

BLC

BASIC LAB CONTROLS

BLC Series Pre-Assembled Solenoid Enclosures



**The BLC Series Enclosures are pre-assembled
with threaded shut-off valves, strainers and
union fittings**

**BLC Series Enclosure
Pre-Assembled White Powder Coated Solenoid
Enclosure
Model Number and Description**

BLC

Valve Box Size

Box Mounting Style

- Surface Mount - SM
- Semi-Recessed - SR
- Fully-Recessed - FR

120 volt Solenoid Valve Size & System

- Gas - G
- Hot Water - HW
- Cold Water - CW
- Compressed Air - A

Options

Options

- Stainless Steel Cabinet - **SS**
- On Light Indicator - **OL**
- Louvered Door - **(Standard)**
- Cooling Fan with Louvered Door - **CF**
- Individual Push Button Switch - **PB**
- Individual Thumb Switch - **TS**
- Individual Key Switch - **KS**
- Key Operated EPO Control Switch with Red Light Indicator - **EPO/RL**

Standard Solenoid Valve Description

The Solenoid Valves are ASCO NPT Valve Sizes 1/2" thru 1-1/2"

Brass Body Construction

Maximum Operating Temperature 180f / 82.2c

120 VAC wiring required

All Solenoid Coils are NE

All Solenoid Coils are NEMA 4 Rating

STANDARD BLC VALVE BOX ENCLOSURES

	<u>BOX SIZE DIMENSIONS</u>	<u>NUMBER OF VALVES</u>	<u>PIPE & VALVE SIZES</u>
HEIGHT	20"	1 or 2	1/2" - 3/4" - 1"
WIDTH	20"		
DEPTH	6" or 8"		
HEIGHT	24"	3	1/2" - 3/4" - 1"
WIDTH	24"		
DEPTH	8"		
HEIGHT	30"	2	1-1/4"
WIDTH	24"		
DEPTH	8"		
HEIGHT	30"	3	1-1/4"
WIDTH	30"		
DEPTH	8"		
HEIGHT	36"	1 or 2 or 3	1-1/2"
WIDTH	36"		
DEPTH	8"		

Note: Valve Box Enclosure Size is Determined by the Number of Valves and Size of the Valves.

All Valve Box Assemblies will include Manual Shut-Off Valves, Strainers, Unions and Electrical J-box for Wiring Connections.

BLC Solenoid valve enclosure with key locked louvered door, cooling fan and individual utility switches. Door below shown with three different types of Optional Individual Switches; Thumb Turn Switch, Push Button Switch, and Key Switch. Individual switches are controlled by integrated key operated EPO/RL switch with Red Light Indicator and Emergency Shut-off Button.



BLC-SR-SS UTILITY CONTROLLER

Recessed or Surface Mounted Nema-1 Stainless Steel Utility Controller, with Locking Door, Individual Thumb Switches to Control 120 volt Gas and Water Solenoid Valves, 120 volt Electrical Outlets at Student & Teachers Work Stations. Green Indicator Light for each Utility Control Switch. Controller to be Integrated with Solenoid Valve Enclosure & Electrical Contact Enclosure and includes Red Key Operated Pushbutton On/Off Switch with Emergency Panic Control.

BLC-080804-SR-SS-2-TS Unit (8" x 8" x 4") to Control 120 volt Gas Solenoid Valve and 120 volt Electrical Outlets

BLC-080804-SR-SS-3-TS Unit (8" x 8" x 4") to Control 120 volt Gas and Water Solenoid Valves, and 120 volt Electrical Outlets

BLC-081004-SR-SS-4-TS Unit (8" x 10" x 4") to Control 120 volt Gas and Water Solenoid Valves, Fume Hood, and 120 volt Electrical Outlets

Options-SS Stainless Steel with Satin Finish (Standard)

- SR Semi-Recessed
- SM Surface Mount
- TS Individual Thumb Control Switches
- PB Individual Pushbutton Control Switches (Shown with Controller below)
- KR Individual Key Operated Control Switches
- D Delay Timer for Fume Hood Exhaust Fan



BLC-E SERIES PRE-ASSEMBLED ELECTRICAL CIRCUIT ENCLOSURE

BLC-E SERIES ELECTIRCAL CIRCUIT ENCLOSURE IS A PRE-ASSEMBLED NEMA 1 GRAY POWDER COATED ENCLOSURE WITH HINGED SCREWDRIVER LATCH DOOR. THE ENCLOSURE IS SURFACE MOUNTED AND HAS UP TO 24 RELAY CONTACT BLOCKS (120 VOLT - MINIMUM 30, MAXIMUM 100 AMPS EACH) TO CONTROL UP TO 48 ELECTRICAL OUTLETS AT EACH STUDENT AND TEACHER WORK STATION. THE ENCLOSURE SIZE IS 16" X 16" X 6" DEEP.

