

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.....	EL
RAILROADS.....	VERTICAL CURVE.....	VC
RETAINING WALL.....	BENCH MARK.....	B.M.
BASE OR SURVEY LINE.....	SECTIONAL CONCRETE CULVERT.....	P.1
LEVEE.....	CORRUGATED METAL CULVERT.....	C.M.
GRAVEL PIT.....	CULVERT HAUL.....	P.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.....		

PIT DATA

Borrow Pit "A" Located 250' North of Larpenteur Ave. & Prosperity Road.

OFFICE OF COUNTY SURVEYOR RAMSEY COUNTY

Construction Plan of County Project No. P.W.S. 583

From A Point On The South Line Of Section 16, T29N, R.22W. Which Is 1632.65 Ft. W. Of The S.E. Cor. Thereof. To A Point On The South Line Of Section 13, T29N, R.22W. Which Is 11 Ft. West Of The S.E. Corner Thereof.

GROSS LENGTH 17,356.77 FEET 3.287 MILES
 LENGTH OF EXCEPTIONS 48.86 FEET 0.009 MILES
 NET LENGTH 17,307.91 FEET 3.278 MILES

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

LAYOUT
 SCALE, 1 Inch = 2,640 Feet

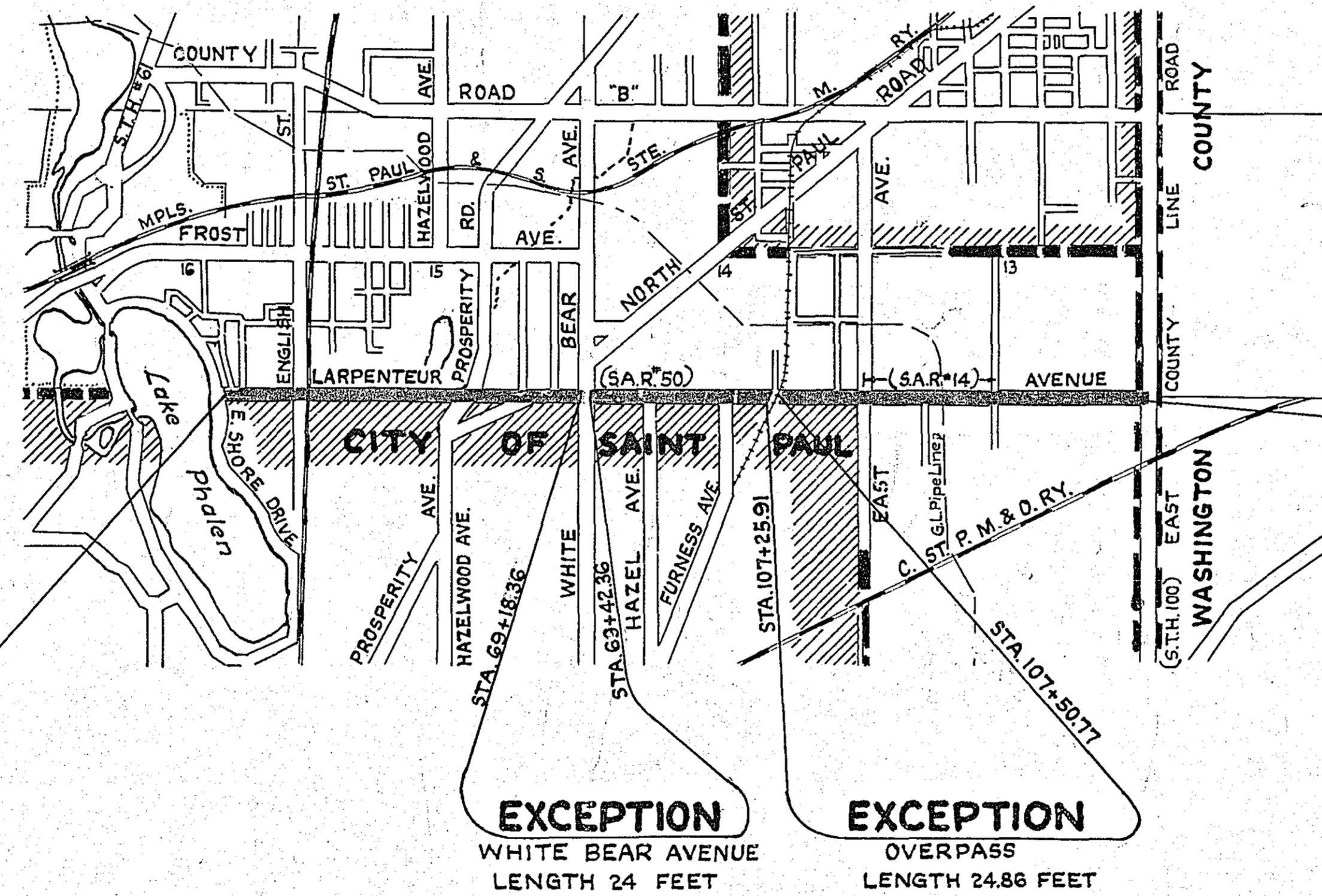
SPECIFICATIONS

NOTE: The Minnesota Highway Department Specifications for Highway Construction Dated July 1, 1938 and Supplement No. 3 Approved By The Public Roads Administration Nov. 15, 1939 As Modified By Supplement No. 4 Dated March 1, 1940 And Approved By The Public Roads Administration April 28, 1941, Shall Govern.

INDEX OF SHEETS

Sheet No. 1.	Title Sheet
" No. 2	Estimate & Grading Details
" No. 3	Paving & Misc. Details
" No. 4	Concrete Flume Details
" No. 5 to 8	Panel Layout Sheets
" No. 9 to 15	Plan Sheets
" No. 16 to 51	Cross Section Sheets

**BEG P.W.S. 583
STA. 0+49**



**END P.W.S. 583
STA. 174+05.77**

Planned By *A. D. Bramble* 11/13 1945
ASST. CIVIL ENGINEER

Approved *Barry S. Brown* 11/19 1945
COUNTY ENGINEER

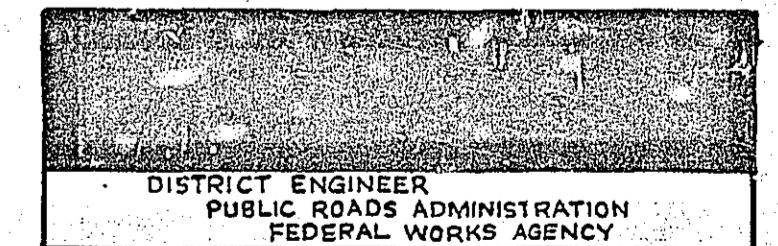
Approved *J. L. Leonard* 11/19 1945
CHAIRMAN RAMSEY COUNTY BOARD

Recommended for Approval *H. E. Guad* 10-15 1946
DISTRICT ENGINEER

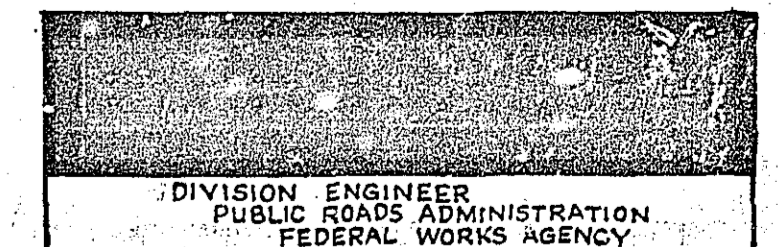
Recommended for Approval *J. M. Egan* 10-15 1946
ENGINEER OF COUNTY DIVISION

Approved *F. J. Edwards* 10/17 1946
ENGINEER OF PLANS AND SURVEYS

RECOMMENDED FOR APPROVAL 19



APPROVED 19



STATEMENT OF ESTIMATED QUANTITIES

SPEC. REF.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
2101.4A.1	Clearing	Acre	0.05
2101.4A.2	Clearing	Tree	278
2102.4B	Grubbing	Tree	294
2103.4	Removing Portable Culverts	Lin. Ft.	2680
2104.4A	Removing Concrete Driveways	Sq. Yd.	55.4
2104.4C	Removing Concrete Curb	Lin. Ft.	104
2104.4D	Removing Gutter	Lin. Ft.	274
2104.4E	Removing Sidewalk	Sq. Yd.	27.25
2104.4G	Removing Masonry Structures	Cu. Yd.	54.2
2104.4I	Removing Guard Rail	Lin. Ft.	1605
2104.4J	Removing Fence	Lin. Ft.	9814
2104.4K	Removing Catch Basin	Structure	1
2416.5E	Concrete Headwall (Grade 'A' Concrete)	Cu. Yd.	3
2105.4C	Class 'C' Excavation	Cu. Yd.	90,175
2116.5B	Drain Tile 6"	Lin. Ft.	144
2116.5D	Gravel Pit Stripping	Cu. Yd.	740
2116.5F	Screening & Loading Sand & Gravel	Cu. Yd.	5,776
2116.5H	Haul	Cu. Yd. Mile	10,749
2116.5J	Sand-Gravel Fill in Place	Cu. Yd.	5,776
2417.5C18	Furnish & Install 18" Sectional Concrete Pipe (See Spec. Prov.)	Lin. Ft.	178
2417.5C24	Furnish & Install 24" Sectional Concrete Pipe (See Spec. Prov.)	Lin. Ft.	1,176
2417.5C36	Furnish & Install 36" Sectional Concrete Pipe (See Spec. Prov.)	Lin. Ft.	228
2417.5C48	Furnish & Install 48" Sectional Concrete Pipe (See Spec. Prov.)	Lin. Ft.	250
2417.5E15	Relaying 15" Sectional Concrete Pipe (See Spec. Prov.)	Lin. Ft.	14
2417.5E18	Relaying 18" Sectional Concrete Pipe (See Spec. Prov.)	Lin. Ft.	34
2417.5E24	Relaying 24" Sectional Concrete Pipe (See Spec. Prov.)	Lin. Ft.	44
2417.5E36	Relaying 36" Sectional Concrete Pipe (See Spec. Prov.)	Lin. Ft.	27
2418.5C15	Furnishing & Installing 15" Corrugated Metal Culvert Pipe	Lin. Ft.	378
2418.5E15	Relaying 15" Corrugated Metal Culvert Pipe	Lin. Ft.	302
2418.5E18	Relaying 18" Corrugated Metal Culvert Pipe	Lin. Ft.	124
2418.5E24	Relaying 24" Corrugated Metal Culvert Pipe	Lin. Ft.	20
2503.5	Hand Placed Rip-rap	Cu. Yd.	19
2524.5A1a	Trench Excavation 0' to 6' Deep	Lin. Ft.	235
2524.5D-18	Furnish & Install 18" Reinforced Conc. Sewer Pipe (See Spec. Prov.)	Lin. Ft.	128
2524.5D-24	Furnish & Install 24" Reinforced Conc. Sewer Pipe (See Spec. Prov.)	Lin. Ft.	126
2524.5E-24	Relaying 24" Sectional Concrete Pipe (See Spec. Prov.)	Lin. Ft.	16
2530.5A	Excavation For Manholes & Catch Basins	Cu. Yd.	11
2530.5B	Construct Manholes	Cu. Yd.	21.8
2530.5C	Construct Catch Basins	Cu. Yd.	7.1
2530.5D	Reconstruct Manholes	Structure	1
2530.5F	Furnishing & Installing Casting Assemblies	Casting Assembly	5
2530.5G	Adjust Ring Casting	Casting	2
2548.5C	Concrete Erosion Control Structure	Cu. Yd.	73
2548.5N15	Furnish & Install Metal Aprons 15' C.M.	Aprons	64
2548.5N18	Furnish & Install Metal Aprons 18' C.M.	Aprons	4
2568.5	Project Markers	Marker	2
2573.5	Seeding (Class I)	Acre	20
2576.5A	Area Sodding	Sq. Yd.	937
101	Replace Fence	Lin. Ft.	9,309

* This Item Includes: 2-15" Flared Sectional Concrete End Sections, 9-18" Flared Sectional Concrete End Sections, 28-24" Flared Sectional Concrete End Sections, 5-36" Flared Sectional Concrete End Sections, 2-48" Flared Sectional Concrete End Sections.

a- This Item Includes: 2 Castings #708, 2 Covers #712, 3 City of St. Paul Standard Frames "H" & 3 Covers "I"

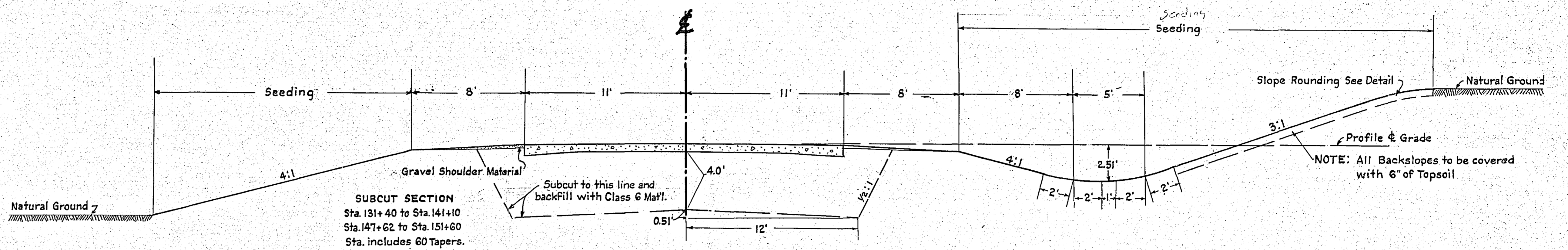
STANDARD DETAILS	PLATE NO.
Tapered Panel Layout (Skew)	1010
Bridge Approach Panel (Skew)	1014
Support Of Bridge Approach Slab (Design D)	1018
Terminal Header	1021
Curb Transition Adjacent To Bridges	1022
Expansion Joint Design No. 12	1041
Bar Support For Expansion Joint	1046
Contraction Joint Design No. 6	1057
Dowel Socket For 7/8" Dowel Bar	1062
Temporary Crossing	1063
Cast-In-Place Concrete Railway Crossing	1064
Equipment	1500 to 1523
Sectional Concrete Culverts	2007 & 2008
Manhole Detail	3000
Metal Apron For Culverts	3016
Flared End Section For Reinforced Sec. Conc. Pipe	3019 & 3120
Curb Detail	3023
Concrete Sidewalk	3032
Manhole Ring Casting No. 708	3033
Manhole Cover Casting No. 712	3035
Manhole Step Casting No. 880	3052
Standard Barricade	3071
Federal Project Field Marker	3079
Sodding Detail Flared End Culvert Ends	3093
Concrete Headwall For Culverts	2000

NOTE: Standard Detail Plates Issued March 1, 1941, With Revisions And Additions Approved By The Public Roads Administration On Dec. 27, 1941 And Detail Plate No. 3120 Approved Oct. 13, 1945, Shall Govern. Use The Following Standard Details On This Project.

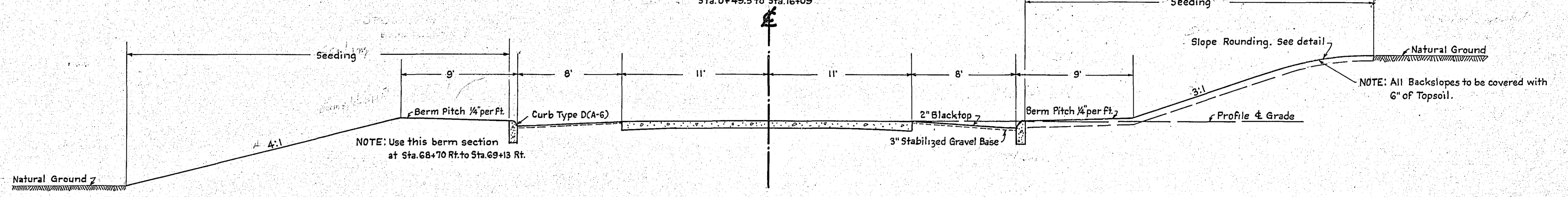
SPECIAL DETAILS	SHEET NO.
Special Grading Section	2
Shouldering Detail	2
Slope Rounding Detail	2
Subgrade Treatment	2
Subcut	2
Catch Basin & Curb Inlet	3
9-7-9 Concrete Pavement	3
Transverse Joint Details (Preformed Filler)	3
Expansion Joint Design	3
Contraction Joint Design	3
Concrete Driveway Detail	3
Ditch Sodding Detail	3
Concrete Step Detail	3
Typical Bituminous Surface Section	3
Concrete Flume Detail	4

Sta. 173+00 R/L to Sta. 173+92 F/L
Daylight See X Sections

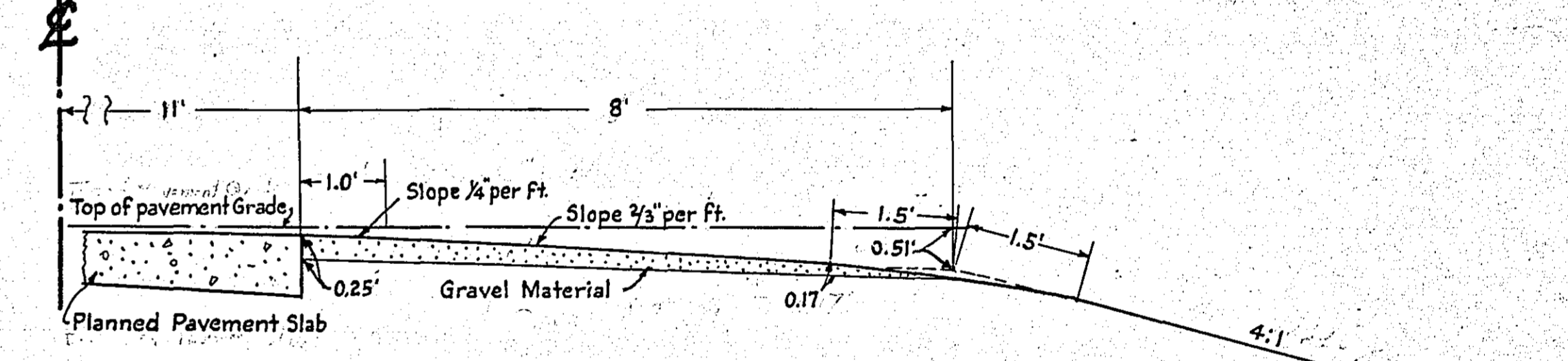
TYPICAL SECTION
Sta. 16+56 To Sta. 173+97



