McHenry County
Staff Plat Review - Public Meeting
AGENDA

April 15, 2026, 8:30 AM
County Board Conference Room
Administration Building, 667 Ware Rd., Woodstock, IL 60098

Pages

1. **CALL TO ORDER**
   Roll Call
2. **PUBLIC COMMENT**
3. **DRAFT MINUTES FOR APPROVAL** 2
4. **SITE PLAN REVIEW**
   - 4.1 SP26-0001 - Stare Patriot LLC 4
     Location: 4617 US Hwy 12, Richmond 04-22-300-011

     Request: Approval of Site Plan for parking area associated with Landscape Business with outdoor storage (Zoning of northern portion is B-1 Neighborhood Business District, Zoning of southern portion is I-1 Light Industrial District)
   - 4.2 Z26-0018 - George Matos 31
     Location: 10204 Charles Road, Woodstock 08-27-200-017

     Request: Conditional Use Permit to allow for Agriculture Employee Housing in the A-1 Agriculture District
5. **SUBDIVISION REVIEW**
6. **STATUS UPDATE**
7. **MEMBERS' COMMENTS**
8. **ADJOURNMENT**

McHenry County
Staff Plat Review - Public Meeting
MINUTES

March 18, 2026, 8:30 AM
County Board Conference Room
Administration Building, 667 Ware Rd., Woodstock, IL 60098

Members Present: Adam Wallen, Stoyan Kolev, Anna Kurtzman, Keith McGraw, Edward Varga, Celine Taylor, JT Bowers

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1. CALL TO ORDER

Meeting called to order at: 8:30am by Adam Wallen

2. PUBLIC COMMENT

Ms. Celine Taylor came in at 8:33am.

The following individuals made a public comment: Rob Roitblat, Ron Bryant, Gerri Songer, Jennifer Mulllen, Annette Zimmer, Shane Vetter, Mike Gajewski from the Village of Spring Grove, Kim Durkot, Linda Bryant, Dave Laurine, Michael Duzenski, Jason Sethen, Christina Swanson, Shawn Hanson. Their concerns ranged from environmental, traffic safety, impacts to residents property values and health concerns regarding earth extraction sites.

3. DRAFT MINUTES FOR APPROVAL

Mover: Anna Kurtzman
Seconder: Stoyan Kolev

Approve previous minutes

Approved by Voice

4. SITE PLAN REVIEW

4.1 Z26-0004, Paradise Lake Earth Extraction, Burton Twp

Mr. Jack Pease gave an overview of the project.

Building Division: JT Bowers

Mr. Bowers had no comments regarding the request for the conditional use permit. He reviewed his comments of the general requirements for permitting.

Environmental Health: Celine Taylor

Ms. Taylor reviewed her comments.

Ms. Taylor noted the well and septic for the scale house will require both primary and secondary replacement areas.

The applicant confirmed fuel storage will be stored above ground in a well tank. Mr. Wallen said that will need to be updated on the site plan.

Division of Transportation: Keith McGraw

Mr. McGraw reviewed his comments.

Zoning: Anna Kurtzman

Ms. Kurtzman reviewed her comments.

Ms. Kurtzman went over some of the documents that are incomplete and/or missing and reports that need to be updated.

Water Resources: Edward Varga

Mr. Varga reviewed his comments.

Mr. Wallen said there are approximately 42 revisions to be based upon staff comments.

Mover: Anna Kurtzman
Seconder: JT Bowers

Motion to accept the documentation that has been presented noting that modifications are required. Once those are resubmitted then it will be to brought back to this committee for review.

Approved by Voice

5. SUBDIVISION REVIEW

None.

6. STATUS UPDATE

None.

7. MEMBERS' COMMENTS

None.

8. ADJOURNMENT

Mover: Keith McGraw
Seconder: JT Bowers

To adjourn the meeting at 9:47 am

Approved by Voice

SP26-0001

Project Name: Parking Site Plan Review

Project Description: Review the site plan to show that parking of landscaping equipment is in the rear of the property where it is zoned Industrial

Permit Type: SITE PLAN REVIEW

Site Address (Parcel) Owner Name: 3605 Windmere Ln

Parcel Identification Number: 04-22-300-011

Site (Parcel) Address: 4617 US HWY 12 RICHMOND, IL 60071

Number of Acres:

Site Address (Parcel) Owner Phone Number:

Site Address (Parcel) Owner Email Address:

