FIRE PROTECTION SYSTEMS
2018 NEW JERSEY STATE BUILDING CODE NOTES

FIRE PROTECTION SYSTEMS
2018 NEW JERSEY STATE BUILDING CODE NOTES

1) THE DESIGN, INSTALLATION AND OPERATION OF FIRE PROTECTION SYSTEMS SHALL COMPLY WITH 2018 NEW JERSEY STATE BUILDING CODE (BC) CHAPTER 9.
2) REFFERENCED STANDARDS SHALL BE IN ACCORDANCE WITH BC 901.1.1.
3) FIRE PROTECTION SYSTEMS SHALL BE INSTALLED, REPAIRED, OPERATED AND MAINTAINED IN ACCORDANCE WITH THE BC AND THE 2018 NEW JERSEY FIRE PROTECTION SUBCODE (FC). ANY FIRE PROTECTION SYSTEM FOR WHICH AN EXCEPTION OR REDUCTION TO THE PROVISIONS OF THE BC HAS BEEN GRANTED SHALL BE CONSIDERED A REQUIRED SYSTEM AS PER BC 901.2.
4) NO PERSON SHALL REMOVE OR MODIFY ANY FIRE PROTECTION SYSTEM INSTALLED OR MAINTAINED UNDER THE PROVISIONS OF THE BC OR FC WITHOUT APPROVAL OF THE BUILDING COMMISSIONER.
5) THREADS PROVIDED FOR FIRE DEPARTMENT CONNECTIONS TO SPRINKLER SYSTEMS, STANDPIPES, YARD HYDRANTS OR ANY OTHER FIRE HOSE CONNECTION SHALL BE COMPATIBLE WITH THE CONNECTIONS USED BY THE FIRE DEPARTMENT AS PER BC 901.4.
6) FIRE PROTECTION SYSTEMS SHALL BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE BC AND THE FC. WHEN REQUIRED, THE TESTS SHALL BE CONDUCTED IN THE PRESENCE OF THE FIRE PROTECTION SUBCODE OFFICIAL OR AN APPROVED SPECIAL INSPECTION AGENCY. TESTS REQUIRED BY THE BC, FC AND THE STANDARDS LISTED IN THE BC SHALL BE CONDUCTED AT THE EXPENSE OF THE OWNER OR THE OWNER'S REPRESENTATIVE. IT IS UNLAWFUL TO OCCUPY PORTIONS OF A STRUCTURE BEFORE THE REQUIRED FIRE PROTECTION SYSTEMS WITHIN THAT PORTION OF THE STRUCTURE HAVE BEEN TESTED AND APPROVED AS PER BC 901.5.
7) FIRE PROTECTION SYSTEMS SHALL BE MONITORED BY AN APPROVED SUPERVISING STATION IN ACCORDANCE WITH BC 901.6.
8) WHERE BUILDINGS, OR PORTIONS THEREOF, ARE DIVIDED INTO FIRE AREAS SO AS NOT TO EXCEED THE LIMITS ESTABLISHED FOR REQUIRING A FIRE PROTECTION SYSTEM, THEY SHALL COMPLY WITH BC 901.7.

