



Land Division Evaluation Report

Kent County Health Department
700 Fuller Avenue NE - Grand Rapids, Michigan 49503
616-632-6900 (ph) 616-632-6892 (fax) kchmail@kentcountymi.gov

This is not a permit for installation and may not be used for issuance of a building permit

Location/Address: 6700 Whitneyville Ave SE (Parent) Perm. Parcel No.: 41-23-02-451-004 (Parent)
City, Village, or Twp.: Caledonia Township Subdivision & Lot No.: _____
Owner: Steve Hanson (Agent) Phone No: 616-291-2668 E-mail: steve@hansonrealestategrou
Address: 8106 E. Fulton St. City: Ada State: MI Zip Code: 49301

It shall be unlawful for any sewage dispersal facility to be constructed, repaired, enlarged, or relocated without issuance of a permit for such by the Kent County Health Department. This land division evaluation report is valid contingent upon proposed site plan and site conditions at the time of the evaluation. This determination is subject to change in the event that the site conditions no longer exist or proposed site plan no longer supportable due to substantial change from the time of the evaluation. Application for an onsite waste water dispersal permit is required.

Proposed Number of Splits: 7

Proposed Site Details

Soil Texture: Varies, see attached

Isolation Requirements:

100 surface water(s)

10 Ft. from lot lines

25 Ft. Other Subsurface drainage / storm sewers

System Type:

- Conventional System
- Deep Cut to _____
- Low pressure dose mound
- Alternative System
- Varies, see attached soil log**

Comments:

The site was reviewed under the Sewage Disposal Regulations for Kent County, Michigan. The site has not been approved for subdivisions, site condominiums, non-residential land use, or parcels under one acre. Locations of test pits were collected with hand held GPS unit (accuracy +/- 40 feet).


Most of the site has shallow loamy sand soils with underlying slowly permeable soils. Seasonal soil saturation levels was observed less than 48 inches across the site. Most of the site will require site modification. Site modification would require placing sand fill at the ground surface to elevate the drain bed above seasonal soil saturation levels. Please refer to the attached soil boring logs for descriptions of soil conditions and drain bed requirements.

A review of surrounding water well records indicates that groundwater is available between 75 and 90 feet. High levels of iron, chlorides, and sulfates may occur in the groundwater. Water treatment systems may be required. Some nearby wells have arsenic levels above the recommended level of 10 ppb. Water treatment systems approved for arsenic removal may be required.

Please provide a copy of this report with applications for water supply and sewage disposal permits. A site evaluation may be required if the proposed septic system area is not included as shown on the attached aerial photo.

Site evaluation determinations are contingent upon proposed site plan and site conditions at the time of the evaluation. This determination is subject to change in the event that the site conditions no longer exist or proposed site plan no longer supportable due to substantial change from the time of the evaluation.

See Attached Sketch For Location Details and Additional Information.

Signature of Sanitarian:  Jason E. Buck, REHS Date Issued: 12/3/2021 (revised)