BLC-E

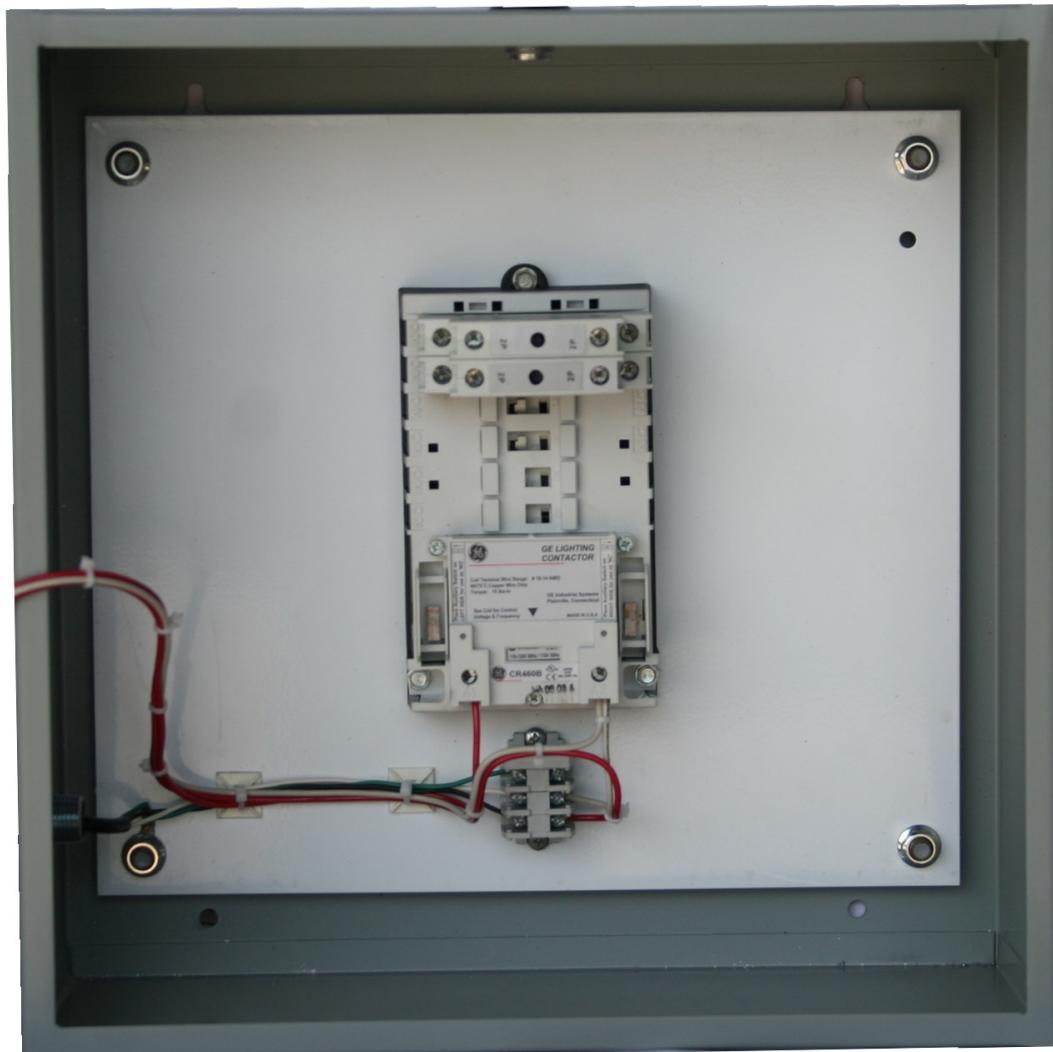
OPTIONS:

Number of Contacts

2 thru 24

Green Light Indicator - **GL**

Key Lock Door - **KL**



TYPICAL SPECIFICATION

V-1 SOLENOID VALVE BOX

MODEL BLC-20206-SR-1G-1CW-CF-EPO/RL WHITE POWDER COATED SEMI-RECESSED NEMA-1 ENCLOSURE SIZE 20”H x 20”W x 6” D WITH FULL PANEL DOOR, COOLING FAN AND KEYED LOCK. FURNISHED WITH ONE 120 VOLT NORMALLY CLOSED 1” GAS AND 1” COLD WATER SOLENOID VALVE, INTEGRATED EMERGENCY SHUT-OFF BUTTON, KEY RESET SWITCH, CONTROL SWITCH FOR GAS AND WATER SERVICE TO SCIENCE PREP-ROOM, FUME HOOD, AND TEACHER’S DEMO DESK OUTLETS. VALVE BOX SHALL BE LABELED FOR ITS INTENDED USE AND ASSEMBLED WITH THREADED LEVER HANDLE MAIN BALL VALVE AND 20-MESH STRAINER WITH UNION FITTING UPSTREAM OF SOLENOID VALVE ASSEMBLY AND UNION FITTING DOWN STREAM OF VALVE ASSEMBLY. REFER TO ELECTRICAL DRAWING FOR WIRING REQUIREMENT AND CONTRACTOR LOCATION AND EPO NEAR TEACHER’S DEMO DESK.



BLC enclosure with cooling fan and louvered door.