Applicant Name (if other than owner): Schenck, Randall

Primary Contact: Schenck, Randall

Applicant Address: 3605 Windmere Ln

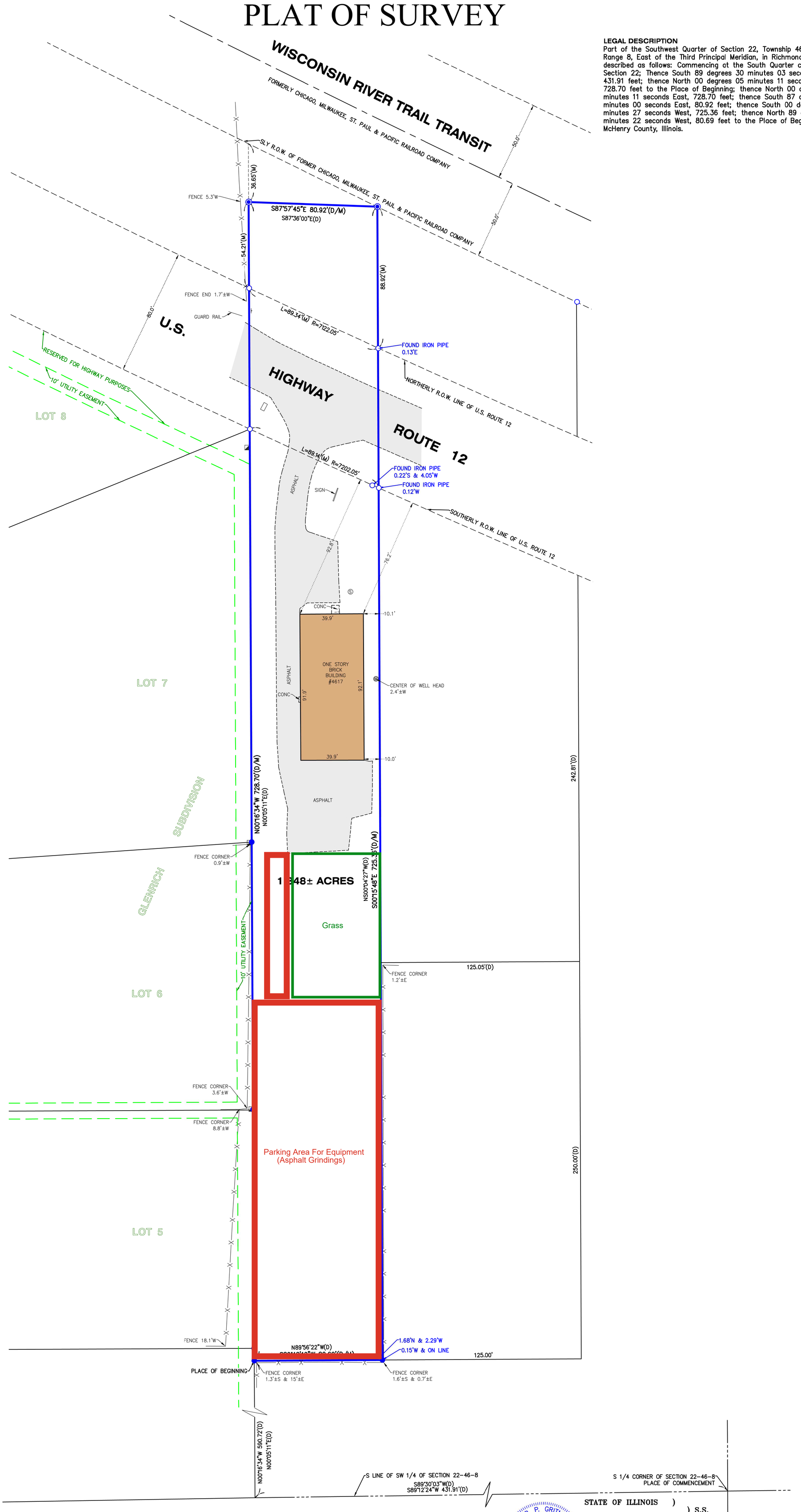
Applicant Phone Number: 2244993570

Applicant Email Address: randy@patriotpropertyservice.com

Vanderstappen
Land Surveying, Inc.
www.vandersinc.com
1316 N. Madison St.
Woodstock, Illinois 60098
ph. 815-337-8310 fax 815-337-8314
"Always faithful to the property line"

PLAT OF SURVEY

LEGAL DESCRIPTION
Part of the Southwest Quarter of Section 22, Township 46 North, Range 8, East of the Third Principal Meridian, in Richmond Township, described as follows: Commencing at the South Quarter corner of said Section 22; Thence South 89 degrees 30 minutes 03 seconds West, 431.91 feet; thence North 00 degrees 05 minutes 11 seconds East, 728.70 feet to the Place of Beginning; thence North 00 degrees 05 minutes 11 seconds East, 728.70 feet; thence South 87 degrees 36 minutes 00 seconds East, 80.92 feet; thence South 00 degrees 04 minutes 27 seconds West, 725.36 feet; thence North 89 degrees 56 minutes 22 seconds West, 80.69 feet to the Place of Beginning, in McHenry County, Illinois.



LEGEND	
◪	ELECTRIC RISER
●	FOUND IRON BAR
○	FOUND IRON PIPE
▭	MAIL BOX
Ⓢ	SEPTIC LID
⊦	SIGN
⊗	WELL
(M)	MEASURE
(D)	DEED
(R)	RECORD

20' 0' 20' 40'
SCALE: 1" = 20'

N

CLIENT: DONALD STINESPRING & ASSOC
DRAWN BY: PJD CHECKED BY: APG
SCALE: 1"=30' SEC. 22 T. 46 R. 08 E.
BASIS OF BEARING: IL EAST ZONE NAD83 (2011)
P.I.N.: 04-22-300-011
JOB NO.: 231087 I.D. MBS
FIELDWORK COMP.: 12/20/23 BK. ___ PG. ___
ALL DISTANCES SHOWN IN FEET AND DECIMAL PARTS THEREOF CORRECTED TO 68° F. REF: ___

NOTE: Only those Building Line Restrictions or Easements shown on a Recorded Subdivision Plat are shown hereon unless the description ordered to be surveyed contains a proper description of the required building lines or easements.
* No distance should be assumed by scaling.
* No underground improvements have been located unless shown and noted.
* No representation as to ownership, use, or possession should be hereon implied.
* This Survey and Plat of Survey are void without original embossed or colored seal and signature affixed.

Compare your description and site markings with this plat and AT ONCE report any discrepancies which you may find.

STATE OF ILLINOIS)
) S.S.
COUNTY OF McHENRY)

ARTHUR P. GRITMACKER
035-003857
PROFESSIONAL
LAND SURVEYOR
STATE OF ILLINOIS
EXP. 11/30/2024
WOODSTOCK, ILLINOIS

In my professional opinion, and based on my observations, I hereby certify that we have surveyed the premises above described, and that the plat hereon is a true representation of the said survey. This professional service conforms to the current Illinois minimum standards for a boundary survey.

Dated at Woodstock, McHenry County, Illinois 12/29 A.D., 2023.

Vanderstappen Land Surveying Inc.
Design Firm No. 184-002792

By: _____
Illinois Professional Land Surveyor No. 3857

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PATRIOT
PROPERTY SERVICES LLC

McHenry County Zoning

RE: Property Utilization

To whom it may concern,

Please find the narrative below itemizing out the details noted in the deficiency report.

1). The project/property will be used to operate a landscape business. All equipment, other than trucks, plows, and employee vehicles will be stored in the rear of the property where it is zoned Industrial.

2). Patriot has 8 employees that will park in the front and rear of the building. There will be no equipment stored in the areas zoned business (just Industrial).

3). We do not have guests that visit the property. If anyone does, the front parking spaces will be left open.

4). All trailers, equipment, and associated equipment due to our business will be stored in the rear of the property where the zoning requires.

If you have any questions, please feel free to contact me.