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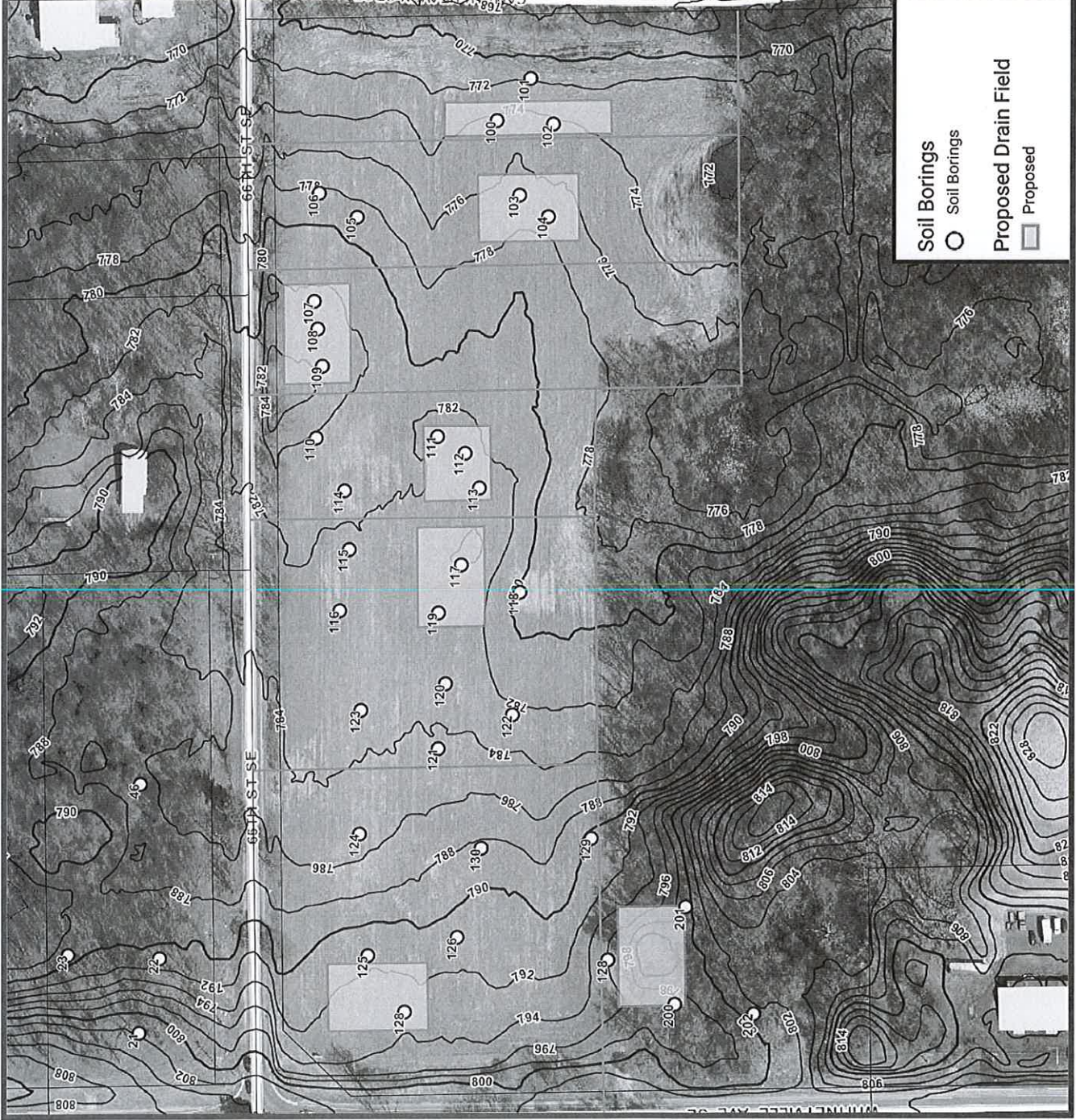
6700 Whitneyville Ave SE



Map Publication:
12/03/2021 1:28 PM



Disclaimer: This map does not represent a survey or legal document and is provided on an "as is" basis. Kent County expresses no warranty for the information displayed on this map document.



