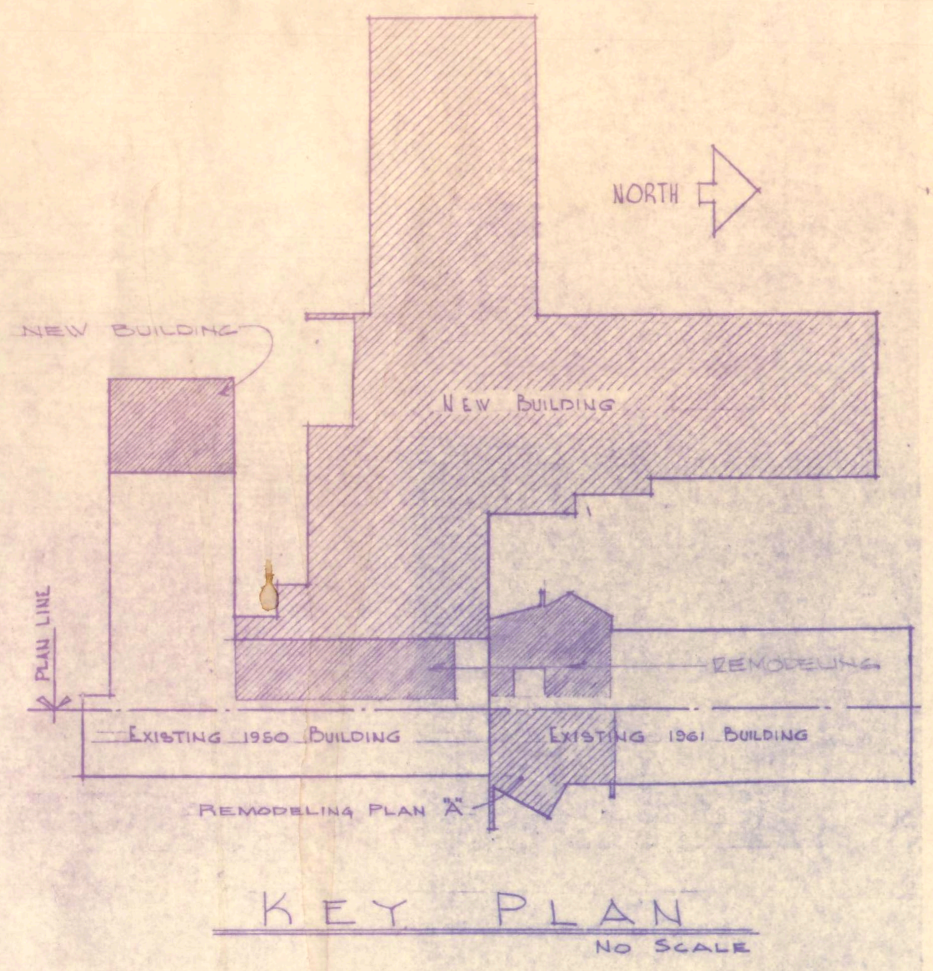
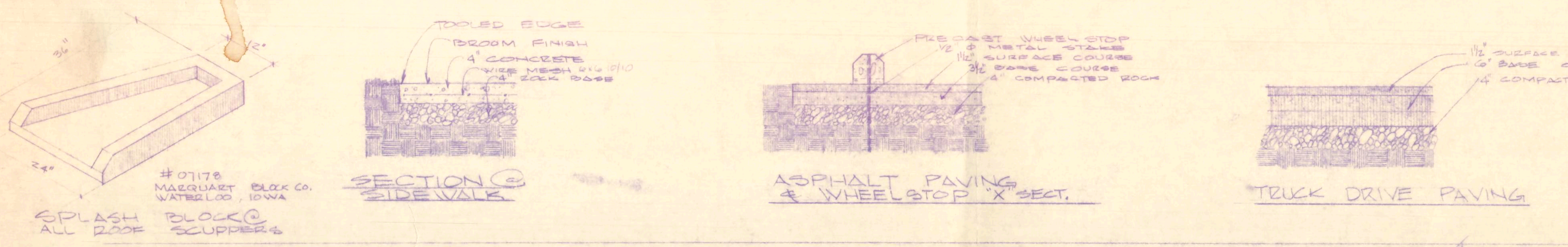


KEY PLAN
NO SCALE



GENERAL NOTES

1. THE "WORK" MEANS PROVIDE AND INSTALL A COMPLETE OPERATING, FUNCTIONING ASSEMBLY, FRAMEWORK, SYSTEM, FIXTURE OR APPARATUS READY FOR USE BY THE OWNER OR OTHER CONTRACTORS TO WHICH CONNECTION IS REQUIRED.

2. ALL CONTRACTORS SHALL PERFORM THE WORK IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
   - AMERICAN INSTITUTE OF STEEL CONST. MANUAL
   - CONCR. REINFORCING STEEL INSTITUTE MANUAL
   - AMERICAN CONCRETE INSTITUTE MANUAL.
   - BRICK INSTITUTE MANUAL FOR ENGINEERED BRICK MAS.
   - SHEET METAL & AIR COND. CONTRS NATIONAL ASSN.

3. ALL MATERIAL, EQUIPMENT, DEVISES, AND THEIR INSTALLATION SHALL CONFORM AND COMPLY WITH THE FOLLOWING CODES, REGULATIONS, AND ORDINANCES:
   - UNIFORM BUILDING CODE
   - N.F.P.A.; N.E.C., 101 L.F.C. REGULATIONS
   - NATIONAL PLUMBING CODE
   - STATE DEPT. OF HEALTH - RULES & REGULATIONS FOR LONG TERM CARE IN NORTH DAKOTA.
   - A.N.S.I. - ELEVATOR CODE
   - UNDERWRITERS LABORATORIES DESIGN NUMBERS

4. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PARTS OF HIS WORK WHICH MAY BE SHOWN ON ANY OR ALL SHEETS OF THIS SET OR CONTAINED ON ANY PAGE OF THE SPECIFICATIONS.

5. EACH CONTRACTOR SHALL FIELD VERIFY DIMENSIONS OF THE EXISTING BUILDING AS REQUIRED BY THE WORK. HE SHALL VERIFY JOB DIMENSIONS ALSO. THESE VERIFIED DIMENSIONS SHALL APPEAR ON CONTRACTOR APPROVED SHOP DRAWINGS PRIOR TO BEING SUBMITTED TO ARCHITECT FOR APPROVAL.

6. APPROVAL OF SHOP DRAWINGS BY THE ARCHITECT DOES NOT RELIEVE THE CONTRACTOR OF PROVIDING, EQUIPMENT, DEVISES, AND FIXTURES AS REQUIRED BY THE CONTRACT DOCUMENTS.

7. THE CONTRACTOR SHALL GRADE & SMOOTH ALL EARTH DISTURBED IN THE CONSTRUCTION PROCESS. TOP SOIL SHALL BE STOCKPILED ON SITE AND RE-DISTRIBUTED OVER AREAS TO BE SEEDED. ALL DISTURBED AREAS SHALL BE SEEDED AND CAUSED TO GROW. SEE SPECIFICATIONS.

8. EACH CONTRACTOR SHALL PROVIDE ALL NECESSARY INCIDENTALS AS REQUIRED BY THE WORK THAT ARE NOT SHOWN OR SPECIFICALLY MENTIONED ON THE DRAWINGS OR IN THE SPECIFICATIONS, INCLUDING ITEMS REQUIRED BY CODE TO MAKE THE SYSTEM, EQUIPMENT, ETC. OPERATIONAL WITHIN THE SCOPE OF LAW.

9. REMOVE AND STORE AT THE OWNERS DIRECTION ALL DEVICES, ITEMS, FIXTURES AND MISCELLANEOUS EQUIPMENT NOT RE-USED, RE-LOCATED OR RE-INSTALLED.

10. EQUIPMENT POSITIONS SHOWN ARE APPROXIMATE. VERIFY WITH APPROVED SHOP DRAWINGS ALL LOCATIONS REQUIRED TO MAKE ROUGH-IN AND FINAL CONNECTION. PROVIDE ALL MATERIALS REQUIRED TO CONNECT OWNERS RELOCATED NEW EQUIPMENT TO ITS SYSTEM. FIELD VERIFY AND COORDINATE WITH EQUIPMENT SUPPLIER.

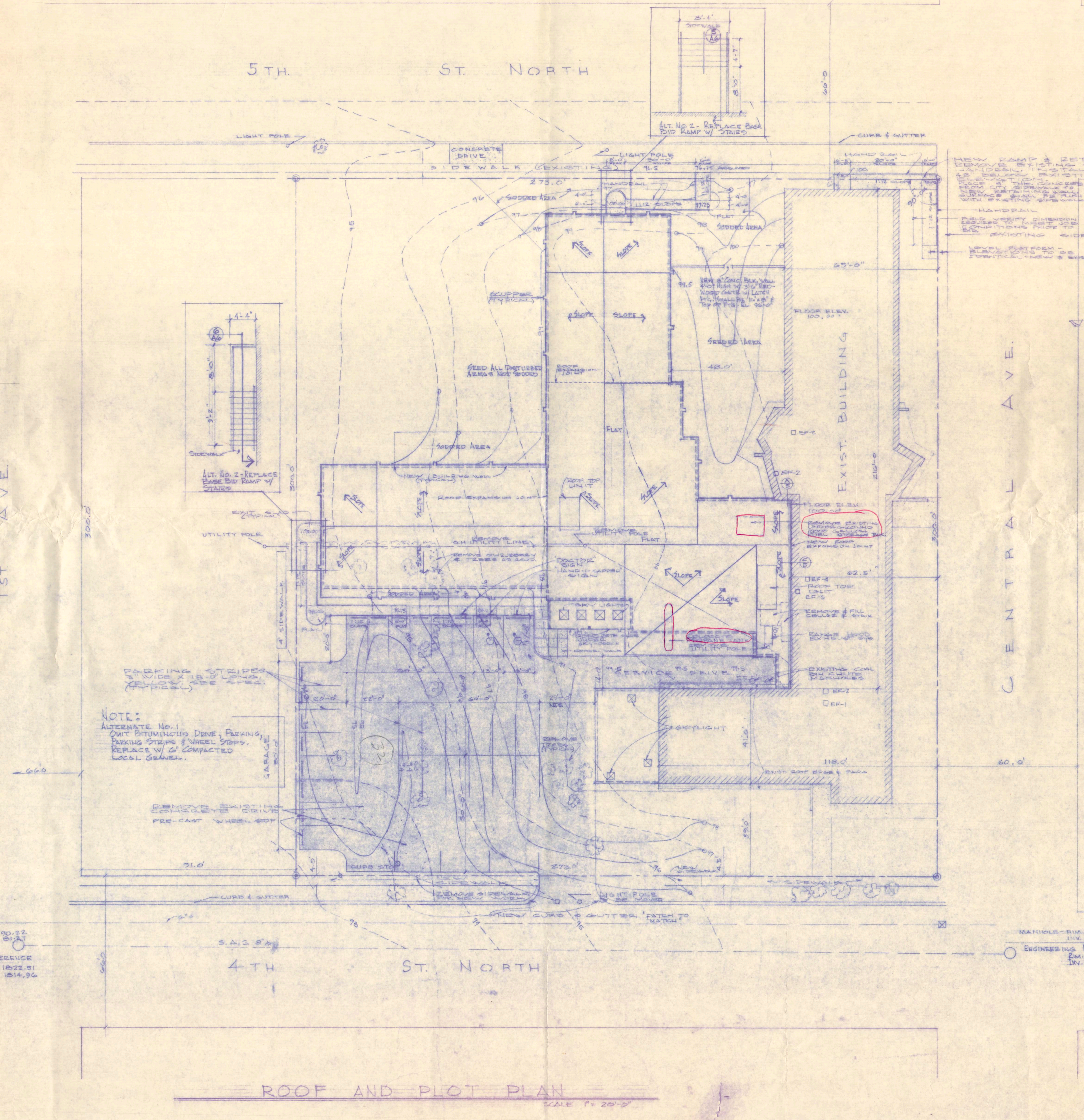
11. ALL CONTRACTORS SHALL CO-ORDINATE WITH EACH OTHER AS REQUIRED FOR TIMELY INSTALLATION AND COMPLETION OF THE WORK.

12. INSTALL ALL EQUIPMENT, DEVICES, AND FIXTURES ACCORDING TO THE MANUFACTURES PRINTED DIRECTIONS, INSTRUCTIONS, AND RECOMMENDATIONS.

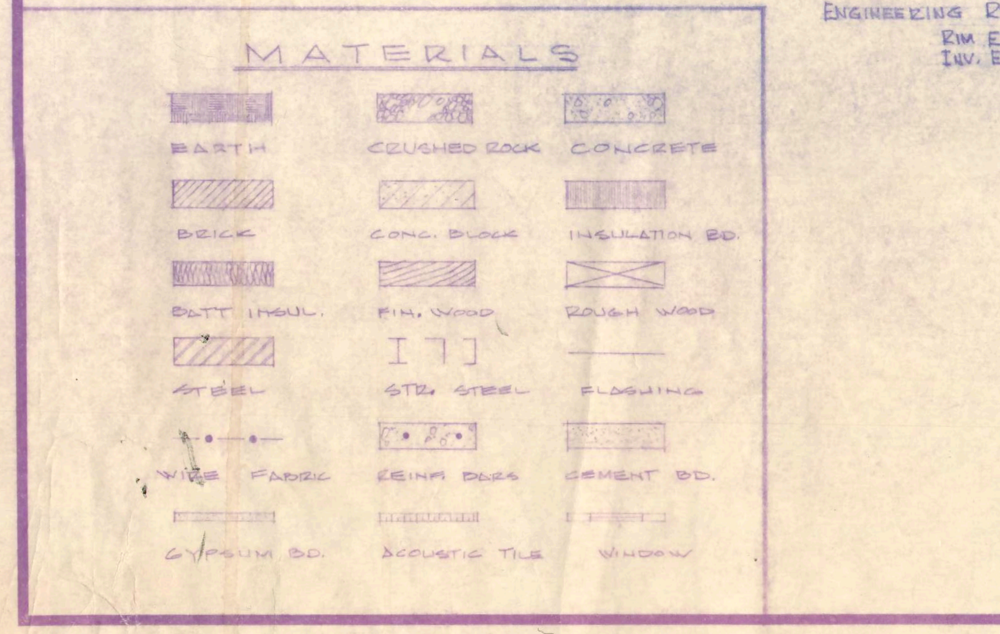
13. PROVIDE REINFORCED PRE-CAST CONCRETE SPLASH BLOCK AT EACH SCUPPER. (SEE DETAIL THIS SHEET). INSTALL TO PROVIDE PROPER DRAINAGE AWAY FROM BUILDING.

14. SLOPE EXIT SLABS @ 1/16" PER FOOT, CO-ORDINATE WITH FOUNDATION PLAN.

15. GENERAL CONTRACTOR SHALL MAINTAIN TRUCK ACCESS TO EXISTING COAL BIN CHUTES AT ALL TIMES.



ROOF AND PLOT PLAN



INDEX

NEW ADDITION	20,073 S.F.
REMODELING	4,668 S.F.
TOTAL AREA	24,741 S.F.

B. F. Samuels
Date 10/15/1980 Reg. No. 747

C M CORPORATION

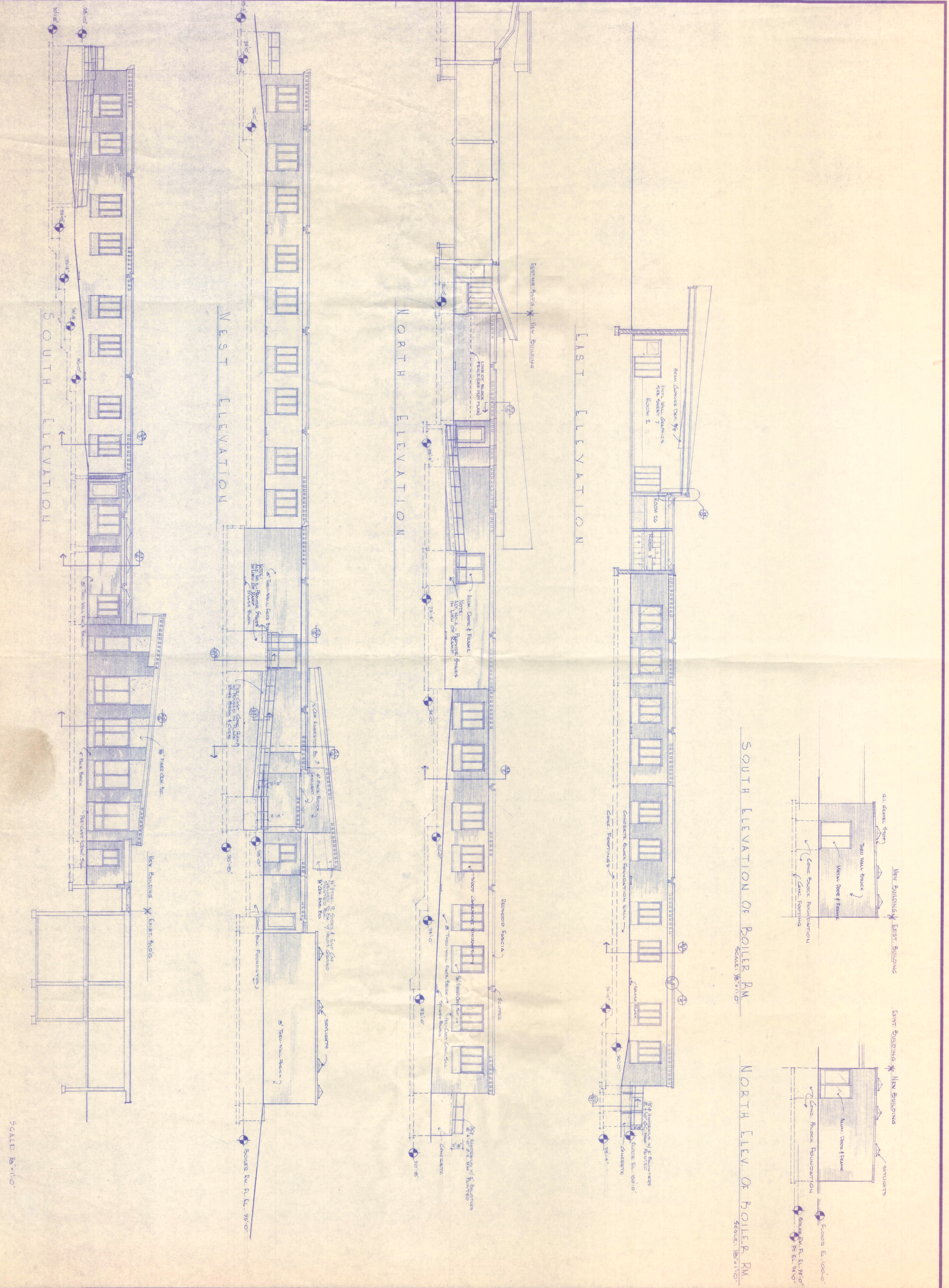
ARCHITECTURAL & ENGINEERING SERVICES DIVISION
SIOUX CITY, IOWA 51102

ADDITION & REMODELING
BEULAH NURSING HOME
BEULAH NO. DAK.

JOB 7706

DATE AUG. 4, 80
REVISED OCT. 10, 1980
DRAWN D.W.

SHEET A-1



SHEET A-2

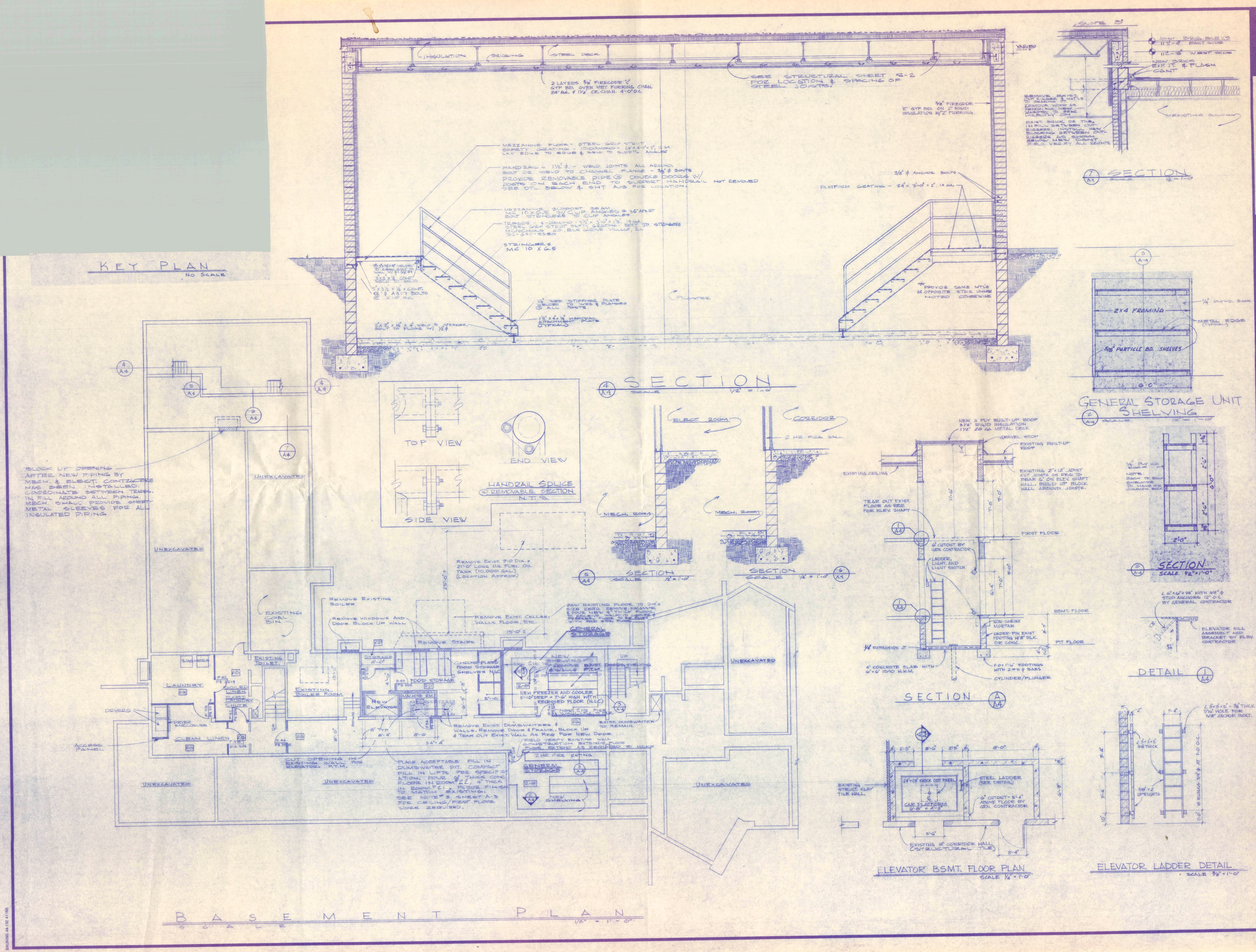
DATE AUG. 4, 80
REVISED OCT. 10, 1980
DRAWN BFS

JOB 7706

ADDITION & REMODELING
BEULAH NURSING HOME
BEULAH, NORTH DAKOTA

C M CORPORATION

ARCHITECTURAL & ENGINEERING SERVICES DIVISION
SIOUX CITY, IOWA 51102



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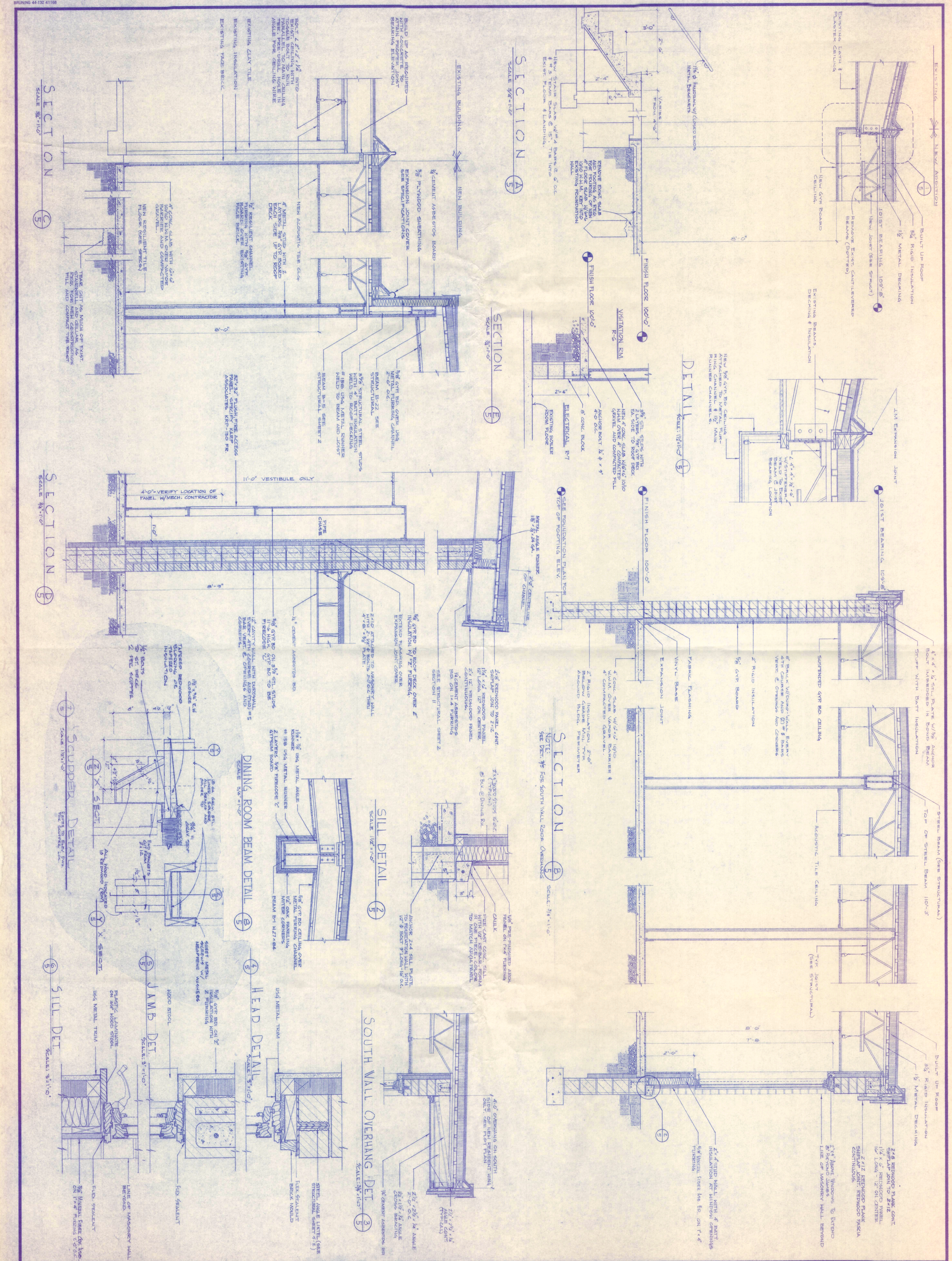
SIOUX CITY, IOWA 51102

ADDITION & REMODELING
BEULAH NURSING HOME
BEULAH, NORTH DAKOTA

JOB 7706

DATE AUG. 4, 80
REVISED OCT. 10, 1980
DRAWN SJA

SHEET A-4



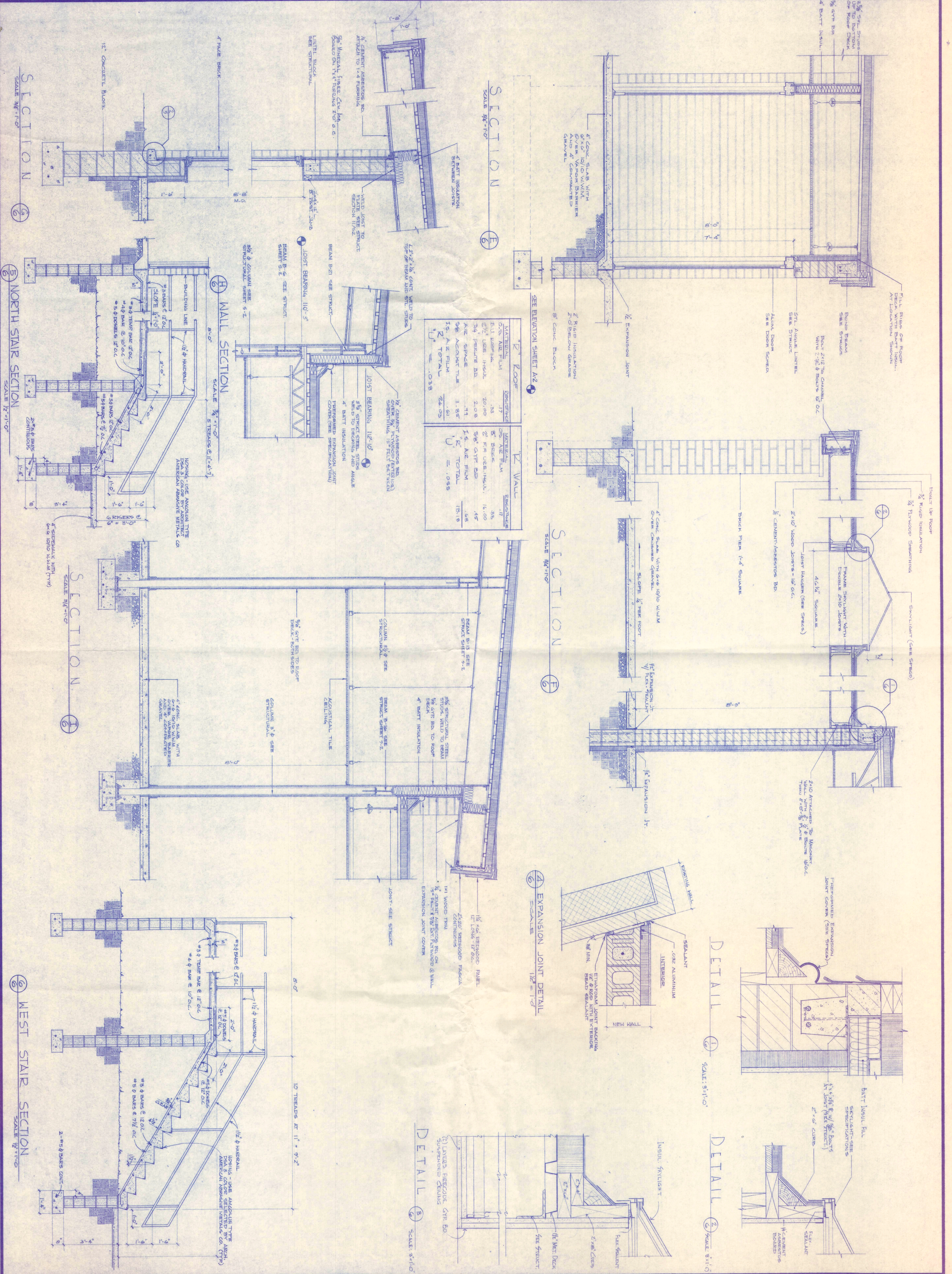
SHEET A-5

JOB 7706

ADDITION & REMODELING
BEULAH NURSING HOME
BEULAH, NORTH DAKOTA

C M CORPORATION

ARCHITECTURAL & ENGINEERING SERVICES DIVISION
SIOUX CITY, IOWA 51102



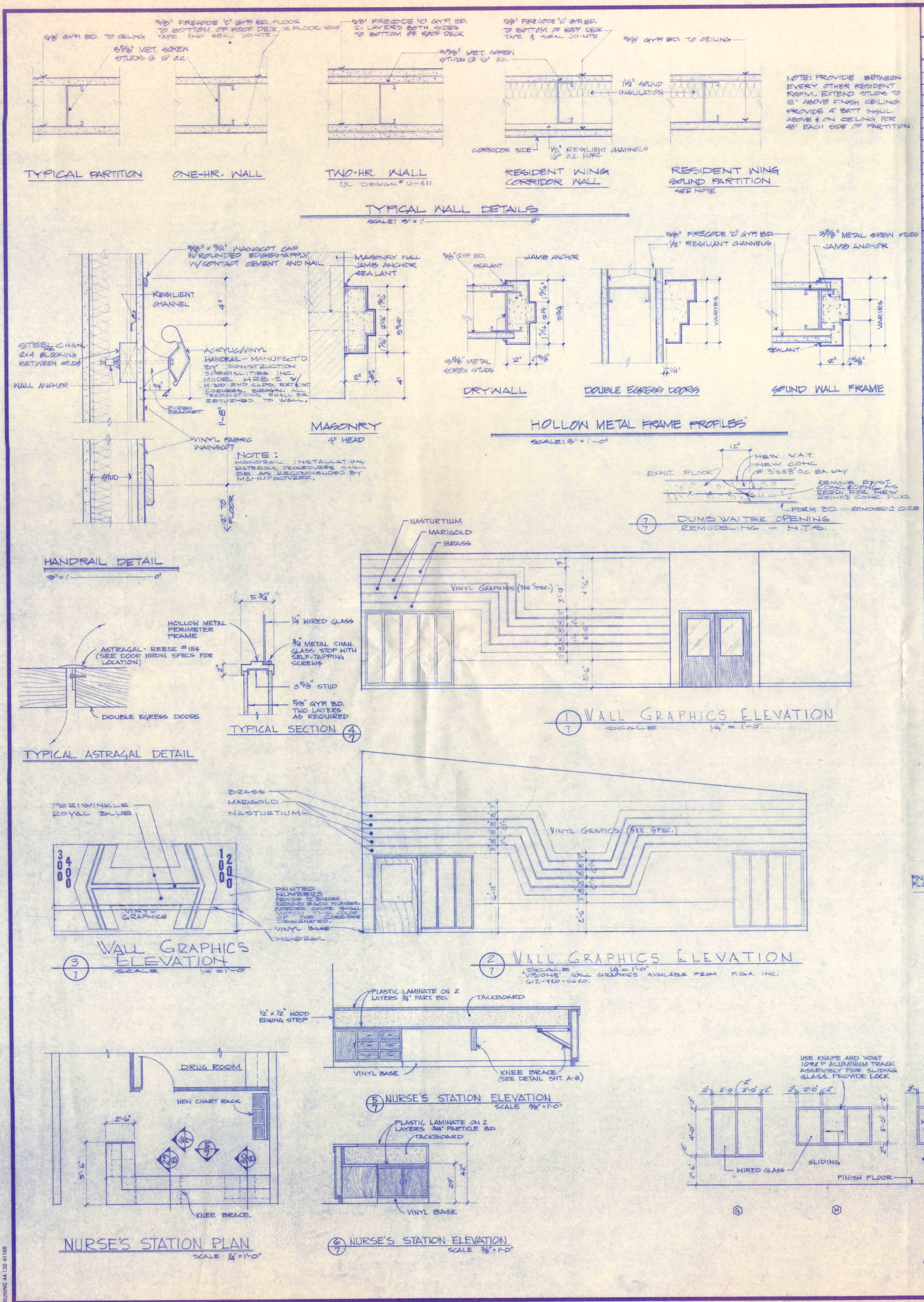
"R" ROOF MATERIAL	RESISTANCE
O.S. AIR FILM	.17
B.U. ROOFING	.33
2 1/2" URE. INSUL	20.00
3/4" PERLITE BD.	2.08
AIR SPACE	.99
5/8 ACOUST. TILE	1.85
I.S. AIR FILM	.61
"R" TOTAL	26.03
"U" = .038	

