

#6046

SEN-224  
SLM 29.88 to 30.27

FED. RD. DIV. NO.	STATE	PROJECT	FISCAL YEAR
2	OHIO		1946

1  
9

SENECA COUNTY  
S.H.4 SEC. ATTICA (PT.)  
S.H.272 SEC. ATTICA (PT.)

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
COLUMBUS-SANDUSKY ROAD-S.H.4, SEC. ATTICA (PT.)  
TIFFIN-NEW HAVEN ROAD-S.H.272, SEC. ATTICA (PT.)  
SENECA COUNTY,  
VILLAGE OF ATTICA.

CONVENTIONAL SIGNS

STATE LINE	-----
COUNTY LINE	-----
TOWNSHIP LINE	-----
SECTION LINE	-----
CENTER LINE	-----
PROPERTY LINE	-----
CITY OR VILLAGE LINE	-----
FENCE LINE	-X-X-X-X-
STEAM RAILROAD	===== 
ELECTRIC RAILROAD	===== 
POLE LINE	o-o-o-o-o
GUARD RAIL	o-o-o-o-o
DRAIN PIPE, NEW	-----
DRAIN PIPE, OLD	-----

INDEX OF SHEETS

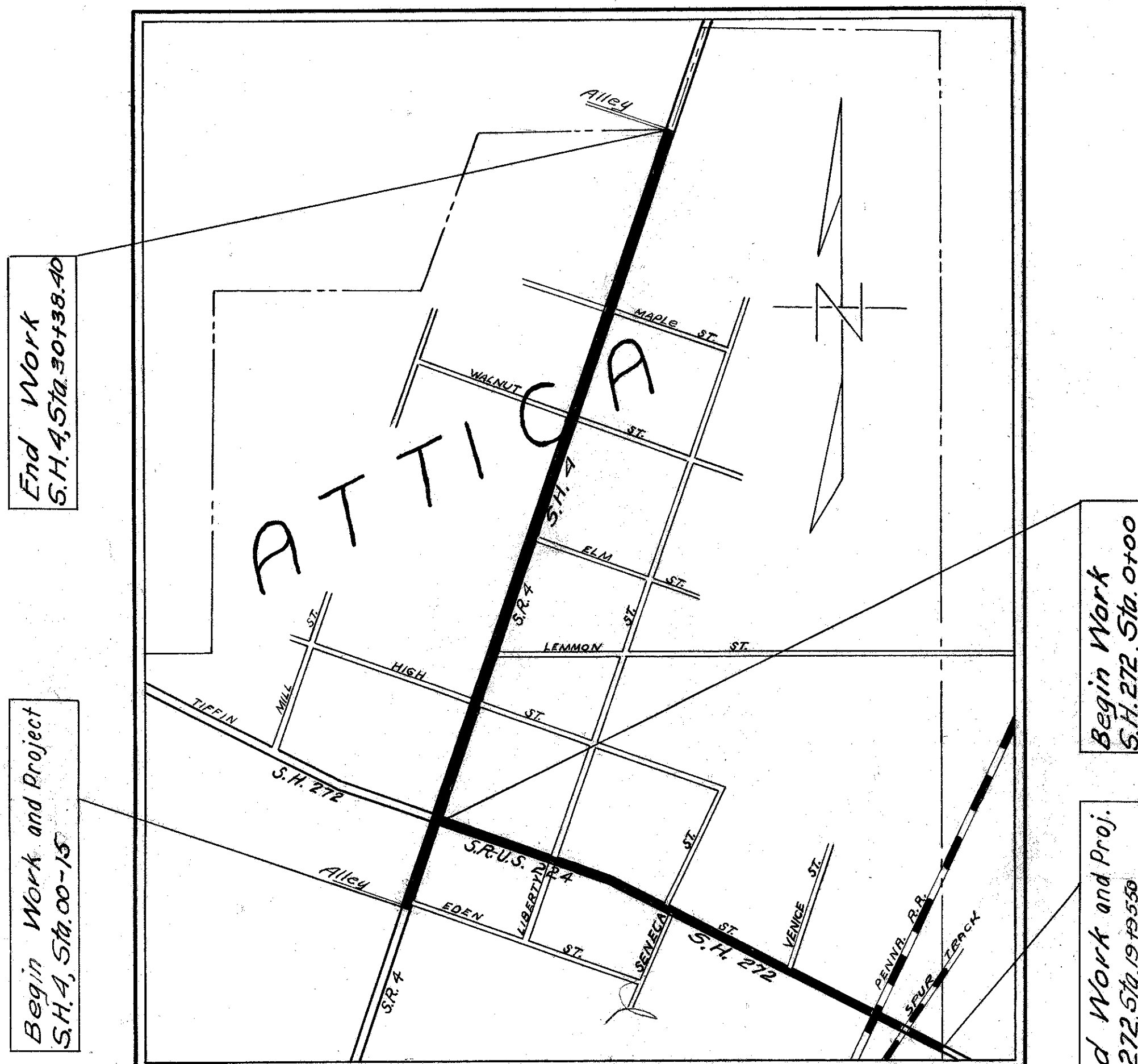
TITLE SHEET	1
TYPICAL SECTIONS	2-3
PLAN & PROFILE	5-9
GENERAL NOTES	4
PAVEMENT COMPUTATIONS	4
SUMMARIES	4

LINE DATA

S.H. 4  
Begin Work and Project Sta. 0+15, End Work Sta. 30+38.4 = 3053.4 Lin. Ft.  
Gross Length = Net Length = 3053.4 Lin. Ft.

S.H. 272  
Begin Work Sta. 0+00, End Work and Project Sta. 19+95.5 = 1995.5 Lin. Ft.  
Gross Length = 1995.50 Lin. Ft.  
Deduct for Railroads = 34.80 Lin. Ft.  
Net Length = 1960.70 Lin. Ft.

Net Length of Project = 3053.40 + 1960.70 = 5014.10 Lin. Ft.  
or 0.949 Mile



LOCATION PLAN

SCALE: 1" = 400'

PORTION TO BE IMPROVED  
STATE HIGHWAYS  
OTHER HIGHWAYS

SCALES

PLAN 1" = 50'  
PROFILE - HORIZONTAL 1" = 50'  
PROFILE - VERTICAL 1" = 5'

The Standard Specifications of The State of Ohio, Department of Highways, 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 of traffic of the highway and that traffic will be maintained as shown on the plans and estimates.

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

Approved: Arnold V. Finch  
Date 7-8-46 Assistant to the Chief Engineer.

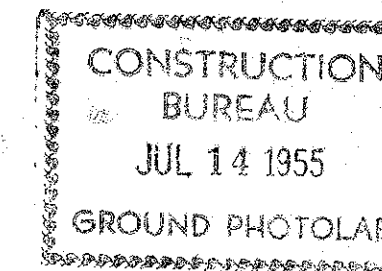
Approved: \_\_\_\_\_  
Date \_\_\_\_\_ Chief Engineer, Bureau of Maintenance.

Approved: \_\_\_\_\_  
Date \_\_\_\_\_ Chief Engineer, Bureau of Bridges & R.R. Crossings.

Approved: C. Muck  
Date 8-13-46 Chief Engineer, Bureau of Location & Design.

Approved: Edwin W. Ellis  
Date 8-13-46 First Ass't Director & Chief Engineer

Approved: Perry T. Ford  
Date 8-13-46 Director of Highways.



SUPPLEMENTAL SPECIFICATIONS


STANDARD DRAWINGS	
G-707	6-1-42

FILE NO.	SENECA COUNTY S.H.4 & 272 SEC. ATTICA (PTS)
DATE OF LETTING	
CONTRACT NO.	

