



**Fire Station Renovation and
Police Station Addition**
Building 7200 - Camp Joseph T. Robinson
North Little Rock, Arkansas

REVISIONS

ISSUE DATE
07/01/2016
PROJECT NO.
0901U

CONTENTS
GENERAL NOTES
AND RISER
DETAILS - FIRE
PROTECTION

SHEET NUMBER

F0.1

WATER FLOW INFORMATION:

STATIC: 71 GPM
RESIDUAL: 69 PSI
FLOW: 1020 GPM
TIME: 11:15 AM
DATE: 01/27/16
PERFORMED BY: TME
WITNESSED: CAMP ROBINSON FIRE DEPARTMENT

LOCATION: STATIC/RESIDUAL WAS TAKEN FROM THE FIRE HYDRANT LOCATED ON ARKANSAS AVE. IN FRONT OF THE EXISTING FIRE STATION. THE FLOW WAS TAKEN FROM THE HYDRANT LOCATED AT THE INTERSECTION OF ARKANSAS AVENUE, AND 6TH STREET ON THE EAST CORNER.

EQUIPMENT NOMENCLATURE:

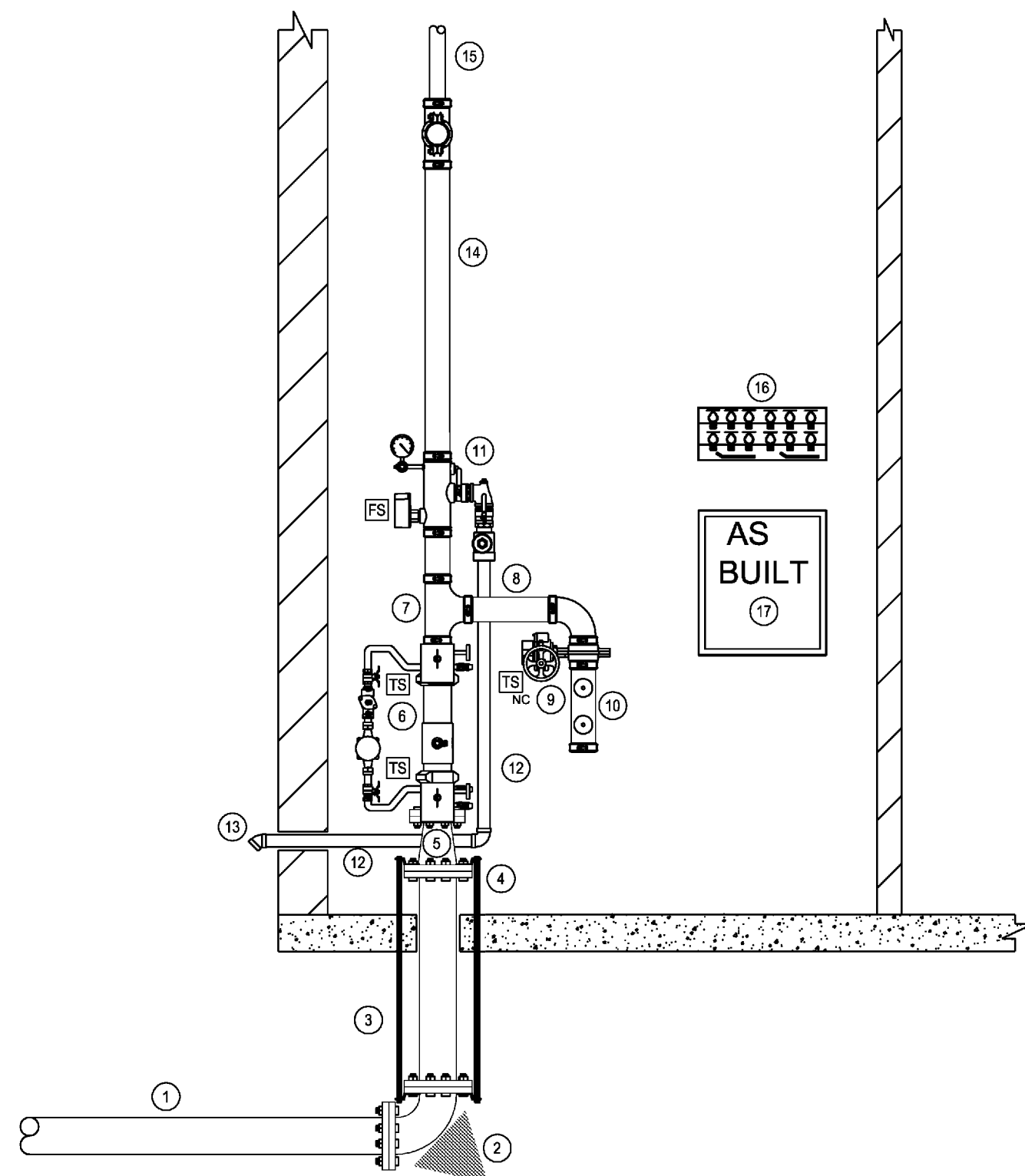
- 1 6" UNDERGROUND FIRE PROTECTION LEAD IN
- 2 CONCRETE THRUST BLOCKING
- 3 3/4" ROD
- 4 6" MECHANICAL JOINT ADAPTOR
- 5 6" x 4" FLANGED REDUCER
- 6 4" GROOVED DOUBLE CHECK DETECTOR ASSEMBLY WITH TAMPER SWITCHES
- 7 4" GROOVED TEE
- 8 4" PIPING TO FORWARD FLOW TEST OUTLET
