1) Culvert shall be sized to at least the bankfull width of the stream or engineered to pass the 25-year flow.

2) Culvert length shall be at least the road width + (3 x fill height) to have a maximum fill slope grade of 1.5:1.

3) Culvert shall be installed in a in straight, stable reach of stream and positioned perpendicular to the direction of stream flow.

4) When possible a construct a low, armored portion of the road for high water to flow over if the installed culvert is unable to pass the stream flow in a flood event.

5) All work must be completed in an expeditious manner and must take place during low flow periods.

6) Work must be conducted to minimize impact on the stream and immediate vicinity, with use of machinery in stream only when absolutely necessary. To prevent leaks of petroleum products into the waterway, defective equipment must not be operated in areas capable of contributing surface flows to the waterway.

7) Any excess material generated from a project must be disposed of out of the flood plain and not in an area classified as a wetland.

8) All disturbed area (including any spoils or excess material) must be shaped and be seeded to native grass to control erosion and prevent the infestation of noxious weeds. Existing vegetation must be preserved wherever possible.

9) The culvert shall be bedded in gravel and set to the pre-existing slope of the stream.

10) Culvert shall be embedded at least of 20% of the height for round pipes and 10% of the height for arched pipes.

11) Both the upper and lower ends of the culvert must be armored with oversize angular rock to control erosion and piping around the culvert, unless otherwise specified.

12) Culverts must have a fill depth over the top of the culvert of one-third (1/3) the diameter of the culvert, but no less than one (1) foot.

13) Culverts must be installed so that the low point in the road grade is not over the stream crossing. If this is not possible, construct water bars or cross drains in the road grade above the stream crossing.

14) Dewatering may be required to reduce sedimentation and/or to improve the culvert installation process. This will be determined on a site by site basis.

15) Culvert will be inspected annually (post run-off), and maintained to avoid blockage and upstream aggredation, and to ensure proper hydraulic function and stream channel integrity.