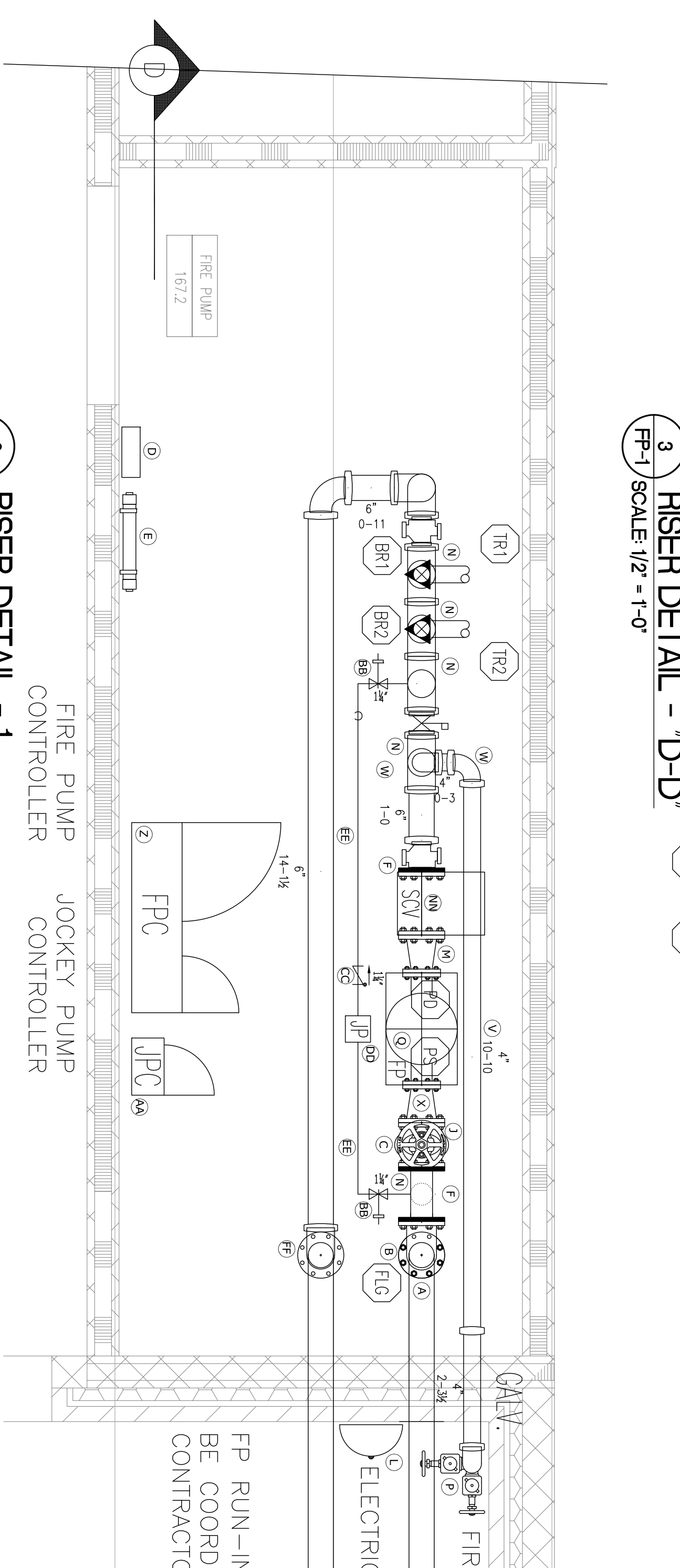
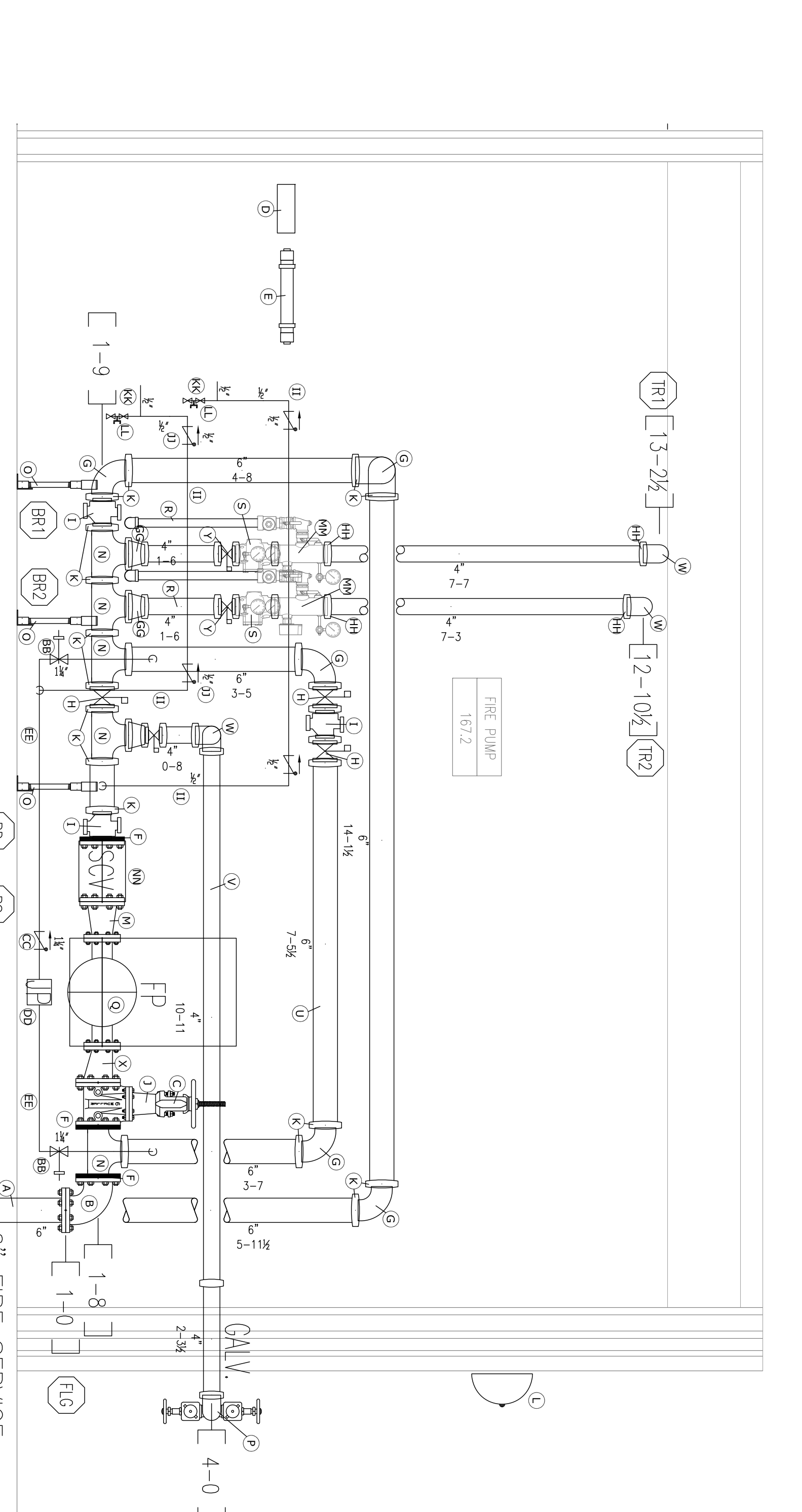


