

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	NOTE BOOK		
	ALIGNMENT CHECKED		
	RT. OF WAY CHECKED		
	NO.		

PROFILE	EXAMINED	BY	DATE
	PLOTTED		
	NOTE BOOK		
	GRADES CHECKED		
	B. M. NOTED		
	STRUCTURE NOTED AT THIS POINT		
	NO.		

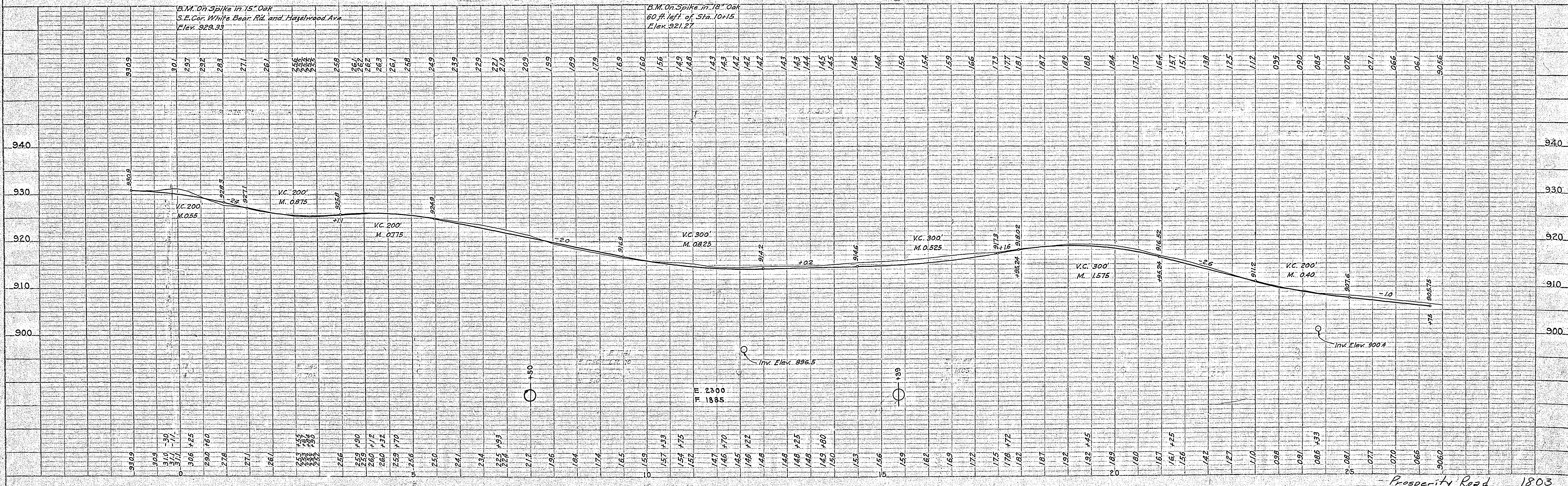
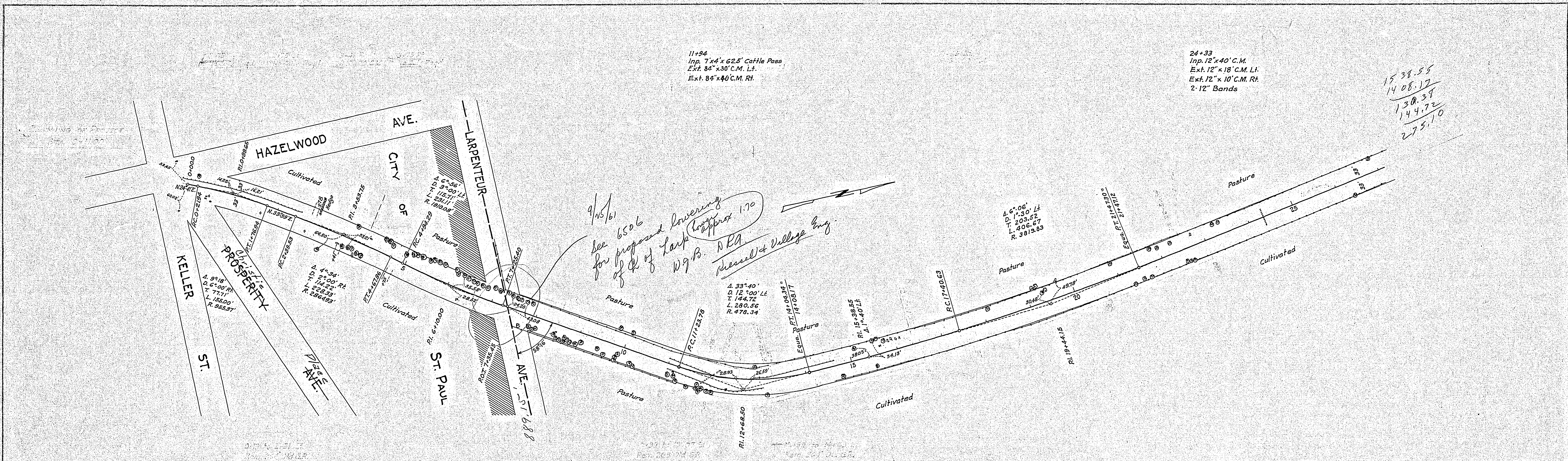


