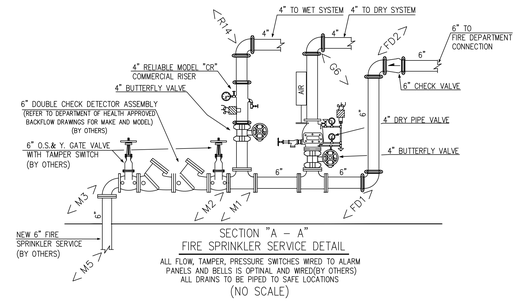
OWNER'S NOTE:
ENTIRE BUILDING MUST MAINTAIN ABOVE 55° F AT ALL TIMES.

HANGER TYPE 28

ALL MATERIAL TO BE 3/8" FOR PIPE 1" TO 4" DIA.
ALL MATERIAL TO BE ½" FOR PIPE 6" AND LARGER

FIRST FLOOR FIRE SPRINKLER HEAD LEGEND

SYM	SPRINKLER LEGEND DESCRIPTION	TEMPERATURE(F) 155	165	175	200	212	SIZE ORF	NPT	K	SN NUMBER
	RELIABLE MODEL "GS-56" CONCEALED PENDENT SPKR (QUICK RESPONSE TYPE)						½"	½"	5.6	RA3415
	RELIABLE MODEL "F1FR56" UPRIGHT SPRINKLER WITH CAGES (QUICK RESPONSE TYPE)						½"	½"	5.6	RA1425
	RELIABLE MODEL "F1FR56" UPRIGHT SPRINKLER (QUICK RESPONSE TYPE)						½"	½"	5.6	RA1425
	RELIABLE MODEL "F1FR QREC" EXTENDED COVERAGE SIDEWALL SPRINKLER (QUICK RESPONSE TYPE)						¾"	¾"	8.0	R4862
	RELIABLE MODEL "F3QR56" DRY PENDENT SPRINKLER (QUICK RESPONSE TYPE)							1"	5.6	R5714
	VICTAULIC MODEL "VS1" VICFLEX DRY PENDENT SPRINKLER (QUICK RESPONSE TYPE)						½"	½"	5.6	V3506
	VICTAULIC MODEL "VS1" VICFLEX DRY SIDEWALL SPRINKLER (QUICK RESPONSE TYPE)						½"	½"	5.6	V3509
	TRASH CHUTE SPRINKLER									



SECTION "A – A"
FIRE SPRINKLER SERVICE DETAIL

ALL FLOW, TAMPER, PRESSURE SWITCHES WIRED TO ALARM PANELS AND BELLS IS OPTINAL AND WIRED(BY OTHERS)
ALL DRAINS TO BE PIPED TO SAFE LOCATIONS
(NO SCALE)

3.3.12.5 Manual wet standpipe system - a standpipe system containing water at all times that relies exclusively on the fire department connection to supply the system demand.

5.3.1 Class I System - A Class I standpipe system shall provide 2 ½" hose connections to supply water for use by fire department and those trained in handling heavy fire streams.

Section 5.4.1.1 - Class I standpipe systems shall be permitted to be automatic dry, automatic wet, semiautomatic dry, manual dry, or manual wet in buildings not classified as high-rise buildings.

Section 6.4.5.2 - Each Fire Department Connection shall be designated by a sign, with letters at least 1 in in height, that reads "Manual Wet Standpipe"

Section 7.7.3 - Where a manual system is permitted by Section 5.4 and an attached water supply is provided to supply an automatic sprinkler system or to maintain water in a wet system, the attached water supply shall not be required to satisfy the standpipe system demand.

Section 7.7.4 - When the system demand to be supplied by the fire department at the fire department connection is being determined, the local fire department shall be consulted regarding the water supply available from a fire department pumper.

Section 7.8.1 - Hydraulically designed standpipe systems shall be designed to provide the waterflow rate required by Section 7.10 at a minimum residual pressure of 100 psi (6.9 bar) at the outlet of the hydraulically most remote 2-1/2 in. (65 mm) hose connection.

Section 7.8.1.1. - Manual standpipe system shall be deigned to provide 100 Psi at the topmost outlet with the calculations terminating at the fire department connections.

Section 7.10.1.1.1 - For Class I or Class III systems, the minimum flow rate for hydraulically most remote standpipe shall be 500 GPM, through two 2 ½" outlets.

Section 7.10.1.1.3 - The minimum flow rate for additional standpipes shall be 250 GPM per standpipe.

Section 7.12.3 - Fire Department Connections sizes shall be based on the standpipe system demand and shall include one 2 ½" inlet per every 250 GPM.

Section 9.1.2 - Manual Standpipe systems shall have an approved water supply accessible to a fire department pumper.

FIRE SPRINKLER NOTES:

CONTRACTOR IS RESPONSIBLE TO INSTALL FIRE SPRINKLER SYSTEM AS PER N.F.P.A. #13 2016 EDITION AND LOCAL A.H.J. REQUIREMENTS.

WHERE ABOVEGROUND WATER-FILLED SUPPLY PIPES, RISERS, SYSTEM RISERS, OR FEED MAINS PASS THROUGH OPEN AREAS, COLD ROOMS, PASSAGEWAYS, OR OTHER AREAS EXPOSED TO FREEZING TEMPERATURES, THE PIPE SHALL BE PROTECTED AGAINST FREEZING BY CONTRACTOR/OWNER USING INSULTING COVERINGS, FROSTPROOF CASINGS, OR OTHER RELIABLE MEANS CAPABLE OF MAINTAINING A MINIMUM TEMPERATURE BETWEEN 40° F & 120° F

SPRINKLERS LOCATED NEAR A HEAT SOURCE OR IN AREAS WHERE THE AMBIENT TEMPERATURE MAY BE HIGH SUCH AS ATTICS, ELECTRIC ROOMS, UNDER SKYLIGHTS, BOILER ROOMS, KITCHENS, ETC. SHALL HIGH TEMPERATURE TYPE.

SPRINKLER CONTRACTOR IS RESPONSIBLE FOR ALL AS-BUILT CONDITIONS.

