

## Detour

The overtopping frequency should be designed as the  $Q_2$  except in cases where a higher frequency can be justified by risk. Do not size pipe to pass  $Q_2$ . The detour should overtop at about a 2 year storm (i.e. speed limit and sight distance). Design to fail at the 2 year storm. Roadway elevation should not go lower than the natural overbank. Design the detour to fit within the natural channel with no excavation. If required provide information regarding the detour run. Include the location (station offset distance and direction), structure description including number, diameter, inlet elevation, and slope of the detour pipes. Provide summary with detour overtopping frequency discharge, velocity, and computed high-water elevation. Add to notes section of the summary and design to ODOT 2009 Standards (see standard drawings R-47 Standard Pipe Installation, R-50 Fill Height Tables, R-49 Standard Pipe Bedding).