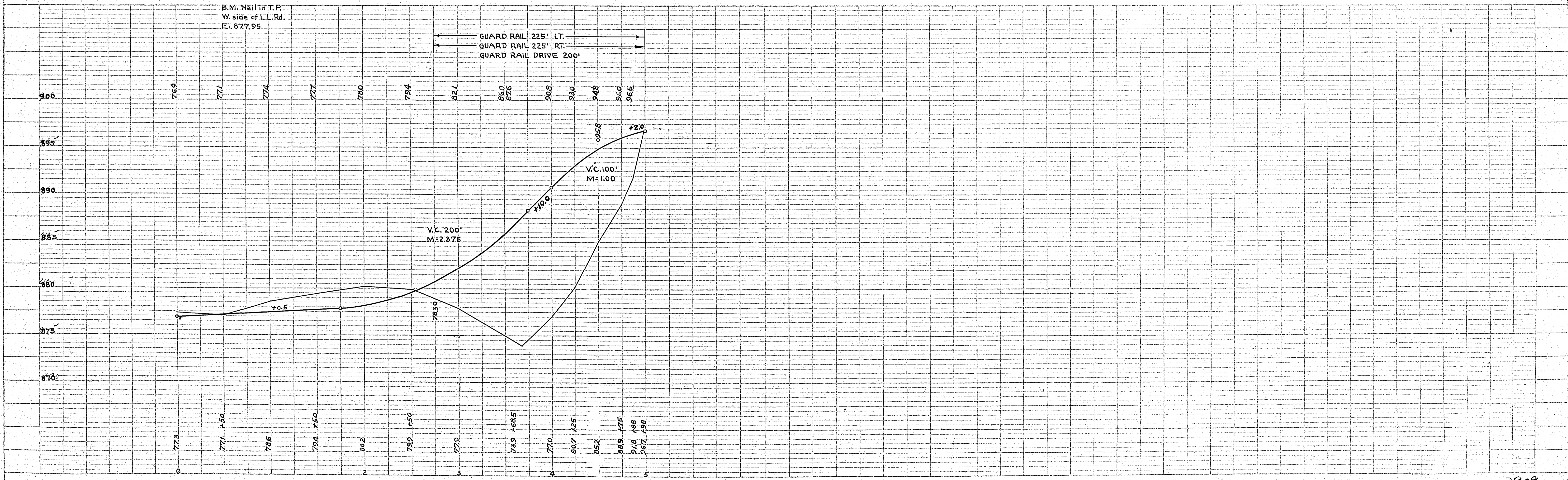
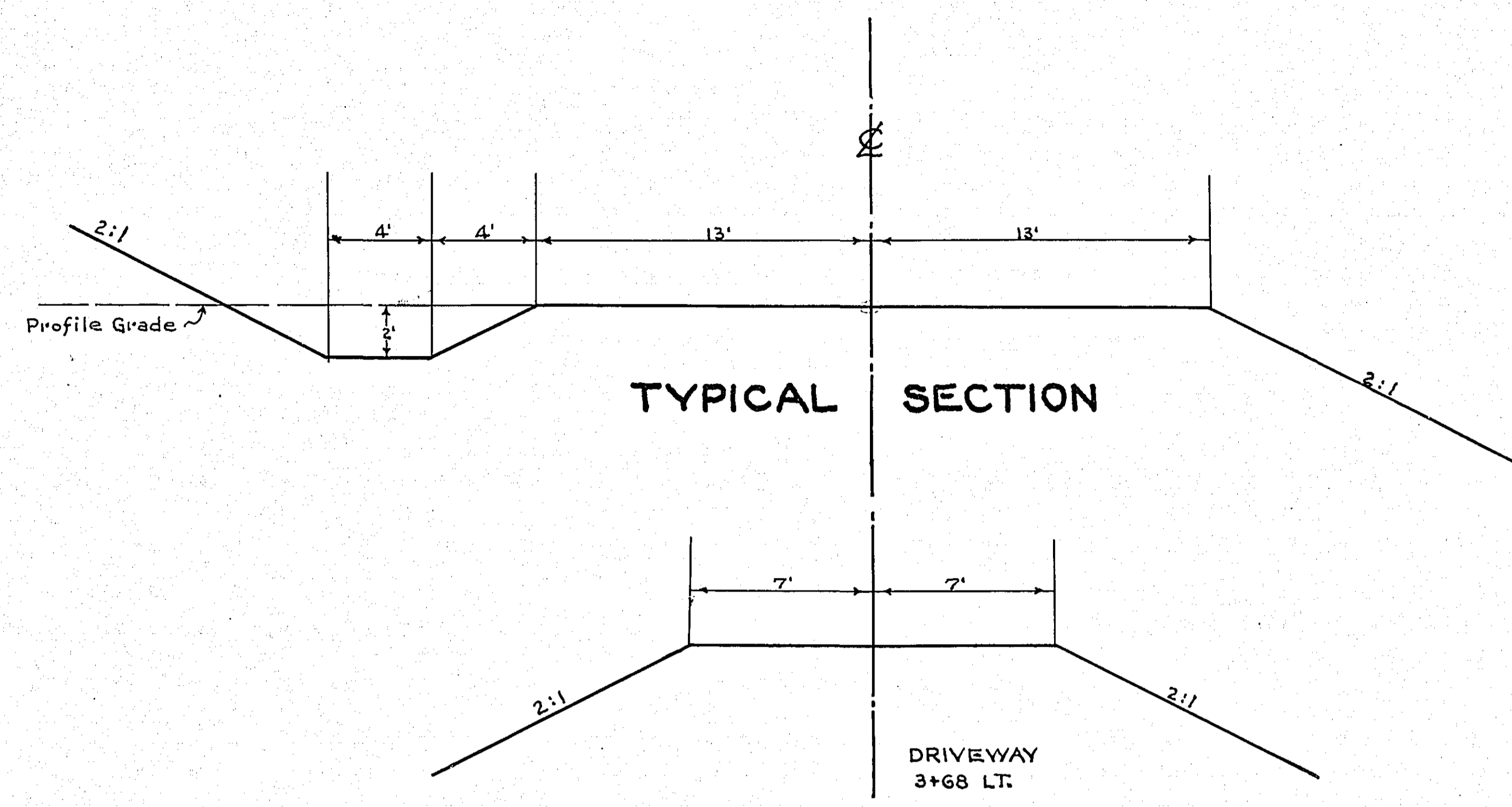
