

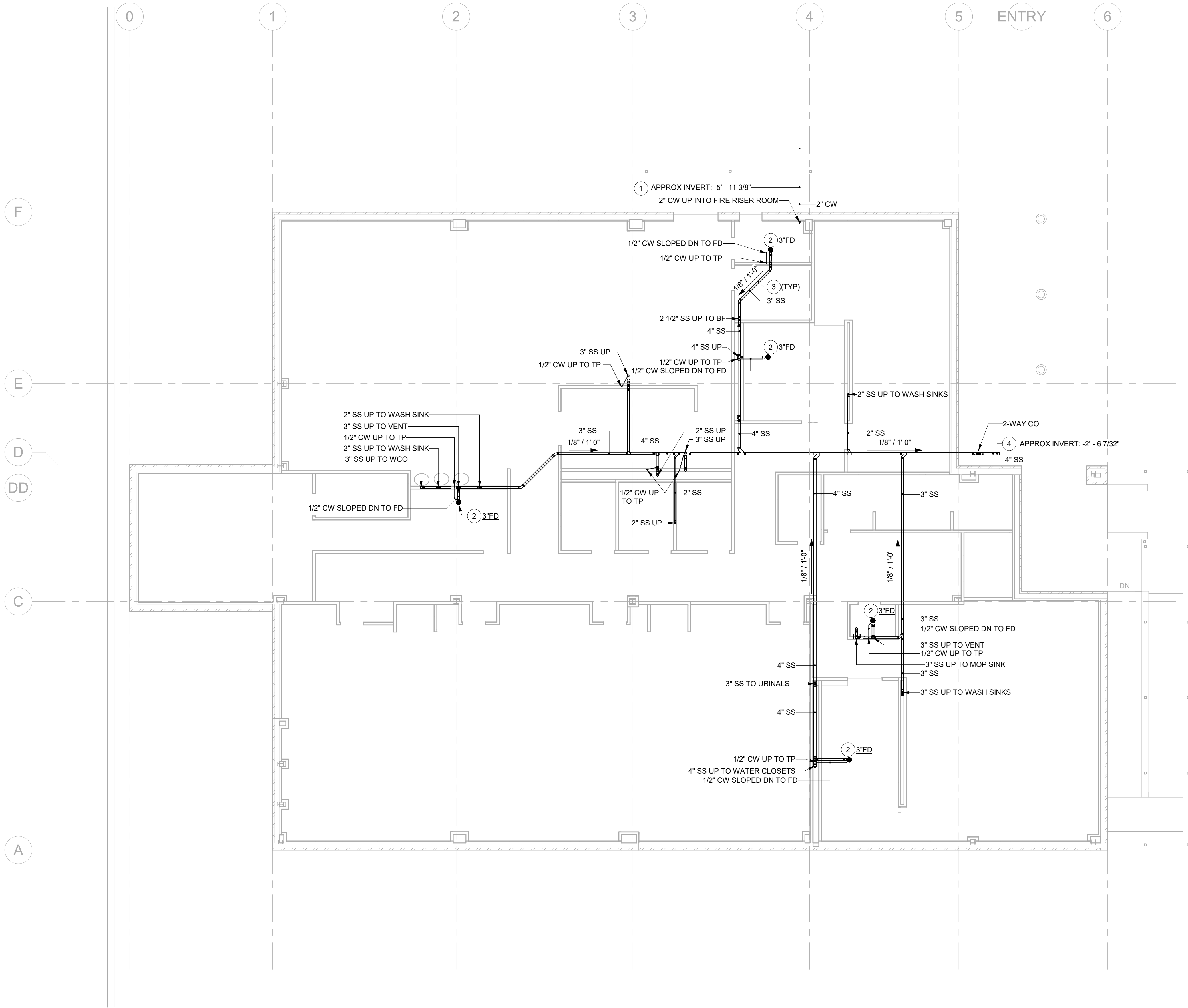
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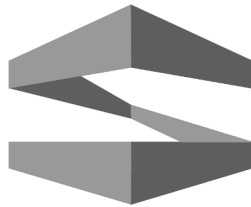
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9/2/2022 10:35:04 AM

1 PLUMBING UNDERFLOOR PLAN  
1/8" = 1'-0"



KEYED NOTES	
MARK	COMMENT
1	PROVIDE AND INSTALL TYPE "K" COPPER WATER LINE BELOW GRADE, APPROXIMATE INVERT AS NOTED ON PLANS. REFERENCE CIVIL PLANS FOR CONNECTION/CONTINUATION.
2	PROVIDE AND INSTALL SCHEDULE 80 SANITARY LINE UP TO DRAIN, COMPLETE WITH P-TRAP AND TRAP PRIMER. SIZE DRAIN AS NOTED.
3	PROVIDE AND INSTALL SCHEDULE 80 PVC SANITARY LINE. ROUTE AS INDICATED WITH A MINIMUM 1/8" PER FOOT SLOPE.
4	PROVIDE AND INSTALL SCHEDULE 80 PVC SANITARY LINE BELOW GRADE, APPROXIMATE INVERT AS NOTED ON PLANS. REFERENCE CIVIL PLANS FOR CONNECTION/CONTINUATION.



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## FRITO-LAY LIBERTY PLANT

PLANT ADDITION  
89 MILL ST  
LIBERTY, NY 12754

Project Number: 2021-213  
Drawing Date: 17 AUG 2022  
Drawn: RM  
Checked: CBC  
Scale: 1/8" = 1'-0"

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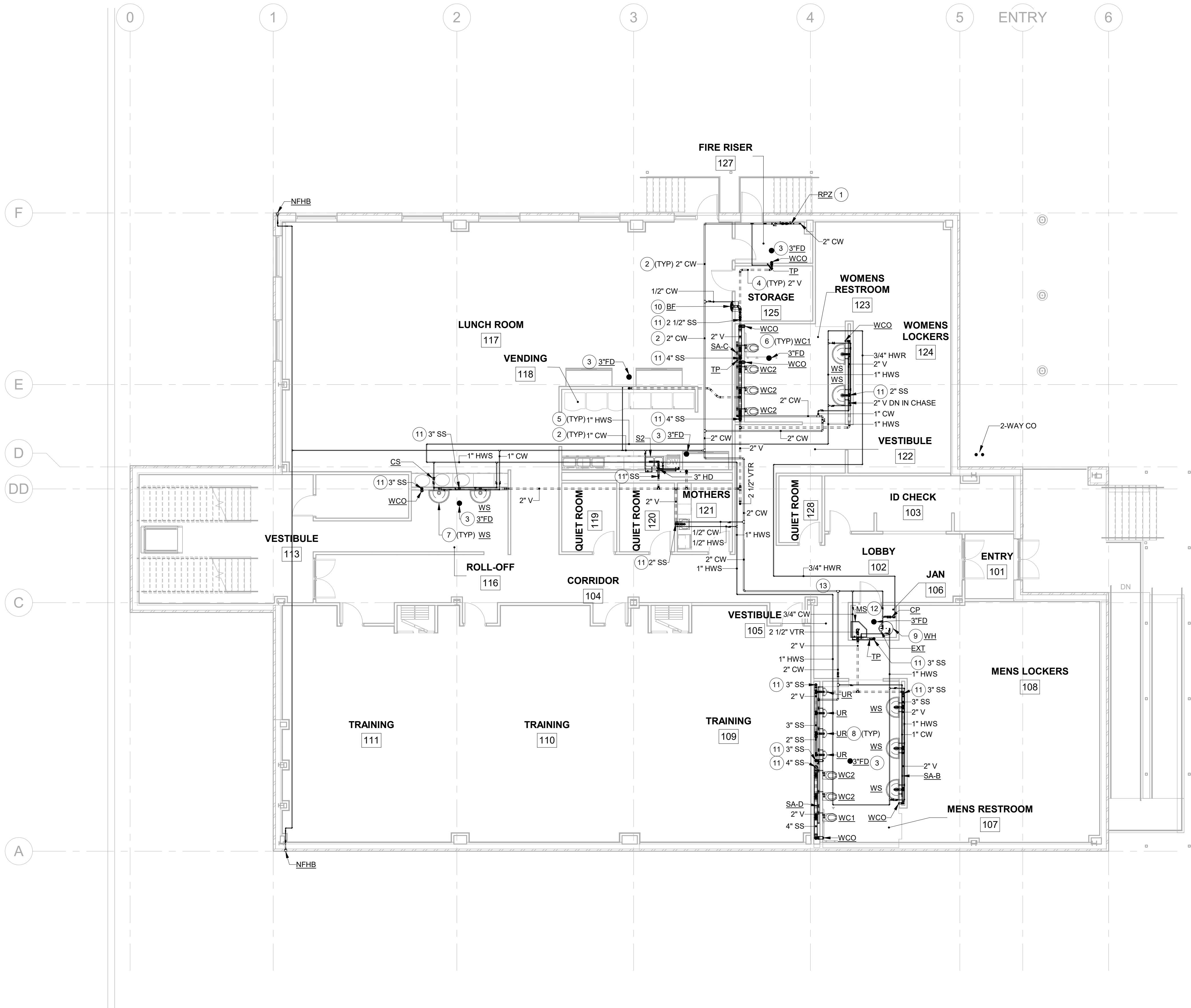
### Revisions:

