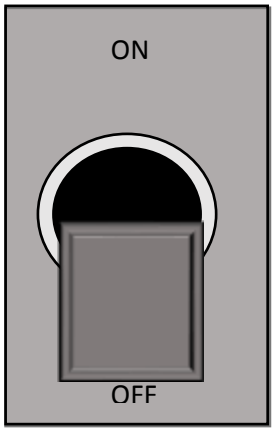
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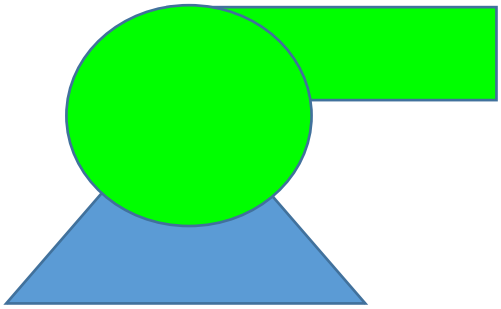

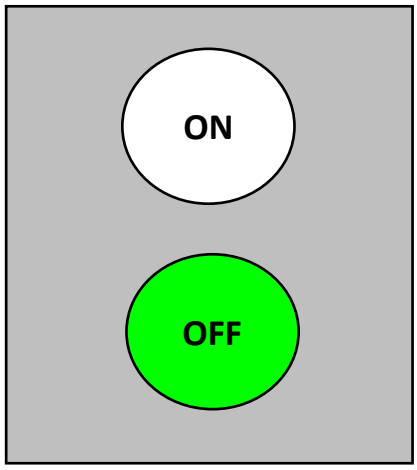
ON
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Tips for Drawing

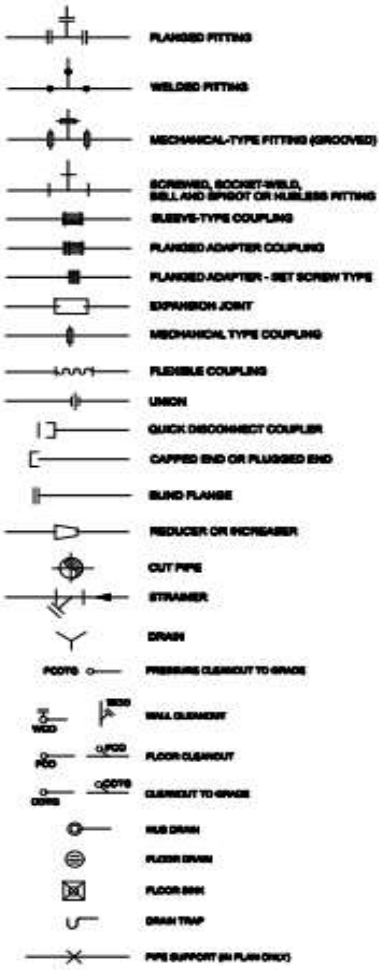
If you hold the **SHIFT** key down while drawing a line, the line will be a perfectl horizontal or vertical line.
If you hold the **SHIFT** key down while drawing a rectangleline, the rectangle will be a perfect square.
If you hold the **SHIFT** key down while drawing an oval, the oval will be a perfect circle.
If you hold the **SHIFT** key down while drawing an triangle, the triangle will be an equalateral traiangle.

Holding the Shift or Control key down while selecting objects will allow you to select multiple objects.
When selecting multiple objects, you should select the last items with a right-click
I change the cell widths in order to have a "grid" to work with.

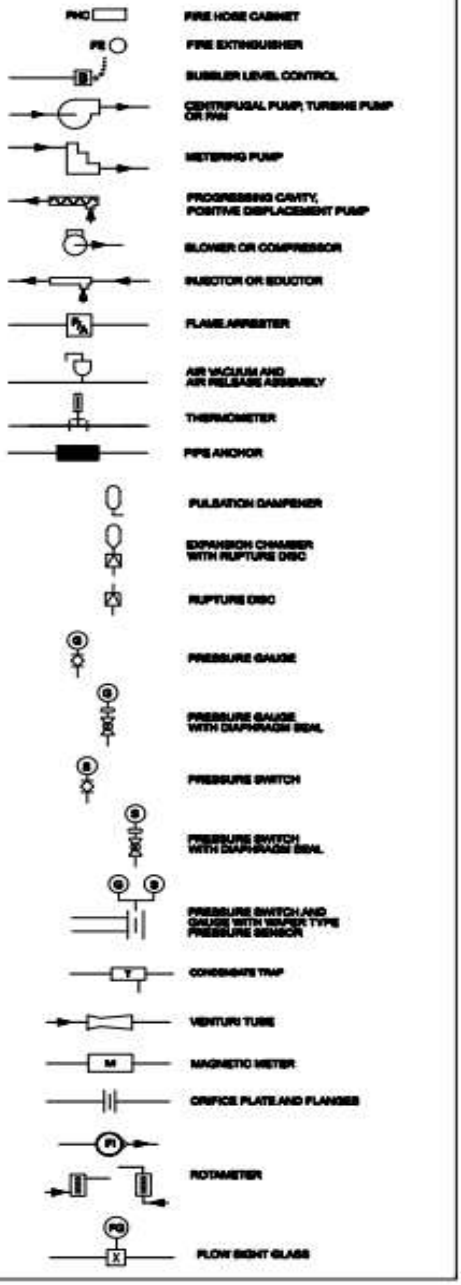
Send to Back
Grouping
Rotate Shapes
Insert -----> Illustrations----------> Shapes
Picture Tools or Drawing Tools
Control - C (copy)
Control - V (paste)
Control-Z (undo)
Selecting Objects - Shift-Click, Control-Click
Intersecting Lines

Skills take time to develop.
Google and You Tube are your friends

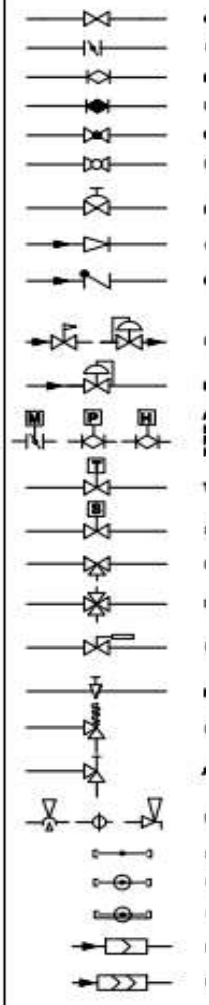
PIPING



EQUIPMENT AND METER



VALV



'E AND GATE

GATE VALVE

BUTTERFLY VALVE

ECCENTRIC PLUG VALVE

LUBRICATED PLUG VALVE

GLOBE VALVE

BALL VALVE

DIAPHRAGM VALVE

CHECK VALVE

CHECK VALVE

PRESSURE REGULATING VALVE

BACK-PRESSURE VALVE

ACTUATOR TYPES FOR VALVES
M = ELECTRIC MOTOR
P = PNEUMATIC
H = HYDRAULIC

TEMPERATURE CONTROL VALVE

SOLENOID VALVE

MULTIPORT VALVE - 3 WAY

MULTIPORT VALVE - 4 WAY

FLOAT OPERATED VALVE

NEEDLE VALVE

PRESSURE RELIEF VALVE

ANGLE VALVE

HOSE BIBB (HB)