"R" WALL MATERIAL	RESISTANCE
O.S. AIR FILM	.17
8" BRICK	.88
2" F.F. URE. INSUL.	16.00
5/8" GYP. BD	.45
I.S. AIR FILM	.68
"R" TOTAL	18.18
"U" = .055	

SHEET	DATE AUG. 4 1980 REVISED OCT. 10, 1980 DRAWN SJA	JOB	
A-6		7706	ADDITION & REMODELING BEULAH NURSING HOME BEULAH, NORTH DAKOTA

C M CORPORATION

ARCHITECTURAL & ENGINEERING
SERVICES DIVISION
SIOUX CITY, IOWA 51102



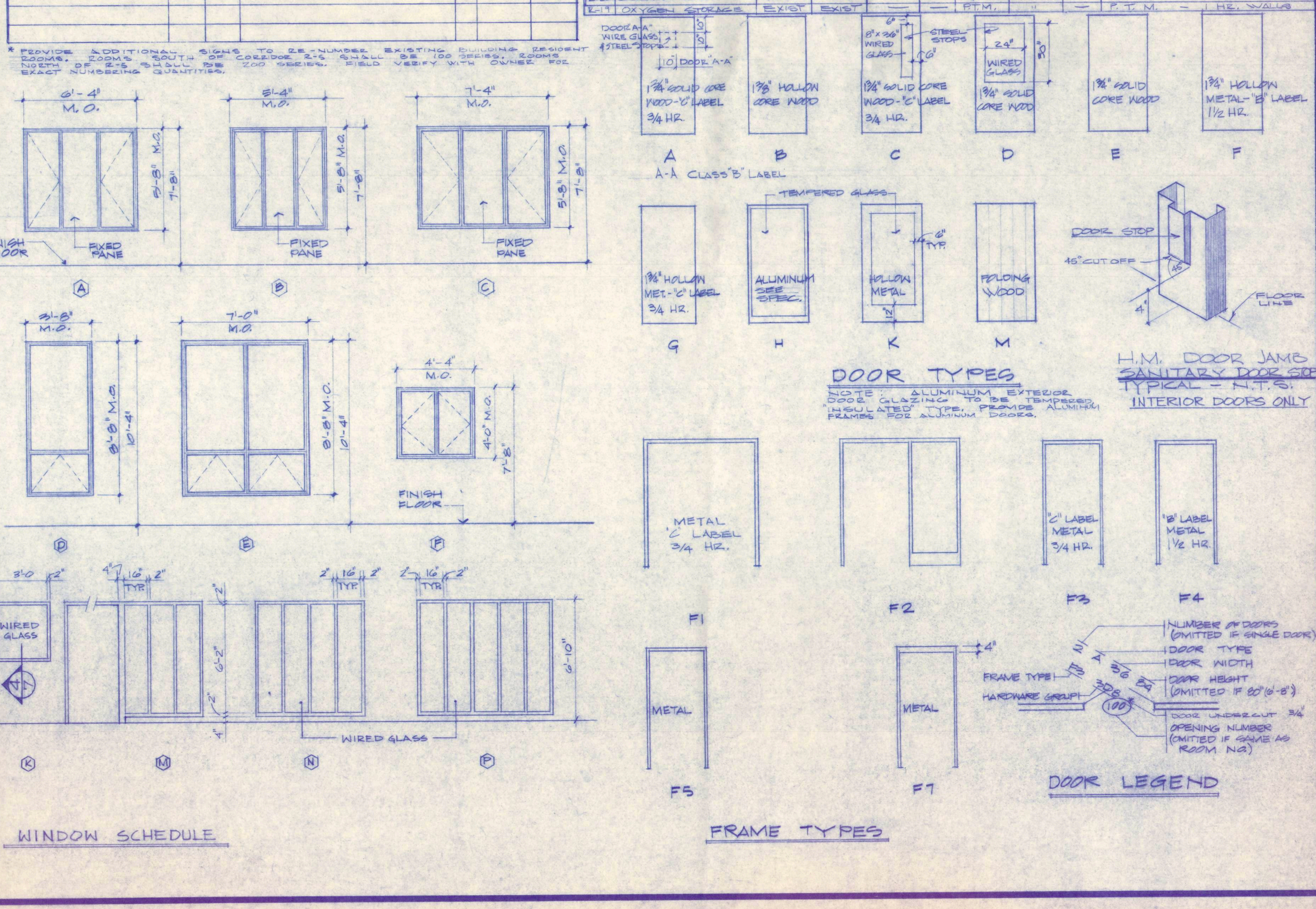
SIGN SCHEDULE *

ROOM NAME	ROOM NO.	DOOR NO.	SIGN COPY	QTY.	MTG.	HT.
DINING ROOM	2		DINING ROOM	3	DOOR	BELOW GLASS
KITCHEN	3,R-1		KITCHEN	3	DOOR	
DISHWASHING	4		DISHWASH	1	DOOR	5'-0"
EMPLOYEE DINING	5		EMPLOYEES' DINING ROOM	2	DOOR	BELOW GLASS
JAN. & ELECT. RM.	6		JANITOR / ELECTRICAL ROOM	1	DOOR	5'-0"
MEN	7		MEN	1	DOOR	5'-0"
WOMEN	8		WOMEN	1	DOOR	5'-0"
SOILED UTILITY	9		SOILED UTILITY	1	DOOR	
CLEAN UTILITY	10		CLEAN UTILITY	1	DOOR	
CRAFTS & ACTIVITIES	11		CRAFTS & ACTIVITY ROOM	2	DOOR	BELOW GLASS
PHYSICAL THERAPY	12		PHYSICAL THERAPY	1	DOOR	
PERSONAL CARE	13		PERSONAL CARE	1	DOOR	
MEN'S BATH	15		MEN'S BATH	1	DOOR	5'-0"
WOMEN'S BATH	16		WOMEN'S BATH	1	DOOR	5'-0"
JANITOR	18		JANITOR	1	DOOR	5'-0"
LINEN	19,19A		CLEAN LINEN	2	DOOR	5'-0"
SOLARIUM	20		SOLARIUM	1	DOOR	
DRUG ROOM	21, R-9		MEDICATION	2	DOOR	5'-0"
VISITATION	22, R-6		VISITATION	2	DOOR	
RESIDENT ROOM	TYPICAL		RM. NO. / SIGN COPY / RM. NO. / SIGN COPY			
			101 / 301 / 102 / 302	1	WALL	4'-6"
			103 / 303 / 104 / 304	1	WALL	4'-6"
			105 / 305 / 106 / 306	1	WALL	4'-6"
			107 / 307 / 108 / 308	1	WALL	4'-6"
			109 / 309 / 110 / 310	1	WALL	4'-6"
			111 / 311 / 112 / 312	1	WALL	4'-6"
			113 / 313 / 114 / 314	1	WALL	4'-6"
			115 / 315 / 117 / 317	1	WALL	4'-6"
			201 / 401 / 202 / 402	1	WALL	4'-6"
			203 / 403 / 204 / 404	1	WALL	4'-6"
			205 / 405 / 206 / 406	1	WALL	4'-6"
			207 / 407 / 208 / 408	1	WALL	4'-6"
			209 / 409 / 210 / 410	1	WALL	4'-6"
			211 / 411 / 212 / 412	1	WALL	4'-6"
			213 / 413 / 214 / 414	1	WALL	4'-6"
			215 / 415 / 216 / 416	1	WALL	4'-6"
SOILED LINEN	R-23		SOILED LINEN	1	DOOR	5'-0"
CLEAN LINEN	R-25		CLEAN LINEN	1	DOOR	5'-0"
LAUNDRY	R-24		LAUNDRY	2	DOOR	5'-0"
TOILET	23		NURSES TOILET	1	DOOR	5'-0"
ELECTRICAL	31		ELECTRICAL EQUIPMENT	2	DOOR	5'-0"
BOILER	29		BOILER ROOM	1	DOOR	5'-0"
TRASH	33		REFUSE STORAGE	1	DOOR	5'-0"
TOILET	11B		TOILET	1	DOOR	5'-0"
EMPLOYEE LOUNGE	R-3		EMPLOYEE LOUNGE	2	DOOR	5'-0"
RECEPTION	R-4		BUSINESS OFFICE	1	DOOR	5'-0"
NURSES OFFICE	R-8		DIRECTOR OF NURSING	1	DOOR	5'-0"
ADMIN. OFFICE	R-17		ADMINISTRATOR	1	DOOR	5'-0"
VESTIBULE	1		DINING ROOM	1	DOOR	5'-0"
OXYGEN STOR.	R-19		OXYGEN-NO SMOKING	1	DOOR	5'-0"
STORAGE	11-A		STORAGE	1	DOOR	5'-0"
STORAGE	R-18,18A		STORAGE	2	DOOR	5'-0"
ELECT. RM	R-7		ELECTRIC	1	DOOR	5'-0"
KIT. JAN.	R-1A		JANITOR	1	DOOR	5'-0"
STORAGE	R-20		STORAGE	1	DOOR	5'-0"
FOOD STOR.	R-21		FOOD STORAGE	2	DOOR	5'-0"
MACHINE ROOM	R-22		ELEVATOR MACHINE ROOM	1	DOOR	5'-0"

* PROVIDE ADDITIONAL SIGNS TO RE-NUMBER EXISTING BUILDING RESIDENT ROOMS. ROOMS SOUTH OF CORRIDOR R-5 SHALL BE 100 SERIES. ROOMS NORTH OF R-5 SHALL BE 200 SERIES. FIELD VERIFY WITH OWNER FOR EXACT NUMBERING QUANTITIES.

ROOM FINISH SCHEDULE

NO.	ROOM NAME	FLOOR	BASE	WAINSCOT MAT'L.	WAINSCOT HT	WALL	CEILING MAT'L	CEILING HT.	REMARKS
1	VESTIBULE	V.A.T.	VINYL	VINYL FAB.	8'-0"	GYP. BD.	AC.T."A"	11'-0"	1 HR. WALLS
2	DINING ROOM	V.A.T.	VINYL	VINYL FAB.	3'-0"	GYP. LATH	GYP. BD.	VARIES	ACOUSTIC SPRAY FINISH ON CEILING, WALL GRAPHICS
3	NEW KITCHEN	"	VINYL	—	—	GYP. BD.	AC. T. "B"	8'-0"	EPOXY PAINT - 1 HR. & 2 HR WALLS CERAMAGARD TILE
4	DISHWASHING	"	VINYL	—	—	GYP. BD.	AC. T. "B"	8'-0"	" "
5	EMPLOYEE DINING	"	"	VINYL FAB.	3'-0"	"	AC. T.	8'-0"	1 HR. & 2 HR. WALLS
6	JANITOR/MECH. RM.	"	"	—	—	"	GYP. BD.	8'-0"	CER. TILE @ SINK - 1 HR. WALLS
7	TOILET	"	"	—	—	"	"	8'-0"	
8	TOILET	"	"	—	—	"	"	8'-0"	
9	SOILED UTILITY	"	"	—	—	"	"	8'-0"	
10	CLEAN UTILITY	"	"	—	—	"	"	8'-0"	
11	CRAFTS & ACTIVITIES	"	"	VINYL FAB.	3'-0"	"	AC. T. "A"	8'-0"	1 HR. WALLS
11A	STORAGE	"	"	—	—	"	GYP. BD.	8'-0"	1 HR. WALLS
11B	TOILET	"	"	—	—	"	"	8'-0"	
12	PHYSICAL THER.	"	"	—	—	"	AC. T. "A"	8'-0"	
13	PERSONAL CARE	"	"	VIN. FAB ACCENT	8'-0"	"	"	8'-0"	ACCENT END WALLS
14/17	W. C. STORAGE	"	"	—	—	"	GYP. BD.	8'-0"	1 HR. WALLS
15/16	BATH	CER. TILE	CER. TILE	CER. TILE	5'-0"	"	AC.T "B"	8'-0"	FIBERGLAS REINF'D CONC. BD. & CER. TILE - 6'-8" @ SHOWERS - NO GYP. BD
18	JANITOR	"	VINYL	—	—	"	"	8'-0"	CER. TILE @ SINK - 1 HR. WALLS
19,19A	CLEAN LINEN	V.A.T.	"	—	—	"	"	8'-0"	1 HR. WALLS
20	SOLARIUM	CARPET	"	VINYL FAB.	3'-0"	"	AC. T. "A"	8'-0"	
21	DRUG RM	V.A.T.	"	—	—	"	GYP. BD.	8'-0"	
22	VISITATION	CARPET	"	VINYL FAB.	3'-0"	"	AC. T. "A"	8'-0"	
23	NURSES' TOILET	V.A.T.	"	—	—	"	GYP. BD.	8'-0"	
24	NURSING CORRIDOR	"	"	VINYL FAB.	3'-0"	"	AC. T. "A"	8'-0"	WALL GRAPHICS - 1 HR. WALLS
25	NURSES' STATION	"	"	"	8'-0"	"	"	8'-0"	1 HR. WALLS
26	CORRIDOR	"	"	"	3'-0"	"	"	8'-0"	1 HR. WALLS
27	CORRIDOR	"	"	"	3'-0"	"	"	8'-0"	1 HR. WALLS
28	CORRIDOR	"	"	"	3'-0"	"	"	8'-0"	1 HR. WALLS
TYP.	RESIDENT/TOILET ROOM	"	"	—	—	"	GYP. BD.	8'-0"	PAINT HEAD OF BED WALL-ACCENT
R-26	CORRIDOR	"	"	—	—	"	P.T.M.		1 HR. WALLS
29	BOILER ROOM	CONC.	"			"	"	20'-0"	2 HR. WALLS
30	CORRIDOR	V.A.T.	"	VINYL FAB.	3'-0"	"	AC. T. "A"	8'-0"	2 HR. WALLS
31	ELECTRICAL	CONC	"	—	—	"	GYP. BD	8'-0"	1 & 2 HR. WALLS
32	SERVICE VEST.	V.A.T.	"	—	—	"	"	8'-0"	1 HR. WALLS
33	TRASH	V.A.T.	VINYL	—	—	GYP. BD	AC. T. "B"	8'-0"	1 HR. WALLS
R-1	KITCHEN	V.A.T.	VINYL	—	—	GYP. BD.	AC. T. "B"	8'-0"	EPOXY PAINT, 1 HR. WALLS, CERAMAGARD TILE
R-2	DIETICIAN'S OFFICE	"	"	—	—	"	" "B"	8'-0"	1 HR. WALLS
R-3	EMPLOYEE LOUNGE	"	"	—	—	"	" "A"	8'-0"	1 HR WALLS
R-4	RECEPTION & BOOKKEEPING	CARPET	"	—	—	"	" "A"	8'-0"	
R-5	CORRIDOR	V.A.T.	"	VINYL FAB.	3'-0"	"	" "A"	8'-0"	1 HR. WALLS
R-6	VISITATION	CARPET	"	"	3'-0"	"	" "A"	8'-0"	
R-7	ELECT. ROOM	EXIST.	—	—	—	"	—	—	1 HR. WALLS
R-8	NURSES'S OFFICE	CARPET	VINYL	—	—	"	EXIST.	VARIES	EXIST. BRICK WALL FINISH TO REMAIN
R-9	DRUG ROOM	V.A.T.	"	—	—	"	"	"	
R-10	NURSES' STATION	V.A.T.	"	—	—	"	"	"	PATCH TO MATCH V.A.T. - 1 HR. WALLS
R-11	SINGLE ROOM	P.T.M.	"	—	—	P.T.M.	"	—	NEW PAINT ALL WALLS
R-12	SINGLE ROOM	"	"	—	—	"	"	—	" "
R-13	BATH	"	"	—	—	"	"	—	" "
R-14	DOUBLE ROOM	"	"	—	—	"	"	—	" "
R-15	DOUBLE ROOM	"	"	—	—	"	"	—	" "
R-1A	KITCHEN JANITOR	V.A.T.	"	—	—	GYP. BD	AC. T"B"	8'-0"	EPOXY PAINT - 1 HR. WALLS, CERAMAGARD TILE
R-16	LIVING	CARPET	"	VINYL FAB	8'-0"	"	EXIST.	—	NEW WALL ONLY
R-17	ADMINISTRATOR	CARPET	"	VINYL FAB	3'-0	"	"	—	NEW WALL ONLY
R-18,18A	GENERAL STORAGE	—	—	—	—	—	AC. T. "A"		2 HR. WALLS & DOOR, FIELD VERIFY AREA OF CEILING REQ'D
R-20	STORAGE	V.A.T.	VINYL	—	—	GYP. BD	AC. T "A"	8'-0"	2 HR. WALLS & DOOR
R-21	FOOD STORAGE	V.A.T.	VINYL	—	—	GYP. BD.	AC. T "A"	8'-0"	P. T. M.
R-22	MACHINE ROOM	CONC. W/ HARDNER	—	—	—	CONC. BLK	AC. T "A"	8'-0"	2 HR. BLOCK WALLS
R-23	SOILED LINEN	V.A.T.	VINYL	—	—	GYP. BD	EXIST.	—	P. T. M. - 1 HR. WALLS
R-24	LAUNDRY	V.A.T.	VINYL	—	—	GYP. BD	EXIST.	—	P. T. M. - 1 HR. WALLS
R-25	CLEAN LINEN	V.A.T.	VINYL	—	—	GYP. BD	EXIST.	—	P. T. M. - 1 HR. WALLS
R-19	OXYGEN STORAGE	EXIST	EXIST	—	—	P.T.M.	"	—	P. T. M. - 1 HR. WALLS

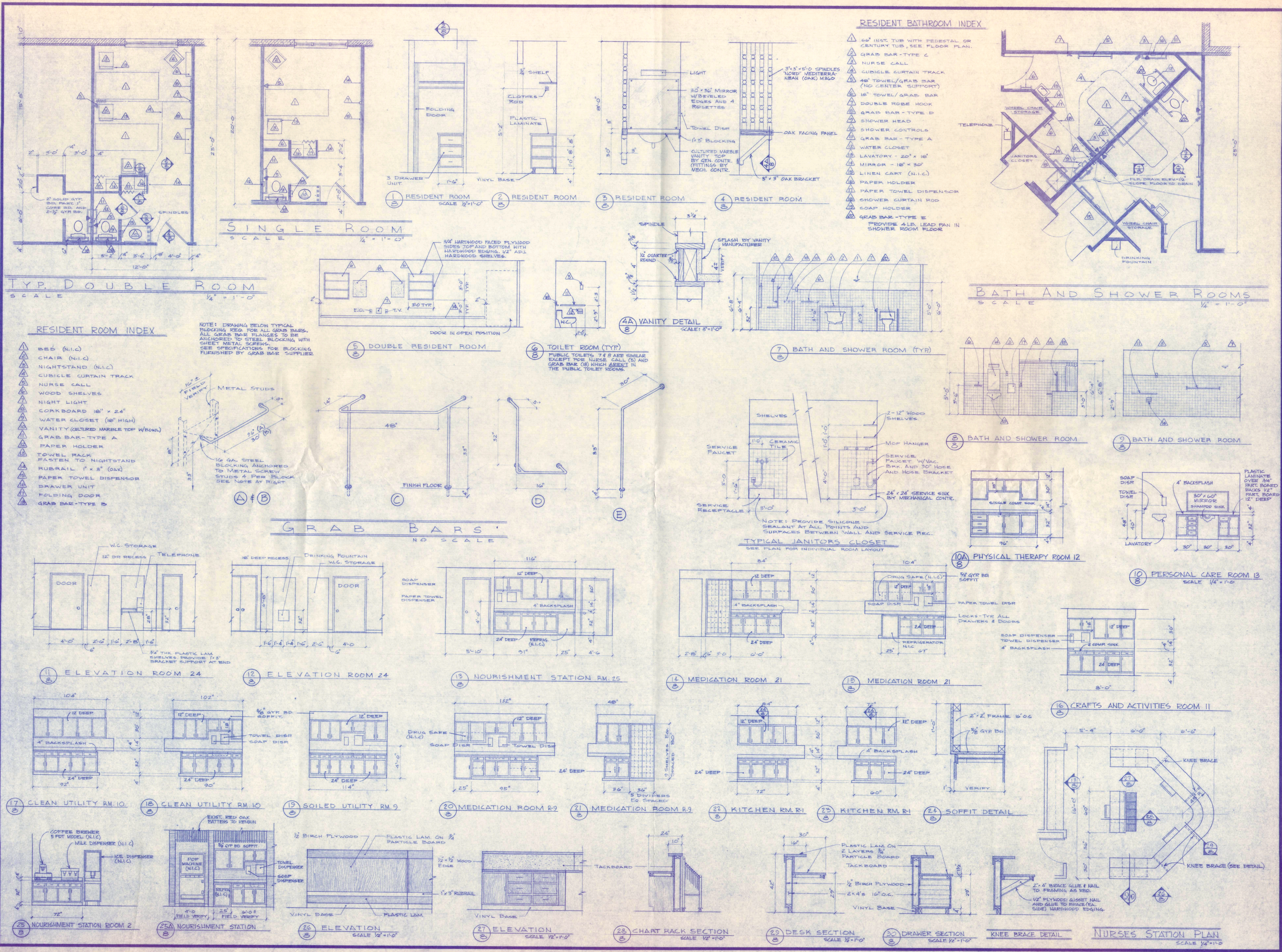


C M CORPORATION

ARCHITECTURAL & ENGINEERING SERVICES DIVISION
SIOUX CITY, IOWA 51102

ADDITON & REMODELING
BEULAH NURSING HOME
BEULAH, NORTH DAKOTA

JOB 7706
DATE AUG 4, 1980
REVISED OCT. 10, 1980
SHEET A-7



ARCHITECTURAL & ENGINEERING SERVICES DIVISION

SIOUX CITY, IOWA 51102

C M CORPORATION

ADDITION & REMODELING
BEULAH NURSING HOME
BEULAH NORTH DAKOTA

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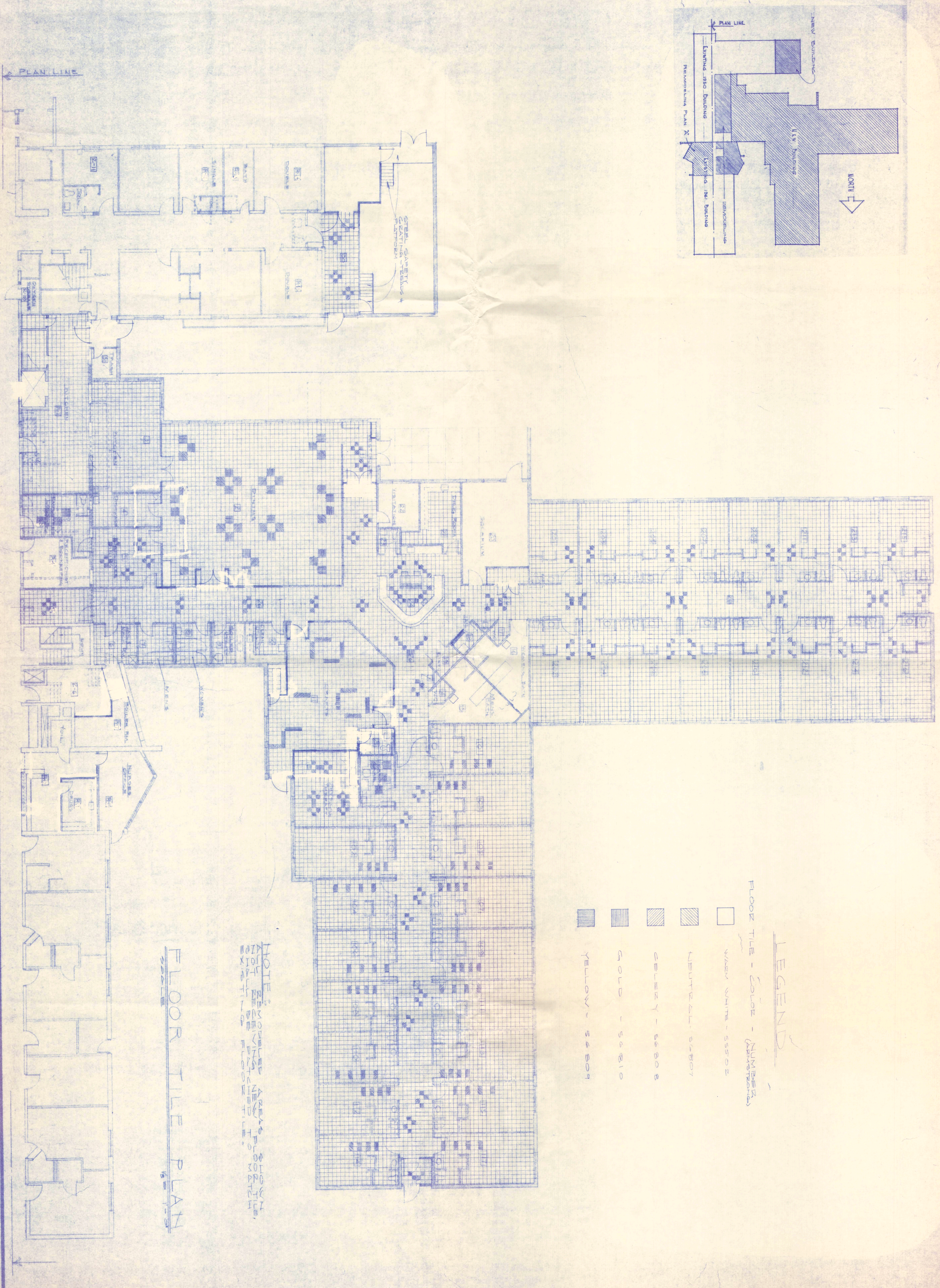
DATE AUG. 4, 80
REVISED OCT. 10, 1980
DRAWN SJA

SHEET A-8



LEGEND

FLOOR TILE - COLOR - NUMBER (ARMSTRONG)

- WARM WHITE - 55502
- NEUTRAL - 56807
- CELERY - 56808
- GOLD - 56810
- YELLOW - 56809

NOTE: ALL REMODELED AREAS SHOWN NOT RECEIVING NEW FLOOR TILE, SHALL BE PATCHED TO MATCH EXISTING FLOOR TILE.

FLOOR TILE PLAN
SCALE 1/8" = 1'-0"

SHEET A-9 | DATE AUG. 4, 80 REVISED OCT. 10, 1980 DRAWN DAW | JOB 7706

ADDITION & REMODELING
BEULAH NURSING HOME
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ARCHITECTURAL & ENGINEERING SERVICES DIVISION
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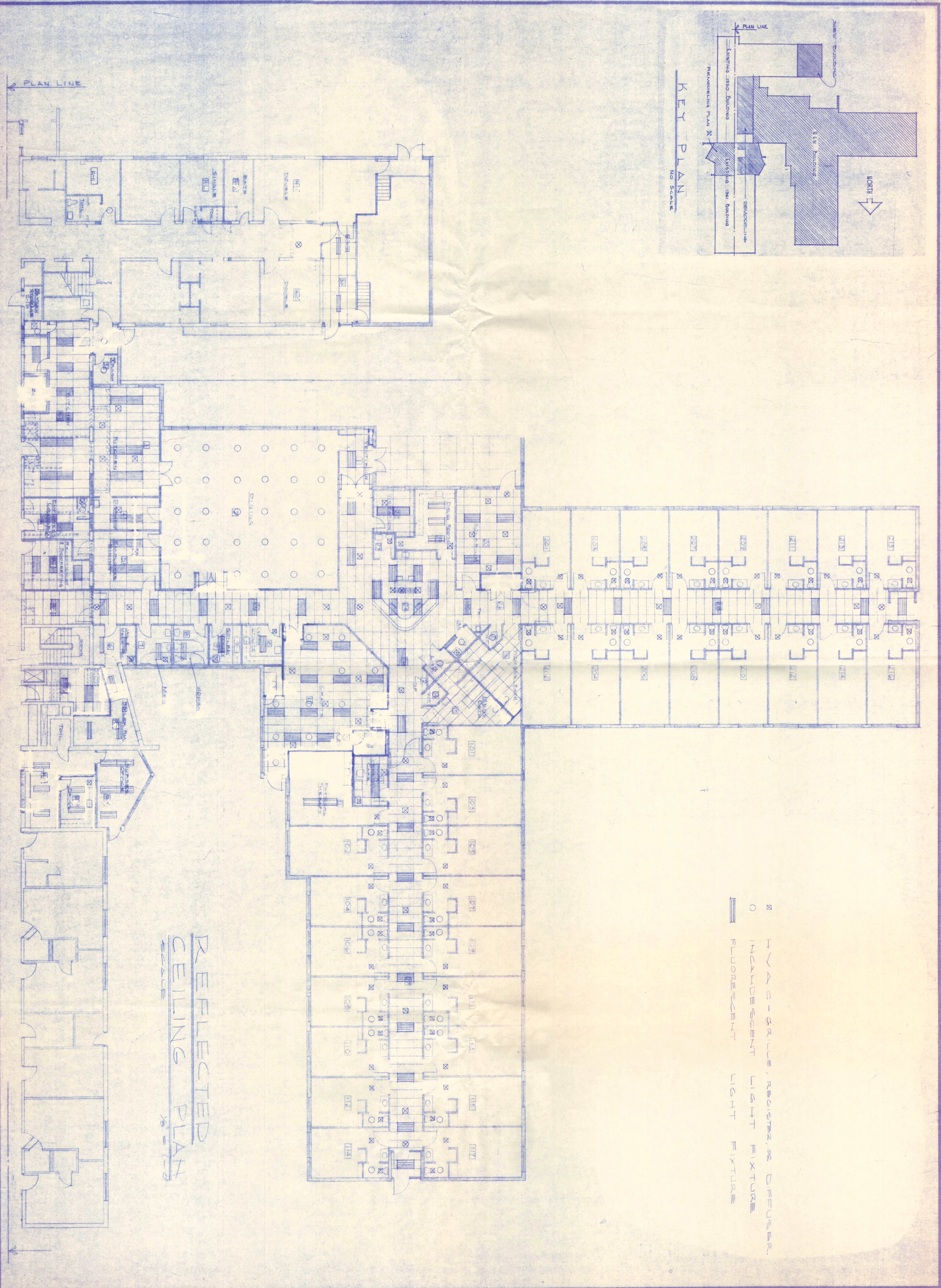

SHEET A-10

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DRAWN D.W.

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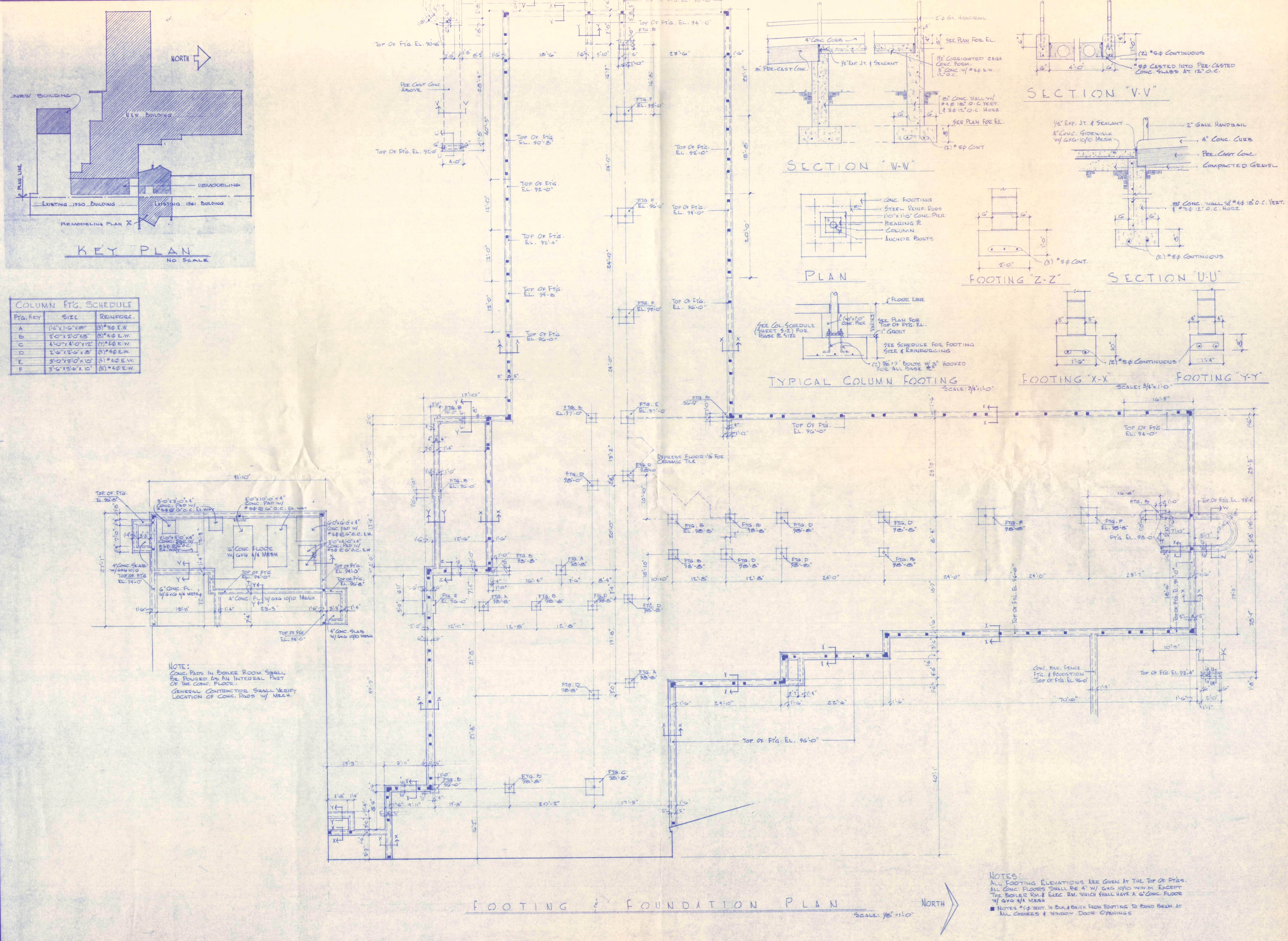

COLUMN FT'G. SCHEDULE		
FT'G. KEY	SIZE	REINFORC.
A	1'-6"x1'-6"x8"	(3)#3Φ E.W
B	2'-0"x2'-0"x8"	(3)#4Φ E.W.
C	4'-0"x4'-0"x12"	(7)#4Φ E.W
D	2'-6"x2'-6"x8"	(3)#4Φ E.W.
E	3'-0"x3'-0"x10"	(4)#4Φ E.W.
F	3'-6"x3'-6"x10"	(5)#4Φ E.W.

