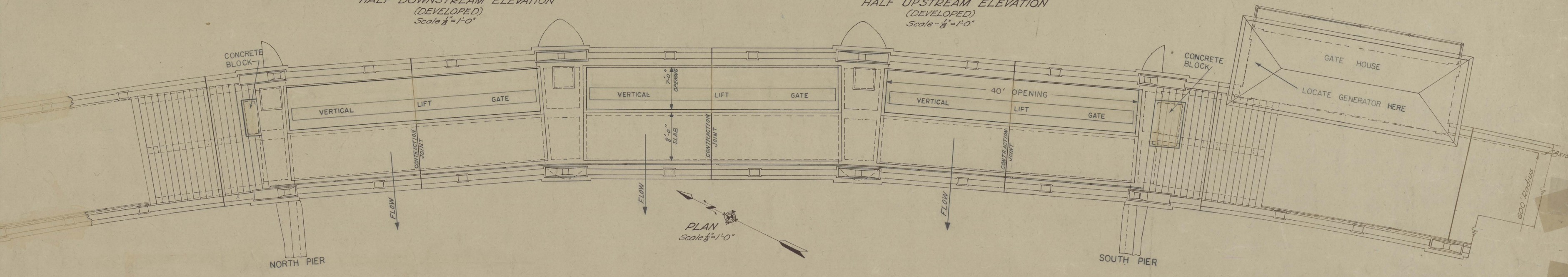
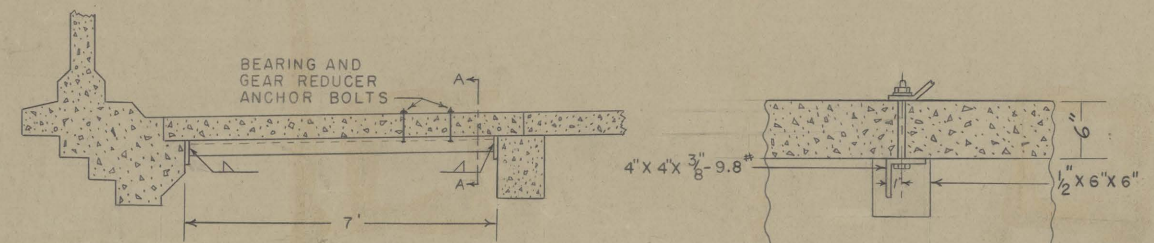


HALF DOWNSTREAM ELEVATION  
(DEVELOPED)  
Scale  $\frac{3}{8}'' = 1'-0''$

HALF UPSTREAM ELEVATION  
(DEVELOPED)  
Scale  $\frac{3}{8}'' = 1'-0''$

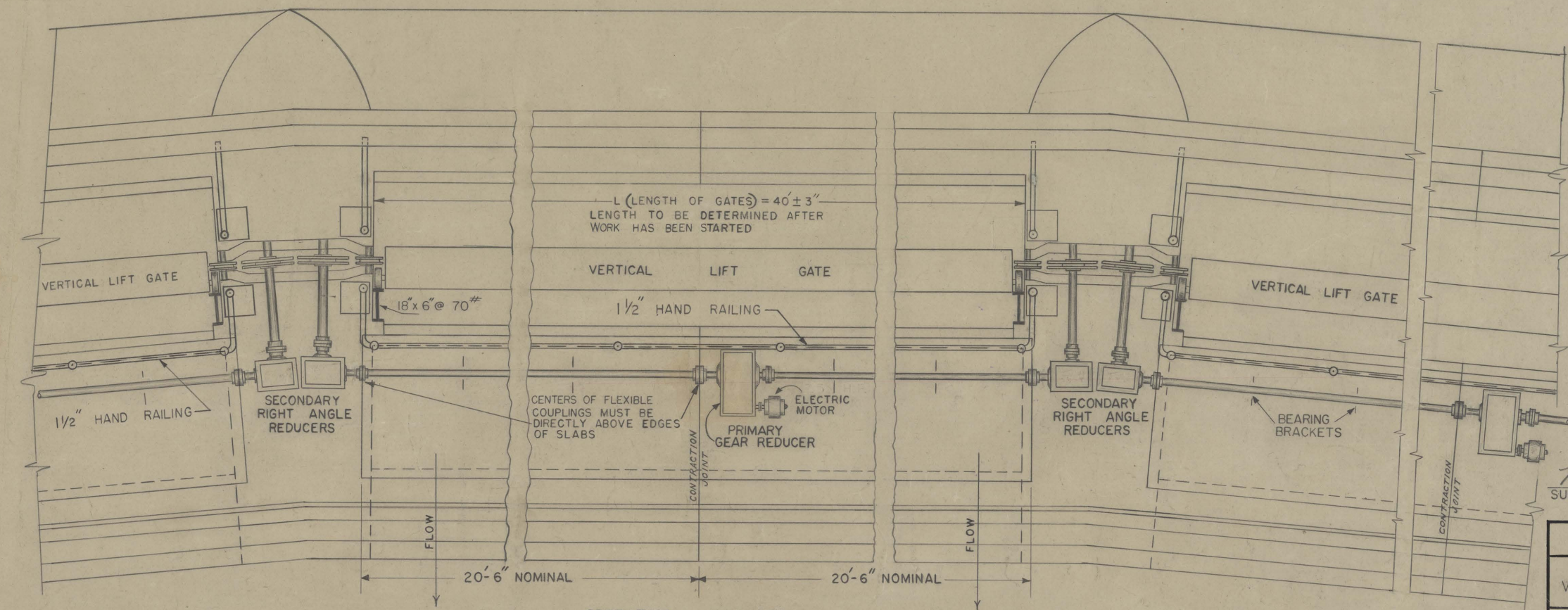


PLAN  
Scale  $\frac{3}{8}'' = 1'-0''$

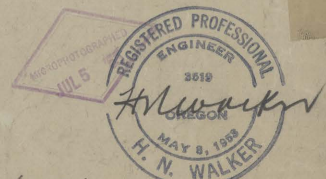


BOTTOM ANCHOR BOLT  
PLATE & SLAB ANCHOR  
6 REQUIRED  
Scale  $\frac{3}{8}'' = 1'$

SECTION A - A  
Scale  $1'' = 1'$



OPERATING MACHINERY  
Scale  $\frac{1}{4}'' = 1'$



H. Kenneth Anderson  
SUBMITTED BY H. KENNETH ANDERSON  
PRINCIPAL CIVIL ENGINEER

CITY OF PORTLAND, OREGON  
BUREAU OF WATER WORKS  
BULL RUN DAM  
VERTICAL LIFT GATES  
OPERATING MACHINERY  
SCALE AS SHOWN DRAWN BY F.M.  
DATE 3-25-54 TRACED BY F.M.  
NO. 6 OF 6 CHECKED BY [Signature]  
APPROVED [Signature]