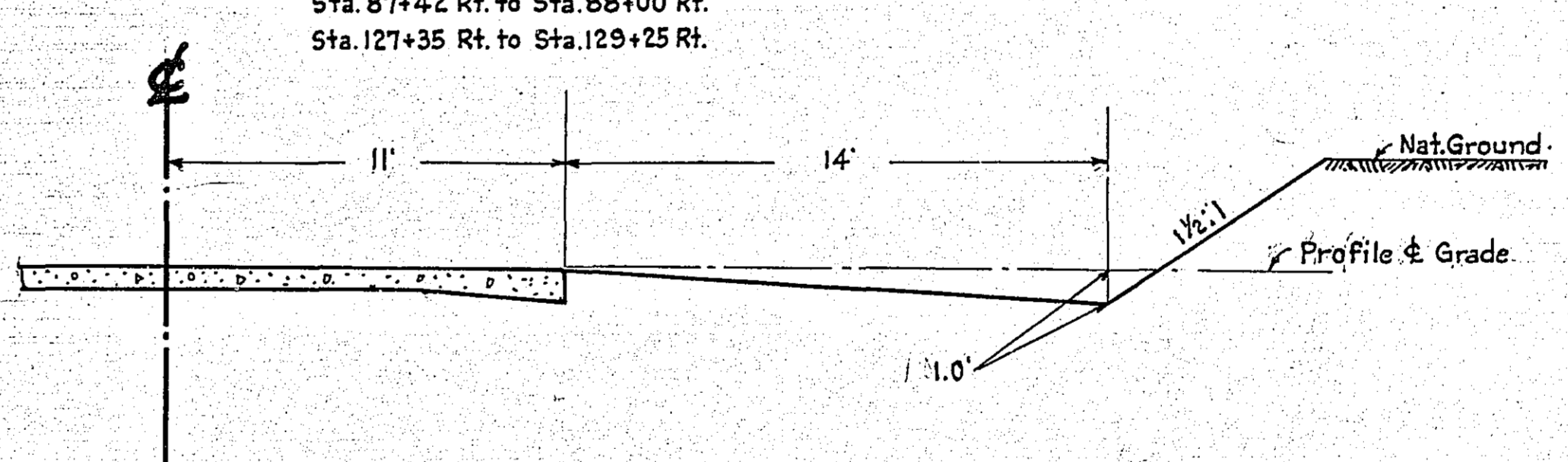
TYPICAL SECTION
Sta. 0+49.5 to Sta. 16+09



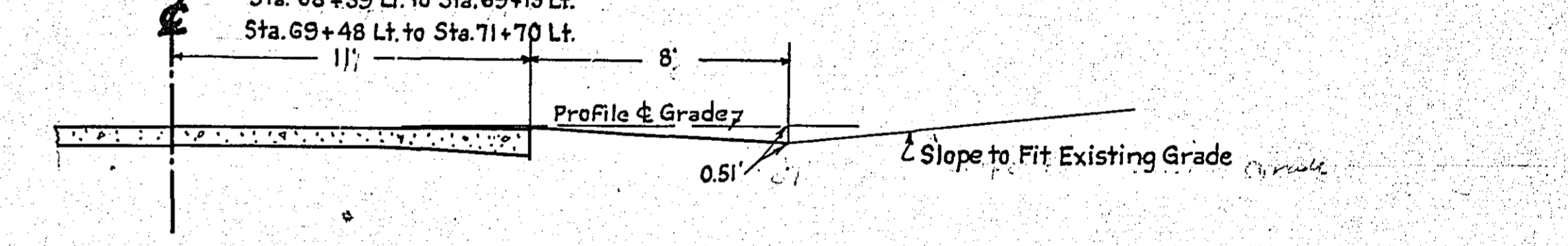
GRAVEL MATERIAL SHOULDERING DETAIL



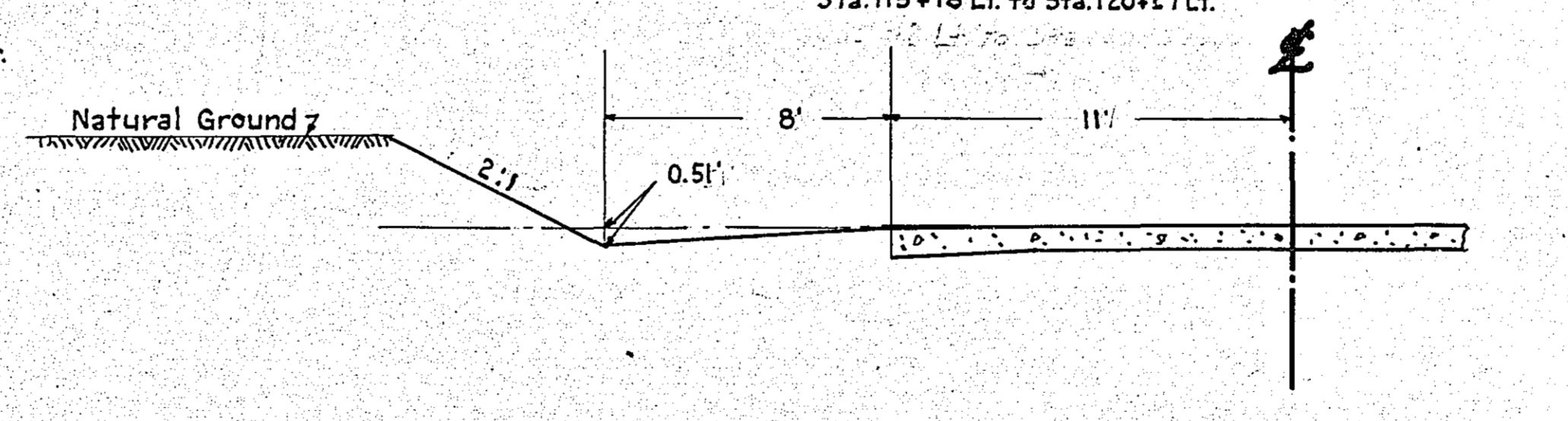
SPECIAL SECTION RIGHT
Sta. 87+42 Rt. to Sta. 88+00 Rt.
Sta. 127+35 Rt. to Sta. 129+25 Rt.



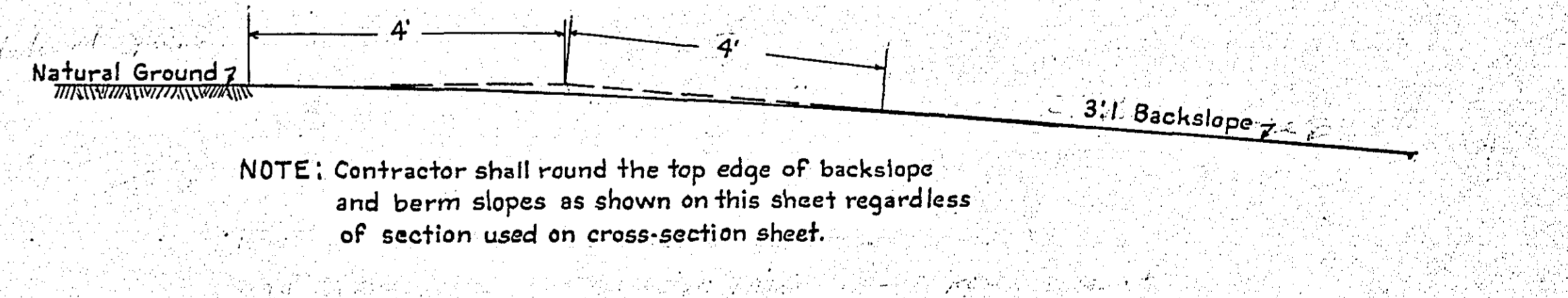
SPECIAL SECTION
Sta. 68+39 Lt. to Sta. 69+13 Lt.
Sta. 69+48 Lt. to Sta. 71+70 Lt.



SPECIAL SECTION LEFT
Sta. 115+18 Lt. to Sta. 120+27 Lt.

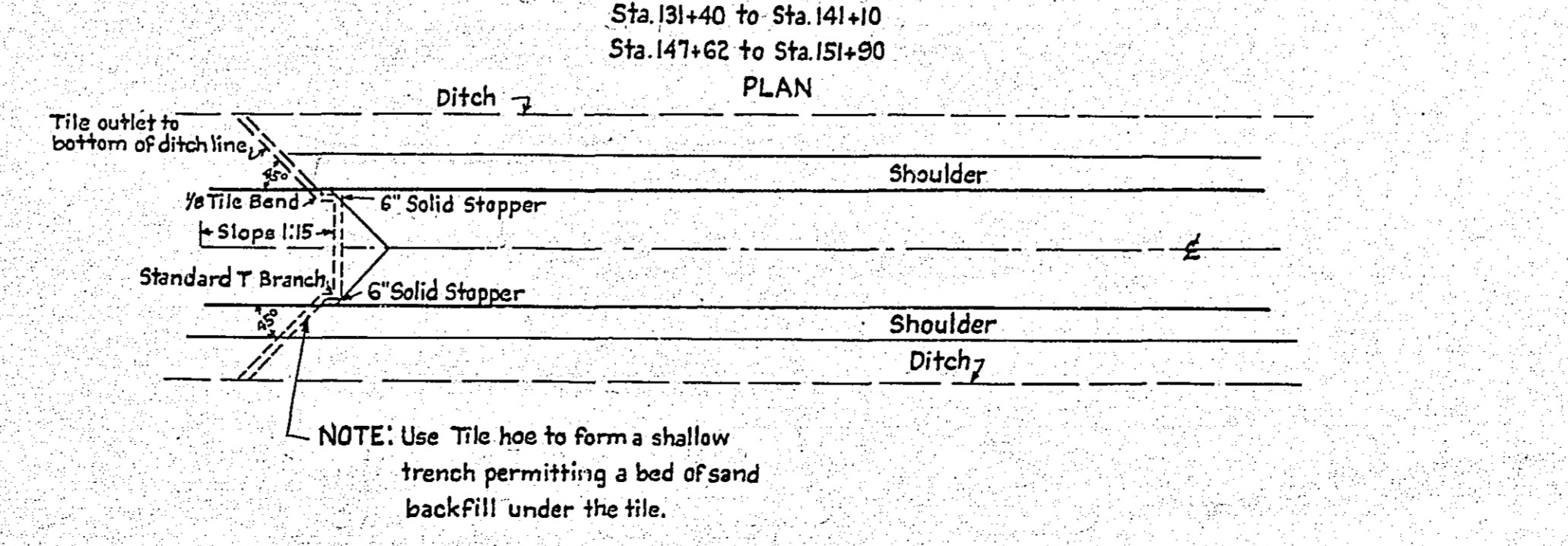


SLOPE ROUNDING DETAIL

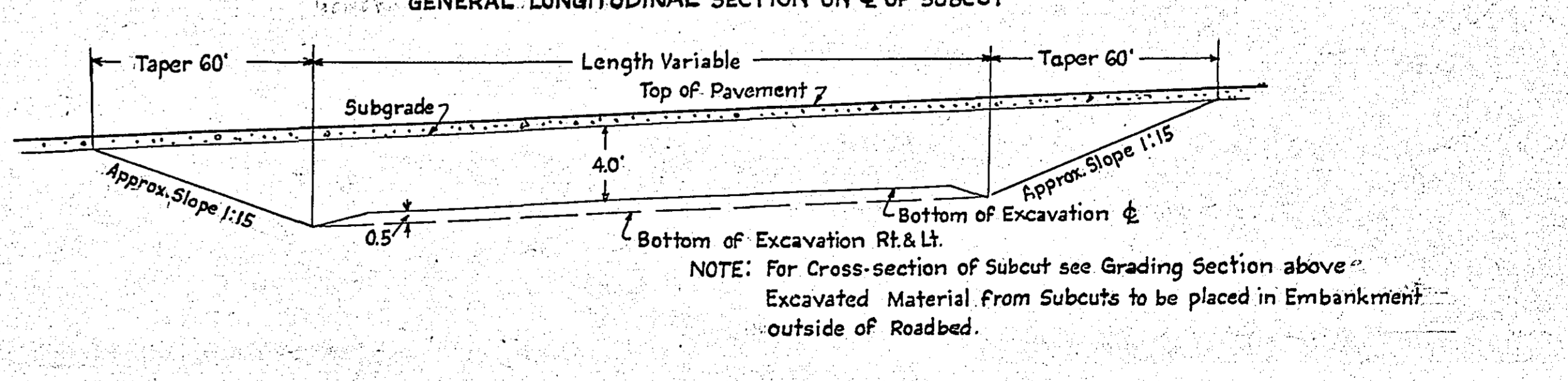


NOTE: Contractor shall round the top edge of backslope and berm slopes as shown on this sheet regardless of section used on cross-section sheet.

SUBGRADE TREATMENT
Sta. 131+40 to Sta. 141+10
Sta. 147+62 to Sta. 151+60



SUBCUT



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

P.W.S. 583

6506

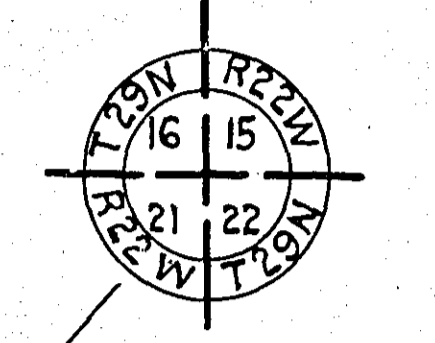
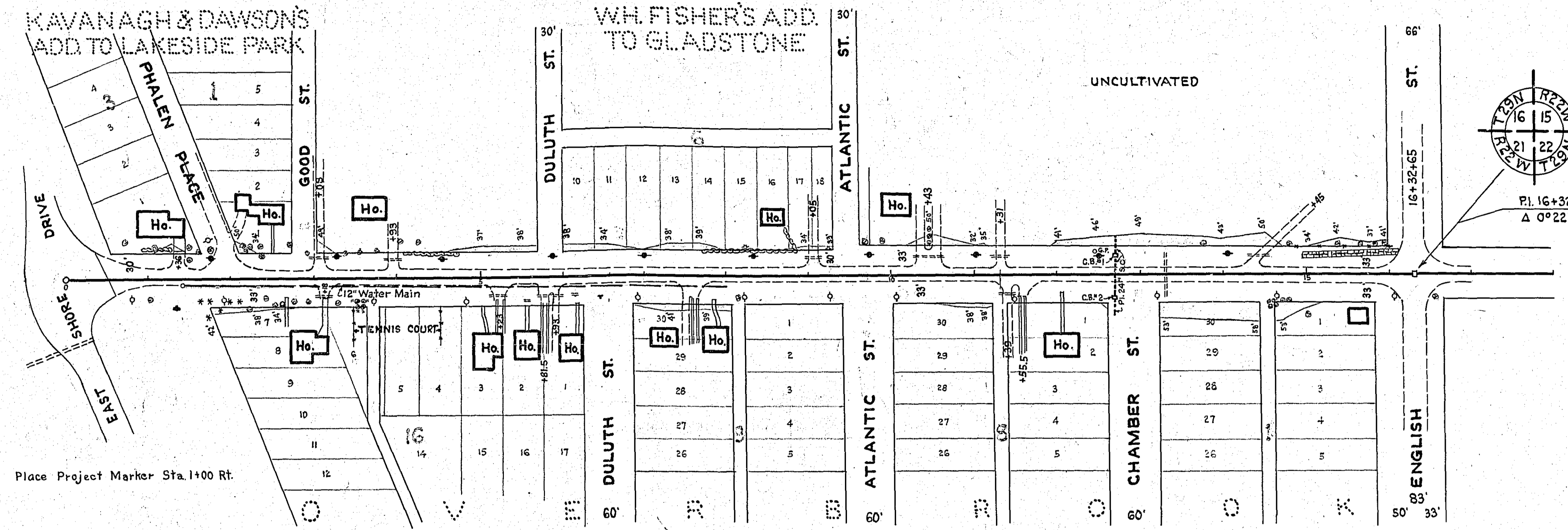
- | | | | | | | | | | | | | | | | |
|--|--|--|--|---|--|---|--|---|---|--|--|---|--|--|--|
| Sta. 3+08 Lt.
Inp. 12"x27" C.M.
Remove | Sta. 3+18 Rt.
Inp. 12"x18" C.M.
Remove | Sta. 3+93 Lt.
Inp. 12"x27" C.M.
Remove | Sta. 5+23 Rt.
Inp. 12"x20" C.M.
Remove | Sta. 5+52 Rt.
Inp. 10"x4" C.M.
Remove | Sta. 5+87 Rt.
Inp. 12"x30" C.M.
Remove | Sta. 6+18 Rt.
Inp. 10"x4" C.M.
Remove | Sta. 9+05 Lt.
Inp. 12"x20" C.M.
Remove | Sta. 10+43 Lt.
Inp. 15"x36" C.M.
Remove | Sta. 11+31 Lt.
Inp. 15"x20" C.M.
Remove | 11+39 Rt.
Inp. 12"x20" C.M.
Remove | Sta. 13+29 Lt.
Inp. 12"x52" Vit. P.
Remove | Sta. 14+45 Lt.
Inp. 15"x18" C.M.
Remove | Sta. 14+93 Lt. 23' to Sta. 16+04 Lt. 23'
Inplace Rubble Gutter
Remove 111 Lin. Ft. | Sta. 12+70 Lt. 21'
Const. C.B.#1 1.3 Cu. Yds.
Exc. For C.B. 3.5 Cu. Yds. | Sta. 12+70 Rt. 21'
Const. C.B.#2 1.3 Cu. Yds.
Exc. For C.B. 4.5 Cu. Yds. |
|--|--|--|--|---|--|---|--|---|---|--|--|---|--|--|--|

Sta. 1+44 Rt. 9' to Sta. 8+10 Rt. 9'
Inp. 12" Water Main
To Be Lowered Where Required
Work To Be Done By Others.

Sta. 12+70 Lt. 20' to 20' Rt.
Furn. & Inst. 24"x40" S.C. Sew. Pipe
Trench Exc. 0' to 6' Deep 38 Lin. Ft.

Sta. 12+70 Lt. 20' to Sta. 12+70 Lt. 47'
Furn. & Inst. 24"x26" S.C. Sew. Pipe
Trench Exc. 0' to 6' Deep 4 Lin. Ft.
Pl. I Flared End Section
Sodding 7 Sq. Yds.

Sta. 12+70 Rt. 20' to Sta. 12+70 49' Rt.
Furn. & Inst. 24"x28" S.C. Sewer Pipe
Trench Exc. 0' to 6' Deep. 17 Lin. Ft.
Pl. I Flared End Section
Sodding 7 Sq. Yds.



