

**MOTOR CONTROL CENTER SCHEDULE**

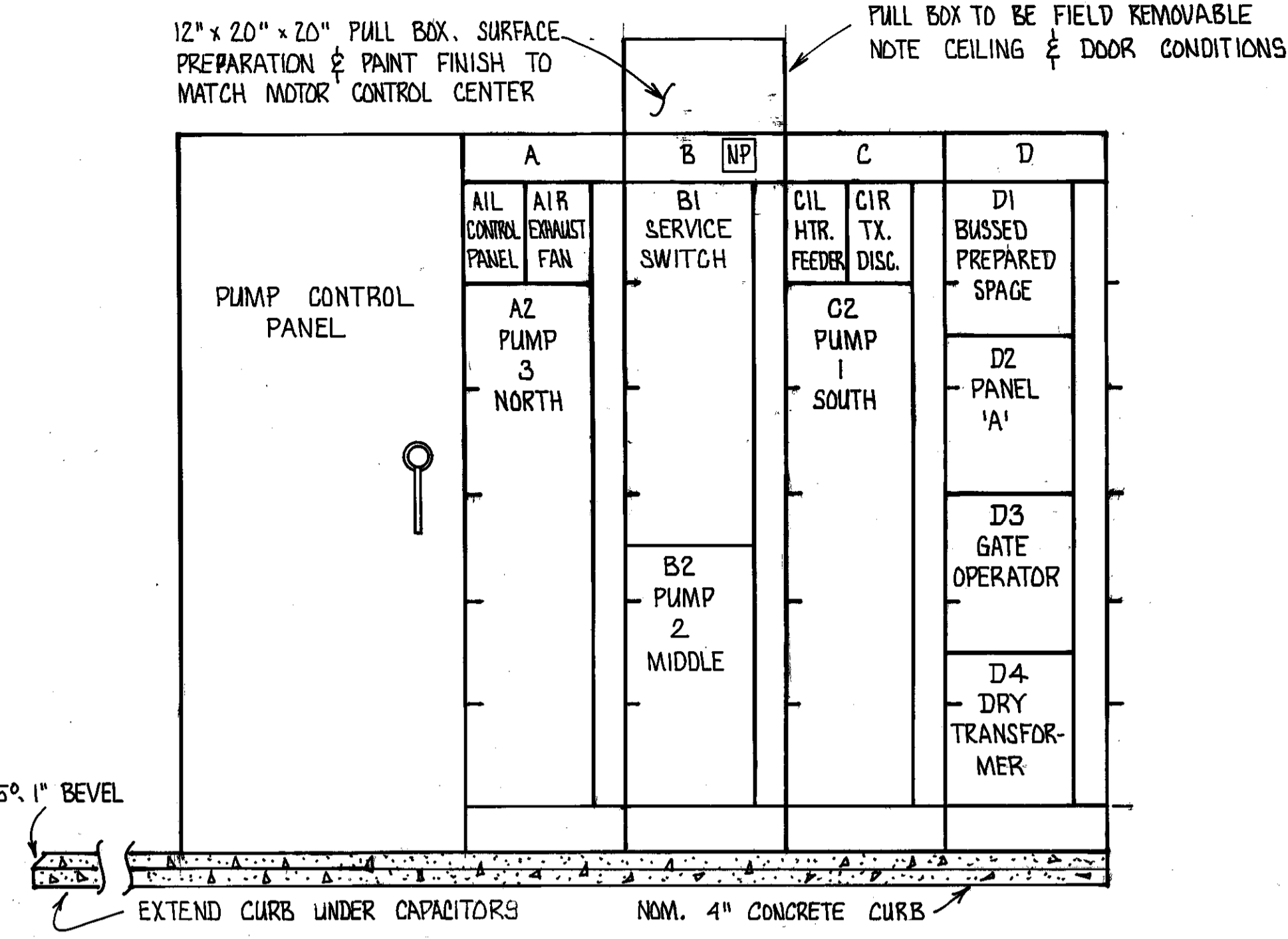
MCC# 1 NAMEPLATE ENGRAVING: MCC NO. 1		NEMA CLASS 1 WIRING TYPE B 480 V, 500 A, 3Ø, 3 WIRE														
SOURCE: 480 VAC, 3 Ø, 3 WIRE, 60 HZ.		MAIN BUS 600 A, NEUTRAL N/A, GROUND BUS 250 A, BRACED 42,000 A, SYM.														
INCOMING CABLE 2 CABLES PER Ø OF CUL. SIZE 250MM CENTERING AT TOP																
MCC UNIT NUMBER	EQUIPMENT NUMBER	STARTER UNIT NAMEPLATE ENGRAVING	MOTOR HORSEPOWER	MOTOR VOLTAGE AND PHASE	FUSED SWITCH SIZE	TIME DELAY FUSE SIZE, AMPS.	FEEDER		STARTER				PILOT DEVICES		REMARKS	
							CONDUCTOR	CONDUIT, IN.	TYPE	NEMA SIZE	NORMALLY OPEN	AUXILIARY	NORMALLY CLOSED	CONTACTS		CPT, 3 FUSES, 120 VAC SEC'D.
A1L	→	CONTROL PWR. PUMP PANEL		3P-15A	CB	2-#12										USE 2 POLES
A1R	→	EXHAUST FAN, LOWER LEVEL		3P-15A	CB	3-#12	3/4"									
A2		PUMP 3 (NORTH)	100	460/3	400	250	3-#3/0	WW	FVNR	5	2	0	NO	2		⚠ ⚠
B1	→	MAIN SERVICE SWITCH		460/3	600	500	2-250MCM/Ø	2-3"								
B2		PUMP 2 (MIDDLE)	35	460/3	100	80	3-#6	WW	FVNR	3	2	0	NO	2		⚠ ⚠
C1L		HEATER FEEDER		3P-30A	CB	3-#10	3/4"									
C1R		TRANSFORMER DISCONNECT		3P-35A	CB	BY MCC MFG.	WW									USE OUTER 2 POLES
C2		PUMP 1 (SOUTH)	100	460/3	400	250	3-#3/0	WW	FVNR	5	2	0	NO	2		⚠ ⚠
D1																BUSSED PREPARED SP.
D2	→	PANEL 'A' 120/240 VAC	1Ø													SEE SCHL. BELOW
D3		GATE OPERATOR	0.66	460/3	30	4	10-#12	1"	FVRS	1	2	2	YES			⚠ ELE. & MECH. INTERLOCKS
D4		7 1/2 KVA TRANSFORMER														BY MCC MFG. WW