DRAWING INDEX

AUTOMATIC SPRINKLER SYSTEMS
2018 NEW JERSEY STATE BUILDING CODE AND NFPA 13 NOTES

AUTOMATIC SPRINKLER SYSTEMS
2018 NEW JERSEY STATE BUILDING CODE AND 2016 NFPA 13 NOTES

1. SPRINKLER SYSTEM COMPLIES WITH NFPA 13-2016.
2. THE INSTALLATION COMPONENT, SIZING SPACING, CLEARANCES, POSITION AND TYPE OF SYSTEMS SHALL CONFORM TO NFPA 13 AND BC SECTION 903.
3. ONLY APPROVED AND LISTED MATERIALS SHALL BE USED AS PER CHAPTER 6 OF NFPA 13.
4. DIRECT CONNECTION OF SPRINKLERS TO THE PUBLIC WATER SYSTEM SHALL CONFORM TO NFPA 13 SECTION 15.2.1 AND 15.1.1(D).
5. SPRINKLER SHALL BE PROTECTED AGAINST FREEZING AND INJURY AS PER NFPA 13, SEC. 8.16.4.1 AND 6.2.8.
6. INSPECTIONS AND TESTS OF SPRINKLERS SHALL BE CONDUCTED AS PER SEC, 901.5 AND NFPA 13 CHAPTER 27.
7. THE OCCUPANCY OF THE AREAS TO BE SPRINKLERED IN ACCORDANCE WITH SECTIONS 5.2 AND A.5.2 OF NFPA 13.
8. WATER SUPPLY TEST PIPES AND GAUGES SHALL BE PROVIDED AS PER SECTION 8.17 OF NFPA 13.
9. PIPING, FITTING, SPECIFICATIONS, PIPE SCHEDULES, SYSTEM TEST PIPES, PROTECTION AGAINST CORROSION, DAMAGE, VALUES, HANGERS, SPRINKLER GUARDS AND SHIELDS SHALL BE AS PER NFPA 13, CHAPTERS 6 AND 9.
10. STOCK OF EXTRA SPRINKLERS SHALL BE FURNISHED AS PER SECTION 6.2.9 OF NFPA 13 (REQUIRED FOR EACH TEMPERATURE RATING).
11. SPRINKLER ALARM WILL BE IN ACCORDANCE WITH SECTION 8.17.1 OF NFPA 13.
12. SPACING, LOCATION AND POSITION OF SPRINKLER WILL BE AS PER CHAPTER 8 NFPA 13.
13. ALL BLIND SPACES EXCEEDING 6" IN WIDTH OR DEPTH WHICH CONTAIN COMBUSTIBLE MATERIAL WILL BE SPRINKLERED.
14. ALL PIPING PASSING THROUGH WALLS WILL COMPLY WITH SECTION BC712.
15. ALL STORAGE IS TO BE 12' IN HEIGHT OR LESS IN ACCORDANCE WITH SEPTEMBER 24, 2021 EMAIL WITH ARCHITECT.
16. CONTRACTOR IS RESPONSIBLE TO ENSURE DISTANCES OF SPRINKLERS FROM HEAT SOURCES AND OBSTRUCTIONS SHALL BE AS PER TABLES 8.3.2.5 (A), 8.3.2.5 (B), AND 8.6.5.1.2 OF NFPA 13 AS CONFIGURATION MAY CHANGE IN FIELD.
17. AS PER SECTION BC903.1.2 SUEZ WATER FIRE HYDRANT FLOW TEST LETTER IS PROVIDED WITH FLOW TEST DATA DUE TO DIRECT CONNECTION TO THE STREET WATER SUPPLY.
18. ALL PIPES PASSING THROUGH FOUNDATION WALLS SHALL BE PROTECTED AS PROVIDED BY SECTION 305.5 OF THE PLUMBING CODE.
19. ALL VALVES SHALL BE IDENTIFIED AS REQUIRED BY SECTION 6.6.4 OF NFPA 13.
20. DRAINAGE SHALL CONFORM TO SECTION 8.16.2 OF NFPA 13.
21. A ONE PIECE REDUCING FITTING OF GOOD DESIGN SHOULD BE USED WHENEVER A CHANGE IS MADE IN THE SIZE OF PIPE, AS PER SECTION 6.4.7.1 OF NFPA 13.
22. ALL VALVES ON CONNECTIONS TO WATER SUPPLY TO SPRINKLER SHALL BE APPROVED OS&Y OR APPROVED INDICATOR TYPE.
23. DRAIN VALVES AND TEST VALUES SHALL BE APPROVED TYPE AS PER SECTION 6.6 OF NFPA 13.
24. HANGERS SHOULD BE SUPPORTED BY WROUGHT IRON U TYPE OR APPROVED ADJUSTABLE HANGERS. HANGERS SHALL BE OF THE TYPE APPROVED FOR USE WITH THE PIPE OR TUBE INVOLVED. AS PER CHAPTER 9 OF NFPA 13.
25. PROVISIONS SHOULD BE MADE TO FACILITATE FLUSHING SYSTEM PIPING BY PROVIDING FLUSHING CONNECTION CONSISTING OF A CAPPED NIPPLE 4" LONG ON END OF A CROSS MAIN AS PER SECTION 8.16.3 OF NFPA 13.
26. SPRINKLERS SHALL BE AN APPROVED TYPE AS PER SECTION 8.3 OF NFPA 13.
27. TEMPERATURE RATING SHALL COMPLY WITH SECTION 8.3 OF NFPA 13.
28. 18" MINIMUM CLEARANCE TO BELOW SPRINKLER DEFLECTOR AS PER SECTION 8.5.6 OF NFPA 13.
29. SPACING AND LOCATION OF SPRINKLERS SHALL COMPLY WITH CHAPTER 8 OF NFPA 13.
30. SOURCES OF WATER SUPPLY FOR SPRINKLER SYSTEMS AS PER CHAPTER 24 OF NFPA 13.
31. HYDRAULICALLY DESIGNED SPRINKLER SYSTEMS SHALL BE IN ACCORDANCE WITH CHAPTER 11 OF NFPA 13.
32. MINIMUM BRANCH PIPE SIZE TO BE ONE INCH (1").
33. THIS APPLICATION IS MADE ONLY FOR WORK INDICATED ON THE SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.
34. INTERSTITIAL SPACE ABOVE CEILING IS TO BE MAINTAINED ABOVE 40 DEGREES FAHRENHEIT IN ACCORDANCE WITH AUGUST 24, 2021 EMAIL WITH MECHANICAL ENGINEER.