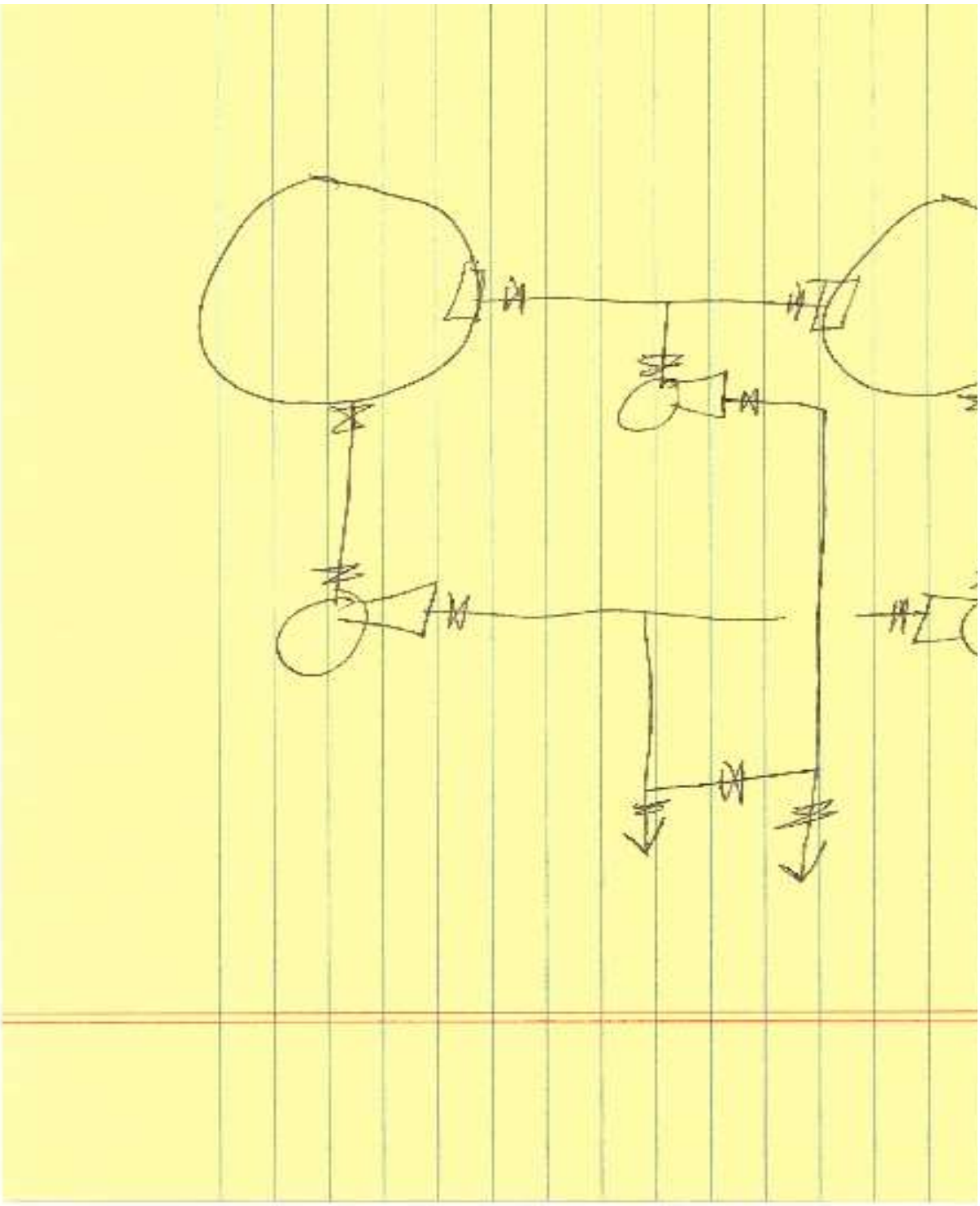
STOP GATE

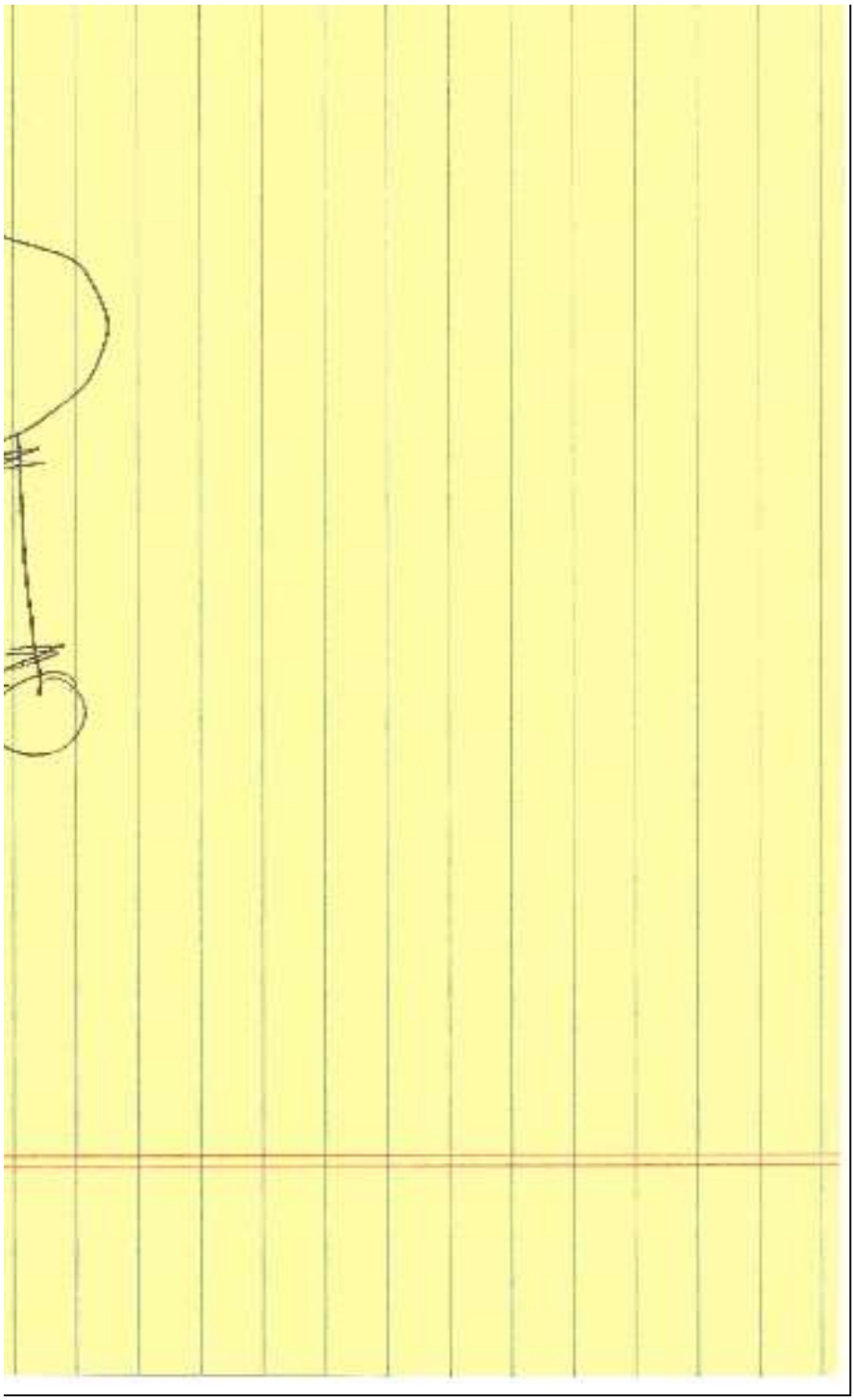
SLIDE GATE

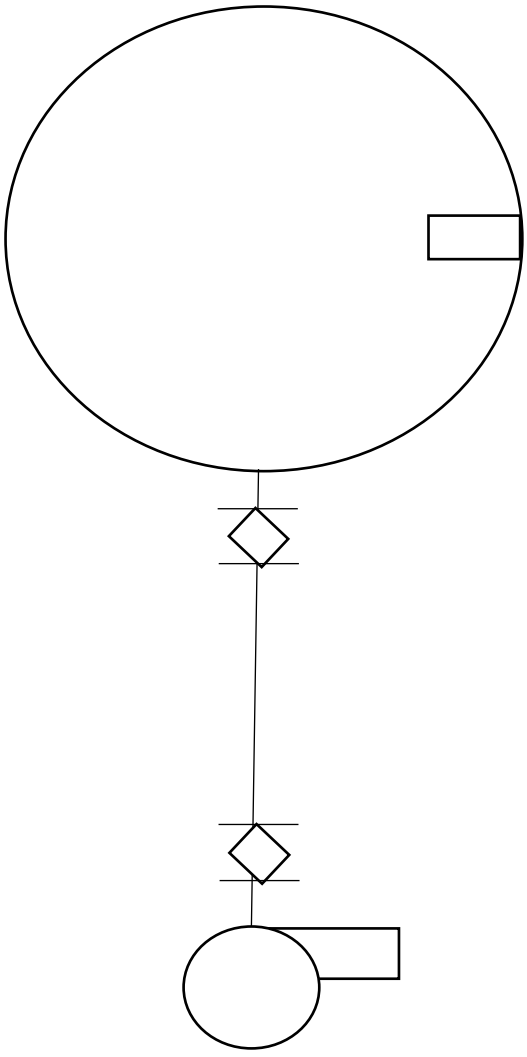
SLUICE GATE