EQUIPMENT LIST	
(A) 6" DUCT STRAIN-BY OTHERS	(N) SUCTON CONTROL VALVE
(B) FLANGED BELT	(O) 1 1/2" GATE VALVE (TV)
(C) POTTER OSWEGO-2 TAPERS SWITCH (TV) (NOT SHOWN)	(P) 2" PIPE STRAIN (TV)
(D) 12 SPRINKLER HEAD CABINET	(Q) ELECTRIC SHOWER HEAD PUMP 500 GPM @ 40 PSI
(E) PVC TUBING W/ AS BUILT SPRINKLER BRANWIMS	(R) 2" MAIN DRAIN
(F) 6" GROUND FLOOR ADAPTER (TV)	(S) 4" TPO CV-R RISER CHECK VALVE
(G) 6" GROUND FLOOR CHECK VALVE (TV)	(T) 4" WATERTIGHT FLOW SWITCH / INSPECTORS TEST
(H) 6" GROUND FLOOR CHECK VALVE (TV)	(U) 4" BRASS PUMP
(I) 6" GROUND FLOOR CHECK VALVE (TV)	(V) 4" BRASS PUMP TEST HEAD PRING
(J) 6" GROUND FLOOR CHECK VALVE (TV)	(W) 4" GROUND 90
(K) 6" GROUND FLOOR CHECK VALVE (TV)	(X) 6" x 4" GROUNDED RECEPTRIC REDUCER
(L) 6" GROUND FLOOR CHECK VALVE (TV)	(Y) 4" GROUNDED BUTTERFLY VALVE / DAMPER SWITCH (TV)
(M) 6" GROUND FLOOR CHECK VALVE (TV)	(Z) 1/2" GLOBE VALVE
(N) 6" x 4" GROUNDED RECEPTRIC REDUCER	(AA) 1/2" RESTRICTED ORIFICE UNION OR SWING CHECK VALVE W/ 3/2" HOLE-NOSE INSTALL NO CLOSER THAN 5'-0"
(O) 1 1/2" GATE VALVE	(AB) 4" RISER HANGDOWN (FLOW SWITCH / INSPECTORS TEST) (TIE DRAIN PRING INTO MAIN DRAIN)
(P) 2" PIPE STRAIN (TV)	
(Q) ELECTRIC SHOWER HEAD PUMP 500 GPM @ 40 PSI	
(R) 2" MAIN DRAIN	
(S) 4" TPO CV-R RISER CHECK VALVE	
(T) 4" WATERTIGHT FLOW SWITCH / INSPECTORS TEST	
(U) 4" BRASS PUMP	
(V) 4" BRASS PUMP TEST HEAD PRING	
(W) 4" GROUND 90	
(X) 6" x 4" GROUNDED RECEPTRIC REDUCER	
(Y) 4" GROUNDED BUTTERFLY VALVE / DAMPER SWITCH (TV)	
(Z) 1/2" GLOBE VALVE	
(AA) 1/2" RESTRICTED ORIFICE UNION OR SWING CHECK VALVE W/ 3/2" HOLE-NOSE INSTALL NO CLOSER THAN 5'-0"	
(AB) 4" RISER HANGDOWN (FLOW SWITCH / INSPECTORS TEST) (TIE DRAIN PRING INTO MAIN DRAIN)	

