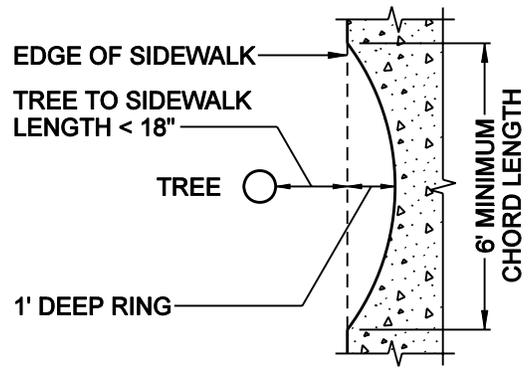
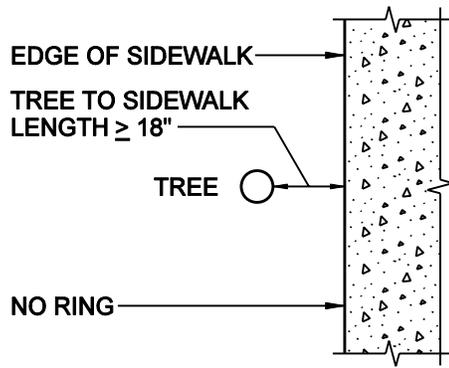
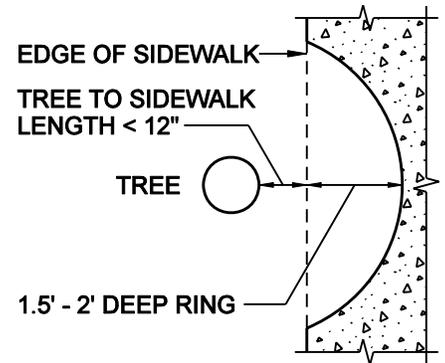
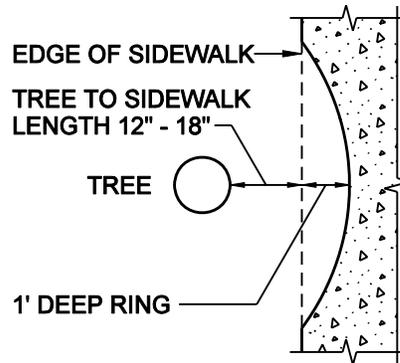
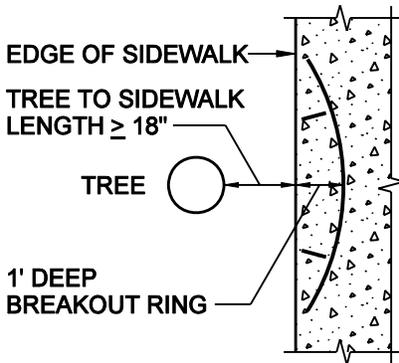


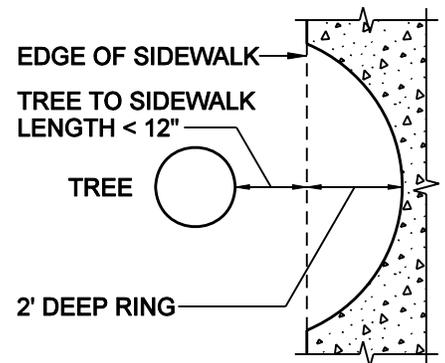
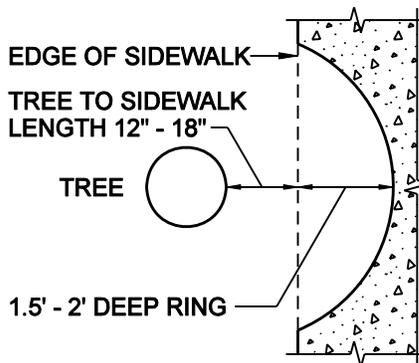
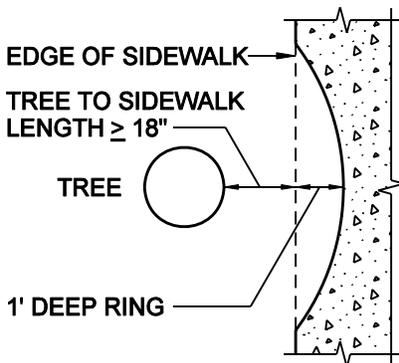
**SMALL TREE - LESS THAN 8" DIAMETER AT A HEIGHT OF 4.5'**



**MEDIUM TREE - 8" TO 20" DIAMETER AT A HEIGHT OF 4.5'**  
**NO ADJUSTMENT TO SIDEWALK IF TREE TO SIDEWALK LENGTH IS ≥ 36"**



**LARGE TREE - GREATER THAN 20" DIAMETER AT A HEIGHT OF 4.5'**  
**NO ADJUSTMENT TO SIDEWALK IF TREE TO SIDEWALK LENGTH IS ≥ 30"**



**NOTES:**

1. RING DEPTH IS THE DISTANCE MEASURED FROM THE NORMAL SIDEWALK EDGE TO THE POINT OF THE RING ARC PERPENDICULAR TO THE BASE OF THE TREE (SEE DIAGRAM).
2. MINIMUM CHORD LENGTH IS 6 X DEPTH OF TREE RING.  
 MAXIMUM CHORD LENGTH IS 18' UNLESS A LONGER CHORD IS APPROVED BY THE CITY ENGINEER.
3. BREAKOUT RINGS WILL BE FORMED USING A TOOL JOINT AT LEAST 1/3 THE THICKNESS OF THE CONCRETE.
4. MINIMUM REMAINING SIDEWALK WIDTH IS 4'-0".

	<b>MINNEAPOLIS</b> DEPARTMENT OF PUBLIC WORKS	<b>TREE RING INSTALLATION GUIDE</b>	<b>STANDARD PLATE NO. ROAD-4005</b>	
	DRAWN: JFC			DATE: 1/10/11
	APPROVED: RJC			DATE: 1/10/11