# Soil and Environmental Consulting Services, Inc.



Wednesday, June 14, 2023

Hurdle Enterprises 1616 Lexington Ave Mansfield OH 44907

Re: Soil investigation for on-site septic disposal for the parcel split north of 18560 Smokey Road, Allen Township, Union County, Ohio

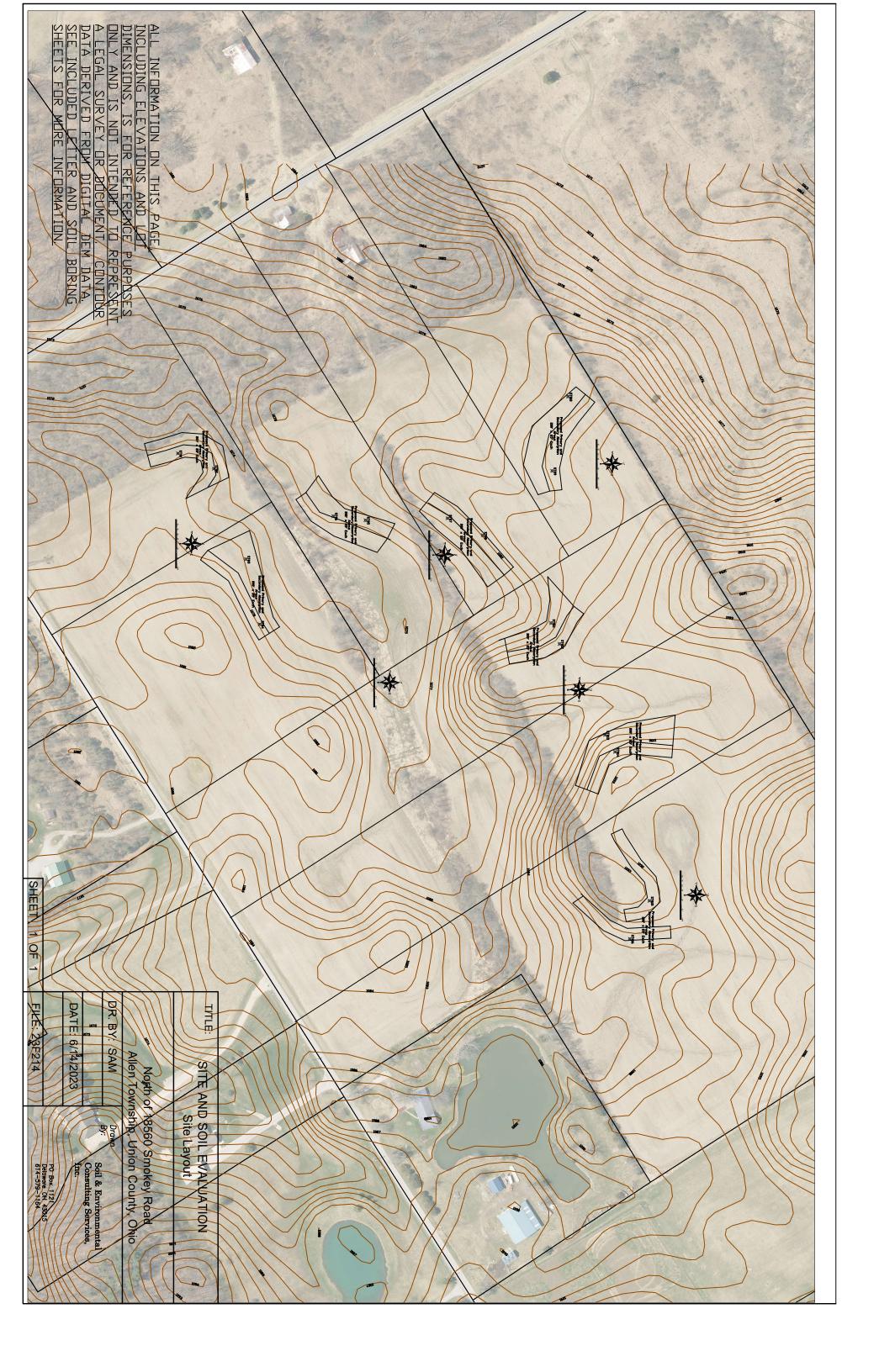
Enclosed you will find the requested detailed soil descriptions for the parcel split north of 18560 Smokey Road, Allen Township, Union County, Ohio

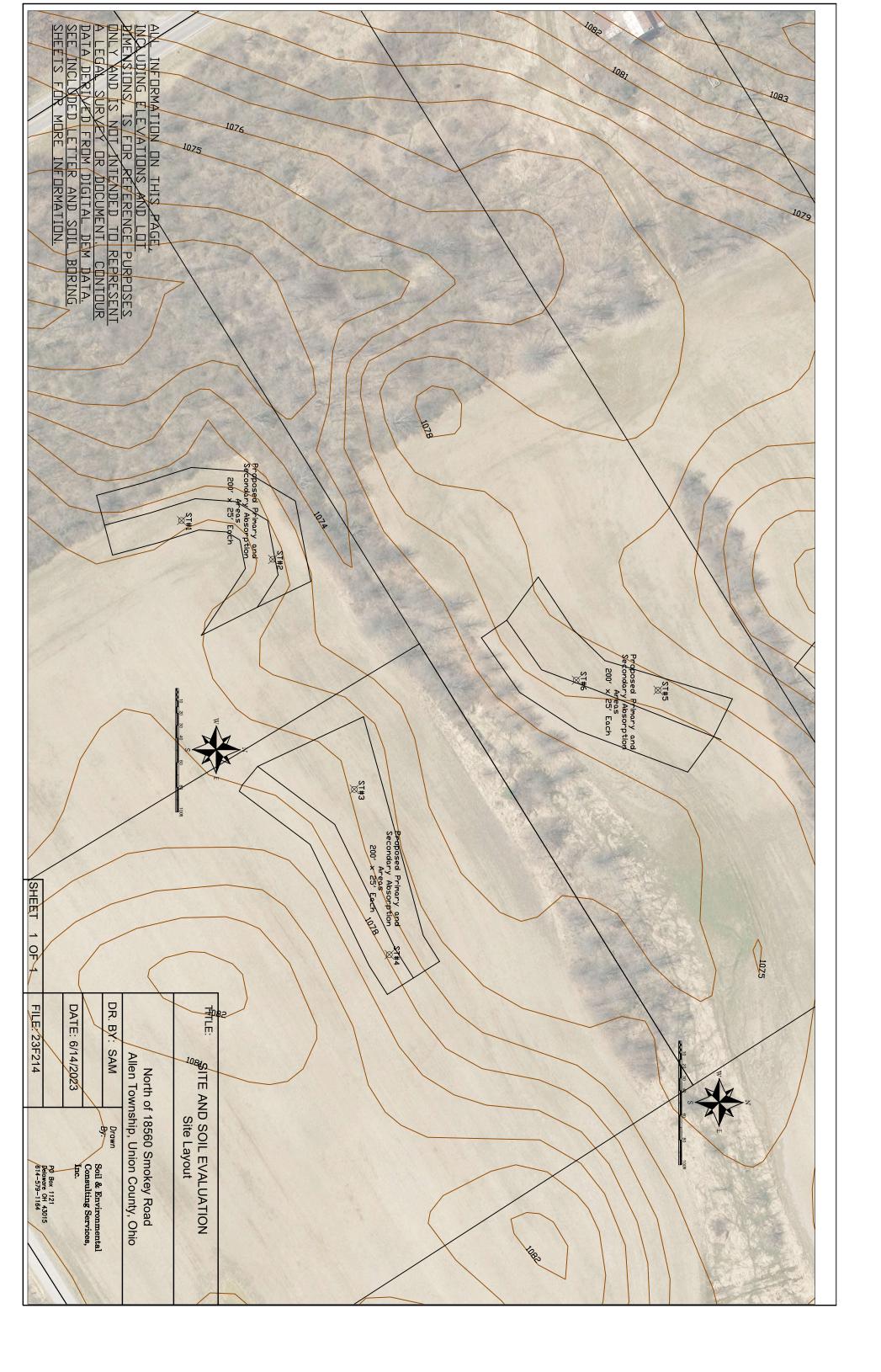
The soils of the selected sites were mapped and described on the enclosed sheets for your records. The locations of the soil borings have been located using GPS and the locations have been delineated on the enclosed map. Copies of this letter, soil boring descriptions, sketch, and system drawing should be submitted to local health department. The health department will make the determination if the soil and site area is suitable for onsite sewage treatment.

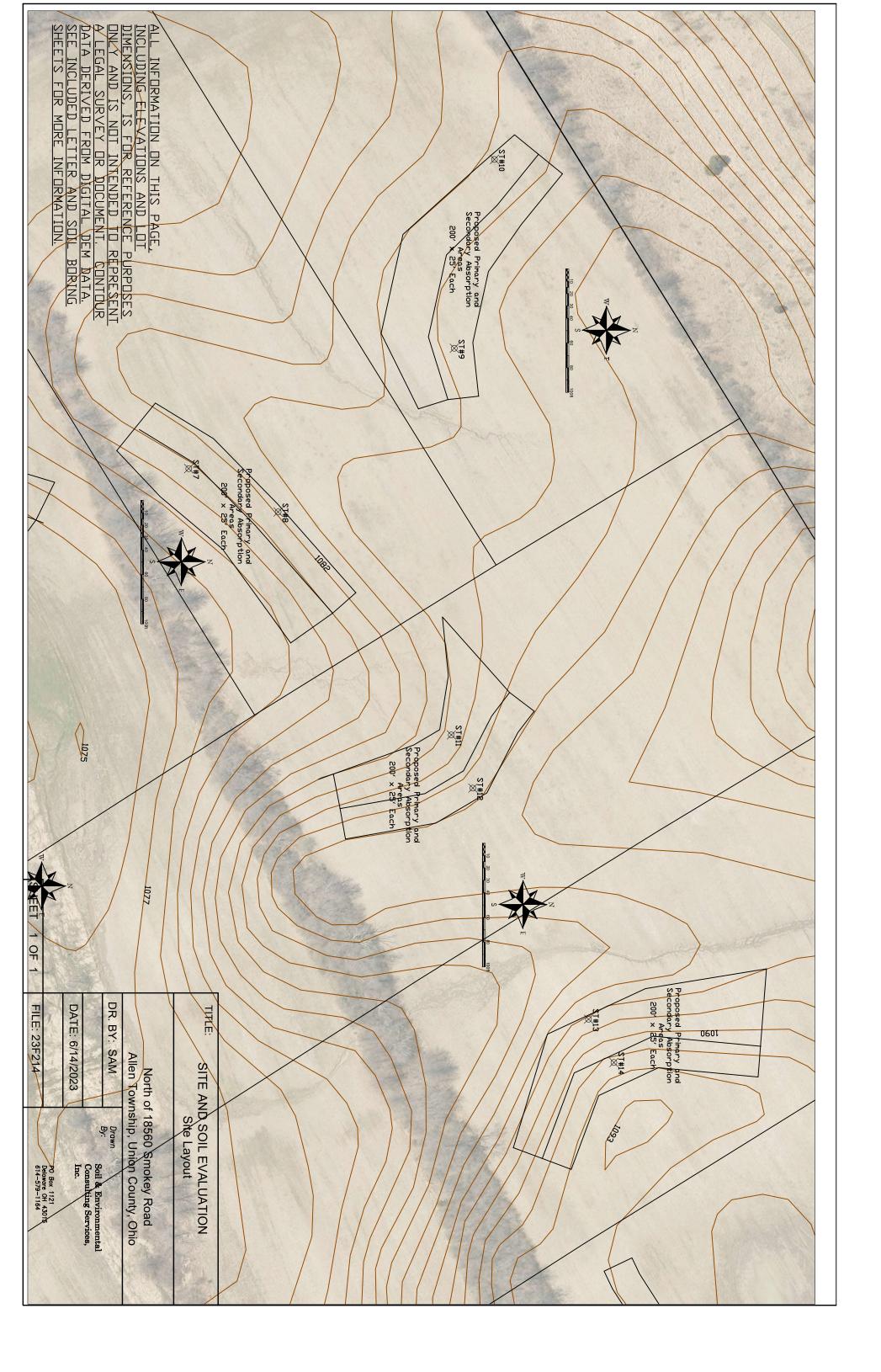
Please protect all areas approved for septic disposal by having the contractor stake and rope off the proposed locations prior to driveway and basement excavation. No soil, building, or waste material should be stored on the proposed absorption areas. Disturbance to the areas may result in compaction and the subsequent failure of the system. Any disturbance to the 504 absorption area voids the results of this analysis.

