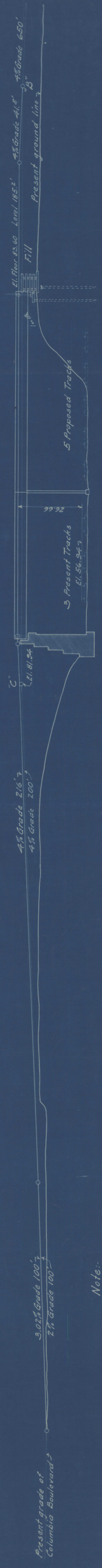
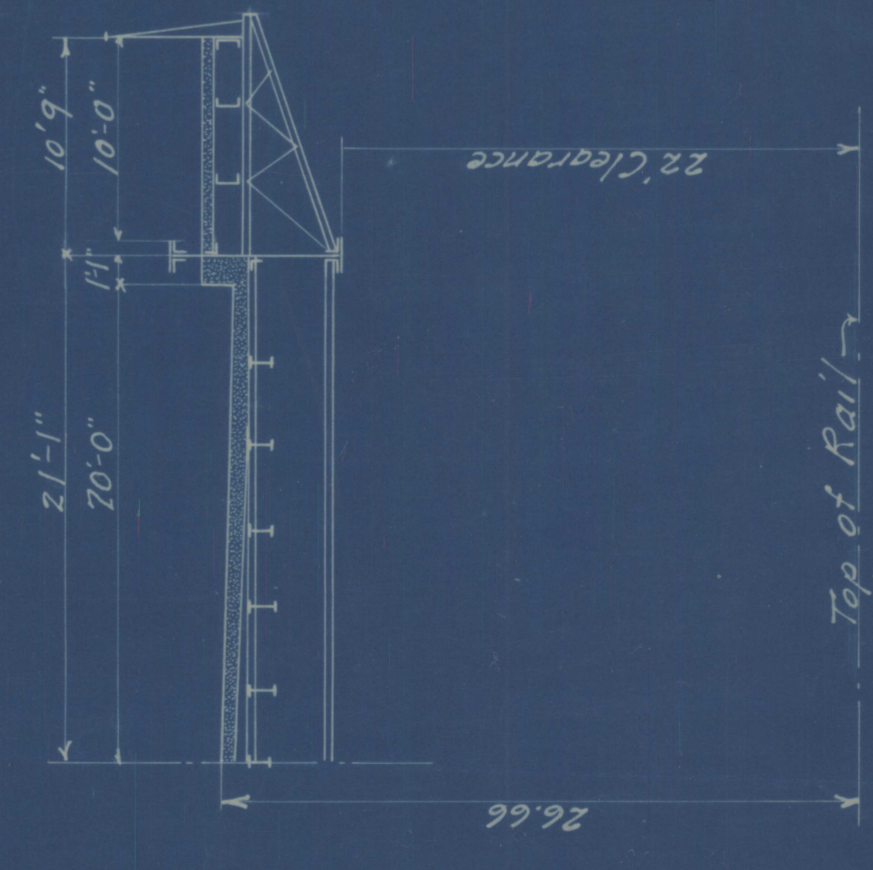


Plan  
Scale: 1" = 50'



Section on & Road  
Scale 1" = 20'

Note:  
Red lines indicate grades as originally proposed.  
Black lines indicate grades necessary to raise bridge floor to proper elevation.