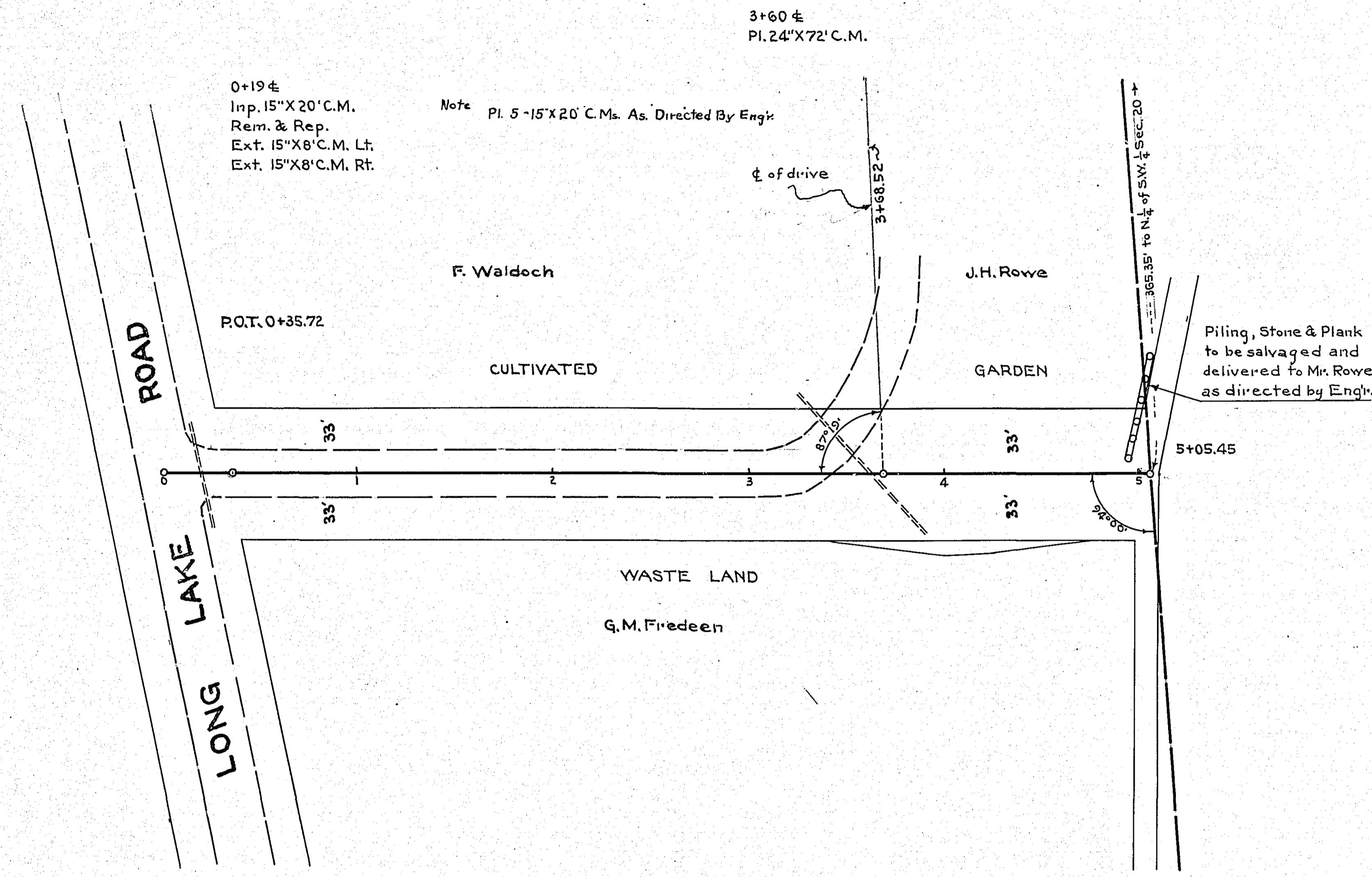
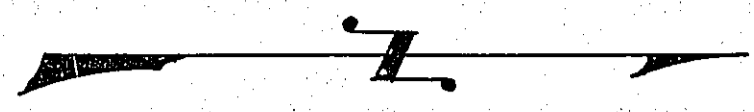