PLATE 1 - PLAN - PROFILE OF R.R. & R.E. STANDARD
 KUTTEL & ESSER CO., NEW YORK

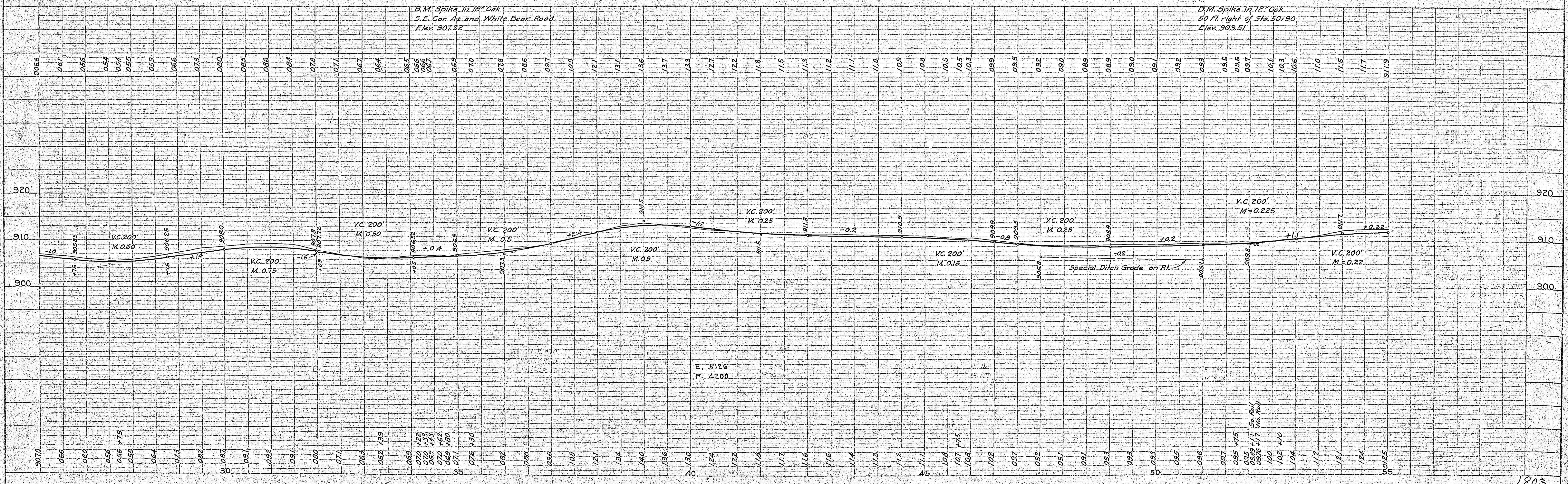
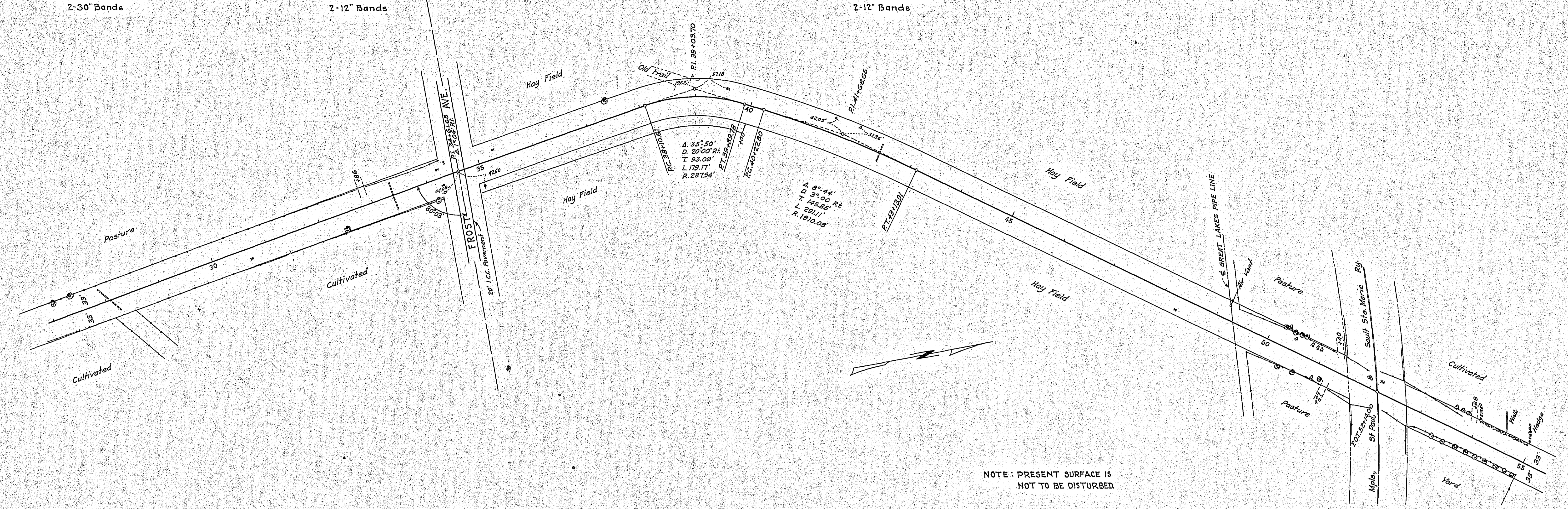
PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNMENT CHECKED	
	NOTE BOOK	
	NO. 1	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	NOTE BOOK	
	NO. 1	

28+00 ±
Inp. 30' x 61' C.M.
Ext. 30' x 12' C.M. Rt.
Ext. 30' x 12' C.M. Lt.
2-30' Bands

