ADVANCED SECONDARY TREATMENT
STANDARD "ASTS" TYPE III
AS PER CHAPTER 62-6 F.A.C.

LOT SIZE: 39,493 Sq Ft = .91 ACRES
0.91 ACRES x 2500 = 2,275 G.P.D . MAX.

FIRST 2,551-3,300 SQ FT — *400 GPD*
FOR EACH ADDITIONAL 750 S.F. = 60 G.P.D
6,868 S.F. - 3,300 = 3,568 / 750 = 4.75 x 60 G.P.D. = 285 G.P.D. (USE 300) — *300 GPD*
700 GPD TOTAL

SEPTICK TANK ----- HOOT H-1000-AN

DRAINFIELD: *A DRIP DISPOSAL SYSTEM AS PER TABLE N° III NETAFIN OR APPROVED EQUAL*

25% APPLIED FOR SECONDARY TREATMENT STANDARDS "STS"

ESTIMATED SEWAGE FLOW (G.P.D) / RATE ABSORSION IN (G.P.D) => *700 / 0.8 (DRIP IRRIGATION)* = *825 SQ FT @ 25% REDUCTION*
620 SQ FT RESERVE AREA
REQUIRED 310 SQ FT
UNOBSTRUCTED AREA REQUIRED
930 SQ FT 950 SQ FT PROVIDED

NOTE:
1- WATER PIPES SHALL BE INSTALLED AT LEAST 12" ABOVE THE HIGHEST SEWER PIPE AS PER F.B.C. 603.2 EXCEPTION No1. 2- ALL PENETRATIONS THRU STRUCTURAL BEARING WALLS SHALL BE PROVIDED WITH SLEEVE AS REQUIRED IN COMPLIANCE WITH F.B.C. 305 THRU 305.5

NOTE:
THERE ARE NO PERTINENT FEATURES ON ADJACENT PROPERTIES AND ACROSS THE STREET THAT MAY AFFECT THE SYSTEM INSTALLATION.

PRESSURE LOSS IN 100' OF 1-1/4" TUBING IS 0.39 LBS.
(306 LF) 3.06 X 0.39 =1.20 LBS
PRESSURE LOSS ACROSS FILTER IS 7 PSI INCLUDING FILTER FLUSH RETURN LINE FLOW RATE WHILE THE SYSTEM IS RUNNING IS 2.3 GPM. RECIRCULATING RATE TO ACHIEVE 2.0 FT/S SCOURING VELOCITY 10.36 GPM AT 60' OF HEAD PRESSURE TO FIELD WILL BE ADJUSTED TO ACHIEVE A MAXIMUM OF 30 PSI ON THE SUPPLY MANIFOLD BY OPENING THE BY PASS PETCOCK LOCATED IN THE PUMP TANK.

ONE ZONE SYSTEM(LESS THAN 2000 L.F.)
ALL DRIP LINES SHALL BE INSTALLED
BETWEEN 8" AND 6" DEPTH. MIN.
WITH EMITTERS AT 24" O/C .(PIPES 25" SEPARATED.)
620 S.F. AREA / 4 S.F.PER EMITER =
153 EMITTERS REQUIRED. 306 LINEAL FEET OF DRIP LINE

CONTINGENCY PLAN:

AS OWNER OF THE PROPERTY IN THIS PLANS YOU WILL BE REQUIRED TO HAVE A CONTRACT WITH AN APPROVED CERTIFIED MAINTENANCE COMPANY FOR INNOVATIVE SYSTEM (P.B.T.S.), EVERY 2 YEAR MINIMUM AS PER 64-6.027, THIS CONTRACT WILL HAVE THE FOLLOWING ITEMS.
a) MONITORING (IN COMPLIANCE WITH 64-6.029)
b) MAINTENANCE PLAN.
C) AND IN CASE OF SYSTEM FAILURE :
1) TO CALL MAINTENANCE COMPANY IN THE FIRST 24 HOUR AFTER ALARM OR SYSTEM FAILURE.
2) MAINTENANCE COMPANY TO PROVIDE TO TREAT THE EFFLUENT OR TO COLLECT AND DISPOSE THE EFFLUENT UNTIL THE SYSTEM IS IN COMPLIANCE WITH THE ORIGINAL DESIGN PARAMETERS .

