

CONVENTIONAL SIGNS & ABBREVIATIONS

STATE LINE.....	-----	EXCAVATION.....	E
COUNTY LINE.....	-----	EMBANKMENT.....	F
TOWNSHIP LINE.....	-----	OVERHAUL.....	H
SECTION LINE.....	-----	SURFACING.....	S
CITY, VILLAGE, OR BOROUGH.....	-----	GUARD RAIL.....	GR
FENCE LINE.....	-----	INTERSECTION ANGLE.....	A
RIGHT-OF-WAY LINE.....	-----	RADIUS.....	R
TRAVELLED WAY.....	-----	ELEVATION.....	EI
RAILROADS.....	-----	VERTICAL CURVE.....	VC
RETAINING WALL.....	-----	BENCH MARK.....	B.M.
BASE OR SURVEY LINE.....	-----	SECTIONAL CONCRETE CULVERT.....	P.C.
LEVEE.....	-----	CORRUGATED METAL CULVERT.....	C.M.
GRAVEL PIT.....	-----	CULVERT HAUL.....	P.L.H.
SAND PIT.....	-----	TON MILES.....	T.M.
CLAY PIT.....	-----	PLACE.....	P
ROCK QUARRY.....	-----	IN PLACE.....	Inp.
CULVERTS.....	-----	REPLACE.....	Rep.
PLAIN.....	-----	RIGHT.....	R
WITH FACEWALLS.....	-----	LEFT.....	L
WITH WINGWALLS.....	-----	HAND DITCHING.....	H.D.
DROP INLET.....	-----	POINT OF CURVE.....	P.C.
POWER POLE LINE.....	-----	POINT OF TANGENT.....	P.T.
TELEPHONE OR TELEGRAPH LINE.....	-----	POINT OF INTERSECTION.....	P.I.
MARSH.....	-----	SPECIAL EXCAVATION.....	S.E.
HEDGE, BRUSH, OR TIMBER.....	-----	SPECIAL FLOWING.....	S.P.
GROUND ELEVATION.....	-----	TELEPHONE POLE.....	Tel.P.
GRADE ELEVATION.....	-----		

OFFICE OF COUNTY SURVEYOR
RAMSEY COUNTY

Plan and Profile of County Road "C"

A point on the North line of Sec. 7, 1283.67 Ft. A point on the East line of Sec. 4, 120.5 Ft.
From West of the N.E. Cor. of Sec. 7 T. 29 N. R. 23 W. To North of the S.E. Cor. of Sec. 4 T. 29 N. R. 23 W.
MINNESOTA - A1 - F.A.S. NO. 200A (1)

GROSS LENGTH 11820.44 FEET 2.239 MILES
LENGTH OF EXCEPTIONS FEET MILES
NET LENGTH 11820.44 FEET 2.239 MILES

PLAN, 1 Inch = 100 Feet
PROFILE, Horz. 1 Inch = 100 Feet, Vert. 1 Inch = 10 Feet
WORKING PLANS { Horz. 1 Inch = 100 Feet
Vert. 1 Inch = 10 Feet
Cross-Sections, 1 Inch = 10 Feet

LAYOUT
SCALE, 1 Inch = 2640 Feet

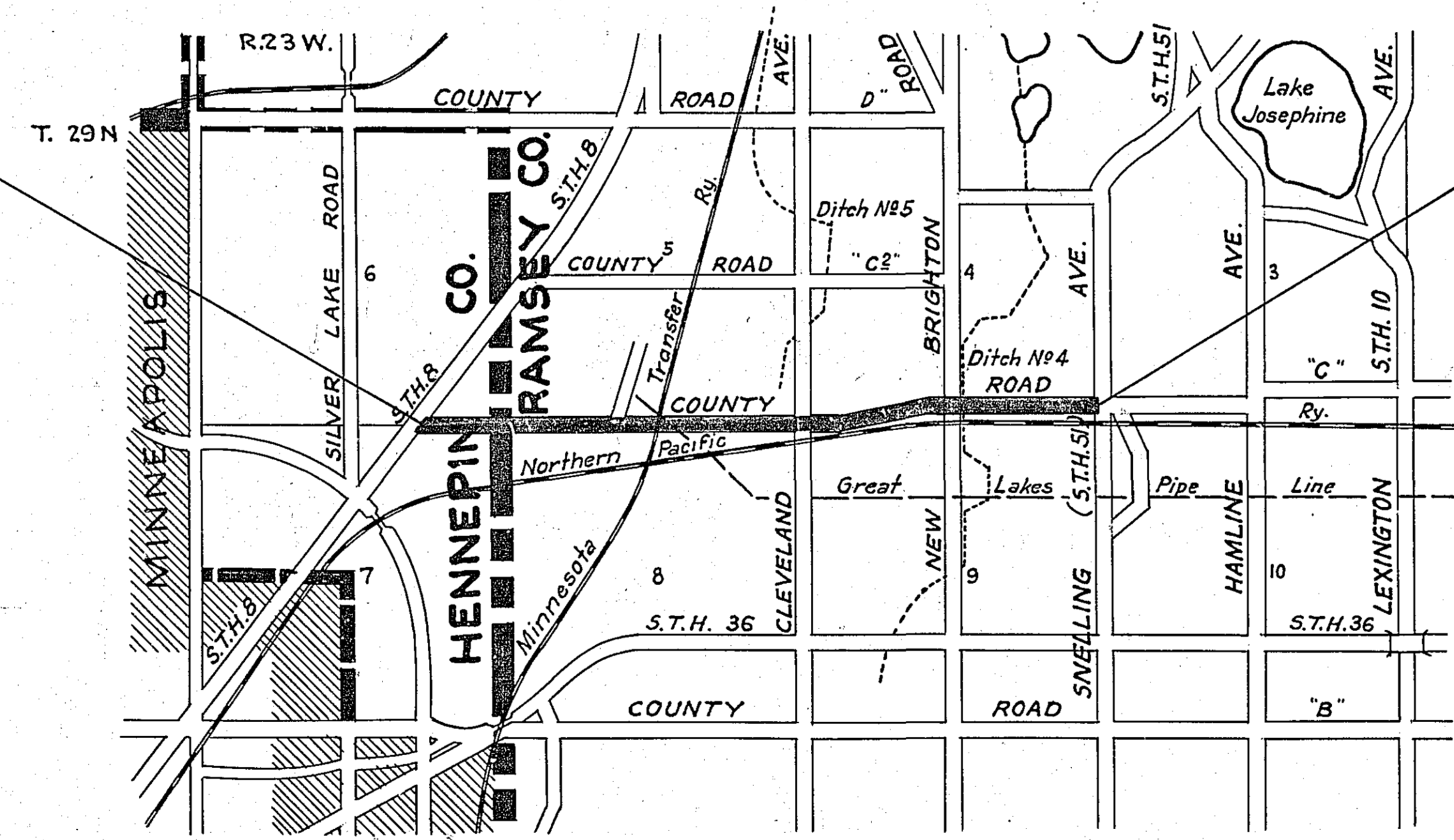
SPECIFICATIONS

The "Specifications for Highway Construction" dated July 1, 1936, and Supplement No. 3 approved by the Public Roads Administration Nov. 15, 1939 as modified by Supplement No. 4, dated March 1, 1940 shall govern.

INDEX OF SHEETS

DESCRIPTION	SHEET NO.
Title Sheet & Layout Map.....	1
Estimate & Typical Sections.....	2
Intersections & Joint Details.....	3
Manhole Details.....	4
Plan & Profile.....	5 to 7
Cross-Sections.....	8 to 23

BEG. CO. RD. "C" - F.A.S. 200 A (1)
STA. 0+17.6



END CO. RD. "C" - F.A.S. 200 A (1)
STA. 105+54.37

Right of Way Approval *S. R. Green* 6-25-1942
ENGINEER OF LANDS & RIGHT OF WAY

Recommended for Approval *H. E. Colvard* 6-22-1942
DISTRICT ENGINEER

Recommended for Approval *F. J. Quinn* 6-23-1942
ENGINEER OF SURVEYS & DESIGN

Recommended for Approval *O. L. Kipp* 6-24-1942
ASS'T. CHIEF ENGINEER & PLANNING ENGINEER