ALBERT STERLING & ASSOCIATES, INC.

www.AlbertSterling.com

Dallas

972-458-8015

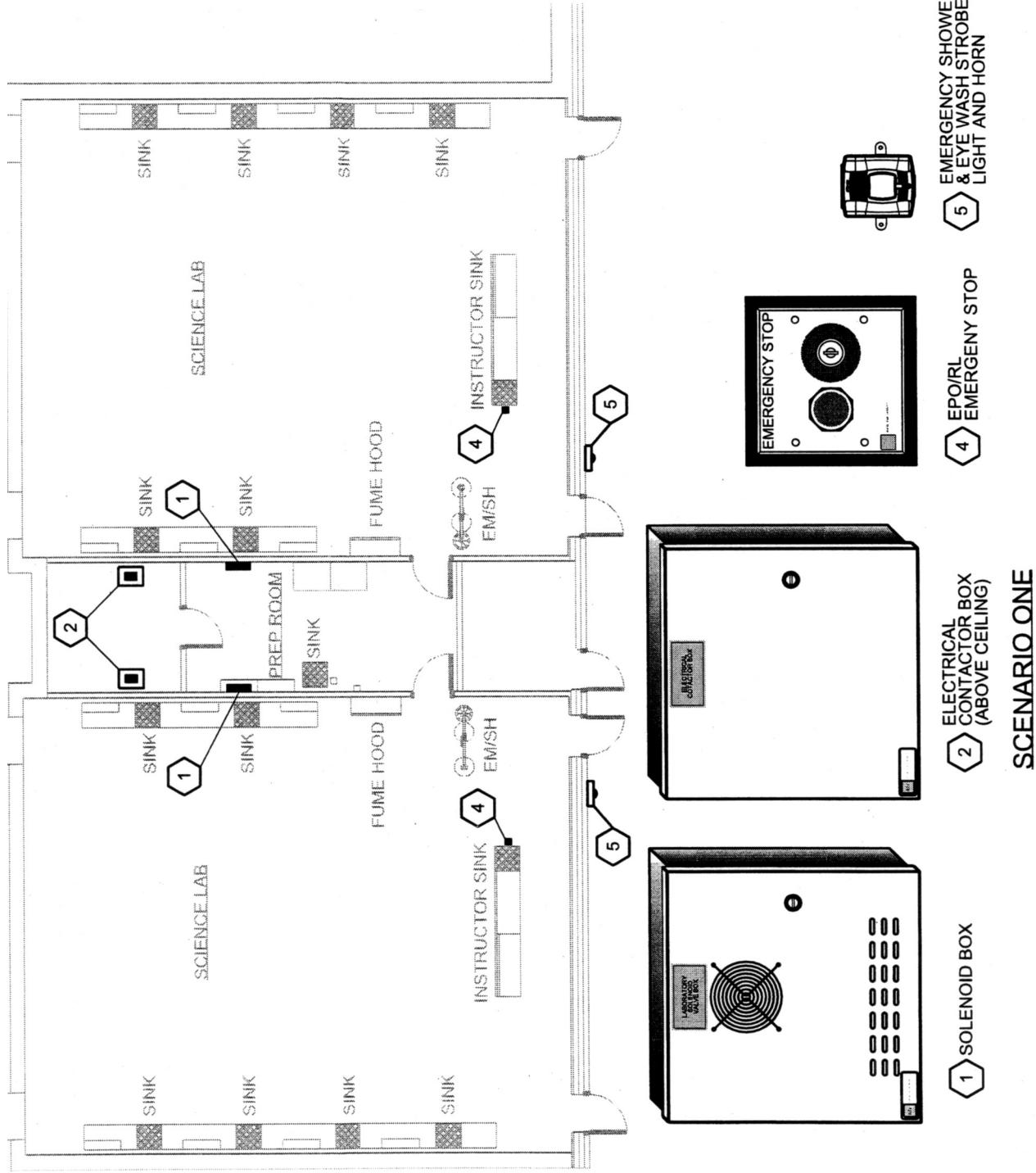
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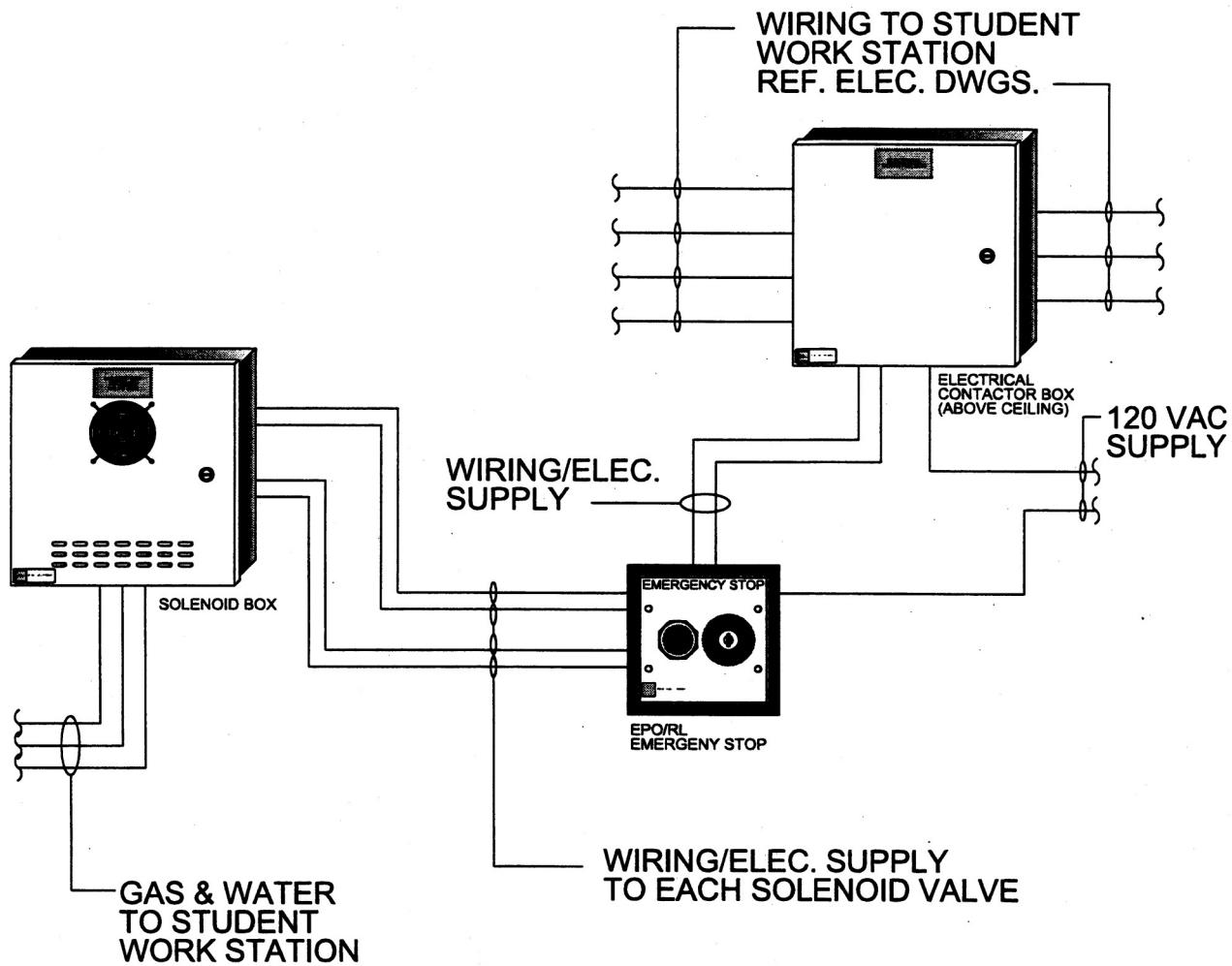
713-780-1600

