

CONVENTIONAL SIGNS & ABBREVIATIONS

STATE LINE	-----	EXCAVATION	F
COUNTY LINE	-----	EMBANKMENT	F
TOWNSHIP LINE	-----	OVERHAUL	H
SECTION LINE	-----	SURFACING	S
CITY, VILLAGE, OR BOROUGH	-----	GUARD RAIL	G.R.
FENCE LINE	-----	INTERSECTION ANGLE	A
RIGHT-OF-WAY LINE	-----	RADIUS	R
TRAVELLED WAY	-----	ELEVATION	EL
RAILROADS	-----	VERTICAL CURVE	V.C.
RETAINING WALL	-----	BENCH MARK	B.M.
BASE OR SURVEY LINE	-----	SECTIONAL CONCRETE CULVERT	P.C.
LEVÉE	-----	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	Imp.
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.F.
GROUND ELEVATION	-----	TELEPHONE POLE	Tel.P.
GRADE ELEVATION	-----		

STATE HIGHWAY DEPARTMENT
OF MINNESOTA

Plan and Profile of State Road No. 1

COUNTY OF RAMSEY

From a point 200' S and 918' W of the N-E. Cor. of Sec. 25-30-23 To a point 6' E & 602' N of the N-E. Cor. of Sec. 2-30-23

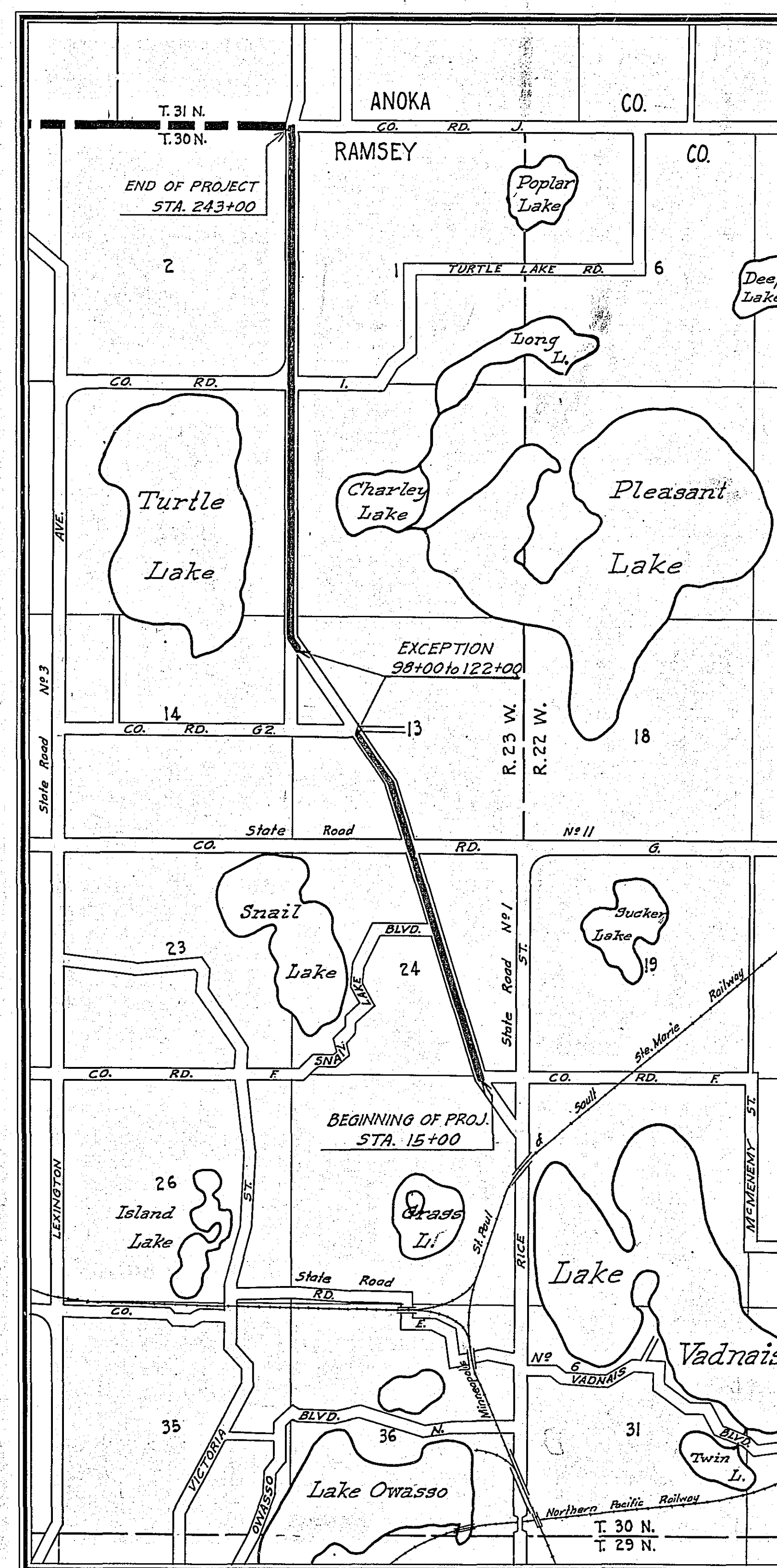
GROSS LENGTH - 22800 FEET 4.318 MILES
LENGTH OF EXCEPTIONS - 2400 FEET .454 MILES
NET LENGTH - 20400 FEET 3.864 MILES

