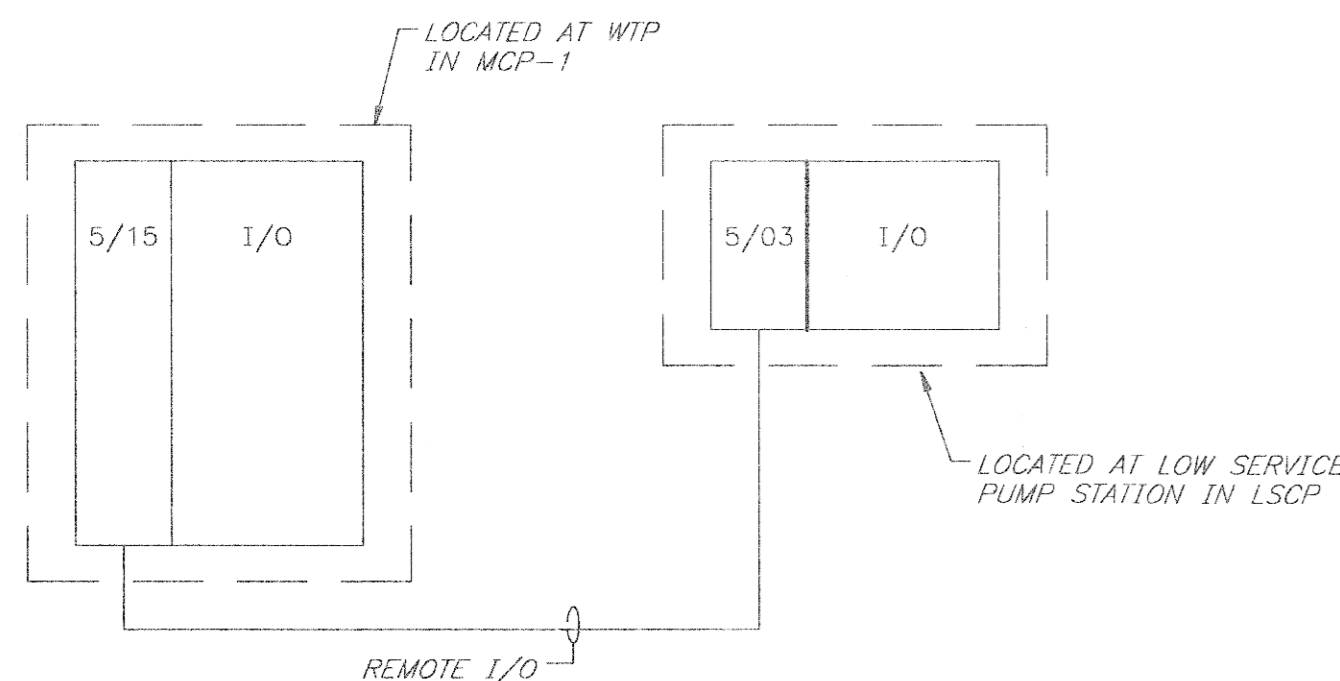


INTERCONNECT DETAIL

FIELD VERIFY LOCATION OF MCP AND MCP-1
COIL UP WIRE AT EACH END FOR FUTURE USE

NOTES:

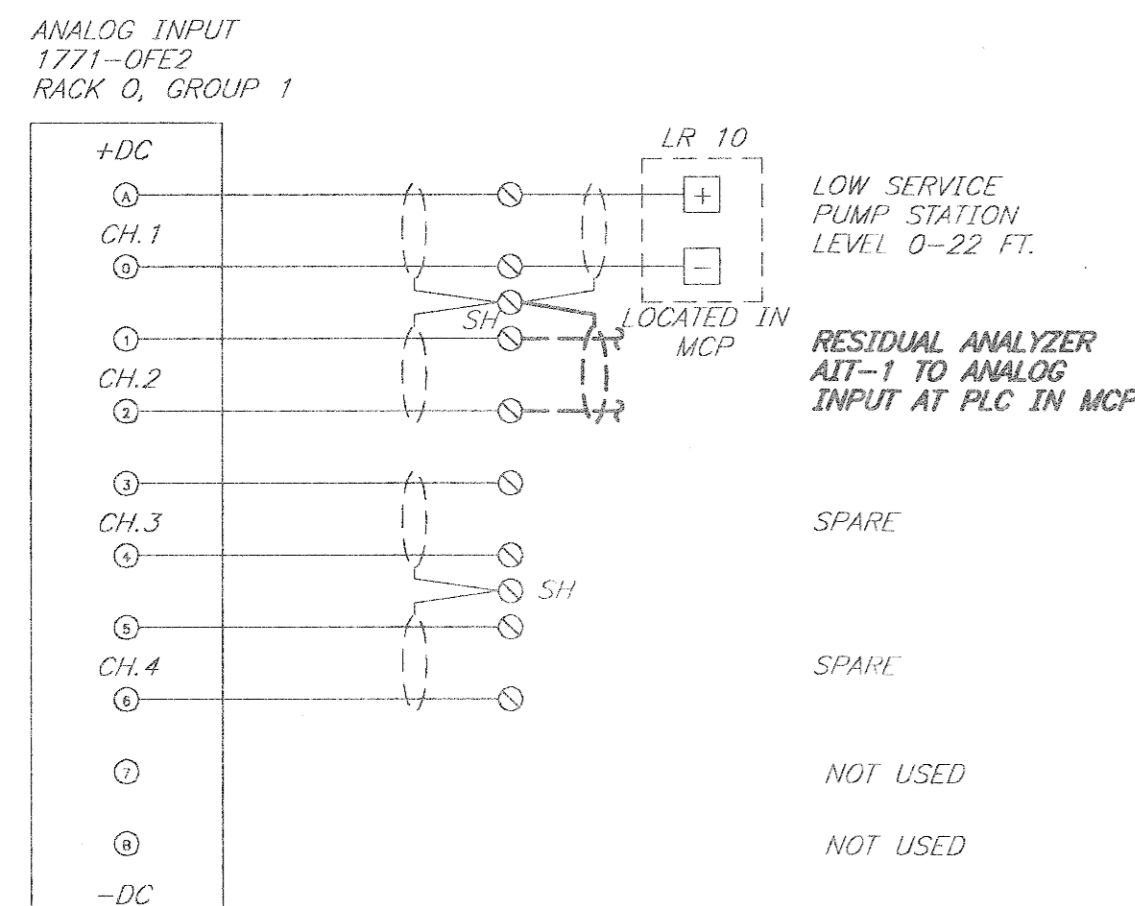
- AT MCP IN LABORATORY THERE EXISTS LOCATED IN THE REAR OF THE OF MCP A ALLEN-BRADLEY PLC 5/15 WITH A 16-SLOT I/O RACK. PROVIDE AND INSTALL ONE (1) 8 POINT ANALOG INPUT CARD FOR ANALOG SIGNALS SHOWN ON CONTRACT DRAWINGS. WIRE ALL 8 POINTS TO TERMINAL BLOCKS. PROVIDE ASSOCIATED WIRING, TERMINAL BLOCKS, ETC. FIELD VERIFY WORK. PROVIDE ALSO ONE (1) 16 POINT INPUT CARD 1771-IAD AND INSTALL IN RACK. WIRE ALL POINTS TO TERMINAL STRIP FOR FUTURE USE. PROVIDE TERMINAL BLOCKS/WIRE AS REQUIRED. TAG ALL WIRING TO MATCH EXISTING WIRING SCHEME.
- AT MCP PROVIDE A 15 WINDOW LAMPBOX SIMILAR TO EXISTING LAMPBOX. MOUNT ON FACE OF MCP AS SHOWN. PROVIDE WIRING FROM EXISTING OUTPUT CARD SPARE POINTS TO LAMPBOX.
- UPDATE CONTROL PANEL SHOP DRAWINGS FROM 1992 CONTRACT, SUBMIT FOR AS-BUILTS.
- OBTAIN LOOP POWER FOR LIT 4 FROM WITHIN EXISTING MCP.
- REFERENCE COMMERCE CONTROLS DRAWINGS 1-21 DATED 10-92 FOR CITY OF TRAVERSE CITY WATER TREATMENT PLANT IMPROVEMENTS.