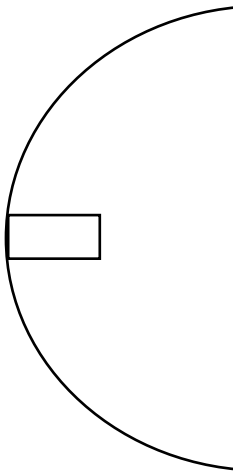
BACKWATER VALVE

BACKFLOW PREVENTER

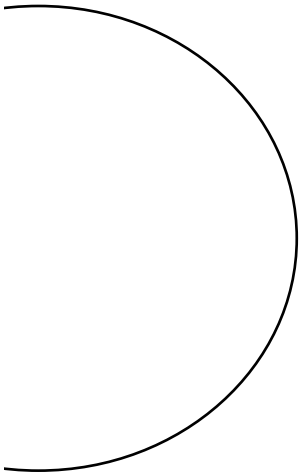


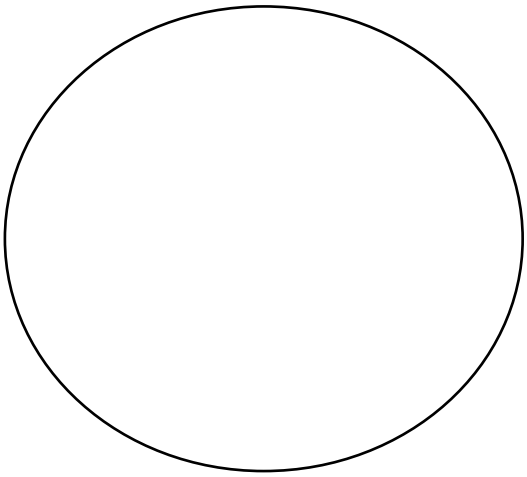