NOTES:
ALL FOOTING ELEVATIONS ARE GIVEN AT THE TOP OF FT'GS.
ALL CONC. FLOORS SHALL BE 4" W/ 6x6 10/10 W.W.M EXCEPT THE BOILER RM. & ELEC. RM. WHICH SHALL HAVE A 6" CONC. FLOOR W/ 6x6 4/4 MESH

■ NOTES #5Φ VERT. IN BLK. & BRICK FROM FOOTING TO BOND BEAM AT ALL CORNERS & WINDOW DOOR OPENINGS

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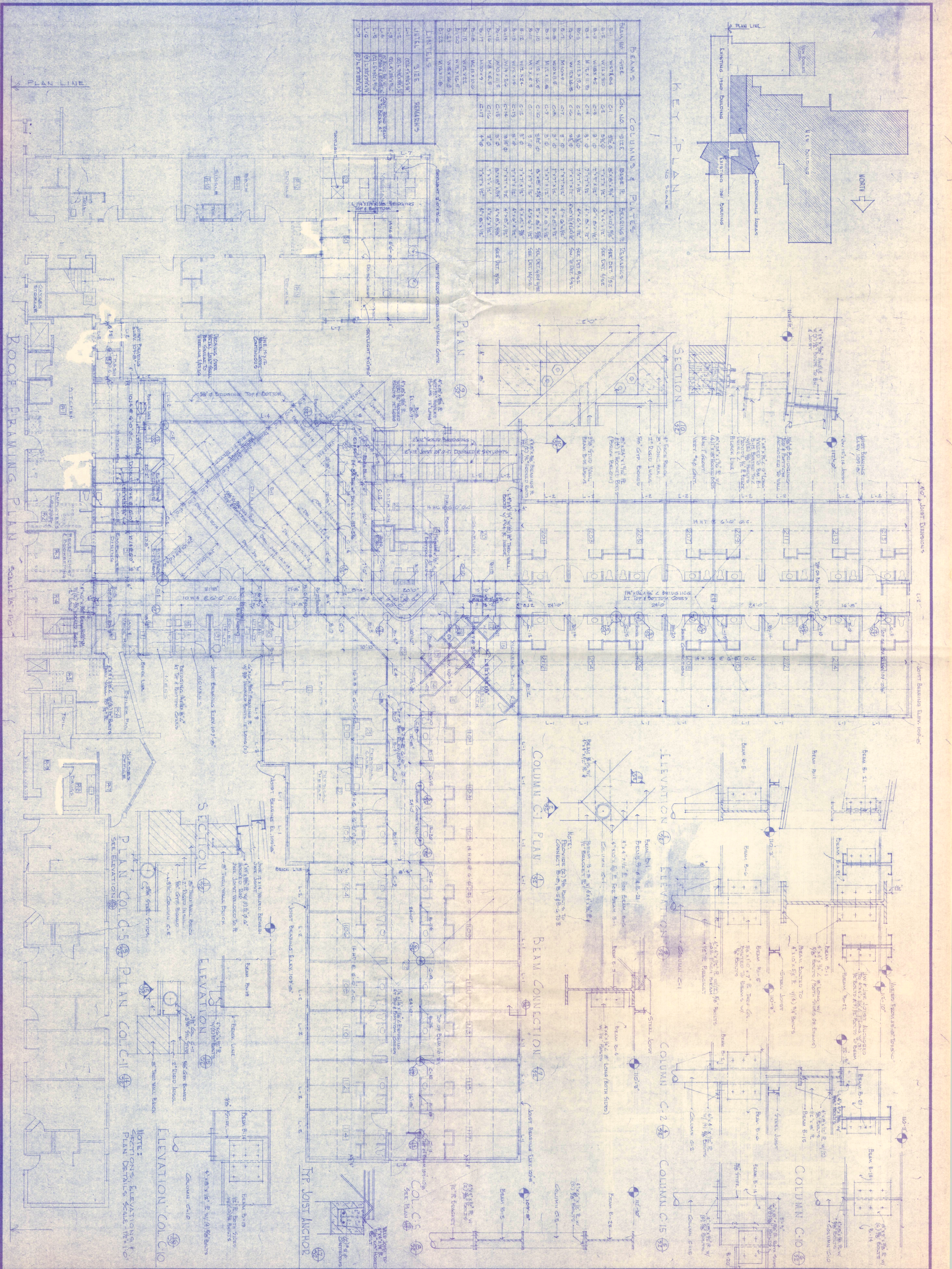
ADDITION & RENOVATION
BEULAH NURSING HOME
BEULAH, NORTH DAKOTA

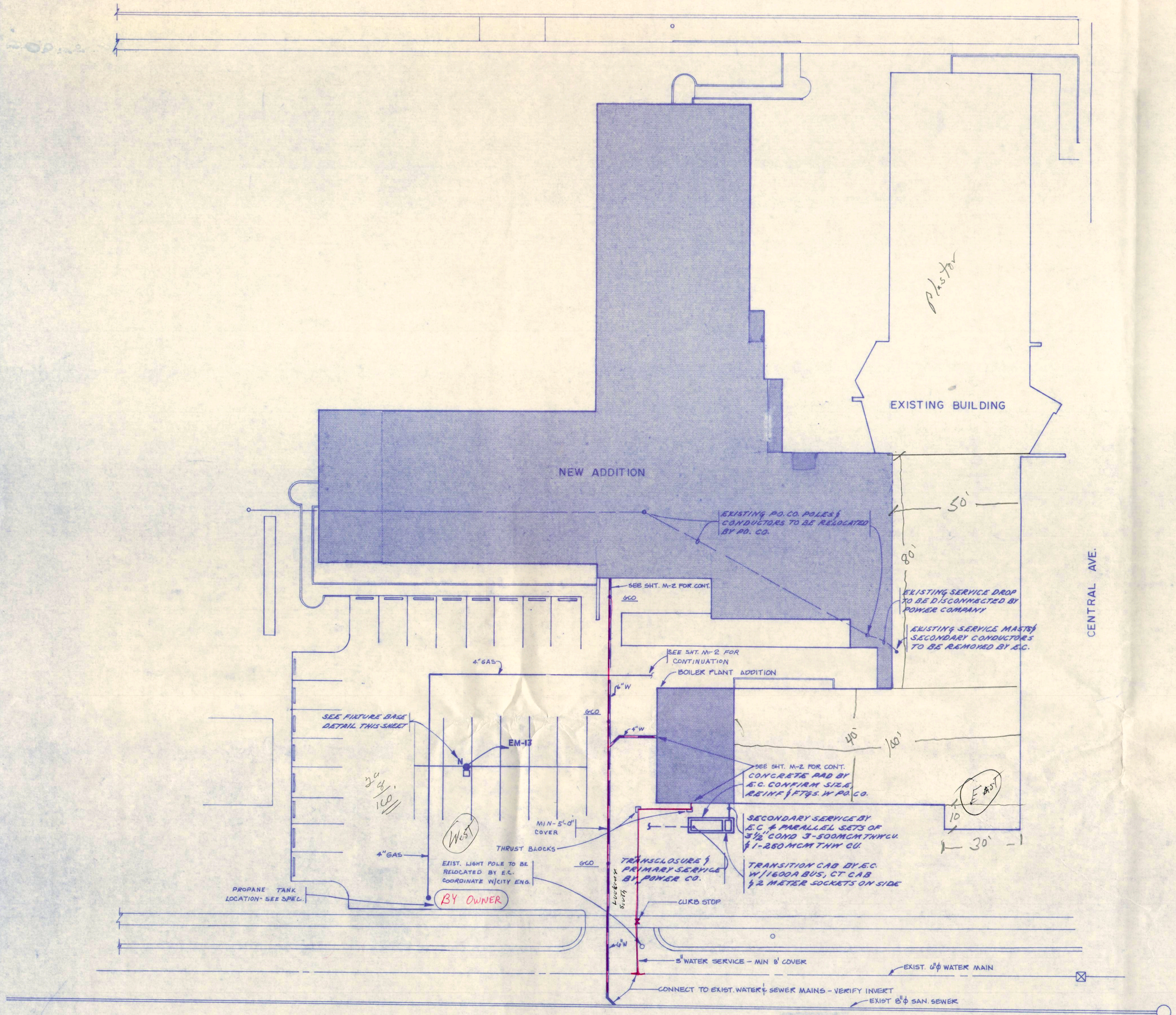
JOB 7706

DATE AUG. 4, 80
REVISED OCT. 10, 1980
DRAWN BFS

SHEET S-1



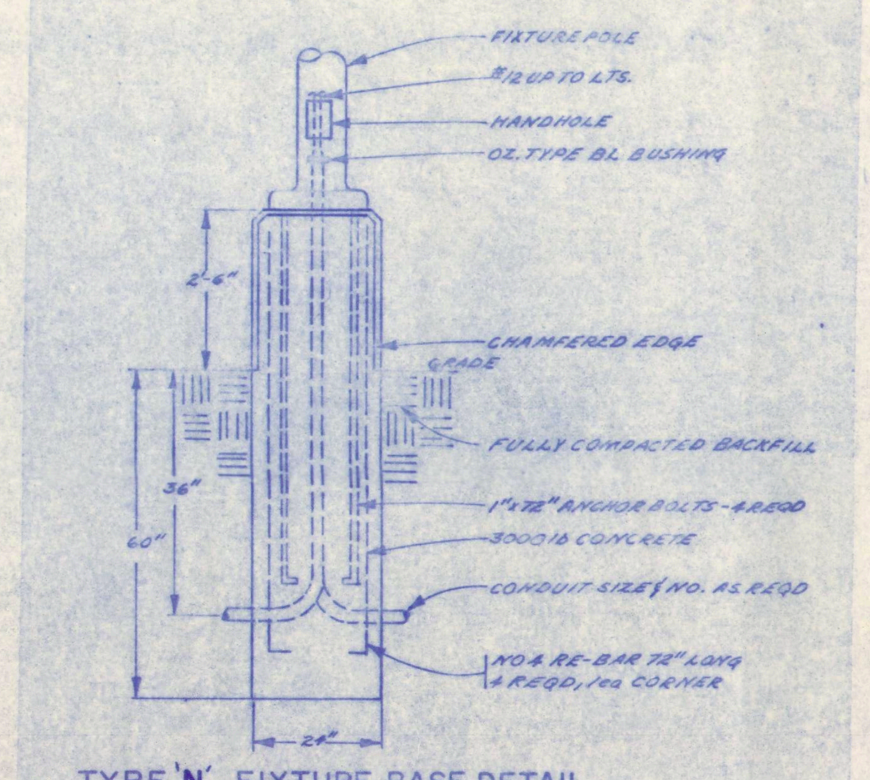
SHEET S-2	JOB 7706	Addition & Remodeling Beulah Nursing Home Beulah, North Dakota	C M CORPORATION	ARCHITECTURAL & ENGINEERING SERVICES DIVISION SIOUX CITY, IOWA 51102



MECHANICAL & ELECTRICAL SITE PLAN

SCALE: 1" = 20'-0"

NORTH



TYPE 'N' FIXTURE BASE DETAIL

NO SCALE

MECHANICAL SYMBOLS

- WASTE PIPING BELOW GRADE
- WASTE PIPING ABOVE GRADE
- VENT PIPING ABOVE GRADE
- VENT PIPING BELOW GRADE
- DOMESTIC COLD WATER
- DOMESTIC HOT WATER (180°)
- DOMESTIC HOT WATER (110°)
- 110° DOMESTIC CIRCULATING HOT WATER
- 180° DOMESTIC CIRCULATING HOT WATER
- LP GAS PIPING
- HOT WATER HEATING SUPPLY
- HOT WATER HEATING RETURN
- GLYCOL SUPPLY
- GLYCOL RETURN
- CONDENSATE DRAIN
- LOW PRESSURE STEAM SUPPLY
- CONDENSATE RETURN
- CONDENSATE PUMP RETURN
- UNION
- GATE VALVE
- CHECK VALVE
- PLUG VALVE
- BALL VALVE
- GLOBE VALVE
- STRAINER WITH BLOW DOWN VALVE
- FLOW INDICATOR
- MOTOR OPERATED VALVE - 2-WAY (AUTOMATIC VALVE)
- MOTOR OPERATED VALVE - 3-WAY (AUTOMATIC VALVE)
- MANUAL AIR VENT
- THERMOMETER
- PRESSURE GAUGE WITH PIG TAIL & GAUGE LINE VALVE
- THERMOSTAT

ELECTRICAL SYMBOLS

- INCANDESCENT OR HID FIXTURE 'B' ON CIRCUIT 1, SWITCH 'b'
- WALL FIXTURE
- RECESSED FIXTURE
- EXIT LIGHT
- RECESSED FLUORESCENT FIXTURE
- FLUORESCENT FIXTURE
- S.P. SWITCH - UP 48" - LETER IDENTIFIES SWITCH
- GANGED SWITCHES
- 3-WAY SWITCH
- 4-WAY SWITCH
- SWITCH WITH PILOT LIGHT
- DIMMER SWITCH
- DENOTES HALF LEVEL SWITCHING SWITCH a CONTROLS OUTSIDE LAMPS, SWITCH b CONTROLS INSIDE LAMPS
- PHOTOELECTRIC SWITCH
- FLOAT SWITCH BY M.C., WIRED BY E.C.
- MANUAL MOTOR SWITCH
- GROUNDED DUPLEX RECEPTACLE - UP 12" OR AS NOTED
- WEATHERPROOF OUTLET - UP 24"
- CLOCK OUTLET - UP 7'-0"
- JUNCTION BOX
- SPECIAL PURPOSE OUTLET AS NOTED - PROVIDE OUTLET OR CONNECTION REQUIRED BY EQUIPMENT MANUFACTURER. COORDINATE ROUGH-IN WITH G.C. SHOP DRAWINGS.
- MOTOR AND CONTROLLER - FURNISHED BY MECHANICAL CONTRACTOR
- MOTOR STARTER
- MOTOR STARTER - DISCONNECT COMBINATION
- THERMOSTAT - UP 54" - FURNISHED BY MECHANICAL CONTRACTOR
- ELECTRIC HEAT
- FUSIBLE DISCONNECT SWITCH - NF - NON-FUSED WP - WEATHERPROOF
- BRANCH CIRCUIT PANELBOARD
- DISTRIBUTION PANEL
- BRANCH CIRCUIT IN CEILING OR WALL - 2 WIRE (3 WIRE, ETC.)
- RUN IN FLOOR
- A-1,3,5 HOME RUN TO PANEL A, CIRCUITS 1, 3, AND 5
- EXPOSED RUN ON WIREMOLD
- TV OUTLET - UP 18"
- TV CONDUIT RUN TO TERMINAL CABINET - 3/4" OR AS NOTED
- TELEPHONE OUTLET - UP 12" OR AS NOTED
- TELEPHONE CONDUIT RUN TO TERMINAL CABINET - 1/2" OR AS NOTED
- POLE MOUNTED FIXTURE
- TIME SWITCH
- HEADBOLT HEATER
- RELAY
- AQUASTAT BY M.C., WIRED BY E.C.
- AUTOMATIC FIRE DETECTOR - 136° RATE-OF-RISE OR AS NOTED - 190° FIXED TEMPERATURE
- MANUAL BREAK-GLASS STATION - UP 60"
- HORN - UP 7'-6" OR AS NOTED
- FIRE ALARM CONTROL PANEL
- RUN TO FIRE ALARM CONTROL PANEL
- SMOKE DETECTOR
- DOOR HOLDER
- DISCONNECTING RELAY
- DUCT SMOKE DETECTOR
- MICROPHONE OUTLET - UP 12" OR AS NOTED
- CHIME W/FLASHING INDICATING LIGHT
- SECURITY DOOR DETECTORS
- NURSE CALL SYSTEM MASTER STATION
- BEDSIDE STATION WITH SINGLE CORD - UP 40"
- EMERGENCY TOILET STATION - UP 36"
- INDICATING LIGHT - WHITE - OVER DOOR
- NURSE CALL SYSTEM ANNUNCIATOR
- NURSE CALL DUTY STATION
- PILLOW SPEAKER JACK
- HOME RUN TO NURSE CALL STATION
- PAGING PHONE OUTLET - UP 60"
- NITE LIGHT UP 18"
- EMERGENCY SHUT DOWN PUSH BUTTON
- SMOKE DAMPER BY MC. WIRED BY E.C.
- DAMPER REMOTE INDICATING LIGHT - UP 60"

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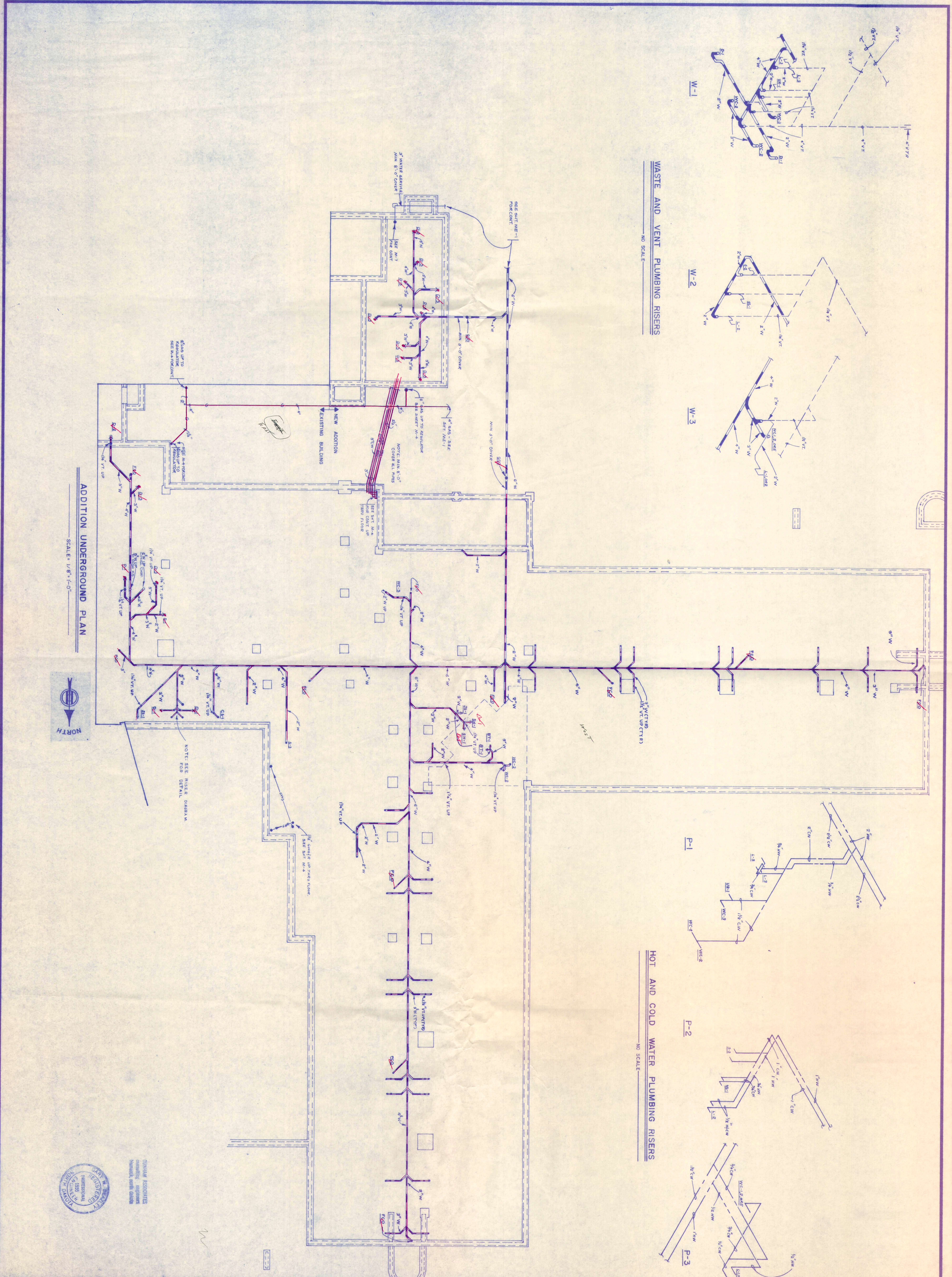
ADDITION & REMODELING
BEULAH NURSING HOME
BEULAH, NORTH DAKOTA

JOB	7706
DATE	10-10-80
DRAWN	D.L.M.
SHEET	ME-1
OF	10

BRUNING 44-132 41168



JOB	7706
DATE	10-10-80
DRAWN	K.J.M.
SHEET	M-2 OF 10

ADDITION & REMODELING
BEULAH NURSING HOME
BEULAH, NORTH DAKOTA

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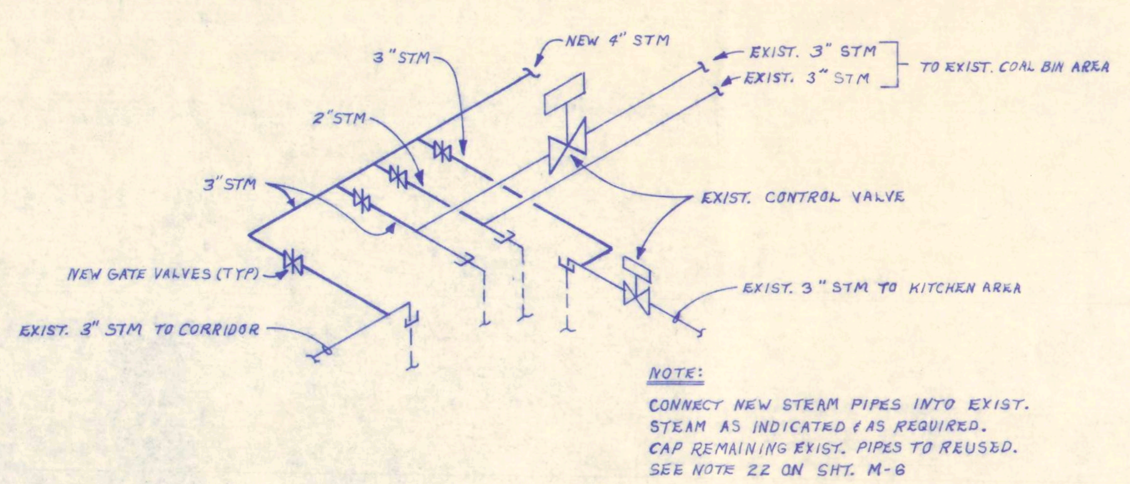
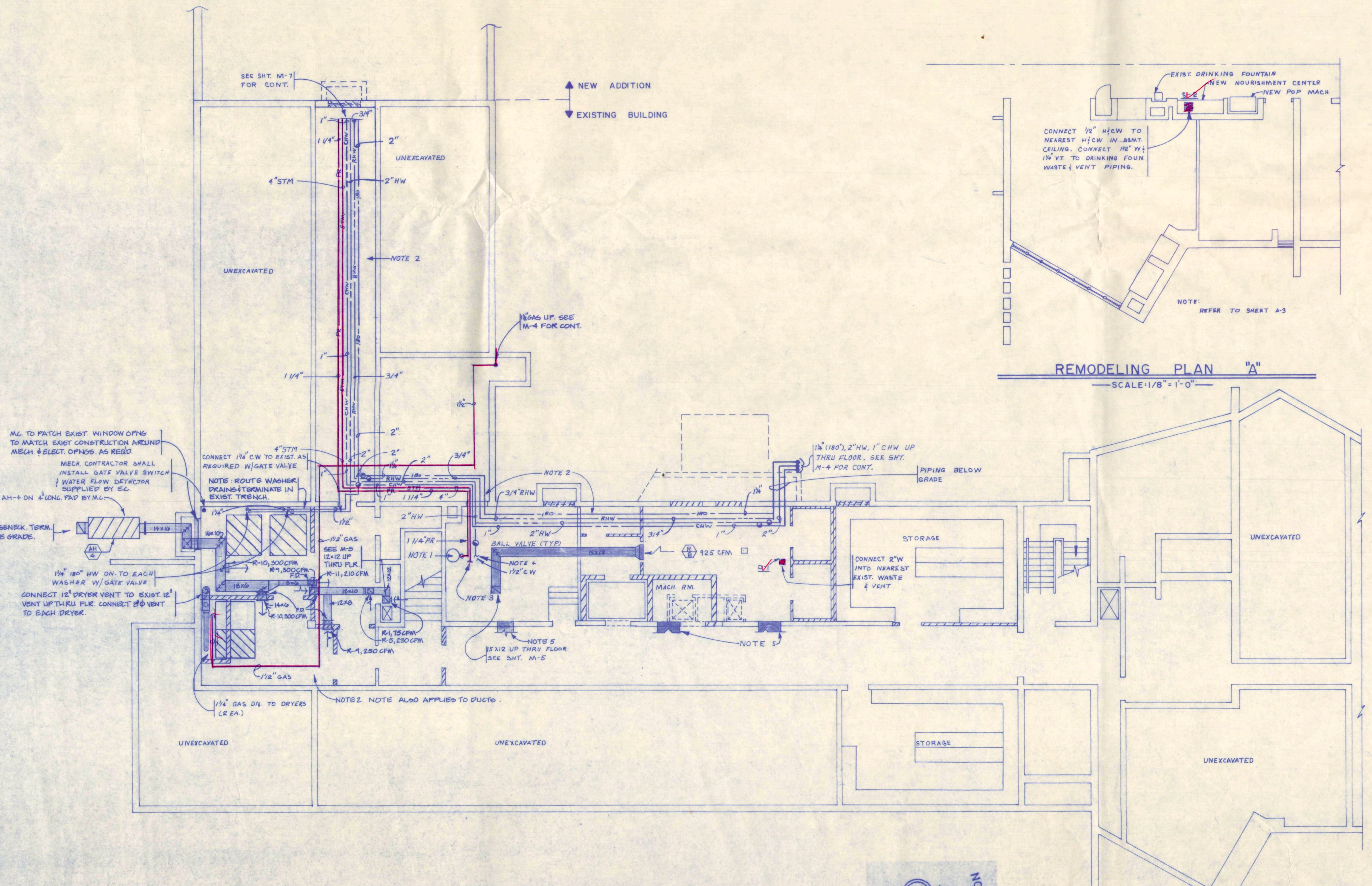


DIAGRAM 'A'
NO SCALE

80,000
65,000
145,000
11
266
33
18
5
10
10
333



REMODELED BASEMENT FLOOR PLAN
SCALE 1/8" = 1'-0"

NORTH

REMODELING PLAN "A"
SCALE 1/8" = 1'-0"

NOTES:

1. CONNECT 1-1/4" PR INTO EXISTING CONDENSATE PUMP WITH GATE VALVE AND CHECK VALVE.
2. ALL NEW PIPES SHOWN BEING ROUTED THROUGH EXISTING BUILDING ONLY INDICATE SUGGESTED LOCATION AND ROUTING. THIS CONTRACTOR SHALL VERIFY AND COORDINATE EXACT ROUTING REQUIRED AROUND EXISTING EQUIPMENT AND PIPES.
3. CONNECT 4" STEAM INTO EXISTING SYSTEM AS REQUIRED AND AS INDICATED ON DIAGRAM 'A' THIS SHEET. ALL REQUIRED DROPS IN STEAM MAIN FROM THE NEW BOILER ROOM TO POINT OF CONNECTION TO EXISTING STEAM PIPES AS INDICATED SHALL HAVE MAIN STEAM TRAPS AS DETAILED AND CONNECT TO NEAREST EXISTING CONDENSATE RETURN LINE TO EXISTING CONDENSATE PUMP.
4. CONNECT 1-1/2" HW TO EXISTING 1-1/4" HW BEING ROUTED TO 1964 BUILDING. CAP AND REMOVE AS REQUIRED. ALSO CONNECT 1-1/2" HW TO EXISTING HW PIPE SERVING ORIGINAL BUILDING.
5. RELOCATED GRILLES, CONNECT INTO EXISTING DUCT IN CORRIDOR. SEE NOTE 34 ON SHEET M-6.
6. WALL IN EXISTING BUILDING:
   - EXISTING
   - NEW
   - EXISTING TO BE REMOVED

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ADDITION & REMODELING
BEULAH NURSING HOME
BEULAH, NORTH DAKOTA

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SHEET	M-3
OF	10

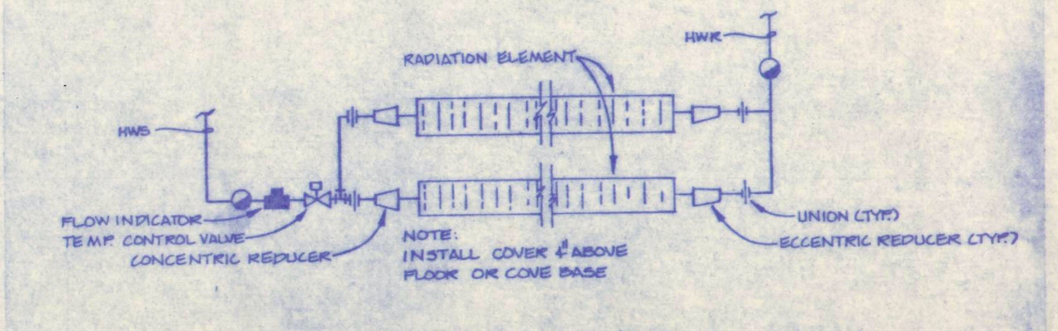
NOTES:

1. RELOCATED WATER CLOSET AND LAVATORY - SEE NOTE 4 ON SHEET M-6. CONNECT 3" WASTE FROM WATER CLOSET AND LAVATORY TO NEAREST EXISTING WASTE OF SUFFICIENT SIZE. CONNECT 3/4" CW AND 1/2" HW FROM RELOCATED FIXTURES TO NEAREST EXISTING CW AND HW PIPES OF SUFFICIENT SIZE. ROUTE 1-1/4" VT FROM FIXTURES UP AND 2" VTR.
2. RELOCATED FIXTURES - SEE NOTES 5 AND 6 ON SHEET M-6. RECONNECT EXISTING PIPES INTO FIXTURES AS REQUIRED.
3. CONNECT 1/2" H AND CW, 3" WASTE INTO NEAREST EXISTING PIPES OF SUFFICIENT SIZE. ROUTE 1-1/4" VT. UP, 2" VTR.
4. CONNECT WASTE AND H AND CW PIPES FOR FIXTURES TO NEAREST EXISTING PIPES OF SUFFICIENT SIZE.
5. CONNECT 2-1/2" HWS AND R TO EXISTING 2" AND 1-1/2" HWS AND R AT CHASE WALL. CONNECTIONS TO 2" HWS SHALL BE WITH PLUG VALVE AND FI-15 (THIS SERVES EXISTING VENTILATION UNITS). CONNECTIONS TO 1-1/2" HWS SHALL BE WITH PLUG VALVE AND FI-16 (THIS SERVES EXISTING RADIATION). INSTALL A 2" BYPASS BETWEEN THE 2" AND 1-1/2" LINES WITH A PLUG VALVE.

   COMBINE THE TWO EXISTING 1/2" CHW LINES AND CONNECT TO THE NEW 3/4" CHW LINE AT THE CHASE WITH A BALL VALVE.

