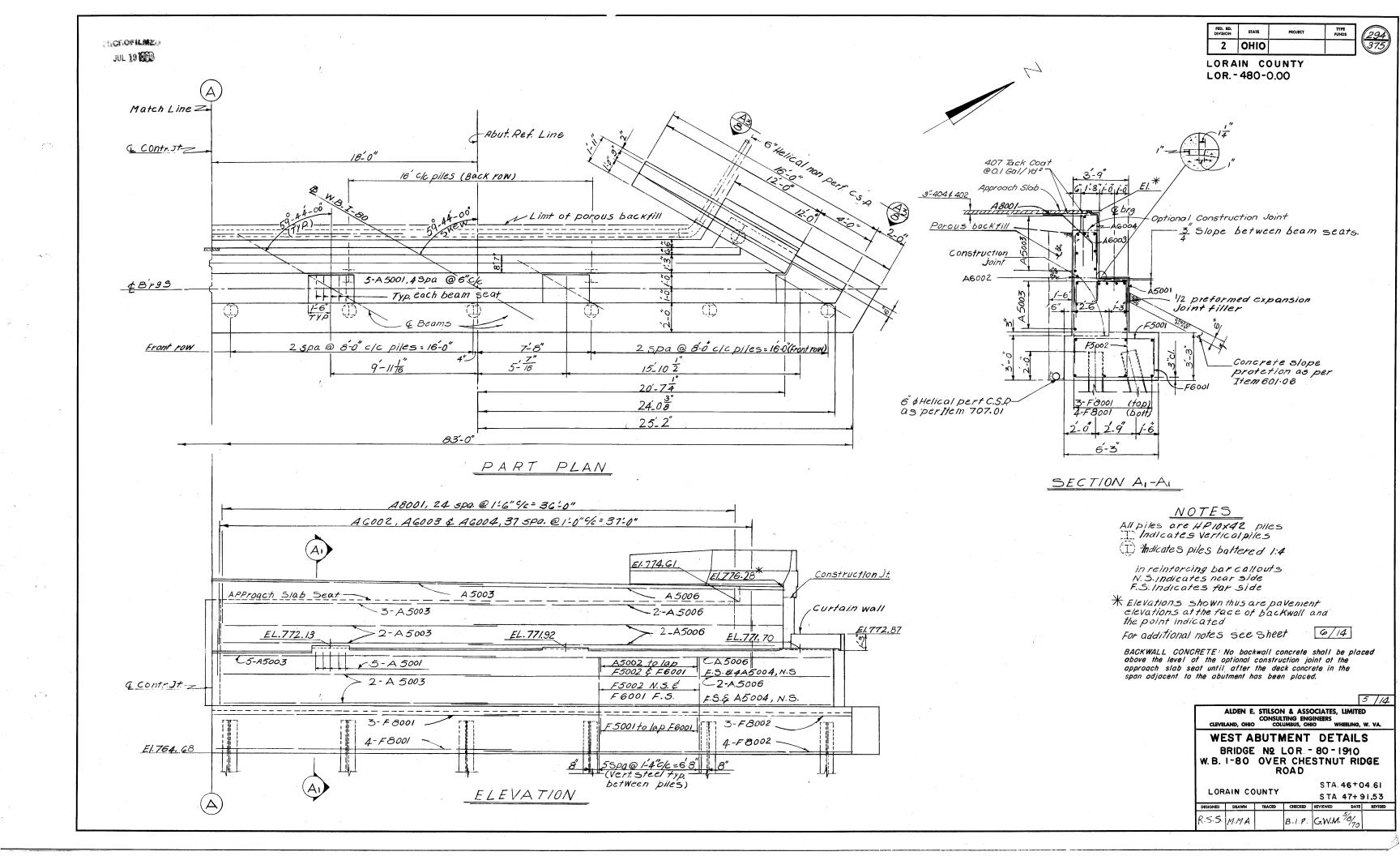
BRIDGE Nº LOR-80-1910 W.B. I-80 OVER CHESTNUT RIDGE RD. STA. 46 + 04.61

