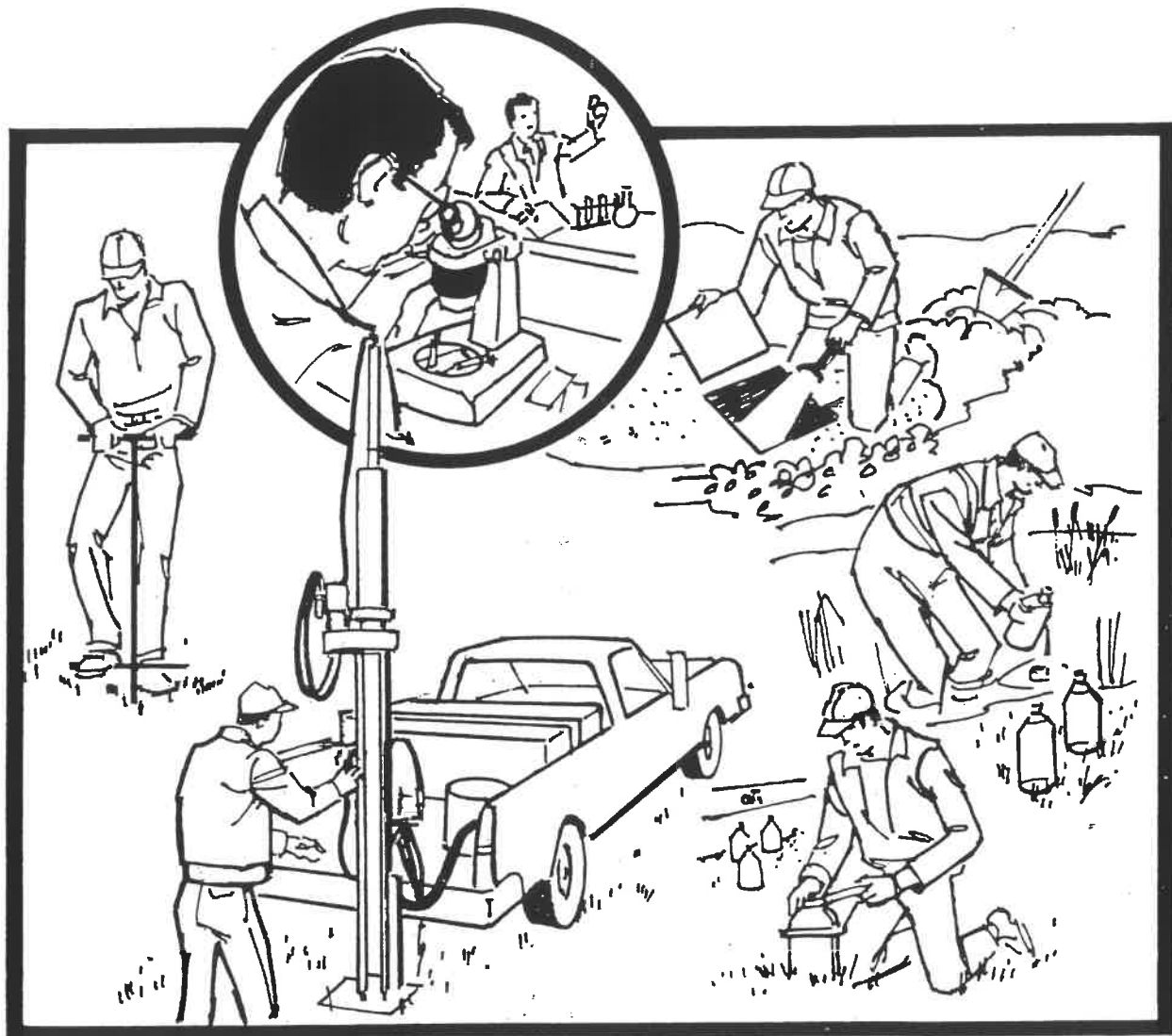


ENVIRONMENTAL CONSULTING AND INSPECTION SERVICES



John A. Raber and Associates, Inc.