- 9 4" GROOVED CONTROL VALVE WITH TAMPER SWITCH (NORMALLY CLOSED)
- 10 4" PIPE HEADER WITH 2) 2-1/2" HOSE ADAPTOR OUTLETS FOR FORWARD FLOW TEST
- 11 4" GROOVED SPRINKLER RISER MANIFOLD
- 12 2" MAIN DRAIN PIPING DISCHARGED TO OUTSIDE
- 13 THREADED GALVANIZED 45° ELL
- 14 4" WET FEED MAIN TO WET PIPE SPRINKLER SYSTEM
- 15 2" PIPING TO WET PIPE SPRINKLER SYSTEM IN ATTIC ABOVE KITCHEN/DINING AREA.
- 16 SPARE SPRINKLER HEAD CABINET
- 17 DBX "AS-BUILT" CABINET
- 18 2-1/2" WET PIPE SUPPLY PIPING TO DRY PIPE VALVE
- 19 ADJUSTABLE PIPE STAND
- 20 2-1/2" GROOVED DRAIN 90
- 21 1/2" AUXILIARY DRAIN VALVE AND PIPING CONNECTED INTO MAIN DRAIN PIPING
- 22 2-1/2" GROOVED CONTROL VALVE WITH TAMPER SWITCH
- 23 2-1/2" GROOVED DRY PIPE VALVE WITH TRIM
- 24 MAIN DRAIN PIPING DISCHARGED TO OUTSIDE
- 25 TANK MOUNTED AIR COMPRESSOR WITH 10 GALLON TANK AND 1/6 HP/ 115V/ 5 FLA MOTOR EQUIVALENT TO GENERAL AIR PRODUCTS OL12516ACT
- 26 2-1/2" DRY PIPE SUPPLY MAIN TO DRY PIPE SPRINKLER SYSTEM IN ATTIC

FIRE PROTECTION GENERAL NOTES:

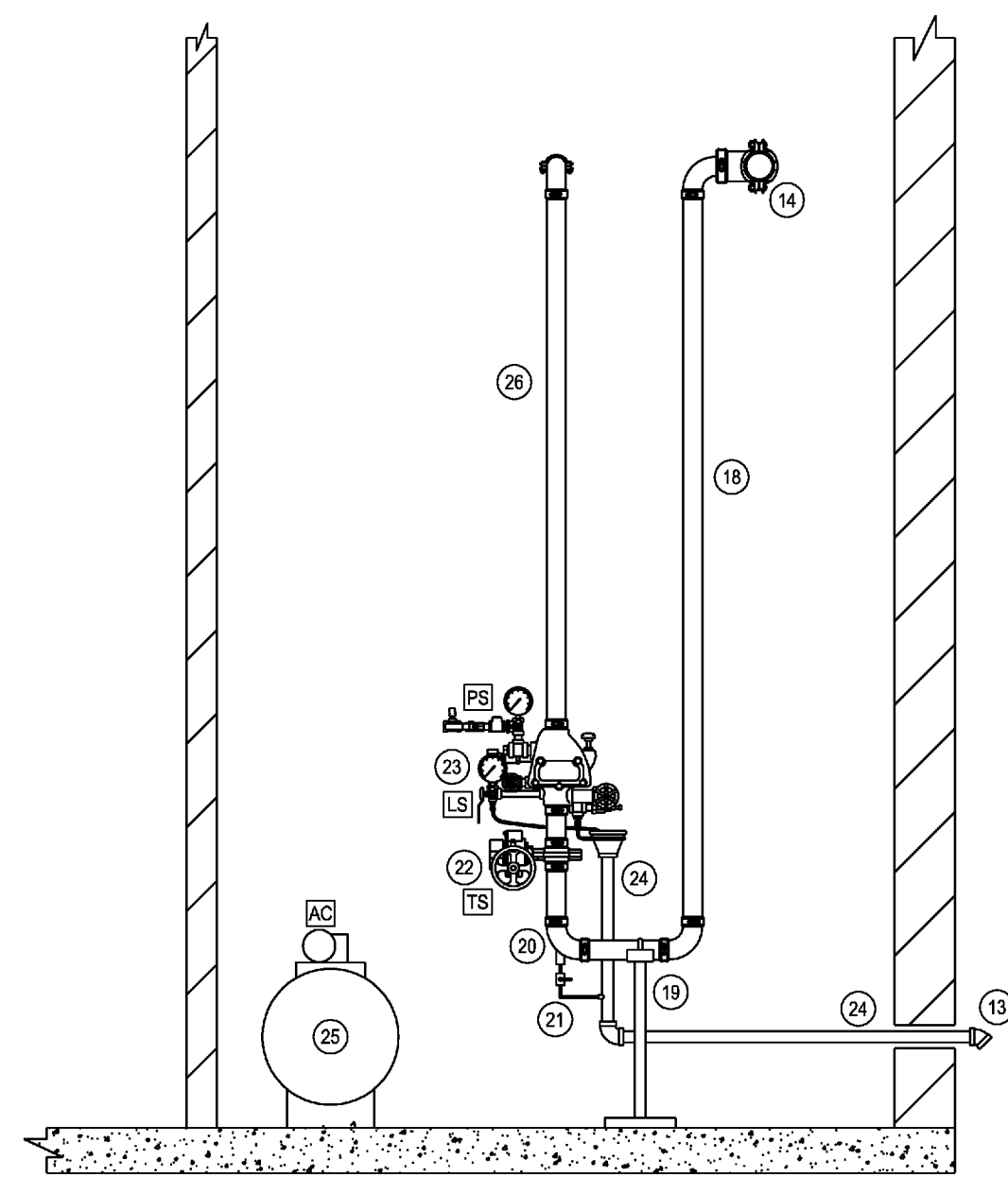
1. THE SUCCESSFUL FIRE PROTECTION CONTRACTOR SHALL PROVIDE THE ENGINEER OF RECORD WITH A PRELIMINARY PUNCH LIST AND DRAWING PRIOR TO COMPLETION OF CONSTRUCTION. ALL ITEMS NOTED SHALL BE ADDRESSED BY THE CONTRACTOR PRIOR TO REQUESTING PUNCH LIST BY THE ENGINEER OF RECORD.
2. ALL PIPE, DEVICES, AND INSTALLATION SHALL FULLY COMPLY WITH NFPA 13 AND ALL REQUIRED AUTHORITIES HAVING JURISDICTION.
3. REFER TO NOTES ON DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. REFER TO STRUCTURAL AND ARCHITECTURAL DRAWINGS FOR BUILDING DETAILS.
4. PROVIDE A COMPLETE, HYDRAULICALLY CALCULATED, FULLY AUTOMATIC WET PIPE SPRINKLER SYSTEM THROUGHOUT THE BUILDING EXCEPT WHERE INDICATED ON DRAWINGS. FIRE PROTECTION CONTRACTOR SHALL INSTALL THE FIRE PROTECTION SYSTEM IN ACCORDANCE WITH ALL APPLICABLE NFPA STANDARDS, JOB SPECIFICATIONS, AND LOCAL CODE.
5. SPRINKLER COVERAGE SHALL NOT EXCEED 225 SQUARE FEET PER HEAD FOR LIGHT HAZARD AREAS. EXCEPTION: SPRINKLER COVERAGE SHALL NOT EXCEED 130 SQUARE FEET PER HEAD FOR ORDINARY HAZARD AREAS.
6. DURING THE PROCESS OF CREATING THE CONSTRUCTION DOCUMENTS FOR THIS PROJECT, DESIGN PARAMETERS HAVE BEEN GRAPHICALLY ILLUSTRATED FOR PIPE LAYOUT, SPRINKLER HEAD LOCATION, RISER CONFIGURATION AND SUPPORT, ETC. THE FIRE PROTECTION SHOP DRAWINGS SHALL REFLECT THE LAYOUT OF ALL THE EQUIPMENT AND DEVICES AS SHOWN WITHIN THESE CONSTRUCTION DOCUMENTS AS CLOSELY AS POSSIBLE. IN THE EVENT THAT THESE DESIGN PARAMETERS CANNOT BE MET OR FOLLOWED, THE CONTRACTOR SHALL PRESENT HIS ALTERNATE DESIGN LAYOUT IN THE FORM OF REQUEST FOR INFORMATION. REGARDLESS, THE SHOP DRAWINGS SHALL COMPLY TO ALL CODES AND STANDARDS PRIOR TO SUBMITTAL PROCESS.
7. FIRE PROTECTION SYSTEM, PIPING, VALVES AND APPURTENANCES INDICATED ON THE DRAWING ARE DIAGRAMMATIC ONLY IN THAT ALL REQUIRED DEVICES, PIPES, FITTINGS, AND OFFSETS MAY NOT BE SHOWN. FIRE PROTECTION CONTRACTOR SHALL VERIFY EQUIPMENT SELECTIONS, PIPE ROUTING, ETC. FOR CODE COMPLIANCE, AND ARCHITECTURAL AND STRUCTURAL CONFORMITY. FIRE PROTECTION CONTRACTOR SHOULD THOROUGHLY SURVEY THE PROPERTY AND REVIEW ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL AND PLUMBING (M.E.P.) CONSTRUCTION DOCUMENTS PRIOR TO BID.
