

**NOTES:**

- OCCUPANT: APARTMENTS - RESIDENTIAL, LOCAL
- DESIGN BASIS: HYDRAULIC CALCULATION PER NFPA 13A WET SPRINKLER SYSTEM (SEE HYDRAULIC DATA SHEETS)
- ALL PIPING IS AND SHALL BE BLACK STEEL PIPE UNLESS OTHERWISE NOTED. ALL FITTINGS TO BE CAST IRON SCREWED OR WELDED.
- ALL PIPING AND VALVES SHALL BE LISTED FOR USE WITH WET SPRINKLER SYSTEMS.
- EXISTING CEILING TO REMAIN UNLESS OTHERWISE NOTED.
- TOP OF WOOD JOIST TO REMAIN UNLESS OTHERWISE NOTED.
- FEL DEPENDS BOTTOM OF WOOD JOIST TO CENTERLINE OF PIPE.
- OWNER TO PROVIDE SUFFICIENT HEAD (MIN 40 FT) IN ENTIRE BUILDING TO PREVENT SPRINKLER PIPE FROM FREEZING.
- OWNER: CITY OF PORTLAND
- OWNER: HEALTH & HUMAN SERVICES DIVISION
- OWNER: 55 CHESTNUT STREET
- OWNER: PORTLAND, MAINE 04101
- OWNER: TEL: 855

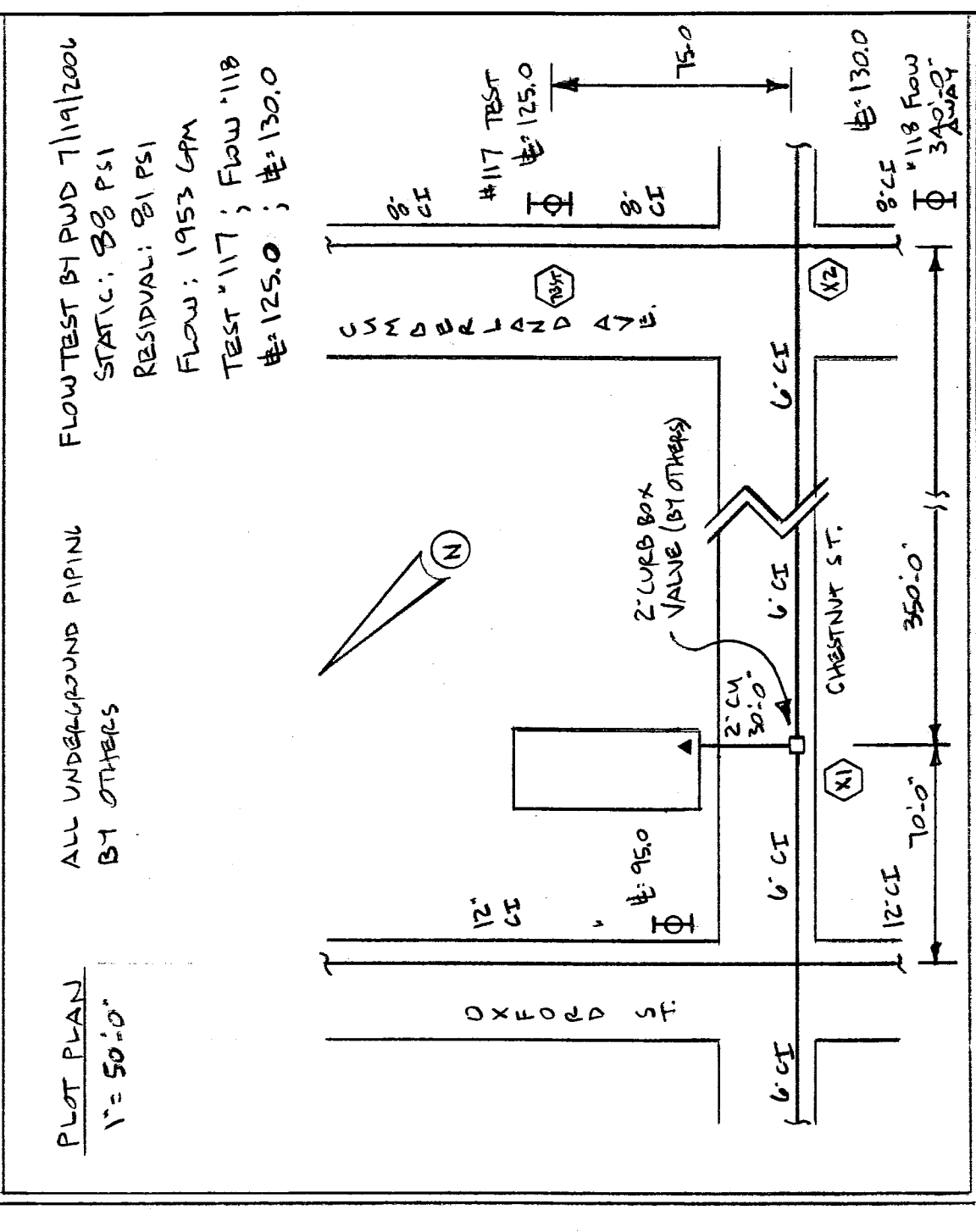
**WATER SUPPLY:**

FLOW TEST BY PORTLAND WATER DISTRICT  
 WATER WAS FLOWED FROM HYDRANT #113 ON UMBRELAND AVENUE, APPROXIMATELY 140.0' FROM THE BUILDING FROM AN 8" CIRCULATING CITY MAIN. TEST HYDRANT #17 LOCATED ON UMBRELAND AVENUE, APPROXIMATELY 225.0' FROM THE BUILDING.

STATIC: 88.5 PSI  
 RESIDUAL: 81.5 PSI WITH 195 GPM FLOW  
 @ 1250'

