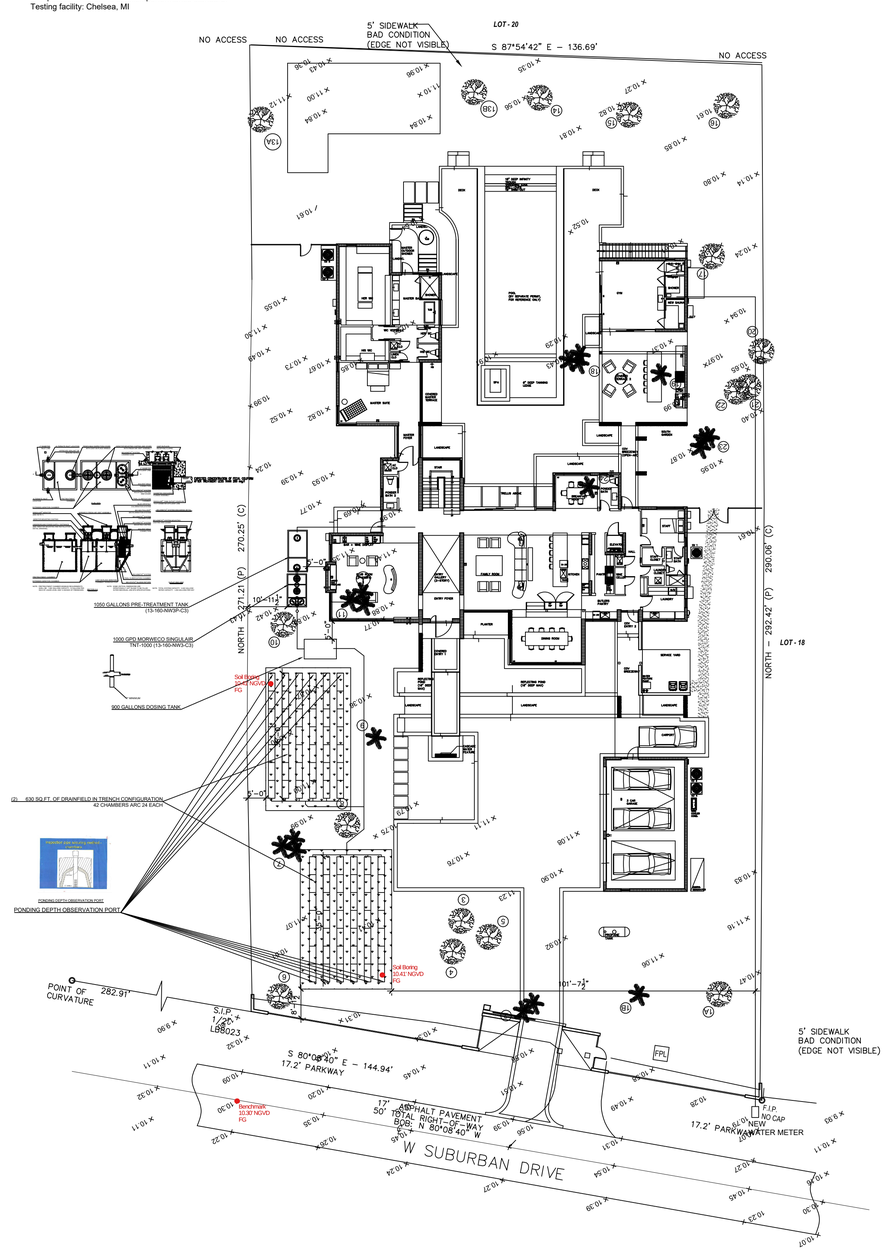
Certification of Design

I certified that the engineering features of this performance-based treatment system have been designed or specified by me and conform to engineering principles applicable to such projects. In my professional judgment, this system, when properly constructed, operated and maintained, will achieve the established performance standard and comply with all applicable status of the State of Florida and rules of the Department.

This is based on average Testing Performance Data for components of Performance-Based Treatment Systems (PBTS) by E. Roeder. for innovative system testing in Florida or from test centers for evaluation of use in nutrient and fecal coliform reducing PBTS or from test centers for NSF-certification as Aerobic Treatment Units (ATUs).
Florida-approved NSF 40-Certified Models

Florida-approved NSF Standard 245
Nitrogen-Reducing, certified Aerobic Treatment Units in Florida (Rule 62.6-6.012, Florida Administrative Code)
Norweco Singulair 960-500, 600, 750, 800, 1000, 1250, 1500
Average Total Nitrogen Reduction NSF 245 Completion report 68%
Singulair TNT TN=6.80 mg/L, CBOD5=6 mg/L, TSS=10 mg/L
TP treatment anticipates sufficiently low influent concentrations and is expected to meet the stablish performance standard.
Testing facility: Chelsea, MI



