



1 GROUND FLOOR PLAN (EAST) - FIRE PROTECTION
 F1.100E 1/8"=1'-0"

21500 SPRINKLER SYSTEMS

- A. This Section 21500 and the accompanying drawings cover the provisions of all labor, equipment, appliances, and materials and performing all operations in connection with the construction of sprinkler systems as specified herein and as shown.
- B. The work included under this Section 21500 shall include, but is not limited to, the following:
 - a. Piping and sprinkler heads.
- C. The sprinkler systems shall be designed and installed in conformance with the standards of NFPA 13, NFPA 72A, 72B, 72C, 72D, NFPA 231, the standards of the Underwriter (RI/FM/ISO, etc.) and local codes.
- D. The sprinkler design and installation shop drawings shall be submitted and approved by the Owner's underwriter and the Fire Marshal.
- E. The sprinkler systems shall be installed by a firm which is duly licensed to install such systems in the State of Maine.
- F. Upon completion of the work, provide three (3) sets of "record" drawings of the fire protection systems as actually installed to the Owner. Drawings shall be to scale, and shall include all details required to accurately indicate the system as installed.
- G. All control, check, drain, test and alarm valves and alarms shall be provided with identification signs of the standard design as adopted by the sprinkler industry and as recommended for the particular services. The signs shall be securely attached to each piece of equipment.
- H. All equipment and materials provided under this Section 21500 shall be new and of the best grade commercial quality, shall be of the latest design of the manufacturer, and shall be listed and approved by U.L. and the Underwriter. Materials and equipment manufactured outside of the United States will not be acceptable. All components shall be suitable for the pressures indicated on the flow test.
- I. All valves shall comply with requirements of NFPA and shall be Underwriters' Laboratories, Inc. (UL) listed.
- J. Working pressure of all valves shall be minimum 175 psig at 70 degrees F. water temperature.
- K. All sprinkler heads shall be automatic, closed-type standard spray heads.
- L. Sprinkler Heads in Ceilings: 1) All areas with ceilings shall be provided with flush-type, fully recessed heads.
- M. Sprinkler heads installed in areas without ceilings shall be bronze heads in the upright position unless otherwise noted.
- N. The temperature rating of the sprinkler heads shall be in accordance with the recommendations of the Underwriter.
- O. Sprinkler guards shall be provided for all heads within seven feet of the floor, in mechanical, electrical and storage rooms, and elsewhere as required by the Underwriter.
- P. Each drop to a sprinkler head in a ceiling shall be equipped with a chrome plated ceiling plate at the point the pipe passes through the ceiling.
- Q. All heads installed in areas with tile ceilings shall have the heads centered in the tile within 3".
- R. Aboveground piping shall be Schedule 40, grade A53 or A120; except that Schedule 10 piping is acceptable on pipe sizes 2 1/2" and larger where permitted by the applicable codes and standards. Schedule 10 piping shall not be threaded nor cut-grooved.
- S. Provide all necessary hangers, supports, bracing, accessories, etc., as required for proper installation of the work, and only approved type hangers shall be used. All sprinkler piping shall be supported from building structure; sprinkler lines under ducts shall not be supported from duct work but shall be supported from building structure with trapeze hangers where necessary.
- T. The design and installation of the sprinkler system shall be based on office occupancy - light hazard.
- U. The entire sprinkler system shall be tested at 200 psi for not less than 2 hours. All leaks discovered shall be repaired by tightening, replacing or re-working the leaking component or joint.
- V. Fire Protection scope of work consists of relocating existing sprinkler heads to coordinate with new wall, diffuser, and light fixture locations. Special attention is called to areas with gyp board ceilings. Provide fully recessed flush type heads as directed above for gyp board ceilings. Verify that all sprinkler heads are in good condition. Replace any sprinkler heads that are no longer in good condition.

GENERAL NOTES:

- 1. IT IS THE FIRE PROTECTION CONTRACTOR'S RESPONSIBILITY TO INSTALL, RELOCATE AND REMOVE SPRINKLER HEADS AS REQUIRED TO MEET CODE. SEE SPECIFICATIONS FOR FURTHER INFORMATION.
 - 2. NO SPRINKLER HEAD SHALL BE CLOSER THAN 6'-0" TO ANOTHER SPRINKLER HEAD OR 4" TO A WALL. NO SPRINKLER HEAD SPACING SHALL EXCEED 15'-0" FROM ANOTHER SPRINKLER HEAD OR 7'-6" FROM A WALL.
 - 3. HEADS SHALL BE INSTALLED FOLLOWING NFPA 13 AND MANUFACTURER'S RECOMMENDATIONS.
 - 4. ALL SPRINKLER HEADS IN THE SPACE SHALL BE THE SAME TYPE, CHANGE OUT HEADS AS NECESSARY.
 - 5. COORDINATE SPRINKLER LAYOUT WITH LIGHTS AND AIR DISTRIBUTION DEVICES.
 - 6. SPRINKLER HEAD TO MATCH CEILING COLOR. COORDINATE WITH ARCHITECT.
 - 7. ALL HEADS SHALL BE REPLACED WITH NEW CONCEALED HEADS EXCEPT THOSE IN EXPOSED CEILINGS AND THOSE SHALL BE UPRIGHT.
 - 8. FLEXIBLE BRAIDED HOSE PIPING IS ALLOWED BY THE OWNER AS AN ALTERNATIVE TO THE THREADED PIPE SPECIFIED.
- LEGEND NOTES:
 (APPLY THIS SHEET ONLY)
- ① RELOCATE EXISTING HEADS IN THIS AREA TO MEET COVERAGE REQUIREMENTS NOTED ABOVE. HEADS SHALL BE LINED UP IN A UNIFORM PATTERN AND COORDINATED WITH THE LIGHTS AND DIFFUSERS.
 - ② PROVIDE WATER CURTAIN AROUND STAIR IN ARCHITECTURAL SOFFIT. COORDINATE PIPE ROUTING AND SPRINKLER PLACEMENT AS REQUIRED.

THERE IS NO SPRINKLER WORK IN THE HATCHED AREAS. LEGEND NOTES WITH LINES THROUGH THEM DO NOT APPLY TO THIS PROJECT.



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Date	Description
08.18.2017	ISSUE FOR PERMIT AND CONSTRUCTION

Seal / Signature



Project Name

Unum Workplace
 Transformation- Phase 1 (H02)

Project Number

59.6481.000

Description

GROUND FLOOR PLAN (EAST) - FIRE PROTECTION

Scale

1/8" = 1'-0"

F1.100E