Thanks,

Randall Schenck, Owner

Ph: 847.366.5234

Email: randy@patriotpropertyservice.com

Vanderstappen
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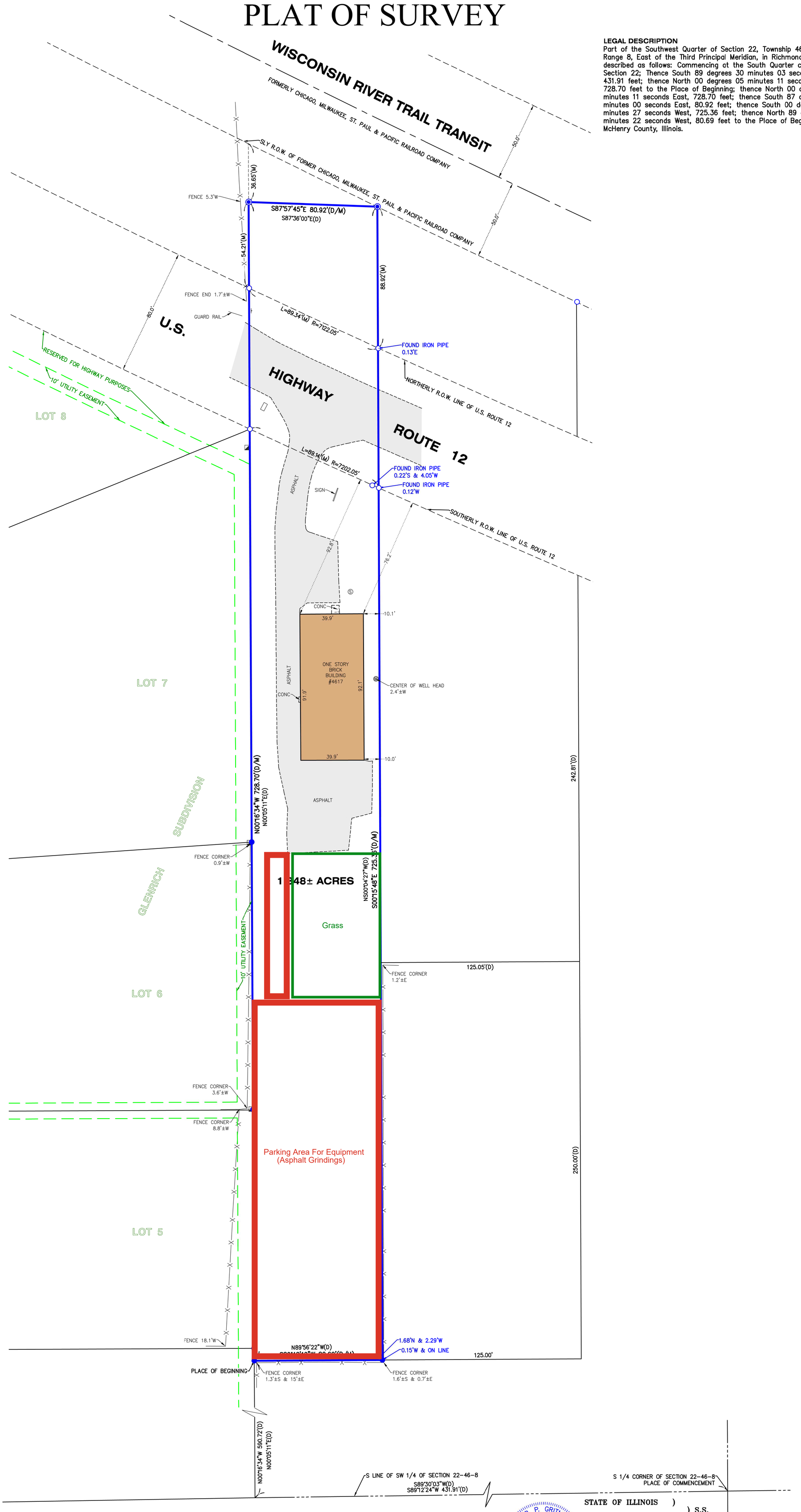

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Compare your description and site markings with this plat and AT ONCE report any discrepancies which you may find.

STATE OF ILLINOIS)
) S.S.
COUNTY OF McHENRY)

In my professional opinion, and based on my observations, I hereby certify that we have surveyed the premises above described, and that the plat hereon is a true representation of the said survey. This professional service conforms to the current Illinois minimum standards for a boundary survey.

ARTHUR P. GRITMACHER
035-003857
PROFESSIONAL
LAND SURVEYOR
STATE OF ILLINOIS
EXP. 11/30/2024
WOODSTOCK, ILLINOIS

Dated at Woodstock, McHenry County, Illinois 12/29 A.D., 2023.

Vanderstappen Land Surveying Inc.
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McHenry County
Department of Planning & Development
2200 North Seminary Ave.
Woodstock, IL 60098
plandev@mchenrycountyil.gov
815.334.4560

MCH
MCHENRY COUNTY · IL

Planning Division Review Comments SP26-0001

To: Randall Schenck

From: Anna Kurtzman, Senior Planner

Date: April 7, 2026 (SPRC 4/15/26)

RE: Request for approval of a Site Plan for a Storage Yard within the I-1 Light Industrial District

The Planning Division has considered the following documents in developing this analysis of your zoning application:

- Plat of Survey prepared by Arthur Gritmacker dated 12/23/26, with site plan overlaid
- Undated letter from Randall Schenck, as narrative description

Staff has the following comments:

1. The property has split zoning, with the northern portion zoned B-1 Neighborhood Business District with I-1 Light Industrial District to the South. The applicant is seeking to develop the property as a landscape business with outdoor storage with part of the landscape business located in the B-1 district (Landscape Business with no outdoor storage allowed by right in the B-1 district) and the outdoor storage portion being located on the I-1 portion (allowed by right as a principal use within the I-1 district). Normally, such development would be looked at as a Landscape Business without Outdoor Storage (allowed by right within the I-1 district or with a Conditional Use Permit in the B-1 district). Given the request, staff is, instead, looking at this property as having two (2) principal uses (Landscape Business with no outdoor storage – allowed by right in the B-1 district) and Storage Yard (allowed by right within the I-1 District.

2. Ordinance 81-07 established the I-1 zoning on this property and includes a legal description of that area (Ordinance attached). The applicant will need to demonstrate that the Outdoor Storage component is located within the legal boundaries of the I-1 district.

3. Section 16.56.030QQ of the Unified Development Ordinance (UDO) provides the minimum standards for Storage Yards (see attached). These standards include:

    a. A requirement that the site be at least one (1) acre in size. Staff believes that the I-1 portion of the property does not meet this minimum requirement.

    b. A requirement that the yard will be completely enclosed by a solid fence along all lot lines adjacent to property not zoned for industrial use. This would apply to the west, east and north property lines. The site plan will need to note the location of the fencing.

c. A requirement that the storage area be paved – asphalt grindings are not considered to be pavement.

d. Storage is to be limited to the areas noted on the site plan. To ensure compliance, staff requests that dimensions of the storage area be provided on the site plan.

4. Section 16.20.050D provides a list of the minimum requirements for a Site Plan (section requirements listed at end of this memo). Missing from the proposed site plan is:

   a. identifying existing and proposed screening.

   b. Is external lighting proposed within the storage area? If yes, provide details.

5. One hundred (100%) percent of the entire property is within the Sensitive Aquifer Recharge Area (SARA). Standards of development within this area are located below. The site plan will need to demonstrate compliance of this standard (no more than fifty (50%) percent of the property may be covered in impervious surface.

6. Section 16.60.030 Permitted Encroachments also apply to this property (see attached) – including providing a buffer yard along the western property line.

7. If being provided, show the location of any waste disposal dumpsters and/or storage area(s) that will be located within the Storage Yard.

/abk

Section 16.20.050D

D. *Standards for Site Plan Review.*

1. Each site plan submitted for review shall include the following details:

a. The location of principal and accessory structures, and all open space.

b. The location of all water supply and sanitary waste (well and septic) facilities.

c. All existing and proposed screening and landscaping.

d. All exterior lighting.

e. The location of parking lots, including required landscape islands, buffers, number of parking spaces, driveways, and internal access roads.

Depending on the complexity of the project, the required details shall be divided into multiple plan sheets as necessary to ensure legibility.

2. In addition, the following characteristics will also be considered:

a. The conformance of the site plan to adopted land use policies and the policies of the *2030 Comprehensive Plan* and this Ordinance.

b. Compliance with other applicable County ordinances.

c. The location, arrangement, size, design, and general site compatibility of structures, lighting, and signs, including:

(1) Efficient use of land that responds to the existing off-site utilities and service conditions in order to minimize the demand for additional municipal services, utilities, and infrastructure.