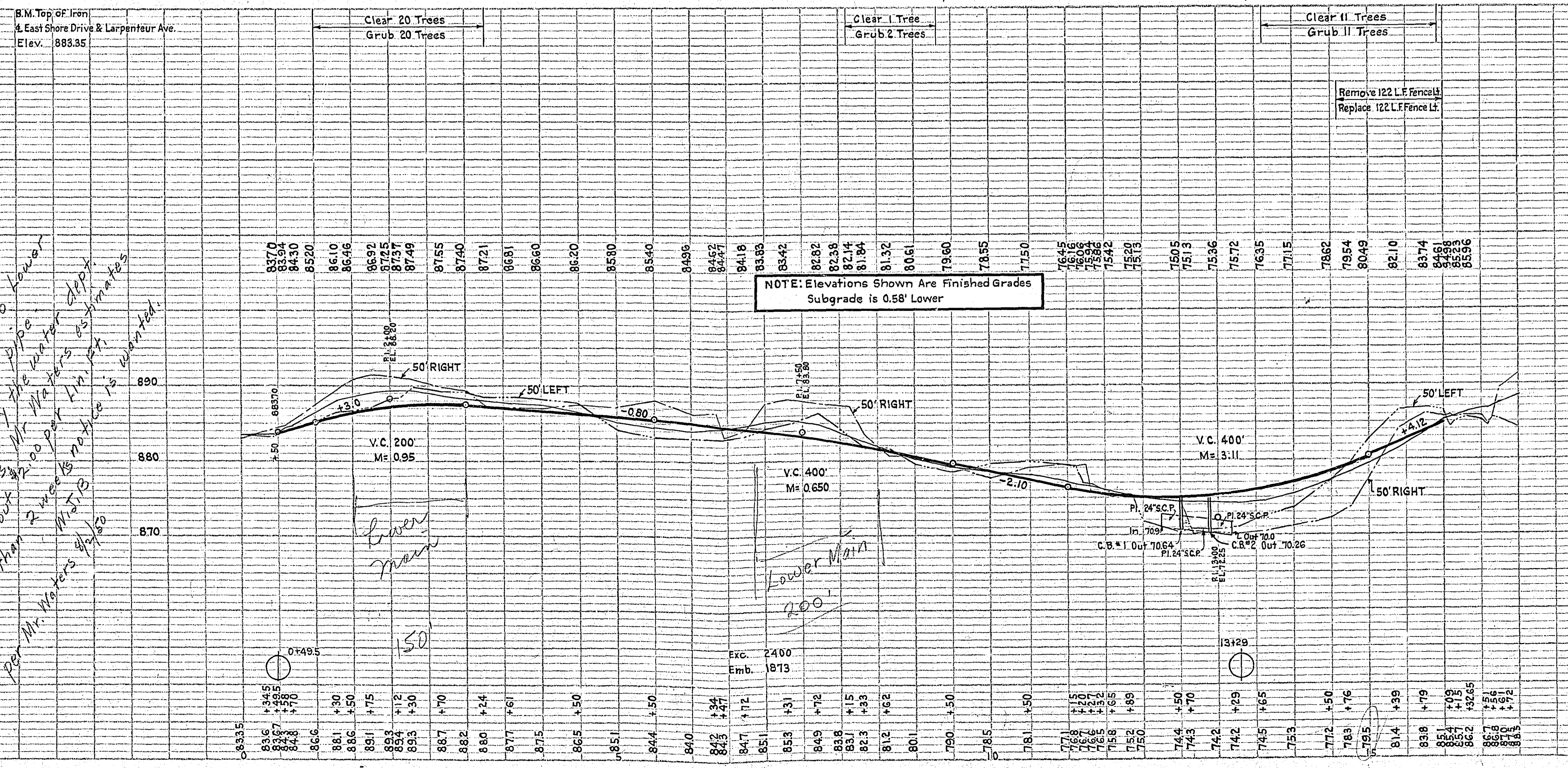
Place Project Marker Sta. 1+00 Rt.

- | | |
|---|---|
| Sta. 2+70 Rt. 19' to 33' Rt.
Remove Conc. Sidewalk 6.2 Sq. Yds.
Const. Concrete Drive 21 Sq. Yds. | Sta. 7+63 Rt. 28' to 75' Rt.
Remove Conc. Drive 21 Sq. Yds.
Const. Concrete Drive 21 Sq. Yds. |
| Sta. 2+70 Rt. 29' to 33' Rt.
Const. Concrete Steps 0.3 Cu. Yds. | Sta. 7+84 Rt. 28' to 40' Rt.
Remove Conc. Sidewalk 5.3 Sq. Yds. |
| | Sta. 7+84 Rt. 30' to 40' Rt.
Const. Concrete Steps 1.0 Cu. Yd. |

875 pc
634 c
181.26

B.M. Top of Iron
4 East Shore Drive & Larpenaur Ave.
Elev. 883.35

B.M. Top No. End Door Sill
Front of Bldg SW. Cor. of
English St. & Larpenaur Ave.
Elev. 886.88



NOTE: Elevations Shown Are Finished Grades
Subgrade is 0.58' Lower

*Repairs Water Main
Approval It will be necessary to lower
this is to be done by the water dept
and charged to 25 Mr. Waters estimate
the cost at about 200 per ft. in pit
Not less than 200 per ft. in pit
Per Mr. Waters estimate
Material notice is wanted.*

PLAN	DATE
REVISIONS	
NOTED	
ALIGNED	
CHECKED	
BY	
NO.	

PROFILE	DATE
REVISIONS	
NOTED	
ALIGNED	
CHECKED	
BY	
NO.	

P.W.S. 583

Larpenaur

Sta. 50+57 Lt. 40' to 51+20 Lt. 22' Inp. Masonry Gutter Remove 63 Lin. Ft.

Sta. 55+64 Lt. 20' to Sta. 55+91 Lt. 46' Inp. Masonry Gutter Remove 60 Lin. Ft.

Sta. 56+22 Lt. 36' to 40' to Sta. 56+36 Lt. 23' Inp. Masonry Gutter Remove 40 Lin. Ft.

Sta. 42+40 Rt. 105' to Sta. 43+00 Lt. 113' Furn. & Inst. 24"x23" S.C. Culv. Pl. 2 Flared End Sections Sodding 14 Sq. Yds.

Sta. 46+64 Rt. 40' to Sta. 47.02 Lt. 25' Inp. 18"x77" C.M. Remove

Sta. 46+75 Lt. 44' to 48+80 Rt. 41' Inp. 36"x85" C.M. Remove

Sta. 50+67 Rt. 15.5' to 28' Inp. 12"x12" C.M. Remove

Sta. 55+76 Lt. 21' to Sta. 56+36 Lt. 20' Inp. 24"x60" Conc. P. Remove

Sta. 55+52 Rt. 58' to Sta. 56+05 Rt. 24' Inp. 36"x84" Vit. P. Remove

Sta. 60+27 Rt. 21' Inp. 12"x20" C.M. Remove

Sta. 61+79 Rt. 21' Inp. 15"x20" C.M. Remove

Sta. 65+62 Rt. 20' Inp. 15"x20" C.M. Remove

Sta. 67+14 Rt. 21' Inp. 15"x20" C.M. Remove

Sta. 68+39 Lt. 21' to Sta. 69+01 Lt. 21' Inp. 12"x40" Dredge Pipe & Inp. 18"x20" C.M. Remove

Sta. 69+01 Lt. 21' Inp. M.H. Reconstruct Top Furn. & Inst. 1 Ring Casting #712

Sta. 68+80 Rt. 20' Const. C.B. Check Wall 1.0 Cu. Yd. Trench Exc. 0' to 6' Deep 60 L.F.

Sta. 68+91 Rt. 23' Inp. Catch Basin Remove

Sta. 69+07 Rt. 2' Inp. M.H. Adjust Ring Castg.

Sta. 69+55 Rt. 2' Inp. M.H. Adjust Ring Castg.

Sta. 69+15 Rt. 19' Inp. Telephone M.H. Adjust Ring Casting Work To Be Done By Others.

Sta. 68+70 Rt. 29.5' to Sta. 68+80 Rt. 20' Furn. & Inst. 18"x14" S.C.P. Trenching 0' to 6' Deep. 14 Lin. Ft. Sta. 68+70 Rt. 29.5' Const. Conc. Check Wall 1.0 Cu. Yd.

Sta. 68+80 Rt. 20' Const. C.B. 3.5 C.Y. Exc. For C.B. 1.0 C.Y.

Sta. 68+80 Rt. 20' to Sta. 69+07 Rt. 2' Furn. & Inst. 18"x32" S.C. Pipe Trench Exc. 0' to 6' Deep 32 Lin. Ft.

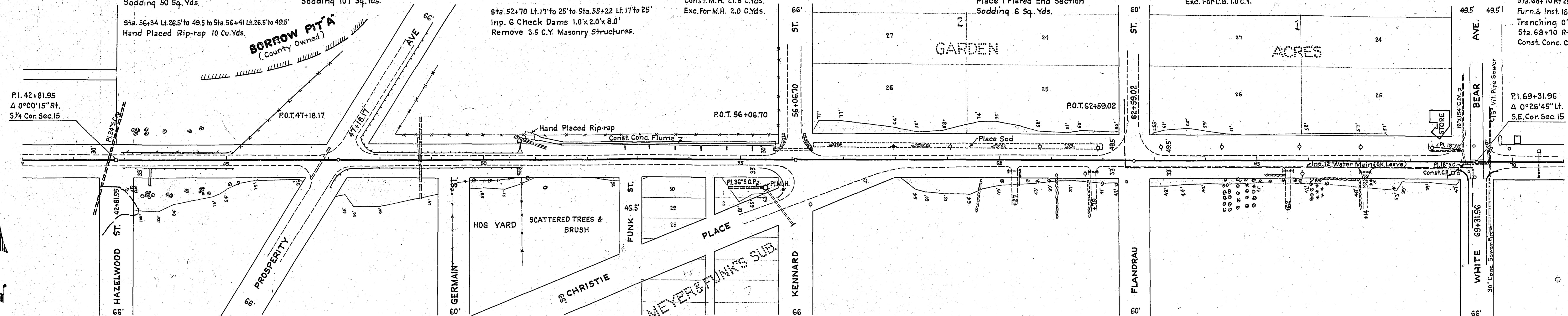
Sta. 68+93 Rt. 16.4' to Sta. 69+13 Rt. 36.4' to 56.4' Inp. Conc. Curb Remove 52 Lin. Ft.

Sta. 67+14 Rt. 24' to 60' Rt. Remove 34.4 Sq. Yds. Conc. Driveway

Sta. 67+14 Rt. 24' to 60' Rt. Const. 34.4 Sq. Yds. Conc. Driveway

Sta. 60+36 Rt. 15.2' to 45' Rt. Remove Conc. Sidewalk 7 Sq. Yds. Construct Conc. Sidewalk 24 Sq. Ft.

Sta. 69+48 Rt. 36.4' to 56.4' to Sta. 69+69 Rt. 16.6' Inp. Conc. Curb Remove 52 Lin. Ft.

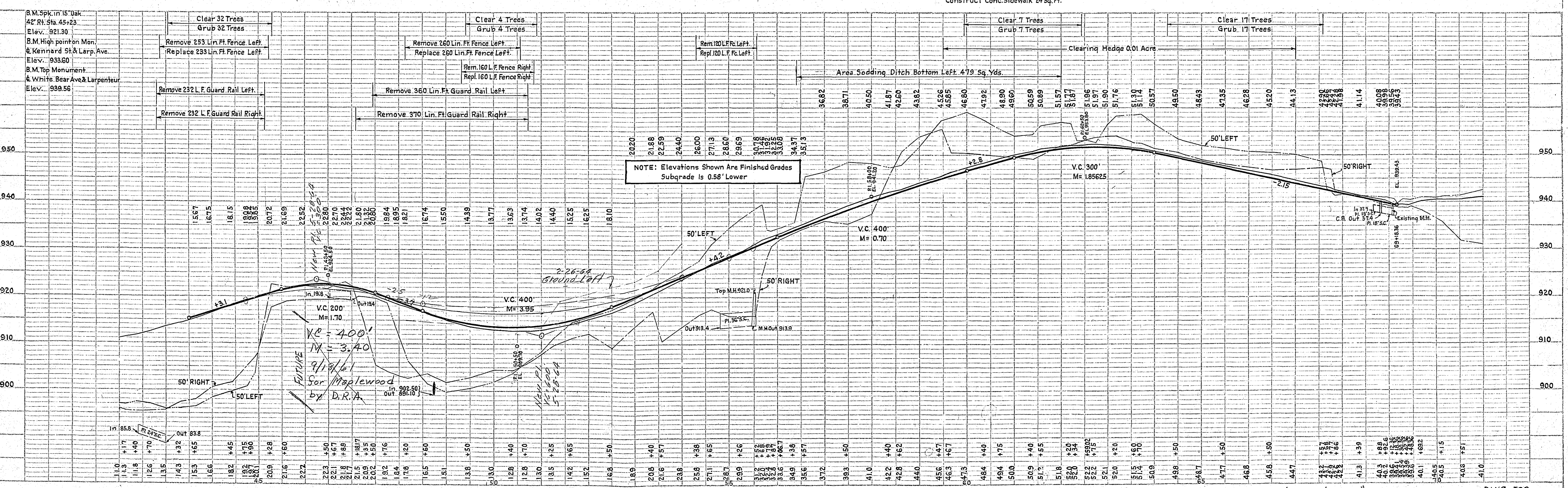


PLAN CHECKED BY: DATE: NO. 1

DESIGNED BY: DATE: NO. 1

NOTED BY: DATE: NO. 1

DATE: NO. 1

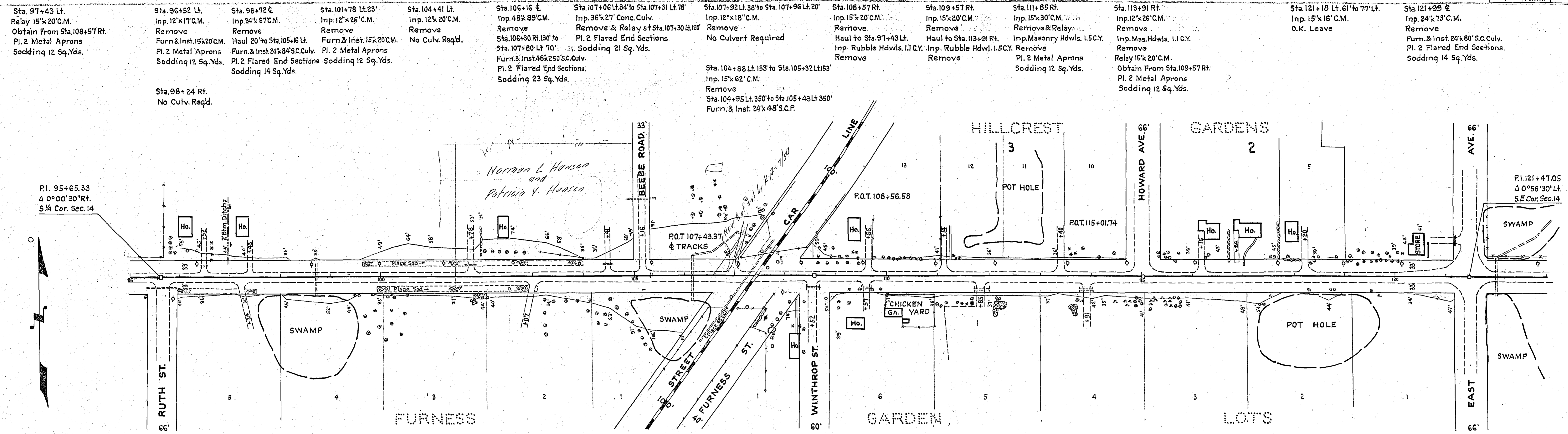


PROFILE CHECKED BY: DATE: NO. 1

DESIGNED BY: DATE: NO. 1

NOTED BY: DATE: NO. 1

DATE: NO. 1

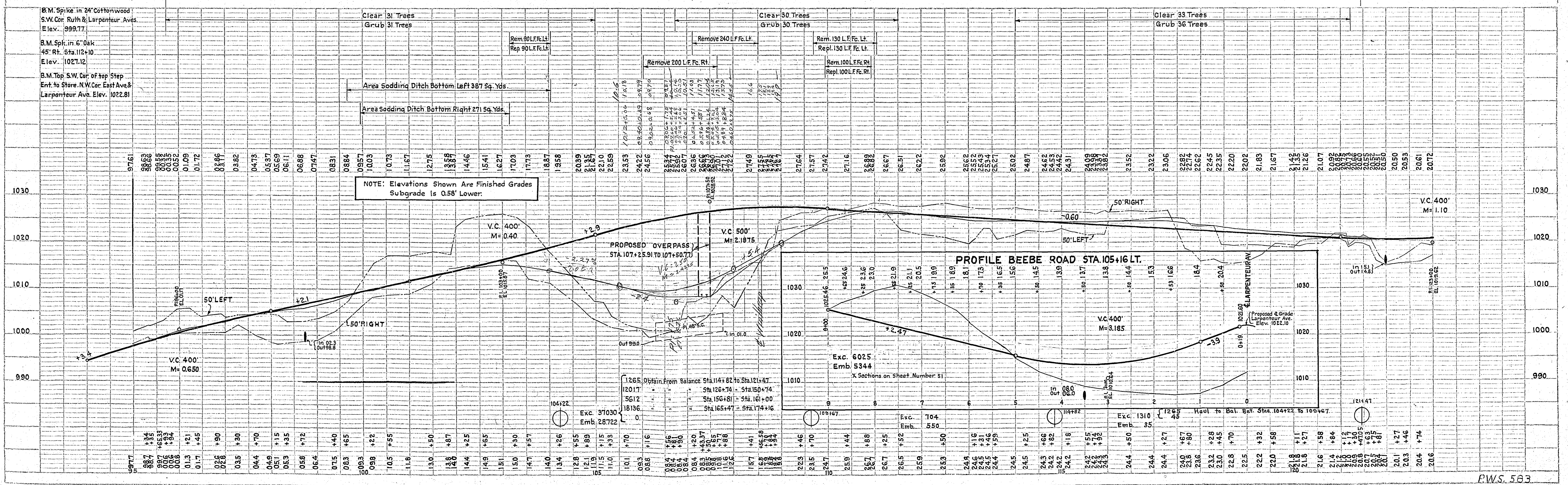


P.I. 95+65.33
 Δ 0°00'30" Rt.
 S 1/4 Cor. Sec. 14

P.I. 121+47.05
 Δ 0°58'30" Lt.
 S.E. Cor. Sec. 14

PLAN
 SURVEYED
 PLOTTED
 CALCULATED
 CHECKED
 DATE
 NO.

NOTE: Buried Telephone Cable in South Shoulder of Road to be Lowered.
 Work to be done by others.



NOTE: Elevations Shown Are Finished Grades
 Subgrade is 0.58' Lower.

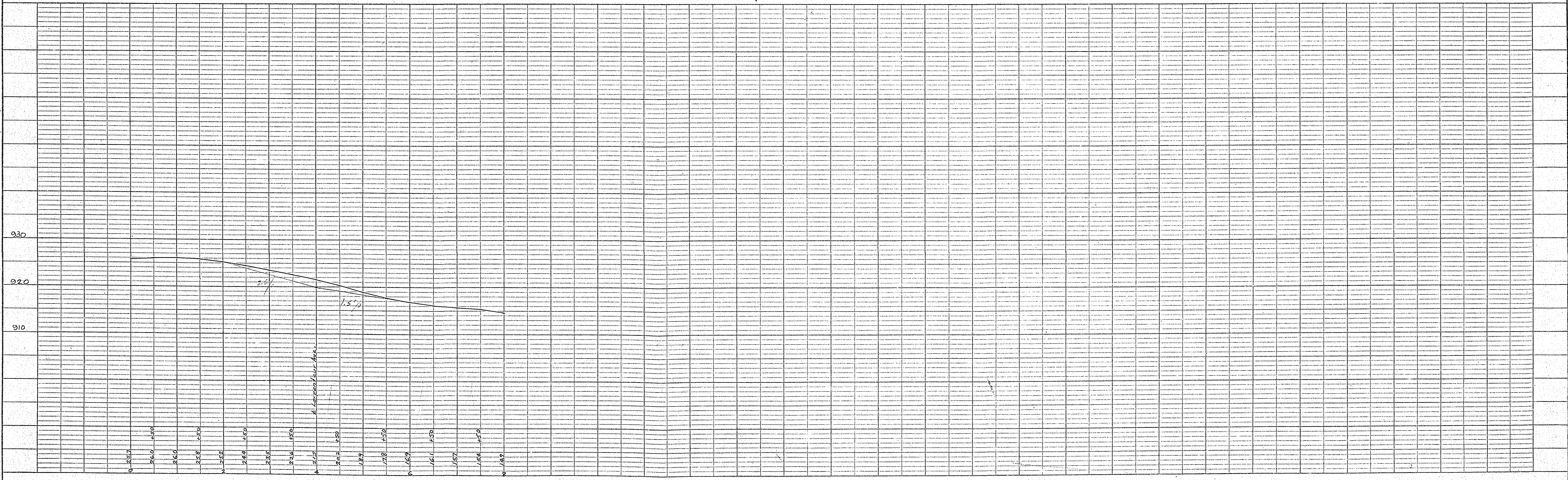
PROFILE BEEBE ROAD STA. 105+16 LT.

