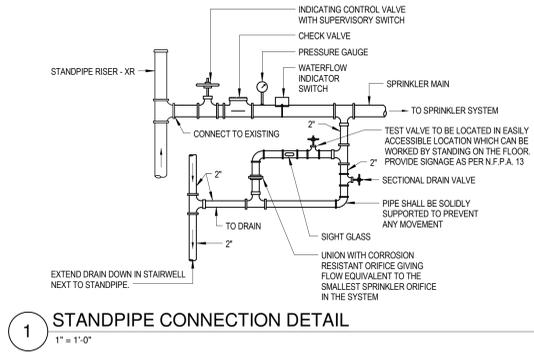
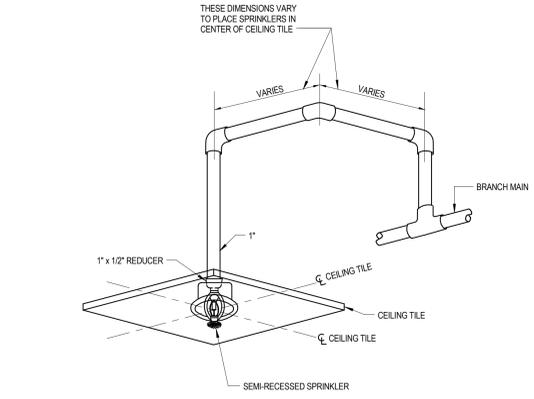


three inches = one foot
 one and one half inch = one foot
 one inch = one foot
 one quarter inch = one foot
 three quarters inch = one foot
 one half inch = one foot
 one eighth inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot

SPRINKLER HEAD LEGEND					
SYMBOL	MANUFACTURER OR APPROVED EQUAL	TYPE	MODEL	ORIFICE	TEMP. RATING (°F)
⊗	VIKING	UPRIGHT W/ GUARD	MICROFAST MODEL M	1/2"	155°
○	VIKING	SEMI-RECESSED	HORIZON	1/2"	155°
◁	VIKING	SIDE WALL	MICROFAST MODEL QR	1/2"	200°