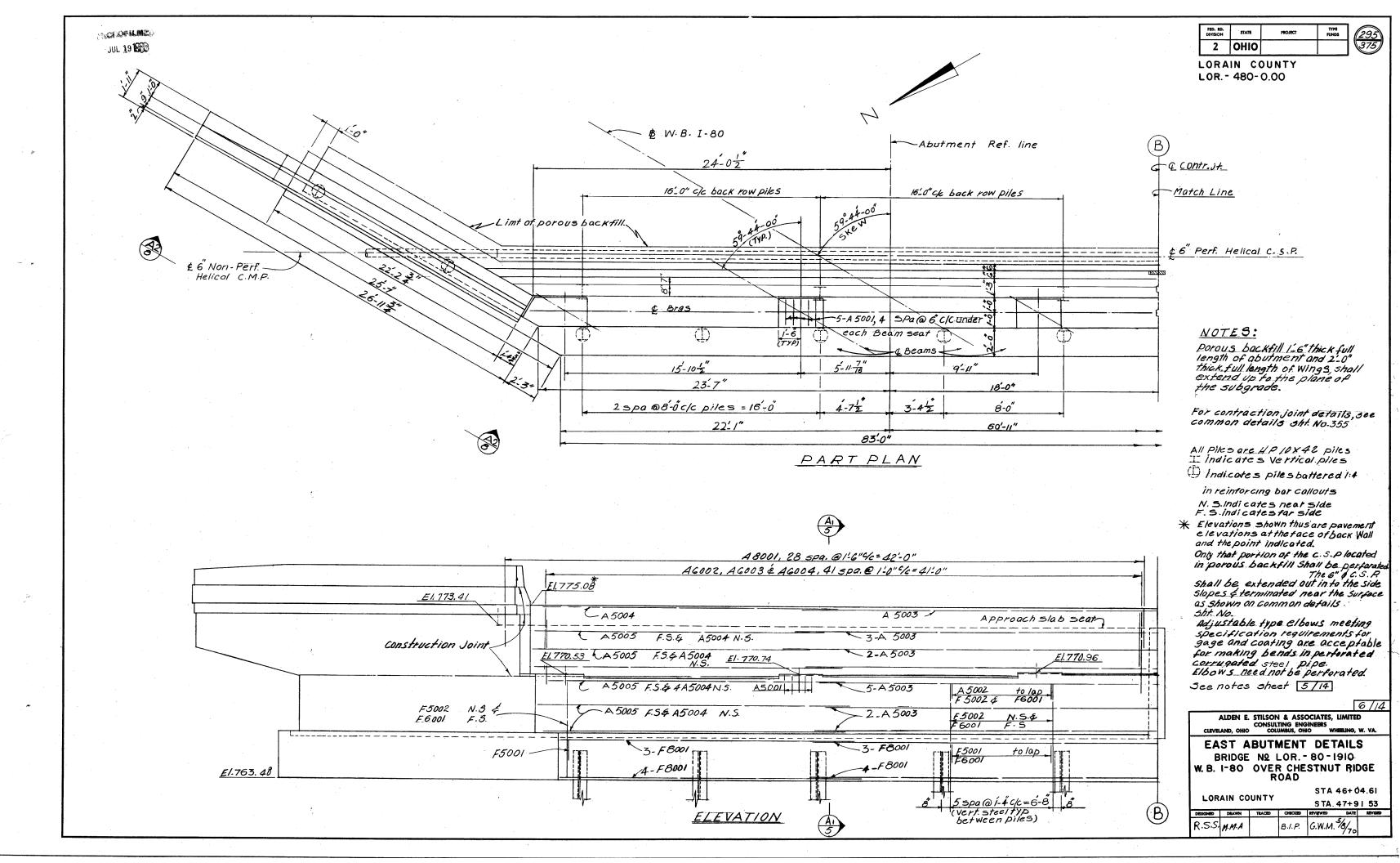
LORAIN COUNTY

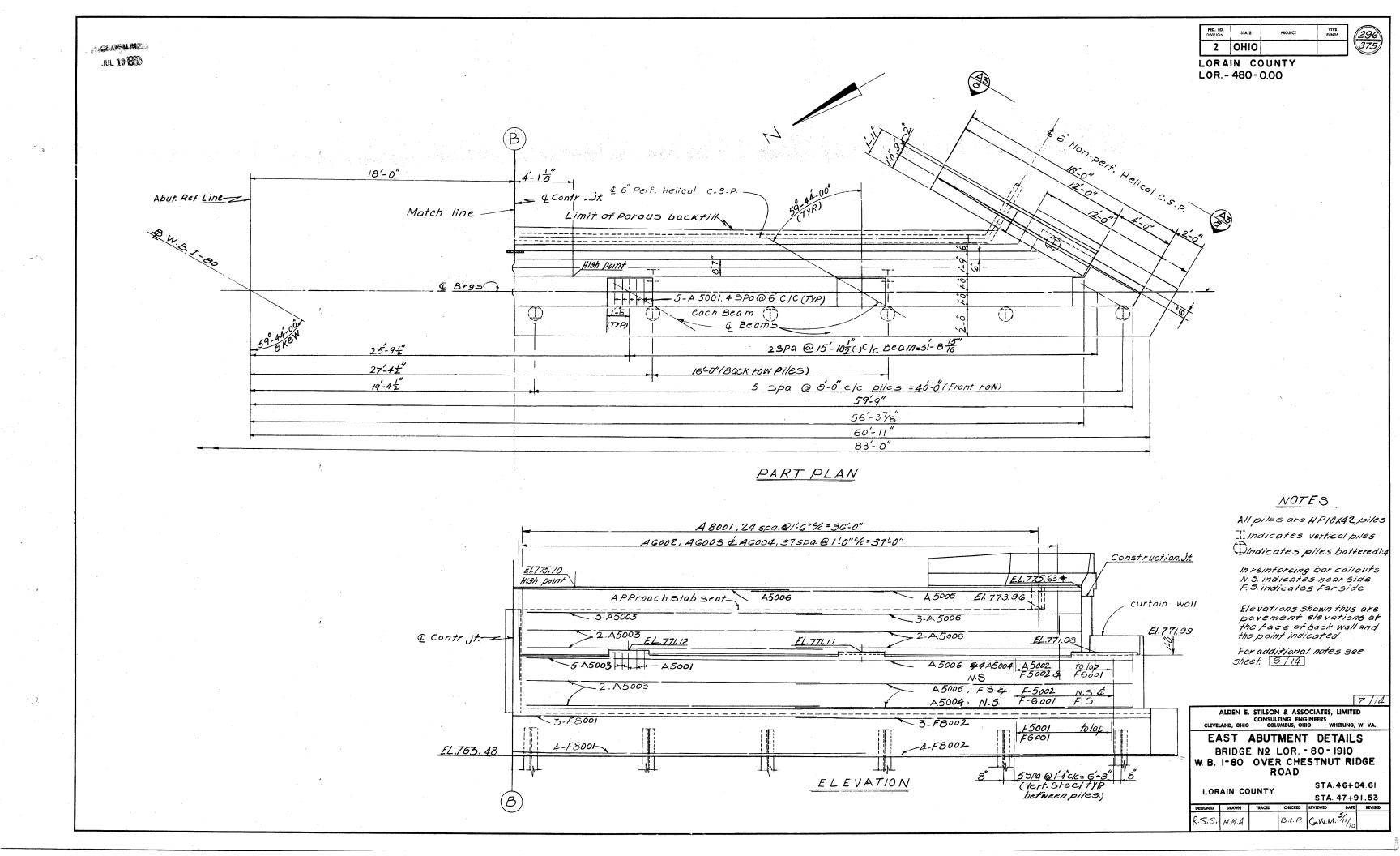
TRACED CHECKED REVIEWED U.M.A. G.W.M. 5/7/70