Approved 6-24-1942 *J. J. Quinn*
CHIEF ENGINEER

RECOMMENDED FOR APPROVAL

DISTRICT ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

Planned By *A. D. Crampton*
ASSISTANT ENGINEER

Approved *June 15, 1942*
COUNTY SURVEYOR
RAMSEY COUNTY

Approved *June 22, 1942*
CHAIRMAN OF RAMSEY COUNTY BOARD

Approved *6/22 1942 W. E. Dushett*
HENNEPIN COUNTY HIGHWAY ENGINEER

APPROVED

COMMISSIONER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

3334

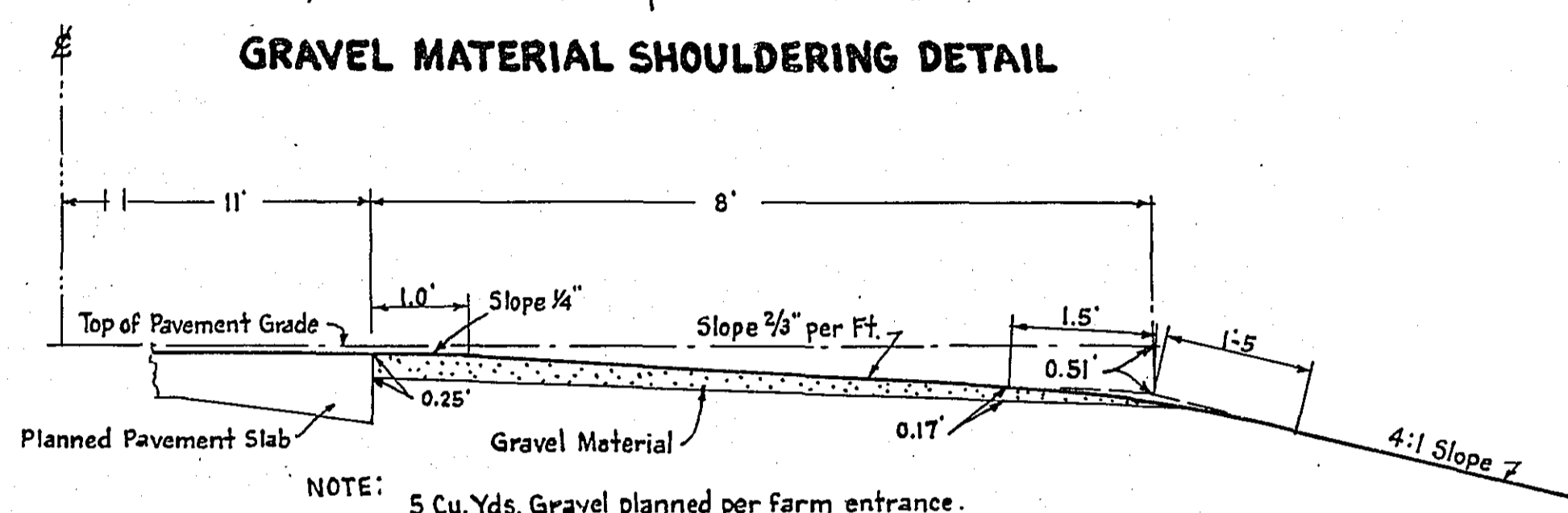
ESTIMATED QUANTITIES

SPECIFICATION NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
2101 . 4A2	Clearing	Tree	64
2102 . 4B	Grubbing	Tree	72
2101 . 4A1	Clearing	Acre	0.3
2102 . 4A	Grubbing	Acre	0.3
2103 . 4	Removing Portable Culverts	Lin. Ft.	584
2104 . 4J	Remove Fence	Lin. Ft.	8041
2105 . 4C	Excavation - Class "C"	Cu. Yd.	50776
2116 . 5E6	Drain Tile 6"	Lin. Ft.	90
2116 . 5J	Sand-Gravel Fill in Place	Cu. Yd.	1588
2417 . 5C24	Furnishing and Installing 24" S.C. Pipe Culverts (non-reinforced)	Lin. Ft.	444
2417 . 5E24	Relaying 24" S.C. Pipe Culverts	Lin. Ft.	62
2418 . 5E12	Relaying 12" C.M. Pipe Culverts	Lin. Ft.	132
2418 . 5E15	Relaying 15" C.M. Pipe Culverts	Lin. Ft.	107
2524 . 5A1a	Trench Excavation - 0 to 6' deep	Lin. Ft.	184
2524 . 5A1b	Trench Excavation - 0 to 10' deep	Lin. Ft.	392
2524 . 5D4-18	Furnishing and Installing 18" Clay Sewer Pipe	Lin. Ft.	576
2568 . 5	Federal Project Field Marker	Marker	2
2576 . 5A	Area Sodding (Culvert Ends)	Sq. Yd.	223
101	Replace Fence	Lin. Ft.	7949
109	Remove Old Bituminous Surface	Sq. Yd.	7494
160 . 5D	Construct Manhole	Each	2
2120 . 5L1	Gravel Material in Place (Shoulders and Entrances)	Cu. Yd.	1438
2120 . 5M	Water (See Special Provisions)	M. Gal.	28
2391 . 5B	One Course Concrete Pavement	Sq. Yd.	29328
2391 . 5G	Foundation Headers	Each	4
2391 . 5I	Temporary Crossing	Crossing	1
2203 . 5P1	Stabilized Gravel Base in Place	Cu. Yd.	71
2203 . 5L	Water	M. Gal.	2
2321 . 5A	Bituminous Material for Prime Coat (RT-2 or M.C.O.)	Gal.	255
2321 . 5B	Bituminous Material for Wearing Course, Tack Coat and Fog Seal (Road Tar RL6W)	Gal.	1148
2321 . 5D	Mineral Aggregate for Wearing Course	Ton	64
2321 . 5F	Wearing Course	Sq. Yd.	850

STANDARD DETAILS	PLATE NO.
Terminal Header	1021
Method of Forming Traffic Marker at Longitudinal Construction Joints	1058
Keyed Joint and Alternate Metal Forms	1059 & 1060
Federal Project Field Marker	3080
Temporary Crossings	1063
Cast-in-Place Concrete Railway Crossing	1064
Paving Equipment	1550 to 1517 & 1519 to 1623 Incl.
Sectional Concrete Culvert Pipe	2007 & 2008
Sodding at Culvert Ends	3093

NOTE: Plates No 1058 and No 1060 shall apply to this project except that there shall be no tie bars in the Keyed Joint. Plates No 1514 and No 1515 shall apply to this project insofar as the details of the construction of the Hand Strike Off Board, and the Scratch Template are concerned.

GRAVEL MATERIAL SHOULDERING DETAIL

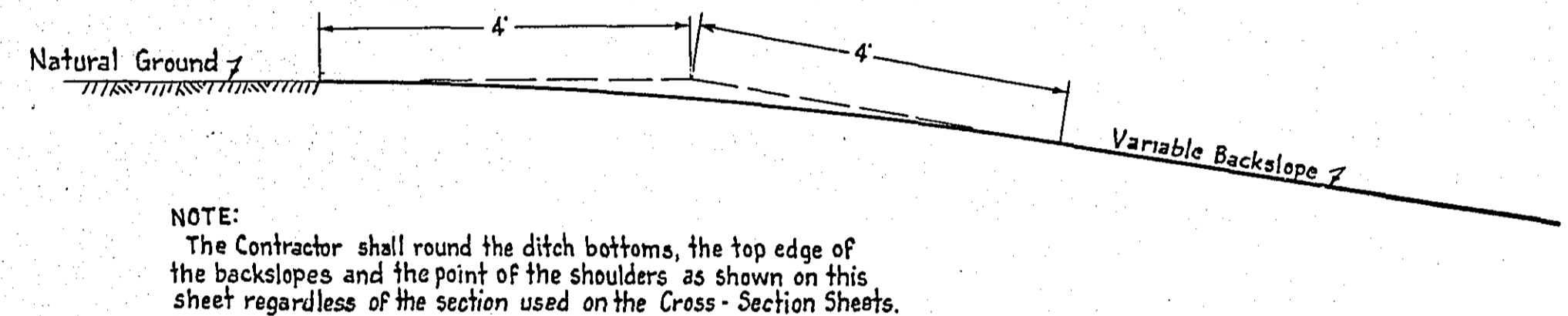


STABILIZED GRAVEL BASE
Stabilized Gravel Base estimated on basis of 40% Shrinkage
Water for Compaction estimated on basis of 20 Gals. per Cu. Yd.

SURFACED SHOULDERS
Gravel Material for Surfaced Shoulders estimated on basis of 35% Shrinkage.
Water for Compaction estimated on basis of 20 Gals. per Cu. Yd.

BITUMINOUS WEARING SURFACE.
Bituminous Material for Prime Coat (RT-2 or M.C.O.) estimated on basis of 0.3 Gals. per Sq. Yd.
Bituminous Material for Wearing Course (RT-6 or RT-7) estimated on basis of 1.15 Gals. per Sq. Yd.
Bituminous Material for Tack Coat (RT-6 or RT-7) estimated on basis of 0.1 Gal. per Sq. Yd.
Bituminous Material for Seal Coat-Fog (RT-6 or RT-7) estimated on basis of 0.1 Gal. per Sq. Yd.
Mineral Aggregate for Wearing Course estimated on basis of 150 Lbs. per Sq. Yd.