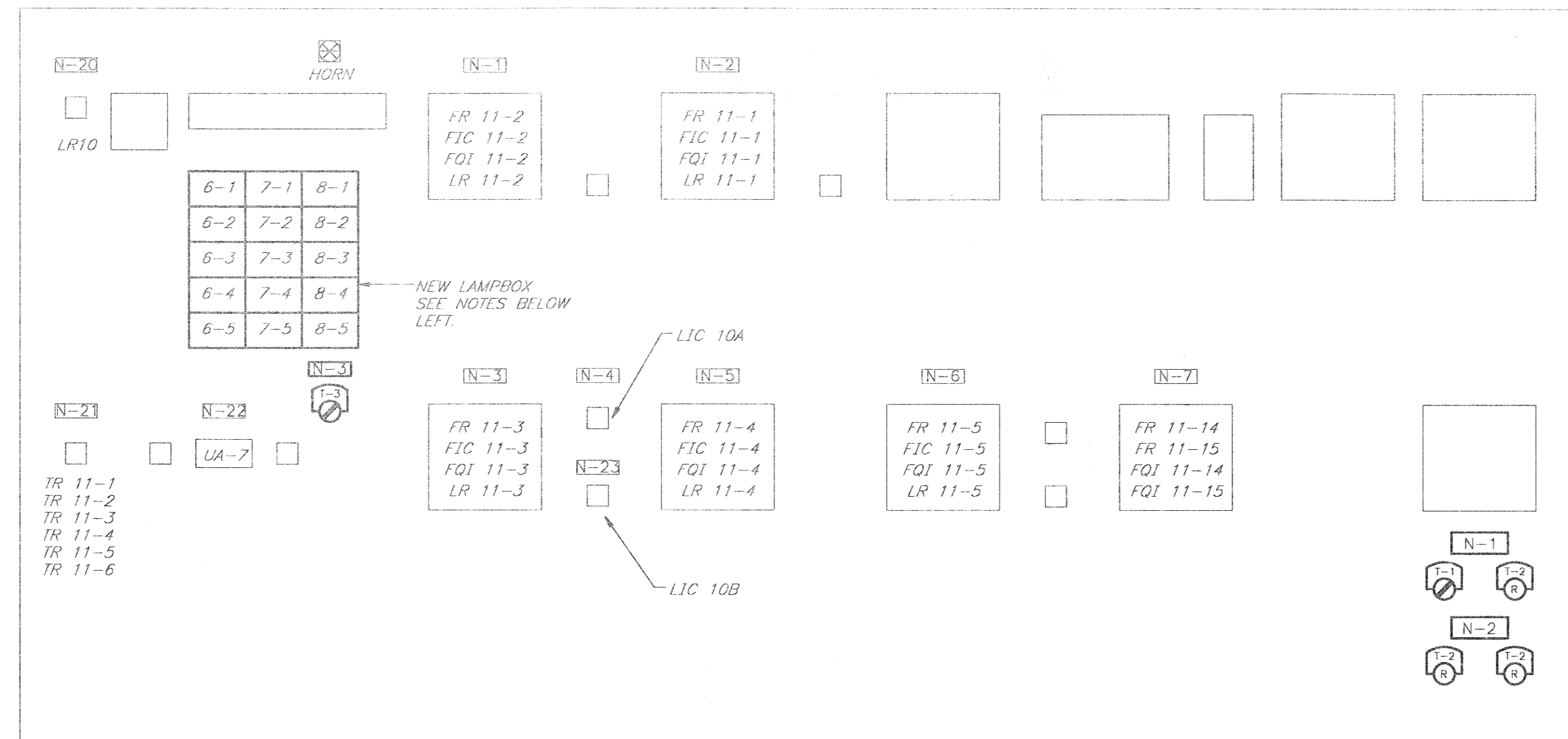
EXISTING COMMUNICATION ONE-LINE

NOTES:

- PROVIDE PROGRAMMING FOR I/O SHOWN ON P&ID'S FOR ALARMS, RUN SIGNALS, ETC. ASSOCIATED WITH LSCP AND MCP-1. PROGRAMMING FOR I/O ASSOCIATED WITH MCP IS BY OWNER.
- CONTRACTOR SHALL PROVIDE PROGRAMMING HARDWARE TO PROGRAM LOGIC SHOWN WITHIN PLC 5/15 AT MCP-1 AND SLC 5/03 AT LSCP. OBTAIN OWNER'S LICENSED SOFTWARE FOR USE IN PROGRAMMING. PROGRAMMING ADDITIONS MAY BE PERFORMED AT WTP SITE.
- SUBMIT DOCUMENTED PRINTOUTS OF PLC PROGRAMS FOR AS-BUILTS.