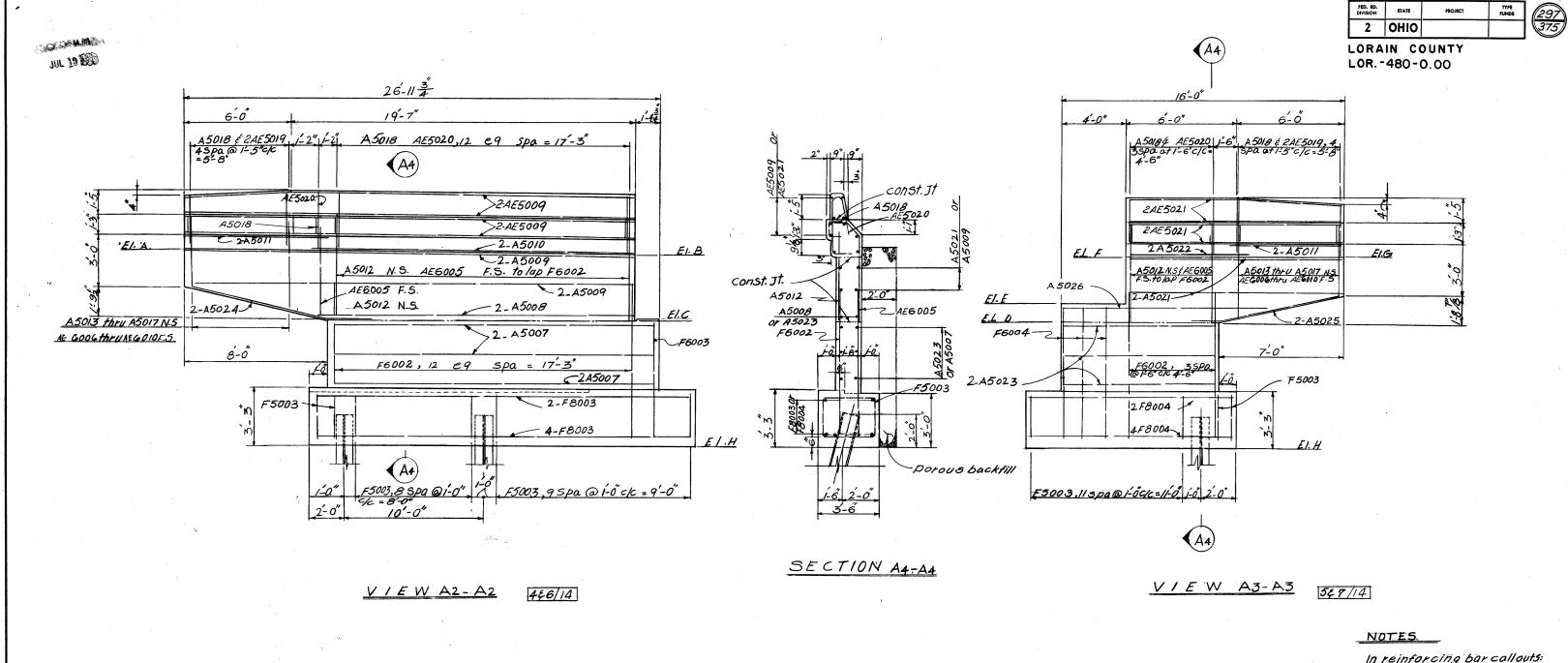


TABLE OF ELEVATIONS									
Elev.	'A"	*B"	·c·	,D,	"E"	"F	'G'	"H"	
W.Abut.	776.21	776.06	772.17	771.62	<i>772,</i> 87	775.51	775.59	764.68	
E.Abut.	774.14	774:31	770.45	770.99	771.99	774,86	774.78	<b>763.</b> 48	

In reinforcing bar callouts: N.5. indicates near side F.5. indicates far side

For additional notes see 5ht No. 6/14

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CONSULTING ENGINEERS
COLUMBUS, OHIO WHEELING, W. VA.

