

P:\PROJECTS\17-034 DURHAM TECH FACILITIES SVCS BLDG\3.0 CAD\3.0 FIRE PROTECTION\FP1.0.DWG PLOTTED BY: DARRIN METER - 9/17/2018 2:44 PM

2 Fire Protection Plan
FP1.1 SCALE: 1/8" = 1'-0" Mechanical Mezzanine

SPRINKLER DATA SHEET:

NAME OF PROJECT: DURHAM TECHNICAL COMMUNITY COLLEGE
DURHAM, NC

1. CLASSIFICATION OF TYPES OF SYSTEM (NFPA 13 - 2013 EDITION):

- A. WET PIPE SPRINKLER SYSTEM THROUGHOUT ENTIRE BUILDING SPACE.
B. DRY PIPE SPRINKLER SYSTEM THROUGHOUT EXTERIOR COVERED AREAS.

2. WATER SUPPLY AVAILABLE:

TEST

- A. WATERFLOW - 1293 GPM
B. STATIC PRESSURE - 85 PSI
C. RESIDUAL PRESSURE - 67 PSI
D. DATE - 2/9/2018
E. FLOW TEST PERFORMED BY - CITY OF DURHAM
F. TEST HYDRANTS - FLOW HYDRANT - COOPER STREET 1100' EAST OF BACON STREET.

PRESSURE HYDRANT - COOPER STREET 620' EAST OF BACON STREET

3. DESIGN (SPRINKLER CONTRACTOR SHALL INCLUDE A MINIMUM SAFETY FACTOR OF 10 PSI LESS STATIC, 10 PSI LESS RESIDUAL, AND 10 PERCENT LESS FLOW IN THE HYDRAULIC CALCULATIONS.)

4. CLASSIFICATION OF OCCUPANCY HAZARD:

- A. LIGHT HAZARD, THROUGHOUT OFFICE AREAS OF BUILDING. 0.10 GPM/SQ. FT. OVER THE MOST REMOTE 1500 SQ.FT.
B. ORDINARY HAZARD GROUP I THROUGHOUT MECHANICAL ROOM OF BUILDING. 0.15 GPM/SQ. FT. OVER THE MOST REMOTE 1500 SQ.FT.
C. ORDINARY HAZARD GROUP II THROUGHOUT WAREHOUSE AREA OF BUILDING. 0.26 GPM/SQ. FT. OVER THE MOST REMOTE 2000 SQ.FT.
D. ORDINARY HAZARD GROUP I DRY PIPE THROUGHOUT COVERED STORAGE AREA OF BUILDING. 0.15 GPM/SQ. FT. OVER THE MOST REMOTE 1500 SQ.FT.
E. SEE PLAN NOTES FOR RACK STORAGE CRITERIA.

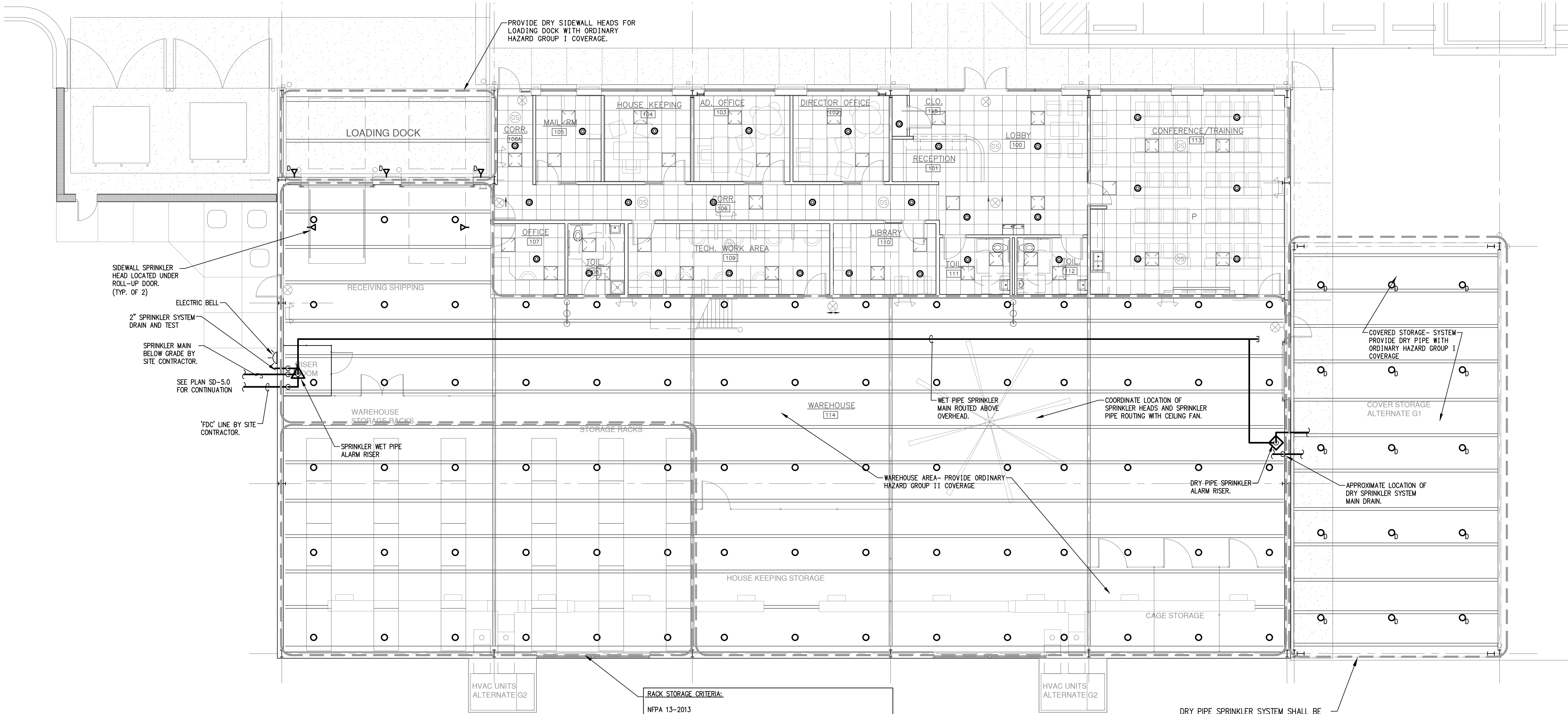
5. SYSTEM DESIGN:

- A. HYDRAULICALLY CALCULATED PER NFPA 13.
B. 225 S.F. MAXIMUM PER SPRINKLER.
C. BUILDING AREA IS APPROXIMATELY 12,961 SQ.FT.
* SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING CURRENT WATER FLOW TEST FOR USE IN HYDRAULIC CALCULATIONS.

ABBREVIATIONS	
SYMBOL	DESCRIPTION
AFF	ABOVE FINISHED FLOOR ELEVATION
AFG	ABOVE FINISHED GRADE ELEVATION
CR	CONCENTRIC REDUCER
ELEV	ELEVATION
FDC	FIRE DEPARTMENT CONNECTION
FS	FLOW SWITCH
FT	FEET OF HEAD
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
NIC	NOT IN CONTRACT
OC	ON CENTER
PSIG	POUNDS PER SQUARE INCH GUAGE
TYP	TYPICAL
TS	SUPERVISORY "TAMPER" SWITCH

AUTOMATIC SPRINKLER LEGEND	
SYMBOL	DESCRIPTION
○	RECESSED PENDENT SPRINKLER HEAD - QUICK RESPONSE, WHITE ON WHITE FINISH, 155° RANGE.
○	UPRIGHT SPRINKLER HEAD - QUICK RESPONSE, BRASS HEAD, 200° RANGE. PROVIDE AND INSTALL PROTECTIVE WIRE GUARDS ON ALL UPRIGHT HEADS WITHIN WAREHOUSE AREAS
◁D	DRY SIDEWALL SPRINKLER HEAD - QUICK RESPONSE, BRASS HEAD WITH BRASS ESCUTCHEON, INTERMEDIATE TEMPERATURE RATING.
○D	UPRIGHT SPRINKLER HEAD - QUICK RESPONSE, BRASS HEAD, 200° RANGE. PROVIDE AND INSTALL PROTECTIVE WIRE GUARDS ON ALL UPRIGHT HEADS WITHIN WAREHOUSE AREAS
◁	SIDEWALL SPRINKLER HEAD - QUICK RESPONSE, BRASS HEAD WITH BRASS ESCUTCHEON, INTERMEDIATE TEMPERATURE RATING.

PIPE AND VALVE LEGEND	
SYMBOL	DESCRIPTION
—	AUTOMATIC SPRINKLER SYSTEM PIPING
○	PIPE UP
○	PIPE DOWN
—	PIPE CAP (GROOVED COUPLING)
—	PIPE CAP (THREADED)
⊥	TEE OFF TOP
⊥	TEE OFF BOTTOM
◁	WET PIPE SPRINKLER ALARM VALVE
◁	DRY PIPE SPRINKLER ALARM VALVE



1 Fire Protection Plan
FP1.1 SCALE: 1/8" = 1'-0"

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NEW FACILITIES
SERVICE BUILDING FOR:

DURHAM
TECHNICAL
COMMUNITY
COLLEGE

1700 COOPER ST.
DURHAM, NC

SCO PROJECT
NUMBER
17-16794-01A

PROJECT NUMBER
17-034

Fire Protection Plan

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CONSTRUCTION DOCUMENTS

Revisions
Drawn LDH
Checked CTC
Date SEPTEMBER 17, 2018
Sheet

FP1.1

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