

ISSUED FOR BID  
STAGE OF PLANS

ADD - FUEL  
27514-000-0002/0

DATE

DESCRIPTION

REV.

**Burns & McDonnell**  
SINCE 1939

**Addison!**

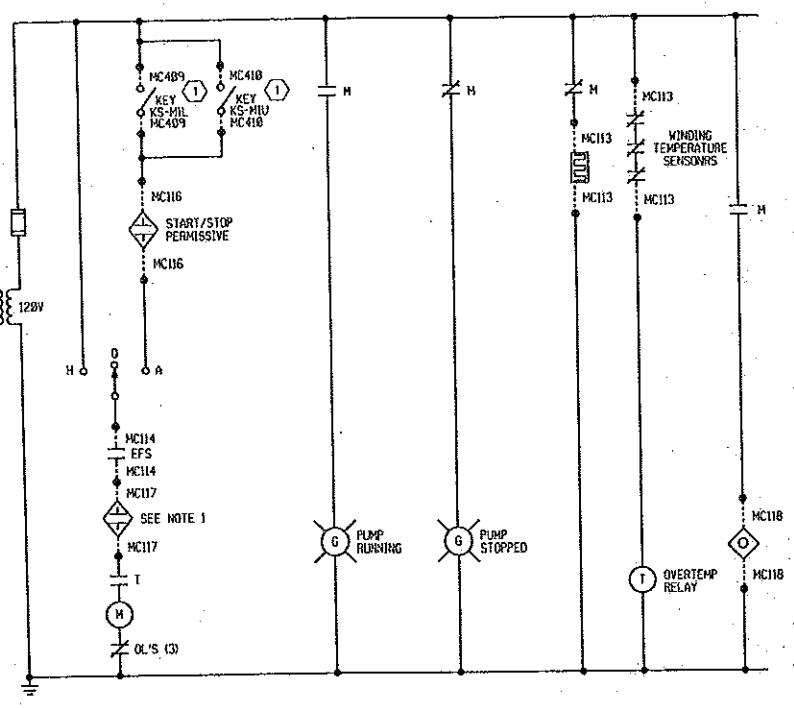
**Addison Airport**  
ADDISON, TEXAS

**Washington Group International**  
Integrated Engineering, Construction, and Management Solutions

**BULK FUEL STORAGE AND DISPENSING SYSTEM**  
WIRING DIAGRAMS - 1

DESIGNER: B.E.H. PROJ. LEAD: J.H.B. APPROVED: M.S.  
CADD TECH: D.M.B. CHECKED: D.R.V.

DATE: OCTOBER 25, 2004  
SHEET 25 OF 33



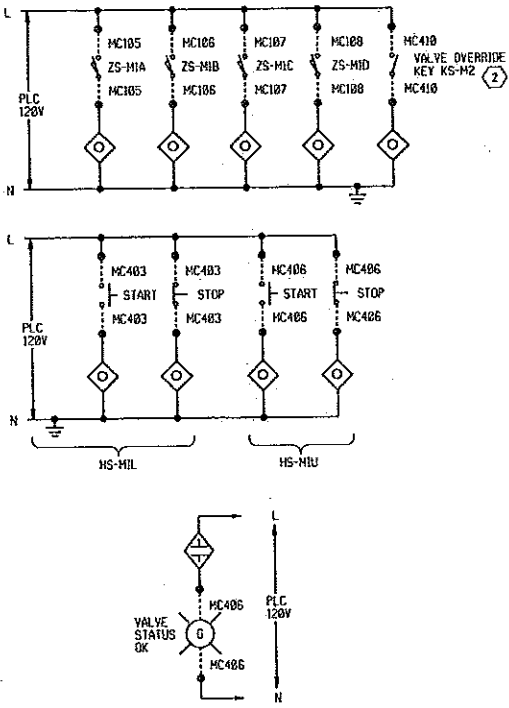
**CONTROL DIAGRAM - FUEL PUMP MFP-1**  
(TYPICAL MFP-2, MFP-3)  
SIMILAR EACH FBO

**NOTES:**

- PLC PERMISSIVE, OPENS ON NO FLOW AFTER 10 SECONDS AND CLOSES ON VERIFICATION OF LIMIT SWITCH POSITIONS.

**KEYED NOTES:**

- PROVIDE PERMISSIVE CONNECTIONS TO EACH PUMP MOTOR STARTER FOR THIS FBO.
- ONLY ONE VALVE POSITION OVERRIDE KEYED SWITCH PER FBO, OVERRIDE KEYED SWITCH LOCATED ON UNLOADING RACK.

