

$$ROS: -180 - (2.74)(3.39)$$

GENERAL NOTES

REFERENCE shall be made to Standard Drawings A-1-54, P-1-54, and CS-1-54, all revised 12-1-54.

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 10-1-51, together with revisions thereof dated 7-15-52, 4-1-54 and 2-1-55.

TEMPORARY RUN-AROUND BRIDGE:

Load frequency for bridge, CF-30, with unit stresses increased 25% as per Sec. 82 of the Design Specifications for Highway Structures. T-10 surface course on the approaches.

REMOVAL OF EXISTING STRUCTURE: When no longer needed to maintain traffic, the existing structure shall be removed. The substructure shall be removed to proposed ground lines. Waste masonry shall be placed in embankment slopes under or adjacent to the proposed structure at the direction of the Engineer. The remainder of the removed materials shall become the property of the Contractor.

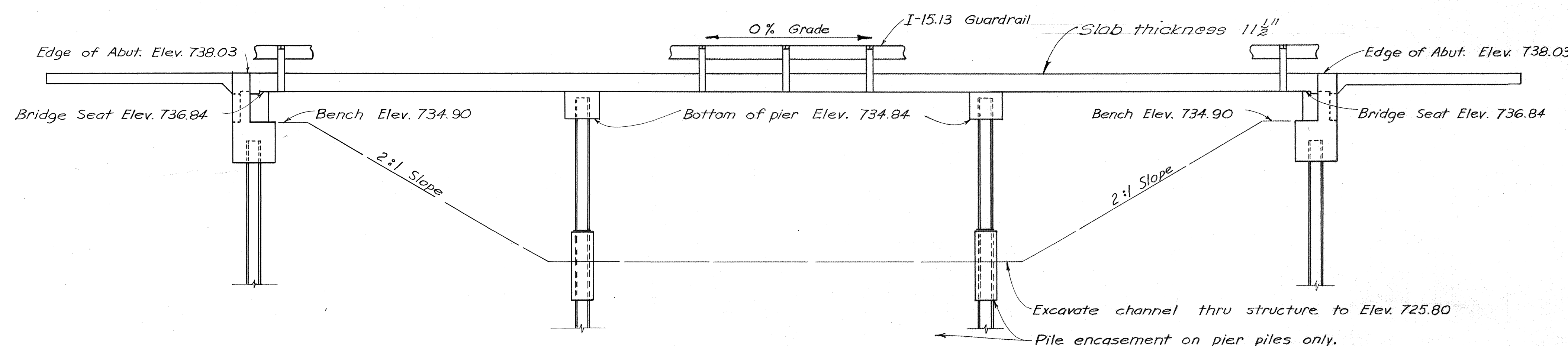
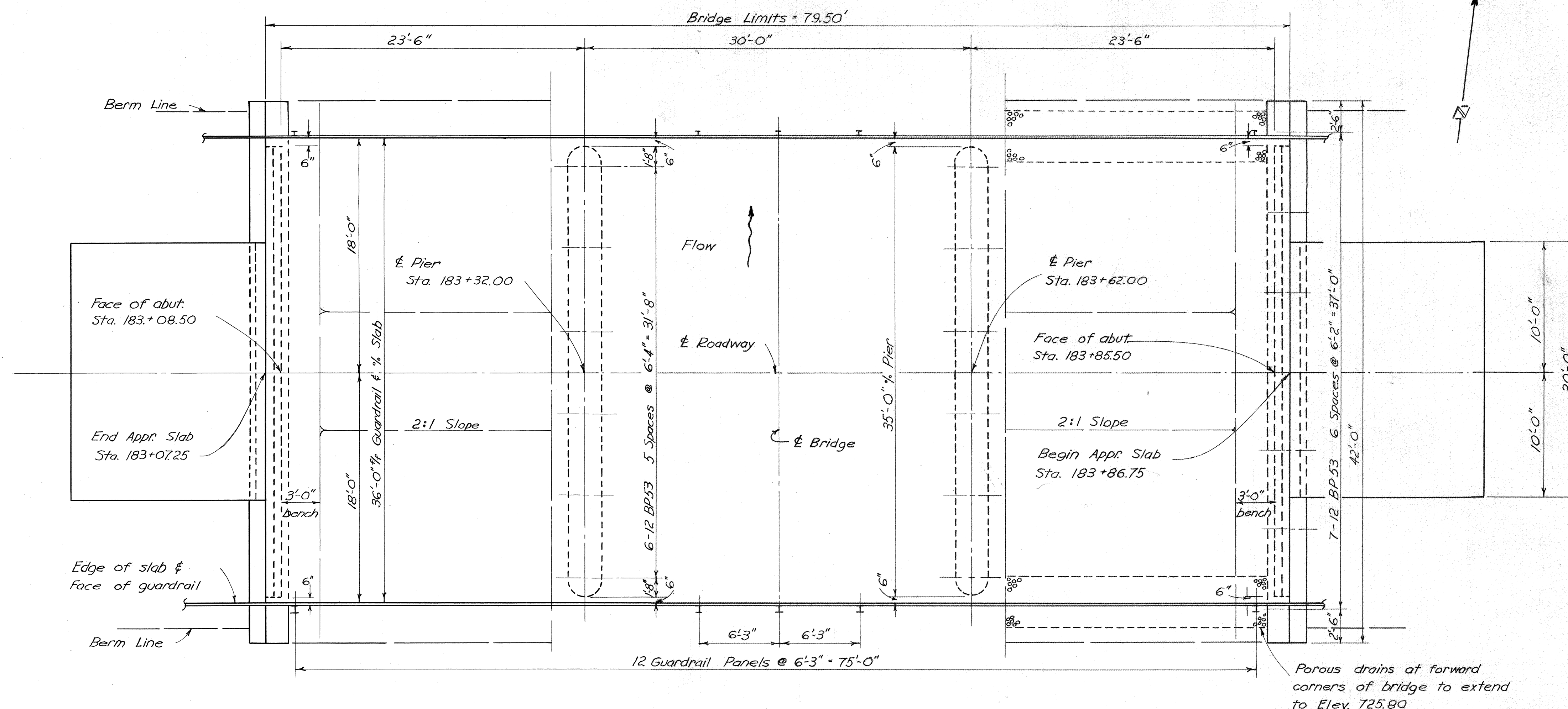
PILES shall be driven to firm contact with rock, which shall be considered as attained when the capacity according to the formula in Sec. S-18.05 is at least 60 tons per pile for the pier piles and 35 tons for the abutment piles if a 7000 ft. lb. steam hammer is used, or 50 tons for the pier piles and 25 tons for the abutment piles if a steam hammer or drop hammer of 15000 ft. lb. or greater energy is used and if the length of penetration is approximately equal to the depth to rock according to the bridge foundation investigation report. If the energy rating of the hammer is between these values the required formula capacity shall be determined by interpolation. (The design load is 33 tons per pile for the pier piles and 23 tons for the abutment piles.) The length of penetration of every pile shall be at least 80 % of the estimated average pay length of the piles in the pertinent pier or abutment as indicated on the plans unless a lesser penetration is approved by the Director.