#	Revision Date	Revision Description
1	17 AUG 2022	ISSUE FOR PERMIT
2	02 SEPT 2022	OWNER REVIEW

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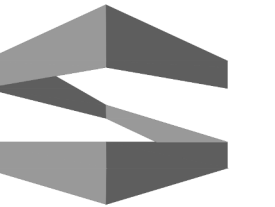
**PLUMBING  
UNDERFLOOR  
PLAN**

P2.00



## KEYED NOTES

MARK	COMMENT
1	PROVIDE AND INSTALL TYPE "L" COPPER COLD WATER LINE DOWN, SIZE AS NOTED.
2	PROVIDE AND INSTALL TYPE "L" COPPER COLD WATER LINE WITH LEAD FREE SHUT-OFF VALVES COMPLETE WITH INSULATION, HANGERS, SUPPORTS AND ALL ASSOCIATED APPURTENANCES, ROUTE AS INDICATED.
3	PROVIDE AND INSTALL SCHEDULE 80 SANITARY LINE UP TO DRAIN, COMPLETE WITH P-TRAP AND TRAP PRIMER, SIZE DRAIN AS NOTED.
4	PROVIDE AND INSTALL VENT LINE COMPLETE WITH HANGERS, SUPPORTS AND ALL ASSOCIATED APPURTENANCES, ROUTE AS INDICATED.
5	PROVIDE AND INSTALL TYPE "L" COPPER HOT WATER LINE COMPLETE WITH INSULATION, HANGERS, SUPPORTS AND ALL ASSOCIATED APPURTENANCES, ROUTE AS INDICATED.
6	PROVIDE AND INSTALL WALL-HUNG WATER CLOSET AND ASSOCIATED FLUSH VALVE. SEE PLUMBING SCHEDULE SHEET.
7	PROVIDE AND INSTALL WASH STATION AND ASSOCIATED FAUCET. SEE PLUMBING SCHEDULE SHEET.
8	PROVIDE AND INSTALL WALL-HUNG URINAL AND ASSOCIATED FLUSH VALVE. SEE PLUMBING SCHEDULE SHEET.
9	PROVIDE AND INSTALL ELECTRIC TANK TYPE WATER HEATER ON STAND. SEE PLUMBING SCHEDULE SHEET.
10	PROVIDE AND INSTALL ELECTRIC BOTTLE FILLER / COOLER AND ALL ASSOCIATED APPURTENANCES. SEE PLUMBING SCHEDULE SHEET.
11	PROVIDE AND INSTALL SCHEDULE 80 SANITARY LINE DOWN, SIZE AS NOTED.
12	PROVIDE AND INSTALL UTILITY SINK AND ASSOCIATED FAUCET. SEE PLUMBING SCHEDULE SHEET.
13	



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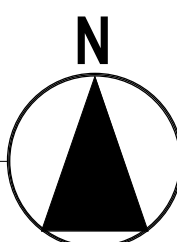
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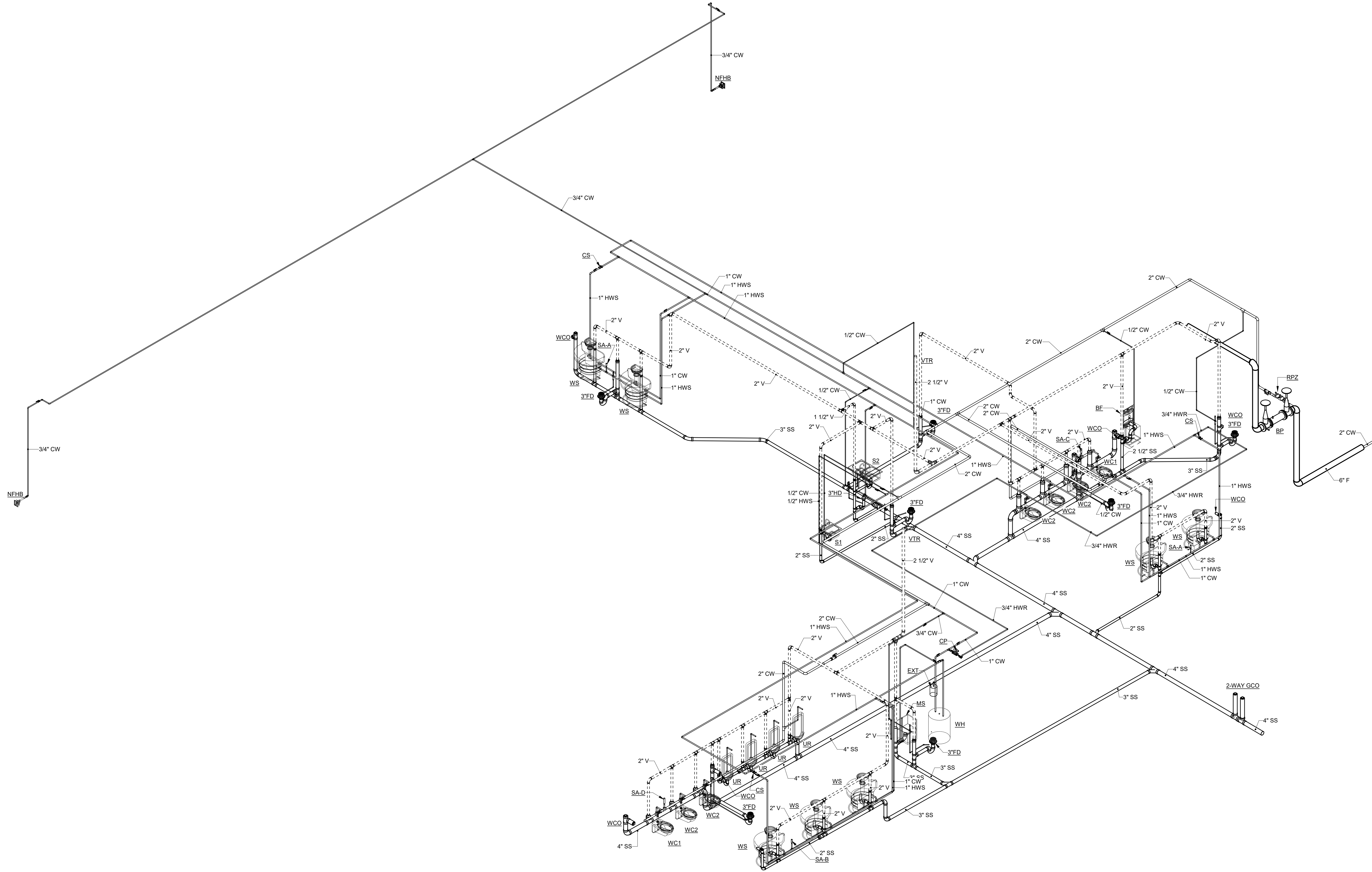
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PLUMBING FIRST  
FLOOR PLAN