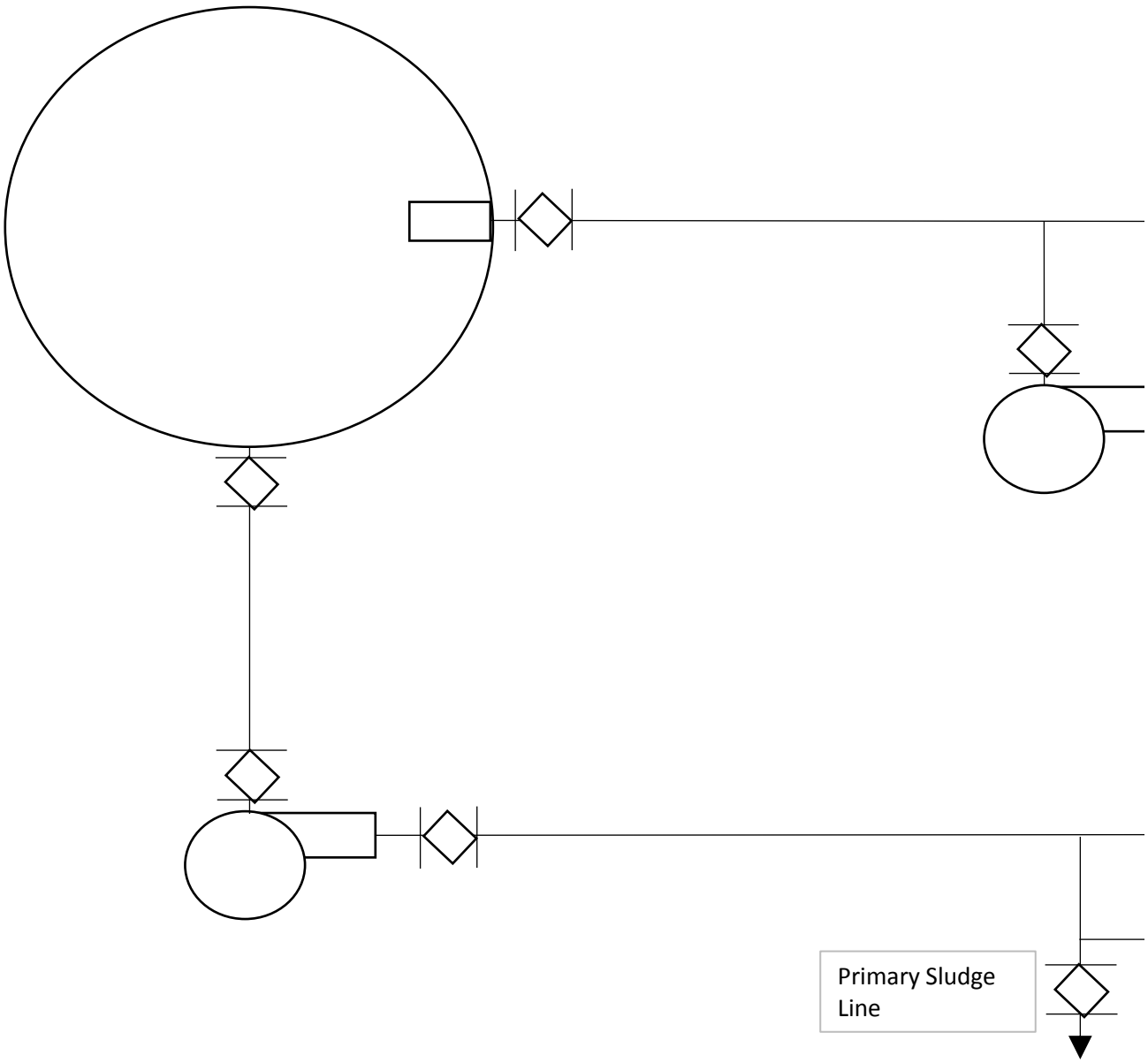


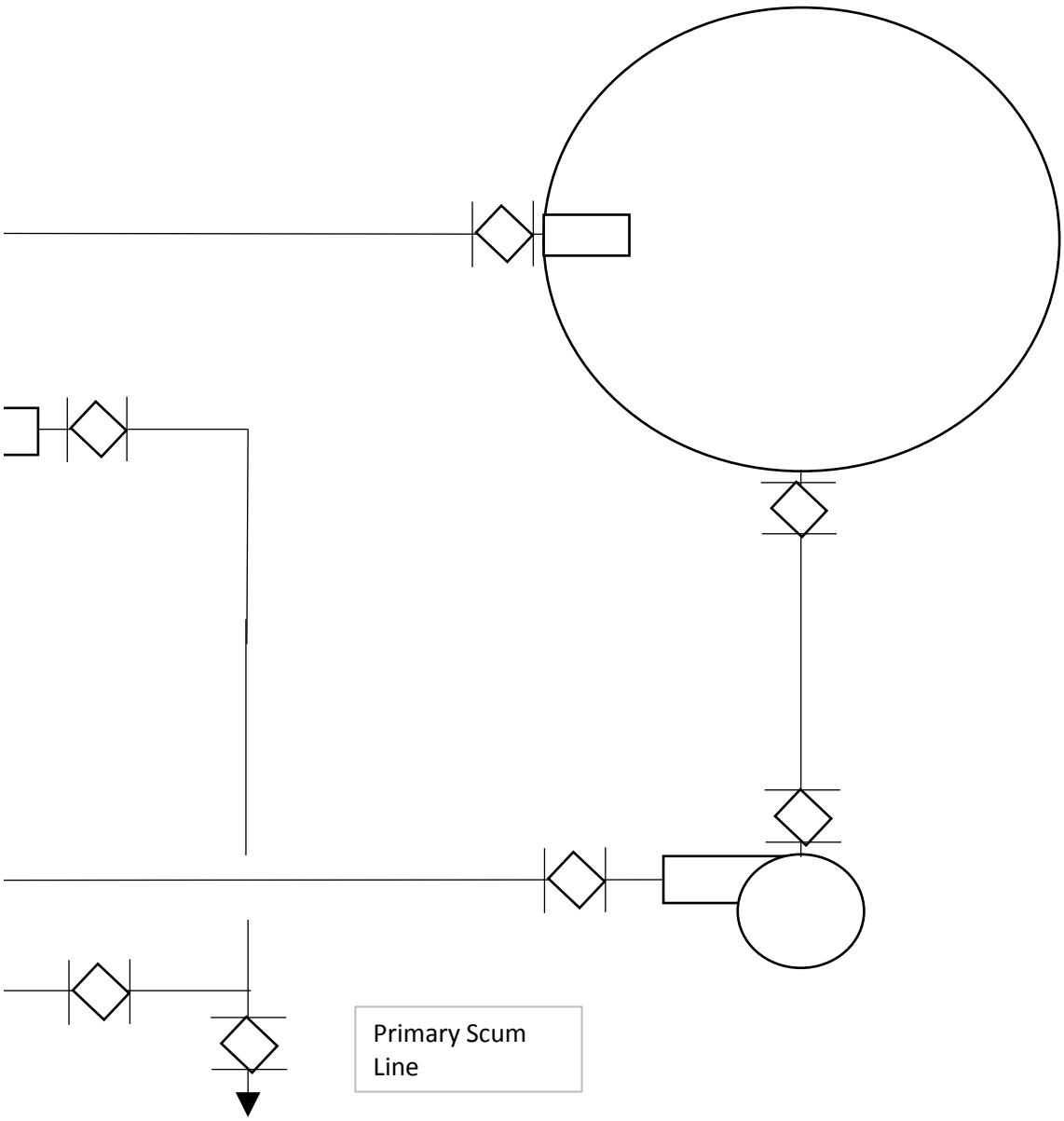


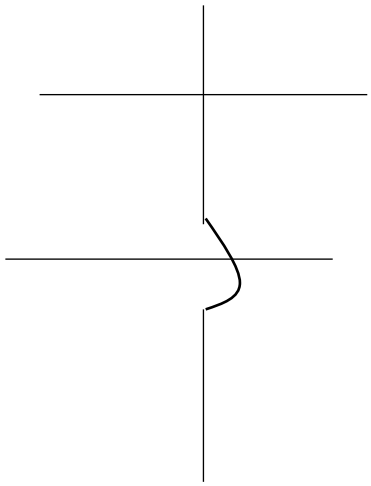
Primary Sludge Pump 1

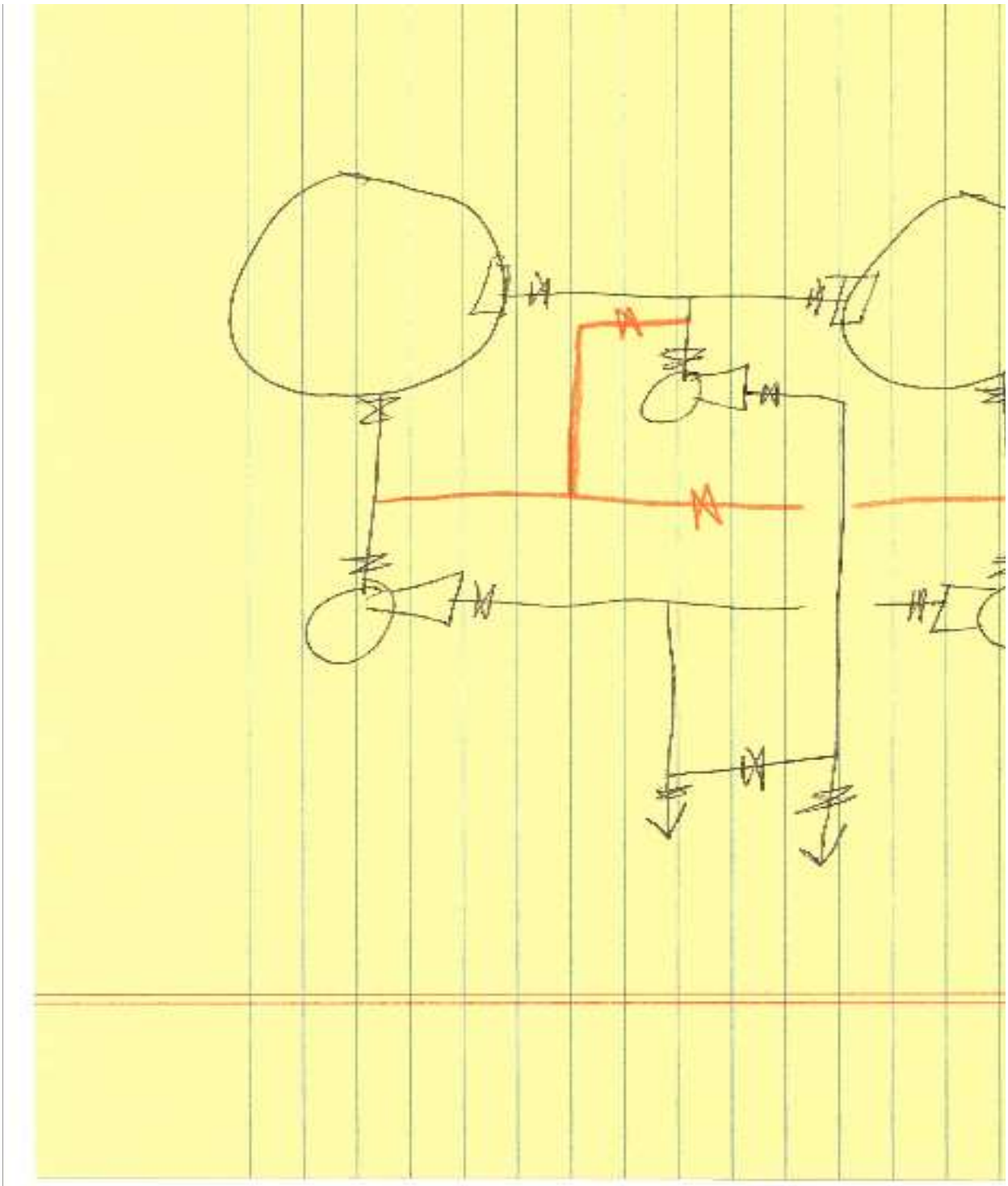