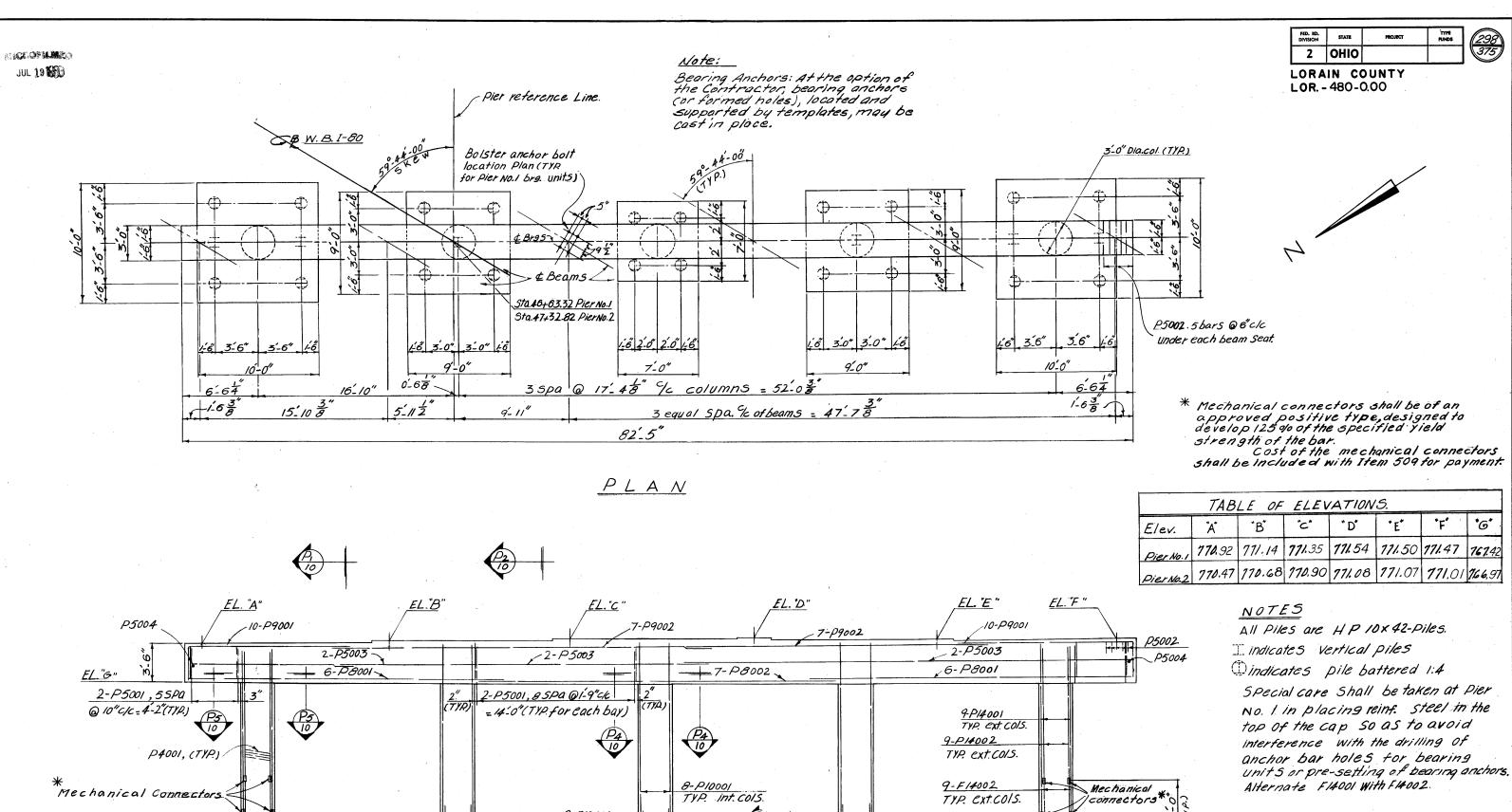
ABUTMENT DETAILS
BRIDGE Nº LOR. - 80 - 1910
W. B. 1-80 OVER CHESTNUT RIDGE
ROAD

STA 46+04.61

STA 47+91.53

SIGNED DRAWN TRACED CHECKED REVIEWED DATE REVISED.

P.S.S. M.M.A B.I.P. G.W.M. 11/7/2



10-F500

F5001

9-F14001

TYP. ext. Cols.

For Grounding Details at Pier No. 1 See Standard Drawing HL-7.

8-F10001

TYP int. cols.

F5001,55Pa.@

7(+)CK = 3'-0"

F500V

ELEVATION

12 F6005

Structural Grounding

EL.751.48 (Typ) N.F

F7001.

F7001, 85PQ

at Pier No. 1

16 F 7001

9/14 ALDEN E. STILSON & ASSOCIATES, LIMITED CONSULTING ENGINEERS CLEVELAND, OHIO COLUMBUS, OHIO WHEELING, W. VA. PIER DETAILS BRIDGE Nº LOR. - 80-1910 W.B. 1-80 OVER CHESTNUT RIDGE ROAD

