

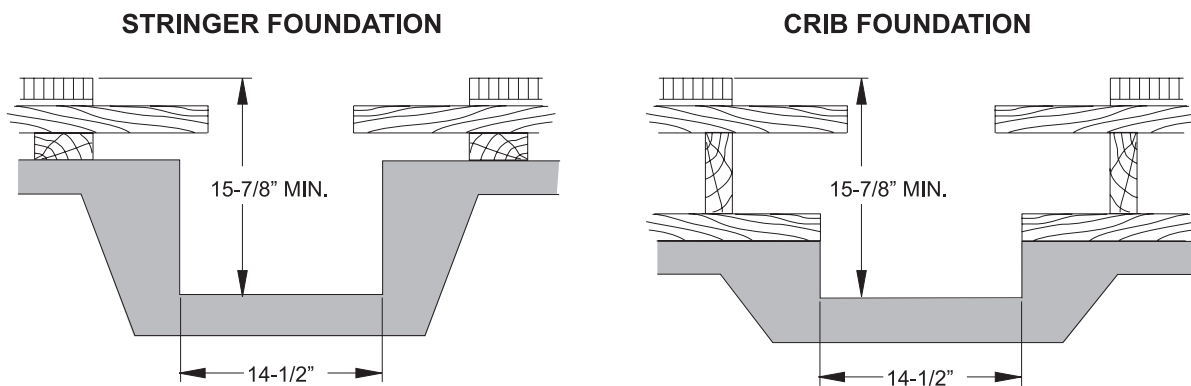
## Trenching for Ball Return, Pinball Wizard and Pinsetter Area



**WARNING!** Customer must ensure that removing concrete from the foundation will not result in future structural damage by conferring with a qualified structural engineer.

### Ball Return Area Trenching

The subway return requires a minimum depth of 15-7/8 inches. This dimension is taken from the top of the lane surface. The type of foundation under the lanes determines the actual concrete depth, stringer foundations or crib foundation. Refer to *Figure 1*.



*Figure 1*

The width of the concrete trench (14-1/2 inches) remains the same for both stringer and crib.

## Modify Leveling Strips

**i** **NOTE:** The in-line ball return and cluster ball return determine the location and dimensions of the concrete trench and leveling strips to be cut. Refer to Figure 2.

**DETAIL "A"** - Cut the two leveling strips in the Power Lift and Power Lift Access Door area vertically to a width of 14-1/2 inches, centered between lanes. Refer to Figures 2 & 3.