GALVANIZING of all members which are specified to be galvanized shall be as called for in Sec M-74(d).

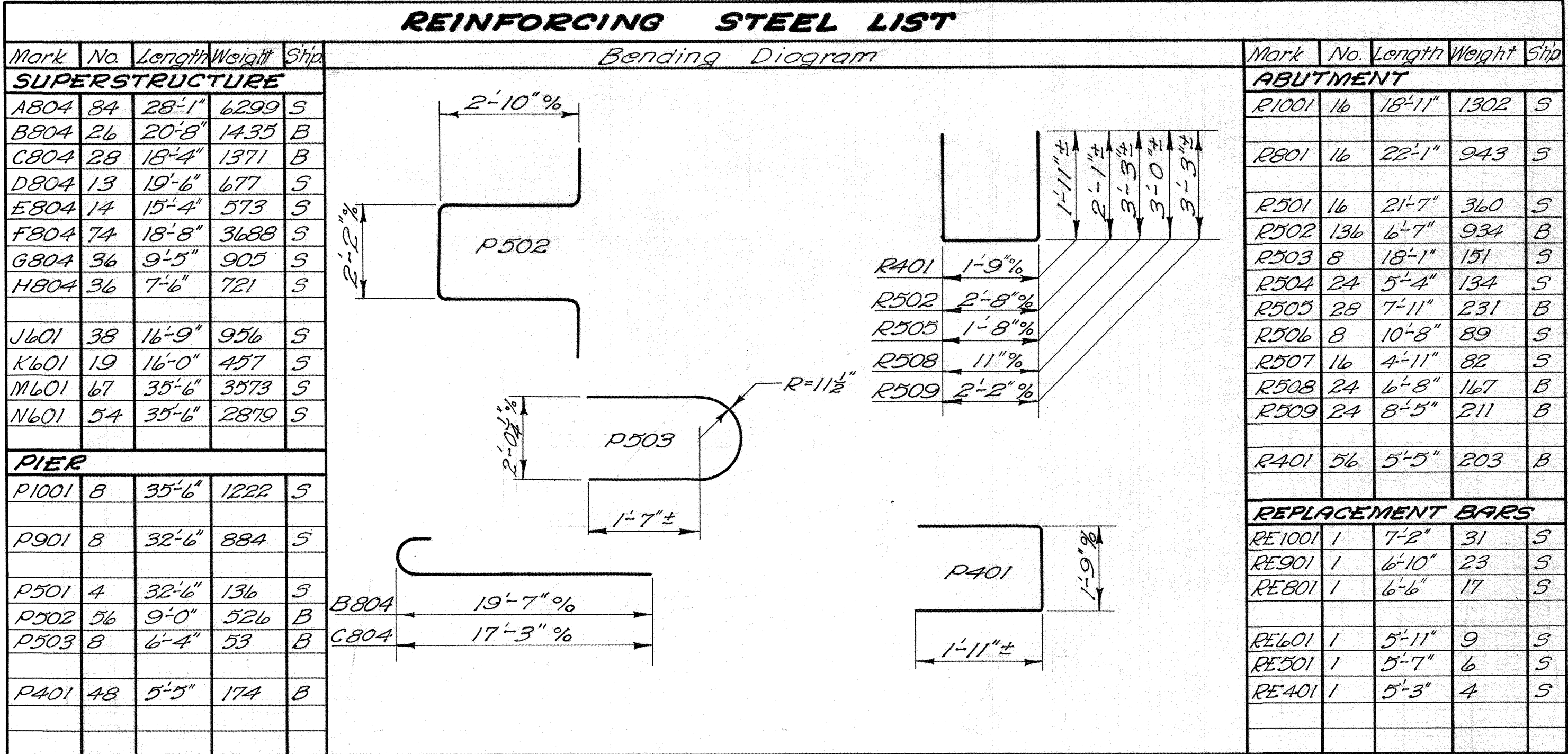
POROUS DRAINS, extending from face of abutment to Elev. 725.80, shall be provided at forward corners of the bridge. The drains shall be 4 ft wide and one foot thick.