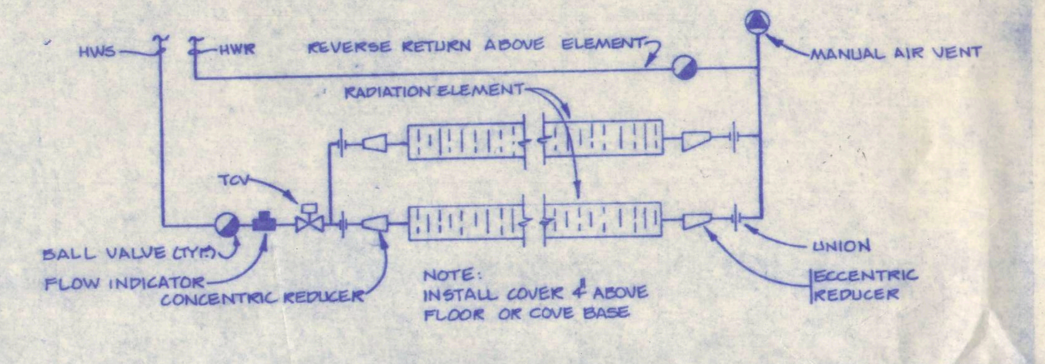
   CONNECT THE 2-1/2" CW LINE INTO THE EXISTING 2" CW LINES (2 EACH) AT THE CHASE WALL THROUGH BALL VALVES. CONNECT THE TWO EXISTING 1-1/4" HW LINES AT THE CHASE WALL.
6. REVERSE RETURN UNDER COVER.
7. 2-1/2" HWS AND R, 3" CW, 3" GWS AND R WITH GATE VALVES AND THERMOMETERS ON HEATING PIPES DOWN THROUGH FLOOR - SEE SHEET M-2 FOR CONT. GATE VALVES ON ALL PIPES.
8. 2" W, 1/2" H AND CW ROUTED BELOW CABINET.
9. IN EXISTING BUILDING ONLY:

   - EXISTING WALL
   - NEW WALL



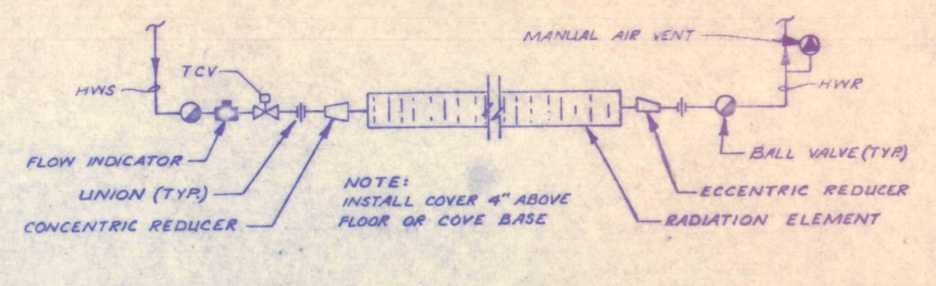
DOUBLE ELEMENT RADIATION DETAIL

NO SCALE

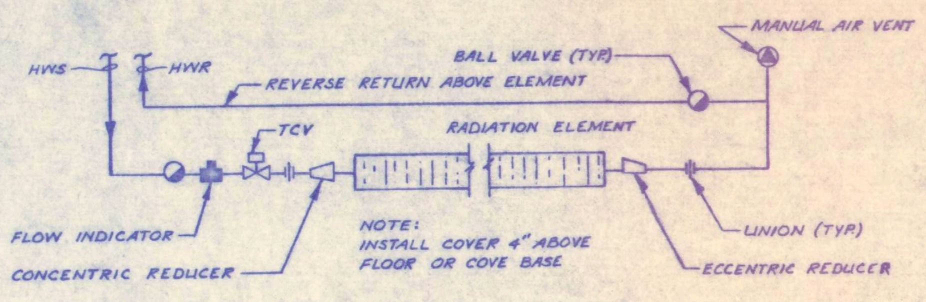


REVERSE RETURN DOUBLE ELEMENT RADIATION DETAIL

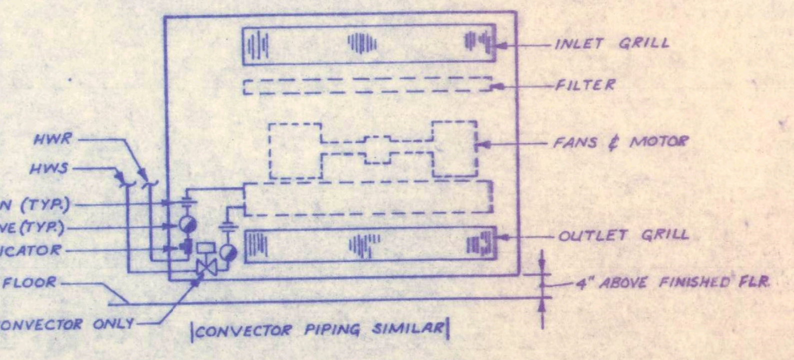
NO SCALE



HOT WATER RADIATION DETAIL

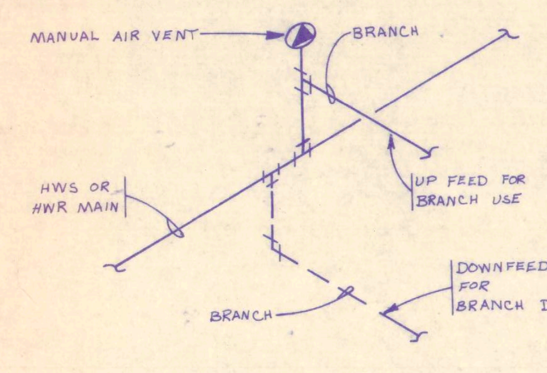


REVERSE RETURN RADIATION DETAIL



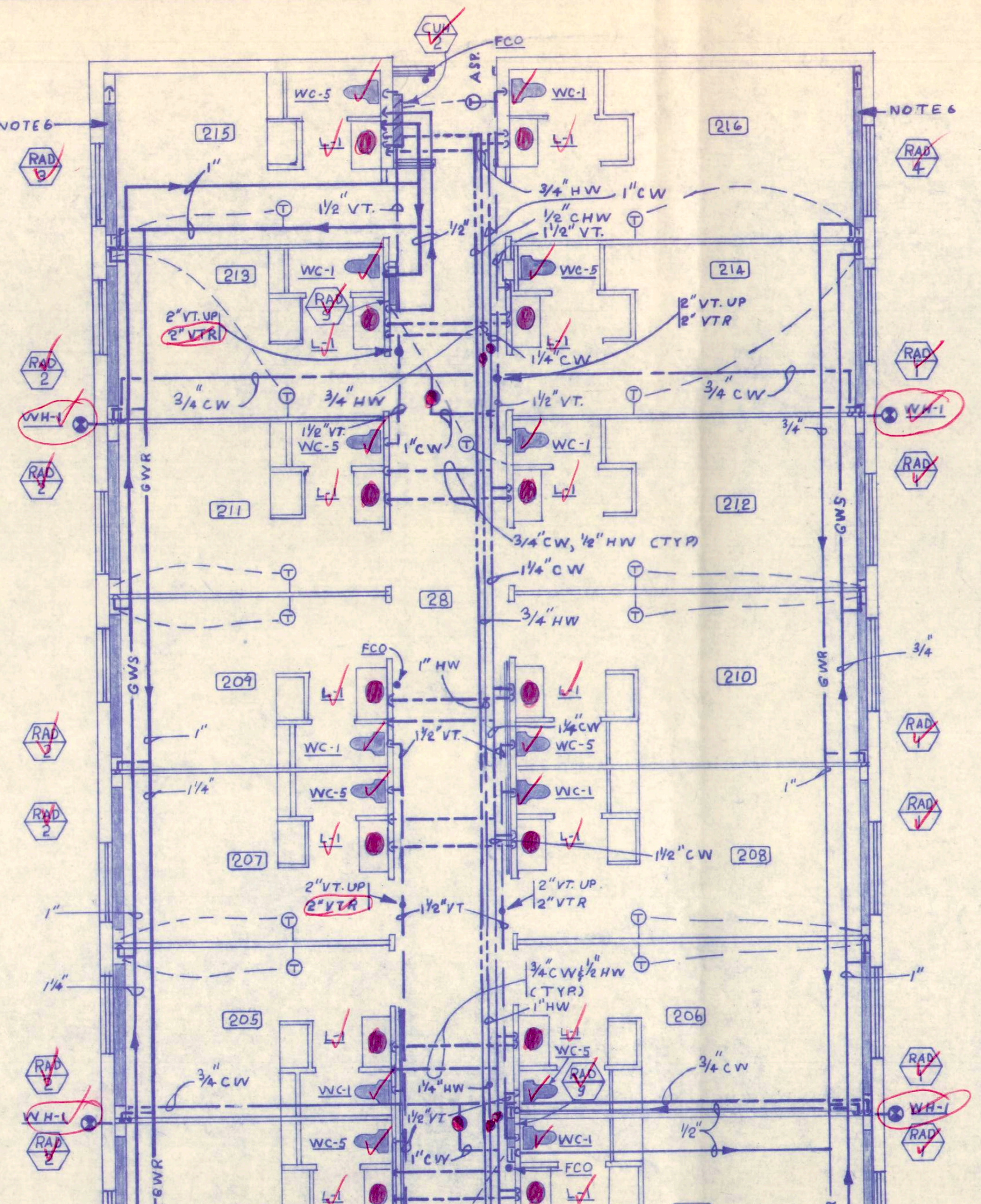
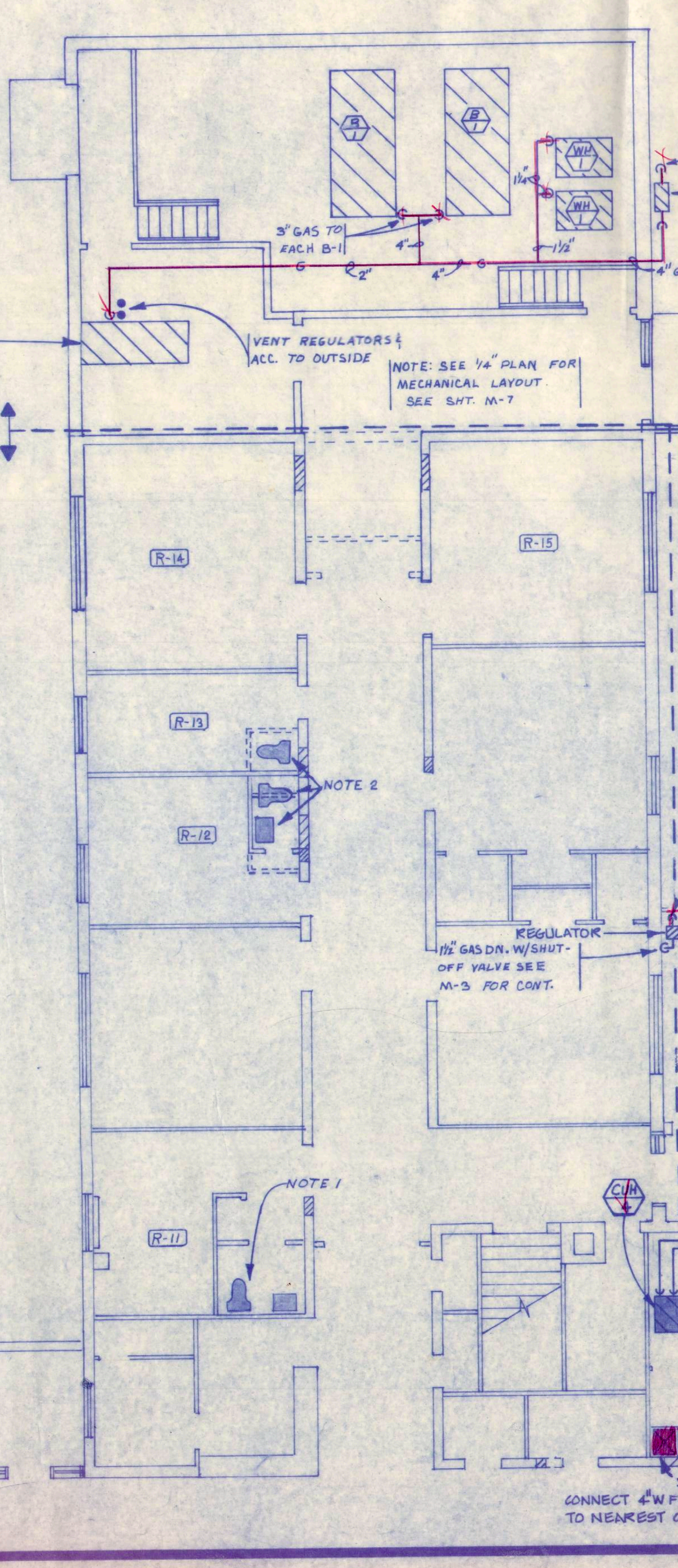
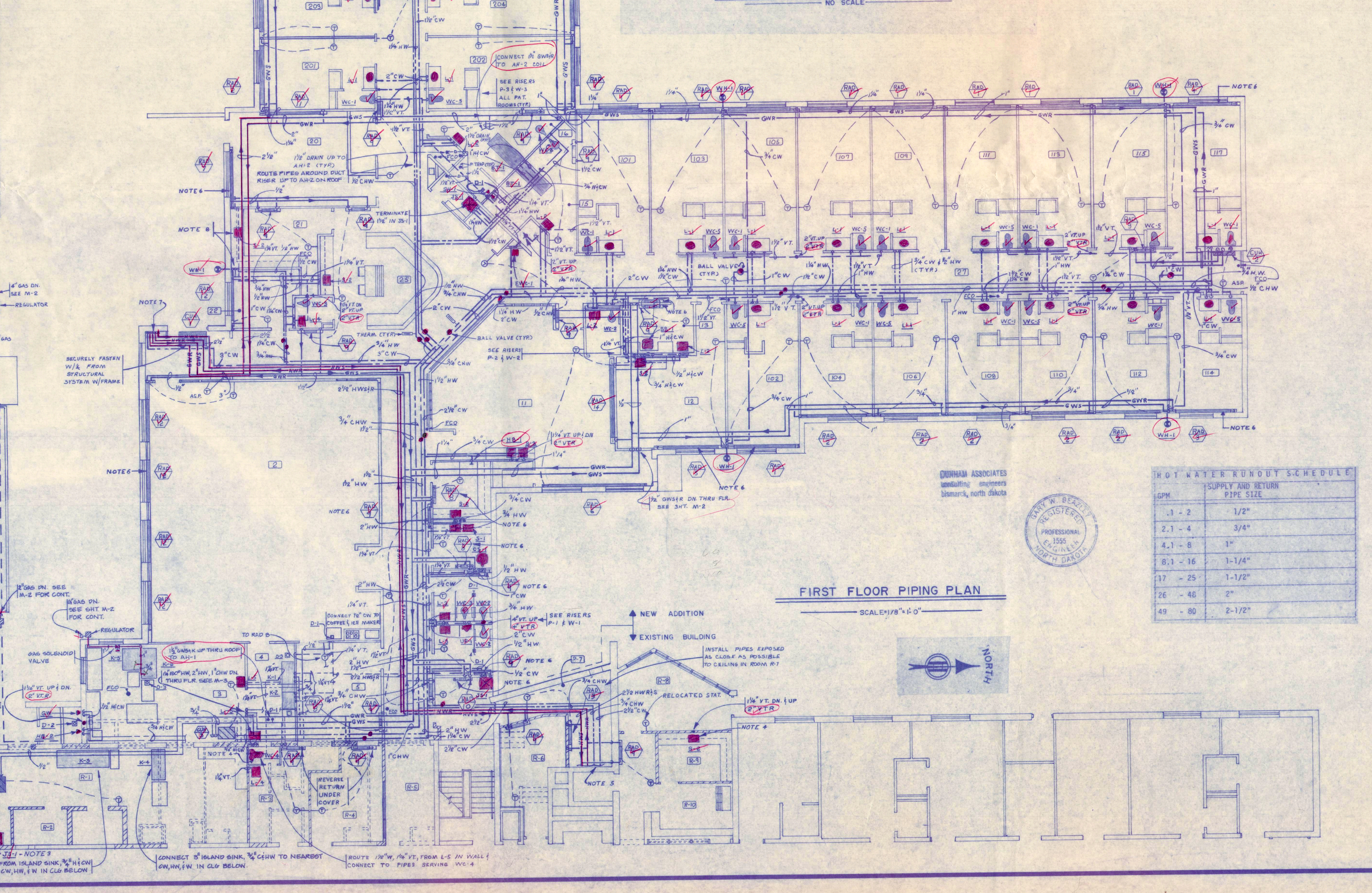
CABINET UNIT HEATER DETAIL

NO SCALE



HEATING PIPE TAKEOFF DETAIL

NO SCALE

FIRST FLOOR PIPING PLAN

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

HOT WATER RUNOUT SCHEDULE	
GPM	SUPPLY AND RETURN PIPE SIZE
.1 - 2	1/2"
2.1 - 4	3/4"
4.1 - 8	1"
8.1 - 16	1-1/4"
17 - 25	1-1/2"
26 - 48	2"
49 - 80	2-1/2"

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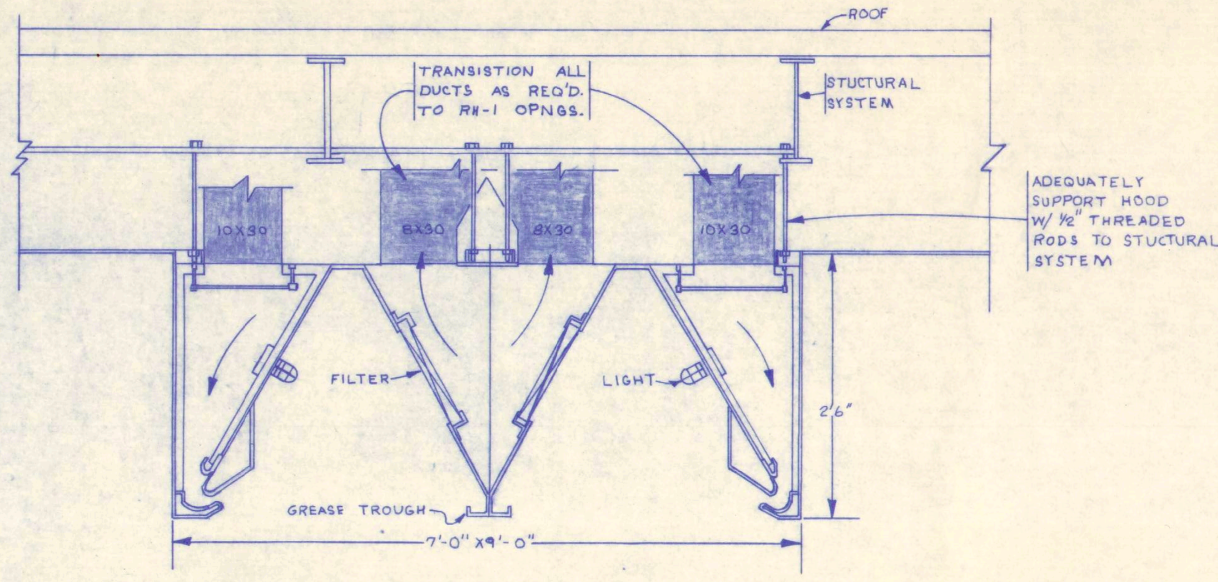
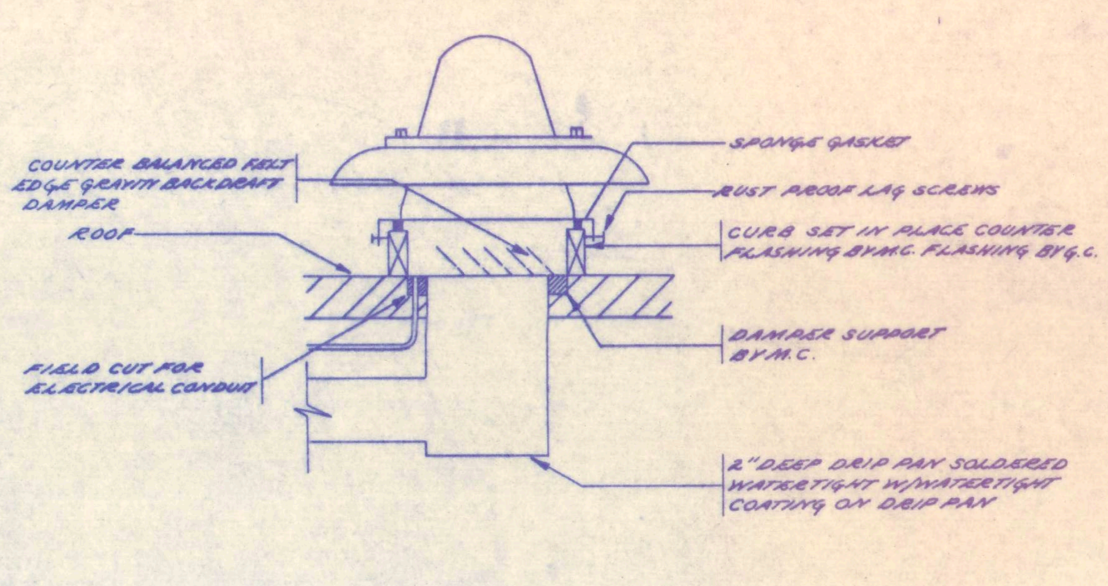
SHEET M-4 OF 10



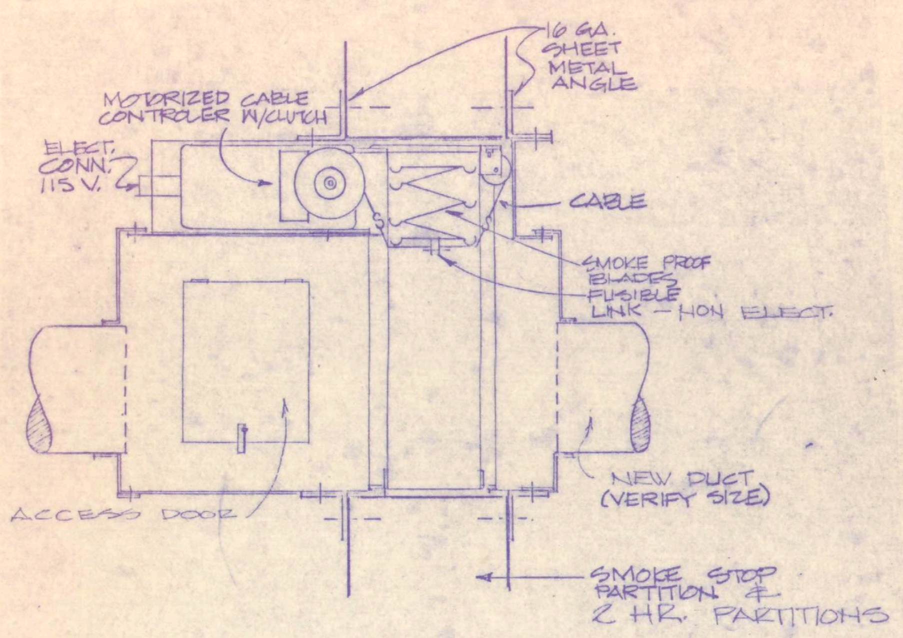
RANGE HOOD DETAIL

NO SCALE



POWER ROOF VENTILATOR DETAIL

NO SCALE



DETAIL SMOKE DAMPER INSTALLATION @ RATED PARTITIONS

N. T. S.

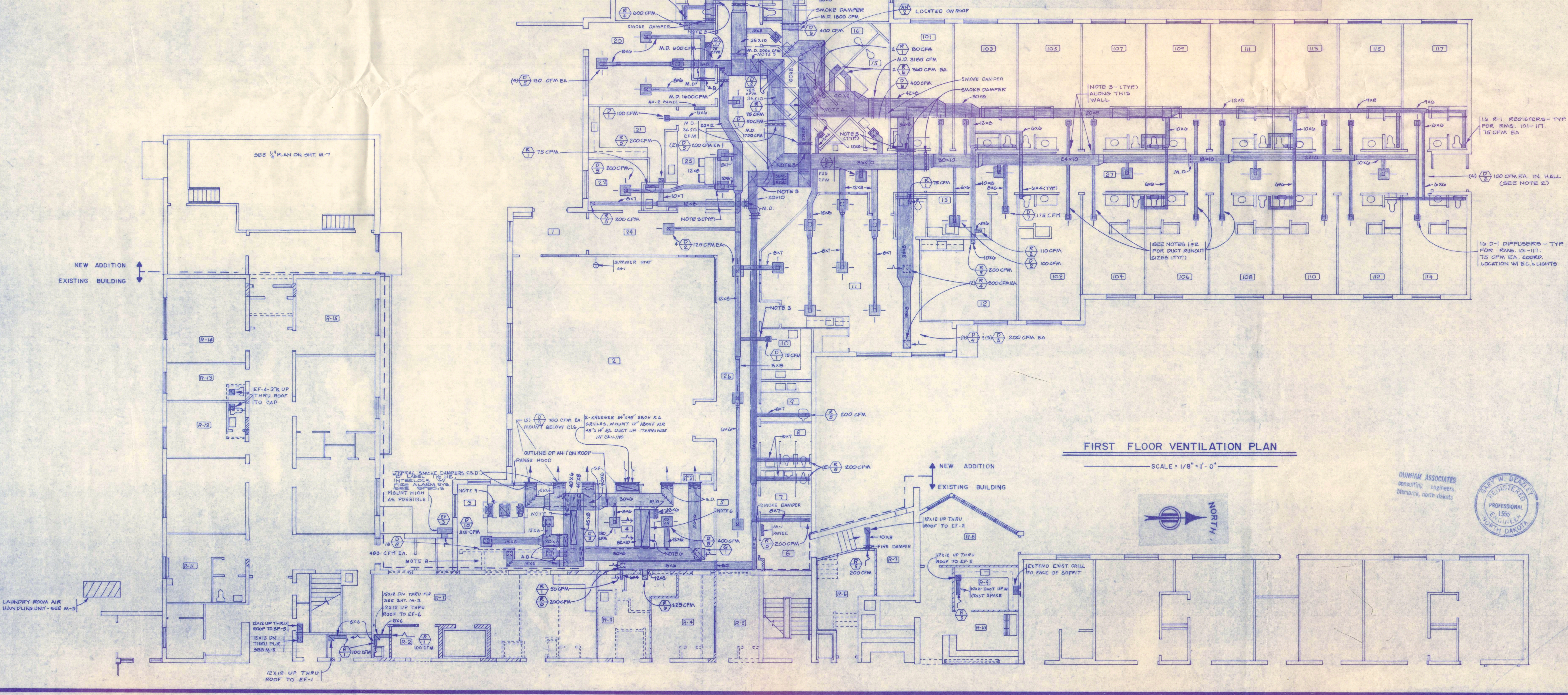
THE DAMPER SHALL BE INTER CONNECTED WITH FIRE ALARM PANEL. AT AN "ALARM", POWER TO DAMPER MOTOR IS CUT OFF AND DAMPER CLOSES. UPON RETURN TO "NORMAL", DAMPER SHALL OPEN. SEE SPECS.

NOTES

1. INDIVIDUAL DUCT RUNOUTS TO D-1 AND R-1 SHALL BE 6" X 4".
2. INDIVIDUAL DUCT RUNOUTS TO D-2 SHALL BE 6" X 6".
3. DROP OR RISE DUCT BELOW BEAM AND BACK AS REQUIRED. SEE STRUCTURAL PLAN FOR BEAM LOCATIONS. ALL DUCTS UP IN JOIST SPACE AS REQUIRED FOR CLEARANCE AT CROSSOVERS.
4. 36 x 24 R.A. UP THROUGH ROOF TO AH-2.
5. 21 X 28 S.A. UP THROUGH ROOF TO AH-2.
6. 82×20 R.A. UP THROUGH ROOF TO 82×20 CONNECTION ON AH-1.
7. 78×14 S.A. UP THROUGH ROOF TO 78×14 CONNECTION ON AH-1.
8. ALL DUCTS IN ROOM 3, 4 AND 5 UP IN JOIST SPACE EXCEPT AS OTHERWISE INDICATED.
9. RH-1 LOCATED ON ROOF. (2) 8 X 30 CONNECTIONS ON HOOD TO 23 X 23 THROUGH ROOF. (EXHAUST) (2) 10 X 30 CONNECTIONS ON HOOD TO (2) 14 X 16 THROUGH ROOF. (SUPPLY)
10. FURNISH AND INSTALL ACCESS DOORS FOR ACCESS TO ALL SMOKE, FIRE AND AUTOMATIC DAMPERS. SEE SPECIFICATION.
11. WITHIN EXISTING BUILDING ONLY:

EXISTING WALLS

NEW WALLS



FIRST FLOOR VENTILATION PLAN

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

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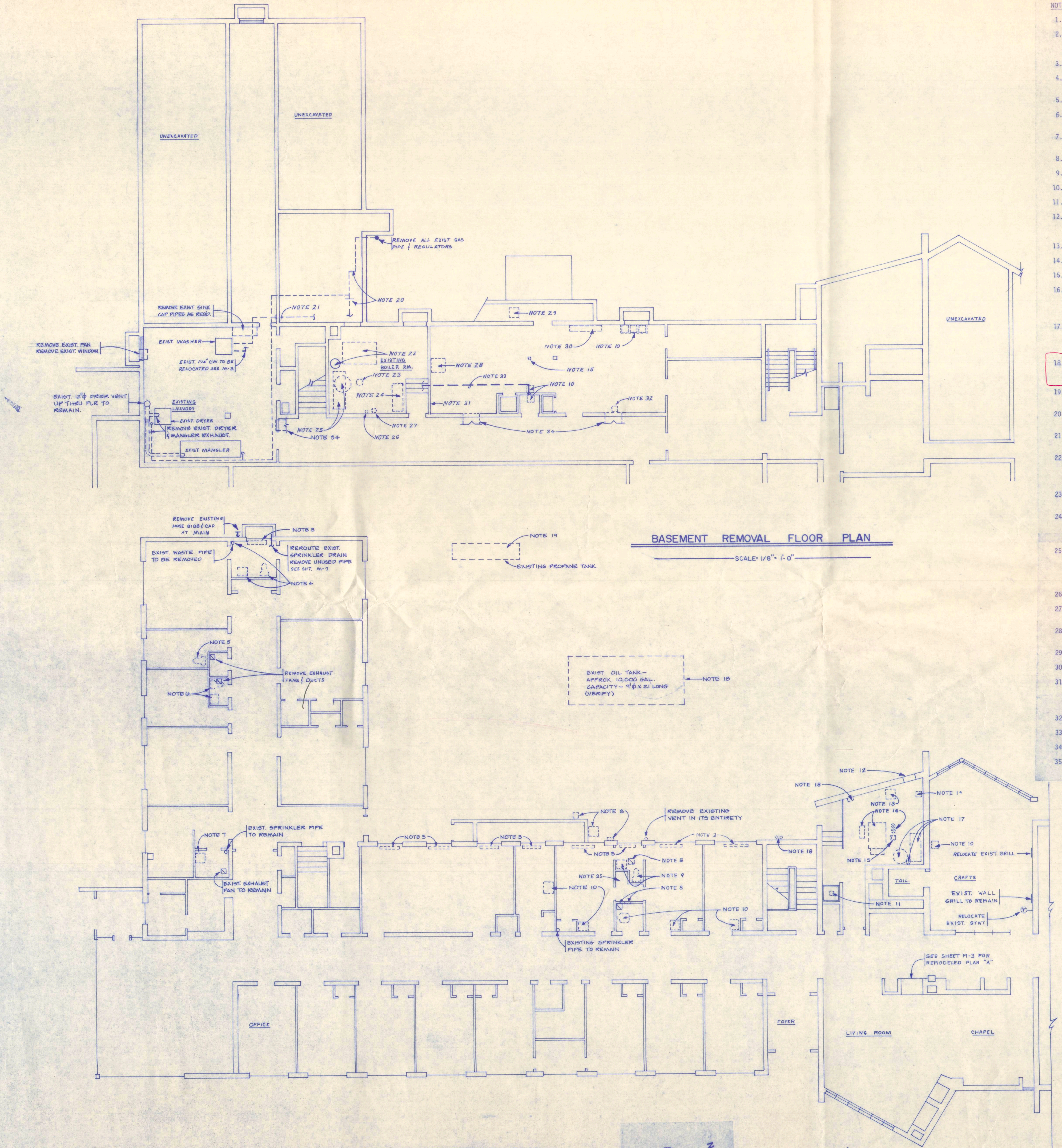


BASEMENT REMOVAL FLOOR PLAN

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

FIRST FLOOR REMOVAL PLAN

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

NORTH

NOTES:

1. SEE NEW/REMODELED MECHANICAL FLOOR PLAN SHEETS FOR RELOCATED AND REROUTED EQUIPMENT/FITTINGS.

2. THIS CONTRACTOR SHALL RELOCATE, REROUTE, REMOVE AND CAP AS REQUIRED ALL SPRINKLER PIPES AND HEADS TO CONFORM TO NFPA 13 AND ARCHITECTURAL REMODELED PLANS. THIS PERTAINS TO SPACING, CLEARANCES, HEAD LOCATIONS, ETC.

3. REMOVE EXISTING RADIATION, PIPE AND FITTINGS, CAP PIPES BELOW FLOOR.

4. RELOCATE EXISTING LAVATORY AND WATER CLOSET TO ROOM R-11. REMOVE ALL PIPING AND CAP BELOW FLOOR AND ABOVE CEILING. REMOVE WASTE PIPING IN BASEMENT AND CAP AT BASEMENT FLOOR.

5. RELOCATE EXISTING WATER CLOSET TO ROOM R-13. REMOVE ALL PIPING AND CAP BELOW FLOOR AND ABOVE CEILING.

6. RELOCATE EXISTING WATER CLOSET AND LAVATORY TO ROOM R-12. REMOVE ALL PIPING AND CAP BELOW FLOOR AND ABOVE CEILING.

7. REMOVE EXISTING STERILIZER AND ALL PIPING. CAP ALL PIPES BELOW FLOOR AND ABOVE CEILING. TURN STERILIZER OVER TO OWNER.

8. REMOVE EXISTING FANS, GRILLES AND ALL DUCTWORK.

9. REMOVE EXISTING LAVATORY AND WATER CLOSET, PIPING AND CAP BELOW FLOOR AND ABOVE CEILING.

10. REMOVE EXISTING LAVATORY, SINK, AND PIPING AND CAP BELOW FLOOR AND ABOVE CEILING.

11. REMOVE EXISTING JANITOR SINK, FAUCETS, FLOOR DRAIN AND PIPING, CAP PIPES BELOW FLOOR AND ABOVE CEILING.

12. THIS CONTRACTOR SHALL BLANK-OFF THE TOP 24" AND BOTTOM 24" OF LOUVER WHICH IS USED FOR COMBUSTION AIR. REMOVE EXISTING DUCTS AND DAMPERS FROM THESE TWO OPENINGS. BLANK-OFF SHALL INCLUDE SHEETMETAL PLATE ON INSIDE OF OPENING, 4" STYROFOAM, SHEETMETAL PLATE - SECURED TO WALL.