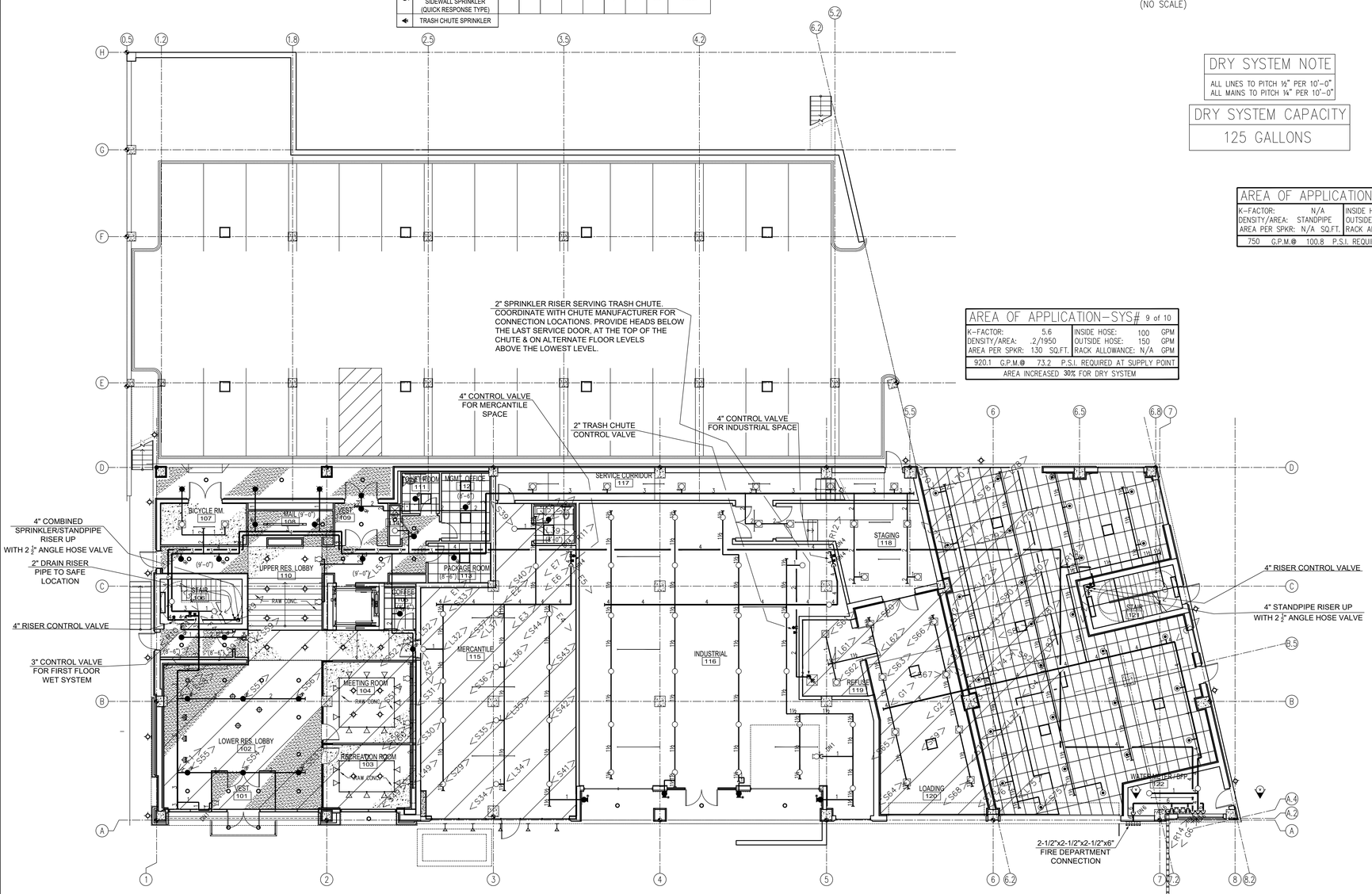
CONTRACTOR IS TO PROVIDE AN ACCURATE SET OF AS-BUILT DRAWINGS TO THE OWNER INDICATING ALL CHANGES MADE IN THE FIELD. THESE AS-BUILT DRAWINGS ARE TO REFLECT ANY ARCHITECTURAL CHANGES THAT ARE NOT SHOWN ON THE PLANS AS WELL AS ALL PIPE CHANGES.

CONTRACTOR IS RESPONSIBLE TO VERIFY WATER SUPPLY PRESSURE.

AS PER N.F.P.A. #13 2016 EDITION. THE OWNER SHALL BE RESPONSIBLE FOR THE CONDITION OF A SPRINKLER SYSTEM AND SHALL KEEP THE SYSTEM IN NORMAL OPERATING CONDITION.

BACKFLOW PREVENTER MUST BE APPROVED BY HEALTH DEPARTMENT BEFORE BEING INSTALLED.

THIS FIRE SUPPRESSION SYSTEM HAS BEEN DESIGNED BASED ON N.F.P.A. #13 2016 EDITION GUIDELINES ON THE DATE INDICATED ON THE DRAWING. FIRE PROTECTION DESIGN, INC. CANNOT BE HELD RESPONSIBLE FOR ANY FUTURE CHANGES OF OCCUPANCY AND/OR MODIFICATIONS TO THE EXISTING FIRE SUPPRESSION SYSTEM AS DESIGNED OR INSTALLED.



FIRST FLOOR – FIRE SPRINKLER PLAN

SCALE: ⅛" = 1'-0"

DRY SYSTEM NOTE

ALL LINES TO PITCH ½" PER 10'-0"
ALL MAINS TO PITCH ¼" PER 10'-0"

DRY SYSTEM CAPACITY

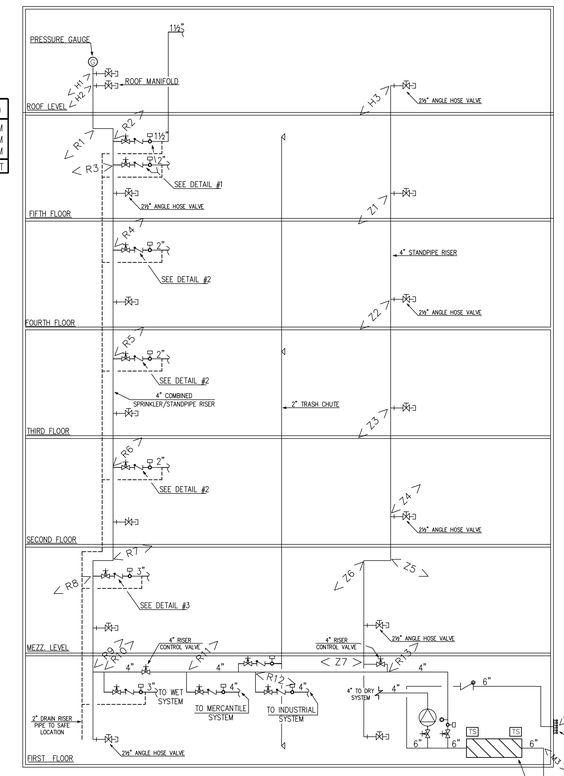
125 GALLONS

AREA OF APPLICATION–SYS# 10 of 10

K–FACTOR:	N/A	INSIDE HOSE:	N/A GPM
DENSITY/AREA:	STANDPIPE	OUTSIDE HOSE:	N/A GPM
AREA PER SPKR:	N/A SQ.FT.	RACK ALLOWANCE:	N/A GPM
750 G.P.M.@	100.8 P.S.I. REQUIRED AT SUPPLY POINT		