**LEGEND**

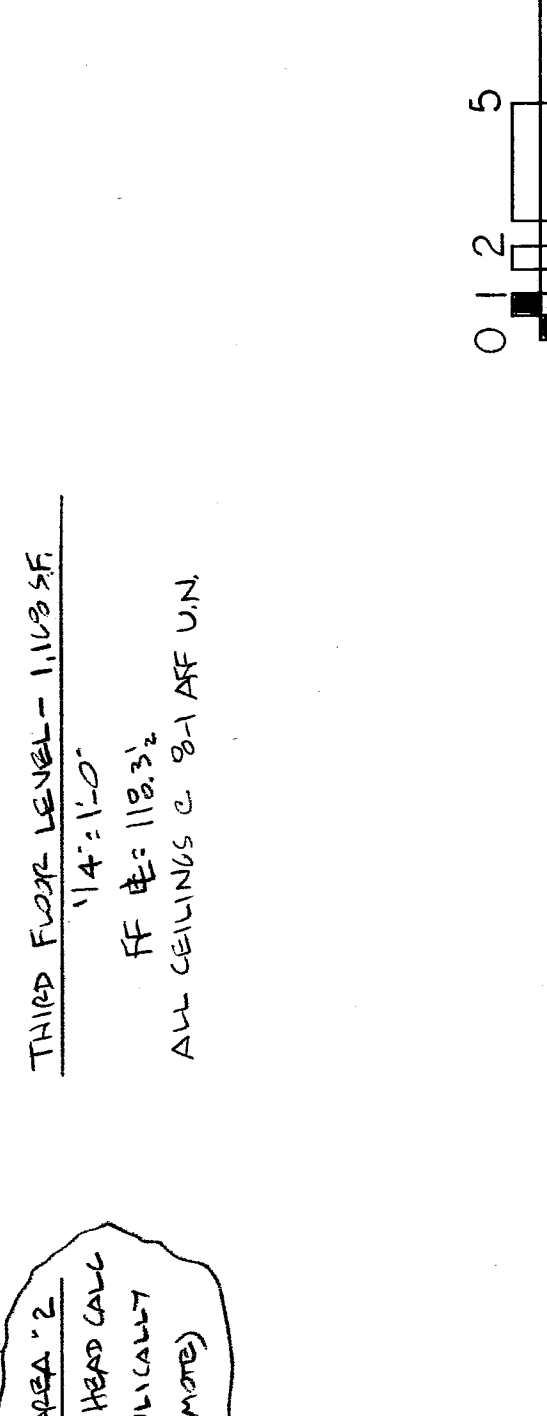
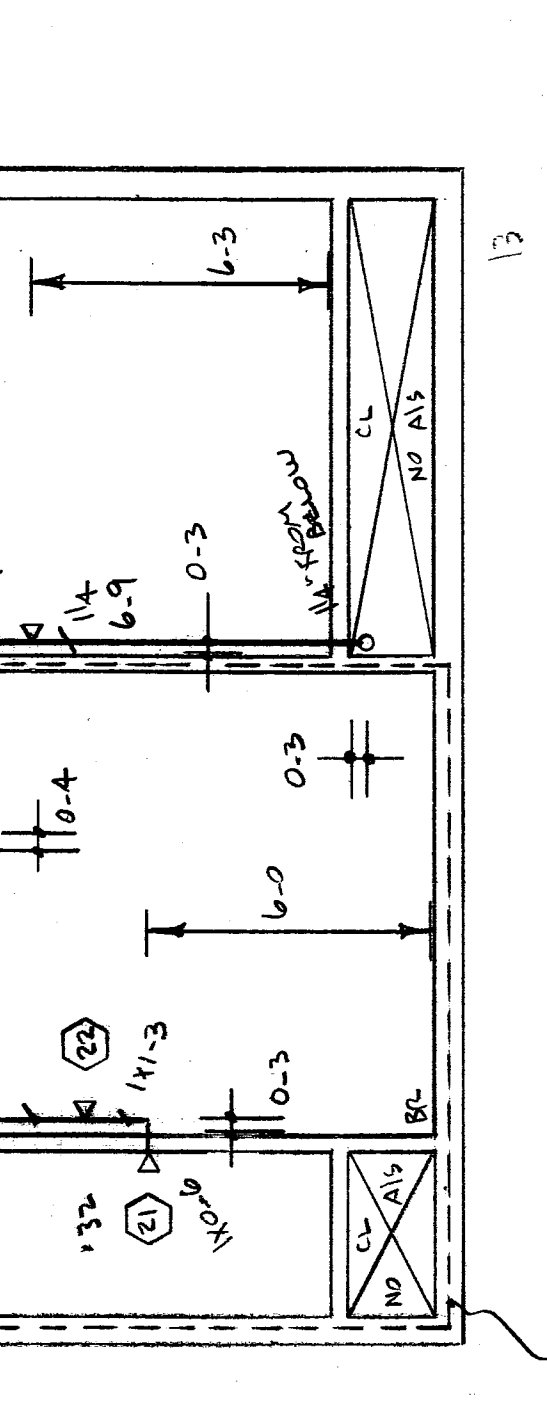
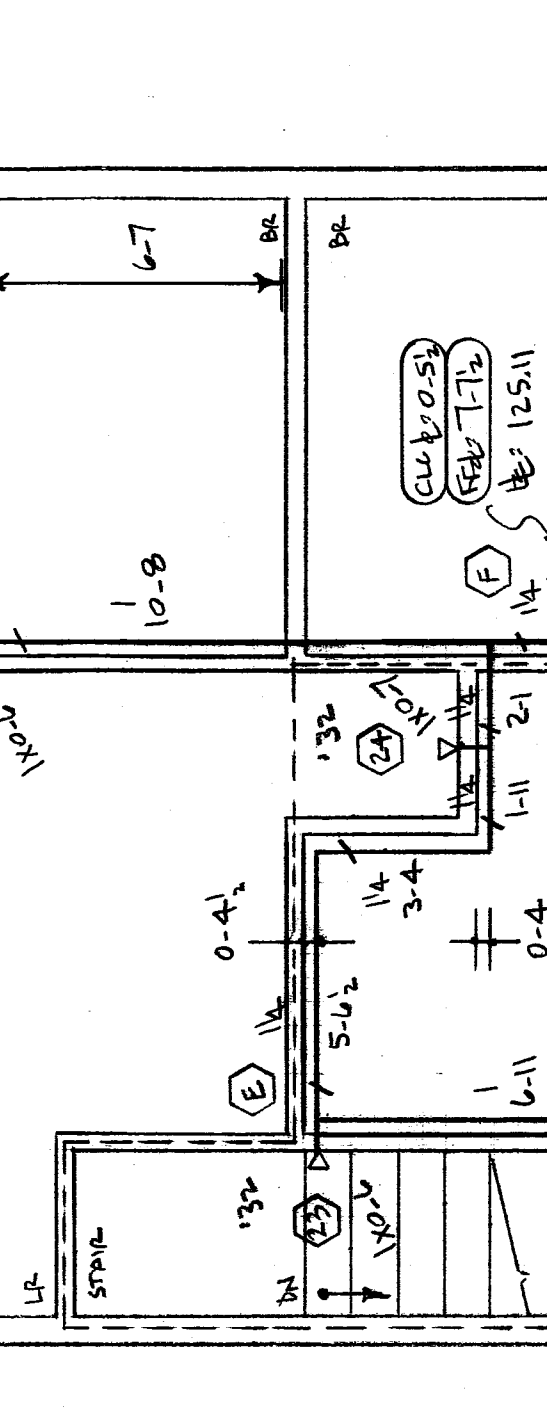
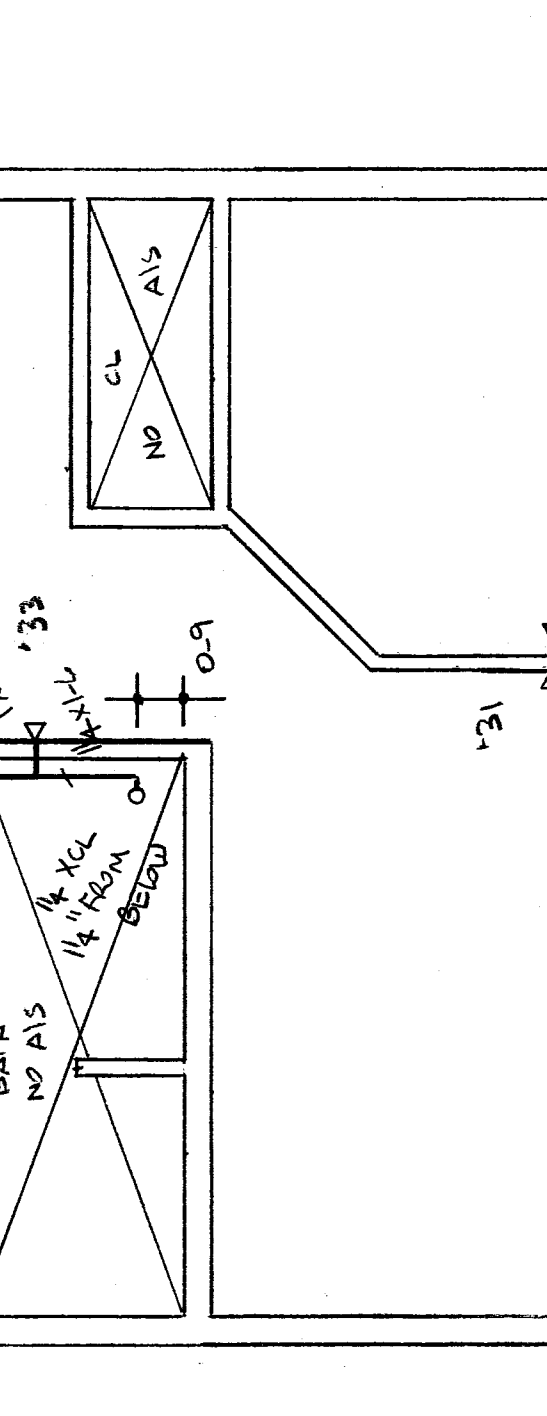
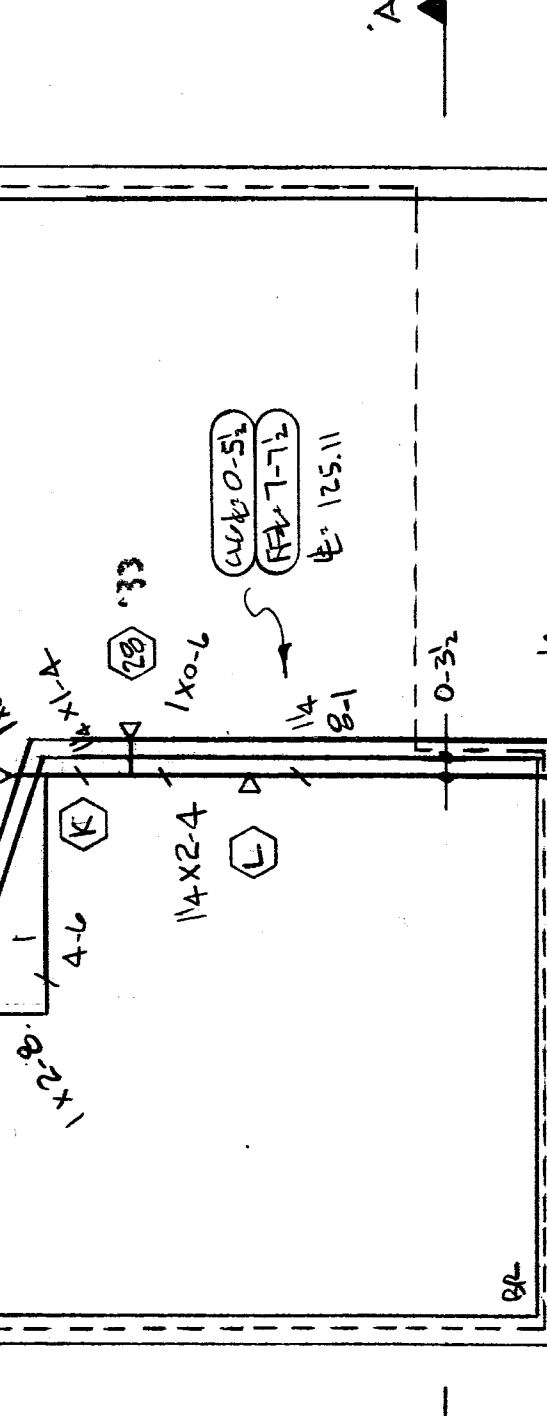
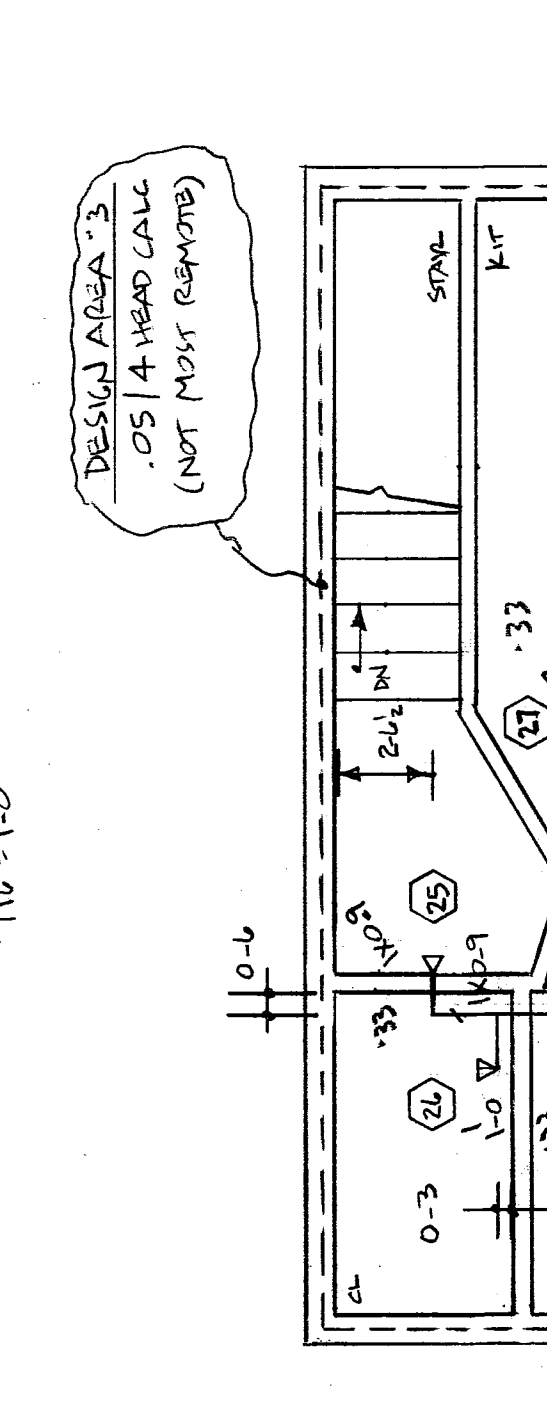
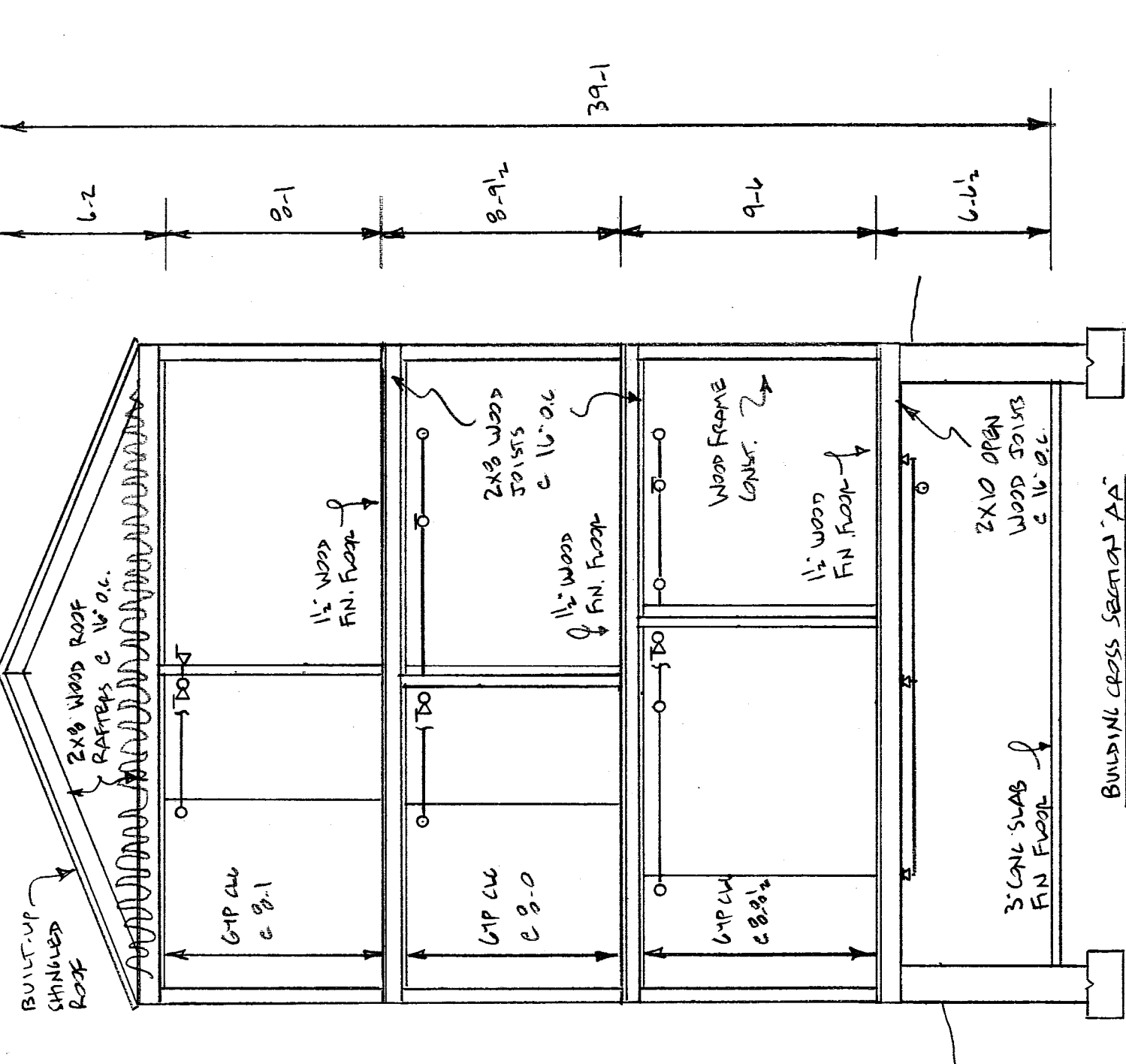
HYDRAULIC RESERVE PIPE  
 SCREWED OR WELDED JOINT