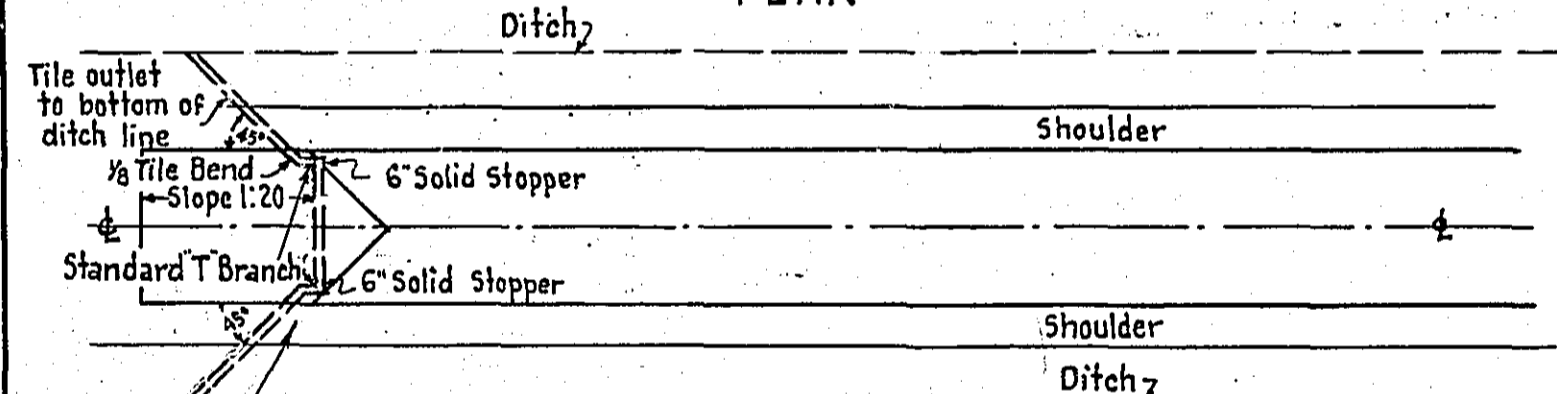
SLOPE ROUNDING DETAIL



SUBGRADE TREATMENT

Sta. 85+50 To Sta. 88+00

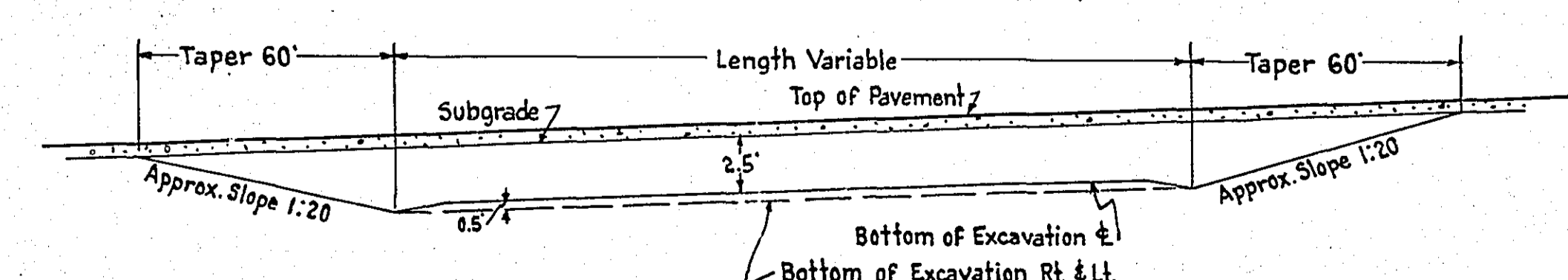
PLAN



Note: Use Tile Hoe to form a shallow trench permitting a bed of sand backfill under the tile.

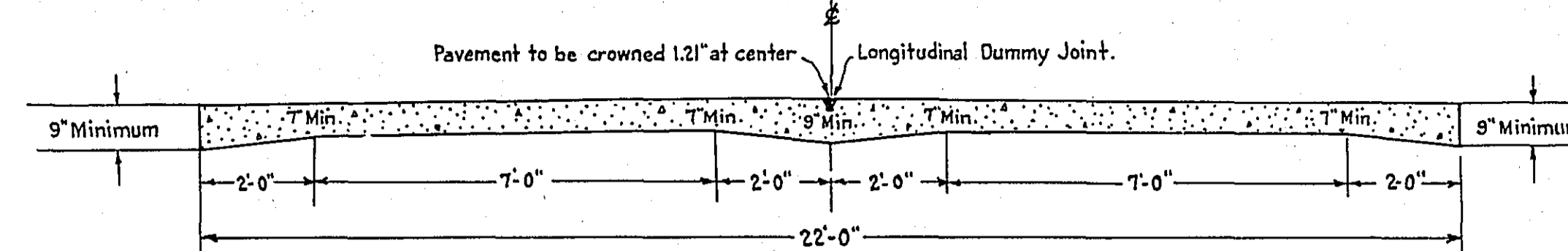
SUBCUT

GENERAL LONGITUDINAL SECTION ON E OF SUBCUT

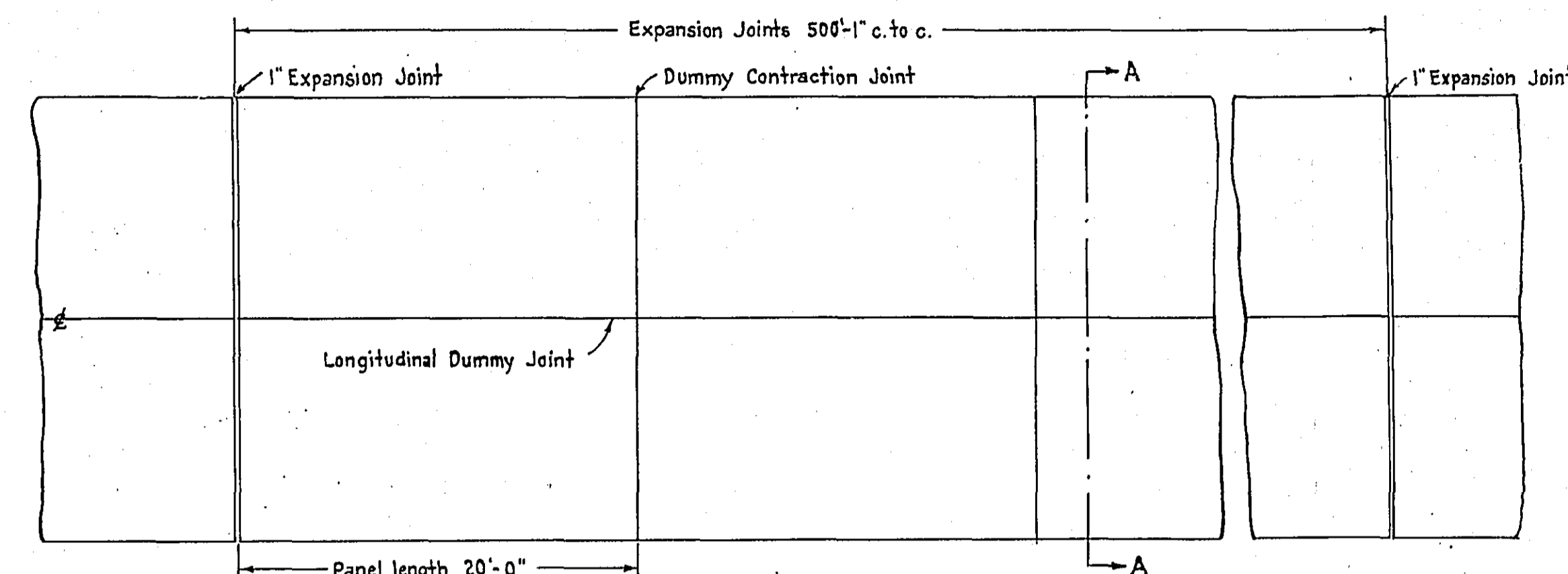


NOTE: For Cross-Section of Subcut see Grading Section to the Right. Excavated Material From Subcuts to be placed in Embankment outside of Roadbed.

TYPICAL PAVING SECTION SECTION A-A



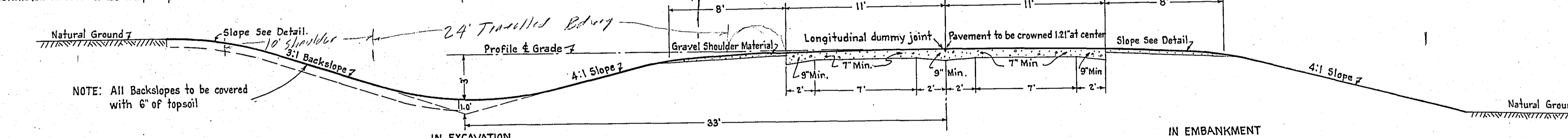
PLAN



TYPICAL GRADING SECTION

This Section to be used on the entire project except where Widening and Daylight Sections occur as shown in the Grading Sections below.

NOTE: Railroad Crossings to be poured in place See Standard Detail Plate No 1064 Design Speed 50 Miles per hour

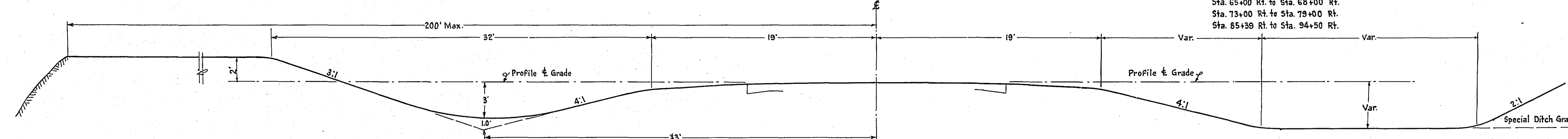


DAYLIGHT SECTION

Sta. 51+50 Lt. to Sta. 52+62 Lt.

GRADING SECTION

SHOWING DAYLIGHTING & SPECIAL SECTIONS

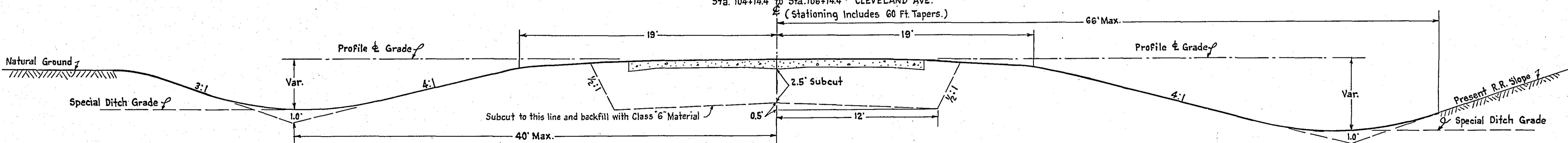


SPECIAL SECTION

Sta. 63+50 Lt. to Sta. 67+50 Lt.

