Installation Checklist

Water source

Determine the depth of water at piping entry location. In ponds, use low water level if known, to ensure operation during droughts. Place intake below acticipated ice level (Figure 2). A minimum of two feet of water over pipe is necessary.

Feet of lift

Lift is the vertical distance from the water's surface to the hydrant outlet. Avoid lift in excess of 10 feet.

Accessibility

Hydrants should be located with the following considerations:

- ! All-weather access road.
- ! Sustained maximum grade not to exceed 8 percent.
- ! Road width minimum of 12 feet.
- ! Proper drainage of site.
- ! Proper erosion control measures.
- ! Pull-out area at the hydrant for the fire engine (See figure 4).

Benefits

- ! Improved fire protection (both structural and wildland).
- ! Lower insurance rates.
- ! Conservation of treated water supply.
- ! Increased fire fighter safety.

Additional installation requirements may be necessary given site-specific conditions. All systems should be designed to achieve maximum flow rates. For additional information on the dry hydrant program including material list, installation and plan submittal requirements, contact:

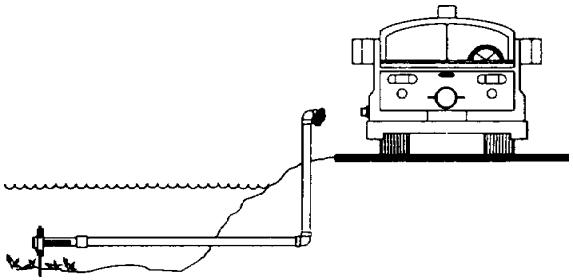
Tony Simons, Larimer County Wildfire Safety Coordinator

970-498-7718

Larimer County Planning Division
Wildfire Safety Coordinator
P.O. Box 1190
Fort Collins, CO 80522

Larimer County

Dry Hydrant Information



FIREWISE

Community Fire Prevention Partnership

Are you FireWise?

Dry Hydrant Concept

A dry hydrant is a non-pressurized pipe system permanently installed in lakes, ponds and streams that provides efficient access to water for fire-fighting.

In many rural areas of the county, the lack of water mains and fire hydrants can impair a fire department's ability to do its job safely, quickly and effectively. Fire engines known as "water tenders" are used to carry large amounts of water to the fire scene. The success of the water supply operation hinges on the time it takes to fill up the tenders and the distance they must drive from this fill up point (cistern, pond, stream) to the fire scene. Since fill-up points are often a long distance from the fire, firefighters are unable to maintain an uninterrupted water supply at the scene. This can result in the complete loss of a structure and fire spreading to the surrounding area, starting a wildland fire.

The installation of a dry hydrant system increases the efficiency of the water supply operation by reducing the time it takes to fill up fire engines and by helping to maintain an uninterrupted water supply for fire-fighting.

The dry hydrant can be made of any hard, permanent material such as (steel or iron). However, schedule 80 PVC (polyvinyl chloride) is commonly used. Elements of the system include an intake filtration section, submerged in the pond or stream to draw water directly through the system, and a fire department connection with screen and cap (see figure 2). All component parts should be designed and manufactured for trouble-free service. It is important to paint all exposed PVC for ultra-violet (UV) protection. We suggest red paint which is easy to find under low light or smokey conditions.