SPRINKLER SYSTEM GENERAL NOTES

1) AUTOMATIC SPRINKLER SYSTEM SHALL COMPLY WITH 2018 EDITION NEW JERSEY STATE BUILDING CODE SECTION 903 AND NFPA 13-2016.
2) SPRINKLERS SHALL NOT BE OMITTED FROM ANY ROOM MERELY BECAUSE IT IS DAMP, OF FIRE-RESISTANCE RATED CONSTRUCTION OR CONTAINS ELECTRICAL EQUIPMENT AS PER SECTION 903.3.1.1.1 OF BC.
3) AUTOMATIC SPRINKLERS SHALL BE INSTALLED WITH DUE REGARD TO OBSTRUCTIONS THAT WILL DELAY ACTIVATION OR OBSTRUCT THE WATER DISTRIBUTION PATTERN. AUTOMATIC SPRINKLERS SHALL BE INSTALLED IN OR UNDER COVERED KIOSKS, DISPLAYS, BOOTH, CONCESSION STANDS, OR EQUIPMENT THAT EXCEEDS 4 FEET IN WIDTH. NOT LESS THAN 3 FOOT CLEARANCE SHALL BE MAINTAINED BETWEEN AUTOMATIC SPRINKLERS AND TOP OF PILES OF COMBUSTIBLE FIBERS PER SECTION 903.3.3 OF BC.
4) FIRE HOSE THREADS USED IN CONNECTION WITH AUTOMATIC SPRINKLER SYSTEM SHALL BE APPROVED AND COMPATIBLE WITH FIRE DEPARTMENT HOSE THREADS PER SECTION 903.3.6 OF THE BC.
5) OCCUPANCY CLASSIFICATION SHALL COMPLY WITH CHAPTER 5 OF NFPA 13-2016.
6) REQUIREMENTS FOR CORRECT USE OF SPRINKLER SYSTEM COMPONENTS SHALL COMPLY WITH CHAPTER 6 OF NFPA 13-2016.
7) AUTOMATIC SPRINKLERS SHALL HAVE THEIR FRAME ARMS, DEFLECTOR, COATING MATERIAL, OR LIQUID BULB COLORED IN ACCORDANCE WITH THE REQUIREMENTS OF TABLE 6.2.5.1 OF NFPA 13-2016.
8) ALL CONTROL, DRAIN AND TEST CONNECTION VALVES SHALL BE PROVIDED WITH PERMANENTLY MARKED WEATHERPROOF METAL OR RIGID PLASTIC IDENTIFICATION SIGNS. SECTION 6.6.4.1 OF NFPA 13-2016.
9) THE MAXIMUM FLOOR AREA TO BE PROTECTED BY A SINGLE RISER FROM A CONTROL VALVE AND ALARM DEVICE SHALL COMPLY WITH SECTION 8.2.1 OF NFPA 13-2016.
10) SPRINKLERS OF INTERMEDIATE AND HIGH TEMPERATURE RATINGS SHALL BE INSTALLED IN SPECIFIC LOCATIONS AS REQUIRED BY SECTION 8.3.2 OF NFPA 13-2016.
11) SPRINKLERS SHALL BE LOCATED, SPACED AND POSITIONED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 8.5 OF NFPA 13-2016.
12) PROTECTION AREAS AND MAXIMUM SPACING FOR EACH HAZARD SHALL COMPLY WITH TABLE 8.6.2.2.1(a) THROUGH (d) OF NFPA 13-2016.
13) DRAIN CONNECTIONS FOR SYSTEMS SUPPLY RISERS AND MAINS SHALL BE SIZED IN ACCORDANCE WITH TABLE 8.16.2.4.2 OF NFPA 13-2016.
14) TYPES OF HANGERS SHALL BE IN ACCORDANCE WITH THE REQUIREMENT OF SECTION 9.1 OF NFPA 13-2016.
15) MAXIMUM DISTANCE BETWEEN HANGERS SHALL COMPLY WITH TABLE 9.2.2.1 OF NFPA 13-2016.
16) HOSE STREAM DEMAND AND WATER SUPPLY DURATION REQUIREMENT SHALL COMPLY WITH SECTION 11.2.3.1. OF NFPA 13-2016.
17) OWNER SHALL NOTIFY BUILDING DEPARTMENT OF SPRINKLER SYSTEM DISCONNECTION, AND TEMPORARY FIRE PROTECTION MEASURES TO BE PROVIDED AS REQUIRED.
18) CONTRACTOR IS TO PROVIDE DRAIN ON ANY TRAPPED SECTIONS CREATED DURING CONSTRUCTION EXCEEDING 5 GALLONS IN ACCORDANCE WITH NFPA 13-2016 SECTION 8.16.2.5.2.
19) ALL SPRINKLER HEADS ARE TO BE INSTALLED IN ACCORDANCE WITH THEIR LISTING AND CEILING CLEARANCE DISTANCE.
20) SPRINKLER ACTIVATION TEMPERATURE RATING IS TO COMPLY WITH NFPA 13-2016 SECTION 8.3.2.
21) AREA OF WORK IS NOT WITHIN SPECIAL FLOOD HAZARD AREA.
22) DRY PENDENT SPRINKLERS ARE TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER INSTALLATION DOCUMENTS.
23) CONTRACTOR TO LOCATE SPRINKLERS AT HALF AND QUARTER TILE LOCATIONS.
24) SPACING NOT TO EXCEED 130 FT^2 FOR ORDINARY HAZARD AND 225 FT^2 FOR LIGHT HAZARD IN ACCORDANCE WITH NFPA 13-2016, CHAPTER 8.
25) STORAGE AREAS ARE TO BE FULLY ENCLOSED FROM FLOOR TO CEILING/ROOF DECK.
26) SPRINKLER PIPING IN ELECTRICAL ROOM IS NOT TO BE INSTALLED ABOVE ELECTRICAL EQUIPMENT.
27) SPRINKLER MAIN, CROSS MAIN, AND BRANCH LINE PIPING ARE TO BE PAINTED WITH EPOXY PAINT AND ALL PIPING ABOVE REFRIGERATED AREAS ARE TO BE INSULATED TO PROTECT FROM CONDENSATION. INSULATION IS NOT TO INTERFERE WITH EXPOSED BARREL LENGTH.
28) DRY PENDENT SPRINKLERS ARE REQUIRED TO AVE EXPOSED THE MINIMUM BARREL LENGTH IN ACCORDANCE WITH NFPA 13, 8.4.9.1(a).

APPLICABLE CODES

NEW JERSEY STATE BUILDING CODE 2018 EDITION

NEW JERSEY FIRE PREVENTION SUBCODE 2018 EDITION

NEW JERSEY STATE MECHANICAL CODE 2018 EDITION

NFPA 13 2016 EDITION

SCOPE OF WORK

THE SCOPE OF THIS PROJECT IS TO MODIFY EXISTING AUTOMATIC, WET-PIPE FIRE SPRINKLER SYSTEM THROUGHOUT THE BUILDING IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS.

JENSEN HUGHES
254 WEST 31ST STREET
8TH FLOOR
NEW YORK, NY 10001
+1 212.695.6670
WWW.JENSENHUGHES.COM

PROJECT NAME:
LORENZO FOODS
SPRINKLER DESIGN
LORENZO FOODS
25 CENTRAL AVENUE
TETERBORO, NJ

IT IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

DESIGNED BY: TEW
DRAWN BY: TEW
CHECKED BY: MAA

ISSUED FOR: 100% DESIGN
ISSUE DATE: 10/11/2021
PROJECT NUMBER: 1NYC21050
PERMIT #: ---

SHEET TITLE:
FIRE SPRINKLER
SHEET NOTES

FP-001.00
1 OF 6

PLOTTED: 10/21/21 8:28AM BY TWENDT
DRAWING: C:\USERS\TWENDT\DESKTOP\LORENZO FOOD\DRAWINGS\WORKING MODEL\LORENZO FOOD FIRE PROTECTION DESIGN.DWG [FP-001.00 COVER PAGE] 10/21/21 8:28AM