4314-A CRYSTAL LAKE ROAD
McHENRY, IL 60050
815/344-4020

RECONNAISSANCE SOIL SURVEY
OF THE
NORTHWEST 1/4 OF THE SOUTHEAST 1/4
OF SEC. 28
CORAL TOWNSHIP

May 16, 1997

Prepared for:

Mitch Weisz
Weisz & Michling
2030 N. Seminary
Woodstock, Illinois 60098

Submitted by:

Bruce J. Houghtby, C.P.S.S./S.C.
JOHN A. RABER AND ASSOC., INC.
4314-A Crystal Lake Road
McHenry, Illinois 60050

INTRODUCTION

A reconnaissance soil survey was performed on the 40 acre parcel on Church Road (NW 1/4 of the SW 1/4, Sec.28, T.43N, R.6E.) The purpose of the survey was to broadly delineate the soils on the parcel.

SITE CHARACTERISTICS

The site is located in an area which is dominated by glacial till deposits of the Tiskilwa member. These materials were deposited during the last glacial period by the Wisconsin Glacier. This till is dominately loam in texture, pinkish in color and dense. Some areas are underlain with silty and loamy glacial outwash.

PROCEDURES

The field work was conducted on May 12, 1997. The soils were mapped using an aerial photograph and soil probe. The soils were classified according to Keys to Soil Taxonomy, 6th Edition, to the series level.

A soil map was made from analyzing the field data. This map identifies the soil map units, the boundary between the different soils and the approximate location of the soil borings.

RESULTS

The soils found on the site classify to the Miami, Lisbon and Drummer soil series. The Miami soils are well to moderately well drained and occupy the higher elevations and the sideslopes. The soils on the steeper sideslope have a lesser developed profile and approach the Strawn soil series. The Lisbon soils have a dark surface layer and are somewhat poorly drained. They occupy the nearly level areas below the Miami soils. The Drummer soils occupy the lowest elevations and the closed depressions on the site.

An intermittent drainageway bisects the parcel. It appears that this drainageway has been dug in order to connect the low lying Drummer soils and to provide an outlet to the southwest corner of the parcel.

I, Bruce J. Houghtby, hereby certify that the soil mapping represented on this sheet was done by myself following the guidelines of the National Cooperative Soil Survey. I further certify that the McHenry County Health Department accepts my qualifications to do this work.

DATE: 5/16/97

SIGNATURE: Bruce J. Houghtby
Bruce J. Houghtby, C.P.S.S./S.C.
ARCPACS No. 1530
ISCA No. 51

KEY FOR CORING LOG

SERIES Soil Series Name

CLASSIFICATION Classification of soil according to Soil Taxonomy

DRAINAGE CLASS Drainage class according to the USDA, and the Soil Conservation Service Soil Survey Manual

TEXTURE

C - Clay	L - Loam
SIC - Silty Clay	SL - Sandy Loam
SC - Sandy Clay	SIL - Silt Loam
SICL - Silty Clay Loam	LS - Loamy Sand
SCL - Sandy Clay Loam	S - Sandy
CL - Clay Loam	SI - Silt
GR - Gravelly Modifier	

PERMEABILITY (inches/hour)

Very slow - <0.06	Mod. rapid - 2.00-6.30
Slow - 0.06-0.20	Rapid - 6.30-20.00
Mod. slow - 0.20-0.63	Very rapid - >20.00
Low. Mod. - 0.63-1.00	
Up. Mod. - 1.00-2.00	

MOTTLES

<u>QUANTITY</u>	<u>SIZE</u>
f - Few: less than 2% of exposed surface	1 - Fine: less than 5mm in diameter
c - Common: 2-20% of exposed surface	2 - Medium: 5-15% in diameter
m - Many: more than 20% of exposed surface	3 - Coarse: more than 15mm in diameter