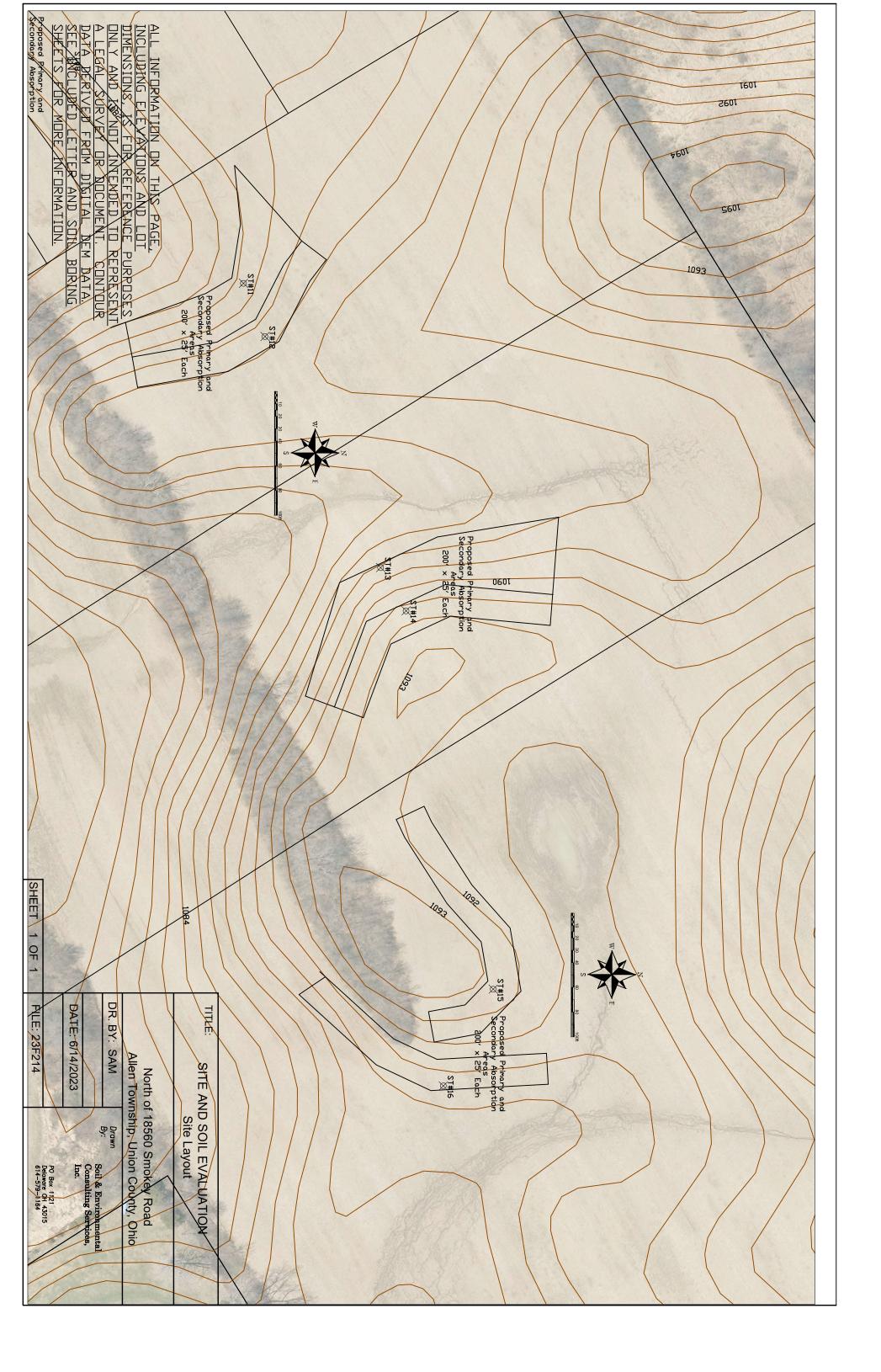
If you have any questions or want to move forward with the septic design process feel free to contact us.

Steven Miller, CPSS









| Landforms              |
|------------------------|
| Upland*                |
| Terrace                |
| Flood Plain            |
| Lake Pain              |
| Beach Ridge            |
| *Includes glacial till |
| plain and end moraine  |

| Position on Landform |
|----------------------|
| Depression           |
| Flat                 |
| Knoll                |
| Crest                |
| Hillslope            |
| Footslope            |

| Shape of Slope |  |
|----------------|--|
| Convex         |  |
| Concave        |  |
| Linear         |  |
| Complex        |  |

|   | Horizon Nomenclature                             |   |  |  |                                    |  |  |  |  |  |
|---|--|---|--|--|------------------------------------|--|--|--|--|--|
|   | Master Horizons                                  |   | Horizon Suffixes                           |  | Horizon Modifiers                  |  |  |  |  |  |
| О | Predominantly organic matter (litter &           | a | Highly decomposed organic matter           |  |                                    |  |  |  |  |  |
|   | humus)   | b | Buried genetic horizon                     |  | Numerical Prefixes: Used to denote |  |  |  |  |  |
| A | Mineral, organic matter (humus)                  | d | Densic layer (physically root restrictive) |  | lithologic discontinuities.        |  |  |  |  |  |
|   | accumulation, loss of Fe, Al, clay               | e | Moderately decomposed organic matter       |  |                                    |  |  |  |  |  |
| Е | Mineral, loss of Si, Fe, Al, clay, organic       | g | Strong gley                                |  |                                    |  |  |  |  |  |
|   | matter   | i | Slightly decomposed organic matter         |  | Numerical Suffixes: Used to denote |  |  |  |  |  |
| В | Subsurface accumulation of clay, Fe, Al, Si,     | p | Plow layer or artificial disturbance       |  | subdivisions within a master       |  |  |  |  |  |
|   | humus; sesquioxides; loss of CaCo <sub>3</sub> ; | r | Weathered or soft bedrock                  |  | horizon.                           |  |  |  |  |  |
|   | subsurface soil structure                        | t | Illuvial accumulation of silicate clay     |  |                                    |  |  |  |  |  |
| С |  | W | Weak color or structure within B           |  |                                    |  |  |  |  |  |
|   | Little or no pedogenic alteration,               | X | Fragipan characteristics                   |  |                                    |  |  |  |  |  |
|   | unconsoilidated earthy material, soft bedrock    | - | -  |  |                                    |  |  |  |  |  |
| R | Hard bedrock                                     |   |  |  |                                    |  |  |  |  |  |

|                          | Soil     | Texture                  |     |
|--------------------------|----------|--------------------------|-----|
| Texture Class Abbreviati | ons      | Textural Class Modifiers |     |
| Course Sand              | cos      | Gravelly                 | GR  |
| Sand                     | S        | Fine Gravelly            | FGR |
| Fine Sand                | fs       | Medium Gravelly          | MGR |
| Very Fine Sand           | vfs      | Coarse Gravelly          | CGR |
| Loamy Coarse Sand        | lcos     | Very Gravelly            | VGR |
| Loamy Sand               | ls       | Extremely Gravelly       | XGR |
| Loamy Fine Sand          | lfs      | Cobbly                   | СВ  |
| Loamy Very Fine Sand     | lvfs     | Very Cobbly              | VCB |
| Coarse Sandy Loam        | cosl     | Extremely Cobbly         | XCB |
| Sandy Loam               | sl       | Stony                    | ST  |
| Fine Sandy Loam          | fsl      | Very Stony               | VST |
| Very Fine Sandy Loam     | vfsl     | Extremely Stony          | XST |
| Loam                     | 1        | Bouldery                 | BY  |
| Silt Loam                | sil      | Very Bouldery            | VBY |
| Silt                     | si       | Extremely Bouldery       | XBY |
| Sandy Clay Loam          | scl      | Channery                 | CN  |
| Clay Loam                | cl       | Very Channery            | VCN |
| Silty Clay Loam          | sicl     | Extremely Channery       | XCN |
| Sandy Clay               | sc       | Flaggy                   | FL  |
| Silty Clay               | sic      | Very Flaggy              | VFL |
| Clay                     | c        | Extremely Flaggy         | XFL |
| *Estimate approximate c  | lay perc |                          |     |
|                          |          |                          |     |

| Soil Structure |   |              |    |                   |     |  |  |  |  |  |
|----------------|---|--------------|----|-------------------|-----|--|--|--|--|--|
| Grade          |   | Size         |    | Type (Shape)      |     |  |  |  |  |  |
| Structureless  | 0 | Very Fine    | vf | Granular          | gr  |  |  |  |  |  |
| Weak           | 1 | Fine         | f  | Angular Blocky    | abk |  |  |  |  |  |
| Moderate       | 2 | Medium       | m  | Subangular Blocky | sbk |  |  |  |  |  |
| Strong         | 3 | Coarse       | co | Platy             | pl  |  |  |  |  |  |
|                |   | Very Coarse  | vc | Prismatic         | pr  |  |  |  |  |  |
|                |   | Extr. Coarse | ec | Columnar          | cpr |  |  |  |  |  |
|                |   | Very Thin*   | vn | Single Grain      | sg  |  |  |  |  |  |
|                |   | Thin*        | tn | Massive           | m   |  |  |  |  |  |
|                |   | Thick*       | tk | Cloddy            | CDY |  |  |  |  |  |
|                |   | Very Thick*  | vk |                   | -   |  |  |  |  |  |

\* The sizes Very Thin, Thin, Thick, and Very Thick, are used when describing platy structure only. Substitute thin for fine, and thick for coarse when describing platy structure.

| Moist Consistence |     |  |  |  |  |  |  |  |  |
|-------------------|-----|--|--|--|--|--|--|--|--|
| Loose             | 1   |  |  |  |  |  |  |  |  |
| Very Friable      | vfr |  |  |  |  |  |  |  |  |
| Friable           | fr  |  |  |  |  |  |  |  |  |
| Firm              | fi  |  |  |  |  |  |  |  |  |
| Very Firm         | vfi |  |  |  |  |  |  |  |  |
| Extremely Firm    | efi |  |  |  |  |  |  |  |  |

