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August 10, 2022

Ryan Kutzler
16816 330th Place
Isle, MN

RE: Review of setback to
Septic System Rock Bed and
Septic Tank

To Whom It May Concern:

Introduction & Background

The owner is planning to build a new home on the lot. Due to setbacks to water, the house needs to encroach on the minimum setback to septic tank of 10 feet and minimum setback to rock bed of 25 feet. The septic tank would be 7 feet from the home and the rock bed would be 20 feet from the home. We were asked to comment about any effects on septic system or proposed home.

The proposed home would be on a frost protected structural slab, which has a thickened heel that is 12 inches thick. The top of the floor of the home would be 1 foot above top of septic tank.

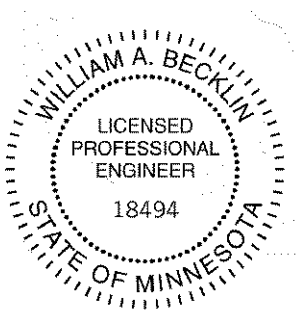
Discussion

The septic tank has a depth of no more than 5 feet. So the bottom the septic tank will be 6 feet below top of floor and 5 feet below bottom of heel of slab. The influence zone of the foundation extends at a 45 degree angle from the bottom of the heel. The septic tank is outside of the influence zone of the foundation and is satisfactory. The nearest the rock bed would be to home is 20 feet. The proposed location of the home will not affect the septic system rock bed function.

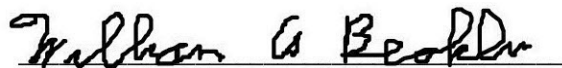
Conclusions

The home on a frost protected structural slab can be built with 7 foot setback to septic tank and 20 foot setback to rock bed. The home will not have a detrimental effect of septic system. The home will be 1 foot higher than septic tank and effluent will not back flow into the home. Maintain surface drainage.

Attachments: Photos, Related Documents



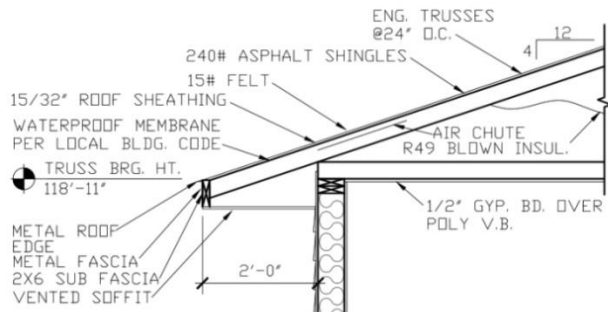
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.



WILLIAM A. BECKLIN, P.E.

DATE: AUGUST 10, 2022

LIC. No. 18494



TYPICAL WALL CONSTRUCTION

LP SMARTSIDE SIDING
HOUSE WRAP
7/16\"/>

UPPER LEVEL
110'-9 7/8"

TRUSS BRG. HT.
109'-1 1/8"