GRADING SECTION

SHOWING SPECIAL & SUBCUT SECTIONS



SPECIAL SECTION

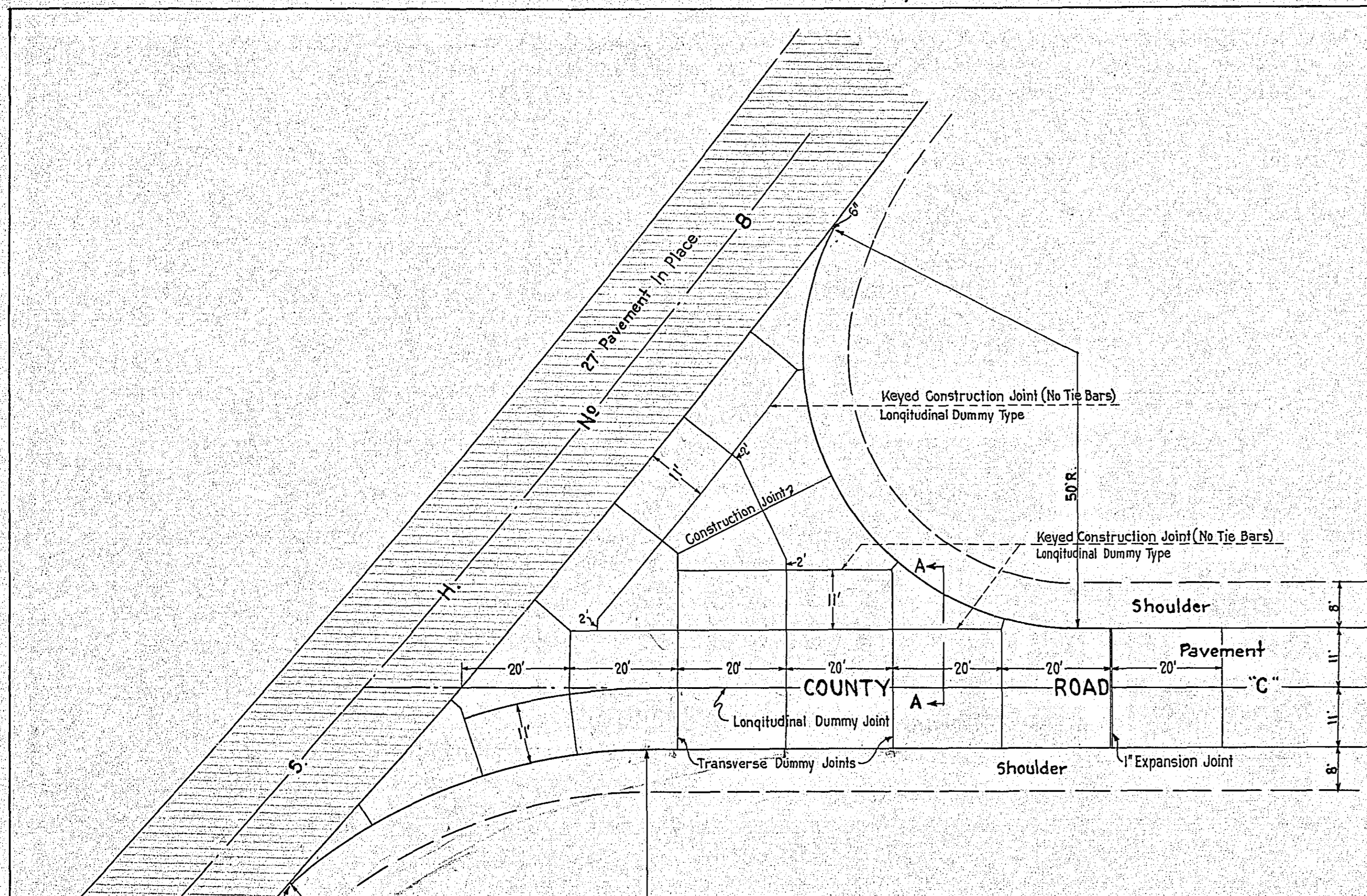
Sta. 53+46 Rt. to Sta. 55+63 Rt.
Sta. 56+82 Rt. to Sta. 62+00 Rt.
Sta. 65+00 Rt. to Sta. 68+00 Rt.
Sta. 73+00 Rt. to Sta. 79+00 Rt.
Sta. 85+39 Rt. to Sta. 94+50 Rt.

SUBCUT SECTION

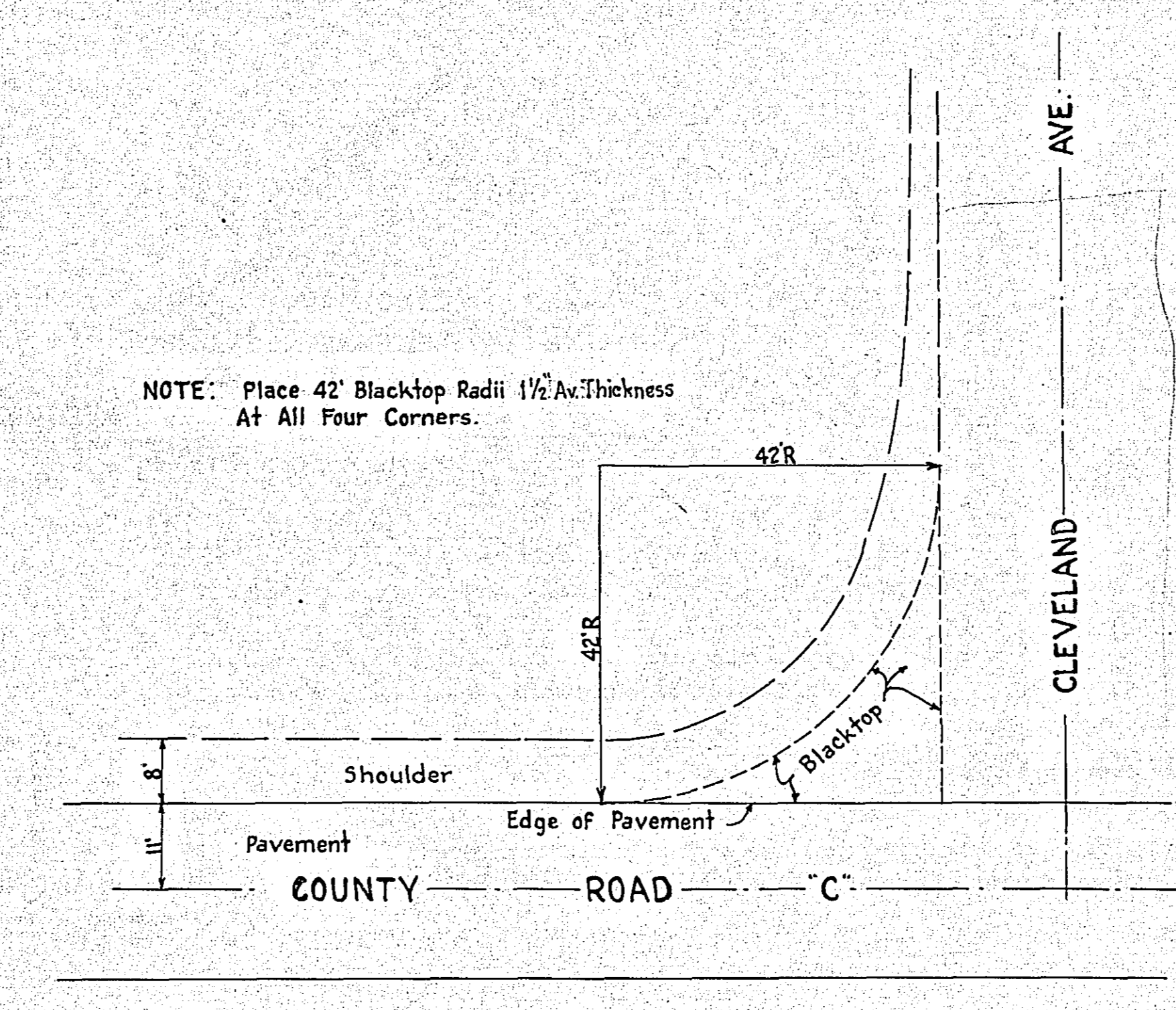
Sta. 50+90 to Sta. 54+10 } COUNTY ROAD "C"
Sta. 84+90 to Sta. 88+60 }
Sta. 104+144 to Sta. 106+144 } CLEVELAND AVE.
(Stationing includes 60 Ft. Tapers.)

SPECIAL SECTION

Sta. 81+50 Rt. to Sta. 85+00 Rt.

