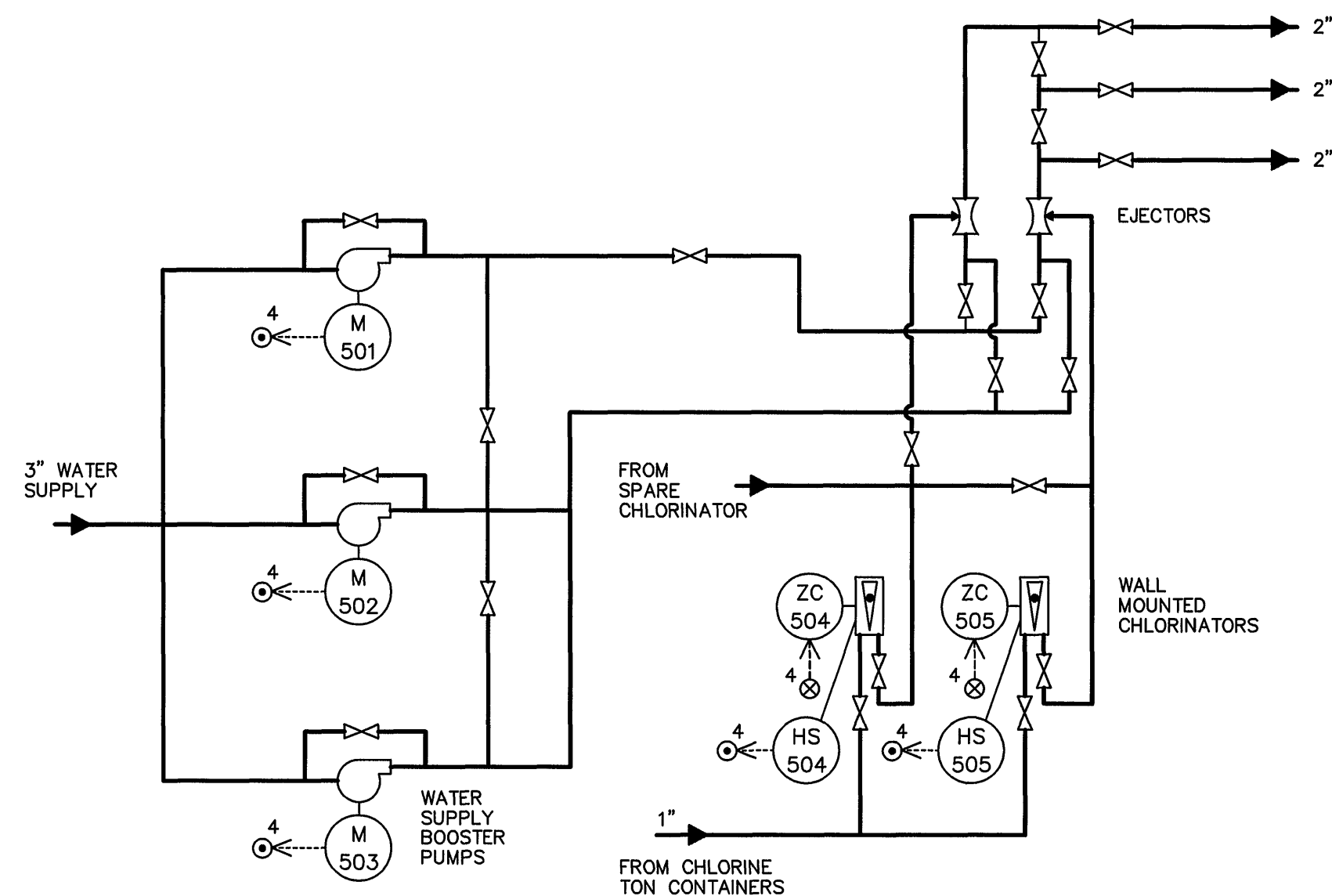
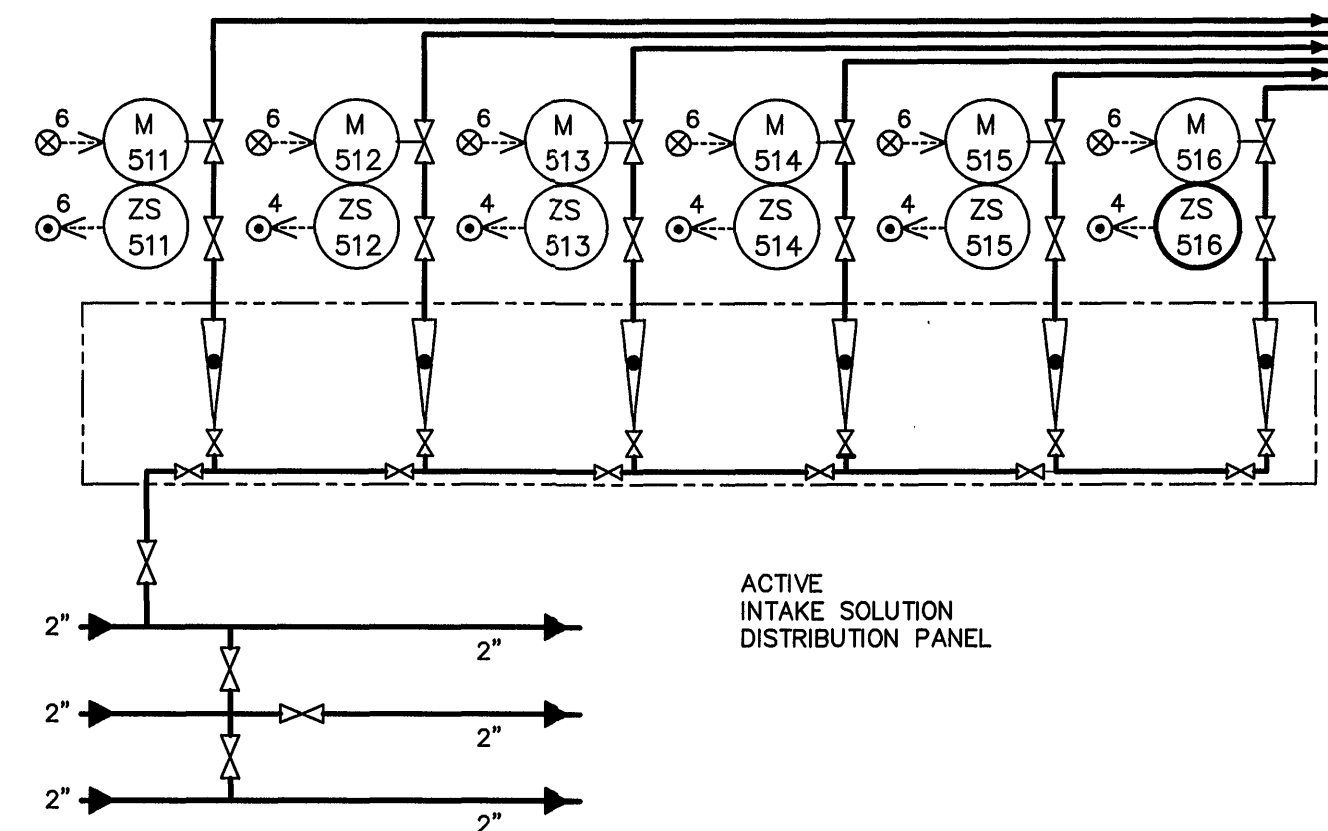
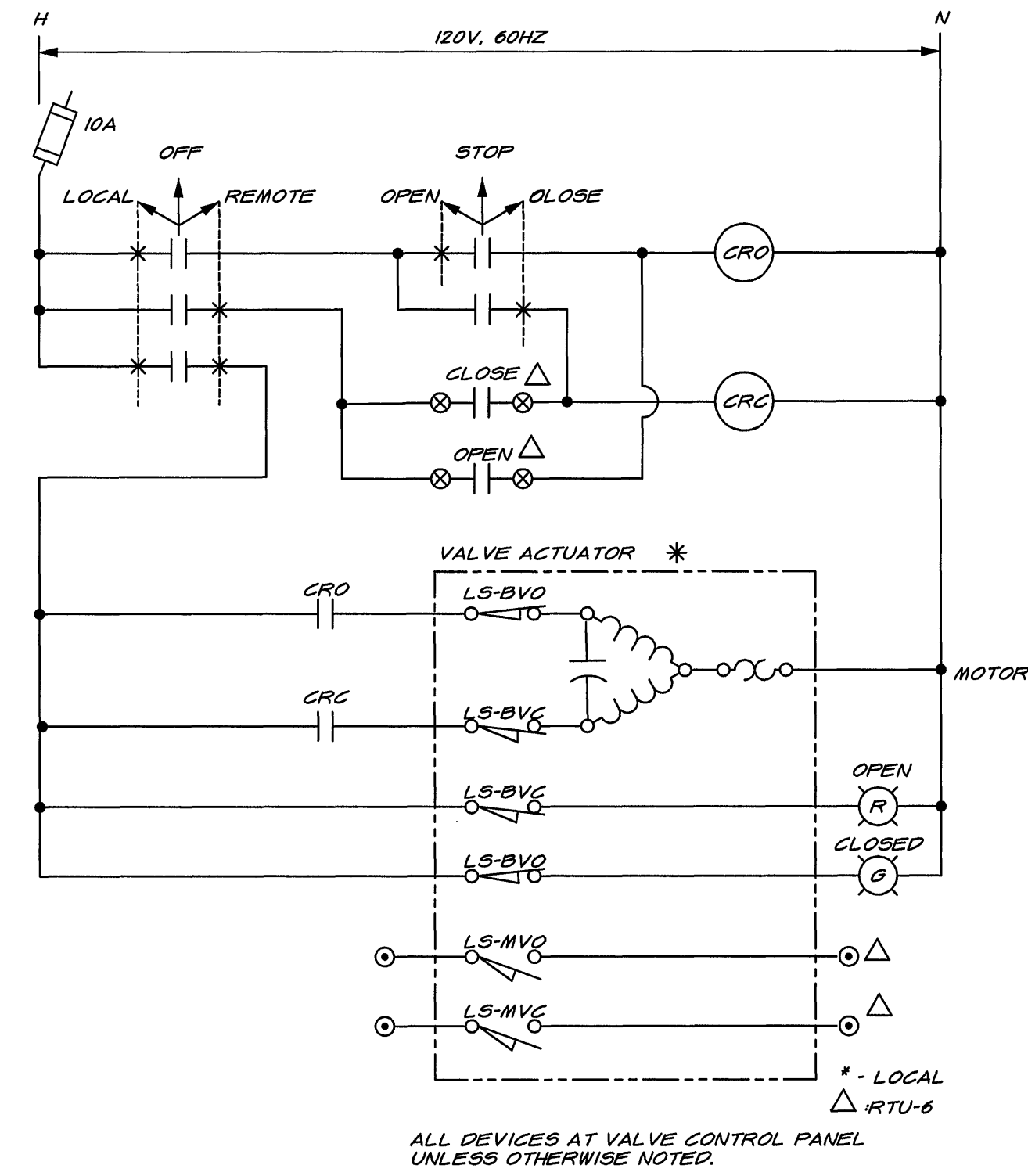




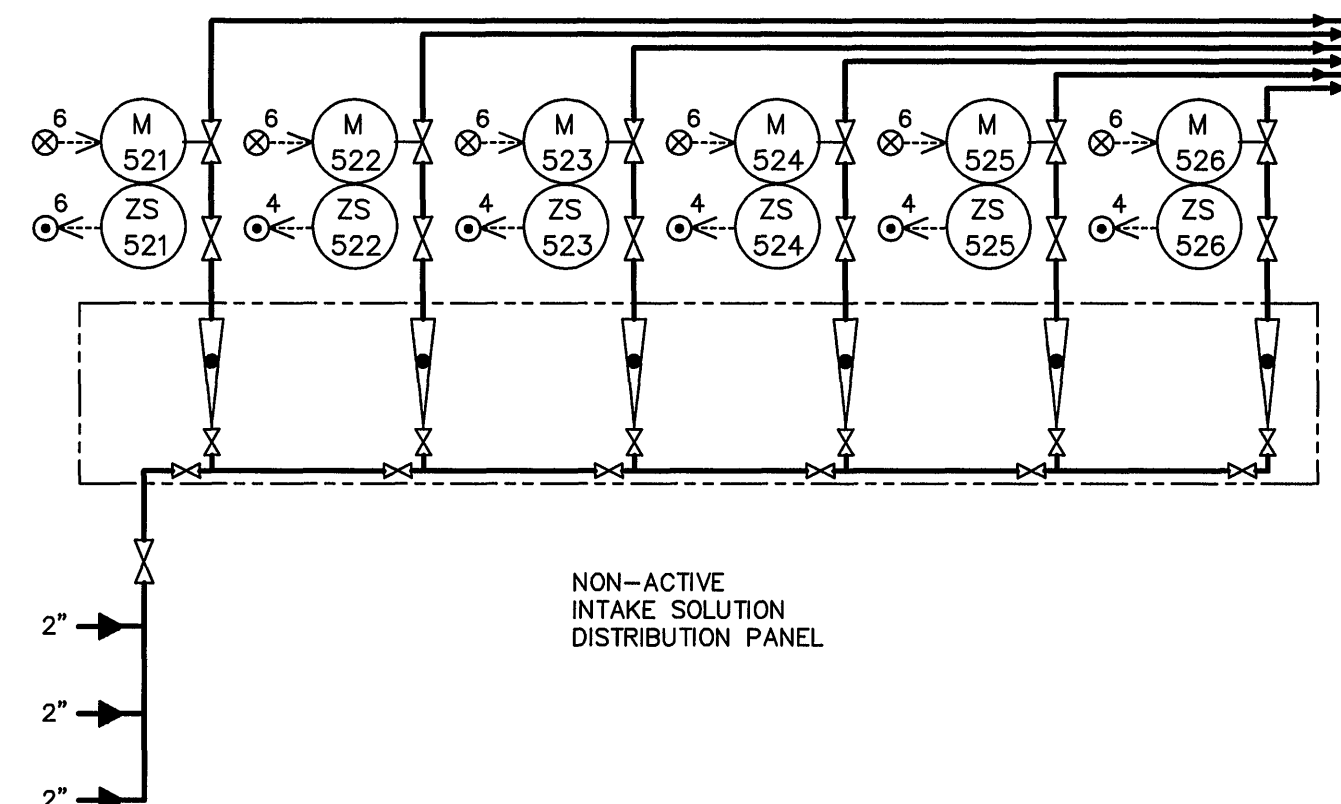
CHLORINATION EQUIPMENT AT CHEM. BLDG 1  
PRECHLORINATION SYSTEM



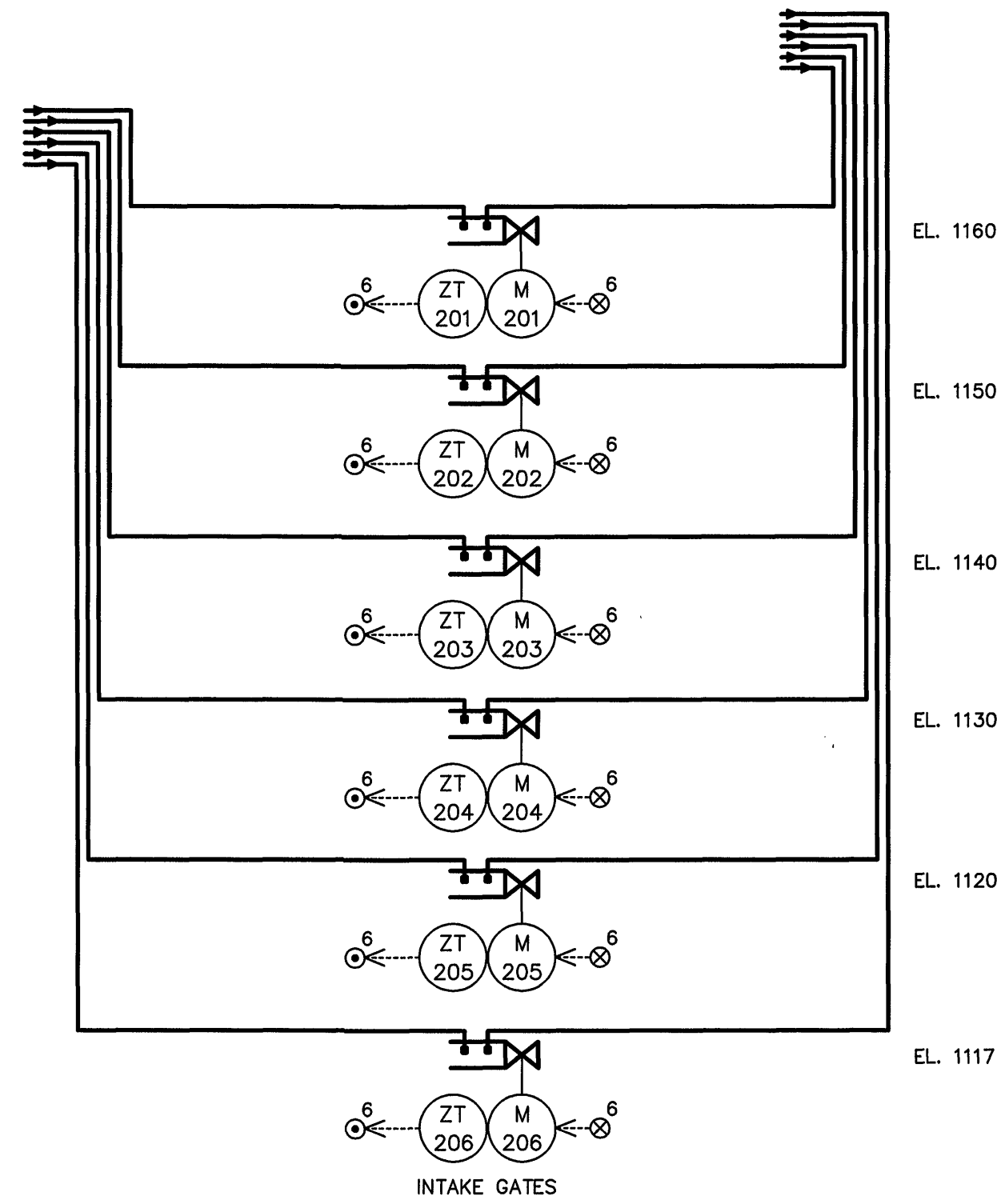
SOLUTION DISTR. PANEL FOR  
ACTIVE INTAKES AT INTAKE STRUCTURE  
PRECHLORINATION SYSTEM



TYPICAL ELEMENTARY DIAGRAM FOR  
BALL VALVE ACTUATOR



SOLUTION DISTR. PANEL FOR  
NON-ACTIVE INTAKES AT INTAKE STRUCTURE  