PROFILE
 SURVEYED
 PLOTTED
 CALCULATED
 CHECKED
 DATE
 NO.

RWS. 583

PLAN	SUBJECT	BY	DATE
	NOTE BOOK, ALIGNMENT CHECKED NO.		

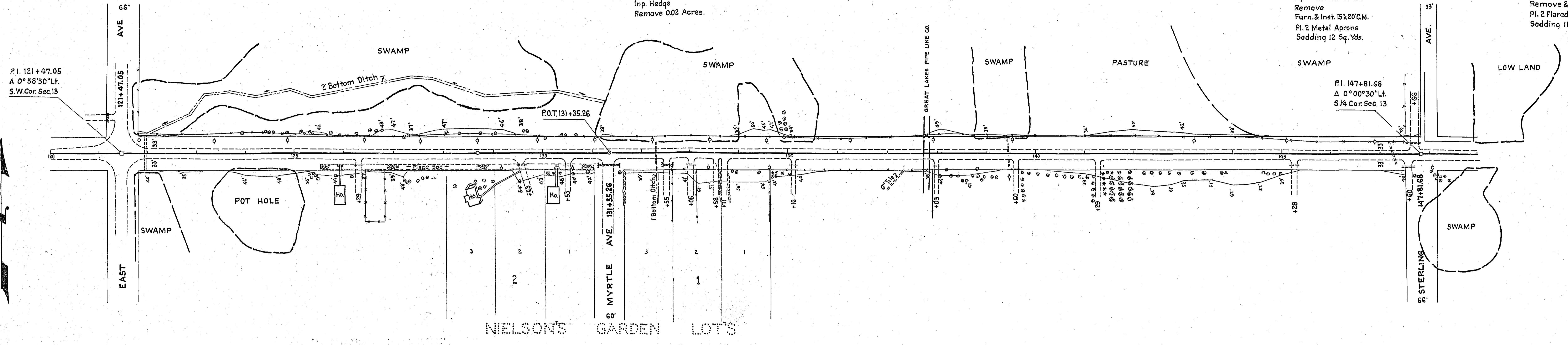
PROFILE	SUBJECT	BY	DATE
	NOTE BOOK, GRADES CHECKED NO.		



Prosperity Ave.

- | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|--|--|---|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Sta. 125+93 Rt. 23'
Inp. 18"x 12" C.M.
Remove
Relay 15'x 6" C.M.
Obtain From 131+35 Rt.
Pl. 2 Metal Aprons
Sodding 12 Sq. Yds. | Sta. 126+29 Rt. 23'
Inp. 12"x 16" C.M.
Inp. 6"x 2.5' Vit. Pipe
Remove
Inp. Mas. Hdw. 1.0 C.Y.
Remove
Furn. & Inst. 15x20' C.M.
Pl. 2 Metal Aprons.
Sodding 12 Sq. Yds. | Sta. 129+63 Rt. 23'
Inp. 15"x 20" C.M.
Remove & Relay
Inp. Mas. Hdw. 1.0 C.Y.
Remove
Pl. 2 Metal Aprons
Sodding 12 Sq. Yds. | Sta. 130+29 Rt. 23'
Inp. 12"x 8" C.M.
Remove
Inp. Mas. Hdw. 1.0 C.Y.
Remove
Relay 15'x 6" C.M.
Obtain From 131+35 Rt.
Pl. 2 Metal Aprons
Sodding 12 Sq. Yds. | Sta. 130+53 Rt. 23'
Inp. 12"x 20" C.M.
Remove
Inp. Mas. Hdw. 1.4 C.Y.
Remove
Relay 15x20' C.M.
Obtain From 131+35 Rt.
Pl. 2 Metal Aprons
Sodding 12 Sq. Yds. | Sta. 131+35.26 Rt. 23'
Inp. 15'x 38' C.M.
Remove
Haul 6 L.F. to 125+93 Rt.
Haul 20 L.F. to 130+53 Rt.
Inp. Mas. Hdw. 3.0 C.Y.
Remove
Furn. & Inst. 18'x 46" S.C. Culv.
Pl. 2 Flared End Sections
Sodding 11 Sq. Yds. | Sta. 132+29 &
Inp. 12'x 46" C.M.
Remove
Furn. & Inst. 24'x 28' to 28' Lt.
Pl. 2 Flared End Sections
Sodding 14 Sq. Yds. | Sta. 132+80 Rt. 27' to 37' Rt.
Inp. 12'x 10" C.M.
Remove
Inp. Mas. Hdw. 1.2 C.Y.
Remove
Furn. & Inst. 15x20' C.M.
Pl. 2 Metal Aprons
Sodding 12 Sq. Yds. | Sta. 132+55 Rt. 23'
Inp. 12'x 20" C.M.
Remove
Inp. Mas. Hdw. 1.2 C.Y.
Remove
Furn. & Inst. 15x20' C.M.
Pl. 2 Metal Aprons
Sodding 12 Sq. Yds. | Sta. 133+05 Rt. 23'
Inp. 12'x 20" C.M.
Remove
Inp. Mas. Hdw. 0.5 C.Y.
Remove
Furn. & Inst. 15x20' C.M.
Pl. 2 Metal Aprons
Sodding 12 Sq. Yds. | Sta. 133+58 Rt. 23'
Inp. Mgs. Hdw. 0.8 C.Y.
Remove
Furn. & Inst. 15x20' C.M.
Pl. 2 Metal Aprons
Sodding 12 Sq. Yds. | Sta. 133+71 Rt. 23'
Inp. Mas. Hdw. 0.8 C.Y.
Remove
Furn. & Inst. 15x20' C.M.
Pl. 2 Metal Aprons
Sodding 12 Sq. Yds. | Sta. 135+12 Rt. 22'
Inp. 12'x 17" C.M.
Remove
Inp. Mas. Hdw. 1.2 C.Y.
Remove
Furn. & Inst. 15x20' C.M.
Pl. 2 Metal Aprons
Sodding 12 Sq. Yds. | Sta. 137+52 Rt. 25'
Inp. 6" Tile
Remove 10 Lin. Ft.
Remove
Inp. Mas. Hdw. 2.0 C.Y.
Remove | Sta. 139+03 Rt. 23'
Inp. 12'x 10" C.M.
Remove
Inp. Mas. Hdw. 1.0 C.Y.
Remove
Furn. & Inst. 15x20' C.M.
Pl. 2 Metal Aprons
Sodding 12 Sq. Yds. | Sta. 139+43 Lt. 34' to 139+45 Rt. 25'
Inp. 12'x 59" C.M.
Remove
Furn. & Inst. 24'x 68" S.C. Culv.
Pl. 2 Flared End Sections
Sodding 14 Sq. Yds. | Sta. 139+60 Rt. 31'
Inp. 12'x 18" C.M.
Remove
Inp. Mas. Hdw. 1.0 C.Y.
Remove
Furn. & Inst. 15x20' C.M.
Pl. 2 Metal Aprons
Sodding 12 Sq. Yds. | Sta. 145+28 Rt. 22'
Inp. 12'x 22" C.M.
Remove
Inp. Mas. Hdw. 1.0 C.Y.
Remove
Furn. & Inst. 15x20' C.M.
Pl. 2 Metal Aprons
Sodding 12 Sq. Yds. | Sta. 147+11 Lt. 24' to 147+32 Rt. 20'
Inp. 12'x 47" C.M.
Remove
Inp. Mas. Hdw. 1.0 C.Y.
Remove
Furn. & Inst. 15x20' C.M.
Pl. 2 Metal Aprons
Sodding 12 Sq. Yds. | Sta. 147+60 Rt. 24'
Inp. 18'x 31" C.M.
Remove & Relay
Pl. 2 Metal Aprons
Sodding 12 Sq. Yds. | Sta. 141+29 Rt.
Inp. Mas. Hdw. 1.0 C.Y.
Remove
Furn. & Inst. 15x20' C.M.
Pl. 2 Metal Aprons
Sodding 12 Sq. Yds. | Sta. 147+66 Lt. 22'
Inp. 18'x 34" S.C. Culv.
Remove & Relay
Pl. 2 Flared Ends
Sodding 11 Sq. Yds. |
|--|--|---|--|--|---|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|---|

PLAN
 SURVEYED
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 DATE

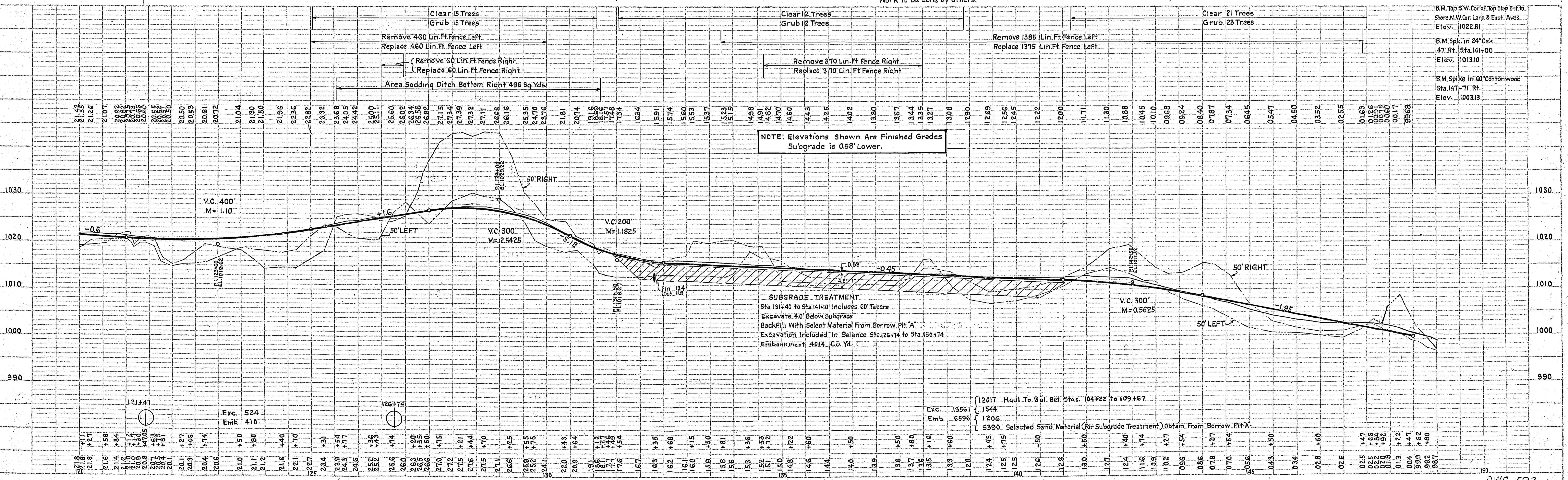


NOTE: Buried Telephone Cable in South Shoulder of Road To Be Lowered
 Work to be done by others.

Sta. 140+50 &
 Furn. & Inst. 6"x 72" Drain Tile
 See Subgrade Treatment Sheet #2

Sta. 137+78 &
 Inp. 2'-6" Gasoline Pipe Lines
 To be Lowered
 Work to be done by others.

PROFILE
 SURVEYED
 PLOTTED
 CALCULATED
 CHECKED
 DATE



NOTE: Elevations Shown Are Finished Grades
 Subgrade is 0.58' Lower.

SUBGRADE TREATMENT
 Sta. 131+40 to Sta. 141+00 (Includes 60' Tapers)
 Excavate 4' Below Subgrade
 Backfill With Select Material From Borrow Pit 'A'
 Excavation Included In Balance Sta. 126+74 to Sta. 150+374
 Embankment 4014 Cu. Yd.

Exc. 13561
 Emb. 6596
 12017 Haul To Bal. Est. Stas. 104+22 to 109+67
 1544
 1206
 5390 Selected Sand Material (For Subgrade Treatment) Obtain From Borrow Pit 'A'

Sta. 151+77 Lt. 18' to 31' Rt. Inp. 18"x49" C.M. Remove. No Culv. Req'd.

Sta. 151+55 Rt. Inp. 15"x20" C.M. Remove & Relay Inp. Mas. Hdw. 5.8 C.Y. Remove Pl. 2 Metal Aprons Sodding 12 Sq. Yds.

Sta. 154+65 Lt. Inp. 12"x29" C.M. Remove Inp. Mas. Hdw. 1.0 C.Y. Obtain From 156+72 Rt. Pl. 2 Metal Aprons Sodding 12 Sq. Yds.

Sta. 153+76 Lt. Inp. 12"x70" C.M. Remove Sta. 153+76 Lt. 40' to 50' Rt. Furn. & Inst. 24"x90" S.C. Culv. Pl. 2 Flared End Sections Sodding 14 Sq. Yds.

Sta. 156+72 Rt. 21' to Sta. 157+12 Rt. 21' Inp. 15"x40" C.M. Remove. Relay 20' Inp. Mas. Hdw. 1.2 C.Y. Remove Pl. 2 Metal Aprons Sodding 12 Sq. Yds. Haul 20' C.M. to Sta. 154+65 Lt.

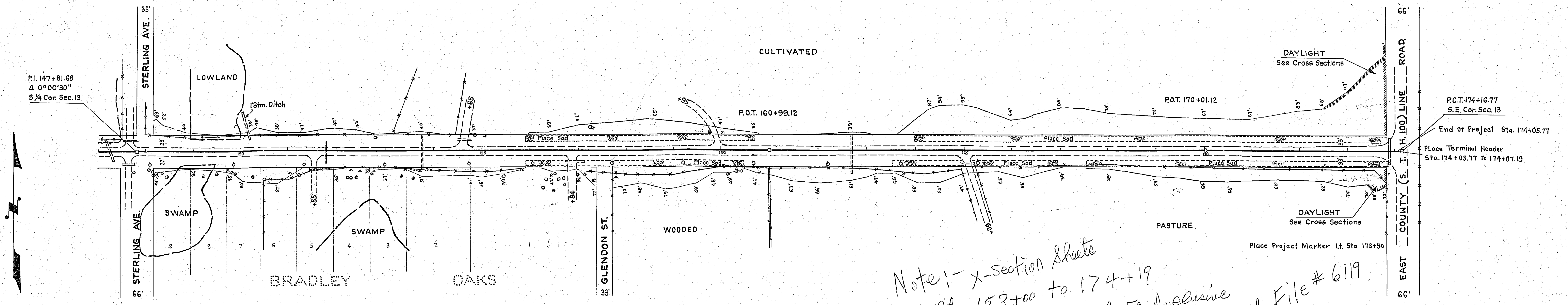
Sta. 159+95 Lt. No Culv. Req'd.

Sta. 162+67 Lt. Inp. 18"x80" C.M. Remove. Sta. 162+67 Lt. 39' to 61' Rt. Furn. & Inst. 24"x100" S.C. Culv. Pl. 2 Flared End Sections Sodding 14 Sq. Yds.

Sta. 165+09 Rt. 23' Inp. 12"x28" C.M. Remove Inp. Mas. Hdw. 1.2 C.Y. Remove Furn. & Inst. 15"x20" C.M. Pl. 2 Metal Aprons Sodding 12 Sq. Yds.

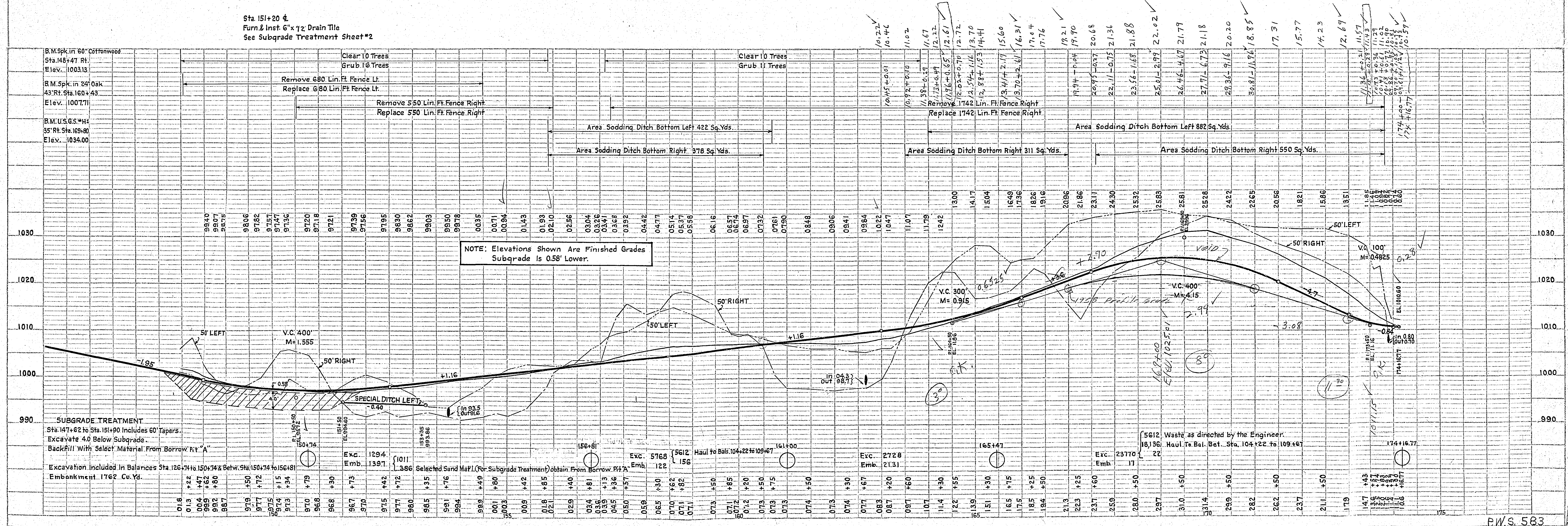
Sta. 173+89 Lt. Inp. 15"x54" C.M. Remove Sta. 173+83 Lt. 34' to 34' Rt. Furn. & Inst. 24"x68" S.C. Culv. Pl. 2 Flared End Sections Sodding 14 Sq. Yds.