AREA OF APPLICATION–SYS# 9 of 10

K–FACTOR:	5.6	INSIDE HOSE:	100 GPM
DENSITY/AREA:	.2/1950	OUTSIDE HOSE:	150 GPM
AREA PER SPKR:	130 SQ.FT.	RACK ALLOWANCE:	N/A GPM
920.1 G.P.M.@	73.2 P.S.I. REQUIRED AT SUPPLY POINT		
AREA INCREASED 30% FOR DRY SYSTEM			



RISER DIAGRAM

SCALE: NONE

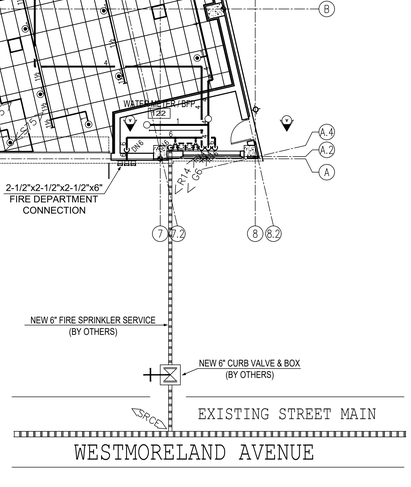
AREA OF APPLICATION–SYS# 8 OF 10

K–FACTOR:	5.6/8.0	INSIDE HOSE:	100 GPM
DENSITY/AREA:	.1/1500	OUTSIDE HOSE:	N/A GPM
AREA PER SPKR:	16'x18' SQ.FT.	RACK ALLOWANCE:	N/A GPM
468.8 G.P.M.@	83.0 P.S.I. REQUIRED AT SUPPLY POINT		
AREA REDUCED 40 % FOR QUICK RESPONSE SPRINKLERS			

AREA OF APPLICATION–SYS# 6 of 10

K–FACTOR:	5.6	INSIDE HOSE:	100 GPM
DENSITY/AREA:	.2/1500	OUTSIDE HOSE:	150 GPM
AREA PER SPKR:	130 SQ.FT.	RACK ALLOWANCE:	N/A GPM
689.5 G.P.M.@	71.1 P.S.I. REQUIRED AT SUPPLY POINT		

PIPING NOTE FOR FIRST FLOOR:
ALL 1" PIPE TO BE STEEL – BLACK PIPE SCHEDULE #40
ALL 1½" – 6" PIPE TO BE STEEL – BLACK PIPE SCHEDULE #10



STANDPIPE SYSTEM HAS BEEN DESIGNED FOR A MANUAL WET STANDPIPE SYSTEM. IT DOES NOT MEET THE 100 PSI REQUIREMENT AT THE TOP MOST OUTLET. THIS MANUAL WET STANDPIPE SYSTEM CONTAINS WATER AT ALL TIMES AND RELIES EXCLUSIVELY ON THE FIRE DEPARTMENT PUMPER TO SUPPLY THE STANDPIPE DEMAND. BY APPROVING THESE PLANS ALL PARTIES ACKNOWLEDGE THIS BUILDING MANUAL WET STANDPIPE SYSTEM.

FIRE DEPARTMENT SIGN NOTE:
DEMAND AT FDC:
(3) HOSE VALVE FLOWING W/ 250 GPM
@ 100 PSI AT THE MOST REMOTE HOSE VALVE.
MOST REMOTE HOSE VALVE AT TOP OF STAIRWELL 106.
FIRE DEPARTMENT TO PROVIDE
750 GPM @ 175 PSI

WATER PRESSURE

STATIC PRESSURE:	98 P.S.I.
RESIDUAL PRESSURE:	90 P.S.I.
GPM FLOWING:	1453 G.P.M.
TEST TAKEN:	12/17/15
BY:	WHITE PLAINS WATER DEPT.

HYDRAULIC CALCULATIONS HAVE BEEN PREFORMED BASED ON THE HYDRANT FLOW TEST TAKEN ON THIS DATE. FIRE PROTECTION DESIGN, INC. CANNOT BE HELD RESPONSIBLE FOR ANY FUTURE CHANGES OR DEPLETION OF THE WATER SUPPLY AND/OR MODIFICATIONS TO THE EXISTING OF THE WATER SUPPLY OR MODIFICATIONS TO THE FIRE SUPPRESSION SYSTEM.

BACKLFOW PREVENTER MUST BE APPROVED BY WESTCHESTER COUNTRY HEALTH DEPARTMENT BEFORE BEING INSTALLED

NO	REVISIONS	DATE	BY

PAPP ARCHITECTS
188 EAST POST ROAD WHITE PLAINS, NEW YORK 10601

WESTMORELAND LOFTS

FIRST FLOOR FIRE SPRINKLER PLAN
136–158 WESTMORELAND AVENUE WHITE PLAINS, NEW YORK 10606

PLANS DRAWN BY
FIRE PROTECTION DESIGN, INC.
(845)634–2133 NICET CERTIFIED (845)634–2144

JOB NO	DWG NO
2021–C–966	1 OF 3

SCALE: 1/8"=1'-0" DRAWN: 3/22/21 BY: M.K.

IMPORTANT DISCLAIMER
THE NEW YORK STATE EDUCATION LAW PERTAINING TO PROFESSIONAL ENGINEERS AND LAND SURVEYORS ARTICLE 145H, SECTION 7200, REQUIRES THAT A PROJECT INVOLVING THE SAFEGUARDING OF LIFE, HEALTH AND PROPERTY MUST BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER (P.E.) OF THE STATE OF NEW YORK. THE DESIGN OF BACKFLOW PREVENTION DEVICE INSTALLATION IS SUCH A PROJECT. AN ARCHITECT LICENSED IN THIS STATE MAY ALSO DESIGN THE INSTALLATION. THE INSTALLATION OF THE DEVICE MUST BE MADE BY A LICENSED PLUMBER. IT IS THE RESPONSIBILITY OF THE CUSTOMER TO OBTAIN ALL NECESSARY PLUMBING PERMITS, PLANS, REPORTS AND APPLICATIONS TO THE DEPARTMENT OF HEALTH. UNAUTHORIZED ALTERATIONS OR ADDITIONS TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

IMPORTANT

IN LOCALITIES SUBJECT TO FREEZING CONDITIONS IT IS THE OWNERS RESPONSIBILITY TO PROVIDE HEAT THROUGHOUT WET PIPE SPRINKLER SYSTEM AREAS AND IN ENCLOSURES FOR DRY PIPE, DELUGE AND OTHER TYPES OF VALVES CONTROLLING WATER SUPPLIES TO SPRINKLER SYSTEMS.