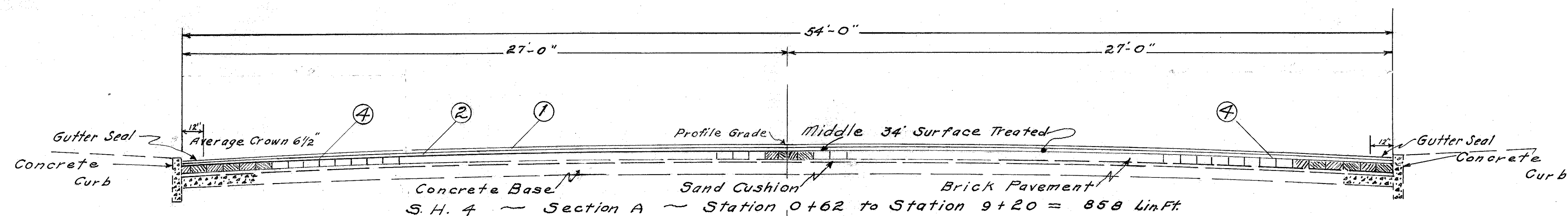
FED. RD. DIV. NO.	STATE	PROJECT	FISCAL YEAR
2	OHIO		1946

29

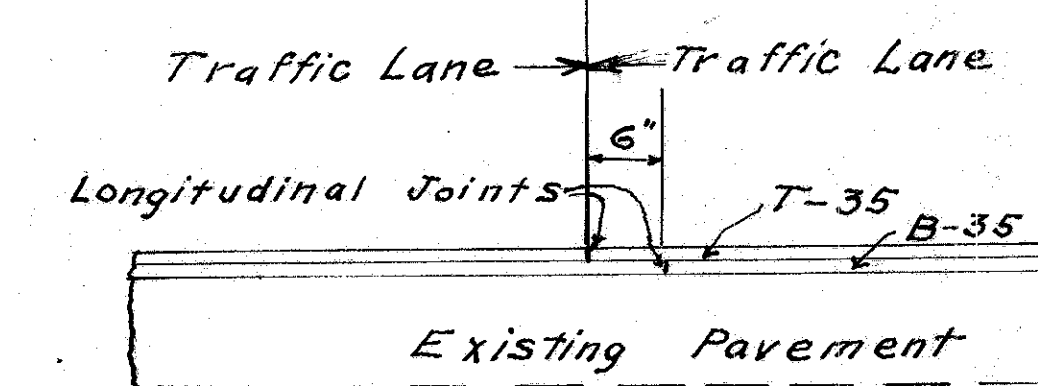
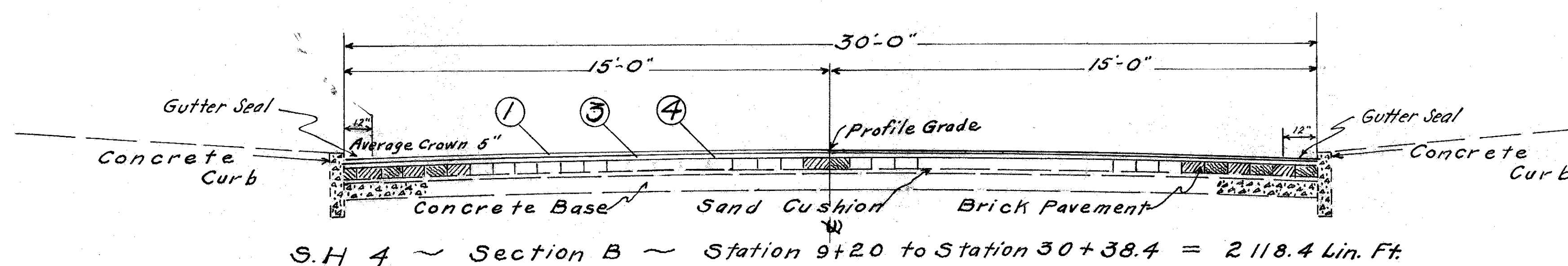
SENECA COUNTY  
S.H. 4, SEC. ATTICA (PT)  
S.H. 272, SEC. ATTICA (PT)

# TYPICAL SECTIONS

## TYPE T-35

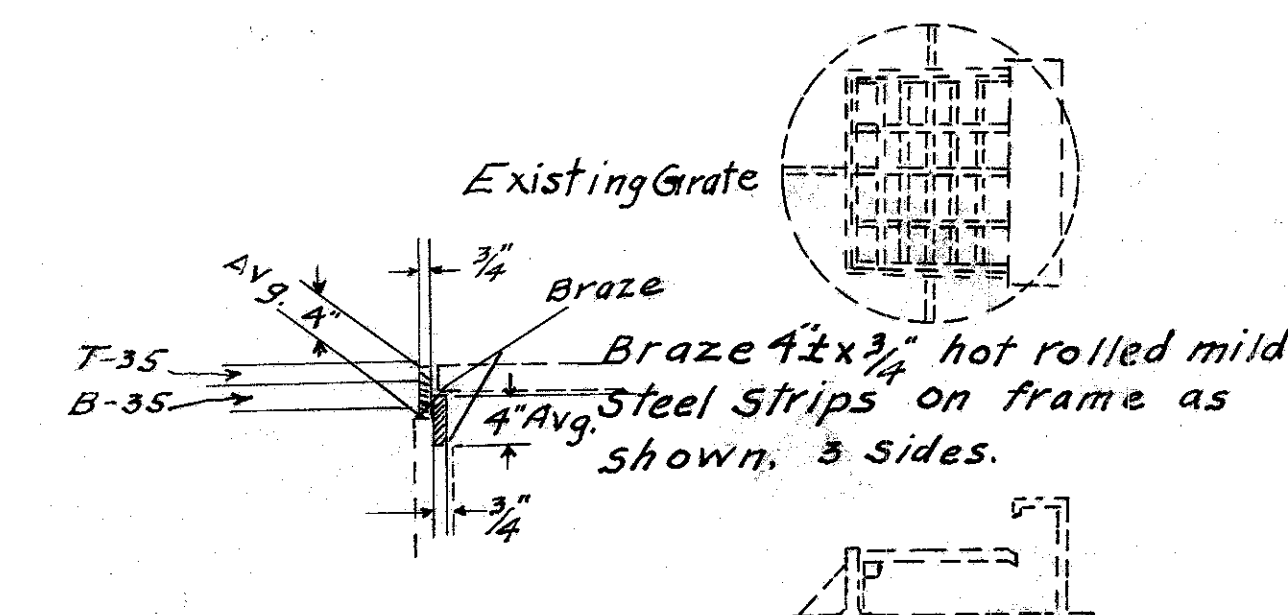


Gutter Seal to be in accordance with Specification Item T-35.20



DETAIL ~ Showing Longitudinal Joints.

- ① Item T-35, 1" Asphaltic Concrete Surface Course, Type "C".
- ② Item B-35, 1/4" Minimum thickness, Asphaltic Concrete Leveling Course. (Section A.)
- ③ Item B-35, 1/2" Minimum thickness, Asphaltic Concrete Leveling Course. (Section B.)
- ④ Item T-30, Bituminous Tack Coat Using Bituminous Material Sec. M-5.5, MS-1 applied at the rate of 0.10 gal. per sq. yd, including 2 to 5 lbs. Sand Cover per. Sq. Yd.



DETAIL :- Showing method of raising grate on combined curb and gutter inlets.

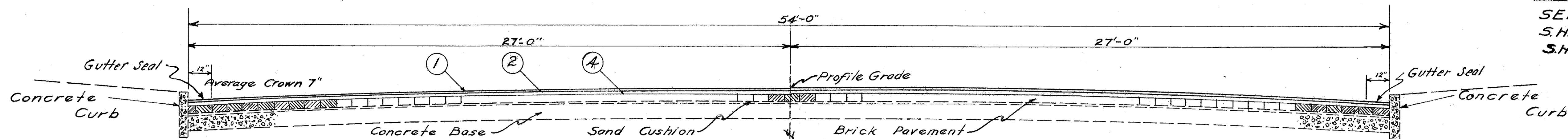
Note: - This method to be optional. Contractor may suggest other method for approval of Engineer. Existing Grates are approx. 2" below Gutters.

# TYPICAL SECTIONS, TYPE-T-35

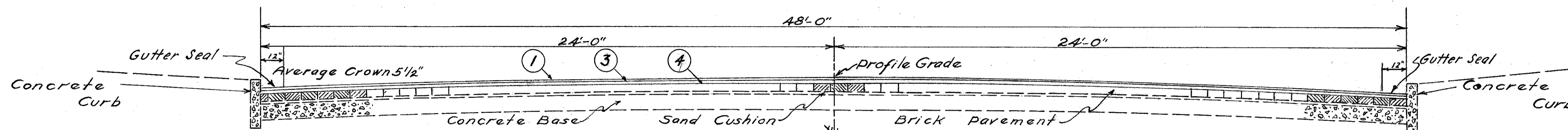
FED. RD. DIV. NO.	STATE	PROJECT	FISCAL YEAR
2	OHIO		1946

3  
9

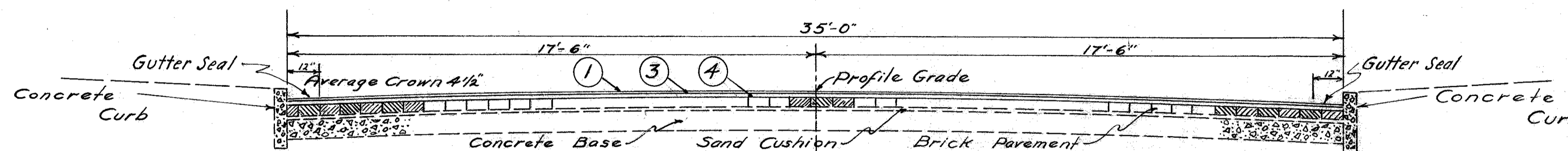
SENECA COUNTY  
S.H. 4, SEC. ATTICA (PT.)  
S.H. 272, SEC. ATTICA (PT.)