PLAN
 DRAWN BY
 CHECKED BY
 DATE



Note: - x-section sheets Sta. 153+00 to 174+19 sheets 46 to 50 inclusive 7/18/58 are with File # 6119

Sta. 151+20 Lt. Furn. & Inst. 6"x72" Drain Tile See Subgrade Treatment Sheet #2



NOTE: Elevations Shown Are Finished Grades Subgrade Is 0.58' Lower.

SUBGRADE TREATMENT
 Sta. 147+62 to Sta. 151+90 Includes 60' Tapers.
 Excavate 4.0 Below Subgrade.
 Backfill With Select Material From Borrow Pit "A"
 Excavation included in Balances Sta. 126+74 to 150+74 & Betw. Sta. 150+74 to 156+19
 Embankment 1762 Cu. Yd.

5612 Waste as directed by the Engineer.
 18136 Haul To Bal. Bet. Sta. 104+22 to 109+67

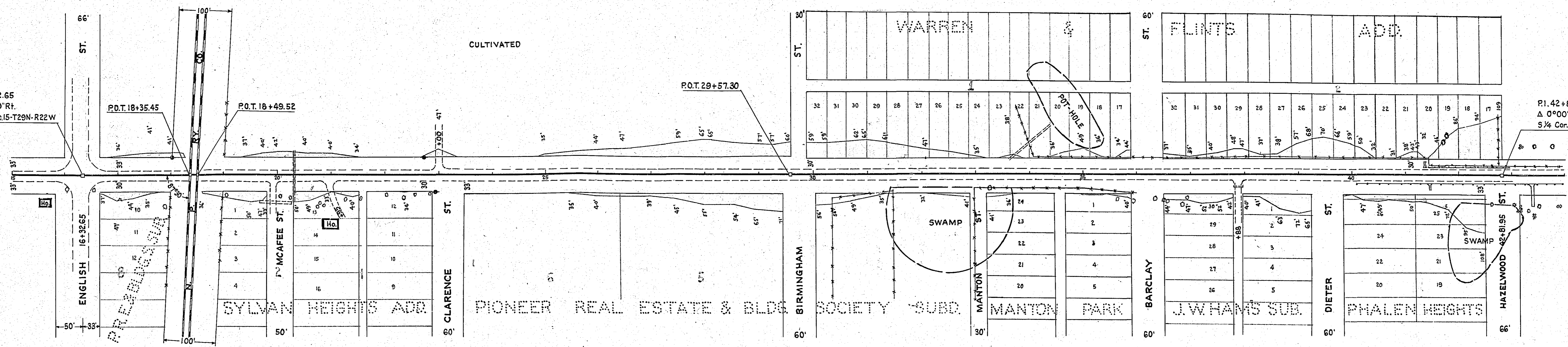
Sta. 19+96 Rt.
Inp. 24% 60'C.M.
OK Leave

Sta. 20+30 L.
Inp. 24% 78'C.M.
Remove
Sta. 20+30 Lt. 42' to 50' Rt.
Furn. & Inst. 24% 92'S.C.Culv.
Pl. 2 Flared End Sections
Sodding 14 Sq. Yds.

Sta. 37+88 Rt.
Inp. 15% 19'S.C.Culv.
Remove
Relay 14 Lin. Ft.
Furn. & Inst. 2 Flared End Sections
Sodding 12.5q. Yds.

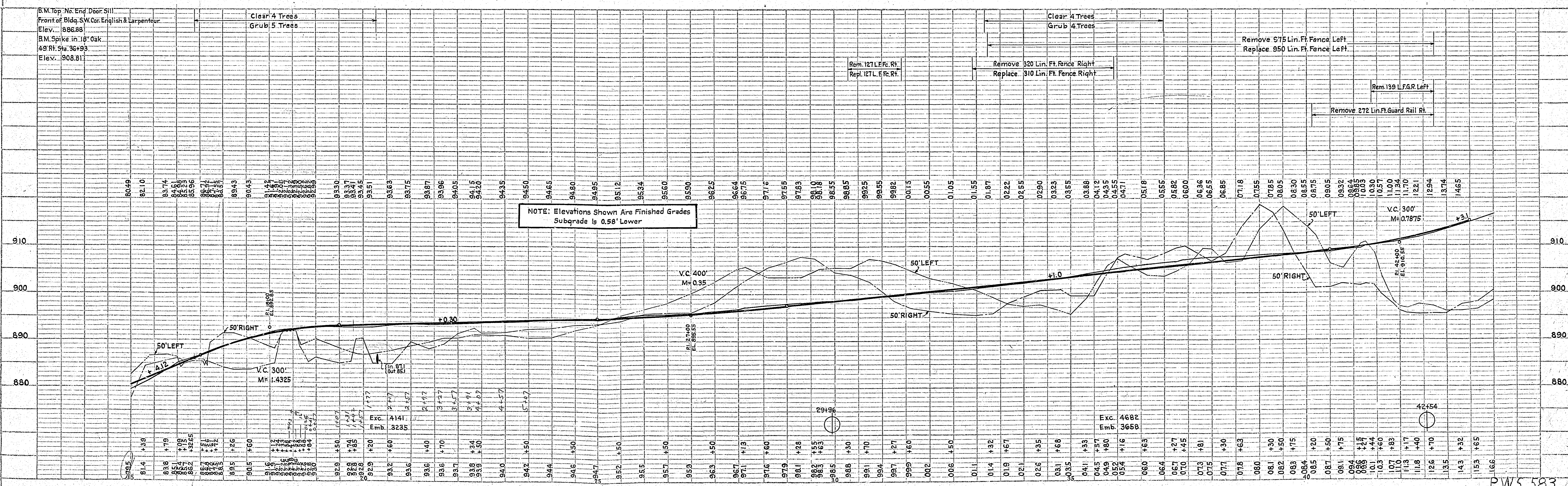
P.I. 16+32.65
Δ 0°22'30" Rt.
S.W. Cor. Sec. 15-T29N-R22W

P.I. 42+81.95
Δ 0°00'15" Rt.
S 1/4 Cor. Sec. 15-T29N-R22W.



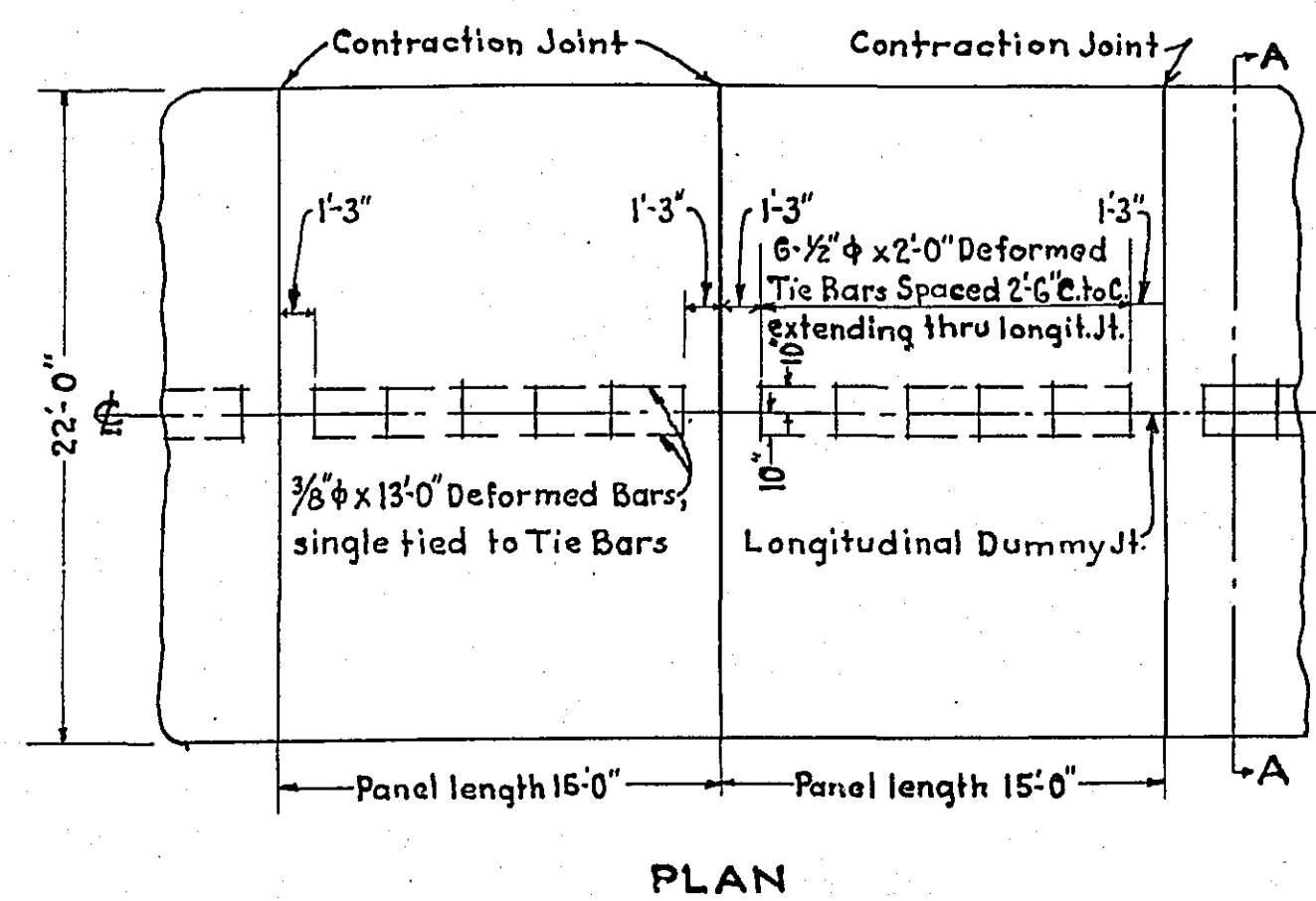
PLAN	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	CHECKED		
	INT. OF WAY CHECKED		

PROFILE	SURVEYED	BY	DATE
NOTE BOOK	GRADES CHECKED		
	B.M. & NOTES		
	STRUCTURE NOTATION CHECKED		

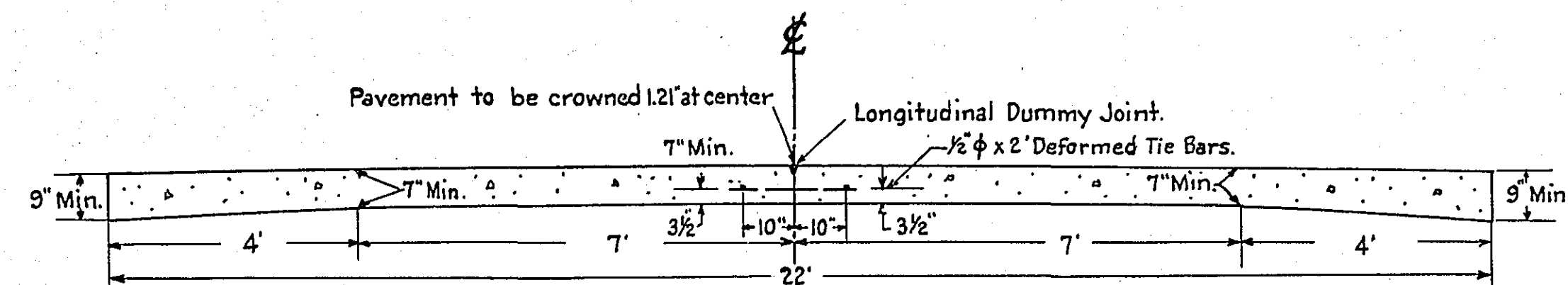


P.W. 583

9-7-9 CONCRETE PAVEMENT 22' FOOT WIDTH STANDARD PANEL DETAIL

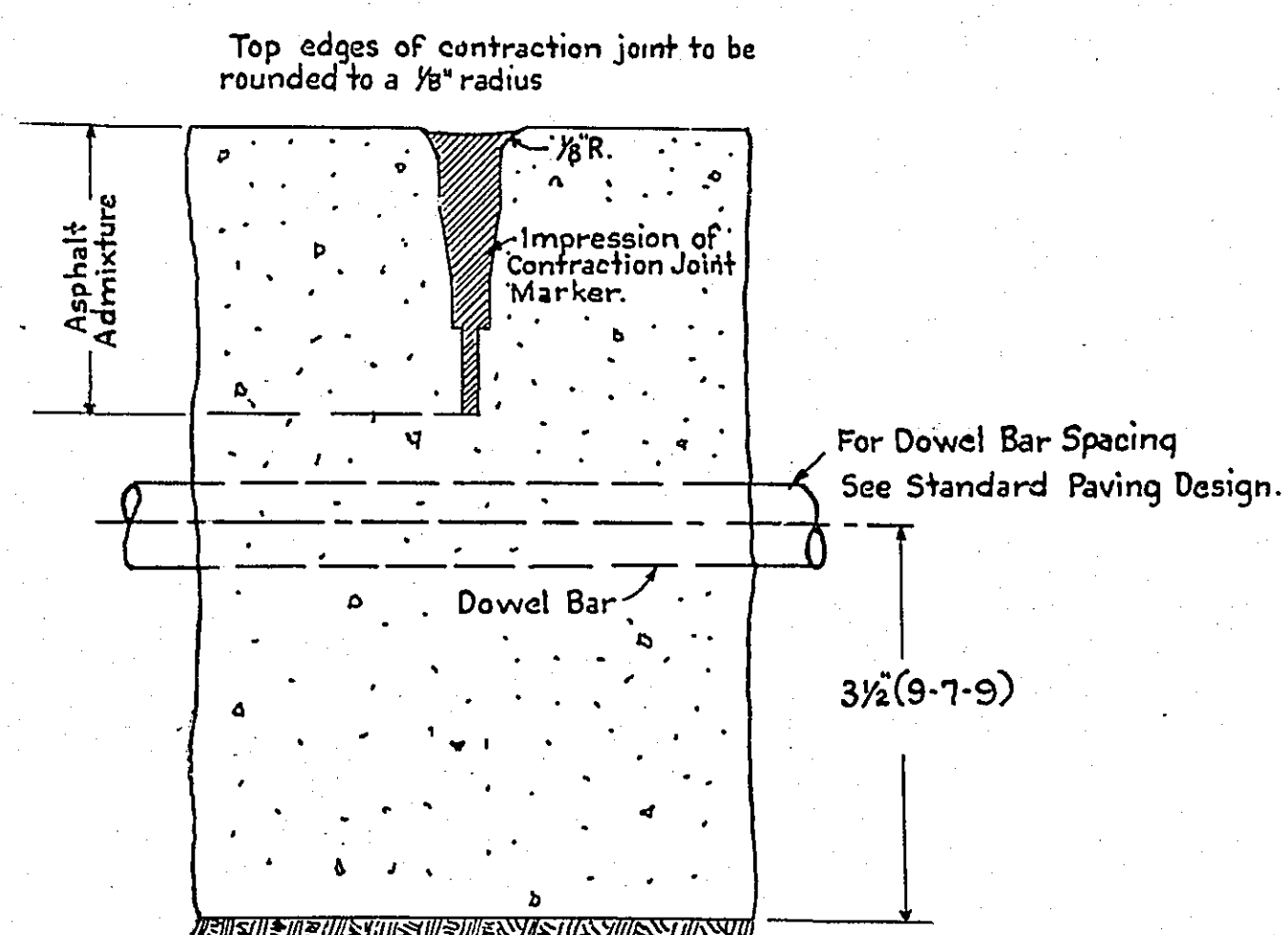


PLAN



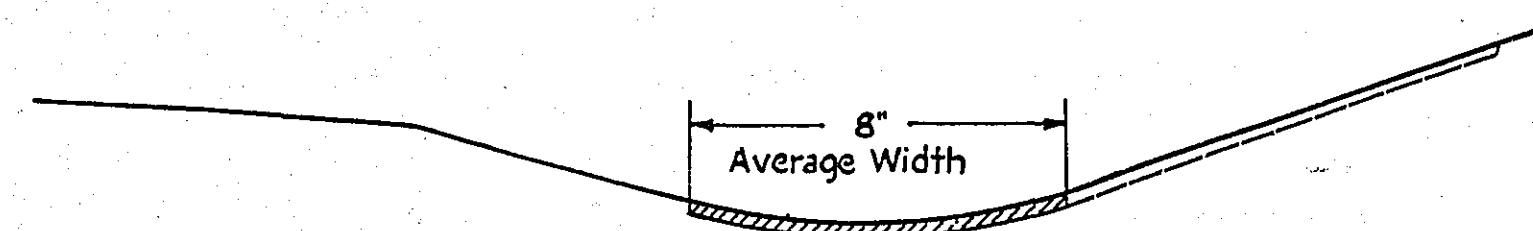
SECTION A-A

CONTRACTION JOINT DESIGN Specification Reference Classification N2 2391.3B Asphalt Admixture 3722



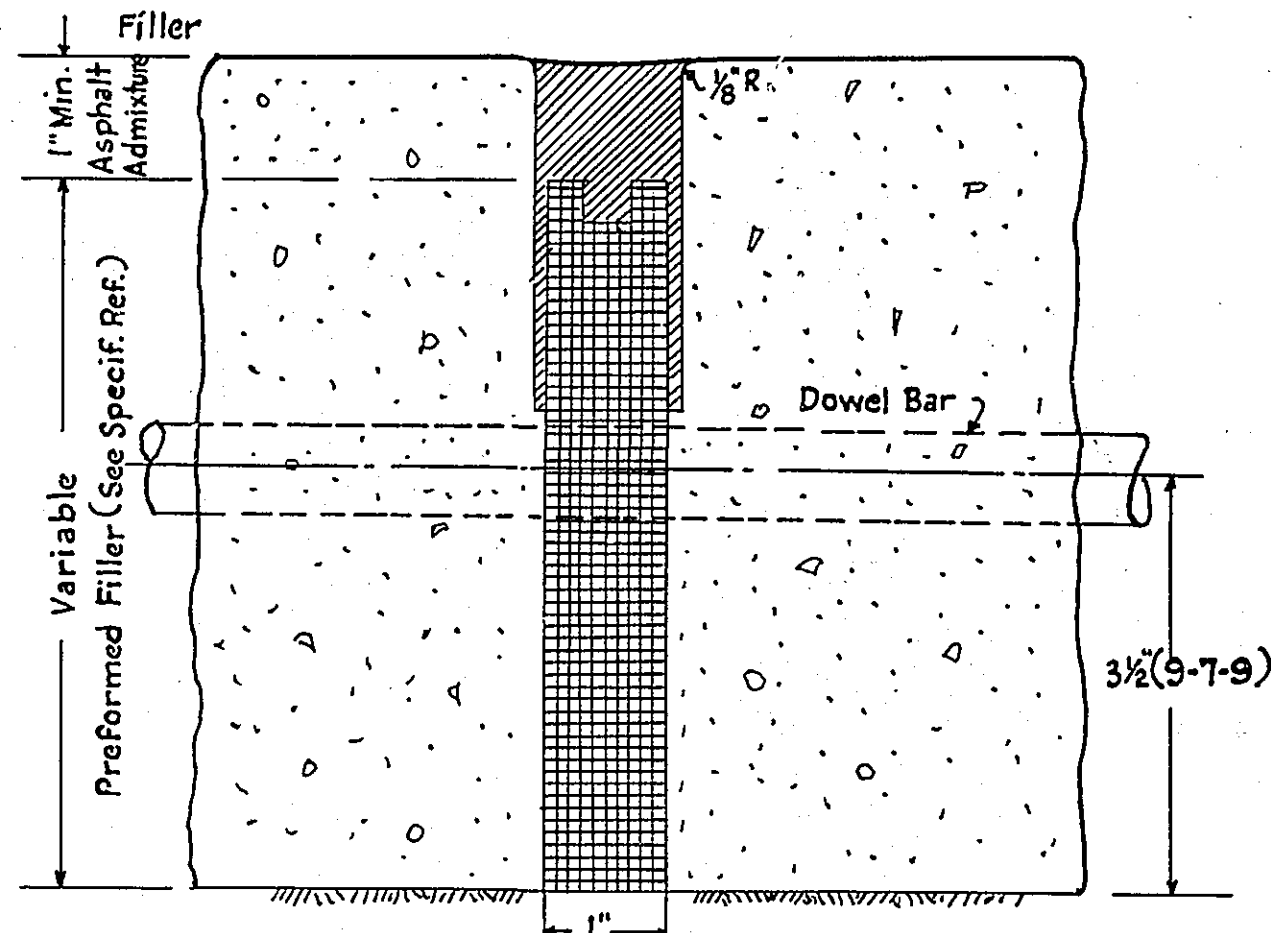
TYPICAL SECTION
Design N2 B1C
See Plate N2 1057