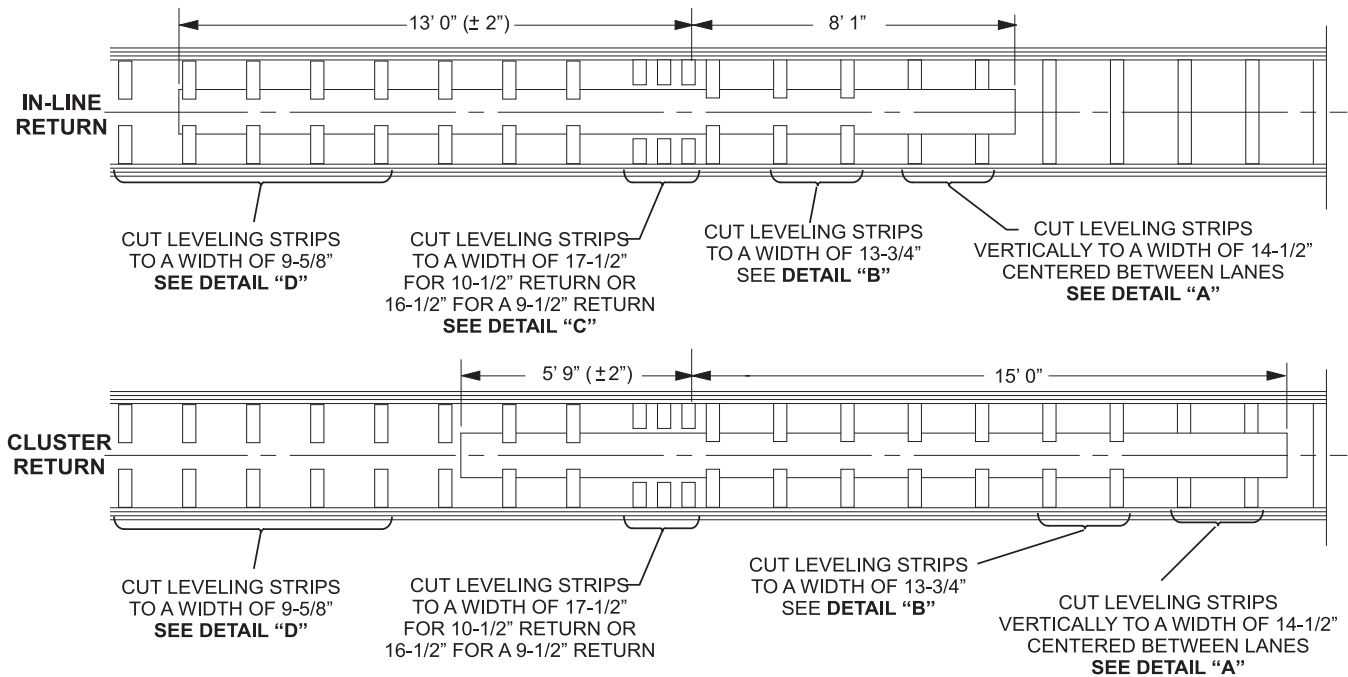


Figure 2

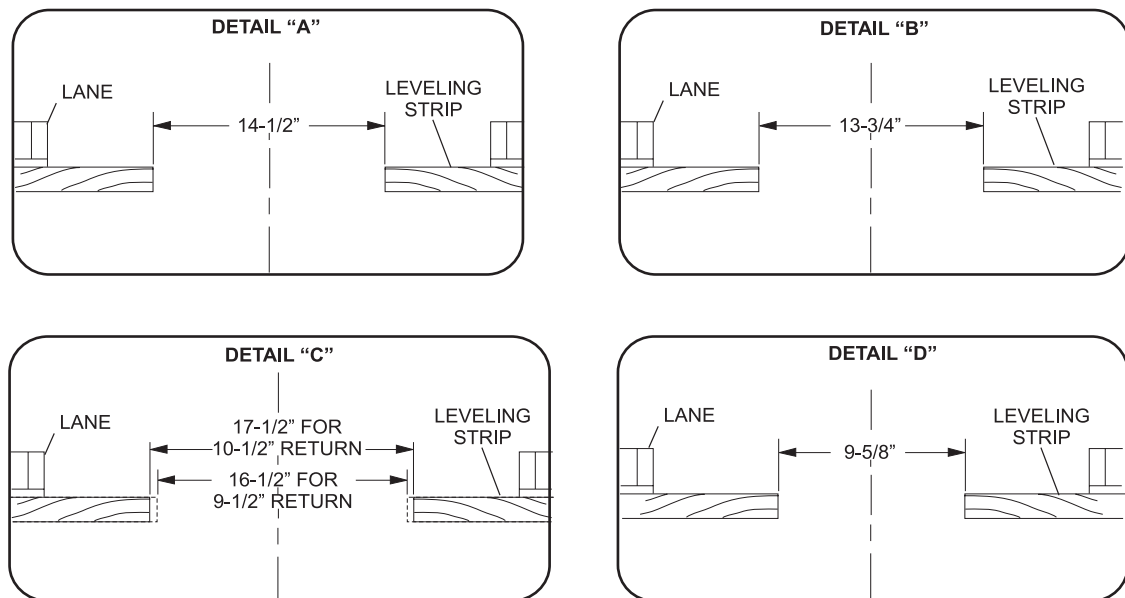


Figure 3

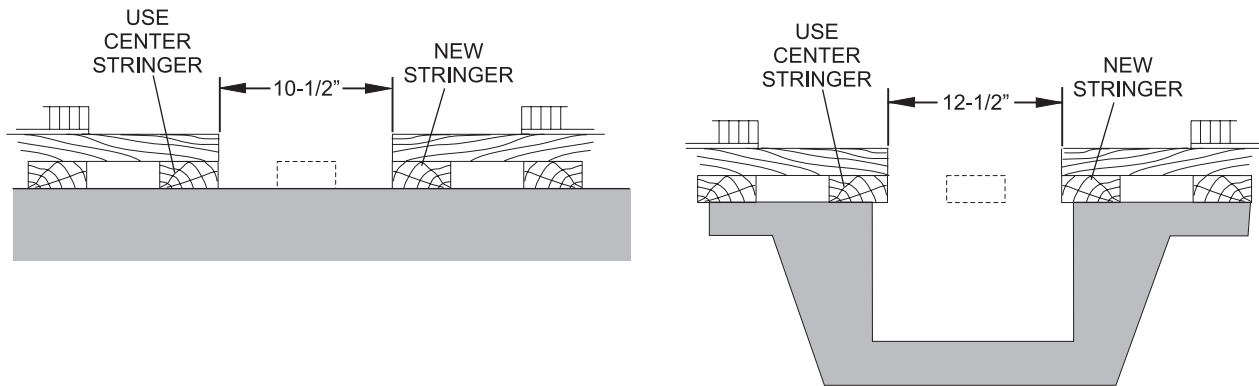
**DETAIL "B"** - Cut the two leveling strips at the retarder access door to a width of 13-3/4 inches. Refer to Figures 2 & 3.

**DETAIL "C"** - Cut the three leveling strips in the Tel-E-Foul area to a width of 17-1/2 inches for the 10-1/2 inch return or 16-1/2 inches for the 9-1/2 inch return. Refer to *Figure 2 & 3*.

**DETAIL "D"** - Cut all remaining leveling strips from the retarder area to the nose of the kickback to a width of 9-5/8 inches. Refer to *Figure 2 & 3*.

### Stringer Foundation

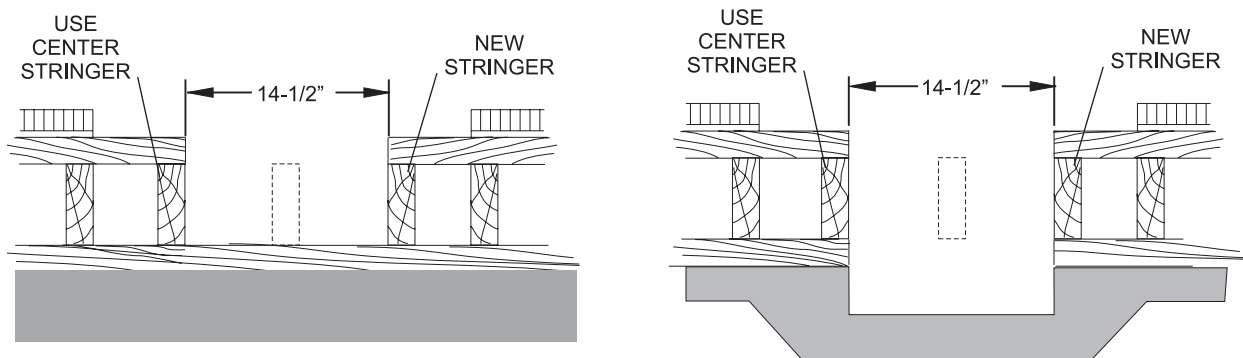
1. Install stringers in stringer foundation 10-1/2 inch wide ahead of concrete trough, 12-1/2 inch wide in concrete trough area. Refer to *Figure 4*.



*Figure 4*

### Crib Foundation

1. Install stringers in crib foundation 14-1/2 inch wide. Refer to *Figure 5*.



*Figure 5*

# Pinball Wizard Area Trenching

When installing Pinball Wizard on lanes with Stringer or Crib foundations, it may be necessary to remove additional concrete to provide clearance for the motor, actuating arms and brackets. Refer to *Figure 6*.