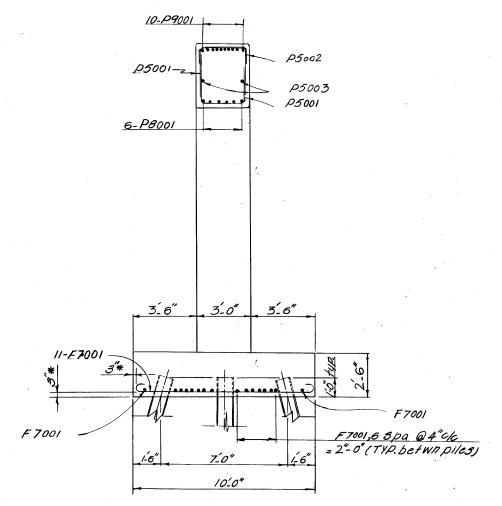
LORAIN COUNTY

STA. 46+04.61 STA. 47+91.53 B.1.P. G.W.M. R.S.S. M.M.A



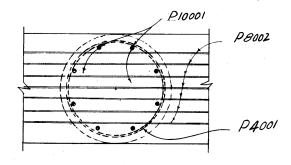


LORAIN COUNTY LOR. - 480-0.00

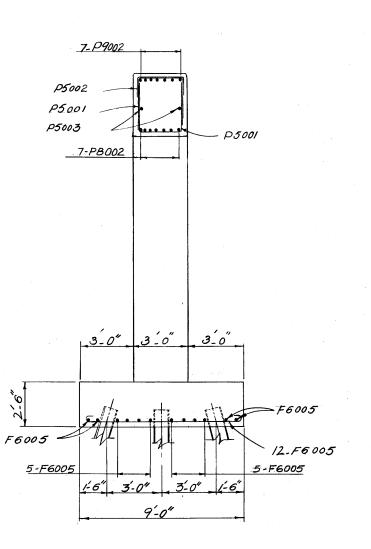


\* Min. clearance all footing surfaces

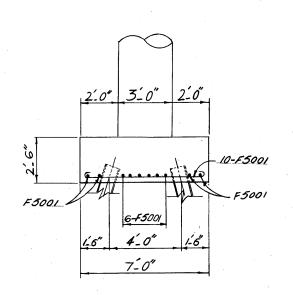
## SECTION A-P.



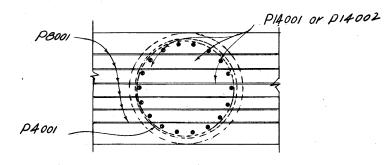
SECTION P4-P4



SECTION P2-P2



VIEW P3-P3



SECTION P3-P5

ALDEN E. STILSON & ASSOCIATES, LIMITED CONSULTING ENGINEERS CLEVELAND, OHIO COLUMBUS, OHIO WHEELING, W. VA.

