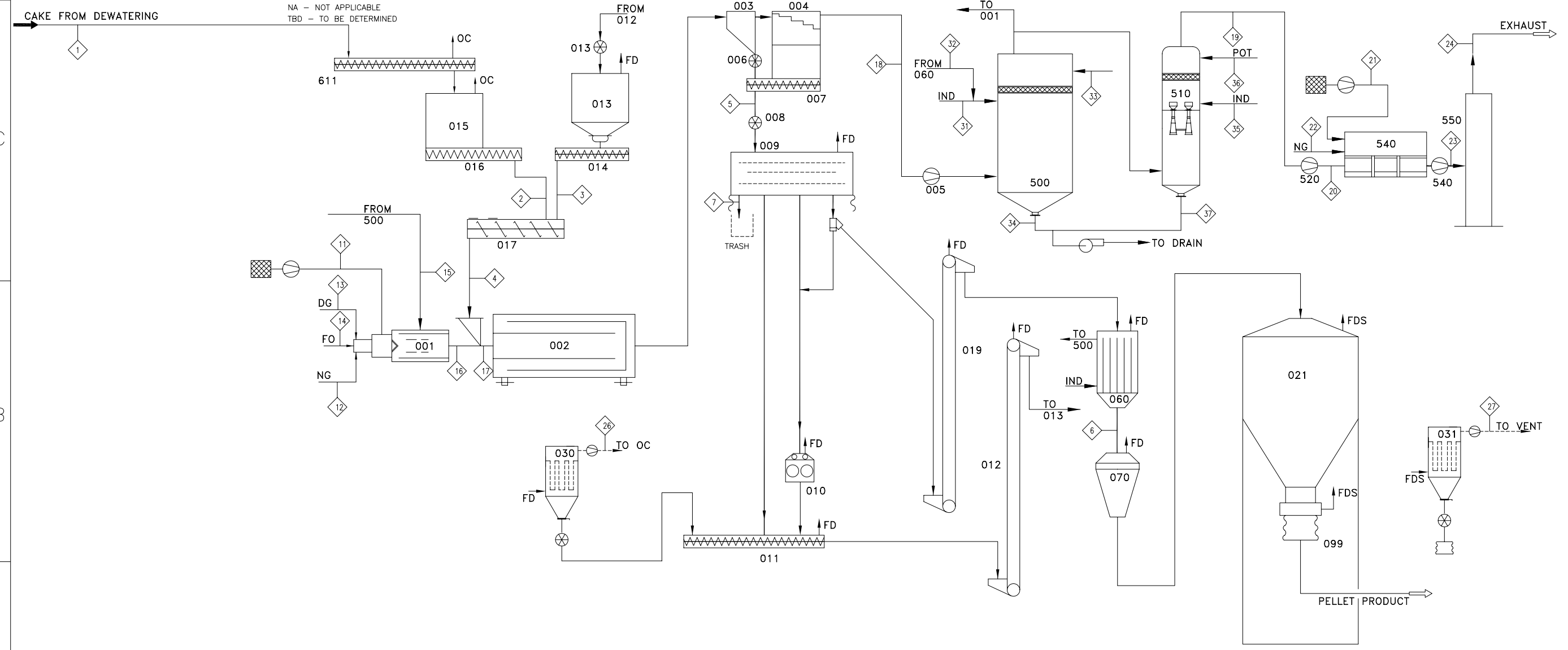


TAG NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37				
DESCRIPTION		Cake from Dewatering	Wet Cake	Recycle Material	Dryer Feed	Dried Solids	Pellet Product	Trash Product				Comb. Air	Natural Gas	Digester Gas	Fuel Oil	Circulating Gas	Leak air	Process Gas	Process Gas	Process Gas	Process Gas	Comb. Air	Natural Gas	Process Gas	Process Gas		Aspiration air	Aspiration air				Cooling Water	Cooling Water	Cooling Water	Cooling Water	Cooling Water	Cooling Water	Cooling Water			
MASS FLOW	LBS/HR		12,084	24,716	36,800	27,934	3,216	2				10,076	555			40,433	4,060	55,125	63,925	14,232	14,232	347	19	14,598	14,598		8,296	8,664				121,097	24,578	7,506	162,039	12,311	7,506	20,219			
VOL. FLOW	ACFM											2,326	203			10,457	937	33,280	20,012	3,550	3,550	80	7	4,263	4,263		2,000	2,000													
TEMPERATURE	°F		70	155	112	161	99	155								125	85	905	200	113	113	85	60	210	210		115	85				75	78	75	146	76	75	113			
SOLIDS CONTENT	%DS		25.0%	92.0%	70.0%	92.0%	92.0%	92.0%																																	

Design Conditions		Utilities Per Dryer Train	
Client		Natural Gas (Therms/H)	146(10% contingency)
City	Stamford, CT	Digester Gas (Therms/H)	NA
Dryer	DDS-40	Fuel Oil (GPH)	NA
No. of Dryers	1	Plant Water (GPM)	370(10% contingency)
Cake Solids %DS	25%	Plant Water Temp. °F	75
Evaporation lbs/hr	8,800	Potable Water (GPM)	TBD
Fuels	NG	Electricity (kWH)	TBD
Operation	24/5		

001	Furnace	009	Screen	017	Mixer	500	Saturator	IND	Plant Water
002	DDS Drum	010	Crusher	019	Bucket Elevator	510	Venturi Scrubber	NA	Not Applicable
003	Preseparator	011	Screw Conveyor	021	Product Silo	520	Venturi Fan	NG	Natural Gas
004	Polycyclone	012	Bucket Elevator	030	Fugitive Dust System	540	RTO	POT	Potable
005	Main ID Fan	013	Recycle Bin	031	Silo Fugitive Dust	550	Stack	TBD	To Be Determined
006	Rotary Valve	014	Feed Conveyor	060	Pellet Cooler	600	Nitrogen System		
007	Screw Conveyor	015	Cake Bin	070	Transporter	620	Pellet Oiling System		
008	Rotary Valve	016	Cake Feed	099	Loading Spout				



DATE	REV	DESCRIPTION
06/05/06	0	FOR FINAL REVIEW/BUILDING PERMIT

DRAWN BY: DAN	DATE: 8/11/04
CHECKED BY:	DATE:
APPROVED BY:	DATE:
SCALE: NONE	FILE: 1524P1003
SIZE:	

JOB NAME	CITY OF STAMFORD CONNECTICUT SOLIDS DRYING PROJECT
TITLE	PROCESS DIAGRAM MASS BALANCE 25%
PROJECT NUMBER	1524
DRAWING NUMBER	PI-003
SHEET	1 OF 1

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