For a more detailed explanation on describing and sampling soils, please refer to the "Field Book for Describing and Sampling Soils" Schoeneberger, P.J., Wysocki, D.A., Benham, E.C., and Broderson, W.D. (editors) 2002. Field book for describing and sampling soils, version 2.0. Natural Resources Conservation Service, USDA, National Soil Survey Center, Lincoln, NE.

|            |                |            | Use / Vegetation:    |              | Beans            |               |                 |               |            |                |             |   |
|------------|----------------|------------|----------------------|--------------|------------------|---------------|-----------------|---------------|------------|----------------|-------------|---|
| To         | wnship / Sec.: | Alle       | n                    |              | Landform:        |               | Till Plain      |               |            |                |             | 1-1   |
| Property A |                |            | tion on Landform:    |              | Backslope        |               |                 |               | 1          |                |             |   |
|            |                |            |                      |              | Percent Slope:   |               | 2 to 4%         |               |            |                | 1 1         | cacpaes \                                   |
| Ap         | plicant Name:  | Hurdle Ent | erprises             |              | Shape of Slope:  |               | Linear / linear |               |            |                |             |   |
|            | Address:       |            |                      | E            | Bedrooms or GPD: |               |                 |               |            |                | 1           | STEVEN A MILLER                             |
|            |                |            |                      |              | Date:            | Tues          | sday, June 13,  | 2023          |            | ,              | 1 2         | CERTIFIED PROFESSIONAL SOIL SCIENTIST DISC. |
|            | Phone #:       |            |                      |              | Evaluator:       | Ste           | ven Miller, CP  | SSc           |            | b              | 103         | 0   |
|            | Lot #:         | _          |                      |              |                  | Soil & Envir  | onmental Cons   | ulting, Inc.  | Signature: | XD.            | A San       | 28423                                       |
|            | Test Hole #:   | 1          |                      |              |                  | P.O. Box 1121 |                 |               | win        | V 2 0 -        |             |   |
| Latitu     | de/Longitude:  |            |                      |              |                  | De            | elaware OH 430  | 015           | Phone#:    | p-614.579.     | 1164        |   |
|            | Method:        | Pit Auger  | X Tube               |              | Job Number:      |               | 23F214          |               |            | <u>soilcor</u> | nsultant@ya | ahoo.com                                    |
|            |                |            |                      |              | Soil Series:     |               |                 |               |            |                |             |   |
|            |                |            |                      |              |                  |               |                 |               |            |                |             |   |
| Soil I     | Profile        | Esti       | imating Soil Satur   | ation        |                  |               | Estimatiı       | ng Soil Perme | ability    |                |             |   |
|            |                | Munsel     | l Color (hue, value, | chroma)      |                  |               |                 |               |            |                |             |   |
|            |                |            | Redoximorp           | hic Features |                  | Texture       |                 |               | Structure  |                |             |   |
|            | Depth          | Matrix     |                      |              |                  | Approx.       | Approx. %       |               |            | Type           |             |   |
| Horizon    | (inches)       | Color      | Concentrations       | Depletions   | Class            | % Clay        | Fragments       | Grade         | Size       | (shape)        | Consistence | Other Soil Features                         |
| Ap         | 0 to 8         | 10YR 4/3   |                      |              | sil              | 25            | 2               | 1             | m          | sbk            | fr          |   |
| Bt1        | 8 to 20        | 10YR 5/4   |                      | 15%10vR 5/2  | sicl             | 35            | 2               | 2             | m          | sbk            | fi          |   |

| Ap  | 0 to 8   | 10YR 4/3 |             | sil  | 25 | 2 | 1 | m | sbk | fr  |  |
|-----|----------|----------|-------------|------|----|---|---|---|-----|-----|--|
| Bt1 | 8 to 20  | 10YR 5/4 | 15%10yR 5/2 | sicl | 35 | 2 | 2 | m | sbk | fi  |  |
| Bt2 | 20 to 22 | 10YR 5/4 | 20%10YR 5/2 | sicl | 38 | 2 | 2 | m | sbk | fi  |  |
| ВС  | 22 to 24 | 10YR 5/4 | 15%10YR 5/2 | sicl | 36 | 2 | 1 | m | sbk | fi  |  |
| Cd  | 24+      | 10YR 5/4 | 10%10YR 5/2 | cl   | 34 | 5 | 0 |   | m   | vfi |  |
|     |          |          |             |      |    |   |   |   |     |     |  |
|     |          |          |             |      |    |   |   |   |     |     |  |

| Limiting Conditions          | inches | Description             | Remarks / Risk Factors:  |
|------------------------------|--------|-------------------------|--|
| Perched Seasonal Water Table | 8      | perched on glaical till | Surface water should be diverted around system. Subsurface ag drainage may be present. |
| Apparent Water Table         | >60    |                         |  |
| Highly Permeable Material    | >60    |                         |  |
| Bedrock                      | >60    |                         |  |
| Restrictive Layer            | 24     | glacial till            |  |

| County:                    | Union                      | Land Use / Vegetation: | Beans                              | and the second  |
|----------------------------|----------------------------|------------------------|------------------------------------|---|
| Township / Sec.:           | Allen                      | Landform:              | Till Plain                         |   |
| Property Address/Location: | North of 18560 Smikey Road | Position on Landform:  | Backslope                          |   |
|                            |                            | Percent Slope:         | 2 to 4%                            | ( cacpaes)  |
| Applicant Name:            | Hurdle Enterprises         | Shape of Slope:        | Linear / linear                    | I have been a supplied to the supplied of the |
| Address:                   |                            | Bedrooms or GPD:       |                                    | STEVEN A MILLER   |
| _                          |                            | Date:                  | Tuesday, June 13, 2023             | CERTIFIED PROFESSIONAL  |
| Phone #:                   |                            | Evaluator:             | Steven Miller, CPSSc               | 1 O Sole Sole Sole Sole Sole Sole Sole Sole   |
| Lot #:                     | <u>_</u>                   | Soil                   | l & Environmental Consulting, Inc. | Signature: XQ 423   |
| Test Hole #:               | 2                          |                        | P.O. Box 1121                      | with voor   |
| Latitude/Longitude:        |                            |                        | Delaware OH 43015                  | Phone#: p-614.579.1164  |
| Method:                    | Pit Auger X Tube           | Job Number:            | 23F214                             | soilconsultant@yahoo.com  |
| _                          |                            | Soil Series:           |                                    |   |

| Soil Profile      |                   |                                    | imating Soil Satur |                     | _           | Estimating Soil Permeability |                        |                 |                 |              |             |                     |
|-------------------|-------------------|------------------------------------|--------------------|---------------------|-------------|------------------------------|------------------------|-----------------|-----------------|--------------|-------------|---------------------|
|                   |                   | Munsell Color (hue, value, chroma) |                    |                     |             |                              |                        |                 |                 |              |             |                     |
|                   |                   |                                    | Redoximor          | ohic Features       |             | Texture                      |                        |                 | Structure       |              |             |                     |
| Horizon           | Depth<br>(inches) | Matrix<br>Color                    | Concentrations     | Depletions          | Class       | Approx.<br>% Clay            | Approx. %<br>Fragments | Grade           | Size            | Type (shape) | Consistence | Other Soil Features |
| Ap                | 0 to 8            | 10YR 4/3                           |                    |                     | sil         | 25                           | 2                      | 1               | m               | sbk          | fr          |                     |
| Bt1               | 8 to 17           | 10YR 5/4                           |                    | 10%10yR 5/2         | sicl        | 35                           | 2                      | 2               | m               | sbk          | fi          |                     |
| Bt2               | 17 to 20          | 10YR 5/4                           |                    | 15%10YR 5/2         | sic         | 40                           | 2                      | 2               | m               | sbk          | fi          |                     |
| ВС                | 20 to 22          | 10YR 5/4                           |                    | 20%10YR 5/2         | sicl        | 36                           | 2                      | 1               | m               | sbk          | fi          |                     |
| Cd                | 22+               | 10YR 5/4                           |                    | 10%10YR 5/2         | cl          | 34                           | 5                      | 0               |                 | m            | vfi         |                     |
|                   |                   |                                    |                    |                     |             |                              |                        |                 |                 |              |             |                     |
|                   |                   |                                    |                    |                     |             |                              |                        |                 |                 |              |             |                     |
|                   |                   |                                    |                    |                     |             |                              |                        |                 |                 |              |             |                     |
| Limiting (        | Conditions        | inches                             |                    | Description         |             |                              |                        |                 | rks / Risk Fac  |              |             |                     |
| Perched Seasonal  |                   | 8                                  | pero               | hed on glaical till | Surface was | ter should be di             | verted around s        | system. Subsurf | ace ag drainage | e may be pre | esent.      |                     |
| Apparent Water T  |                   | >60                                |                    |                     |             |                              |                        |                 |                 |              |             |                     |
| Highly Permeable  | Material          | >60                                |                    |                     |             |                              |                        |                 |                 |              |             |                     |
| Bedrock           |                   | >60                                |                    |                     |             |                              |                        |                 |                 |              |             |                     |
| Restrictive Layer |                   | 22                                 |                    | glacial till        |             |                              |                        |                 |                 |              |             |                     |

| County: Township / Sec.: Property Address/Location:  Applicant Name: Address: | Union Allen North of 18560 Smikey Road Hurdle Enterprises                 | Land Use / Vegetation:  Landform:  Position on Landform:  Percent Slope:  Shape of Slope:  Bedrooms or GPD:  Date: | Beans Till Plain Backslope 2 to 4% Linear / linear Tuesday, June 13, 2             | 023                            |                                  | STEVENA MILLER CERTIFIED PROFESSIONAL |
|---|---|--|--|--------------------------------|----------------------------------|---------------------------------------|
| Phone #: Lot #: Test Hole #: Latitude/Longitude: Method:                      | - 3 Pit Auger X Tube  | Evaluator:   | Steven Miller, CPS Soil & Environmental Const P.O. Box 1121 Delaware OH 430 23F214 | SSc<br>ulting, Inc. Signature: | p-614.579.1164 soilconsultant@ya | SOIL SOILHTIST                        |
| Call Duagel   | Estimating Soil Saturat   | Soil Series:   | Fating   | - C-:1 D                       |                                  |                                       |
| Soil Profile  | Estimating Soil Saturati<br>Munsell Color (hue, value, cl<br>Redoximorphi | hroma)   | Texture  | g Soil Permeability  Structure |                                  |                                       |