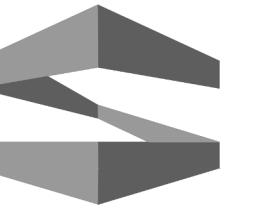


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1 PLUMBING RISER DIAGRAM



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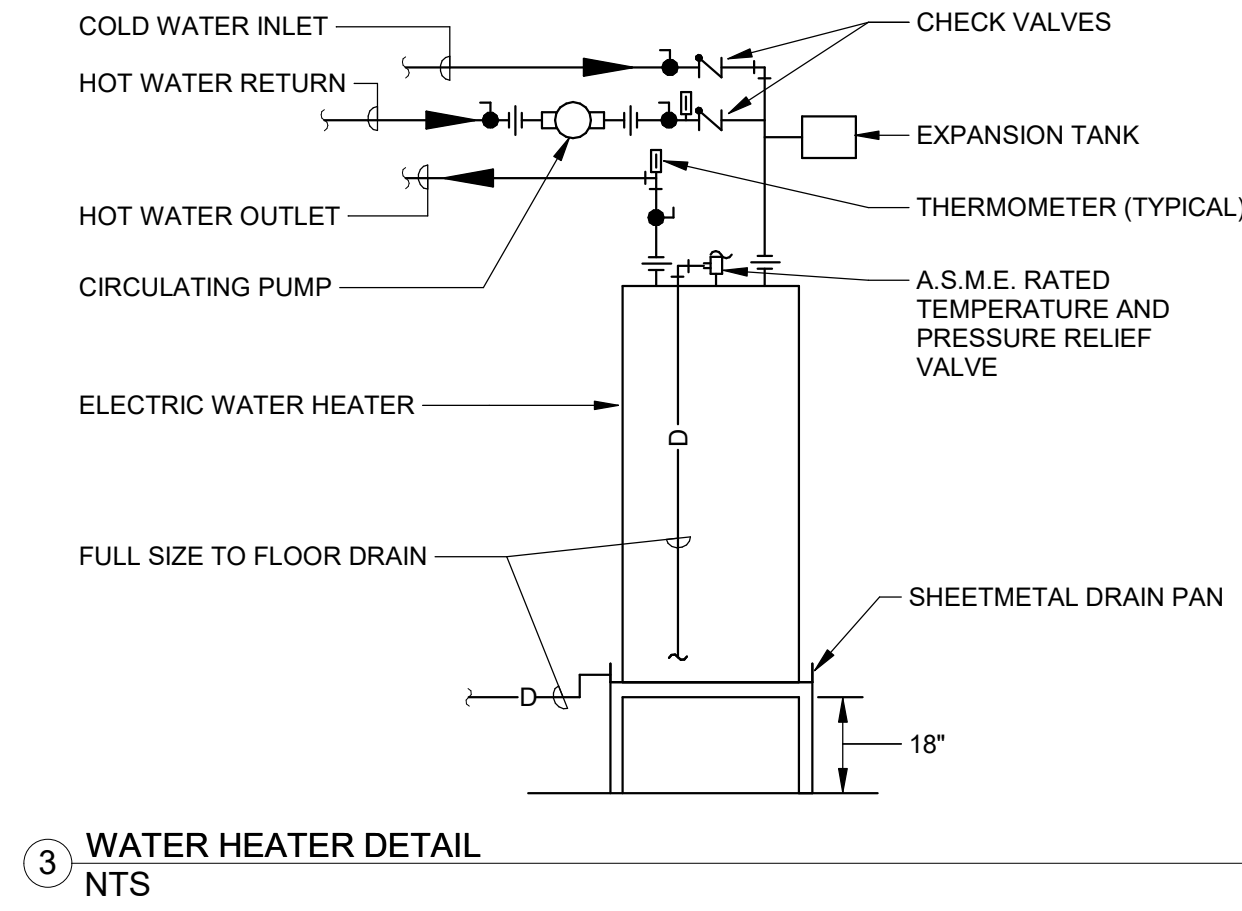