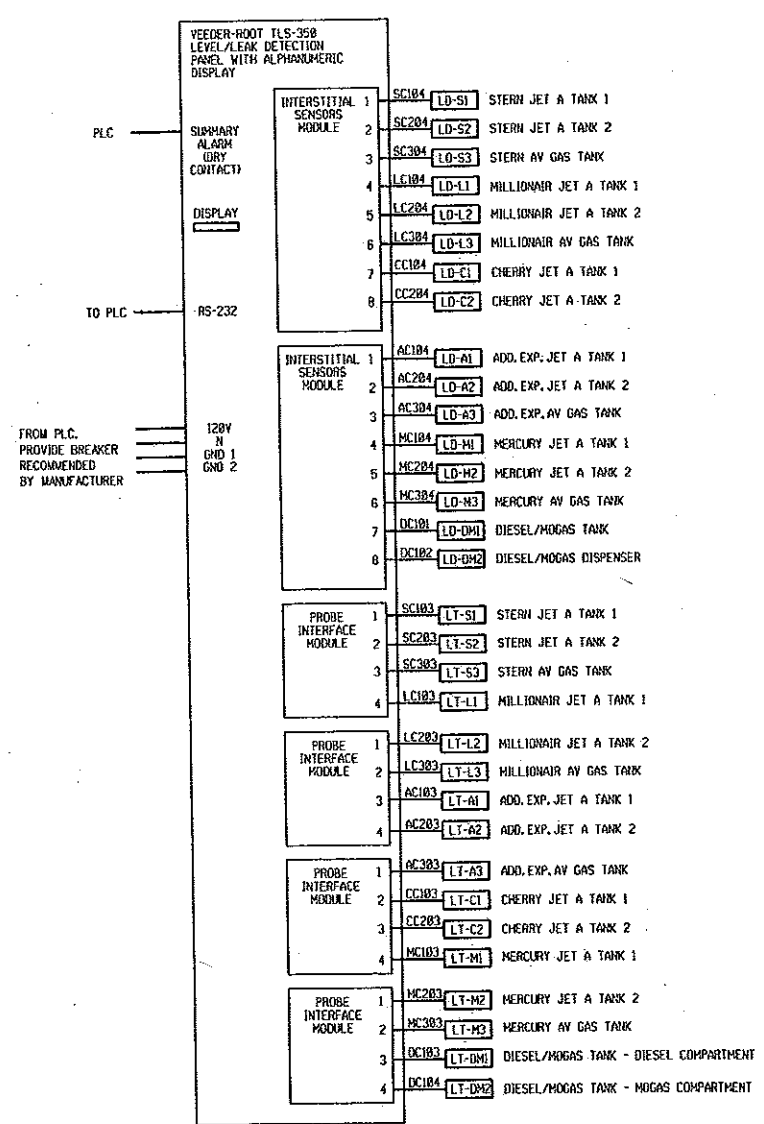


**TABLE OF CORRESPONDING CIRCUITS AND DEVICES**

MERCURY		
MFP-1	MFP-2	MFP-3
MC113	MC213	MC313
MC114	MC214	MC314
MC116	MC216	MC316
MC118	MC218	MC318
KS-MIL MC409		①
KS-MIU MC410		①
HS-MIL MC403	HS-M2L MC404	HS-M3L MC405
HS-MIU MC406	HS-M2U MC407	HS-M3U MC408

**DEVICE NUMBERS AND CIRCUIT NUMBERS**  
SIMILAR EACH FBO:

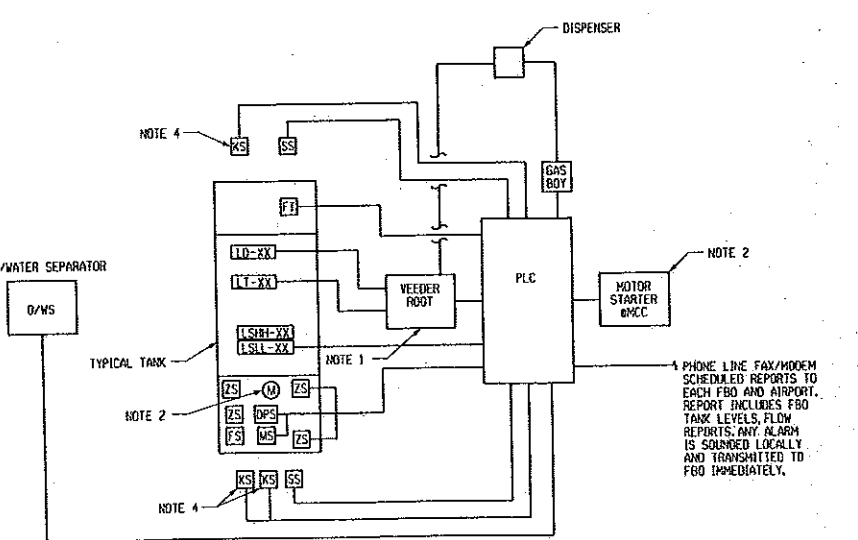
M = MERCURY  
C = CHERRY  
A = ADDISON EXPRESS  
L = MILLIONAIRE  
S = STERN



**BLOCK DIAGRAM - LEVEL/LEAK DETECTION PANEL**

**NOTES:**

- LOCATE LEVEL/LEAK DETECTION PANEL INSIDE PLC ENCLOSURE IN MCC-1.



**BLOCK DIAGRAM - CONTROL SYSTEM**

**NOTES:**

- SEE BLOCK DIAGRAM - LEVEL/LEAK DETECTION PANEL.
- SEE CONTROL DIAGRAM - FUEL PUMP.
- THE CONTROL SYSTEM DESIGN IS INTENDED TO BE SCHEMATIC IN NATURE AND INDICATES BASIC PERFORMANCE CRITERIA AND BASIC WIRING REQUIREMENTS. THE LEVEL OF DETAIL IS INTENDED TO BE UTILIZED BY THE CONTRACTOR FOR ACCURATE BIDDING AND ROUGH-IN INSTALLATION OF EQUIPMENT, BUT IS NOT SUFFICIENT FOR FINAL INSTALLATION AND STARTUP. THE CONTRACTOR SHALL PROVIDE EXACT, DETAILED, COMPLETE POINT-TO-POINT CONTROL SYSTEM DESIGN INCLUDING POINT-TO-POINT PANEL AND EQUIPMENT DRAWINGS, BASED ON THE ACTUAL EQUIPMENT FURNISHED BY THE CONTRACTOR.
- ONE PER FBO.