PIER DETAILS

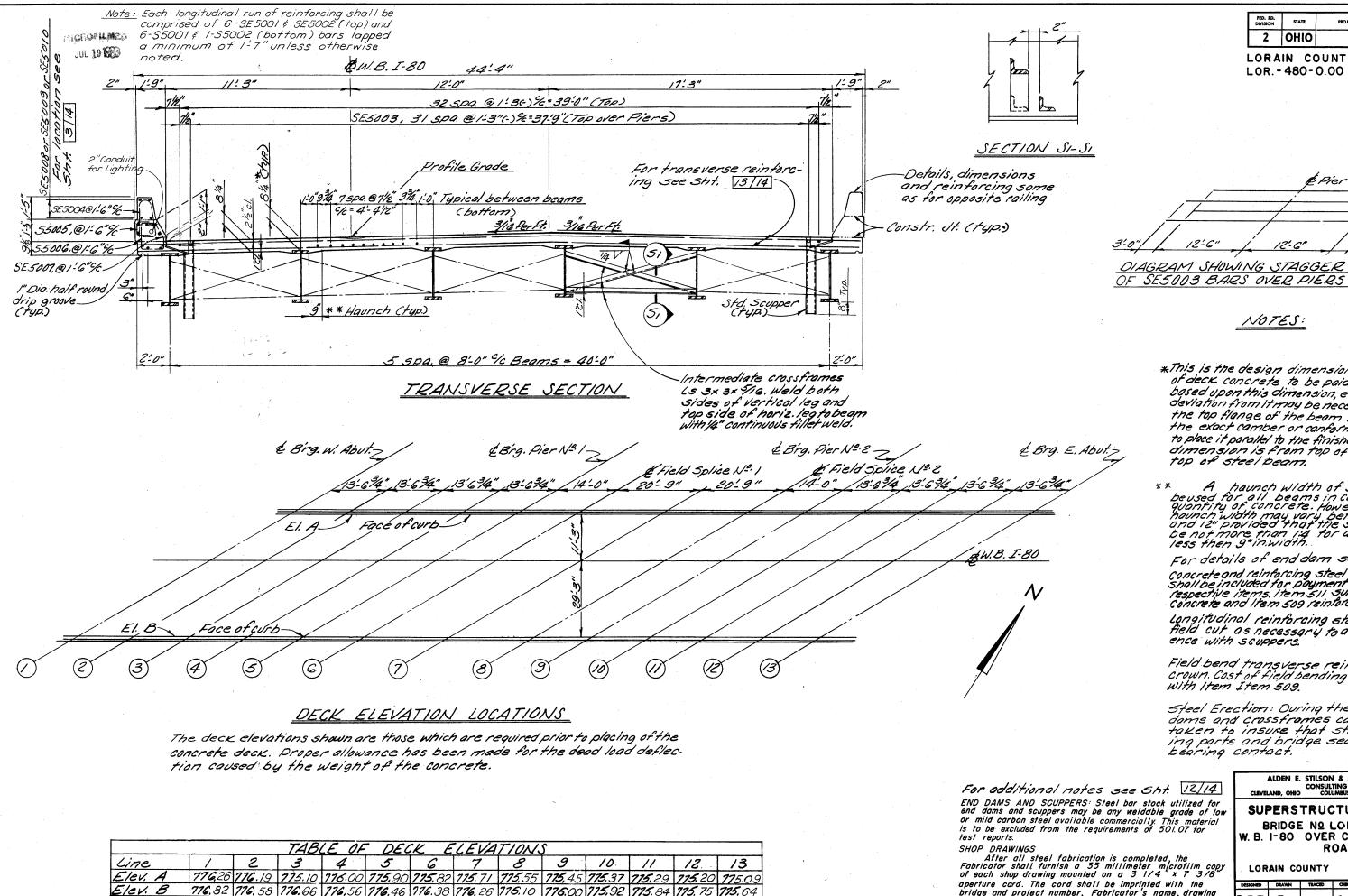
BRIDGE № LOR. - 80 - 1910

W. B. 1-80 OVER CHESTNUT RIDGE

ROAD

LORAIN COUNTY

STA. 46+ 04.61 STA. 47+91.53



TYPE <u>300</u> 375) 2 OHIO

LORAIN COUNTY LOR. - 480 - 0.00

NOTES:

\*This is the design dimension, The quantity of deck concrete to be paid for shall be based upon this dimension, even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or canformation required to place it parallel to the finished grade. This dimension is from top of deck slab to top of steel beam,

\* A haunch width of 9" shall beused for all beams in computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall be not more than 14 for a hounch

For details of end dam see 5ht. 354 Concrete and reinforcing steel for parapets shall be included for payment with their respective items, I tem 511 Superstructure concrete and I tem 509 reinforcing steel.

