



Onsite Wastewater Concepts, Materials, Regulations & The Application Process Part I

E – Site Plan Review and Classroom Exercise

Instructor:

Kim Duffek, Environmental Consultant

Florida Department of Health

Division of Disease Control and Health Protection

Bureau of Environmental Health-Onsite Sewage Programs

kimberly.duffek@flhealth.gov

(850) 251-7503

1



Classroom Exercise #1

Complete the classroom exercise #1
handout before reviewing the presentation

2

Classroom Exercise #1



1. What is the size of the lot in <u>square feet</u> ? 70 ft. x 125 ft.	8,750 sq. ft.
2. What is the size of the lot in <u>acres</u> ? 8,750 sq. ft. / 43,560 sq. ft.	.20 acres
3. What is the net usable area of the lot in <u>acres</u> ? Lot: 70 x 125 = 8750 sq. ft. ROW: 15 x 125 = 1875 sq. ft. Total: 10,625 / 43,560 = .24	.24 acres


3

Classroom Exercise #1




4. What is the minimum setback requirement to the surface water body across the road? There is no surface water body – only a conservation/wetlands area	None
5. What is the <u>minimum setback</u> requirement for the private potable well?	75 ft.
6. What is the <u>estimated sewage flow</u> for the proposed residence? From Table I	300 gpd
7. What is the authorized sewage flow for the lot? Net usable area x 1500 gal. per acre/per day .24 acres x 1500 = 360 gpd	360 gpd

4



STATE OF FLORIDA
DEPARTMENT OF HEALTH
ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
APPLICATION FOR CONSTRUCTION PERMIT

PERMIT NO. 10-1010-N
DATE PAID: 7/12/2010
FEE PAID: \$
RECEIPT #:



APPLICATION FOR: ☒ New System ☐ Existing System ☐ Holding Tank ☐ Innovative
☐ Repair ☐ Abandonment ☐ Temporary ☐

APPLICANT: Orville Stern
AGENT: NA TELEPHONE: 407-111-1111
MAILING ADDRESS: PO BOX 1244, Orlando, FL 32801

TO BE COMPLETED BY APPLICANT OR APPLICANT'S AUTHORIZED AGENT. SYSTEMS MUST BE CONSTRUCTED BY A PERSON LICENSED PURSUANT TO 489.105(3)(a) OR 489.552, FLORIDA STATUTES. IT IS THE APPLICANT'S RESPONSIBILITY TO PROVIDE DOCUMENTATION OF THE DATE THE LOT WAS CREATED OR PLATTED (MM/DD/YY) IF REQUESTING CONSIDERATION OF STATUTORY GRANDFATHER PROVISIONS.

PROPERTY INFORMATION


LOT: 10 BLOCK: NA SUBDIVISION: Sandy Hill PLATTED: 3/2/71
PROPERTY ID #: 293031000585858 ZONING: R I/M OR EQUIVALENT: ☐ Y ☐ N
PROPERTY SIZE: .24 ACRES WATER SUPPLY: ☒ PRIVATE PUBLIC ☐ ☐ <=2000GPD ☐ >2000GPD
IS SEWER AVAILABLE AS PER 381.0065, FS? ☒ Y ☐ N DISTANCE TO SEWER: NA FT
PROPERTY ADDRESS: 3215 Hills Lane
DIRECTIONS TO PROPERTY: Go east on I-4, take left on HWY 50 and turn right on Hills in 2 miles.

BUILDING INFORMATION ☒ RESIDENTIAL ☐ COMMERCIAL

Unit No	Type of Establishment	No. of Bedrooms	Building Area Sqft	Commercial/Institutional System Design Table 1, Chapter 64E-6, FAC
1	SFR	3	1900	
2				
3				
4				


☐ Floor/Equipment Drains ☐ Other (Specify) _____

SIGNATURE: Orville Stern DATE: 7/12/2010
DS 4015, 08/09 (Obsoletes previous editions which may not be used) Incorporated 64E-6.001, FAC Page 1 of 4



STATE OF FLORIDA
DEPARTMENT OF HEALTH
ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
SITE EVALUATION AND SYSTEM SPECIFICATIONS

PERMIT #. 10-1010-N
Classroom Exercise #1



APPLICANT: Orville Stern AGENT: NA
LOT: 10 BLOCK: NA SUBDIVISION: Sandy Hill
PROPERTY ID #: 29-30-31 (Section/Township/Parcel No. or Tax ID Number)

TO BE COMPLETED BY ENGINEER, HEALTH DEPARTMENT EMPLOYEE, OR OTHER QUALIFIED PERSON. ENGINEERS MUST PROVIDE REGISTRATION NUMBER AND SIGN AND SEAL EACH PAGE OF SUBMITTAL. COMPLETE ALL ITEMS.