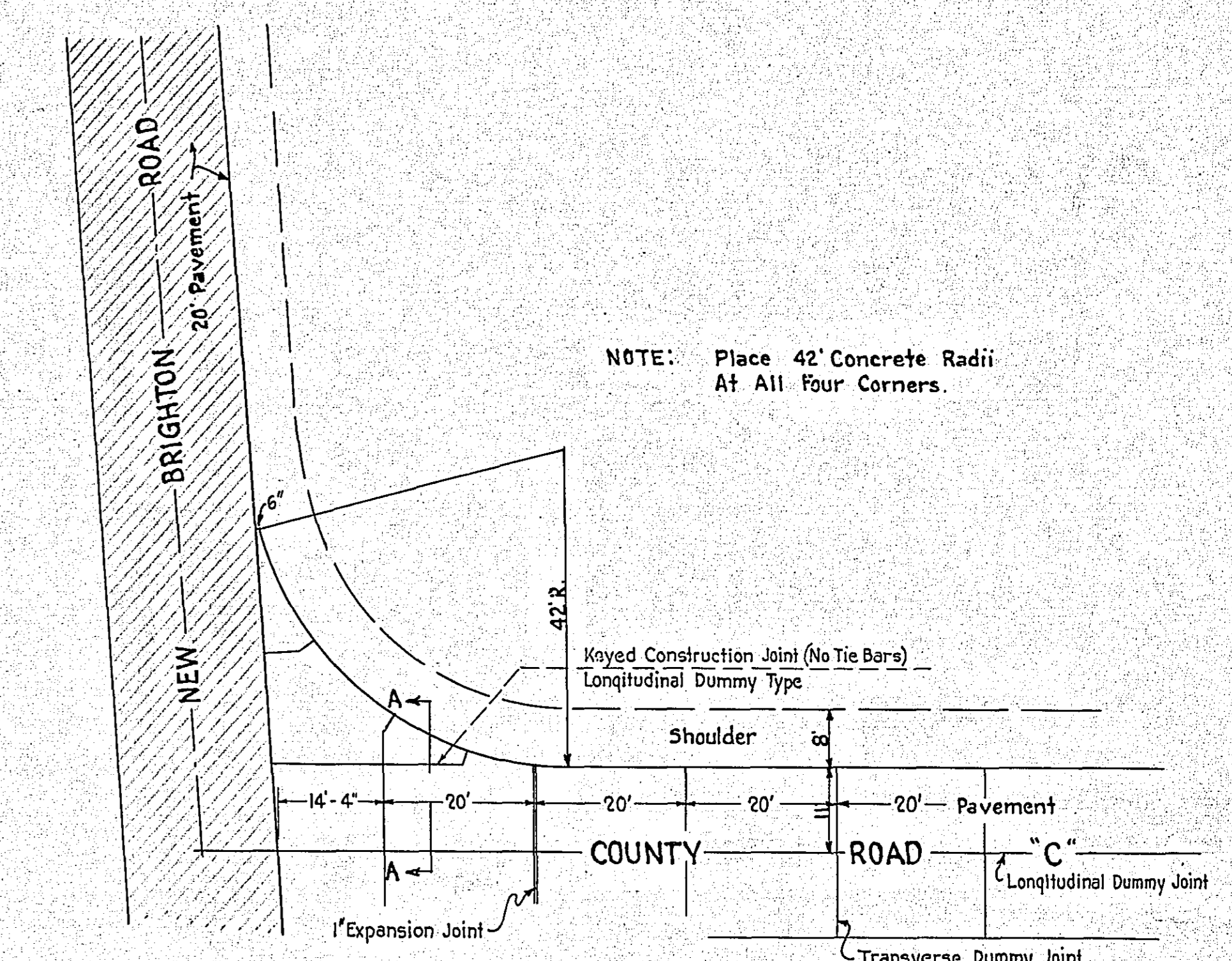


INTERSECTION AT U. S. HWY. NO 8



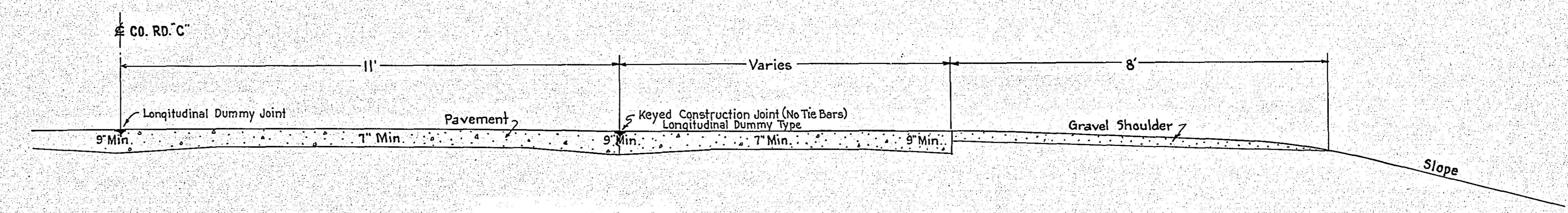
NOTE: Place 42' Blacktop Radii 1 1/2" Av. Thickness At All Four Corners.

INTERSECTION AT CLEVELAND AVENUE

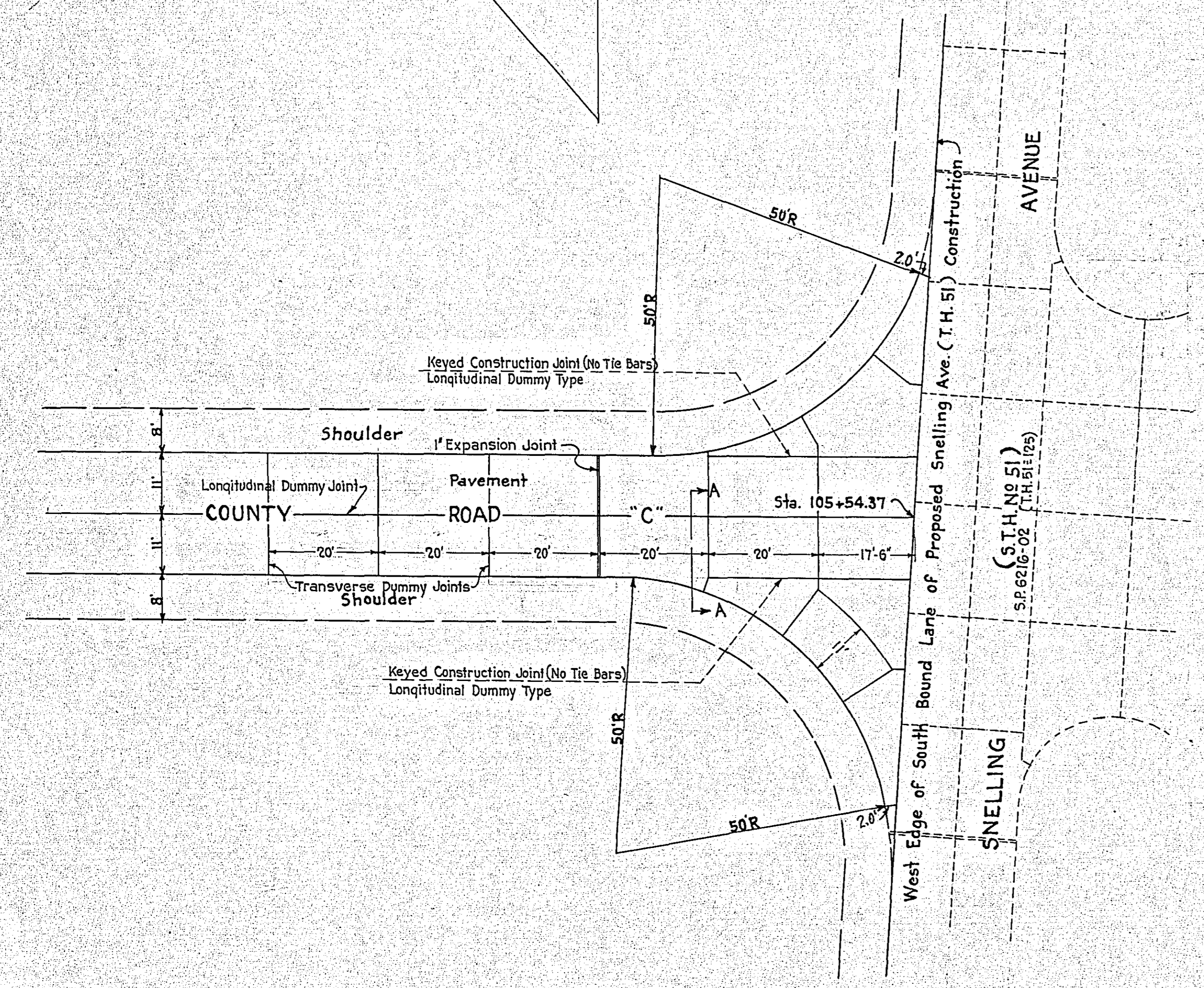


NOTE: Place 42' Concrete Radii At All Four Corners.

