



Legend:

Redundant Ethernet

3rd Party Connection

Ethernet Connection

Hardwired

Control Signal (See Note 2)

- Abbreviations:**
- AI Analog Input
 - AO Analog Output
 - BMS Burner Management System
 - DCS Distributed Control System
 - DI Digital Input
 - DO Digital Output
 - HMI Human Machine Interface
 - I/O Inputs/Outputs
 - OIT Operator Input Terminal
 - PLC Programmable Logic Controller
 - QTY Quantity
 - SIS Safety Instrumented System
 - TBD To Be Determined
 - VFD Variable Frequency Drive
 - TE Temperature Element

- Notes:**
- All instrumentation is based on preliminary P&ID’s and process knowlage. This is not meant to be inclusive of all instrumentation required.
 - Assumed communications to be redundant Ethernet for backbone; 3rd party Ethernet; hardware signals for SIS (TBD); and the control signals which may be HART, Modbus, Foundation FieldBus, DeviceNet, etc.
All are preliminary and TBD.
 - Assumed 3rd Party PLCs, but some may have only local control panels not connected to DCS.
 - Vendor Packages may be supplied as pre-manufactured skids (e.g., Flare Vendor Package may include analyzers, flow instrumentation and pressure regulators).
 - Only two sets of redundant Ethernet switches are show for simplicity; other redundant switches to be provided as necessary.
 - System consists of one or more controllers as required.
 - HMIs/OITs locations (e.g., field mounting) are TBD.

ENG RECORD			Control System Architecture Diagram		
DRAWN					
CHECKED					
APPROVED			Project:	PRELIMINARY	
			Scale: None	Sheet 2 of 2	