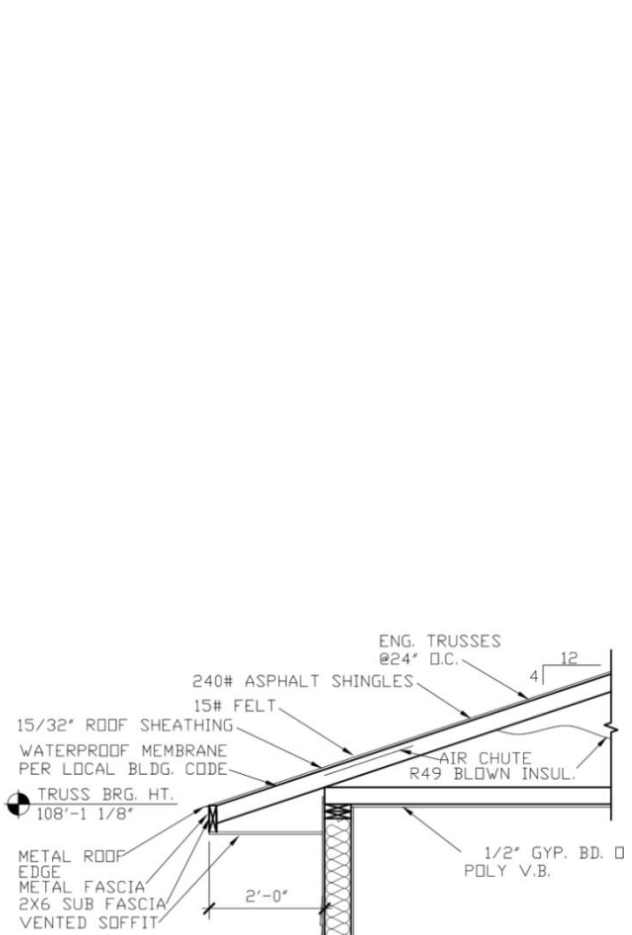
TYPICAL WALL CONSTRUCTION

LP SMARTSIDE SIDING
HOUSE WRAP
7/16\"/>

MAIN LEVEL
100'-0"

B.D. FOOTING
EL. 98'-6"