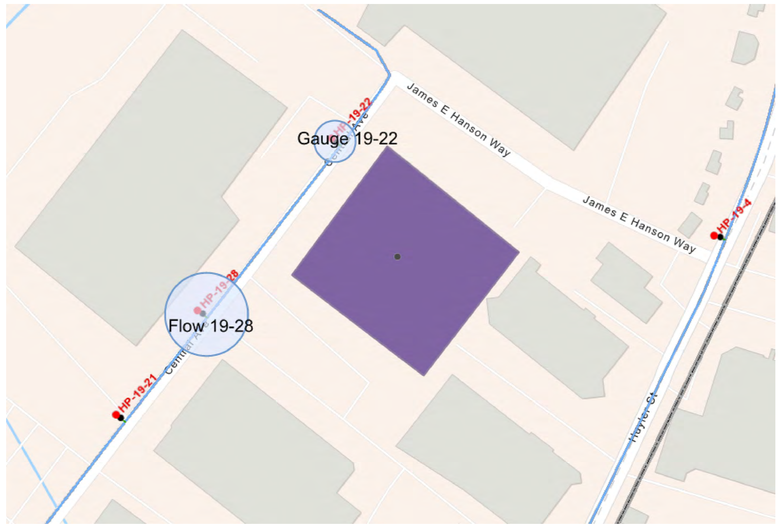
ABBREVIATIONS

-A-	
AFF	ABOVE FINISHED FLOOR
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS
-C-	
CLG	CEILING
-D-	
DEMO	DEMOLITION
DN	DOWN
DR	DRAIN
DWG	DRAWING
-E-	
EX	EXISTING TO REMAIN
-F-	
FCVA	FLOOR CONTROL VALVE ASSEMBLY
FDC	FIRE DEPARTMENT CONNECTION
FHC	FIRE HOSE CABINET
FHR	FIRE HOSE RACK
FLR	FLOOR
FP	FIRE PROTECTION
FSP	FIRE STANDPIPE
FT	FEET / FOOT
-G-	
GAL	GALLON
GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
-I-	
IN	INCH
-M-	
MAX	MAXIMUM
MIN	MINIMUM OR MINUTE
-N-	
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
-P-	
PSI	POUNDS PER SQUARE INCH
-R-	
RPZ	REDUCED PRESSURE ZONE
-S-	
SP	SPRINKLER, SPRINKLER PIPING

SQ FT	SQUARE FEET
-T-	
TYP	TYPICAL
-U-	
UL	UNDERWRITERS LABORATORY
-W-	
W/	WITH
W/O	WITHOUT

SYMBOLS LEGEND

1 FP-201 TITLE SCALE: NTS	TITLE MARK DETAIL
xxx	HYDRAULIC REFERENCE NODE
	NEW SPRINKLER PIPING
	NEW ABOVEGROUND PIPE
	SPRINKLER RISER
	UPRIGHT SPRINKLER
	DRY PENDENT SPRINKLER
	STANDARD PENDENT SPRINKLER
	IN-RACK SIDEWALL SPRINKLER
	REDUCED PRESSURE ZONE BACKFLOW PREVENTER ASSEMBLY
	UNDERGROUND FIRE SERVICE CONTROL VALVE
	OS&Y VALVE
	BUTTERFLY VALVE
	CHECK VALVE
	RISER CHECK VALVE
	DRY PIPE VALVE
	WATERFLOW SWITCH
	PRESSURE SWITCH
W	PRESSURE GAUGE
	FIRE DEPARTMENT CONNECTION



FLOW TEST RESULTS

TEST DATE: AUGUST 6, 2021
PERFORMED BY: SUEZ WATER

STATIC: 105 PSI
RESIDUAL: 80 PSI
FLOW: 1163 GPM

"TEST GAUGE" LOCATION: HYDRANT HP-19-22

"FLOW" LOCATION: HYDRANT HP-19-28

NORTH

SPRINKLER SCHEDULE

SYMBOL	SPRINKLER ORIENTATION	K-FACTOR	TEMPERATURE RATING	ORIFICE SIZE	FINISH
	UPRIGHT (STANDARD)	8.0	155°F	17/32"	BRASS
	DRY PENDENT	8.0	161°F	17/32"	STAINLESS STEEL
	PENDANT (STANDARD)	8.0	161°F	17/32"	STAINLESS STEEL
	IN-RACK	5.6	155°F	1/2"	BRASS
	DRY-SIDEWALL	8.0	155°F	1/2"	STAINLESS STEEL

NOTE: FOR ALL WASHDOWN AREAS, AS INDICATED BY ARCHITECTURAL PLANS, CONTRACTOR TO ENSURE THAT INSTALLED SPRINKLERS ARE SPRINKLERS AND ESCUTCHEONS ARE COMPOSED OF 316 STAINLESS STEEL OR APPROVED COATING TO PREVENT CORROSION. CONTRACTOR TO PROVIDE PRICING FOR BOTH OPTIONS. ADDITIONALLY, EXTENDED ESCUTCHEONS MAY BE REQUIRED FOR EVAPORATOR UNIT SPRINKLERS. CONTRACTOR TO VERIFY CORRECT SPRINKLER INSTALLED AND CORRECT ESCUTCHEON USED SUCH THAT EVAPORATOR DOES NOT REPRESENT AN OBSTRUCTION.

