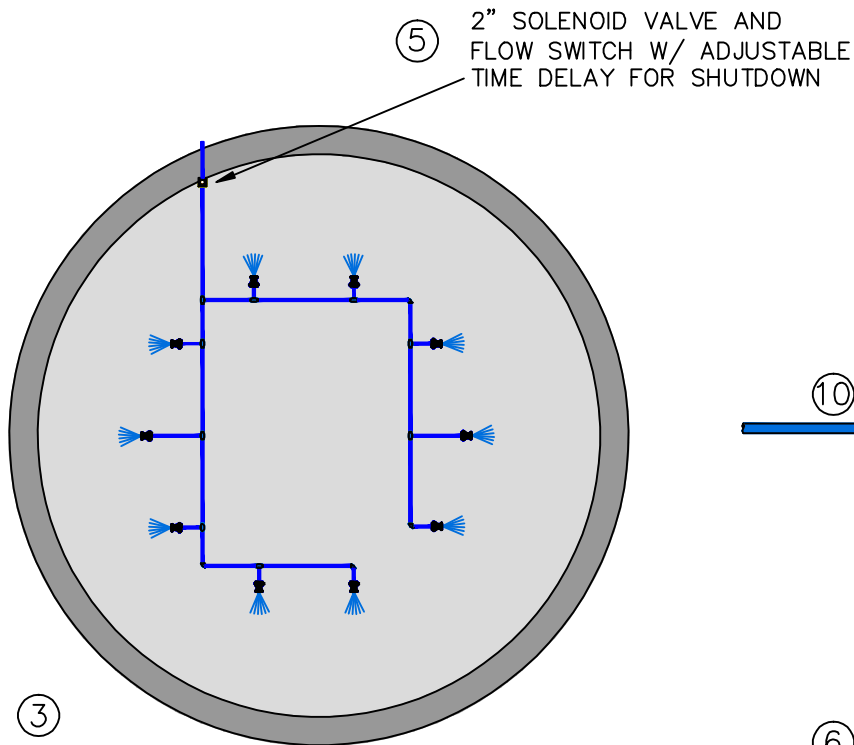



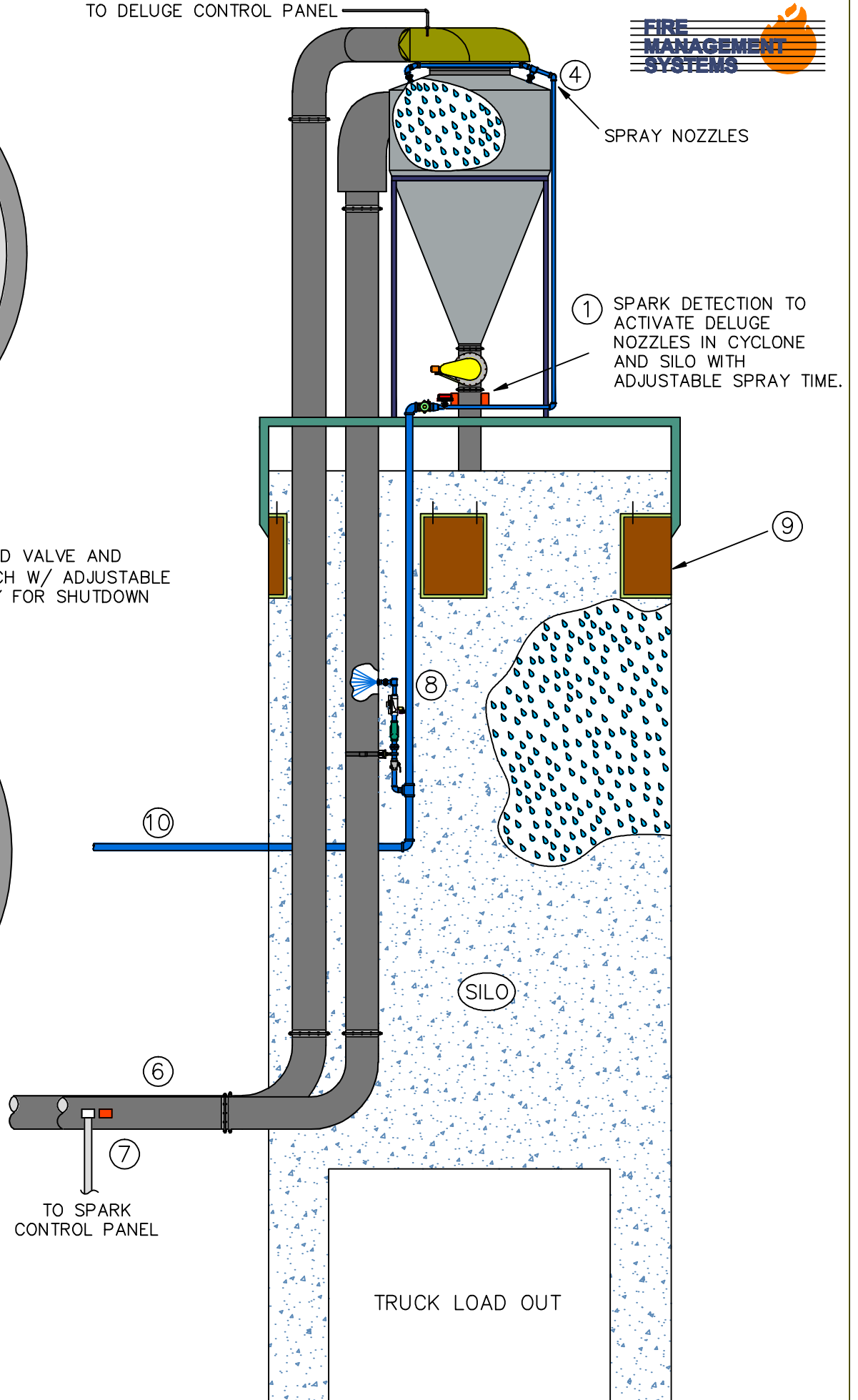


② DETECTION DETAIL



③ SUPPRESSION PIPING DETAIL

-  SPARK DETECTOR TO ACTUATE RETURN AIR ABORT
-  ATOMIZE SPRAY NOZZLE
-  FENWALL RATE OF RISE HEAT DETECTOR



1. SPARK Detectors  
Detection to activate atomized spray for preset time 5 to 99 sec. taking dust cloud out of suspension.
2. THERMAL Detectors  
Rate of Rise thermal detection located at the top silo to pickup heat from a deep seated fire.
3. SUPPRESSION  
Nozzle quantity and layout is based on size of silo (NFPA 664 8.2.2.6). Nozzles create an atomized spray and are self closing, protecting themselves from outside contamination.
4. CYCLONE Deluge  
Operates with thermal rate of rise sensors located in cyclone flute and nozzles located in cyclone. Activates silo suppression simultaneously.
5. DELUGE Suppression Assembly  
Located atop the silo to eliminate water transit time. The flow switch in the suppression assembly serving the silo is tied to the emergency stop on the fans. With the built-in time delay the water has a chance to saturate the silo before the fans are shutdown and dust drops into suspension and crosses the (LEL) Lower Explosion Limit.
6. RELAY Line  
Relay line carrying material to storage bins or truck loading system must be protected to ensure fire from the collector is not transported to silo's, storage bins, truck dumps etc.
7. SPARK Detectors / Test Lights  
Detectors monitor the interior of the ductwork. They have a 90° cone of vision allowing two sensors to cover up to a 79" duct. Test lights are recommended to give through the lens testing and verification of operation, both are easily removed for cleaning.
8. WATER Suppression Assembly  
This assembly injects an atomized water spray into the duct when receiving the signal from the control panel with complete annunciation provided by a pressure switch. A service valve along with a wye strainer and flush valve completes the assembly.
9. EXPLOSION Venting  
This is required on the Silo and must follow NFPA 68 guidelines for quantity and sizing. These can be provided for ductwork, filters, storage bins, baghouses, cyclones, etc.
10. HEAT Tape and Insulation Blankets  
In all locations where temperatures fall below 35°F suppression piping and spray assembly is required to be protected from freezing, self-regulating heat tape must be designed along with insulation to provide protection. Insulation blankets are provided so the suppression assembly can be serviced easily.