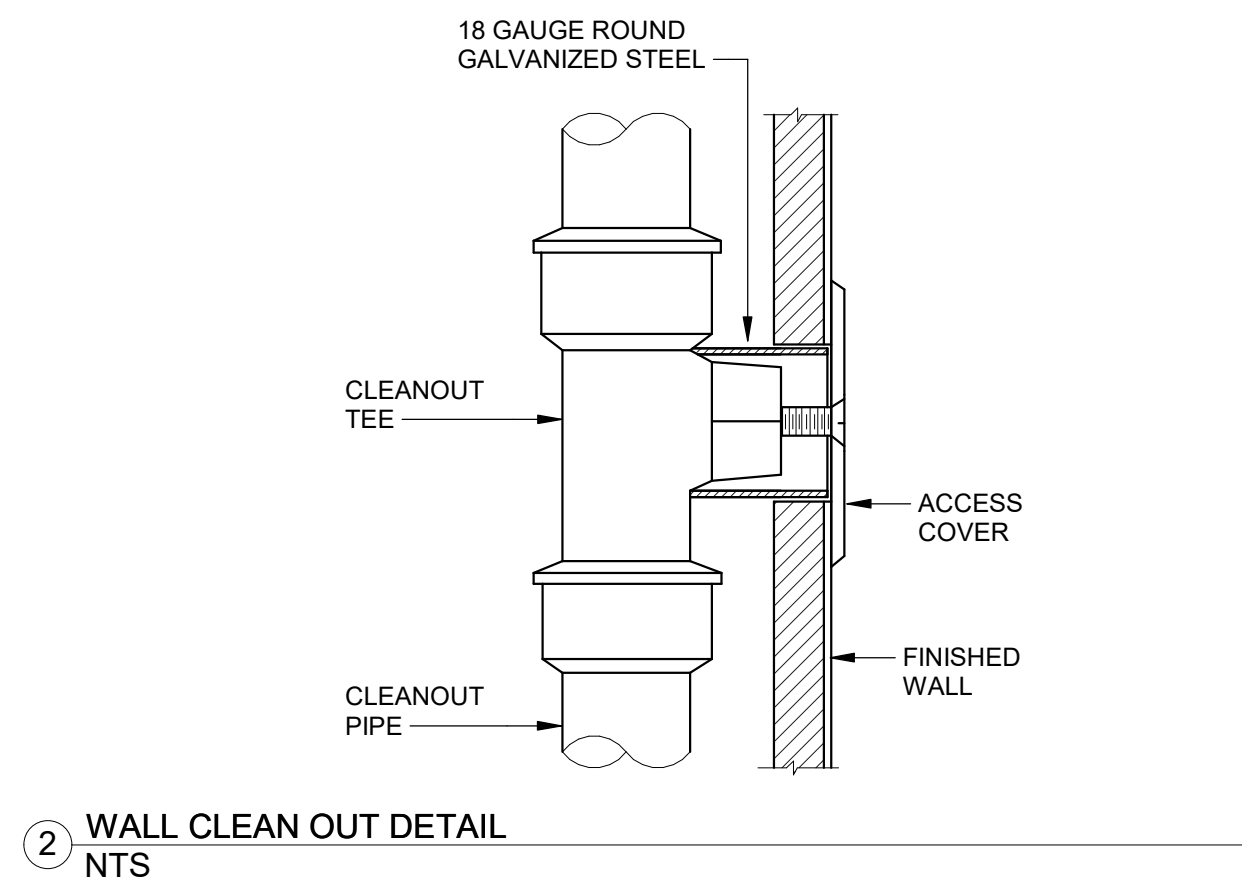
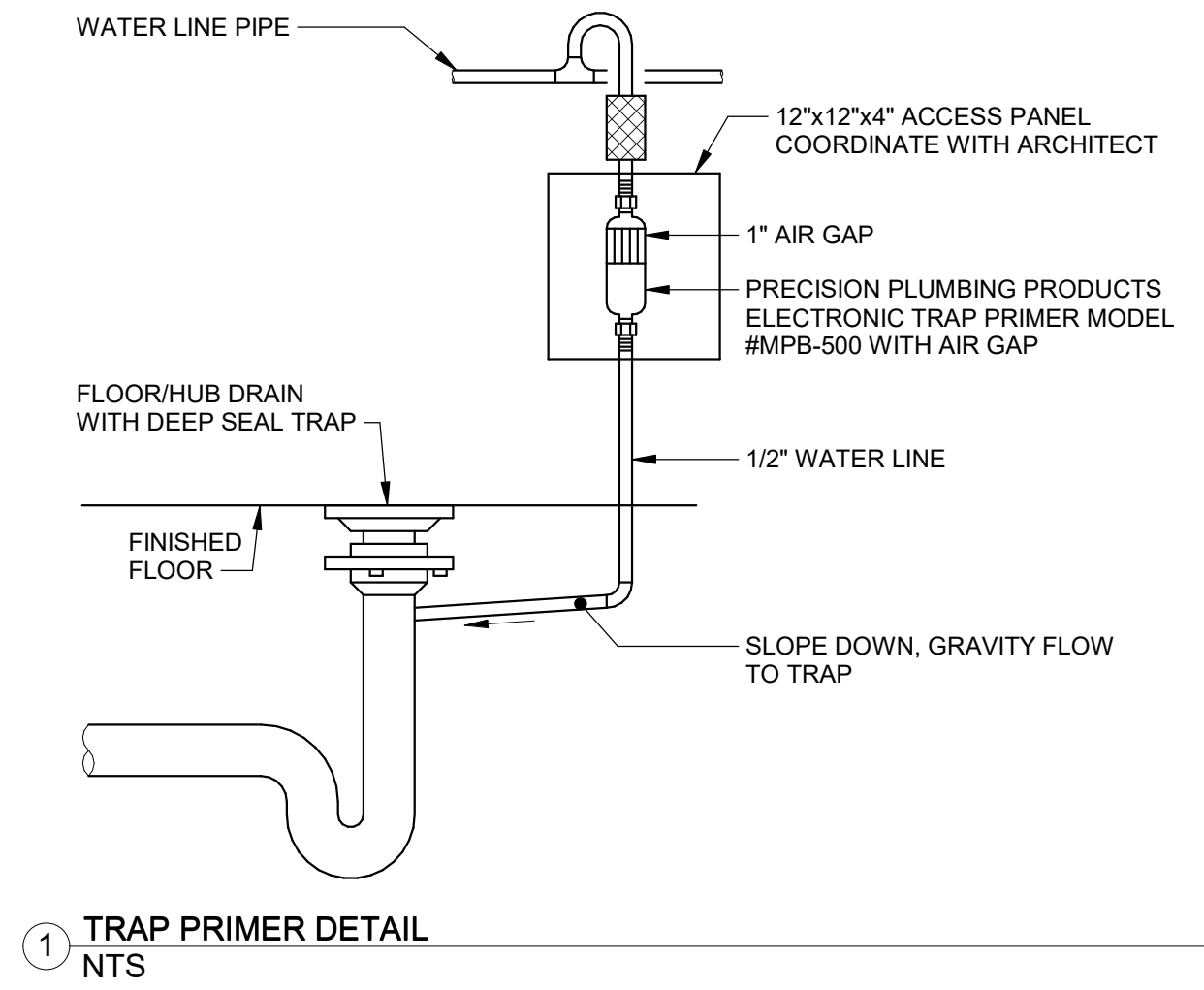
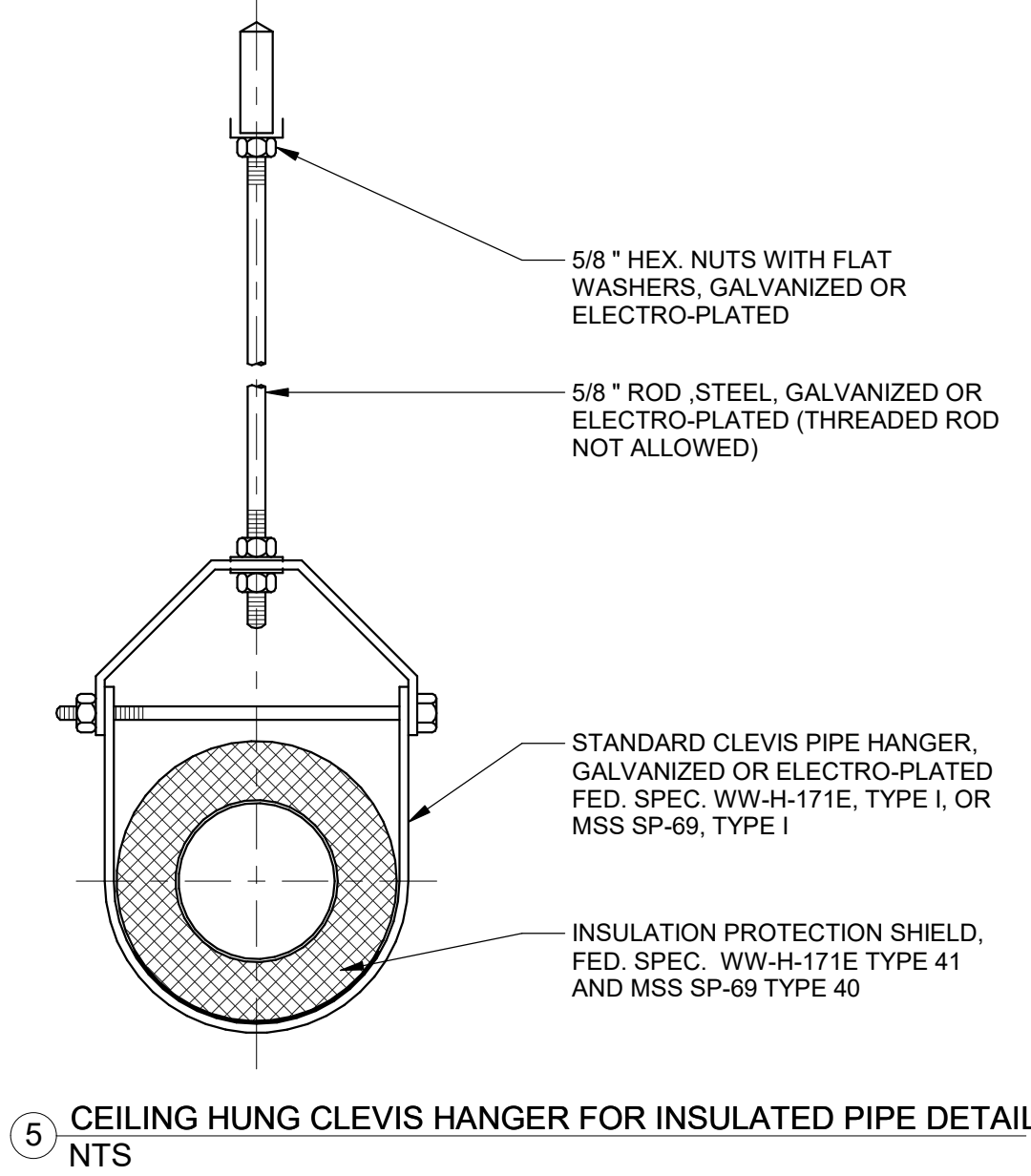
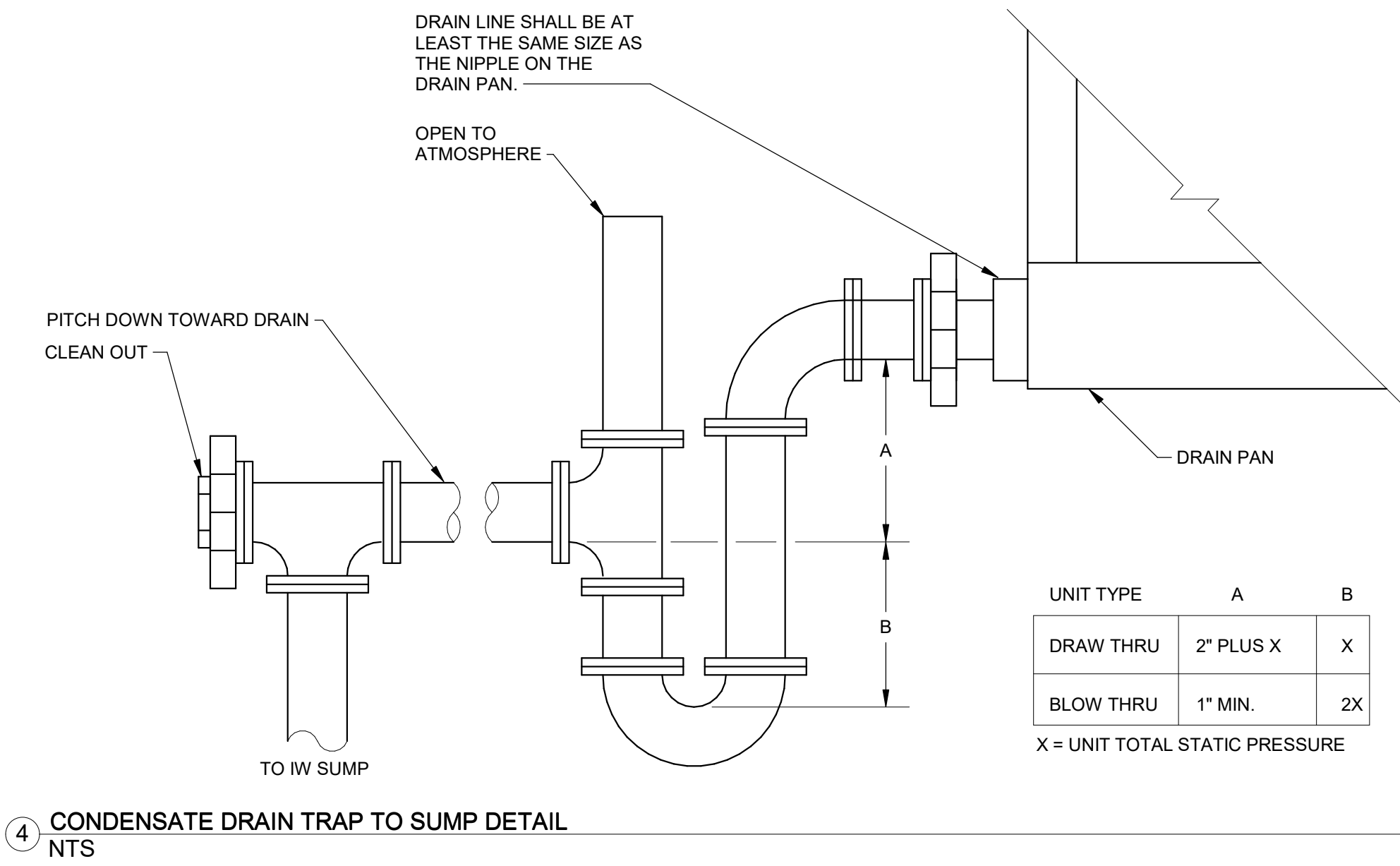
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PLUMBING  
DIAGRAMS /  
ENLARGED PLANS