Langitudinal reinforcing steel shall be field cut as necessary to avoid interfer ence with scuppers.

Field bend transverse reinforcing to fit crown. Cost of field bending to be included With Item Item 509.

Steel Erection: Ouring the erection of end dams and crossframes care shall be taken to insure that stringers, bearing parts and bridge seats remain in bearing contact.

bridge and project number, Fabricator's name, drawing number and details shown on the drawing (girders, beams crossframes, etc.)

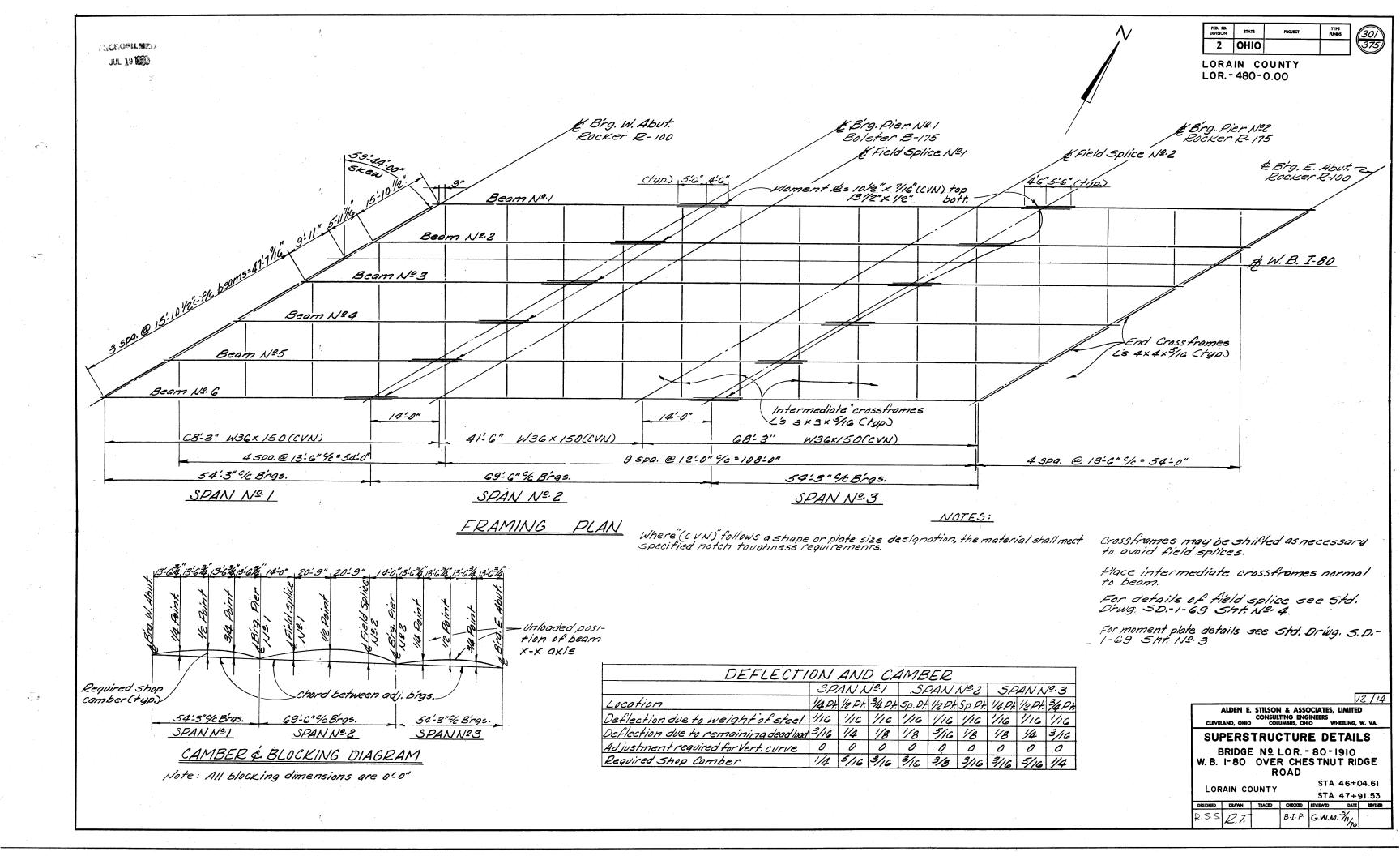
ALDEN E. STILSON & ASSOCIATES, LIMITED CONSULTING ENGINEERS
COLUMBUS, OHIO WHEELING, W. VA