REFERENCE DRAWINGS

DWG. NO.	DESCRIPTION	DATE	REV

NORTH

DESIGN CRITERIA

HAZARD: LIGHT & ORD. .1/1500, .2/900, & .2/1950 SQ.FT.
SPACING: 16'x18', 225 & 130 SQ. FT. MAX.
PIPE SIZING: HYDRAULIC CALCULATIONS
SYSTEM TYPE: WET/DRY TREE
GENERAL CONSTRUCTION: STEEL & CONCRETE

IBC CODE ☐
NYC CODE ☐
NYS CODE ☐
N.F.P.A.#13 ■
N.F.P.A.#14 ☐
N.F.P.A.#13D ☐
N.F.P.A.#13R ☐

SPRINKLER SYMBOLS AND GENERAL NOTES

EXISTING PIPE TO REMAIN
BRANCH LINE OR MAIN NUMBER
< S01 > HYDRAULIC REFERENCE POINT
RISE SYMBOL UP OR DOWN
RISER OR DROP PIECE WITH DIAMETER AND LENGTH
SPRINKLER SYSTEM OUTLET OR SYSTEM RISER
ELEV. FROM UNDERSIDE SLAB TO ℄ PIPE IN INCHES
9–0 ELEV. FROM ℄ PIPE TO FLOOR IN FEET AND INCHES

PIPE SCHEDULES

MAINS		LINES	
SCH. 40	☐	SCH. 40	■
SCH. 10	■	SCH. 10	■
GALV.40	☐	GALV.40	☐
GALV.10	☐	GALV.10	☐
CPVC PIPE	☐	CPVC PIPE	☐
COPPER "L"	☐	COPPER "L"	☐
PEX TUBING	☐	PEX TUBING	☐

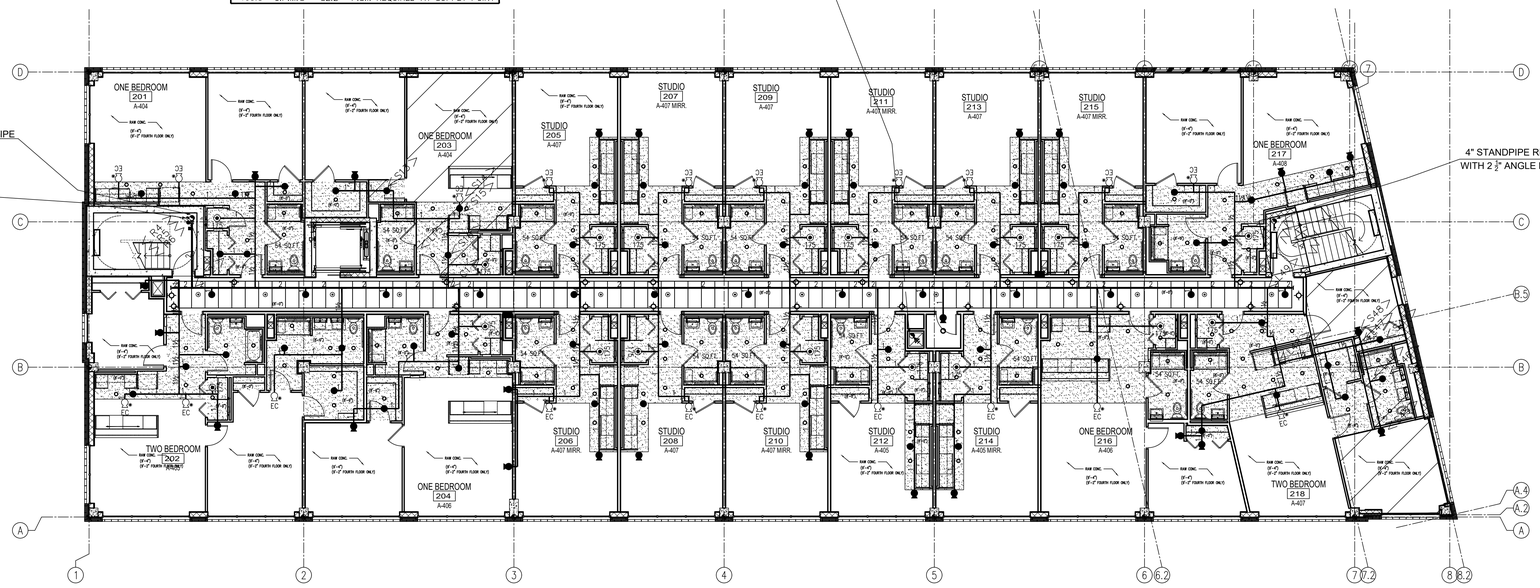
IMPORTANT DISCLAIMER
THIS DRAWING REPRESENTS THE DRAFTING WORK PERFORMED BY FIRE PROTECTION DESIGN, INC. HEREAFTER KNOWN AS FPD, INC. ONCE THIS DRAWING LEAVES OUR OFFICE WE HAVE NO CONTROL OVER ANY CHANGES MADE TO THE BLUEPRINTS AND/OR COPIES OF THE ORIGINAL DRAWING. FPD, INC. IS NOT RESPONSIBLE FOR THE INSTALLATION AND CANNOT BE HELD RESPONSIBLE FOR ANY CLAIMS THAT MAY ARISE FROM THE INSTALLATION OF THIS SYSTEM. THE OWNER, GENERAL CONTRACTOR, SUB–CONTRACTOR OR ANY PERSON OR ENTITY WHICH ACQUIRES OR OBTAINS THIS DRAWING SHALL TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD FIRE PROTECTION DESIGN, INC. AND ITS OFFICES, EMPLOYEES AND SUBSIDIARIES HARMLESS FROM ANY DAMAGE, LIABILITY OR COST, INCLUDING REASONABLE ATTORNEY FEES AND COST OF DEFENSE, ARISING FROM ANY RE–USE OR MODIFICATIONS MADE TO THIS DRAWING AND/OR INSTALLATION OF THIS SYSTEM. IN NO EVENT SHALL FPD, INC. BE LIABLE FOR ANY LOSS OF INCOME, PROFITS OR ANY DAMAGES. FPD'S TOTAL LIABILITY ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS DRAWING WILL NOT EXCEED THE TOTAL AMOUNT OF OUR CONTRACT. FURTHERMORE BY ACCEPTING THIS DRAWING THE OWNER, GENERAL CONTRACTOR, SUB–CONTRACTOR OR ANY PERSON OR ENTITY WHICH ACQUIRES OR OBTAINS THIS DRAWING ACCEPT AND AGREES TO THE TERMS OUTLINED HEREIN.

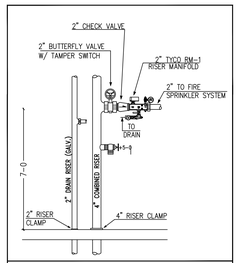
NICET or P.E. SEAL

OWNER'S NOTE:
ENTIRE BUILDING MUST MAINTAIN ABOVE 55° F AT ALL TIMES.