P3.00



PLUMBING FIXTURE & EQUIPMENT SCHEDULE									
TAG	QTY	CONNECTION SIZE				MANUFACTURER	MODEL	DESCRIPTION	
		SS (DIA)	VENT (DIA)	CW (DIA)	HW (DIA)				
3*FD	7	3"				JOSAM	30000	ADA COMPLIANT CAST IRON BODY FLOOR DRAIN WITH CAST IRON COLLAR WITH SATIN BRONZE STRAINER, VANDALPROOF SCREWS AND BOTTOM OUTLET.	
BF	1			1/2"		ELKAY	LZWSGRN8K	ADA COMPLIANT IN-WALL, BOTTLE FILLING STATION, FILTERED REFRIGERATED STAINLESS, CHILLING CAPACITY OF 8.0 GPH OF 50°F DRINKING WATER, BASED ON 80°F INLET WATER AND 90°F AMBIENT, ANTIMICROBIAL, HANDS FREE, SENSOR ACTIVATION.	
BF18	1			1/2"		PPP	MPB-500	TRAP PRIMER VALVE WITH BOX, ROUGH-IN DIMENSIONS 12"x12"x4" DEPTH, 24 VOLT, 6.3 WATTS. 1/2" SUPPLY FROM TOP OF MAIN TO VALVE, 1/2" SUPPLY TO FLOOR OR HUB DRAIN, DISTRIBUTION UNIT AS REQUIRED.	
BF20	1			1/2"		PPP	MPB-500	TRAP PRIMER VALVE WITH BOX, ROUGH-IN DIMENSIONS 12"x12"x4" DEPTH, 24 VOLT, 6.3 WATTS. 1/2" SUPPLY FROM TOP OF MAIN TO VALVE, 1/2" SUPPLY TO FLOOR OR HUB DRAIN, DISTRIBUTION UNIT AS REQUIRED.	
BF21	1			1/2"		PPP	MPB-500	TRAP PRIMER VALVE WITH BOX, ROUGH-IN DIMENSIONS 12"x12"x4" DEPTH, 24 VOLT, 6.3 WATTS. 1/2" SUPPLY FROM TOP OF MAIN TO VALVE, 1/2" SUPPLY TO FLOOR OR HUB DRAIN, DISTRIBUTION UNIT AS REQUIRED.	
CP	1				3/4"	GRUNDFOS	ALPHA2 15-55PLC	DOMESTIC HOT WATER IN-LINE RETURN PUMP, MAX FLOW 21 GPM, MAX HEAD 19 FT, 120V1, 45 WATTS, 230°F MAX LIQUID TEMP. VARIABLE SPEED PUMP, INTEGRATED CHECK-VALVE, STAINLESS STEEL BODY.	
EXT	1			3/4"		WATTS	PLT-5	POABLE WATER EXPANSION TANK, 3/4" MALE CONNECTION, TANK VOLUME 2.1 GAL, DRWN STEEL TANK CONSTRUCTION, BUTYL DIAPHRAGM, STAINLESS STEEL INLET CONNECTOR.	
MS	1								
NFHB	2			1"		JOSAM	71000-74-95	NON-FREEZE CAST BRONZE WALL HYDRANT, SATIN FINISH STAINLESS STEEL BOX AND HINGED LATCHING COVER, INTEGRAL VACUUM BREAKER BACKFLOW PREVENTER, PRESSURE RELIEF VALVE, BRONZE OPERATING PARTS. 1" MALE INLET CONNECTION, VANDALPROOF LOCK WITH 3/4" OUTLET, UNIVERSAL INLET CONNECTION OR EQUAL.	
S1	1	2"	2"	1/2"	1/2"	ELKAY	LRAD171655	ADA COMPLIANT STAINLESS STEEL DROP IN SINK, SINGLE COMPARTMENT SINK, 5-1/2" DEEP, CENTER REAR DRAIN, ELKAY FAUCET, MODEL LK800GN04T4, CHROME 8" CENTERSET WITH CONCEALED DECK FAUCET WITH 4" GOOSENECK SPOUT, 4" WRISTBLADE HANDLES.	
S2	1	2"	2"	1/2"	1/2"	ELKAY	LRAD372255	ADA COMPLIANT STAINLESS STEEL DROP IN SINK, DOUBLE BOWL SINK, 5-1/2" DEEP, CENTER REAR DRAINS, ELKAY FAUCET, MODEL LK900LGN05T4, CHROME 8" CENTERSET WITH CONCEALED DECK FAUCET WITH 5" GOOSENECK SPOUT, 6" WRISTBLADE HANDLES.	
TP	5			1/2"		PPP	MPB-500	TRAP PRIMER VALVE WITH BOX, ROUGH-IN DIMENSIONS 12"x12"x4" DEPTH, 24 VOLT, 6.3 WATTS. 1/2" SUPPLY FROM TOP OF MAIN TO VALVE, 1/2" SUPPLY TO FLOOR OR HUB DRAIN, DISTRIBUTION UNIT AS REQUIRED.	
UR	4	2"	2"	3/4"		AMERICAN STANDARD	6581.001EC	ADA COMPLIANT WALL HUNG URINAL WITH 3/4" TOP SPUD, AMERICAN STANDARD EXPOSED, SENSOR-OPERATED FLUSH VALVE, MODEL 6065.121.002 EXPOSED, SENSOR-OPERATED FLUSH VALVE, 1.28 GPF. ES-S SENSOR ACTIVATED FLUSH VALVE, CR-P2 LITHIUM BATTERY POWERED, INLET: HIGH BACK PRESSURE VACUUM BREAKER WITH SPUD COUPLING AND FLANGE. JAY R. SMITH CARRIER OR WATTS CARRIER. MOUNTING HEIGHT AS DIRECTED BY ARCHITECT.	
WC1	2	4"	2"	1"		AMERICAN STANDARD	3351.101	ADA COMPLIANT WALL MOUNTED WATER CLOSET, ELONGATED BOWL WITH 1-1/2" TOP SPUD, AMERICAN STANDARD MODEL 6065.121.002 EXPOSED, SENSOR-OPERATED FLUSH VALVE, 1.28 GPF. ES-S SENSOR ACTIVATED FLUSH VALVE, CR-P2 LITHIUM BATTERY POWERED, INLET: ANGLE STOP WITH BACKFLOW PROTECTION AND VANDAL-RESISTANT CAP, OUTLET: HIGH BACK PRESSURE VACUUM BREAKER WITH SPUD COUPLING AND FLANGE. 25 PSI FLOW RATE REQUIRED, CHURCH OPEN FRONT SEAT, LESS COVER. JAY R. SMITH CARRIER OR WATTS CARRIER. MOUNTING HEIGHT AS DIRECTED BY ARCHITECT.	
WC2	5	4"	2"	1"		AMERICAN STANDARD	3351.101	WALL MOUNTED WATER CLOSET, ELONGATED BOWL WITH 1-1/2" TOP SPUD, AMERICAN STANDARD MODEL 6065.121.002 EXPOSED, SENSOR-OPERATED FLUSH VALVE, 1.28 GPF. ES-S SENSOR ACTIVATED FLUSH VALVE, CR-P2 LITHIUM BATTERY POWERED, INLET: ANGLE STOP WITH BACKFLOW PROTECTION AND VANDAL-RESISTANT CAP, OUTLET: HIGH BACK PRESSURE VACUUM BREAKER WITH SPUD COUPLING AND FLANGE. 25 PSI FLOW RATE REQUIRED, CHURCH OPEN FRONT SEAT, LESS COVER. JAY R. SMITH CARRIER OR WATTS CARRIER. MOUNTING HEIGHT AS DIRECTED BY ARCHITECT.	
WH	1			1"	1"	AO SMITH	DEL-40	ELECTRIC TANK TYPE WATER HEATER, STORAGE WATER TEMP @ 160°F, 480/3, 9 KW SIMULTANEOUS DUAL ELEMENT (2 @ 4.5 KW), 40 GALLON CAPACITY, MINIMUM 100°F TEMP RISE WITH MINIMUM 36 GALLON RECOVERY RATE.	
WS	7	2"	2"	1/2"	1/2"	ACORN	3423ADA-2-H	ADA COMPLIANT 38" WIDE, STAINLESS STEEL SEMI-CIRCULAR WASH STATION, INTEGRAL BACKSPASH AND SPRAYHEAD, 1/2" SUPPLY INLETS, 1 1/2" WASTE CONNECTION, HAND PUSHBUTTON OPERATED.	