ASPHALTIC CONCRETE SURFACE COURSE, Item T-35, laid in two courses, shall be provided.

GRAVEL, if used as the coarse aggregate, shall be according to Sec. M-3.93 instead of M-3.91 for Class "C" concrete in the superstructure. Gravel meeting the requirements of Sec. M-3.93 also may be used for other concrete in this structure.

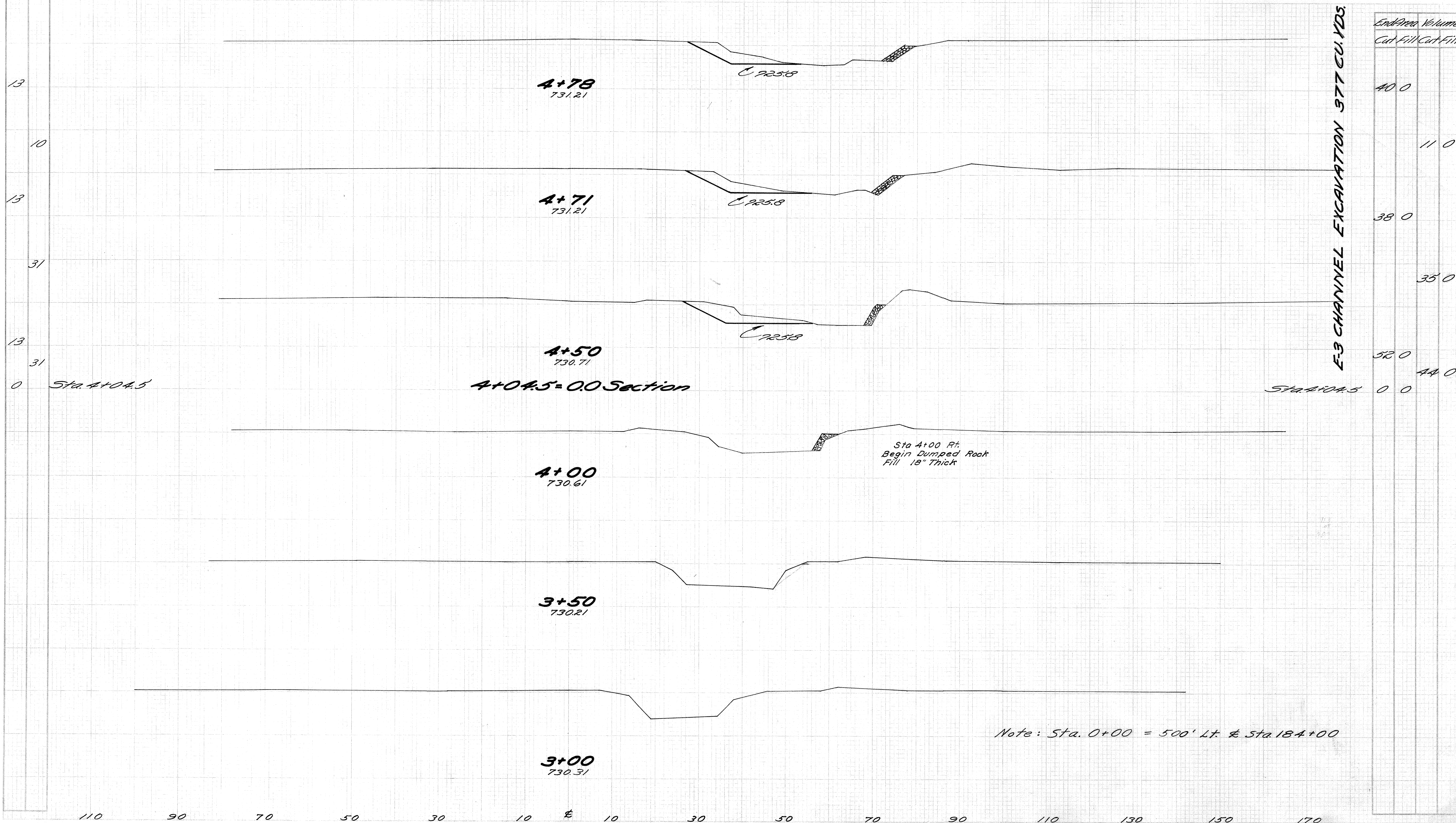


ROS-180-(2.74)(3.39)