Soil Borings

- Soil Borings

Proposed Drain Field

- ▭ Proposed

Date: November 18, 2021

For: Dyer, Jane
10790 68th St SE
Alto, MI 49302

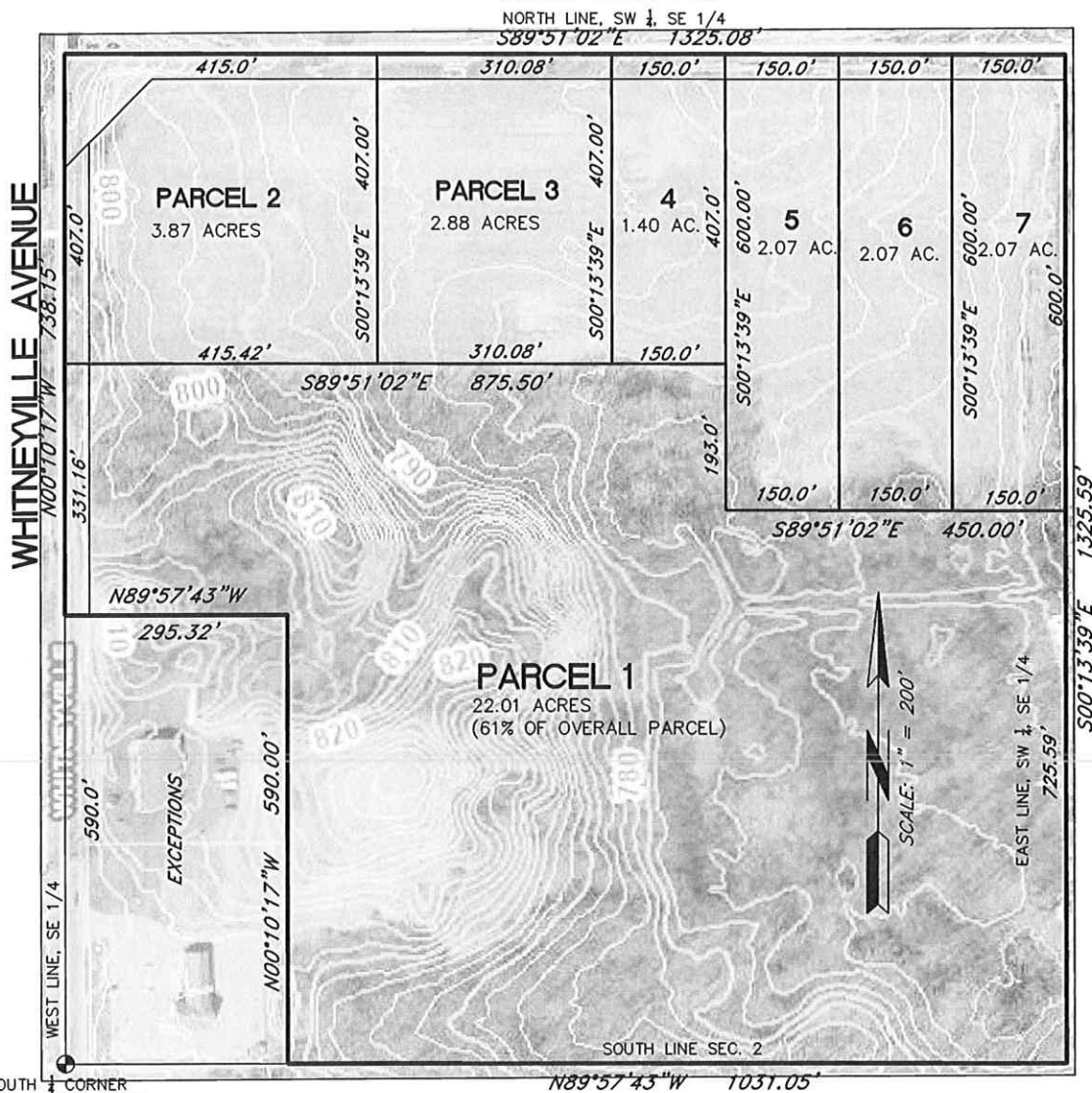
ORDERED BY: Hanson, Steve
Hanson Real Estate Group
8106 East Fulton
Ada, MI

RE: Shagbark LLC
Prop. Address: 6700 Whitneyville Rd

LEGAL DESCRIPTION

Part of the SE 1/4 of Section 2, T5N, R10W, Caledonia Township, Kent County, Michigan.

66th STREET



SOUTH 1/4 CORNER
SEC. 2, T5N, R10W
COUNTY MONUMENT

This survey was made from the legal description shown hereon. The drawing and description should be compared to the Abstract of Title or Title Insurance Policy for easements, restrictions, rights-of-way, or differences in description not indicated hereon. I certify that the requirements for 1970 PA 132, MCL 54.213 have been met. The relative positional precision of the corners identified for this survey and shown on the map are within the limits accepted by the practice of professional surveying.

LEGEND

- SET "ROOSIEN 31604"
- CAPPED REROD
- IRON FOUND
- - WOOD STAKE
- R - RECORDED DIMENSION
- D - DEED DIMENSION
- P - PLATTED DIMENSION
- M - MEASURED DIMENSION
- ⊙ - CENTERLINE
- x-x - FENCE LINE

Roosien & Associates
SURVEYING AND ENGINEERING

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BY *Kevin Roosien*

KENT COUNTY HEALTH DEPARTMENT

ENVIRONMENTAL HEALTH DIVISION
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Adam London, PhD, RS, DAAS
Administrative Health Officer

SOILS WORKSHEET

Project: 6700 Whitneyville Ave SE **Property Size:** Approx. 14 acres
Applicant: Steve Hanson **Approval Size:** N/A
Date: 10/27/2021 and 12/3/2021
KCHD: Jason Buck
Method: Excavator/hand auger

Soil boring 100

Depth	Soil Texture	Structure	Color	Mottling
0-8"	Sandy loam topsoil (fine)	Soft	Brown	No
8"-28"	Sandy loam (med to fine)	Soft	Light brown	Yes at 26"
28"-40"	Loamy sand (med to fine)	Loose	Tan/gray	Moist
40"-60"	Sandy loam (fine)	Soft	Dull tan	Wet

Notes: Suitable for raised mound drain bed. Free water at 40"