8. FIRE PROTECTION SHOP DRAWINGS SHALL HAVE COMPLETE REFLECTED CEILING PLANS INDICATING LOCATION OF EACH SPRINKLER HEAD, AS WELL AS PIPING LAYOUTS. PROVIDE ADDITIONAL SPRINKLER HEADS (OVER CODE MINIMUM), IF REQUESTED BY THE ARCHITECT, TO OBTAIN SYMMETRICAL CEILING LAYOUTS.
9. FIRE PROTECTION SYSTEM SHALL BE COMPLETE WITH BACKFLOW PREVENTER, FIRE DEPARTMENT CONNECTION, FORWARD FLOW TEST OUTLET, CONTROL VALVES, DRY PIPE VALVE, SPRINKLER PIPING AND HEADS, ELECTRONIC SUPERVISION AND OTHER APPURTENANCES AS REQUIRED BY NFPA AND AUTHORITIES HAVING JURISDICTION.
10. GENERAL CONTRACTOR SHALL CONDUCT A COORDINATION MEETING WITH THE SUBCONTRACTORS TO ESTABLISH CLEARANCE REQUIREMENTS NEEDED FOR M.E.P. WORK PRIOR TO FABRICATION OF THE SPRINKLER SYSTEM. ANY RELOCATION OF FIRE SPRINKLER SYSTEM REQUIRED FOR PROPER INSTALLATION OF M.E.P. SYSTEMS SHALL BE AT THE FIRE PROTECTION CONTRACTOR'S EXPENSE.
11. FIRE PROTECTION CONTRACTOR SHALL BASE BID ON CAREFUL COORDINATION OF ARCHITECTURAL COMPONENTS, MECHANICAL DUCT, MECHANICAL AND PLUMBING PIPING, ELECTRICAL, AND STRUCTURAL SYSTEMS IN THE BUILDING.
12. HYDRAULIC CALCULATIONS SHALL BE BASED ON THE WATER FLOW TEST INFORMATION PROVIDED ON THIS SHEET. PROVIDE A MINIMUM OF 10 PSI SAFETY FACTOR FOR ALL HYDRAULIC CALCULATIONS. PIPE SIZING INDICATED ON THE DRAWINGS IS FOR INFORMATIONAL PURPOSES ONLY. PIPE SIZING SHALL BE ESTABLISHED BY THE FIRE PROTECTION CONTRACTOR.
13. PROVIDE A DOUBLE CHECK DETECTOR ASSEMBLY TO ISOLATE THE SPRINKLER SYSTEM FROM THE MAIN SUPPLY. COORDINATE REQUIREMENTS WITH THE CITY OF NORTH LITTLE ROCK AND THE STATE OF ARKANSAS.
14. FIRE PROTECTION SYSTEM SHALL INTERFACE WITH THE BUILDING FIRE ALARM SYSTEM. REFER TO ELECTRICAL.
15. ALL CONTROL VALVES SHALL HAVE ELECTRONIC SUPERVISION.
16. SPECIAL CONSIDERATION SHALL BE GIVEN TO AREAS THROUGHOUT THE BUILDING SUCH AS DROPPED SOFFITS, RAISED CEILINGS, FALSE BEAMS, AND LIGHTING SOFFITS THAT NECESSITATE ADDITIONAL SPRINKLER HEADS. REFER TO ARCHITECTURAL DRAWINGS FOR REFLECTED CEILING PLANS AND BUILDING DETAILS.
17. ALL SPRINKLER HEADS FOR LIGHT HAZARD AND ORDINARY HAZARD SHALL BE QUICK RESPONSE.
18. ALL CEILING MOUNTED SPRINKLER HEADS SHALL BE CHROME WITH CHROME RECESSED ESCUTCHEONS, UNLESS NOTED OTHERWISE ON FIRE PROTECTION PLANS OR SPECIFICATIONS.
19. ALL SPRINKLER HEADS INSTALLED IN EXPOSED STRUCTURE SHALL BE BRASS UPRIGHT, UNLESS NOTED OTHERWISE ON FIRE PROTECTION PLANS OR SPECIFICATIONS.