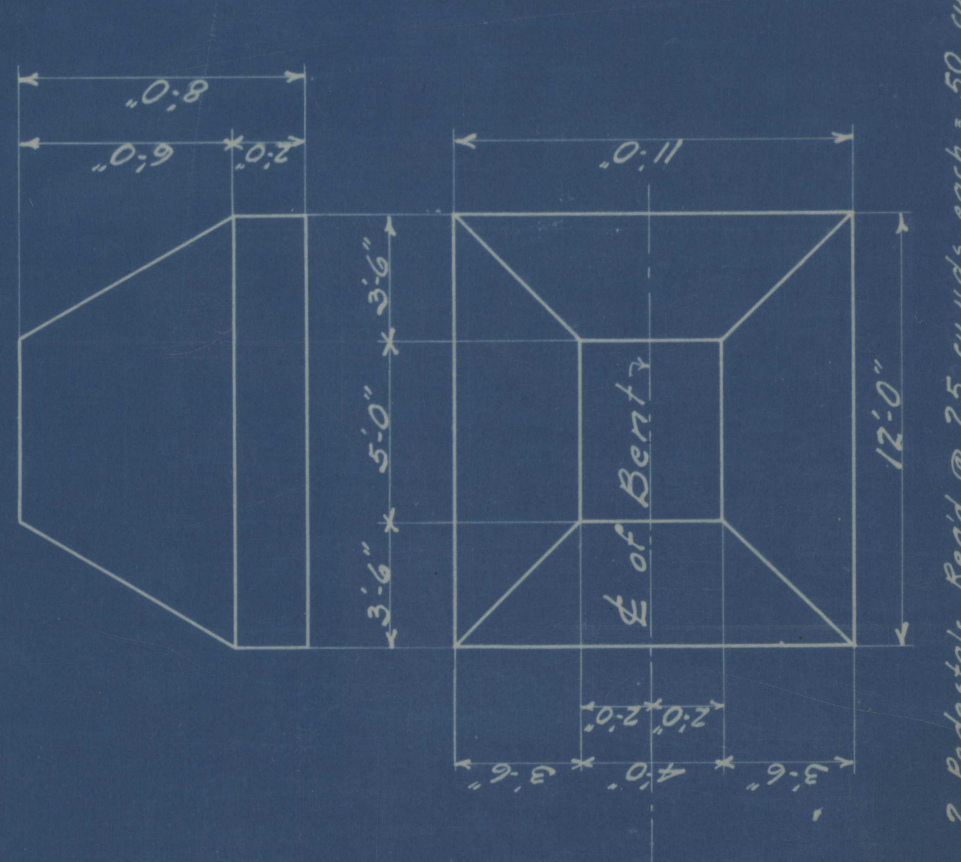
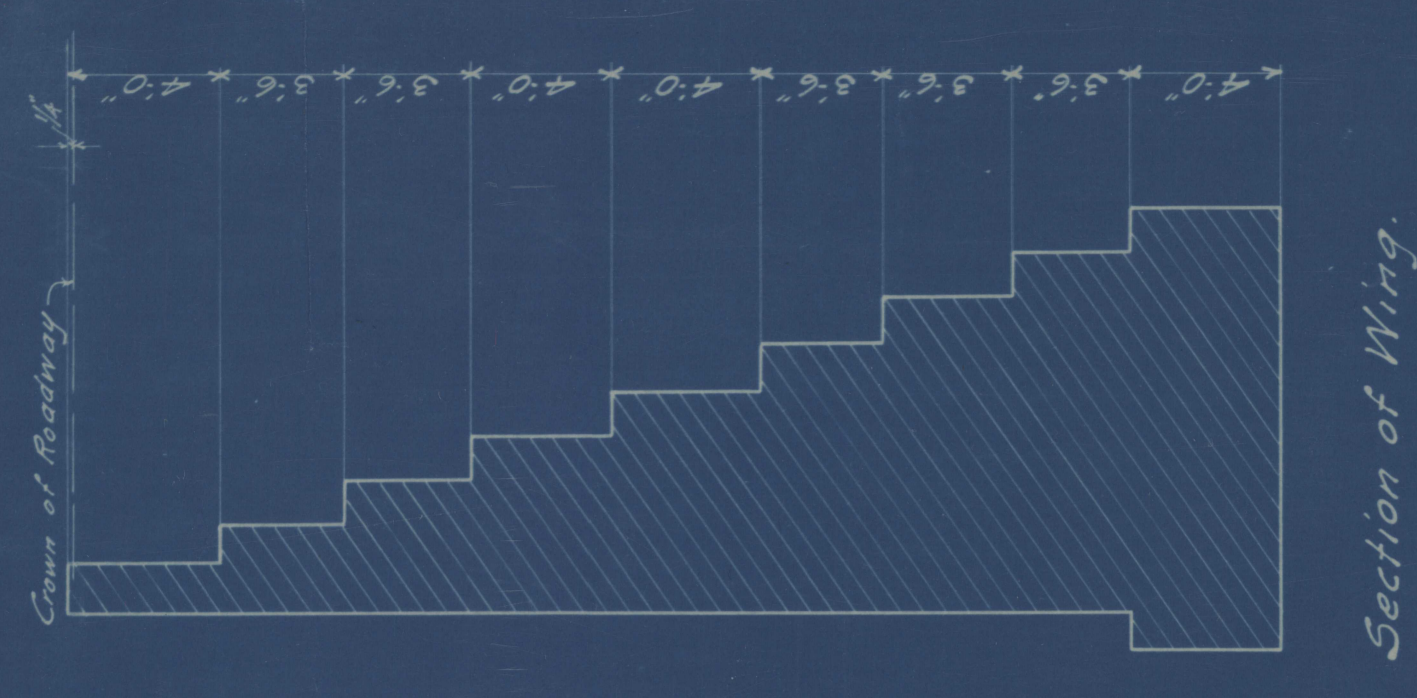