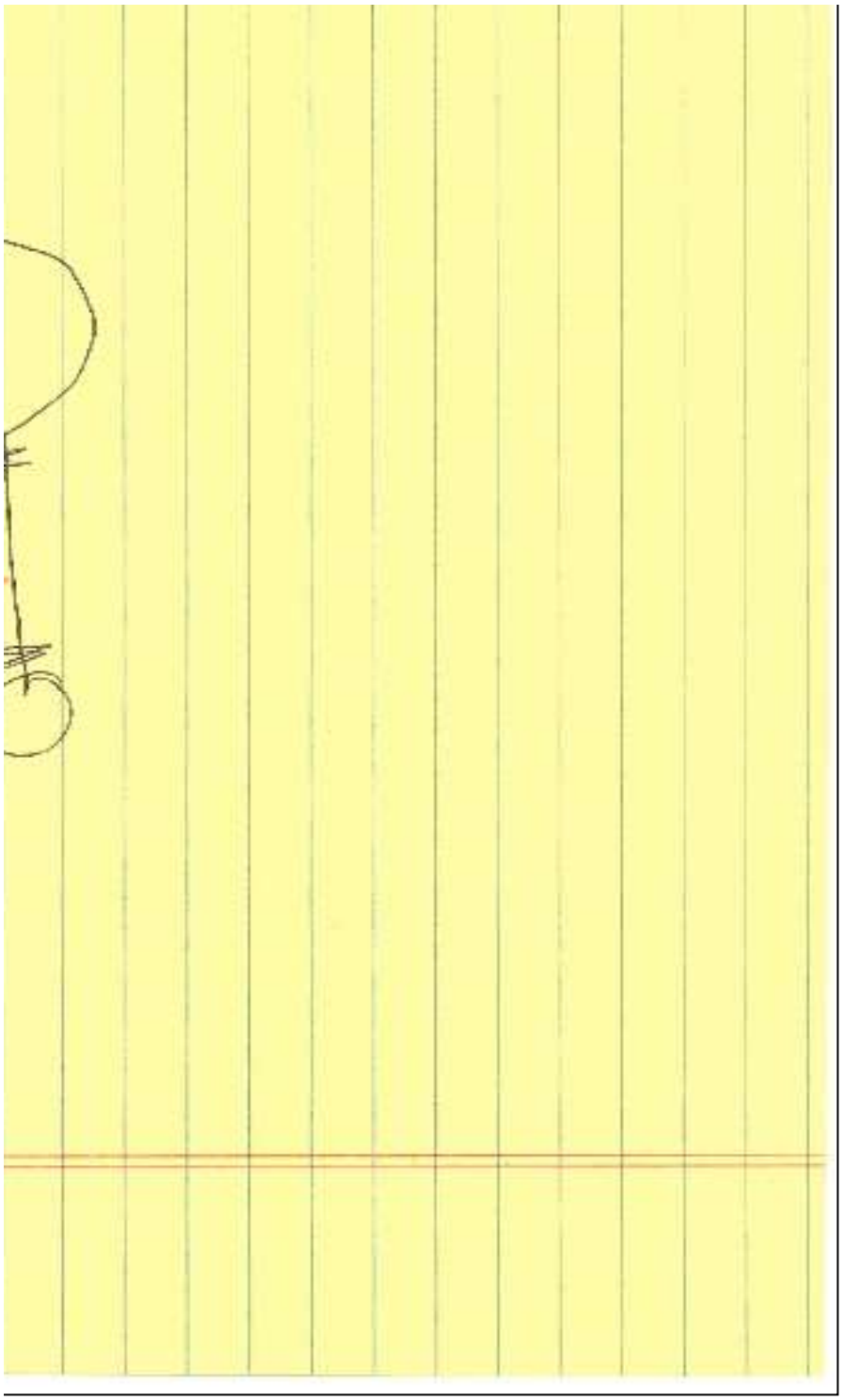


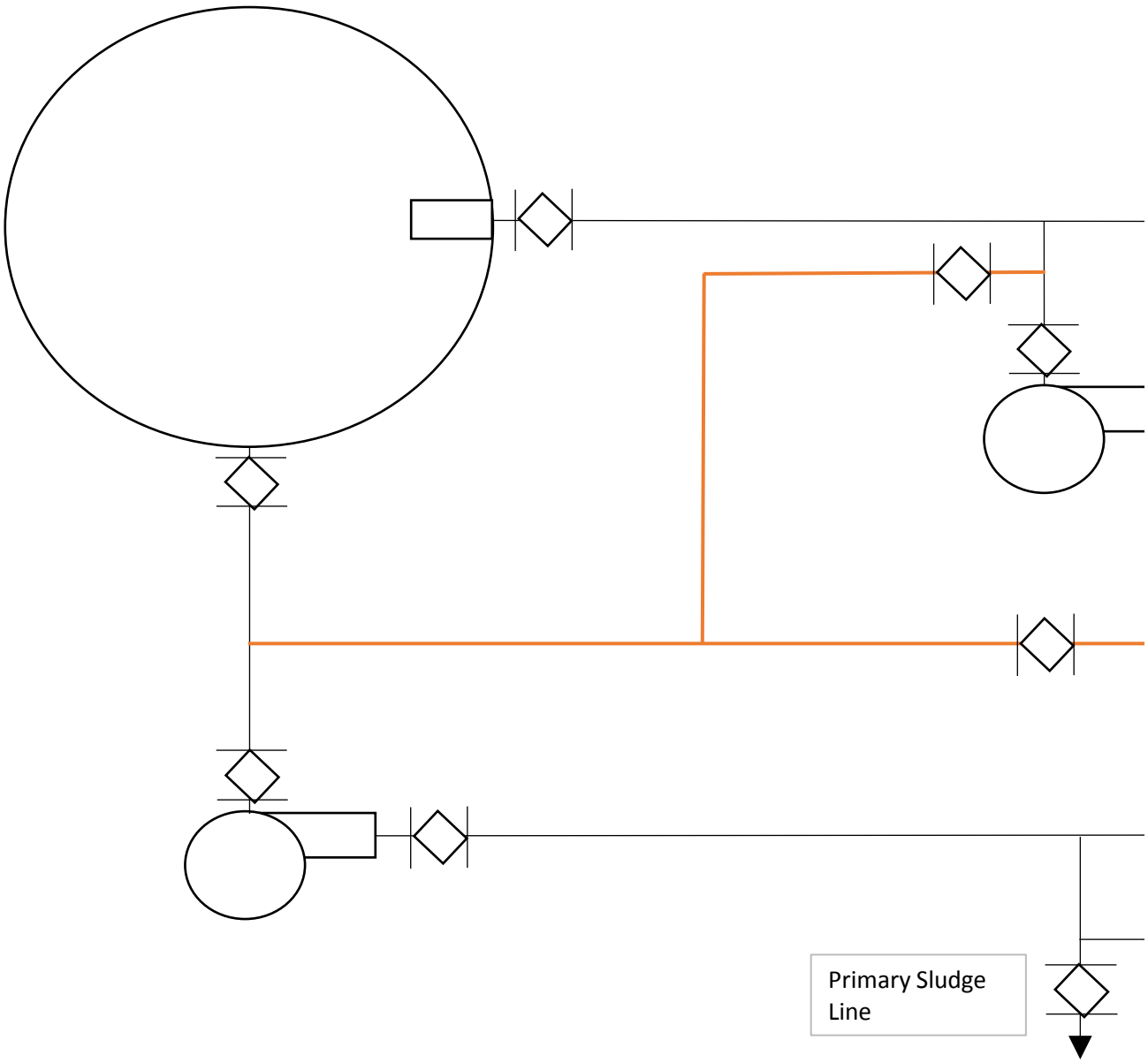

Primary Sludge
Line

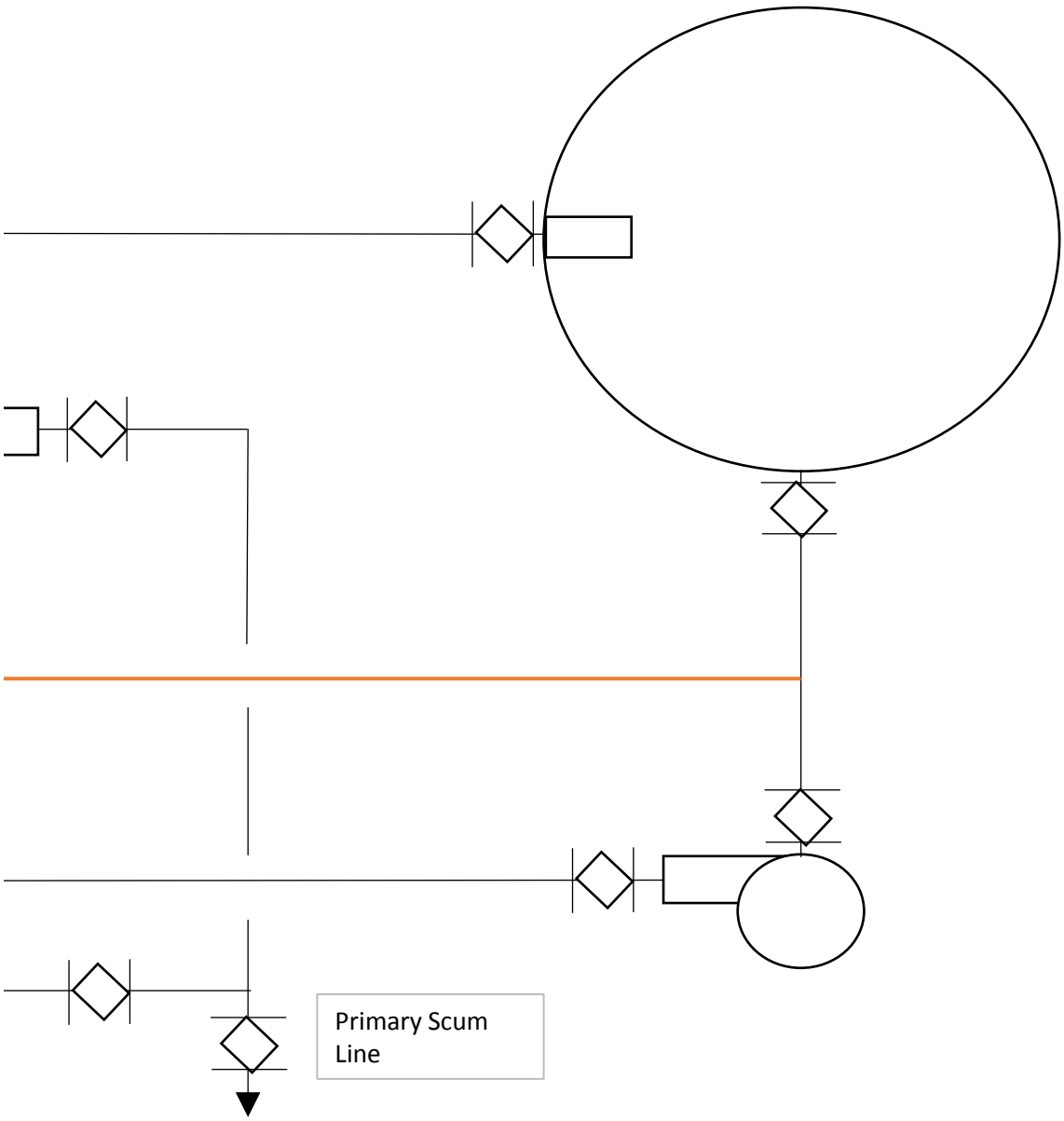

