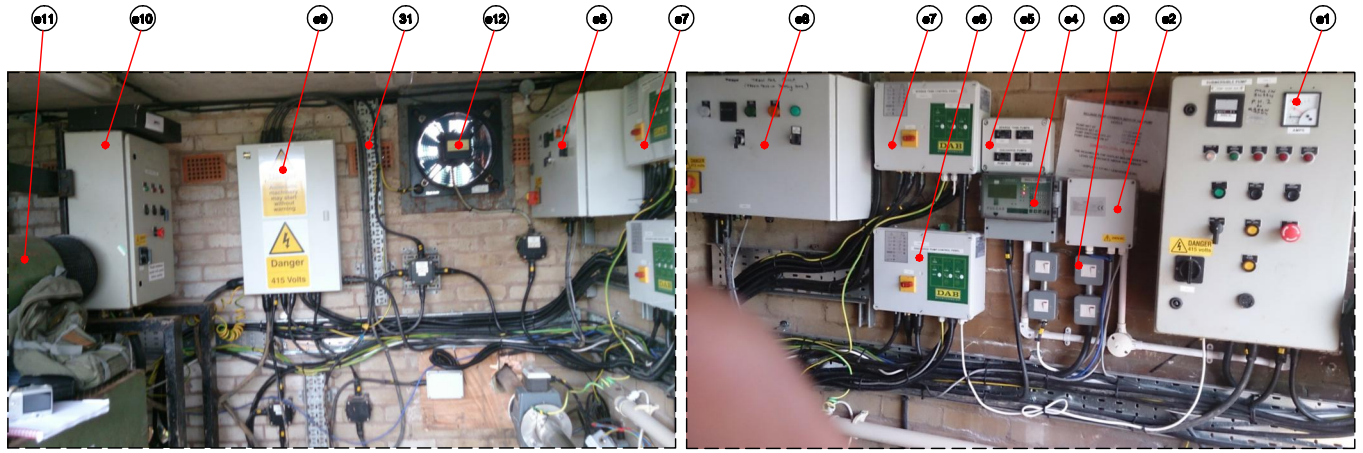
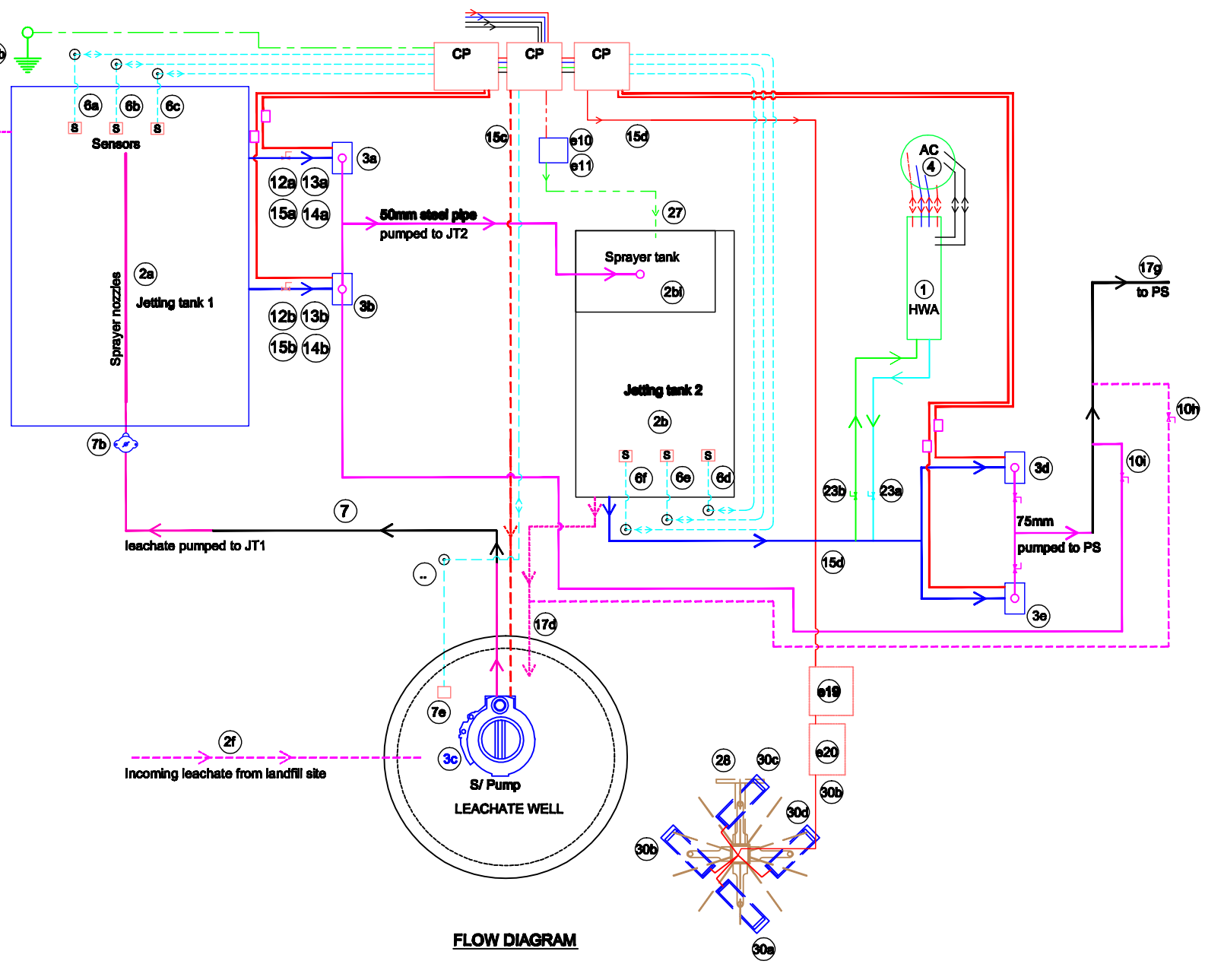


