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) 261-7503

Classroom Exercise #1

Complete the classroom exercise #1 handout before reviewing the presentation
Classroom Exercise #1

1. What is the size of the lot in square feet?
   \[ 70 \text{ ft.} \times 125 \text{ ft.} \]
   \[ 8,750 \text{ sq. ft.} \]

2. What is the size of the lot in acres?
   \[ 8,750 \text{ sq. ft.} / 43,560 \text{ sq. ft.} \]
   \[ .20 \text{ acres} \]

3. What is the net usable area of the lot in acres?
   \[ \text{Lot: } 70 \times 125 = 8,750 \text{ sq. ft.} \]
   \[ \text{ROW: } 15 \times 125 = 1,875 \text{ sq. ft.} \]
   \[ \text{Total: } 10,625 / 43,560 = .24 \text{ acres} \]

4. What is the minimum setback requirement to the surface water body across the road?
   \[ \text{There is no surface water body -- only a conservation/wetlands area} \]
   \[ \text{None} \]

5. What is the minimum setback requirement for the private potable well?
   \[ 75 \text{ ft.} \]

6. What is the estimated sewage flow for the proposed residence?
   \[ \text{From Table I} \]
   \[ 300 \text{ gpd} \]

7. What is the authorized sewage flow for the lot?
   \[ \text{Net usable area x 1500 gal. per acre/per day} \]
   \[ .24 \text{ acres} \times 1500 = 360 \text{ gpd} \]
   \[ 360 \text{ gpd} \]
TABLE I
For System Design
ESTIMATED SEWAGE FLOWS

<table>
<thead>
<tr>
<th>RESIDENTIAL:</th>
<th>GPD</th>
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<tbody>
<tr>
<td>Residences</td>
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<td>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.</td>
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Classroom Exercise #2

Complete the classroom exercise #2 handout during the presentation.

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
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.
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 an 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 ft. x 86 ft = 903 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

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

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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

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

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

.25 acres x 2500 gpd per acre = 625 gpd.
Site Evaluation
Classroom Exercise

- Authorized Sewage Flow

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
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
5. What is the total square footage of permissible rights of ways and easements? 10.5 ft x 86 ft. = 903 SF

Onsite Wastewater Concepts – Part D, New Permit Applications and Site Plans, 2012
### Classroom Exercise #2

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<th>Answer/Calculation</th>
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<td>6. Are there surface water bodies present? If so, what is the total area excluded from the net usable area?</td>
<td>No / NA</td>
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<td>7. What is the net usable area of the lot in acres?</td>
<td>$\frac{10,026 \text{ sq. ft.} \times 903 \text{ sq. ft.}}{43,560} = 0.25 \text{ acres}$</td>
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<td>8. What is the estimated sewage flow for the residence?</td>
<td>400 gpd</td>
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<td>9. What is the sizing criteria the estimated sewage flow is based on?</td>
<td>4 beds/ 2461 sf bldg area</td>
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<td>10. What is the authorized sewage flow for the lot?</td>
<td>$0.25 \text{ acres} \times 2500 \text{ GPD} = 625 \text{ gpd}$</td>
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### Classroom Exercise #3

This section is left blank or unspecified in the document.
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

Classroom Exercise #4
Review the differences.

What is the estimated sewage flow for each?

300 gpd

200 gpd

The “Den” would not count as a bedroom.

3 Bedrooms – 901 Sq. Ft. Building Area

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

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QUESTIONS