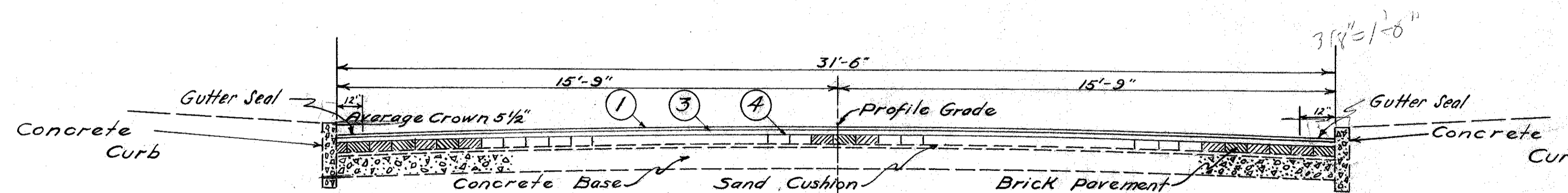
S.H. 272 - Section A - Station 0+00 to Station 1+75 = 175 Lin. Ft.



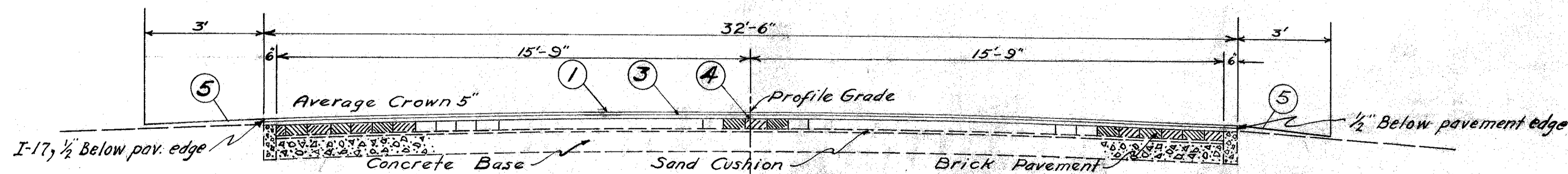
S.H. 272 - Section B - Station 1+75 to Station 3+88 = 213 Lin. Ft.



S.H. 272 - Section C - Station 3+88 to Station 13+55 = 967 Lin. Ft.

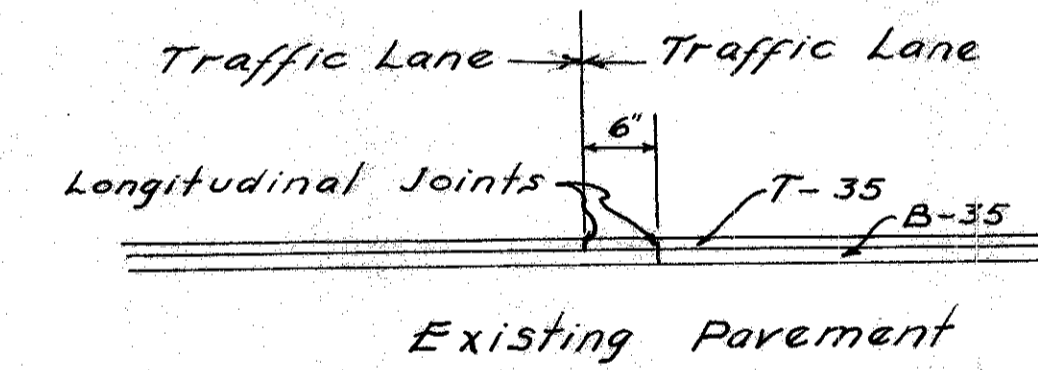


S.H. 272 - Section D - Station 13+55 to Station 17+01.75 = 346.75 Lin. Ft.



S.H. 272 - Section E - Station 17+25.55 to Station 18+17.40 = 91.85 Lin. Ft.  
Station 18+28.40 to Station 19+95.50 = 167.10 Lin. Ft.

Gutter Seal according to Specifications. Sec. T-35.20



DETAIL - Showing Longitudinal Joints.

- ① Item T-35, 1" Asphaltic Concrete Surface Course, Type "C"
- ② Item B-35, 1 1/4" Minimum thickness, Asphaltic Concrete Leveling Course.
- ③ Item B-35, 1 1/2" Minimum thickness, Asphaltic Concrete Leveling Course.
- ④ Item T-30, Bituminous Tack Coat Using Bituminous Material Sec. M-5.5, MS-1 applied at the rate of 0.10 gal. per sq. yd., including 2 lbs. to 5 lbs. of sand cover per sq. yd.
- ⑤ Item I-17, Side approaches, Mail box turnouts and berm Material.

3100  
20  
9) 42000 (4666  
360  
54

# GENERAL NOTES

**PROFILE** — The profile of the proposed surface course shall be approximately 2 1/2 inches above that of the existing pavement.

**TRAFFIC** — Traffic shall be maintained at all times. The length of one way traffic zones shall be kept to a minimum consistent with the requirements of Sec. T-35.23. The item of "Maintaining Traffic" shall include furnishing lights, signs, barricades and watchmen to secure the flow of traffic twenty-four (24) hours daily.

**RAILROAD CROSSINGS** — The new surface course shall be feathered to meet rail grades, if necessary.

**FILLING MAJOR DEPRESSIONS** — Major depressions in existing pavement shall be filled and compacted with bituminous concrete leveling material in advance of placing the regular leveling course. These depressions shall be filled in layers not to exceed 3" in depth when compacted.

**RESETTING CASTINGS** — This item shall be performed after completion of leveling course and prior to placing the surface course. Compaction of the material around castings inaccessible to rollers shall be in accordance with the requirements of Section T-50.21. Portions of the existing pavement removed to adjust manhole and pool grate frame castings to the grade of the new surface shall be replaced full depth with Class "C" Concrete.

The cost of labor, materials, etc, shall be included in the unit price bid for Item I-B Resetting Castings.

**UTILITY ADJUSTMENT** — 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 in these plans.

**CONTROL POINTS** — None on Project.

**DISPOSAL OF WASTE MATERIAL** — All waste material shall be disposed of by the contractor outside the limits of the project Right of Way.

**GUTTER SEAL:** — After placing and compacting the bituminous concrete surface course, the gutter surface shall be sealed with the same bituminous material contained in the mixture. Only enough material shall be applied to coat the surface for a distance of 12" inches from the curb or 24 inches wide for a "V" gutter. The material shall be applied by an approved method at a temperature of from 300 deg. F. to 350 deg. F. The cost of such operation and material shall be included in the price bid for bituminous concrete.

**TREATMENT OF FEATHERED AREA:** — Where directed the new surface shall be feathered. The area upon which less than one (1) inch of surface course is to be placed shall be considered as the area to be feathered. A paint coat of the same bituminous material used in the mix shall be applied to this area, before placing the bituminous concrete surface course. The cost of such operation and material shall be included in the price bid for bituminous concrete.

# PAVEMENT COMPUTATIONS

**S. H. 4**  
 Sta. 0+62 to Sta. 9+20 = 858.0 Lin.Ft.  
 Width of Pavement = 54.0 Lin.Ft.  
 Area = (54 x 858) ÷ 9 = 5148.0 Sq.Yds.

Sta. 9+20 to Sta. 30+38.4 = 2118.4 Lin.Ft.  
 Width of Pavement = 30.0 Lin.Ft.  
 Area = (30 x 2118.4) ÷ 9 = 7061.0 Sq.Yds.

**S. H. 272**  
 Sta. 0+00 to Sta. 1+75 = 175.0 Lin.Ft.  
 Width of Pavement = 54.0 Lin.Ft.  
 Area = (54 x 175) ÷ 9 = 1050.0 Sq.Yds.

Sta. 1+75 to Sta. 3+88 = 213.0 Lin.Ft.  
 Width of Pavement = 48.0 Lin.Ft.  
 Area = (48 x 213) ÷ 9 = 1136.0 Sq.Yds.

Sta. 3+88 to Sta. 13+55 = 967.0 Lin.Ft.  
 Width of Pavement = 35.0 Lin.Ft.  
 Area = (35 x 967) ÷ 9 = 3760.0 Sq.Yds.

