

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	-----	GR
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	-----	Te.P.
GRADE ELEVATION	-----			

OFFICE OF COUNTY SURVEYOR

RAMSEY COUNTY

Plan and Profile of County Project No. 27-99

From South 1/4 Cor. Sec. 17-29-23 To Cen. Sec. 17-29-23

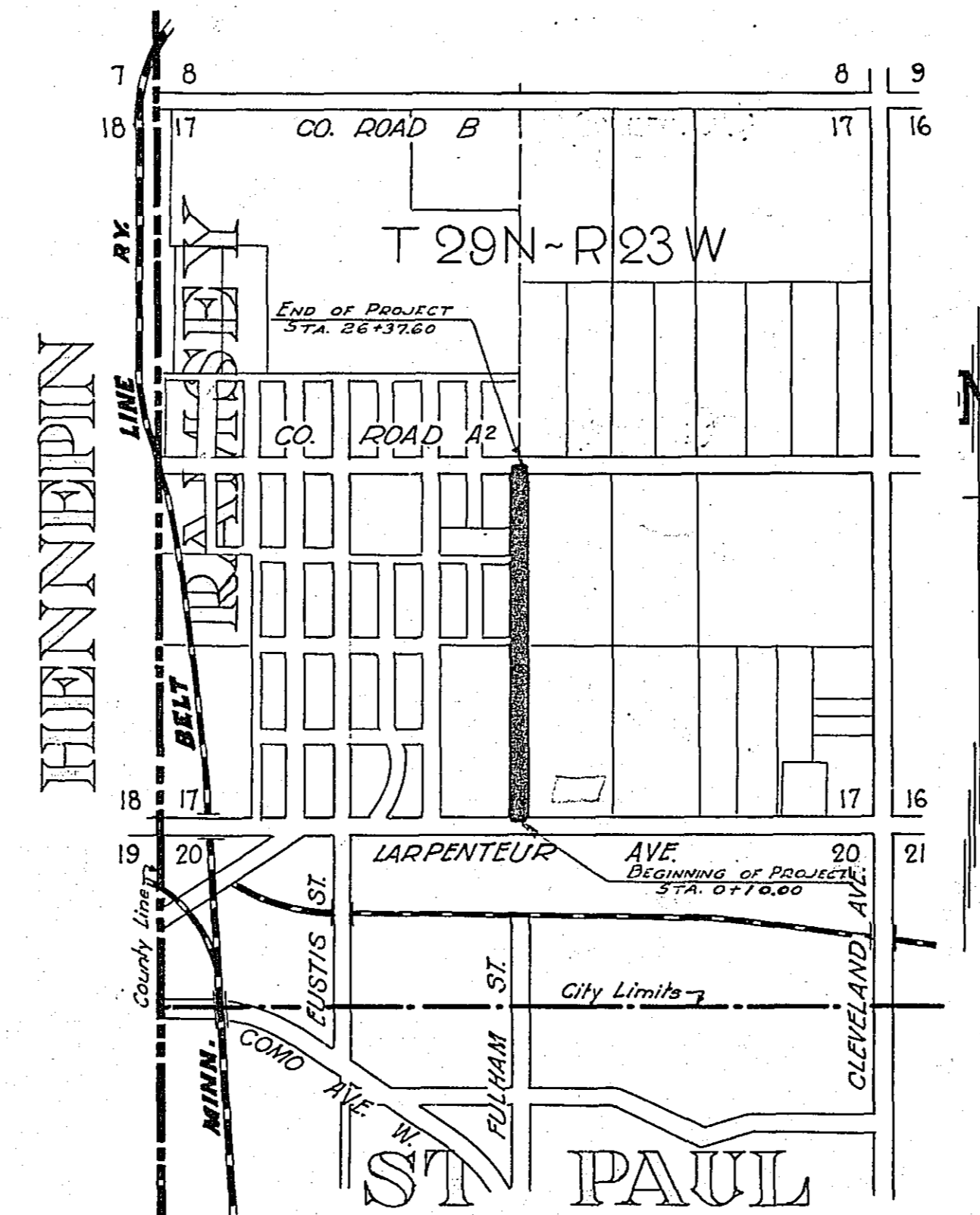
GROSS LENGTH 26276 FEET 0.498 MILES
 LENGTH OF EXCEPTIONS FEET MILES
 NET LENGTH FEET MILES
 PLAN, 1 Inch = 100 Feet
 PROFILE, Horz. 1 Inch = 100 Feet. Vert. 1 Inch = 10 Feet
 WORKING PLANS { Horz. 1 Inch = 100 Feet
 Vert. 1 Inch = 10 Feet
 Cross-Sections, 1 Inch = 10 Feet
 LAYOUT
 SCALE, 1 Inch = .1320 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+00 to Sta. 26+37.6
- " No. 4. Cross Sections

3-23-27
"B"

Gravel Note: 800 Cu.Yds. hauled from McManamy pit 6.5 miles from Sta. 0+00. Gravel to be furnished and loaded by Ramsey Co.