COATINGS

<u>AMOUNT</u>	<u>KIND</u>
vf - Very few: less than 5% of surface	cf - Clay films
f - Few: 5-25% of surface	of - Organic films
c - Common: 25-50% of surface	sic - Silica coatings silt or sand
m - Many: more than 50% of surface	sl - Slickensides

STRUCTURE

<u>GRADE</u>	<u>SIZE</u>	<u>SHAPE</u>
1 - Weak: poorly formed indistinct peds barely observable	vf - Very fine f - Fine m - Medium	gr - Granular pl - Platy sbk - Subangular blocky
2 - Moderate: well formed distinct peds evident in undisturbed profile	c - Coarse vc - Very coarse	abk - Angular blocky pr - Prismatic
3 - Strong: durable peds quite evident in undisturbed profile		m - Massive sg - Single grain

CONSISTENCE (for moist soils)

- 1 - Loose: non-coherent
- vfr - Very friable: crushes under very slight pressure
- fr - Friable: crushes under gentle to slight pressure
- fi - Firm: crushes under moderate pressure, resistance noticed
- vfi - Very firm: crushes under strong pressure
- efi - Extremely firm: crushes only with strong pressure, not between fingers

COLORS

10 YR

- 2/1 - Black
- 2/2 - Very Dark Brown
- 3/1 - Very Dark Gray
- 3/2 - Very Dark Grayish Brown
- 3/3 - Dark Brown
- 4/1 - Dark Gray
- 4/2 - Dark Grayish Brown
- 4/3 - Brown
- 4/4, 3/4 - Dark Yellowish Brown
- 5/1 - Gray
- 5/2 - Grayish Brown
- 5/3 - Brown
- 5/4, 5/6, 5/8 - Yellowish Brown
- 6/1 - Gray to Light Gray
- 6/2 - Light Brownish Gray
- 6/3 - Pale Brown
- 6/4 - Light Yellowish Brown
- 6/6, 6/8 - Brownish Yellow
- 7/2 - Light Gray

7.5 YR

- 5/4 - Brown
- 4/6, 5/6, 5/8 - Strong Brown
- 4/2, 4/3, 4/4 - Brown to Dark Brown

5 YR

- 4/4, 5/4 - Reddish Brown

2.5 YR

- 5/2 - Grayish Brown

5 Y

- 5/1 - Gray

SOIL MAPPING LOG

CORE #: 1
SOIL SERIES: Miami
CLASSIFICATION: Typic Hapludalfs
PARENT MATERIAL: loam till
DEPTH TO SEASONALLY HIGH WATERTABLE (in.): >60
DEPTH TO LIMITING PERMEABILITY (in.): 48

REMARKS:

DEPTH	COLOR	TEXTURE	MOTTLES	STRUCTURE	CONSISTENCE	PERMEABILITY
0-6	10yr4/3	l		2mgr	Friable	Upper Moderate
6-25	5yr4/4	cl		2msbk	Friable	Upper Moderate
25-48	5yr5/4	l		mass.	Friable	Lower Moderate
48-60	5yr5/4	l		mass.	Firm	Moderately Slow

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CORE #: 2
SOIL SERIES: Drummer Overwash
CLASSIFICATION: Cummulic Endoaquolls
PARENT MATERIAL: silty colluvium/silty outwash
DEPTH TO SEASONALLY HIGH WATERTABLE (in.): 0
DEPTH TO LIMITING PERMEABILITY (in.): >60

REMARKS:

DEPTH	COLOR	TEXTURE	MOTTLES	STRUCTURE	CONSISTENCE	PERMEABILITY
0-33	10yr3/2	sil		2mgr	Friable	Upper Moderate
33-60	10yr2/1	sil		2vf&fsbk	Friable	Upper Moderate