PROPERTY SIZE CONFORMS TO SITE PLAN: ☒ YES ☐ NO NET USABLE AREA AVAILABLE: .24 ACRES
TOTAL ESTIMATED SEWAGE FLOW: 300 GALLONS PER DAY (RESIDENCES-TABLE 1/OTHER-TABLE2)
AUTHORIZED SEWAGE FLOW: 360 GALLONS PER DAY (1500 GPD/ACRE OR 2500 GPD/ACRE)
UNOBSTRUCTED AREA AVAILABLE: 1875 SQFT UNOBSTRUCTED AREA REQUIRED: 750 SQFT

BENCHMARK/REFERENCE POINT LOCATION: disc on CL of RD
ELEVATION OF PROPOSED SYSTEM SITE IS 6 (INCHES/FT) (ABOVE/BELOW) BENCHMARK/REFERENCE POINT

THE MINIMUM SETBACK WHICH CAN BE MAINTAINED FROM THE PROPOSED SYSTEM TO THE FOLLOWING FEATURES
SURFACE WATER: NA FT DITCHES/DRALES: NA FT NORMALLY WET? ☐ YES ☐ NO
WELLS: PUBLIC: NA FT LIMITED USE: NA FT PRIVATE: 85 FT NON-POTABLE: NA FT
BUILDING FOUNDATIONS: 5 FT PROPERTY LINES: 7 FT POTABLE WATER LINES: 80 FT

SITE SUBJECT TO FREQUENT FLOODING: ☐ YES ☒ NO 10 YEAR FLOODING? ☐ YES ☒ NO
10 YEAR FLOOD ELEVATION FOR SITE: NA FT MSL/NUVD SITE ELEVATION: NA FT MSL/NUVD

SOIL PROFILE INFORMATION SITE 1			SOIL PROFILE INFORMATION SITE 2		
MUNSELL #/COLOR	TEXTURE	DEPTH	MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 3/2	FS	0 TO 5	10YR 3/2	FS	0 TO 4
10YR 5/6	FS	5 TO 31	10YR 5/6	FS	4 TO 35
10YR 5/8	FS	31 TO 73	10YR 6/8	FS	30 TO 71
10YR 7/6	FS	73 TO 80	10YR 7/6	FS	71 TO 80
		TO			TO
		TO			TO
		TO			TO
		TO			TO
		TO			TO

USDA SOIL SERIES: Candler USDA SOIL SERIES: Candler

OBSERVED WATER TABLE: 72 INCHES (ABOVE / BELOW) EXISTING GRADE. TYPE: (PERCHED / APPARENT)
ESTIMATED NET SEASON WATER TABLE ELEVATION: 72 INCHES (ABOVE / BELOW) EXISTING GRADE
HIGH WATER TABLE VEGETATION: ☐ YES ☒ NO MOTTILING: ☐ YES ☐ NO DEPTH: _____ INCHES

SOIL TEXTURE/LOADING RATE FOR SYSTEM SIZING: FS/0.6 DEPTH OF EXCAVATION: NA INCHES
DRAINFIELD CONFIGURATION: ☐ TRENCH ☒ BED ☐ OTHER (SPECIFY) _____
REMARKS/ADDITIONAL CRITERIA:
SP #1 is 6" ARM, SP #2 is 6" ARM. No WENT indicators within 72 inches

SITE EVALUATED BY: Carroll Sweet ESI DATE: 7/12/2010
DS 4015, 08/09 (Obsoletes previous editions which may not be used) Incorporated 64E-6.001, FAC Page 3 of 4

Onsite Wastewater Concepts – Part D, New Permit Applications and Site Plans, 2012

