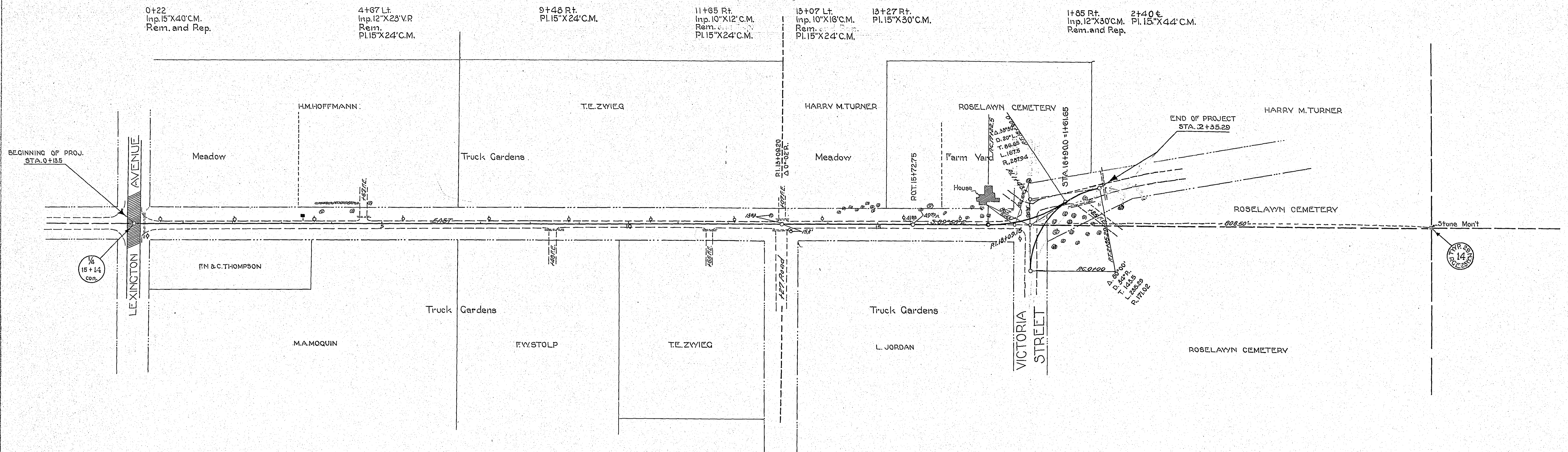
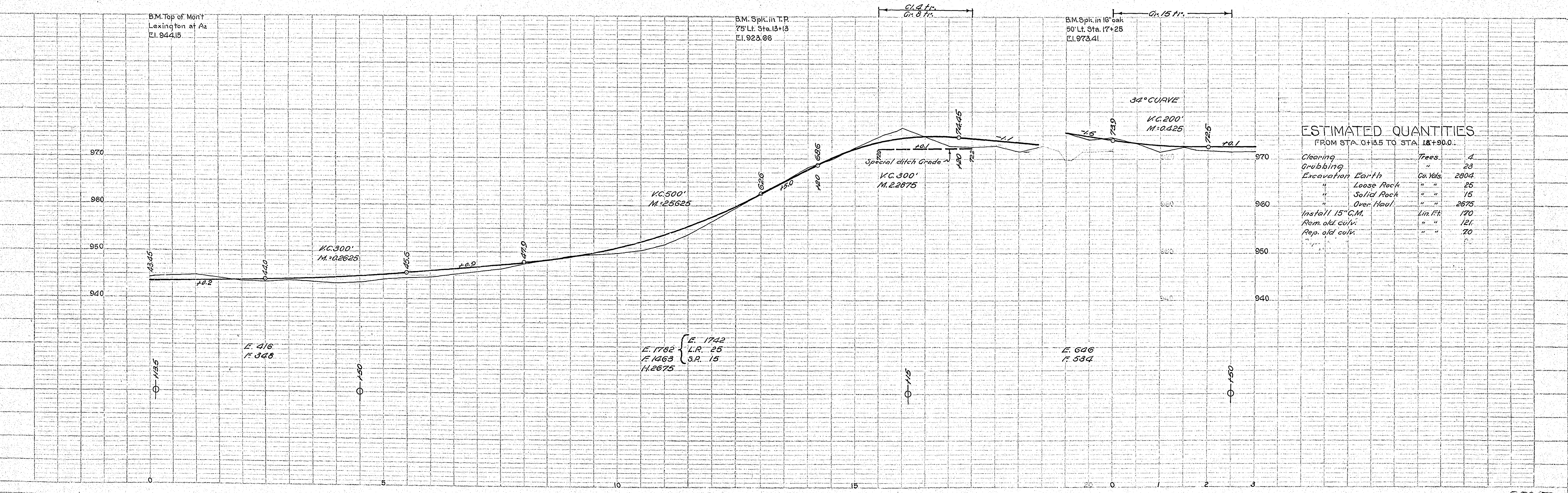