SOIL MAPPING LOG

CORE #: 3
SOIL SERIES: Lisbon
CLASSIFICATION: Oxyaquic Argiudolls
PARENT MATERIAL: loess/loam till
DEPTH TO SEASONALLY
HIGH WATERTABLE (in.): 25
DEPTH TO LIMITING
PERMEABILITY (in.): 25

REMARKS:

DEPTH	COLOR	TEXTURE	MOTTLES	STRUCTURE	CONSISTENCE	PERMEABILITY
0-10	10yr3/2	sil		2vfsbk	Friable	Upper Moderate
10-25	7.5yr4/4	cl		2msbk	Friable	Upper Moderate
25-60	5yr5/4	l	5yr6/2	mass.	Firm	Moderately Slow

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CORE #: 4
SOIL SERIES: Lisbon
CLASSIFICATION: Oxyaquic Argiudolls
PARENT MATERIAL: loess/loam till
DEPTH TO SEASONALLY
HIGH WATERTABLE (in.): >28
DEPTH TO LIMITING
PERMEABILITY (in.): >28

REMARKS:

DEPTH	COLOR	TEXTURE	MOTTLES	STRUCTURE	CONSISTENCE	PERMEABILITY
0-12	10yr3/2	sil		2vfsbk	Friable	Upper Moderate
12-28	7.5yr4/4	cl		2f&msbk	Friable	Upper Moderate

SOIL MAPPING LOG

CORE #: 5
SOIL SERIES: Miami
CLASSIFICATION: Oxyaquic Hapludalfs
PARENT MATERIAL: loess/loam till
DEPTH TO SEASONALLY
HIGH WATERTABLE (in.): 36
DEPTH TO LIMITING
PERMEABILITY (in.): 36

REMARKS:

DEPTH	COLOR	TEXTURE	MOTTLES	STRUCTURE	CONSISTENCE	PERMEABILITY
0-9	10yr3/2	sil		2mgr	Friable	Upper Moderate
9-36	5yr4/6	cl		2m&csbk	Friable	Upper Moderate
36-42	5yr5/4	l		mass.	Firm	Moderately Slow

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CORE #: 6
SOIL SERIES: Drummer
CLASSIFICATION: Cummulic Endoaquolls
PARENT MATERIAL: colluvial silts/silty outwash
DEPTH TO SEASONALLY
HIGH WATERTABLE (in.): 0
DEPTH TO LIMITING
PERMEABILITY (in.): 26

REMARKS:

DEPTH	COLOR	TEXTURE	MOTTLES	STRUCTURE	CONSISTENCE	PERMEABILITY
0-26	10yr2/1	sil&sicl		2vf&fsbk	Friable	Upper Moderate
26-30	10yr4/1	sicl		mass.	Friable	Moderately Slow

SOIL MAPPING LOG

CORE #: 7
SOIL SERIES: Miami
CLASSIFICATION: Typic Hapludalfs
PARENT MATERIAL: loam till
DEPTH TO SEASONALLY
HIGH WATERTABLE (in.): >60
DEPTH TO LIMITING
PERMEABILITY (in.): >60

REMARKS:

DEPTH	COLOR	TEXTURE	MOTTLES	STRUCTURE	CONSISTENCE	PERMEABILITY
0-9	10yr4/3	l		2mgr	Friable	Upper Moderate
9-24	7.5yr4/4	cl		1msbk	Friable	Upper Moderate
24-60	5yr5/4	l		mass.	Friable	Lower Moderate

=====
CORE #: 8
SOIL SERIES: Miami
CLASSIFICATION: Typic Hapludalfs
PARENT MATERIAL: loam till
DEPTH TO SEASONALLY
HIGH WATERTABLE (in.): >60
DEPTH TO LIMITING
PERMEABILITY (in.): >60

REMARKS:

DEPTH	COLOR	TEXTURE	MOTTLES	STRUCTURE	CONSISTENCE	PERMEABILITY
0-7	10yr4/3	l		2mgr	Friable	Upper Moderate
7-26	5yr4/4	cl		2f&msbk	Friable	Upper Moderate
26-38	5yr5/4	l		mass.	Firm	Lower Moderate
38-60	5yr5/4	l		mass.	Firm	Moderately Slow



The Green Environmental Group
Environmental Assessments & Consulting

May 6, 1996

Mr. Mitch Weisz
Weisz & Michling
2030 N. Seminary Avenue
Woodstock, Illinois 60098

Dear Mr. Weisz:

Pursuant to your request, we have performed a subsurface investigation at the property known as The Munao Farm, located on the east and west sides of Route 20, just north of the area known as Harmony in southwestern McHenry County. This investigation was performed as a result of concerns relative to a former gravel extraction area on a portion of the subject site.

A Phase I Environmental Assessment for the farm was prepared by Green Environmental and issued on January 25, 1996. This assessment revealed the presence of a former gravel extraction area (identified on historical topographic maps) on that portion of the subject site west of Route 20, across from the farm buildings. Specifically the Phase I Assessment identified the following:

Topographic maps for the site indicate that at one time there was a gravel pit located on that portion of the subject site located west of Route 20. This would be consistent with a disturbed area which is present in aerial photography from 1939, 1954 and 1967. Based on a mid-1960's aerial photo from the McHenry County Planning Department, this area of gravel extraction was located approximately 600 feet west of Route 20 and 150 feet north of the south line of Section 28. The area was approximately two acres in size and would have probably been considered a "borrow pit", an area to obtain gravel for use on the farm. There is no indication that the pit was a fully operational gravel pit by today's size and volume. The vertical depth of the pit is unknown. When this pit was closed and how it was closed is unknown, however, there was only a limited amount of activity in the 1967 aerial photo. At the time of the operation and closure (assumed to be mid-1960's) it was not uncommon to use old gravel pits or borrow pits as a place to dump household waste and other debris, particularly on a farm or agricultural property. It is unknown if there was any filling of the pit or if the site was graded out level.

There is no direct evidence of there being any dumping in this pit; no dumping was observed in the aerial photography. There are no materials protruding from the surface in the suspected area of the gravel pit and the area has been consistently farmed. The only definitive means of determining whether there has been any filling or dumping in the former gravel pit would be to perform an exploratory excavation of the area. This activity may not be conclusive given the exact location of the former gravel pit is not certain. The risk associated with any dumping or filling in of the gravel pit is considered moderate at this time. Development of the site may reveal an area of fill which may need to be cleaned up.

At your request, Green Environmental coordinated with Gavers Excavating of Woodstock, Illinois to perform an exploratory excavation of the presumed gravel extraction area. Based on the aerial photography and the topography of the site, we chose an area to perform nine

exploratory holes to determine if there had been any materials buried in the former extraction area. The area to be excavated was also identified based on bricks and small pieces of concrete which had risen to the surface of the agricultural field following the freezing and thawing of the ground over the winter. The excavation holes which were performed were located west of a drainage way and east of a stand of trees on that portion of the site west of Route 20.

There were 3-4 holes dug nearer to the stand of trees which did not reveal the presence of any buried materials on the site. These holes were dug to a depth of approximately 7-8 feet beneath the surface and no debris of any sort was uncovered. The soil consisted of a loamy clay from 1-4 feet, a sandy loam from 4-6 feet and a fine sand at a depth of approximately 6 feet to the base of the excavation. No water was encountered in any of the excavation. The remaining holes were dug in an area where bricks and small pieces of concrete were protruding from the surface. These holes were dug along the western edge of the drainage way and were dug approximately 8-9 feet beneath the surface. One hole dug in this area revealed approximately 4-5 five feet of soil fill, intermixed with bricks and pieces of concrete. There were also pieces of wood uncovered in this area. It appeared that there may have been building materials buried in this area. The fill material extended to a depth of approximately 6 feet in this area and was followed by sand at a depth of 6 feet to the base of the excavation. There was nothing discovered in the exploratory excavation holes which would indicate that there was an extensive amount of fill material present and nothing hazardous was noted in the fill material; most of the fill material contained bricks.