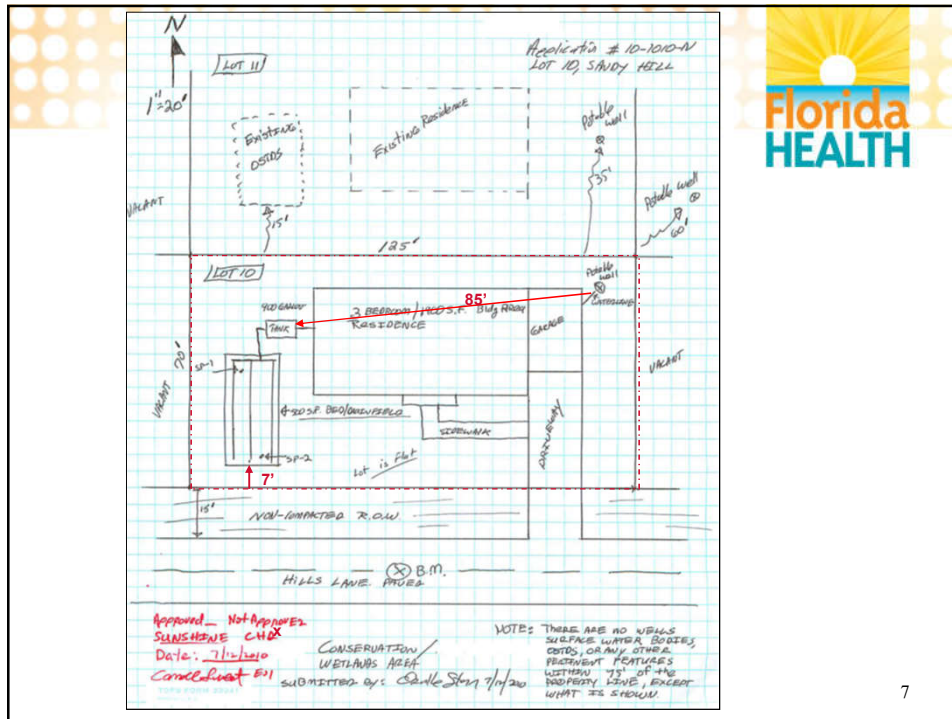


TABLE I For System Design ESTIMATED SEWAGE FLOWS	
RESIDENTIAL:	GPD
Residences	
(a) Single or multiple family per dwelling Unit	
1 Bedroom with 750 sq. ft. or less of building area.....	100
2 Bedrooms with 751-1200 sq. ft. of building area.....	200
3 Bedrooms with 1201-2250 sq. ft. of building area.....	300
4 Bedrooms with 2251-3300 sq. ft. of building area.....	400
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.	
(b) Other per occupant.....	50

Florida HEALTH

8



Classroom Exercise #2

Complete the classroom exercise #2 handout during the presentation

9

Application

Form DH 4015 pg 1 of 1
Classroom Exercise #2

- Applicant/
authorized agent
(signature needed)
- Date lot
platted/subdivided
- Property size
- Water supply
- Sizing criteria

CLASS ROOM
Exercise #24

STATE OF FLORIDA
DEPARTMENT OF HEALTH
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
APPLICATION FOR CONSTRUCTION PERMIT

APP DOC # 24
PERMIT # 3
DATE PAID 05/28/2010
FEE PAID: 0
RECEIPT # 59-PID-127177

X APPLICATION FOR:
☒ New System ☐ Existing System ☐ Holding Tank ☐ Innovative
☐ Repair ☐ Abandonment ☐ Temporary ☐

APPLICANT: Mark Peter
AGENT: _____ TELEPHONE: _____
MAILING ADDRESS: 623 Yorkshire Dr Oviedo, FL 32765

TO BE COMPLETED BY APPLICANT OR APPLICANT'S AUTHORIZED AGENT. SYSTEMS MUST BE CONSTRUCTED BY A PERSON LICENSED PURSUANT TO 489.105(3) AND 489.552, FLORIDA STATUTES. IT IS THE APPLICANT'S RESPONSIBILITY TO PROVIDE DOCUMENTATION OF THE DATA THE LOT WAS CREATED OR PLATTED (MM/DD/YY) IF REQUESTING CONSIDERATION OF STATUTORY GRANDFATHER PROVISIONS.

LOT: 132 BLOCK: _____ PLATTE: 02/15/1982
SUBDIVISION: Bentley Woods PLAT: _____ SIZING: RT I/M OR EQUIVALENT: ☐ Y ☒ N
PROPERTY ID #: 00-21-31-514-0000-1320
PROPERTY SIZE: 0.23 ACRES WATER SUPPLY: ☐ PRIVATE ☒ (X) <2000GPD ☐ >2000GPD
IS SEWER AVAILABLE AS PER 381.0065, FWS? ☐ Y ☒ N DISTANCE TO SEWER: _____ FT
PROPERTY ADDRESS: 623 Yorkshire Dr Oviedo, FL 32765

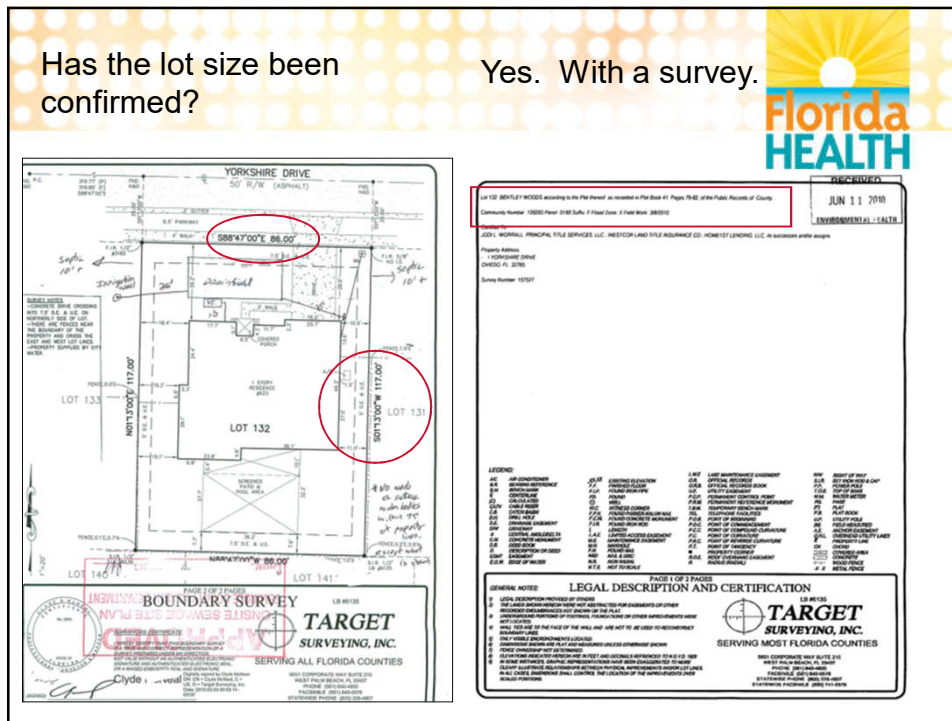
DIRECTIONS TO PROPERTY:
right on red bog lake left on alone, left on right on bentley left on wallington
right on southeast left on yorkshire