PLAN	SUBMITTED	BY	DATE
	PLOTTED		
	ALIGNED		
	CHECKED		
	NOTED		
	NO.		

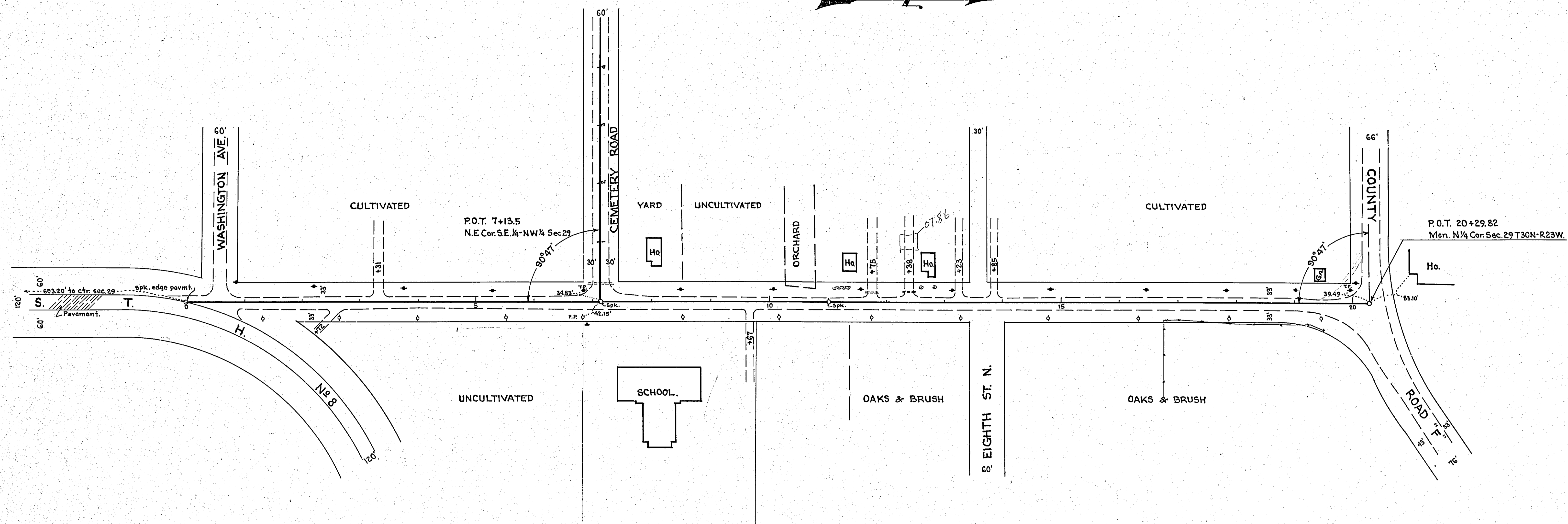
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	PLOTTED		
	CHECKED		
	NOTED		
	NO.		



