

6 UTILITY TRENCHING AND SAFETY

There are instances where utilities are required to cross the roadways or water bodies. In such situations, it is recommended that the utilities should cross under these entities. Hence, based on certain local conditions and nature of utilities, different methods can be adopted by the designers to facilitate such utilities crossing. The commonly adopted methods are summarized as follows:

- 1. Open Trenching
- 2. Trenchless Technologies (Non Disruptive Methods)
- 3. Utility Culverts
- 4. Utility Bridges

The factors that facilitate in the selection of a suitable method for utility crossings are the availability of space, type of the surrounding development, intensity of surrounding road traffic, soil conditions and cost effectiveness.

However, the above methods are not approved by SAUP, therefore, in case that any trenching option is adopted, it is recommended that all the relevant SAUP are contacted to obtain NOCs/approvals. The consultants are responsible for the safety, design details and safe working or post construction/operation of such facilities.

Furthermore, EHS Manual and other related manuals published by DoT should be referred during the design of utility trenches.