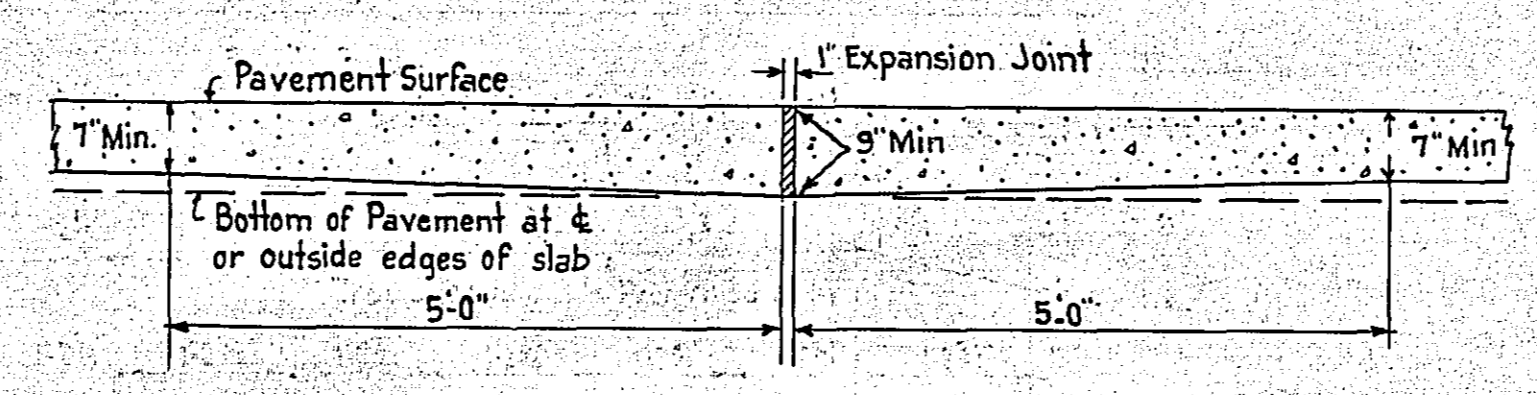
INTERSECTION AT NEW BRIGHTON ROAD



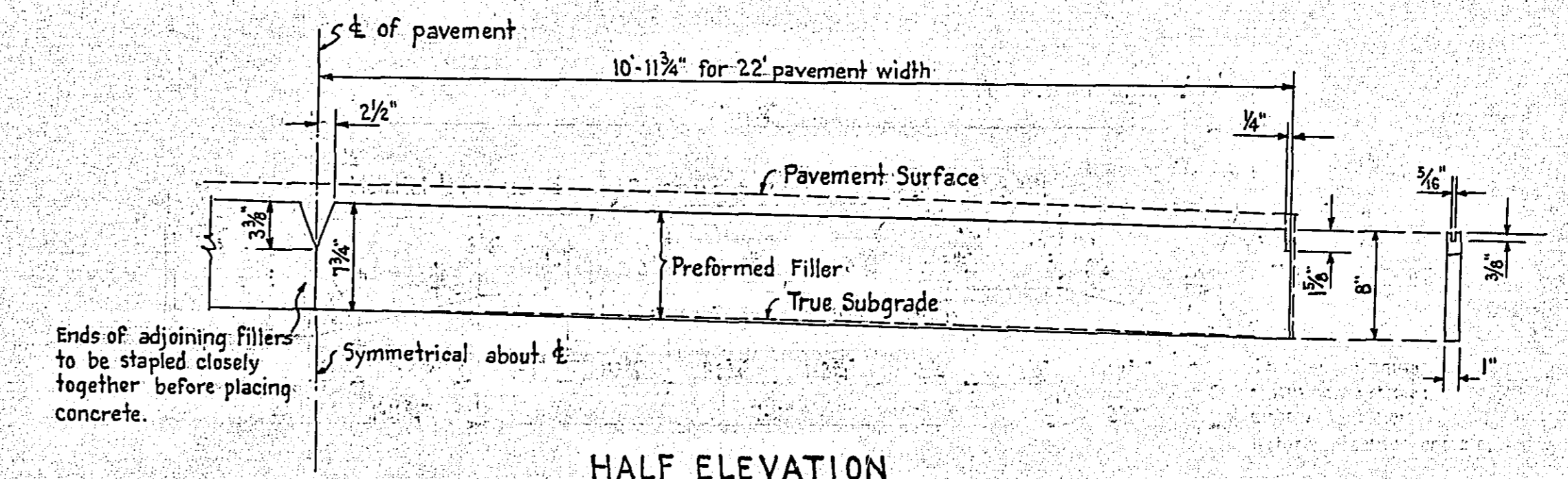
SECTION A-A



INTERSECTION AT SNELLING AVENUE



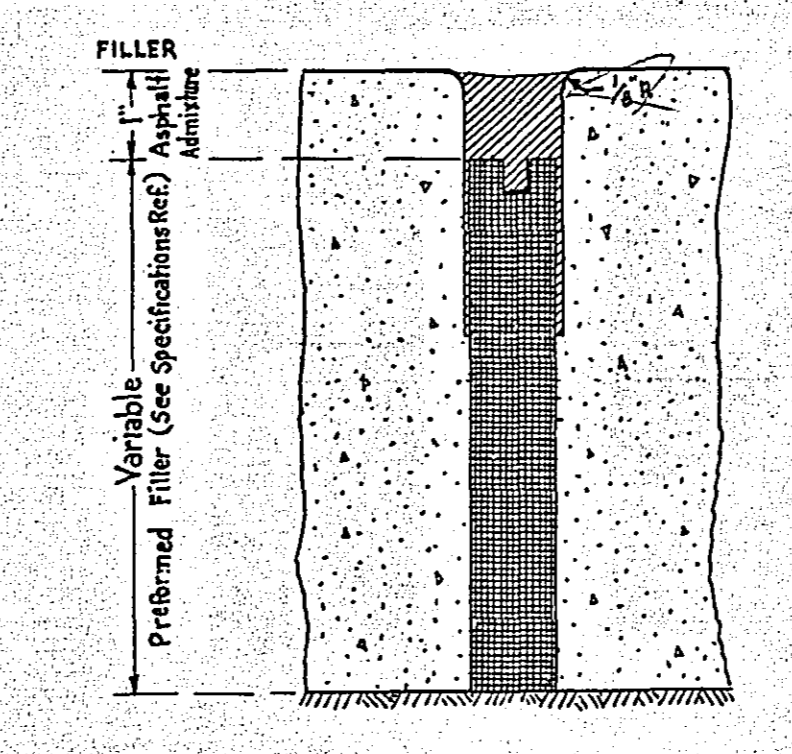
SECTION AT EXPANSION JOINT
Showing Pavement Transition to 9' Uniform Depth.



HALF ELEVATION
9-7-9x22' PAVEMENT
PREFORMED FILLER DETAILS

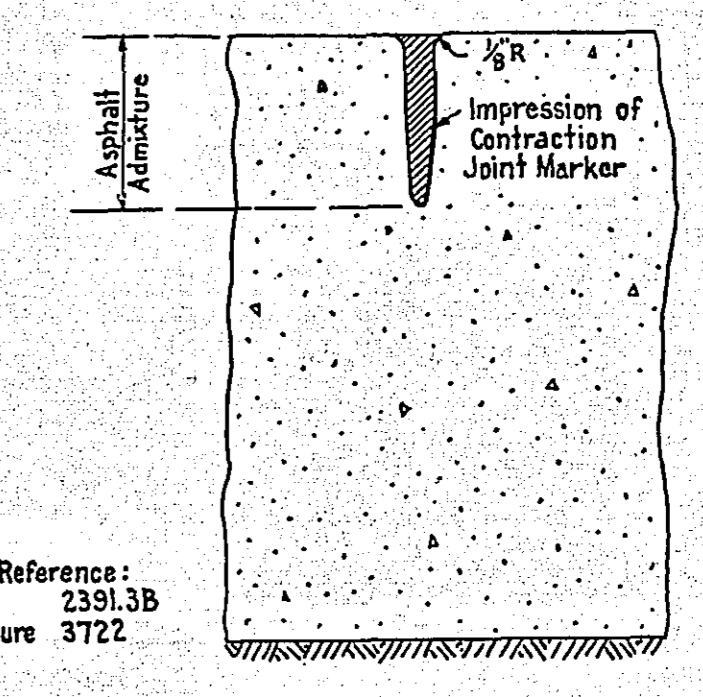
NOTE: Remove enough material from the crown of the subgrade to permit a straight line section from the centerline to the pavement edge.
The subgrade, along both edges of the joint, is to be tamped with a tamping iron to close all openings along the joint and to fill any minor depressions under the joint.
Top edges of expansion joints must be edged to a 1/8" radius. An approved edging cap must be used which will provide the full depth of bituminous seal indicated in this design.

TRANSVERSE JOINT DETAILS



TYPICAL SECTION
EXPANSION JOINT
CLASS B I-E

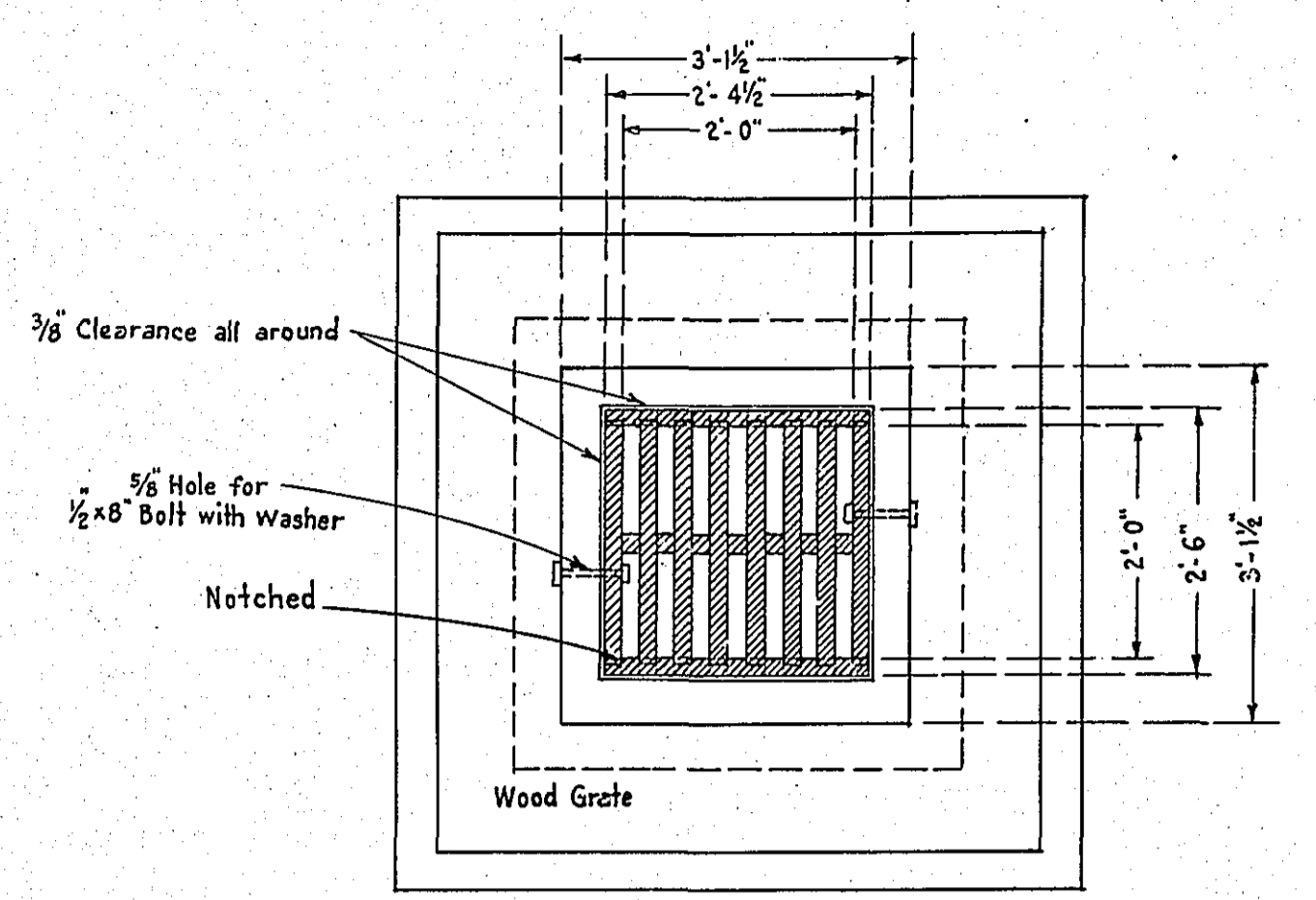
Specifications Reference:
Classification 2391.3B
Asphalt Admixture 3722
Preformed Filler 3702