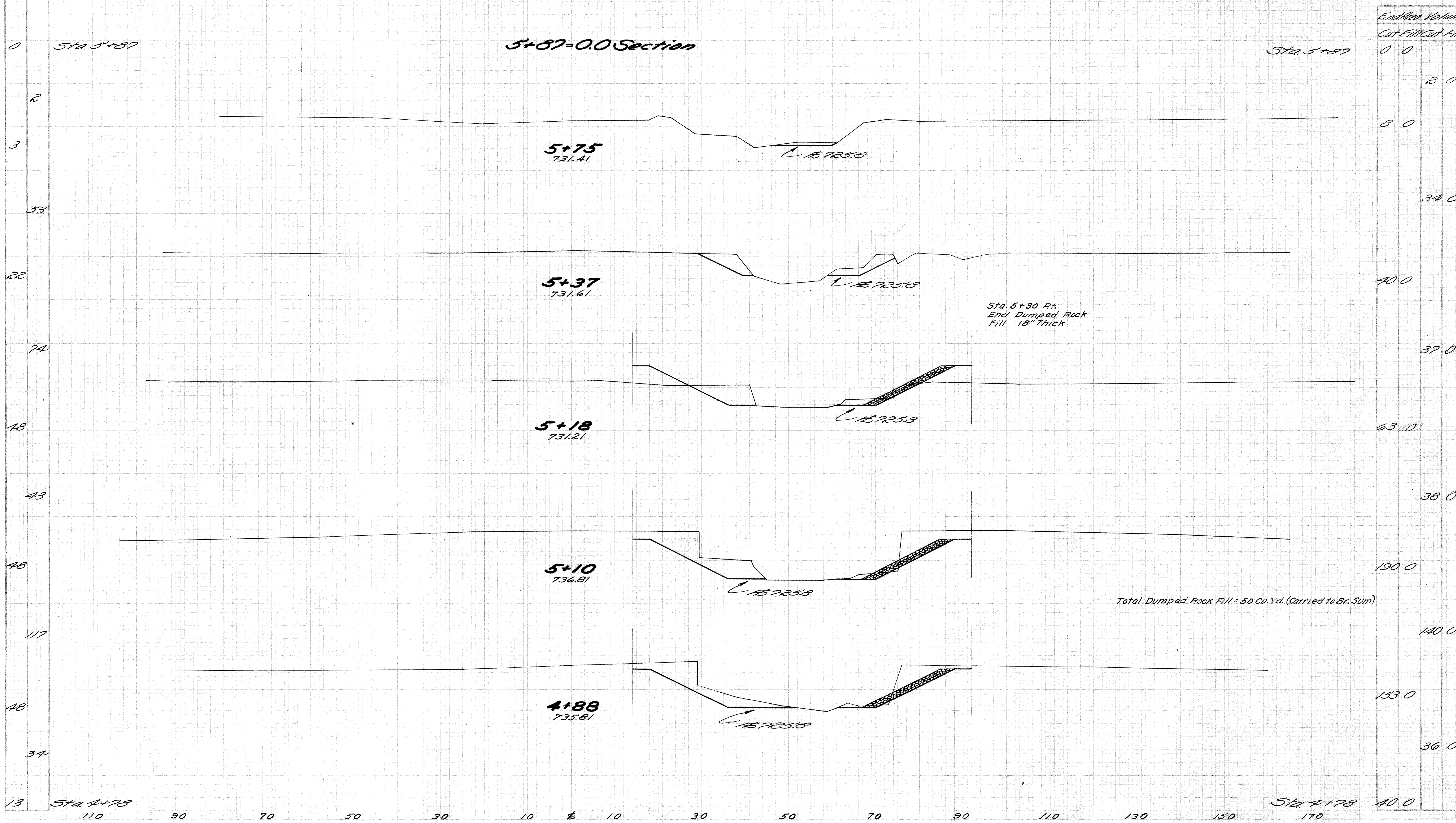


ESTIMATED QUANTITIES									
Item	Total	Unit	Description	Super.	Abut.	Piers	Gen.		
E-2	87	Cuyd.	Unclassified excavation		87				
E-3	377	Cuyd.	Channel excavation				377		
S-1	116	Cuyd.	Class "C" concrete, superstructure and pier caps	103		13			
S-1	41	Cuyd.	Class "E" concrete, abutments		41				
S-3	338	Sqyd.	Type "C" waterproofing	338					
S-4	31426	Lb.	Reinforcing steel	23534	4807	2995	90		
S-14	159	linft.	Railing (Type I-1513 with galvanized steel posts and bolts)	159					
S-15	lump	Sum	Temporary run-around bridge				lump		
S-16	lump	Sum	First test pile				lump		
S-18	645	linft.	12 BP 53 piling		335	310			
S-24	lump	Sum	Removal of existing structure				lump		
S-29	7	Cuyd.	Porous drains on embankment slopes				7		
S-29	13	Cuyd.	Porous backfill		13				
T-35	20	Cuyd.	Asphaltic concrete surface course, Type "A" or "C" (85-100)	20					
I-10	50	Cuyd.	Dumped rock fill				50		

Seeding
End Sta
Width Yd.



Seeding
End Sta.
Width Yds.



Seeding
End Sta
Width Yds.

ROSS COUNTY
ROS 180(2.70)(3.35)

End Area	Volume
Cut-Fill	Cut-Fill

7+00
732.51

6+75
732.51

6+52
732.31

6+10
731.81

5+95
731.81

110 90 70 50 30 10 ± 10 30 50 70 90 110 130 150 170

CHANNEL SECTIONS ON KINNICKINNICK CREEK S.R. 180

UTILITIES:
* Power Line Owned By The Inter County Rural Electric Co-op.
102 S. Walnut Street, Chillicothe, Ohio
* Telephone Line Owned By S. O. Kellenberger System
Hallowville, Ohio

WALTER & MAUD M. OPP
Parcel N^o 1
0.182 Acres

JESSIE F. DRESBACH
Parcel N^o 2
0.049 Acres

HIRAM E. BROWN
Parcel N^o 4A
0.292 Acres

HIRAM E. BROWN
Parcel N^o 4
0.051 Acres

R/W PLAN
ROS. 180-1270X.35
ROSS COUNTY

ETHEL F. MAXWELL et al.
Parcel N^o 5-0.72 Acres

JAMES & ELIZABETH HOLBROOK
Parcel N^o 3
0.968 Acres

EXIST. & PROP. CURVE DATA
PI 140+00
Δ 2° 21' 41"
D_s 0° 30'
R 11459.16'
T 235.03'
L 470.0'
E 2.41'

SEC. 22, T9N, R21W
GREEN TOWNSHIP

EXIST. & PROP. CURVE DATA
PI 161+01.33
Δ 9° 25' 41"
D_s 1° 30'
R 3512.72'
T 312.60'
L 627.77'
E 12.93'