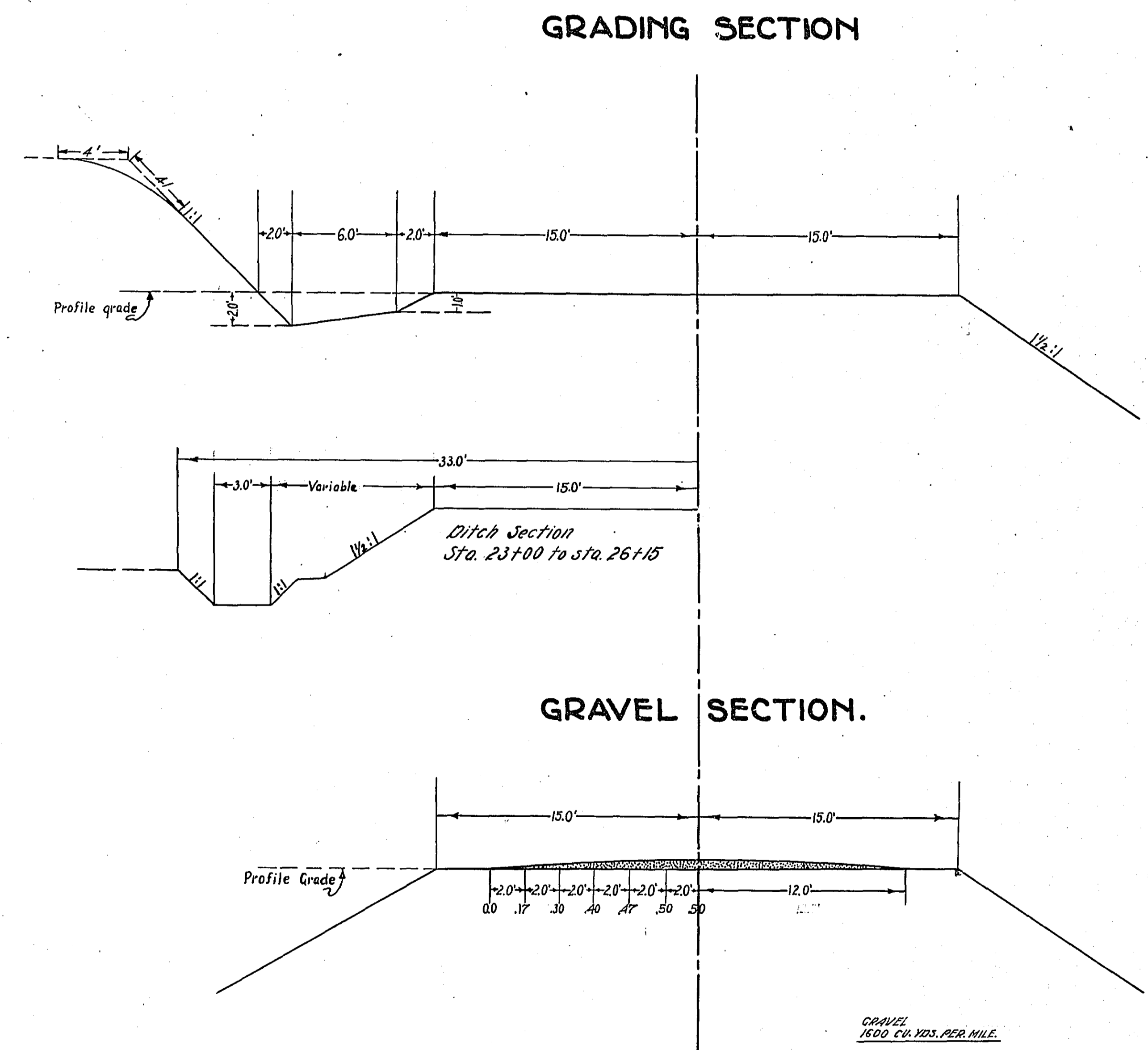
Date of Resolution for Preparation of Plans September 13, 1926
 Planned by [Signature] ASSISTANT ENGINEER
 Recommended for Approval [Signature] CONSTRUCTION ENGINEER
 Plans Approved and Recommended for Consideration [Signature] COUNTY SURVEYOR
 Approved by County Board 19 CHAIRMAN OF COUNTY BOARD

STATEMENT OF ESTIMATED QUANTITIES AND COSTS.