TYPICAL SECTION
CONTRACTION JOINT
CLASS B I-C

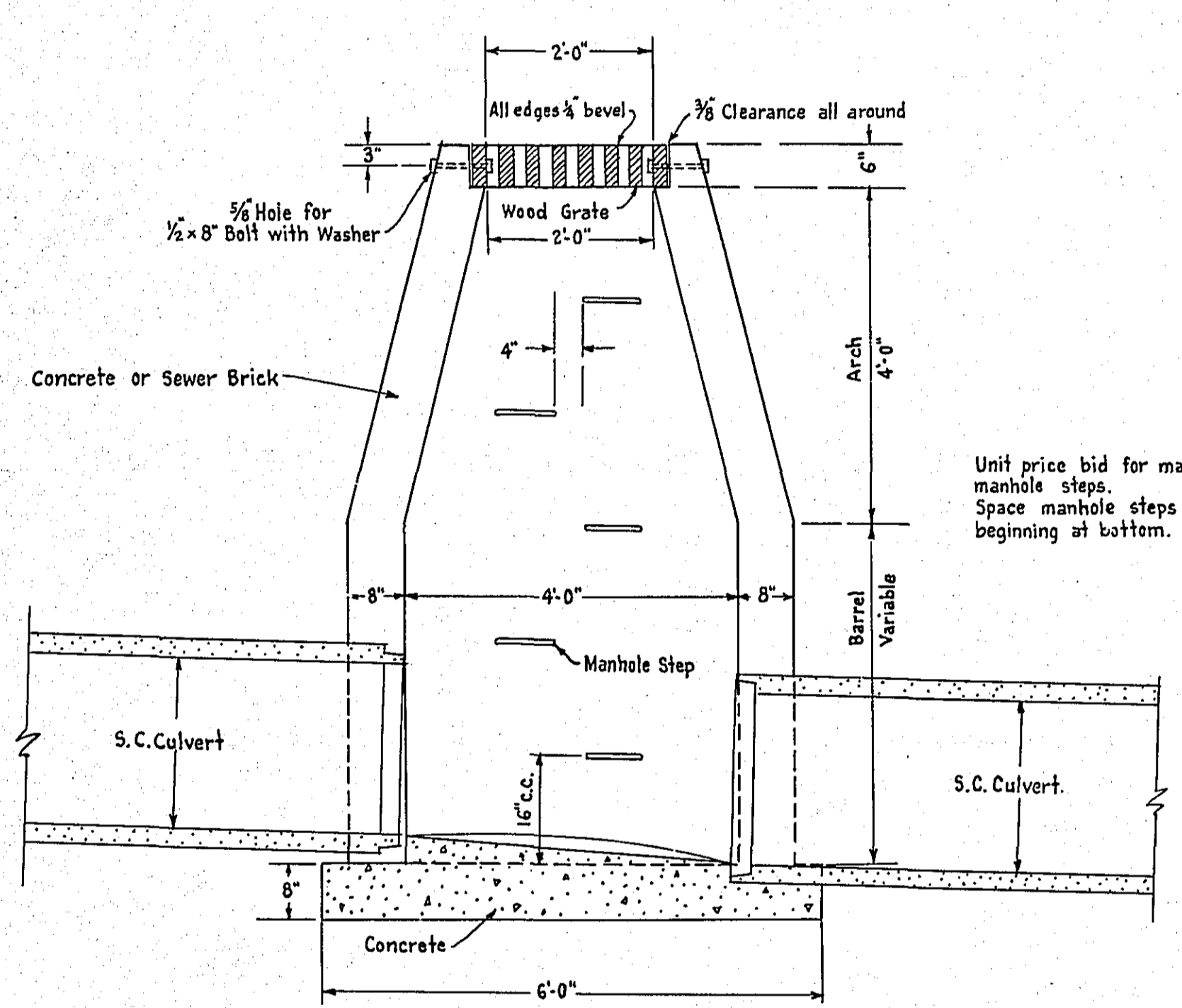
Specifications Reference:
Classification 2391.3B
Asphalt Admixture 3722

MANHOLE



PLAN

NOTE:
The Wood Grate shall be constructed with treated timber of 2'x6' nominal dimension, Nails to be 20d and staggered.

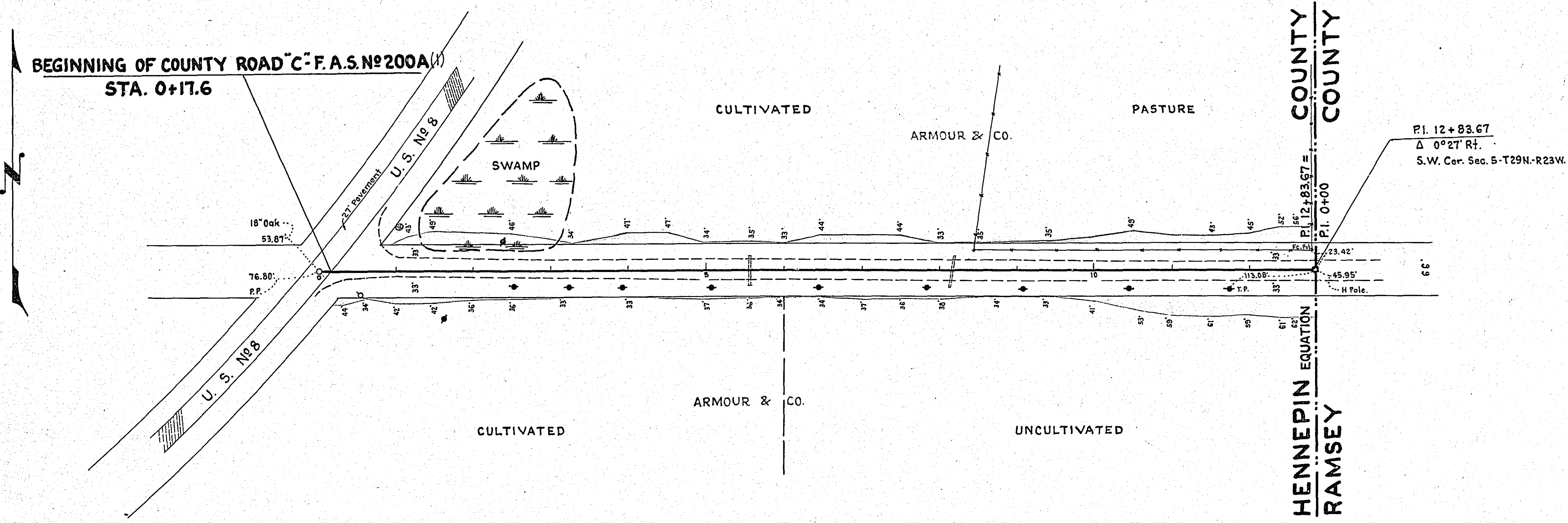


SECTIONAL VIEW

Unit price bid for manhole to include manhole steps. Space manhole steps 16" c.c. beginning at bottom.

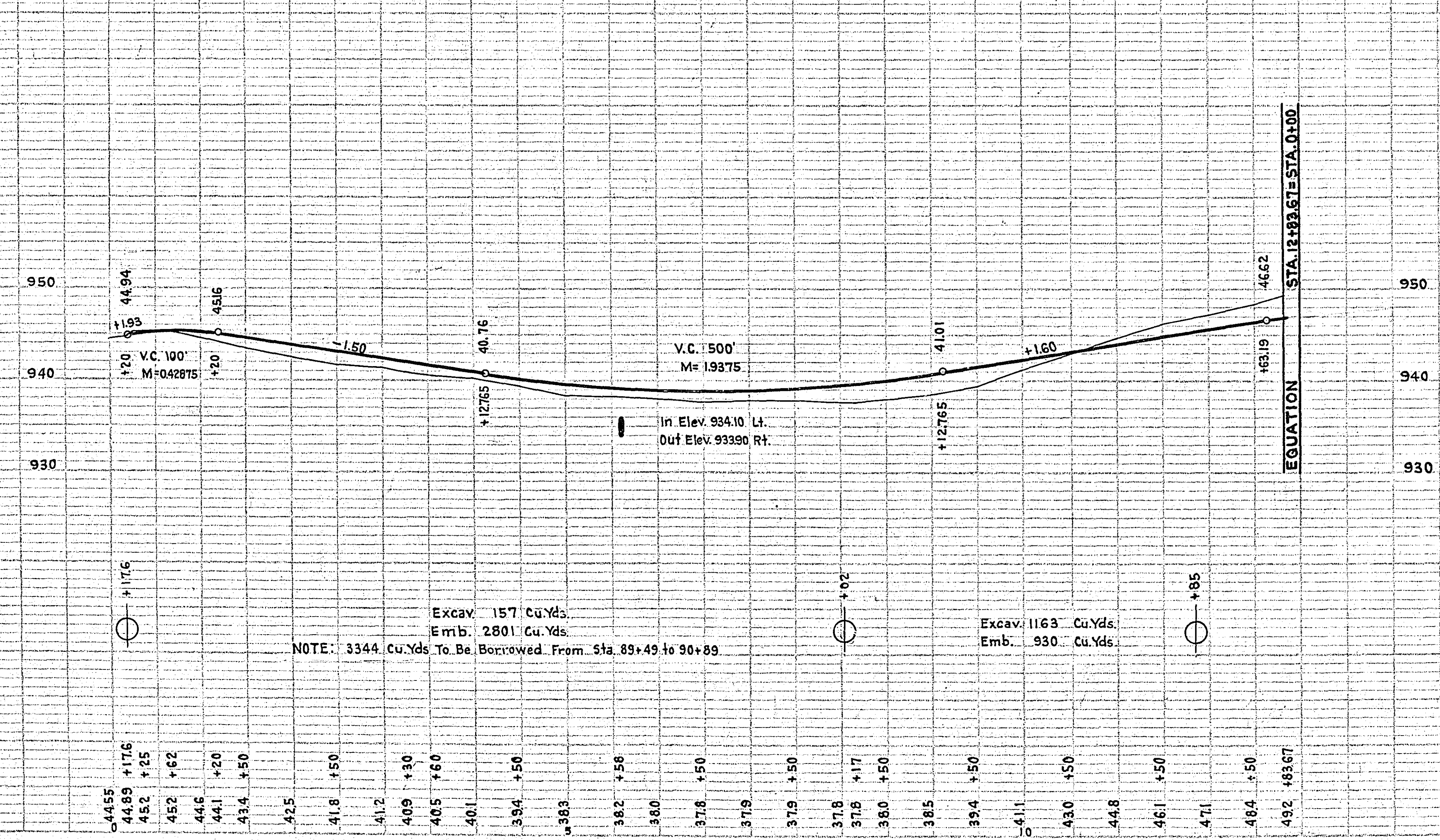
5+57 E
Imp. 24'x10' C.M. Lt.
Imp. 15'x28.5' C.M. Rt.
Remove
Pl. 24'x66' S.C. Culv. (33'Rt & 33'Lt)
Sodding 14 Sq. Yds.
Haul 15'x28.5' C.M. To Sta. 51+83 Rt.