Sta. 13+55 to Sta. 17+00 = 345.0 Lin.Ft.  
 Width of Pavement = 31.5 Lin.Ft.  
 Area = (31.5 x 345) ÷ 9 = 1207.0 Sq.Yds.

Sta. 17+00 to Sta. 19+95.5 = 295.5 Lin.Ft.  
 Deduct for Railroads = 34.8 Lin.Ft.  
 = 260.7 Lin.Ft.  
 Width of Pavement = 32.5 Lin.Ft.  
 Area = (260.7 x 32.5) ÷ 9 = 941.0 Sq.Yds.

5148 Sq.Yds.	5148	Sq.Yds.
7061 Sq.Yds.	7061	Sq.Yds.
1050 Sq.Yds.	1050	Sq.Yds.
1136 Sq.Yds.	1136	Sq.Yds.
3760 Sq.Yds.	3760	Sq.Yds.
1207 Sq.Yds.	1207	Sq.Yds.
941 Sq.Yds.	941	Sq.Yds.
<b>Total Areas</b>	<b>6198</b>	<b>Sq.Yds.</b>

**T-35, 1" Thick.**  
 Area from Typical Sections = 20303 Sq.Yds.  
 Area from Extra Pavement = 2179 Sq.Yds.  
 Total Area = 22482 Sq.Yds.  
 Volume =  $\frac{22482 \times 1}{36}$  = 624 Cu.Yds.

**B-35, 1 1/4" Thick.**  
 Area from Typical Sections = 6198 Sq.Yds.  
 Volume =  $\frac{6198 \times 1 1/4}{36}$  = 215 Cu.Yds.

**B-35, 1 1/2" Thick.**  
 Area from Typical Sections = 14105 Sq.Yds.  
 Area from Extra Pavement = 1411 Sq.Yds.  
 Total Area = 15516 Sq.Yds.  
 Volume =  $\frac{15516 \times 1 1/2}{36}$  = 647 Cu.Yds.

Extra Leveling Material to correct weak areas (estimated) = 15 Cu.Yds.  
 Extra Leveling Material to correct surface irregularities (estimated) = 200 Cu.Yds.  
 Total = 1077 Cu.Yds.

**T-30, Tack Coat.**  
 Area from Typical Sections = 20303 Sq.Yds.  
 Area from Extra Pavement = 2179 Sq.Yds.  
 Total Area = 22482 Sq.Yds.  
 Deduct Resurfaced Area = 3241 Sq.Yds.  
 Total Area = 19241 Sq.Yds.  
 Volume = 19241 x 0.10 = 1,924 Gallons.

I-17,  $(522' \times 2 1/2' + 1') \times 3 \div 27 = 8.4 \text{ Cu.Yds} \times 115\% = 10 \text{ Cu.Yds.}$   
 E-8, Removal and disposal of Existing Wearing Surface. Sheet No. 5 32 Sq.Yds. Sheet No. 8 160 Sq.Yds. Total 192 Sq.Yds.  
 E-8 Removal and disposal of Existing Brick Surface. Sheet No. 8 20 Sq.Yds.

# EXTRA PAVEMENT P" S.H. 4

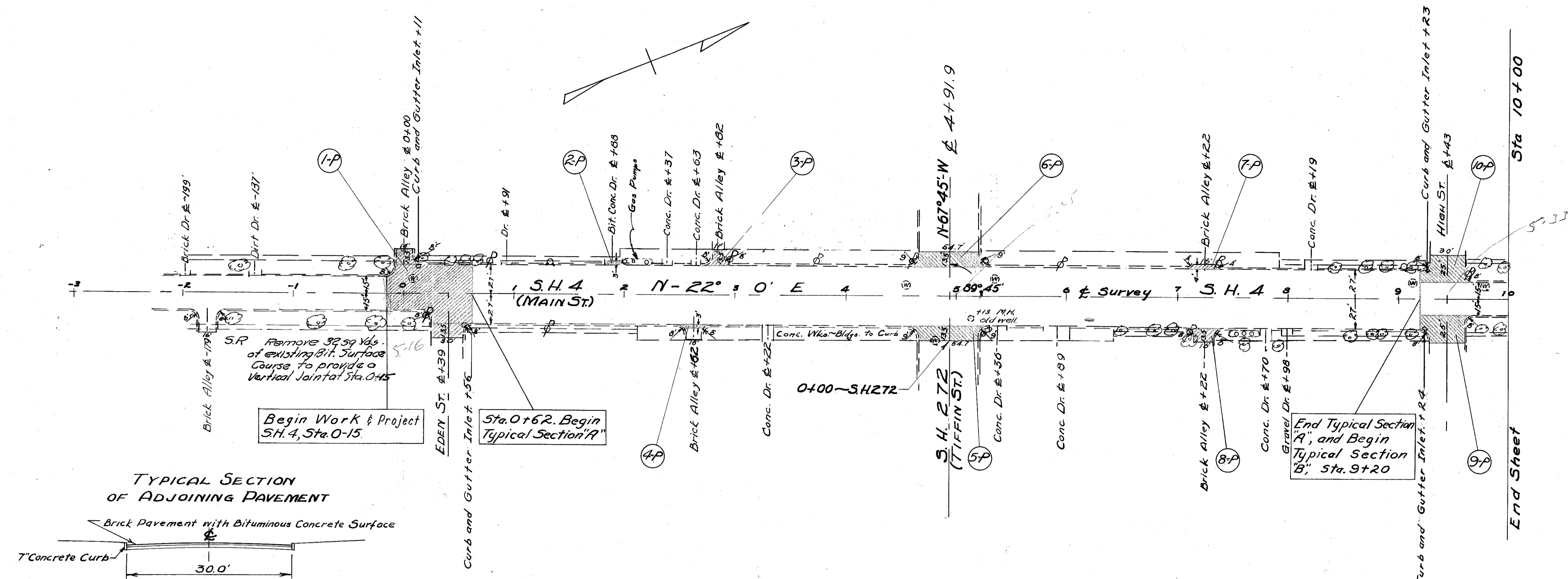
SHEET		T-30 Sq.Yds.	T-35 Sq.Yds.	B-35 Sq.Yds.
5	1-P	482	482	426
5	2-P	5	5	0
5	3-P	20	20	10
5	4-P	8	8	0
5	5-P	86	86	86
5	6-P	86	86	43
5	7-P	8	8	0
5	8-P	27	27	14
5	9-P	95	95	70
5	10-P	95	95	70
6	11-P	48	48	25
6	12-P	116	116	73
6	13-P	37	37	20
6	14-P	48	48	25
6	15-P	59	59	31
6	16-P	59	59	31
6	17-P	59	59	31
7	18-P	45	45	24
7	19-P	51	51	26
7	20-P	65	65	34
7	21-P	65	65	34
7	22-P	48	48	26
7	23-P	48	48	26
7	24-P	59	59	31
7	25-P	41	41	21
<b>S.H. 272</b>				
8	1-P	28	28	16
8	2-P	29	29	17
8	3-P	77	77	42
8	4-P	71	71	39
8	5-P	20	20	11
8	6-P	20	20	11
8	7-P	44	44	23
8	8-P	32	32	19
8	9-P	22	22	12
9	10-P	24	24	12
9	11-P	3	3	2
9	12-P	8	8	8
9	13-P	41	41	22
<b>TOTALS</b>		<b>2179</b>	<b>2179</b>	<b>1411</b>

# RESETTING CASTINGS

STA.	SIDE	DESCRIPTION
<b>S.H. 4</b>		
0+07	Lt.	Manhole (water) Reset
0+11	Lt.	Curb and Gutter Inlet, Raise Grade.
0+56	Rt.	Curb and Gutter Inlet, Raise Grade.
4+51	Lt.	Manhole (Water) Reset
4+76	Rt.	Manhole (Water) Reset
5+13	Rt.	Manhole (Water) Reset
5+32	Lt.	Manhole (Water) Reset
9+11	Lt.	Manhole (Water) Reset
9+23	Lt.	Curb and Gutter Inlet, Raise Grade.
9+24	Rt.	Curb and Gutter Inlet, Raise Grade.
9+77	Lt.	Manhole (Water) Reset.
11+16	Rt.	2 Pool Grates, Reset.
11+33	Lt.	Curb and Gutter Inlet
11+67	Rt.	Manhole (Storm Sewer) Reset
11+69	Rt.	Curb and Gutter Inlet, Raise Grade.
14+01	Lt.	Curb and Gutter Inlet, Raise Grade.
16+05	Rt.	Curb and Gutter Inlet, Raise Grade.
24+48	Lt&Rt.	Curb and Gutter Inlets, Raise Grade.
24+92	Lt.	Water Valve Box, Reset by Village.
28+62	Lt.	Curb and Gutter Inlet, Raise Grade.
30+35	Rt.	Curb and Gutter Inlet, Raise Grade.
<b>S.H. 272</b>		
0+3	Rt.	Curb and Gutter Inlet, Raise Grade.
8+53	Lt&Rt.	Curb and Gutter Inlets, Raise Grade.
13+47	Lt.	Curb and Gutter Inlet, Raise Grade.
13+88	Rt.	Manhole (water) Reset.
15+96	Lt&Rt.	Curb and Gutter Inlets, Raise Grade.
<b>TOTALS:</b>		Manholes adjusted to grade. 9 Curb and Gutter Inlet Grates to be reset 17 Pool Grate Frames Adjusted to grade 2