(2) Adequate water supply and sewage disposal in compliance with the McHenry County Public Health Ordinance.

(3) Compatibility with, and mitigation of, any potential impact upon, adjacent property.

(4) Site illumination designed and installed to minimize adverse impact on adjacent properties.

d. Landscape and the arrangement of open space or natural features designed to:

(1) Create a desirable and functional environment for motorists, pedestrians, bicyclists, and occupants of residences and businesses. To achieve such an environment, landscape may take advantage of open space design features such as bike paths, running paths, and outdoor relaxation areas.

(2) Preserve unique natural resources, including preservation and protection of existing healthy, mature trees.

(3) Protect natural resources and landscape on adjacent sites.

(4) Design drainage facilities to promote retention of water onsite and preservation of natural watercourses and patterns of drainage.

(5) Utilize plant materials suitable to withstand the climatic conditions of the County and microclimate of the site.

(6) Use of screening to buffer the impact of the development on adjacent uses and screen incompatible uses and certain site elements, creating a logical transition to contiguous lots and developments.

e. Circulation systems and off-street parking designed to:

(1) Provide adequate and safe access to the site for motor vehicles as well as alternate modes of transportation, including pedestrians and bicyclists.

(2) Minimize potentially dangerous traffic movements.

(3) Separate pedestrian and auto circulation, and provide for bicycle parking or storage insofar as practical.

(4) Minimize curb cuts by using cross-access easements and shared parking.

(5) Design off-street parking lots or garages to minimize adverse impacts on adjacent properties, particularly through the use of perimeter and interior landscape, and promote logical and safe parking and internal circulation.

(6) Clearly define pedestrian access from the parking area to the structures.

Section 16.56.030Z

Z. *Landscape Business.*

1. Storage areas shall be restricted to those areas so designated on the site plan.

2. All landscape business vehicles and equipment shall be stored entirely within an enclosed structure or in a permitted exterior storage area.

3. Preparation, assembly, and processing of materials shall occur wholly indoors or within the permitted exterior storage area only.

4. Storage shall be limited to vehicles, equipment, and materials owned or leased by the property owner or tenant.

5. All vehicles stored on-site must have current plate registration.

6. All structures utilized by the Landscape Business must meet all applicable building codes for the occupancy category.

7. Vehicle oil changes and maintenance shall occur only inside of an enclosed structure meeting all applicable building and plumbing codes.

8. On-site retail sales are prohibited, except as allowed by a Greenhouse/Nursery Business.

9. The collection and storage of landscape waste at the facility shall be limited to tree branches two (2) inches or greater in diameter, free of leaves, to be used as raw material to produce a legitimate product (i.e. firewood, mulch, wood chips), so long as it is processed in a reasonable amount of time, as determined by the Illinois Environmental Protection Agency Bureau of Land Permit Section.

10. A landscape business shall not store asphalt paving equipment or supplies.

11. Storage of pavement de-icing agents shall comply with § 16.56.050E. (De-Icing Agent Storage).

12. Employee parking shall be provided in accordance with Chapter 16.64 (Off-Street Parking and Loading).

13. Employee bathrooms shall be provided in accordance with the McHenry County Public Health Ordinance and Illinois State Plumbing Code.

14. All storage areas, parking areas, and buildings shall comply with required setbacks for the zoning district.

Section 16.56.030QQ

QQ. *Storage Yard.*

1. Storage yards shall be located on sites of a minimum of one (1) acre in area.

2. A storage yard shall be completely enclosed by a solid fence, a minimum of six (6) feet in height, with openings only for ingress and egress along all lot lines adjacent to property not zoned for industrial use.

3. Outdoor storage areas shall be paved.

4. All storage yards require site plan review. Storage areas shall be restricted to those areas so designated on the site plan.

5. Preparation, assembly, and processing of materials are prohibited.

6. Storage shall be limited to vehicles, equipment, and materials owned or leased by the property owner or tenant.

7. All vehicles stored on-site must have current plate registration.

8. Vehicle maintenance, including changing oil, is prohibited.

9. All structures utilized in conjunction with the storage yard must meet all applicable building codes for the occupancy category.

10. On-site retail sales are prohibited.

6.52.030 SENSITIVE AQUIFER RECHARGE AREA (SARA)

E. *Development Standards.*

1. When the property to be developed includes SARA Overlay District or any Class III Special Resource Areas Overlay District, the following standard applies:

a. The maximum impervious surface coverage is limited to the lesser of the maximum impervious surface area allowed in the zoning district or fifty percent (50%), but in no case shall more than fifty percent (50%) of the SARA Overlay District area on site be made impervious.

Section 16.60.030

A. Purpose. The landscape and screening requirements are intended to preserve and enhance the appearance, public health, safety, and welfare of the County by fostering an aesthetically pleasing development. Proper landscape contributes to the County in many ways: enhancing its character and scenic beauty, providing clean air, reducing noise, preventing erosion of topsoil, reducing the rate of stormwater runoff, providing nesting areas for birds and habitat for other wildlife, conserving energy, and providing shade and windbreaks. These regulations are also intended to increase the compatibility of adjacent uses, and minimize the adverse impact of noise, dust, motor vehicle headlight glare or other artificial light intrusions, and other objectionable activities or impacts conducted on, or created by, adjoining or neighboring uses.

B. Applicability. The landscape and screening requirements established by this Section apply to property in the commercial, office, and industrial zoning districts. Property in the agricultural and residential zoning districts are exempt. Landscape and screening standards must be met for buffer yards, refuse storage areas, loading berths, and parking lot perimeters and interiors.

C. Enforcement of Landscape Provisions. No occupancy permit will be issued for any structure, subject to the requirements of this Section, unless all the requirements have been met. Failure to implement the landscape plan or to maintain the lot or use in substantial conformance with the landscape plan is cause for an enforcement action including the possible application of fines and penalties, as established in this Ordinance. In addition, all landscape is subject to periodic inspection.

1. If weather prohibits the installation of landscape at the time an occupancy permit is applied for, the applicant can provide the County with a letter of credit or cash in the amount required to complete landscape installation in order to receive an occupancy permit, which will be returned upon completion of required landscape.

2. Landscape materials depicted on approved landscape plans are considered required site plan elements in the same manner as buildings, parking and other improvements. As such, the owner or, if applicable, the homeowners association is responsible for the maintenance, repair and replacement of all landscape materials, and fences, steps, retaining walls, and similar landscape elements over the entire life of the development.

3. All landscape materials shall be maintained in good condition, present a healthy, neat and orderly appearance, and kept free of refuse and debris. Unless an extension is granted due to weather, any dead, unhealthy, or missing plants shall be replaced within thirty (30) days of notification by the Zoning Enforcement Officer. Fences, steps, and retaining walls and similar elements shall be maintained in good repair. The owner of the premises is responsible for the maintenance, repair, and replacement of all landscape materials, fences, steps, retaining walls and similar elements, and refuse disposal areas. Irrigation systems, when provided, shall be maintained in good operating condition.