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**FRITO-LAY**  
**LIBERTY**  
**PLANT**

PLANT ADDITION  
89 MILL ST  
LIBERTY, NY 12754

Project Number: 2021-213  
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Sheet Title:  
**PLUMBING**  
**DETAILS AND**  
**SCHEDULES**

FIRE PROTECTION PERFORMANCE SPECIFICATIONS MASTER SPEC

PART 1 - GENERAL

1. SUMMARY

A. THIS SECTION SPECIFIES THE AUTOMATIC SPRINKLER SYSTEMS FOR BUILDINGS AND STRUCTURES. MATERIAL AND EQUIPMENT SPECIFIED IN THIS SECTION INCLUDE:

a. PIPE, FITTINGS, VALVES AND SPECIALTIES.

b. SPRINKLERS AND ACCESSORIES.

B. PRODUCTS FURNISHED BUT NOT INSTALLED INCLUDE SPRINKLER HEAD CABINET WITH SPARE SPRINKLER HEADS. FURNISH TO OWNER'S MAINTENANCE PERSONNEL.

2. DEFINITIONS

A. PIPE SIZES USED IN THIS SPECIFICATION ARE NOMINAL PIPE SIZE (NPS).

B. OTHER DEFINITIONS FOR FIRE PROTECTION SYSTEMS ARE LISTED IN NFPA STANDARDS 13, 14 AND 24.

3. WORK INCLUDED

A. THE FULL EXTENT OF FIRE SPRINKLER PIPING WORK IS NOT INDICATED BY DRAWINGS AND SCHEDULES. THE SUCCESSFUL CONTRACTOR SHALL PREPARE AND SUBMIT DRAWINGS AND SCHEDULES FOR APPROVAL BY THE REQUIREMENTS OF THIS SECTION, AND IS HEREBY DEFINED TO INCLUDE (BUT IS NOT NECESSARILY LIMITED TO) PURCHASE AND COMPLETE INSTALLATION OF ALARM CHECK VALVES AND TRIM, FEED AND CROSS MAIN PIPING, BRANCH LINE PIPING, TEST VALVES, TEST CONDITIONS AND SPRINKLERS, DOUBLE CHECK BACK FLOW PREVENTORS AND INSIDE FIRE DEPARTMENT VALVE CONNECTIONS, AS REQUIRED BY LOCAL AUTHORITIES.

B. DESIGN A "WET PIPE" SYSTEM TO PROVIDE A COMPLETE FIRE PROTECTION SYSTEM TO PROVIDE 100 PERCENT FLOOR COVERAGE AND COORDINATED WITH THE INSTALLATION OF OTHER TRADES AS SHOWN ON THE DRAWINGS.

C. IT SHALL BE THE FIRE PROTECTION INSTALLER'S RESPONSIBILITY, PRIOR TO BID, VERIFY PRESSURE AT THE PROJECT SITE BY OBTAINING A SITE FLOW TEST PERFORMED WITHIN ONE CALENDAR YEAR OR PERFORMING A SITE FLOW TEST. DETERMINE IF THE AVAILABLE STATIC AND RESIDUAL PRESSURES ARE ADEQUATE. NOTIFY THE ARCHITECT AND ENGINEER IF LOW WATER FLOW / PRESSURE CONDITIONS EXIST PRIOR TO PROCEEDING.

4. SUBMITTALS

A. PRODUCT DATA FOR EACH TYPE OF SPRINKLER HEAD, VALVE, PIPING MATERIAL AND SPECIALTY FIRE PROTECTION SPECIALTY AND FIRE DEPARTMENT CONNECTION.

B. SHOP DRAWINGS PREPARED IN ACCORDANCE WITH NFPA 13, INCLUDING HYDRAULIC CALCULATIONS WHERE APPLICABLE. BOTH APPROVED BY A LICENSED FIRE PROTECTION ENGINEER. MAKE COMPLETE SHOP DRAWINGS AND WORKING DRAWINGS OF EQUIPMENT FURNISHED, INCLUDING DETAILED DRAWINGS OF PIPING AND SPRINKLER HEAD LOCATIONS.

C. SUBMIT THE SHOP DRAWINGS TO THE JURISDICTIONS WITH AUTHORITY FOR APPROVAL PRIOR TO SUBMITTING TO THE ARCHITECT AND ENGINEER. ALL SUBMITTALS SHALL INCLUDE THE APPROVALS NOTED ON THE DRAWING OR BY ACCOMPANYING LETTER.

5. QUALITY ASSURANCE

A. SPRINKLER EQUIPMENT AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS AND THE APPROVAL OF LOCAL, STATE AND FEDERAL FIRE AUTHORITIES.

B. EQUIPMENT AND INSTALLATION TO MEET THE REQUIREMENTS OF NFPA 13, 14 AND 24.

C. USE MATERIALS AND EQUIPMENT THAT ARE NEW AND APPROVED BY NFPA, LISTED BY THE UNDERWRITERS LABORATORY (UL) AND FACTORY MUTUAL APPROVED FOR THE PROPOSED APPLICATION.

D. IN ADDITION TO THE REQUIREMENTS OF THE GOVERNING AUTHORITIES, THE FOLLOWING DESIGN CRITERIA SHALL BE MET:

a. THE SPRINKLER SYSTEM SHALL BE DESIGNED TO MEET THE HYDRAULICALLY MOST REMOTE REQUIREMENTS. PROVIDE GPM DENSITY AND REMOTE AREA SQUARE FOOTAGE AS REQUIRED BY OWNER'S INSURANCE CARRIER AND BY NFPA STANDARDS. (THE MOST STRINGENT SHALL BE USED).

b. A SAFETY FACTOR PER CITY REQUIREMENTS SHALL BE DESIGNED INTO ALL THE HYDRAULIC CALCULATIONS.

c. THE MAXIMUM VELOCITY IN THE PIPES SHALL NOT EXCEED 20 FT/SEC.

d. SPRINKLER SPACING SHALL NOT EXCEED 225 SQ. FT. FOR LIGHT HAZARD AREAS AND 130 SQ. FT. FOR ORDINARY HAZARD. SPRINKLER SPACING SHALL BE FURTHER RESTRICTED BY CEILING TYPE WHERE APPROPRIATE PER NFPA-13. EXTENDED COVERAGE SPRINKLERS ARE NOT ACCEPTABLE.

e. A MAIN DRAIN SHALL BE PROVIDED NEXT TO THE MAIN SPRINKLER STANDPIPE RISER.

PART 2 - PRODUCTS

1. MATERIALS

A. MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF NFPA-13, I.S.O. COMMERCIAL RISK GROUP, UNDERWRITERS LABORATORIES AND FACTORY MUTUAL.

2. PIPE AND FITTINGS

A. ABOVE GRADE, INDOOR PIPING: ASTM A-53/135, SCHEDULE 40, BLACK STEEL PIPE. PROVIDE FITTINGS AS FOLLOWS:

a. CLASS 125 CAST IRON, THREADED FITTINGS, ANSI B16.1.

b. STEEL, WELDING FITTINGS, ASTM A 234, ASME B16.9 OR ASME B16.11.

c. STEEL, GROOVED-END FITTINGS: UL-LISTED AND FM-APPROVED, ASTM A 47, MALLEABLE IRON OR ASTM A 338, DUCTILE IRON, WITH DIMENSIONS MATCHING STEEL PIPE AND ENDS FACTORY GROOVED ACCORDING TO AWWA C900.