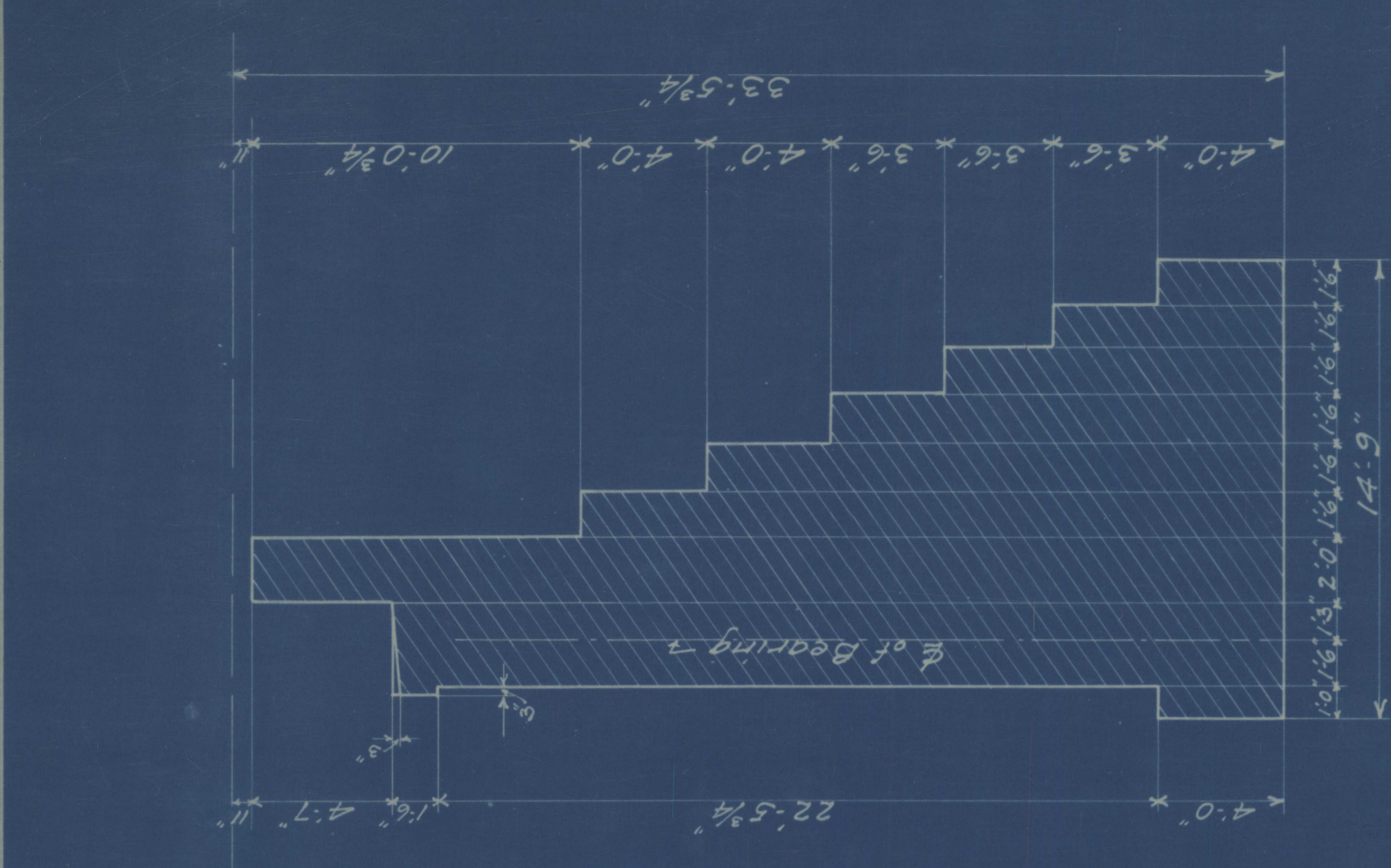