13. REMOVE EXISTING GENERATOR EXHAUST PIPING AND FUEL OIL PIPING. CAP FUEL OIL PIPING BELOW FLOOR.

14. REMOVE EXISTING TEMPERATURE CONTROL COMPRESSOR, ALL CONTROLLERS AND ALL PIPING NOT RE-USED.

15. REMOVE EXISTING FLOOR DRAIN AND CAP PIPE BELOW FLOOR.

16. REMOVE EXISTING OIL FIRED BOILER, EXPANSION TANK AND ASSOCIATED PIPING, CIRCULATING PUMPS, FLUE, ALL HEATING SUPPLY AND RETURN PIPING TO POINT OF CONNECTION FROM CHASE WITH NEW HWS AND R PIPING. REMOVE FUEL OIL SUPPLY AND RETURN PIPING AND CAP BELOW FLOOR. REMOVE BOILER 4" CONCRETE PAD. REMOVE ALL VALVES AND PIPE FITTINGS. PATCH FLUE OPENINGS IN EXISTING CHIMNEY.

17. REMOVE EXISTING OIL FIRED WATER HEATER, DOMESTIC HOT WATER STORAGE TANK AND SUPPORT STAND, RECIRCULATING HOT WATER PUMP, FLUE TO CHIMNEY AND PATCH OPENING IN CHIMNEY, ALL DOMESTIC COLD, HOT AND RECIRCULATING WATER PIPING AND FITTINGS TO POINT OF NEW CONNECTION WITH NEW PIPING, ALL FUEL OIL SUPPLY AND RETURN PIPING AND CAP BELOW FLOOR. CAP ALL PIPES REMOVED AT MAINS.

18. REMOVE EXISTING OIL TANK, LEVELOMETER AND ACCESSORIES AS SHOWN. REMOVE ALL UNDERGROUND PIPING AND CAP AT ENTRANCE TO EXISTING BUILDING. REMOVE ALL EXISTING OIL TANK FILL AND VENT PIPING. REMOVE ALL ASSOCIATED CONCRETE.

19. REMOVE EXISTING PROPANE TANK AND ACCESSORIES. REMOVE EXISTING UNDERGROUND AND ABOVE GROUND PIPING AND CAP AT BUILDING ENTRANCE IF NOT RE-USED. REMOVE ALL ASSOCIATED CONCRETE.

20. REMOVE ALL EXISTING GAS PIPING INSIDE OF BUILDING FROM POINT AS SHOWN. CAP GAS PIPE AT POINT OF REMOVAL AS SHOWN.

21. REMOVE ALL EXISTING 180° HW PIPING INSIDE OF BUILDING FROM POINT AS SHOWN. CAP AT POINT OF REMOVAL AS SHOWN.

22. REMOVE EXISTING COAL FIRED BOILER, ACCESSORIES, COAL AUGERING SYSTEM AND BREECHING. PATCH BREECHING OPENING IN CHIMNEY. REMOVE ALL EXISTING PIPING AND FITTINGS TO AND FROM BOILER NOT TO BE RE-USED AND CONNECTED TO NEW SYSTEM. EXISTING CONDENSATE PUMP SHALL BE RE-USED, THEREFORE EXISTING PIPE FROM PUMP TO EXISTING BOILER SHALL BE REMOVED.

23. EXISTING SUMP PUMP, SUMP AND ALL PIPING SHALL BE REMOVED. CAP DISCHARGE PIPE AT POINT WHERE IT CONNECTS INTO SEWER LINE. FILL SUMP HOLE AS REQUIRED AND CAP WITH CONCRETE.

24. REMOVE EXISTING INCINERATOR, ALL FUEL OIL PIPING TO OUTSIDE OF BUILDING AND TO FUEL OIL TANK (SEE NOTE 18), REMOVE BREECHING AND PATCH OPENING IN CHIMNEY.

25. REMOVE EXISTING FUEL OIL WATER HEATER, BREECHING AND HOT WATER STORAGE TANK AND SUPPORT STAND. PATCH OPENING IN CHIMNEY. REMOVE ALL FUEL OIL PIPING TO OUTSIDE OF BUILDING AND TO FUEL OIL TANK (SEE NOTE 18). REMOVE COLD WATER AND 180° HOT WATER PIPING FROM TANK. CAP COLD WATER AT MAIN. REMOVE ALL 180° WATER PIPING TO LAUNDRY ROOM (SEE NOTE 21) AND TO DISHWASHER. REROUTE EXISTING 120° CHW PIPE AS REQUIRED FOR NEW CONNECTION IN 1964 BUILDING AS INDICATED.

26. REMOVE AND CAP EXISTING FLOOR DRAIN.

27. REMOVE EXISTING WATER METER AND CAP BELOW FLOOR EXISTING WATER SERVICE. REMOVE EXISTING COLD WATER PIPING TO MAIN CW PIPE AND CAP.

28. REMOVE EXISTING PIPING FROM EXISTING DISHWASHER, PRE-RINSE UNIT AND DISPOSAL AND CAP BELOW FLOOR AND AS REQUIRED.

29. REMOVE EXISTING AIR COMPRESSOR AND ALL PIPING.

30. REMOVE EXISTING RANGE HOOD, PIPING AND ALL DUCTWORK (SEE NOTE 8).

31. ALL EXISTING PIPING ROUTED THROUGH THIS WALL THAT IS NOT TO BE UTILIZED SHALL BE REMOVED AND CAPPED TO FACILITATE THE REMODELING OF THIS AREA. IF THE PIPES ARE TO BE USED AFTER REMODELING, THEN THEY SHALL BE REROUTED AS REQUIRED IF THE PIPES CONFLICT WITH THE REMODELED AREAS. COORDINATE REROUTING PROCEDURES WITH THE ENGINEER.

32. REMOVE EXISTING PIPING FROM COFFEE MAKER AND CAP BELOW FLOOR AND ABOVE CEILING (SEE NOTE 29).

33. REMOVE EXISTING VENT PIPE AND CAP AT MAIN IN EXISTING BOILER ROOM.

34. RELOCATE EXISTING GRILLES AND CAP AT MAIN DUCT IN CORRIDOR. SEE NOTE 5 ON SHEET M-3.

35. REMOVE EXISTING SHOWER HEADS, VALVES AND FLOOR DRAIN. CAP PIPES ABOVE CEILING AND BELOW FLOOR.

100,000

DURHAM ASSOCIATES consulting engineers bismarck, north dakota

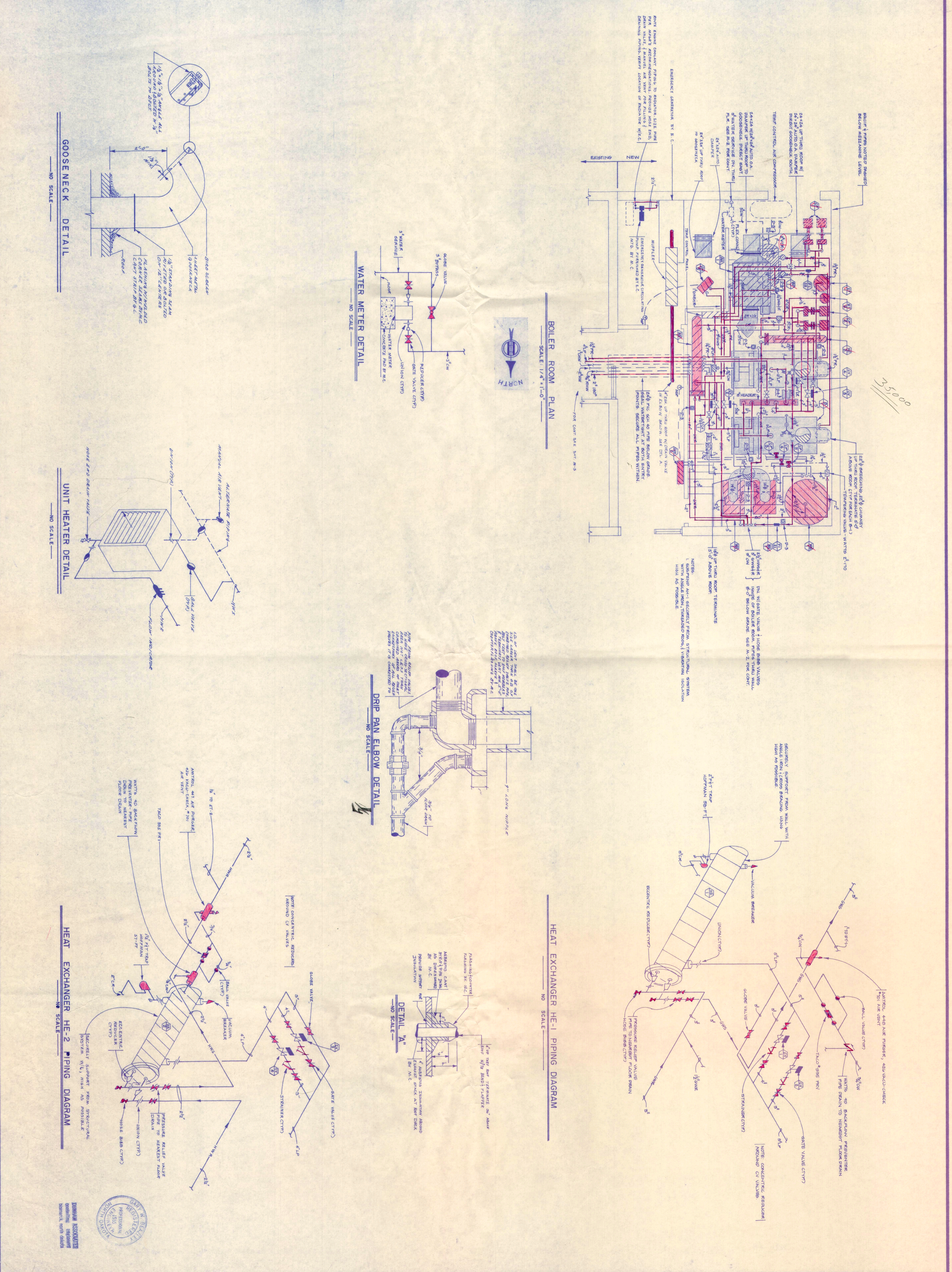
REGISTERED PROFESSIONAL ENGINEER — NORTH DAKOTA

ADDITION & REMODELING BEULAH NURSING HOME BEULAH, NORTH DAKOTA	JOB 7706 DATE 10-10-80 DRAWN K.J.M. SHEET M-6 OF 10

C M CORPORATION

ARCHITECTURAL & ENGINEERING SERVICES DIVISION

SIOUX CITY, IOWA 51102



BRUNING 44-132 41168

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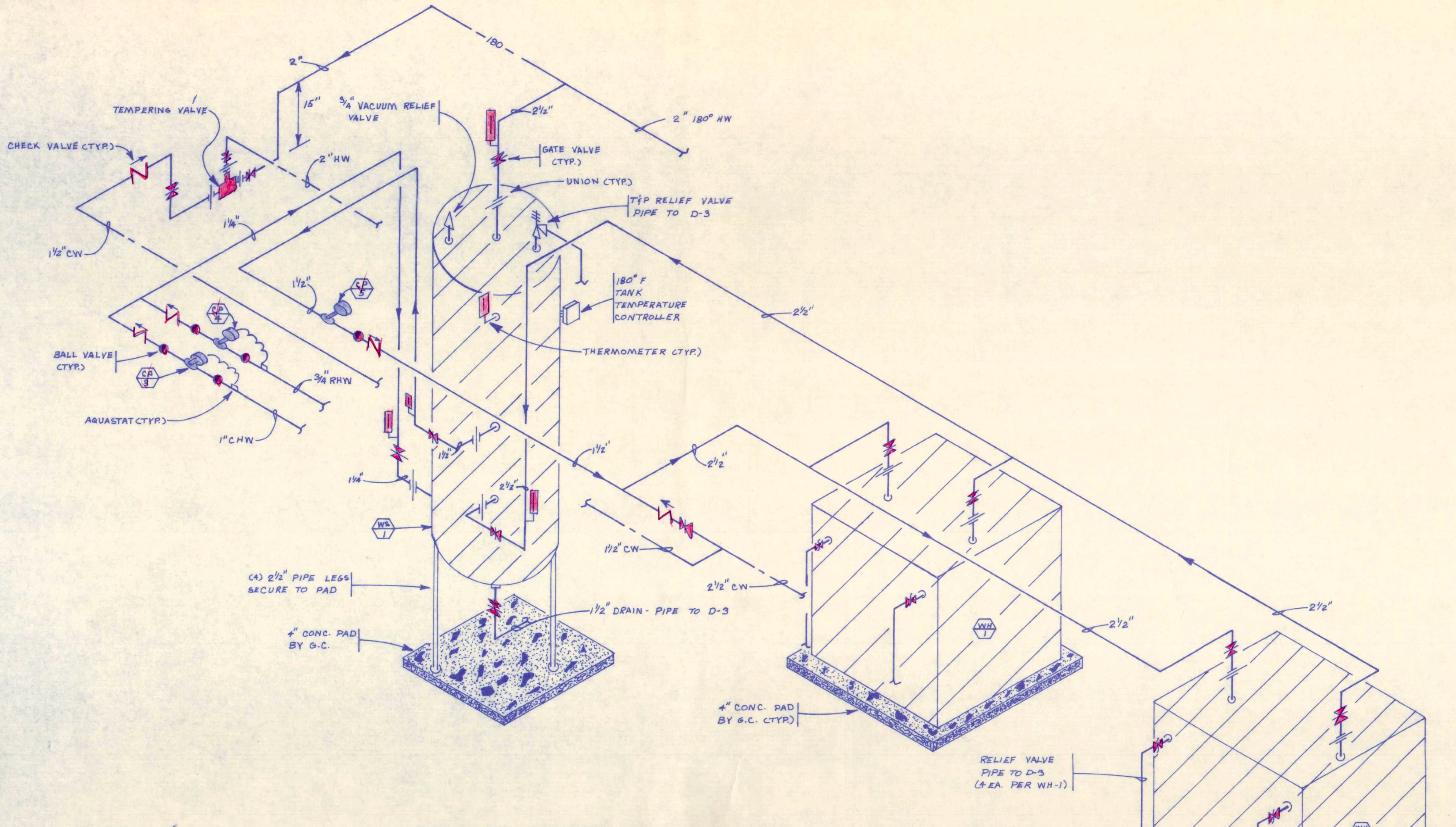
SIOUX CITY, IOWA 51102

ADDITION & REMODELING
BEULAH NURSING HOME
BEULAH, NORTH DAKOTA

JOB 7706
DATE 10-10-80
DRAWN G.W.B.
SHEET M-7 OF 10



DOMESTIC WATER HEATING DIAGRAM
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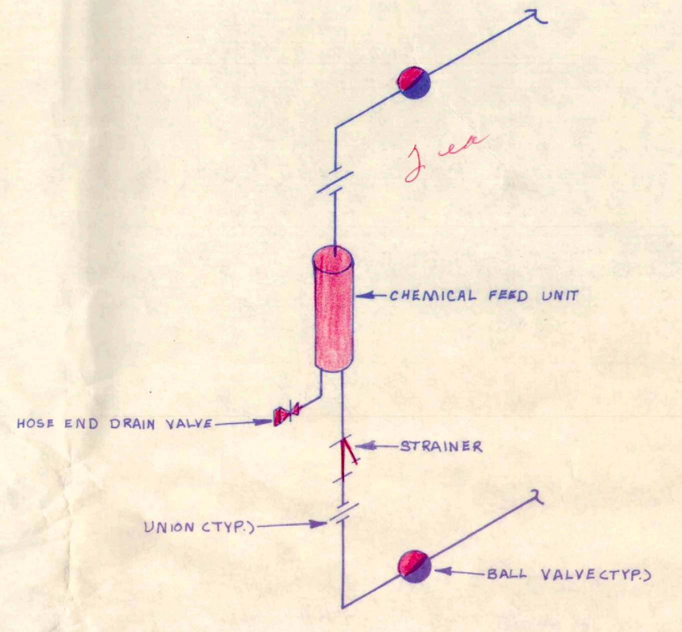

DETAIL "A"
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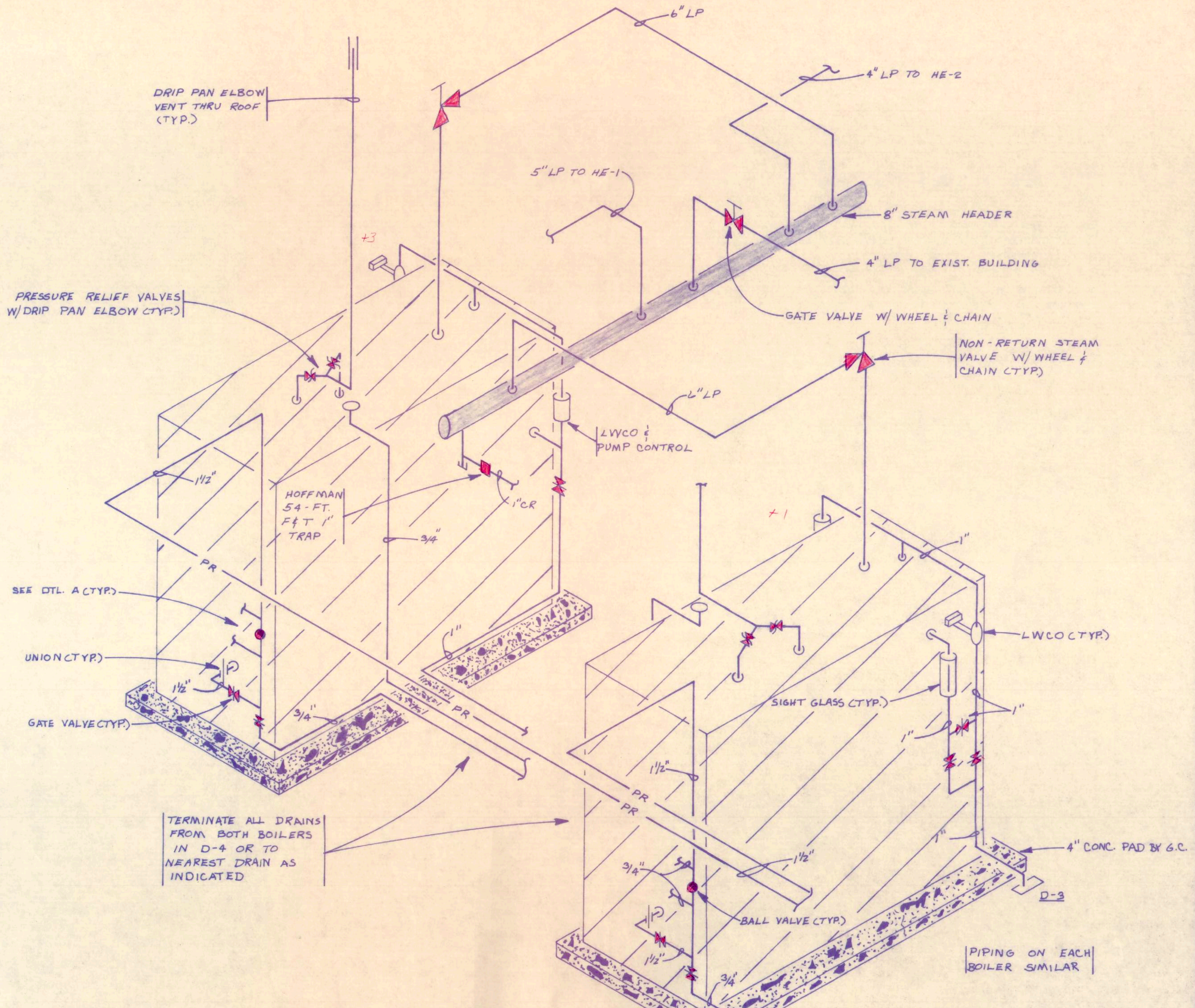

BOILER PIPING DIAGRAM
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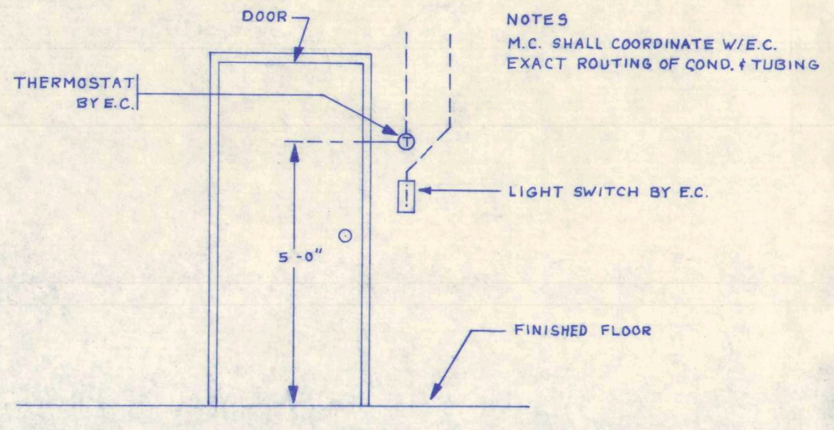

THERMOSTAT MOUNTING DETAIL
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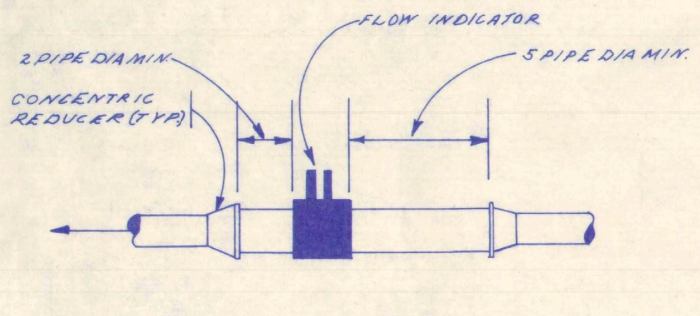
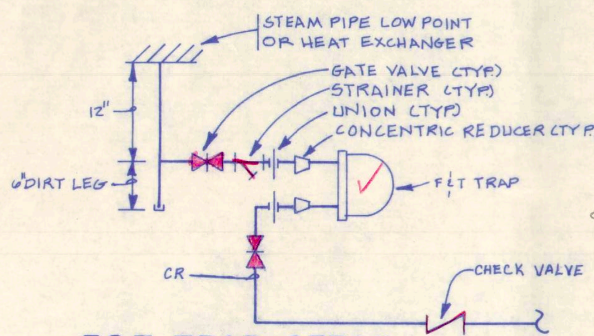


FLOW INDICATOR DETAIL
NO SCALE



F&T TRAP DETAIL
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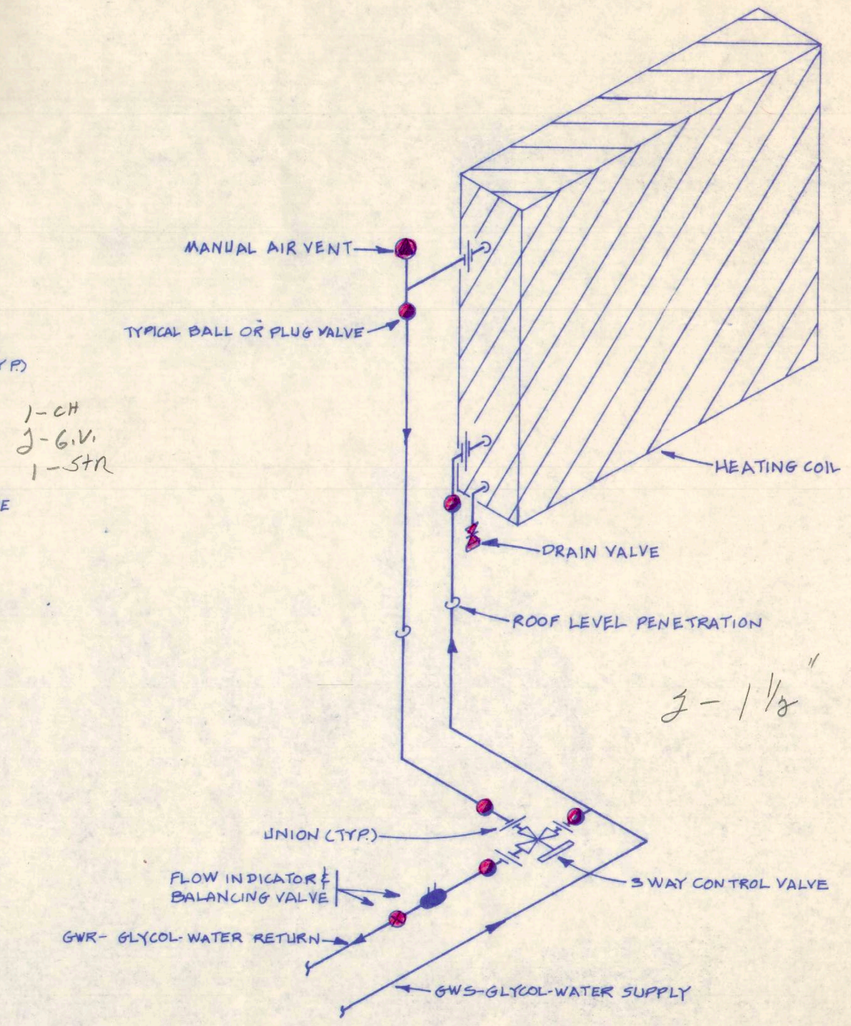
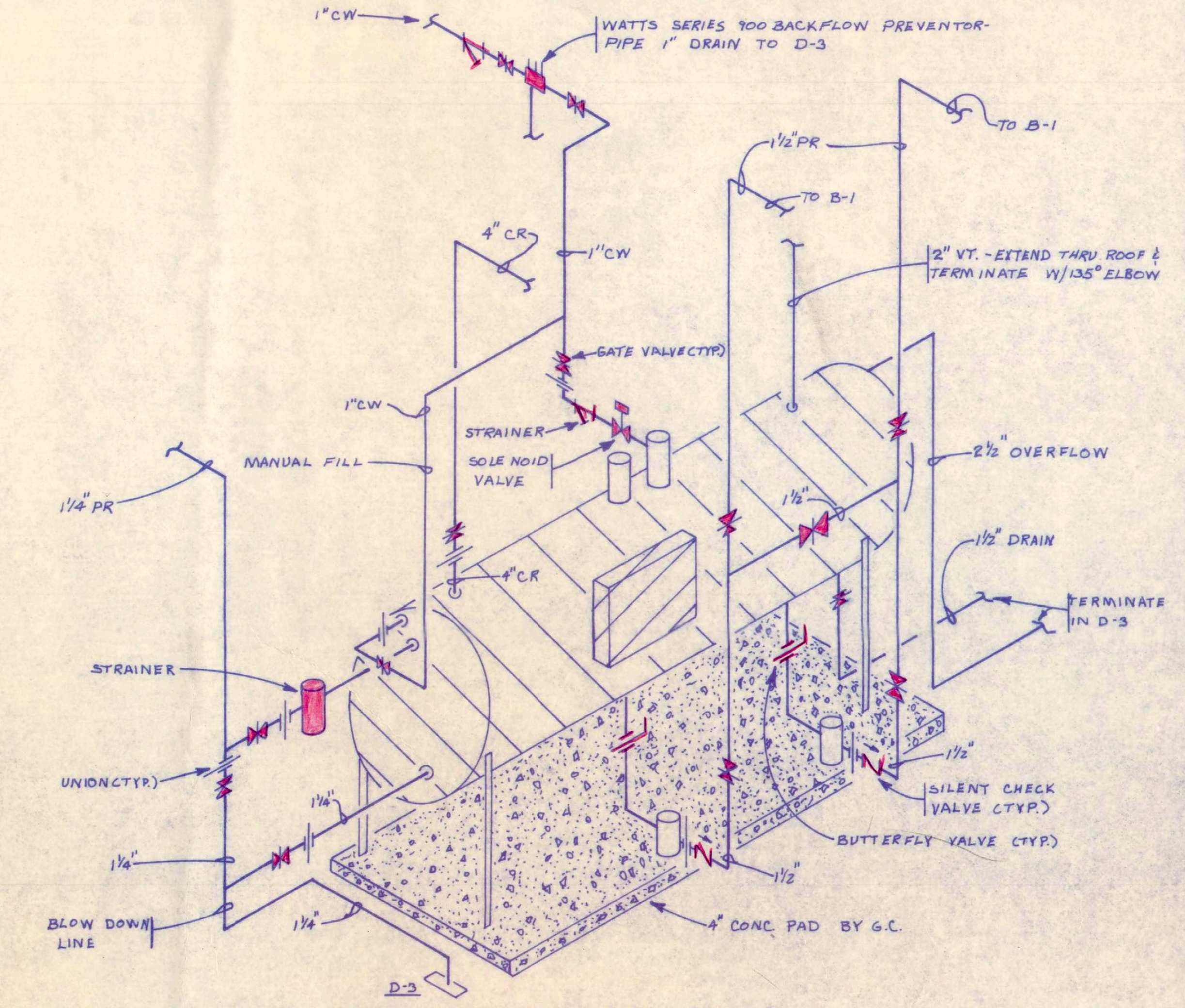
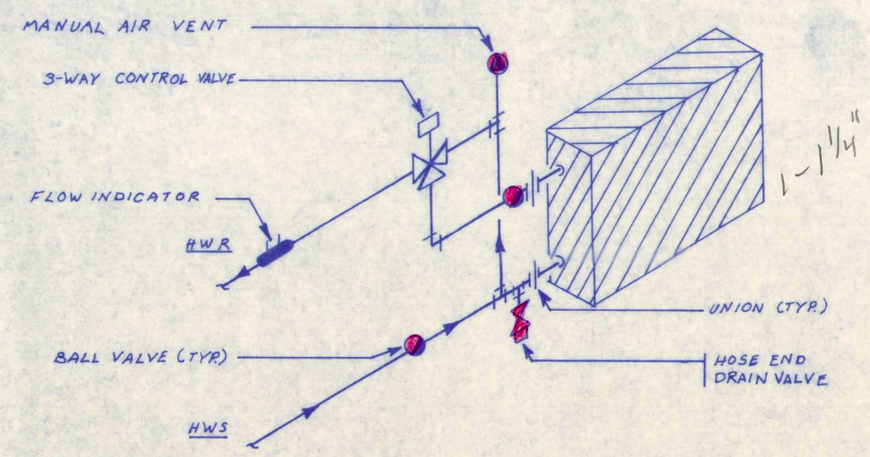


AH-1 & 2 HEATING COIL PIPING DIAGRAM
NO SCALE



BOILER FEED UNIT PIPING DIAGRAM
NO SCALE



AH-3 HEATING COIL PIPING DIAGRAM
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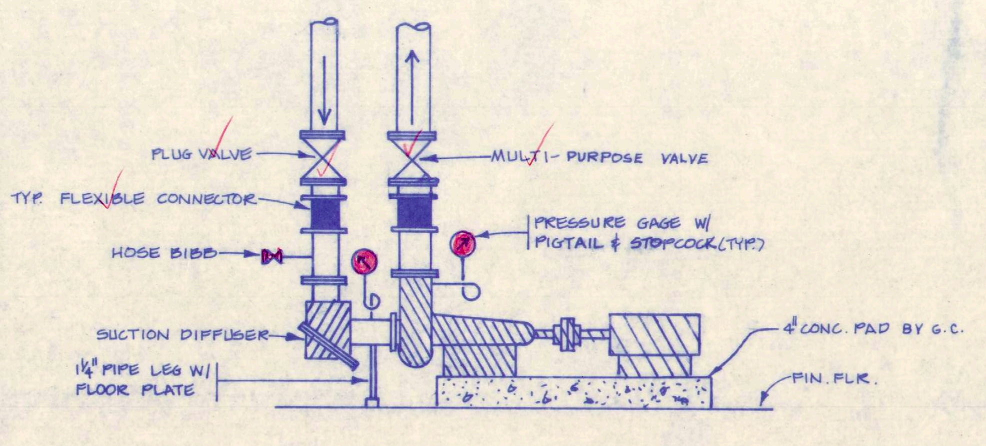

CIRCULATING PUMP DETAIL
NO SCALE

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ADDITION & REMODELING
BEULAH NURSING HOME
BEULAH, NORTH DAKOTA

JOB 7706
DATE 10-10-80
DRAWN K.J.M.
SHEET M-8 OF 10

HEAT RECOVERY ROOFTOP AIR HANDLING UNIT SCHEDULE

DESIG.	CFM SUPPLY	CFM EXHAUST	HEAT RECOVERY SECTION EXCHANGER	EFF. %	EXHAUST TEMP. IN °F	EXHAUST TEMP. OUT °F	SUPPLY TEMP. IN °F	SUPPLY TEMP. OUT °F	HOT WATER COIL - 50% WATER GLYCOL EWT °F	LWT °F	EAT °F	LAT °F	GPM	NBH	TYPE	FPM (MAX.)	PRESSURE DROP WATER FT.	PRESSURE DROP AIR IN.-WG.	FILTERS (SUPPLY)
AH-2	7850	7240	(8) NO. 74-1000-A6	67	70	+2.7	-30	32	210	170	32	80	23	407	2 ROW	500	1	0.16	PERMANENT FARR 30/30 (8) 20" X 20" X 2" 35%EFFICIENCY

DESIG.	POWER V	POWER PH	POWER HZ	FANS EXHAUST TYPE	EXHAUST TSP IN.-WG.	EXHAUST HP	EXHAUST RPM	SUPPLY TYPE	SUPPLY TSP IN.-WG.	SUPPLY HP	SUPPLY RPM	ACCESSORIES	MFG. NO.
AH-2	240	3	60	18" FC 729 RPM	1.5	5	1725	20" BI 1318 RPM	2.2	7-1/2	1725	O.A. DAMPER W/OPERATOR, FUSED DISCONNECTS, STARTERS (SUPPLY, EXHAUST), REMOTE CONTROL PANEL, FILTER MANOMETER, DIRTY FILTER LIGHTS, ROOF CURB	DES CHAMPS MODEL PV8