PRECHLORINATION SYSTEM



INTAKE GATES & SOLUTION DIFFUSERS  
AT INTAKE STRUCTURE  
PRECHLORINATION SYSTEM

**DRAWING OF RECORD**  
DATE: SEP 30 1997

|                                                                         |           |                                                                                       |      |         |                                               |     |      |                                                                       |                                                                        |
|-------------------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------|------|---------|-----------------------------------------------|-----|------|-----------------------------------------------------------------------|------------------------------------------------------------------------|
| MATTERN & CRAIG<br>CONSULTING ENGINEERS • SURVEYORS<br>ROANOKE VIRGINIA | DESIGNED: |  | REV. | DATE    | DESCRIPTION                                   | BY  | APP. | CARVINS COVE FILTER PLANT IMPROVEMENTS – PHASE I<br>ROANOKE, VIRGINIA | DATE<br>MARCH 1992                                                     |
|                                                                         | DRAWN:    |                                                                                       | NEW  | 1-15-93 | ISSUED FOR ADDITION OF PRECHLORINATION SYSTEM | KGG |      |                                                                       | COMM. NO.<br>9130                                                      |
| ALVORD, BURDICK & HOWSON<br>ENGINEERS CHICAGO                           | CHECKED:  |                                                                                       |      |         |                                               |     |      |                                                                       | INSTRUMENTATION DIAGRAMS & CONTROL SCHEMATIC<br>PRECHLORINATION SYSTEM |