San Antonio

210-349-9828

SCENARIO ONE ROOM LAYOUT

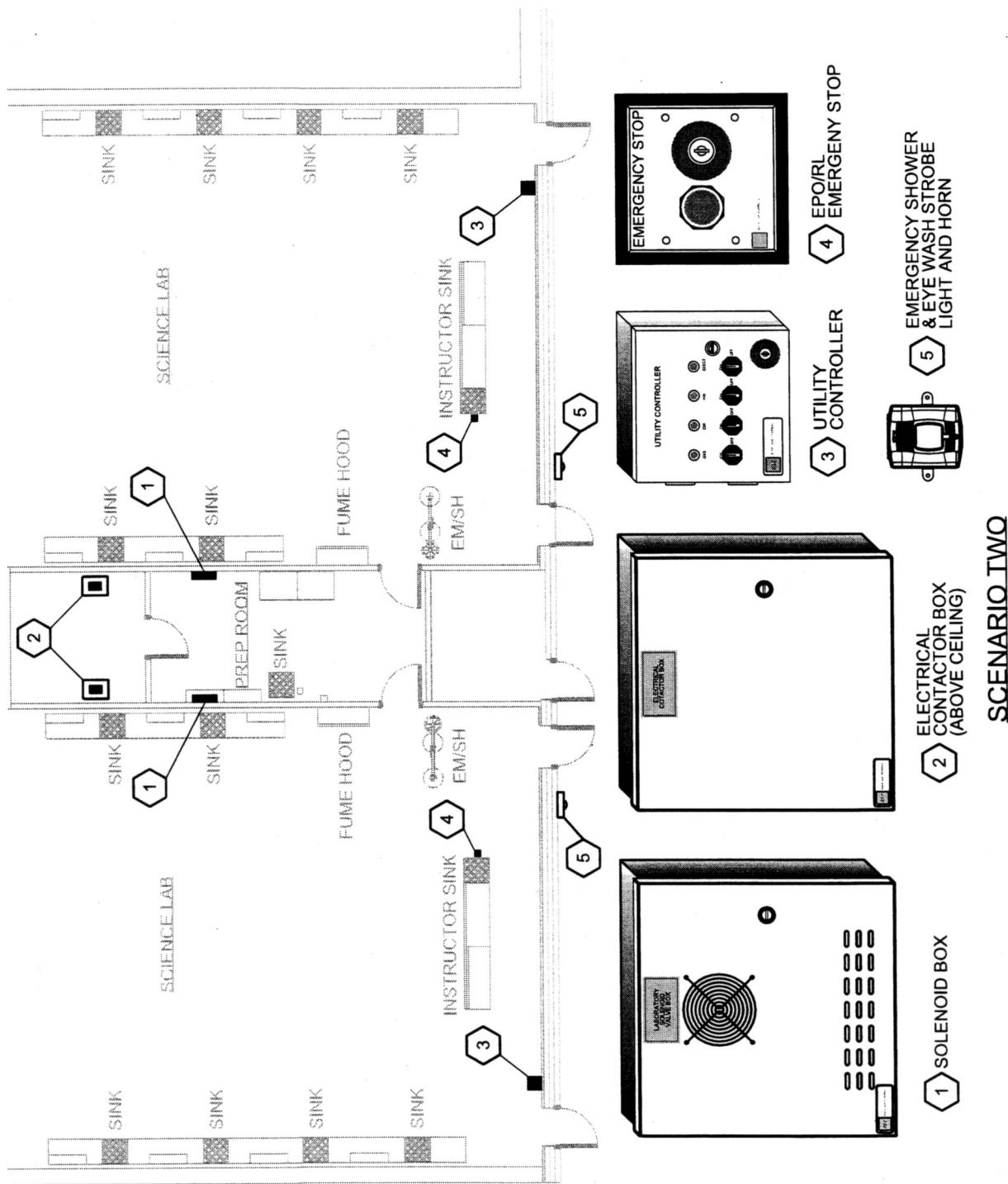




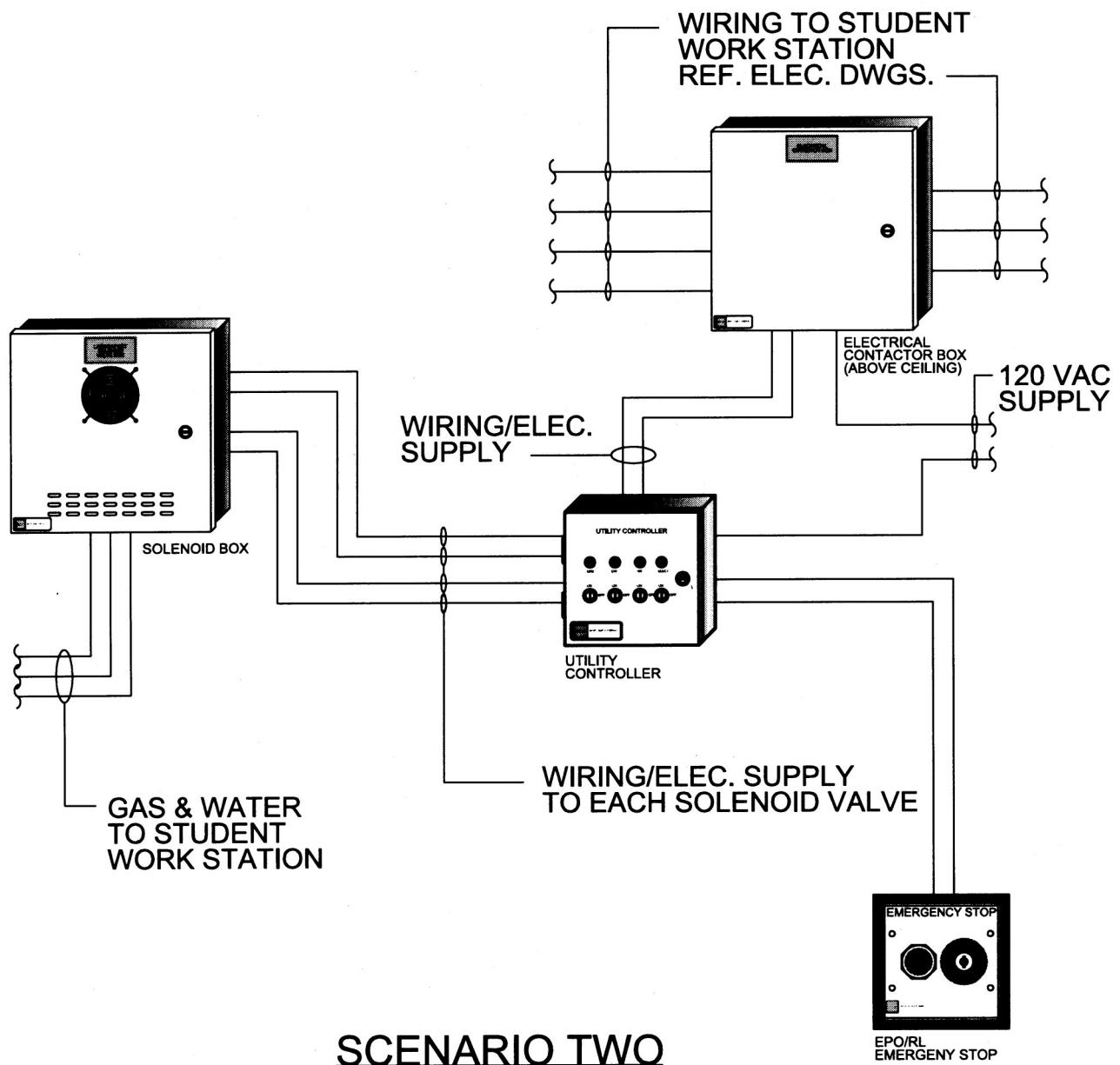
SCENARIO ONE

TYPICAL SCIENCE LAB UTILITY CONTROLLER PANEL DIAGRAM

