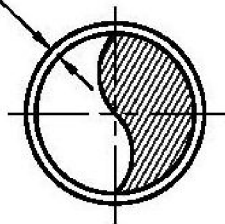


Bore Annulus to be
No Larger than 1"
Greater than Coated
Line Pipe



1. Crossing would be in accordance with applicable permit.
2. Road crossing pipe would extend at minimum to ROW line unless otherwise specified.
3. The type and minimum required length of pipe for crossings of roads would be as specified on alignment sheets.
4. Pipe for bored crossings to include abrasion-resistant coating.
5. Pipeline marker and test stations to be installed on ROW line next to fence if possible.
6. The crossing pipe would be straight with no vertical or horizontal bends within road ROW.

Figure 2.3.3-1

KEYSTONE XL PROJECT

Typical Uncased
Road/Railroad
Crossing Bore Detail