**NOTES:**

1. **MINIMUM COVER HEIGHTS ARE BASED ON LIVE LOADING CALCULATIONS PER AASHTO LRFD SECTION 12.** VEHICLE LOADS ARE BASED UPON DRIVING OVER THE PIPE WHILE NOT PERFORMING OPERATIONAL TASKS.

2. COVER HEIGHTS DO NOT TAKE INTO CONSIDERATION POTENTIAL RUTTING OF DRIVE SURFACE. BACKFILL MATERIAL IS ASSUMED FULLY COMPACTED TO SURFACE.

3. IF MINIMUM COVER CANNOT BE ACHIEVED, IT IS RECOMMENDED TO PERFORM PERIODIC DEFLECTION EVALUATIONS TO ENSURE PIPE ROUNDNESS. THE USE OF STEEL PLATES, MOUNDING, OR TEMPORARY FILL MAY BE REQUIRED TO DISTRIBUTE VEHICLE LOADING.

4. CONTACT YOUR LOCAL ADS REPRESENTATIVE WHEN VEHICLES ENCOUNTERED IN THE FIELD EXCEED THE MAXIMUM LOADINGS INCLUDED IN THE TABLE. VEHICLES LISTED IN THE TABLE ARE FOR REFERENCE AND COMPARISON PURPOSES.

5. REFER TO STANDARD STD-101 & STD-101B FOR RECOMMENDED INSTALLATION PRACTICES.

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**VEHICLE** | **VEHICLE DESCRIPTION** | **MINIMUM TRACK WIDTH** | **GROUND PRESSURE, psf** | **PIPE DIAMETER** | **TEMPORARY MINIMUM COVER HEIGHTS**
---|---|---|---|---|---
BOBCAT T870 COMPAKT LOADER | 18" (457mm) | 706 (34kPa) | 12'-48" (300mm-1200mm) | **CLASS I** COMPACTED | **CLASS II @ 95% SPD**
HITACHI ZX300LC-6 FORESTER | 24 (610mm) | 1,108 (53kPa) | 12'-48" (300mm-1200mm) | 6" (152mm) | 6" (152mm)
CAT 390 FL LARGE EXCAVATOR | 26 (660mm) | 2,608 (125kPa) | 12'-48" (300mm-1200mm) | 6" (152mm) | 9" (229mm)
CAT D11T LARGE DOZER | 28" (711mm) | 3,389 (162kPa) | 12'-48" (300mm-1200mm) | 6" (152mm) | 12" (305mm)
CAT 6020B HYDRAULIC SHOVEL | 31" (787mm) | 4,552 (217kPa) | 12'-60" (300mm-1500mm) | 15" (381mm) | 18" (457mm)

COVER OVER 60° (1500mm) PIPE SHOULD BE NO LESS THAN 6° (152mm)