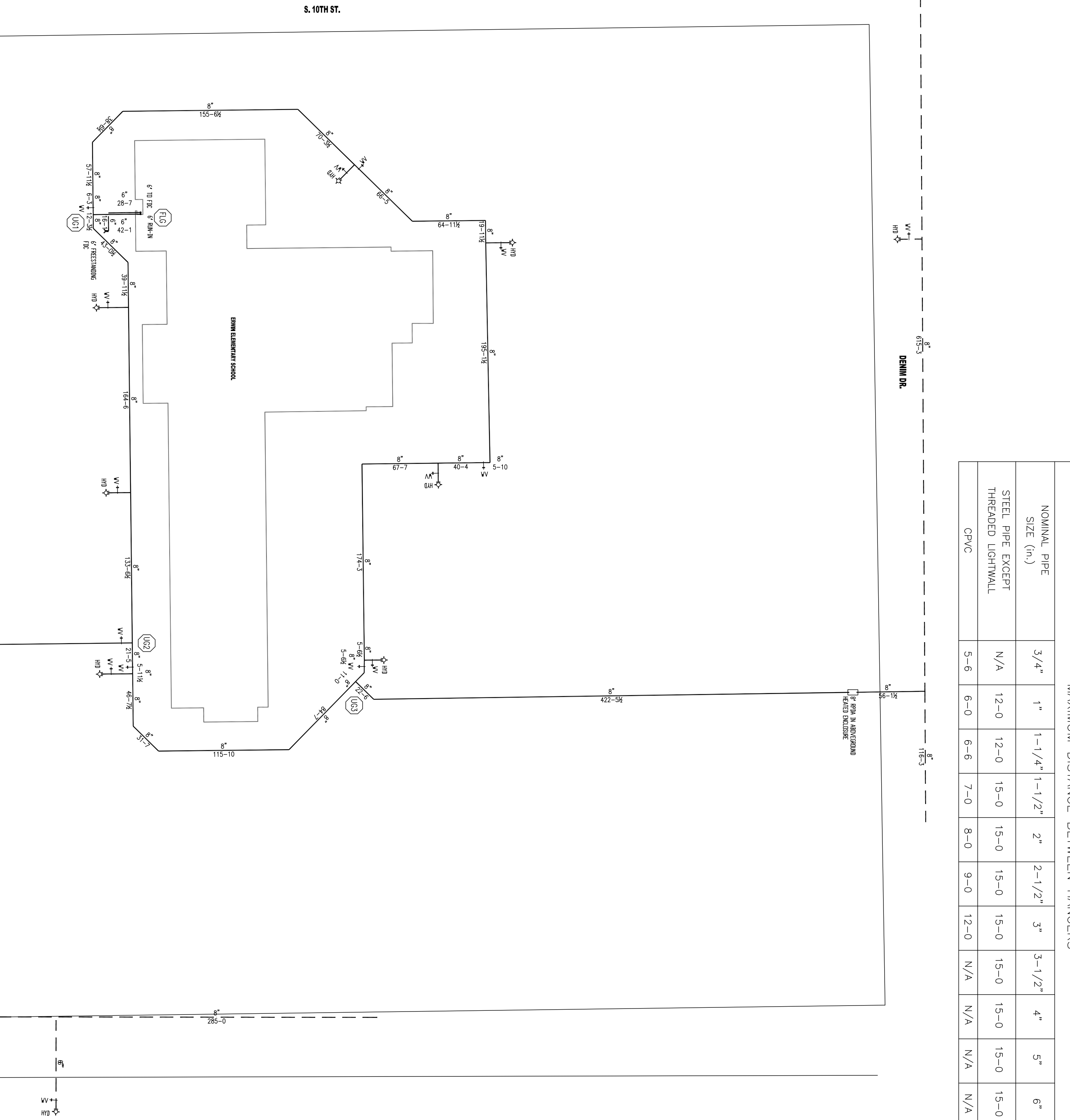
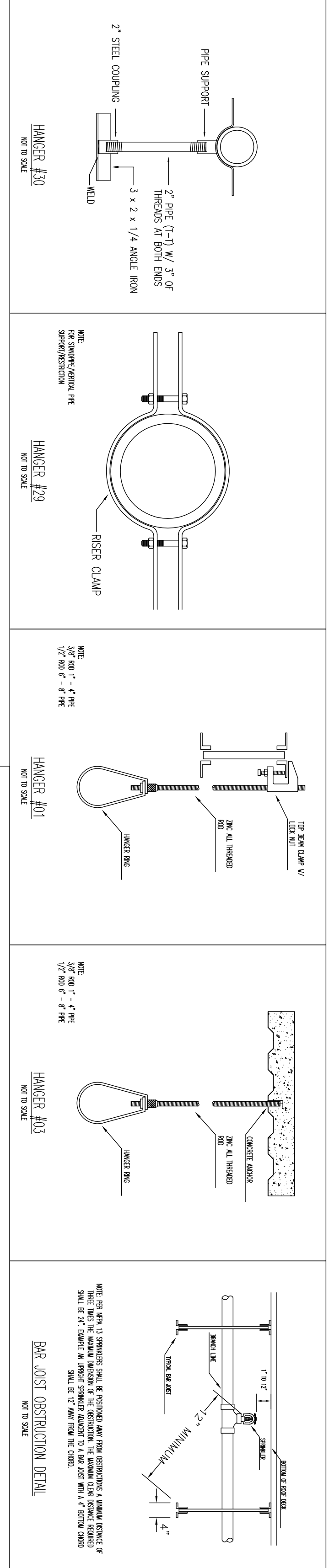
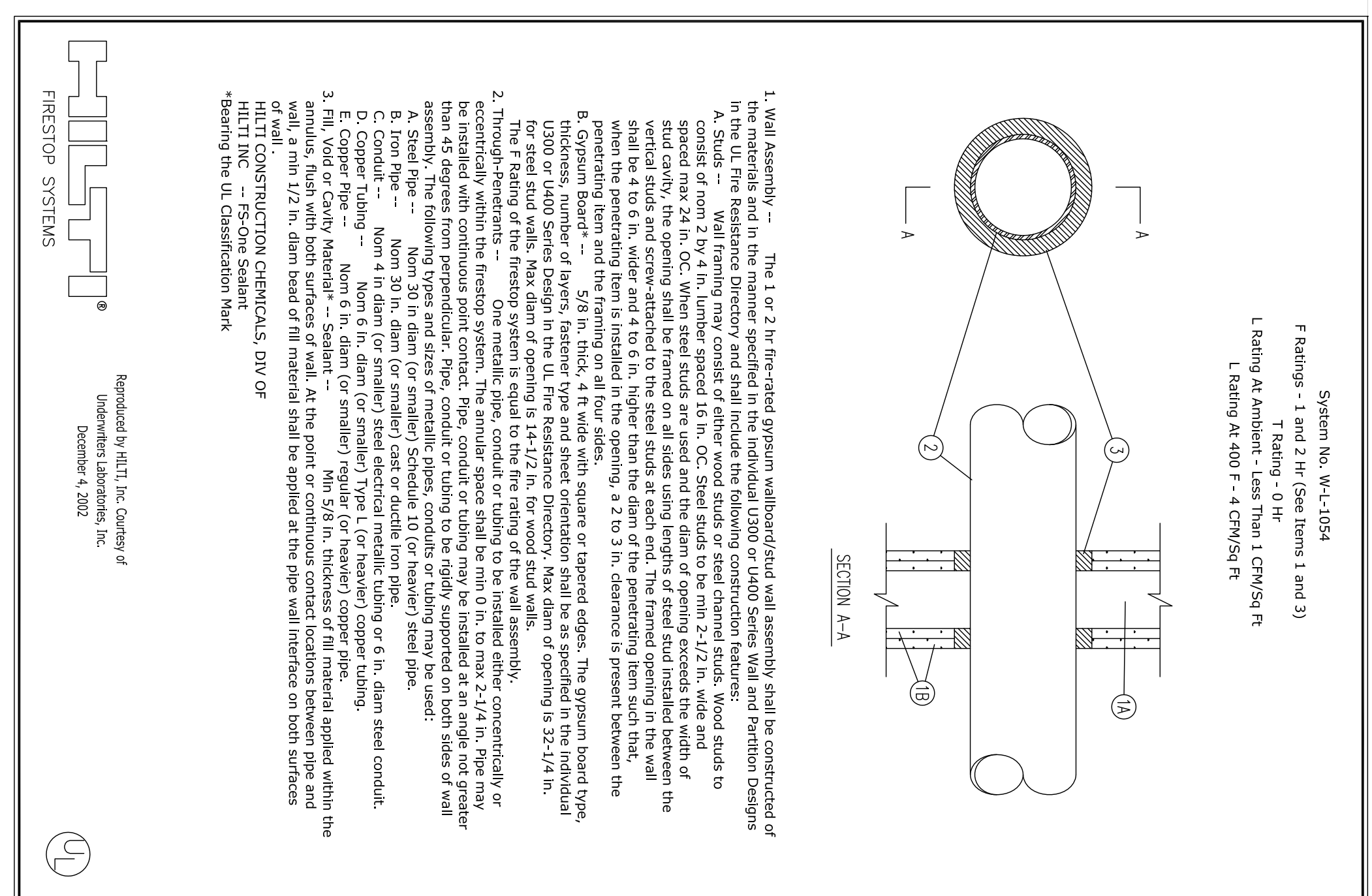