Soil boring 101

Depth	Soil Texture	Structure	Color	Mottling
0-8"	Sandy loam topsoil	Soft	Black	Yes
8"-30"	Sandy loam (fine to med)	Soft	Dull brown	Moist
30"-40"	Loamy sand (med to fine)	Loose	Dull tan/gray	Wet

Notes: Not suitable, soil saturation within 24 inches of ground surface. Free water at 24"

Soil boring 102

Depth	Soil Texture	Structure	Color	Mottling
0-8"	Sandy loam topsoil (fine)	Soft	Brown	No
8"-18"	Loamy sand (fine to med)	Soft	Light brown	No
18"-48"	Loamy sand (medium)	Loose	Tan/gray	Yes at 27"

Notes: Suitable for raised mound drain bed. Free water at 36"

Soil boring 103

Depth	Soil Texture	Structure	Color	Mottling
0-11"	Sandy loam topsoil (fine)	Soft	Brown	No
11"-36"	Sandy loam (med to fine)	Soft	Light brown	Yes at 24"
36"-7'	Sandy clay loam (fine)	Soft/sticky	Dull brown	Yes
7'-8'	Sand (med to fine)	Loose	Brown	Wet

Notes: Suitable for raised mound drain bed. Free water at 86"

Soil boring 104

Depth	Soil Texture	Structure	Color	Mottling
0-6"	Sandy loam topsoil (fine)	Soft	Brown	No
6"-18"	Loamy sand (fine)	Soft	Light brown	No
18"-7'	Sandy clay loam (fine)	Soft/sticky	Dull brown	Yes at 18"
7'-8'	Loamy sand (fine to med)	Loose	Light brown	Wet

Notes: Not suitable, soil saturation within 24 inches of ground surface. Free water at 78"

Soil boring 105

Depth	Soil Texture	Structure	Color	Mottling
0-12"	Loamy sand topsoil	Soft	Brown	No
12"-40"	Loamy sand (fine)	Soft	Light brown	No
40"-7'	Sandy clay loam (fine)	Soft/sticky	Brown/gray	Yes at 36"

Notes: Suitable for raised mound drain bed. Free water at 84"

Soil boring 106

Depth	Soil Texture	Structure	Color	Mottling
0-12"	Sandy loam topsoil	Soft	Brown	No
12"-48"	Sandy loam (fine to med)	Soft	Light brown	Yes at 28"
48"-6'	Sandy clay loam (fine)	Firm/sticky	Brown/gray	Yes

Notes: Suitable for raised mound drain bed.

Soil boring 107

Depth	Soil Texture	Structure	Color	Mottling
0-11"	Sandy loam topsoil	Soft	Brown	No
11"-48"	Sandy loam (fine to med)	Soft	Light brown	Yes at 24"
48"-6'	Sandy clay loam (fine)	Firm/sticky	Brown/gray	Yes

Notes: Suitable for raised mound drain bed. Free water at 60"

Soil boring 108

Depth	Soil Texture	Structure	Color	Mottling
0-8"	Sandy loam topsoil	Soft	Brown	No
8"-30"	Sandy loam (fine)	Soft	Light brown	Yes at 26"
30"-7'	Sandy clay loam (fine)	Firm/sticky	Brown/gray	Yes

Notes: Suitable for raised mound drain bed. Free water at 54"

Soil boring 109

Depth	Soil Texture	Structure	Color	Mottling
0-9"	Sandy loam topsoil	Soft	Brown	No
9"-29"	Loamy sand (fine)	Soft	Light brown	Yes at 27"
29"-48"	Loamy sand (fine to med)	Soft	Brown/gray	Yes

Notes: Suitable for raised mound drain bed. Free water at 48"

Soil boring 110

Depth	Soil Texture	Structure	Color	Mottling
0-14"	Sandy loam topsoil (fine)	Soft	Brown	No
14"-24"	Loamy sand w/ clay lenses	Soft	Light brown	Yes at 17"
24"-30"	Sandy clay loam (fine)	Firm/sticky	Dull brown	Moist
30"-48"	Sandy loam (fine)	Soft	Light brown	Wet

Notes: Not suitable, soil saturation within 24 inches of ground surface. Free water at 48"

Soil boring 111

Depth	Soil Texture	Structure	Color	Mottling
0-8"	Sandy loam topsoil	Soft	Brown	No
8"-30"	Loamy sand (fine)	Soft	Light brown	No
30"-7.5'	Sand (fine to med)	Loose	Tan to gray	Yes at 72"

Notes: Suitable for conventional drain bed. Note limited area and variable soils. Free water at 96" below ground.