Primary Scum
Line

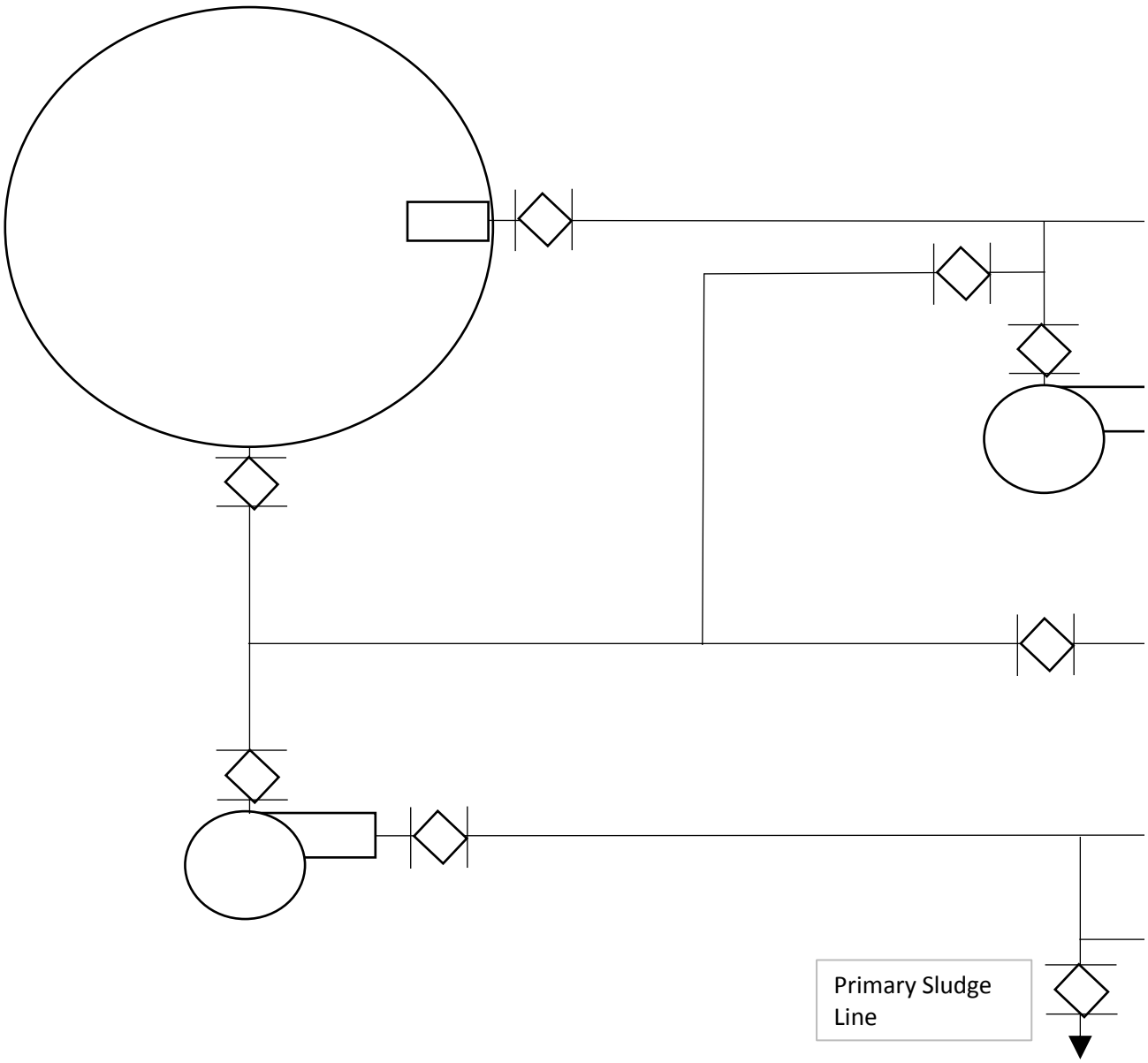


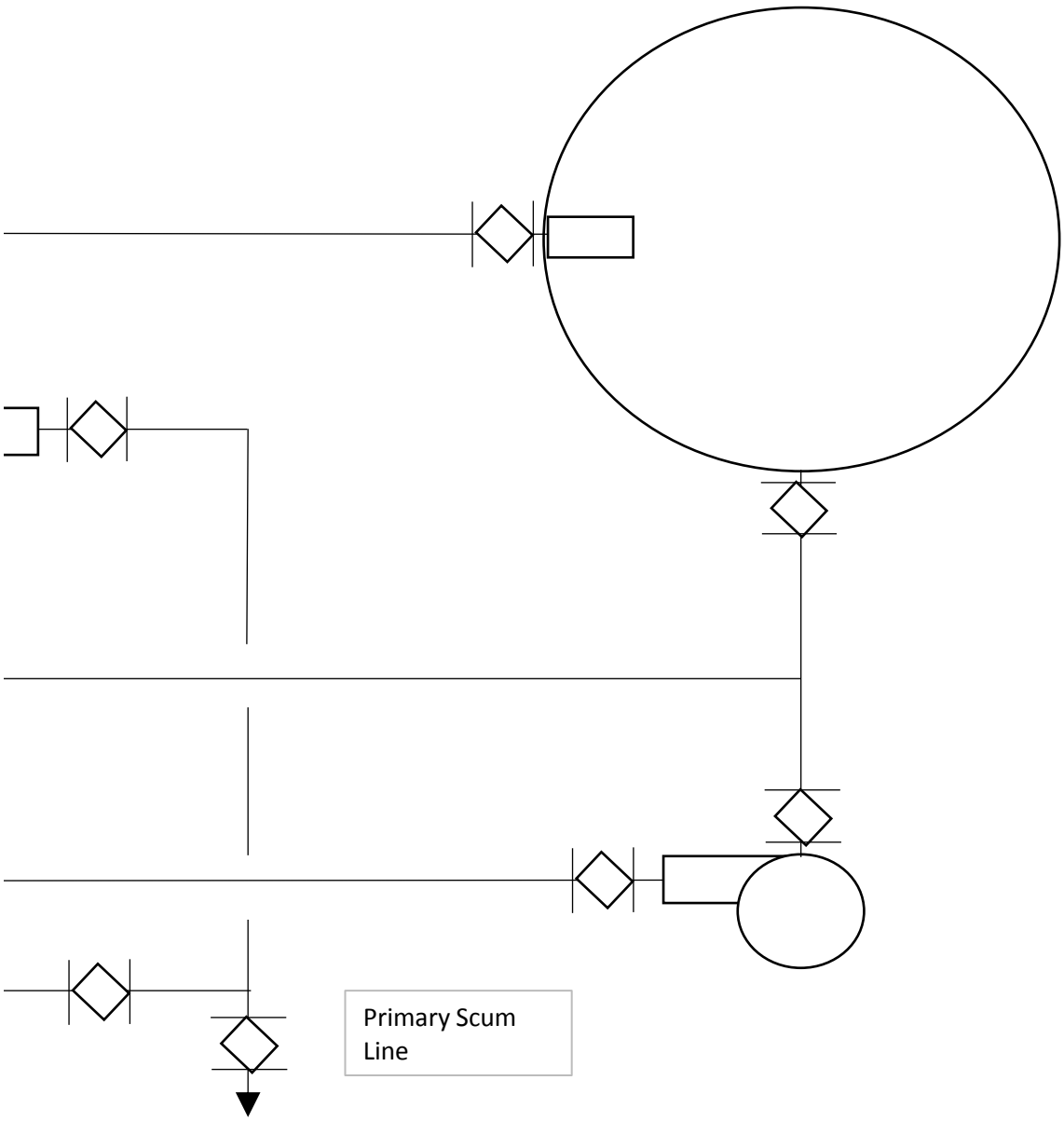


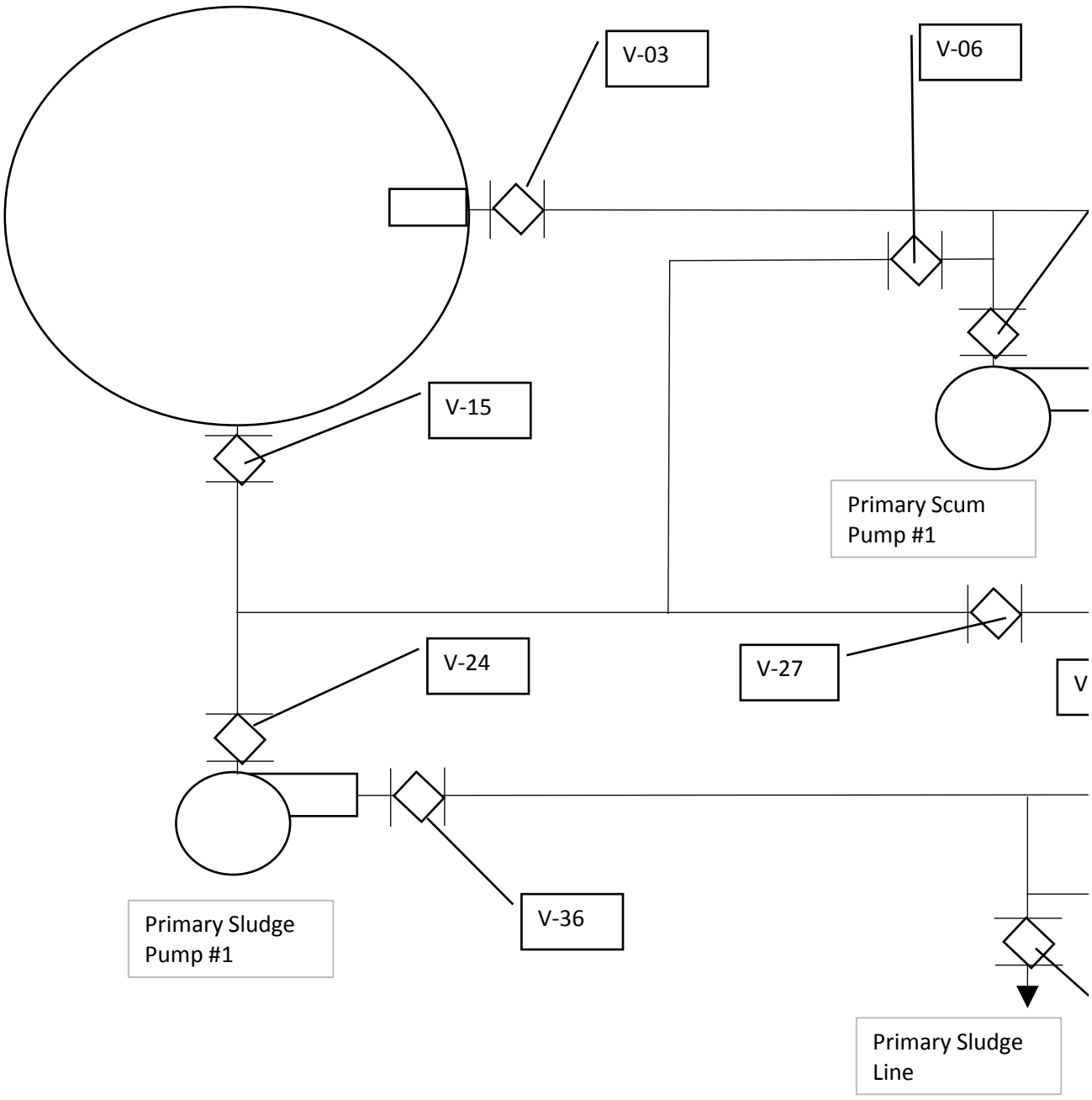