GENERAL FIRE PROTECTION NOTES	
1	ALL WORKMANSHIP AND MATERIALS SHALL BE PER NFPA 13 STANDARDS AND ALL APPLICABLE LOCAL CODES.
2	IT IS THE BUILDING OWNERS RESPONSIBILITY TO PROVIDE ADEQUATE HEAD, 40' OR HIGHER, FIRE ALL HEADS OF THE BUILDING THAT CONTAIN WATER FILLED SPRINKLER SYSTEM PRING.
3	CUTTING OF STRUCTURAL OR ARCHITECTURAL MEMBERS ARE TO BE PERFORMED ONLY WITH THE WRITTEN APPROVAL OF THE ARCHITECT OR STRUCTURAL ENGINEER.
4	ANY FIELD WALL OR FLOOR PENETRATIONS ARE TO BE FIRE STOPPED PER THE APPLICABLE DETAIL.
5	NO FIELD CHANGES OR DEVIATIONS FROM THE APPROVED PLANS ARE TO BE MADE WITHOUT THE APPROVAL OF RELIABLE FIRE PROTECTON CONSULTANTS.
6	ANY AND ALL CHANGES MADE DURING INSTALLATION SHALL BE RECORDED AND RETURNED TO THE DESIGN DEPARTMENT PER AS BUILT DRAWINGS.
7	THE JOB PERMAN IS TO REVIEW ALL NOTES AND DETAILS BEFORE STARTING INSTALLATION BRING ANY DISCREPANCIES BETWEEN THIS PLAN AND ACTUAL FIELD CONDITIONS TO THE CONSTRUCTION AND DESIGN DEPARTMENTS ATTENTION IMMEDIATELY.
8	RELIABLE FIRE PROTECTION, LLC SHALL OBTAIN A CERTIFIED FLUSHING CERTIFICATE BEFORE ASSEMBLING THE RISER.
9	ALL ELECTRICAL / ALARM DEVICES SHALL BE TIED INTO THE FIRE ALARM SYSTEM BY THE OWNERS FIRE ALARM CONTRACTOR.
10	NO LESS NOTED ON THE PLANS ALL TYPES OF EXISTING SPRINKLER BOLLDS THE RISER AND WORK BEYOND THE PROTECTION HEAD MANAGER. THE RISER SHALL BE INSTALLED IN THE RISER ROOM AND THE RISER SHALL BE PROTECTED BY A MINIMUM OF 1 1/2" CONCRETE OR 2" GYPSUM BOARD.
11	RELIABLE FIRE PROTECTION - SLOPE OF WORK INSTAL STARTING AT 6" FLANGE BY OTHERS, 1'-0" DET IN THE SPRINKLER RISER ROOM INSTAL A NEW COMPLETE & WORKING FIRE PUMP AND TWO WET PIPE FIRE SPRINKLER SYSTEM PER NFPA CODE STANDARDS AND SPECIFICATIONS PROVIDED.
12	X AUTODRUM PLATFORM - ON EACH SIDE OF THE PLATFORM INSTAL A RECESSED HOSE CABINET W/ 1 1/2" HOSE VALVE AND 50' OF HOSE W/ AN ADJUSTABLE TIE NOZZLE.

DESIGN CENTER	
OCCUPANCY - EDUCATIONAL, OFFICE, LIBRARIES, AUDITORIUMS	
HAZARD - LIGHT	
DENSITY - 0.10 GPM/SQ.FT.	
ROOM AREA - 1500 SQ.FT.	
HEAD SPRING - 225 SQ.FT.	
HOSE ALLOWANCE - 100 GPM	
OCCUPANCY - MECHANICAL ROOMS	
HAZARD - MODERATE TO SEVERE	
DENSITY - 0.15 GPM/SQ.FT.	
ROOM AREA - 1300 SQ.FT.	
HEAD SPRING - 130 SQ.FT.	
HOSE ALLOWANCE - 250 GPM	
OCCUPANCY - MECHANICAL PLATFORM, KITCHEN	
HAZARD - MODERATE TO SEVERE	
DENSITY - 0.20 GPM/SQ.FT.	
ROOM AREA - 1500 SQ.FT.	
HEAD SPRING - 150 SQ.FT.	
HOSE ALLOWANCE - 250 GPM	

SPECIAL HEAD										
001	TRSD	1/2"	5.6	1/2"	155	QUICK	CONCRETE	STANDARD	TS	INSTALL IN COOLER/REFRIGER
002	TRSD	1/2"	5.6	1/2"	200	QUICK	UPHIGHT	TS	INSTALL 288" AT HEADERS	
003	TRSD	1/2"	5.6	1/2"	155	QUICK	CONCRETE	TS	INSTALL ON ELEVATOR RISERS	
004	TRSD	1/2"	5.6	1/2"	200	QUICK	UPHIGHT	TS	INSTALL ON ELEVATOR RISERS	
005	TRSD	1/2"	5.6	1/2"	155	QUICK	CONCRETE	TS	INSTALL ON ELEVATOR RISERS	
006	TRSD	1/2"	5.6	1/2"	200	QUICK	UPHIGHT	TS	INSTALL ON ELEVATOR RISERS	
007	TRSD	1/2"	5.6	1/2"	155	QUICK	CONCRETE	TS	INSTALL ON ELEVATOR RISERS	
008	TRSD	1/2"	5.6	1/2"	200	QUICK	UPHIGHT	TS	INSTALL ON ELEVATOR RISERS	
009	TRSD	1/2"	5.6	1/2"	155	QUICK	CONCRETE	TS	INSTALL ON ELEVATOR RISERS	
010	TRSD	1/2"	5.6	1/2"	200	QUICK	UPHIGHT	TS	INSTALL ON ELEVATOR RISERS	
011	TRSD	1/2"	5.6	1/2"	155	QUICK	CONCRETE	TS	INSTALL ON ELEVATOR RISERS	
012	TRSD	1/2"	5.6	1/2"	200	QUICK	UPHIGHT	TS	INSTALL ON ELEVATOR RISERS	

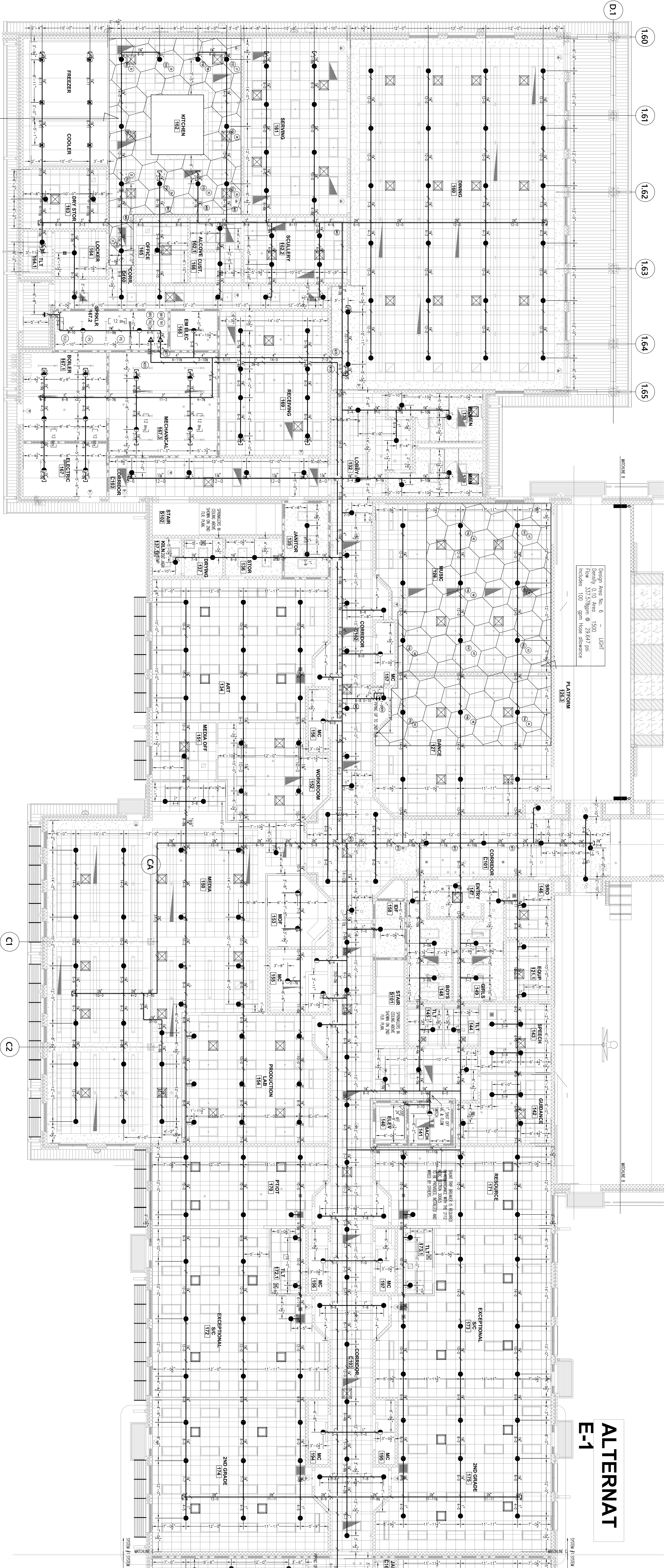
Reviewed For Code Compliance By:  
**D. Banks Wallace**  
 Chief Deputy Fire Marshal  
 11/30/2020 8:09:26 AM