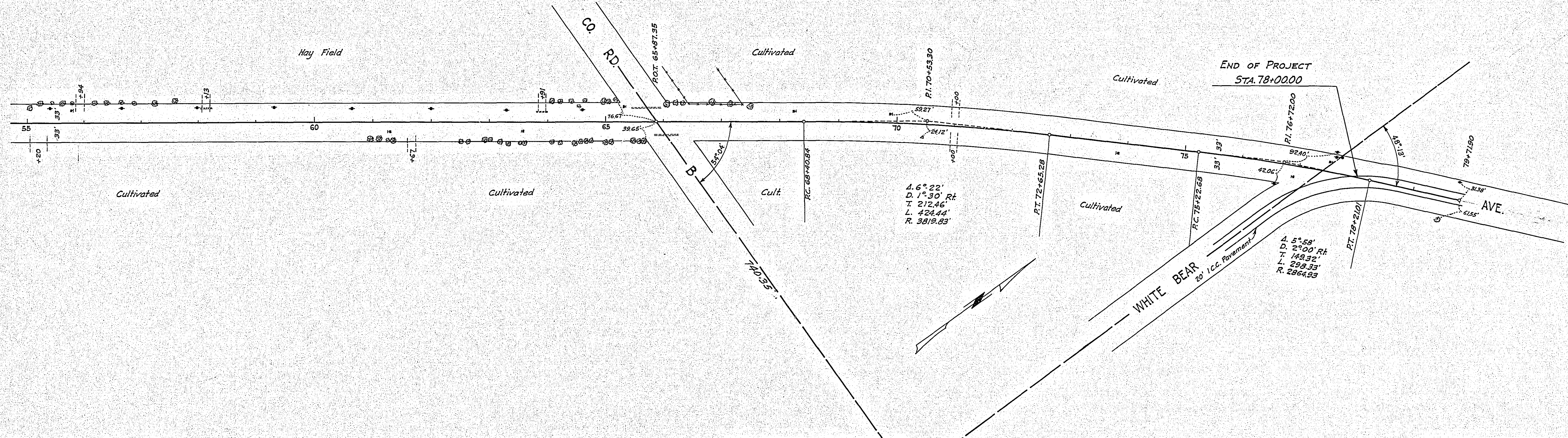
33+39 ±
Inp. 12' x 40' C.M.
Ext. 12' x 24' C.M. Lt.
12' x 12'
2-12' Bands

42+40 ±
Inp. 12' x 34' C.M.
Ext. 12' x 16' C.M. Lt.
12' x 16' C.M. Rt.
2-12' Bands

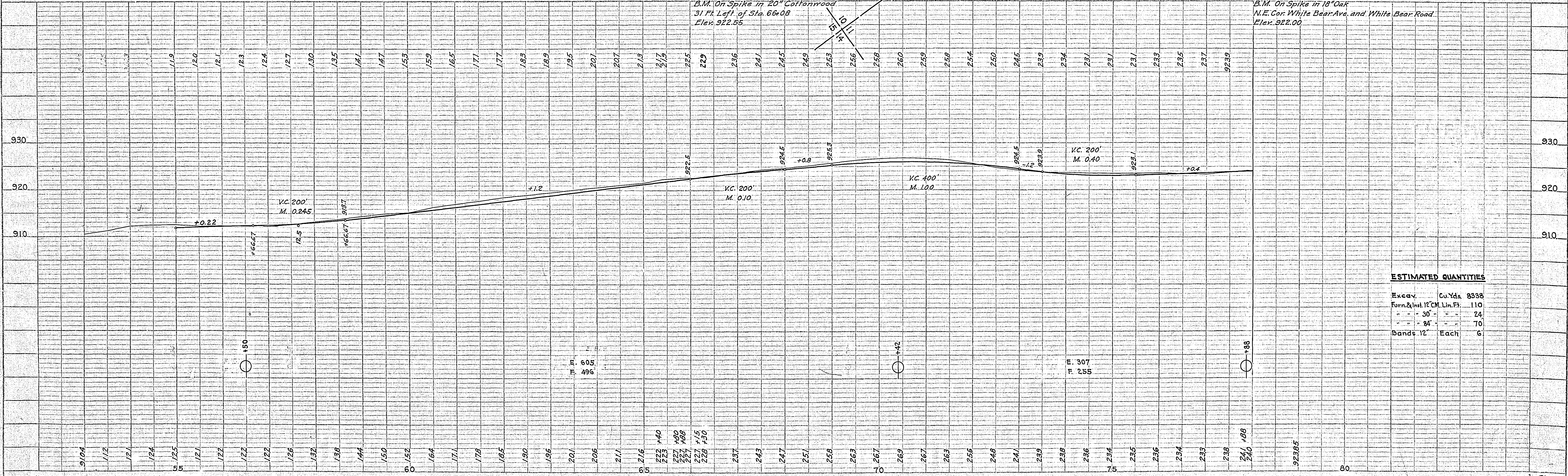


58+13 Lt. Rem. & Rep. 61+67 Rt. Pl. 12' x 20' C.M. 63+91 Lt. Rem. & Rep.