20. ALL CEILING MOUNTED SPRINKLER HEADS SHALL BE LOCATED IN THE CENTER OF CEILING TILES.
21. PROVIDE SPRINKLER SYSTEM MAIN DRAIN IN ACCORDANCE WITH NFPA 13.
22. PROVIDE AUXILIARY DRAINS FOR ALL TRAPPED PIPING SECTIONS IN ACCORDANCE WITH NFPA 13.
23. ALL DRAIN PIPING SHALL TERMINATE AT THE EXTERIOR WITH 45 DEGREE DOWN GALVANIZED ELBOW. INSTALL THE DRAIN IN A MANNER TO PREVENT FLOODING OR DAMAGE TO LANDSCAPING, AND TO PREVENT WETTING OF WALKWAYS. EXCEPTION: DRAIN PIPING MAY TERMINATE AT INTERIOR FLOOR DRAINS IF THE DRAIN HAS BEEN SIZED APPROPRIATELY. COORDINATE WITH PLUMBING CONTRACTOR FOR LOCATION OF FLOOR DRAIN.
24. INSTALL PIPING HORIZONTALLY AND AT RIGHT ANGLES TO WALLS AND CEILINGS.
25. ALL GROOVED WET PIPING SHALL BE BLACK SCHEDULE 10 OR SCHEDULE 40 WITH GROOVED AND WELDED OUTLETS. FITTINGS AND COUPLINGS SHALL BE STANDARD GROOVED.
26. ALL THREADED WET PIPING SHALL BE BLACK SCHEDULE 40. FITTINGS SHALL BE STANDARD "BLACK" GRADE.
27. ALTERNATIVE STEEL PIPE SCHEDULES ALLOWED BY NFPA 13 ARE NOT ACCEPTABLE ON THIS PROJECT.
28. CPVC PIPING IS NOT ALLOWED ON THIS PROJECT.
29. ALL FIRE PROTECTION PIPING, FITTINGS, SUPPORTS AND ACCESSORIES IN EXPOSED AREAS SHALL BE PREPARED FOR FINISH PAINTING. PIPING, FITTINGS, SUPPORTS AND ACCESSORIES IN MECHANICAL ROOMS SHALL BE PAINTED OSHA RED.
30. FIRE PROTECTION CONTRACTOR SHALL PROVIDE PROTECTION FOR SPRINKLER HEADS IN AREAS WHERE THE CEILING AND SURROUNDING AREAS ARE TO BE PAINTED. FIRE PROTECTION CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF SPRINKLER PROTECTION AFTER PAINTING WORK IS COMPLETE. ANY SPRINKLER HEAD WITH PAINT OR TEXTURE OVERSPRAY SHALL BE REPLACED BY THE FIRE PROTECTION CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
31. PROVIDE HEAD GUARDS ON ALL SPRINKLER HEADS AT OR BELOW AN ELEVATION OF 7'-0" AFF, OR THAT OTHERWISE MAY BE SUBJECT TO MECHANICAL DAMAGE, SUCH AS IN THE MECHANICAL ROOMS.
32. PROVIDE SEISMIC BRACING AS REQUIRED BY THE INTERNATIONAL BUILDING CODE, ASCE 7 (AMERICAN SOCIETY OF CIVIL ENGINEERS), AND NFPA 13 FOR SEISMIC DESIGN CATEGORY "C". REFER TO TYPICAL SEISMIC DETAIL ON SHEET F0.0 FOR SEISMIC REQUIREMENTS.
33. FIRE PROTECTION PLANS SHALL BE SUBMITTED AND RECEIVE APPROVAL PRIOR TO FABRICATION BY ALL REQUIRED LOCAL AND STATE AUTHORITIES.