D. Required Landscape Design Standards. Required landscape plans, as described above, shall be evaluated and approved based on the following design criteria.

1. The scale and nature of landscape materials shall be appropriate to the size of the site and related structures.

2. Plant material shall be selected for its form, texture, color, pattern of growth, and suitability to local conditions. Species shall be considered for hardiness, year-round interest, color, habitat and food source for birds and animals, and use in similar locations in other communities. Trees with inappropriate root systems for an area or those generally not recommended by landscape architects are not permitted.

3. All planting materials used shall be of good quality. The use of species native to northeastern Illinois is encouraged. Size and density of plant material, both at the time of planting and at maturity, should be considered when selecting plant material. Where appropriate, the use of drought and salt tolerant plant material is preferred.

4. All plant materials shall be free of disease and installed so that soil of sufficient volume, composition, and nutrient balance are available to sustain healthy growth.

5. Unless specified otherwise in this ordinance, trees and shrubs shall be sized as follows at planting:

a. All deciduous shade trees shall have a minimum trunk size of three (3) inches in caliper at planting.

b. Evergreens trees shall have a minimum height of eight (8) feet at planting.

c. Single stem ornamental trees shall have a minimum trunk size of three (3) inches in caliper at planting. Multiple stem ornamental trees shall have a minimum height of eight (8) feet at planting.

d. Unless otherwise specified, all large deciduous and evergreen shrubs shall have a minimum height of three (3) feet at installation, and all small deciduous and evergreen shrubs shall have a minimum height of eighteen (18) inches at installation. Large shrubs are those that reach five (5) or more feet in height at maturity. Small shrubs are those that can grow up to five (5) feet in height if left unmaintained, but are generally kept at heights of eighteen (18) to thirty (30) inches.

8. Species diversity in required plant material is required for visual interest and to reduce the risk of losing a large population of plants due to disease. Table 16.60-2: Species Diversity indicates the of diversity required based on the total quantity of species being used. (For example, if a landscape plan requires 12 trees, a minimum of three tree species is required.)

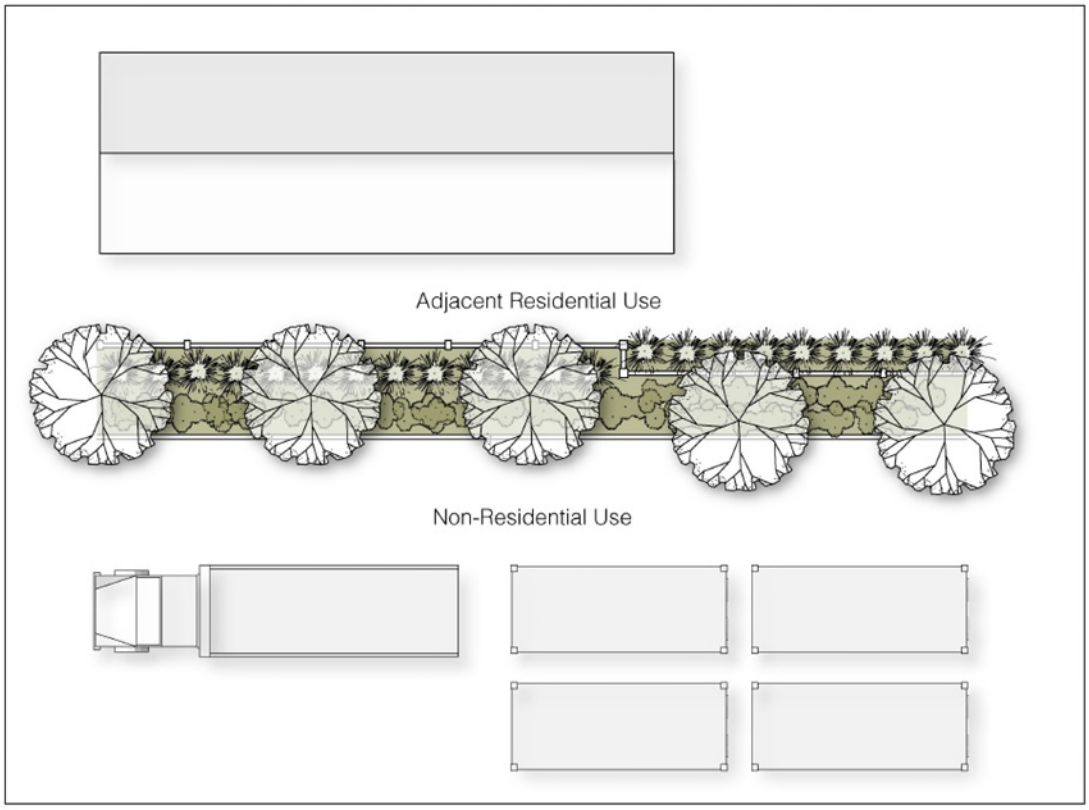
TABLE 16.60-2: SPECIES DIVERSITY	
TOTAL NUMBER OF REQUIRED PLANTINGS PER EACH PLANT TYPE	***MINIMUM NUMBER OF SPECIES***

TABLE 16.60-2: SPECIES DIVERSITY	
TOTAL NUMBER OF REQUIRED PLANTINGS PER EACH PLANT TYPE	***MINIMUM NUMBER OF SPECIES***
1-4	1
5-10	2
11-15	3
16-75	5
76-500	8
500-1,000	10
1,000+	15

E. Buffer Yards. This section establishes standards for the dimensions and improvement requirements of buffer yards between land uses and/or zoning districts within the rear or interior side yard. (See Figure 16.60-5: Buffer Yard Landscape)

Figure 16.60-5: BUFFER YARD LANDSCAPE

Figure 16.60-5: BUFFER YARD LANDSCAPE



1. As of the effective date of this Ordinance, buffer yards are required for new commercial or industrial construction or uses that abut a property with an existing residential use in a residential zoning district or the A-2 District, unless separated by a street or alley. When new commercial construction locates next to an existing residential use, the new commercial construction shall provide the buffer yard. If a new residential use locates next to an existing commercial use, the existing commercial use is not required to provide a buffer yard and is not considered nonconforming. Agricultural buildings and uses are not required to provide buffer yards.

2. Buffer yards are required along the interior side and rear lot lines. Buffer yards may be located within required setbacks, but shall be reserved for the planting of material and installation of screening as required by this section. No parking, accessory buildings, or other structures are permitted within the buffer yard area.