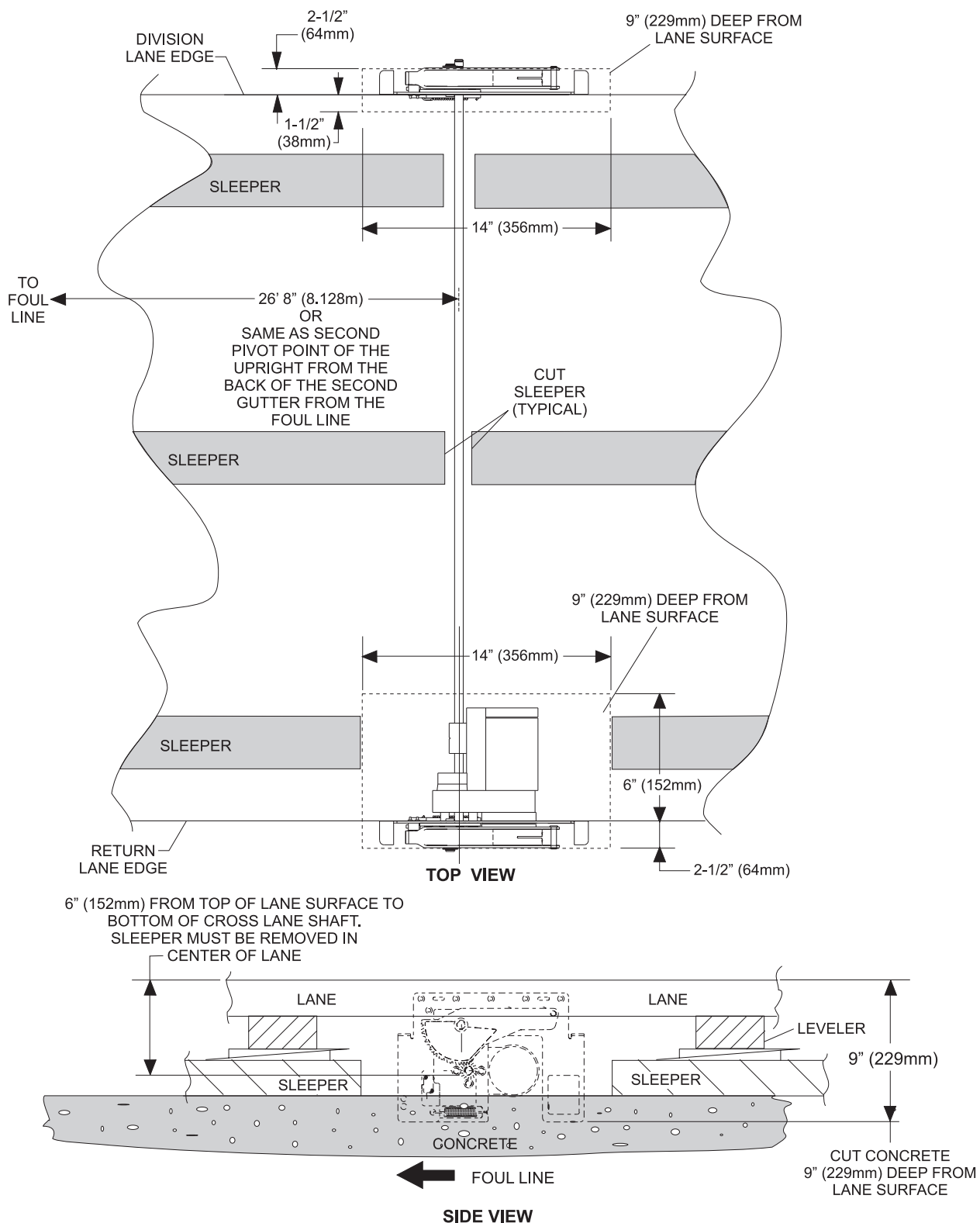


Figure 6

# Pinsetter