PLAN, 1 Inch = 200 Feet
PROFILE, Horiz. 1 Inch = 200 Feet. Vert. 1 Inch = 20 Feet
WORKING PLANS { Horiz. 1 Inch = 100 Feet
Vert. 1 Inch = 10 Feet
Cross-Sections, 1 Inch = 10 Feet

LAYOUT
SCALE, 1 Inch = 2640 Feet

INDEX OF SHEETS

- Sheet No. 1. Title Sheet and Layout Map
- " No. 2. Typical Cross-Sections and Statement
- " No. 3. Plan and Profile, Sta. 15+00 to Sta. 98+00
- " No. 4. " " " 122+00 " " 203+86
- " No. 5. " " " 203+86 " " 243+00
- " Nos. 6 to 18 incl. Cross Sections



DESIGNED FIRST	2/24/29 M.C.
DESIGNED TO END	
DESIGNED SECOND	
NO. DESIGNED FIRST	
APPROVED	
FROM OFFICE ENGINEER	
FILED	

Planned by P. J. ...
HIGHWAY ENGINEER FOR RAMSEY COUNTY.
Recommended for Approval _____ DIVISION ENGINEER
Recommended for Approval E. T. ... ENGINEER OF SURVEYS AND DESIGN
Approved 8-26-1929 J. P. ... CHIEF ENGINEER & DEPUTY COMMISSIONER

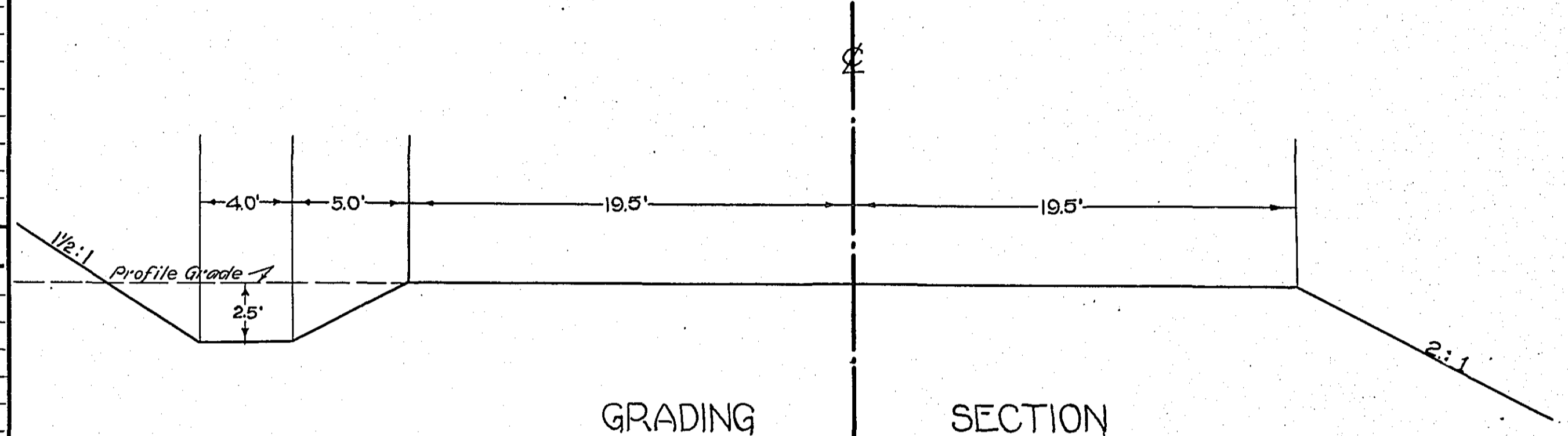
T.H. 49

STATEMENT OF ESTIMATED QUANTITIES AND COSTS.