AIR HANDLING UNIT SCHEDULE

DESIG.	TYPE	CFM	TOTAL STATIC PRESSURE IN. WG.	HEATING COIL - 50% GLYCOL-WATER EWT °F	LWT °F	EAT °F	LAT °F	CAPACITY MBH	GPM	APD IN.-WG.	WPD FT.	MAX. FACE VELOCITY FPM	COIL TYPE	BLOWER HP	BLOWER RPM	POWER V	POWER PH	POWER HZ	STARTER	VIBRATION ISOLATION SPEC. NO.	DEFLECTION MIN.	FILTERS	MFG. NO.
AH-3	HORIZONTAL DRAW THRU CLIMATE CHANGER	3530	1	210	152	-30	60	344	13.5	0.22	4.3	627	P4, 2 ROW, SERIES 56	2	875	240	3	60	2 SPEED BY E.C.	I	0.75"	2" PERMANENT, 11.12 FT^2 (4) 16" X 25"	TRANE NO. 6A, 12.25" FC FAN, MEDIUM CAPACITY FILTER BOX, 2 SPEED MOTOR - 1800/900 RPM

ROOFTOP AIR HANDLING UNIT SCHEDULE

DESIG.	CFM	HOT WATER COIL - 50% WATER-GLYCOL EWT °F	LWT °F	EAT °F	LAT °F	GPM	MBH	FPM (MAX.)	PRESSURE DROP WATER FT. (MAX.)	PRESSURE DROP AIR IN.-WG.	TYPE	TOTAL S.P. IN. - WG.	BLOWER HP	BLOWER RPM	POWER V	POWER PH	POWER HZ	FILTERS	MFG. NO.
AH-1	5400	210	170	45	88	11.6	252	500	1.3	0.20	20.3 FT^2 LOW CAP. 12 FINS 1 ROW	1.5	3	900	240	3	60	95% EFFICIENT BAG FILTERS	MCQUAY RPS-018B, 12" HIGH ROOF CURB, MOTOR STARTER, GRAVITY RELIEF

COOLING COIL SCHEDULE

LOCATION	REFRIGERANT	CFM	MAXIMUM COIL FACE VELOCITY	AIR IN DB	AIR IN WB	AIR OUT DB	AIR OUT WB	TOTAL AREA FT^2	ROWS	FPI	CAPACITY MBH TOTAL	SATURATED SUCTION TEMP.	MAX. AIR PRESSURE DROP IN.-WG.	MFG. NO.
AH-1	22	5400	300	80	65.2	55	54	19	2	12	184	45	0.15	MCQUAY STD. COIL

AIR COOLED CONDENSING UNIT SCHEDULE

LOCATION	CAPACITY MBH	REFRIGERANT	SATURATED SUCTION TEMP. °F	AMBIENT TEMP. °F	POWER V	POWER PH	POWER HZ	COMPRESSOR MOTOR FLA - TOTAL	CONDENSER FAN HP	CONDENSER FAN FLA	MFG. NO.
AH-1	184	22	45	105	240	3	60	64	(2) 1	10.4	MCQUAY

GRADE MOUNTED AIR HANDLING UNIT

DESIG.	CFM	TOTAL S.P. IN.-WG.	ELECTRIC COIL KW	ELECTRIC COIL STAGES	BLOWER HP	POWER V	POWER PH	POWER HZ	FILTERS	MFG.
AH-4	810	0.75	23	3	1/2	240	3	60	BAG, 80% EFFICIENCY	TJERNLUND CUSTOM 5000 RT-SZ

REGISTER AND GRILLE SCHEDULE

DESIG.	TYPE	SIZE	OPPOSED BLADE DAMPER	MFG. NO.	REMARKS
D-1	PERFORATED CEILING DIFFUSER	6" X 6" NECK	FURNISH	KRUEGER C1101, FRAME 22	WHITE FINISH
D-2	PERFORATED CEILING DIFFUSER	6" X 6" NECK 24" X 24" PANEL	FURNISH	KRUEGER 1102, FRAME 23	WHITE FINISH
D-3	PERFORATED CEILING DIFFUSER	9" X 9" NECK 24" X 24" PANEL	FURNISH	KRUEGER 1104, FRAME 23	WHITE FINISH
D-4	PERFORATED CEILING DIFFUSER	9" X 9" NECK 24" X 24" PANEL	FURNISH	KRUEGER 1103, FRAME 23	WHITE FINISH
D-5	PERFORATED CEILING DIFFUSER	8" X 8" NECK 24" X 24" PANEL	FURNISH	KRUEGER 1103, FRAME 23	WHITE FINISH
D-6	PERFORATED CEILING DIFFUSER	12" X 12" NECK 24" X 24" PANEL	FURNISH W/ FUSIBLE LINK	KRUEGER 1101, FRAME 23	WHITE FINISH
D-7	PERFORATED CEILING DIFFUSER	8" X 8" NECK 24" X 24" PANEL	FURNISH	KRUEGER 1101, FRAME 23	WHITE FINISH
D-8	PERFORATED CEILING DIFFUSER	12" X 12" NECK 24" X 24" PANEL	FURNISH W/ FUSIBLE LINK	KRUEGER 1104, FRAME 23	WHITE FINISH
D-9	DRUM LOUVER	26" X 8"	FURNISH W/ FUSIBLE LINK	KRUEGER 6/24	FINISH BY ARCHITECT
D-10	PERFORATED CEILING DIFFUSER	12" X 12" NECK 24" X 24" PANEL	FURNISH W/ FUSIBLE LINK	KRUEGER 1103, FRAME 23	WHITE FINISH
R-1	EXHAUST REGISTER	6" X 6"	FURNISH	KRUEGER S80H	GRAY FINISH
R-2	EXHAUST REGISTER	8" X 6"	FURNISH	KRUEGER S80H	GRAY FINISH
R-3	EXHAUST REGISTER	10" X 6"	FURNISH	KRUEGER S80H	GRAY FINISH
R-4	EXHAUST REGISTER	16" X 16" NECK 24" X 24" PANEL	FURNISH W/ FUSIBLE LINK	KRUEGER 1190, FRAME 23	WHITE FINISH
R-5	EXHAUST REGISTER	10" X 8"	FURNISH	KRUEGER S80H	GRAY FINISH
R-6	EXHAUST REGISTER	12" X 12"	FURNISH W/ FUSIBLE LINK	KRUEGER S80H	GRAY FINISH
R-7	EXHAUST REGISTER	18" X 12"	FURNISH W/ FUSIBLE LINK	KRUEGER S80H	GRAY FINISH
R-8	EXHAUST REGISTER	24" X 48"	FURNISH	KRUEGER S80H	FINISH BY ARCHITECT
R-9	EXHAUST REGISTER	12" X 10"	FURNISH	KRUEGER S80H	GRAY FINISH
R-10	SUPPLY REGISTER	14" X 6"	FURNISH	KRUEGER 880H	GRAY FINISH
R-11	SUPPLY REGISTER	8" X 6"	FURNISH	KRUEGER 880H	GRAY FINISH
G-1	RETURN GRILLE	24" X 24"	FURNISH W/ FUSIBLE LINK	KRUEGER EGC-5-TB	WHITE FINISH

EXHAUST FAN SCHEDULE

DESIG.	TYPE	CFM	STATIC PRESS.	MAX. TIP SPEED	MIN. FAN RPM	POWER V	POWER PH	POWER HZ	MOTOR HP	MOTOR RPM	STARTER	BACKDRAFT DAMPER	CURB	MFG. NO.
EF-1	POWER ROOF VENTILATOR	100	3/8"	2827	1200	120	1	60	1/10	1750	BY E.C.	FURNISH	TYPE PAC	POWERLINE 90DRE8X, EXPLOSION PROOF MOTOR
EF-2	POWER ROOF VENTILATOR	200	3/8"	3246	1550	120	1	60	1/25	1750	BY E.C.	FURNISH	TYPE PAC	POWERLINE 80DRE8Y
EF-3	WALL MOUNTED EXHAUSTER	180	1/4"	2827	1350	120	1	60	1/10	1750	BY E.C.	FURNISH	--	POWERLINE 80DWF8X, WALL GRILLE
EF-4	CEILING FAN	80	--	--	--	120	1	60	--	--	BY E.C.	FURNISH	--	NUTONE 8833, ROOF CAP 841-AL
EF-5	POWER ROOF VENTILATOR	855	3/8"	3688	1150	120	1	60	1/6	1750	BY E.C.	FURNISH	TYPE PAC	POWERLINE 122BRE8B
EF-6	POWER ROOF VENTILATOR	1125	3/8"	4330	1350	120	1	60	1/6	1750	BY E.C.	FURNISH	TYPE PAC	POWERLINE 122BRE8B

STEAM BOILER SCHEDULE

DESIG.	FUEL	INPUT MBH	OUTPUT MBH	OUTPUT LBS/HR	CODE	OPERATING PRESSURE	NO. PASSES	HEATING SURFACE FT^2 FIRESIDE	HEATING SURFACE FT^2 WATERSIDE	FURNACE VOLUME FT^3	HEAT RELEASE MBH	BLOWER MOTOR HP	BLOWER MOTOR STARTER	POWER V	POWER PH	POWER HZ	MFG. NO.
B-1	PROPANE GAS	3780	3015	3108	ASME 15 PSIG	5 PSIG	3	450	497	68	55.6	2	BY M.C.	240	3	60	BURNHAM SERIES 4F 50, MODEL 450A, SAFETY RELIEF VALVES, LWCO AND PUMP CONTROLS - M & M 157, AUXILIARY LWCO - M & M 63

EQUIPMENT SCHEDULES

DUNHAM ASSOCIATES
consulting engineers
bismarck, north dakota

GARY W. BEAZLEY
REGISTERED
PROFESSIONAL
1555
ENGINEER
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SERVICES DIVISION
SIOUX CITY, IOWA 51102

ADDITION & REMODELING
BEULAH NURSING HOME
BEULAH, NORTH DAKOTA

JOB 7706
DATE 10-10-80
DRAWN K.J.M.
SHEET M-9
OF 10

CIRCULATING PUMP SCHEDULE

DESIG.	TYPE	GPM	HEAD	POWER V	POWER PH	POWER HZ	MOTOR HP	MOTOR RPM	STARTER	IMPELLER MATERIAL	VOLUTE MATERIAL	MFG. NO.
CP-1	GLYCOL BASE MOUNTED CENTRIFUGAL	99	85	240	3	60	5	1750	BY E.C.	BRONZE	CAST IRON	TACO 88-2510-9.3
CP-2	HOT WATER BASE MOUNTED CENTRIFUGAL	52	75	240	3	60	5	1750	BY E.C.	BRONZE	CAST IRON	TACO 55-2510-8.7
CP-3	CHW IN-LINE CIRCULATOR	10	20	120	1	60	1/4	1750	BY E.C.	BRONZE	BRONZE	TACO 1600
CP-4	RHW IN-LINE CIRCULATOR	10	20	120	1	60	1/4	1725	BY E.C.	BRONZE	BRONZE	TACO 1600
CP-5	STORAGE TANK IN-LINE CIRCULATOR	15	10	120	1	60	1/8	1725	BY E.C.	BRONZE	BRONZE	TACO 111-1-1/2"

FLOW INDICATOR SCHEDULE

DESIG.	LOCATION	GPM	PRESSURE DROP (MAX.) IN.-WG.	SIZE	MFG. NO.
FI-1	CUH-1	2.1	5	3/4"-S7	GERAND STYLE BI
FI-2	CUH-2	4.2	12	1"-U9	GERAND STYLE BI
FI-3	CUH-3	0.71	9	1/2"-N1	GERAND STYLE BI
FI-4	CUH-4	0.71	9	1/2"-N1	GERAND STYLE BI
FI-5	RAD-1	0.81	12	1/2"-N1	GERAND STYLE BI
FI-6	RAD-2	0.77	10	1/2"-N1	GERAND STYLE BI
FI-7	RAD-3	0.97	5.5	1/2"-O5	GERAND STYLE BI
FI-8	RAD-4	1.02	6	1/2"-O5	GERAND STYLE BI
FI-9	RAD-5	0.76	10	1/2"-N1	GERAND STYLE BI
FI-10	RAD-11	0.81	12	1/2"-N1	GERAND STYLE BI
FI-11	RAD-7	0.72	9	1/2"-N1	GERAND STYLE BI
FI-12	RAD-12	0.59	6	1/2"-N1	GERAND STYLE BI
FI-13	RAD-8, 9 & 10	0.2	2.5	1/2"-M3	GERAND STYLE BI
FI-14	RAD-13	0.24	3.5	1/2"-M3	GERAND STYLE BI
FI-15	ROOM R-7	33	9	2"-685	GERAND STYLE VS
FI-16	ROOM R-7	19	9	1-1/2"-632	GERAND STYLE VS
FI-17	UH-5	4.2	12	1"-U0	GERAND STYLE BI
FI-18	AH-1	11.6	6	1-1/4"-616	GERAND STYLE VS
FI-19	AH-2	23	13	1-1/2"-632	GERAND STYLE VS
FI-20	AH-3	13.5	9	1-1/4"-616	GERAND STYLE VS
FI-21	CP-2	52	8	2-1/2"-746	GERAND STYLE VW-8
FI-22	CP-1	99	13	3"-735	GERAND STYLE VW-8
FI-23	RAD-14	1.07	6	1/2"-36	GERAND STYLE BI
FI-24	RAD-6	1.79	10	3/4"-R3	GERAND STYLE BI

FIN TUBE RADIATION SCHEDULE (EWT = 210°F, TD = 40°F, EAT = 65°F)

DESIG.	TOTAL BTU	ELEMENT LENGTH FEET	ELEMENT TYPE	COVER GAUGE	FINISH	MFG. NO.
RAD-1	14,400	10'-0"	1-1/4" COP.-AL. SERIES 60	16	BY ARCHITECT	TRANE TYPE 12S, 1 ROW
RAD-2	13,680	9'-6"	1-1/4" COP.-AL. SERIES 60	16	BY ARCHITECT	TRANE TYPE 12S, 1 ROW
RAD-3	17,100	9'-0"	1-1/4" COP.-AL. SERIES 60	16	BY ARCHITECT	TRANE TYPE 16S, 2 ROW, 4" CENTER
RAD-4	18,050	9'-6"	1-1/4" COP.-AL. SERIES 60	16	BY ARCHITECT	TRANE TYPE 16S, 2 ROW, 4" CENTER
RAD-5	33,320	9'-0"	1-1/4" COP.-AL. SERIES 60	16	BY ARCHITECT	TRANE TYPE 12TA, 1 ROW
RAD-6	31,545	15'-0"	1-1/4" COP.-AL. SERIES 60	16	BY ARCHITECT	TRANE TYPE 16TA, 2 ROW, 4" CENTER
RAD-7	12,640	8'-0"	1-1/4" COP.-AL. SERIES 60	16	BY ARCHITECT	TRANE TYPE 16TA, 1 ROW
RAD-8	1,480	1'-0"	1-1/4" COP.-AL. SERIES 60	16	BY ARCHITECT	TRANE TYPE 12TA, 1 ROW
RAD-9	2,960	2'-0"	1-1/4" COP.-AL. SERIES 60	16	BY ARCHITECT	TRANE TYPE 12TA, 1 ROW
RAD-10	1,440	1'-0"	1-1/4" COP.-AL. SERIES 60	16	BY ARCHITECT	TRANE TYPE 12S, 1 ROW
RAD-11	14,220	9'-0"	1-1/4" COP.-AL. SERIES 60	16	BY ARCHITECT	TRANE TYPE 16TA, 1 ROW
RAD-12	10,360	7'-0"	1-1/4" COP.-AL. SERIES 60	16	BY ARCHITECT	TRANE TYPE 12TA, 1 ROW
RAD-13	4,320	3'-0"	1-1/4" COP.-AL. SERIES 60	16	BY ARCHITECT	TRANE TYPE 12S, 1 ROW
RAD-14	18,960	12'-0"	1-1/4" COP.-AL. SERIES 60	16	BY ARCHITECT	TRANE TYPE 16TA, 1 ROW

CONTROL VALVE SCHEDULE

DESIG.	TYPE	SYSTEM	SIZE	MEDIUM	FLOW	MAX. DROP P.S.I.	MIN. CV
CV-1	N.O. 2-WAY MODULATING	HE-1	2-1/2"	5 PSIG STEAM	1173 PPH	3	51
CV-2	N.O. 2-WAY MODULATING	HE-1	2"	5 PSIG STEAM	573 PPH	3	26
CV-3	N.O. 2-WAY MODULATING	HE-2	2"	5 PSIG STEAM	582 PPH	3	26
CV-4	N.O. 2-WAY MODULATING	HE-2	1-1/2"	5 PSIG STEAM	388 PPH	3	18
CV-5	N.O. 3-WAY MODULATING	AH-1	1"	50% WATER GLYCOL	11.6 GPM	4	6
CV-6	N.O. 3-WAY MODULATING	AH-2	1-1/4"	50% WATER GLYCOL	23 GPM	4	12
CV-7	N.O. 3-WAY MODULATING	AH-3	1"	50% WATER GLYCOL	13.5 GPM	4	6
CV-8	N.O. 2-WAY MODULATING	RAD	AS REQ'D	50% WATER GLYCOL	SEE FI SCHEDULE	4	-

UNIT HEATER SCHEDULE EWT = 210°F, EAT = 60°F

DESIG.	TYPE	CAPACITY MBH	50% WATER & GLYCOL GPM	WATER TEMP. DROP °F	FAN CFM	FILTER	POWER V	POWER PH	POWER HZ	MOTOR HP	MOTOR RPM	RECESS DEPTH	MFG. NO.
CUH-1	HORIZONTAL RECESSED CEILING MOUNTED	29.2	2.1	31.6	265	FURNISH	120	1	60	1/30	700	--	TRANE E46-A0-04, CAPACITY BASED ON LOW SPEED
CUH-2	VERTICAL INVERTED CABINET	19.25	4.2	10.4	145	FURNISH	120	1	60	1/60	700	--	TRANE M46-A0-02, CAPACITY BASED ON LOW SPEED
CUH-3	HORIZONTAL RECESSED CEILING MOUNTED CABINET	12	0.71	38.3	145	FURNISH	120	1	60	1/60	700	FULL	TRANE E46-A0-02, CAPACITY BASED ON LOW SPEED
CUH-4	HORIZONTAL CABINET	12	0.71	38.3	145	FURNISH	120	1	60	1/60	700	--	TRANE D46-A0-02, CAPACITY BASED ON LOW SPEED
UH-5	HORIZONTAL UNIT HEATER	37	4.2	20	815	FURNISH	120	1	60	1/20	1550	--	TRANE 60-S

HEAT EXCHANGER SCHEDULE

DESIG.	TYPE	FOULING FACTOR	SHELL MEDIUM	SHELL LB/HR	SHELL MBH	TUBES MEDIUM	TUBES GPM	TUBES EWT °F	TUBES LWT °F	TUBES VELOCITY FPS	TUBES PRESS. DROP FT.	HTG. SURFACE FT^2	CODE DESIGN	MFG. NO.
HE-1	4 PASS STEAM/WATER	0.0005	2 PSIG STEAM	1746	1685	50% WATER GLYCOL	99	172	210	2.5	3.4	236	125 PSI ASME	TACO MODEL B14418-SB
HE-2	4 PASS STEAM/WATER	0.0005	2 PSIG STEAM	970	936	WATER	52	174	210	2.5	2.7	97.5	125 PSI AMSE	TACO MODEL B10414-SB UNIT WITH SADDLE

BOILER FEED UNIT SCHEDULE

DESIG.	RECEIVER NO.	RECEIVER CAPACITY GALLONS	PUMPS QTY.	PUMPS HP (EACH)	PUMPS GPM	PUMPS DISCHARGE PRESSURE PSIG	PUMPS TYPE	ELECTRICAL V	ELECTRICAL PH	ELECTRICAL HZ	MFG. NO.
BF-1	138 (30" DIA. X 48" LONG)	162	2	1/2 STARTER BY M.C.	17	20	B-35	240	3	60	DOMESTIC TYPE CMD, STYLE CMED

WATER STORAGE TANK SCHEDULE

DESIG.	TYPE	SIZE	GALLONS	CODE	MFG.
WS-1	GLASS LINED VERTICAL	66" DIA. 104" LONG	1330	ASME 125 PSI	ACE S66-6, TANK SHALL BE COMPLETE W/THERMOMETER, 120 VOLT TANK TEMPERATURE CONTROL, INSTALLED BY M.C., WIRED BY E.C., ADJUSTABLE TO 180°F

EXPANSION TANK SCHEDULE

DESIG.	TYPE	WORKING PRESSURE P.S.I.	CHARGE PRESSURE P.S.I.	GALLONS CAPACITY	SIZE	MFG. NO.
ET-1	VERTICAL DIAPHRAGM	125	15	77	16" DIA. X 82" HIGH	AMTROL AX-144V
ET-2	VERTICAL DIAPHRAGM	125	15	44	16" DIA. X 56" HIGH	AMTROL AX-80V

WATER HEATER SCHEDULE

DESIG.	TYPE	TANK CAPACITY GALLONS	RECOVERY @ 140° RISE	INPUT BTU	MFG. NO.
WH-1	PROPANE STORAGE	84	432	720,000	RUUD GL84-720A-1

PLUMBING FIXTURE SCHEDULE

DESIG.	TYPE	MFG. NO.	CONNECTIONS WASTE	CONNECTIONS VENT	CONNECTIONS C.W.	CONNECTIONS H.W.	FIXTURE MOUNTING HEIGHT
WC-1	FLOOR MOUNT TANK TYPE WATER CLOSET	KOHLER "HIGHLINE" K-3528-EB, K-7638 SUPPLY, K-4670-C SEAT, TANK FITTINGS, PROVIDE ROUGH-IN ONLY FOR K-13961 BEDPAN WASHER	3"	1-1/4"	1/2"	--	--
WC-2	FLOOR MOUNT FLUSH VALVE WATER CLOSET	KOHLER "HIGHCLIFF" K-4268-ET, K-4562 CAPS, K-4670-C SEAT, SLOAN 110-FYB-3 FLUSH VALVE	4"	1-1/4"	1"	--	--
WC-3	FLOOR MOUNT FLUSH VALVE WATER CLOSET	KOHLER "WELLCOMM" K-4250-ET K-4670-C SEAT, K-4562 CAPS, SLOAN 110-FYB-3 FLUSH VALVE	4"	1-1/4"	1"	--	--
WC-4	FLOOR MOUNT TANK TYPE WATER CLOSET	KOHLER "WELLWORTH" K-3500-EB, K-7638 SUPPLY, K-4670-C SEAT, TANK FITTINGS	4"	1-1/4"	1/2"	--	--
WC-5	FLOOR MOUNT TANK TYPE WATER CLOSET	KOHLER "HIGHLINE" K-3528-EB, K-7638 SUPPLY, S-4670-C SEAT, K-13961 BEDPAN WASHER, TANK FITTINGS	3"	1-1/4"	1/2"	--	--
UR-1	WALL MOUNT URINAL	KOHLER "FRESHMAN" K-4985-T, SLOAN 186 FLUSH VALVE	2"	1-1/4"	3/4"	--	19" TO RIM
L-1	LAVATORY	LAV. BY G.C., PROVIDE CHICAGO FAUCET 894-317 GOOSENECK, 4" V.B., 1¼ P-U	1-1/2"	1-1/4"	1/2"	1/2"	K-7606 STOPS --
L-2	WALL HUNG LAVATORY 20" X 18"	KOHLER "GREENWICH" K-2030, K-7606 STOPS, K-9000 P-TRAP, K-7715 DRAIN, DELTA 710 FAUCET AND GOOSENECK	1-1/2"	1-1/4"	1/2"	1/2"	30" ABOVE FLOOR TO RIM
L-3	WALL HUNG LAVATORY 20" X 18"	KOHLER "GREENWICH" K-2032, K-7606 STOPS, K-9000 P-TRAP, K-7715 DRAIN, DELTA 502 FAUCET	1-1/2"	1-1/4"	1/2"	1/2"	26" CLEAR FROM FLOOR TO UNDERSIDE. INSULATE HW AND WASTE WITH 1/2" ASJ FIBERGLASS
L-4	WALL HUNG LAVATORY 20" X 18"	KOHLER "GREENWICH" K-2032, K-7606 STOPS, K-9000 P-TRAP, K-7715 DRAIN, DELTA 502 FAUCET	1-1/2"	1-1/4"	1/2"	1/2"	30" ABOVE FLOOR TO RIM
L-5	WALL HUNG LAVATORY 24" X 20"	KOHLER "GREENWICH" K-2030, K-7606 STOPS, K-9000 P-TRAP, K-7715 DRAIN, K-13341 FAUCET, WRIST HANDLES, GOOSENECK	1-1/2"	1-1/4"	1/2"	1/2"	30" TO RIM
S-1	DOUBLE COMPARTMENT STAINLESS STEEL SINK 48" X 22"	ELKAY ILR-4822-R, LK-99 DRAIN, CHROME P-TRAP, CHICAGO FAUCET NO. 895-317 FAUCET	1-1/2"	1-1/4"	1/2"	1/2"	--
S-2	SINGLE COMPARTMENT STAINLESS STEEL SINK 19" X 19" X 10"	ELKAY DLR-1919, LK-99 DRAIN, CHROME P-TRAP, DELTA 710 FAUCET	1-1/2"	1-1/4"	1/2"	1/2"	--
S-3	DOUBLE COMPARTMENT STAINLESS STEEL SINK 33" X 19-1/2" X 7-1/2"	ELKAY LR-3319, LK-99 DRAIN, CHROME P-TRAP, LK-2232 FAUCET	2"	1-1/4"	1/2"	1/2"	--
CS-1	FLOOR MOUNTED CLINICAL SINK	KOHLER "TYRRELL" K-6676, SLOAN 117-YB FLUSHING VALVE, K-13960 BEDPAN WASHER, K-8935 RIM GUARDS, K-13629 FAUCET	4"	1-1/4"	1"	1/2"	PROVIDE 10" HIGH BASE --
SS-1	SHAMPOO SINK	KOHLER "BELVEDERE" NO. 3800, WHIZ SPRAY, HAIR STRAINER, NO. 622 FLO TEMP. FITTING, CHICAGO FAUCET 892-G V.B.	2"	1-1/4"	1/2"	1/2"	31" ABOVE FLOOR TO RIM
SH-1	SHOWER	LEONARD LVC-F 2 GPM MODEL 55-1C, HEAD ARM, FLANGE & MIXING VALVE, LOCATE VALVE AS SHOWN ON ARCHITECTURAL PLAN	2"	1-1/4"	1/2"	1/2"	MIXING VALVE 48" ABOVE FLOOR, HEAD 72" ABOVE FLOOR
BT-1	BATHTUB	CENTURY DELUXE DCT-10V, AUTO-MIXING VALVE, 60 GPM CAPACITY, "SAF-LIFT" SL-10, FOOT CONTROLLED, "SAF-KARY" SO-10, SAFETY SEAT BELT, COLOR WHITE, P-TRAP	2"	1-1/4"	1"	1"	--
JS-1	JANITOR SINK 24" X 24"	FIAT MODEL MSB-2424, HOSE BRACKET, MOP HANGER, 36" HOSE, FLAT STRAINER, P-TRAP, CHICAGO FAUCET 897-VB CHROME FAUCET	3"	1-1/4"	1/2"	1/2"	36" ABOVE FLOOR TO FAUCET
EWC-1	ELECTRIC WATER COOLER	ELKAY EHFS-8, P-TRAP, FINISH BY ARCHITECT	1-1/2"	1-1/4"	1/2"	--	36" TO RIM
7 D-1	FLOOR DRAIN	SMITH 2010-B, POLISHED BRONZE STRAINER, P-TRAP	2"	1-1/4"	--	--	--
D-2	FLOOR DRAIN	SMITH 2690, P-TRAP	3"	1-1/4"	1/2"	--	--
10 D-3	FLOOR DRAIN	SMITH 2010A-F38, P-TRAP	3" 3	--	--	--	--
1 D-4	FLOOR DRAIN	SMITH 2631, FLASHING FLANGE, P-TRAP	4"	--	--	--	--
FCO	FLOOR CLEANOUT	SMITH 4020	SEE PLANS	--	--	--	--
GCO	GRADE CLEANOUT	SMITH 4250, ANCHOR IN 12" X 12" X 12" CONCRETE COLLAR, ALL BY M.C.	SEE PLANS	--	--	--	--
HB-1	HOSE BIBB	CHICAGO FAUCET NO. 305-VB, POLISHED CHROME	--	--	3/4"	--	36" ABOVE FLOOR
HB-2	HOSE BIBB	CHICAGO FAUCET 897-VB CHROME PLATED, WALL BRACE, PAIL HOOK, 3 FOOT HOSE	--	--	3/4"	3/4"	36" ABOVE FLOOR
WH-1	WALL HYDRANT	WOODFORD MODEL 85	--	--	3/4"	--	24" ABOVE GRADE
GW	CAN WASHER MIXING VALVE	DELTA 601 VALVE, CHICAGO FAUCET 892-G VACUUM BREAKER	--	--	1/2"	1/2"	40" ABOVE FLOOR
K-1	DISPOSER W/OVERHEAD SPRAY UNIT	FURNISHED BY K.C., PIPING ROUGH-IN AND FINAL CONNECTIONS BY M.C. VERIFY PIPING SIZES REQUIRED	2"	1-1/4"	3/4"	1/2"	--
K-2	DISHWASHER	FURNISHED BY K.C., PIPING ROUGH-IN AND FINAL CONNECTIONS BY M.C. VERIFY PIPING SIZES REQUIRED	3"	1-1/4"	--	3/4"	PROVIDE: FLOOR SINK AM. STD. #7765.068 W/ ½ GRATE #7768.013 NOTE: 1-1/4" - 180° HW
K-3	3-COMPARTMENT ISLAND SINK	FURNISHED BY K.C., PIPING ROUGH-IN AND FINAL CONNECTIONS BY M.C. VERIFY PIPING SIZES REQUIRED	4"	--	3/4"	3/4"	--
K-4	2-COMPARTMENT ISLAND SINK	FURNISHED BY K.C., PIPING ROUGH-IN AND FINAL CONNECTIONS BY M.C. VERIFY PIPING SIZES REQUIRED	3"	--	3/4"	3/4"	--
K-5	CONVECTION OVEN	FURNISHED BY K.C., PIPING ROUGH-IN AND FINAL CONNECTIONS BY M.C. VERIFY PIPING SIZES REQUIRED	--	--	--	--	3/4" GAS CONN.
K-6	RANGE & GRILL	FURNISHED BY K.C., PIPING ROUGH-IN AND FINAL CONNECTIONS BY M.C. VERIFY PIPING SIZES REQUIRED	--	--	--	--	3/4" GAS CONN.

Carrier

BY others

BY M.C.

K.C. = KITCHEN EQUIPMENT CONTRACTOR
NOTE: OWNER OR K.C. SHALL SET NEW OR RELOCATED KITCHEN EQUIPMENT.