3. All plantings in the buffer yard shall meet the following standards:

a. The buffer yard planting area shall be a minimum of five (5) feet in width in addition to the area provided for the required fence or wall.

b. Shade trees shall be planted on an average of one (1) tree for every twenty-five (25) linear feet of yard length. As part of the landscape plan approval, trees may be spaced at various intervals based on specific site requirements or design scheme, but the total number of trees planted shall be no less than the amount required by a linear planting spaced twenty-five (25) feet apart.

c. An opaque masonry wall (stone, stucco or brick), solid fence, or dense evergreen hedge, at least six (6) feet in height, is required along one hundred percent (100%) of the yard length. The fence may be located on the inside of the landscape plantings (adjacent to the non-residential use) or may be located on the outside of the landscape plantings (adjacent to the existing residential use in a residential zoning district or the A-2 District).

d. Shrubs shall be planted on an average of one (1) shrub for every three (3) feet of yard length. As part of the landscape plan approval, shrubs may be spaced at various intervals based on specific site requirements or design scheme, but the total number of shrubs planted will be no less than the amount required by a linear planting spaced three (3) feet apart.

F. Screening Requirements.

1. Refuse Disposal Dumpsters and Refuse Storage Areas. All refuse containers shall be fully enclosed on three (3) sides by an opaque masonry wall (stone, stucco or brick) or wall of the principal structure six (6) feet in height, or a solid fence, and the enclosure shall be gated. The materials used for screening, including the enclosure, shall complement the architecture of the principal structure. An extension of an exterior principal structure wall may be used as one of the screening walls for a refuse container, provided that such wall meets the minimum six (6) foot height requirement and is of the same building materials as the principal building. Such wall may not be the gated enclosure.

2. Loading Berths. Where feasible, loading berths should be located and oriented so as not be visible from the street and adjacent properties, while still allowing access to the use it is serving. In addition, loading berths in all zoning districts shall be screened from view, unless such screening is determined unnecessary by the Zoning Enforcement Officer. Such screening shall consist of an opaque masonry wall (stone, stucco or brick), a solid fence, or dense evergreen hedge, at least six (6) feet in height.

G. Parking Lot Landscape.

1. Applicability.

a. Interior parking lot landscape is required for new or expanded parking facilities that consist of fifteen (15) or more paved spaces. This Section applies whether the parking facilities are required to be paved by this Ordinance or have been paved voluntarily.

b. Perimeter parking lot landscape is required for new or expanded parking facilities within ten (10') feet of a right-of-way that consist of fifteen (15) or more paved spaces. This Section applies whether the parking facilities are required to be paved by this Ordinance or have been paved voluntarily.

c. For existing parking lots in the commercial, office, and industrial zoning districts that currently do not comply with the required parking lot landscape standards, such landscape is required when a new principal building is constructed or an existing building or use is expanded to the extent that the parking lot is required to be expanded by fifty percent (50%) or more.

d. Nothing in this Section prevents the applicant's voluntary installation of additional landscape.

2. Parking Lot Perimeter Landscape. Parking lot perimeter landscape provides for the enhancement and screening of parking lots by requiring a scheme of pedestrian walls and/or landscape along public streets. The landscape treatment shall run the full length of the parking lot and be located between the property line and the edge of the parking lot. Landscape areas outside of shrub and tree masses shall be planted in live groundcover. (See Figure 16.60-6: Parking Lot Perimeter Landscape.) The landscape area shall be improved as follows:

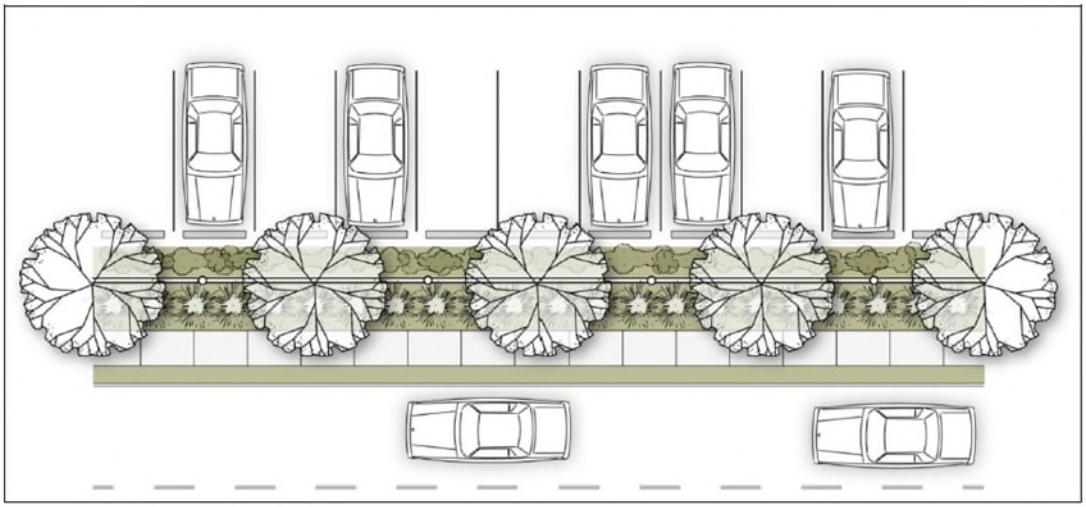
a. The perimeter parking lot landscape area shall be at least five (5) feet in width, as measured from the back of curb or wheelstop.

b. One (1) shrub, measuring a minimum of eighteen (18) inches at planting and a minimum of three (3) feet at maturity, shall be planted for every three (3) feet of landscape area length, spaced linearly to adequately screen vehicle bumpers. Alternatively, a low pedestrian wall, the height of which provides effective screening to a maximum height of three (3) feet, may be used instead of shrubs.

c. All perimeter parking lot landscape areas shall be protected through curbing or alternate designs to prevent damage to landscape from vehicles. Protection designs that allow water to infiltrate into landscape are encouraged.

Figure 16.60-6: Parking Lot Perimeter Landscape

Figure 16.60-6: Parking Lot Perimeter Landscape



3. Parking Lot Interior Landscape. (See Figure 16.60-7: Interior Parking Lot Landscape)

a. Amount of Landscape. A minimum of one (1) parking lot island shall be provided per every row of twenty (20) parking spaces, whether a single row or double row of stalls. As part of the landscape plan approval, parking lot island locations may be varied based on specific site requirements or design scheme. All rows of parking spaces shall be terminated by a parking lot island or landscape area.

b. Size and Planting of Parking Lot Islands. Parking lot islands shall be the same width and depth as a parking stall. Double rows of parking shall provide parking lot islands that are the same width and depth as the double parking stall. A minimum of one (1) shade tree is required for every parking lot island. If the island extends the width of a double row, then two (2) shade trees are required. As an alternative to intermediate landscape islands within rows of more than twenty (20) parking stalls, linear planting strips that separate double rows of parking stalls and that serve as stormwater swales are permitted. However, all rows of parking spaces shall be terminated by a parking lot island or landscape area.