ITEM	UNIT	MILE COLUMNS										TOTAL ESTIMATED QUANTITIES	ESTIMATED UNIT PRICES	AMOUNTS	TOTALS		
		MILE Sta. 151+00 to Sta. 151+22	MILE Sta. 151+22 to Sta. 151+44	MILE Sta. 151+44 to Sta. 151+66	MILE Sta. 151+66 to Sta. 151+88	MILE Sta. 151+88 to Sta. 152+10	MILE Sta. 152+10 to Sta. 152+32	MILE Sta. 152+32 to Sta. 152+54	MILE Sta. 152+54 to Sta. 152+76	MILE Sta. 152+76 to Sta. 152+98	MILE Sta. 152+98 to Sta. 153+20						
1	Clearing	Acre	0.26	0.27	0.28	0.28	0.21										
2	Clearing	Tree	32	25	2	70	56										
3	Grubbing	Acre	0.30	1.02	0.56	0.86	0.21										
4	Grubbing	Tree	89	45	15	76	111										
5	Excavation - Earth	Cu. Yd.	7018	6225	2766	1834.6	2696										
6	Excavation - Loose Rock	Cu. Yd.															
7	Excavation - Solid Rock	Cu. Yd.															
8	Excavation - Overhaul	Cu. Yd.	11,260	3216	1305	28,600	33,015										
9	Special Excavation	Lin. Ft.															
10	Hand Ditching	Cu. Yd.															
11	Scarifying	Lin. Ft.	3400	3000	1600	284	354										
12	Tile Drain	Lin. Ft.															
13	Tile Drain	Lin. Ft.															
14	Porous Bank Fill Material	Cu. Yd.															
15	Stone Rip - Rap	Cu. Yd.															
16	Trailing Rip-Rap or Stone (See Notes)	Cu. Yd. mile															
17	Install	Lin. Ft.															
18	Install 15" C.M.	Lin. Ft.	150	370	210	280	230										
19	Install	Lin. Ft.															
20	Install	Lin. Ft.															
21	Install	Lin. Ft.															
22	Install	Lin. Ft.															
23	Install	Lin. Ft.															
24	Install	Lin. Ft.															
25	Install 24" P ₃	Lin. Ft.	66	54		132	138										
26	Install 30" P ₃	Lin. Ft.															
27	Install 36" P ₃	Lin. Ft.															
28	P ₁ Culvert Haul	Ton Mile															
29	P ₃ Culvert Haul	Ton Mile	27.91	31.60		123.91	148.22										
30	Furnish & Install 24" V.P.	Lin. Ft.															
31	Rem. old culv.	Lin. Ft.	34			48	96										
32																	
TOTAL ESTIMATED COST OF GRADING (IN 'TOTALS' COLUMN)																	
33	G.M. Culv. Material 15"	Lin. Ft.	150	370	210	280	230										
34	Culv. Material	Lin. Ft.															
35	Culv. Material	Lin. Ft.															
36	Culv. Material	Lin. Ft.															
37	Culv. Material	Lin. Ft.															
38	Culv. Material	Lin. Ft.															
39	P ₃ Culv. Material 24"	Lin. Ft.	66	54		132	138										
40	P ₃ Culv. Material 30"	Lin. Ft.															
41	P ₃ Culv. Material 36"	Lin. Ft.															
TOTAL ESTIMATED COST OF PORTABLE CULVERT MATERIAL (IN 'TOTALS' COLUMN)																	
42	Gravel Pit Stripping	Cu. Yd.															
43	Screening	Cu. Yd.															
44	Loading	Cu. Yd.															
45	Hauling	Cu. Yd. Mile															
46	Shaping & Compacting	Man Hour															
47	Shaping & Compacting	Man & Team Hour															
48																	
49																	
50																	
51																	
TOTAL ESTIMATED COST OF GRAVEL HAUL (IN 'TOTALS' COLUMN)																	
52	Gravel Material F. O. B. PIT	Cu. Yd.															
53	Freight (If any)	Cu. Yd.															
54	Unloading from Cars	Cu. Yd.															
TOTAL ESTIMATED COST OF GRAVEL MATERIAL (IN 'TOTALS' COLUMN)																	
55	Fine Grading - Exc. & Emb.	Cu. Yd.															
56	Shoulders - Earth	Cu. Yd.															
57																	
58																	
59	Pavement	Sq. Yd.															
60	Integral Curb (One Course Concrete)	Lin. Ft.															
61	Sloping Curb	Lin. Ft.															
62	Surface Drain	Lin. Ft.															
63	Surface Drain Basins	Basin															
64	Bridge Approach Slabs (Square)	Slab															
65	Bridge Approach Slabs (Rect.)	Slab															
66																	
67																	
68																	
TOTAL ESTIMATED COST OF PAVEMENT CONSTRUCTION (IN 'TOTALS' COLUMN)																	
69	Concrete	Cu. Yd.															
70	Reinforcing Steel	Lb.															
71	Excavation - Earth	Cu. Yd.															
72	Excavation - Loose Rock	Cu. Yd.															
73	Excavation - Solid Rock	Cu. Yd.															
74	Bridge	* Bridge No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.
75		Station															
76	Concrete	Cu. Yd.															
77	Reinforcing Steel	Lb.															
78	Structural Steel	Lb.															
79	Piling	Lin. Ft.															
80	Temporary Crossing	Lump Sum															
81	Removing old Bridge	Lump Sum															
82	Bituminous Surface	Sq. Yd.															
83																	
84																	
TOTAL ESTIMATED COST OF STRUCTURES (IN 'TOTALS' COLUMN)																	
85	Guard Rail	Lin. Ft.															
86	Gutter	Lin. Ft.															
87	Excavation for Gutter	Cu. Yd.															
TOTAL ESTIMATED COST OF MISCELLANEOUS ITEMS (IN 'TOTALS' COLUMN)																	

