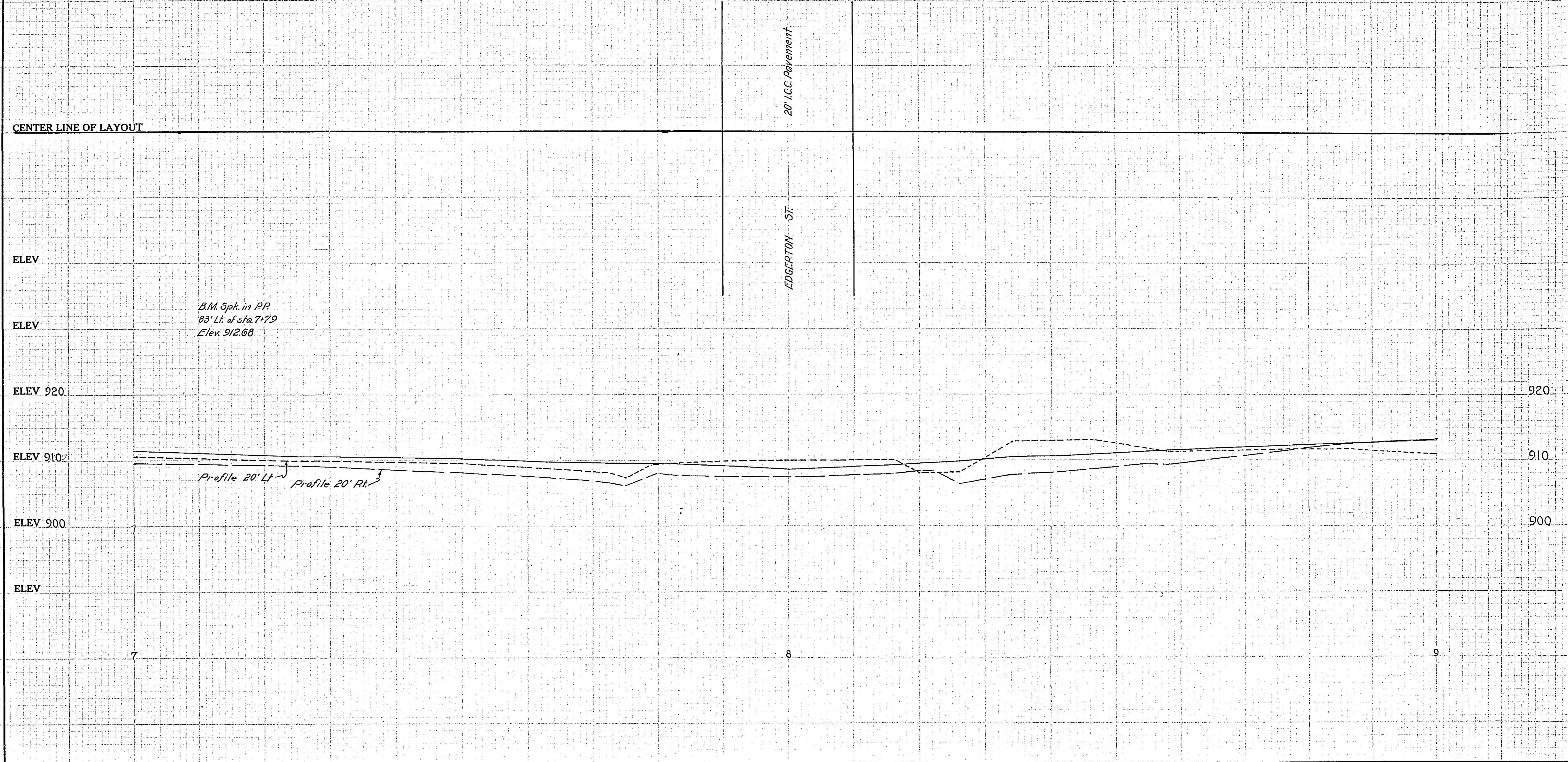