DATE	
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REVISIONS	
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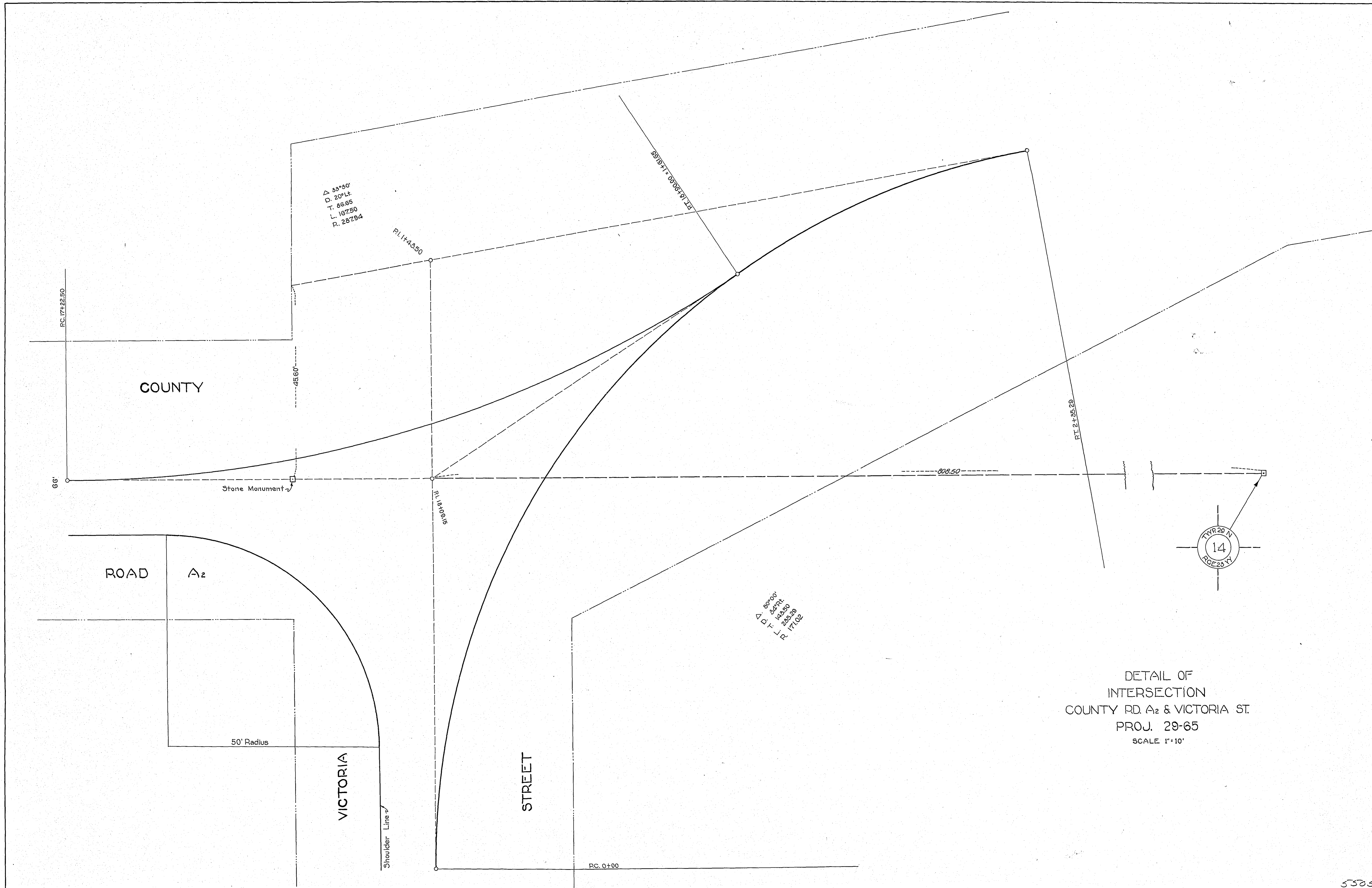


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REVISIONS	
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BY	
REVISIONS	
NO.	