**RELIABLE FIRE PROTECTION, LLC**  
 22 PEARSON RD, DUNN, NC 28334 P: 910-890-1234 F: 910-890-1235  
 910-890-1234  
 910-890-1235

**ERWIN ELEMENTARY SCHOOL**  
 301 S. 10TH ST. & DENHAM DR.  
 ERWIN, NORTH CAROLINA 28339

DATE: 07-29-20



Design Area No. 7 ——— ORDINARY II  
 Density 0.10 gpm/ft.²  
 Row 544-ft design @ 23.950 psi  
 Includes 250 gpm hose distance

**ALTERNAT  
E-1**

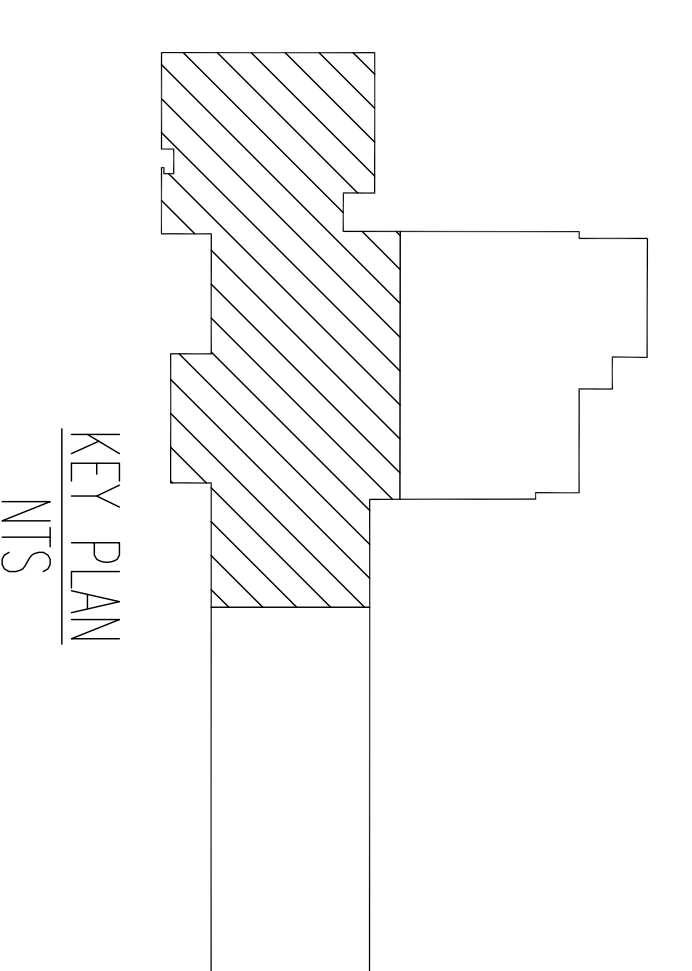
**FIRE SPRINKLER PIPING PLAN - A (1ST FLR) SYSTEM 1**  
 SCALE 1/8" = 1'-0"

AREA #	SYS #	LOCATION	SYSTEM TYPE	HIGHEST CLASS	sq. ft. AREA	DESIGN FLOW	K - 1 DESIGN CALC	HOSE STREAM	MINIMUM DESIGN DIST.	SPRINKLER FLOW	SPRINKLER FLOW	SPRINKLER FLOW
1	2	2ND FLOOR CLASSROOMS	WET	LIGHT	1,500	5.8	14	100	315.529	31.461	13.12	
2	1	MECHANICAL PLATFORM	WET	LIGHT	1,300	0.20	1.60	250	644.329	26.636	13.57	
3	1	GYMNASIUM	WET	LIGHT	2,250	0.10	1.500	100	262.480	21.814	23.90	
4	1	AUDITORIUM	WET	LIGHT	2,250	0.10	1,500	100	414.007	23.374	20.83	
5	1	1ST FLOOR OFFICES	WET	LIGHT	2,250	0.10	1,500	100	472.149	27.544	15.83	
6	1	MISC/DANCE CLASSROOMS	WET	LIGHT	2,250	0.10	1,500	100	311.578	29.647	13.30	
7	1	KITCHEN	WET	ORDINARY 2	1,300	0.20	1.600	250	544.485	26.635	16.34	
8	1	AUDITORIUM PLATFORM	WET	ORDINARY 2	1,300	0.20	1.600	250	544.482	11.038	31.83	