TYPICAL CROSS SECTIONS AND DETAILS

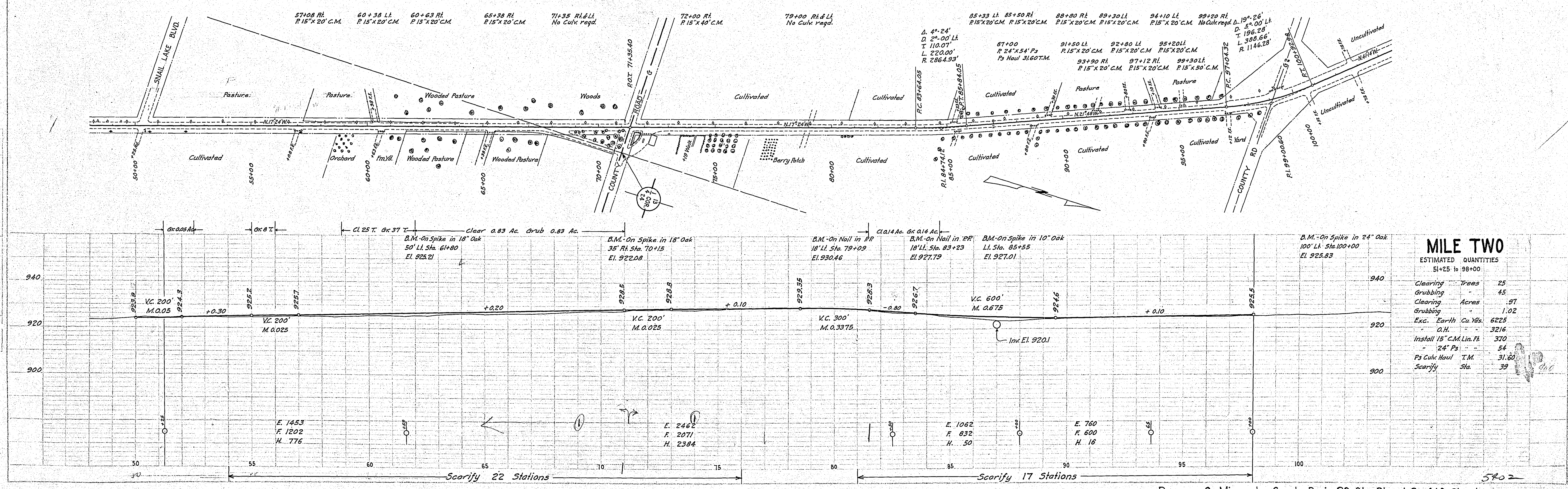
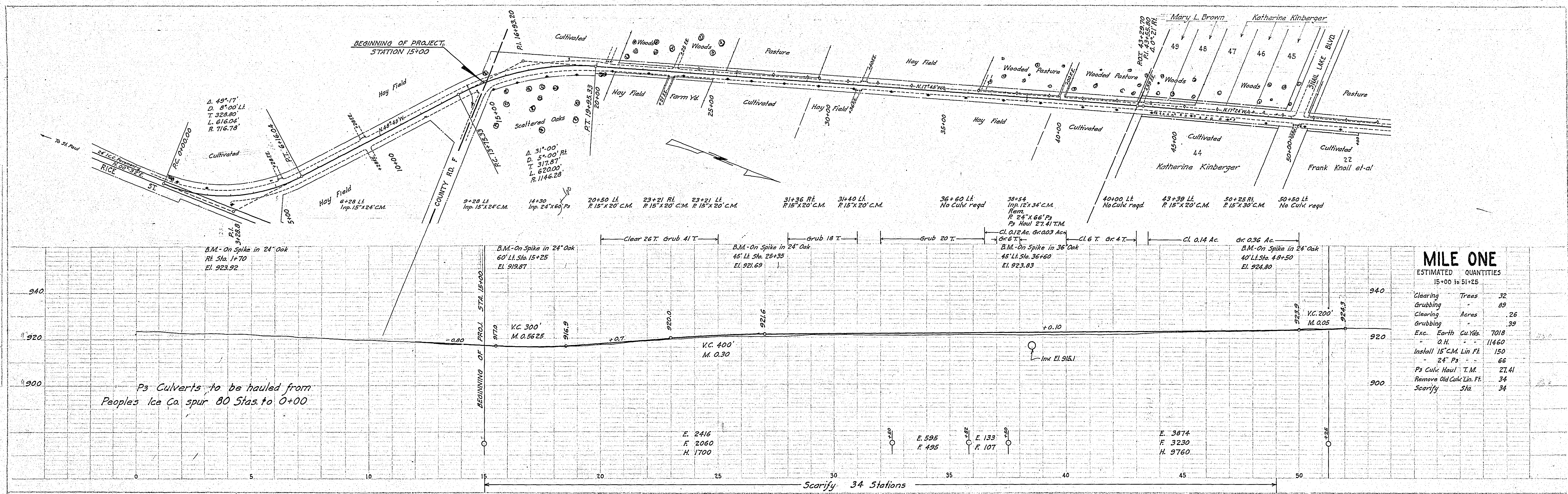
FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	SEC.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