⚠ SEE CONTROL DWGS. ⚠ PROVIDE ADDITIONAL NAMEPLATE ADVISING OF FUSE SIZE AND CHANGING INSTRUCTIONS.  
 ⚠ CONFIRM MOTOR N/P CURRENT, S.F. & POWER FACTOR CORRECTION CAPACITOR "AR" FACTOR BEFORE ORDERING MCC, FUSES, HEATERS, ETC. ⚠ WIRE GATE OPERATOR CONTROL DEVICES PER MFG.'S INSTRUCTIONS

PANEL "A" 120/240 VOLTS, 1 PHASE, 3 WIRE, 100 AMP. BUSSING IN M.C.C. MOUNTING

WIRE SIZE	LOAD DESCRIPTION	CB #P/AMP.	CIRCUIT NO.	CIRCUIT NO.	CB #P/AMP.	LOAD DESCRIPTION	WIRE SIZE
12	LTS.: STEPS, LOWER LEVEL	15	1	2	15	LTS.: NIGHT AREA	12
12	LTS.: ELE. EQUIP. RM.	15	3	4	15	SPARE	
12	RECT.: ELE. EQUIP. RM. SPACE	15 6FI	5	6	15	EXHAUST FAN: ELE. RM.	12
"	"		7	8	15	SPARE	
"	"		9	10	15	SPARE	
"	"		11	12	15	SPARE	
"	"		13	14	15	SPACE	
"	"		15	16	"	"	
"	"		17	18	"	"	
"	"		19	20	"	"	
"	"		21	22	"	"	
"	"		23	24	"	"	
"	"		25	26	"	"	
"	"		27	28	"	"	
"	"		29	30	"	"	
"	"		31	32	"	"	
"	"		33	34	"	"	
"	"		35	36	"	"	
"	"		37	38	"	"	
"	"		39	40	"	"	
"	"		41	42	"	"	

REMARKS:  
 ⚠ PROVIDE 2 TRANSFORMER SECONDARY FUSES. NEC MAXIMUM-TIME DELAY  
 ⚠ PROVIDE FUSE & CIRCUIT BREAKER TIME-CURRENT CURVES WITH APPROVAL DWGS.