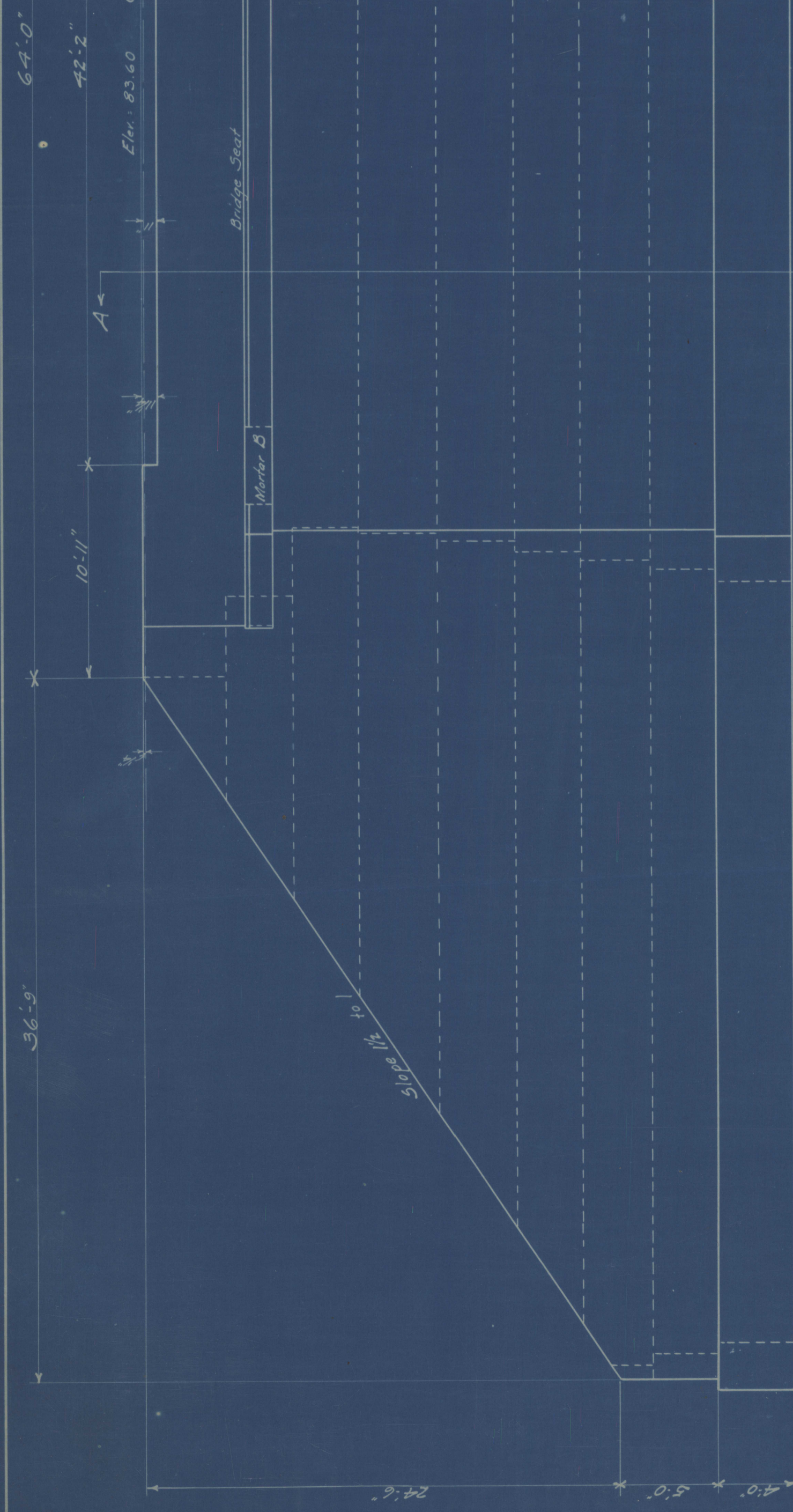
Half Section thro. Span  
Scale: 1/8" = 10'