4	MINN.					



* NOTE: BRIDGE ITEMS LISTED UNDER BRIDGE NUMBERS IN MILE COLUMNS REGARDLESS OF LOCATION

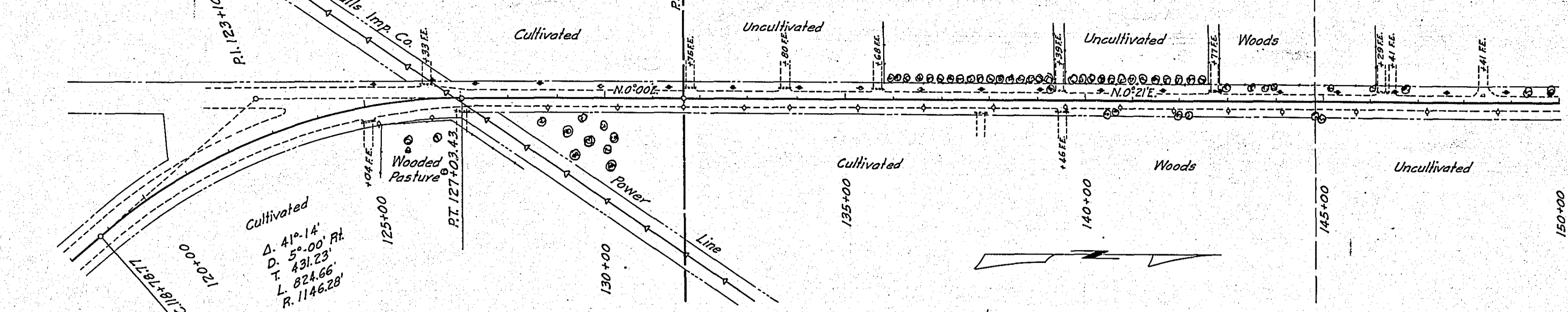
PLANNING
 SURVEYED
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 PROFILE
 NOTE BOOK
 NO.