1 STANDPIPE CONNECTION DETAIL
 1" = 1'-0"



2 TYPICAL SEMI-RECESSED SPRINKLER DETAIL
 1" = 1'-0"

FIRE PROTECTION GENERAL NOTES

- ALL WORK SHOWN IS NEW UNLESS INDICATED OTHERWISE.
- COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS PRIOR TO THE FABRICATION OR INSTALLATION OF ANY PIPING.
- THE DRAWINGS ARE DIAGRAMMATIC. THE CONTRACTOR MUST FIELD VERIFY ACTUAL CONDITIONS AT THE SITE PRIOR TO PROCEEDING WITH THE WORK.
- ALL EXISTING SERVICES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS.
- ALL NEW PIPING SHALL BE INSTALLED IN SUCH A WAY THAT IT DOES NOT HAMPER ACCESS TO NEW OR EXISTING VALVES, ACCESS DOORS OR EQUIPMENT.
- SPRINKLER PIPING SHALL BE HYDRAULICALLY DESIGNED BY THE SPRINKLER CONTRACTOR AND SHALL BE APPROVED BY ALL AUTHORITIES HAVING JURISDICTION. VELOCITIES OF WATER IN HYDRAULICALLY DESIGNED SPRINKLER PIPING SHALL NOT EXCEED TWENTY FEET PER SECOND.
- ALL SPRINKLER HEADS INSTALLED IN LAY-IN CEILINGS SHALL HAVE THE HEADS LOCATED IN THE CENTER OF TILES. IF FOR ANY REASON HEADS CANNOT BE LOCATED IN THE CENTER OF TILES, THEN THE ARCHITECT/ENGINEER SHALL BE CONTACTED FOR NEW LOCATIONS BEFORE INSTALLING ANY HEAD OR PIPING.
- CONTRACTOR SHALL INCLUDE IN HIS BID A WATER FLOW TEST/FIRE PUMP TEST. THE RESULTS OF WHICH SHALL BE USED TO PERFORM HYDRAULIC CALCULATIONS.
- ENTIRE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13 LATEST EDITION.
- ALL WORK SHALL BE STRICTLY COORDINATED AMONG ALL INDIVIDUAL CONTRACTORS BEFORE ANY WORK IS PERFORMED.
- DO NOT ROUTE PIPING THROUGH ELEVATOR SHAFT(S), ELEVATOR EQUIPMENT ROOM(S) & ELECTRICAL ROOMS. PIPING TO TERMINATE AT SPRINKLER HEAD.
- PIPES 2-1/2" & LARGER TO BE SCHEDULE 10 STEEL PIPE WITH GROOVED END PREP.
- PIPES 2" & SMALLER TO SCHEDULE 40 STEEL PIPE WITH THREADED END PREP OR AS NEEDED.
- PIPES TO BE SIZED PER HYDRAULIC CALCULATIONS.
- VERIFY ALL CEILING HEIGHTS AT SITE PRIOR TO INSTALLATION. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF CEILINGS AND CEILING TYPES.
- IN ROOMS WHICH ARE INDICATED AS BEING MECHANICAL AND ELECTRICAL ROOMS, THE SPRINKLER CONTRACTOR SHALL COORDINATE THE LOCATION OF HIS PIPING AND SPRINKLER HEADS TO AVOID INSTALLATION OVER ELECTRICAL PANELS OR EQUIPMENT. PROVIDE ADDITIONAL SPRINKLER HEADS AS NECESSARY, AT NO ADDITIONAL COST TO THE OWNER. REFER TO HVAC AND ELECTRICAL DRAWINGS.
- DESIGN DENSITIES: A, LIGHT HAZARD: 101/500 ALL AREAS.
- FIRE PROTECTION HYDRAULIC CALCULATIONS FOR AUTOMATIC SPRINKLER SYSTEMS SHALL INCORPORATE A MINIMUM 10 PSI SAFETY FACTOR.
- PRESSURE TEST OF THE AUTOMATIC SPRINKLER SYSTEM SHALL BE WITNESSED BY THE FIRE DEPARTMENT UNLESS SPECIFICALLY WAIVED. TWO (2) WEEKS WRITTEN ADVANCE NOTICE OF TEST SHALL BE GIVEN.
- FIRE PROTECTION CONTRACTOR SHALL COORDINATE HIS WORK WITH MECHANICAL, ELECTRICAL AND ALL OTHER DISCIPLINES TO AVOID INTERFERENCES PRIOR TO FABRICATION OF ANY PIPE. INTERFERENCES SHALL INCLUDE ROOF OPENINGS, BUS DUCTS, GANGED CONDUIT, DUCT, RUNS, ETC.
- ALL PIPE PENETRATIONS THROUGH FLOORS OR WALLS SHALL BE SLEEVED AND SEALED TO MAKE WATERTIGHT AND MAINTAIN FIRE RATINGS.
- ALL VALVE SUPERVISORY SWITCHES AND WATER FLOW SWITCHES SHALL BE PROVIDED AND INSTALLED BY THE FIRE PROTECTION CONTRACTOR AND WIRED BY THE ELECTRICAL CONTRACTOR.
- FIRE PROTECTION CONTRACTOR SHALL BE CERTIFIED BY STATE OF PENNSYLVANIA FOR SPRINKLER SYSTEM INSTALLATION.

FIRE PROTECTION SYMBOLS

— F —	FIRE LINE
— SPR —	SPRINKLER BRANCH LINE
— F-DM —	FIRE LINE TO BE DEMOLISHED
— FDC —	FIRE DEPARTMENT CONNECTION
— D —	DRAIN LINE
○	SEMI-RECESSED SPRINKLER
⊗	UPRIGHT SPRINKLER W/ GUARD
⊕	ZONE CONTROL VALVE
TS	TAMPER SWITCH
FDHV	FIRE DEPARTMENT HOSE VALVE
XR	EXISTING TO REMAIN
○	RISE
↳	DROP
⌋	CAP
① ②	KEYED NOTE DESCRIBING WORK TO BE DONE
—	CONNECT TO EXISTING PIPING THIS POINT
⊞	REMOVE EXISTING PIPING TO THIS POINT

FULLY SPRINKLERED
 BID DOCUMENTS

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		Approved: Project Director	Location: 1400 Blackhorse Hill Road Coatesville, PA 19320	Building Number 9	
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