CONTROL ROOM



FLOW DIAGRAM

KEYS

Civil /Bldg.

- FENCELINES
- BRICK BUILT BUILDING
- Concrete roof /hardstanding

Mechanical

- Foul water to the WELL in collection chamber
- S/pump delivery, flex- 75mm
- S/pump delivery pipe, steel - 75mm
- Washout pipe, steel - 75mm
- Pump 1&2 suction,attached to JT1 - 75mm
- Pump 3&4 suction,in the Control room - 75mm
- Pump 1&2 delivery pipe, steel - 50mm
- Pump 3&4 delivery pipe, steel - 75mm
- Pump 3&4 delivery pips, flex - 75mm
- Overflow (return) from JT2 to Well
- Aerated liquid to HWA , flex - 25mm
- Aerated liquid return - 25mm flex
- Blower line - 25mm flex

Electrical

- Power supply to S/pump
- UG power cables
- Power supply to Pump controls
- Power supply to Analysing C & return to CP
- Power supply to Sensors
- Power supply to CCTV
- Earthing

Component Details

1. Hightech Water Analyser MMD MK
2a. Jetting tank (JT 1), Capacity- 5 cu.m
2b. Jetting tank (JT 2), Capacity- 12 cu.m
2bi. Jetting (JT 2)-sprayer
2c. 8 Adjustable steel legs JT1
2d. 2 Adjustable steel legs -pumps platform
2e. Pumps platform
2f. Leachate collected from site
3a. Pump 1, attached to JT1
3b. Pump 2, attached to JT1
3c. Submersible pump
3d. Pump 3, in control room
3e. Pump 4, in control room
4. Analysing Chamber
5. Flow Meter ABB
5a. Pressure gauge on JT1
5b. Pressure gauge on 7a
5c. Pressure gauge on 17c
5d. Pressure gauge on 17c
6. 20mm plastic duct
6a. High high level sensor on JT1
6b. High level sensor on JT1
6c. Low level sensor on JT1
6d. High high level sensor on JT2
6e. High level sensor on JT2
6f. Low level sensor on JT2
7. 75mm flexible delivery hose to JT1
7a. 75mm steel pipe to strainer
7b. Strainer on platform
7c. 75mm steel sprayer pipe
7d. Sprayer nozzles (100 nos.)
7e. 100mm steel delivery pipe
8a. 75mm steel checknut JT1
8b. 50mm steel checknut
8c. 75mm steel checknut
9a. 75mm Steel suction to pump1
9b. 75mm Steel suction to pump2
9c. 75mm Steel suction to pump 3 &4
9d. 75mm steel delivery pipe to PS (17g)
9e. 75mm delivery pipe (black flex) to PS
10a. 75mm Steel Isolation valve on 9a.
10b. 75mm Steel Isolation valve on 9b.
10c. 75mm Steel washout pipe from JT1
10d. 75mm Steel Isolation valve on washout 10c.
10e. 75mm Steel Isolation valve on pump3.
10f. 75mm Steel Isolation valve on pump4.
10g. 75mm Steel Isolation valve on suction from JT2
10h. 75mm Steel Isolation valve
10i. 50mm Steel Isolation valve
11a. 75mm flange joint on Pump1
11b. 75mm flange joint Pump2
11c. 75mm flange joint on Pump3
11d. 75mm flange joint Pump4
12a. Non return valve on Pump1
12b. Non return valve on Pump2
12c. Non return valve on Pump3
12d. Non return valve on Pump4
13a. Power incomer to switch1