55 CHESTNUT STREET  
 PORTLAND, MAINE 04101

SCALE 1/4" = 1'-0"

DRAWN BY: SEG  
 CHECKED BY: SEG  
 DATE: 1-6-12  
 TOTAL SPRINKLER HEADS: 50  
 SHEET 1 OF 1  
 JOB # 11078



CONTRACT WITH OWNER

REVISIONS

NO. DATE DESCRIPTION

1 1-6-12 TOTAL SPRINKLER HEADS

2 1-6-12 TOTAL SPRINKLER HEADS

3 1-6-12 TOTAL SPRINKLER HEADS

4 1-6-12 TOTAL SPRINKLER HEADS

5 1-6-12 TOTAL SPRINKLER HEADS

6 1-6-12 TOTAL SPRINKLER HEADS

7 1-6-12 TOTAL SPRINKLER HEADS

8 1-6-12 TOTAL SPRINKLER HEADS

9 1-6-12 TOTAL SPRINKLER HEADS

10 1-6-12 TOTAL SPRINKLER HEADS

11 1-6-12 TOTAL SPRINKLER HEADS

12 1-6-12 TOTAL SPRINKLER HEADS

13 1-6-12 TOTAL SPRINKLER HEADS

14 1-6-12 TOTAL SPRINKLER HEADS

15 1-6-12 TOTAL SPRINKLER HEADS

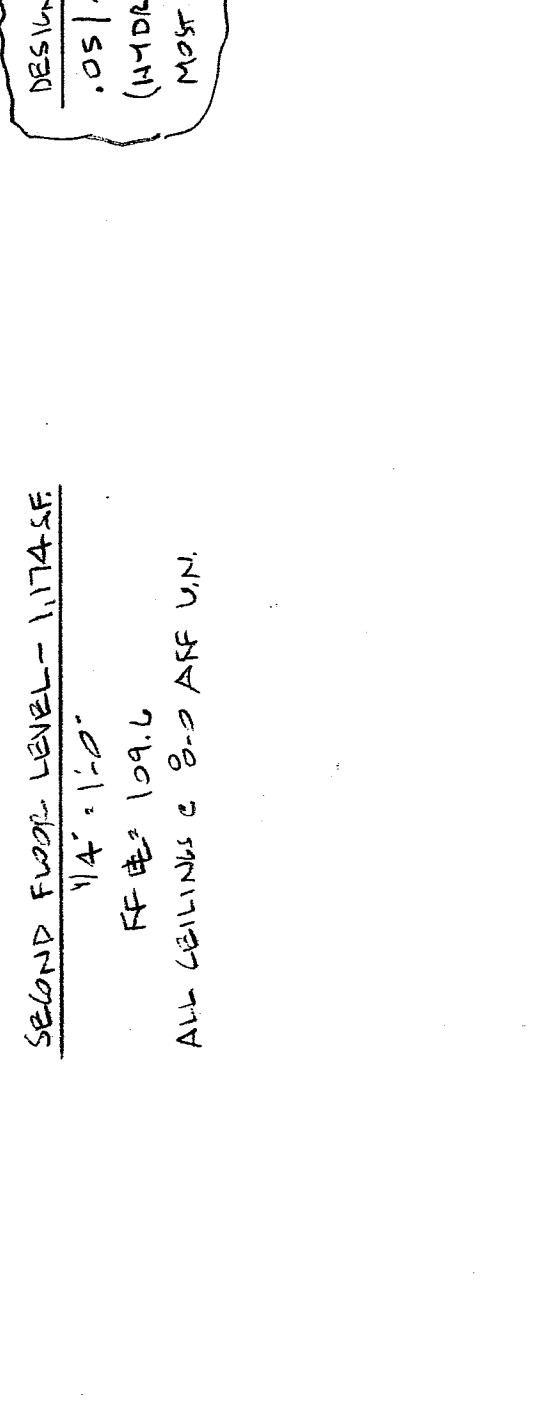
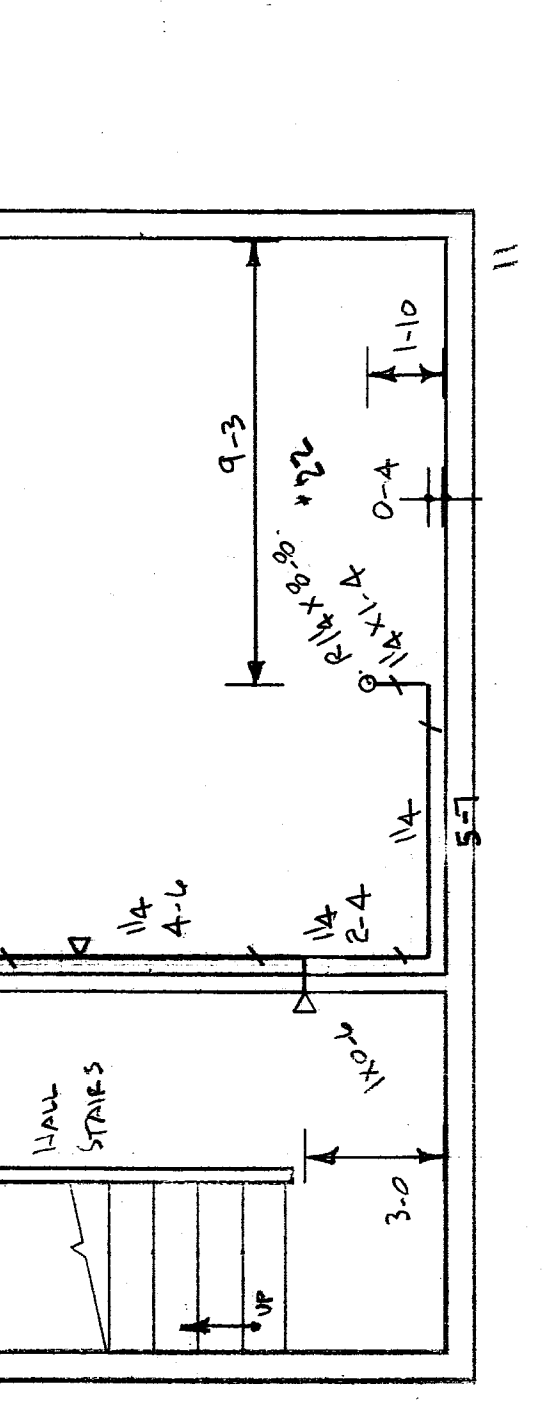
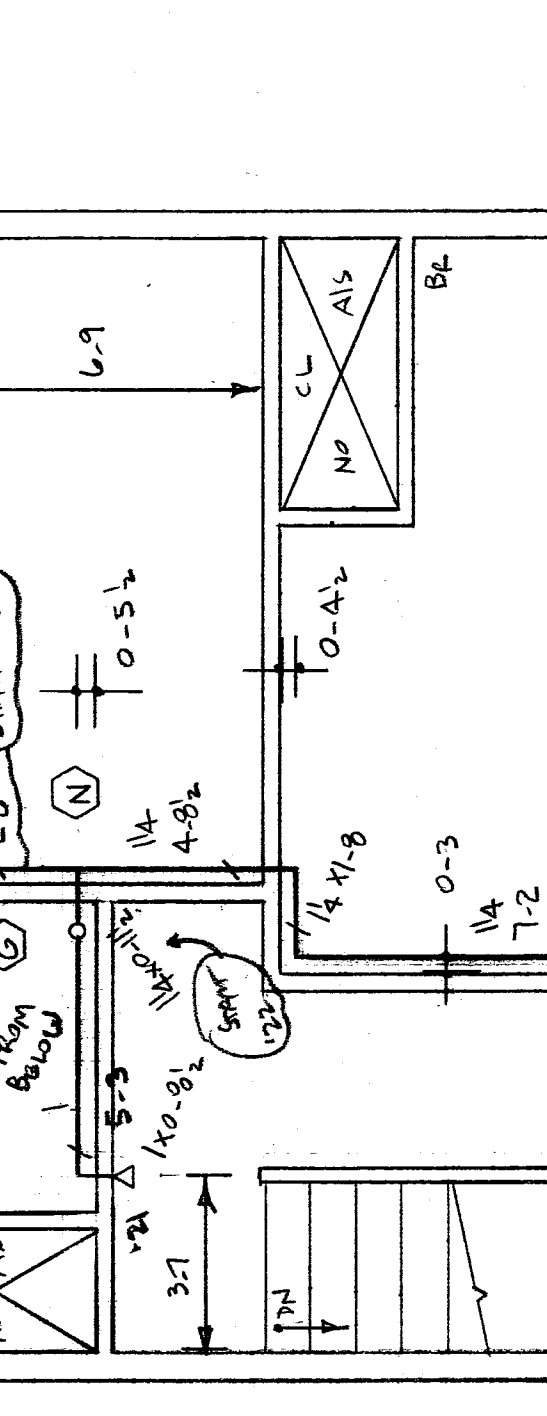
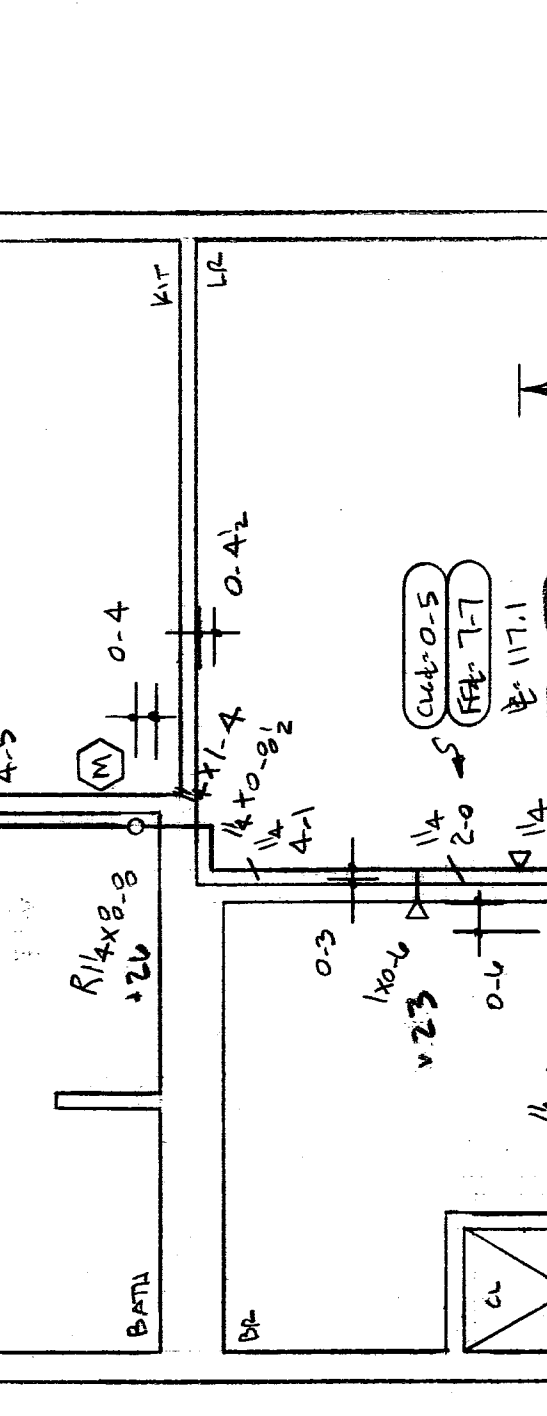
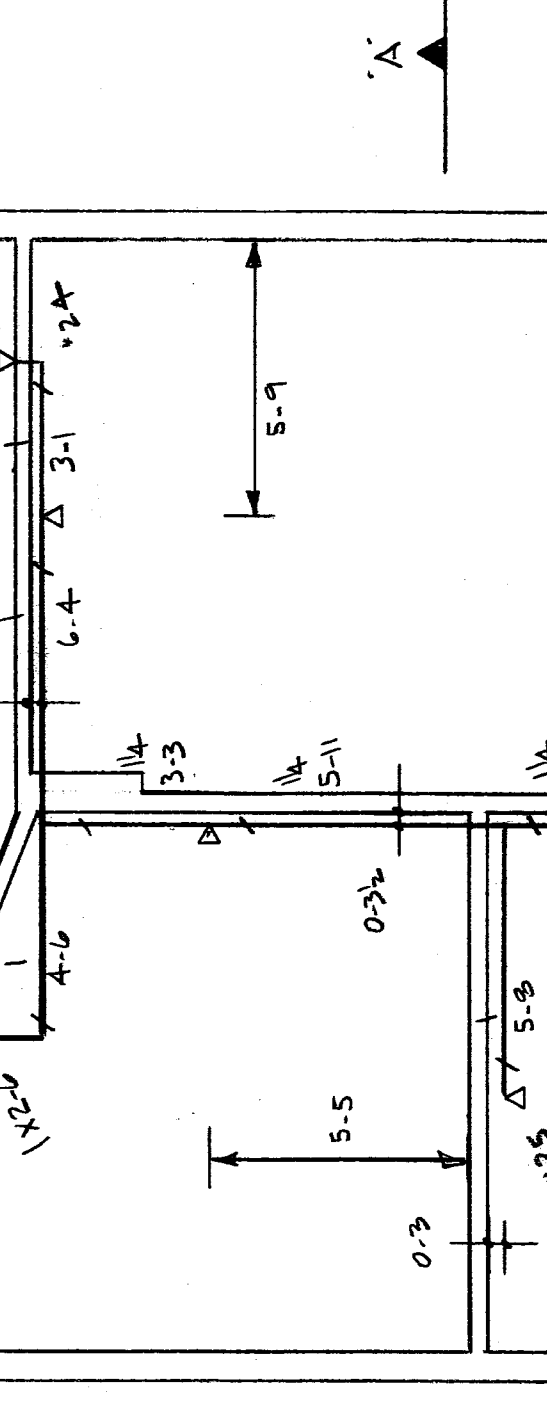
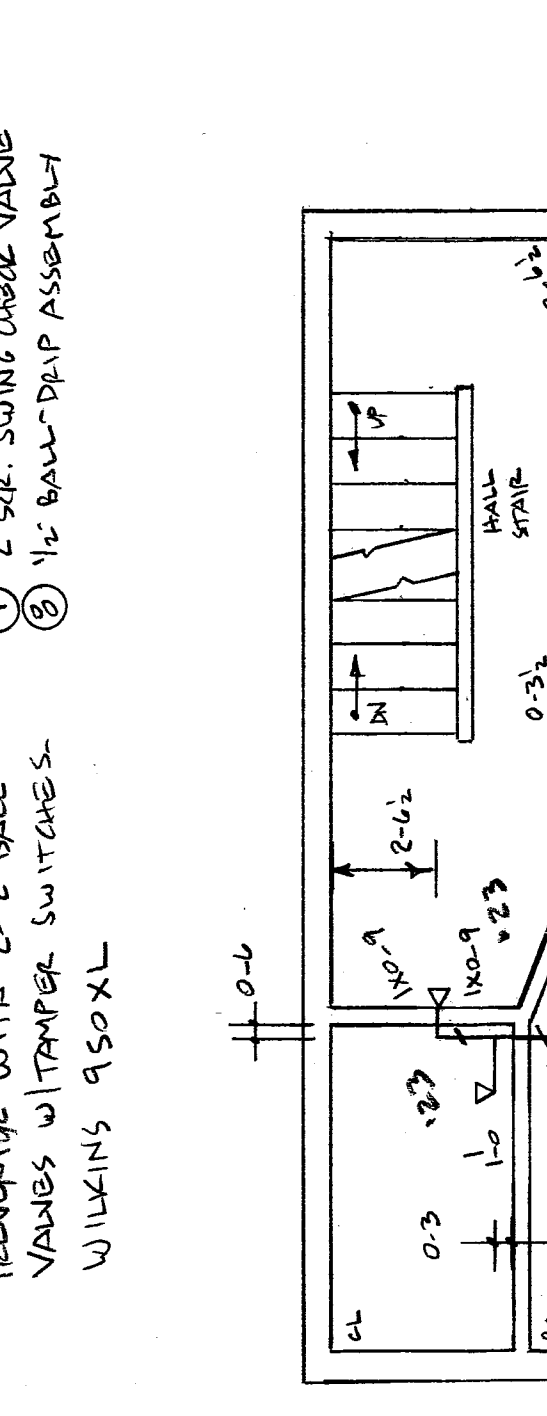
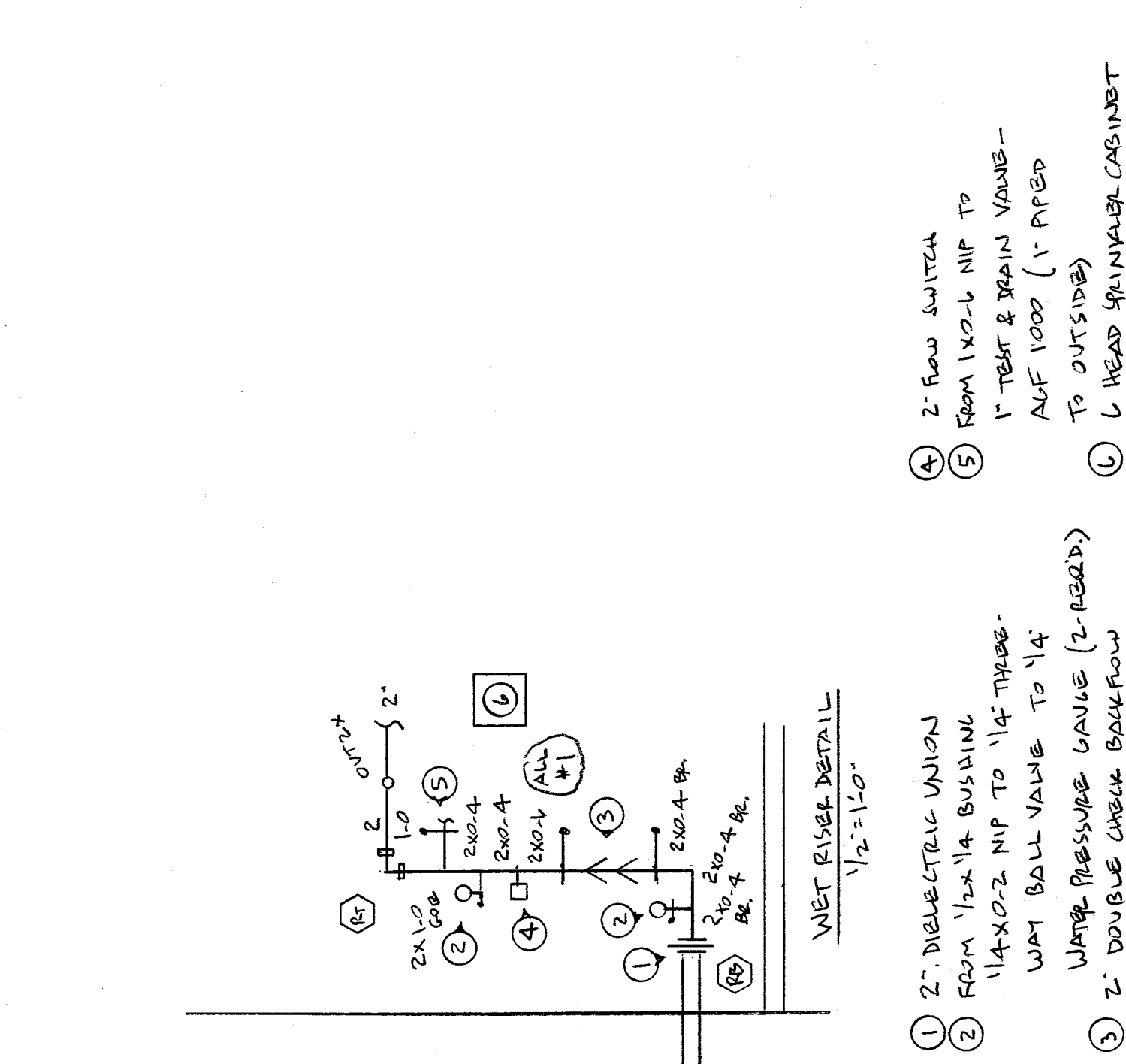
16 1-6-12 TOTAL SPRINKLER HEADS