SYSTEM DESIGN CRITERIA

OCCUPANCY CLASSIFICATION	DENSITY (GPM/SQ FT)	DESIGN AREA (SQ FT)	HOSE ALLOWANCE (GPM)	MAXIMUM COVERAGE AREA (SQ FT)	MINIMUM K-FACTOR	SPRINKLER SYSTEM TYPE
LIGHT HAZARD: OFFICES	0.10	1500	100	225	K = 5.6	WET
ORDINARY HAZARD GROUP 2: STORAGE	N/A	12 ESFR SPRINKLERS	250	100	K = 25.2 @15 PSI	WET
ORD. HAZARD GROUP 2: FOOD PROCESSING	0.20	1500	250	130	K = 8.0	WET

NOTE: RACK STORAGE OF GROUP A PLASTICS REQUIRED TO HAVE 1 LAYER OF IN-RACK SPRINKLERS IN ACCORDANCE WITH NFPA 13, TABLE 13.2.1

SYSTEM DESIGN CRITERIA #1

REMOTE AREA:	BOX/PACKAGE STORAGE
OCCUPANCY TYPE:	STORAGE
DESIGN DENSITY:	0.2 GPM/FT^2 + 4 IN-RACK
AREA OF OPERATION:	1500 SQ FT
COVER PER SPRINKLER:	130 SF
SYSTEM DEMAND:	535 GPM
HOSE STREAM:	250 GPM
AVAILABLE PRESSURE AT SUPPLY:	93 PSI @ 785 GPM
REQUIRED PRESSURE AT SUPPLY:	61 PSI @ 785 GPM

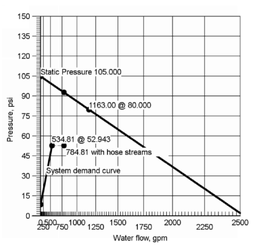
SYSTEM DESIGN CRITERIA #2

REMOTE AREA:	FREEZER 129
OCCUPANCY TYPE:	STORAGE
DESIGN DENSITY:	0.2 GPM/FT^2
AREA OF OPERATION:	1500 SQ FT
COVER PER SPRINKLER:	130 SF
SYSTEM DEMAND:	424 GPM
HOSE STREAM:	250 GPM
AVAILABLE PRESSURE AT SUPPLY:	96 PSI @ 674 GPM
REQUIRED PRESSURE AT SUPPLY:	37 PSI @ 674 GPM

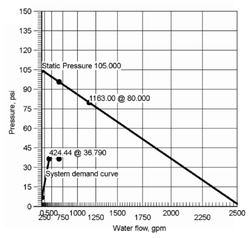
SYSTEM DESIGN CRITERIA #3

REMOTE AREA:	ASSEMBLY SCALING PACKAGING
OCCUPANCY TYPE:	F-2
DESIGN DENSITY:	0.2 GPM/FT^2
AREA OF OPERATION:	1500 SQ FT
COVER PER SPRINKLER:	130 SF
SYSTEM DEMAND:	698 GPM
HOSE STREAM:	250 GPM
AVAILABLE PRESSURE AT SUPPLY:	88 PSI @ 948 GPM
REQUIRED PRESSURE AT SUPPLY:	60 PSI @ 948 GPM

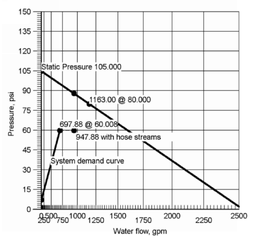
CALCULATION 1 DEMAND GRAPH



CALCULATION 2 DEMAND GRAPH



CALCULATION 3 DEMAND GRAPH



JENSEN HUGHES
254 WEST 31ST STREET
8TH FLOOR
NEW YORK, NY 10001
+1 212.695.6670
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25 CENTRAL AVENUE
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DESIGNED BY: TEW
DRAWN BY: TEW
CHECKED BY: MAA

ISSUED FOR: 100% DESIGN
ISSUE DATE: 10/11/2021
PROJECT NUMBER: 1NYC21050
PERMIT #: ---

SHEET TITLE:
FIRE SPRINKLER SYMBOL LEGEND AND HYDRAULIC DEMAND

FP-002.00

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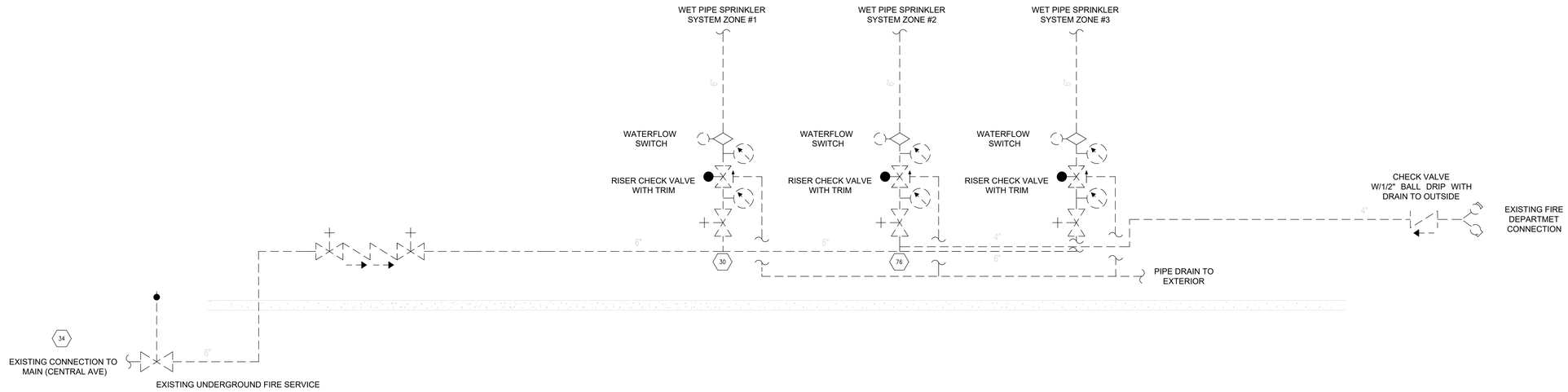
SYMBOLS LEGEND

1 TITLE EP-201 SCALE: NTS	TITLE MARK DETAIL
	REVISION CLOUD
1	KEY NOTE
HN	HYDRAULIC REFERENCE NODE
	HYDRAULIC CALCULATION AREA
	EXISTING PIPING
	NEW PIPING
	SPRINKLER RISER
	PIPE CONTINUATION
	PIPE ELBOW FITTING
	PIPE TEE FITTING
	PIPE RISE
	POINT OF CONNECTION
	REDUCED PRESSURE ZONE BACKFLOW PREVENTER ASSEMBLY
	UNDERGROUND FIRE SERVICE CONTROL VALVE
	OS&Y VALVE
	BUTTERFLY VALVE
	CHECK VALVE
	RISER CHECK VALVE
	DRY PIPE VALVE
	WATERFLOW SWITCH
	PRESSURE SWITCH
	PRESSURE GAUGE
	FIRE DEPARTMENT CONNECTION