# GENERAL SUMMARY

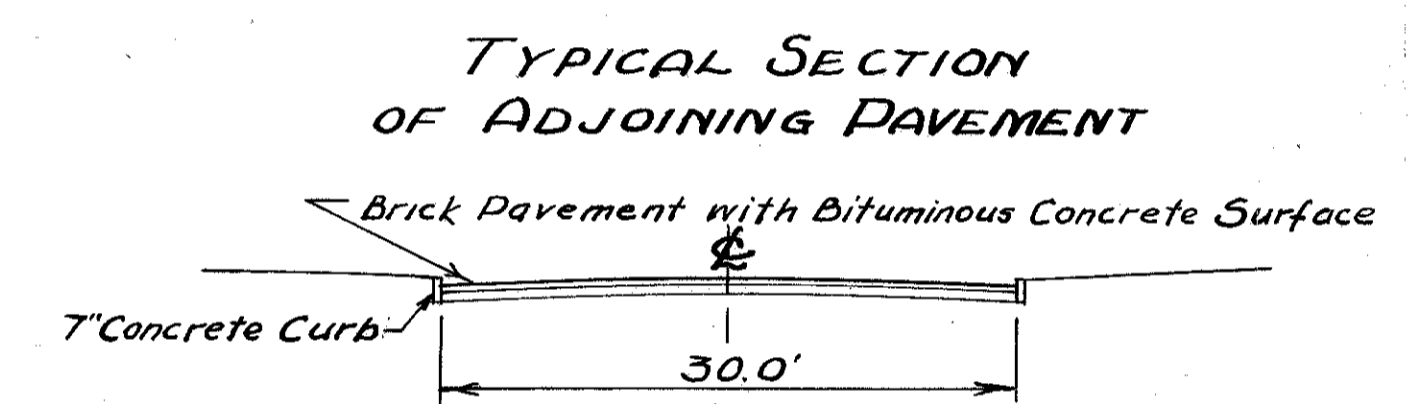
Item	Quantity	Unit	Description
E-8	192	Sq.Yds.	Removal and disposal of existing Bituminous Surface.
E-8	20	Sq.Yds.	Removal and disposal of existing Brick Surface.
I-8	9	each	Resetting Manholes
I-8	17	each	Curb Inlet (Grates only) Reset
I-8	2	each	Pool Grate Frames Reset
I-17	10	Cu.Yds.	Side Approaches, Mail Box Turnouts, and Berm Material.
T-30	1924	Gallons	Bituminous Tack Coat, using Bituminous Material Sec. M-5.5, MS-1 applied at the rate of 0.10 gallons per sq.yd. including 2 to 5 lbs sand cover per sq.yd.
T-35	624	Cu.Yds.	Asphaltic Concrete Surface Course, Type "C"
B-35	1077	Cu.Yds.	Asphaltic Concrete Leveling Course.
Lump	Lump Sum		Maintaining Traffic, including Lights, Signs, Barricades, and Watchmen, Twenty-Four Hour Service.



Begin Work & Project S.H. 4, Sta 0-15.

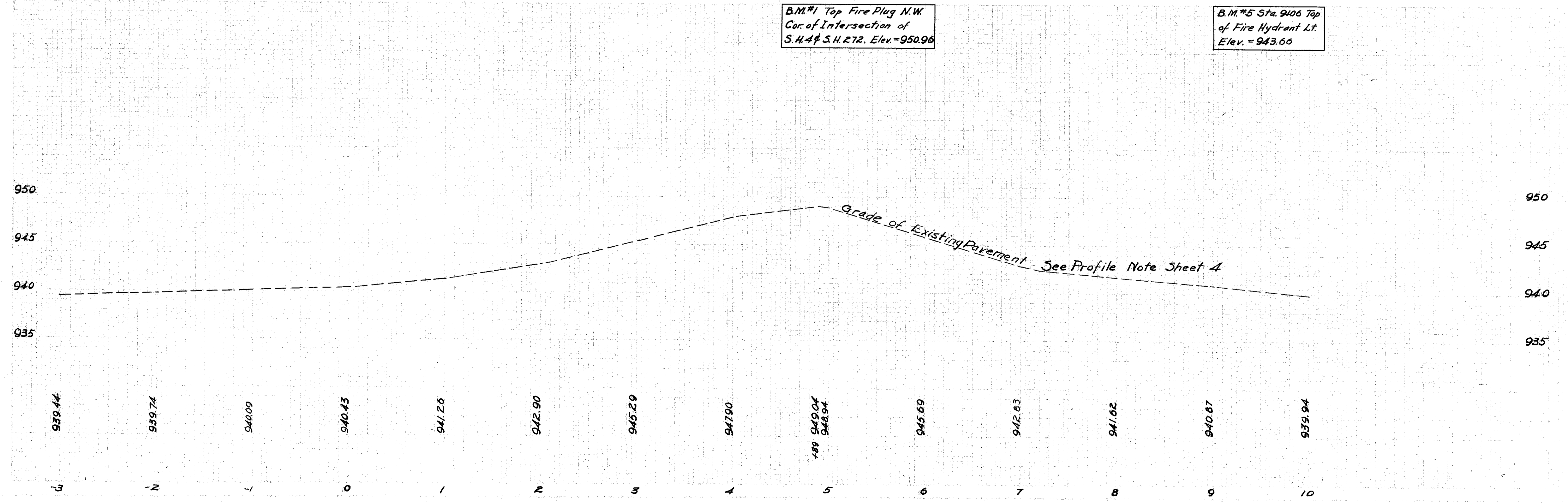
Sta 0+62. Begin Typical Section "A"

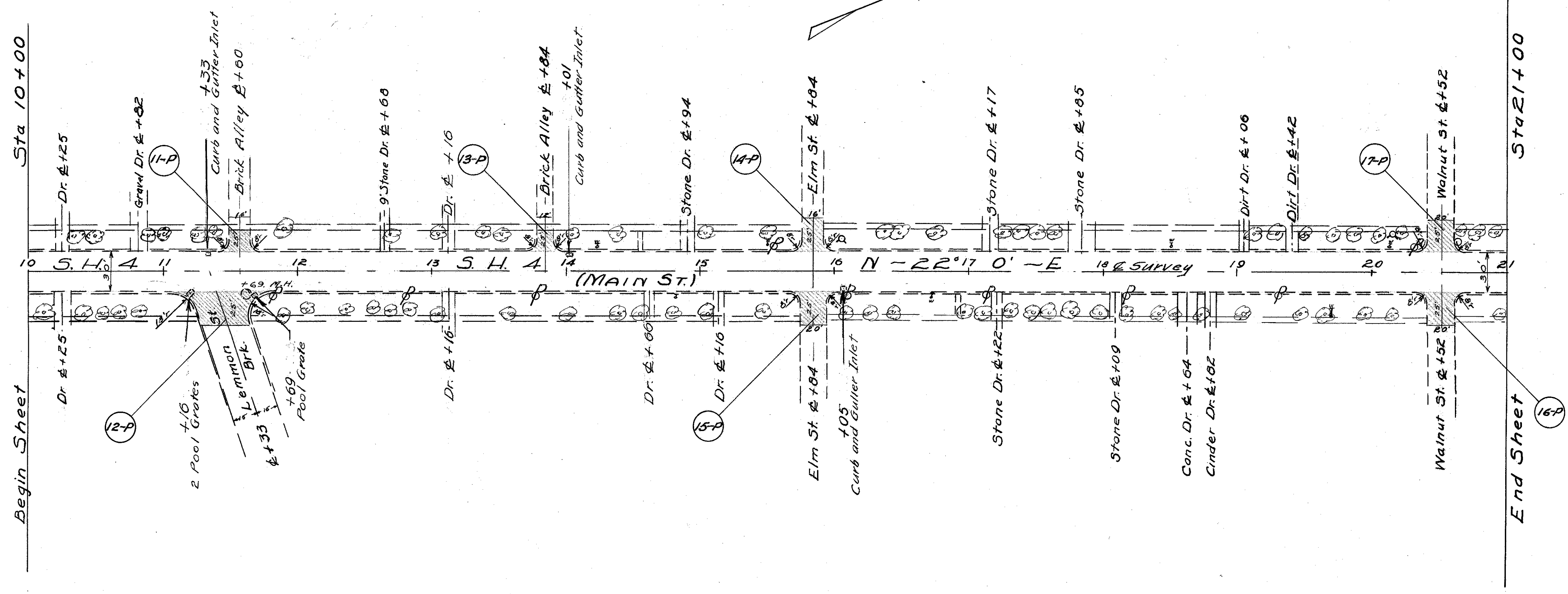
End Typical Section "A", and Begin Typical Section "B", Sta. 9+20