ESTIMATED QUANTITIES
FROM STA. 0+13.5 TO STA. 18+90.0

Clearing	Trees	4
Grubbing	"	23
Excavation Earth	Cu. Yds.	2804
" Loose Rock	" "	25
" Solid Rock	" "	15
" Over Haul	" "	2675
Install 15" C.M.	Lin. Ft.	170
Rem. old culv.	" "	121
Rep. old culv.	" "	70



COUNTY

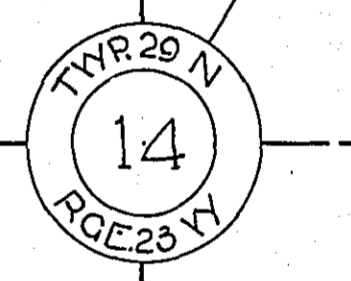
ROAD

A₂

VICTORIA

STREET

DETAIL OF
 INTERSECTION
 COUNTY RD. A₂ & VICTORIA ST.
 PROJ. 29-65
 SCALE 1"=10'



5505

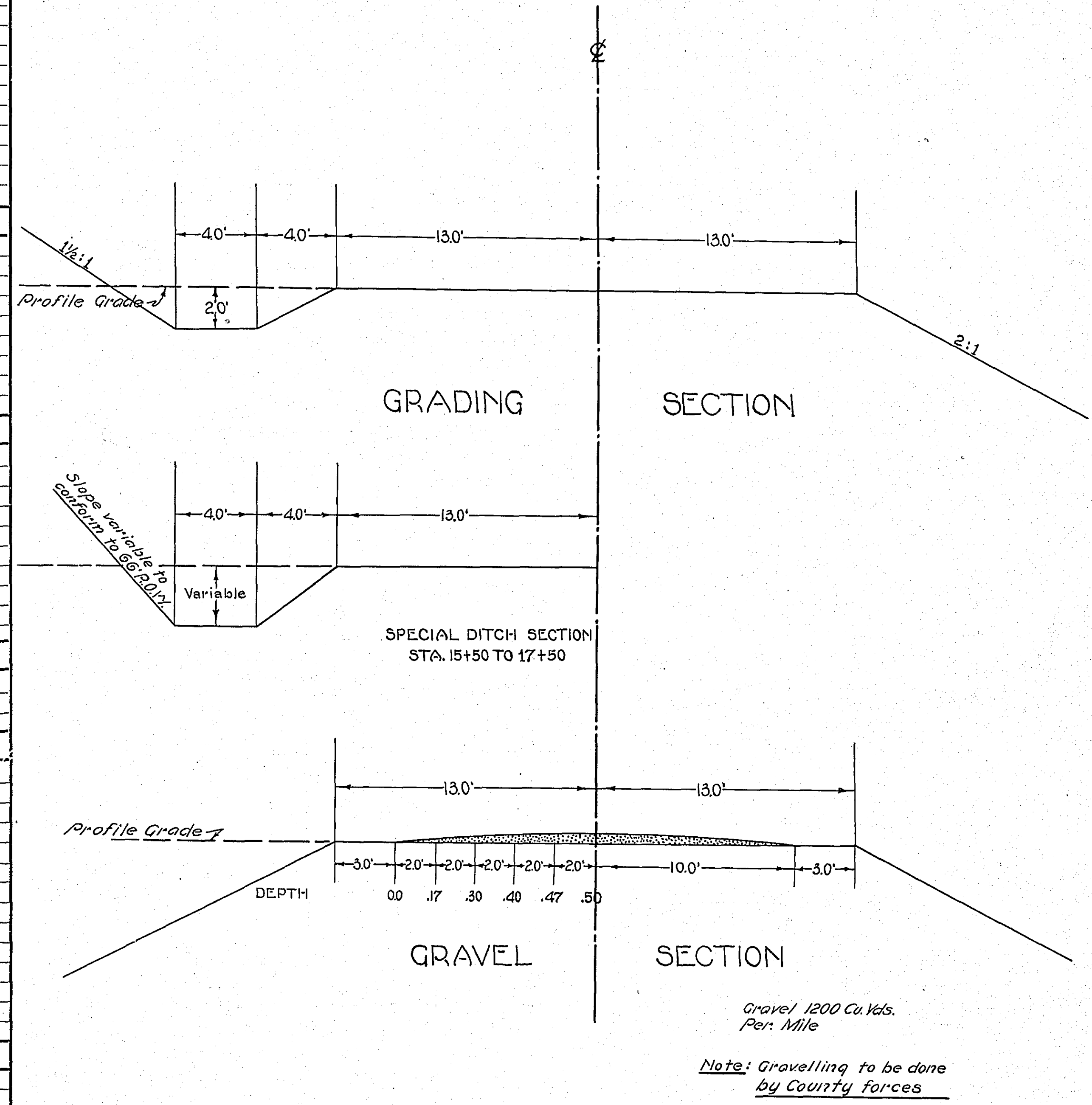
STATEMENT OF ESTIMATED QUANTITIES AND COSTS.

