(1) The carrier pipe shall conform to the material and design requirements of the utility industry and government codes and specifications.

(2) The carrier pipe shall be designed to support the load of the highway plus superimposed loads thereon when the pipe is operated under all ranges of pressure from maximum internal to zero pressures.

(3) Suitable bridging, concrete slabs, or other appropriate measures as approved by the department shall be used to protect existing carrier pipes which by reason of shallow bury or location makes them vulnerable to damage from highway construction or maintenance operations.

(4) Existing carrier pipelines may remain in place without further protective measures if they are of adequate depth and do not conflict with highway construction or maintenance and provided the department (and the pipeline officials) agree that the lines are, and will remain, structurally sound and operationally safe.