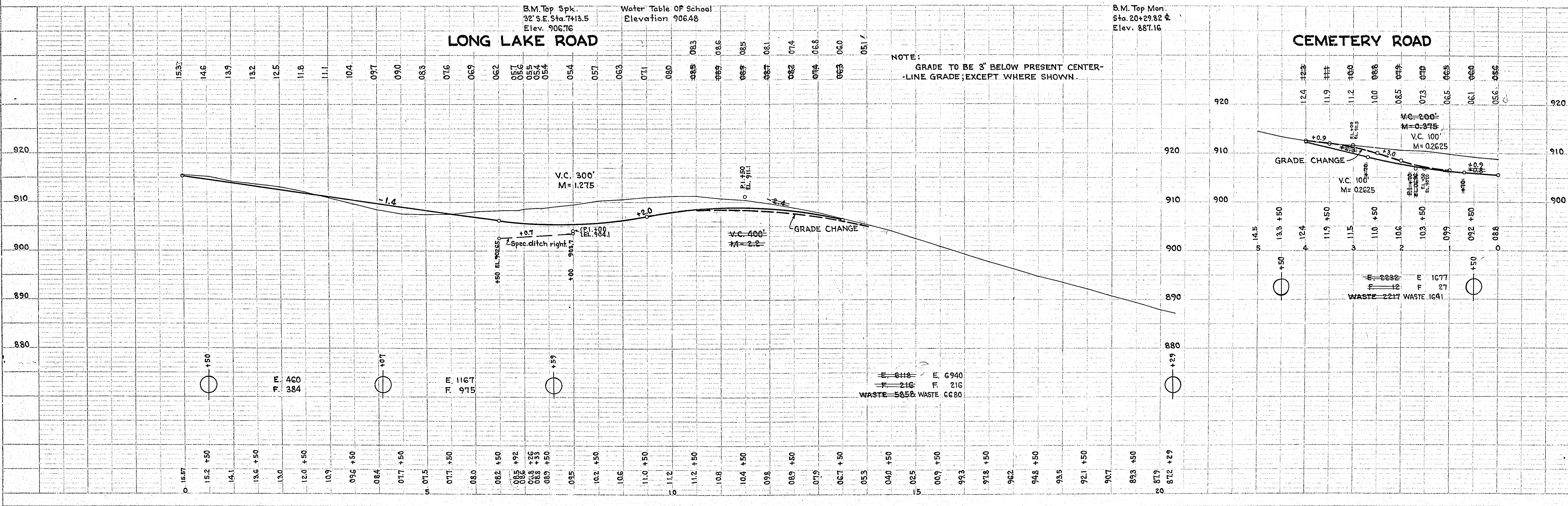
7+14 Lf. Inp. 24'x42' Conc. P. Rem. & Repl.
 9+67 Rf. Pl. 15'x20' CM.
 11+75 Lf. Inp. 12'x22' CM. Rem. & Repl.
 12+38 Lf. Inp. 12'x20' CM. Rem. & Repl.
 13+23 Lf. Pl. 15'x20' CM.
 13+85 Lf. Pl. 15'x20' CM.