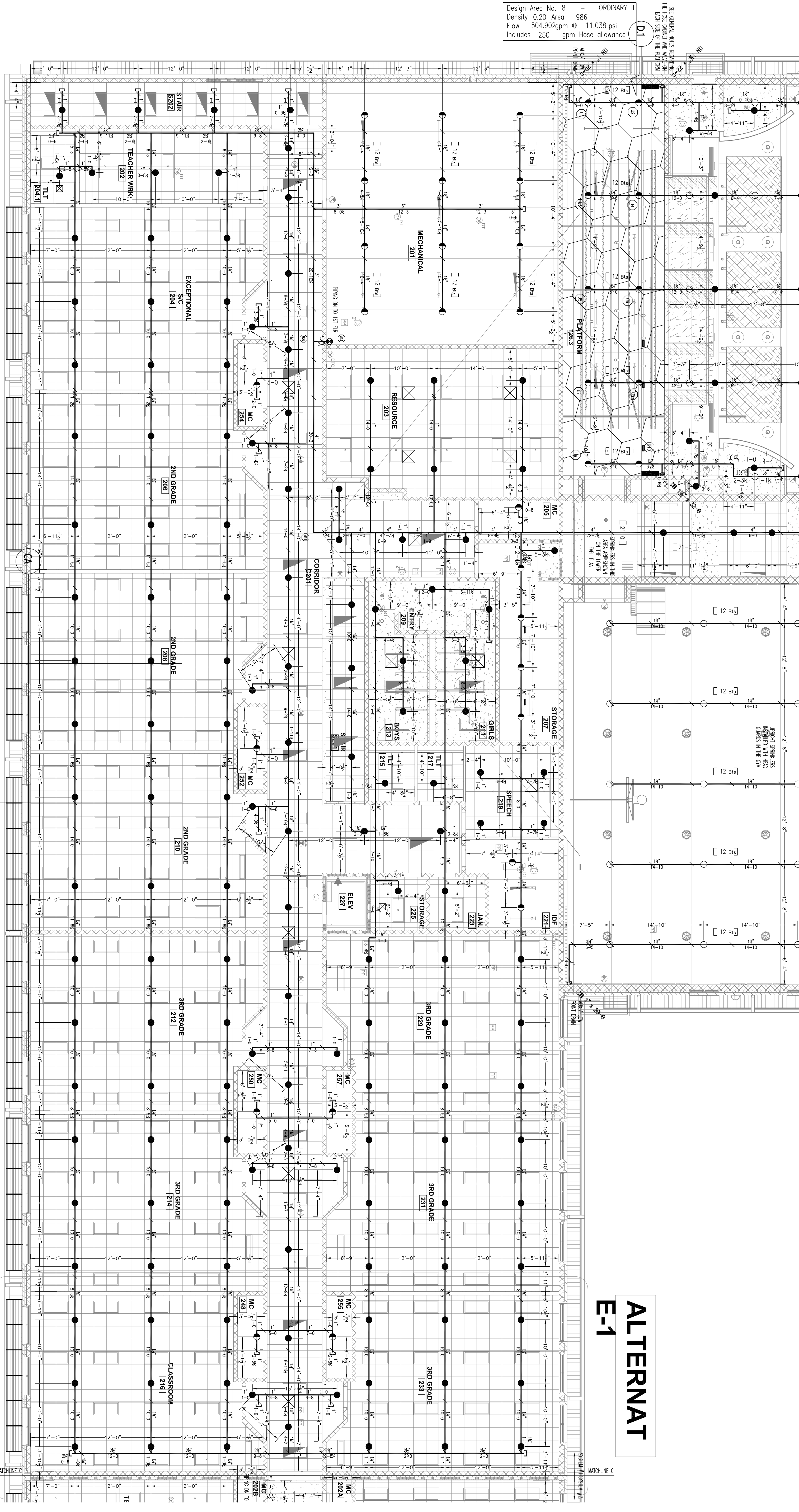
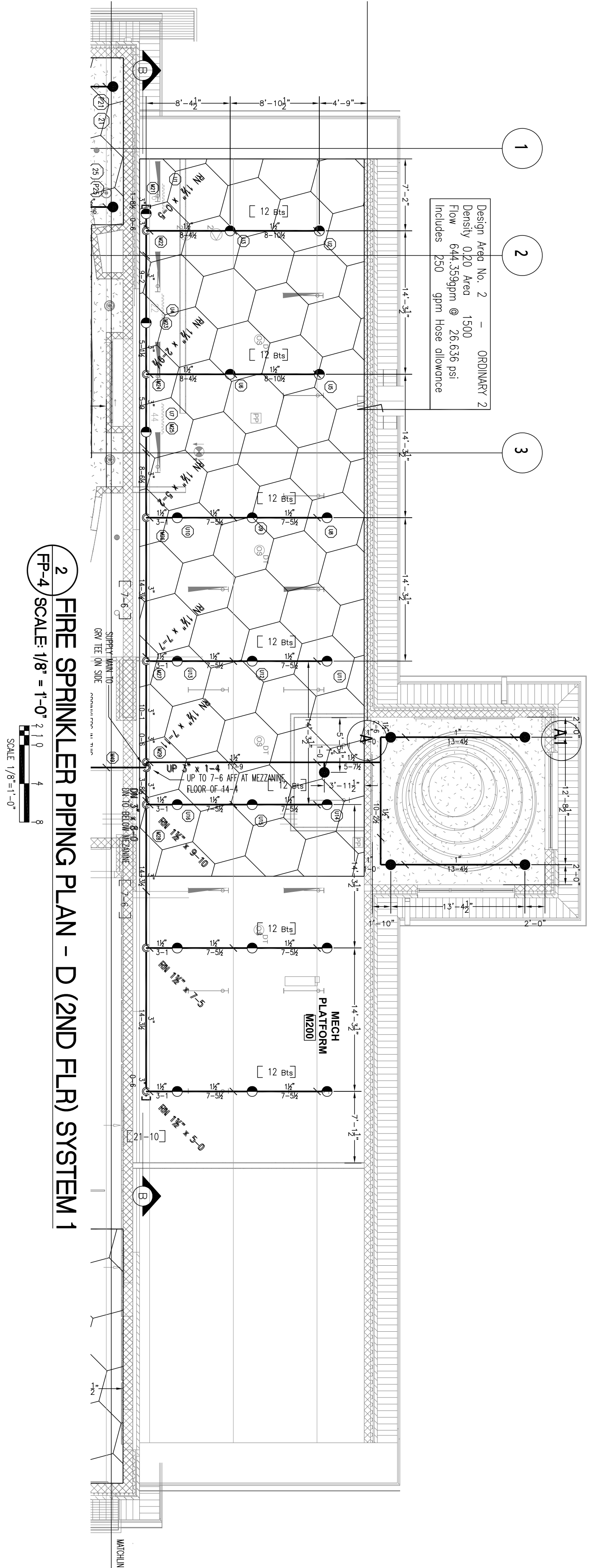
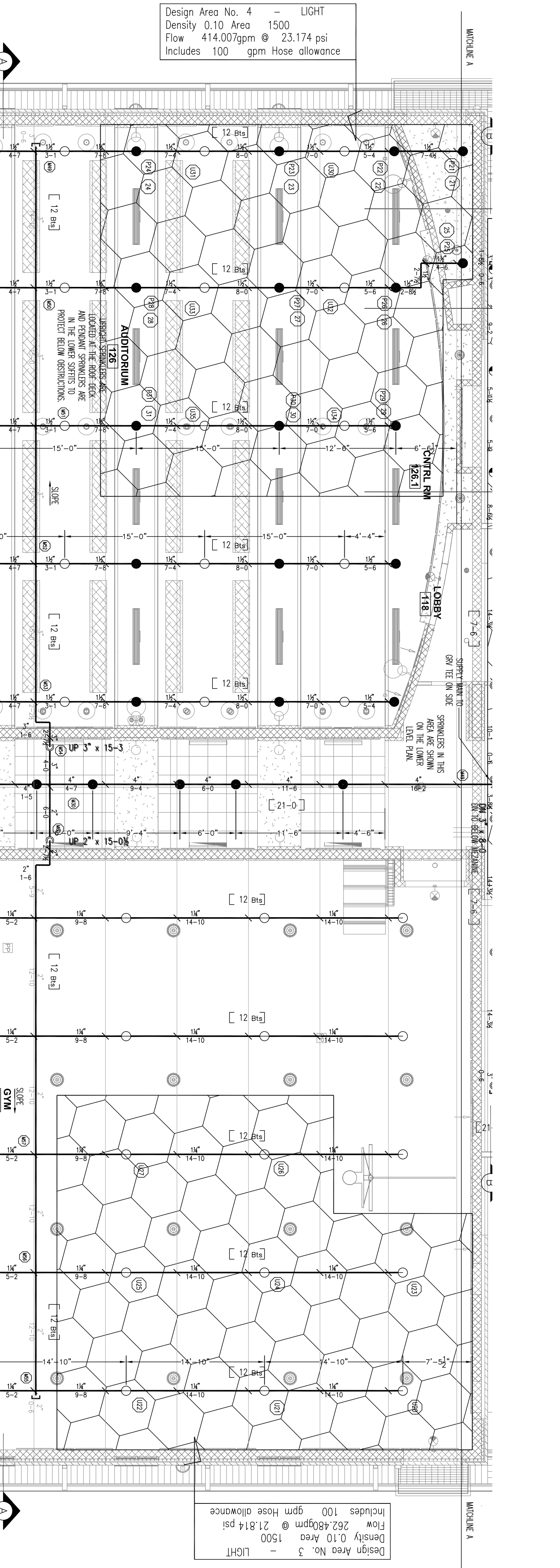
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	FIREFIGHTER		FIREFIGHTER		FIREFIGHTER		FIREFIGHTER		FIREFIGHTER		FIREFIGHTER
	FIREFIGHTER		FIREFIGHTER		FIREFIGHTER		FIREFIGHTER		FIREFIGHTER		FIREFIGHTER

