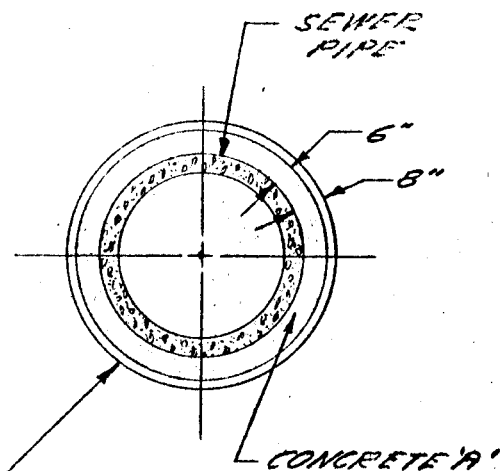


STEEL LINER PLATES. MIN. THICKNESS $\frac{1}{8}$ " OR MORE AS REQUIRED TO RESIST SOIL LOADS AND GROUTING PRESSURES

GROUT ALL VOIDS OUTSIDE LINER PLATES AFTER EXCAVATION. AFTER CONCRETING, GROUT ALL VOIDS LEFT BETWEEN LINER PLATE AND PIPE.

CLEARANCES SHOWN BETWEEN PIPE AND LINER PLATES ARE AVERAGE. TUNNEL SHALL BE DRIVEN TO WITHIN $2\frac{1}{2}$ " OF TRUE LINE AND GRADE, AND CLEARANCES SHOWN SHALL NOT BE REDUCED BY MORE THAN $2\frac{1}{2}$ ". CONTRACTOR SHALL ALSO PROVIDE REASONABLE WORKING SPACE IF ABOVE CLEARANCES GIVE TOO SMALL A TUNNEL

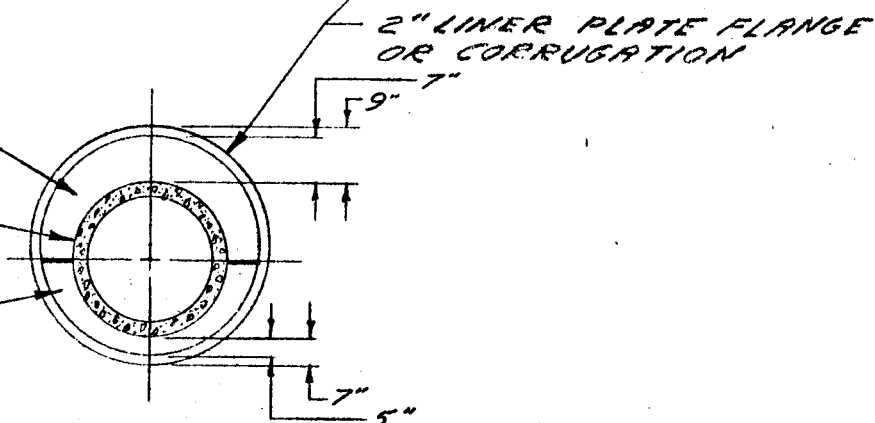


CROSS SECTION
42" & LARGER PIPES

SAND, GRAVEL
CONCRETE OR
GROUT AS SPECIFIED
OR AS ORDERED

SEWER PIPE

CONCRETE 'A'

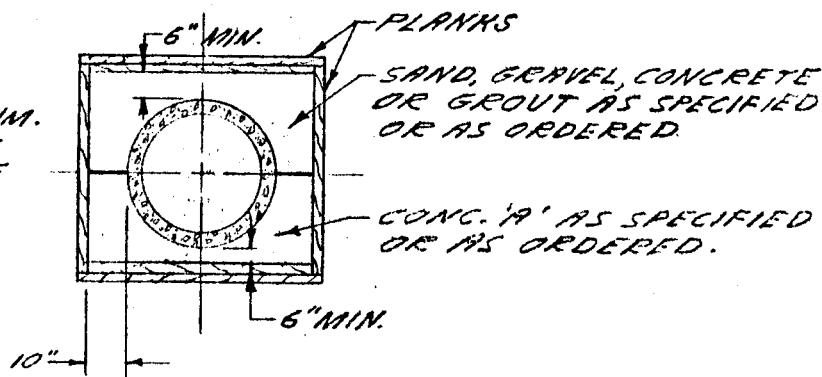


CROSS SECTION - SMALL PIPES

STEEL LINER PLATE TUNNEL

CLEARANCES SHOWN BETWEEN PIPE AND TIMBERING ARE MINIMUM. CONTRACTOR SHALL ALSO PROVIDE REASONABLE WORKING SPACE IF ABOVE MINS. GIVE TOO SMALL A TUNNEL.

GROUT ALL VOIDS



CROSS SECTION - TIMBERED LINED TUNNEL

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PREPARE DRAWINGS SHOWING THE CONSTRUCTION DETAILS AND METHOD TO BE USED AND SHALL SUBMIT 5 COPIES OF THE DRAWINGS TO THE DISTRICT FOR APPROVAL.

TYPICAL TUNNEL SECTIONS