BUILDING INFORMATION:				
Type of Establishment	No. of Bedrooms	Building Area Ft	# Persons Served	Total Design Flow For This Unit
(X) RESIDENTIAL <input type="checkbox"/> COMMERCIAL	4	2461	4	400

SIGNATURE: Mark Peter DATE: 05/28/2010
IN 4015, 08/09 (Obsolesces previous editions which may not be used)
Incorporated 645-6.001, FWS v 1.0.0 APP#723 ETD1146017 Page 1 of 4

Has the lot size been confirmed?

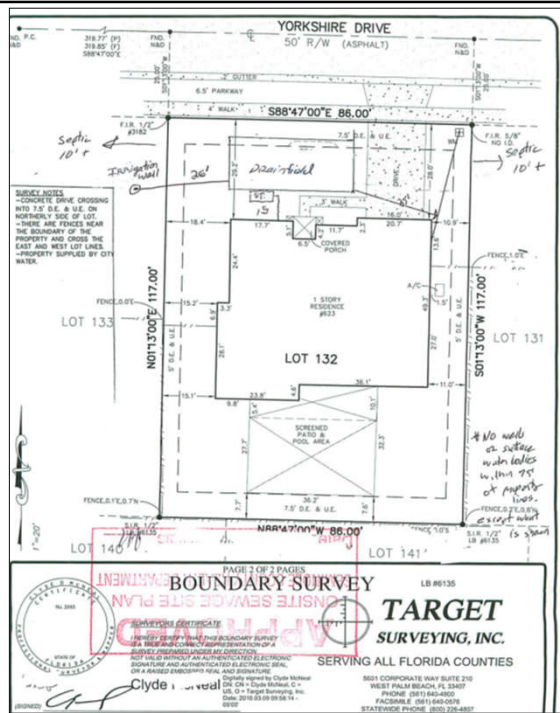
Yes. With a survey.



Does this lot meet lot size requirements?

The lot was platted on 2/15/1989
and is served by public water.

Site Plan



Lot size and Determination of Net Usable Area:

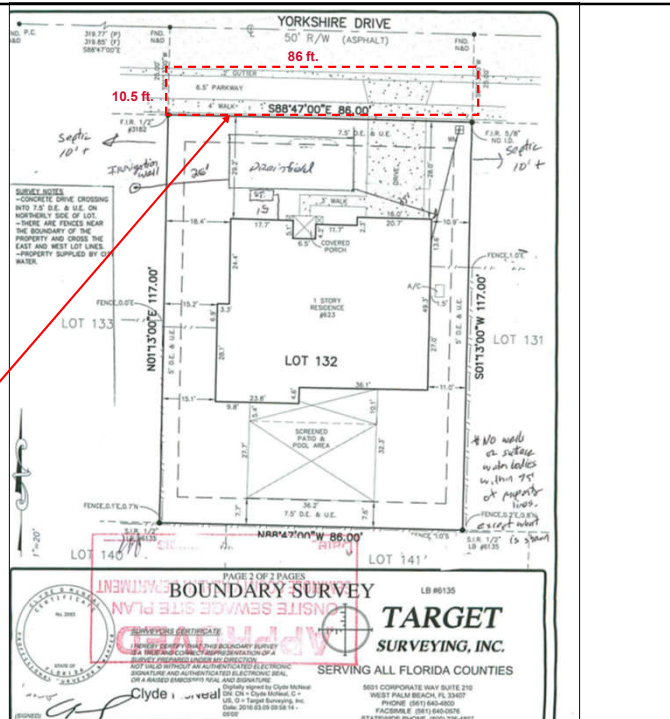


- Calculate Property Dimensions (Lot Size)
86 ft. x 117 ft. = 10,062 sq. ft.
- Add permissible public rights-of-way and easements
10.5 ft. x 86 ft. = 903 sq. ft.
- Exclude paved and compacted road beds in rights-of-way
- Exclude surface water bodies
NA
- Calculate in Acreage – **Net Usable Area of Lot**
10,062 sq. ft. + 903 sq. ft. = 10,965 sq. ft.
(10,965 sq. ft. / 43,560 sq. ft. per acre) = .25 acres

Net usable area of property in acres exclusive of all paved areas and prepared road beds within public rights-of-way or easements and exclusive of streams, lakes, normally wet drainage ditches, marshes, or other such bodies of water. Contiguous unpaved and non-compacted road rights-of-way and easements with no subsurface obstructions may be included in calculating lot area. 6464E-6.005(7)(c), F. A. C.