B. PIPE SLEEVES

a. PIPE SLEEVES THROUGH GRADE BEAMS OR GROUND FLOOR SLAB SHALL RECEIVE "LINK SEAL" CLOSURES MADE OF INTERLOCKING SYNTHETIC RUBBER LINKS. SEALS SHALL PROVIDE FOR ABSOLUTE WATER TIGHTNESS. SEAL SHALL BE CONSTRUCTED TO INSULATE ELECTRICALLY PIPE FROM WALL. INSTALL AS RECOMMENDED BY MANUFACTURER. PROVIDE CENTURY-LINE SLEEVES WITH WATER STOP AND ANCHOR COLLAR FOR PIPES PENETRATING GRADE BEAMS DESIGNATED TO BE ANCHORED.

3. VALVES

A. GENERAL: CONFORM TO THE REQUIREMENTS OF NFPA-13 AND NFPA-24. UL LISTED AND FM APPROVED AND SUITABLE FOR 175 WOG.

B. CHECK VALVES:

a. UP TO AND INCLUDING 2 INCHES: BRONZE BODY, BRONZE TRIM, RISING STEM, HANDWHEEL, INSIDE SCREW, SINGLE WEDGE OR DISC, THREADED ENDS, NIBCO #KT-403-W, OVER 2 INCHES: IRON BODY, BRONZE TRIM, SWING DISC, RENEWABLE DISC AND SEAT, FLANGED ENDS, NIBCO #F-908.

C. SECTIONAL VALVES:

a. INDICATING GATE CONTROL VALVE: OUTSIDE-SCREW-AND-YOKE (OS&Y), 175 LB RATED WORKING PRESSURE OF SIZE AND END TYPES INDICATED.

b. UP TO AND INCLUDING 2 INCHES: BRONZE BODY, BRONZE TRIM, RISING STEM, HANDWHEEL, INSIDE SCREW, SINGLE WEDGE OR DISC, THREADED ENDS, NIBCO #T-104-0.

c. OVER 2 INCHES: IRON BODY, BRONZE TRIM, RISING STEM, HANDWHEEL, OS&Y, SINGLE WEDGE, FLANGED OR GROOVED ENDS, NIBCO #F-607-0.

d. BUTTERFLY VALVES: BUILT IN TAMPER RESISTANT SWITCH FOR SUPERVISION OF THE OPEN POSITION. THE SWITCH SHALL BE CONTAINED WITHIN A NEMA 1 GENERAL PURPOSE HOUSING. DUCTILE IRON BODY AND DISK AND STAINLESS STEEL STEM, GROOVED OR LUG BODY STYLE ENDS, NIBCO #GD-4765 OR #LD-3510.

D. ALARM VALVE ASSEMBLIES: PROVIDE APPROVED ALARM VALVES, 175 LBS RATED PRESSURE. COMPLETE WITH ALL VARIABLE PRESSURE TRIM, VALVES, ETC., AS REQUIRED.

4. AUTOMATIC SPRINKLERS

A. FIRE SPRINKLERS: PROVIDE STANDARD BULB-TYPE, ("O-RING" WATER SEAL DESIGN NOT ACCEPTABLE) AUTOMATIC FIRE SPRINKLERS WITH 165 DEG.F. OR AS REQUIRED BY NFPA-13, OPERATING TEMPERATURE OF THE FOLLOWING STYLE AND FINISH: SPRINKLERS SHALL BE LIMITED TO 225 SQ. FT. COVERAGE FOR LIGHT HAZARD AND 130 SQ. FT. COVERAGE FOR ORDINARY HAZARD AREA. EXTENDED COVERAGE SPRINKLERS ARE NOT ALLOWED.

a. SPRINKLER STYLE: UPRIGHT, IN MECHANICAL SPACES WITHOUT CEILINGS OR CONCEALED PENDENT TYPE AS REQUIRED FOR CEILINGS TO MATCH HEADS USED FOR EXISTING SECOND LEVEL OFFICE AREA.

b. SPRINKLER FINISH: CAST BRASS (IN NON-EXPOSED AREAS) AND CHROME PLATED (IN OCCUPIED AREAS). COORDINATE FINISH FOR OCCUPIED AREA SPRINKLER HEADS WITH ARCHITECTURAL RCP AND OWNER TO MATCH FINISH OF EXISTING HEADS SERVING SECOND LEVEL OFFICE AREA.

c. UPRIGHT PENDENT SHALL HAVE 1" LINE OUTLETS AND BUSHED DOWN TO SPRINKLER HEAD SIZE IN UNFINISHED FUTURE TENANT LEASE SPACE.

ACCESSORIES

A. TAMPER SWITCHES: PROVIDE TAMPER SWITCHES EQUAL TO POTTER TYPE PS10-1 ON ALL CONTROL VALVES FOR CONNECTION TO THE FIRE ALARM SYSTEM.

B. WATER FLOW DETECTORS: PROVIDE WATER FLOW DETECTORS EQUAL TO POTTER TYPE VRS-D. PROVIDE A WATER FLOW DETECTOR AT THE MAIN FIRE PROTECTION PIPING ENTRANCE TO THE BUILDING OR SYSTEM, IN ADDITION TO OTHER LOCATIONS SHOWN, SPECIFIED, OR REQUIRED, TO DETECT ANY FLOW IN THE SYSTEM FROM ANY CAUSE. IF FLOW IS DETECTED, SOUND A LOCAL ALARM. SEE FIRE ALARM SECTION FOR CONNECTION TO FIRE ALARM SYSTEM.

C. PRESSURE GAUGES: PROVIDE 3-1/2 INCH DIAMETER PRESSURE GAUGES EQUAL TO ALLENCO NO. 1700 WITH STAINLESS STEEL CASE AND WITH A RANGE OF 0-300 PSIG, INCLUDE GAUGE COCK, WATER-MOTOR GONG, PROVIDE 1" WEATHERPROOF, RED ENAMELED FINISHED, WATER-MOTOR GONG AS INDICATED.

D. BALL DRIPS: PROVIDE BALL DRIPS EQUAL TO ALLENCO NO. 2112, BALL DRIPS FOR PIPING BETWEEN CHECK VALVES AND FIRE DEPARTMENT CONNECTIONS. EXTEND DRAIN LINE FROM EACH BALL DRIP TO POINT OF DISPOSAL AS SHOWN ON THE DRAWINGS, OR AS DIRECTED.

E. HANGERS AND SUPPORTS: PROVIDE HANGERS AND SUPPORTS AS REQUIRED BY NFPA-13.

F. INSPECTOR'S TEST CONNECTION

A. PROVIDE INSPECTOR'S TEST CONNECTION AS REQUIRED BY NFPA 13 AND AUTHORITIES HAVING JURISDICTION.

a. DUCTILE IRON MODULE HOUSING WITH COMBINATION SIGHT GLASS, ORIFICE AND BONNET ASSEMBLY.

b. UL LISTED AND FM APPROVED.

PART 3 - EXECUTION

1. INSTALLATION

A. INSTALL AUTOMATIC SPRINKLER SYSTEM WHERE SHOWN ON THE DRAWINGS OR AS NOTED. INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF NFPA-13, THESE SPECIFICATIONS, AND THE GOVERNING AUTHORITIES, AND WITH THE MANUFACTURERS WRITTEN INSTRUCTIONS. COORDINATE WITH OTHER WORK, INCLUDING PLUMBING PIPING, AS NECESSARY TO INTERFACE COMPONENTS OF FIRE SPRINKLER PIPING PROPERLY WITH OTHER WORK.

B. PROVIDE PIPE OFFSETS AS REQUIRED. MODIFY SHOP PRE-FABRICATED PIPING, PIPE HANGERS, AND OTHER COMPONENTS AS REQUIRED TO FIT THE JOB SITE CONDITIONS.

C. INSTALLATION OF HOODS AND SHIELDS FOR PROTECTION OF ELECTRICAL EQUIPMENT SHALL BE IN ACCORDANCE WITH APPROVED DETAILS, INCLUDED AS A PART OF THE COORDINATED SHOP DRAWINGS.