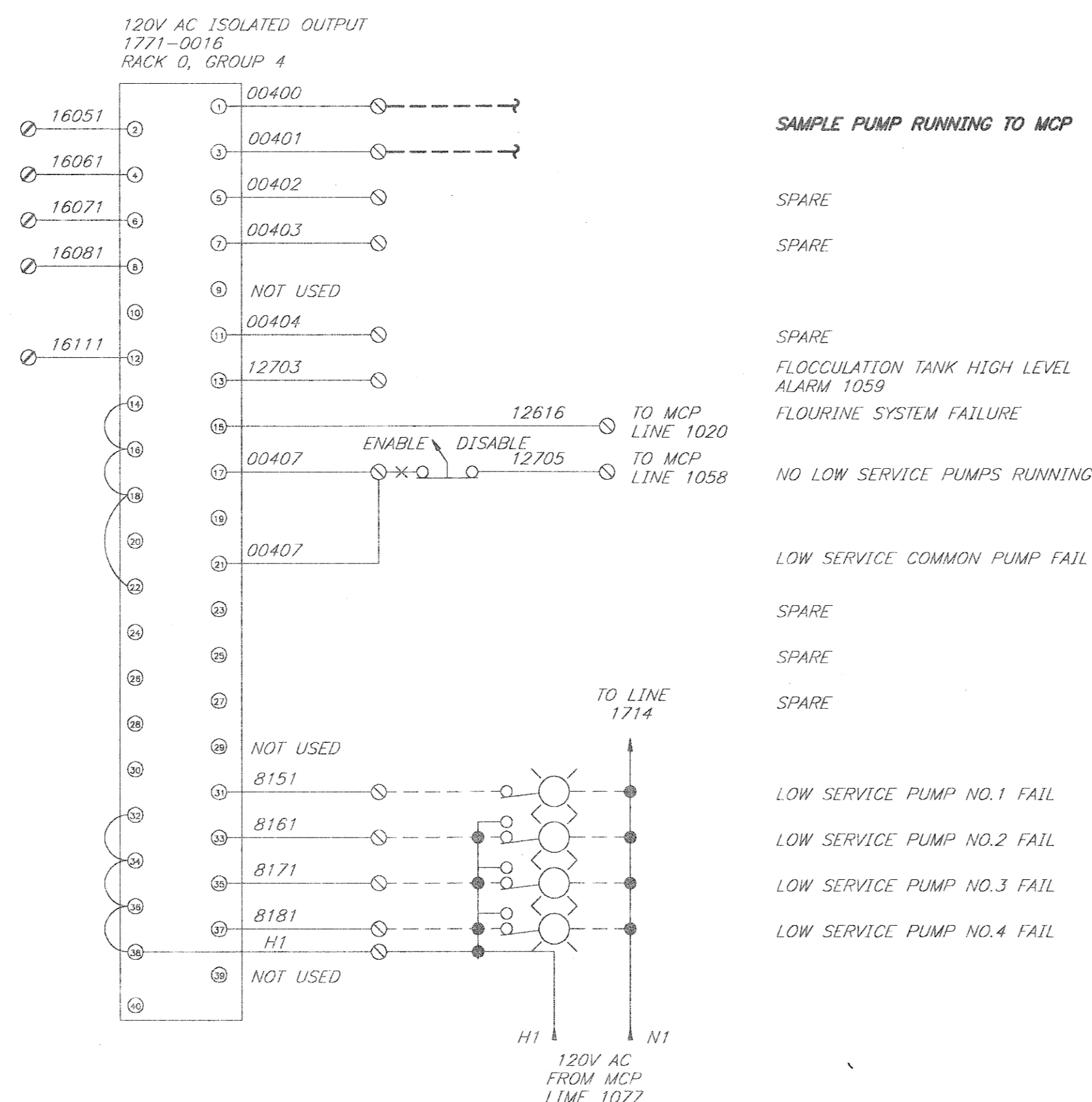


EXISTING MCP-1 PROPOSED ADDITIONS



EXISTING MCP LAYOUT-PROPOSED WORK

NO SCALE



EXISTING MCP-1 PROPOSED ADDITIONS

NAMEPLATE LEGEND

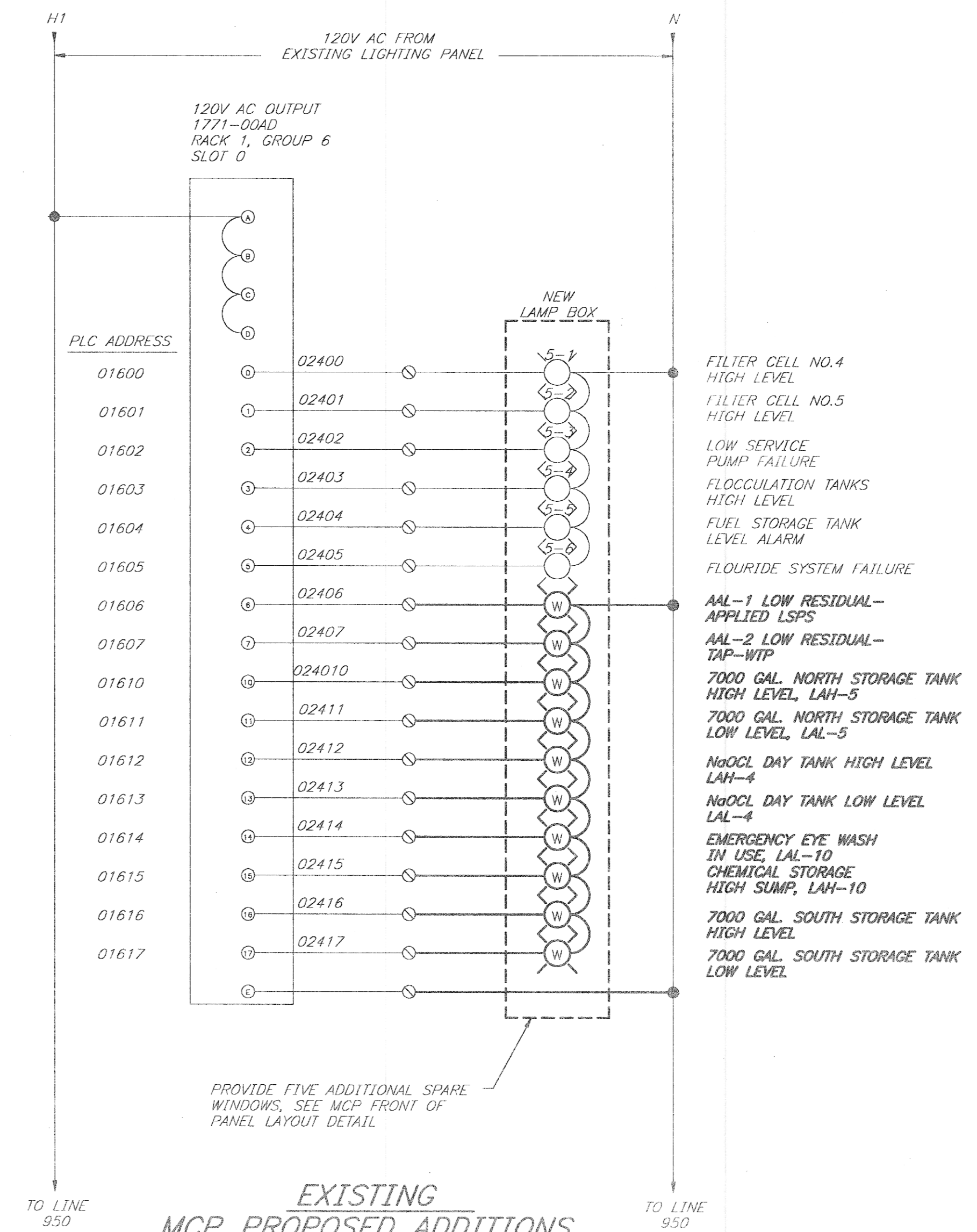
QTY.	NO.	LETTER HEIGHT	NOMENCLATURE
	N-1		SAMPLE PUMP CONTROL
	N-2		NaOCL TRANSFER PUMP STATUS
	N-3		NaOCL STORAGE TANK ALARM SELECTION

ANNUNCIATOR LEGEND

WINDOW	NOMENCLATURE	CHERRY
6-1	LOW RESIDUAL APPLIED LSPS	
6-2	LOW RESIDUAL TOP WTP	
6-3	7000 GALLON STORAGE TANKS HIGH LEVEL	
6-4	7000 GALLON STORAGE TANK LOW LEVEL	
6-5	NaOCL DAY TANK HIGH LEVEL	
7-1	NaOCL DAY TANK LOW LEVEL	
7-2	EMERGENCY EYEWASH IN USE	
7-3	CHEMICAL STORAGE ROOM HIGH SUMP	

TAG LEGEND

QTY.	NO.	NOMENCLATURE
	T-1	ON-OFF
	T-2	RUNNING
	T-3	NORTH-SOUTH-NORTH/SOUTH



EXISTING MCP PROPOSED ADDITIONS

Ann Arbor, Michigan Detroit, Michigan Escanaba, Michigan Grand Rapids, Michigan Lansing, Michigan		M-N-W-E-F-P-R-T-E-R & S-E-E-L-E-R, I-N-C	
DESIGNED G. JONES	CHECKED T. RITTER	SCALE: NO SCALE	
CITY OF TRAVERSE CITY, MICHIGAN WATER TREATMENT PLANT IMPROVEMENTS SODIUM HYPOCHLORITE SYSTEM ADDITION		PART 02/MS/0225/01430/E/PLC	
ELECTRICAL/INSTRUMENTATION ONE-LINES, WIRING DIAGRAMS, CONTROL PANEL DETAILS		SHEET EI-5 OF 6	