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



PROFILE SURVEYED BY DATE
 PLOTTED BY
 NOTE BOOK NO. OF WAY CHECKED
 NO.

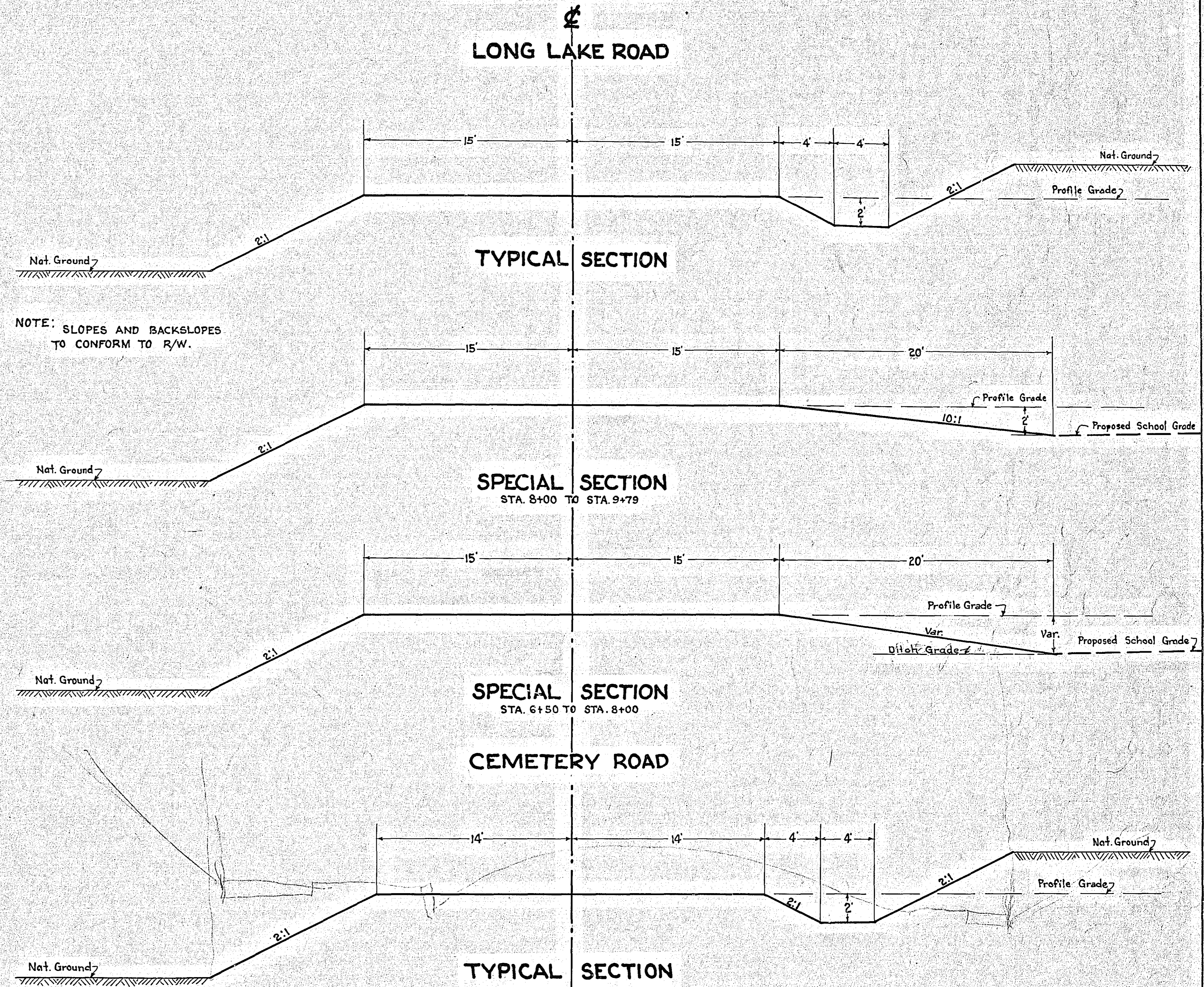


PLANS - PLAN PROFILE 10' & 1/2" SCALE
 ELEVATIONS - ELEV. 1/4" SCALE

STATEMENT OF ESTIMATED QUANTITIES

CLASS	ITEM	UNIT	LONG LAKE ROAD	CEMETERY ROAD	FREDEEN ROAD	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	4		6							10
	2	Grubbing	Trees	4		6							10
	3	Clearing	Acres										
	4	Grubbing	Acres										
	5	Excavation Earth	Cu. Yds.	8567	1697	2067							12311
	6	Excavation Borrow	Cu. Yds.			8075							8075
	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.	60		116							176
	13	Install 18" C.M.	Lin. Ft.										
	14	Install 24" C.M.	Lin. Ft.			72							72
	15	Install	Lin. Ft.										
	16	Install	Lin. Ft.										
	17	Install 18" Ps	Lin. Ft.										
	18	Install 24" Ps	Lin. Ft.										
	19	Install 30" Ps	Lin. Ft.										
	20	Install 36" Ps	Lin. Ft.										
	21	Install	Lin. Ft.										
	22	Install	Lin. Ft.										
	23	Remove Old Culvert	Lin. Ft.	84		20							104
	24	Replace Old Culvert	Lin. Ft.	84		20							104
	25	Finishing in Backing	Sq. Yds.	19000	3000	3800							25800
	26	Rubble Gutter	Cu. Yds.										
	27	Headwall Concrete	Cu. Yds.										
	28	Headwall Steel	Lbs.										