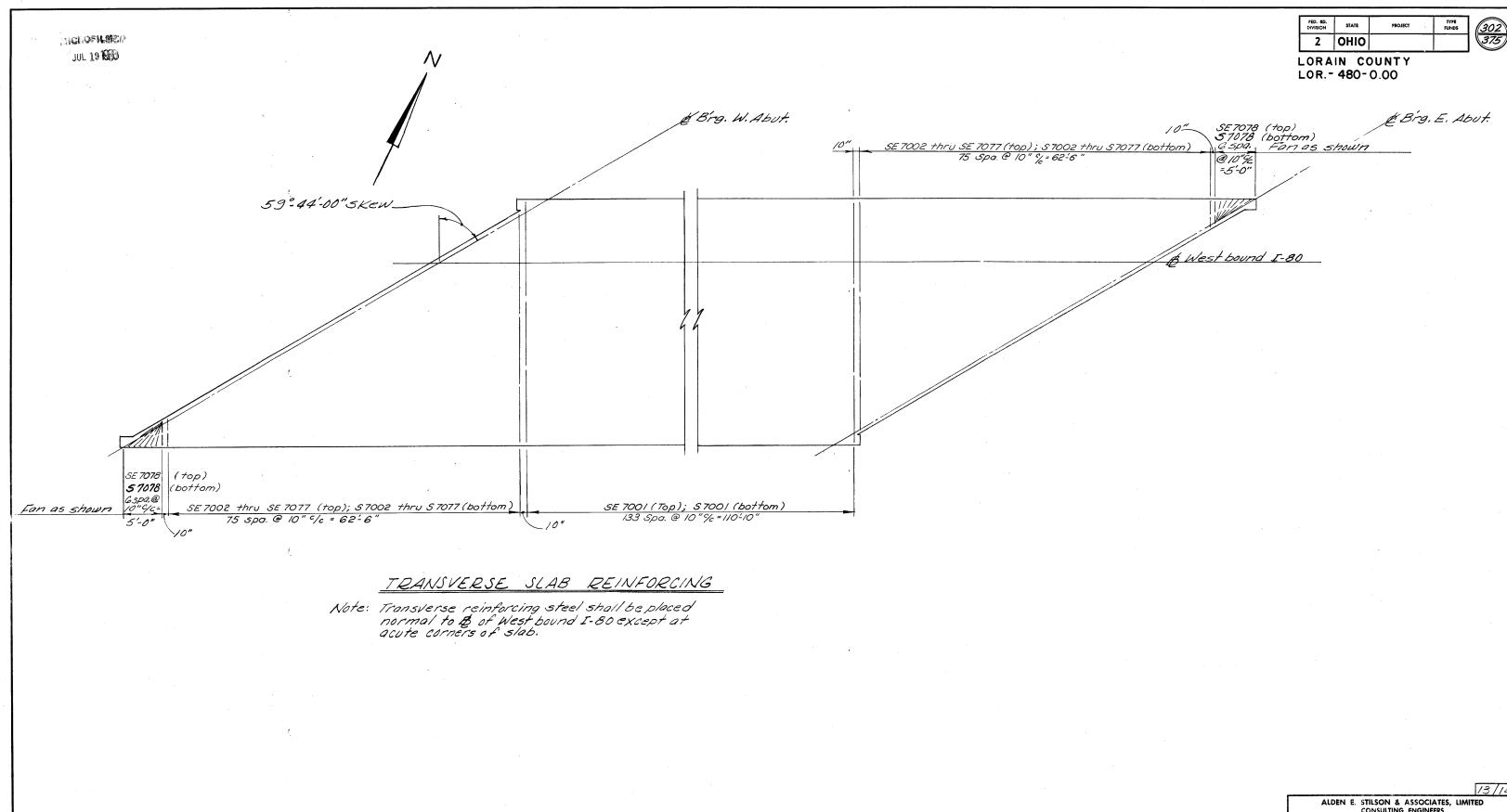
SUPERSTRUCTURE DETAILS BRIDGE Nº LOR. -80-1910 W. B. I-80 OVER CHESTNUT RIDGE ROAD

LORAIN COUNTY

STA-46+04.61 STA. 47+91.53

SS.R.T. B.I.P. G.W.M.





CLEVELAND, OHIO CONSULTING ENGINEERS WHEELING, W. VA.

SUPERSTRUCTURE DETAILS

BRIDGE NO LOR. - 80 - 1910

W. B. 1-80 OVER CHESTNUT RIDGE

BRIDGE Nº LOR. - 80 - 1910 W. B. I-80 OVER CHESTNUT RIDGE ROAD

LORAIN COUNTY

STA 47+91.53

DESIGNED DRAWN TRACED CHECKED REVIEWED DATE REVISED

R. S. S. R. T. B.I.P. G. W.M. 5/1/70