Area Trenching

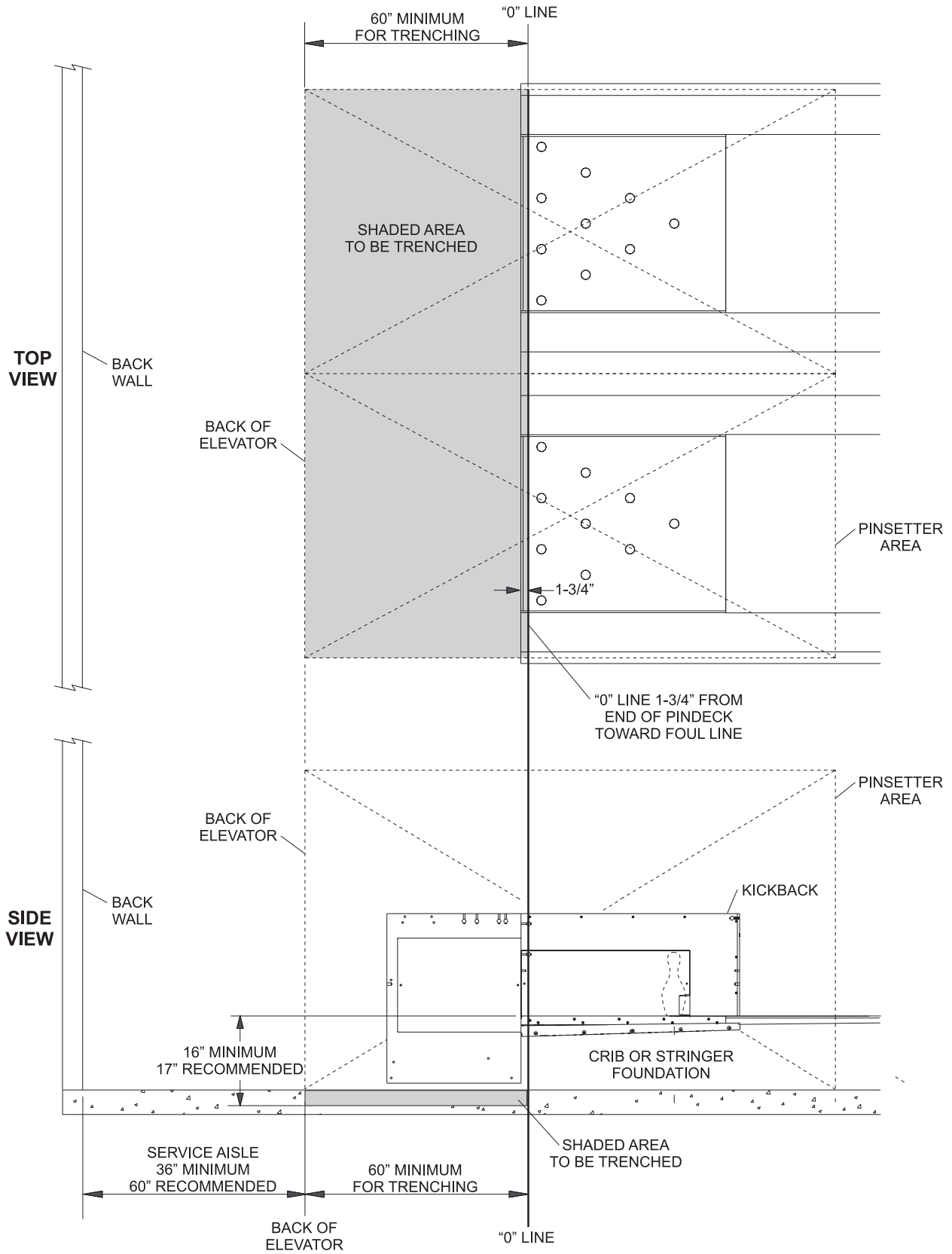


Figure 7