DRY PIPE SYSTEM NOTES:

1. PROVIDE A COMPLETE, HYDRAULICALLY CALCULATED, FULLY AUTOMATIC DRY PIPE SPRINKLER SYSTEM FOR THE FIRE STATION ATTIC AREA OVER THE SLEEPING QUARTERS. CONTRACTOR SHALL INSTALL THE FIRE PROTECTION SYSTEM IN ACCORDANCE WITH ALL APPLICABLE NFPA STANDARDS, JOB SPECIFICATIONS, AND LOCAL CODE.
2. ALL GROOVED DRY PIPING SHALL BE BLACK SCHEDULE 40 WITH GROOVED AND WELDED OUTLETS. FITTINGS AND COUPLINGS SHALL BE STANDARD GROOVED.
3. ALL THREADED DRY PIPING SHALL BE BLACK SCHEDULE 40. FITTINGS SHALL BE STANDARD "BLACK" GRADE.
4. PRIOR TO THE HYDROSTATIC TEST REQUIRED BY NFPA 13, FOR THIS PROJECT, IT IS REQUIRED THAT EACH AREA BE PNEUMATICALLY TESTED FOR 24 HOURS WITH 40 PSI SHOWING NOT MORE THAN 1-1/2" PSI LOSS IN THE 24 HOUR PERIOD AS DESCRIBED IN NFPA 13 FOR PNEUMATIC TESTING REQUIREMENTS FOR DRY SYSTEMS. FIRE PROTECTION CONTRACTOR SHALL ISOLATE EACH AREA FOR TESTING. IF DURING THE ISOLATION PROCESS EXISTING GROOVED COUPLINGS ARE REMOVED, FIRE PROTECTION CONTRACTOR IS REQUIRED TO INSTALL NEW ONES IN THE PLACE OF THE ONES REMOVED FOR ISOLATION PURPOSES.



1 WET PIPE RISER DETAIL
SCALE: NONE



2 DRY PIPE RISER DETAIL
SCALE: NONE