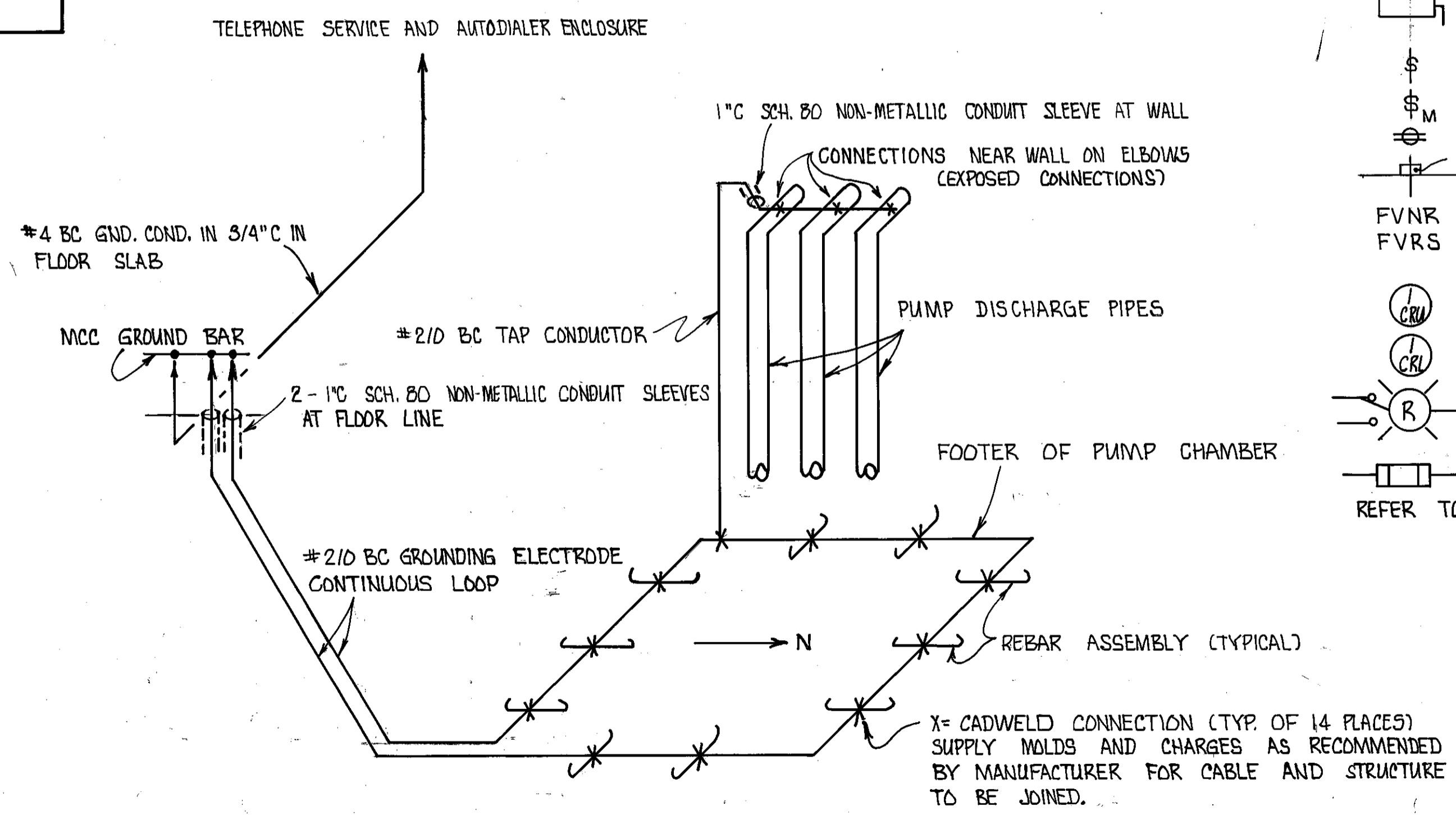


**PUMP PANEL & MCC ELEVATION DETAIL**  
SCALE 3/4" = 1'-0"

12" x 20" x 20" PULL BOX, SURFACE PREPARATION & PAINT FINISH TO MATCH MOTOR CONTROL CENTER  
 PULL BOX TO BE FIELD REMOVABLE NOTE CEILING & DOOR CONDITIONS  
 45° 1" BEVEL  
 EXTEND CURB UNDER CAPACITORS  
 NOM. 4" CONCRETE CURB

- CONDUIT BENDING UP
- ⊖ CONDUIT BENDING DOWN
- ⊙ SINGLE PHASE MOTOR FINAL POWER AND CONTROL WIRING CONNECTIONS
- ⊚ THREE PHASE MOTOR FINAL POWER AND CONTROL WIRING CONNECTIONS
- STRIP FLUORESCENT FIXTURE, CEILING MOUNTED
- WALL MOUNTED FIXTURE
- CEILING MOUNTED FIXTURE
- HORSE POWER RATED DISCONNECT SWITCH (MAY BE FUSED BY NOTE) NEMA HD, NEMA 1 ENCL. INDOORS, NEMA 3R OUTDOORS UNLESS NOTED.
- TOGGLE SWITCH - NUMBERS INDICATE 3-WAY, 4-WAY ETC., MOUNT 54"
- MANUAL MOTOR STARTER, MOUNT 54"