PROFILE
 SURVEYED
 PLANNED
 PROFILE
 NOTE BOOK
 NO.



PLAN
 CHECKED
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 DATE
 REVISIONS
 NO.

125+04 Rt. 17p. 15'x24' C.M. O.K. Leave
 126+33 Lt. R. 15'x20' C.M.
 127+00 Rt. R. 15'x20' C.M.
 131+75 Lt. R. 15'x20' C.M.
 133+80 Lt. R. 15'x20' C.M.
 135+68 Lt. R. 15'x20' C.M.
 139+39 Lt. R. 15'x20' C.M.
 139+46 Rt. R. 15'x20' C.M.
 142+77 Lt. R. 15'x20' C.M.
 146+35 Lt. R. 15'x30' C.M.

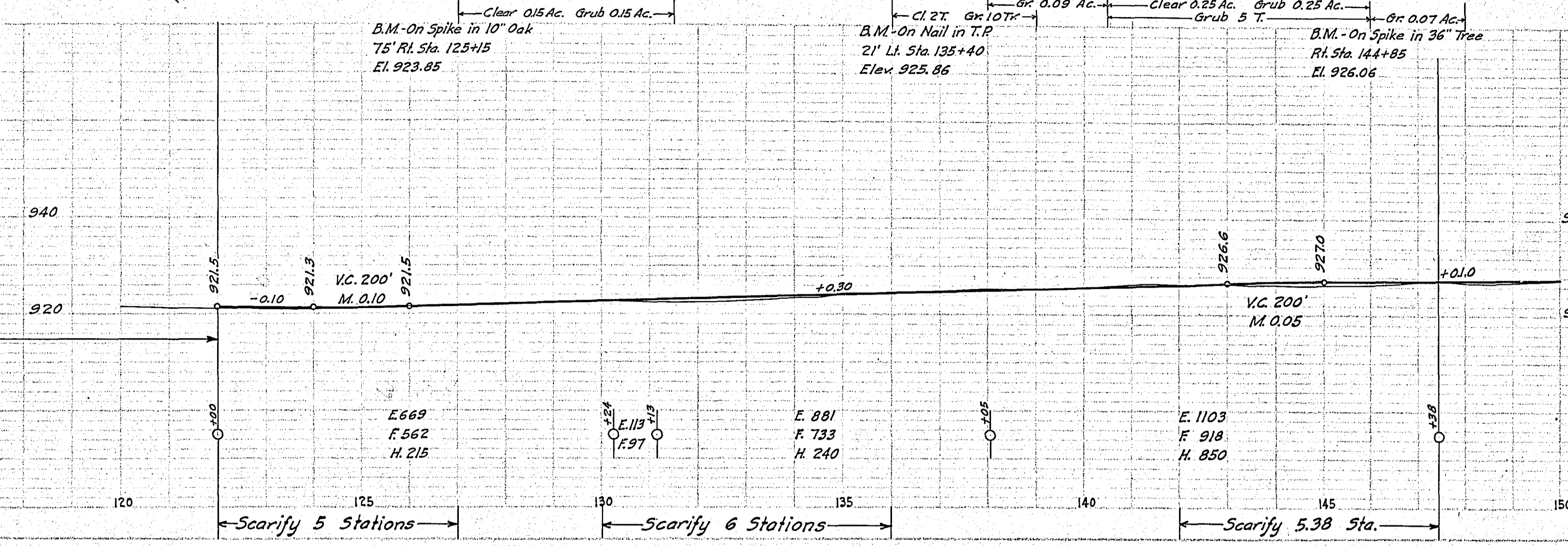


MILE THREE

ESTIMATED QUANTITIES
122+00 to 147+38

Clearing	Trees	2
Grubbing	Acres	.10
Clearing	Acres	.40
Grubbing	Acres	.56
Exc. Earth	Cu. Yds.	2766
O.H.		1305
Install 15" C.M. Lin. Fl.		210
Scarify	Sta.	16.38