B.M.#1 Top Fire Plug N.W. Cor. of Intersection of S.H. 4 & S.H. 272. Elev. = 950.96

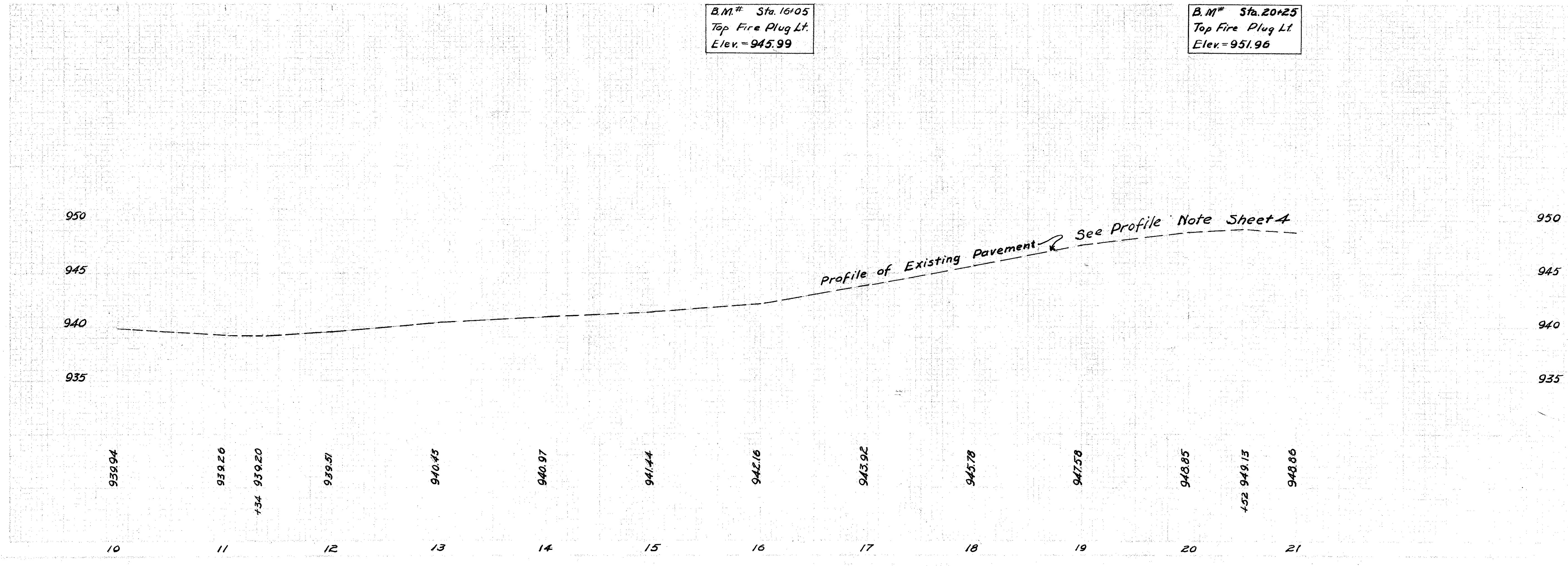
B.M.#5 Sta. 9406 Top of Fire Hydrant Lt. Elev. = 943.66



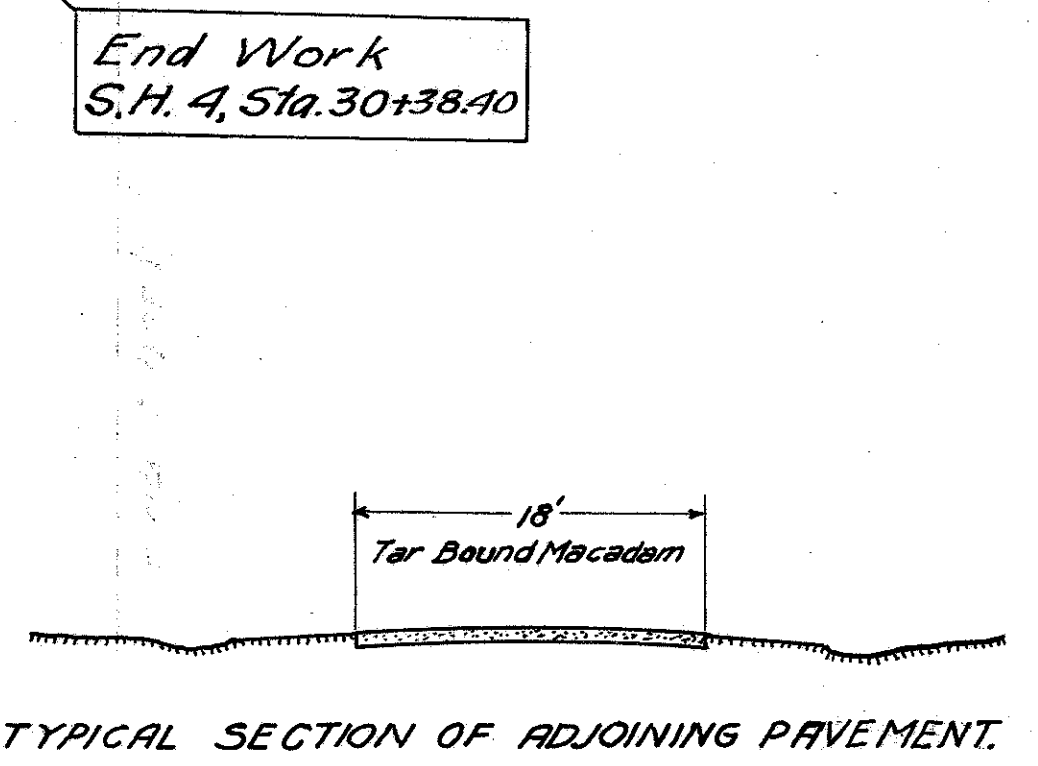
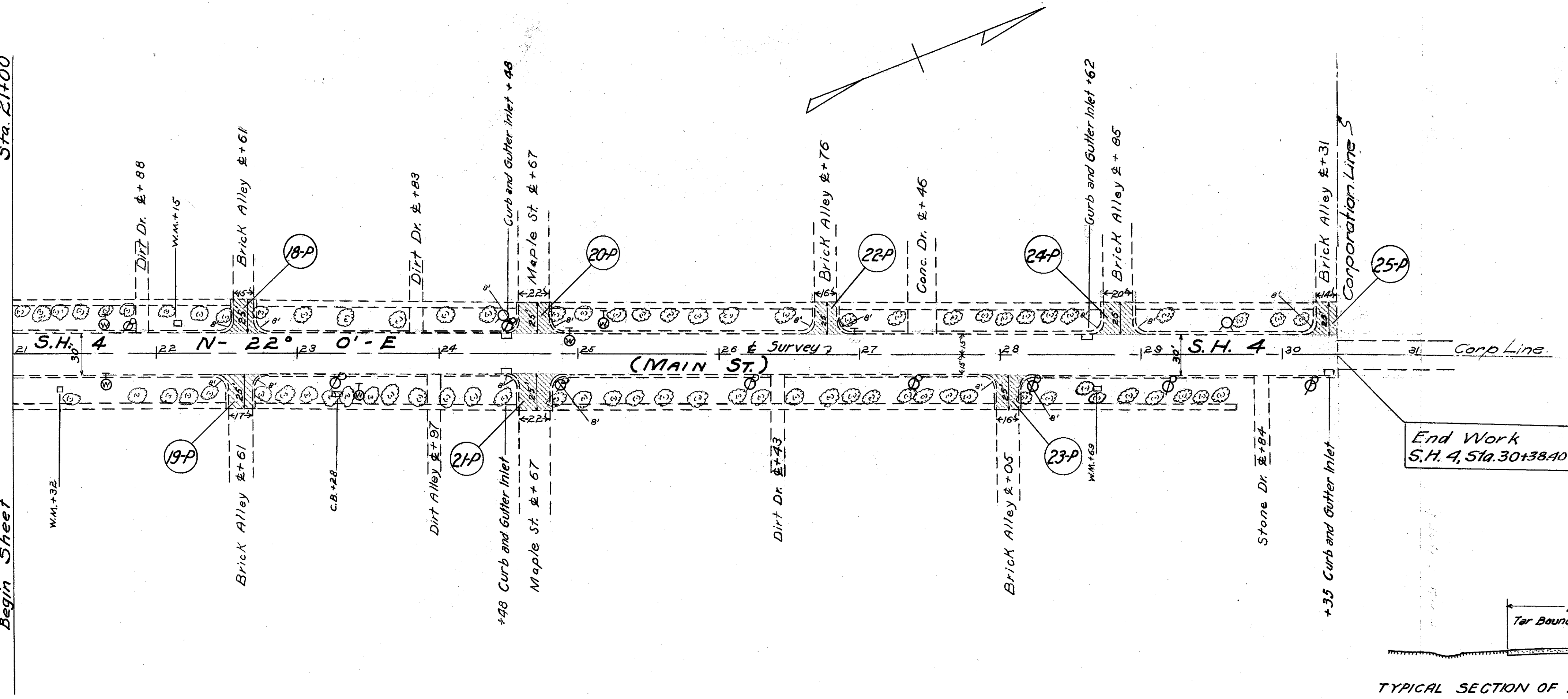