SECTION No. 1 COVER LETTER

Miami-Dade Department of Health
O.S.T.D.S. Program
Miami Dade County Building
11805 S.W. 26th St.
Miami, Fl 33175

ENGINEER OF RECORD: Fausto Guerrero
Florida State Licensed Engineer, Lic. No. 50465
Address: 19552 SW 133 Ave
Miami, Fl 33177
REFERENCE:
HH6100, LLC
6100 W SUBURBAN DR
MIAMI, FL 33156

LEGAL DESCRIPTION: Lot 17, Block N/A Subdivision: MARTIN SUBURBAN ACRES

PROPERTY ID: 20-5001-009-0160

We are hereby requesting approval of a Performance-Base Treatment System (PBTS) designed for, and to be installed upon, the property being dealt with. The Engineer of record, the certified installment entity, (Sarima Batista, Registered Septic Tank Contractor and/or personnel under her supervision), the Aerobic Treatment Unit providers and warrantors in the State of Florida (SB Engineering, Inc) and the primary manufacturer (NORWECO, INC.) will be involved in all necessary activities to warranty the complete installation as well as the maintenance thereof.

WTI/MDR Engineered ATU
Operation, Maintenance, and Inspection Specifications

Operation:
Power supply to all electric components must remain constant at all times. It is not acceptable to disconnect power from the system at any time except under the direction of the maintenance entity or in case of emergency.
Homeowner is not to power off during extended absences from home, vacations or otherwise. Liquid waste treatment additives shall not be used
Maintenance and Inspection 2/year contract
-Inspections: Effluent monitoring and preventative maintenance shall be performed as required by 62.6 Part I, FAC.
-First inspection: At system installation by engineer.
-Second: After system has been in operation a total of 6 months by maintenance entity.
-Thereafter: every 6 months, as part of maintenance entity inspection. Maintenance entity inspection to include:
Solids Check accumulation (expect pump-out every 3 to 5 years)
Blower: Confirm proper operation; clean air filter, as required.
Alarms: Trip all alarms manually to confirm effective operation
Outlet Filter: Operate filter plunger. Remove, clean, and reinstall as required.
Pump: Check operation by manually tripping float switch. Operate each pump manually at control panel
-Monitoring to be conducted semi Annually
Monitoring / Sampling: At SAMPLING PORT
Pollutant to be check

- Ponding depth quarterly
- TN ≤ 50% REDUCTION
- TP ≤ 10 mg/l
- Fecal coliform = ≤ 200 fc col/100 ml

Contingency
1- At the high water level, the system alarm sound. The Owner must contact the Maintenance entity within 24 hours of alarm.
2- Maintenance entity personnel will inspect the system, and order a repair on the problem as necessary, within 36 hours as specified in 62-6.012 (4)(b)
3- Owner shall be have tanks pumped as required to prevent the creation of sanitary nuisance conditions until such time as repairs are effected which prevent sanitary nuisance conditions.

DETERMINATION OF OSTDS TYPE AND STANDARDS PER SECTION 24-42.7

GROSS LOT SIZE 41,955.5 SQ.FT. = 0.963 ACRES
LAND USE: RESIDENTIAL
GROSS BUILDING AREA: 13,202.6 SQ.FT.
SEWAGE FLOW: 510 GPD
SEWAGE LOADING: 510 GPD / 0.963 ACRES= 529 GPD/ACRES

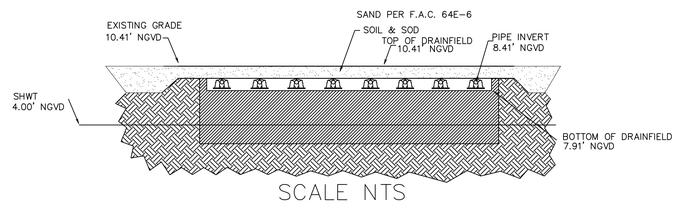
Y	N	CRITERIA FOR OSTDS TYPE SELECTION
X		PROPERTY WILL BE SERVED BY PUBLIC WATER
X		PROPERTY COMPLETELY OUTSIDE WELLFIELD PROTECTION AREA
X		SURFACE WATER BODIES BEYOND 1000 FEET
	X	SEWAGE FLOW IS LESS THAN 500 GPD FOR SFR/DUPLEX
		SEWAGE FLOW IS LESS THAN 1000 GPD FOR MULTI-FAMILY/OTHERS USES
	X	SEWAGE LOADING LESS THAN 500 GPD/ACRE
		OTHER CONSIDERATIONS FOR OSTDS APPROVAL
X		SANITARY SEWERS NOT AVAILABLE, ABUTTING, OR OPERATIVE
X		SYSTEM WILL SERVE ONLY ONE LOT
		PROPERTY LINES OVER 50 FEET FROM OSTDS FOR PROPERTIES SERVE BY A POTABLE WATER WELL