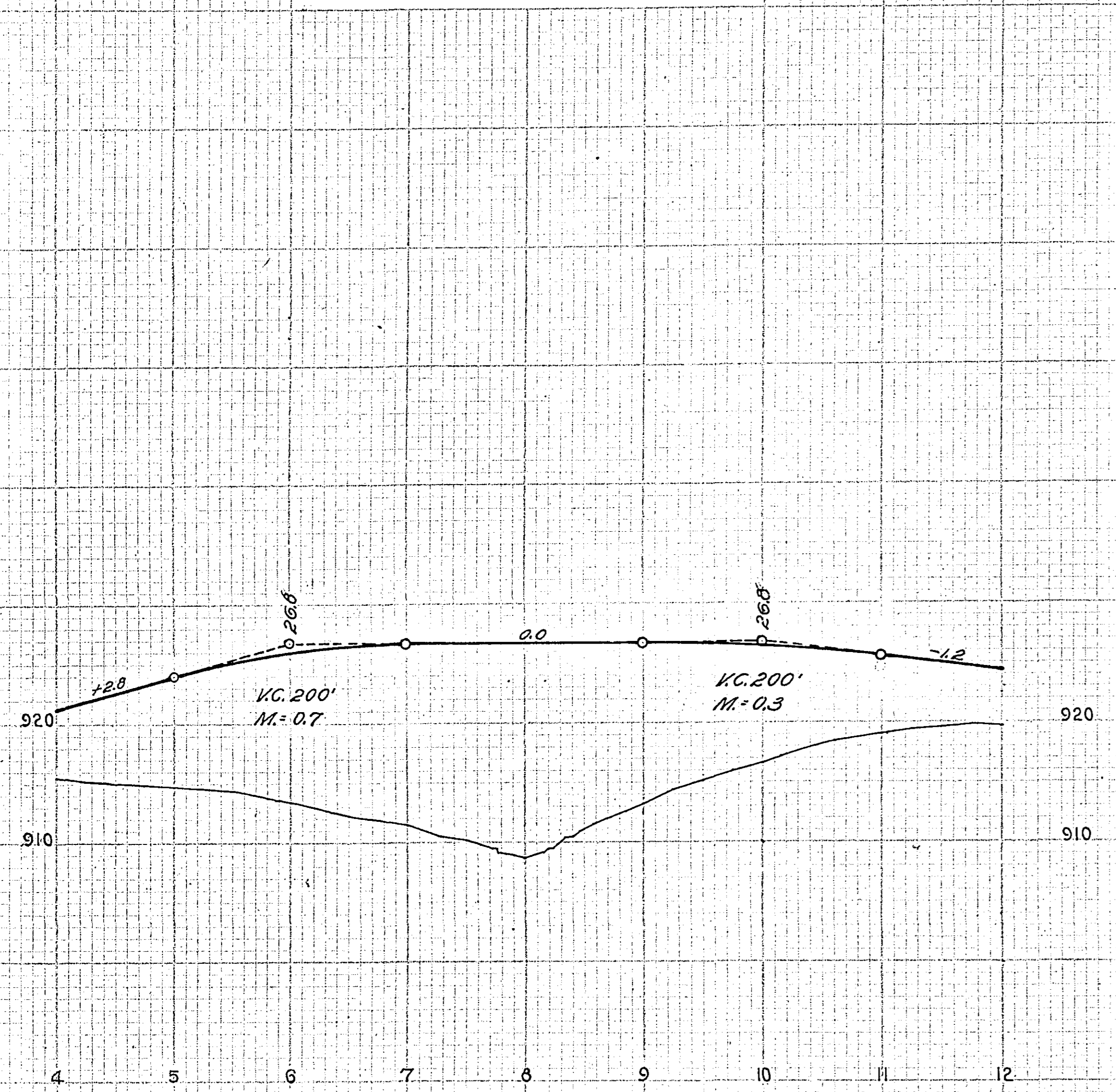