3 TYPICAL HOUSE SECTION
SCALE: 1/2"=1'-0"



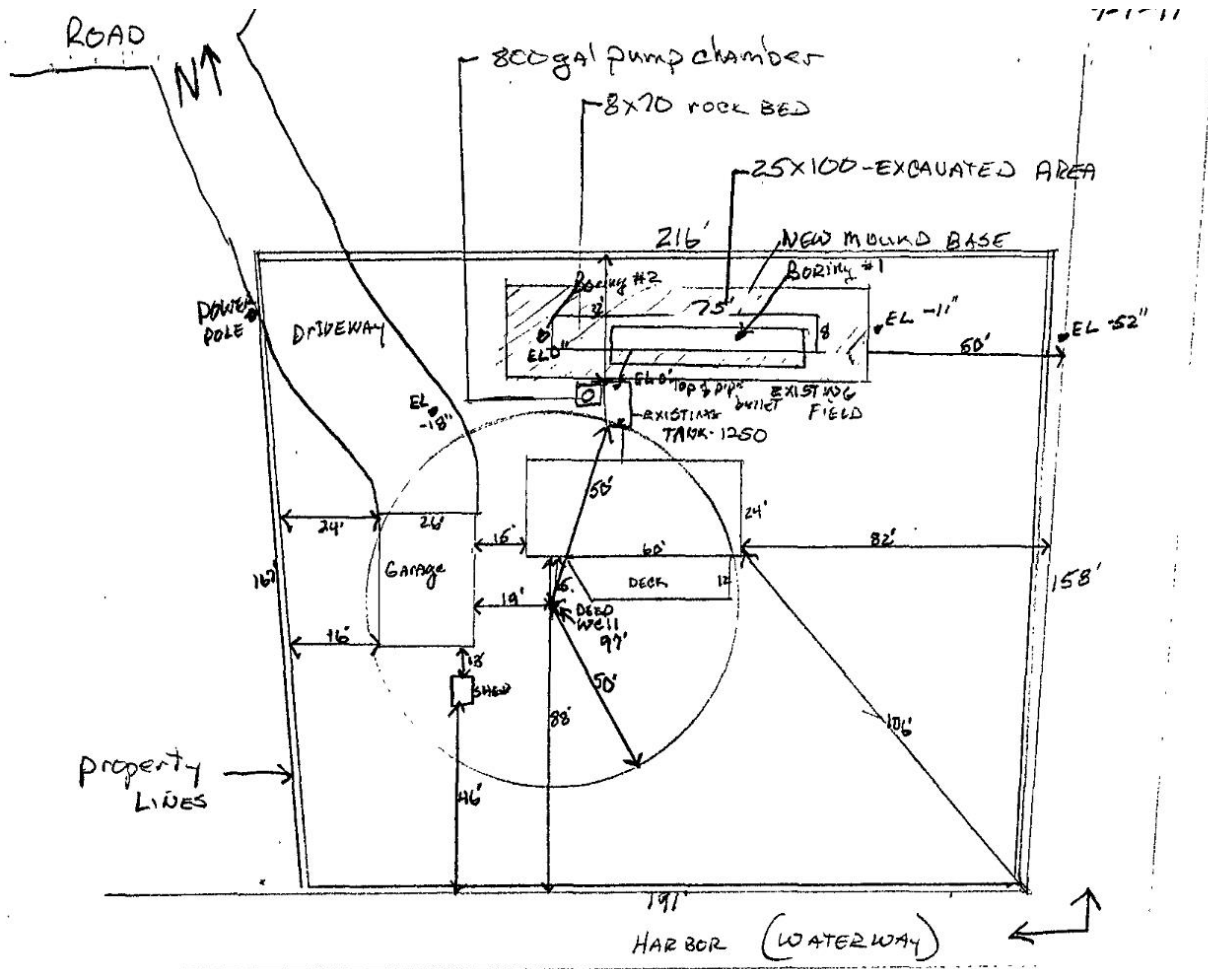
TYPICAL WALL CONSTRUCTION

LP SMARTSIDE SIDING
HOUSE WRAP
7/16\"/>

F.F. ELEVATION
100'-0"

B.D. FOOTING
EL. 98'-6"

4 TYPICAL GARAGE SECTION
SCALE: 1/2"=1'-0"



* SOIL BORING LAYOUT
EXPERIMENTAL DESIGN

* OVERALL MOUND SIZE = 25 X 100
3:1 SLOPE MIN.

OWNER Roger Kaake
 Lot 12 Block 1
 KORNOVICH HARBOUR
 Twp 44 R 25 S 22 32
 Parcel # 16-1-080800
 SCALE 1/4" = 10 FT

DESIGNER: #103
 MIKE CONNOR
 1507-476TH ST
 ISLE MN 56342
 520-676-3538

NOTE THIS DRAWING IS NOT A SURVEY



water supply lines, MN Statutes 4720, 4725, 6105, and 6120 must be approved by the MN Department of Health.

7.4 Department Decisions

The Department may grant an exception to these standards for reduced setback distances to structures when an application is accompanied by an approval from a Registered Engineer of the State of Minnesota approving of the reduced setback distance. The report must address, among other considerations, any impacts to the structural integrity of the structure and septic/pump/holding tank, and contamination from the effluent to the interior of the structure.

The Department may grant an exception to these standards for reduced setback distances to road right-of-ways and easements when an application is accompanied by a letter from the road authority or easement holder(s) approving of the reduced setback distance.

SECTION 8 SSTS PERMITS AND PLANS

8.1 SSTS Permits Required

A SSTS Permit shall be obtained by the property owner or an agent of the property owner from

AITKIN COUNTY

Certificate of Compliance Sewage System

This certificate has been issued this 11th day of JUNE, 1998 to certify

compliance with regulations of Aitkin County, Minnesota. The premises covered by this certificate

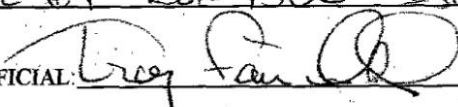
are legally described as: Lot 12 BIK1 KORNOVICHES HARPER lots

Section 32 Township 44 Range 25 Lake MILLE LAES

PERMIT NO. 24280

Owner Name: ROGER KAAKE

Address: Hc 69 Box 158B Idle MN 56342

ZONING OFFICIAL: 

The construction or installation described on the Aitkin County Zoning Permit bearing this number has been inspected by the Planning and Zoning Office of Aitkin County and this construction or installation complies with the Aitkin County Zoning Ordinance, except as to setbacks from right-of-way and boundary lines which Aitkin County is not in a position to certify.