SCENARIO TWO ROOM LAYOUT



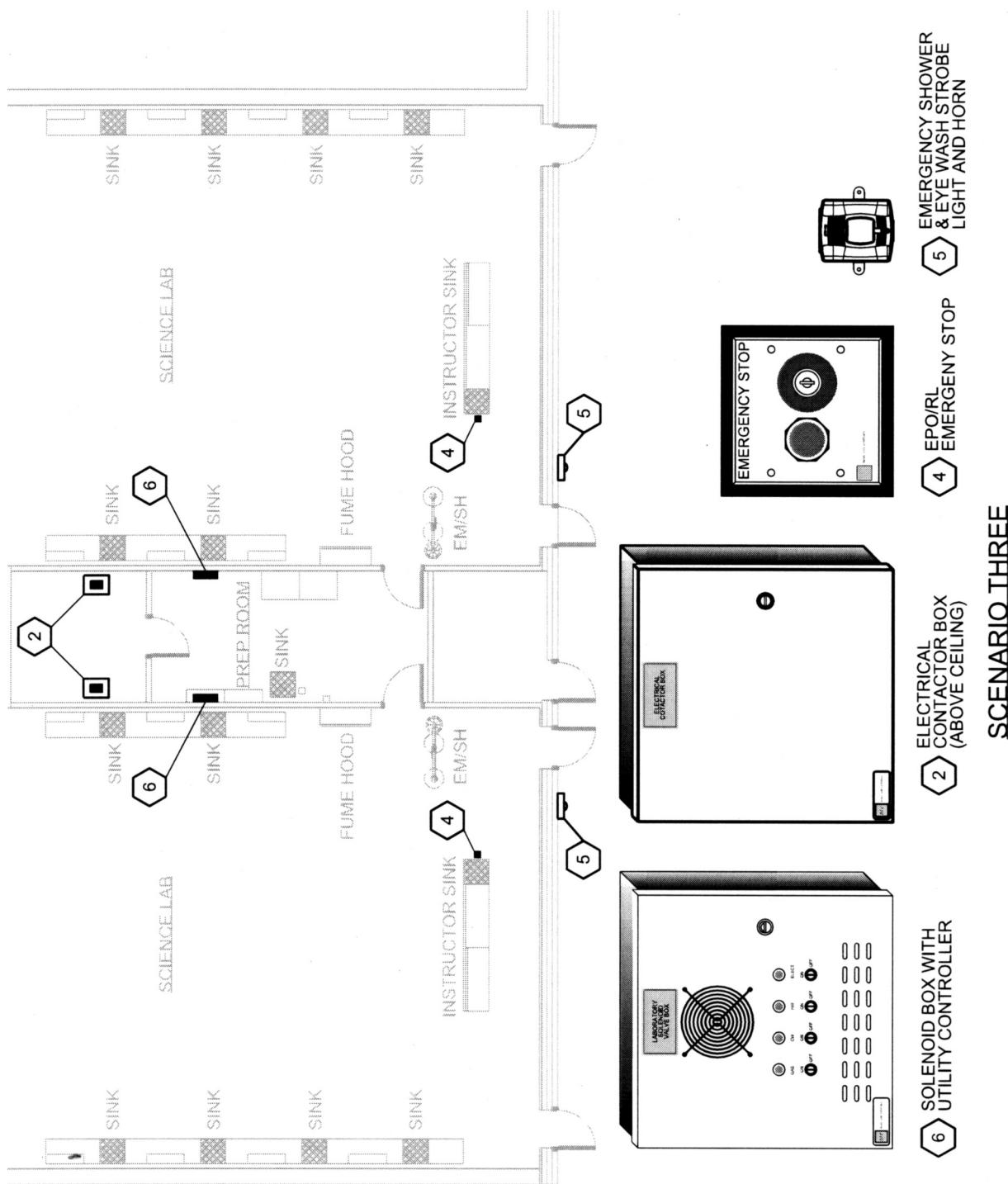
SCENARIO TWO



SCENARIO TWO

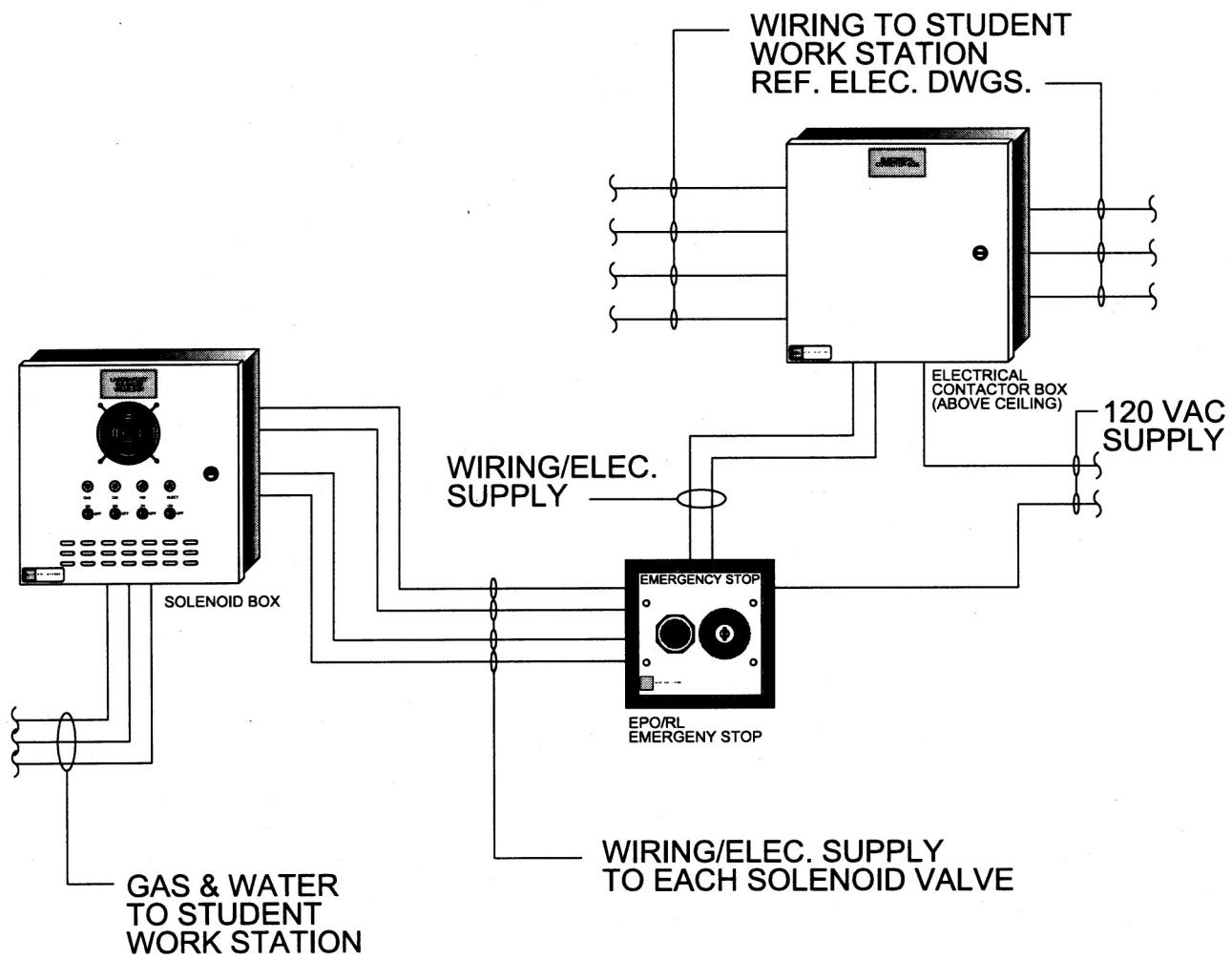
TYPICAL SCIENCE LAB UTILITY CONTROLLER PANEL DIAGRAM

SCENARIO THREE ROOM LAYOUT



SCENARIO THREE

- ⑥ SOLENOID BOX WITH UTILITY CONTROLLER
- ④ EPO/RL EMERGENCY STOP
- ② ELECTRICAL CONTRACTOR BOX (ABOVE CEILING)
- ⑤ EMERGENCY SHOWER & EYE WASH STROBE LIGHT AND HORN