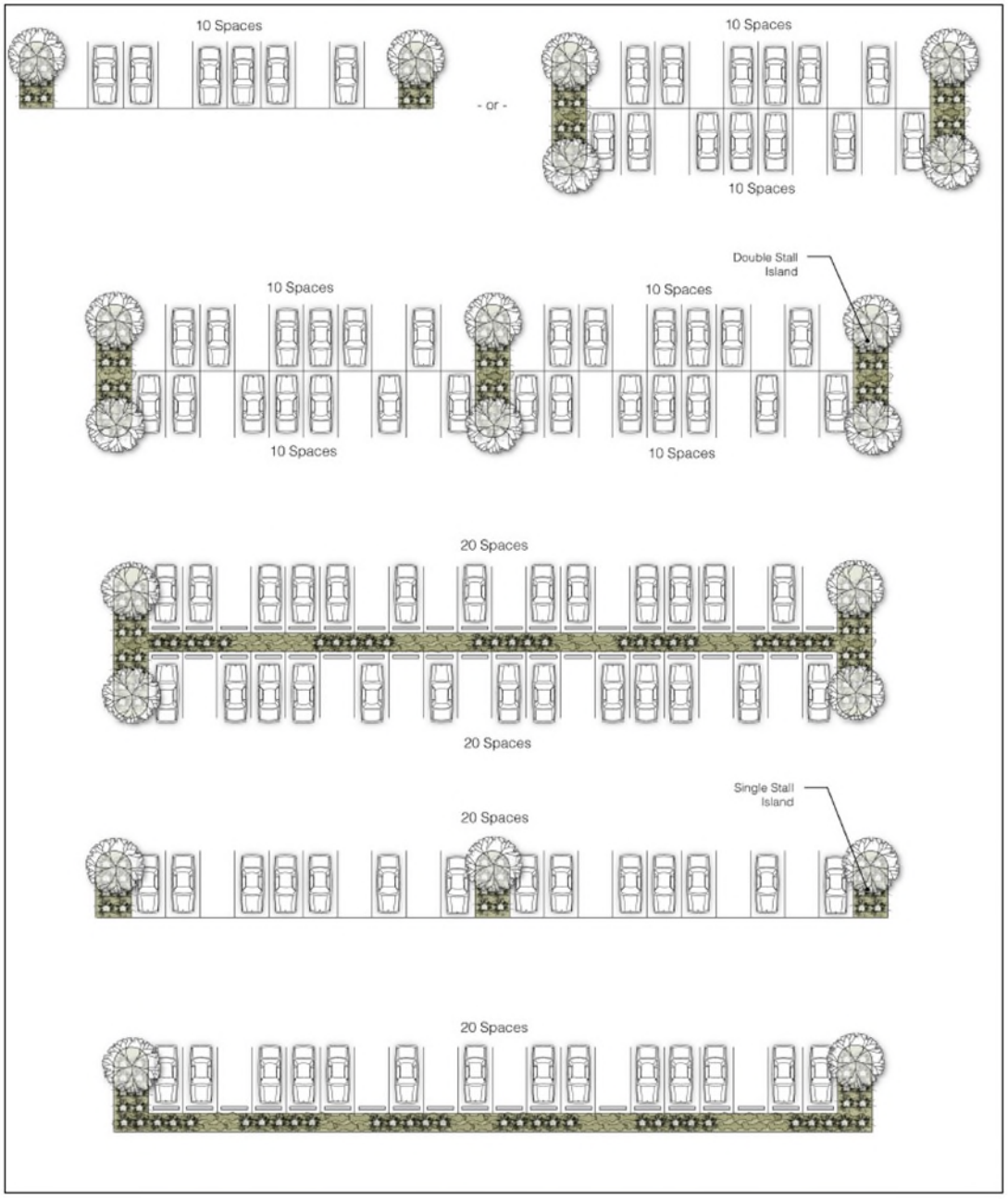
c. Type of Landscape Material. Shade trees shall be the primary plant materials used in parking lot islands and landscape areas. Ornamental trees, shrubs, hedges, and other plant materials may supplement the shade tree plantings but cannot create visibility concerns for automobiles and pedestrians.

d. Groundcover. A minimum of seventy-five percent (75%) of every parking lot island shall be planted in live groundcover, perennials, or ornamental grasses.

e. Curbing. All parking lot islands shall be protected through curbing or alternate designs to prevent damage to landscape from vehicles. Protection designs that allow water to infiltrate into landscape are encouraged.

Figure 16.60-7: Interior Parking Lot Landscape

Figure 16.60-7: Interior Parking Lot Landscape



MAY 1981

IN THE MATTER OF THE APPLICATION OF)
JACK PEASE FOR AN AMENDMENT OF THE)
ZONING ORDINANCE OF McHENRY)
COUNTY, ILLINOIS)

PETITION #81-7

O R D I N A N C E

WHEREAS, your Petitioner, Jack Pease has filed a Petition with the Zoning Board of Appeals of McHenry County requesting the amendment of the Zoning Ordinance of McHenry County, and of such Ordinance as amended, in regard to the following described real estate:

of all that part of the east 432 feet of the southeast quarter of the southwest quarter of section 22, township 46 north, range 8 east of the third principal meridian, lying southerly of a line drawn 350 feet southwesterly of and parallel with the southwesterly right of way line of U.S. Route 12, (excepting therefrom that part thereof falling within a certain parcel of land described on a plat of survey recorded in the recorder's office of McHenry County, Illinois on December 27, 1971 as document No. 558008) in McHenry County, Illinois, containing approximately 7 acres, more or less.

WHEREAS, the Petition requests reclassification of the subject property from its present classification which is A-1 to I-1; and,

WHEREAS, a hearing on said Petition was held before the Zoning Board of Appeals of McHenry County in the manner and in the form as prescribed by Ordinance and Statute; and,

WHEREAS, as a result of said hearing, the taking of evidence, and the viewing of exhibits advanced thereat, the Zoning Board of Appeals of McHenry County did recommend to the McHenryCounty Board the granting of the requested reclassification to I-1, with no restrictions.

WHEREAS, the McHenry County Board has considered the recommendation as submitted by the Zoning Board of Appeals of McHenry County,

NOW NOW, THEREFORE BE IT ORDAINED that the Zoning Ordinance and the Zoning maps of McHenry County, and such Ordinances and such maps as amended, be and the same are hereby amended to reclassify the above-described real estate from A-1 to I-1.

This Ordinance shall be in full force and effect from and after its passage as by law passage as by law provided.

DATED: This 16th day of June, 1981

COUNTY OF McHENRY, ILLINOIS

By: Ronald J. Morris
Chairman McHenry County Board

ATTEST:
By: Rosemary Azzaro
County Clerk

NUMBER VOTING AYE: 20

NUMBER VOTING NAY: 0

NUMBER ABSTAINING: 0

NUMBER ABSENT 2

ZONING BOARD OF APPEALS
McHENRY COUNTY, ILLINOIS

TO: Chairman and Members of
the McHenry County Board
McHenry County Courthouse
Woodstock, IL

RE: Jack Pease
(Richmond Township)

#: 81-7

FOR: Reclassification from "A-1" Agricultural District to "I-1" Industrial District

PRESENT:	Ed Schweiger, chairman; Horace Wagner, Jewel Hahn, Bert Emerson, Dan Rawson, Kathy Schaid
ABSENT:	Ray Deneen
APPEARANCE:	Thomas F. Loizzo (for petitioner) Simon Stickgold (for objector)
WITNESSES:	Jack Pease, Robert Sass
OBSERVERS/ OBJECTORS:	Howard Katzenberg, Sue Edhardt
COUNTY BD. MBRS:	None

The Zoning Board of Appeals submits for your consideration our recommendation on an application for an Amendment to the McHenry County Zoning Ordinance affecting property consisting of approximately seven acres which is the PIQ; when added together with other property controlled by the petitioner, has frontage on U.S. Route 12. The application is to reclassify the PIQ from "A-1" Agriculture District to "I-1" Industrial District.