SEC. 15, T9N, R21W
GREEN TOWNSHIP

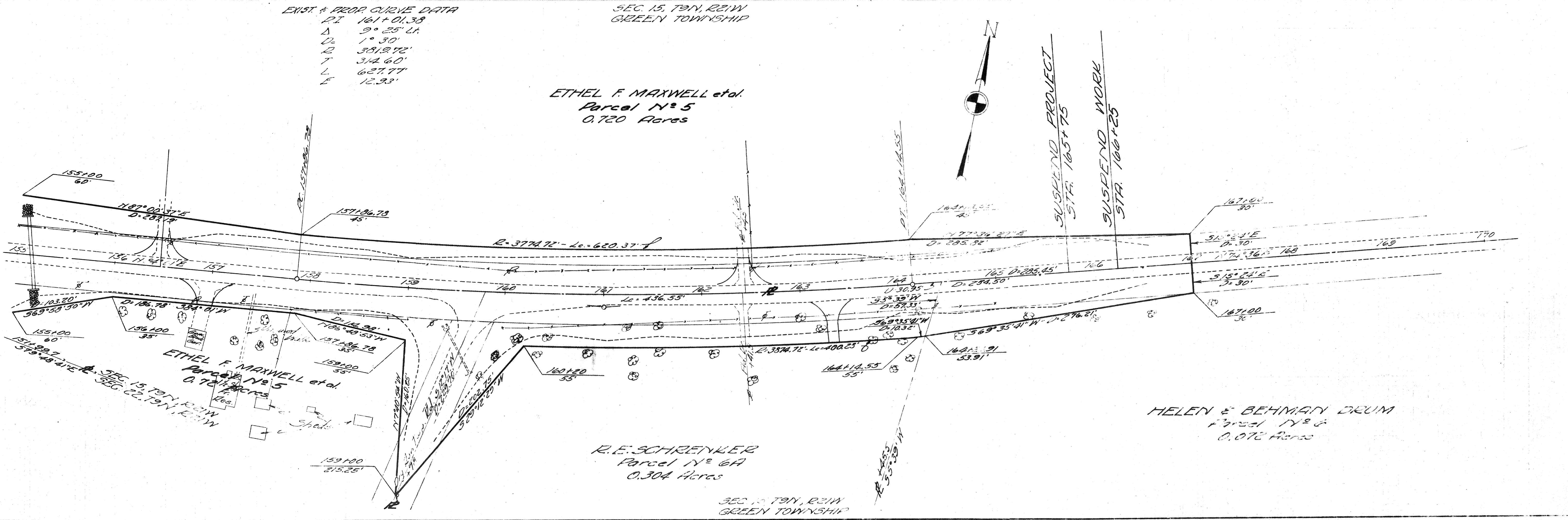
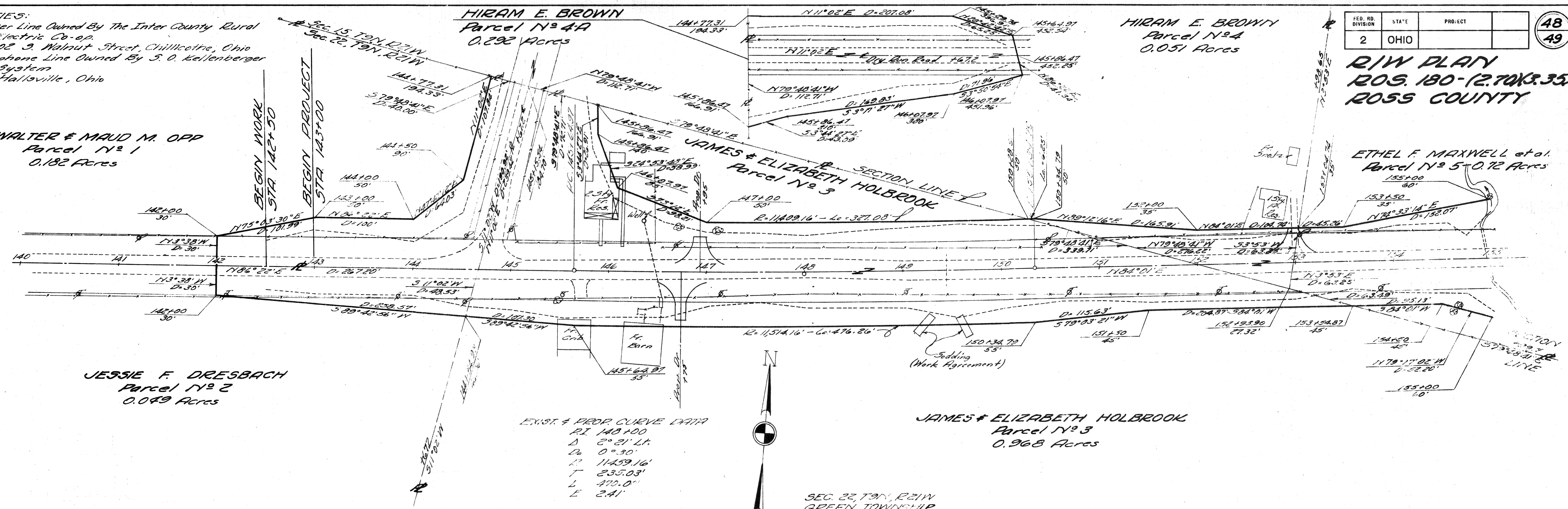
ETHEL F. MAXWELL et al.
Parcel N^o 5
0.720 Acres