17 1-6-12 TOTAL SPRINKLER HEADS

18 1-6-12 TOTAL SPRINKLER HEADS

19 1-6-12 TOTAL SPRINKLER HEADS

20 1-6-12 TOTAL SPRINKLER HEADS



CONTRACT RESPONSIBILITIES

ITEM DESCRIPTION

1. DESIGN AND CONSTRUCTION OF SPRINKLER SYSTEM

2. INSTALLATION OF SPRINKLER SYSTEM

3. TESTING AND COMMISSIONING OF SPRINKLER SYSTEM

4. MAINTENANCE OF SPRINKLER SYSTEM

5. REPLACEMENT OF SPRINKLER HEADS

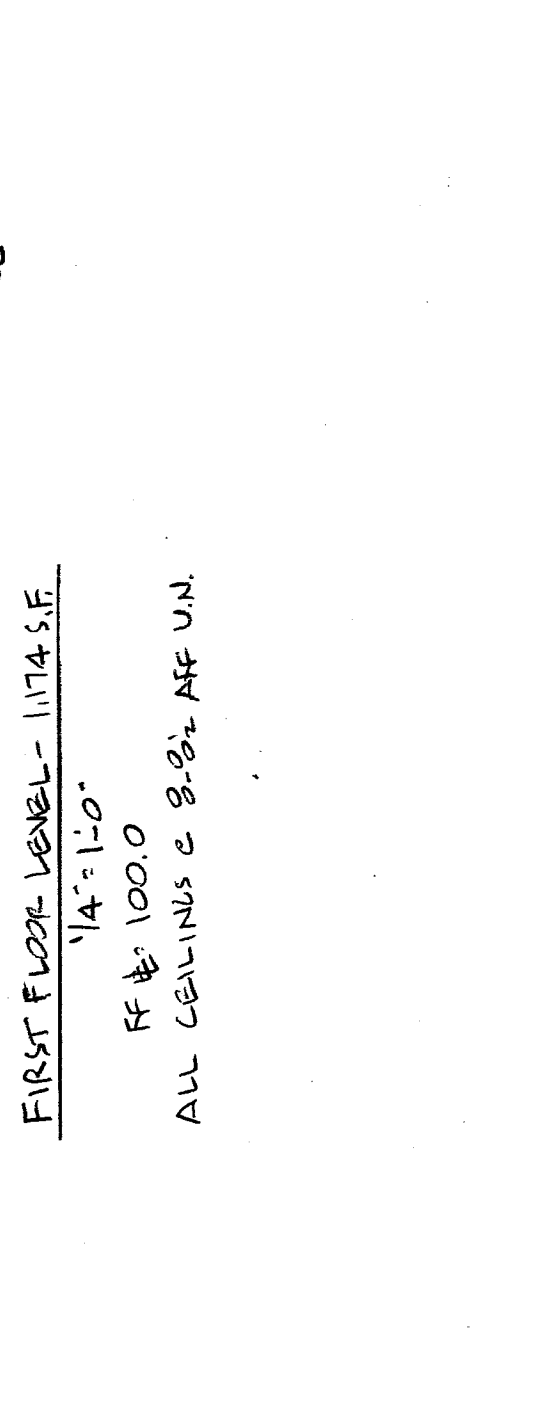
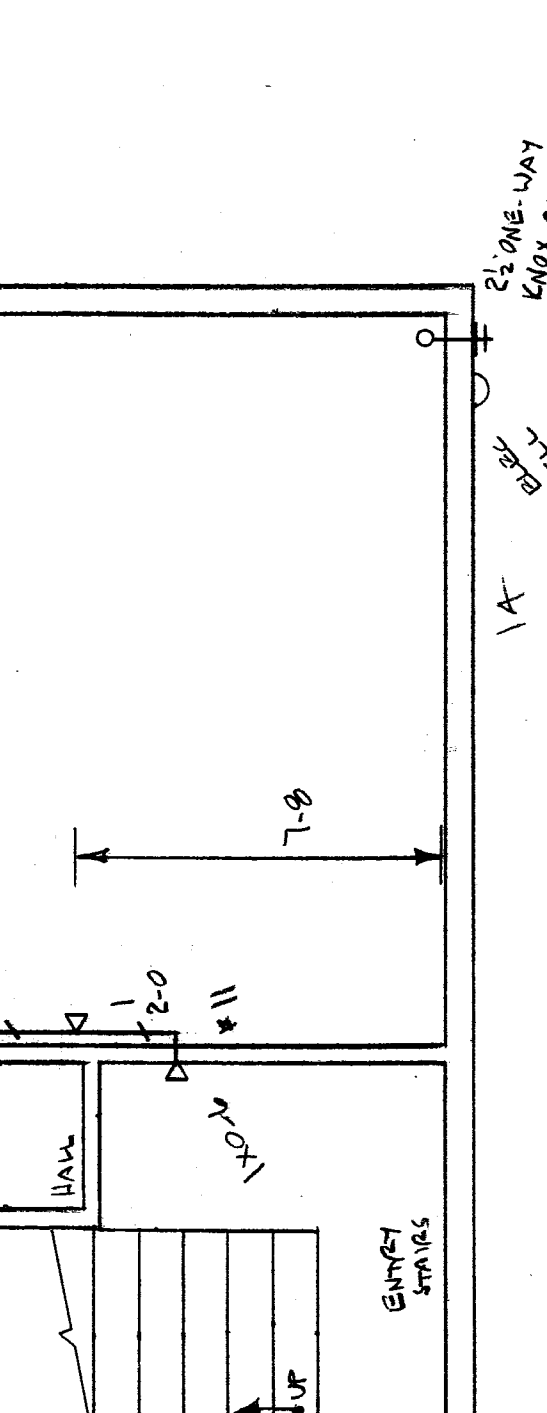
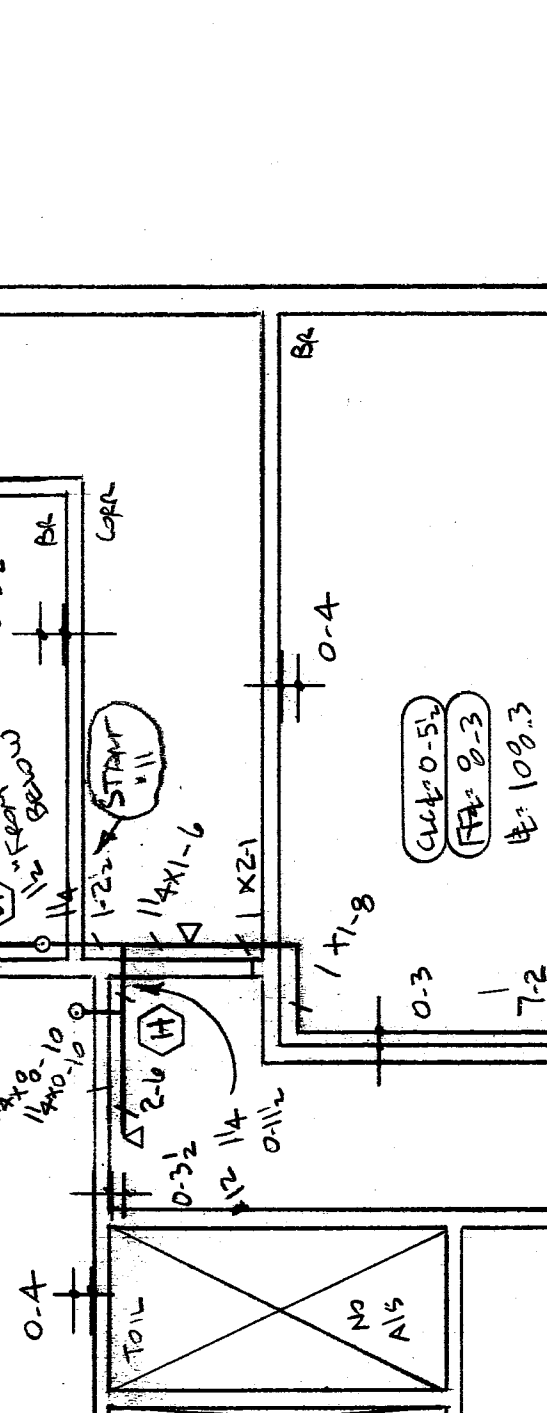
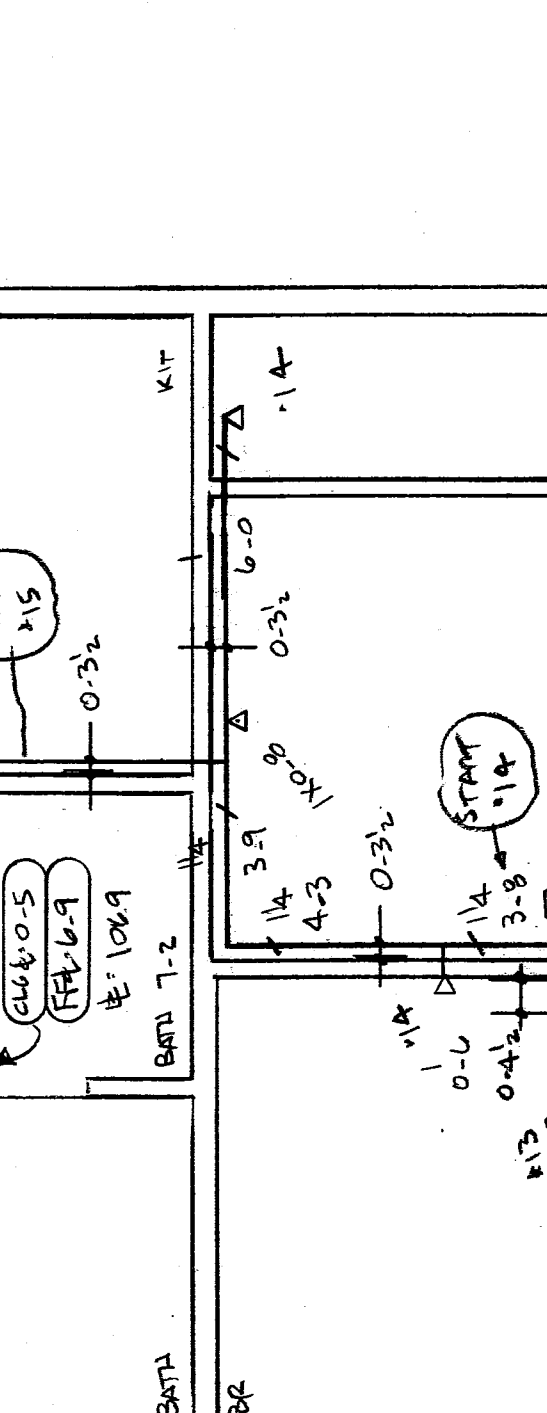
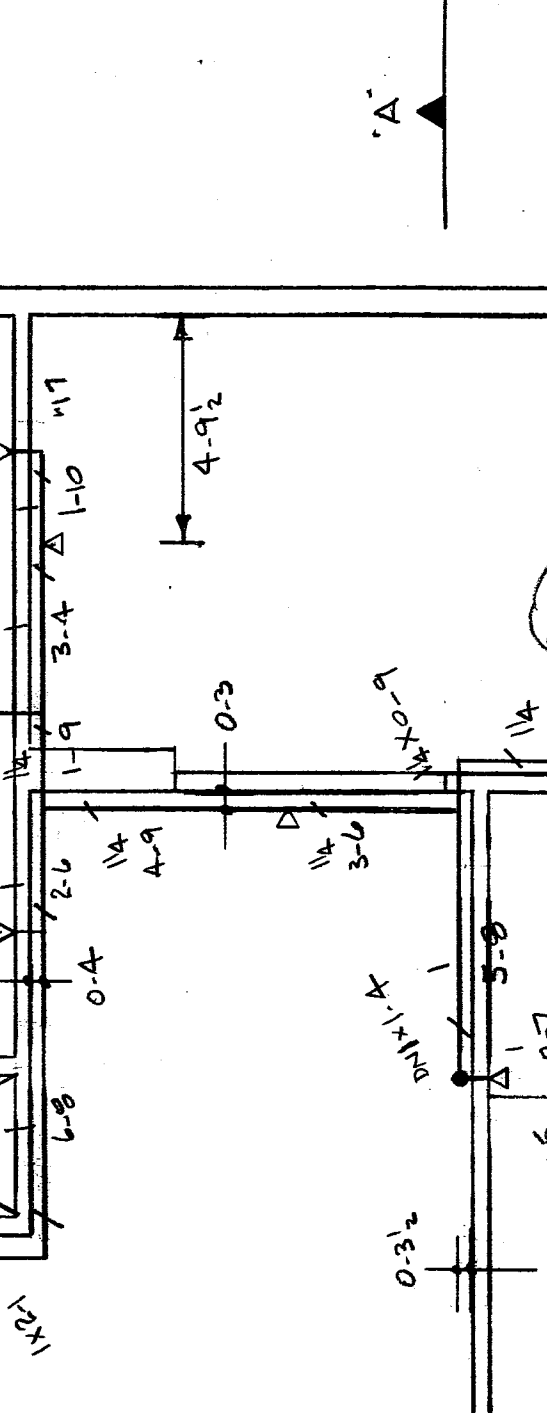
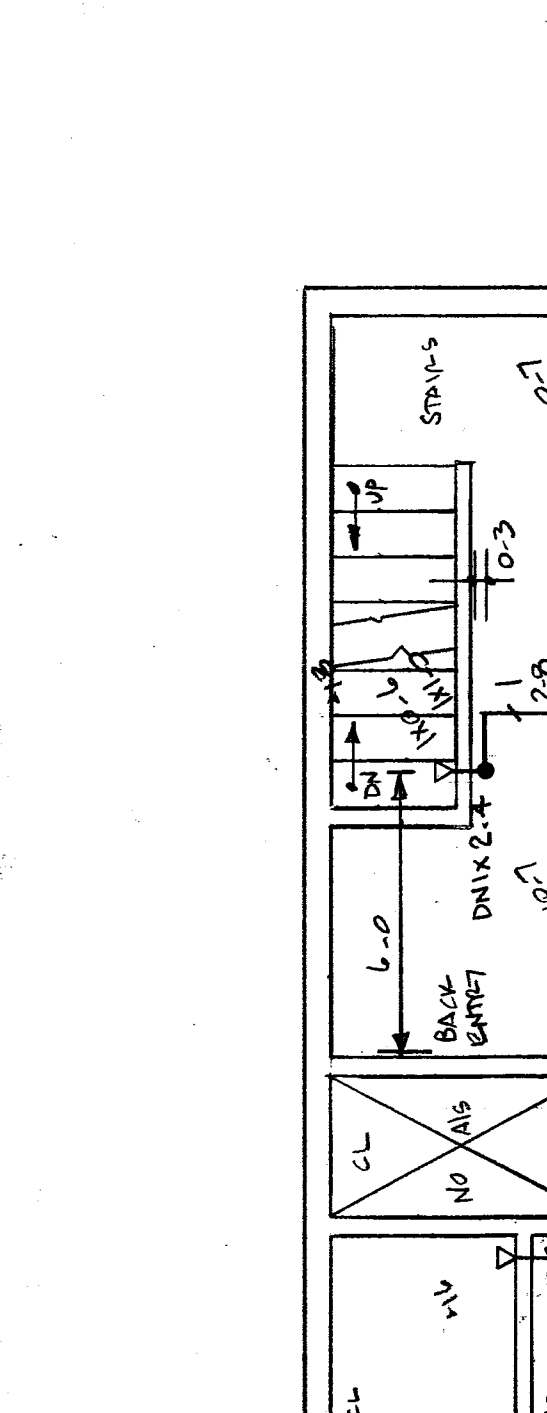
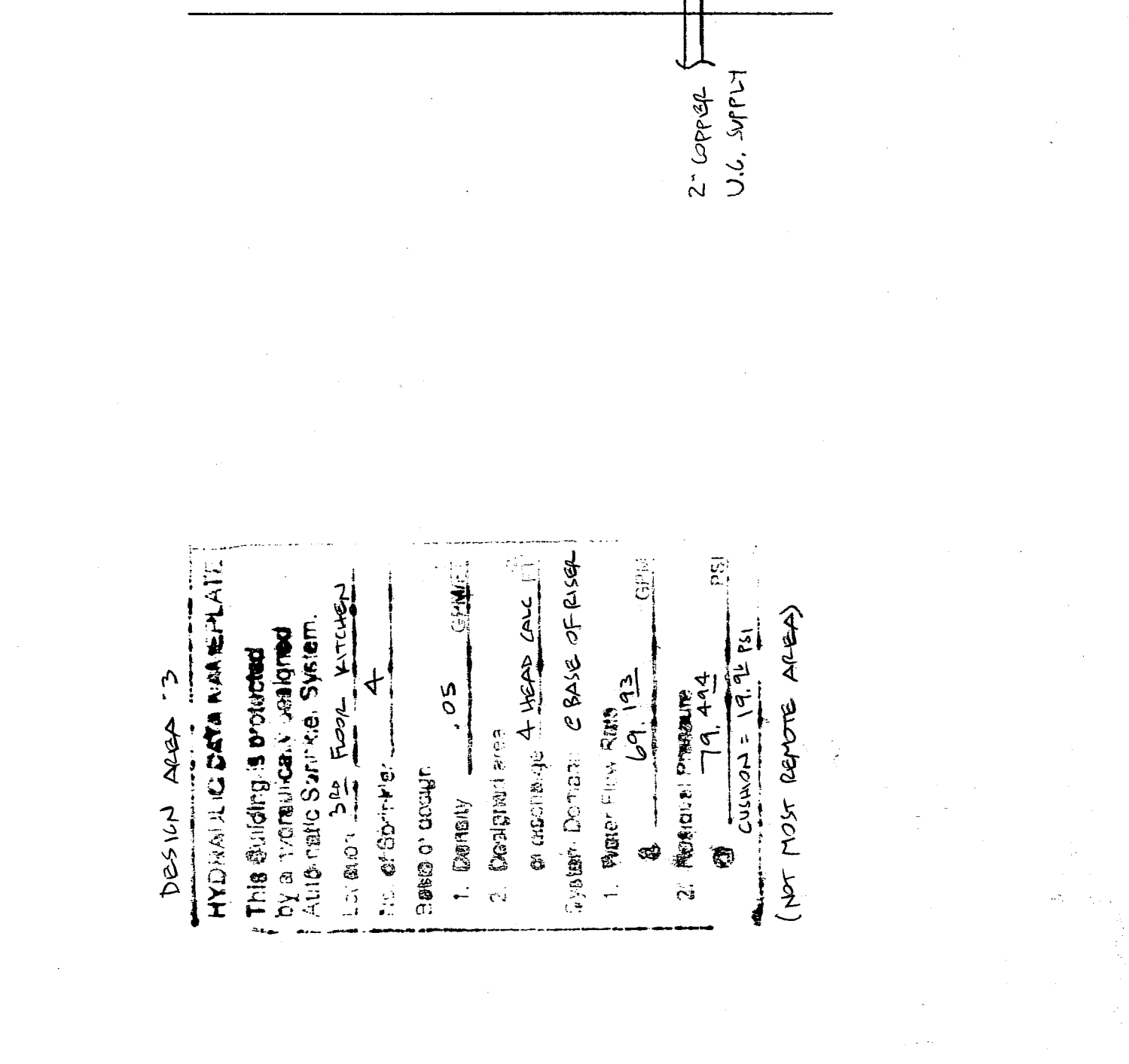
6. REPAIR OF DAMAGED SPRINKLER SYSTEM