13b. Power incomer to switch2
14a. Switch1
14b. Switch2
15a. Supply to Pump1
15b. Supply to Pump2
15c. Supply to Submersible Pump
15d. Supply to Camera
15e. Supply to Pump3
15f. Supply to Pump4
15g. Supply to Analysing Chamber & return to CP
15h. Supply to CCTV Recorder
16a. General earthing pumps
17a. 50mm steel delivery pipe to JT2
17b. 50mm pvc pipe on JT2
17c. 150mm pvc on JT2
17d. 75mm Steel overflow from JT2 to Well
17e. 100mm pvc Spare
17f. 150mm pvc (raw collection) from landfill
17g. 75mm Steelpipe- intake on valve chamber
17h. 75mm Steelpipe- intake spare
18a. 50mm steel flang joint
18b. 150 -75mm steel flang on 9c
18c. 150 -75mm steel flang on 9d
18d. 150 -50mm steel flang
18e. 75mm steel flang
19a. 75mm Bowel connection
19b. 75mm Bowel connection
19c. 50mm Axial lock
19d. 50mm Coupling
19e. 75mm Axial lock
19f. 75mm Coupling
20a. Cover JT1
21a. Vent Cowl on JT1
22a. Short handles
23. 15mm valve
23a. 25mm valve
23b. 25mm valve
23c. 25mm valve
23d. 50mm valve
23e. 40mm valve
23f. 75mm isolation valve
25. Aerated liquid to HWA
26. Aerated liquid return from HWA
27. Blower line - 75mm green flex
27a. 100mm PVC pipe
28. 50mm steel square pipe - camera pole
28a. Security mesh
29a. Flood light 1
29b. Flood light 2
29c. Flood light 3
30. CCTV recorder
30a. CCTV Camera 1
30b. CCTV Camera 2
30c. CCTV Camera 3
30d. CCTV Camera 4
31. Cable tray
32. 15mm breather
33. Ladder in the main chamber
34. Steel mesh
35. Air valve
35a. Chainblock in the main chamber
36. UG power cable
37. Novera Condensing compressors
38. Flagged compound
39. Fencing (wiremesh)
40. Lockable gate
41. Platform with handrailing and steps

Control room & Power components

- e1. Control panel
- e2. Telemetry
- e3. 240v feeder
- e4. Well- water level
- e5. Pump run time
- e6. DAB - Automatic control
- e7. DAB - Automatic control
- e8. Redundant Control panel
- e9. Power incomer
- e10. Blower Control panel
- e11. BLOWER
- e12. Exo. fan
- e13. Distribution board -Vent Asia
- e14. ABB controls
- e15. Motion detetor1
- e15b. Motion detetor2
- e16. Supply to flood lights
- e17. Distribution board - nos
- e18a. Earthing cabinet
- e18b. Copper Earthing Rod
- e19. Distribution board
- e20. Distribution board
- e21. Junction boxes
- 30. CCTV Recorder
- 31. Cable trays

Rev.	Amendment	Date
B	PLATFORM AND NEW PIPING ADDED	SEPT 2014
A	NEW AERATION SYSTEM ADDED	JUNE 2013

Client

Site: **BILLINGE FORMER LANDFILL SITE**

Title: **FLOW DIAGRAM AND COMPONENT DETAILS**

MWDA
Merseyside Waste Disposal Authority
5th Floor
North Horse
North John Street
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L2 6RT

A1	Drg. No. MWDA.510-350-003	Rev. B
Drawn Binu	Scale N.T.S	Date JUNE 11