Soil boring 112

Depth	Soil Texture	Structure	Color	Mottling
0-13"	Sandy loam topsoil	Soft	Brown	No
13"-40"	Sandy loam (fine to med)	Soft	Light brown	No
40"-8"	Loamy sand (fine)	Loose	Tan to gray	Yes

Notes: Unclear elevation of seasonal soil saturation. Highly variable soil strata in test pit. Mottling was evident at 64 inches and free water was observed at 80"

Soil boring 113

Depth	Soil Texture	Structure	Color	Mottling
0-10"	Sandy loam topsoil	Soft	Brown	No
10"-28"	Sandy clay loam (fine)	Soft	Light brown	Yes at 24"
28"-40"	Sandy loam (very fine to fine)	Friable	Gray/brown	Yes
40"-48"	Clay loam	Firm/sticky	Gray	Yes

Notes: Suitable for raised mound drain bed. Free water at 40"

Soil boring 114

Depth	Soil Texture	Structure	Color	Mottling
0-10"	Clay loam topsoil	Soft	Dark Brown	Yes
10"-60"	Clay loam (loamy lenses)	Plastic	Gray	Yes

Notes: Not suitable, soil saturation within 24 inches of ground surface. Very slowly permeable

Soil boring 115

Depth	Soil Texture	Structure	Color	Mottling
0-10"	Clay loam topsoil	Soft	Dark Brown	Yes
10"-60"	Clay loam (loamy lenses)	Plastic	Gray	Yes

Notes: Not suitable, soil saturation within 24 inches of ground surface. Very slowly permeable

Soil boring 116

Depth	Soil Texture	Structure	Color	Mottling
0-10"	Clay loam topsoil	Soft	Dark Brown	Yes
10"-60"	Clay loam (loamy lenses)	Plastic	Gray	Yes

Notes: Not suitable, soil saturation within 24 inches of ground surface. Very slowly permeable

Soil boring 117

Depth	Soil Texture	Structure	Color	Mottling
0-10"	Sandy loam topsoil	Soft	Brown	No
10"-36"	Loamy sand (fine to med)	Soft	Light brown	No
36"-90"	Loamy sand (medium)	Loose	Tan/gray	Yes at 66"

Notes: Suitable for conventional drain bed. Note limited area and variable soils. Free water at 80" below ground.

Soil boring 118

Depth	Soil Texture	Structure	Color	Mottling
0-12"	Organic	Soft	Black	Yes
12"-36"	Sandy clay loam	Soft	Gray	Yes

Notes: Not suitable, slowly permeable, poorly drained. Free water at 30" below ground.

Soil boring 119

Depth	Soil Texture	Structure	Color	Mottling
0-14"	Sandy loam topsoil	Soft	Brown	No
14"-36"	Sandy loam (fine to med)	Soft	Light brown	No
36"-96"	Loamy sand (fine)	Loose	Tan/gray	Yes at 60"

Notes: Suitable for conventional drain bed. Note limited area and variable soils. Free water at 96" below ground.

Soil boring 120

Depth	Soil Texture	Structure	Color	Mottling
0-10"	Loam topsoil	Soft	Brown	No
10"-60"	Sandy clay loam (fine)	Friable	Light brown	Yes at 14"
60"-96"	Loamy sand (fine to med)	Soft	Brown/gray	Yes

Notes: Not suitable, seasonal saturation within 24 inches of ground surface. Free water at 60 inches below ground surface

Soil boring 121

Depth	Soil Texture	Structure	Color	Mottling
0-10"	Loam topsoil	Soft	Brown	No
10"-60"	Sandy clay loam (fine)	Friable	Light brown	Yes at 14"
60"-96"	Loamy sand (fine to med)	Soft	Brown/gray	Yes
Notes:	Not suitable, seasonal saturation within 24 inches of ground surface. Free water at 60 inches below ground surface			

Soil boring 122

Depth	Soil Texture	Structure	Color	Mottling
0-9"	Loam topsoil	Soft	Brown	No
9"-36"	Sandy clay loam (fine)	Friable	Light brown	Yes at 18"
36"-48"	Sandy clay loam (fine)	Soft	Brown/gray	Yes
Notes:	Not suitable, seasonal saturation within 24 inches of ground surface.			