S. P. & S. P. I.  
PORTLAND, OREGON.  
WALKER STREET BRIDGE  
LOCATION PLAN

SCALE: 1/8" = 10'  
OFFICE OF BRIDGE ENGINEER - ST. PAUL, MINN. MAY 29, 1903  
APPROVED.

BRIDGE ENGINEER  
VICE PRES. & CONSULTING ENGR.  
CHIEF ENGINEER

CITY ENGINEER OF PORTLAND



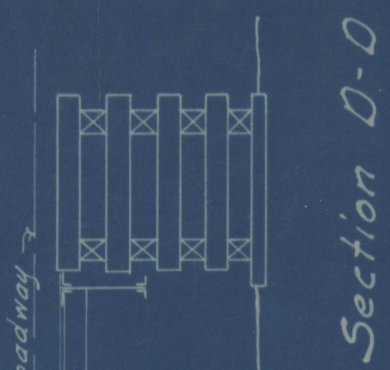
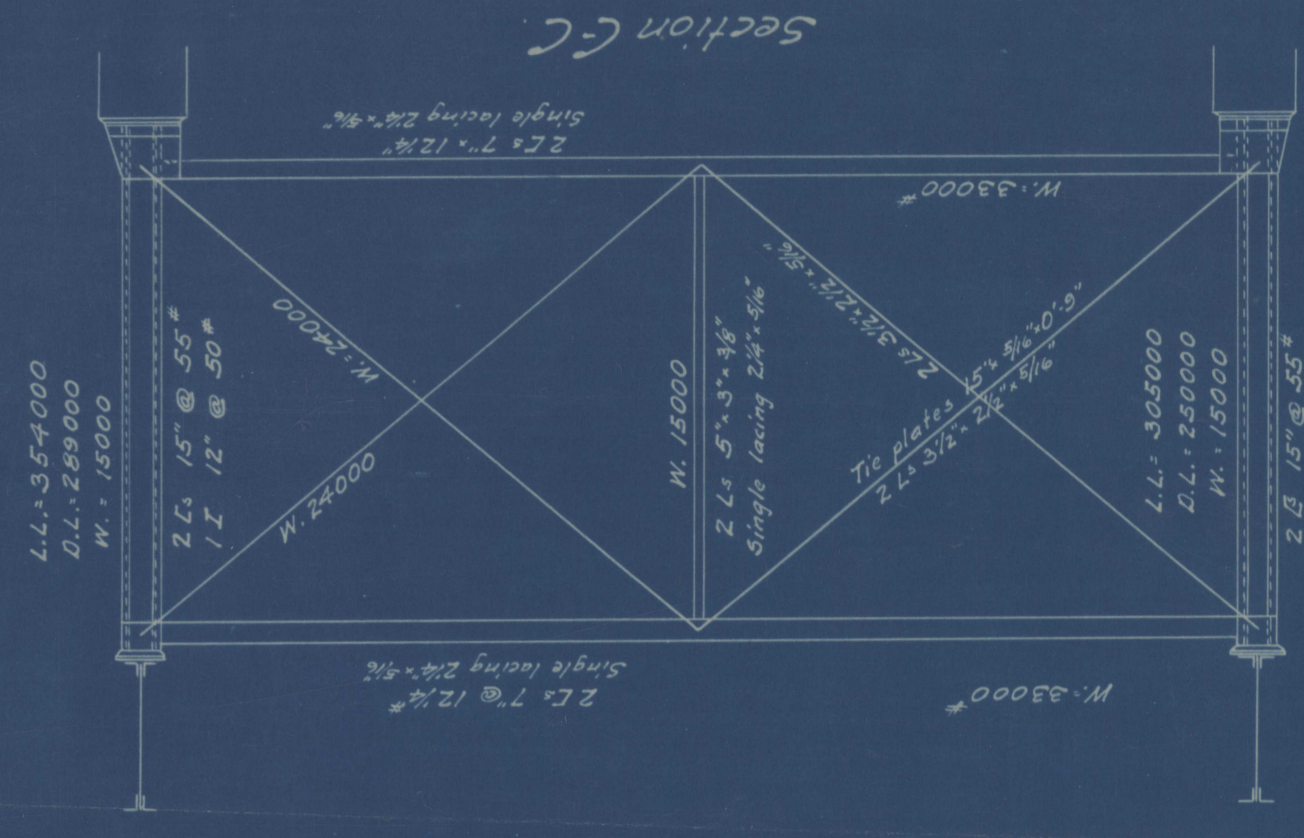
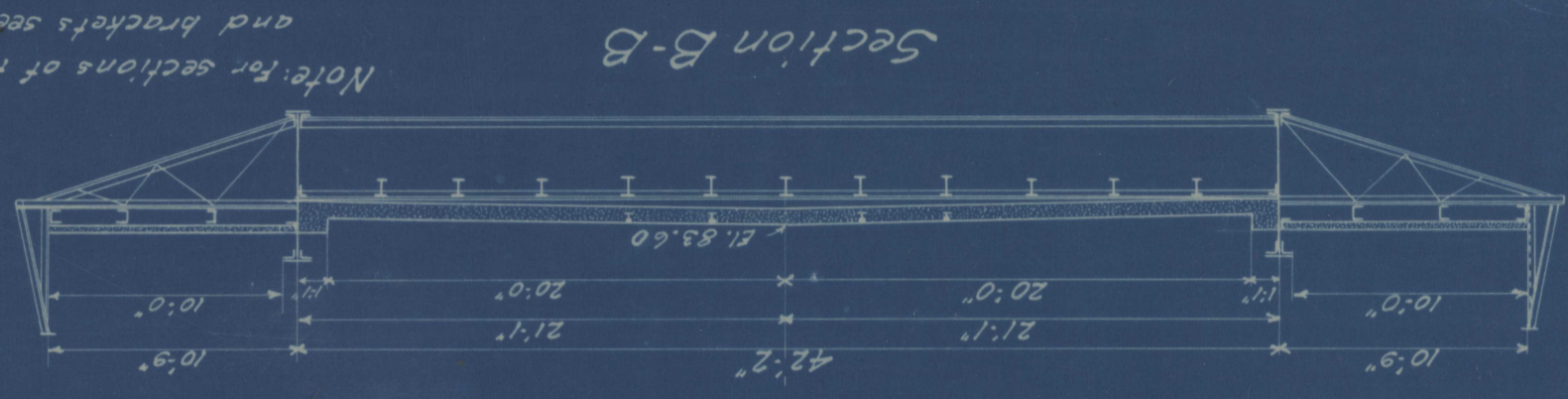
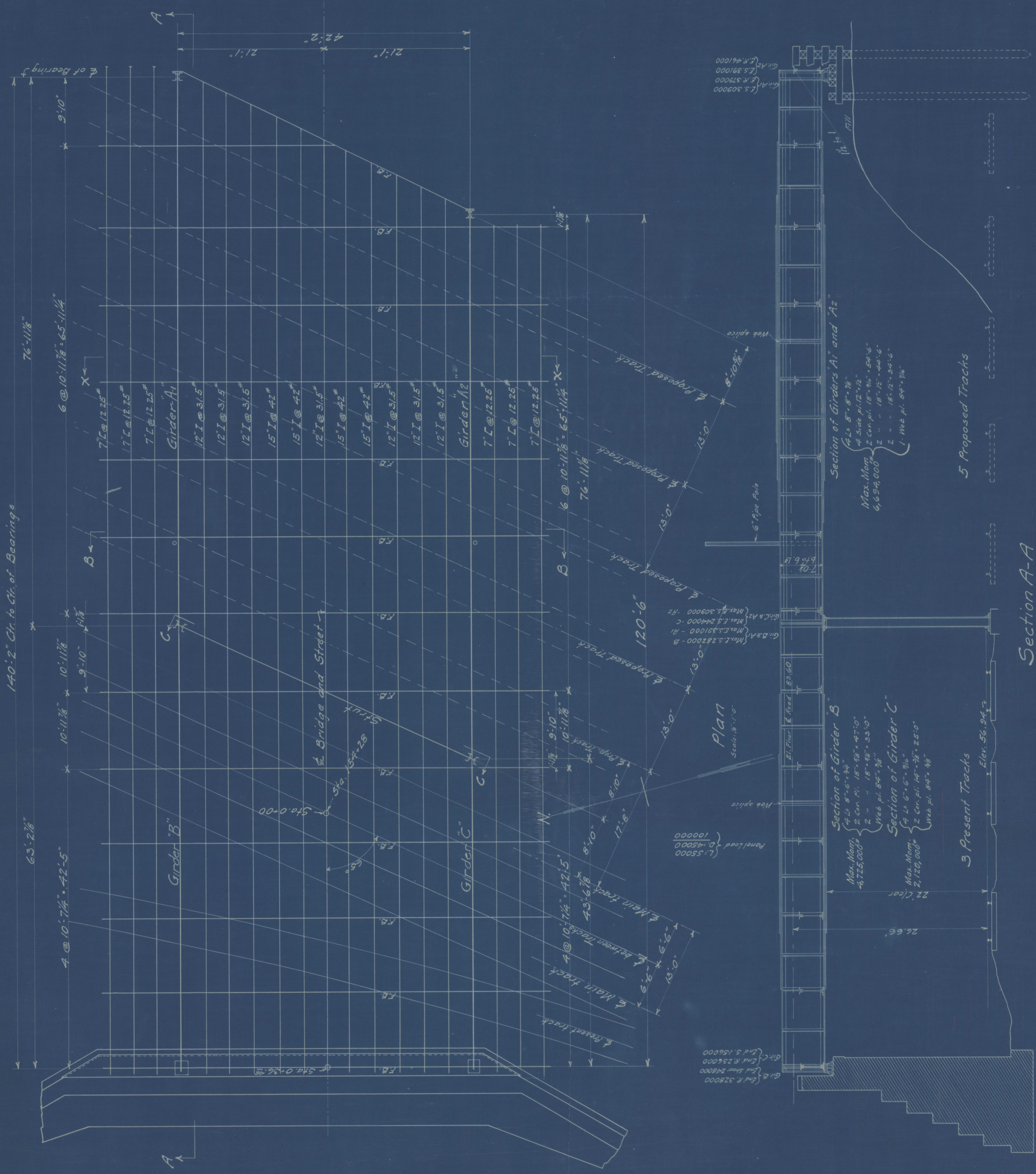
1 Abutment Reg'd.  
855 cu. yds.