DETAIL OF DITCH SODDING



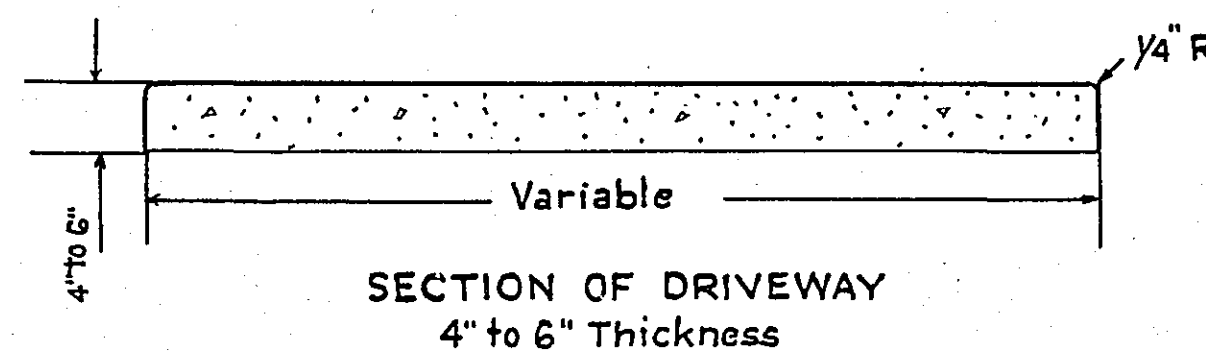
EXPANSION JOINT DESIGN

CLASS B1E
Specification Reference
Classification N2 2391.3B
Asphalt Admixture 3702
Preformed Filler 3702



TYPICAL SECTION

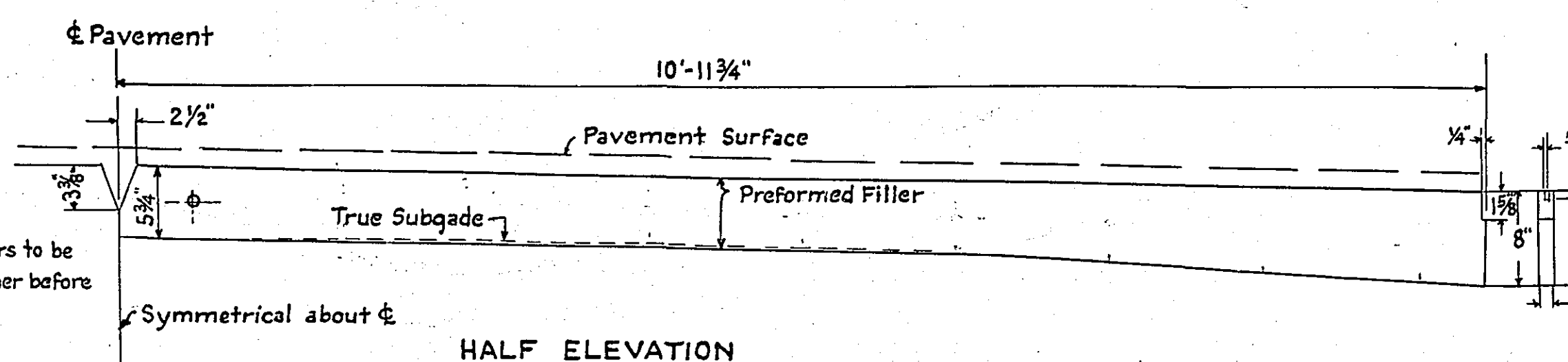
CONCRETE DRIVEWAYS



SECTION OF DRIVEWAY
4" to 6" Thickness

NOTE: The Thickness and Width of Concrete Driveways will vary to fit existing driveways.

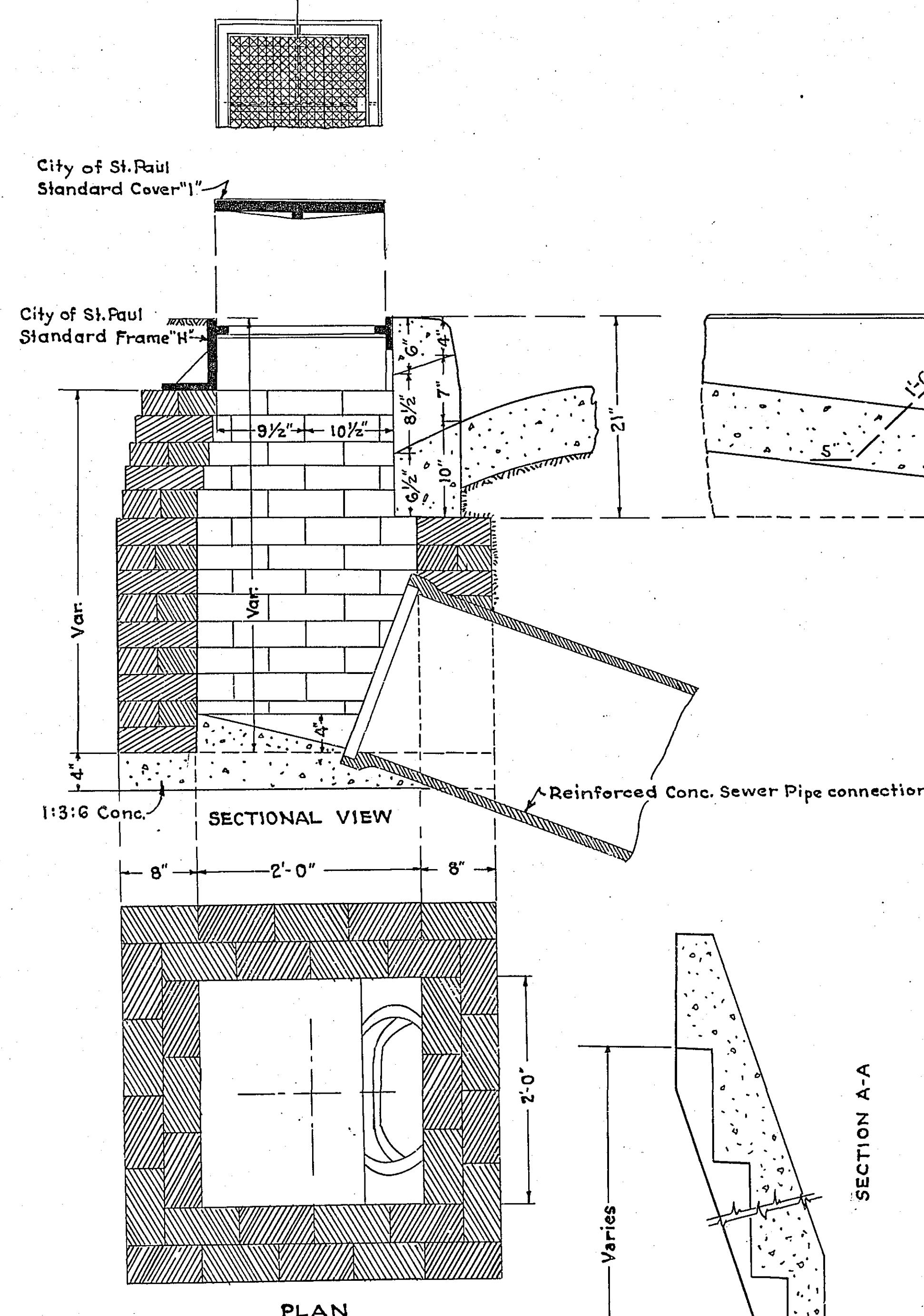
TRANSVERSE JOINT DETAILS PREFORMED FILLER



Ends of adjoining fillers to be stapled closely together before placing concrete.

NOTE: Remove enough material from the crown of the subgrade to permit a straight line section for a distance of 1/2 pavement width less 4" on either side of centerline. 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.
For dimensions of preformed filler see plate N2 1048