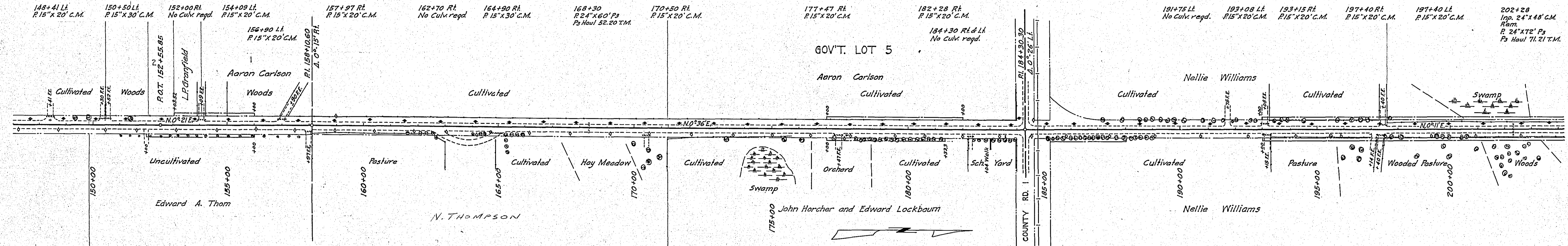
EXCEPTION - STA. 98+00 to STA. 122+00



148+41 Lt. R. 15'x20' C.M.
 150+50 Lt. R. 15'x30' C.M.
 152+00 Rt. No cult. reqd.
 154+09 Lt. R. 15'x20' C.M.
 156+90 Lt. R. 15'x20' C.M.
 157+97 Rt. R. 15'x20' C.M.
 162+70 Rt. No cult. reqd.
 164+90 Rt. R. 15'x30' C.M.
 168+30 R. 24'x48' C.M. P. Haul 52.20 T.M.
 170+50 Rt. R. 15'x20' C.M.
 177+47 Rt. R. 15'x20' C.M.
 182+28 Rt. R. 15'x20' C.M.
 184+30 Rt. & Lt. No cult. reqd.
 191+75 Lt. No cult. reqd.
 193+08 Lt. R. 15'x20' C.M.
 193+15 Rt. R. 15'x20' C.M.
 197+40 Rt. R. 15'x20' C.M.
 197+40 Lt. R. 15'x20' C.M.
 202+28 Top 24'x48' C.M. P. Haul 71.21 T.M.