7. INSPECTION AND TESTING OF SPRINKLER SYSTEM

8. RECORD DRAWINGS AND AS-BUILT DRAWINGS

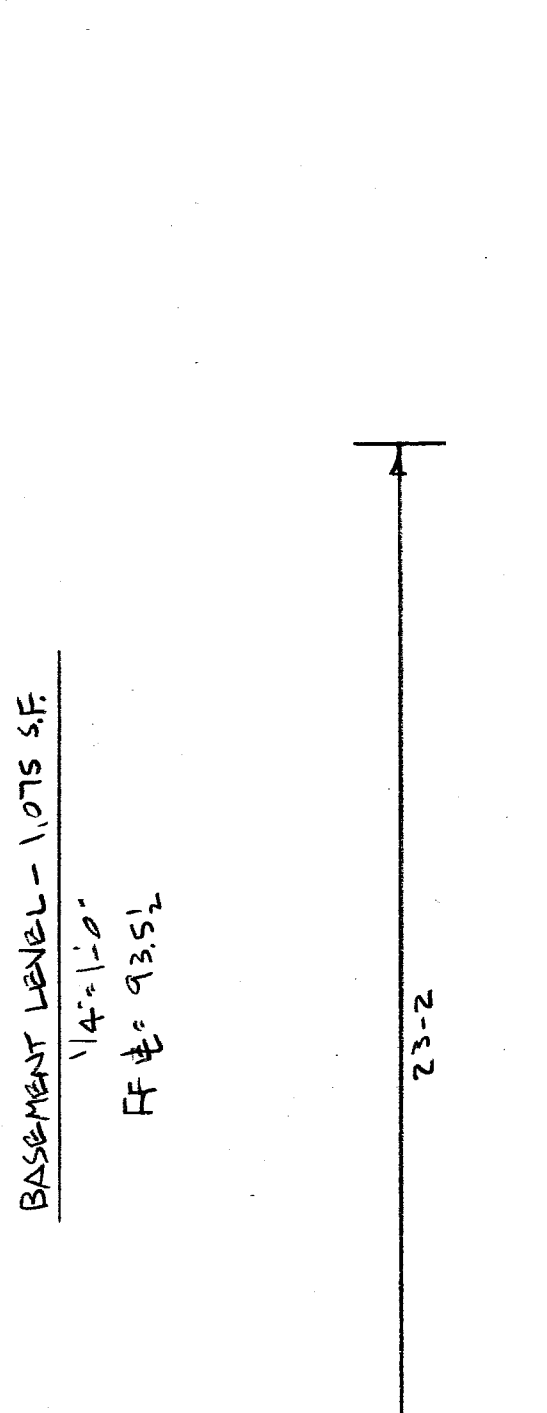
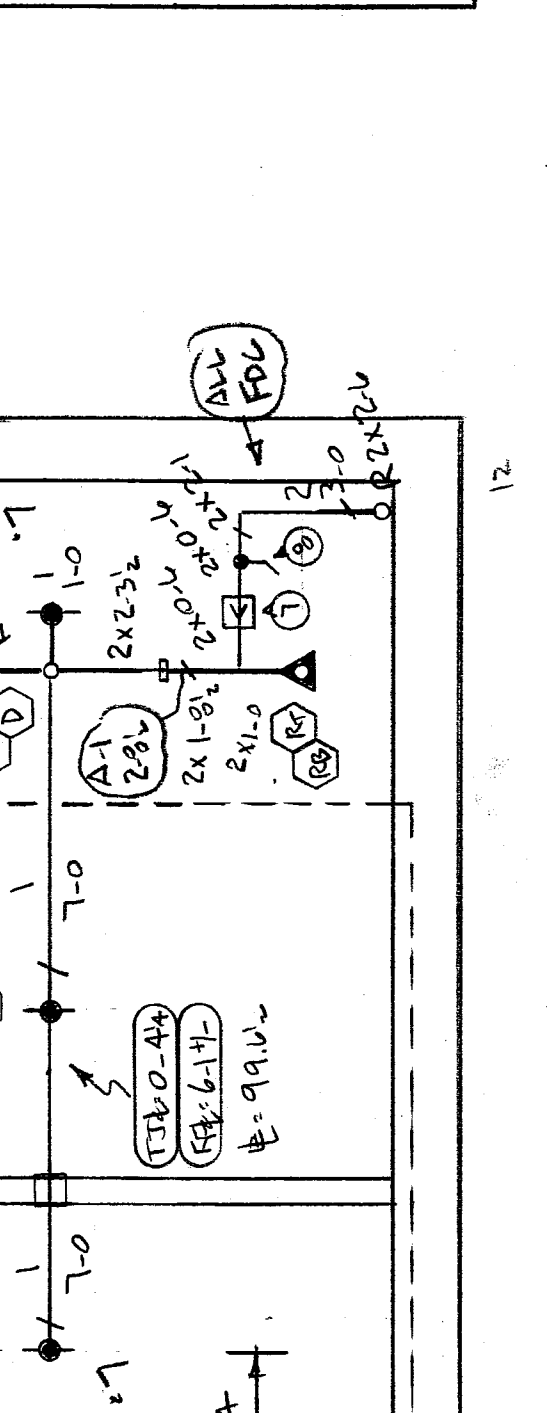
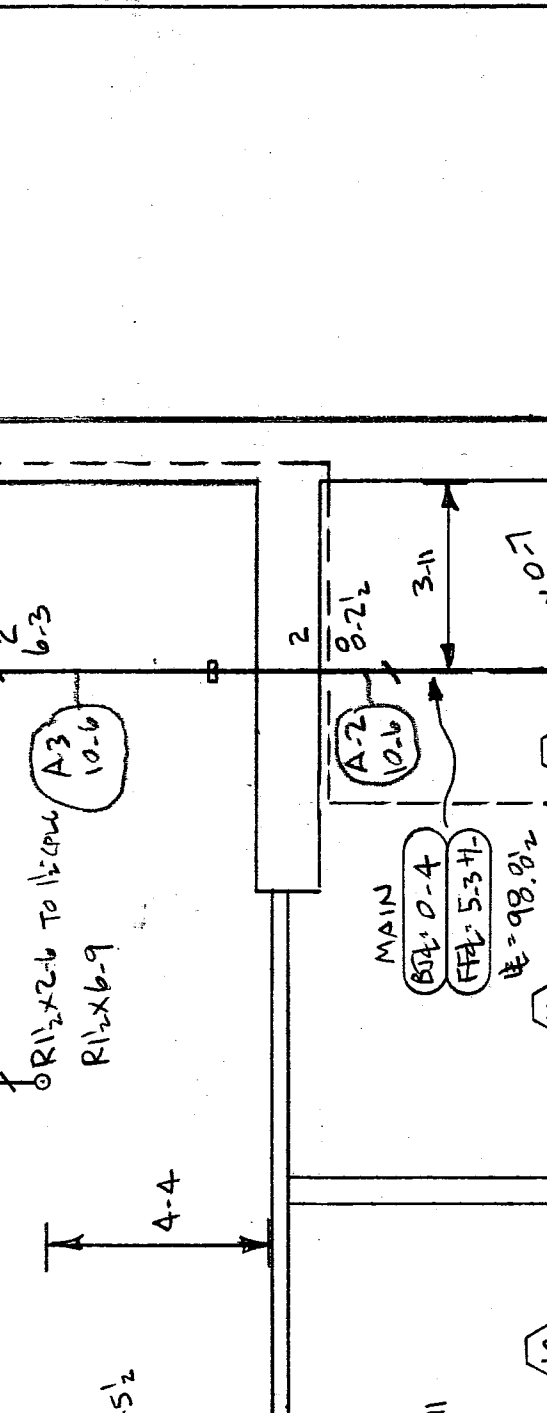
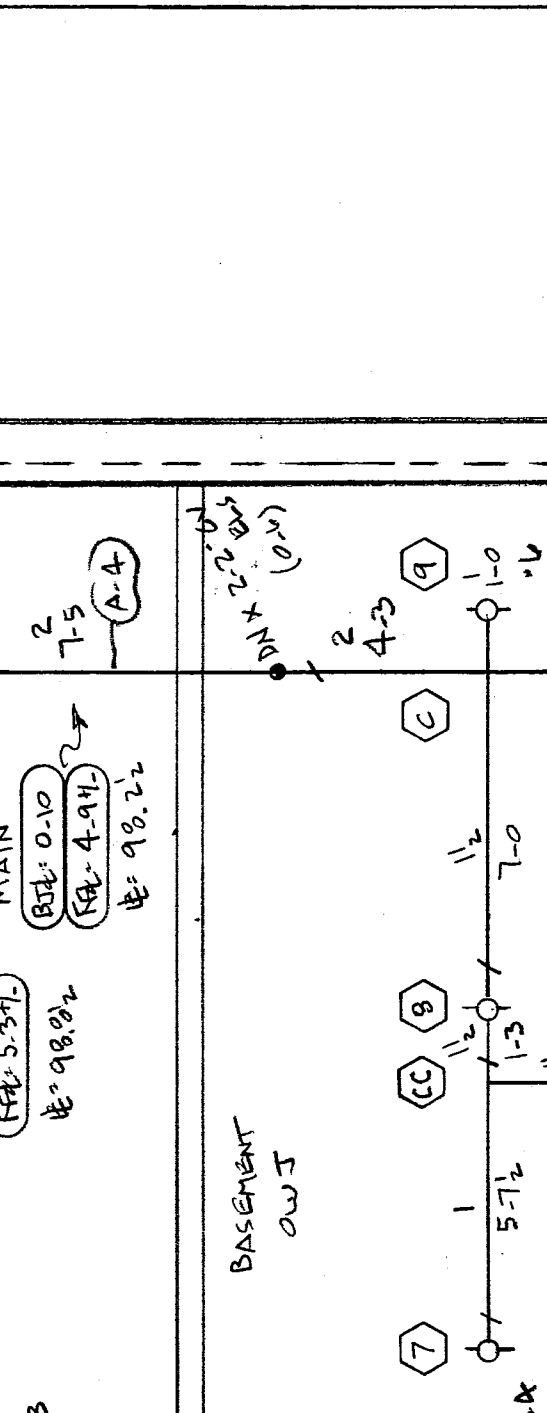
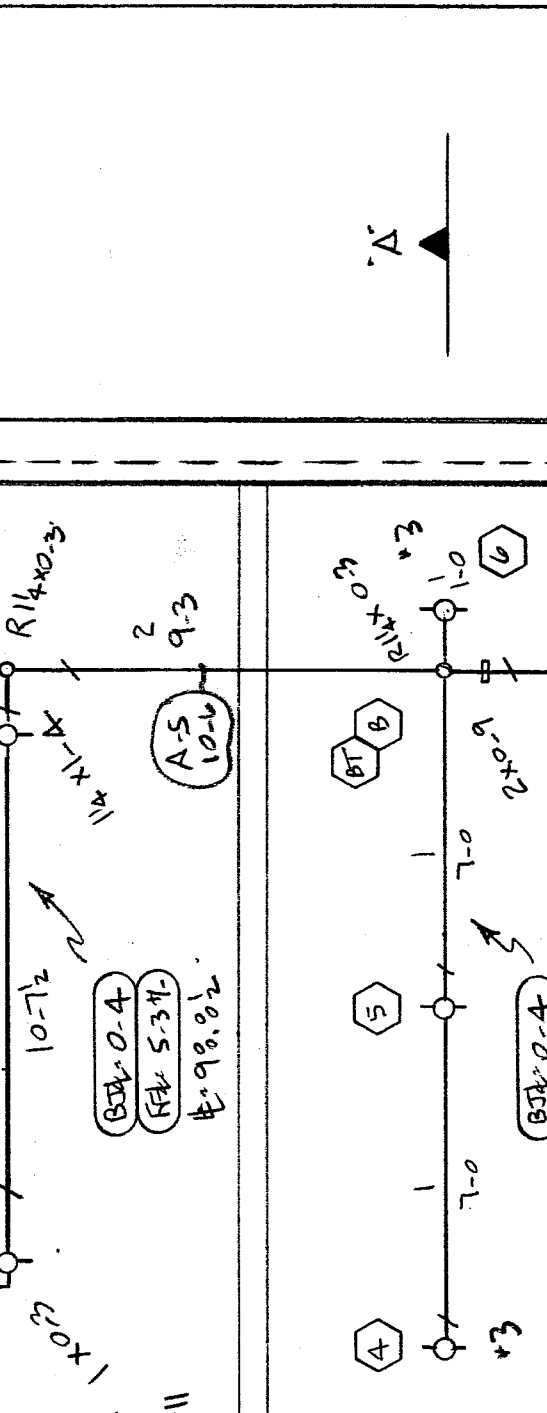
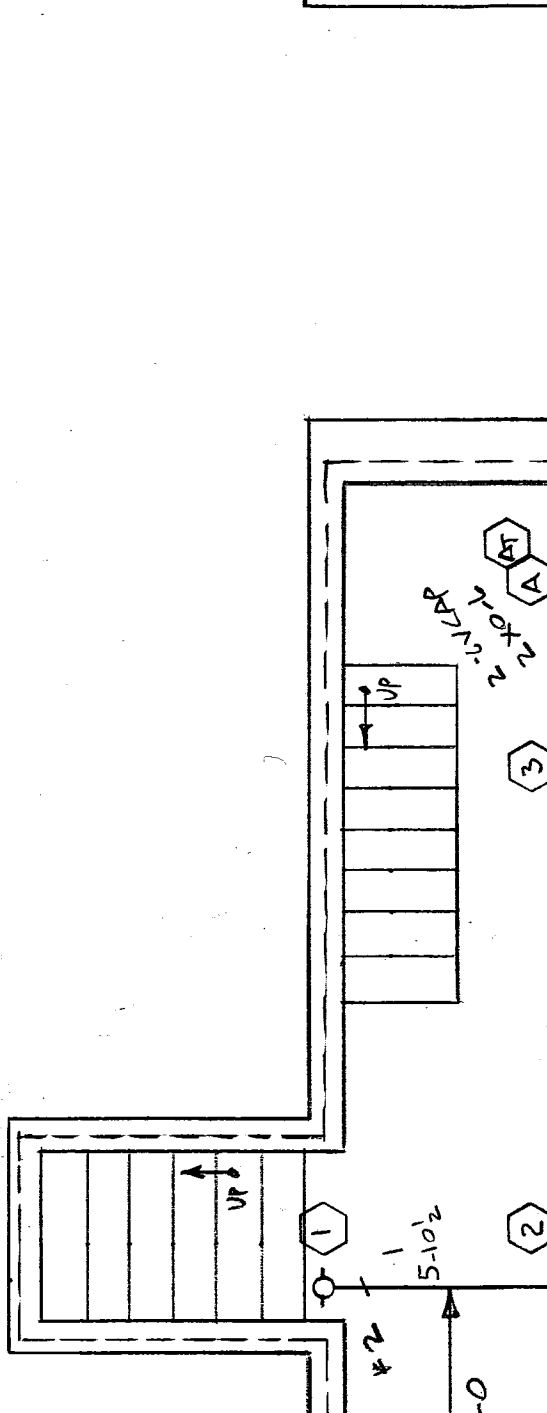
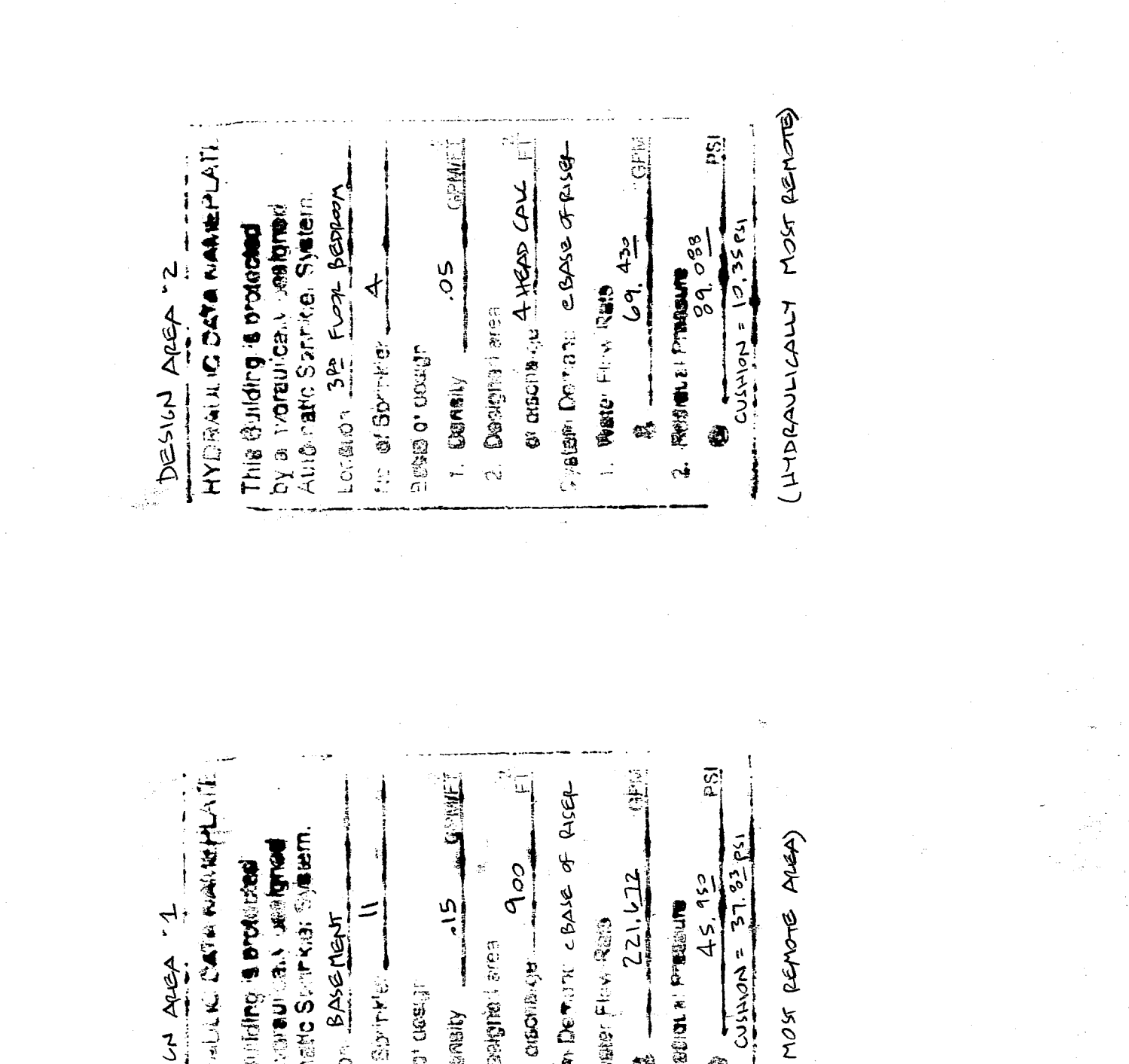
9. TRAINING OF PERSONNEL

10. Ongoing Support



SPRINKLER HEAD LEGEND

SYMBOL	MAKE	MODEL	FINISH	TEMP	N.P.T.	ORIFICE	K-FACTOR	TOTAL
○	RELIABLE	ET-50	BRASS	155°	1/2"	1/2"	5.7	9
○	RELIABLE	ET-50	BRASS	155°	1/2"	1/2"	5.7	3
○	RELIABLE	ET-50	BRASS	155°	1/2"	1/2"	5.7	38