| Soil 1            | Profile           |                 | imating Soil Satur   |                     |  |                   | Estimati               | ng Soil Permeat | oility         |              |             |                     |
|-------------------|-------------------|-----------------|----------------------|---------------------|--|-------------------|------------------------|-----------------|----------------|--------------|-------------|---------------------|
|                   | 1                 | Munsel          | l Color (hue, value, |                     |  | <b>.</b>          |                        |                 | a              |              | 1           |                     |
|                   |                   |                 | Redoximorp           | hic Features        |  | Texture           |                        | Structure       |                |              |             |                     |
| Horizon           | Depth<br>(inches) | Matrix<br>Color | Concentrations       | Depletions          | Class  | Approx.<br>% Clay | Approx. %<br>Fragments | Grade           | Size           | Type (shape) | Consistence | Other Soil Features |
| Ap                | 0 to 8            | 10YR 4/3        |                      |                     | sil  | 25                | 2                      | 1               | m              | sbk          | fr          |                     |
| Bt1               | 8 to 14           | 10YR 5/4        |                      | 5%10yR 5/2          | sicl   | 35                | 2                      | 2               | m              | sbk          | fi          |                     |
| Bt2               | 14 to 18          | 10YR 5/4        |                      | 10%10YR 5/2         | sic  | 40                | 2                      | 2               | m              | sbk          | fi          |                     |
| ВС                | 18 to 20          | 10YR 5/4        |                      | 15%10YR 5/2         | sicl   | 35                | 2                      | 1               | m              | sbk          | fi          |                     |
| Cd                | 20+               | 10YR 5/4        |                      | 10%10YR 5/2         | cl   | 32                | 5                      | 0               |                | m            | vfi         |                     |
|                   |                   |                 |                      |                     |  |                   |                        |                 |                |              |             |                     |
|                   |                   |                 |                      |                     |  |                   |                        |                 |                |              |             |                     |
| Limiting          | Conditions        | inches          |                      | Description         |  |                   |                        | Rema            | rks / Risk Fac | tors:        |             |                     |
| Perched Seasonal  |                   | 8               | nerc                 | hed on glaical till | Surface wa   | ter should be di  | verted around s        |                 |                |              | esent       |                     |
| Apparent Water 7  |                   | >60             | pere                 | nea on glateat till | Surface water should be diverted around system. Subsurface ag drainage may be present. |                   |                        |                 |                |              |             |                     |
| Highly Permeable  |                   | >60             |                      |                     |  |                   |                        |                 |                |              |             |                     |
| Bedrock           |                   | >60             |                      |                     |  |                   |                        |                 |                |              |             |                     |
| Restrictive Layer |                   | 20              |                      | glacial till        |  |                   |                        |                 |                |              |             |                     |

|             | County:          | Unio           | on                   | Land         | Use / Vegetation: |              | Beans           |               |            |            |                    |  |
|-------------|------------------|----------------|----------------------|--------------|-------------------|--------------|-----------------|---------------|------------|------------|--------------------|--|
| To          | wnship / Sec.:   | Alle           | n                    |              | Landform:         |              | Till Plain      |               |            |            |                    |  |
| Property Ac | ddress/Location: | North of 18560 | Smikey Road          | Posi         | tion on Landform: |              | Backslope       |               |            |            | 1                  |  |
|             |                  |                |                      |              | Percent Slope:    |              | 2 to 4%         |               |            |            | 1 1                | cacpaes \                                    |
| App         | plicant Name:    | Hurdle Ent     | erprises             |              | Shape of Slope:   |              | Linear / linear |               |            |            |                    |  |
|             | Address:         |                |                      | E            | Bedrooms or GPD:  |              |                 |               |            |            | 1                  | STEVEN A MILLER                              |
|             |                  |                |                      |              | Date:             | Tue          | sday, June 13,  | 2023          |            | ,          | 1                  | CERTIFIED PROFESSIONAL SOIL SCIENTIST JOSEPH |
|             | Phone #:         |                |                      |              | Evaluator:        | Ste          | ven Miller, CP  | SSc           |            | V          | 103                | 0  |
|             | Lot #:           |                |                      |              |                   | Soil & Envir | onmental Cons   | ulting, Inc.  | Signature: | XIP.       | A San              | 28423  |
|             | Test Hole #:     | 4              |                      |              |                   |              | P.O. Box 1121   |               |            | wan        | 0 2 0 -            |  |
| Latitu      | de/Longitude:    |                |                      |              |                   | De           | elaware OH 430  | )15           | Phone#:    | p-614.579. |                    |  |
|             | Method:          | _PitAuger      | Tube                 |              | Job Number:       |              | 23F214          |               |            | soilcor    | <u>nsultant@ya</u> | ahoo.com                                     |
|             |                  |                |                      |              | Soil Series:      |              |                 |               |            |            |                    |  |
|             |                  |                |                      |              |                   |              |                 |               |            |            |                    |  |
| Soil I      | Profile          |                | imating Soil Satur   |              |                   |              | Estimatii       | ng Soil Perme | ability    |            |                    |  |
|             |                  | Munsel         | l Color (hue, value, |              |                   |              |                 |               |            |            |                    |  |
|             |                  |                | Redoximorp           | hic Features |                   | Texture      |                 |               | Structure  |            | 1                  |  |
|             | Depth            | Matrix         |                      |              |                   | Approx.      | Approx. %       |               |            | Type       |                    |  |
| Horizon     | (inches)         | Color          | Concentrations       | Depletions   | Class             | % Clay       | Fragments       | Grade         | Size       | (shape)    | Consistence        | Other Soil Features                          |
| Ap          | 0 to 8           | 10YR 4/3       |                      |              | sil               | 25           | 2               | 1             | m          | sbk        | fr                 |  |
| Bt1         | 8 to 15          | 10YR 5/4       |                      | 10%10vR 5/2  | sicl              | 35           | 2               | 2             | m          | sbk        | fi                 |  |

| ВС               | 20 to 23    | 10YR 5/4 |      | 25%10YR 5/2          | sicl   | 36 | 2 | 1     | m              | sbk  | fi  |  |
|------------------|-------------|----------|------|----------------------|--|----|---|-------|----------------|------|-----|--|
| Cd               | 23+         | 10YR 5/4 |      | 10%10YR 5/2          | cl   | 34 | 5 | 0     |                | m    | vfi |  |
|                  |             |          |      |                      |  |    |   |       |                |      |     |  |
|                  |             |          |      |                      |  |    |   |       |                |      |     |  |
|                  |             |          |      |                      |  |    |   |       |                |      |     |  |
| Limiting (       | Conditions  | inches   |      | Description          |  |    |   | Remai | ks / Risk Fact | ors: |     |  |
| Perched Seasonal | Water Table | 8        | pero | thed on glaical till | Surface water should be diverted around system. Subsurface ag drainage may be present. |    |   |       |                |      |     |  |
| Apparent Water T | able        | >60      |      |                      |  |    |   |       |                |      |     |  |
| Highly Permeable | Material    | >60      |      |                      |  |    |   |       |                |      |     |  |

Note: The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

glacial till

>60

23

Bt2

Bedrock

Restrictive Layer

|            | County:          | Unio            | on                   | Land                                  | Use / Vegetation: |                   | Beans                  |                |            |              |                    | 14===1                 |
|------------|------------------|-----------------|----------------------|---------------------------------------|-------------------|-------------------|------------------------|----------------|------------|--------------|--------------------|------------------------|
| To         | wnship / Sec.:   | Alle            | en                   | •                                     | Landform:         |                   | Till Plain             |                |            |              |                    |                        |
| Property A | ddress/Location: | North of 18560  | Smikey Road          | Posi                                  | tion on Landform: |                   | Backslope              |                |            |              | 1                  |                        |
|            |                  |                 |                      |                                       | Percent Slope:    |                   | 2 to 4%                |                |            |              | 1.1                | ciecpaes \             |
| Ap         | plicant Name:    | Hurdle En       | terprises            |                                       | Shape of Slope:   |                   | Linear / linear        |                |            |              |                    | and the second         |
|            | Address:         |                 |                      | E                                     | Bedrooms or GPD:  |                   |                        |                |            |              |                    | STEVENA MILLER         |
|            |                  |                 |                      |                                       | Date:             | Tues              | sday, June 13,         | 2023           |            |              | 1 2                | CERTIFIED PROFESSIONAL |
|            | Phone #:         |                 |                      |                                       | Evaluator:        | Ste               | ven Miller, CP         | SSc            |            | b            | 103                | 0                      |
|            | Lot #:           | _               |                      |                                       |                   | Soil & Envir      | onmental Cons          | sulting, Inc.  | Signature: | XD.          | A San              | 28423                  |
|            | Test Hole #:     | 5               |                      |                                       |                   | P.O. Box 1121     |                        |                |            | wh           | 0 2 0 -            |                        |
| Latitu     | ide/Longitude:   |                 |                      | i                                     |                   | De                | elaware OH 430         | 015            | Phone#: p  | -614.579.    |                    |                        |
|            | Method:          | PitAuge         | r X Tube             |                                       | Job Number:       |                   | 23F214                 |                |            | soilcor      | <u>ısultant@ya</u> | ahoo.com               |
|            |                  |                 |                      |                                       | Soil Series:      |                   |                        |                |            |              |                    |                        |
|            |                  |                 |                      |                                       |                   |                   |                        |                |            |              |                    |                        |
| Soil 1     | Profile          |                 | imating Soil Satur   |                                       |                   |                   | Estimatii              | ng Soil Permea | bility     |              |                    |                        |
|            |                  | Munsel          | ll Color (hue, value | , , , , , , , , , , , , , , , , , , , |                   |                   |                        |                |            |              |                    |                        |
|            |                  |                 | Redoximorp           | hic Features                          |                   | Texture           |                        |                | Structure  |              |                    |                        |
| Horizon    | Depth (inches)   | Matrix<br>Color | Concentrations       | Depletions                            | Class             | Approx.<br>% Clay | Approx. %<br>Fragments | Grade          | Size       | Type (shape) | Consistence        | Other Soil Features    |
| Ap         | 0 to 8           | 10YR 4/3        |                      |                                       | sil               | 25                | 2                      | 1              | m          | sbk          | fr                 |                        |
| Bt1        | 8 to 12          | 10YR 5/4        |                      | 15%10YR 5/2                           | sicl              | 36                | 2                      | 2              | m          | sbk          | fi                 |                        |
| Bt2        | 12 to 18         | 10YR 5/4        |                      | 25%10YR 5/1                           | sic               | 42                | 2                      | 2              | m          | sbk          | fi                 |                        |

36

34

5

0

| Limiting Conditions          | inches | Description             | Remarks / Risk Factors:  |
|------------------------------|--------|-------------------------|--|
| Perched Seasonal Water Table | 8      | perched on glaical till | Surface water should be diverted around system. Subsurface ag drainage may be present. |
| Apparent Water Table         | >60    |                         |  |
| Highly Permeable Material    | >60    |                         |  |
| Bedrock                      | >60    |                         |  |
| Restrictive Layer            | 20     | glacial till            |  |