FLOOR SINK TO BE INSTALLED UNDER DISHWASHING MACHINE - MAINTAIN AIR GAP, CO-ORDINATE W/ OWNER & K.C. FOR EXACT LOCATION REQUIRED

EQUIPMENT SCHEDULES

DUNHAM ASSOCIATES
consulting engineers
bismarck, north dakota

GARY W. BEAZLEY REGISTERED PROFESSIONAL ENGINEER 1555 NORTH DAKOTA

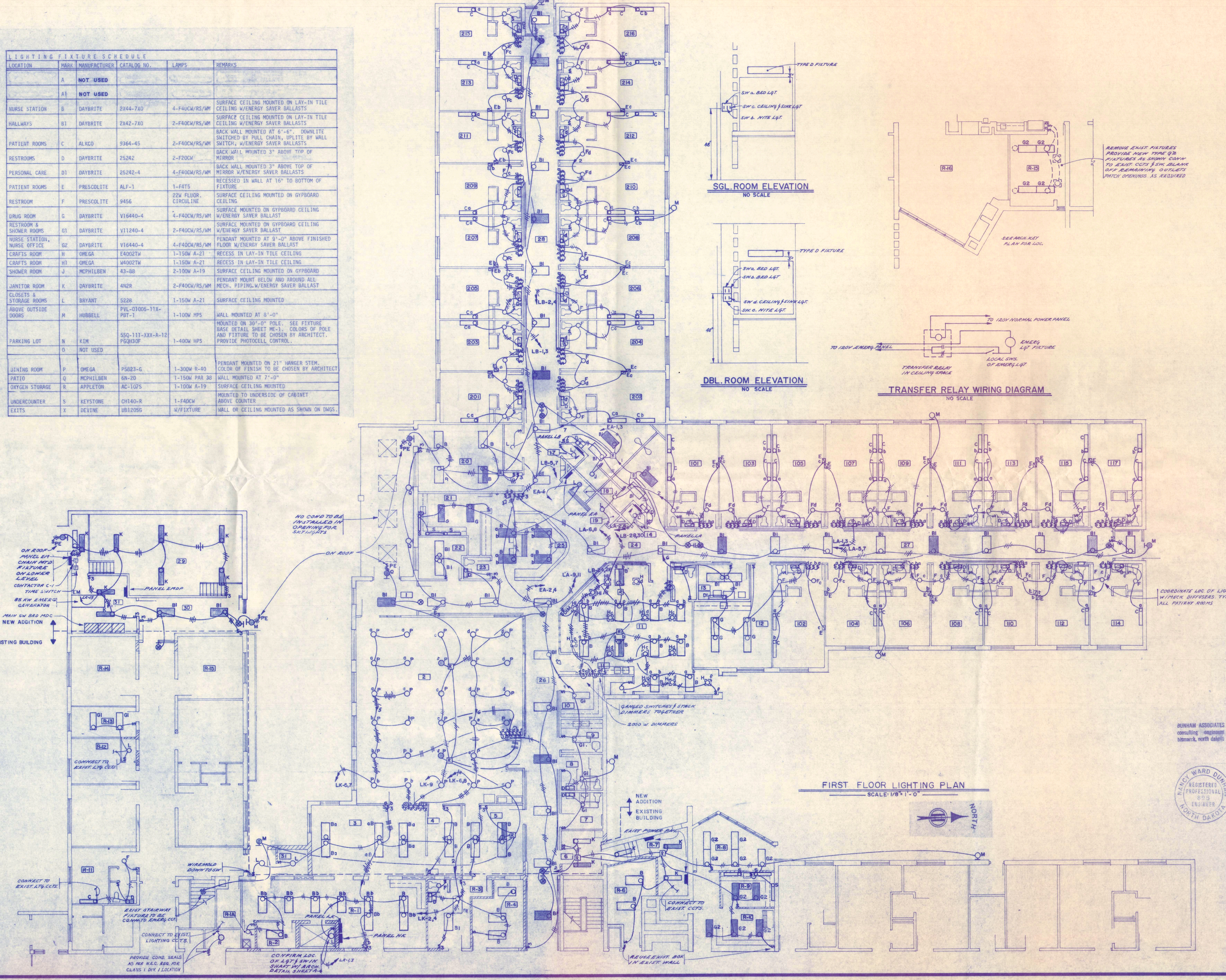
C M CORPORATION

ARCHITECTURAL & ENGINEERING SERVICES DIVISION
SIOUX CITY, IOWA 51102

ADDITION & REMODELING
BEULAH NURSING HOME
BEULAH, NORTH DAKOTA

JOB 7706
DATE 10-10-80
DRAWN K.J.M.
SHEET M-10 OF 10

LIGHTING FIXTURE SCHEDULE					
LOCATION	MARK	MANUFACTURER	CATALOG NO.	LAMPS	REMARKS
	A	**NOT USED**			
	A1	**NOT USED**			
NURSE STATION	B	DAYBRITE	2X44-7X0	4-F40CW/RS/WM	SURFACE CEILING MOUNTED ON LAY-IN TILE CEILING W/ENERGY SAVER BALLASTS
HALLWAYS	B1	DAYBRITE	2X42-7X0	2-F40CW/RS/WM	SURFACE CEILING MOUNTED ON LAY-IN TILE CEILING W/ENERGY SAVER BALLASTS
PATIENT ROOMS	C	ALKCO	9364-45	2-F40CW/RS/WM	BACK WALL MOUNTED AT 6'-6". DOWNLITE SWITCHED BY PULL CHAIN, UPLITE BY WALL SWITCH, W/ENERGY SAVER BALLASTS
RESTROOMS	D	DAYBRITE	25242	2-F20CW	BACK WALL MOUNTED 3" ABOVE TOP OF MIRROR
PERSONAL CARE	D1	DAYBRITE	25242-4	4-F40CW/RS/WM	BACK WALL MOUNTED 3" ABOVE TOP OF MIRROR W/ENERGY SAVER BALLASTS
PATIENT ROOMS	E	PRESCOLITE	ALF-1	1-F4T5	RECESSED IN WALL AT 16" TO BOTTOM OF FIXTURE
RESTROOM	F	PRESCOLITE	9456	22W FLUOR. CIRCULINE	SURFACE CEILING MOUNTED ON GYPBOARD CEILING
DRUG ROOM	G	DAYBRITE	V16440-4	4-F40CW/RS/WM	SURFACE MOUNTED ON GYPBOARD CEILING W/ENERGY SAVER BALLAST
RESTROOM & SHOWER ROOMS	G1	DAYBRITE	V11240-4	2-F40CW/RS/WM	SURFACE MOUNTED ON GYPBOARD CEILING W/ENERGY SAVER BALLAST
NURSE STATION, NURSE OFFICE	G2	DAYBRITE	V16440-4	4-F40CW/RS/WM	PENDANT MOUNTED AT 9'-0" ABOVE FINISHED FLOOR W/ENERGY SAVER BALLAST
CRAFTS ROOM	H	OMEGA	E4002TW	1-150W A-21	RECESS IN LAY-IN TILE CEILING
CRAFTS ROOM	H1	OMEGA	W4002TW	1-150W A-21	RECESS IN LAY-IN TILE CEILING
SHOWER ROOM	J	MCPHILBEN	43-88	2-100W A-19	SURFACE CEILING MOUNTED ON GYPBOARD
JANITOR ROOM	K	DAYBRITE	4N2R	2-F40CW/RS/WM	PENDANT MOUNT BELOW AND AROUND ALL MECH. PIPING.W/ENERGY SAVER BALLAST
CLOSETS & STORAGE ROOMS	L	BRYANT	5228	1-150W A-21	SURFACE CEILING MOUNTED
ABOVE OUTSIDE DOORS	M	HUBBELL	PVL-01005-11X-PBT-1	1-100W HPS	WALL MOUNTED AT 8'-0"
PARKING LOT	N	KIM	5SQ-111-XXX-A-12 PGQH30F	1-400W HPS	MOUNTED ON 30'-0" POLE. SEE FIXTURE BASE DETAIL SHEET ME-1. COLORS OF POLE AND FIXTURE TO BE CHOSEN BY ARCHITECT. PROVIDE PHOTOCELL CONTROL.
	O	NOT USED			
DINING ROOM	P	OMEGA	P5823-G	1-300W R-40	PENDANT MOUNTED ON 21" HANGER STEM. COLOR OF FINISH TO BE CHOSEN BY ARCHITECT.
PATIO	Q	MCPHILBEN	6N-20	1-150W PAR 38	WALL MOUNTED AT 7'-0"
OXYGEN STORAGE	R	APPLETON	AC-107S	1-100W A-19	SURFACE CEILING MOUNTED
UNDERCOUNTER	S	KEYSTONE	CH140-R	1-F40CW	MOUNTED TO UNDERSIDE OF CABINET ABOVE COUNTER
EXITS	X	DEVINE	UB120SG	W/FIXTURE	WALL OR CEILING MOUNTED AS SHOWN ON DWGS.



SGL. ROOM ELEVATION
NO SCALE

DBL. ROOM ELEVATION
NO SCALE

TRANSFER RELAY WIRING DIAGRAM
NO SCALE

FIRST FLOOR LIGHTING PLAN
SCALE: 1/8" = 1'-0"

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NANCY WARD DUNHAM
REGISTERED PROFESSIONAL ENGINEER
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SIOUX CITY, IOWA 51102

ADDITION & REMODELING
BEULAH NURSING HOME
BEULAH, NORTH DAKOTA

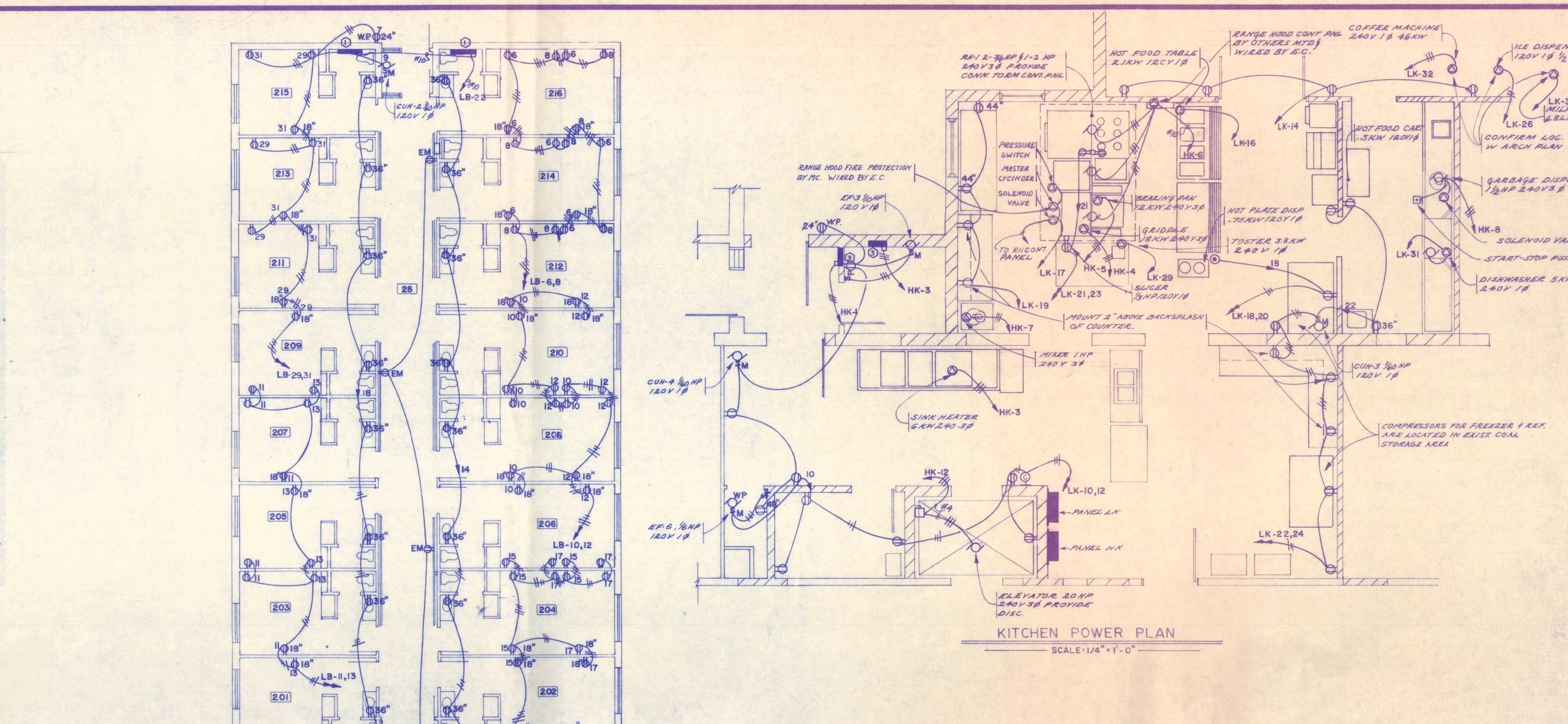
JOB 7706
DATE 10-10-80
DRAWN D.L.M.
SHEET E-2

KITCHEN EQUIPMENT SCHEDULE				
ITEM	LOAD	VOLTAGE	PHASE	CONNECTION
SINK HEATER	6 KW	240	3	CONFIRM ONE POINT CONNECTION
SLICER	1/3 HP	120	1	PROVIDE NEMA 5-20R ON UNISTRUT STAND
HOT FOOD TABLE	2.1 KW	120	1	CONFIRM RECEPTACLE CONFIGURATION IN FIELD
RANGE HOOD	(2) 3/4 HP & (1) 2 HP	240	3	PROVIDE CONNECTION TO R.H. CONTROL PANEL. ALL WIRING TO MOTORS & CONTROL PANEL BY E.C.
BRAISING PAN	12 KW	240	3	CONFIRM ONE POINT CONNECTION
MOBILE HOT FOOD CART	.5 KW	120	1	PROVIDE NEMA 5-20R
TOASTER	3.8 KW	240	1	CONFIRM ONE POINT CONNECTION
COFFEE MAKER	4.6 KW	240	1	CONFIRM SINGLE PHASE 3 WIRE CONNECTION IN FIELD
MILK DISPENSER	6.8 L.R.A.	240	1	CONFIRM ONE POINT CONNECTION
ICE DISPENSER	1/2 HP	120	1	CONFIRM ONE POINT CONNECTION
GARBAGE DISPOSAL	1-1/2 HP	240	3	PROVIDE CONNECTION TO DISPOSAL, SWITCH & SOLENOID VALVE. SWITCH & VALVE BY F.C.
DISHWASHER	5 KW & 1 HP	240	1	CONFIRM CONNECTION IN FIELD
HOT PLATE DISPENSER	.75 KW	120	1	PROVIDE NEMA 5-20R IN FLOOR BOX
REFRIGERATOR *2	3/4 HP	120	1	PROVIDE NEMA 5-20R
GRIDDLE	18 KW	240	3	CONFIRM ONE POINT CONNECTION
RANGE HOOD FIRE PROTECTION	--	120	1	PROVIDE 120V CONNECTION
MIXER	1 HP	240	3	CONFIRM CONNECTION OR CONFIGURATION IN FIELD
WALK-IN FREEZER *1	1-1/2 HP	240	1	CONFIRM ONE POINT CONNECTION
WALK-IN COOLER *1	3/4 HP	240	1	CONFIRM ONE POINT CONNECTION
FREEZER *2	1/2 HP	120	1	NEMA S-20 R

*1 WALK-IN COOLER AND FREEZER ARE SHOWN ON BASEMENT FLOOR PLAN - SEE SHEET E-4

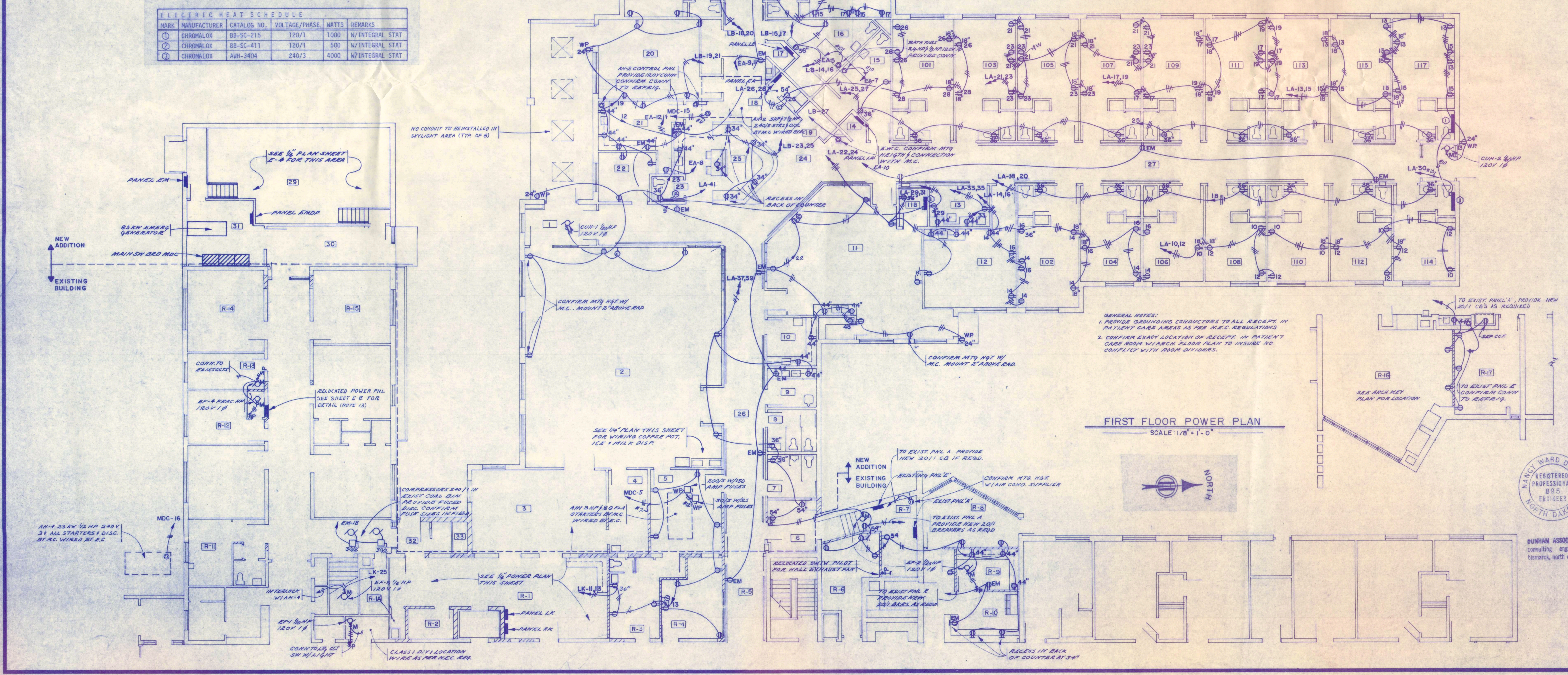
*2 FREEZER AND REFRIGERATOR HAVE REMOTE COMPRESSOR (LOCATED IN EXISTING COAL BIN), NEMA 5-20R IS FOR LIGHT AND CONTROL CONNECTION ONLY

ELECTRIC HEAT SCHEDULE					
MARK	MANUFACTURER	CATALOG NO.	VOLTAGE/PHASE	WATTS	REMARKS
1	CHROMALOX	BB-SC-215	120/1	1000	W/INTEGRAL STAT
2	CHROMALOX	BB-SC-411	120/1	500	W/INTEGRAL STAT
3	CHROMALOX	AWH-3404	240/3	4000	W/INTEGRAL STAT



KITCHEN POWER PLAN

SCALE 1/4" = 1'-0"



GENERAL NOTES:
1. PROVIDE GROUNDING CONDUCTORS TO ALL RECEPT. IN PATIENT CARE AREAS AS PER N.E.C. REGULATIONS
2. CONFIRM EXACT LOCATION OF RECEPT. IN PATIENT CARE ROOM W/ARCH. FLOOR PLAN TO INSURE NO CONFLICT WITH ROOM DIVIDERS.

FIRST FLOOR POWER PLAN

SCALE 1/8" = 1'-0"

NORTH

NANCY WARD DUNHAM REGISTERED PROFESSIONAL 895 ENGINEER NORTH DAKOTA

DUNHAM ASSOCIATES consulting engineers bismarck, north dakota

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ADDITION & REMODELING
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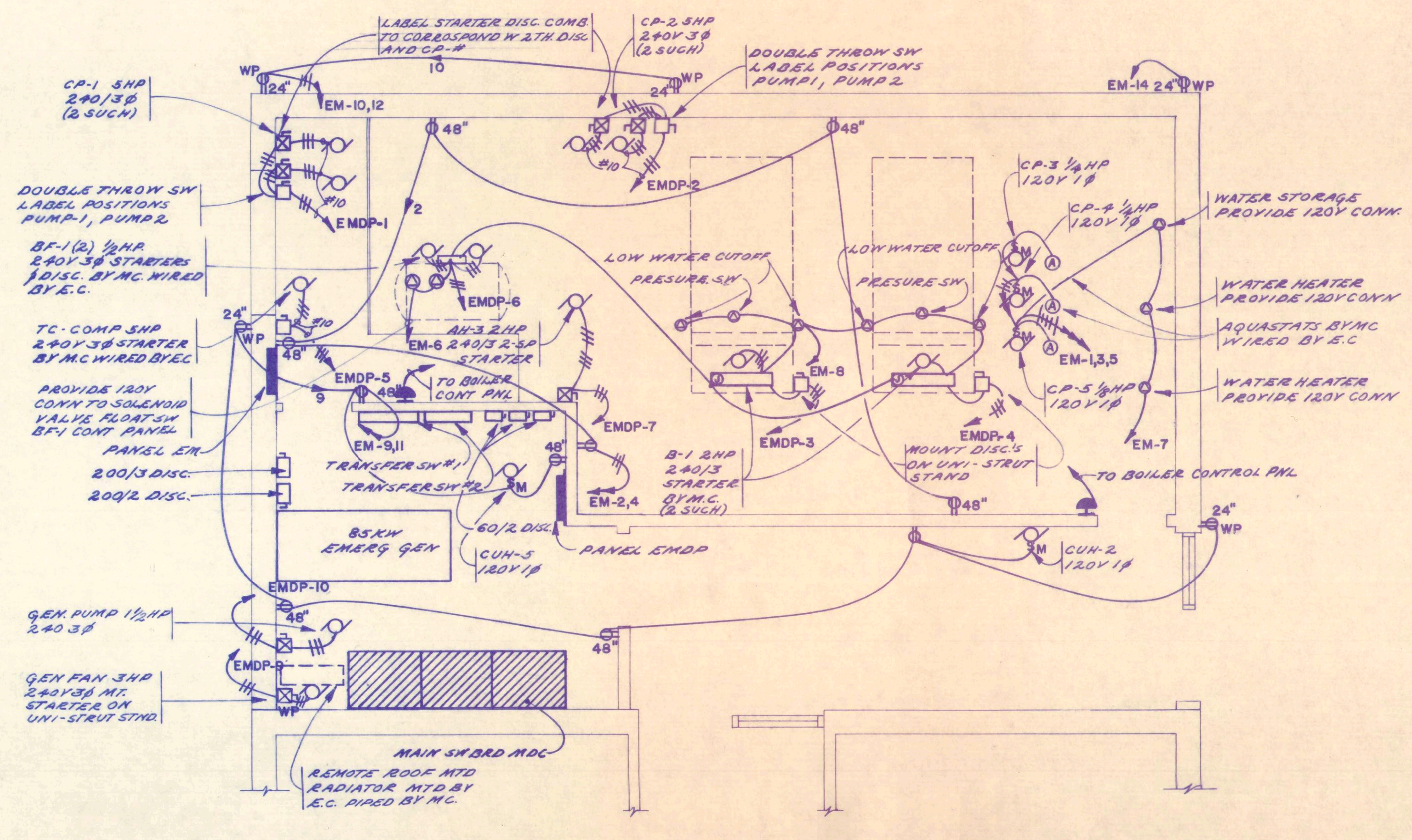
BEULAH, NORTH DAKOTA

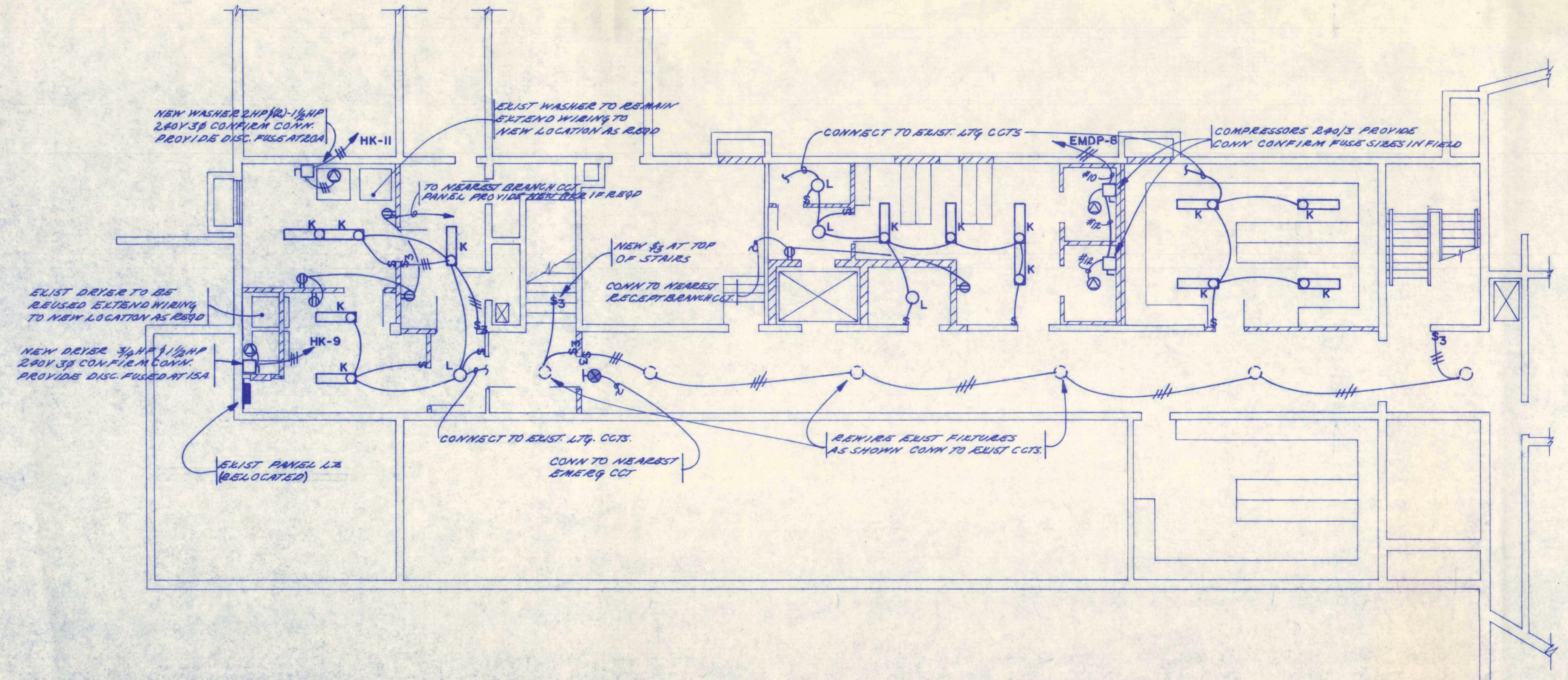
JOB	7706
DATE	10-10-80
DRAWN	D.L.M.
SHEET	E-3

MOTOR, STARTER AND CONTROL SCHEDULE									
STARTER & MOTOR NO.	DRIVEN EQUIPMENT	MOTOR H.P.	VOLTAGE & PHASE	MOTOR LOCATION	CONTROL	CONTROL LOCATION	STARTER SIZE	STARTER LOCATION	DISC. SIZE & TYPE
CP-1	CIRCULATING PUMP (2 SUCH)	5 HP	240/3	BOILER RM.	HOA IN COVER	ON STARTER	NEMA 2	BOILER ROOM	30/3 W/25A FUSES
CP-2	CIRCULATING PUMP (2 SUCH)	5 HP	240/3	BOILER RM.	HOA IN COVER	ON STARTER	NEMA 2	BOILER ROOM	30/3 W/25A FUSES
CP-3	CIRCULATING PUMP	1/4 HP	120/1	BOILER RM.	AQUASTAT	--	THERMAL SWITCH	BOILER ROOM	20/1 IN PANEL EM
CP-4	CIRCULATING PUMP	1/4 HP	120/1	BOILER RM.	AQUASTAT	--	THERMAL SWITCH	BOILER ROOM	20/1 IN PANEL EM
CP-5	CIRCULATING PUMP	1/8 HP	120/1	BOILER RM.	AQUASTAT	--	THERMAL SWITCH	BOILER ROOM	20/1 IN PANEL EM
TC-COMP	TEMP. CONTROL AIR COMPRESSOR	5 HP	240/3	BOILER RM.	BY OTHERS	BY OTHERS	BY OTHERS	BOILER ROOM	30/3 W/25 AMP FUSES
BF-1	BOILER FEED PUMPS (2 SUCH)	1/2 HP	240/3	BOILER RM.	BF-1 CONTROL PNL BY OTHERS	BOILER ROOM	BY OTHERS	IN CONTROL PANEL	IN CONROL PANEL BY OTHERS
AH-3	AIR HANDLING UNIT	2 HP	240/3	BOILER RM.	HIGH-LOW-AUTO-OFF W/PILOT IN COVER	BOILER ROOM	NEMA 1 (2 SPEED)	BOILER ROOM	30/3 W/10 AMP FUSES
AH-2	AIR HANDLING UNIT	5 & 7-1/2 HP	240/3	ROOFTOP	BY OTHERS	--	BY OTHERS	BY OTHERS	BY OTHERS
AH-1	AIR HANDLING UNIT	75 FLA 3 HP	240/3	ROOFTOP	BY OTHERS	--	BY OTHERS	BY OTHERS	30/3 AT 25A AND 200/3 AT 150A
	GEN. FAN	3 HP	240/3	BOILER RM.	HOA IN COVER	ON STARTER	NEMA 1	ROOFTOP	30/3 NF
	GEN. PUMP	1-1/2 HP	240/3	BOILER RM.	HOA IN COVER	ON STARTER	NEMA 1	BOILER RM.	30/3 NF
CUH-1	CABINET UNI HEATER	1/30 HP	120/1	ROOM #1	BY OTHERS	--	THERMAL SWITCH	IN UNIT	--
CUH-2	CABINET UNIT HEATERS (3 SUCH)	1/60 HP	120/1	VARIOUS ENTRYWAYS	BY OTHERS	--	THERMAL SWITCH	IN UNIT	--
CUH-3	CABINET UNIT HEATER	1/60 HP	120/1	ROOM #3	BY OTHERS	--	THERMAL SWITCH	IN UNIT	--
CUH-4	CABINET UNIT HEATER	1/60 HP	120/1	ROOM #R-1	BY OTHERS	--	THERMAL SWITCH	IN UNIT	--
CUH-5	CABINET UNIT HEATER	1/60 HP	120/1	ELEC. RM.	BY OTHERS	--	THERMAL SWITCH	IN UNIT	--
AH-4	AIR HANDLING UNIT	23 KW & 1/2 HP	240/3	OUTSIDE BLDG.	BY OTHERS	--	BY OTHERS	BY OTHERS	BY OTHERS
EF-1	EXHAUST FAN	1/10 HP	120/1	OXYGEN STORAGE RM.	SWITCH WITH PILOT LIGHT	OUTSIDE ROOM	THERMAL SWITCH	ON UNIT	--
EF-2	EXHAUST FAN	1/25 HP	120/1	R-1A	SWITCH WITH PILOT LIGHT	RM. R-1A	THERMAL SWITCH	ON UNIT	--
EF-3	EXHAUST FAN	1/10 HP	120/1	RM. #31	SWITCH WITH PILOT LIGHT	RM. #31	THERMAL SWITCH	ON UNIT	--
EF-4	EXHAUST FAN (2 SUCH)	FRAC.	120/1	RESTROOMS	SWITCH WITH PILOT LIGHT	RESTRMS.	THERMAL SWITCH	ON UNIT	--
EF-5	EXHAUST FAN	1/6 HP	120/1	EXISTING STAIRWAY	INTERLOCK TO START W/AH-4	--	THERMAL SWITCH	ON UNIT	--
EF-6	EXHAUST FAN	1/6 HP	120/1	KITCHEN	SWITCH WITH PILOT LIGHT	AS SHOWN	THERMAL SWITCH	ON UNIT	--
B.T.	BATHTUB LIFTS (2 SUCH)	3/4 & 1/3 HP	120/1	SHOWER RM. 15, 16	BY OTHERS	SHOWER ROOM	BY OTHERS	BY OTHERS	BY OTHERS
ELEV.-1	ELEVATOR MOTOR	20 HP	240/3	ELEV. SHAFT	BY OTHERS	BY OTHERS	BY OTHERS	BY OTHERS	100/3 W/80A
SEE KITCHEN EQUIPMENT SCHEDULE FOR KITCHEN APPLIANCE MOTORS.									



MECHANICAL ROOM FLOOR PLAN

SCALE: 1/4" = 1'-0"



BASEMENT FLOOR REMODEL PLAN

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

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ARCHITECTURAL & ENGINEERING SERVICES DIVISION
SIOUX CITY, IOWA 51102

ADDITION & REMODELING
BEULAH NURSING HOME
BEULAH, NORTH DAKOTA

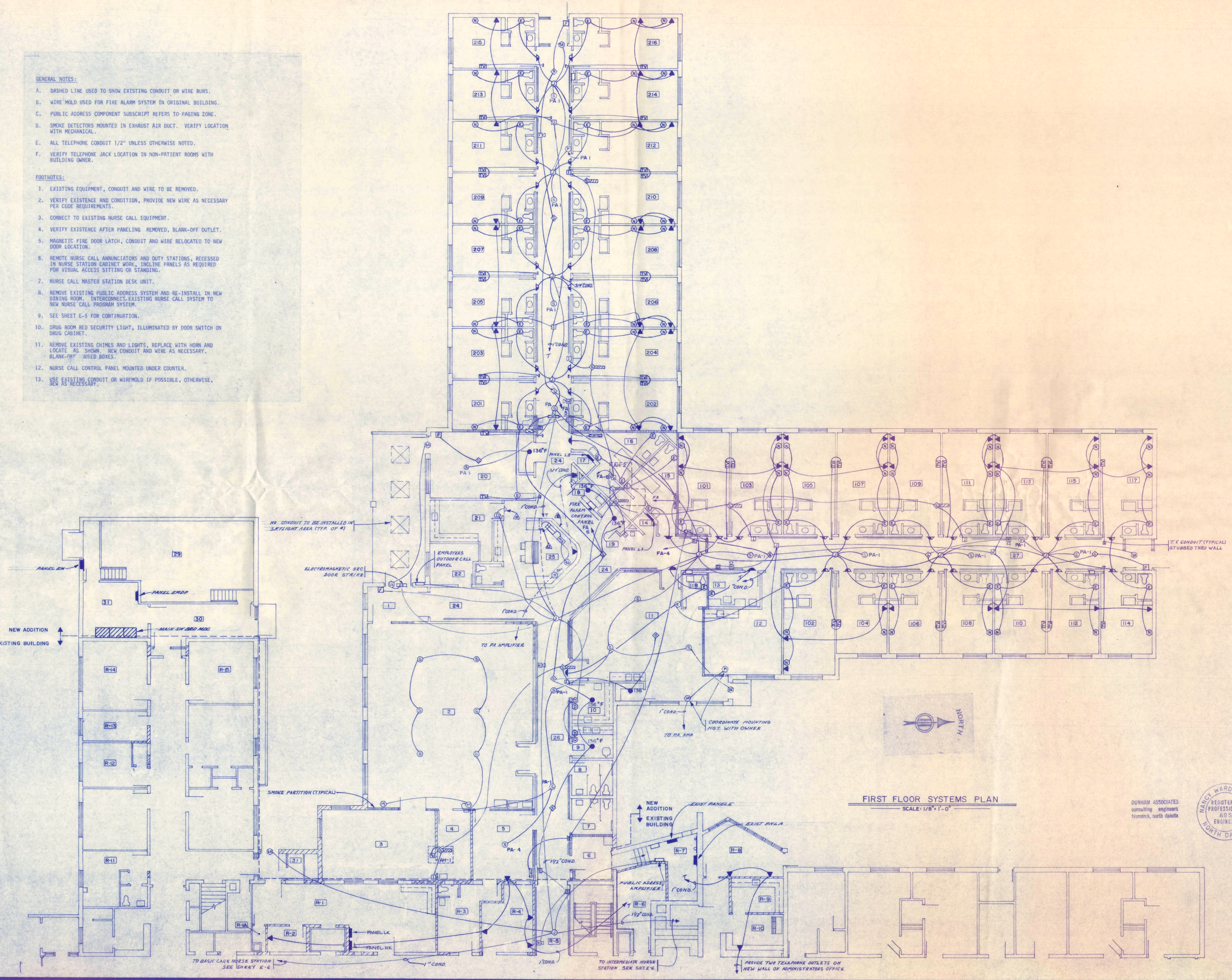
JOB	7706
DATE	10-10-80
DRAWN	D.L.M.
SHEET	E-4

GENERAL NOTES:

A. DASHED LINE USED TO SHOW EXISTING CONDUIT OR WIRE RUNS.
B. WIRE MOLD USED FOR FIRE ALARM SYSTEM IN ORIGINAL BUILDING.
C. PUBLIC ADDRESS COMPONENT SUBSCRIPT REFERS TO PAGING ZONE.
D. SMOKE DETECTORS MOUNTED IN EXHAUST AIR DUCT. VERIFY LOCATION WITH MECHANICAL.
E. ALL TELEPHONE CONDUIT 1/2" UNLESS OTHERWISE NOTED.
F. VERIFY TELEPHONE JACK LOCATION IN NON-PATIENT ROOMS WITH BUILDING OWNER.