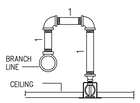
AREA OF APPLICATION–SYS# 4 OF 10			
K–FACTOR:	4.9/4.4	INSIDE HOSE:	N/A GPM
DENSITY/AREA:	.1/4 SPKR	OUTSIDE HOSE:	N/A GPM
AREA PER SPKR:	16'x20' SQ.FT.	RACK ALLOWANCE:	N/A GPM
105.8 G.P.M.@	82.2 P.S.I. REQUIRED AT SUPPLY POINT		

2" SPRINKLER RISER SERVING TRASH CHUTE. COORDINATE WITH CHUTE MANUFACTURER FOR CONNECTION LOCATIONS. PROVIDE HEADS BELOW THE LAST SERVICE DOOR, AT THE TOP OF THE CHUTE & ON ALTERNATE FLOOR LEVELS ABOVE THE LOWEST LEVEL. SPRINKLER LOCATED ON THIRD FLOOR.

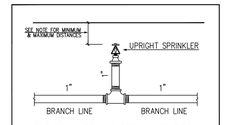




2" TYCO RM–1
RISER MANIFOLD – DETAIL #2



FLUSH SPRINKLER DROP WITH RETURN BEND



TYPICAL UPRIGHT SPRINKLER DETAIL

DEFLECTOR NOTE FROM CIELING OR ROOF DECK:
UNOBSTRUCTION CONSTRUCTION
MINIMUN 1" MAXIMM 12"
OBSTRUCTED CONSTRUCTION
1" – 6" BELOW STRUCTURAL MEMBER
AND A MAXIMUM DISTENCE OF 22"

AREA OF APPLICATION–SYS# 7 OF 10			
K–FACTOR:	4.9/4.4	INSIDE HOSE:	N/A GPM
DENSITY/AREA:	.1/4 SPKR	OUTSIDE HOSE:	N/A GPM
AREA PER SPKR:	16'x18' SQ.FT.	RACK ALLOWANCE:	N/A GPM
69.6 G.P.M.@	63.5 P.S.I. REQUIRED AT SUPPLY POINT		

SECOND - THIRD FLOOR FIRE SPRINKLER HEAD COUNT LEGEND

SYM	SPRINKLER LEGEND DESCRIPTION	TEMPERATURE(F) 155	165	175	200	212	SIZE ORF	NPT	K	SN NUMBER
●	RELIABLE MODEL "RFC49" CONCEALED PENDENT SPKR (16'x16' MAX SPACING)						1/2"	3/4"	4.9	RA0616
	RELIABLE MODEL "F1/RES 49" PENDENT SPRINKLER (16'x16' MAX SPACING)						1/2"	3/4"	4.9	R3516
	RELIABLE MODEL "F1/RES44" HORIZ. SIDEWALL SPRINKLER (16'x16' MAX SPACING)						1/2"	3/4"	4.4	R3531
	RELIABLE MODEL "F1/RES44" HORIZ. SIDEWALL SPRINKLER (16'x20' MAX SPACING)						1/2"	3/4"	4.4	R3531
	TRASH CHUTE SPRINKLER									

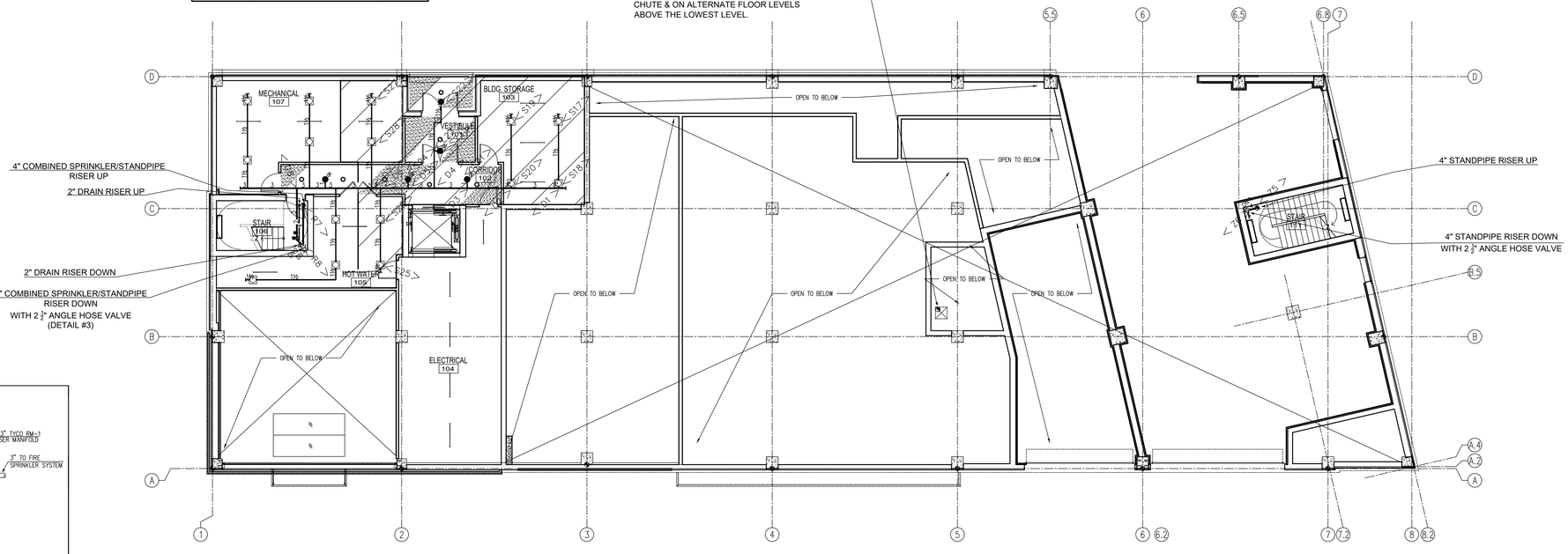
SECOND – FOURTH FLOOR – FIRE SPRINKLER PLAN

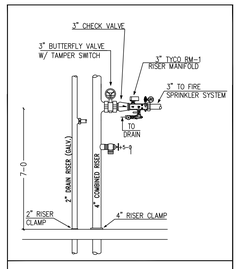
SCALE: 1/8" = 1'–0"

PIPING NOTE FOR SECOND – FOURTH FLOOR:
ALL 1" – 1½" PIPE TO BE STEEL – BLACK PIPE SCHEDULE #40
ALL 2" – 4" PIPE TO BE STEEL – BLACK PIPE SCHEDULE #10

AREA OF APPLICATION–SYS# 5 of 10			
K–FACTOR:	5.6	INSIDE HOSE:	100 GPM
DENSITY/AREA:	.2/900	OUTSIDE HOSE:	150 GPM
AREA PER SPKR:	130 SQ.FT.	RACK ALLOWANCE:	N/A GPM
574.8 G.P.M.@	74.1 P.S.I. REQUIRED AT SUPPLY POINT		
AREA REDUCED 40 % FOR QUICK RESPONSE SPRINKLERS			

2" SPRINKLER RISER SERVING TRASH CHUTE. COORDINATE WITH CHUTE MANUFACTURER FOR CONNECTION LOCATIONS. PROVIDE HEADS BELOW THE LAST SERVICE DOOR, AT THE TOP OF THE CHUTE & ON ALTERNATE FLOOR LEVELS ABOVE THE LOWEST LEVEL.





