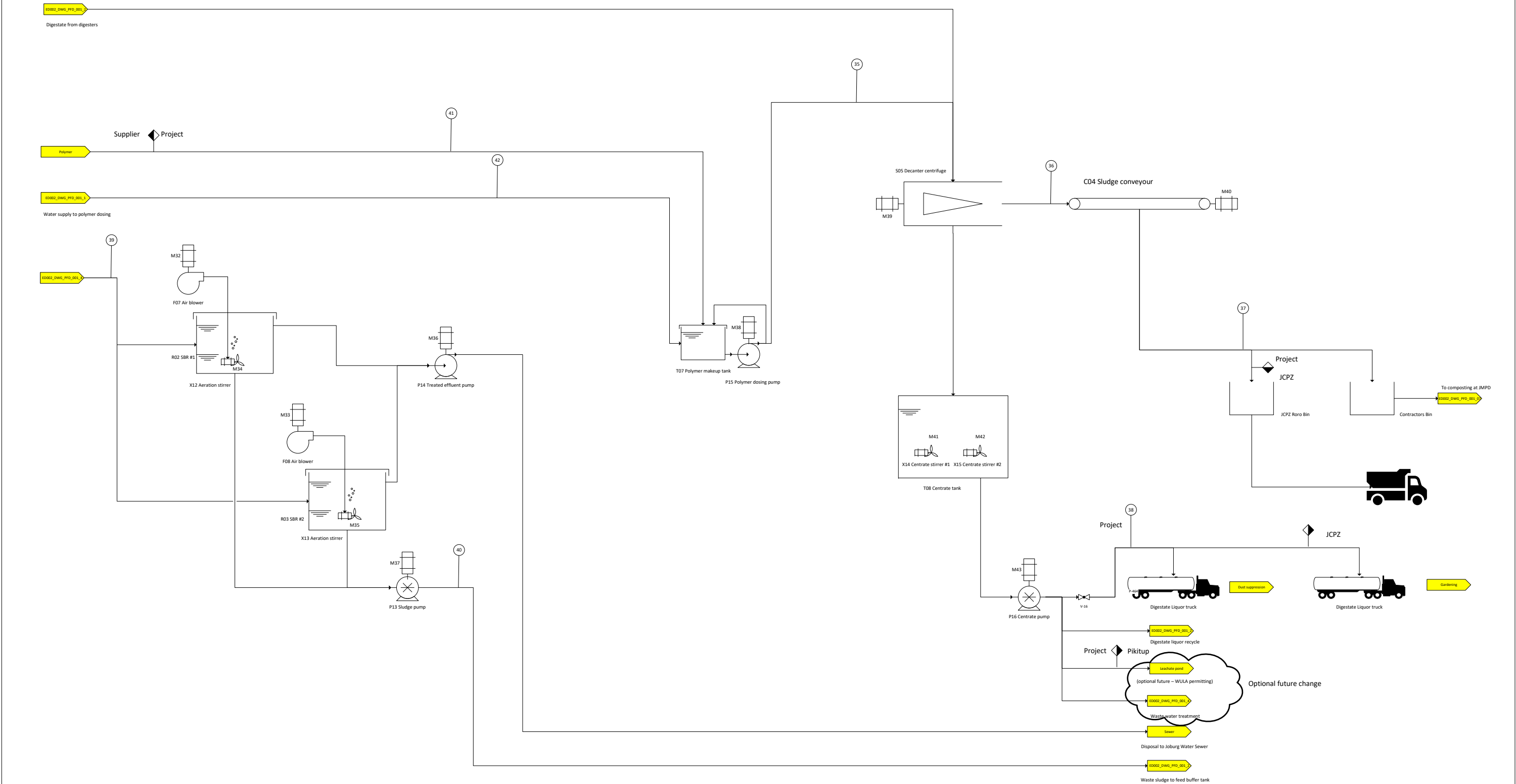


<b>F07/08 Aeration blower</b> Design Conditions: Outside Motor: M32, M33 Electrical Capacity: 5 kW Pressure: 2 barg Flow rate: HOLD	<b>R02/03 SBR 1/2</b> Design Conditions: Outside Material: BRP or FRP Volume: HOLD	<b>X12/13 Aeration stirrers</b> Design Conditions: Removable submerged Location: Inside R02/03 Material: Stainless steel Motors: M34,M35 Electrical capacity: 2 kW each	<b>P13 Sludge pump</b> Design Conditions: Outside Type: Diaphragm Flowrate: 1 m3/hr Pressure: 3 barg Motor: M37 Electrical Capacity: 2 kW	<b>P14 Treated effluent pump</b> Design Conditions: Outside Type: Centrifugal Flowrate: 3 m3/hr Pressure: 3 barg Motor: M36 Electrical Capacity: 5 kW	<b>T07 Polymer make up tank</b> Design Conditions: Outside Material: HDPE Volume: 2m3	<b>P 15 Polymer dosing pump</b> Design Conditions: Outside Type: Metered mono pump Flowrate: 1 m3/hr Pressure: 3 barg Motor: M38 Electrical capacity: 1 kW	<b>T08 Centrate tank</b> Design Conditions: Outside Material: Concrete or GRP or insulated steel Volume: 270m3	<b>S05 Decanter centrifuge</b> Design Conditions: Indoors Location: In Digestate cake building, above digestate cake bin Material: Stainless steel Motors: M39 Electrical capacity:15 kW	<b>X 14/X15 Centrate Stirrer 1/2</b> Design Conditions: Removable submerged Location: Inside T08 Material: Stainless steel Motors: M41, M42 Electrical capacity: 2 kW each	<b>P16 Centrate pump</b> Design Conditions: Outside Flowrate: 10 m3/hr Pressure: 3 barg Motor: M43 Electrical Capacity: 8 kW	<b>C04 sludge conveyour</b> Design Conditions: high pH, indoors Design Capacity: 1 tons per hour Flow: 1 m3/hr Electrical rating: 2 kW Type: Screw Material: Stainless Notes: Retractable for spreading in the bin. Motor: M40
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Stream number		35	36	37	38	39	40	41	42
Stream Name		diluted polymer	digestate solids	digestate solids	digestate liquor	digestate liquor	WWTW sludge	polymer	water
Commodity		liquid	cake	cake	liquid	liquid	sludge (baatch)	powder (bags)	water
pH		7	8	8	7	7	6 to 8	5	7
Frequency of removal/supply	per day	NA	NA	0.4	2.1	NA	0.25	0.64	NA
Normal flow rate	(m3/hr)	0.5	0.4	0.4	1.8	1.8	0.01	0.001	0.5
Design Flow Rate	(m3/hr)	1.6	1.3	1.3	5.3	5.3	0.02	0.001	1.6
Density	(kg/m3)	1000	1200	1200	1000	1000.0	1000	1000	1000
Pressure	(kPag)	<300	0	0	0	0.0	0	0	<300
Temperature	(deg C)	20	30	30	35	35.0	20	20	20
Total Solids	(TS%)	0	27%	27%	1%	0.0	2-8%	100%	0
Volatile Solids	(VS%)	0	77%	77%	77%	0.8	80%	NA	0

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Rev	Review	By	Check	App.	Date	Issued for
9	Included solid digestate treatment	DB			2019/05/27	REVIEW
10	Numbering update	DB			2019/06/07	COMMENT
11	Add Pump	DB			2019/06/16	

Process Flow Diagram: Digestate Treatment

Drawing number: ED-002_ENG_DWG_PFD_001	Compiled: Darius Boshoff	Page: 4 of 7	Rev 12
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