FIRE PROTECTION CONCEPTUAL RISER DIAGRAM

SCALE: NOT TO SCALE

JENSEN HUGHES
254 WEST 31ST STREET
8TH FLOOR
NEW YORK, NY 10001
+1 212.695.6670
WWW.JENSENHUGHES.COM

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DESIGNED BY:	TEW
DRAWN BY:	TEW
CHECKED BY:	MAA
ISSUED FOR:	100% DESIGN
ISSUE DATE:	10/11/2021
PROJECT NUMBER:	1NYC21050
PERMIT #:	---

SHEET TITLE:
FIRE SPRINKLER SYSTEM CONCEPTUAL RISER DIAGRAM

FP-003.00

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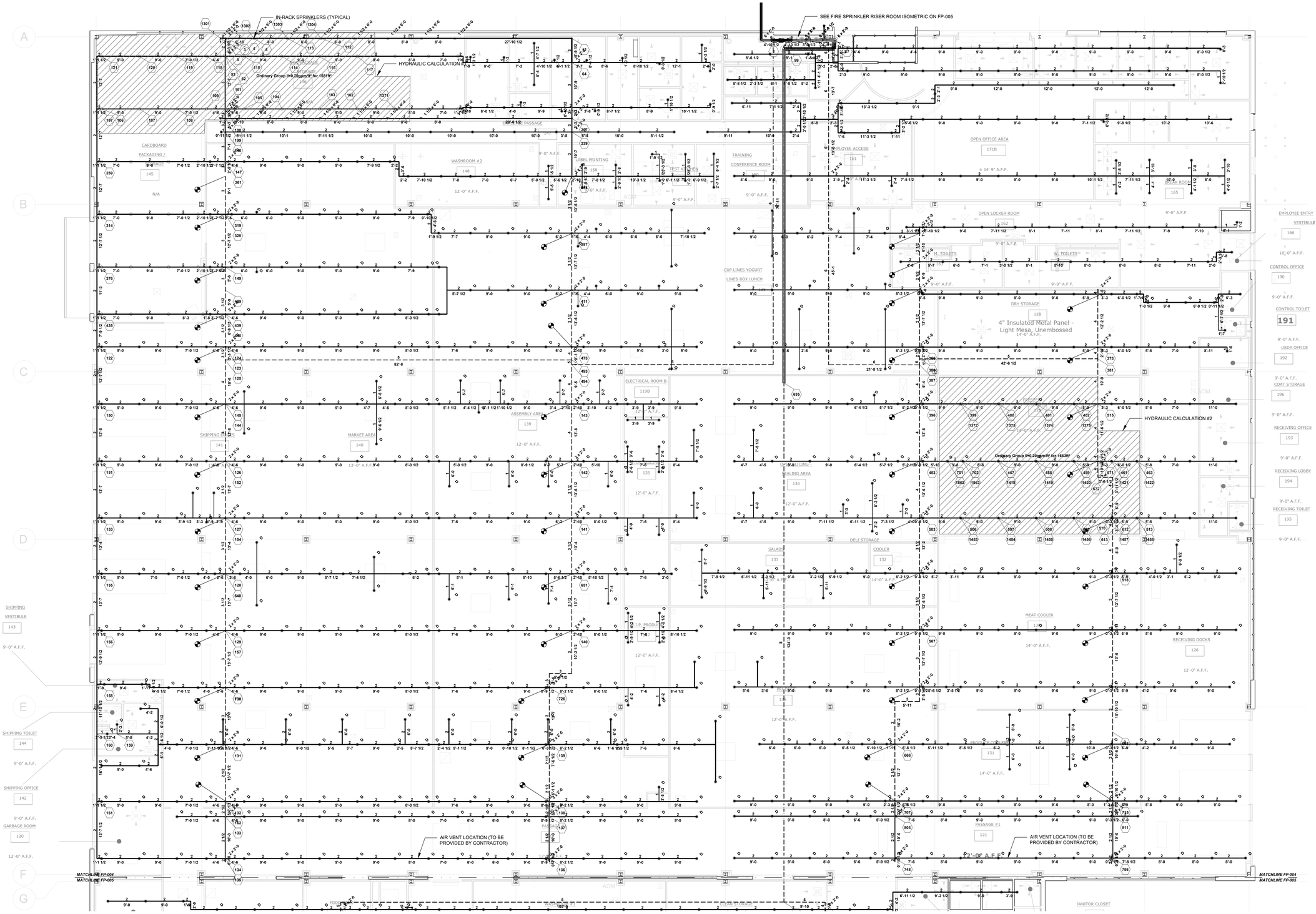

FIRE SPRINKLER LAYOUT

SCALE: 1/8" EQUALS 1'-0"

0 4' 8' 16'

1/8"=1'-0"

JENSEN HUGHES
294 WEST 31ST STREET
8TH FLOOR
NEW YORK, NY 10001
+1.212.695.6670
WWW.JENSENHUGHES.COM

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DESIGNED BY:	TEW
DRAWN BY:	TEW
CHECKED BY:	MAA
ISSUED FOR:	100% DESIGN
ISSUE DATE:	10/11/2021
PROJECT NUMBER:	1NYC21050
PERMIT #:	---

SHEET TITLE:

FIRE SPRINKLER SYSTEM LAYOUT

FP-004.00

4 OF 6

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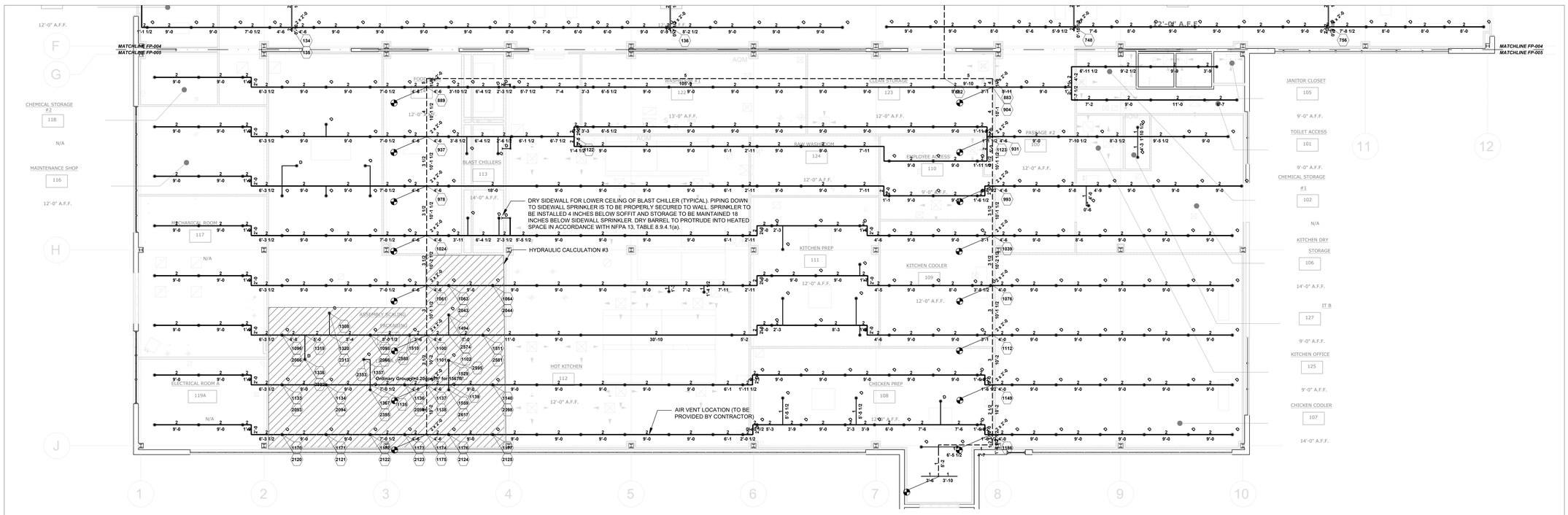
DRAWING: C:\USERS\TWENDT\DESKTOP\LORENZO FOOD\DRAWINGS\WORKING MODEL\LORENZO FOOD FIRE PROTECTION DESIGN.DWG [FP-100.00 OVERALL SPRINKLER PLAN] 10/21/21 8:28AM

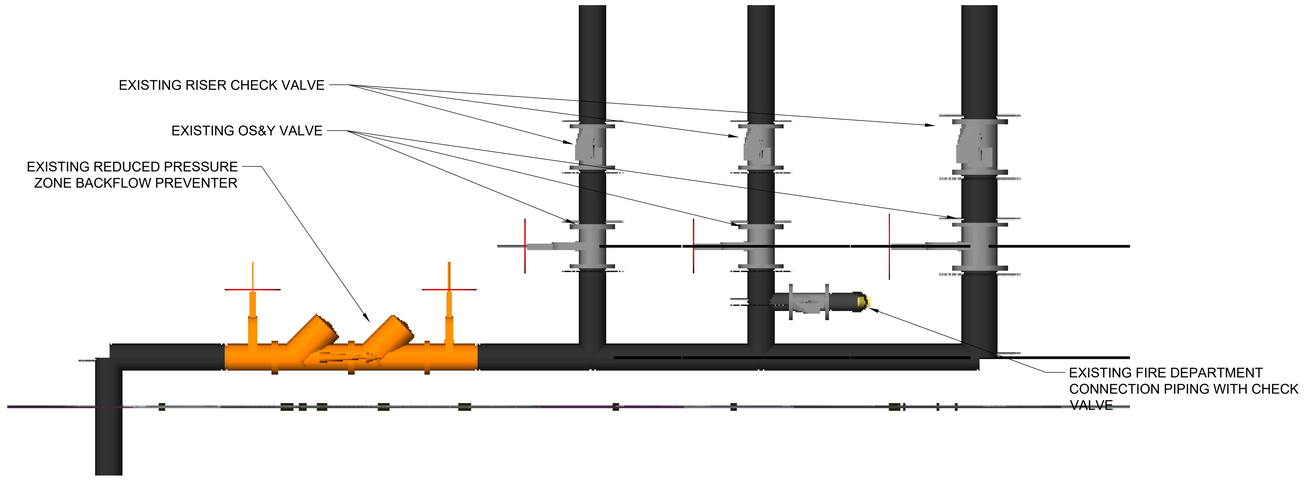


FIRE SPRINKLER LAYOUT

SCALE: 1/8" EQUALS 1'-0"

0 4' 8' 16'

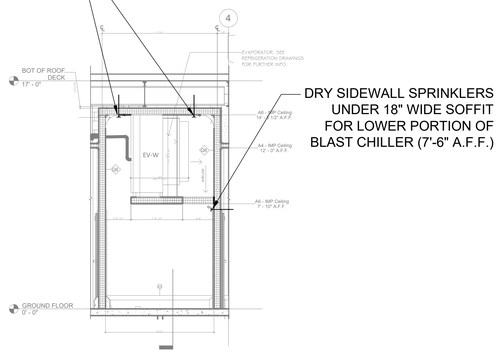
1/8"=1'-0"



FIRE SPRINKLER RISER ROOM ISOMETRIC

SCALE: NTS

DRY PENDENT SPRINKLERS AT UPPER CEILING (14'-0" A.F.F.)