CERTIFICATION:

- I CERTIFY THAT THE ENGINEERING FEATURES IN THIS PERFORMANCE-BASEDTREATMENT SYSTEM HAVE BEEN DESIGNED OR SPECIFIED BY ME AND CONFORM TO ENGINEERING PRINCIPLES APPLICABLE TO SUCH PROJECT. IN MY PROFESSIONAL JUDGMENT, THIS SYSTEM, WHEN PROPERLY CONSTRUCTED, OPERATED AND MAINTAINED, WILL ACHIEVE THE ESTABLISHED PERFORMANCE STANDARD AND COMPLY WITH ALL APPLICABLE STATUTES OF THE STATE OF FLORIDA AND RULES OF THE DEPARTMENT.

- THIS IS BASED ON TESTING RESULTS INFORMATION PROVIDE BY HOOT. THAT SHOW THAT cBOD5= AND TSS = mg/L WERE ACHIEVED DURING NSF -40 TESTING. TN= mg/L WAS ACHIEVED DURING NSF 245 TESTING. IP TREATMENT ANTICIPATES SUFFICIENTLY LOW INFLUENT CONCENTRATIONS (SEE 64E-6.025(3)(a)4. ,FAC) AND IS EXPECTED TO MEET THE STABLISH PERFORMANCE STANDARD.

- (A REFERENCE TO THE OWNERS STUDY IN THE FLORIDA KEYS WOULD COVER DE SAME PARAMETERS .

- FECAL COLIFORM TREATMENT IS ANTICIPATED TO BE ACHIEVED BY SOIL TREATMENT BY ADDING 24" SAND BED.(64E-026(26(2)(d).

- THE PROPOSED SYSTEM INCLUDES SOME RECIRCULATION (SEE DRIP DESIGN) TO THE PRETREATMENT COMPARTMENT THAT WERE NOT PART OF THE TEST CONFIGURATION. BECAUSE THE RECIRCULATION RATE DOES NOT EXCEED 50% ,I ANTICIPATE NO NEGATIVE INFLUENCE ON cBOD5 AND TSS RESULTS AND POSSIBLY AN ENHANCEMENT OF NITROGEN REDUCTION.

FECAL COLIFORM WILL BE TREATED BY SAND FIELD IN SOIL. SEE MONITORING TEST POINT & SHALL BE TESTED TWICE (2) PER YEAR UNDER THE DRAINFIELD.

OSTDS CALCULATIONS PER CHAPTER 62-6 F.A.C.

NET LOT SIZE =	43,542 SQ.FT. =	1.0 ACRES	
LAND USE :	SINGLE FAMILY RESIDENCE		
BUILDING AREA =	5549 SQ FT	5 BEDROOM	
SEWAGE FLOW			
MAXIMUM SEWAGE LOADING ALLOWANCE =	2499 GPD/ACRE (1500 GPDACRE OR 2500 GPD/ACRE)		
AUTORIZED SEWAGE FLOW=	2500 GPD/ACRE *	1.0 ACRES=	2499 GPD
UNIT FLOW CRITERIA (PER TABLE 1)	2500		
SEWAGE FLOW PER UNIT FLOW =	700		
TOTAL SEWAGE FLOW =	700 GPD		
TREATMENT TANK AND DRAINFIELD			
PROPOSED SYSTEM : ADVANCED SECONDRY TREATMENT STANDARDS			
MINIMUM REQUIRED TREATMENT SYSTEM CAPACITY =	700 GPD		
DRAINFIELD CONFIGURATION: DRIP IRRIGATION SYSTEM			
DRAINFIELD MATERIAL :	NEOFIN		
MAXIMUM SEWAGE LOADING RATE FOR THE PROPOSED DRIANFIELD =	0.8 GAL/FT^2 DAY		
DRAINFIELD SIZE =	700 GPD / 0.8 GAL/FT^2 DAY =	875 FT^2	
SEPARATION BETWEEN THE SHWT AND BOTTOM OF DRAINFIELD (NGVD 88)			
GRADE ELEVATION =	12.71 FT		
SEASONAL HIGH WATER TABLE ELEVATION =	4.50 FT		
ELEVATION AT BOTTOM OF DRAINFIELD =	12.11 FT		
SEPARATION BETWEEN SHWT AND BOTTOM OF DRAINFIELD =	8.21 FT		