Note: The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

20%10YR 5/1

15%10YR 5/1

sicl

cl

BC

Cd

18 to 20

20+

10YR 5/4

10YR 5/4

sbk

fi

vfi

| County:                    | Union                      | Land Use / Vegetation: | Beans                                 | and the second              |
|----------------------------|----------------------------|------------------------|---------------------------------------|-----------------------------|
| Township / Sec.:           | Allen                      | Landform:              | Till Plain                            |                             |
| Property Address/Location: | North of 18560 Smikey Road | Position on Landform:  | Backslope                             |                             |
|                            | _                          | Percent Slope:         | 2 to 4%                               | (cecpaes)                   |
| Applicant Name:            | Hurdle Enterprises         | Shape of Slope:        | Linear / linear                       | In the second second second |
| Address:                   | _                          | Bedrooms or GPD:       |                                       | STEVEN A MILLER             |
| _                          | _                          | Date:                  | Tuesday, June 13, 2023                | CERTIFIED PROFESSIONAL      |
| Phone #:                   | _                          | Evaluator:             | Steven Miller, CPSSc                  | A O SUESIBILIS              |
| Lot #:                     | <u>_</u>                   |                        | Soil & Environmental Consulting, Inc. | Signature: Signature: 2842  |
| Test Hole #:               | 6                          |                        | P.O. Box 1121                         | With VIO                    |
| Latitude/Longitude:        |                            |                        | Delaware OH 43015                     | Phone#: p-614.579.1164      |
| Method:                    | Pit Auger X Tube           | Job Number:            | 23F214                                | soilconsultant@yahoo.com    |
|                            |                            | Soil Series:           |                                       |                             |
|                            |                            |                        |                                       |                             |

| Soil F            | Profile           |                 | imating Soil Satur  |                     | •   | •                 | Estimatir              | ng Soil Permeal | oility         |              |             |                     |
|-------------------|-------------------|-----------------|---------------------|---------------------|---|-------------------|------------------------|-----------------|----------------|--------------|-------------|---------------------|
|                   |                   | Munse           | l Color (hue, value |                     |   |                   |                        |                 |                |              |             |                     |
|                   |                   |                 | Redoximor           | ohic Features       |   | Texture           |                        |                 | Structure      |              |             |                     |
| Horizon           | Depth<br>(inches) | Matrix<br>Color | Concentrations      | Depletions          | Class   | Approx.<br>% Clay | Approx. %<br>Fragments | Grade           | Size           | Type (shape) | Consistence | Other Soil Features |
| Ap                | 0 to 8            | 10YR 4/3        |                     |                     | sil   | 25                | 2                      | 1               | m              | sbk          | fr          |                     |
| Bt1               | 8 to 15           | 10YR 5/4        |                     | 20%10YR 5/1         | sicl  | 36                | 2                      | 2               | m              | sbk          | fi          |                     |
| Bt2               | 15 to 19          | 10YR 5/4        |                     | 25%10YR 5/1         | sic   | 40                | 2                      | 2               | m              | sbk          | fi          |                     |
| ВС                | 19 to 23          | 10YR 5/4        |                     | 15%10YR 5/1         | sicl  | 36                | 2                      | 1               | m              | sbk          | fi          |                     |
| Cd                | 23+               | 10YR 5/4        |                     | 10%10YR 6/1         | cl  | 35                | 5                      | 0               |                | m            | vfi         |                     |
|                   |                   |                 |                     |                     |   |                   |                        |                 |                |              |             |                     |
|                   |                   |                 |                     |                     |   |                   |                        |                 |                |              |             |                     |
|                   |                   |                 |                     |                     |   |                   |                        |                 |                |              |             |                     |
| Limiting (        | Conditions        | inches          |                     | Description         |   |                   |                        |                 | rks / Risk Fac |              |             |                     |
| Perched Seasonal  |                   | 8               | pero                | hed on glaical till | till Surface water should be diverted around system. Subsurface ag drainage may be present. |                   |                        |                 | esent.         |              |             |                     |
| Apparent Water T  |                   | >60             |                     |                     |   |                   |                        |                 |                |              |             |                     |
| Highly Permeable  | Material          | >60             |                     |                     |   |                   |                        |                 |                |              |             |                     |
| Bedrock           |                   | >60             |                     |                     |   |                   |                        |                 |                |              |             |                     |
| Restrictive Layer |                   | 23              |                     | glacial till        |   |                   |                        |                 |                |              |             |                     |

| County:                    | Union                      | Land Use / Vegetation: | Beans                                | and the same of th |
|----------------------------|----------------------------|------------------------|--------------------------------------|--|
| Township / Sec.:           | Allen                      | Landform:              | Till Plain                           |  |
| Property Address/Location: | North of 18560 Smikey Road | Position on Landform:  | Backslope                            |  |
| _                          |                            | Percent Slope:         | 2 to 4%                              | ( cacpaes)   |
| Applicant Name:            | Hurdle Enterprises         | Shape of Slope:        | Linear / linear                      |  |
| Address:                   |                            | Bedrooms or GPD:       |                                      | STEVEN A MILLER  |
| _                          |                            | Date:                  | Tuesday, June 13, 2023               | CERTIFIED PROFESSIONAL   |
| Phone #:                   |                            | Evaluator:             | Steven Miller, CPSSc                 | 1 0 0 300 300 300  |
| Lot #:                     | <u>_</u>                   | Sc                     | oil & Environmental Consulting, Inc. | Signature: Signature: 3842   |
| Test Hole #:               | 7                          |                        | P.O. Box 1121                        |  |
| Latitude/Longitude:        |                            |                        | Delaware OH 43015                    | Phone#: p-614.579.1164   |
| Method:                    | PitAuger X Tube            | Job Number:            | 23F214                               | soilconsultant@yahoo.com   |
| _                          | <del>_</del>               | Soil Series:           |                                      |  |

| Soil I            | Profile           |                 | imating Soil Satur  |                     |  |                   | Estimatir              | ng Soil Permeal | oility         |              |             |                     |
|-------------------|-------------------|-----------------|---------------------|---------------------|--|-------------------|------------------------|-----------------|----------------|--------------|-------------|---------------------|
|                   |                   | Munsel          | l Color (hue, value | , chroma)           |  |                   |                        |                 |                |              |             |                     |
|                   |                   |                 | Redoximorp          | ohic Features       |  | Texture           |                        |                 | Structure      |              |             |                     |
| Horizon           | Depth<br>(inches) | Matrix<br>Color | Concentrations      | Depletions          | Class  | Approx.<br>% Clay | Approx. %<br>Fragments | Grade           | Size           | Type (shape) | Consistence | Other Soil Features |
| Ap                | 0 to 7            | 10YR 4/3        |                     |                     | sil  | 25                | 2                      | 1               | m              | sbk          | fr          |                     |
| Bt1               | 7 to 15           | 10YR 5/6        |                     |                     | sicl   | 35                | 2                      | 2               | m              | sbk          | fi          |                     |
| Bt2               | 15 to 20          | 10YR 5/4        |                     | 10%10YR 5/2         | sic  | 40                | 2                      | 2               | m              | sbk          | fi          |                     |
| ВС                | 20 to 25          | 10YR 5/4        |                     | 15%!0YR 5/2         | sicl   | 35                | 2                      | 1               | m              | sbk          | fi          |                     |
| Cd                | 25+               | 10YR 5/4        |                     | 10%10YR 5/2         | cl   | 33                | 5                      | 0               |                | m            | vfi         |                     |
|                   |                   |                 |                     |                     |  |                   |                        |                 |                |              |             |                     |
|                   |                   |                 |                     |                     |  |                   |                        |                 |                |              |             |                     |
|                   |                   |                 |                     |                     |  |                   |                        |                 |                |              |             |                     |
|                   | Conditions        | inches          |                     | Description         |  |                   |                        | Rema            | rks / Risk Fac | tors:        |             |                     |
| Perched Seasonal  |                   | 7               | perc                | hed on glaical till | Surface water should be diverted around system. Subsurface ag drainage may be present. |                   |                        |                 |                |              |             |                     |
| Apparent Water T  |                   | >60             |                     |                     |  |                   |                        |                 |                |              |             |                     |
| Highly Permeable  | Material          | >60             |                     |                     |  |                   |                        |                 |                |              |             |                     |
| Bedrock           |                   | >60             |                     |                     |  |                   |                        |                 |                |              |             |                     |
| Restrictive Layer |                   | 25              |                     | glacial till        |  |                   |                        |                 |                |              |             |                     |

| County:                    | Union                      | Land Use / Vegetation: | Beans                                 | and the second             |
|----------------------------|----------------------------|------------------------|---------------------------------------|----------------------------|
| Township / Sec.:           | Allen                      | Landform:              | Till Plain                            |                            |
| Property Address/Location: | North of 18560 Smikey Road | Position on Landform:  | Backslope                             |                            |
| _                          |                            | Percent Slope:         | 3 to 4%                               | ( cacpaes                  |
| Applicant Name:            | Hurdle Enterprises         | Shape of Slope:        | Linear / linear                       |                            |
| Address:                   |                            | Bedrooms or GPD:       |                                       | STEVEN A MILLER            |
|                            |                            | Date:                  | Tuesday, June 13, 2023                | CERTIFIED PROFESSIONAL /   |
| Phone #:                   |                            | Evaluator:             | Steven Miller, CPSSc                  | 1 O SOLESIANIS             |
| Lot #:                     | <u>_</u>                   |                        | Soil & Environmental Consulting, Inc. | Signature: Signature: 3842 |
| Test Hole #:               | 8                          |                        | P.O. Box 1121                         |                            |
| Latitude/Longitude:        |                            |                        | Delaware OH 43015                     | Phone#: p-614.579.1164     |
| Method:                    | Pit Auger X Tube           | Job Number:            | 23F214                                | soilconsultant@yahoo.com   |
|                            |                            | Soil Series:           | _                                     |                            |

| Soil I            | Profile        |                 | imating Soil Satur  |                     |  |                   | Estimati               | ng Soil Permeal | bility         |              |             |                     |
|-------------------|----------------|-----------------|---------------------|---------------------|--|-------------------|------------------------|-----------------|----------------|--------------|-------------|---------------------|
|                   |                | Munsel          | l Color (hue, value |                     |  |                   |                        |                 |                |              |             |                     |
|                   |                |                 | Redoximorp          | ohic Features       |  | Texture           |                        |                 | Structure      |              |             |                     |
| Horizon           | Depth (inches) | Matrix<br>Color | Concentrations      | Depletions          | Class  | Approx.<br>% Clay | Approx. %<br>Fragments | Grade           | Size           | Type (shape) | Consistence | Other Soil Features |
| Ap                | 0 to 8         | 10YR 4/3        |                     |                     | sil  | 25                | 2                      | 1               | m              | sbk          | fr          |                     |
| Bt1               | 8 to 10        | 10YR 5/6        |                     |                     | sicl   | 36                | 2                      | 2               | m              | sbk          | fi          |                     |
| Bt2               | 10 to 23       | 10YR 5/4        |                     | 5%10YR 5/2          | sic  | 40                | 2                      | 2               | m              | sbk          | fi          |                     |
| ВС                | 23 to 26       | 10YR 5/4        |                     | 10%10YR 5/2         | sicl   | 35                | 2                      | 1               | m              | sbk          | fi          |                     |
| Cd                | 26+            | 10YR 5/4        |                     | 15%10YR 5/2         | cl   | 33                | 5                      | 0               |                | m            | vfi         |                     |
|                   |                |                 |                     |                     |  |                   |                        |                 |                |              |             |                     |
|                   |                |                 |                     |                     |  |                   |                        |                 |                |              |             |                     |
|                   |                |                 |                     |                     |  |                   |                        |                 |                |              |             |                     |
|                   | Conditions     | inches          |                     | Description         |  |                   |                        |                 | rks / Risk Fac |              |             |                     |
| Perched Seasonal  |                | 10              | perc                | hed on glaical till | Surface water should be diverted around system. Subsurface ag drainage may be present. |                   |                        |                 |                | esent.       |             |                     |
| Apparent Water T  |                | >60             |                     |                     |  |                   |                        |                 |                |              |             |                     |
| Highly Permeable  | Material       | >60             |                     |                     |  |                   |                        |                 |                |              |             |                     |
| Bedrock           |                | >60             |                     |                     |  |                   |                        |                 |                |              |             |                     |
| Restrictive Layer |                | 26              |                     | glacial till        |  |                   |                        |                 |                |              |             |                     |