ITEM	UNIT	MILE														TOTAL ESTIMATED QUANTITIES	ESTIMATED UNIT PRICES	AMOUNTS	TOTALS	
		Sta. 18+00 to Sta. 21+25	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.					
1	Clearing	Acre																		
2	Clearing	Tree	4																	
3	Grubbing	Acre																		
4	Grubbing	Tree	23																	
5	Excavation - Earth	Cu. Yd.	2804																	
6	Excavation - Loose Rock	Cu. Yd.	25																	
7	Excavation - Solid Rock	Cu. Yd.	15																	
8	Excavation - Overhaul	Cu. Yd.	2875																	
9	Special Excavation	Lin. Ft.																		
10	Hand Ditching	Cu. Yd.																		
11	Tile Drain	in. Lin. Ft.																		
12	Tile Drain	in. Lin. Ft.																		
13	Tile Drain	in. Lin. Ft.																		
14	Porous Back Fill Material	Cu. Yd.																		
15	Stone Rip - Rip	Cu. Yd.																		
16	Healing Rip-Rap or Stone Drain Material	Cu. Yd. mile																		
17	Install 15" C.M.	Lin. Ft.	170																	
18	Install	Lin. Ft.																		
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.																		
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																		
30	Remove old culv.	Lin. Ft.	120																	
31	Replace old culv.	Lin. Ft.	70																	
32																				
TOTAL ESTIMATED COST OF GRADING (IN 'TOTALS' COLUMN)																				
33	Culv. Material	Lin. Ft.																		
34	C.M. Culv. Material 15"	Lin. Ft.	170																	
35	C.M. 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.																		
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	Max. 8 Ton 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 (Skew)	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.																		
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.					

PROJ. 29-65



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	-----	G.R.
FENCE LINE	-----	INTERSECTION ANGLE	-----	A
RIGHT-OF-WAY LINE	-----	RADIUS	-----	R
TRAVELLED WAY	-----	ELEVATION	-----	E.L.
RAILROADS	-----	VERTICAL CURVE	-----	V.C.
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.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 PLOWING	-----	S.P.
GROUND ELEVATION	-----	TELEPHONE POLE	-----	Tel.P.
GRADE ELEVATION	-----			