Site Plan Classroom Exercise

- Net Usable Area Available is **10,965** sq. ft. or **.25** acres
- Includes non-compacted ROW
 $(10.5 \text{ ft.} \times 86 \text{ ft.} = 903 \text{ sq. ft.})$



Site Evaluation Form DH 4015 Classroom Exercise

- Net Usable Area Available

Note: The remainder of the site evaluation is covered in ACT days 2 and 3 – Soils Course

CLASSROOM EXERCISE 8/4

STATE OF FLORIDA
DEPARTMENT OF HEALTH
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
SITE EVALUATION AND SYSTEM SPECIFICATION

APPLICATION # AP
PERMIT # 20-22-1
DOCUMENT # SEE

APPLICANT: Mark Filler
CONTRACTOR / AGENT: _____
LOT: 132 BLOCK: _____
SUBDIVISION: Bentley Woods TDP: 00-21-31-514-0000-1320

TO BE COMPLETED BY ENGINEER, HEALTH DEPARTMENT EMPLOYEE, OR OTHER QUALIFIED PERSON. ENGINEER MUST PROVIDE REGISTRATION NUMBER AND SIGN AND SEAL EACH PAGE OF SUBMITTAL. COMPLETE ALL PAGES.

PROPERTY SIZE CONFORMS TO SITE PLAN: ☒ YES ☐ NO **NET USABLE AREA AVAILABLE: .25 ACRES**

TOTAL ESTIMATED SEWAGE FLOW: 400 GALLONS PER DAY (RESIDENCE-TABLE 1 / OTHER-TABLE 2)

AUTORIZED SEWAGE FLOW: _____ GALLONS PER DAY (1500 GPD/ACRE OR 2500 GPD/ACRE)

UNOBSTRUCTED AREA AVAILABLE: 8000 UNOBSTRUCTED AREA REQUIRED: _____ SQFT

SEWAGE/REFERENCE POINT LOCATION: corner 66 of road
ELEVATION OF PROPOSED SYSTEM SITE: 8.00 (INCHES) / FT: 0 (ABOVE) / BELOW (REFERENCE POINT)

THE MINIMUM SETBACK WHICH CAN BE MAINTAINED FROM THE PROPOSED SYSTEM TO THE FOLLOWING FEATURES

SURFACE WATER: 0 FT DISTANCE/SEALS: 0 FT NORMALLY SET: ☐ YES ☒ NO

WELLS: PUBLIC: 0 FT LIMITED USE: 0 FT PRIVATE: 0 FT NON-POTABLE: 25 FT

BUILDING FOUNDATIONS: 5 FT PROPERTY LINES: 5 FT POTABLE WATER LINES: 25 FT

SITE SUBJECT TO FREQUENT FLOODING? ☐ YES ☒ NO 10 YEAR FLOODING? ☐ YES ☒ NO

10 YEAR FLOOD ELEVATION FOR SITE: _____ FT (MSL / NGVD) SITE ELEVATION: _____ FT (MSL / NGVD)

SOIL PROFILE INFORMATION SITE 1

Munsell #/Color	Texture	Depth
10YR 7B	FR - Fine Sand	0 To 80
10YR 4D	Fine Sand	80 To 72

SOIL PROFILE INFORMATION SITE 2

Munsell #/Color	Texture	Depth
10YR 7B	FR - Fine Sand	0 To 32
10YR 7D	Fine Sand	32 To 48
7.5YR 5B	CM/SPRM RF	44 To 44
10YR 4D	Fine Sand	48 To 72

OBSERVED WATER TABLE: 80.00 INCHES (ABOVE / BELOW) EXISTING GRADE: 78.00 (PERCHED / APPARENT)

ESTIMATED WET SEASON WATER TABLE ELEVATION: 42 INCHES (ABOVE / BELOW) EXISTING GRADE: _____

WATER TABLE VEGETATION: ☐ YES ☒ NO MOISTURE: ☒ YES ☐ NO DEPTH: 44.00 INCHES

SOIL TEXTURE/LOADING RATE FOR SYSTEM SIZING: Fine Sand/0.00 DEPTH OF EXCAVATION: 0 INCHES

CHAINED/CONFIRMATION: ☐ FRENCH ☒ AND ☐ OTHER (SPECIFY) _____

Remarks: 8/4/27, 8/4/28, 8/4/29, Top of mound 38", Existing site of drainfield 15'30" x 43'30" Existing elevation of drainfield 4" hg. Permit based on inspectors measurement of existing drainfield size and elevation. Soil had sufficient structure that profiles could be advanced through water to 72", FR color texture = 10YR 7B, 4D, 5, 4, 3, 4, 8, 1

SITE DRAINAGE PT: _____ DATE: 08/02/2019

DN 4218, 08/09 (Obsolescence previous edition which may not be used) Interpretation: see 4.001, PAC Page 3 of 4