| County:                    | Union                      | Land Use / Vegetation: | Beans                                 | and the second second  |
|----------------------------|----------------------------|------------------------|---------------------------------------|--|
| Township / Sec.:           | Allen                      | Landform:              | Till Plain                            |  |
| Property Address/Location: | North of 18560 Smikey Road | Position on Landform:  | Backslope                             | 1/80   |
| _                          |                            | Percent Slope:         | 3 to 4%                               | / cacpaes  |
| Applicant Name:            | Hurdle Enterprises         | Shape of Slope:        | Linear / linear                       | I have been a first to be a fi |
| Address:                   |                            | Bedrooms or GPD:       |                                       | STEVEN A MILLER  |
| _                          |                            | Date:                  | Tuesday, June 13, 2023                | CERTIFIED PROFESSIONAL   |
| Phone #:                   |                            | Evaluator:             | Steven Miller, CPSSc                  | 1 0 0 300 300 300  |
| Lot #:                     | <u>_</u>                   |                        | Soil & Environmental Consulting, Inc. | Signature: Signature: 3842   |
| Test Hole #:               | 9                          |                        | P.O. Box 1121                         |  |
| Latitude/Longitude:        |                            |                        | Delaware OH 43015                     | Phone#: p-614.579.1164   |
| Method:                    | Pit Auger X Tube           | Job Number:            | 23F214                                | soilconsultant@yahoo.com   |
|                            |                            | Soil Series:           | •                                     |  |

| Soil              | Profile           |                 | imating Soil Satur   |                        |            |                   | Estimatir              | ng Soil Permeal | bility         |               |             |                     |
|-------------------|-------------------|-----------------|----------------------|------------------------|------------|-------------------|------------------------|-----------------|----------------|---------------|-------------|---------------------|
|                   |                   | Munsel          | l Color (hue, value, |                        |            |                   |                        |                 |                |               |             |                     |
|                   |                   |                 | Redoximorp           | Redoximorphic Features |            | Texture           |                        | Structure       |                |               | 1           |                     |
| Horizon           | Depth<br>(inches) | Matrix<br>Color | Concentrations       | Depletions             | Class      | Approx.<br>% Clay | Approx. %<br>Fragments | Grade           | Size           | Type (shape)  | Consistence | Other Soil Features |
| Ap                | 0 to 10           | 10YR 4/3        |                      |                        | sil        | 25                | 2                      | 1               | m              | sbk           | fr          |                     |
| Bt1               | 10 to 17          | 10YR 5/4        |                      | 10%10yR 5/2            | sicl       | 35                | 2                      | 2               | m              | sbk           | fi          |                     |
| Bt2               | 17 to 23          | 10YR 5/4        |                      | 15%10YR 5/2            | sic        | 40                | 2                      | 2               | m              | sbk           | fi          |                     |
| ВС                | 23 to 28          | 10YR 5/4        |                      | 10%10YR 5/2            | sicl       | 36                | 2                      | 1               | m              | sbk           | fi          |                     |
| Cd                | 28+               | 10YR 5/4        |                      | 25%10YR 5/1            | cl         | 33                | 5                      | 0               |                | m             | vfi         |                     |
|                   |                   |                 |                      |                        |            |                   |                        |                 |                |               |             |                     |
|                   |                   |                 |                      |                        |            |                   |                        |                 |                |               |             |                     |
| Limiting          | Conditions        | inches          |                      | Description            | _          |                   |                        | Rema            | rks / Risk Fac | ctors:        |             |                     |
| Perched Seasonal  |                   | 10              | perc                 | hed on glaical till    | Surface wa | ter should be di  | verted around s        | system. Subsurf | ace ag drainag | ge may be pro | esent.      |                     |
| Apparent Water    |                   | >60             | İ                    |                        |            |                   |                        |                 |                |               |             |                     |
| Highly Permeable  | e Material        | >60             |                      |                        |            |                   |                        |                 |                |               |             |                     |
| Bedrock           |                   | >60             |                      |                        |            |                   |                        |                 |                |               |             |                     |
| Restrictive Layer |                   | 28              |                      | glacial till           |            |                   |                        |                 |                |               |             |                     |

| County:                    | Union                      | Land Use / Vegetation: | Beans                                 | and the second   |
|----------------------------|----------------------------|------------------------|---------------------------------------|--|
| Township / Sec.:           | Allen                      | Landform:              | Till Plain                            |  |
| Property Address/Location: | North of 18560 Smikey Road | Position on Landform:  | Backslope                             |  |
| _                          |                            | Percent Slope:         | 3 to 4%                               | (cacpaes)  |
| Applicant Name:            | Hurdle Enterprises         | Shape of Slope:        | Linear / linear                       |  |
| Address:                   |                            | Bedrooms or GPD:       |                                       | STEVEN A MILLER  |
| _                          |                            | Date:                  | Tuesday, June 13, 2023                | CERTIFIED PROFESSIONAL PROFESSI |
| Phone #:                   |                            | Evaluator:             | Steven Miller, CPSSc                  | 1 0 0 300 300 300  |
| Lot #:                     |                            |                        | Soil & Environmental Consulting, Inc. | Signature: 38423   |
| Test Hole #:               | 10                         |                        | P.O. Box 1121                         |  |
| Latitude/Longitude:        |                            |                        | Delaware OH 43015                     | Phone#: p-614.579.1164   |
| Method:                    | Pit Auger X Tube           | Job Number:            | 23F214                                | soilconsultant@yahoo.com   |
|                            |                            | Soil Series:           |                                       | -  |

| Soil F            | Profile        |                 | imating Soil Satur  |                     | •  | •                 | Estimatii              | ng Soil Permeal | oility |              |             |                     |
|-------------------|----------------|-----------------|---------------------|---------------------|--|-------------------|------------------------|-----------------|--------|--------------|-------------|---------------------|
|                   |                | Munse           | l Color (hue, value |                     |  |                   |                        |                 |        |              |             |                     |
|                   |                |                 | Redoximor           | ohic Features       | Texture  |                   |                        | Structure       |        |              |             |                     |
| Horizon           | Depth (inches) | Matrix<br>Color | Concentrations      | Depletions          | Class  | Approx.<br>% Clay | Approx. %<br>Fragments | Grade           | Size   | Type (shape) | Consistence | Other Soil Features |
| Ap                | 0 to 10        | 10YR 4/3        |                     |                     | sil  | 25                | 2                      | 1               | m      | sbk          | fr          |                     |
| Bt1               | 10 to 18       | 10YR 5/4        |                     | 10%10YR 5/1         | sicl   | 35                | 2                      | 2               | m      | sbk          | fi          |                     |
| Bt2               | 18 to 25       | 10YR 5/4        |                     | 20%10YR 5/1         | sic  | 40                | 2                      | 2               | m      | sbk          | fi          |                     |
| ВС                | 25 to 30       | 10YR 5/4        |                     | 15%10YR 5/1         | sicl   | 35                | 2                      | 1               | m      | sbk          | fi          |                     |
| Cd                | 30+            | 10YR 5/4        |                     | 10%10YR 5/1         | cl   | 34                | 5                      | 0               |        | m            | vfi         |                     |
|                   |                |                 |                     |                     |  |                   |                        |                 |        |              |             |                     |
|                   |                |                 |                     |                     |  |                   |                        |                 |        |              |             |                     |
|                   |                |                 |                     |                     |  |                   |                        |                 |        |              |             |                     |
| Limiting (        | Conditions     | inches          |                     | Description         | Remarks / Risk Factors:  |                   |                        |                 |        |              |             |                     |
| Perched Seasonal  |                | 10              | pero                | hed on glaical till | Surface water should be diverted around system. Subsurface ag drainage may be present. |                   |                        |                 |        |              |             |                     |
| Apparent Water T  |                | >60             |                     |                     |  |                   |                        |                 |        |              |             |                     |
| Highly Permeable  | Material       | >60             |                     |                     |  |                   |                        |                 |        |              |             |                     |
| Bedrock           |                | >60             |                     |                     |  |                   |                        |                 |        |              |             |                     |
| Restrictive Layer |                | 30              |                     | glacial till        |  |                   |                        |                 |        |              |             |                     |

| County:                    | Union                      | Land Use / Vegetation: | Beans                                 | and the second   |
|----------------------------|----------------------------|------------------------|---------------------------------------|--|
| Township / Sec.:           | Allen                      | Landform:              | Till Plain                            |  |
| Property Address/Location: | North of 18560 Smikey Road | Position on Landform:  | Backslope                             |  |
| _                          |                            | Percent Slope:         | 4 to 5%                               | (cacpaes)  |
| Applicant Name:            | Hurdle Enterprises         | Shape of Slope:        | Linear / linear                       |  |
| Address:                   |                            | Bedrooms or GPD:       |                                       | STEVEN A MILLER  |
| _                          |                            | Date:                  | Tuesday, June 13, 2023                | CERTIFIED PROFESSIONAL SOME SOME SOME SOME SOME SOME SOME SOME |
| Phone #:                   |                            | Evaluator:             | Steven Miller, CPSSc                  | 1 0 0  |
| Lot #:                     | <u>_</u>                   |                        | Soil & Environmental Consulting, Inc. | Signature: Sp. A Sp. 38423                                     |
| Test Hole #:               | 11                         |                        | P.O. Box 1121                         |  |
| Latitude/Longitude:        |                            |                        | Delaware OH 43015                     | Phone#: p-614.579.1164   |
| Method:                    | Pit Auger X Tube           | Job Number:            | 23F214                                | soilconsultant@yahoo.com                                       |
| _                          | <u> </u>                   | Soil Series:           |                                       | -  |

| Soil I            | Profile           |                 | imating Soil Satur   |                     |             |                   | Estimatir              | ng Soil Permeal | oility         |              |             |                     |
|-------------------|-------------------|-----------------|----------------------|---------------------|-------------|-------------------|------------------------|-----------------|----------------|--------------|-------------|---------------------|
|                   |                   | Munsel          | l Color (hue, value, |                     |             |                   |                        |                 |                |              |             |                     |
|                   |                   |                 | Redoximorp           | hic Features        | Texture     |                   |                        | Structure       |                |              | 1           |                     |
| Horizon           | Depth<br>(inches) | Matrix<br>Color | Concentrations       | Depletions          | Class       | Approx.<br>% Clay | Approx. %<br>Fragments | Grade           | Size           | Type (shape) | Consistence | Other Soil Features |
| Ap                | 0 to 10           | 10YR 4/3        |                      |                     | sil         | 25                | 2                      | 1               | m              | sbk          | fr          |                     |
| Bt1               | 10 to 15          | 10YR 5/4        |                      | 5%10yR 5/2          | sicl        | 36                | 2                      | 2               | m              | sbk          | fi          |                     |
| Bt2               | 15 to 21          | 10YR 5/4        |                      | 15%10YR 5/2         | sic         | 40                | 2                      | 2               | m              | sbk          | fi          |                     |
| ВС                | 21 to 24          | 10YR 5/4        |                      | 20%10YR 5/2         | sicl        | 38                | 2                      | 1               | m              | sbk          | fi          |                     |
| Cd                | 24+               | 10YR 5/4        |                      | 15%10YR 5/2         | cl          | 35                | 5                      | 0               |                | m            | vfi         |                     |
|                   |                   |                 |                      |                     |             |                   |                        |                 |                |              |             |                     |
|                   |                   |                 |                      |                     |             |                   |                        |                 |                |              |             |                     |
|                   |                   |                 |                      |                     |             |                   |                        |                 |                |              |             |                     |
|                   | Conditions        | inches          |                      | Description         |             |                   |                        |                 | rks / Risk Fac |              |             |                     |
| Perched Seasonal  |                   | 10              | perc                 | hed on glaical till | Surface wat | er should be di   | verted around s        | system. Subsurf | ace ag drainag | e may be pro | esent.      |                     |
| Apparent Water T  |                   | >60             |                      |                     |             |                   |                        |                 |                |              |             |                     |
| Highly Permeable  | Material          | >60             |                      |                     |             |                   |                        |                 |                |              |             |                     |
| Bedrock           |                   | >60             |                      | alacial till        |             |                   |                        |                 |                |              |             |                     |
| Restrictive Layer |                   | L 24            |                      | glacial till        |             |                   |                        |                 |                |              |             |                     |