R.E. SCHREINER
Parcel N^o 6A
0.304 Acres

HELEN & BEHMAN DRUM
Parcel N^o 6
0.078 Acres

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

48
49



R/W PLAY
RDS. 180-(2.70)(3.35)
ROSS COUNTY

ETHEL F. MAXWELL et al.
 Parcel N^o 8
 1.459 Acres

Channel Change
 Parcel N^o 8A-1 - 0.164 Acres

Temporary Run-around
 Parcel N^o 8T
 0.172 Acres

Channel Change
 Parcel N^o 8X
 0.121 Acres

ETHEL F. MAXWELL et al.
 Parcel N^o 8
 1.459 Acres

HELEN & BEHMAN DRUM
 Parcel N^o 7
 0.130 Acres

SEC. 14, T9N, R21W
 GREEN TOWNSHIP

ETHEL F. MAXWELL et al.
 Parcel N^o 8
 1.459 Acres

PI. Sta. 193+43.53
 $\Delta = 0^{\circ} 27' \text{ R.H.}$

PI. Sta. 194+00
 $\Delta = 1^{\circ} 00' \text{ R.H.}$

ETHEL F. MAXWELL et al.
 Parcel N^o 8
 1.459 Acres

END PROJECT
 STA. 191+00

END WORK
 STA. 192+00
 SEC. 14, T9N, R21W
 GREEN TOWNSHIP

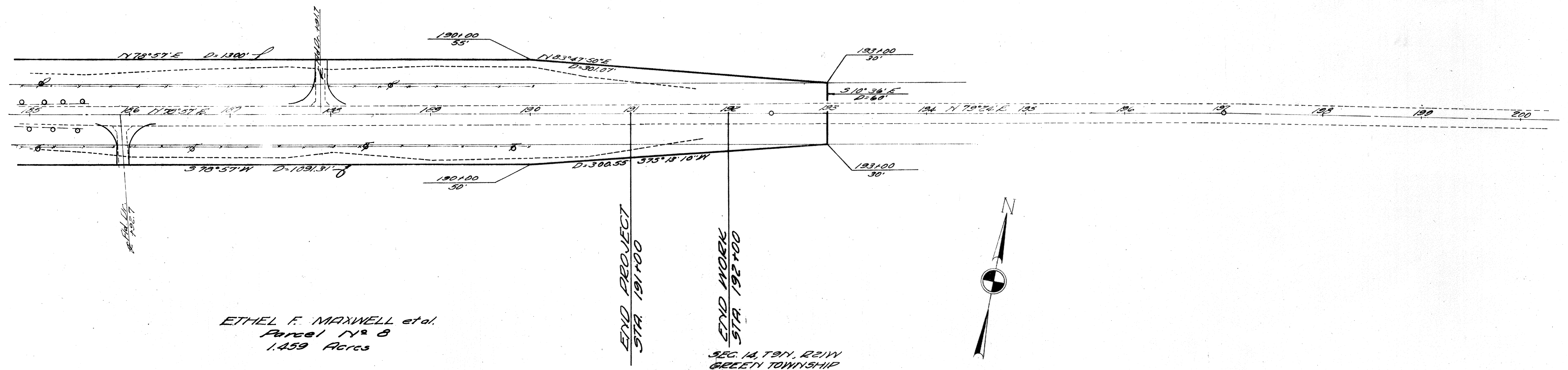
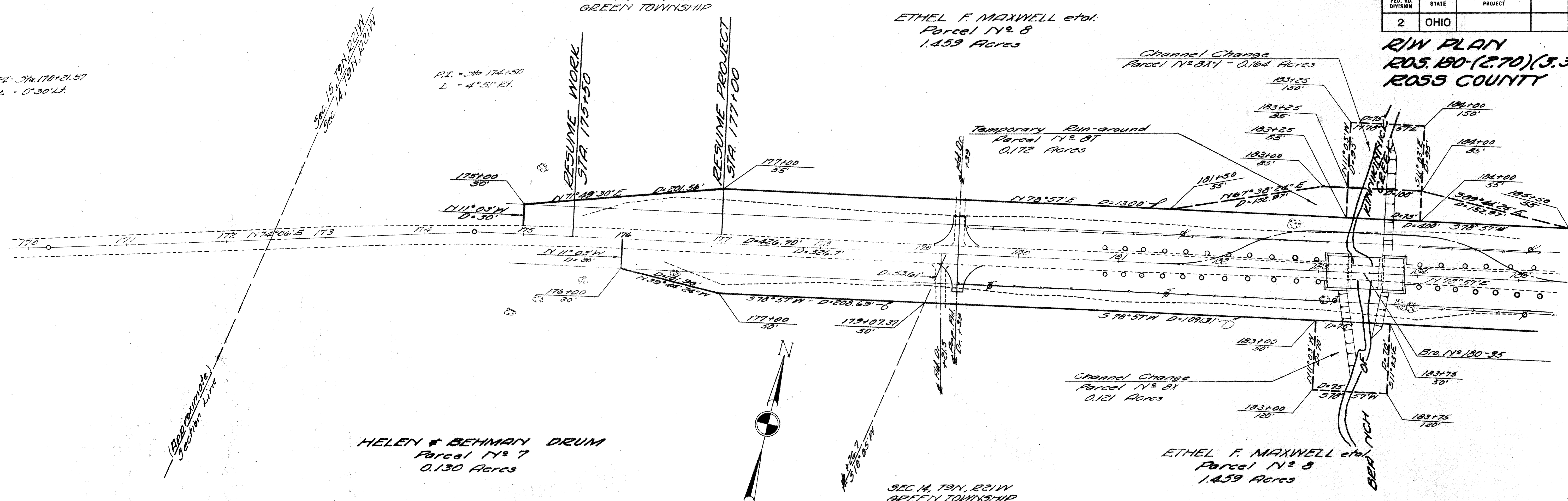
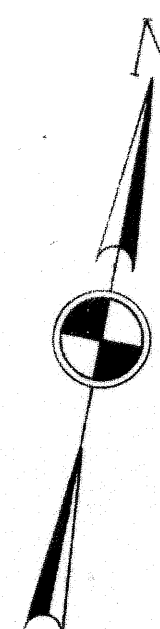
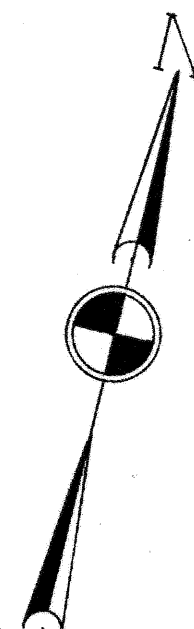
PI. Sta. 170+21.57
 $\Delta = 0^{\circ} 30' \text{ L.H.}$