B.M.# Sta. 16+05  
 Top Fire Plug Lt.  
 Elev. = 945.99

B.M.# Sta. 20+25  
 Top Fire Plug Lt.  
 Elev. = 951.96

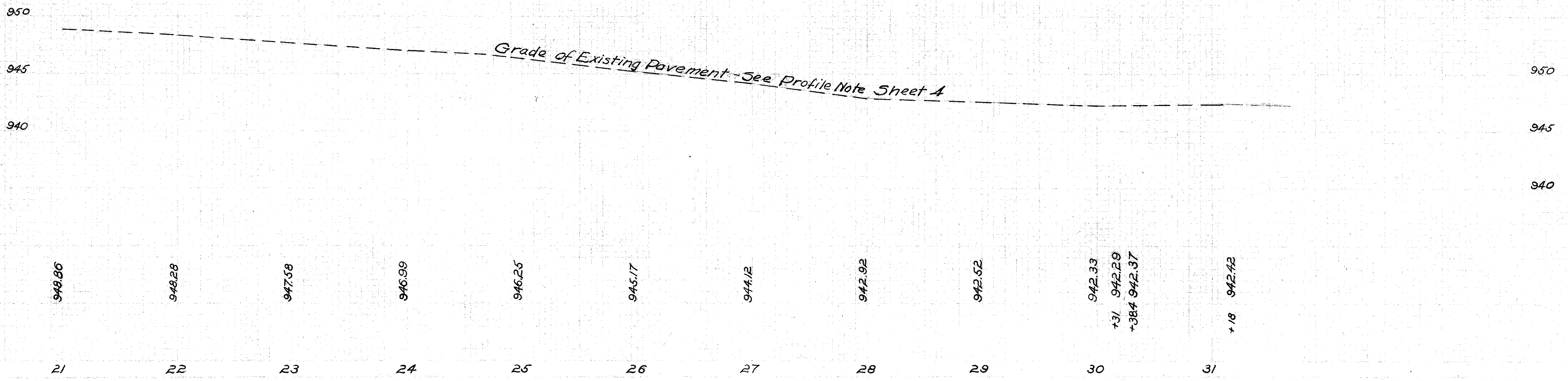


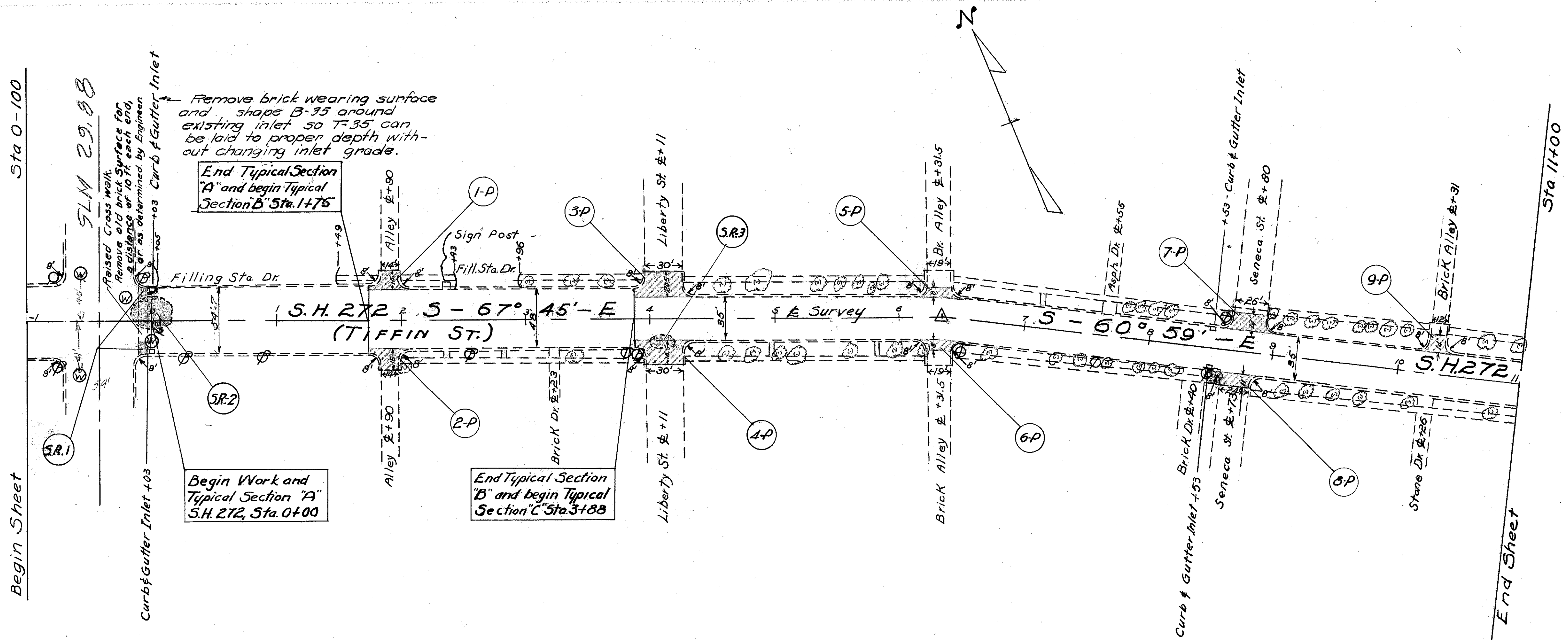
Sta. 21+00  
Begin Sheet



B.M.# Sta. 24+40  
Top Fire Plug Lt.  
Elev. = 950.17

B.M.# Sta. 29+61  
Top Fire Plug Lt.  
Elev. = 945.61





Remove brick wearing surface and shape B-35 around existing inlet so T-35 can be laid to proper depth without changing inlet grade.