PLAN	NO.	BY	DATE
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RT. OF WAY CHECKED			



PROFILE	NO.	BY	DATE
SURVEYED			
GRADES CHECKED			
B. M. S. NOTED			
STRUCTURE NOTATIONS CHECKED			



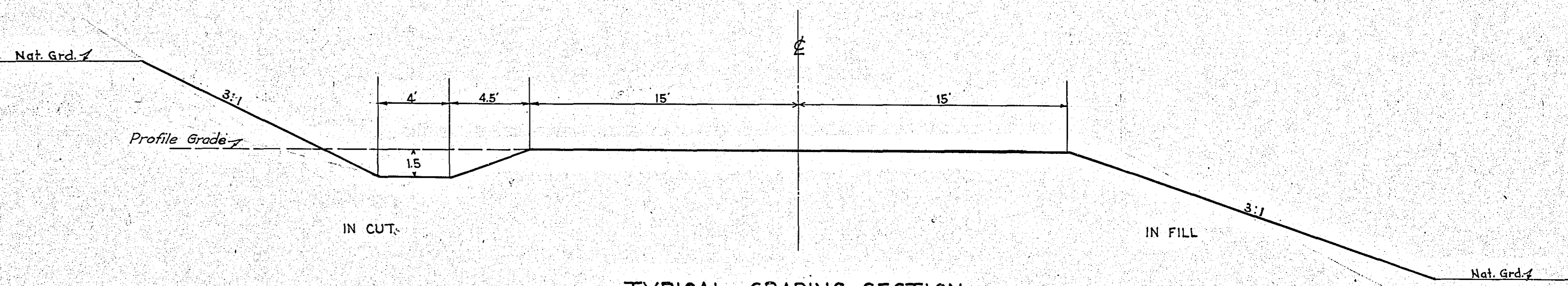
ESTIMATED QUANTITIES

Excav.	Cu. Yds.	8398
Furn. & Int. 12" CM Lin. Ft.		110
" " 30" " " "		24
" " 84" " " "		70
Bands 12" Each		6