DETEIRMIINATIION OF OSTDS TYPE AND STANDARDS PER SECTION 24-42.7

GROSS LOT SIZE =	43,542.0 FT^2 =	1.0 **ACRES**
LAND USE:	SINGLR FAMILY HOUSE	
GROSS BUILDING AREA =	18320 FT^2	
SEWAGE FLOW =	700 **GPD**	
SEWAGE LOADING =	700 **GPD/**	1.0 **ACRES=** 700 **GPD/ARCE**

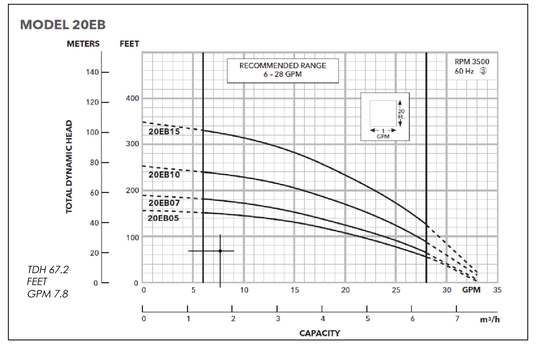
Yes/No	CRITERIA FOR OSTDS TYPE SELECTION
Yes	PROPERTY WILL BE SERVED BY PUBLIC WATER
No	PROPERTY COMPLETELY OUTSIDE WELLFIELD PROTECTION AREA
No	SURFACE WATER BODIES BEYOND 1000 FEET
No	SEWAGE FLOW IS LESS THAN 500 GPD FOR SFR /DUPLEX
Yes	SEWAGE FLOW IS LESS THAN 1000 GPD FOR MULTI-FAMILY/OTHER USES
No	SEWAGE LOADING LESS THAN 500 GPD/ ACRE

Yes/No	OTHER CONSIDERATIONS FOR OSTDS APPROVAL
Yes	SANITARY SEWERS NOT AVAILABLE, ABUTTING, OR OPERATIVE
Yes	SYSTEM WILL SERVE ONLY ONE LOT
Yes	PROPERTY LINES OVER 50 FEET FROM OSTDS FOR PROPERTIES SERVED BY A POTABLE

TYPE OF SYSTEM REQUIRED:	ASTS	HOOT 1000	pick one : ATU (1)	STS (2)	ASTS (3)	AWTS (4)	
TOTAL NITROGEN TREATED BY:	ASTS						
TOTAL PHOSPHORUS TREATED BY:	ASTS						
FECAL COLIFORM TREATED BY:	ASTS						
SOURCE OF TREATMENT STANDARDS:	ASTS						

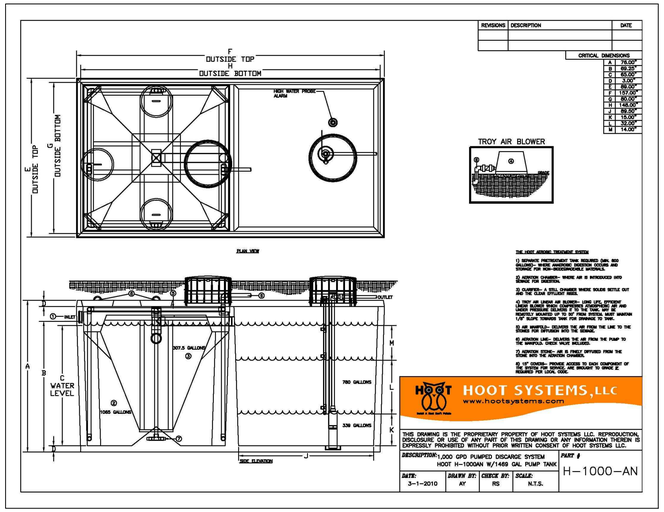
POLLUTANT	REQUIRED (mg/l) (ANUUAL AVERAGE)	PROPOSED (mg/l) (ANNUAL AVERAGE)
TREATMENT STANDARDS		
CBODs	= OR<10 mg/l	= OR<10 mg/l
TSS	= OR<10 mg/l	= OR<10 mg/l
TN	= OR<20 mg/l	= OR<20 mg/l
TP	= OR<10 mg/l	= OR<10 mg/l
FECAL COLIFORM (fc/100ml)	= OR<20 fc col/100ml	= OR<20 fc col/100ml