Figure 1

Dry Hydrant Installation Detailed Drawings

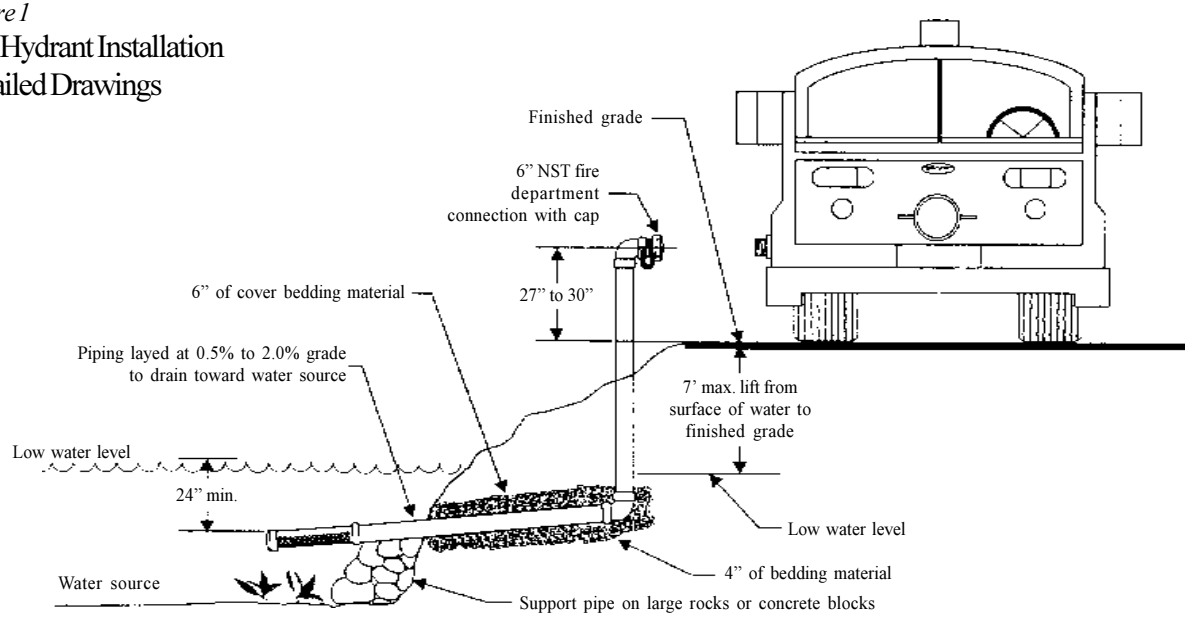


Figure 2

Frost free design using two 90 degree elbows

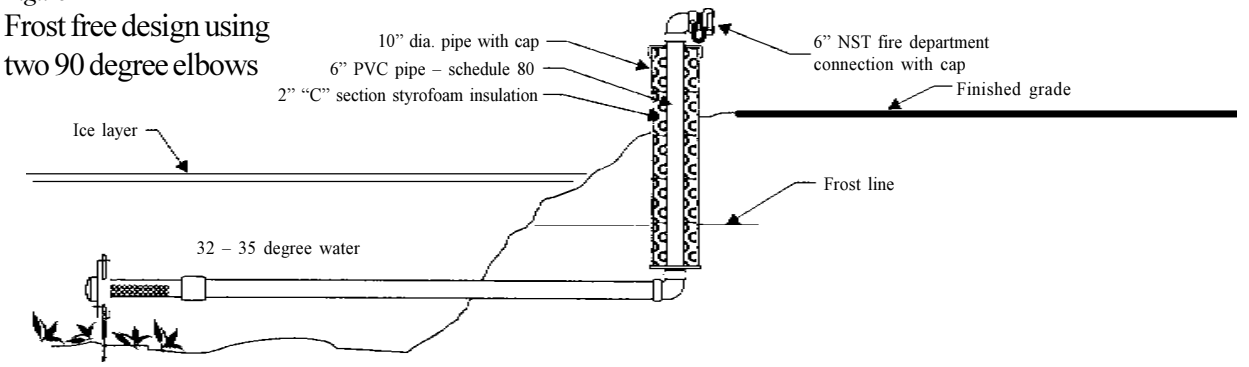


Figure 3

Design using two 45 degree elbows

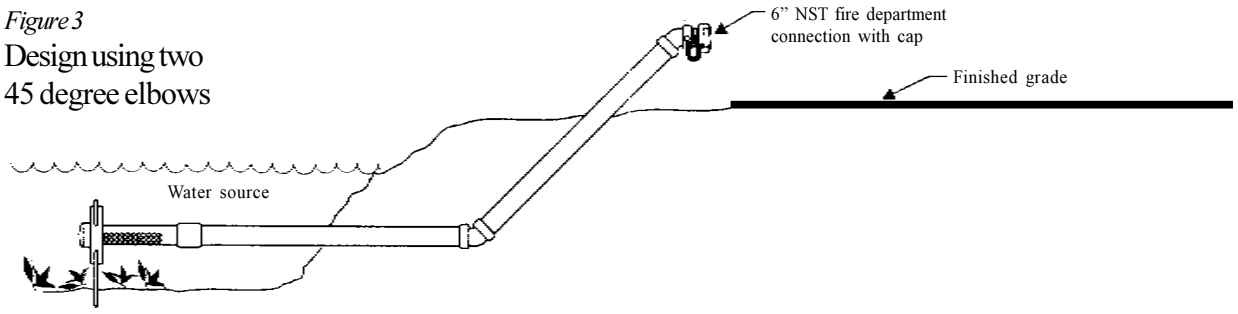


Figure 4

Fire Truck Pull Out Area Drawing