- RECEPTACLE, DUPLEX, GROUNDING, MOUNT 24" WP=WEATHER PROOF INSULATED, GROUNDING BUSHING WITH WIRE BONDING JUMPER
- FVNR FULL VOLTAGE NON-REVERSING MOTOR STARTER
- FVRS FULL VOLTAGE REVERSING MOTOR STARTER - MECHANICAL AND ELECTRICALLY INTERLOCKED
- ⊙ LATCHING RELAY ICR, UNLATCH COIL (RESET)
- ⊙ LATCHING RELAY ICR, LATCH COIL (SET)
- ⊙ PUSH TO TEST PILOT LIGHT, LENS COLOR CODE: R=RED, G=GREEN, A=AMBER.
- FUSE & FUSE BLOCK (RATING AS NOTED)
- REFER TO JIC STD. EMP-1-1967 FOR OTHER SYMBOLS & CONVENTIONS

**ELECTRICAL LEGEND**  
NO SCALE



**GROUNDING ELECTRODE SYSTEM**  
NEC ARTICLE 250-81 TYPE (C)

ELECTRICAL PLANS E-2

<b>FRANKLIN CONSULTANTS INC.</b> Consulting Engineers		OHIO
COLUMBUS,		
<b>PUMP STATION</b> ELECTRICAL DETAILS		
LAKE COUNTY		S.R. 306
DESIGNED R.B.H.	DRAWN R.B.H.	TRACED W.P.
CHECKED	REVIEWED	DATE
		REVISED