CONTRACTED PROFILE
SCALE: HOR. 1" = 100', VERT. 1" = 10'

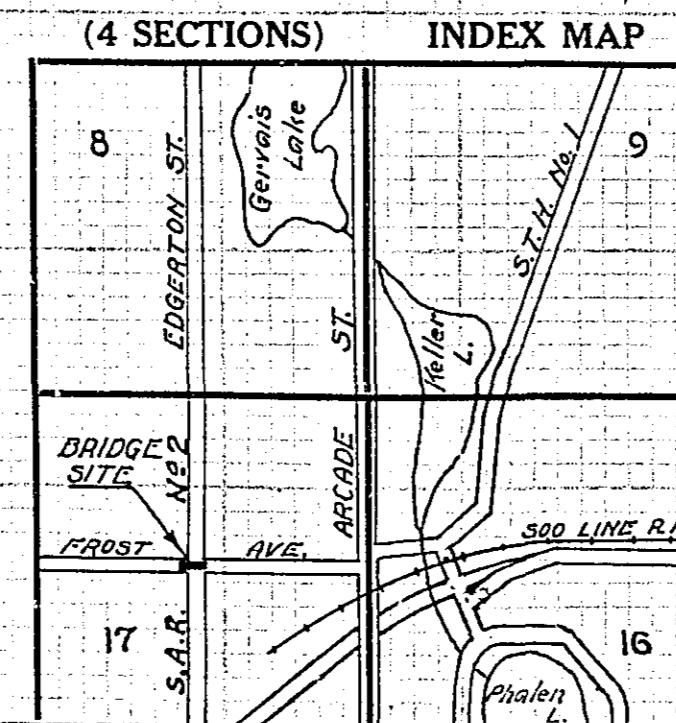
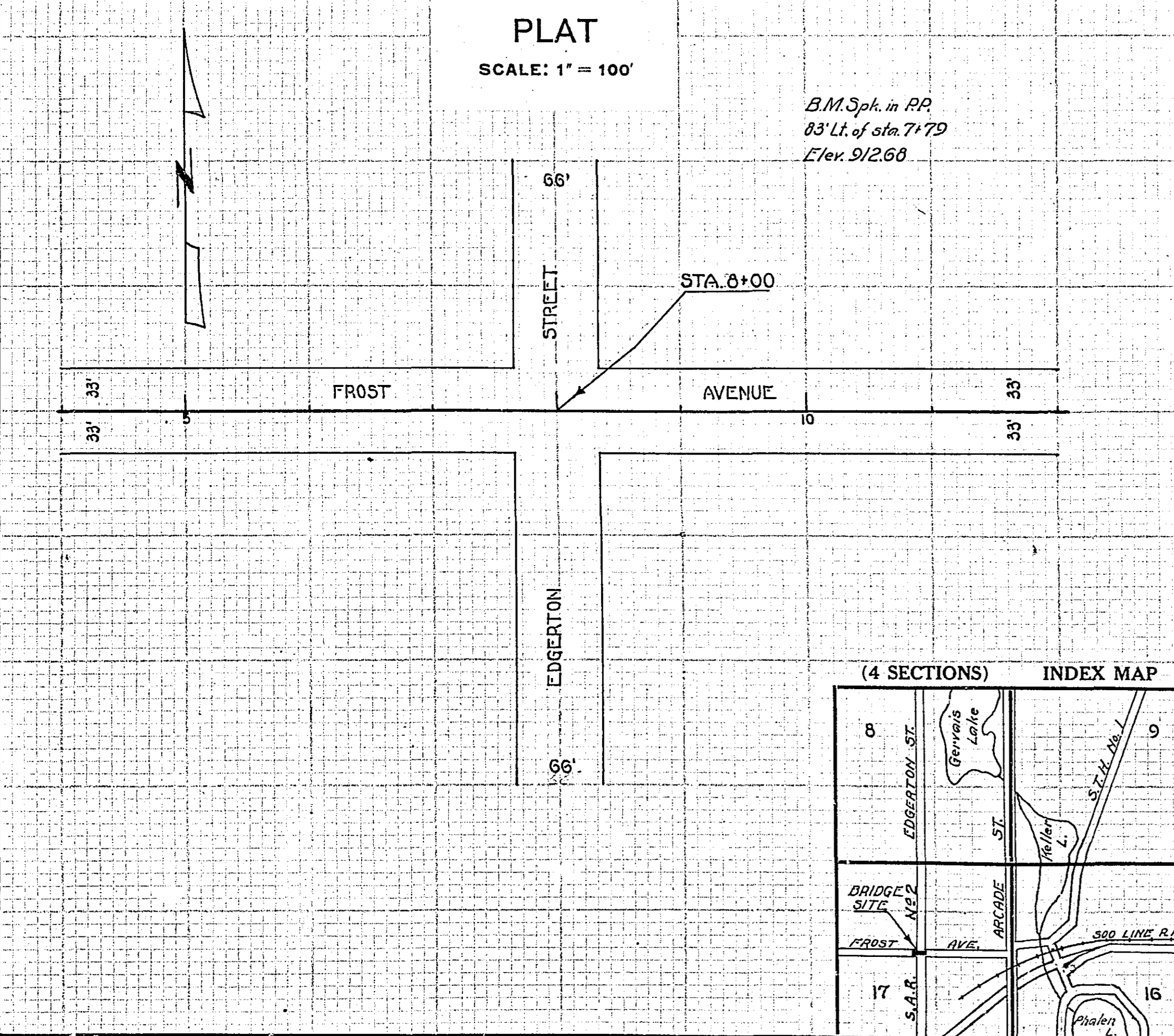
PLAN AND PROFILE
SCALE: 1" = 10'