GOV'T. LOT 5
 Aaron Carlson

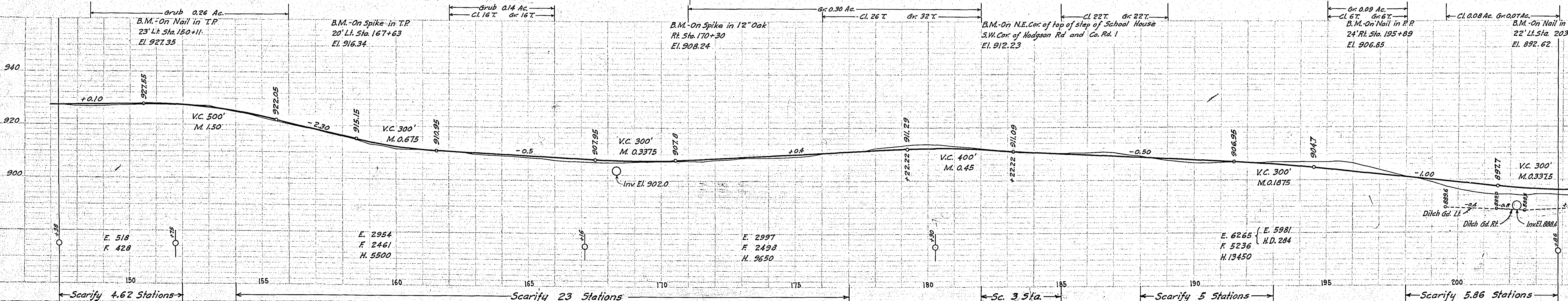
Nellie Williams



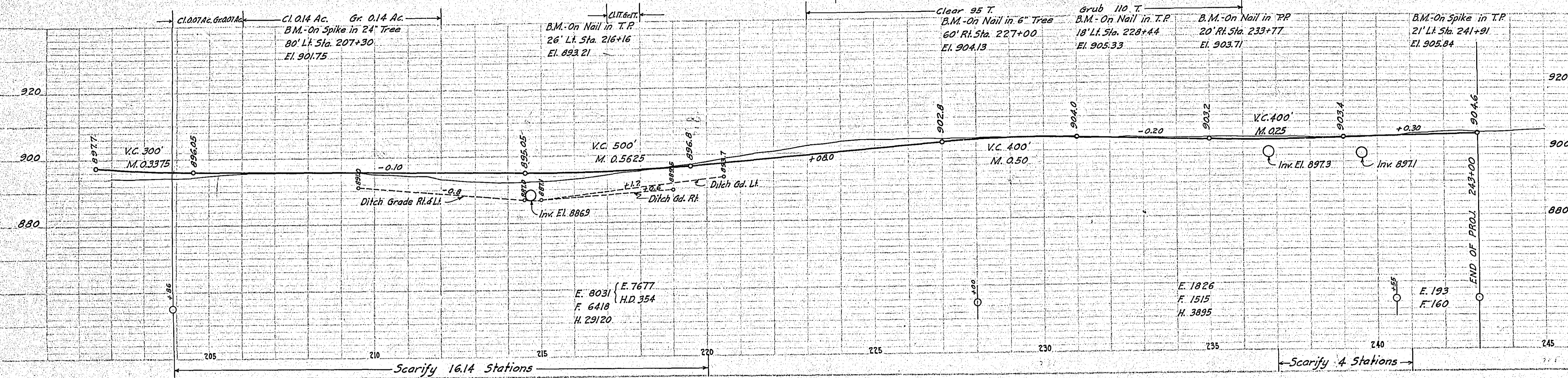
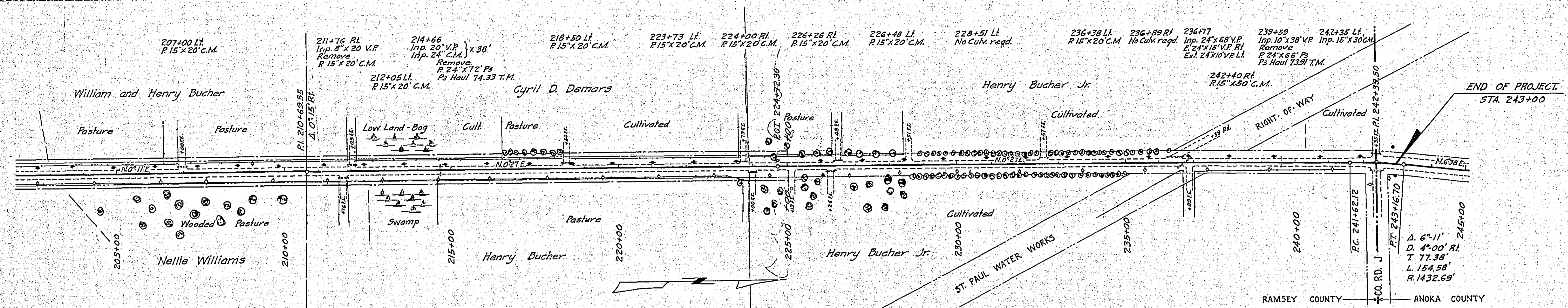
MILE FOUR

ESTIMATED QUANTITIES
147+38 to 203+86

Clearing	Trees	70
Grubbing	Acres	.76
Clearing	Acres	.08
Grubbing	Acres	.86
Exc. E.	Cu. Yds.	12446
O.H.		28600
H.D.		284
Install 15" C.M. Lin. Fl.		280
24" Ps		132
Ps Cult. Haul	T.M.	123.41
Rem. Old Cult. Lin. Fl.		4.8
Scarify	Sta.	41.48



PROFILE
 CHECKED
 DATE
 DRAWN
 DATE
 REVISIONS
 NO.



MILE FIVE
ESTIMATED QUANTITIES
203+86 to 243+00

Clearing	Trees	96
Grubbing		111
Clearing	Acres	21
Grubbing		21
Exc. Earth	Cu Yds.	9666
	O.H.	33015
	H.D.	354
Install 15" C.M. Lin. Ft.		230
	24" Ps	138
Furn. & Inst. 24" VP		25
P3 Culk Haul	T.M.	148.24
Rem. Old Culk	Lin. Ft.	96
Scarify	Sks	20.14

PLAN
PROPERTY
NORTH BOOK
BY: J. W. CHERRY

PROFILE
PROPERTY
NORTH BOOK
BY: J. W. CHERRY