

Private Sewage System Design Document Example/Template **Holding Tank**

PREFACE

This is an example Design Document for a holding tank system. It reflects the information needed to demonstrate the design considerations for the particular site and system required by the Private Sewage Standard of Practice 2009 (Standard) have been made. Considerations needed for a particular site may go beyond those used as an example in this document.

This example document can be used as a template by editing or adding critical information to suit the particular site and system.

While it is preferable to use a consistent format to facilitate quick review, other formats of the design document may be accepted by the Safety Codes Officer (SCO), if the document includes the required information that shows the necessary design considerations were made.

A design is required in support of a permit application. It includes drawings and supporting information as it applies to the specific site and design. This is the information a SCO will review to evaluate whether design considerations required by the Standard have been adequately made prior to issuing the permit.

Including the design in the operation and maintenance manual that must be provided to the owner, will simplify development of the operation and maintenance manual.

PRIVATE SEWAGE SYSTEM DESIGN - HOLDING TANK

Date:

Joe Smith
Box 1,
Somewhere, Alberta

Subject: Residential Wastewater Holding Tank System

Legal Description of Property: SE Sec 9, Twp 71, Rge. 5, W of 6 Mer.
Lot 14; Blk 1; Plan 123450

Municipal Address: 19035 - Rge. Rd. 5

Introduction

This private sewage system is for a 4-bedroom single family dwelling. Based on the characteristics of the home identified during our assessment, the total peak wastewater flow per day is 461 Imperial gallons with average operating flow of 300 gallons per day.

The sewage system is restricted to a holding tank due to the soil conditions of the property. The municipality was contacted and they have no restrictions on the installation of holding tanks. This design applies and meets the requirements of the Alberta Private Sewage Systems Standard of Practice (Standard).

1 Wastewater Characteristics

1.1. Wastewater Peak flow

The development served is a 4-bedroom single-family dwelling. The total plumbing fixture unit load in this residence is 21 based on a building plans review. This requires 50 L/day (11 Imp. gal/day) be added to the peak daily flow. Fixture unit load is as follows:

- Main bath = 6 fixture units
- Bathroom with shower off master bedroom = 6 fixture units
- Kitchen sink = 1.5 fixture units
- Laundry stand pipe = 1.5 fixture units
- Bathroom in basement = 6 fixture units

Total peak daily flow used in the design is: 450 Imp. gal + 11 Imp. gal = 461 Imp. gal	2,090 L/day (461 Imp. gal/day)
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1.2. Wastewater Strength

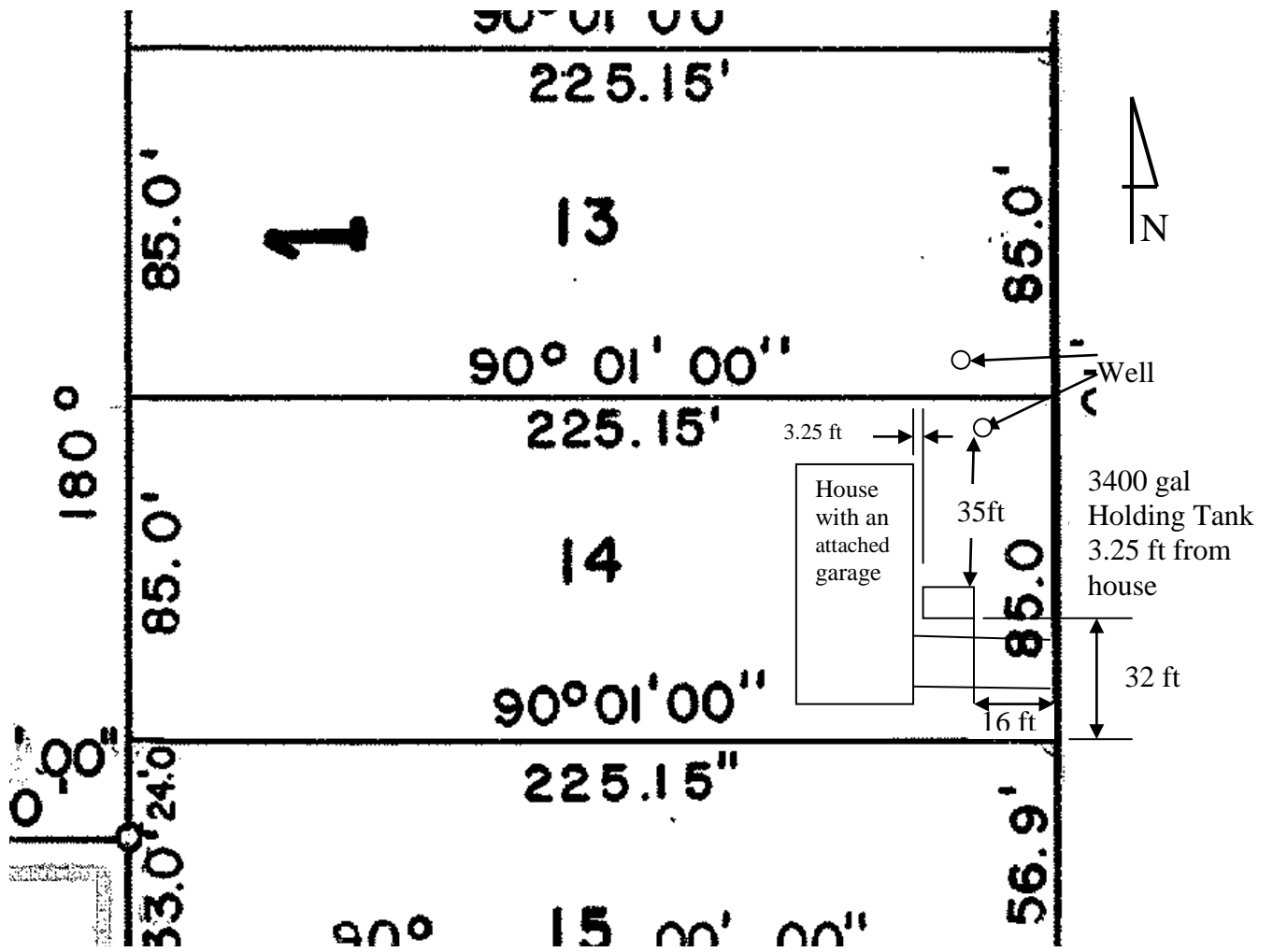
Not applicable to residential holding tank.

2 Site Evaluation Findings

2.1 Site Evaluation

The lot is 0.177 hectare (0.44 acres). The dimensions of the property are shown in the drawing attached in Appendix A. The adjacent lands are small lots within a residential subdivision. There are no water courses on or adjacent this 0.177 hectare property. The property has a 2% slope toward the north property line. Line locates confirmed there are no existing utilities or easements to be considered.

Appendix A Site Information



Appendix B

Manufacturer's and Design Specifications for System Components