HYDRAULIC DESIGN CRITERIA

1. Type of Hazard: **Light**

2. Deflector Distance: **1'-0"**

3. Pipe Type Used: **Black and Gray Iron**

4. Sprinkler Area: **4,511 SF**

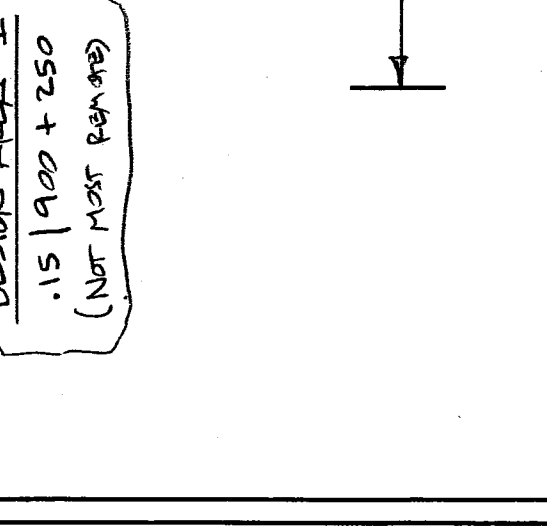
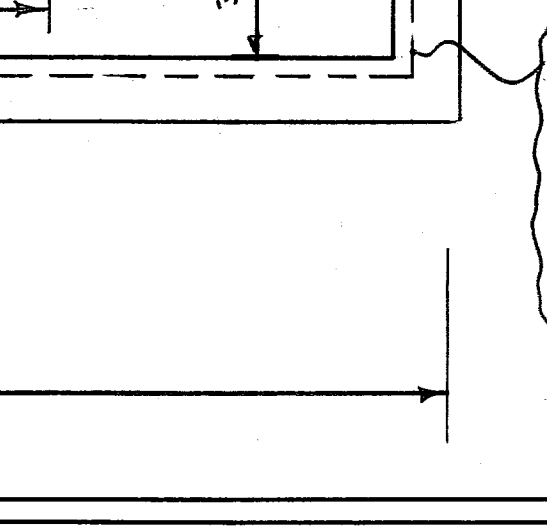
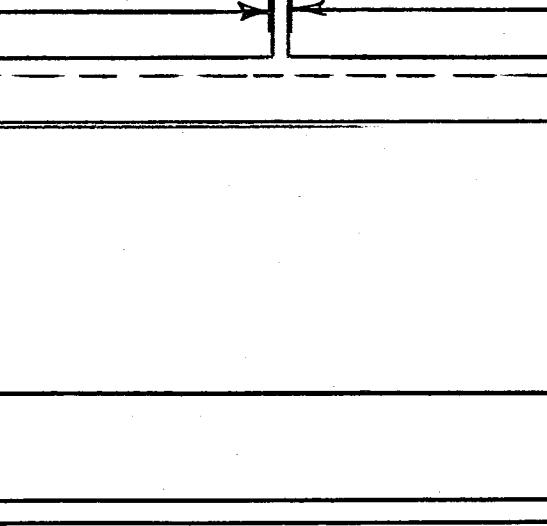
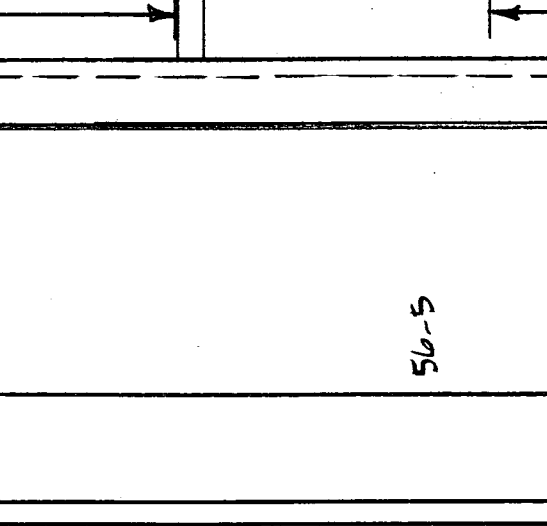
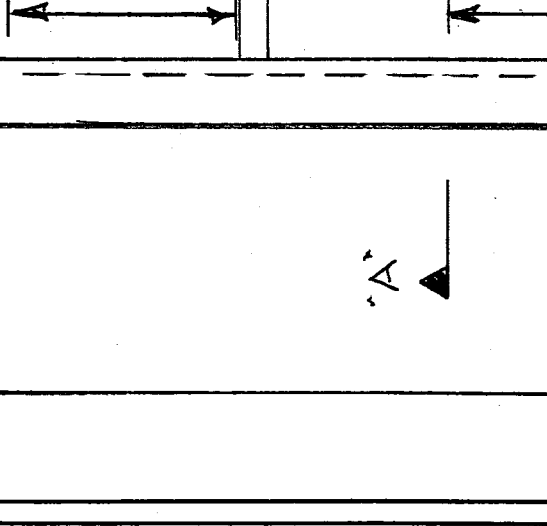
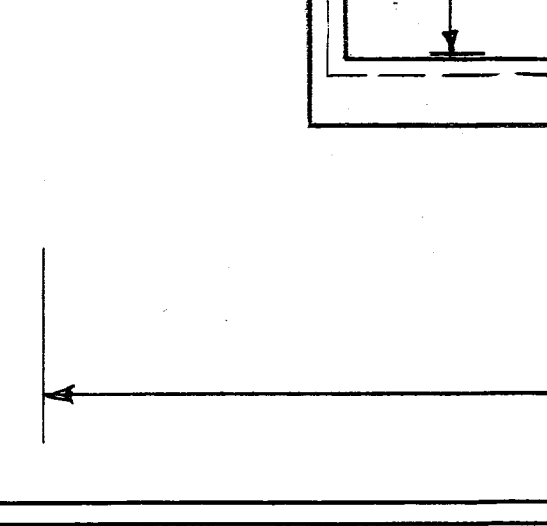
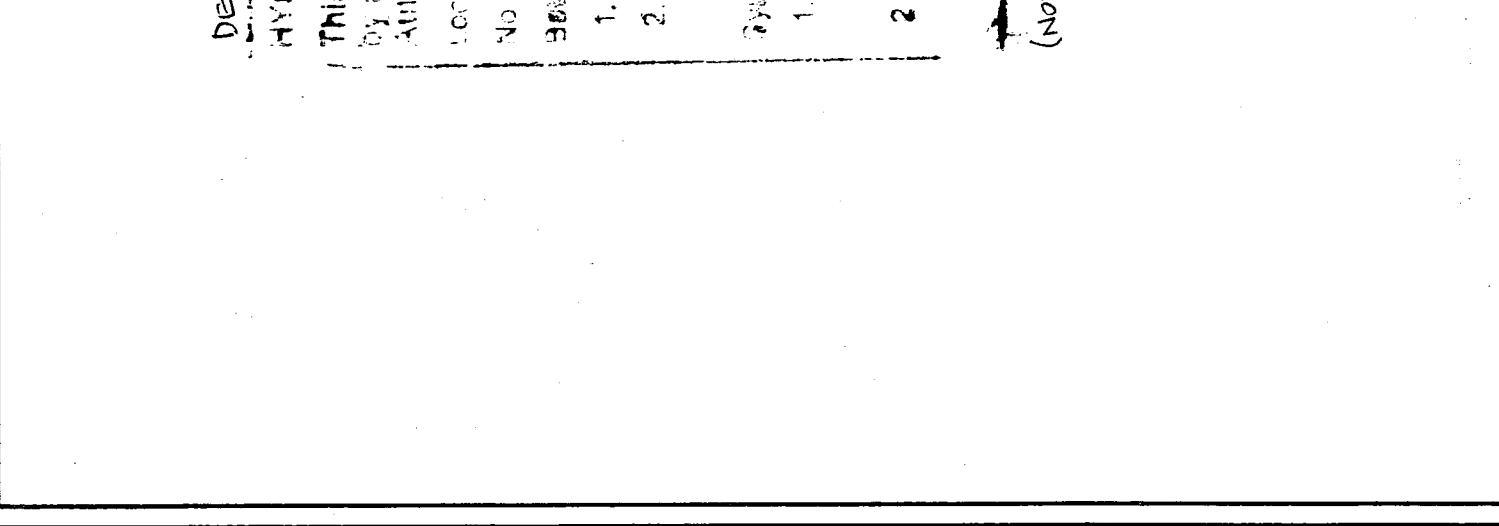
5. Type of Construction: **Type I, II, III, IV, V**

6. Maximum Spacing Allowed: **15'-0"**

7. PIPE SIZING METHOD: **PIPE SCHEDULE**

8. ALL HANGERS AND LOCATIONS TO BE IN ACCORDANCE WITH NFPA 13

9. HIGH DEGREE TEMPERATURE SPRINKLER HEADS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13



CONTRACT RESPONSIBILITIES

ITEM DESCRIPTION

1. DESIGN AND CONSTRUCTION OF SPRINKLER SYSTEM

2. INSTALLATION OF SPRINKLER SYSTEM

3. TESTING AND COMMISSIONING OF SPRINKLER SYSTEM

4. MAINTENANCE OF SPRINKLER SYSTEM

5. REPLACEMENT OF SPRINKLER HEADS

6. REPAIR OF DAMAGED SPRINKLER SYSTEM

7. INSPECTION AND TESTING OF SPRINKLER SYSTEM

8. RECORD DRAWINGS AND AS-BUILT DRAWINGS

9. TRAINING OF PERSONNEL

10. Ongoing Support

HANGERS

SYMBOL	DESCRIPTION
○	1/2" SANITIZED HANGER
○	3/4" SANITIZED HANGER
○	1" SANITIZED HANGER
○	1 1/2" SANITIZED HANGER
○	2" SANITIZED HANGER

CIRCLE HANGER TYPE TO BE USED

TYPE	DESCRIPTION
○	1/2" SANITIZED HANGER
○	3/4" SANITIZED HANGER
○	1" SANITIZED HANGER
○	1 1/2" SANITIZED HANGER
○	2" SANITIZED HANGER

CONTRACT RESPONSIBILITIES

ITEM DESCRIPTION

1. DESIGN AND CONSTRUCTION OF SPRINKLER SYSTEM

2. INSTALLATION OF SPRINKLER SYSTEM

3. TESTING AND COMMISSIONING OF SPRINKLER SYSTEM

4. MAINTENANCE OF SPRINKLER SYSTEM

5. REPLACEMENT OF SPRINKLER HEADS

6. REPAIR OF DAMAGED SPRINKLER SYSTEM

7. INSPECTION AND TESTING OF SPRINKLER SYSTEM

8. RECORD DRAWINGS AND AS-BUILT DRAWINGS

9. TRAINING OF PERSONNEL

10. Ongoing Support

HYDRAULIC DESIGN CRITERIA

1. Type of Hazard: **Light**

2. Deflector Distance: **1'-0"**

3. Pipe Type Used: **Black and Gray Iron**

4. Sprinkler Area: **4,511 SF**

5. Type of Construction: **Type I, II, III, IV, V**

6. Maximum Spacing Allowed: **15'-0"**

7. PIPE SIZING METHOD: **PIPE SCHEDULE**

8. ALL HANGERS AND LOCATIONS TO BE IN ACCORDANCE WITH NFPA 13

9. HIGH DEGREE TEMPERATURE SPRINKLER HEADS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13

CONTRACT RESPONSIBILITIES

ITEM DESCRIPTION

1. DESIGN AND CONSTRUCTION OF SPRINKLER SYSTEM

2. INSTALLATION OF SPRINKLER SYSTEM

3. TESTING AND COMMISSIONING OF SPRINKLER SYSTEM

4. MAINTENANCE OF SPRINKLER SYSTEM

5. REPLACEMENT OF SPRINKLER HEADS

6. REPAIR OF DAMAGED SPRINKLER SYSTEM

7. INSPECTION AND TESTING OF SPRINKLER SYSTEM

8. RECORD DRAWINGS AND AS-BUILT DRAWINGS

9. TRAINING OF PERSONNEL

10. Ongoing Support

HYDRAULIC DESIGN CRITERIA

1. Type of Hazard: **Light**

2. Deflector Distance: **1'-0"**

3. Pipe Type Used: **Black and Gray Iron**

4. Sprinkler Area: **4,511 SF**

5. Type of Construction: **Type I, II, III, IV, V**

6. Maximum Spacing Allowed: **15'-0"**

7. PIPE SIZING METHOD: **PIPE SCHEDULE**

8. ALL HANGERS AND LOCATIONS TO BE IN ACCORDANCE WITH NFPA 13

9. HIGH DEGREE TEMPERATURE SPRINKLER HEADS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13