Based on the excavation which has been conducted, there does not appear to be any extensive amounts of fill material present in the former gravel extraction area. Based on the current topography, Don Gavers who operates a gravel pit in the county, felt that possibly there was a "nob" or a topographic high point of gravel on the site at one time. He felt that the gravel pit which was identified on the topographic maps may have been this "nob" which may have been "shaved off" at one time. It is possible that there may not have been a pit of any great depth. It should also be noted that there were no quantities of gravel found in the excavations, but rather, sandy subsurface soils were discovered. It does not appear that there would have been a sufficient amount of gravel present for any type of an extensive extraction operation.

Based on the exploratory excavation, there does not appear to be a significant environmental hazard associated with the former gravel pit. There was a limited amount of wood, bricks and concrete discovered beneath the surface. No hazardous materials or general refuse was discovered in those areas which were excavated.

If you have any questions please do not hesitate to contact me. Thank You.

Sincerely,



Clancy P. Green

The Green Environmental Group, Ltd.



The Green Environmental Group
Environmental Assessments & Consulting

January 25, 1996

Mr. Mitch Weisz
Weisz and Michling
2030 N. Seminary Ave.
Woodstock, IL 60098

Dear Mr. Weisz:

Attached is a copy of the Phase I Environmental Assessment for the property known as the Munao Farm, located south of the intersection of Route 20 and Church Road, in Coral Township, McHenry County, Illinois. We have personally inspected the property, reviewed records and interviewed knowledgeable people concerning this site. Several recommendations are made regarding on-site dumping areas and hazardous materials usage.

There is a floor drain located in the barn in a room which is used by the tenant in conjunction with skinning of animals such as beaver - a taxidermy operation. Drainage was noted from the taxidermy operation through the drain; it is unknown where this drain leads to. There was evidence of animal waste and possibly some chemical waste entering this drain. It is recommended that the materials and waste entering this drain and the outlet of the drain be verified. The floor drain in the barn should be sealed in order to prevent the migration of any contaminants entering the drain.

There are several potential wetlands areas identified on McHenry County Soil & Water Conservation District maps. A field verification of the wetlands is recommended to confirm the wetlands and delineate the extent.

There was formerly a 1,000 gallon underground gasoline tank located along the east side of the barn. This tank was removed in December of 1995; the tank was removed in accordance with the current Office of the Illinois State Fire Marshall regulations. There is no indication of any additional below ground storage tanks on the subject site. Confirmatory soil sampling from the bottom of the tank cavity did not reveal any residual soil contamination, no further investigation is recommended at this time.

There were three areas of dumping noted on the subject site, none of which appear to be extensive. Two areas consisted mostly of a limited amount of surface dumping. The third area was more extensive and may contain some buried materials. Dumping along the west and south property lines consisted of tires, old fencing, empty cans and buckets, an out of use piece of implement equipment and 10-12 discarded tires. It is recommended that these

materials be cleaned up and disposed of properly. There has been more extensive dumping located within a wooded area at the far north end of that portion of the subject site located east of Route 20. Tires, washing machines, bottles, pesticide cans, and other large ferrous pieces of metal were present within the woods. There were no full containers of hazardous materials, however there were many empty containers of hazardous materials. Most of the debris appeared to be restricted to surface dumping; there was no direct evidence of any materials buried beneath the surface. It is possible that there may be some buried materials in this area. It is recommended that the debris be cleaned up and disposed of properly. At the time of the cleanup several exploratory excavations should be conducted to determine if there are any buried materials present.

True copies of this report are signed and sealed on this page and on page 19 of the report.



Clancy P. Green, Environmental Investigator

THE GREEN ENVIRONMENTAL GROUP, LTD.



William