D. INSTALL SECTIONAL VALVES IN INLET PIPING AT THE BOTTOM OF EACH RISER AND IN LOOPS AS INDICATED OR REQUIRED.

E. INSTALL AIR VENTS AT THE HIGH POINTS OF THE SPRINKLER PIPING.

F. INSTALL A TAMPER SWITCH ON HOSE CONNECTION CABINET DOOR, EACH SECTIONAL VALVE AND ON EACH OTHER SHUT-OFF VALVE.

G. INSTALL DRAIN PIPING AT ALL LOW POINTS OF THE SPRINKLER PIPING.

H. THRUST BLOCKS SHALL COMPLY WITH NFPA #24 AND BE OF SIZE REQUIRED FOR THE SOIL BEARING STRENGTH AND AGAINST COMPACTED SOIL.

I. INSTALL WATER FLOW DETECTORS AT EACH TAKE-OFF FROM A SPRINKLER RISER OR FOR EACH ZONE.

J. INSTALL PRESSURE REDUCING VALVE AS REQUIRED BY NFPA 13.

K. INSTALL HEADS IN ALL LOCATIONS, PENDENT OR UPRIGHT, AS REQUIRED TO PROVIDE COMPLETE COVERAGE.

2. IDENTIFICATION

A. APPLY SIGNS TO IDENTIFY PURPOSES AND FUNCTIONS OF CONTROLS, AND TO IDENTIFY DRAIN, TEST, AND ALARM VALVES. PROVIDE LETTER SIZES AND STYLES AS SELECTED BY THE ARCHITECT FROM NFPA'S SUGGESTED STYLES.

CLEANING AND FLUSHING

A. PRIOR TO CONNECTING SPRINKLER PIPING FOR FLUSHING, FLUSH WATER FEED MAINS, LEAD-IN CONNECTIONS AND CONTROL PORTIONS OF SPRINKLER PIPING. AFTER SPRINKLER PIPING INSTALLATION HAS BEEN COMPLETED, AND BEFORE PIPING IS PLACED IN SERVICE, FLUSH EACH SPRINKLER SYSTEM UNDER PRESSURE TO REMOVE FOREIGN SUBSTANCES AS REQUIRED BY NFPA-13 AND NFPA-14. CONTINUE FLUSHING UNTIL WATER IS CLEAR, AND CHECK TO ENSURE THAT DEBRIS HAS NOT CLOGGED SPRINKLERS.

TESTS

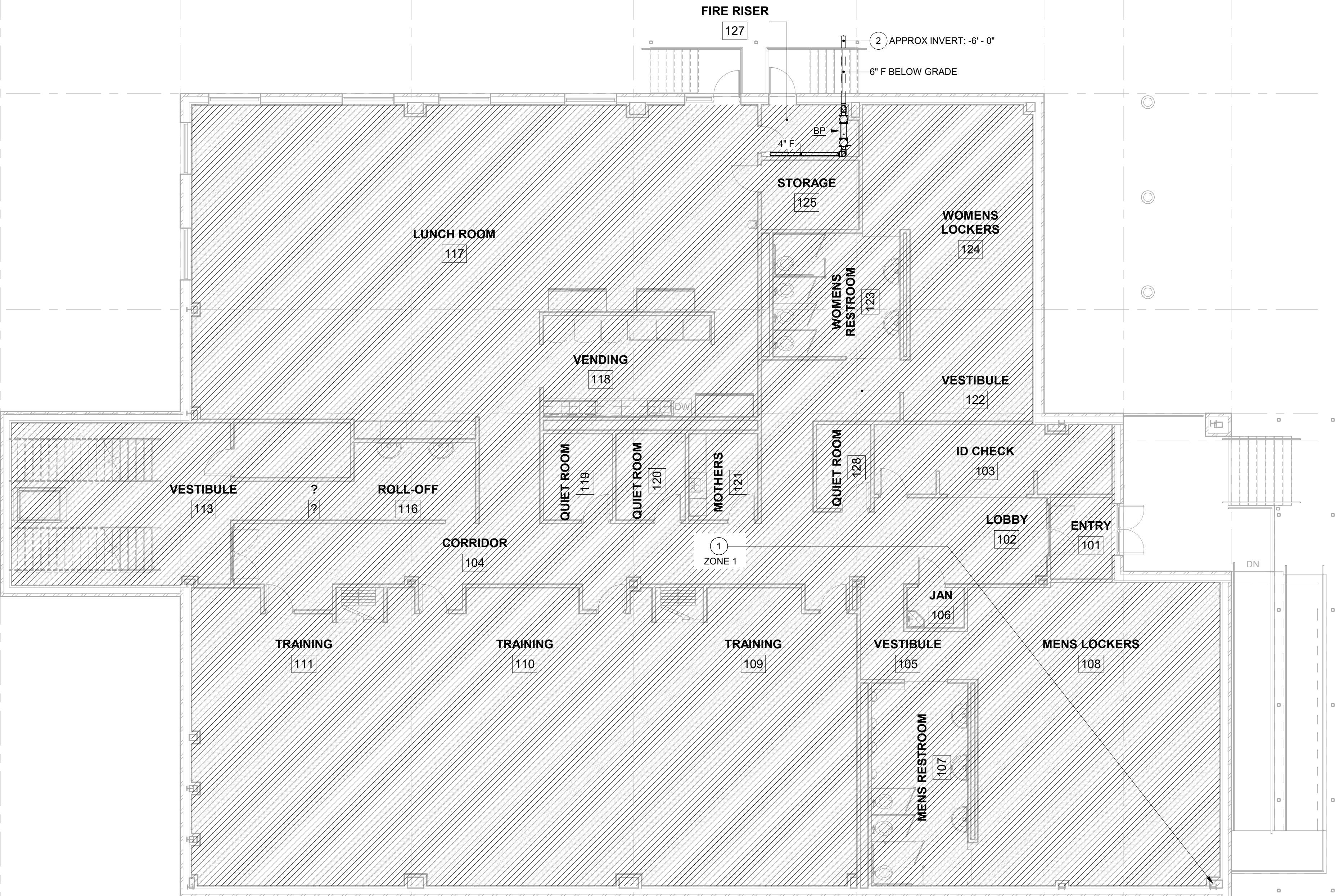
A. AFTER FLUSHING EACH SYSTEM, HYDROSTATICALLY TEST SPRINKLER PIPING IN ACCORDANCE WITH NFPA-13 AND NFPA-24. CHECK SYSTEM FOR LEAKAGE AT JOINTS. MEASURE HYDROSTATIC PRESSURE AT LOW POINT OF EACH SYSTEM OR ZONE BEING TESTED.

B. REPAIR OR REPLACE PIPING SYSTEM AS REQUIRED TO ELIMINATE LEAKAGE IN ACCORDANCE WITH NFPA STANDARDS, THEN RETEST AS SPECIFIED TO DEMONSTRATE COMPLIANCE.

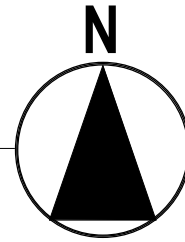
CERTIFICATION

A. BEFORE FINAL APPROVAL OF THE FIRE PROTECTION SYSTEMS ARE REQUESTED, PROVIDE THE ARCHITECT A STATEMENT THAT ALL REQUIREMENTS OF THE STATE BOARD OF INSURANCE, CITY BUILDING INSPECTION AND FIRE DEPARTMENTS HAVE BEEN MET IN THE INSTALLATION OF THE FIRE PROTECTION SYSTEMS.

KEYED NOTES	
MARK	COMMENT
1	PROVIDE AND INSTALL COMPLETE SPRINKLER PIPING SYSTEM IN ACCORDANCE TO NFPA 13 AND THE 2021 INTERNATIONAL FIRE CODE. PROVIDE CALCULATIONS AS REQUIRED.
2	PROVIDE AND INSTALL BLACK IRON FIRE PROTECTION LINE BELOW GRADE, APPROXIMATE INVERT AS NOTED ON PLANS. REFERENCE CIVIL PLANS FOR CONNECTION/CONTINUATION.



1 FIRE PROTECTION FIRST FLOOR PLAN  
1/8" = 1'-0"



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## FRITO-LAY LIBERTY PLANT

PLANT ADDITION  
89 MILL ST  
LIBERTY, NY 12754

Project Number: 2021-213  
Drawing Date: 17 AUG 2022  
Drawn: RM  
Checked: CBC  
Scale: As indicated

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Revisions:	
#	Revision Description
1	17 AUG 2022 ISSUE FOR PERMIT
2	02 SEPT 2022 OWNER REVIEW

Sheet Title:  
**FIRE PROTECTION  
FLOOR PLAN**