Soil boring 123

Depth	Soil Texture	Structure	Color	Mottling
0-12"	Loam topsoil	Soft	Brown	No
12"-7'	Clay loam	Firm/sticky	Gray/brown	Yes at 12"
7'-8'	Loamy sand (med to fine)	Loose	Brown	Yes
Notes:	Not suitable, seasonal saturation within 24 inches of ground surface. Slowly permeable. Free water at 7' below ground surface.			

Soil boring 124

Depth	Soil Texture	Structure	Color	Mottling
0-12"	Loam topsoil	Soft	Brown	No
12"-7'	Clay loam	Firm/sticky	Gray/brown	Yes at 12"
7'-8'	Loamy sand (med to fine)	Loose	Brown	Yes
Notes:	Not suitable, seasonal saturation within 24 inches of ground surface. Slowly permeable. Free water at 7' below ground surface.			

Soil boring 125

Depth	Soil Texture	Structure	Color	Mottling
0-12"	Sandy loam topsoil	Soft	Brown	No
12"-24"	Sandy loam (fine)	Soft	Light brown	No
24"-36"	Sandy clay loam (fine)	Firm/sticky	Brown/gray	Yes at 24"
36"-60"	Loamy sand (fine to med)	Loose	Brown	Wet
Notes:	Suitable for low pressure dose			

Soil boring 126

Depth	Soil Texture	Structure	Color	Mottling
0-12"	Sandy loam topsoil	Soft	Brown	No
12"-7'	Sandy clay loam (fine)	Friable	Light brown	Yes at 20"
7'-8'	Loamy sand (fine)	Loose	Brown/gray	Wet
Notes:	Not suitable, seasonal saturation within 24 inches of ground surface. Slowly permeable. Free water at 7' below ground surface.			

Soil boring 127

Depth	Soil Texture	Structure	Color	Mottling
0-12"	Sandy loam topsoil	Soft	Brown	No
12"-24"	Sandy loam (fine)	Soft	Light brown	No
24"-36"	Sandy clay loam (fine)	Firm/sticky	Brown/gray	Yes at 24"
36"-60"	Loamy sand (fine to med)	Loose	Brown	Wet
Notes:	Suitable for low pressure dose mound.			

Soil boring 128

Depth	Soil Texture	Structure	Color	Mottling
0-10"	Sandy loam topsoil	Soft	Brown	No
10"-48"	Loamy sand (very fine to fine)	Soft	Light brown	No
48"-8'	Sand (medium to coarse)	Loose	Tan	No

Notes: Suitable for conventional drain bed.

Soil boring 129

Depth	Soil Texture	Structure	Color	Mottling
0-8"	Loam topsoil	Soft	Brown	No
8"-24"	Sandy clay loam (fine)	Soft	Light brown	Yes at 17"
24"-72"	Clay loam	Firm/sticky	Brown/gray	Yes

Notes: Not suitable. Seasonal soil saturation within 24 inches of ground surface. Slowly permeable.

Soil boring 130

Depth	Soil Texture	Structure	Color	Mottling
0-8"	Sandy loam topsoil	Soft	Brown	No
8"-52"	Loamy sand/with lenses	Soft	Light brown	Yes at 24"
52"-60"	Clay loam	Firm/sticky	Brown/gray	Wet at 54"

Notes: Suitable for low pressure dose mound.

Soil boring 200 (hand auger)

Depth	Soil Texture	Structure	Color	Mottling
0-7"	Sandy loam topsoil	Soft	Brown	No
7"-18"	Sandy loam (fine)	Friable	Light brown	No
18"-22"	Loamy sand (fine)	Soft	Tan	No
22"-48"	Sand (fine to medium)	Loose	Tan to gray	Yes at 29"

Notes: Suitable for low pressure dose mound.

Soil boring 201 (hand auger)

Depth	Soil Texture	Structure	Color	Mottling
0-6"	Sandy loam topsoil	Soft	Brown	No
6"-30"	Sandy loam (fine)	Friable	Dull brown	Yes at 25"
30"-40"	Loamy sand (fine to very fine)	Soft	Tan to gray	Moist
40"-48"	Clay loam	Firm	Gray	Yes

Notes: Suitable for low pressure dose mound.

Soil boring 202 (hand auger)

Depth	Soil Texture	Structure	Color	Mottling
0-8"	Loam topsoil	Soft	Brown	No
8"-20"	Sandy clay loam (fine)	Soft/sticky	Gray/orange	Yes at 12"
20"-30"	Silty clay loam	Firm/sticky	Gray	Wet

Notes: Not suitable. Seasonal soil saturation within 24 inches of ground surface. Slowly permeable.