**Specifications.**  
All cement to be best American Portland Cement.  
All sand to be clean, coarse and sharp.  
Broken stone to be clean and not over 2 1/4" in size.  
All proportions to be measured by volume.  
Concrete ingredients of mixture, one part cement, three parts sand and five parts broken stone.  
Mortar B. Ingredients of mixture, one part cement and three parts sand.  
Note: Corners to be broken by 1" corner strip.  
Smooth surfaces to be obtained by sanding.

S. P. & S. RY  
PORTLAND, OREGON.  
WALKER STREET BRIDGE  
ABUTMENT & PEDESTALS

SCALE: 3/8" = 1'-0"  
OFFICE OF BRIDGE ENGINEER - ST. PAUL, MINN. MAY 26th 1909  
APPROVED:  
BRIDGE ENGINEER  
2nd VICE PREST. & CONSULTING ENGR.

CHIEF ENGINEER  
CITY ENGINEER OF PORTLAND



**General Notes.**  
 All principal members (A. H. Steel) riveted to steel girders, for all other members, rivets, except in 2" wide, and 1/2" larger in size of thickness of steel, larger in size of thickness.  
 Shop finish surfaces in contact with heavy coat of red lead and putty, and steel surfaces inaccessible after erection to be given two coats of same mixture. All other surfaces to be given one coat of pure, ball-blasted oil.  
 Loading.  
 Dead Load - Actual weight of structure.  
 Live Load - Track stringers are designed for a moving load of 35 tons on 2 axes 20'-0" centers. Remaining roadway stringers for a moving load of 24 tons on 2 axes, 16'-0" centers, and 24 tons on 2 axes, 16'-0" centers, and 24 tons on 2 axes, 16'-0" centers.  
 Floor beams combination of above or 120' per 2' over roadway.  
 Sidewalk stringers for a moving load of 100' per 2'.  
 Trusses and Towers are designed for a moving load of 2500' per lin. ft. of each track, assumed to occupy a width of 100' per track, remainder of roadway covered by a uniform load of 150' per 2' and the sidewalk covered by a uniform load of 100' per 2'.  
 Unit Stresses for live and dead load in tension - 17,000 lb. in compression - 12,000 lb.  
 Where L = unsupported length of column.  
 Where r = least radius of gyration.

**S. P. & S. P.**  
 PORTLAND, OREGON.  
**WALKER STREET BRIDGE**  
**GENERAL PLAN & STRESS SHEET.**  
 SCALE: 1/8" = 1'-0"

OFFICE OF BRIDGE ENGINEER - ST. PAUL, MINN., MAY 24-1909  
 APPROVED:  
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 CHIEF ENGINEER  
 CITY ENGINEER OF PORTLAND

