

FLOW TEST DATA

DATE: 05/28/2019 TIME: AFTERNOON TEST LOCATION: ENTRANCE TO ALLENDALE FAIRFAX MIDDLE SCHOOL.
 PERFORMED BY: RODNEY STANLEY
 INFORMATION PROVIDED BY: LEROY DAVIS
 ORGANIZATION: ALLENDALE COUNTY FIRE AND RESCUE
 PHONE: 606-568-1000

STATIC PRESSURE: 55 PSI / HYDRANT NUMBER: 19
 RESIDUAL: 52 PSI
 FLOW: 1000 GPM
 MAIN SIZE: 8 INCHES

DESIGN CRITERIA

1. PROVIDE HYDRAULICALLY CALCULATED WET PIPE SPRINKLER SYSTEMS AS FOLLOWS:
 - 1.1. LIGHT HAZARD SPACES: MINIMUM 0.10 GPM PER SQ. FT. OVER MOST REMOTE 1,500 SQ. FT. SPACE WITH A MAXIMUM SPRINKLER SPACING OF 220 SQ. FT. PER SPRINKLER HEAD. REDUCTION IN REMOTE AREA SIZE IS ALLOWED WHEN USING QUICK RESPONSE SPRINKLERS PER PARAGRAPH 11.2.3.2.3 OF NFPA 13. CALCULATIONS SHALL INCLUDE A 100 GPM HOSE STREAM ALLOWANCE.
 - LIGHT HAZARD SPACES:
 - OFFICE/ADMINISTRATION
 - CLASSROOM
 - CAFETERIA
 - MULTI-PURPOSE SPACE
 - 1.2. ORDINARY HAZARD (GROUP 1) SPACES: MINIMUM 0.15 GPM PER SQ. FT. OVER THE MOST REMOTE 1,500 SQ. FT. WITH A MAXIMUM SPRINKLER SPACING OF 130 SQ. FT. PER SPRINKLER HEAD. REDUCTION IN REMOTE AREA SIZE IS ALLOWED WHEN USING QUICK RESPONSE SPRINKLER HEAD, PER 11.2.3.2.3 OF NFPA 13. CALCULATIONS SHALL INCLUDE A 250 GPM HOSE STREAM ALLOWANCE.
 - ORDINARY HAZARD SPACES:
 - KITCHEN AND ASSOCIATED AREAS
 - MECHANICAL ROOMS
 - ELECTRICAL ROOMS
 - KITCHEN STORAGE AREAS
 - STORAGE AREAS
 - DATA CLOSETS

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FP101	FIRE PROTECTION FLOOR PLAN

APPLICABLE BUILDING CODES

- 2018 SOUTH CAROLINA FIRE CODE.
- 2012 NFPA-101 LIFE SAFETY CODE.
- 2013 NFPA-13 INSTALLATION OF SPRINKLER SYSTEMS.
- 2012 NFPA-22 STANDARD FOR WATER TANKS FOR PRIVATE FIRE PROTECTION.
- 2012 NFPA-20 STANDARD FOR INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION.

TESTING PROCEDURE

1. WET PIPE SPRINKLER SYSTEM SHALL BE HYDROSTATICALLY TESTED AT 200 PSI AND SHALL MAINTAIN PRESSURE FOR A TWO HOUR PERIOD.

GENERAL FIRE PROTECTION NOTES:

1. THE DESIGN DOCUMENTS - DRAWINGS AND SPECIFICATIONS - FOR SPRINKLER SYSTEM ARE FOR IDENTIFICATION OF PERFORMANCE REQUIREMENTS AND DESIGN INTENT ONLY AND DO NOT REPRESENT FINAL SPRINKLER DESIGN. THE SPRINKLER CONTRACTOR (CONTRACTOR) IS RESPONSIBLE FOR DESIGN OF HYDRAULIC CALCULATION, SPRINKLER HEAD/PIPE DESIGN/LAYOUT AND ALL TRADE REQUIREMENTS.
2. THE FIRE PROTECTION SYSTEM TO COMPLY WITH NFPA 13 - 2013 STANDARD FOR INSTALLATION OF SPRINKLER SYSTEMS, NFPA 101 - 2012 LIFE SAFETY CODE, AND 2018 SOUTH CAROLINA FIRE CODE.
3. SHOWN PIPE ROUTING AND EQUIPMENT ARE SCHEMATIC ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ADDITIONAL PIPING AND EQUIPMENT FOR FULL AND PROPER INSTALLATIONS.
4. THE CONTRACTOR SHALL REQUEST COMPLETE DRAWINGS FROM ORIGINAL CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH ALL OTHER TRADES, INCLUDING BUT NOT LIMITED TO STRUCTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING. THE CONTRACTOR TO PROVIDE ALL NECESSARY MATERIAL AND LABOR NECESSARY FOR COORDINATION AND INSTALL AT NO ADDITIONAL COSTS.
5. SPRINKLER SHOP DRAWINGS ARE REQUIRED AND DEVELOPED BY THE CONTRACTOR PRIOR TO INSTALLATION.
6. THE CONTRACTOR IS RESPONSIBLE FOR ALL CUTTING AND PATCHING REQUIRED FOR INSTALLATION OF A COMPLETE SYSTEM.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN AND ALL CERTIFICATION REQUIRED FOR COMPLETE SPRINKLER SYSTEM INSTALLATION.
8. ALL FIRE PROTECTION MATERIALS AND EQUIPMENT SHALL BE UL LISTED AND FACTORY MUTUAL APPROVED FOR USE IN FIRE PROTECTION SYSTEMS.
9. SPRINKLER PIPING SHALL BE LOCATED ABOVE CEILING.
10. THE SPRINKLER HEADS SHALL BE FIELD COORDINATED WITH CEILING FINISH. WHERE ACTUAL CONDITION VARY, THE CONTRACTOR SHALL INSTALL APPROPRIATE SPRINKLER HEAD (FOR EXAMPLE, PENDANT HEADS IN DROP CEILING) AT NO ADDITIONAL COST TO THE PROJECT. SPRINKLER HEADS SHALL BE LOCATED IN THE CENTER OF CEILING TILE.
12. SPRINKLER PIPING SHALL BE PITCHED BACK TO THE SUPPLY MAIN - WHERE POSSIBLE, PROVIDE AUXILIARY DRAINS ON TRAPPED SECTION OF PIPE PER NFPA 13. FIELD COORDINATE DRAIN LOCATIONS.
13. PROVIDE ARMERS FOR ALL PENDANT HEADS.
14. SPRINKLER PIPING SHALL NOT BE ROUTED OVER ELECTRICAL EQUIPMENT.
15. CONTRACTOR SHALL PROVIDE A CONTRACTORS TEST AND MATERIAL CERTIFICATE FOR ABOVE GROUND PIPING UPON COMPLETION OF WORK(S).
16. ALL SPRINKLER HEADS SHALL BE NEW AND SHALL BE QUICK RESPONSE TYPE. PENDANT SPRINKLERS SHALL BE CHROME RECESSED TYPE, 155FT. UPRIGHT SPRINKLERS SHALL BE BRASS.
17. ALL SPRINKLER PIPING SHALL BE NEW AND SHALL BE SCHEDULE 40 BLACK STEEL PIPE.
18. HEAT TRACE AND INSULATE ALL WEATHER EXPOSED SPRINKLER PIPING FOR FREEZE PROTECTION. INSULATION SHALL BE 1-1/2" CELLULAR GLASS CLOSED CELL WITH ALUMINUM JACKETING. HEAT TRACE SHALL BE RAYCHEM XL-TRACE SYSTEM 5W/PER FT.
19. ALL PIPING PENETRATIONS OF FIRE-RATED WALLS AND FLOORS SHALL BE SEALED WITH UP APPROVED FIRE RESISTANT JOINT SEALER. SPECIFIED TECHNOLOGIES "PENSL 200" OR EQUAL. FIRE RESISTANT SEALER SHALL BE TESTED IN ACCORDANCE WITH ASTM 84.
20. THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF AS-BUILT DRAWINGS INDICATING LOCATION OF ALL SYSTEMS, EQUIPMENT, PIPES, PIPE CONNECTIONS AND ACCESS DOORS.
21. ALL WORK(S), MATERIAL, AND EQUIPMENT SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER CERTIFICATION OF OCCUPANCY.