3" TYCO RM–1
RISER MANIFOLD – DETAIL #3

MEZZANINE LEVEL – FIRE SPRINKLER PLAN

SCALE: 1/8" = 1'–0"

PIPING NOTE FOR MEZZANINE LEVEL:
ALL 1" PIPE TO BE STEEL – BLACK PIPE SCHEDULE #40
ALL 1½" – 4" PIPE TO BE STEEL – BLACK PIPE SCHEDULE #10

MEZZANINE LEVEL FIRE SPRINKLER HEAD LEGEND

SYM	SPRINKLER LEGEND DESCRIPTION	TEMPERATURE(F) 155	165	175	200	212	SIZE ORF	NPT	K	SN NUMBER
	RELIABLE MODEL "G5-56" CONCEALED PENDENT SPKR (QUICK RESPONSE TYPE)						1/2"	3/4"	5.6	RA3415
	RELIABLE MODEL "F1FR56" UPRIGHT SPRINKLER WITH CAGES (QUICK RESPONSE TYPE)						1/2"	3/4"	5.6	RA1425
	VICTAULIC MODEL "VS1" VICFLEX DRY PENDENT SPRINKLER (QUICK RESPONSE TYPE)						1/2"	3/4"	5.6	V3506

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IMPORTANT

IN LOCALITIES SUBJECT TO FREEZING CONDITIONS IT IS THE OWNERS RESPONSIBILITY TO PROVIDE HEAT THROUGHOUT WET PIPE SPRINKLER SYSTEM AREAS AND IN ENCLOSURES FOR DRY PIPE, DELUGE AND OTHER TYPES OF VALVES CONTROLLING WATER SUPPLIES TO SPRINKLER SYSTEMS.

REFERENCE DRAWINGS

DWG. NO.	DESCRIPTION	DATE	REV

NORTH

DESIGN CRITERIA

HAZARD: LIGHT & ORD. .1/4 SPKR & .2/900 SQ.FT.
SPACING: 16'x16', 16'x20', & 130 SQ. FT. MAX.
PIPE SIZING: HYDRAULIC CALCULATIONS
SYSTEM TYPE: WET TREE
GENERAL CONSTRUCTION: STEEL & CONCRETE

IBC CODE ☐
NYC CODE ☐
NYS CODE ☐
N.F.P.A.#13 ■
N.F.P.A.#14 ☐
N.F.P.A.#13D ☐
N.F.P.A.#13R ☐

SPRINKLER SYMBOLS AND GENERAL NOTES

- - - - EXISTING PIPE TO REMAIN
(A) BRANCH LINE OR MAIN NUMBER
< 501 > HYDRAULIC REFERENCE POINT
RISE SYMBOL UP OR DOWN
RISER OR DROP PIECE WITH DIAMETER AND LENGTH
SPRINKLER SYSTEM OUTLET OR SYSTEM RISER
[4] ELEV. FROM UNDERSIDE SLAB TO ℄ PIPE IN INCHES
[9'-0] ELEV. FROM ℄ PIPE TO FLOOR IN FEET AND INCHES

PIPE SCHEDULES

MAINS		LINES	
SCH. 40	☐	SCH. 40	■
SCH. 10	■	SCH. 10	■
GALV.40	☐	GALV.40	☐
GALV.10	☐	GALV.10	☐
CPVC PIPE	☐	CPVC PIPE	☐
COPPER "L"	☐	COPPER "L"	☐
PEX TUBING	☐	PEX TUBING	☐

IMPORTANT DISCLAIMER

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NICET or P.E. SEAL

NO	REVISIONS	DATE	BY

PAPP ARCHITECTS
188 EAST POST ROAD WHITE PLAINS, NEW YORK 10601

WESTMORELAND LOFTS

MEZZANINE – FOURTH FLOOR FIRE SPRINKLER PLAN
136–158 WESTMORELAND AVENUE WHITE PLAINS, NEW YORK 10606

PLANS DRAWN BY
FIRE PROTECTION DESIGN, INC.
(845)634–2133 NICET CERTIFIED (845)634–2144

JOB NO: 2021–C–966
DWG NO: 2 OF 3

SCALE: 1/8"=1'–0" DRAWN: 3/22/21 BY: M.K.

SPKR COUNT	THIS DWG	TOTAL

OWNER'S NOTE:
ENTIRE BUILDING MUST MAINTAIN
ABOVE 55° F AT ALL TIMES.

PIPING NOTE FOR ROOF LEVEL:
ALL 1" PIPE TO BE STEEL – BLACK PIPE SCHEDULE #40
ALL 1½" – 4" PIPE TO BE STEEL – BLACK PIPE SCHEDULE #10

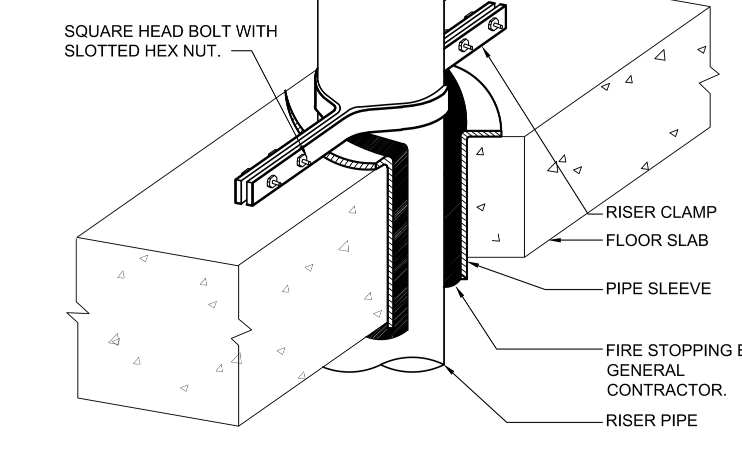
AREA OF APPLICATION–SYS# 1 OF 10	
K–FACTOR: 4.9	INSIDE HOSE: N/A GPM
DENSITY/AREA: .1/4 SPKR	OUTSIDE HOSE: N/A GPM
AREA PER SPKR: 16'x16' SQ.FT.	RACK ALLOWANCE: N/A GPM
53.3 G.P.M.@ 56.1 P.S.I. REQUIRED AT SUPPLY POINT	

ROOF LEVEL – FIRE SPRINKLER PLAN

SCALE: ⅛" = 1'–0"