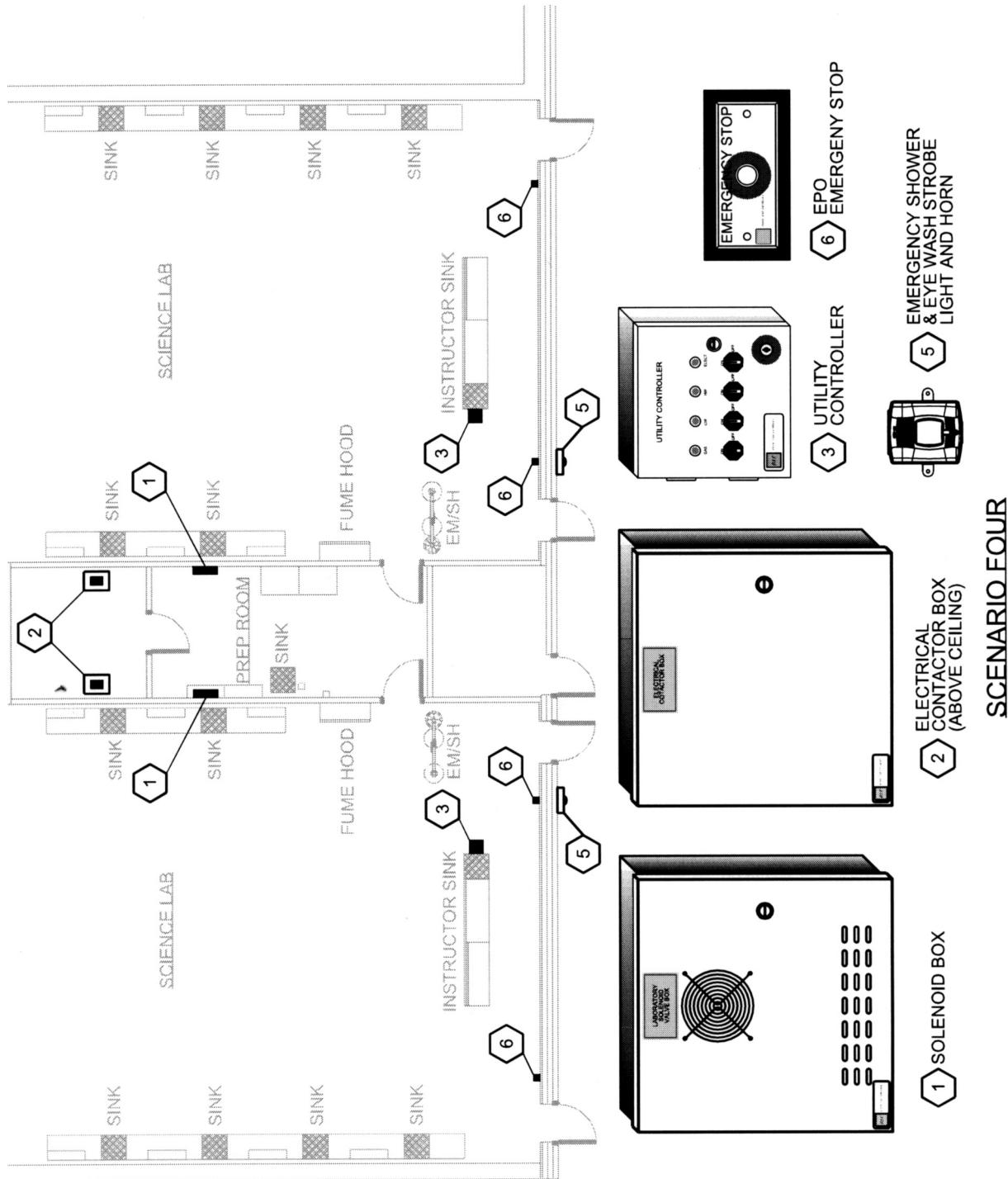


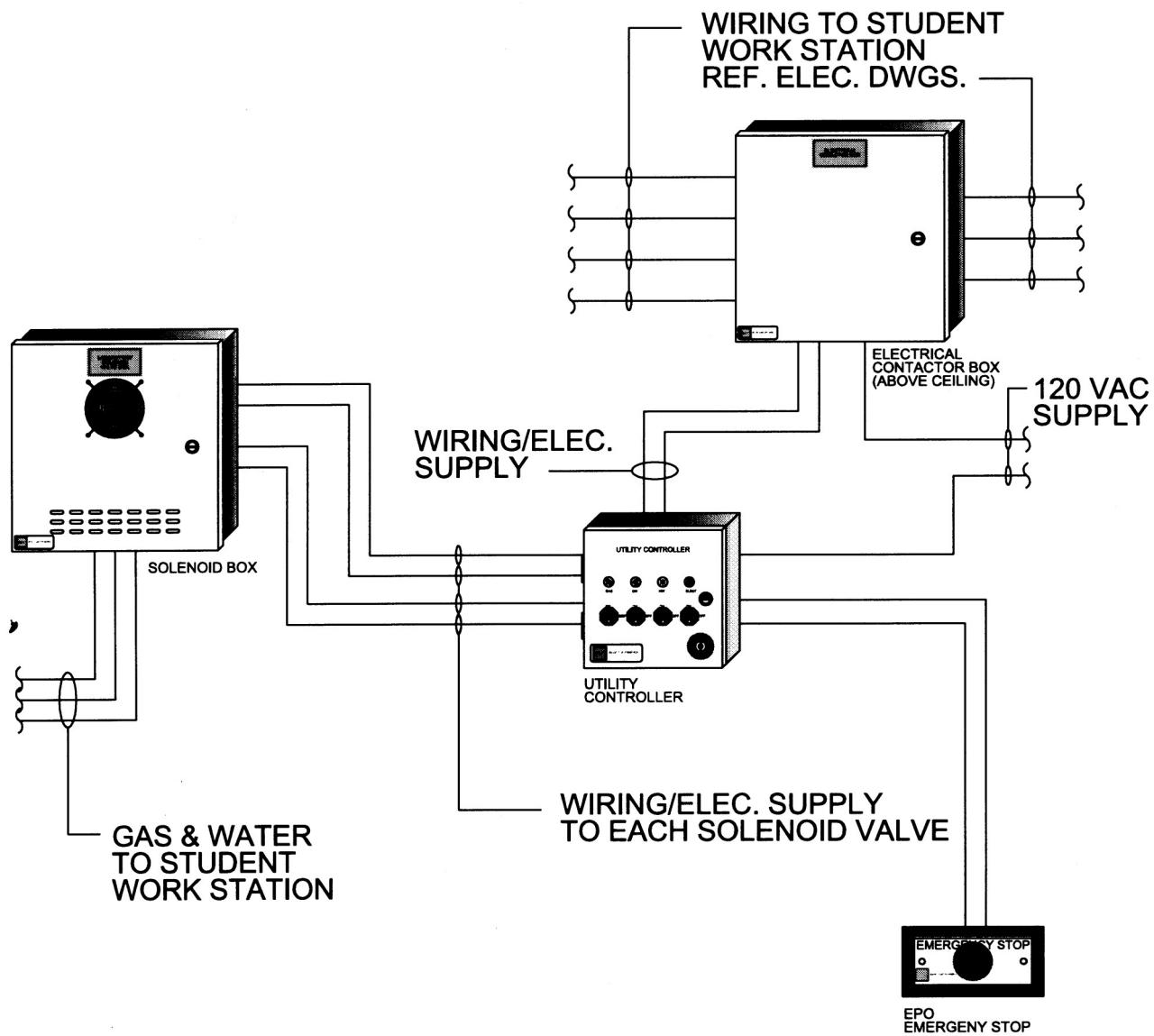
SCENARIO THREE

TYPICAL SCIENCE LAB UTILITY

CONTROLLER PANEL DIAGRAM

SCENARIO FOUR ROOM LAYOUT





SCENARIO FOUR

TYPICAL SCIENCE LAB UTILITY CONTROLLER PANEL DIAGRAM