ABBREVIATIONS

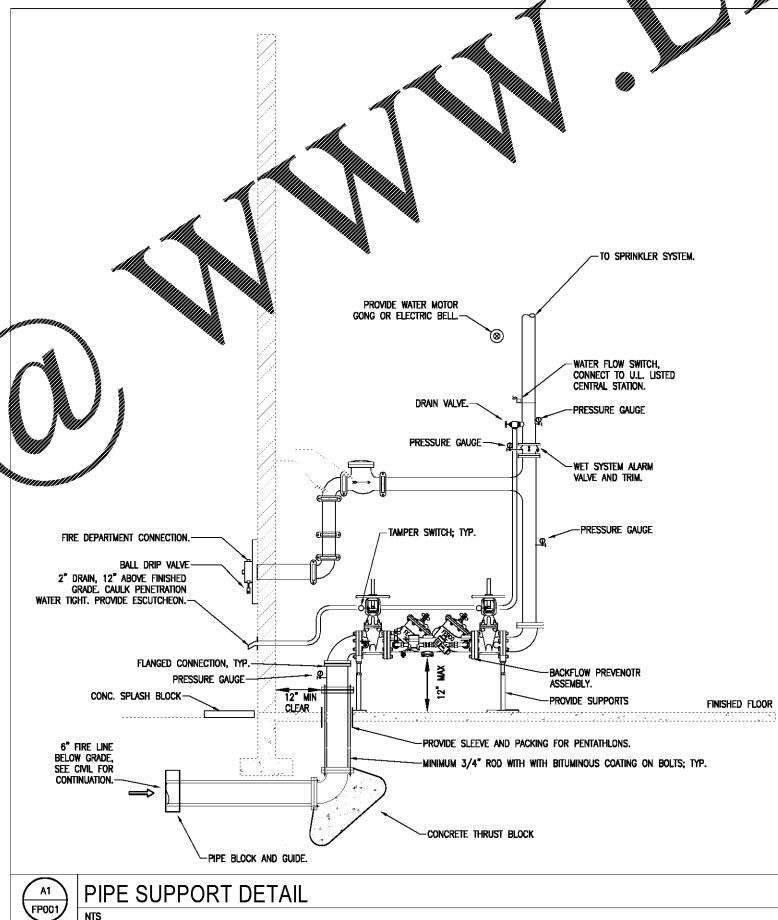
AF	ABOVE FINISHED FLOOR	MAX	MAXIMUM
A/G	ABOVE GRADE	MECH	MECHANICAL
BF	BLIND FLANGE	MIN	MINIMUM
BFP	BACKFLOW PREVENTER	NC	NORMALLY CLOSED
B/G	BELOW GRADE	NFPA	NATIONAL FIRE PROTECTION ASSOC.
BLDG	BUILDING	NIC	NOT IN CONTRACT
CONC	CONCRETE	NO.	NUMBER
CONN.	CONNECTION	PRV	PRESSURE REDUCING VALVE
CONT.	CONTINUATION	PS	PRESSURE SWITCH
COR	CONTRACTING OFFICER'S REPRESENTATIVE	PSIG	POUNDS PER SQUARE INCH GAUGE
DA	DIAMETER	REDD	REQUIRED
DN	DOWN	RPM	ROTATIONS PER MINUTE
DEPT	DEPARTMENT	SP	STATIC PRESSURE
DWG	DRAWING	STL	STEEL
ELEC.	ELECTRICAL	TYP.	TYPICAL
ELEV	ELEVATION	UL	UNDERWRITERS LABORATORY
FP	FIRE PROTECTION	W/	WITH
FS	FLOW SWITCH	W/O	WITHOUT
GPM	GALLONS PER MINUTE		
HP	HORSE POWER		
LFD	LOW POINT DRAIN		

FIRE PROTECTION SYMBOLS

	VALVE IN RISER		ALARM RISER 2
	ANGLE DRAIN VALVE		DRY PIPE VALVE
	FIRE DEPARTMENT CONNECTION		TAMPERS SWITCH
	2.5" ORIFICE FOR TEST HEADER		FLOW SWITCH
	CHECK VALVE		END OF LINE DRAIN
	OS&Y VALVE		DOUBLE CHECK
	PIPE SLEEVE THROUGH FLOOR SLAB		POST INDICATOR
			ALARM RISER 1

SYMBOLS LEGEND

	KEYNOTE INDICATOR
	DEMOLISHING NOTE INDICATOR
	ELEVATION INDICATOR
	ROOM NAME/NUMBER INDICATOR
	COLUMN INDICATOR
	NORTH ARROW



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Seal



Client

ALLENDALE-FAIRFAX COUNTY SCHOOL DISTRICT

Project

ALLENDALE PRIMARY SCHOOL

Issued For

90% PRICING SET
MARCH 16, 2020

No.	Item	Date

Key Plan



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Sheet Title
FIRE PROTECTION LEGENDS, NOTES AND SYMBOLS

FP-001

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Checked By Checker