Do not throw chunks of asphalt that are covered with ice or snow into a heating kettle. The conversion of the ice and snow into steam in the hot asphalt will cause spattering and may also cause the kettle to overflow and start a fire. Never heat asphalt cement directly over a fire; put unopened cans in hot water to warm.

Fire hoses should be kept close to all formwork and buildings when heaters are being used on the job. If there is danger of freezing, the fire main should be kept drained and controlled by a valve protected from freezing but easily accessible. Hand extinguishers are a valuable supplement to a supply of water. These should be checked periodically to determine if they are fully charged and in good working order.

EXCAVATIONS AND FOUNDATIONS Excavating

Modern excavating machinery can readily operate in ground frozen to a depth of 1 foot. Earthwork will usually cost less, however, when it is done before or between frost periods. For a well-planned winter job it is possible that all excavating and trenching can be done before cold weather.

Earth that is to be excavated after winter sets in can be covered with brush or straw to reduce frost penetration. If heavy snows precede periods of very low temperatures, then this snow cover should be left undisturbed to provide a blanket of insulation over the area to be excavated later. Rock excavations present no particularly difficult problems at temperatures above 0°F.

Excavating is sometimes easier in winter. Drainage and well-point work is often reduced or eliminated during cold weather. Shoring, cribbing, and piling may also be reduced if the ground is frozen so as to maintain a certain stability with slopes and vertical cuts.

Frost protection inside the excavation is usually necessary. Straw should be placed in the bottom of the excavation and up the