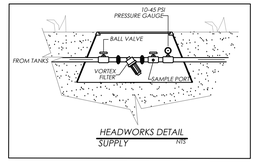
GOULDS 20EB SERIES
SUBMERSIBLE EFFLUENT PUMP

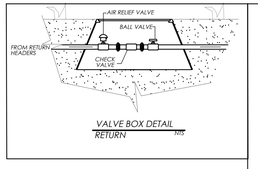


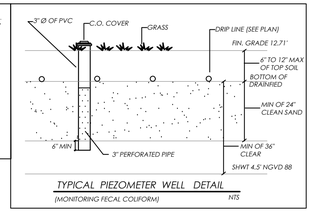
20EB-SERIES ELECTRICAL DATA

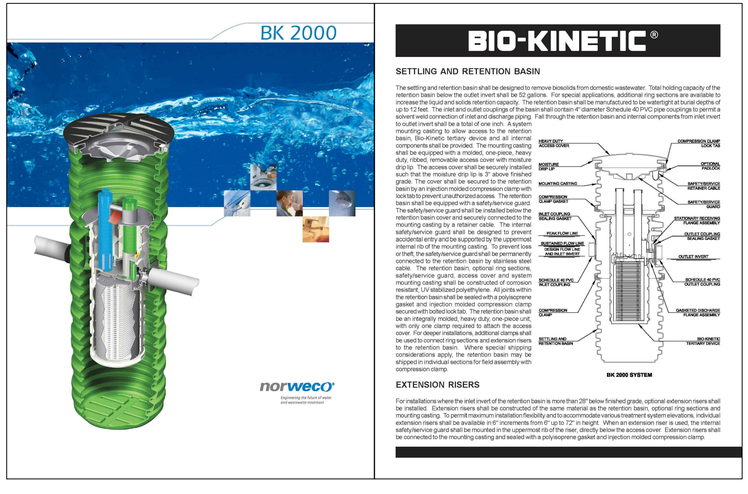
MODEL	HP	VOLTAGE	PHASE	SF	FULL LOAD AMPS	LOCKED ROTOR AMPS	THERMAL OVERLOAD TEMP	STATOR WINDING CLASS	CORD LENGTH FT	DISCHARGE	AUTOMATIC
20EB 0522J	.5	120	1	1.00	6.8	10.5	120˚C 248˚F	B	25	1-1/4" Ø	YES











PASCUAL PEREZ KILIDDJIAN STARR
ARCHITECTS + PLANNERS
LICENSE # AA 26001357
EDGARDO PEREZ , AIA
LICENSE No. : AR 0015394
MARIO P. PASCUAL , AIA
LICENSE No. : AR 0008254
PETER KILIDDJIAN, RA
LICENSE No. : AR 0093067
ANDREW STARR, RA
LICENSE No. : AR 0095130
AT THE BEACON CENTER
1330 NW 84th AVENUE
DORAL, FLORIDA 33126
TELEPHONE :(305) 592-1363
FACSIMILE : (305) 592-6865
http://www.ppkarch.com

REVISIONS:

OWNER:
HERITAGE HOME BUILDERS, LLC.
9350 SOUTH DIXIE HIGHWAY
SUITE 1500
MIAMI, FL 33156
PHONE 305.665.3077

NEW CONSTRUCTION AT PINECREST RESIDENCE:
BY HERITAGE HOME BUILDERS, LLC.
7725 SOUTHWEST 114 STREET
VILLAGE OF PINECREST, FL 33156

SEAL:

Digitally signed by Edmundo Largaespada
Date: 2023.07.31 17:46:39 -04'00'

EDMUNDO J. LARGAESPADA LICENSE No 56915 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY EDMUNDO LARGAESPADA, P.E. 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.

CMBeng
Consulting • Design
CMB eng llc.
14850 SW 26 St. #215 Miami, Florida 33185
O. 786.375.5348 CMB@CMBeng.com
L.C. No. 35097
www.CMBeng.com
Edmundo Largaespada, P.E.
Professional Engineer
P.E. No. 0056915

Project No.: 23_0012

SITE
PLUMBING NOTES & DETAILS

DATE : 03.23.2023
SCALE : AS SHOWN
DRAWN :
CHECK BY:
JOB NO. : 23_0012

SHEET NO. : P-1