FINAL SURVEY
BY: _____ DATE: _____
SUPERVISED BY: _____
PLOTTED BY: _____
NOTE BOOK NO. _____
AREAS CHECKED BY: _____



ORIGINAL SURVEY
BY: _____ DATE: _____
SUPERVISED BY: _____
PLOTTED BY: _____
NOTE BOOK NO. _____
AREAS CHECKED BY: _____

PLAT
SCALE: 1" = 100'



SHOW ON CONTRACTED PROFILE

- a. Present and proposed grades of roadway for a sufficient distance from each end of bridge to show present and proposed spillways, if any, grades of steep approaches, and where material will be taken for fills, also approximate profile of natural surface of ground.
- b. Present and proposed grades of bridge floor.
- c. High and low water stages. Give average high water and extreme high water and state how often extreme high water occurs. Give date by years.
- d. Kind of material for proposed fill.
- e. Proposed elevation of bottom of footings.
- f. Elevation of water surface taken at edge of water, at bridge site, and 100 ft. and 200 ft., both above and below bridge site, also at any sudden drops or waterfalls.

DATA

1. Recommendations of Engineer:
 - a. Span and Type of Superstructure _____ Type of Railing _____
 - b. Width of Roadway on Bridge _____ Number and width of sidewalks, if any _____
 - c. Types of abutments, length of wings and their angle with face of abutment _____
 - d. If a skew span is used, the angle of skew should be _____
 - e. Is piling required? _____ If required, bottom of pile should penetrate to Elev. _____ for Abutments; and Elev. _____ for Pier.
2. Special Features: Waterfalls, dams, exceptional floods, ice, driftwood, sliding earth, logging, etc. _____
3. Changes: In height or length from that of old bridge, and reasons why _____
4. Other bridges over same stream:
 - a. Location, length, height above water, and estimated age _____
 - b. Spillways and flood conditions _____
 - c. Reason why these bridges are, or are not, fair indications of what length the proposed bridge should be _____
5. Purchase of Right of Way: For change in channel or road _____
6. Information and evidence in regard to the high water stage was obtained as follows: _____
7. Must contractor provide for traffic during construction of proposed bridge; _____ if so, by what means? _____

SHOW ON LARGE PROFILE

- a. Cross-section of stream on center line of proposed bridge (full black line), cross-sections parallel to, and 20 feet on each side of the center line (dashed and dotted black lines).
- b. A layout showing station and distance out from proposed center line, to all soundings.
- c. Number the soundings S1, S2, S3, etc., and show plainly on profile what materials are encountered in each sounding and at what elevations the various materials are encountered. Show number of blows required for the driving of each foot of rod and final elevation of bottom of each rod.
- d. Location, elevation and description of a permanent bench mark.

MATERIAL

Nearest or most convenient shipping point for steel, cement and other material is _____ which is about _____ miles from bridge site, condition of the road is _____

Local Gravel:

- a. Location of pit _____
- b. Length of haul from pit to bridge site is _____ miles.
- c. Condition of the road from pit to bridge is _____
- d. Probable price of gravel in pit _____
- e. Number of parts of sand screened from ten (10) parts of pit run, using 1/4-inch screen _____ Average of several samples taken.

Imported Gravel:

- a. Can be shipped from _____
- b. Probable price of same F. O. B. to nearest station is _____ per C. Y.

SHOW ON PLAT

- a. North upward. (Show by arrow)
- b. Course of stream 250 feet or more above and below bridge site.
- c. Direction of flow.
- d. Location of existing and proposed roads, clear widths of same and the stationing.
- e. Location of present bridge with general dimensions and description of same.
- f. Location of proposed bridge, giving station of proposed center of main span.
- g. Location of points where flood waters are likely to scour the banks and bed of stream and description of any pools which may have formed near bridge site.
- h. Recommended change of channel.
- i. Small sketch of four sections showing approximate course of stream and road, also location of proposed bridge.
- j. Location, elevation and description of permanent bench mark.
- k. Show name of road, and if a state road, give number.
- l. Show name of stream, state whether it is a River, Creek, Drainage Ditch, Ravine or Dry Run, etc.

STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS
REPORT OF BRIDGE SURVEY

SEC. 17 T. 29 R. 22
NEW CANADA TOWNSHIP
RAMSEY COUNTY
SURVEY MADE BY: D.O. WEBER 19
CHECKED BY: O.R. VanKrevelen
DIV. ENGR.
BRIDGE NO.

PLAN	DATE
BY	
CHECKED	
NO.	
NOTE BOOK ALPHABET CHECKED	
NO.	
BY	
CHECKED	
NO.	

PROFILE	DATE
BY	
CHECKED	
NO.	
NOTE BOOK ALPHABET CHECKED	
NO.	
BY	
CHECKED	
NO.	