ITEM	UNIT	MILE														TOTAL ESTIMATED QUANTITIES	ESTIMATED UNIT PRICES	AMOUNTS	TOTALS
		Sta. 0+00 to Sta. 26+27	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	0.69																
2	Clearing	Tree	20																
3	Grubbing	Acre	0.71																
4	Grubbing	Tree	20																
5	Excavation - Earth	Cu. Yd.	7900																
6	Excavation - Loose Rock	Cu. Yd.	35																
7	Excavation - Solid Rock	Cu. Yd.	15																
8	Excavation - Overhaul	Cu. Yd.	13820																
9	Special Excavation	Lin. Ft.																	
10	Hand Ditching	Cu. Yd.	112																
11	Tile Drain	in.																	
12	Tile Drain	in.																	
13	Tile Drain	in.																	
14	Porous Back Fill Material	Cu. Yd.																	
15	Stone Rip - Rap	Cu. Yd.																	
16	Gravel Rip-Rap or Stone Drain Material	Cu. Yd. mile																	
17	Install	Lin. Ft.																	
18	Install	Lin. Ft.																	
19	Install 15" CM	Lin. Ft.	216																
20	Install	Lin. Ft.																	
21	Install	Lin. Ft.																	
22	Install	Lin. Ft.																	
23	Install	Lin. Ft.																	
24	Install	Lin. Ft.																	
25	Install 24" Pa	Lin. Ft.	156																
26	Install 30" Pa	Lin. Ft.																	
27	Install 36" Pa	Lin. Ft.																	
28	P ₁ Culvert Haul	Lin. Ft.																	
29	P ₂ Culvert Haul	Lin. Ft.	29.28																
30	Remove old CR	Lin. Ft.	50																
31																			
32																			
TOTAL ESTIMATED COST OF GRADING			(IN 'TOTALS' COLUMN)																
33	Culv. Material	Lin. Ft.																	
34	Culv. Material	Lin. Ft.																	
35	Culv. Material	Lin. Ft.																	
36	Culv. Material	Lin. Ft.																	
37	CM Culv. Material 15"	Lin. Ft.	216																
38	Culv. Material	Lin. Ft.																	
39	P ₂ Culv. Material 24"	Lin. Ft.	156																
40	P ₂ Culv. Material 30"	Lin. Ft.																	
41	P ₂ 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	5200																
46	Shaping & Compacting	Man Hour	51																
47	Shaping & Compacting	Man & Team Hour	118																
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 (sewer)	Slab																	
65	Bridge Approach Slabs (storm)	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.	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 - Cable	Lin. Ft.	1550																
86	Guard Rail Anchors	Each	10																
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.	REC.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MINN.					

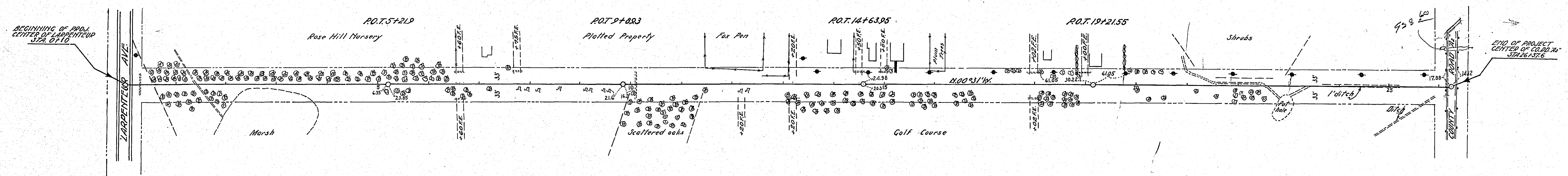


* NOTE: BRIDGE ITEMS LISTED UNDER BRIDGE NUMBERS IN MILE COLUMNS REGARDLESS OF LOCATION

0+28 P 2'4" x 42' P3 P3 Haul 587 TM
 1+45 No Culk. reqd
 6+60 Bl R 18' x 24' CM
 6+80 LL R 18' x 24' CM
 7+75 LL R 15' x 24' CM
 11+00 P 2'4" x 54' P3 P3 Haul 959 TM
 12+20 RL No Culk. reqd
 13+20 LH No Culk. reqd
 13+20 RL R 15' x 24' CM
 14+20 LH R 15' x 24' CM
 15+00 LH R 15' x 24' CM
 18+02 LH R 18' x 24' CM
 18+02 RH R 15' x 24' CM
 19+00 LH R 15' x 24' CM
 26+18 P 2'4" x 60' P3 P3 Haul 1302 TM

S.W. 1/4 SEC. 17-29-30

S.E. 1/4 SEC. 17-29-30



DATE	
BY	
SURVEYED	
PLOTTED	
CHECKED	
NOTE BOOK	
NO.	
STRUCTURE	
NO.	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
CHECKED	
NOTE BOOK	
NO.	
STRUCTURE	
NO.	
NO.	

