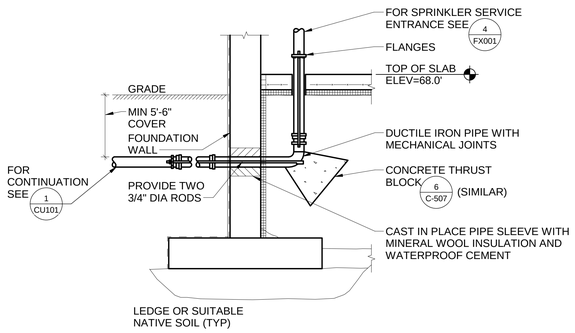
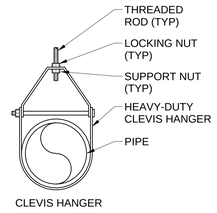
FIRE SUPPRESSION ABBREVIATIONS

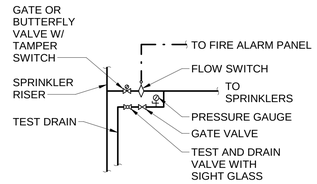
AFF	ABOVE FINISHED FLOOR
BLDG	BUILDING
CLG	CEILING
DIA	DIAMETER
DN	DOWN
DWG	DRAWING
ELEV	ELEVATION
°F	DEGREES FAHRENHEIT
FDC	FIRE DEPARTMENT CONNECTION
FF	FINISH FLOOR
FLR	FLOOR
FT	FOOT/FEET
GPM	GALLONS PER MINUTE
IN	INCHES
INV	INVERT
MIN	MINIMUM
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
OS&Y	OUTSIDE SCREW & YOKE
PSI	POUNDS PER SQUARE INCH
SP	SPRINKLER
TYP	TYPICAL
W/	WITH



1 SPRINKLER ENTRANCE DETAIL
FX101 / FX001 SCALE: NOT TO SCALE



2 PIPE HANGER ATTACHMENT DETAIL 2
FX001 SCALE: NOT TO SCALE



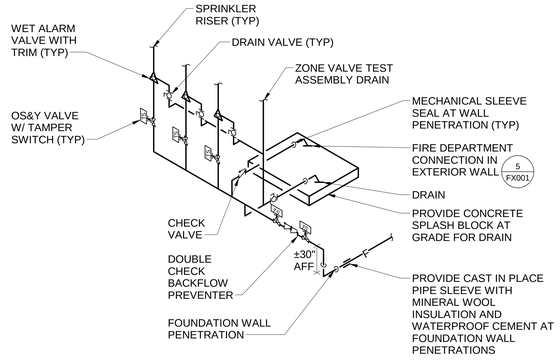
3 TYPICAL ZONE VALVE TEST ASSEMBLY
FX001 SCALE: NOT TO SCALE
FX105

FIRE SUPPRESSION LINE TYPE LEGEND

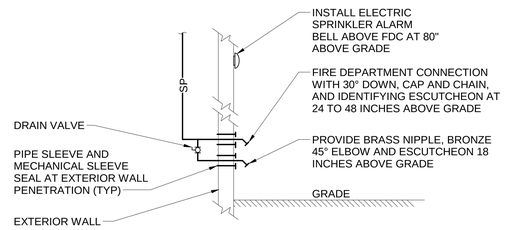
- REMOVE ITEMS
- PROVIDE ITEMS
- SP — WET SPRINKLER
- FIRE ALARM WIRE
- D — DRAIN
- F — FIRE MAIN
- CONTROL WIRING

FIRE SUPPRESSION SYMBOLS LEGEND

- 1 — KEY NOTE
- SPRINKLER FLOW SWITCH
- VALVE WITH TAMPER SWITCH
- FDC — FIRE DEPARTMENT CONNECTION
- ALARM BELL
- ELBOW DOWN
- PIPE TEE UP OR UP AND DOWN
- ELBOW UP OR UP AND DOWN
- PIPE TEE DOWN
- GATE VALVE
- BALL VALVE
- STRAINER
- CHECK VALVE
- DOUBLE CHECK DETECTOR VALVE
- TEST AND DRAIN VALVE W/ SIGHT GLASS
- CAP
- WET-PIPE ALARM VALVE
- PRESSURE GAGE
- TS — OS&Y VALVE WITH TAMPER SWITCH
- UPRIGHT SPRINKLER
- PENDANT SPRINKLER
- SIDEWALL SPRINKLER



4 WET ALARM VALVE PIPING SCHEMATIC
FX101 / FX001 SCALE: NOT TO SCALE



5 FIRE DEPARTMENT CONNECTION DETAIL
FX001 SCALE: NOT TO SCALE

FIRE SUPPRESSION GENERAL NOTES

1. PROVIDE HYDRAULICALLY CALCULATED WET PIPE AND DRY PIPE SPRINKLER SYSTEMS IN ACCORDANCE WITH NFPA 13, CURRENTLY ADOPTED EDITION, FOR LIGHT HAZARD OCCUPANCY UNLESS OTHERWISE INDICATED ON PLANS. SYSTEM SHALL BE FULLY ZONED. PROPOSED ZONES ARE AS FOLLOWS:
   ZONE 1: FIRST FLOOR A WING
   ZONE 2: FIRST FLOOR B AND C WING
   ZONE 3: SECOND FLOOR
2. WATER SUPPLY FOR BUILDING SPRINKLER SYSTEM SHALL BE PROVIDED BY THE MUNICIPAL WATER SYSTEM OF THE PORTLAND WATER DISTRICT. FOR BIDDING PURPOSES, HYDRANT FLOW DATA FOLLOWS:

   HYDRANT NUMBER: 1404
   HYDRANT LOCATION: INTERSECTION OF GODREY STREET AND PURCHASE STREET
   STATIC PRESSURE: 88 PSI
   RESIDUAL PRESSURE: 20 PSI
   FLOW: 5,500 GPM

   FLOW DATA WAS CALCULATED BY THE PORTLAND WATER DISTRICT AND INCLUDE WATER SYSTEM CHANGES THAT WILL BE DONE DURING FIRST PHASE OF PROJECT. SEE DRAWING CU101 FOR WATER LINE IMPROVEMENT AND HYDRANT LOCATION.
3. CONTRACTOR SHALL PERFORM HYDRANT FLOW TEST AT SITE TO USE AS A BASIS FOR SPRINKLER SYSTEM DESIGN. HYDRANT FLOW TEST SHALL BE DONE AFTER COMPLETION OF WATER SYSTEM CHANGES DONE DURING THE FIRST PHASE OF THE PROJECT.
4. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS, LIGHTING PLANS AND MECHANICAL PLANS FOR CEILING TYPES, SOFFITS, FEATURES, AND COORDINATE WITH THIS WORK IN CEILINGS TO PREVENT INTERFERENCES.
5. COORDINATE ALARM DEVICES WITH FIRE ALARM PLANS.
6. PROVIDE QUICK RESPONSE TYPE SPRINKLER HEADS WHERE PERMITTED BY NFPA 13.
7. SPRINKLERS SHALL BE LOCATED IN A CONSISTENT PATTERN AND AT THE CENTER OF CEILING TILES WHERE TILES ARE PROVIDED.
8. PROVIDE SPRINKLERS BELOW DUCTWORK AND SIMILAR OBSTRUCTIONS IN COMPLIANCE WITH NFPA 13.
9. PROVIDE WIRE GUARDS FOR SPRINKLERS WHERE THERE IS LESS THAN 7'-0" CLEARANCE BELOW AND WHERE INDICATED ON DRAWINGS.
10. PIPING IS SHOWN DIAGRAMMATICALLY, EXACT LOCATION SHALL BE DETERMINED IN THE FIELD. COORDINATE IN FIELD WITH FIRE ALARM, MECHANICAL PIPING AND DUCTWORK, AND ELECTRICAL TRADES.
11. PIPING SHALL BE INSTALLED CONCEALED ABOVE CEILINGS, IN WALLS AND IN CHASES, UNLESS OTHERWISE NOTED. PIPING SHALL BE INSTALLED PARALLEL TO BUILDING LINES.
12. PIPING SHALL BE SUPPORTED FROM BUILDING STRUCTURE. PIPING SHALL BE SUPPORTED FROM TOP CHORD OF JOISTS. NO STRUCTURAL MEMBERS SHALL BE CUT.
13. INSTALL WATER PIPE ON THE WARM SIDE OF BUILDING INSULATION IN EXTERIOR WALLS. REFER TO ARCHITECTURAL WALL SECTIONS.
14. REFER TO SHEETS AE220 TO AE222 FOR BUILDING SECTIONS.
15. REFER TO ARCHITECTURAL FLOOR PLANS ON SHEETS AE101 TO AE106 FOR FIRE EXTINGUISHER LOCATIONS.
16. REFER TO FIRE RATING PLANS ON SHEETS G-102 TO G-106 FOR LOCATIONS OF RATED WALLS AND FLOORS.
17. REFER TO SHEET AE520 FOR DETAILS OF PENETRATIONS THROUGH RATED CONSTRUCTION.
18. PROVIDE FLEXIBLE EXPANSION LOOP OR OTHER SEISMIC SEPARATION ASSEMBLY PER NFPA 13, CHAPTER 9, WHERE PIPING CROSSES THE BUILDING FIRE WALL. REFER TO SHEET AE547 FOR JOINT LOCATIONS.

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
DIANE M. ACHESON
No. 9277
3-17-17
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: RDA
CHECK BY: MSA
NO.
DATE: 03/17/17

STATE OF MAINE
PUBLIC SCHOOL PROJECT

TITLE: PORTLAND PUBLIC SCHOOLS
NEW FRED P. HALL ELEMENTARY SCHOOL
LOCATION: 23 ORONO ROAD, PORTLAND, ME

TITLE THIS DWG:
FIRE SUPPRESSION LEGEND, ABBREVIATIONS, GENERAL NOTES AND DETAILS

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0156

DRAWING NO. FX001
SHEET NO. 273 OF 312

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