APR2721 E01148017

11.02 034

Estimated Sewage Flow



64E-6.008, Table I

4 bedroom single family residence
with **2461 sq. ft. bldg. area**
requires

400 gallons per day

*(must be consistent with the application
sizing criteria and floor plan)*

17

TABLE I
For System Design
ESTIMATED SEWAGE FLOWS

RESIDENTIAL:	GPD
Residences	
(a) Single or multiple family per dwelling Unit	
1 Bedroom with 750 sq. ft. or less of building area.....	100
2 Bedrooms with 751-1200 sq. ft. of building area.....	200
3 Bedrooms with 1201-2250 sq. ft. of building area.....	300
4 Bedrooms with 2251-3300 sq. ft. of building area.....	400
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.	
(b) Other per occupant.....	50

18

Site Evaluation
Form DH 4015
Classroom Exercise

- Estimated sewage flow

CLASSROOM EXERCISE 814

STATE OF FLORIDA
DEPARTMENT OF HEALTH
ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
SITE EVALUATION AND SYSTEM SPECIFICATION

APPLICATION # AP
PERMIT # 25-52
DOCUMENT # SEE

APPLICANT: Mark Fisher
CONTRACTOR / AGENT: _____
LOT: 132 BLOCK: _____

SUBDIVISION: Burdley Woods TRS: 00-21-31-514-0000-1320

TO BE COMPLETED BY ENGINEER, HEALTH DEPARTMENT EMPLOYEE, OR OTHER QUALIFIED PERSON. ENGINEER MUST PROVIDE REGISTRATION NUMBER AND SIGN AND SEAL EACH PAGE OF SUBMITTAL. COMPLETE ALL ITEMS.

PROPERTY SIZE CONFORMS TO SITE PLAN: ☒ YES ☐ NO NET USABLE AREA AVAILABLE: .25

TOTAL ESTIMATED SEWAGE FLOW: 400 GALLONS PER DAY ☐ RESIDENCES-TABLE 1 ☐ OTHER-TABLE 2

AUTHORIZED SEWAGE FLOW: _____ GALLONS PER DAY ☐ 1500 GPD/ACRE OR ☐ 2500 GPD/ACRE

UNSTRUCTURED AREA AVAILABLE: _____ SQFT UNSTRUCTURED AREA REQUIRED: _____ SQFT

RECHARGE/REFERENCE POINT LOCATION: SEWAGE DOD OUT OF ROAD

ELEVATION OF PROPOSED SYSTEM SITE: 8.00 (INCHES) / FT ☐ ABOVE ☐ BELOW RECHARGE/REFERENCE POINT

THE RECHARGE STRUCK WHICH CAN BE MAINTAINED FROM THE PROPOSED SYSTEM TO THE FOLLOWING FEATURES

SURFACE WATER: ☐ YES ☐ NO DITCHES/RALES: ☐ YES ☐ NO NORMAL MET: ☐ YES ☐ NO

WELLS: PUBLIC: ☐ YES ☐ NO LIMITED USE: ☐ YES ☐ NO PRIVATE: ☐ YES ☐ NO NON-POTABLE: ☐ YES ☐ NO

BUILDING FOUNDATIONS: 5 FT PROPERTY LINES: 5 FT POTABLE WATER LINES: 25 FT

SITE SUBJECT TO FREQUENT FLOODING? ☐ YES ☒ NO 10 YEAR FLOODING? ☐ YES ☒ NO

10 YEAR FLOOD ELEVATION FOR SITE: _____ FT (MSL / MVD) SITE ELEVATION: _____ FT (MSL / MVD)

SOIL PROFILE INFORMATION SITE 1

Munsell #/Color	Texture	Depth
10YR 7B	Fs - Fine Sand	0 To 60
10YR 4G	Fine Sand	60 To 72

SOIL PROFILE INFORMATION SITE 2

Munsell #/Color	Texture	Depth
10YR 7B	Fs - Fine Sand	0 To 32
10YR 7G	Fine Sand	32 To 48
7.5YR 5B	CHUFFIN FS	48 To 64
10YR 4G	Fine Sand	64 To 72

OBSERVED WATER TABLE: 00.00 INCHES ☐ ABOVE ☒ BELOW EXISTING GRADE ☐ YES ☐ NO ☐ PERCHED ☐ ANOMALY

ESTIMATED WET SEASON WATER TABLE ELEVATION: 46 INCHES ☐ ABOVE ☐ BELOW EXISTING GRADE

SEASON WATER TABLE VARIATION: ☐ YES ☒ NO HOURLY: ☐ YES ☒ NO DEPTH: 44.00 INCHES

SOIL TEXTURE/LANDSCAPE DATA FOR SYSTEM SIZING: Fine Sand/0.60 DEPTH OF EXCAVATION: 0 INCHES

DRAINAGE CONFIGURATION: ☐ TRENCH ☒ BED ☐ OTHER (SPECIFY)

REMARKS/ADDITIONAL CRITERIA

4/26/17, 8:17-8:27, 8:27-8:37, Top of mound=38", Existing site of drainfield=19'35"=625" Existing elevation of drainfield=4" big, Permit based on inspection measurement of existing drainfield site and elevation. Soil had sufficient structure that profiles could be advanced through water to 72", FS color/texture=10YR7B,m&L, 6Y1.5B, 8Y1