STATEMENT OF ESTIMATED QUANTITIES

CLASS	ITEM	UNIT	MILE From To	MILE From To	MILE From To	MILE From To	MILE From To	MILE From To	MILE From To	MILE From To	MILE From To	MILE From To	MILE From To	TOTAL ESTIMATED QUANTITIES	
GRADING	1	Clearing Trees													
	2	Grubbing Trees													
	3	Clearing Acres													
	4	Grubbing Acres													
	5	Excavation Earth	Cu. Yds.												
	6	Excavation Loose Rock	Cu. Yds.												
	7	Excavation Solid Rock	Cu. Yds.												
	8	Excavation Overhaul	Cu. Yds.												
	9	Excavation Special	Cu. Yds.												
	10	Excavation Hand Ditch	Cu. Yds.												
	11	Install 12" C.M.	Lin. Ft.												
	12	Install 15" C.M.	Lin. Ft.												
	13	Install 18" C.M.	Lin. Ft.												
	14	Install 24" C.M.	Lin. Ft.												
	15	Install 30" C.M.	Lin. Ft.												
	16	Install 72" C.M.	Lin. Ft.												
	17	Install 18" P ₃	Lin. Ft.												
	18	Install 24" P ₃	Lin. Ft.												
	19	Install 30" P ₃	Lin. Ft.												
	20	Install 36" P ₃	Lin. Ft.												
	21	Install	Lin. Ft.												
	22	Install	Lin. Ft.												
	23	Remove Old Culvert	Lin. Ft.												
	24	Replace Old Culvert	Lin. Ft.												
	25	Finishing and Seeding	100 Sq.Yds.												
	26	Rubble Gutter	Cu. Yds.												
	27	Headwall Concrete	Cu. Yds.												
	28	Headwall Steel	Lbs.												
	29														
	30	Remove Old Guard Rail	Lin. Ft.												
	31														
	32														
C.M. CULVERTS	1	Furnish 12" C.M.	Lin. Ft.												
	2	Furnish 15" C.M.	Lin. Ft.												
	3	Furnish 18" C.M.	Lin. Ft.												
	4	Furnish 24" C.M.	Lin. Ft.												
	5	Furnish 30" C.M.	Lin. Ft.												
	6	Furnish 72" C.M.	Lin. Ft.												
	7	Furnish 12" C.M. Bond	Each												
	8	Furnish 30" C.M. Bond	Each												
	9														
	10														
P ₃ CULVERTS	1	Furnish 18" P ₃	Lin. Ft.												
	2	Furnish 24" P ₃	Lin. Ft.												
	3	Furnish 30" P ₃	Lin. Ft.												
	4	Furnish 36" P ₃	Lin. Ft.												
	5														
	6														
GUARD RAIL	1	Guard Rail - Cable	Lin. Ft.												
	2	Guard Rail Anchors	Each												
	3	Dummy Posts	Each												
	4														
SIDEWALKS AND CURBING	1	Concrete Curb - Straight	Lin. Ft.												
	2	Concrete Curb - Radius	Lin. Ft.												
	3	Remove Old Curb	Lin. Ft.												
	4	Remove Old Curb and Gutter	Lin. Ft.												
	5	Remove Old Sidewalk	Sq. Ft.												
	6	Replace Old Sidewalk	Sq. Ft.												
	7	Construct New Sidewalk	Sq. Ft.												
	8	Curb Inlet	Each												
	9	Catch Basin Complete	Each												
	10														
	11														
	12														
SEWER	1	12" Vitrified Sewer Pipe	Lin. Ft.												
	2	15" Vitrified Sewer Pipe	Lin. Ft.												
	3	18" Vitrified Sewer Pipe	Lin. Ft.												
	4	20" Vitrified Sewer Pipe	Lin. Ft.												
	5	24" Vitrified Sewer Pipe	Lin. Ft.												
	6	Manhole Complete	Each												
	7	Catch Basin Complete	Each												
	8														
	9														
	10														
PAVEMENT	1	Pavement - 1 Course Conc.	Sq. Yds.												
	2	Pavement - Asphaltic Conc.	Sq. Yds.												
	3	Integral Curb 8"	Lin. Ft.												
	4	Integral Curb 12"	Lin. Ft.												
	5	Surface Drain	Each												
	6	Surface Drain Basin	Each												
	7	Shoulders - Earth	Lin. Ft.												
	8														
STRUCTURES	1	Concrete	Cu. Yds.												
	2	Reinforcing Steel	Lbs.												
	3	Excavation	Cu. Yds.												
	4	Piling	Lin. Ft.												
	5														
6															
7															
8															
9															
10															

DETAILS



TYPICAL GRADING SECTION

Note: All Sections to conform to the R.O.W. as shown on plans.

OFFICE OF
 RAMSEY COUNTY SURVEYOR
 HARRY S. BRONSON
 GRADING PLAN OF
WHITE BEAR RD.
 LARPEUTEUR TO WHITE BEAR AVE.
 SCALE AS SHOWN NOV. 1937

PLANS APPROVED 11-15-1937 *Harry S. Bronson*
 COUNTY SURVEYOR
 APPROVED 11-15-1937 *M. J. Johnson*
 CHAIRMAN OF COUNTY BOARD