8+17 E
Imp. 10'x33' Y.P. Rt.
Imp. 15'x6' C.M. Lt.
Remove
No Culv. Req'd



B.M. Spk. 20" Oak
50' Lt. Sta. 1+00
Elev. 944.33

B.M. Top Iron Mon.
& Sta. 12+83.67
Elev. 948.21



PLAN

REVERTED

NOTES

SCALE

PROFILE

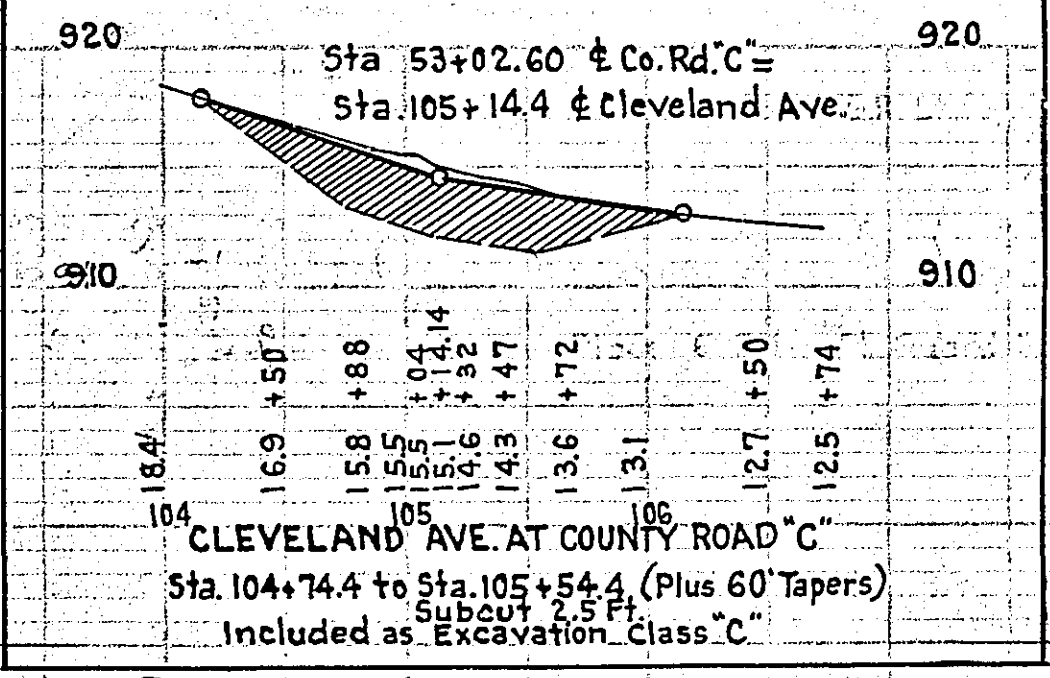
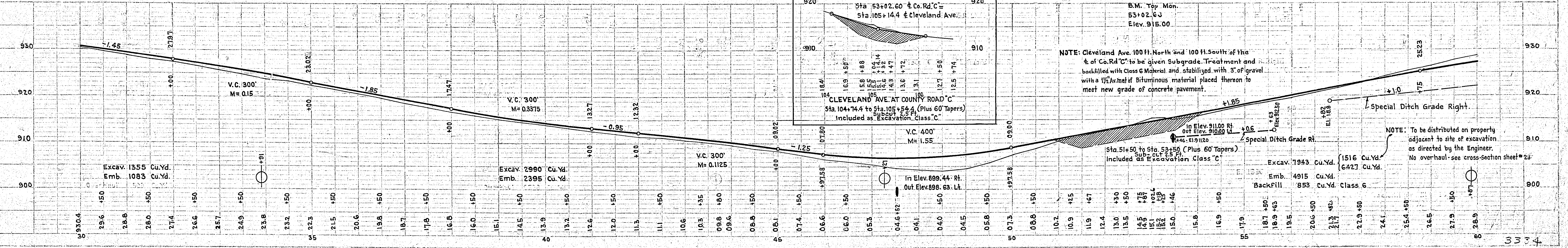
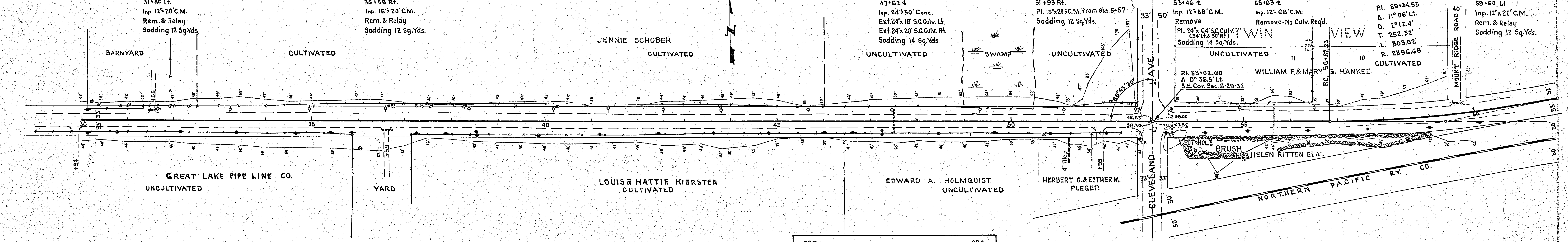
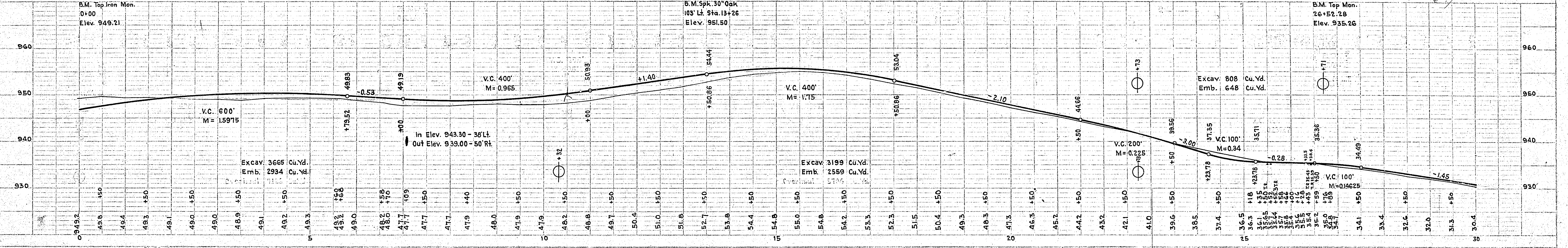
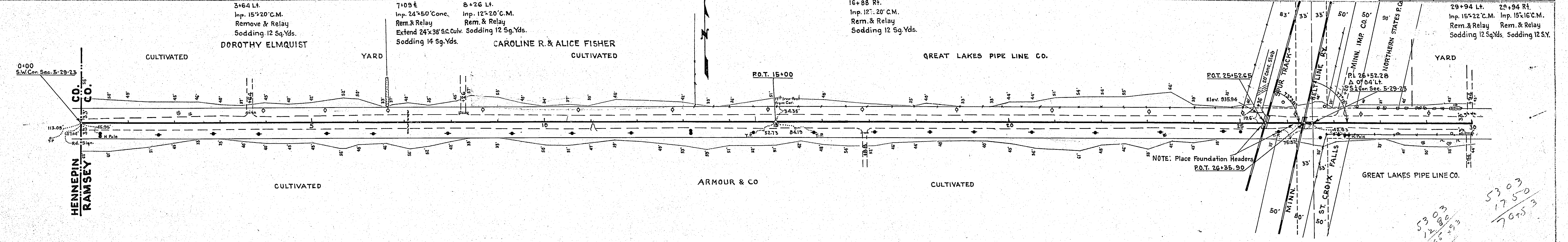
REVERTED

NOTES

SCALE

103-5

3339



NOTE: Cleveland Ave. 100 ft. North and 100 ft. South of the E. of Co. Rd. C' to be given Subgrade. Treatment and backfilled with Class G Material and stabilized with 3" of gravel with a 1 1/2" coat of Bituminous material placed thereon to meet new grade of concrete pavement.

NOTE: To be distributed on property adjacent to site of excavation as directed by the Engineer. No over-haul - see cross-section sheet # 23