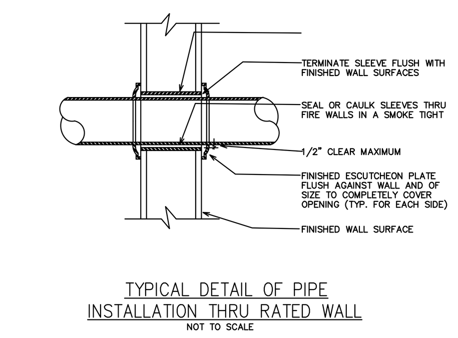
ROOF LEVEL FIRE SPRINKLER HEAD LEGEND

	SPRINKLER LEGEND	TEMPERATURE(F)					SIZE			SN NUMBER
SYM	DESCRIPTION	155	165	175	200	212	ORF	NPT	K	
●	RELIABLE MODEL "RFC49" CONCEALED PENDENT SPKR (16'x16' MAX SPACING)						½"	½"	4.9	RA0616
○	RELIABLE MODEL "F1FR56" UPRIGHT SPRINKLER (QUICK RESPONSE TYPE)						½"	½"	5.6	RA1425



VERTICAL PIPE SUPPORT

SCALE: NONE



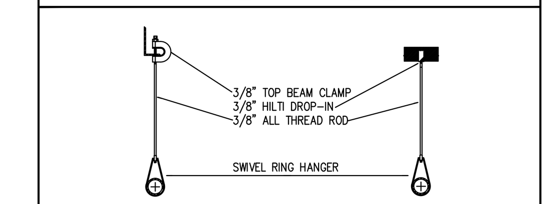
TYPICAL DETAIL OF PIPE INSTALLATION THRU RATED WALL

NOT TO SCALE

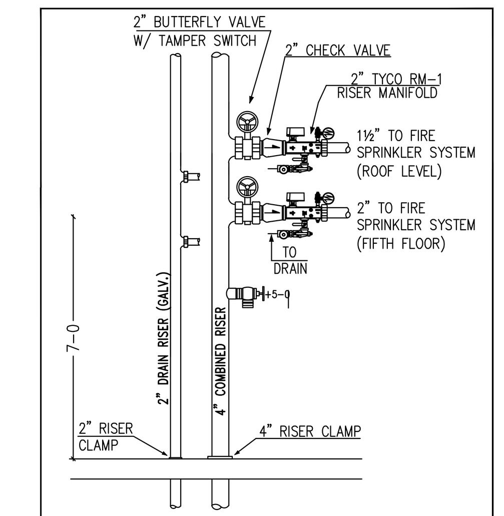
SLEEVES ANS ESCUTCHEONS
A. SLEEVES FOR PIPING THROUGH MASONRY WALLS SHALL BE SCHEDULE 40, STANDARD GALVANIZED STEEL PIPE; IN FRAMED PARTITIONS SHALL BE 20 GAUGE SHEET METAL. THE SPACE BETWEEN THE PIPE AND ITS SLEEVE SHALL NOT EXCEED ONE–HALF INCH. THE SLEEVE SHALL HAVE A SUFFICIENT LENGTH TO BE FLUSH WITH THE FINISHED WALL SURFACE.
B. EXPOSED PIPING PASSING THROUGH WALLS, FLOORS OR CEILING SHALL BE FITTED WITH CHROMIUM–PLATED CAST BRASS ESCUTCHEONS WITH FASTENING SET SCREWS.

CUTTING AND PATCHING
A. PIPING PASSING THROUGH WALLS SHALL HAVE A TRIM OPENING CUT NO GREATER THAN NECESSARY FOR THE INSTALLATION OF A SLEEVE SECURED THEREIN.
B. PIPING PASSING THROUGH CONCRETE FLOORS SHALL HAVE AN OPENING CORE DRILLED SO THAT THE SPACE BETWEEN THE OPENING AND THE PIPE SHALL NOT EXCEED ONE–HALF INCH.
C. ANNULAR SPACES BETWEEN PIPING AND SLEEVES OR CORE DRILLED FLOOR OPENINGS SHALL BE PACKED WITH MINERAL WOOL AND SEALED, TO RETAIN THE FIRE INTEGRITY OF THE WALLS AND FLOORS, WITH A NON–HARDENING COMPOUND SIMILAR OR EQUAL TO DUXSEAL AS MANUFACTURED BY THE J.M. CLIPPER CORP.

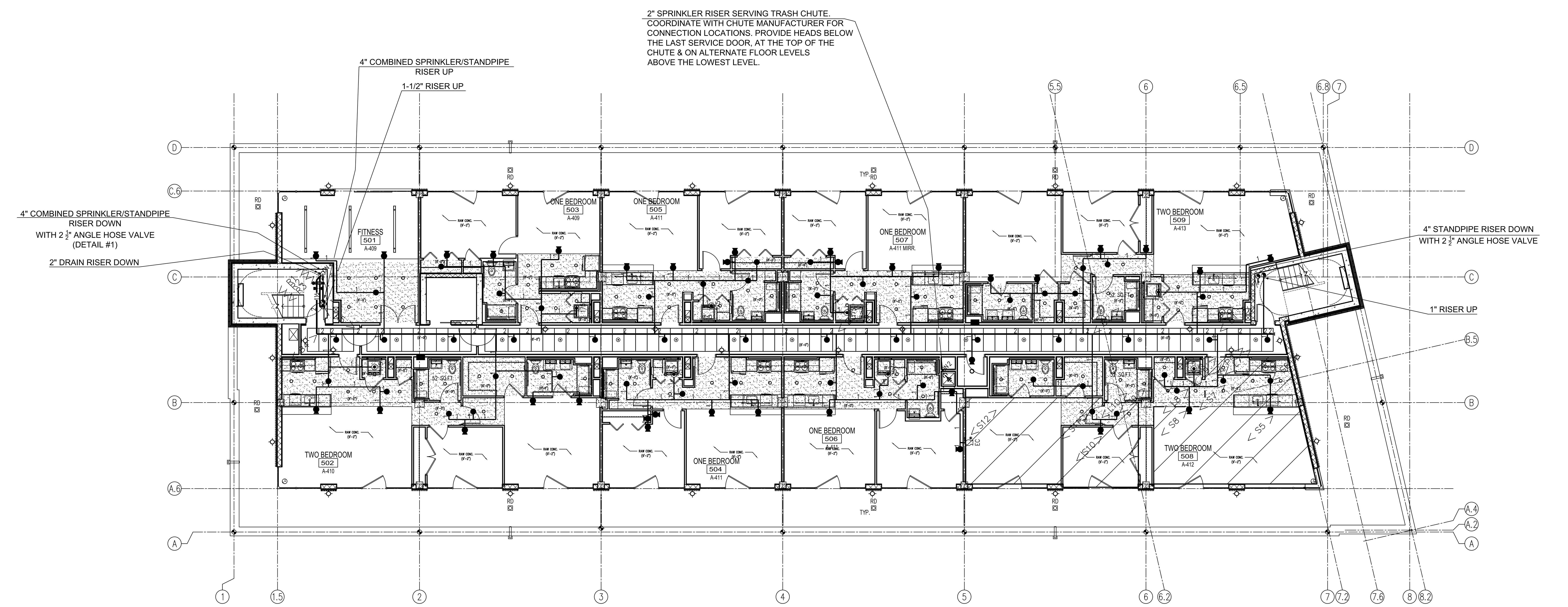
HANGER TYPE 28



ALL MATERIAL TO BE 3/8" FOR PIPE 1" TO 4" DIA.
ALL MATERIAL TO BE ½" FOR PIPE 6" AND LARGER



2" TYCO RM–1
RISER MANIFOLD – DETAIL #1



FIFTH FLOOR – FIRE SPRINKLER PLAN

SCALE: ⅛" = 1'–0"