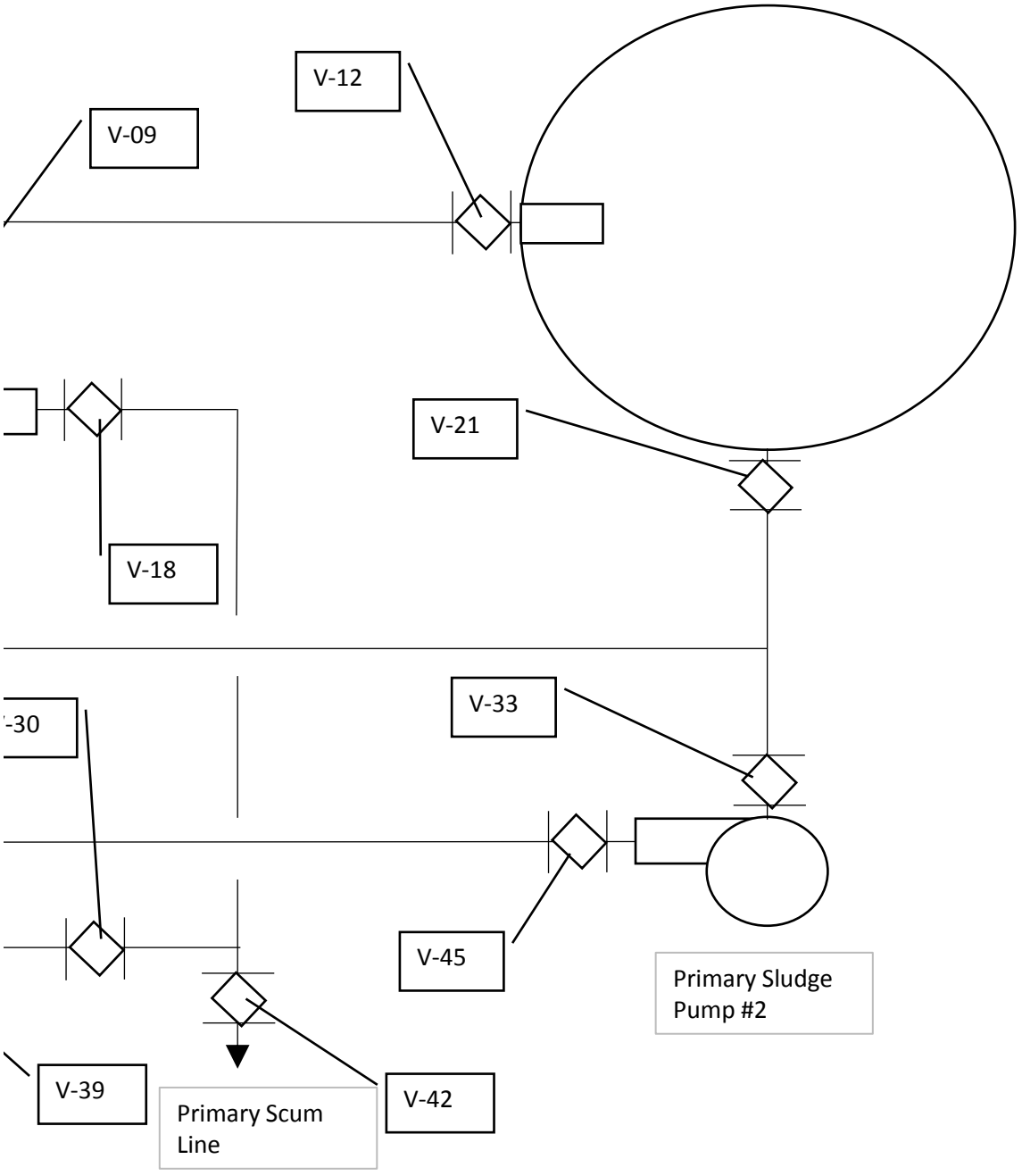
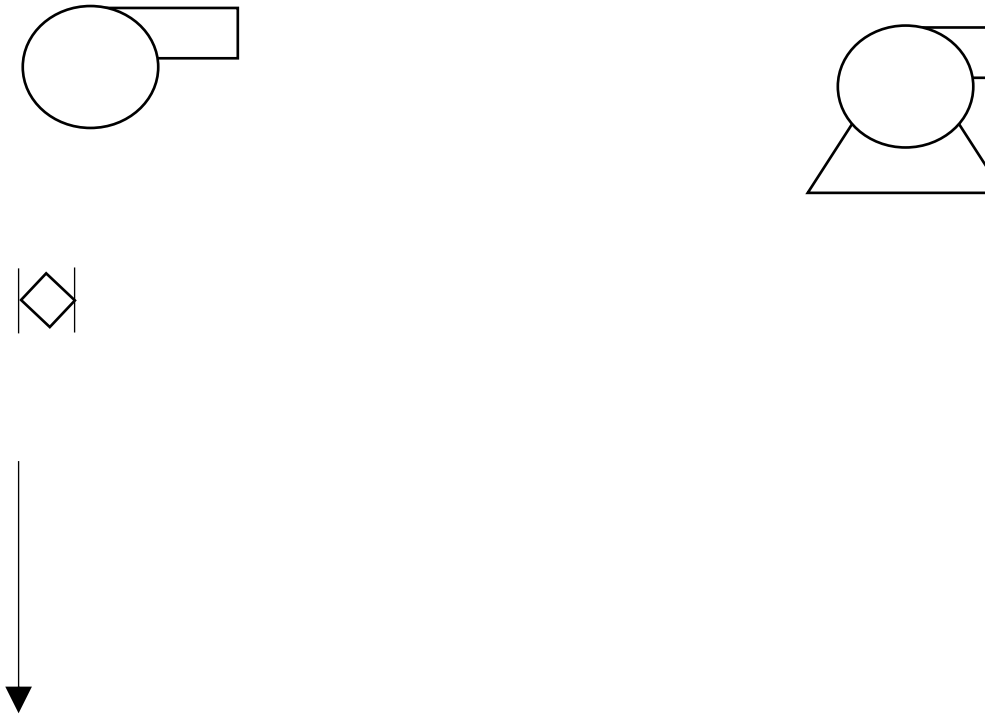

Primary Sludge
Line


Primary Scum
Line


Primary Sludge
Line


Primary Scum
Line


V-03
V-06
V-15
Primary Scum
Pump #1
V-24
V-27
V-36
Primary Sludge
Pump #1
Primary Sludge
Line


V-12
V-09
V-21
V-18
V-33
-30
V-45
Primary Sludge Pump #2
V-39
Primary Scum Line
V-42