

Washington On-Site Treatment System Designer Exam Blueprint

DATA GATHERING 52%

- A. Information from Client and/or Appropriate Source - 8%
- B. Information gathered from Other Sources – 18%
- C. Site Evaluation – 16%
- D. Evaluation of the Soil – 7%
- E. Evaluation Summary – 3%

DESIGN 33%

- A. Type of System – 7%
- B. Location – 10%
- C. Final Design Preparation and Application Submittal – 16%

CONSTRUCTION MANAGEMENT 9%

- A. Preparation – 4%
- B. Inspection – 5%

POST-CONSTRUCTION ACTIVITIES 6%

- A. Operations & Maintenance – 3%
- B. Documentation – 3%

TOTAL: 100%

On-site Designer Exam Task Analysis Blueprint

Exam is administered as a four hour multiple-choice written exam consisting of 100 questions.

DATA GATHERING

(52 questions)

1. Obtain site history including past submittals, existing systems, and land use data
2. Obtain legal lot information (e.g., address, tax information)
3. Obtain a description of user's habits and characteristics relative to the proposed use of the sewage system.
4. Obtain present and future plans for dwelling and site development, dimensions, room types, potable water source
5. Review plats, surveys, and legal descriptions from county records
6. Identify zoning, land use, setback requirements, or other critical areas (e.g., wetlands, flood zone, steep terrain)
7. Gather soil and geohydrologic information on the subject area
8. Determine applicable regulations
9. Verify availability of public sewers or sewage systems
10. Determine hydraulic flow and waste strength including sampling, if appropriate
11. Determine cause(s) of system failure
12. Evaluate topography of the site and adjacent properties
13. Identify location of utilities and easements
14. Identify the most appropriate location for drainfields
15. Identify potential construction pathways
16. Locate and map all pertinent features affecting system placement
17. Determine the location and number of test holes needed
18. Determine soil suitability for an onsite sewage system (soil classification, depth of suitable unsaturated soil, impervious layers, seasonal water table, etc.)
19. Prepare a preliminary site sketch and field notes of findings

DESIGN**(33 questions)**

20. Match site constraints with user needs to determine system type and configuration
21. Establish limits to daily flow
22. Establish limits to wastewater strength
23. Identify location of system components including reserve area
24. Establish system component elevations
25. Establish horizontal and vertical control
26. Consult with client or user regarding final design components
27. Produce a detailed drawing of the site including existing site features and proposed improvements
28. Establish site preparation limitations, conditions and requirements (e.g., creating cut banks, removing stumps, excavating ponds, etc.)
29. Detail decisions made regarding system location and components
30. Specify equipment and materials
31. Prepare and submit permit application package

CONSTRUCTION MANAGEMENT**(9 Questions)**

32. Assess any changes in site conditions (e.g., soil, topography, vegetation that may have affected the approved design.
33. Modify design components, if appropriate
34. Verify disposal site preparation
35. Determine consistency between design and installation and test and document as necessary

POST CONSTRUCTION ACTIVITIES**(6 questions)**

36. Identify the owner's responsibility for operating, monitoring, and maintaining the system
37. Develop and submit a detailed record of installation including all system components (e.g., equipment type, model and system settings.