End Typical Section "A" and begin Typical Section "B" Sta. 1+75

Begin Work and Typical Section "A" S.H. 272, Sta. 0+00

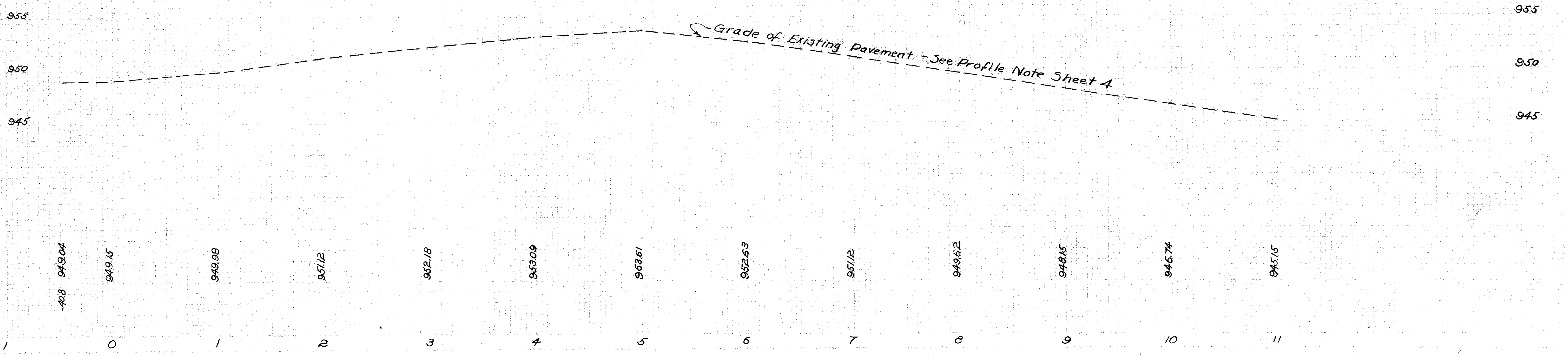
End Typical Section "B" and begin Typical Section "C" Sta. 3+88

**SURFACE REMOVAL "S.R."**

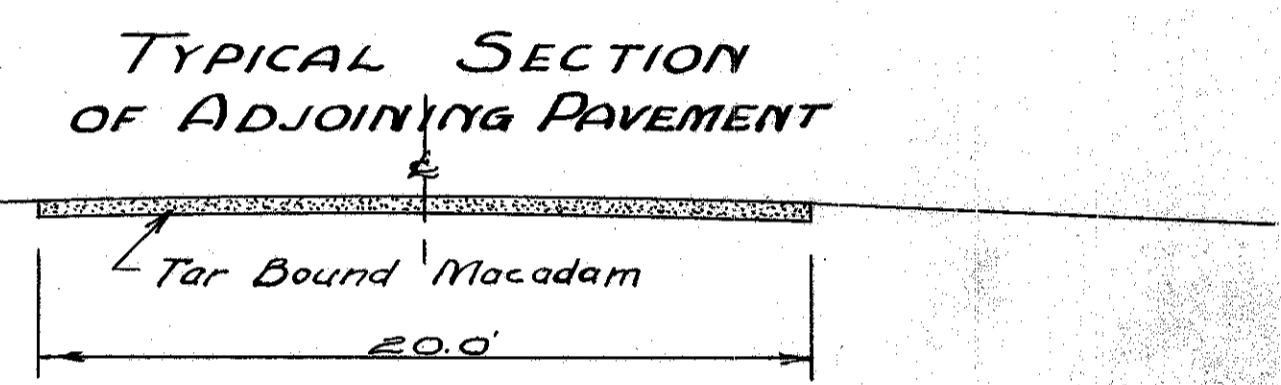
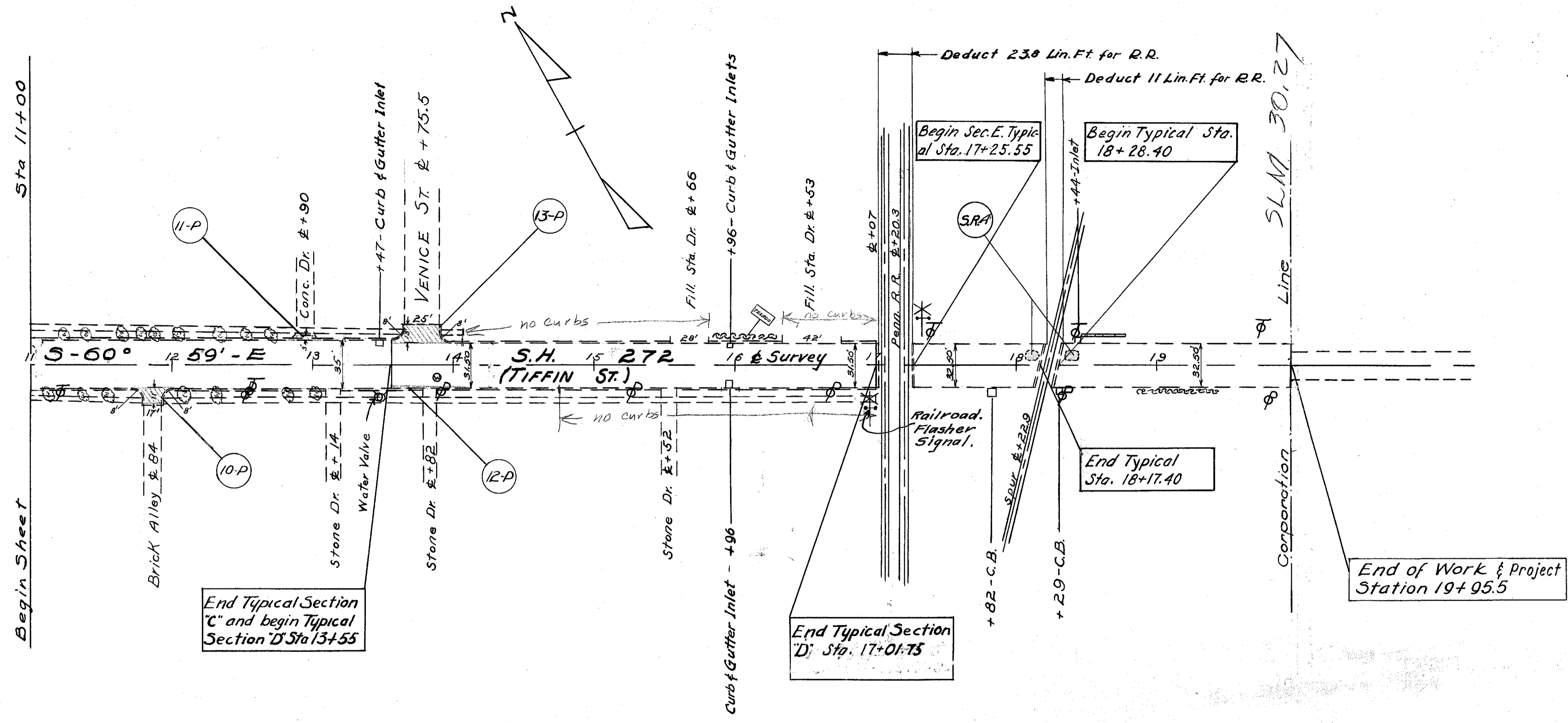
Ref. Sheet No.	Brick Surface Removal Sq. Yds.	Bituminous Mac. Removal Sq. Yds.
SR-1	20	
SR-2		114
SR-3		26
SR-4		20
Total	20	160

B.M.#1 Top of Fire Hydrant N.W. Cor. Intersection of S.H. 4 & S.H. 272. Elev. = 950.96

B.M.#2 Sta. 4+40 S.E. Cor. Bottom Step of Walk to House 38' Lt. Elev. = 954.66

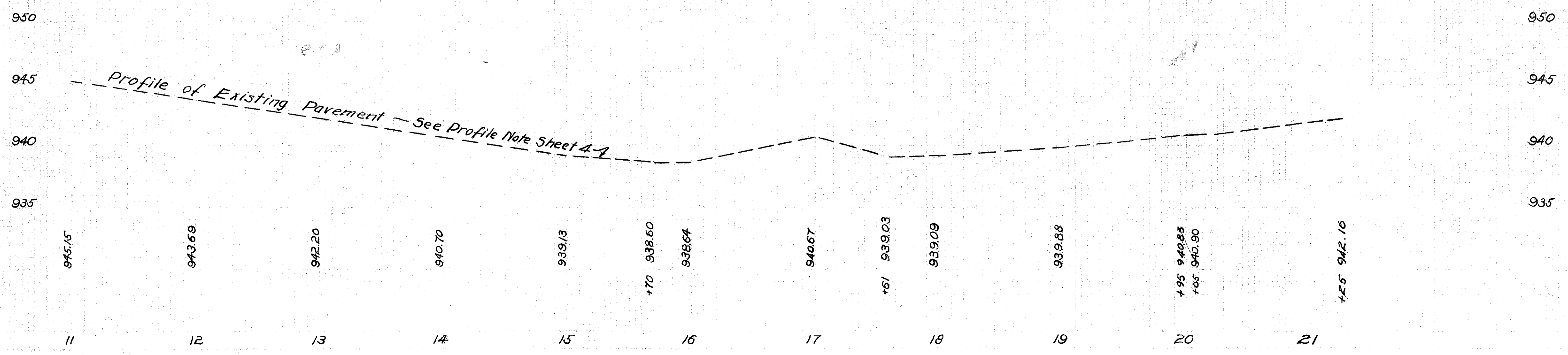






B.M.#3 Sta. 13+50  
 Top Fire Plug Rt.  
 Elev. = 942.40'

B.M.#4 Sta. 18+25 Top  
 Fire Plug 26'Rt.  
 Elev. = 941.38'



el. 4.82