	29												
	30												
	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	Lin. Ft.										
	6	Furnish	Lin. Ft.										
	7	Furnish 12" C.M. Band	Each										
	8	Furnish 15" C.M. Band	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.			650							650
	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													
SURFACE	1	Loading Gravel	Cu. Yds.	20									
	2	Hauling Gravel	C.Y. Mi.										
	3	Shaping & Compacting	Cu. Yds.										
	4	Oil Stabilization	Sq. Yds.		1000	1200							2200
	5	Black-Top	Sq. Yds.	4935									4935
	6	Gravel (on site)	Cu. Yds.	190	50	60							300
	7												
	8												
STRUCTURES	1	Concrete	Cu. Yds.										
	2	Reinforcing Steel	Lbs.										
	3	Excavation	Cu. Yds.										
	4	Piling	Lin. Ft.										
	5												

DETAILS



*24" C.M. at town Hall
piled up for Freden Rd.*

OFFICE OF
RAMSEY COUNTY SURVEYOR
HARRY S. BRONSON

GRADING PLAN OF
LONG LAKE ROAD,
FROM S.T.H.#8 TO COUNTY RD. 'F'
AND
CEMETERY RD.
FROM LONG LAKE RD. TO 400' W.
AND
FREDEEN RD.
FROM LONG LAKE RD. TO 500' E.
AUG. 1939 SCALE AS SHOWN

PLANS APPROVED 8/31 1939 *Harry S. Bronson*
COUNTY SURVEYOR

APPROVED 9/5 1939 *[Signature]*
CHAIRMAN OF COUNTY BOARD

APPROVED 9/22 1939 *[Signature]*
CHAIRMAN OF TOWNSHIP BOARD

2909