| County:                    | Union                      | Land Use / Vegetation: | Beans                                | and the second second      |
|----------------------------|----------------------------|------------------------|--------------------------------------|----------------------------|
| Township / Sec.:           | Allen                      | Landform:              | Till Plain                           |                            |
| Property Address/Location: | North of 18560 Smikey Road | Position on Landform:  | Backslope                            |                            |
|                            |                            | Percent Slope:         | 4 to 5%                              | ( cacpaes)                 |
| Applicant Name:            | Hurdle Enterprises         | Shape of Slope:        | Linear / linear                      |                            |
| Address:                   |                            | Bedrooms or GPD:       |                                      | STEVENA MILLER             |
|                            |                            | Date:                  | Tuesday, June 13, 2023               | CERTIFIED PROFESSIONAL     |
| Phone #:                   |                            | Evaluator:             | Steven Miller, CPSSc                 | 1 0 0 300 300 300          |
| Lot #:                     | <u>_</u>                   | Sc                     | oil & Environmental Consulting, Inc. | Signature: Signature: 3842 |
| Test Hole #:               | 12                         | _                      | P.O. Box 1121                        |                            |
| Latitude/Longitude:        |                            | _                      | Delaware OH 43015                    | Phone#: p-614.579.1164     |
| Method:                    | PitAuger X Tube            | Job Number:            | 23F214                               | soilconsultant@yahoo.com   |
|                            |                            | Soil Series:           |                                      |                            |

| Soil              | Profile           |                 | imating Soil Satur     |                     |  |                   | Estimatir              | ng Soil Permeal | bility         |                 |             |                     |
|-------------------|-------------------|-----------------|------------------------|---------------------|--|-------------------|------------------------|-----------------|----------------|-----------------|-------------|---------------------|
|                   |                   | Munse           | ll Color (hue, value   |                     |  |                   |                        |                 |                |                 |             |                     |
|                   |                   |                 | Redoximorphic Features |                     |  | Texture           |                        | Structure       |                |                 | 4           |                     |
| Horizon           | Depth<br>(inches) | Matrix<br>Color | Concentrations         | Depletions          | Class  | Approx.<br>% Clay | Approx. %<br>Fragments | Grade           | Size           | Type<br>(shape) | Consistence | Other Soil Features |
| Ap                | 0 to 8            | 10YR 4/3        |                        |                     | sil  | 25                | 2                      | 1               | m              | sbk             | fr          |                     |
| Bt1               | 8 to 12           | 10YR 5/4        |                        | 10%10YR 5/1         | sicl   | 36                | 2                      | 2               | m              | sbk             | fi          |                     |
| Bt2               | 12 to 18          | 10YR 5/4        |                        | 15%10YR 5/1         | sic  | 40                | 2                      | 2               | m              | sbk             | fi          |                     |
| ВС                | 18 to 20          | 10YR 5/4        |                        | 20%10YR 5/2         | sicl   | 36                | 2                      | 1               | m              | sbk             | fi          |                     |
| Cd                | 20+               | 10YR 5/4        |                        | 15%10YR 5/2         | cl   | 35                | 5                      | 0               |                | m               | vfi         |                     |
|                   |                   |                 |                        |                     |  |                   |                        |                 |                |                 |             |                     |
|                   |                   |                 |                        |                     |  |                   |                        |                 |                |                 |             |                     |
| Limiting          | Conditions        | inches          |                        | Description         | _  |                   |                        | Rema            | rks / Risk Fac | ctors:          |             |                     |
| Perched Seasonal  |                   | 8               |                        | hed on glaical till | Surface wa   | ter should be di  | verted around s        |                 |                |                 | esent.      |                     |
| Apparent Water    | Гable             | >60             |                        | <u> </u>            | al till Surface water should be diverted around system. Subsurface ag drainage may be present. |                   |                        |                 |                |                 |             |                     |
| Highly Permeable  | e Material        | >60             |                        |                     |  |                   |                        |                 |                |                 |             |                     |
| Bedrock           |                   | >60             |                        |                     |  |                   |                        |                 |                |                 |             |                     |
| Restrictive Layer |                   | 20              |                        | glacial till        |  |                   |                        |                 |                |                 |             |                     |

| County:                    | Union                      | Land Use / Vegetation: | Beans                                 | and the second second  |
|----------------------------|----------------------------|------------------------|---------------------------------------|--|
| Township / Sec.:           | Allen                      | Landform:              | Till Plain                            |  |
| Property Address/Location: | North of 18560 Smikey Road | Position on Landform:  | Backslope                             |  |
| _                          |                            | Percent Slope:         | 7 to 8%                               | (cecpaes)  |
| Applicant Name:            | Hurdle Enterprises         | Shape of Slope:        | Linear / linear                       | la de la constante de la const |
| Address:                   |                            | Bedrooms or GPD:       |                                       | STEVEN A MILLER  |
| _                          |                            | Date:                  | Tuesday, June 13, 2023                | CERTIFIED PROFESSIONAL SOME SOME SOME SOME SOME SOME SOME SOME   |
| Phone #:                   |                            | Evaluator:             | Steven Miller, CPSSc                  | 1 0 0  |
| Lot #:                     |                            |                        | Soil & Environmental Consulting, Inc. | Signature: Sp. A Sp. 38423   |
| Test Hole #:               | 13                         |                        | P.O. Box 1121                         |  |
| Latitude/Longitude:        |                            |                        | Delaware OH 43015                     | Phone#: p-614.579.1164   |
| Method:                    | Pit Auger X Tube           | Job Number:            | 23F214                                | soilconsultant@yahoo.com   |
|                            |                            | Soil Series:           | <u> </u>                              |  |

| Soil I            | Profile           |                 | imating Soil Satur   |                                       |  |                   | Estimatir              | ng Soil Permeal | bility         |              |             |                     |
|-------------------|-------------------|-----------------|----------------------|---------------------------------------|--|-------------------|------------------------|-----------------|----------------|--------------|-------------|---------------------|
|                   |                   | Munse           | l Color (hue, value, | · · · · · · · · · · · · · · · · · · · |  |                   |                        |                 |                |              |             |                     |
|                   |                   |                 | Redoximorp           | hic Features                          | Texture  |                   |                        | Structure       |                |              | 1           |                     |
| Horizon           | Depth<br>(inches) | Matrix<br>Color | Concentrations       | Depletions                            | Class  | Approx.<br>% Clay | Approx. %<br>Fragments | Grade           | Size           | Type (shape) | Consistence | Other Soil Features |
| Ap                | 0 to 4            | 10YR 4/3        |                      |                                       | sil  | 25                | 2                      | 1               | m              | sbk          | fr          |                     |
| Bt                | 4 to 8            | 10YR 5/6        |                      | 10%10yR 5/3                           | sicl   | 38                | 2                      | 2               | m              | sbk          | fi          |                     |
| ВС                | 8 to 12           | 10YR 5/4        |                      | 10%10YR 5/2                           | sicl   | 36                | 2                      | 2               | m              | sbk          | fi          |                     |
| Cd                | 12+               | 10YR 5/4        |                      | 15%10YR 5/2                           | sicl   | 35                | 2                      | 1               | m              | sbk          | fi          |                     |
|                   |                   |                 |                      |                                       |  |                   |                        |                 |                |              |             |                     |
|                   |                   |                 |                      |                                       |  |                   |                        |                 |                |              |             |                     |
|                   |                   |                 |                      |                                       |  |                   |                        |                 |                |              |             |                     |
|                   |                   |                 |                      |                                       |  |                   |                        |                 |                |              |             |                     |
|                   | Conditions        | inches          |                      | Description                           |  |                   |                        |                 | rks / Risk Fac |              |             |                     |
| Perched Seasonal  |                   | 8               | perc                 | hed on glaical till                   | Surface water should be diverted around system. Subsurface ag drainage may be present. |                   |                        |                 |                |              |             |                     |
| Apparent Water T  |                   | >60             |                      |                                       |  |                   |                        |                 |                |              |             |                     |
| Highly Permeable  | Material          | >60             |                      |                                       |  |                   |                        |                 |                |              |             |                     |
| Bedrock           |                   | >60             |                      | 1 : 1 : 11                            | _  |                   |                        |                 |                |              |             |                     |
| Restrictive Layer |                   | 12              |                      | glacial till                          |  |                   |                        |                 |                |              |             |                     |

| County:                    | Union                      | Land Use / Vegetation: | Beans                                 | and the second  |
|----------------------------|----------------------------|------------------------|---------------------------------------|---|
| Township / Sec.:           | Allen                      | Landform:              | Till Plain                            |   |
| Property Address/Location: | North of 18560 Smikey Road | Position on Landform:  | Backslope                             |   |
| _                          |                            | Percent Slope:         | 7 to 8%                               | (caccacs)   |
| Applicant Name:            | Hurdle Enterprises         | Shape of Slope:        | Linear / linear                       | I have been been a second   |
| Address:                   |                            | Bedrooms or GPD:       |                                       | STEVENA MILLER  |
|                            |                            | Date:                  | Tuesday, June 13, 2023                | CERTIFIED PROFESSIONAL /  |
| Phone #:                   |                            | Evaluator:             | Steven Miller, CPSSc                  | 1 O SOLESIANIS  |
| Lot #:                     | <u>_</u>                   |                        | Soil & Environmental Consulting, Inc. | Signature: 2842   |
| Test Hole #:               | 14                         |                        | P.O. Box 1121                         | With V Joseph To The Control of the |
| Latitude/Longitude:        |                            |                        | Delaware OH 43015                     | Phone#: p-614.579.1164  |
| Method:                    | PitAuger X Tube            | Job Number:            | 23F214                                | soilconsultant@yahoo.com  |
|                            |                            | Soil Series:           |                                       |   |
|                            |                            |                        |                                       |   |