PI. Sta. 174+50
 $\Delta = 4^{\circ} 51' \text{ R.H.}$

SEC. 14, T9N, R21W
 GREEN TOWNSHIP

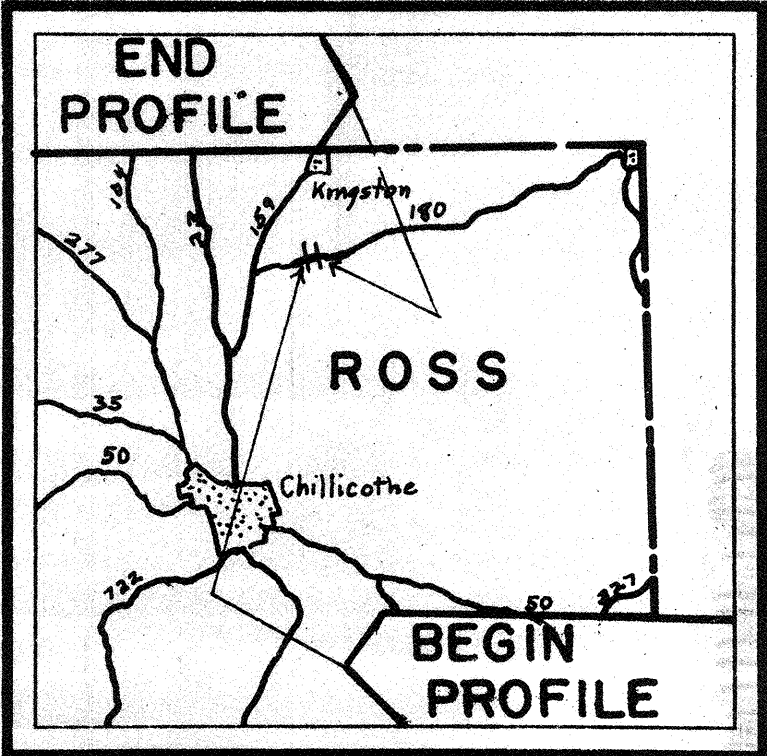
RESUME WORK
 STA. 175+50

RESUME PROJECT
 STA. 177+00



SOIL PROFILE
ROSS COUNTY
ROS 180 (2.74)(3.39)
STATE HIGHWAY TESTING AND
RESEARCH LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO

NOTE: THE INFORMATION SHOWN BY THIS SUBGRADE
PROFILE WAS SECURED FOR THE USE OF THE STATE OF
OHIO AND IS NOT TO BE CONSTRUED AS A PART OF THE
PLANS GOVERNING THE CONSTRUCTION OF THE PROJECT.



LOCATION MAP

LEGEND FOR PROJECT-AVERAGE RESULTS OF TESTS- 42 SAMPLES TESTED										
DESCRIPTION	H. R. B. CLASS	OHIO CLASS	% AGG.	% C. SAND	% F. SAND	% SILT	% CLAY	LIQUID LIMIT	PLASTICITY INDEX	WATER CONTENT
COARSE AND FINE SAND		A-3	6	13	52	10	19	20	5	17
GRAVEL WITH SAND, SILT AND CLAY		A-2-6(1)	A-2-6	12	31	22	13	22	14	14
SANDY SILT		A-4(4)	A-4a	17	12	15	34	25	6	19
SILT		A-4(8)	A-4b	2	3	7	57	31	8	23
SILT AND CLAY		A-6(6)	A-6a	12	9	16	29	32	12	21
SILTY CLAY		A-6(10)	A-6b	8	3	9	37	36	16	23
CLAY		A-7-6(14)	A-7-6	2	2	6	43	44	22	28
SHALE										
										2
CLASSIFIED BY VISUAL INSPECTION										
SAMPLES TESTED LAB. NO'S SO. 14003-14044 INCL.										
NOTE: FIGURES BESIDE BORINGS INDICATE MOISTURE CONTENT IN PERCENT										

NOTE: AT THE TIME OF THIS SOIL INVESTIGATION
NO ELEVATIONS WERE OBTAINABLE