BLAST CHILLER ELEVATION DRAWING (TYPICAL FOR 3 BLAST CHILLERS)

SCALE: NTS

JENSEN HUGHES
254 WEST 31ST STREET
8TH FLOOR
NEW YORK, NY 10001
+1.212.695.6670
WWW.JENSENHUGHES.COM

PROJECT NAME:
LORENZO FOODS
SPRINKLER DESIGN
LORENZO FOODS
25 CENTRAL AVENUE
TETERBORO, NJ

DESIGNED BY:	TEW
DRAWN BY:	TEW
CHECKED BY:	MAA
ISSUED FOR:	100% DESIGN
ISSUE DATE:	10/11/2021
PROJECT NUMBER:	1NYC21550
PERMIT #:	---

SHEET TITLE:
FIRE SPRINKLER SYSTEM LAYOUT

FP-005.00

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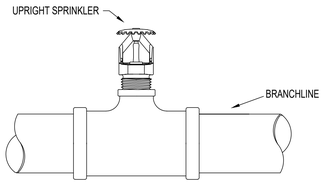
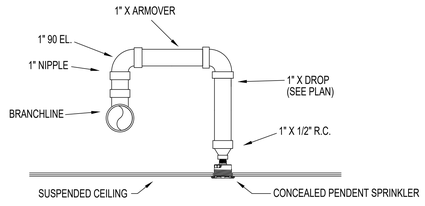


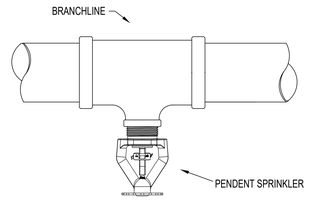
1 TYPICAL UPRIGHT SPRINKLER INSTALLATION DETAIL

SCALE: NOT TO SCALE



2 TYPICAL PENDENT SPRINKLER RETURN BEND DETAIL

SCALE: NOT TO SCALE



3 TYPICAL PENDENT SPRINKLER INSTALLATION DETAIL

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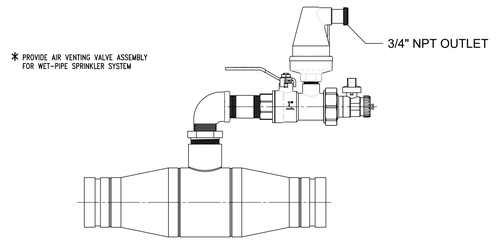
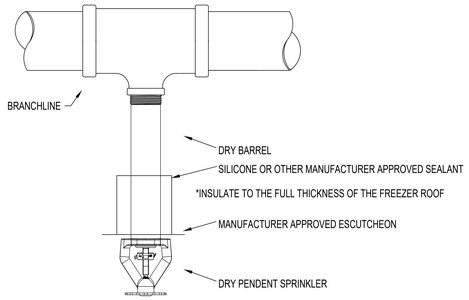


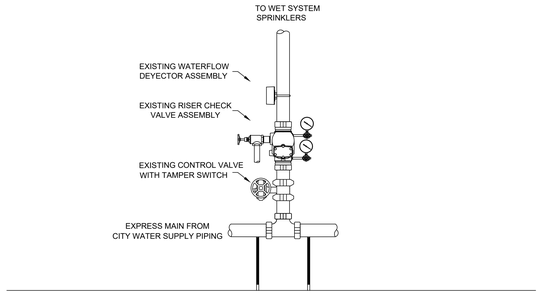
4 TYPICAL AIR VENTING VALVE ASSEMBLY DETAIL

SCALE: NOT TO SCALE



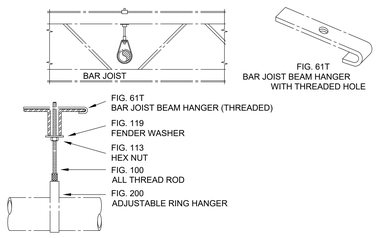
5 TYPICAL DRY PENDENT SPRINKLER INSTALLATION DETAIL

SCALE: NOT TO SCALE



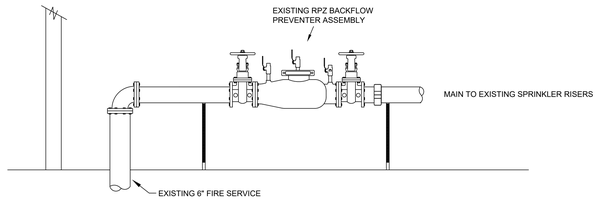
6 TYPICAL SPRINKLER SYSTEM RISER ASSEMBLY DETAIL

SCALE: NOT TO SCALE



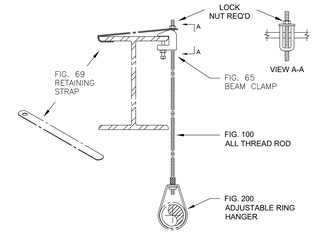
7 TYPICAL BAR JOIST BEAM HANGER ASSEMBLY DETAIL

SCALE: NOT TO SCALE



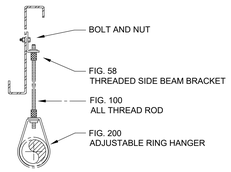
8 TYPICAL BACKFLOW PREVENTER ASSEMBLY DETAIL

SCALE: NOT TO SCALE



9 TYPICAL TOP BEAM CLAMP HANGER ASSEMBLY DETAIL

SCALE: NOT TO SCALE



11 TYPICAL SIDE BEAM BRACKET HANGER ASSEMBLY DETAIL

SCALE: NOT TO SCALE

JENSEN HUGHES
254 WEST 31ST STREET
8TH FLOOR
NEW YORK, NY 10001
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25 CENTRAL AVENUE
TETERBORO, NJ

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DESIGNED BY:	TEW
DRAWN BY:	TEW
CHECKED BY:	MAA
ISSUED FOR:	100% DESIGN
ISSUE DATE:	10/11/2021
PROJECT NUMBER:	1NYC21050
PERMIT #:	---

SHEET TITLE:
FIRE SPRINKLER
SYSTEM DETAILS

FP-006.00

PLOTTED: 10/21/21 8:29AM BY TWENDT
DRAWING: C:\USERS\TWEND1\DESKTOP\LORENZO FOOD\DRAWINGS\WORKING MODEL\LORENZO FOOD FIRE PROTECTION DESIGN.DWG [FP-500.00 DETAILS PLAN] 10/21/21 8:28AM