**RELIABLE  
FIRE PROTECTION, LLC**  
 22 PATTON RD. DUNN, NC 28334 P: 910-980-1234 F: 910-980-1235  
 I CERTIFY THAT THE BEST PRACTICE HAS BEEN USED IN THE DESIGN AND CONSTRUCTION OF THE PROJECT.

DATE: 07-29-20	STATE: NC
PROJECT NO: 2020-099	SHEET NO: 1 OF 2
CLIENT: ERWIN ELEMENTARY SCHOOL	ARCHITECT: KESHA PEAY
CONTRACT NO: 19R-13-20	PERMIT NO: 2021-0013
DATE OF PERMIT: 07-29-20	DATE OF CONSTRUCTION: 2020-09-15
DATE OF AS-BUILT: 07-29-20	DATE OF SIGNATURE: 07-29-20







AREA #	SYSTEM	HAZARD CLASS	DESIGN DENSITY (lb./ft.³)	DESIGN AREA (sq. ft.)	DESIGN FLOW (gpm)	DESIGN PRESSURE (psi)	HOSE ALLOWANCE (gpm)
1	2ND FLOOR CLASSROOMS	WEIGHT	0.20	1,500	44.00	2.3174	100
2	MUSICAL PLATFORM	WEIGHT	0.20	1,500	44.00	2.3174	100
3	GYMNASIUM	WEIGHT	0.20	1,500	44.00	2.3174	100
4	AUDITORIUM	WEIGHT	0.10	1,500	26.24	21.814	100
5	1ST FLOOR OFFICES	WEIGHT	0.10	1,500	26.24	21.814	100
6	MUSICAL PLATFORM	WEIGHT	0.10	1,500	26.24	21.814	100
7	KITCHEN	WEIGHT	0.20	1,500	44.00	2.3174	100
8	AUDITORIUM PLATFORM	WEIGHT	0.20	986	26.24	21.814	250

SYMBOL	DESCRIPTION
(Symbol)	SPRINKLER HEAD
(Symbol)	VALVE
(Symbol)	RISE
(Symbol)	BRANCH LINE
(Symbol)	TEST POINT
(Symbol)	MECHANICAL ROOM
(Symbol)	STORAGE
(Symbol)	LOBBY
(Symbol)	CONFERENCE ROOM
(Symbol)	AUDITORIUM
(Symbol)	CLASSROOM
(Symbol)	MUSICAL PLATFORM
(Symbol)	GYMNASIUM
(Symbol)	KITCHEN
(Symbol)	AUDITORIUM PLATFORM

**RELIABLE FIRE PROTECTION, LLC**  
 42 PANTON RD., DUNN, NC 28534 P: 910-580-1234 F: 910-580-1235  
 I IDENTIFY THIS TO BE THE BEST FIRE PROTECTION PLAN AND DESIGN PER NFPA AND THE  
 APPLICABLE LOCAL, STATE AND FEDERAL CODES AND REGULATIONS.