TYPE OF SYSTEM REQUIRED: TYPE 3 –ADVANCED SECONDARY TREATMENT STANDARDS
TOTAL NITROGEN TREATED BY: 1000 GPD NORWECO SINGULAIR TNT-1000
TOTAL PHOSPHORUS TREATED BY: NO REDUCTION
FECAL COLIFORM TREATED BY: CHLORINATOR / DECHLORINATOR BIOKINETIC FILTER
SOURCE OF TREATMENT STANDARDS: FDEP TESTING PERFORMANCE DATA FOR PBTS

POLLUTANT	REQUIRED (mg/L) (Annual Average)	PROPOSED (mg/L) (Annual Average)
$CBOD_5$	10 mg/L	4 mg/L
TSS	10 mg/L	9 mg/L
TN	50%	68% - 12 mg/L
TP	10 mg/L	10 mg/L
FECAL COLIFORM (CFU/100ml)	200 cfu/ 100 ml	2 cfu/100 ml

OSDTS CALCULATIONS PER CHAPTER 62-6 F.A.C.
NET LOT: 38,332 SQ.FT. = 0.8799 AC
LAND USE: RESIDENTIAL
BUILDING AREA: 10,363.8 SQ.FT. & 6 BEDROOMS
SEWAGE FLOW
MAXIMUM SEWAGE LOADING ALLOWANCE= 2,500 GPD/ACRE (1,500 GPD/ACRE OR 2,500 GPD/ACRE)
AUTHORIZED SEWAGE FLOW: 0.8799 AC X 2500 GPD/AC = 2,199 GPD
UNIT FLOW CRITERIA (PER RESIDENTIAL TABLE I)= # BEDROOMS, BUILDING AREA
SEWAGE FLOW PER UNIT= : 100 GPD per bedroom and/or 750 Sq.Ft. after 400 GPD for each additional bedroom or each additional 750 square feet of building area or fraction thereof in a dwelling unit, system sizing shall be increased by 60 gallons per dwelling unit.
TOTAL SEWAGE FLOW: 1000 GPD
TREATMENT TANK AND DRAINFIELD
PROPOSED SYSTEM: 1000 GPD NORWECO SINGULAIR TNT-1000
MINIMUM REQUIRED TREATMENT CAPACITY: 1000 GPD
DRAINFIELD CONFIGURATION: TRENCH
DRAINFIELD TYPE: STANDARD (NO MOUND)
DRAINFIELD MATERIAL: CHAMBER
MAXIMUM SEWAGE LOADING RATE FOR THE PROPOSED DRAINFIELD: 0.80 gal/FT^2 Day
DRAINFIELD SIZE:
1000 GPD/0.80= 1250 SQ.FT. OF DRAINFIELD (1875 SQ.FT. TOTAL UNOBSTRUCTED AREA)
SEPARATION BETWEEN THE SHWT AND BOTTOM OF THE DRAINFIELD (ELEVATIONS NGVD 29)
GRADE ELEVATION: 10.41' NGVD
SEASONAL HIGH WATER TABLE ELEVATION= 4.00' NGVD
ELEVATION AT THE BOTTOM OF DRAINFIELD= 7.91' NGVD
SEPARATION BETWEEN SHWT AND BOTTOM OF DRAINFIELD= 46.92 INCHES

CROSS SECTION



SCALE NTS

General Notes

NEW 2-STORY RESIDENCE: HH6100, LLC

6100 W SUBURBAN DR
PINECREST, FL, 33156

FAUSTO E. GUERRERO LICENSE No. 50465 STATE OF FLORIDA PROFESSIONAL ENGINEER

PROJECT

Digitally signed by Fausto E Guerrero
Date: 2024.05.12 13:26:05 -04'00'

No.	Revision/Issue	Date

Firm Name and Address
FAUSTO GUERRERO P.E.
LIC. NO.: 50465
19552 SW 133 AVE
MIAMI, FL 33177

Project Name and Address
HH6100, LLC
10101 SOUTH DIXIE HWY
PINECREST, FL 33156

Project	Sheet
6100	SP-1
Date: 05/09/2024	
Scale: 1"=20'-0"	

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY FAUSTO GUERRERO ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.