| Soil I                       | Profile           |                 | imating Soil Satur     |                     |            |                   | Estimatin           | ng Soil Permeal | bility         |              |             |                     |
|------------------------------|-------------------|-----------------|------------------------|---------------------|------------|-------------------|---------------------|-----------------|----------------|--------------|-------------|---------------------|
|                              |                   | Munse           | ll Color (hue, value,  |                     |            |                   |                     |                 |                |              |             |                     |
|                              |                   |                 | Redoximorphic Features |                     |            | Texture           |                     | Structure       |                |              | ]           |                     |
| Horizon                      | Depth<br>(inches) | Matrix<br>Color | Concentrations         | Depletions          | Class      | Approx.<br>% Clay | Approx. % Fragments | Grade           | Size           | Type (shape) | Consistence | Other Soil Features |
| Ap                           | 0 to 5            | 10YR 4/3        |                        |                     | sil        | 25                | 2                   | 1               | m              | sbk          | fr          |                     |
| Bt                           | 5 to 8            | 10YR 5/6        |                        | 15%10YR 5/3         | sicl       | 38                | 2                   | 2               | m              | sbk          | fi          |                     |
| ВС                           | 8 to 13           | 10YR 5/4        |                        | 15%10YR 5/2         | sicl       | 36                | 2                   | 2               | m              | sbk          | fi          |                     |
| Cd                           | 13+               | 10YR 5/4        |                        | 10%10YR 5/2         | sicl       | 35                | 2                   | 1               | m              | sbk          | fi          |                     |
|                              |                   |                 |                        |                     |            |                   |                     |                 |                |              |             |                     |
|                              |                   |                 |                        |                     |            |                   |                     |                 |                |              |             |                     |
|                              |                   |                 |                        |                     |            |                   |                     |                 |                |              |             |                     |
| X                            | G 11:1            |                 |                        | <b>5</b>            | -          |                   |                     |                 | 1 /511.5       |              |             |                     |
|                              | Conditions        | inches          |                        | Description         |            |                   |                     |                 | rks / Risk Fac |              |             |                     |
| Perched Seasonal             |                   | >60             | perc                   | hed on glaical till | Surface wa | ter should be di  | verted around s     | system. Subsurf | ace ag drainag | e may be pre | esent.      |                     |
| Apparent Water T             |                   | >60             |                        |                     |            |                   |                     |                 |                |              |             |                     |
| Highly Permeable             | Material          |                 |                        |                     |            |                   |                     |                 |                |              |             |                     |
| Bedrock<br>Restrictive Layer |                   | >60             |                        | glacial till        | _          |                   |                     |                 |                |              |             |                     |
| Resultave Layer              |                   | 13              |                        | giaciai tili        |            |                   |                     |                 |                |              |             |                     |

| County:                    | Union                      | Land Use / Vegetation: | Beans                                 | and the second second  |
|----------------------------|----------------------------|------------------------|---------------------------------------|--|
| Township / Sec.:           | Allen                      | Landform:              | Till Plain                            |  |
| Property Address/Location: | North of 18560 Smikey Road | Position on Landform:  | Backslope                             |  |
|                            | _                          | Percent Slope:         | 4 to 6%                               | (cecpaes)  |
| Applicant Name:            | Hurdle Enterprises         | Shape of Slope:        | Linear / linear                       | land the second second   |
| Address:                   |                            | Bedrooms or GPD:       |                                       | STEVEN A MILLER  |
| _                          |                            | Date:                  | Tuesday, June 13, 2023                | CERTIFIED PROFESSIONAL SOIL SOIL SOIL SOIL SOIL SOIL SOIL TIST |
| Phone #:                   | _                          | Evaluator:             | Steven Miller, CPSSc                  | 1 O SUESCHILLS   |
| Lot #:                     | <u>_</u>                   |                        | Soil & Environmental Consulting, Inc. | Signature: Sp. A Sa42*   |
| Test Hole #:               | 15                         |                        | P.O. Box 1121                         | with voca  |
| Latitude/Longitude:        |                            |                        | Delaware OH 43015                     | Phone#: p-614.579.1164   |
| Method:                    | Pit Auger X Tube           | Job Number:            | 23F214                                | soilconsultant@yahoo.com                                       |
|                            |                            | Soil Series:           |                                       |  |
|                            |                            |                        |                                       |  |
| C - !1 D C!1 -             | Estimating Sail Saturation | .                      | Estimating Sail Down                  | a a hilitar  |

| Soil Profile                  |                   | Estimating Soil Saturation         |                         |                        |                         | Estimating Soil Permeability   |                        |           |      |              |             |                     |
|-------------------------------|-------------------|------------------------------------|-------------------------|------------------------|-------------------------|--|------------------------|-----------|------|--------------|-------------|---------------------|
|                               |                   | Munsell Color (hue, value, chroma) |                         |                        |                         |  |                        |           |      |              |             |                     |
|                               |                   |                                    | Redoximor               | Redoximorphic Features |                         | Texture  |                        | Structure |      |              |             |                     |
| Horizon                       | Depth<br>(inches) | Matrix<br>Color                    | Concentrations          | Depletions             | Class                   | Approx.<br>% Clay  | Approx. %<br>Fragments | Grade     | Size | Type (shape) | Consistence | Other Soil Features |
| Ap                            | 0 to 8            | 10YR 4/3                           |                         |                        | sil                     | 25   | 2                      | 1         | m    | sbk          | fr          |                     |
| Bt1                           | 8 to 12           | 10YR 5/4                           |                         |                        | sicl                    | 35   | 2                      | 2         | m    | sbk          | fi          |                     |
| Bt2                           | 12 to 19          | 10YR 5/4                           |                         | 10%10yR 5/2            | sic                     | 40   | 2                      | 2         | m    | sbk          | fi          |                     |
| ВС                            | 19 to 22          | 10YR 5/4                           |                         | 15%10YR 5/2            | sicl                    | 36   | 2                      | 1         | m    | sbk          | fi          |                     |
| Cd                            | 22+               | 10YR 4/4                           |                         | 10%10YR 5/2            | sicl                    | 34   | 5                      | 0         |      | m            | vfi         |                     |
|                               |                   |                                    |                         |                        |                         |  |                        |           |      |              |             |                     |
|                               |                   |                                    |                         |                        |                         |  |                        |           |      |              |             |                     |
|                               |                   |                                    |                         |                        |                         |  |                        |           |      |              |             |                     |
| Limiting Conditions inches    |                   |                                    | Description             |                        | Remarks / Risk Factors: |  |                        |           |      |              |             |                     |
| Perched Seasonal Water Table  |                   | 12                                 | perched on glaical till |                        | Surface wat             | Surface water should be diverted around system. Subsurface ag drainage may be present. |                        |           |      |              |             |                     |
| Apparent Water Table >60      |                   |                                    |                         |                        |                         |  |                        |           |      |              |             |                     |
| Highly Permeable Material >60 |                   |                                    |                         |                        |                         |  |                        |           |      |              |             |                     |
| Bedrock >60                   |                   |                                    |                         |                        |                         |  |                        |           |      |              |             |                     |
| Restrictive Layer             |                   | 22                                 |                         | glacial till           |                         |  |                        |           |      |              |             |                     |

| County:                    | Union   | Land Use / Vegetation: | Beans                                 |  |  |  |  |  |  |  |
|----------------------------|---|------------------------|---------------------------------------|--|--|--|--|--|--|--|
| Township / Sec.:           | Allen   | Landform:              | Till Plain                            |  |  |  |  |  |  |  |
| Property Address/Location: | Property Address/Location: North of 18560 Smikey Road |                        | Backslope                             |  |  |  |  |  |  |  |
|                            |   | Percent Slope:         | 4 to 6%                               | ( cacpaes  |  |  |  |  |  |  |
| Applicant Name:            | Hurdle Enterprises                                    | Shape of Slope:        | Linear / linear                       |  |  |  |  |  |  |  |
| Address:                   |   | Bedrooms or GPD:       |                                       | STEVEN A MILLER  |  |  |  |  |  |  |
|                            |   | Date:                  | Tuesday, June 13, 2023                | CERTIFIED PROFESSIONAL PROFESSI |  |  |  |  |  |  |
| Phone #:                   |   | Evaluator:             | Steven Miller, CPSSc                  | 1 0 0 300  |  |  |  |  |  |  |
| Lot #:                     | <u>_</u>  |                        | Soil & Environmental Consulting, Inc. | Signature: 38423   |  |  |  |  |  |  |
| Test Hole #:               | 16  |                        | P.O. Box 1121                         |  |  |  |  |  |  |  |
| Latitude/Longitude:        |   |                        | Delaware OH 43015                     | Phone#: p-614.579.1164   |  |  |  |  |  |  |
| Method:                    | PitAuger X Tube                                       | Job Number:            | 23F214                                | soilconsultant@yahoo.com   |  |  |  |  |  |  |
| _                          | _ <u> </u>  | Soil Series:           |                                       | •  |  |  |  |  |  |  |

| Soil Profile      |  | Estimating Soil Saturation  Munsell Color (hue, value, chroma) |                         |                         | Estimating Soil Permeability |  |                        |           |      |              |             |                     |
|-------------------|--|--|-------------------------|-------------------------|------------------------------|--|------------------------|-----------|------|--------------|-------------|---------------------|
|                   |  |  |                         |                         |                              |  |                        |           |      |              |             |                     |
|                   | Redoxim                                |  | Redoximorp              | hic Features            |                              | Texture  |                        | Structure |      |              |             |                     |
| Horizon           | Depth (inches)                         | Matrix<br>Color  | Concentrations          | Depletions              | Class                        | Approx.<br>% Clay  | Approx. %<br>Fragments | Grade     | Size | Type (shape) | Consistence | Other Soil Features |
| Ap                | 0 to 9                                 | 10YR 4/3   |                         |                         | sil                          | 25   | 2                      | 1         | m    | sbk          | fr          |                     |
| Bt1               | 9 to 15                                | 10YR 5/6   |                         |                         | sicl                         | 36   | 2                      | 2         | m    | sbk          | fi          |                     |
| Bt2               | 15 to 21                               | 10YR 5/4   |                         | 15%10YR 5/2             | sic                          | 40   | 2                      | 2         | m    | sbk          | fi          |                     |
| ВС                | 21 to 24                               | 10YR 5/4   |                         | 20%10YR 5/2             | sicl                         | 35   | 2                      | 1         | m    | sbk          | fi          |                     |
| Cd                | 24+                                    | 10YR 4/4   |                         | 15%10YR 5/2             | sicl                         | 32   | 5                      | 0         |      | m            | vfi         |                     |
|                   |  |  |                         |                         |                              |  |                        |           |      |              |             |                     |
|                   |  |  |                         |                         |                              |  |                        |           |      |              |             |                     |
| Limiting          | Limiting Conditions inches Description |  | Remarks / Risk Factors: |                         |                              |  |                        |           |      |              |             |                     |
|                   | Perched Seasonal Water Table 15        |  | perc                    | perched on glaical till |                              | Surface water should be diverted around system. Subsurface ag drainage may be present. |                        |           |      |              |             |                     |
|                   | Apparent Water Table >60               |  |                         |                         |                              |  |                        | •         |      | - 1          |             |                     |
| Highly Permeable  | Highly Permeable Material >60          |  |                         |                         |                              |  |                        |           |      |              |             |                     |
| Bedrock           | Bedrock >60                            |  | -                       |                         |                              |  |                        |           |      |              |             |                     |
| Restrictive Layer | Restrictive Layer 24                   |  |                         | glacial till            |                              |  |                        |           |      |              |             |                     |