SITE EVALUATED BY: _____ DATE: 06/02/2019

DE 415, 06/05 (Replaces previous editions which may not be used) Incorporates: 04-0-011, PAC Page 3 of 4

APR2721 E01148017

19

Authorized Sewage Flow



Lots served by a public water system:
Net usable area (acres) x 2500 gpd per acre

$$.25 \text{ acres} \times 2500 \text{ gpd per acre} = 625 \text{ gpd.}$$

20

Site Evaluation Classroom Exercise

- Authorized Sewage Flow

CLASSROOM EXERCISE #2

STATE OF FLORIDA
DEPARTMENT OF HEALTH
ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
SITE EVALUATION AND SYSTEM SPECIFICATION

APPLICATION # AP
PERMIT # 25-52
DOCUMENT # SEE

APPLICANT: Mark Filler
CONTRACTOR / AGENT: _____
LOT: 132 BLOCK: _____

SUBDIVISION: Burley Woods TRS: 00-21-31-514-000-1320

TO BE COMPLETED BY ENGINEER, HEALTH DEPARTMENT EMPLOYEE, OR OTHER QUALIFIED PERSON. ENGINEER MUST PROVIDE REGISTRATION NUMBER AND SIGN AND SEAL EACH PAGE OF SUBMITTAL. COMPLETE ALL ITEMS.

PROPERTY SIZE CONFORMS TO SITE PLAN: ☒ YES ☐ NO NET USABLE AREA AVAILABLE: 25

TOTAL ESTIMATED SEWAGE FLOW: 400 GALLONS PER DAY ☐ RESIDENCES-TABLE 1 ☐ OTHER-TABLE 2

AUTHORIZED SEWAGE FLOW: 875 GALLONS PER DAY ☐ 1500 GPD/ACRE OR ☐ 2500 GPD/ACRE

UNPROTECTED AREA AVAILABLE: _____ SQFT UNSTRUCTURED AREA REQUIRED: _____ SQFT

RECHARGE/REFERENCE POINT LOCATION: SEWAGE DOL (d) of road
ELEVATION OF PROPOSED SYSTEM SITE: 8.00 (INCHES) / FT ☐ ABOVE ☐ BELOW RECHARGE/REFERENCE POINT

THE RECHARGE STRUCK WHICH CAN BE MAINTAINED FROM THE PROPOSED SYSTEM TO THE FOLLOWING FEATURES

SURFACE WATER: ☐ NO FT DITCHES/RALES: ☐ NO FT NORMAL MET: ☐ YES ☒ NO

WELLS: PUBLIC: ☐ NO FT LIMITED USE: ☐ NO FT PRIVATE: ☐ NO FT NON-POTABLE: ☐ 25 FT

BUILDING FOUNDATIONS: 5 FT PROPERTY LINES: 5 FT POTABLE WATER LINES: 25 FT

SITE SUBJECT TO FREQUENT FLOODING? ☐ YES ☒ NO 10 YEAR FLOODING? ☐ YES ☒ NO

10 YEAR FLOOD ELEVATION FOR SITE: _____ FT (MEL / MVD) SITE ELEVATION: _____ FT (MEL / MVD)

SOIL PROFILE INFORMATION SITE 1

Munsell #/Color	Texture	Depth
10YR 7B	FR - Fine Sand	0 To 50
10YR 4G	Fine Sand	50 To 72

SOIL PROFILE INFORMATION SITE 2

Munsell #/Color	Texture	Depth
10YR 7B	FR - Fine Sand	0 To 32
10YR 7G	Fine Sand	32 To 48
7.5YR 5B	CHUFFIN FC	48 To 64
10YR 4G	Fine Sand	64 To 72

OBSERVED WATER TABLE: 00.00 INCHES ☐ ABOVE ☒ BELOW EXISTING GRADE ☐ YES ☒ NO ☐ PERCHED ☐ ANOMALY

ESTIMATED WET SEASON WATER TABLE ELEVATION: 46 INCHES ☐ ABOVE ☒ BELOW EXISTING GRADE

SEASON WATER TABLE VEGETATION: ☐ YES ☒ NO MOWING: ☐ YES ☒ NO DEPTH: 44.00 INCHES

SOIL TEXTURE/LANDING RATE FOR SYSTEM SIZING: Fine Sand/0.60 DEPTH OF EXCAVATION: 0 INCHES

DRAINFIELD CONFIGURATION: ☐ TRENCH ☒ BED ☐ OTHER (SPECIFY)

REMARKS/ADDITIONAL CRITERIA

Permit # 25-52, Spt-100, Spt-100, Top of mound=30", Existing site of drainfield=19'30"=622 Existing elevation of drainfield=1" sq. Permit based on inspection measurement of existing drainfield site and elevation. Soil had sufficient structure that profiles could be advanced through water to 72", FR color/texture=10YR7B, 4G, 7.5B, 10YR 4G

SITE EVALUATED BY: _____ DATE: 06/02/2010

DR 4115, 06/09 (Replaces previous editions which may not be used) Incorporates: H&S-011, PAC Page 3 of 4