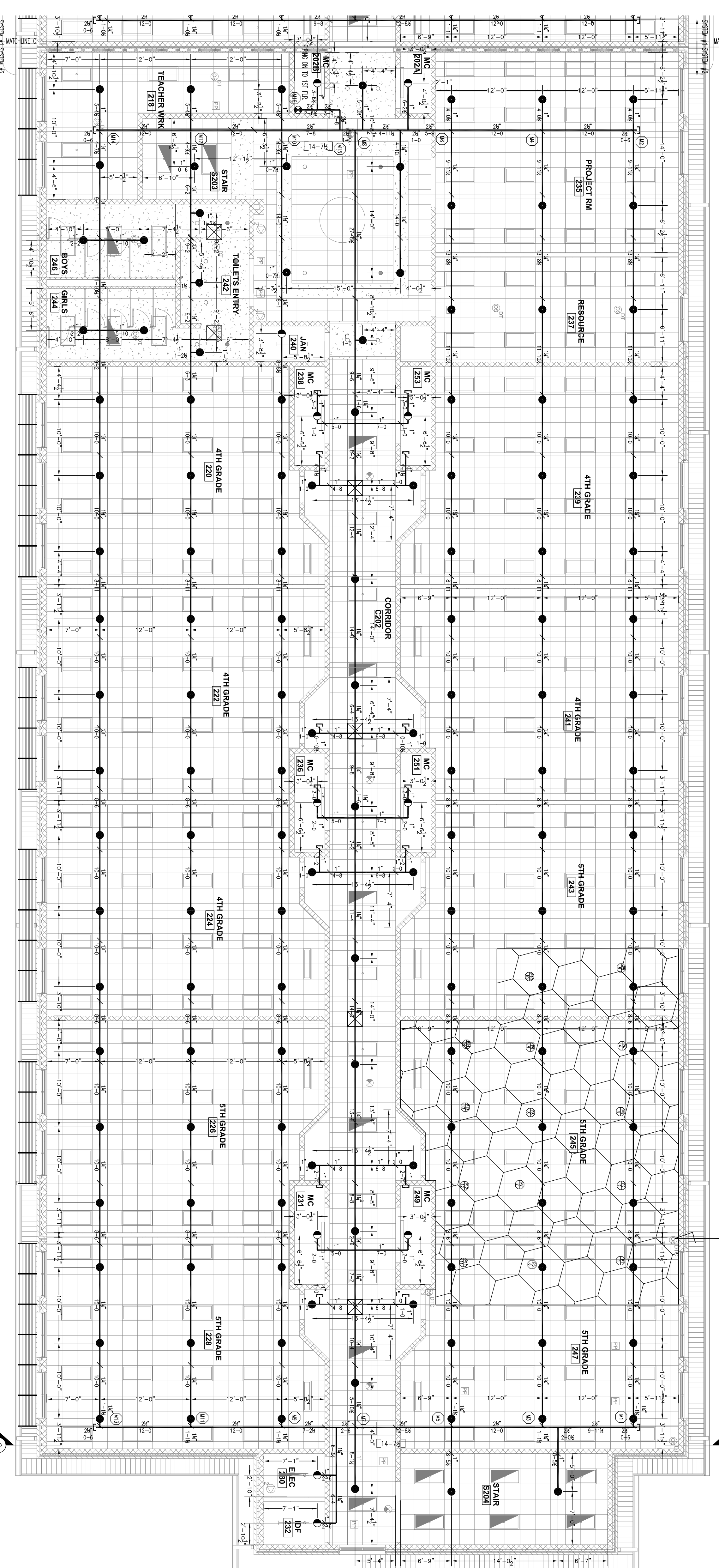
**KEY PLAN**

ERWIN ELEMENTARY SCHOOL  
 301 S. 10TH ST. & DENNA DR.  
 ERWIN, NORTH CAROLINA 28539

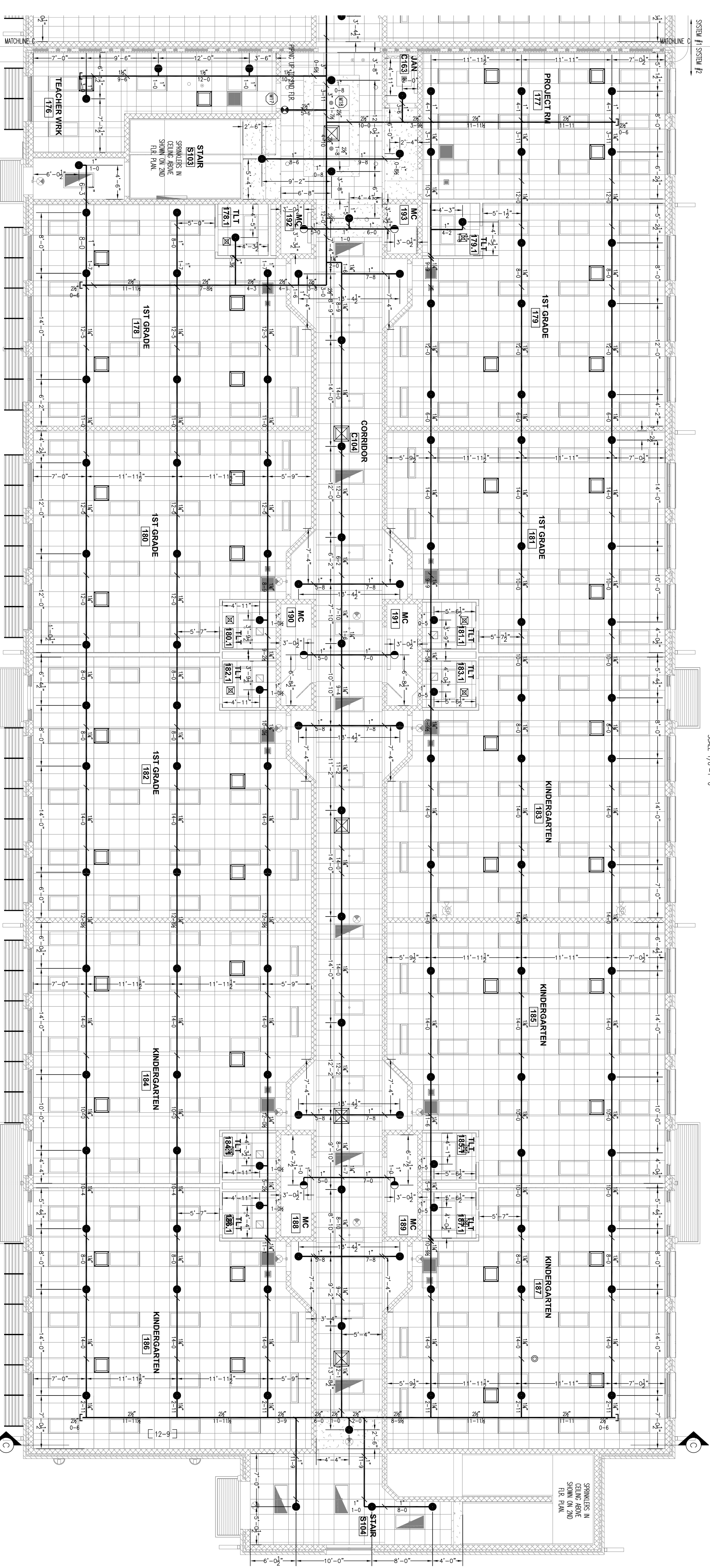
DESIGNED BY: KESHIA PEAY  
 DATE: 07-28-20  
 CHECKED BY: AS SHOWN  
 DATE: 07-28-20

THIS DOCUMENT IS THE PROPERTY OF RELIABLE FIRE PROTECTION, LLC. NO PART OF THIS DOCUMENT IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF RELIABLE FIRE PROTECTION, LLC.

Design Area No. 1  
 1500  
 Flow = 315.52 gpm @ 31.461 psi  
 Includes 100 gpm hose allowance



2 FIRE SPRINKLER PIPING PLAN - F (2ND FLR) SYSTEM 2  
 SCALE: 1/8" = 1'-0"



1 FIRE SPRINKLER PIPING PLAN - E (1ST FLR) SYSTEM 2  
 SCALE: 1/8" = 1'-0"

NO.	SYMBOL	DESCRIPTION	QTY	UNIT	AMOUNT	EXTENSION	MARKING
1	1/2" NPT	PIPE	1500	FT	1500		
2	1/2" NPT	ELBOW	150	PCS	150		
3	1/2" NPT	TEE	150	PCS	150		
4	1/2" NPT	FLANGE	150	PCS	150		
5	1/2" NPT	VALVE	150	PCS	150		
6	1/2" NPT	DRIP	150	PCS	150		
7	1/2" NPT	END CAP	150	PCS	150		
8	1/2" NPT	FLANGE	150	PCS	150		

SYMBOL	DESCRIPTION	QTY	UNIT	AMOUNT	EXTENSION	MARKING
1	1/2" NPT	PIPE	1500	FT	1500	
2	1/2" NPT	ELBOW	150	PCS	150	
3	1/2" NPT	TEE	150	PCS	150	
4	1/2" NPT	FLANGE	150	PCS	150	
5	1/2" NPT	VALVE	150	PCS	150	
6	1/2" NPT	DRIP	150	PCS	150	
7	1/2" NPT	END CAP	150	PCS	150	
8	1/2" NPT	FLANGE	150	PCS	150	

REVISION	DATE	DESCRIPTION
1	07-23-20	ISSUE FOR PERMIT
2	07-23-20	ISSUE FOR CONSTRUCTION

**RELIABLE FIRE PROTECTION, LLC**  
 42 PATTIN RD, DUNN, NC 28334 P: 910-980-1234 F: 910-980-1235  
 1 IDENTIFY THE BEST PUMP AND ENGINE FOR THE PROJECT AND THE PROJECT'S SPECIFIC REQUIREMENTS AND THE PROJECT'S SPECIFIC REQUIREMENTS AND THE PROJECT'S SPECIFIC REQUIREMENTS.

**KEY PLAN**  
 NTS

ERWIN ELEMENTARY SCHOOL  
 301 S. 10TH ST. & DENNA DR.  
 ERWIN, NORTH CAROLINA 28339