FOOTNOTES:

1. EXISTING EQUIPMENT, CONDUIT AND WIRE TO BE REMOVED.
2. VERIFY EXISTENCE AND CONDITION, PROVIDE NEW WIRE AS NECESSARY PER CODE REQUIREMENTS.
3. CONNECT TO EXISTING NURSE CALL EQUIPMENT.
4. VERIFY EXISTENCE AFTER PANELING REMOVED, BLANK-OFF OUTLET.
5. MAGNETIC FIRE DOOR LATCH, CONDUIT AND WIRE RELOCATED TO NEW DOOR LOCATION.
6. REMOTE NURSE CALL ANNUNCIATORS AND DUTY STATIONS, RECESSED IN NURSE STATION CABINET WORK, INCLINE PANELS AS REQUIRED FOR VISUAL ACCESS SITTING OR STANDING.
7. NURSE CALL MASTER STATION DESK UNIT.
8. REMOVE EXISTING PUBLIC ADDRESS SYSTEM AND RE-INSTALL IN NEW DINING ROOM. INTERCONNECT EXISTING NURSE CALL SYSTEM TO NEW NURSE CALL PROGRAM SYSTEM.
9. SEE SHEET E-5 FOR CONTINUATION.
10. DRUG ROOM RED SECURITY LIGHT, ILLUMINATED BY DOOR SWITCH ON DRUG CABINET.
11. REMOVE EXISTING CHIMES AND LIGHTS, REPLACE WITH HORN AND LOCATE AS SHOWN. NEW CONDUIT AND WIRE AS NECESSARY. BLANK-OFF UNUSED BOXES.
12. NURSE CALL CONTROL PANEL MOUNTED UNDER COUNTER.
13. USE EXISTING CONDUIT OR WIREMOLD IF POSSIBLE, OTHERWISE, NEW AS NECESSARY.



FIRST FLOOR SYSTEMS PLAN
SCALE: 1/8" = 1'-0"

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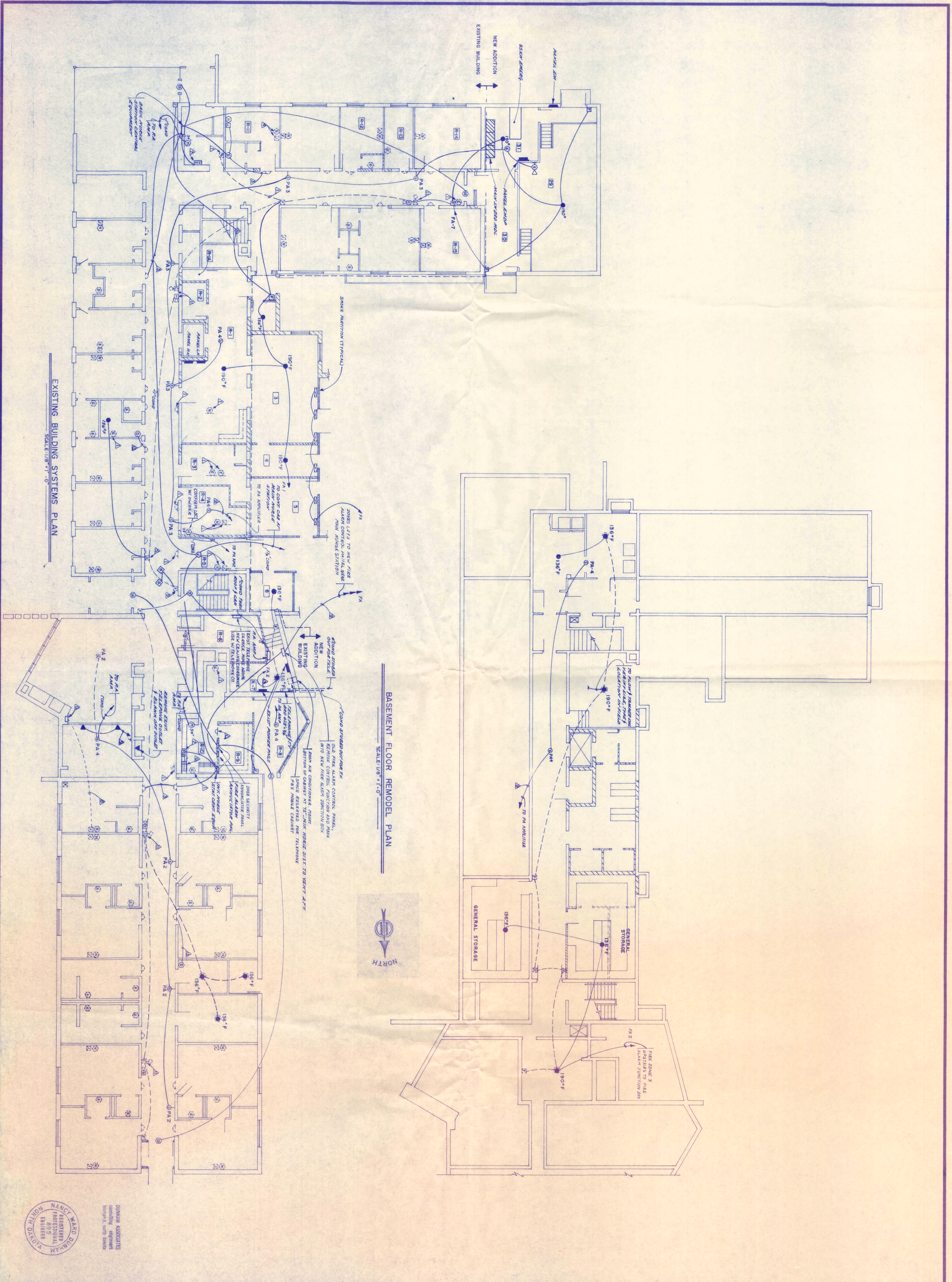

SHEET E-6	DRAWN D.L.M. DATE 10-10-80	JOB 7706	ADDITION & REMODELING BEULAH NURSING HOME BEULAH, NORTH DAKOTA	C M CORPORATION

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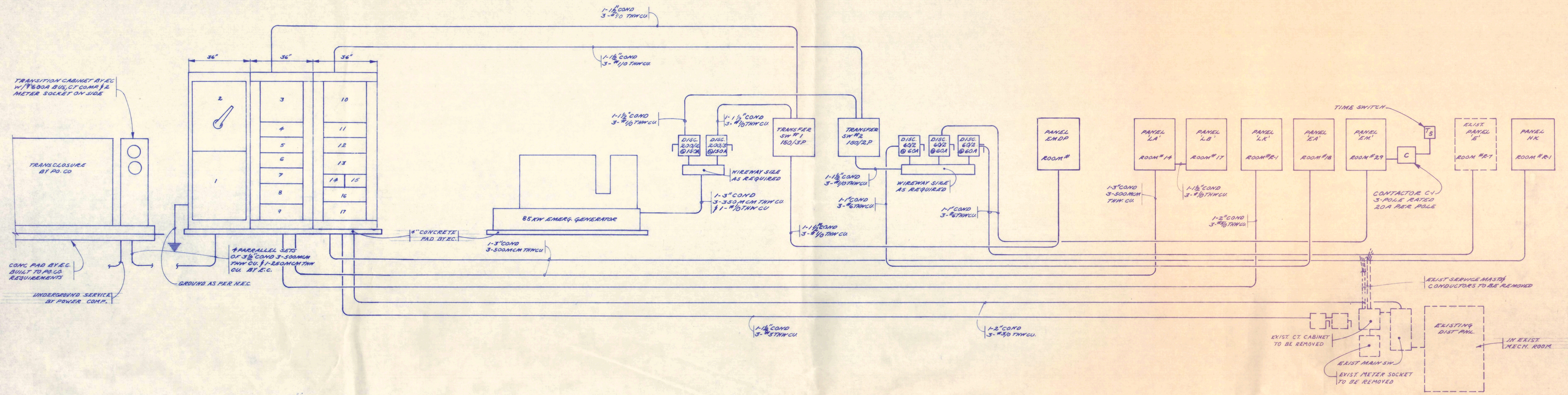

SERVICE & FEEDER RISER DIAGRAM

NO SCALE

PANEL PDC 120/240 V, 3 Ø, 4 W, 1600A BUS				
CCT.	LOAD	SWITCH	FUSE	FEEDER
1	INCOMING LUGS	--	--	4 PARALLEL SETS OF 3-1/2" COND. 3-500 MCM THW CU AND 1-250 MCM THW CU.
2	MAIN SWITCH	600/3	2-1600A 1-1000A	--
3	INCOMING LUGS	--	--	1600A BUS
4	TRANSFER SW. #1	200/3	150A	1 - 1-1/2" COND. 3 - #1/0 THW CU.
5	AH-1	200/3	175A	1 - 1-1/2" COND. 3 - #2/0 THW CU.
6	SPARE	200/3	--	--
7	PANEL LK	200/2	200A	1 - 2" COND. 3 - #3/0 THW CU.
8	PANEL LA, LB	400/2	400A	1 - 2-1/2" COND. 3 - 500 MCM THW CU.
9	SPACE	--	--	--
10	INCOMING LUGS	--	--	1600A BUS
11	EXIST. BLDG.	200/2	200A	1 - 2" COND. 3 - #3/0 THW CU.
12	TRANSFER SW. #2	200/2	150A	1 - 1-1/2" COND. 3 - #1/0 THW CU.
13	PANEL HK	400/3	400A	1 - 3-1/2" COND. 3 - 500 MCM THW CU.
14	EXISTING DISC. SWS.	100/3	100A	1 - 1-1/4" COND. 3 - #3/0 THW CU.
15	AH-2	100/3	70A	1 - 1" COND. 3 - #6/0 THW CU.
16	AH-4	200/3	125A	1 - 1-1/4" COND. 3 - #1/0 THW CU.

PANEL LK SCHEDULE								
120/240 V, 1 Ø, 3 W, 225A, M.L.O., SURFACE MOUNTED								
LOAD	POLES	AMPS	CCT.	PHASE	CCT.	AMPS	POLES	LOAD
KITCHEN LIGHTING	1	20	1	A	2	20	1	EMPLOYEE DINING RM. LIGHTING
KITCHEN LIGHTING	1	20	3	B	4	20	1	OFFICE & LOUNGE LIGHTING
DINING ROOM LIGHTING	1	20	5	A	6	20	1	DINING ROOM LIGHTING
DINING ROOM LIGHTING	1	20	7	B	8	20	1	DINING ROOM LIGHTING
DINING ROOM LIGHTING	1	20	9	A	10	20	1	KITCHEN RECPT.
DINING ROOM RECPT.	1	20	11	B	12	20	1	KITCHEN RECPT.
EMPLOYEE DINING RECPT.	1	20	13	A	14	20	1	KITCHEN RECPT.
SPARE	1	20	15	B	16	30	1	HOT FOOD TABLE
RANGE HOOD FIRE PROTECT.	1	20	17	A	18	20	1	HOT PLATE OUTLET
KITCHEN RECPT.	1	20	19	B	20	20	1	REFRIGERATOR
RANGE RECPT.	1	20	21	A	22	20	1	HOT FOOD CART
SLICER OUTLET	1	20	23	B	24	20	1	KITCHEN RECPT.
EF-5	1	20	25	A	26	20	1	ICE DISPENSER
SPARE	1	20	27	B	28	20	1	SPARE
TOASTER	2	25	29	AB	30	20	2	MILK DISPENSER
DISHWASHER	2	30	31	AB	32	30	2	COFFEE MACHINE
SPARE	2	20	33	AB	34	20	2	SPARE

PANEL HK SCHEDULE								
240 V, 3 Ø, 3 W, 400A, M.L.O., SURFACE MOUNTED								
LOAD	POLES	AMPS	CCT.	PHASE	CCT.	AMPS	POLES	LOAD
ELECTRIC HEAT	3	20	1	ABC	2	20	3	ELECTRIC HEAT
SOUK HEATER	3	20	3	ABC	4	60	3	GRIDDLE
BRAISING PAN	3	40	5	ABC	6	30	3	RANGE HOOD
MIXER	3	20	7	ABC	8	20	3	GARBAGE DISPOSAL
DRYER	3	20	9	ABC	10	20	3	SPARE
WASHER	3	20	11	ABC	12	90	3	ELEVATOR MOTOR
SPARE	3	20	13	ABC	14	20	3	SPARE
SPARE	3	20	15	ABC	16	20	3	SPARE

PANEL EMDP SCHEDULE								
240 V, 3 Ø, 3 W, 225A, M.L.O., SURFACE MOUNTED								
LOAD	POLES	AMPS	CCT.	PHASE	CCT.	AMPS	POLES	LOAD
CP-1	3	30	1	ABC	2	30	3	CP-2
B-1	3	20	3	ABC	4	20	3	B-1
T.C. COMPRESSOR	3	20	5	ABC	6	20	3	BF-1
AH-3	3	20	7	ABC	8	30	3	COMPRESSORS
GEN. FAN	3	20	9	ABC	10	20	3	GEN. PUMP
SPARE	3	20	11	ABC	12	20	3	SPARE

PANEL LA SCHEDULE								
120/240 V, 1 Ø, 3 W, 400A, 300A MAIN CIRCUIT BREAKER, FLUSH MOUNTED								
LOAD	POLES	AMPS	CCT.	PHASE	CCT.	AMPS	POLES	LOAD
PATIENT RM. 113, 115, 117 LTG.	1	20	1	A	2	20	1	PATIENT RM. 101, 103, 105 LTG.
PATIENT RM. 107, 109, 111 LTG.	1	20	3	B	4	20	1	MENS & WOMENS RESTROOM LTG.
PATIENT RM. 110, 112, 114 LTG.	1	20	5	A	6	20	1	PERSONAL CARE PHYSICAL THERAPY
PATIENT RM. 104, 106, 108 LTG.	1	20	7	B	8	20	1	HALLWAY #27 LTG.
HALLWAY #26 LTG.	1	20	9	A	10	20	1	PATIENT RM. 112, 114 RECPT.
PATIENT RM. 7,8,9,10 LTG.	1	20	11	B	12	20	1	PATIENT RM. 108, 110 RECPT.
PATIENT RM. 115, 117 RECPT.	1	20	13	A	14	20	1	PATIENT RM. 12, 102, 104 RECPT.
PATIENT RM. 113, 115 RECPT.	1	20	15	B	16	20	1	PATIENT RM. 12, 102, 104 RECPT.
PATIENT RM. 111, 113 RECPT.	1	20	17	A	18	20	1	LAVATORY RECPT.*
PATIENT RM. 109, 111 RECPT.	1	20	19	B	20	20	1	LAVATORY RECPT.*
PATIENT RM. 103, 105, 107 RECPT.	1	20	21	A	22	20	1	CRAFTS RM. RECPT.
PATIENT RM. 103, 105, 107	1	20	23	B	24	20	1	CRAFTS RM. RECPT.
LAVATORY RECPT.*	1	20	25	A	26	20	1	PATIENT RM. 101 RECPT.
LAVATORY RECPT.*	1	20	27	B	28	20	1	PATIENT RM. 101 RECPT.
PERSONAL CARE RM.*	1	20	29	A	30	20	1	ELECTRIC HEAT NORTH WING
PERSONAL CARE RM.*	1	20	31	B	32	150	2	PANEL LB
PERSONAL CARE RM.*	1	20	33	A	34	--	1	SPACE
PERSONAL CARE RM.*	1	20	35	B	36	--	1	SPACE
LAVATORY RECPT.*	1	20	37	A	38	--	1	SPACE
DINING RM. RECPT.	1	20	39	B	40	--	1	SPACE
ELECTRIC HEAT	1	20	41	A	42	--	1	SPACE

* PROVIDE GFI CIRCUIT BREAKER

PANEL LB SCHEDULE								
120/240 V, 1 Ø, 3 W, 225A, 150A MAIN CIRCUIT BREAKER, FLUSH MOUNTED								
LOAD	POLES	AMPS	CCT.	PHASE	CCT.	AMPS	POLES	LOAD
PATIENT RM. 209, 211, 215 LTG.	1	20	1	A	2	20	1	PATIENT RM. 212, 214, 216 LTG.
PATIENT RM. 203, 205, 207 LTG.	1	20	3	B	4	20	1	PATIENT RM. 206, 208, 210 LTG.
SOLARIUM & HALLWAY LTG.	1	20	5	A	6	20	1	PATIENT RM. 214, 216 RECPT.
PATIENT RM. 202, 204 LTG.	1	20	7	B	8	20	1	PATIENT RM. 210, 212 RECPT.
SPARE	1	20	9	A	10	20	1	PATIENT RM. 210, 212 RECEPT.
PATIENT RM. 211, 213 RECPT.	1	20	11	B	12	20	1	PATIENT RM. 208, 210 RECPT.
PATIENT RM. 207, 209 RECPT.	1	20	13	A	14	20	1	LAVATORY RECPT.*
PATIENT RM. 202, 204 RECPT.	1	20	15	B	16	20	1	LAVATORY RECPT.*
PATIENT RM. 203, 205 RECPT.	1	20	17	A	18	20	1	LAVATORY RECPT.*
DRUG RM. RECPT.	1	20	19	B	20	20	1	LAVATORY RECPT.*
SOLARIUM RECPT.	1	20	21	A	22	30	1	ELECTRIC HEAT WEST WING
NURSE STATION, DINING RM. RECPT.	1	20	23	B	24	20	1	CRAFTS RM. LTG.
NURSE STATION RECPT.	1	20	25	A	26	20	1	CRAFTS RM. LTG.
E.W.C.	1	20	27	B	28	20	1	CRAFTS RM. DOWNLIGHT
PATIENT RM. 213, 215	1	20	29	A	30	20	1	CRAFTS RM. DOWNLIGHT
PATIENT RM. 209, 211	1	20	31	B	32	20	1	SPARE

* PROVIDE GFI CIRCUIT BREAKERS

PANEL EA SCHEDULE								
120/240 V, 1 Ø, 3 W, 100A, M.L.O., SURFACE MOUNTED								
LOAD	POLES	AMPS	CCT.	PHASE	CCT.	AMPS	POLES	LOAD
NORTH CORRIDOR EM LTG.	1	20	1	A	2	20	1	NURSE STA. & JANITOR RM. EM LTG.
WEST CORRIDOR EM LTG.	1	20	3	B	4	20	1	DINING RM. LTG.
BATHTUB*	1	30	5	C	6	20	1	NURSE STATION LTG.
BATHTUB*	1	30	7	A	8	20	1	REFRIGERATOR OUTLET
CORRIDOR RECPT.	1	20	9	B	10	20	1	CORRIDOR RECPT.
CORRIDOR RECPT.	1	20	11	C	12	20	1	REFRIGERATOR
SPARE	1	20	13	A	14	20	1	REFRIGERATOR
SPARE	1	20	15	B	16	20	1	SPARE

* PROVIDE GFI CIRCUIT BREAKER

PANEL EM SCHEDULE								
120/240 V, 1 Ø, 3 W, 100A, M.L.O., FLUSH MOUNTED								
LOAD	POLES	AMPS	CCT.	PHASE	CCT.	AMPS	POLES	LOAD
CP-3	1	20	1	A	2	20	1	LOWER BOILER RM. RECPT.
CP-4	1	20	3	B	4	20	1	T.C. COMPRESSOR
CP-5	1	20	5	A	6	20	1	BF-1 CONTROL PANEL
WATER HEATER CONTROL PANEL	1	20	7	B	8	20	1	LOW WATER CUT-OFFS
MEZZANINE RECPT.	1	20	9	A	10	20	1	OUTDOOR RECPT.
MEZZANINE RECPT.	1	20	11	B	12	20	1	OUTDOOR RECPT.
PARKING LOT LGT.	1	20	13	A	14	20	1	OUTDOOR RECPT.
MECH. RM. LIGHTS	1	20	15	B	16	20	1	SPARE
SPARE	2	20	17	AB	18	20	2	COMPRESSOR

PROVIDE 120 V. 1Ø CONNECTION TO NURSE CALL, TELEPHONE, FIRE ALARM, PAGING SYSTEM & SEC. DOOR MONITOR SYSTEM FROM NEAREST EMERGENCY PANEL. (EM, EA, EXIST. EMERGENCY PANEL).

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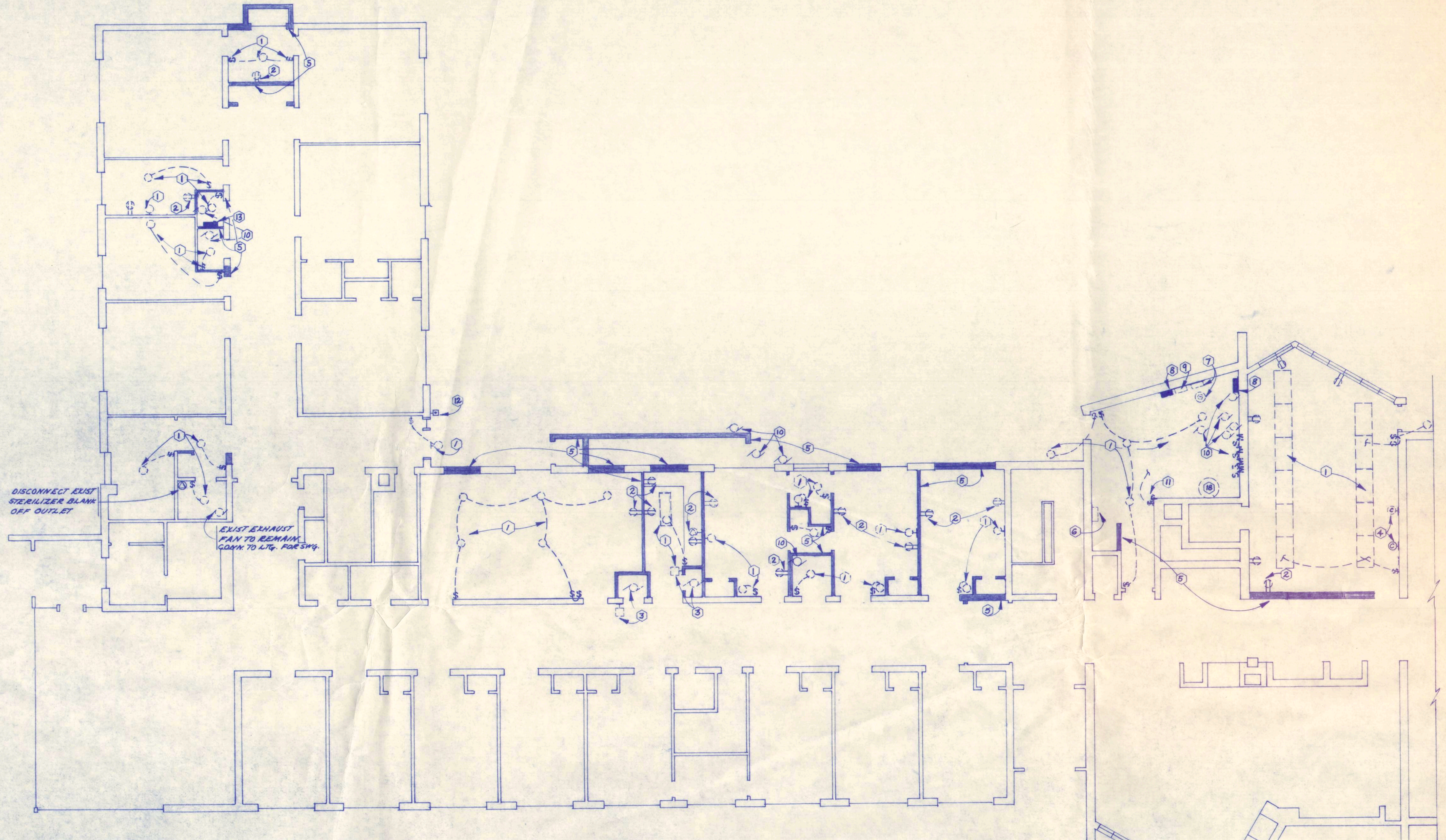
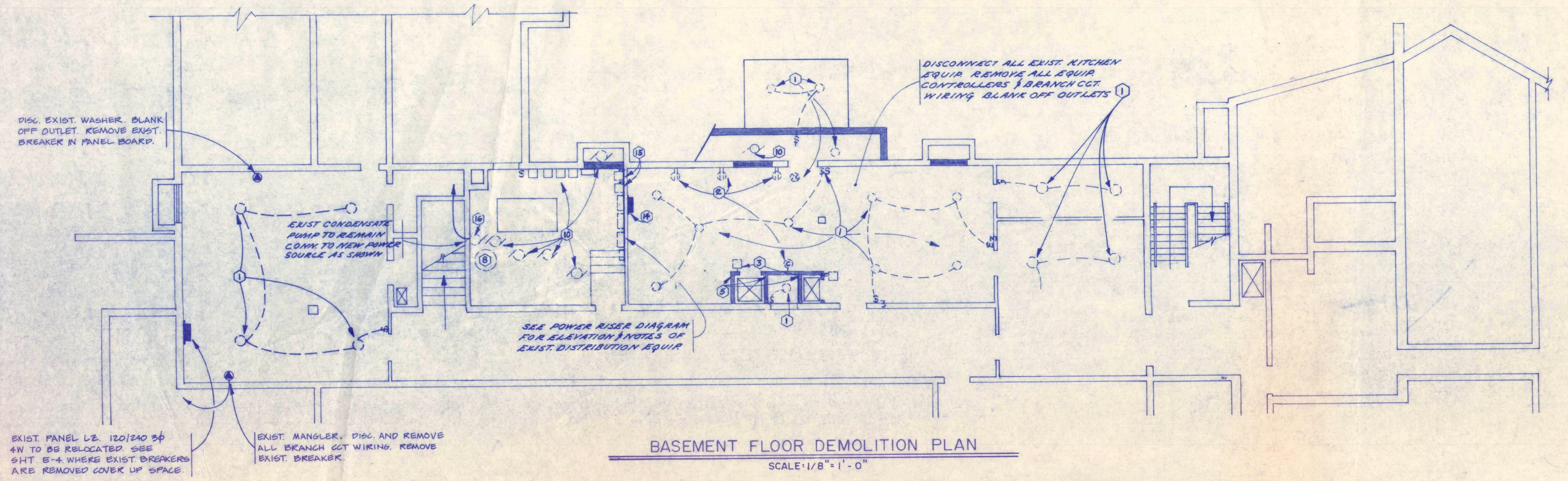


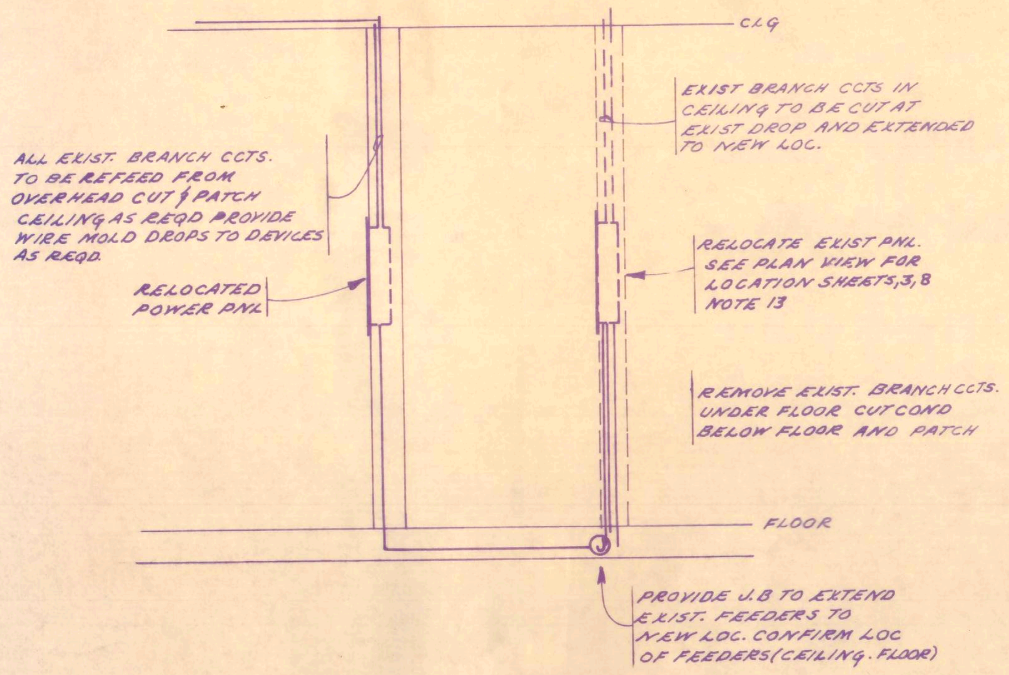
FIRST FLOOR DEMOLITION PLAN

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



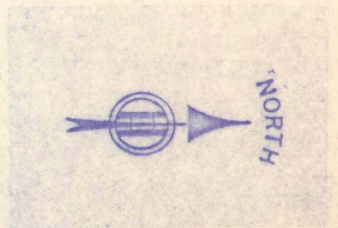
BASEMENT FLOOR DEMOLITION PLAN

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



NOTE 13 DETAIL

NO SCALE



DEMOLITION NOTES:

EXISTING DEVICES AND LIGHTING CIRCUITS TO REMAIN IN EXISTING BUILDING SHALL BE LEFT IN OPERABLE CONDITION AFTER DEMOLITION AND REMODEL. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO RELOCATE ALL CONDUIT AND BRANCH CIRCUIT WIRING TO INSURE PROPER OPERATION OF ALL EQUIPMENT NOT TO BE REMOVED THROUGHOUT THE EXISTING BUILDING. NURSE CALL AND FIRE ALARM AND SOUND SYSTEM DEMOLITION - SEE SYSTEM PLANS. SHADED WALLS ARE TO BE REMOVED.

1. REMOVE EXISTING LIGHT FIXTURES AND ASSOCIATED CONDUIT, WIRING, AND SWITCHES. BLANK-OFF OUTLETS NOT TO BE RE-USED.
2. REMOVE EXISTING RECEPTACLES AND ASSOCIATED WIRING IN WALLS TO BE DEMOLISHED, EXTEND WIRING TO RECEPTACLES THAT ARE TO REMAIN ON CIRCUIT.
3. DISCONNECT ELEVATOR MOTOR, REMOVE ALL WIRING AND CONTROL DEVICES BACK TO PANELBOARD. BLANK-OFF OUTLET FOR PUSHBUTTON CONTROL.
4. RELOCATE EXISTING CLOCK AS SHOWN.
5. IN EXISTING WALLS TO BE DEMOLISHED, REMOVE OR RELOCATE ALL CONDUIT AND WIRING.
6. RELOCATE EXISTING TELEPHONE JUNCTION BOX AND EXTEND WIRING TO NEW LOCATION. SEE SYSTEM'S PLAN FOR NEW LOCATION.
7. REMOVE EXISTING EMERGENCY GENERATOR AND TRANSFER SWITCH. REMOVE ALL FEEDERS TO PANEL E. EXISTING PANEL E TO REMAIN FOR NEW EMERGENCY POWER CONNECTION.
8. EXISTING PANEL E AND A TO REMAIN.
9. EXISTING FIRE ALARM PANEL TO REMAIN AS JUNCTION BOX.
10. EXISTING MOTORS TO BE DISCONNECTED, REMOVE ASSOCIATED MOTOR CONTROLLERS, CONDUIT AND WIRING BACK TO PANEL.
11. RELOCATE EXISTING SWITCH WITH PILOT INTO MECHANICAL ROOM. SEE POWER PLAN FOR NEW LOCATION.
12. REMOVE EXISTING DOOR BELL, BLANK-OFF OUTLET. REMOVE ASSOCIATED WIRING.
13. EXISTING POWER PANEL TO BE RELOCATED. EXTEND EXISTING BRANCH CIRCUIT WIRING AND CONDUIT TO NEW LOCATION - SEE POWER PLAN FOR NEW LOCATION. SEE DETAIL THIS SHEET.
14. REMOVE BRANCH CIRCUIT PANELBOARD AND ALL BRANCH CIRCUITS. REMOVE FEEDERS BACK TO MAIN PANEL, PATCH OPENING IN WALL.
15. EXISTING DISCONNECT SWITCHES FOR AIR HANDLING UNITS TO REMAIN.
16. EXISTING CONDENSATE PUMP AND CONTROL TO REMAIN. PROVIDE NEW CONNECTION TO EMERGENCY CIRCUIT AS SHOWN.
17. EXISTING SERVICE AND DISTRIBUTION EQUIPMENT, REMOVE EXISTING METER SOCKET AND CT CABINET AND OVERHEAD SERVICE MAST AND CONDUCTORS. MAIN SWITCH TO REMAIN FOR NEW POWER CONNECTION.
18. DISCONNECT EXISTING EWH, ALL BRANCH CIRCUIT WIRING AND CONDUIT TO EWH.

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