OFFICE OF COUNTY SURVEYOR

RAMSEY COUNTY

Plan and Profile of County Project No. _____

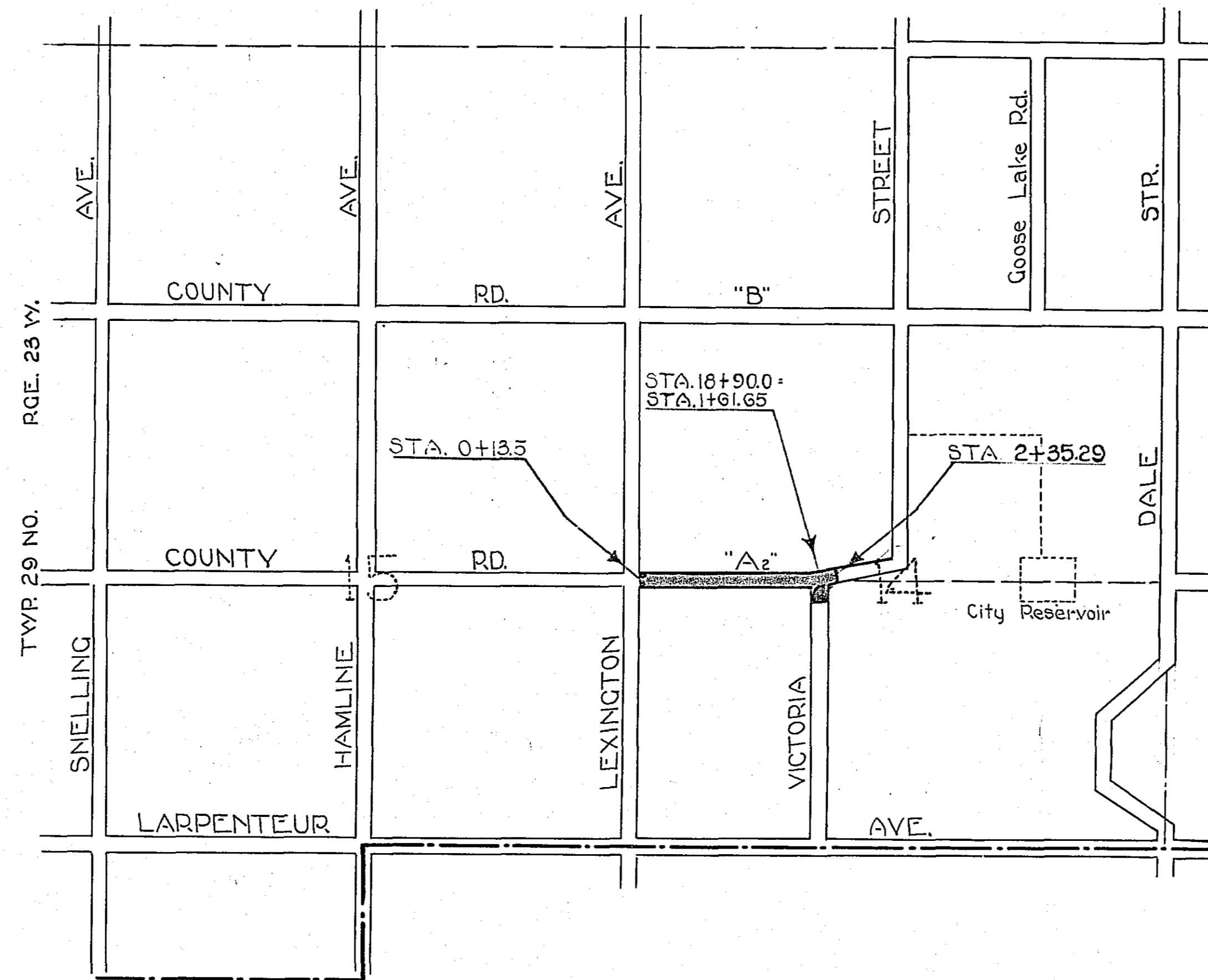
From E. 1/4 Cor. Sec. 15-29-23 To a point 609' N. and 88' N. of center Sec. 14-29-23

GROSS LENGTH- 2010.9 FEET 0.38 MILES
 LENGTH OF EXCEPTIONS- FEET MILES
 NET LENGTH- 2010.9 FEET 0.38 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 = 1320 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. 0+13.5 to Sta. 18+90.0
- " No. 4, 5 & 6 Cross Sections
- " No. 7 Intersection Detail



CITY OF ST PAUL

Date of Resolution for Preparation of Plans 9/12 1928

Planned by *Paul J. Swenson* ASSISTANT ENGINEER

Recommended for Approval *And Mackintosh* CONSTRUCTION ENGINEER

Plans Approved and Recommended for Consideration *Paul J. Swenson* COUNTY SURVEYOR

Approved by County Board 4/1 1928 *W. H. Johnson* CHAIRMAN OF COUNTY BOARD