FIFTH FLOOR FIRE SPRINKLER HEAD LEGEND

	SPRINKLER LEGEND	TEMPERATURE(F)					SIZE			SN NUMBER
SYM	DESCRIPTION	155	165	175	200	212	ORF	NPT	K	
●	RELIABLE MODEL "RFC49" CONCEALED PENDENT SPKR (16'x16' MAX SPACING)						½"	½"	4.9	RA0616
◉ 175	RELIABLE MODEL "F1/RES 49" PENDENT SPRINKLER (16'x16' MAX SPACING)						½"	½"	4.9	R3516
	RELIABLE MODEL "F1/RES44" HORIZ. SIDEWALL SPRINKLER (16'x16' MAX SPACING)						½"	½"	4.4	R3531
EC	RELIABLE MODEL "F1/RES44" HORIZ. SIDEWALL SPRINKLER (16'x18' MAX SPACING)						½"	½"	4.4	R3531
	TRASH CHUTE SPRINKLER									

AREA OF APPLICATION–SYS# 3 OF 10	
K–FACTOR: 4.9/4.4	INSIDE HOSE: N/A GPM
DENSITY/AREA: .1/4 SPKR	OUTSIDE HOSE: N/A GPM
AREA PER SPKR: 16'x18' SQ.FT.	RACK ALLOWANCE: N/A GPM
74.1 G.P.M.@ 74.0 P.S.I. REQUIRED AT SUPPLY POINT	

AREA OF APPLICATION–SYS# 2 OF 10	
K–FACTOR: 4.9/4.4	INSIDE HOSE: N/A GPM
DENSITY/AREA: .1/4 SPKR	OUTSIDE HOSE: N/A GPM
AREA PER SPKR: 16'x16' SQ.FT.	RACK ALLOWANCE: N/A GPM
74.7 G.P.M.@ 85.8 P.S.I. REQUIRED AT SUPPLY POINT	

PIPING NOTE FOR FIFTH FLOOR:
ALL 1" – 1½" PIPE TO BE STEEL – BLACK PIPE SCHEDULE #40
ALL 2" – 4" PIPE TO BE STEEL – BLACK PIPE SCHEDULE #10

IMPORTANT DISCLAIMER

THE NEW YORK STATE EDUCATION LAW PERTAINING TO PROFESSIONAL ENGINEERS AND LAND SURVEYORS ARTICLE 145ff, SECTION 7200, REQUIRES THAT A PROJECT INVOLVING THE SAFEGUARDING OF LIFE, HEALTH AND PROPERTY MUST BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER (P.E.) OF THE STATE OF NEW YORK. THE DESIGN OF BACFKFLOW PREVENTION DEVICE INSTALLATION IS SUCH A PROJECT. AN ARCHITECT LICENSED IN THIS STATE MAY ALSO DESIGN THE INSTALLATION. THE INSTALLATION OF THE DEVICE MUST BE MADE BY A LICENSED PLUMBER. IT IS THE RESPONSIBILITY OF THE CUSTOMER TO OBTAIN ALL NECESSARY PLUMBING PERMITS, PLANS, REPORTS AND APPLICATIONS TO THE DEPARTMENT OF HEALTH. UNAUTHORIZED ALTERATIONS OR ADDITIONS TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB–DIVISION 2 OF THE N.Y. STATE EDUCATION LAW.

IMPORTANT

IN LOCALITIES SUBJECT TO FREEZING CONDITIONS IT IS THE OWNERS RESPONSIBILITY TO PROVIDE HEAT THROUGHOUT WET PIPE SPRINKLER SYSTEM AREAS AND IN ENCLOSURES FOR DRY PIPE, DELUGE AND OTHER TYPES OF VALVES CONTROLLING WATER SUPPLIES TO SPRINKLER SYSTEMS.

REFERENCE DRAWINGS

DWG. NO.	DESCRIPTION	DATE	REV

NORTH

DESIGN CRITERIA

HAZARD: LIGHT .1/4 SPKR
SPACING: 16'x16' & 16'x18" SQ. FT. MAX.
PIPE SIZING: HYDRAULIC CALCULATIONS
SYSTEM TYPE: WET TREE
GENERAL CONSTRUCTION: STEEL & CONCRETE

Code	
IBC CODE	☐
NYC CODE	☐
NYS CODE	☐
N.F.P.A.#13	■
N.F.P.A.#14	☐
N.F.P.A.#13D	☐
N.F.P.A.#13R	☐

SPRINKLER SYMBOLS AND GENERAL NOTES

- - - - EXISTING PIPE TO REMAIN
(A) BRANCH LINE OR MAIN NUMBER
< S01 > HYDRAULIC REFERENCE POINT
RISE SYMBOL UP OR DOWN
RN1 DN1 RISER OR DROP PIECE WITH DIAMETER AND LENGTH
SPRINKLER SYSTEM OUTLET OR SYSTEM RISER
12 ELEV. FROM UNDERSIDE SLAB TO ℄ PIPE IN INCHES
9–0 ELEV. FROM ℄ PIPE TO FLOOR IN FEET AND INCHES

PIPE SCHEDULES

MAINS		LINES	
SCH. 40	☐	SCH. 40	■
SCH. 10	■	SCH. 10	■
GALV.40	☐	GALV.40	☐
GALV.10	☐	GALV.10	☐
CPVC PIPE	☐	CPVC PIPE	☐
COPPER "L"	☐	COPPER "L"	☐
PEX TUBING	☐	PEX TUBING	☐

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NICET or P.E. SEAL

NO	REVISIONS	DATE	BY

PAPP ARCHITECTS
188 EAST POST ROAD — WHITE PLAINS, NEW YORK 10601

WESTMORELAND LOFTS

FIFTH FLOOR & ROOF LEVEL FIRE SPRINKLER PLAN
136–158 WESTMORELAND AVENUE — WHITE PLAINS, NEW YORK 10606

PLANS DRAWN BY
FIRE PROTECTION DESIGN, INC.
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JOB NO: 2021–C–966
DWG NO: 3 OF 3

SCALE: 1/8"=1'–0" | DRAWN: 3/22/21 BY: M.K. | SPKR COUNT | THIS DWG | TOTAL