APR0721 E01146017

Classroom Exercise #2



1. Has the lot size been confirmed? And how?	Yes, Survey
2. Does this lot meet lot size requirements? Need to review adjacent lots	Yes
3. What are the property dimensions of the lot?	86ft. X 117ft.
4. What is the total square footage of the lot? 86 ft. x 117 ft = 10,062 SF	10,062 SF
5. What is the total square footage of permissible rights of ways and easements?	10.5 ft x 86 ft. = 903 SF

22

Classroom Exercise #2



6. Are there surface water bodies present? If so, what is the total area excluded from the net usable area?	No / NA
7. What is the net usable area of the lot in acres? 10,026 sq. ft. x 903 sq. ft. = 10,965 sq. ft.	10,965/43,560 = .25 acres
8. What is the estimated sewage flow for the residence?	400 gpd
9. What is the sizing criteria the estimated sewage flow is based on?	4 beds/ 2461 sf bldg area
10. What is the authorized sewage flow for the lot? .25 acres x 2500 GPD =	625 gpd

23

Classroom Exercise #3

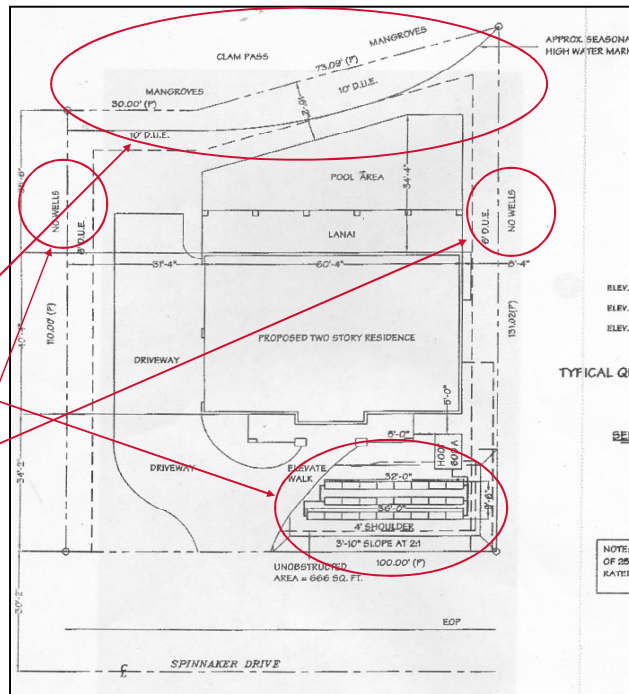


24

Sample Site Plan

Is this site plan complete? **NO**

- Need MHWL labeled and elevation from surveyor
- Need soil profile locations and BM
- Need to address offsite features adequately



25

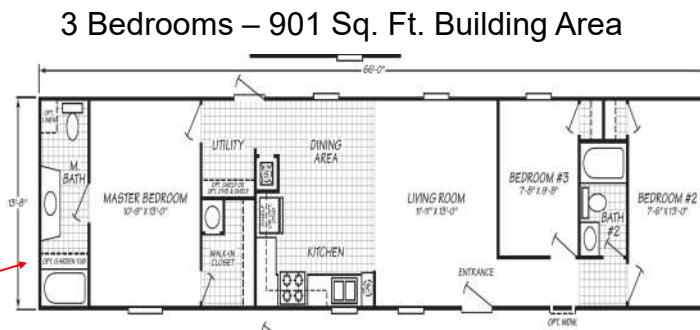


Classroom Exercise #4

26

What is the estimated sewage flow for each?

300 gpd



2 Bedrooms, 1 Den – 901 Sq. Ft. Building Area

200 gpd

The “Den” would not count as a bedroom.

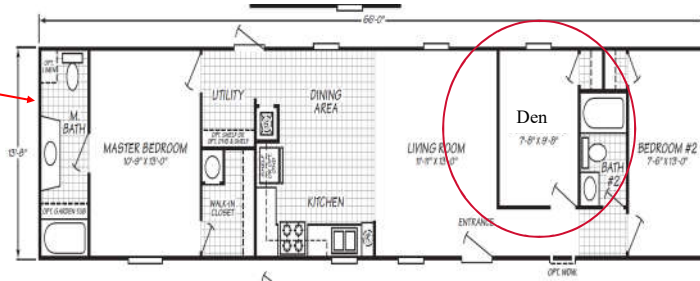


TABLE I
For System Design
ESTIMATED SEWAGE FLOWS



RESIDENTIAL:	GD
Residences	
(a) Single or multiple family per dwelling Unit	
1 Bedroom with 750 sq. ft. or less of building area.....	100
2 Bedrooms with 751-1200 sq. ft. of building area.....	200
3 Bedrooms with 1201-2250 sq. ft. of building area.....	300
4 Bedrooms with 2251-3300 sq. ft. of building area.....	400
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.	
(b) Other per occupant.....	50

2 bedrooms
with 901 sq.
ft. bldg. area

3 bedrooms
with 901 sq.
ft. bldg. area



QUESTIONS