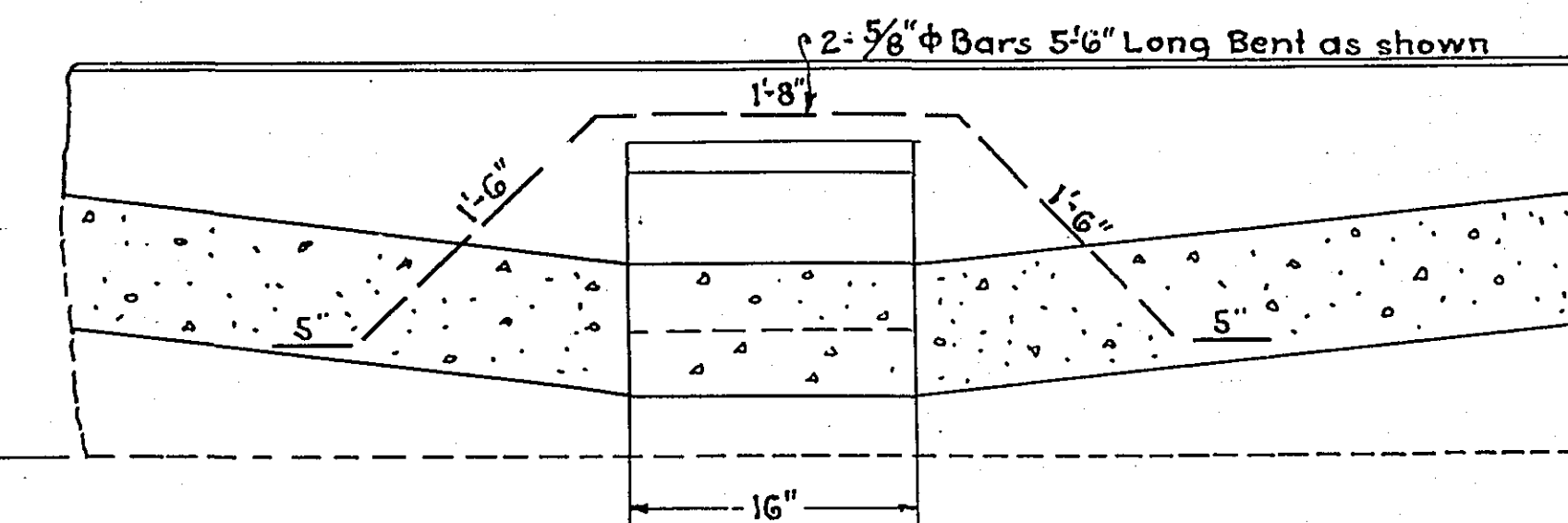
CATCH BASIN



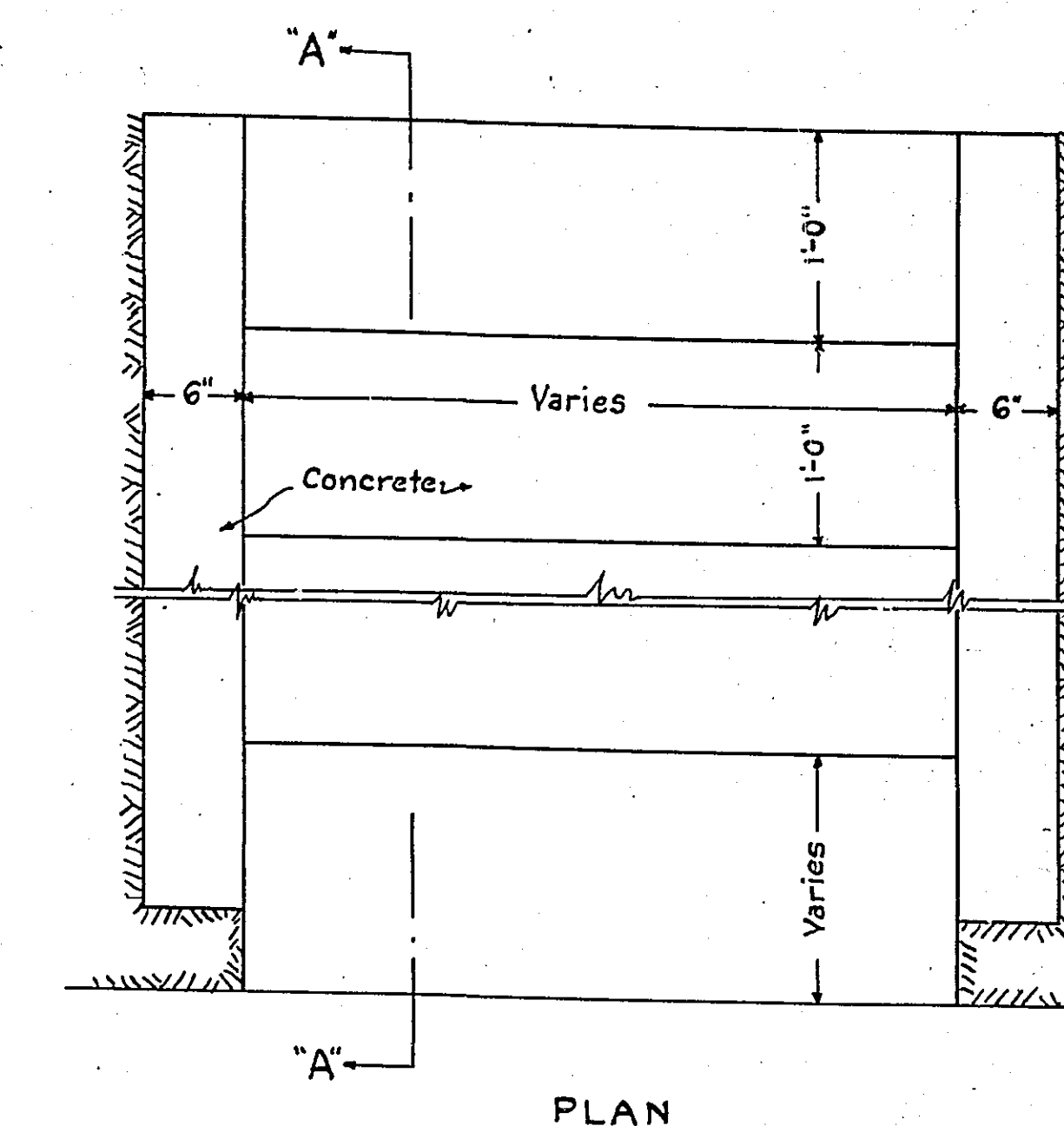
SECTIONAL VIEW

PLAN

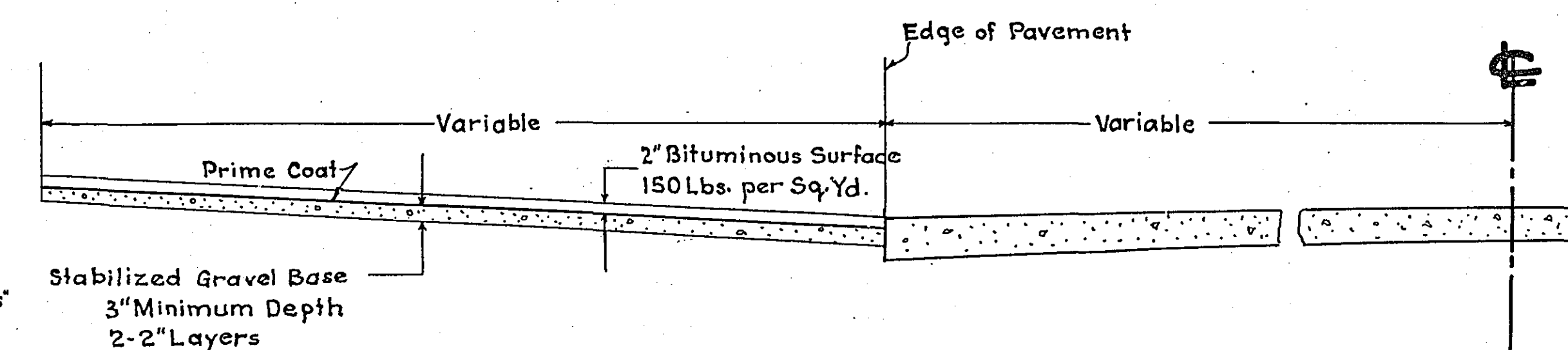
CURB INLET



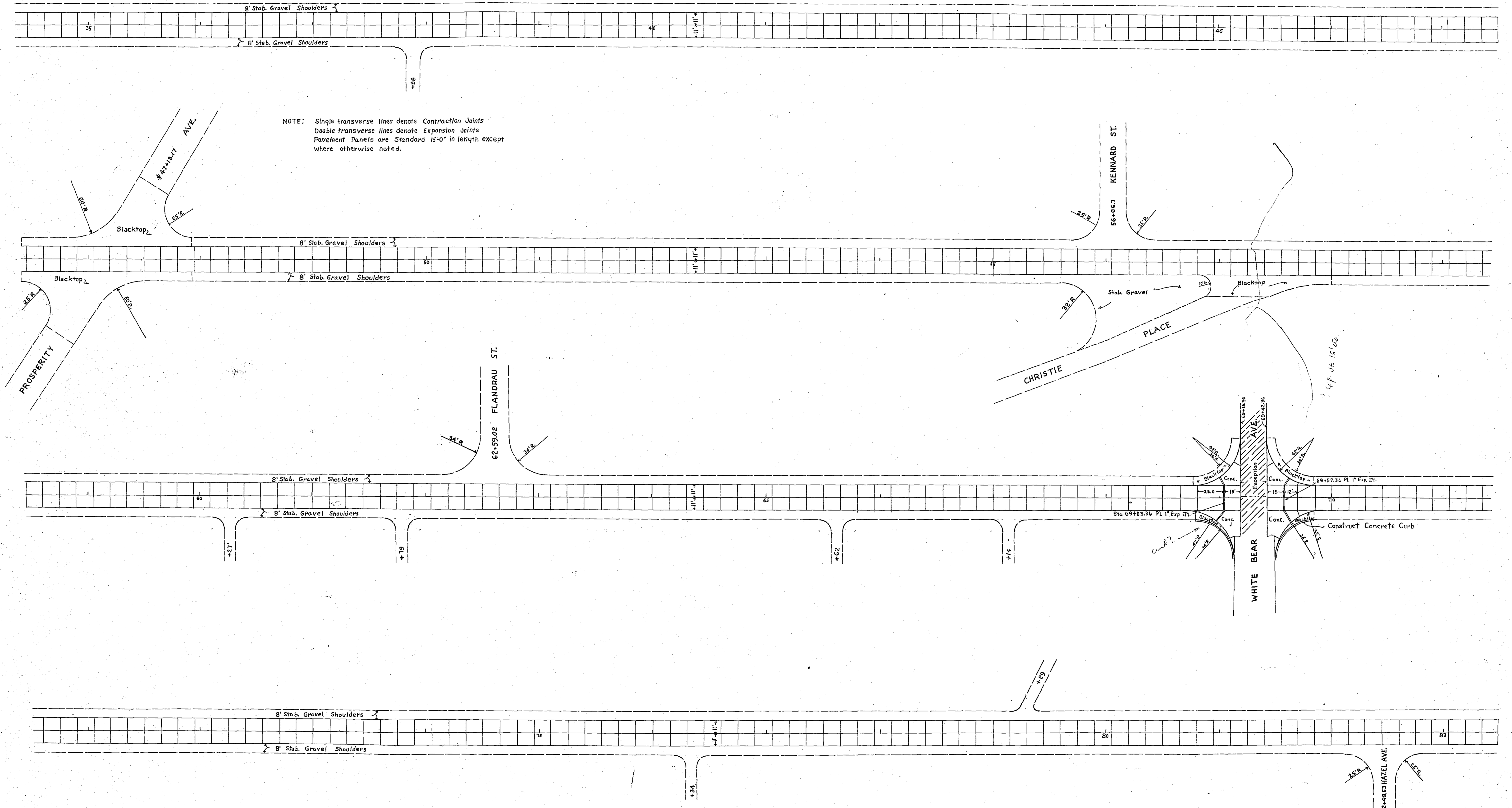
STEP DETAILS



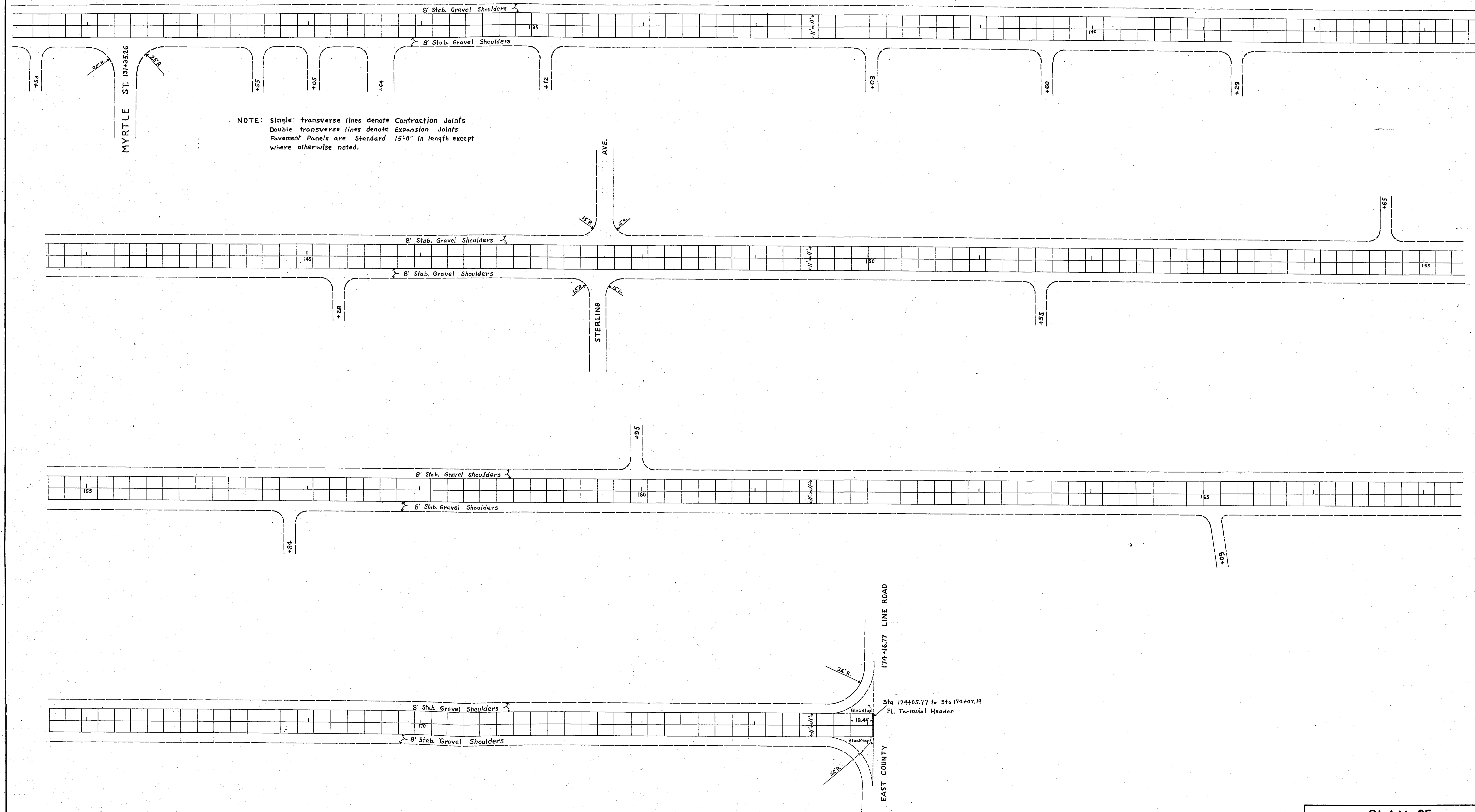
NOTE: The Width of Concrete Step Openings will vary to fit existing sidewalks (3.0' Minimum).



TYPICAL BITUMINOUS SURFACING SECTION
AT INTERSECTIONS (SEE PANEL SHEETS)

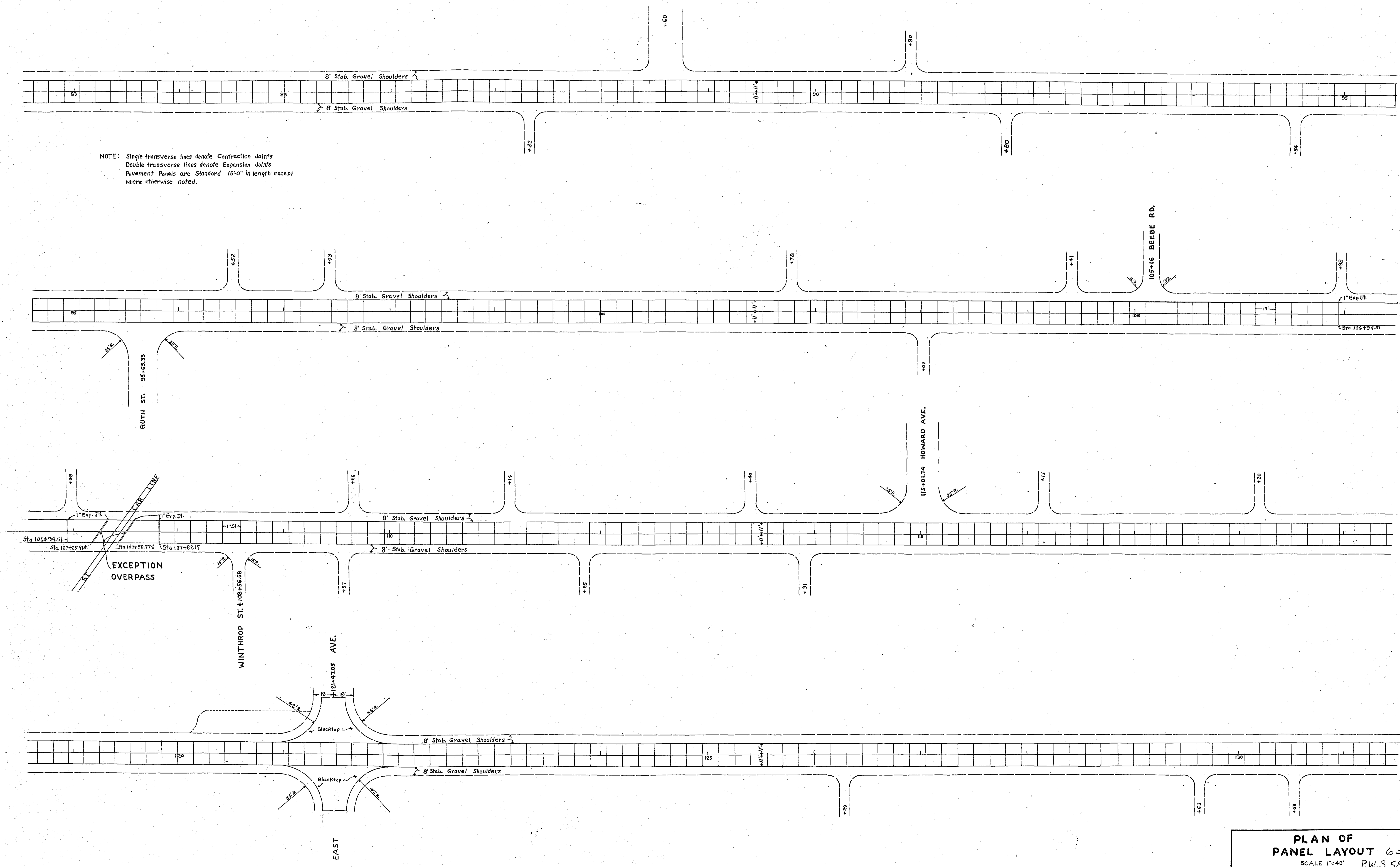


**PLAN OF
PANEL LAYOUT 6506**
SCALE 1"=40' P.W.S. 583

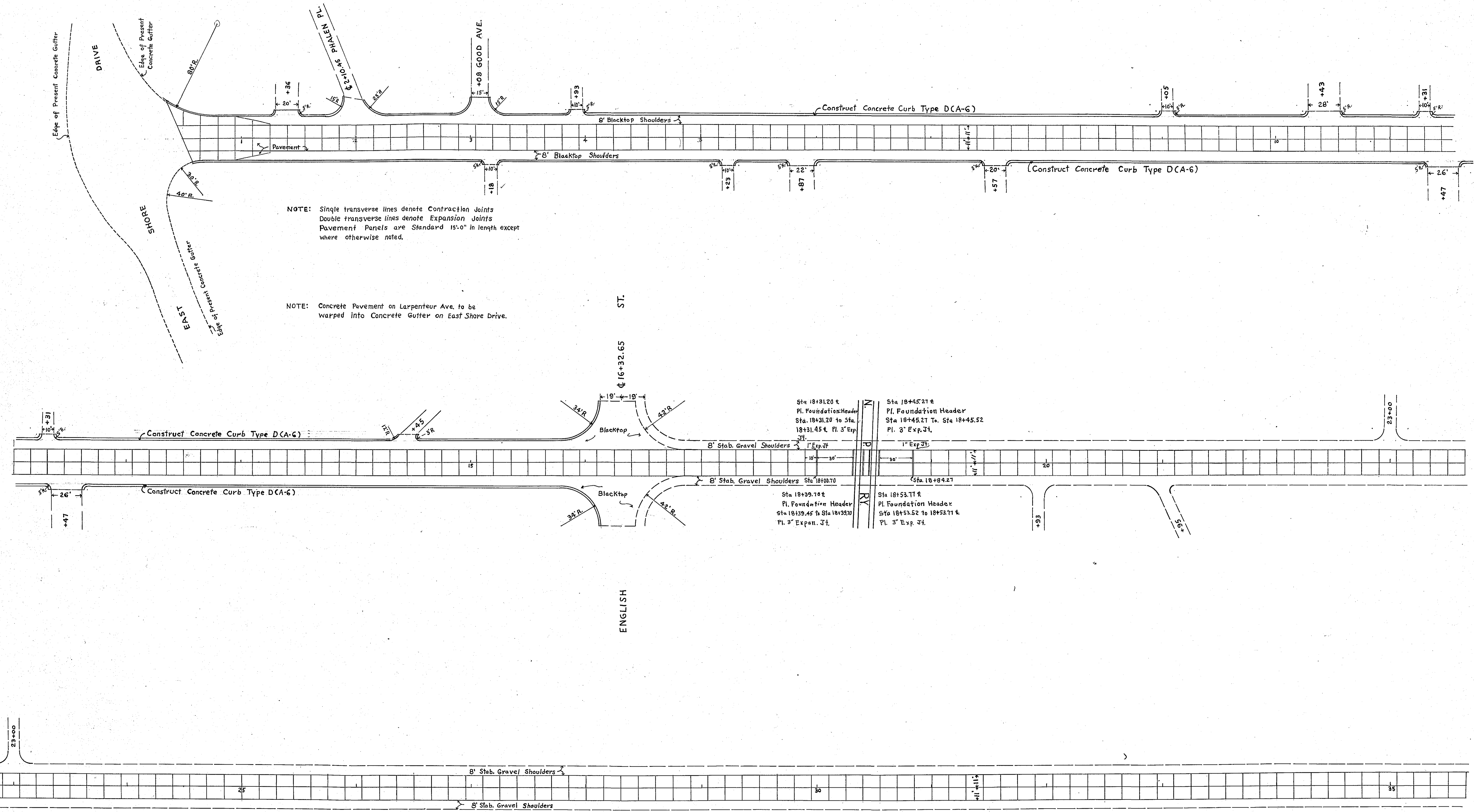


**PLAN OF
 PANEL LAYOUT 6506**
 SCALE 1"=40' P.W.S. 583

NOTE: Single transverse lines denote Contraction Joints
 Double transverse lines denote Expansion Joints
 Pavement Panels are Standard 15'-0" in length except where otherwise noted.



**PLAN OF
 PANEL LAYOUT 6506**
 SCALE 1"=40' P.W.S. 583



**PLAN OF
PANEL LAYOUT 6506**
SCALE 1"=40' P.W.S. 583

Sta. 69+01 Lt. 21' to Sta. 69+05 Lt. 175' Inp. 18" x 154' C.M. O.K. Leave

Sta. 69+01 Lt. 21' to 69+07 Rt. 2' Inp. 12" x 22' C.M. Remove Furn. & Inst. 18" x 22' S.C. Pipe Trench Exc. 0' to 6' Deep 22 L.F.

Sta. 68+91 Rt. 23 to 69+07 Rt. 2' Inp. 12" x 18" Vit. Pipe Remove

Sta. 69+07 Rt. 2' to 69+55 Rt. 2' Inp. 15" x 48" Vit. Pipe Remove Furn. & Inst. 24" x 32' S.C. Sew. P. Relay 24" x 16" Conc. Pipe Obtain From Sta. 55+76 Lt. 21' Trench Exc. 0' to 6' Deep 48 Lin. Ft.

Sta. 69+55 Rt. 2' to 37' Lt. Inp. 15" x 39" Vit. P. O.K. Leave

Sta. 69+55 Lt. 37' Inp. Manhole O.K. Leave

Sta. 70+51 Lt. 24' to 31' Rt. Inp. 18" x 55' C.M. Remove

Sta. 70+51 Lt. 24' Inp. Catch Basin Remove

Sta. 76+34 Rt. 23' Inp. 12" x 16" C.M. Remove Inp. Mas. Hdw. 1.3CY. Remove

Sta. 76+80 Rt. 23' Inp. 12" x 6" C.M. Remove Inp. Mas. Hdw. 1.2CY. Remove

Sta. 79+29 Lt. 22' Inp. 12" x 20" C.M. Remove Inp. Mas. Hdw. 1.3CY. Remove

Sta. 82+20 Rt. 23' to 82+70 Rt. 23' Inp. 12" x 50" C.M. Remove Inp. Masonry Headwall 0.7 CY. Remove

Sta. 87+32 Rt. 24' Inp. 12" x 17" C.M. Remove Inp. Mas. Hdw. 1.0 CY. Remove

Sta. 87+36 Rt. 22' Inp. 12" x 5.5" C.M. Remove

Sta. 88+36 Lt. 23' to 88+81 Lt. 24' Inp. 12" x 43" C.M. Remove Inp. Mas. Hdw. 1.0 CY. Remove

Sta. 88+36 Rt. 24' Inp. 12" x 4" C.M. Remove Inp. Mas. Hdw. 1.0 CY. Remove

Sta. 89+32 Rt. 24' Inp. 18" x 93" C.M. Remove (Hwy. 76 Sta.) Remove & Relay

Sta. 89+32 Rt. 24' Inp. 12" x 17" C.M. Remove Inp. Mas. Hdw. 1.0 CY. Remove

Sta. 89+32 Rt. 24' to 89+32 Rt. 24' Relay 18" x 93" C.M. Obtain From Sta. 89+32 & Pl. 2 Metal Aprons Sodding 13 Sq. Yds.

Sta. 89+32 Rt. 24' to 89+32 Rt. 24' Furn. & Inst. 15" x 38" C.M. Pl. 2 Metal Aprons Sodding 12 Sq. Yds.

Sta. 91+80 Rt. Furn. & Inst. 15" x 20" C.M. Pl. 2 Metal Aprons Sodding 12 Sq. Yds.

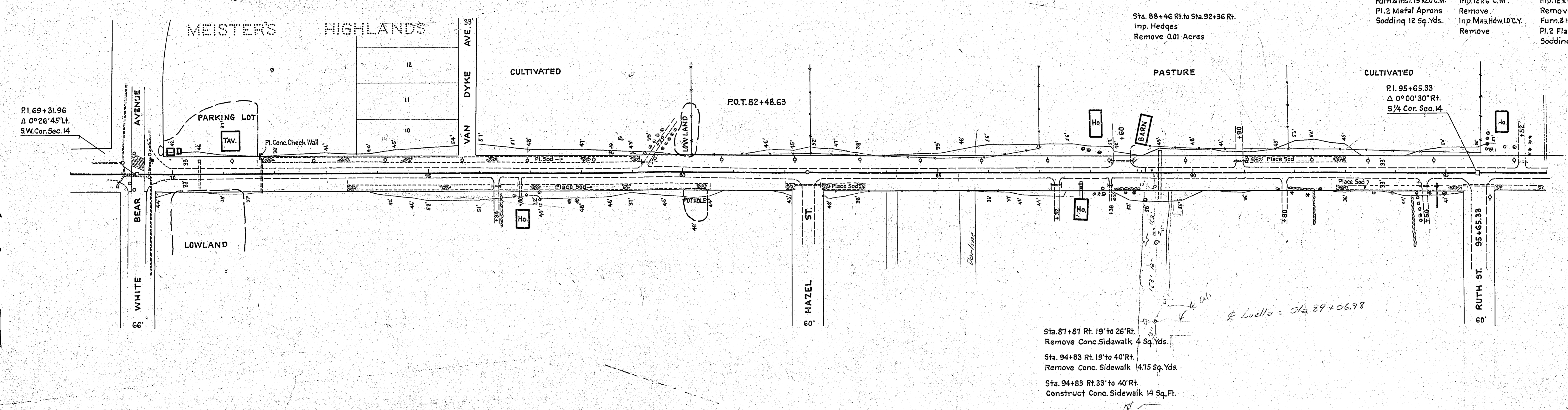
Sta. 94+83 Rt. 19' to 40' Rt. Furn. & Inst. 15" x 20" C.M. Pl. 2 Metal Aprons Sodding 12 Sq. Yds.

Sta. 94+83 Rt. 33' to 40' Rt. Construct Conc. Sidewalk 14 Sq. Ft.

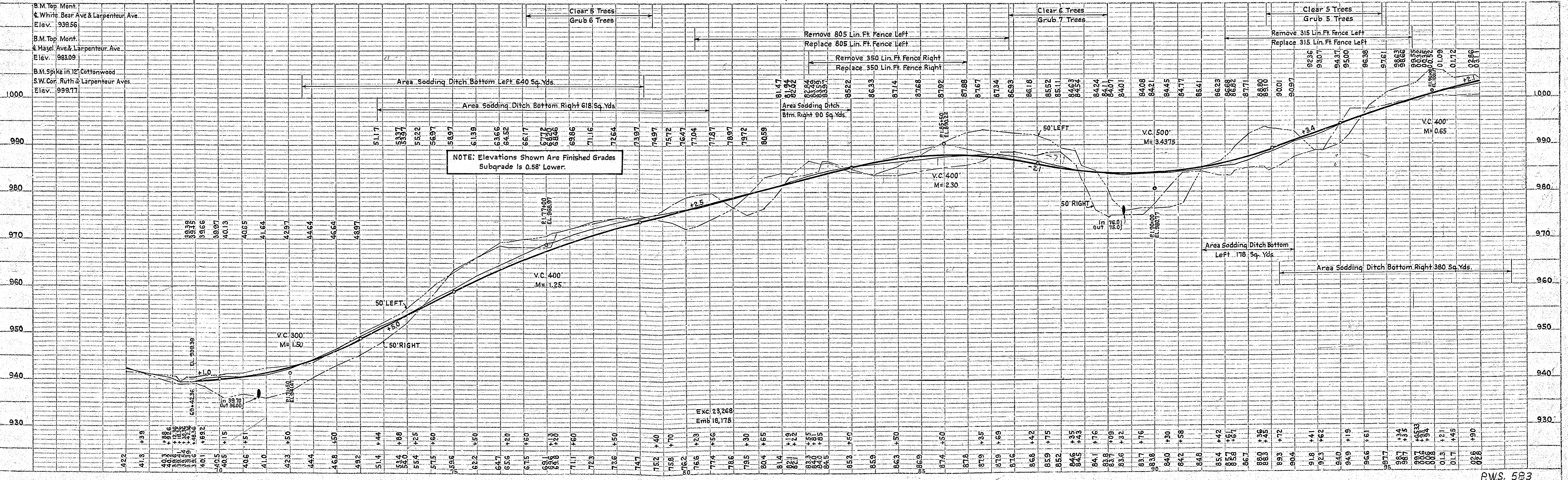
Sta. 95+65.33 Δ 0° 00' 30" Rt. S/4 Cor. Sec. 14

Sta. 95+65.33 Inp. Hedges Remove 0.01 Acres

Sta. 94+83 Rt. 23' to 95+94 Rt. 23' Inp. 12" x 60" C.M. Remove Furn. & Inst. 18" x 60" S.C. Culv. Pl. 2 Flared End Sections Sodding 11 Sq. Yds.



NOTE: Buried Telephone Cable In South Shoulder Of Road To Be Lowered Work To Be Done By Others.



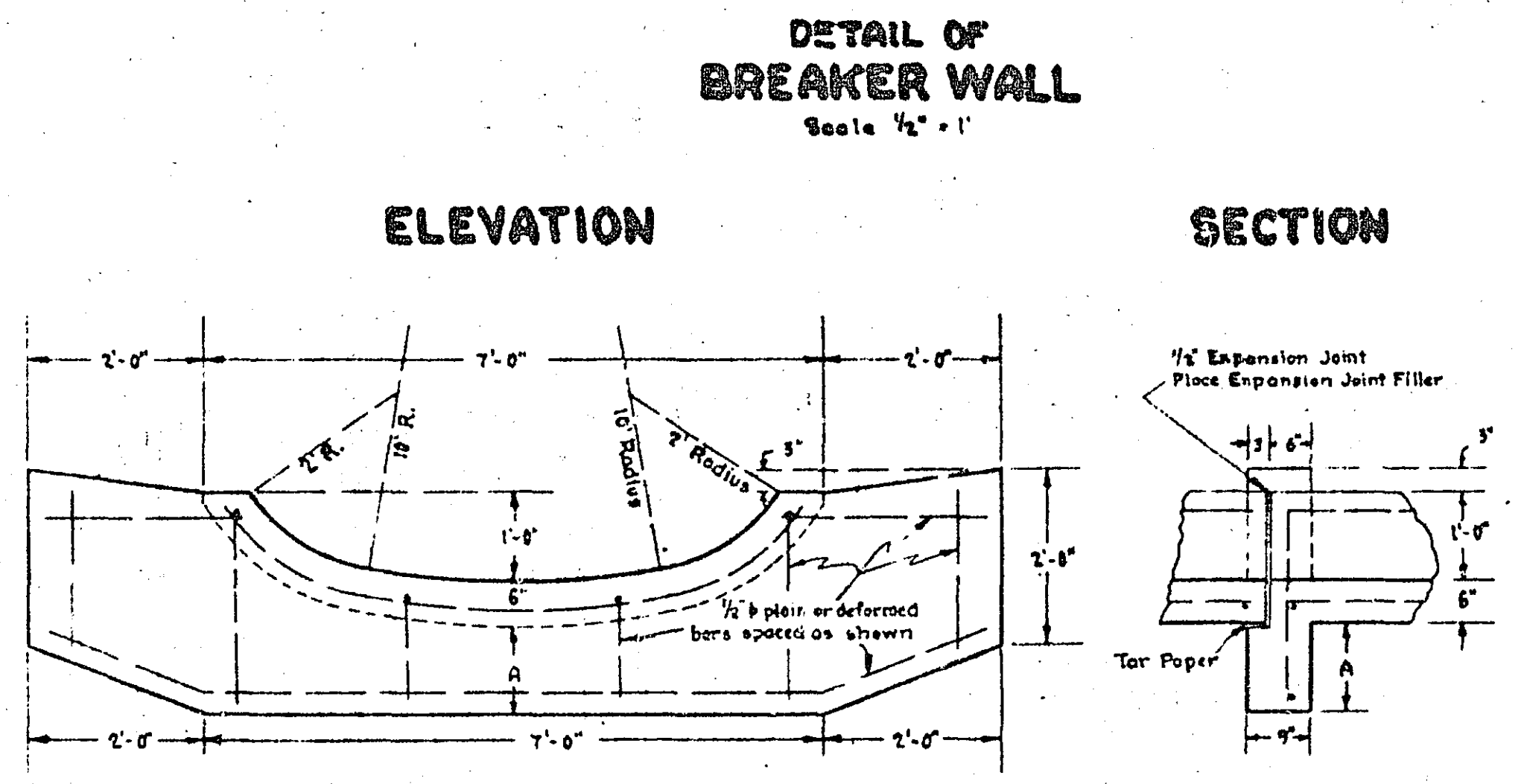
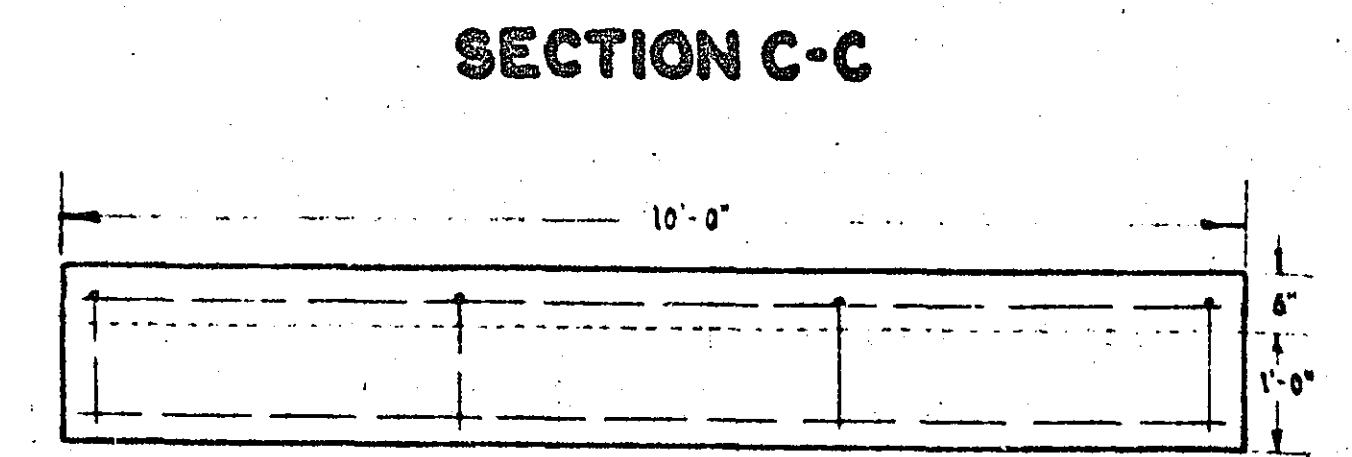
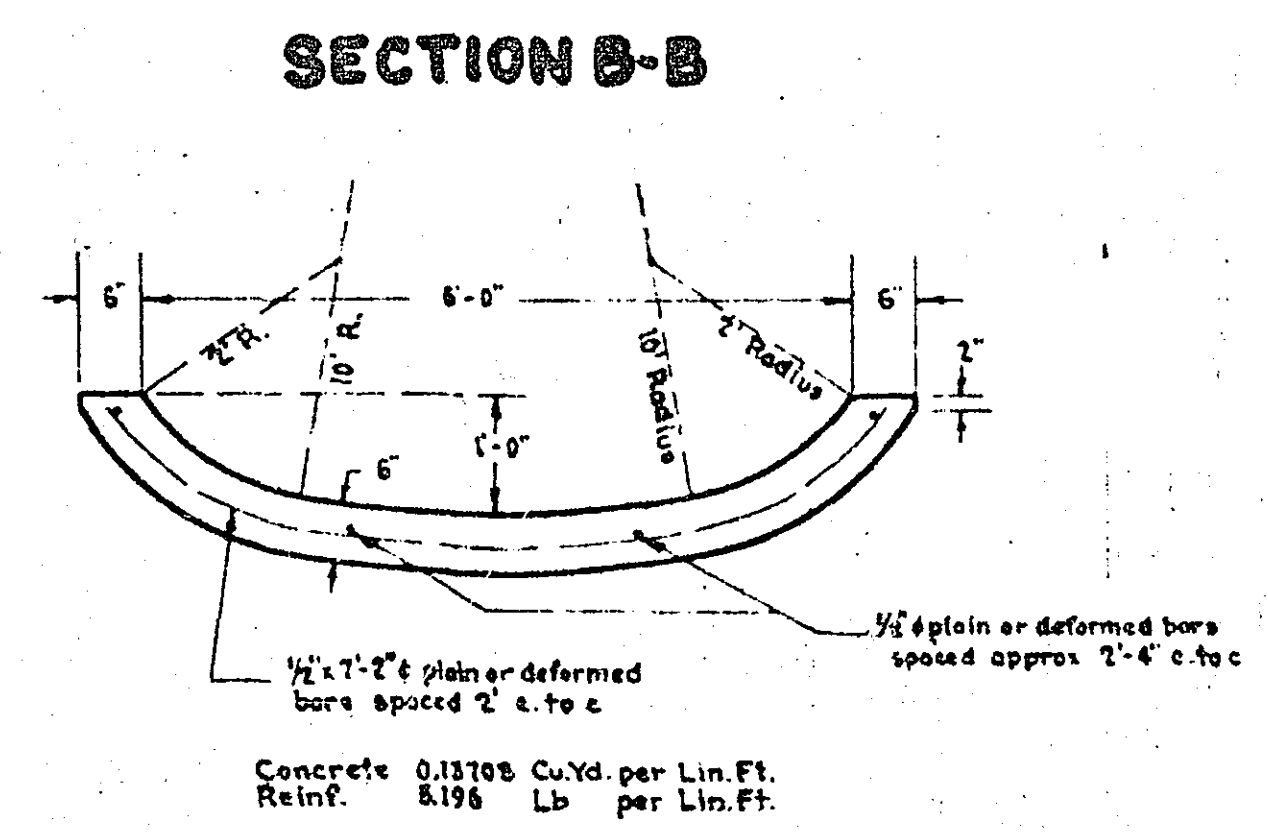
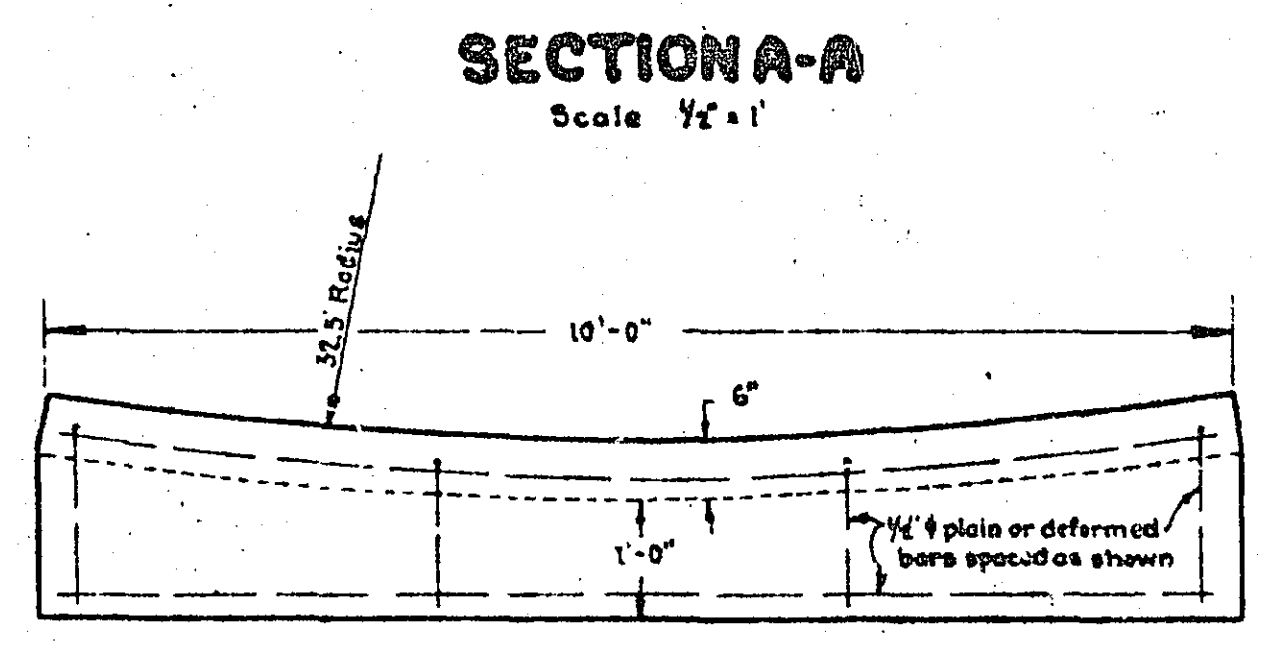
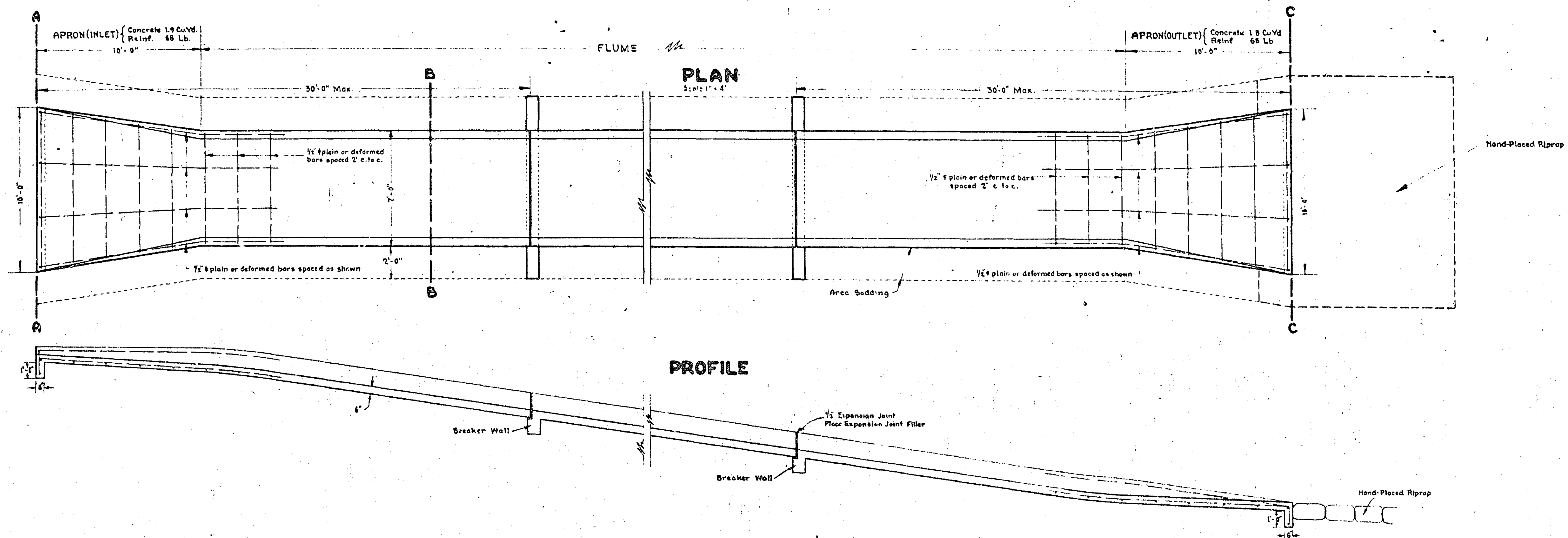
NOTE: Elevations Shown Are Finished Grades Subgrade Is 0.58' Lower.

PLAN SUPERVISOR: [] DATE: []
 PLOTTED: []
 ALIGNMENT CHECKED: []
 NOTE BOOK: []
 NO.:

PROFILE SUPERVISOR: [] DATE: []
 PLOTTED: []
 GRADES CHECKED: []
 NOTE BOOK: []
 STRUCTURE NOTATIONS: []
 NO.:

DETAIL OF CONCRETE FLUME

Specification Reference #2548



Note: Dimension 'A' shall be 6" on grades flatter than 4% and 1'0" on grades steeper than 4%.

Dimension	Concrete	Reinf.
6"	0.35 Cu.Yd.	15.8 Lb.
1'	0.50 Cu.Yd.	17.4 Lb.

DETAIL OF CONCRETE FLUME

6506
P.W.S. 583