After due notice as required by law, the Zoning Board of Appeals held a Public Hearing on March 12, 1981 in the McHenry County Courthouse. At the hearing the applicant presented testimony and documentary evidence. The evidence indicates the petitioner intends to construct a business building as expansion to an existing building.

The petitioner testified he was the president and manager of a construction company located in front of the PIQ. The parcel with the existing building is zoned "B-1" and has been for nine years. Adjacent zoning is "E-1" and farmland. Nearby is property zoned Industrial.

The function of the company is road construction and contract hauling of various commodities. Although the McHenry Comprehensive Land Use Plan reflects agriculture several industrial uses exist in the surrounding area. A nearby farmer when approached to farm the parcel refused indicating the property could not be economically farmed. A maintenance building would be constructed on the PIQ as well as being used for a parking area. Further testimony to the ownership of the two parcels and adequate frontage were made petitioner.

The equipment would normally be stored on the counstruction site only returned for maintenance. Nine trucks, seven semi-trailers and thirteen pieces of heavy equipment are involved. The petitioner stated screening of the property would be accomplished as required by the ordinance.

A witness for the petitioner testified that he was a farmer and that the PIQ was not farmable for the reason of size, soils and trees.

An objector testifed he owned the adjacent "E-1" zoned property and the requested zoning would devaluate his property even though other commercial properties were in existence prior to his "E-1" zoning.

A county planner testified the proposed zoning is not compatible with the land use and comprehensive plan.

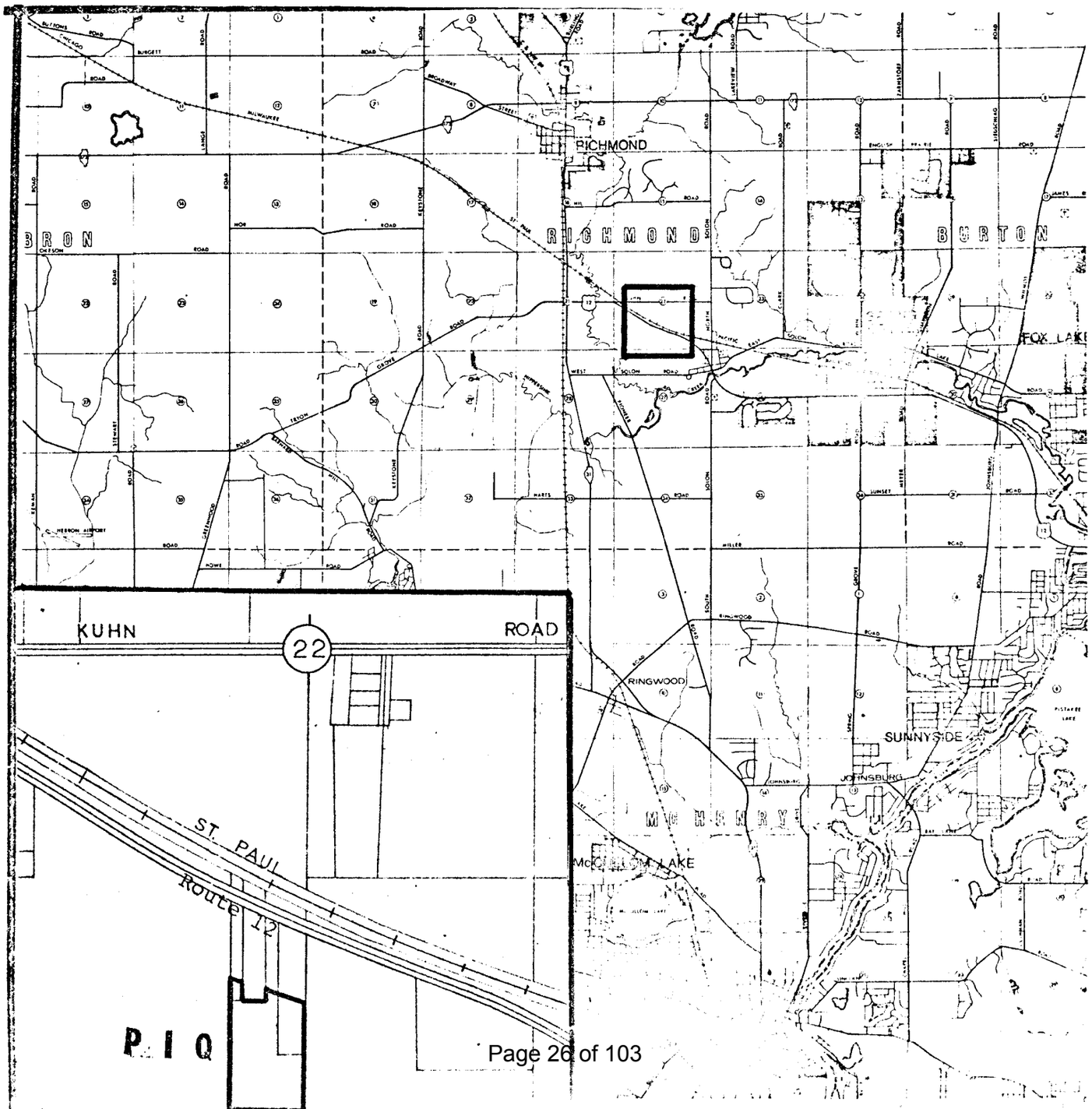
SOIL REPORT was received and reviewed.

After Deliberation on April 28, 1981, the Board made the finding of facts as follows:

1. The petitioner intends to expand his present business operation of contracting.
2. A farmer testified the land was not farmable due to soils and size.
3. Other "I-1" zoning exists in the immediate area.
4. Screening and fencing would be required on the side adjacent to "E-1" zoning to the West.

A motion to grant the petition from "A-1" to "I-1" was made by Wagner, seconded by Deneen.

The Board on a vote of 7 ayes, 0 nays recommended that the petition be granted.



McHenry County
Department of Planning & Development
2200 North Seminary Ave.
Woodstock, IL 60098
plandev@mchenrycountyil.gov
815.334.4560

MCH
MCHENRY COUNTY · IL

MEMORANDUM

TO: Patriot Property Services LLC (Randy Schenck)

FROM: Water Resources Division (Stoyan Kolev)

DATE: April 15, 2026

REGARDING: Staff Plat Review Committee Comments – Petition # SP26-0001

Based on my review of the application information provided, I have the following comments based on the McHenry County Stormwater Management Ordinance (SMO):

- The proposed site plan shows two red boxes indicated as asphalt grindings to be used as parking areas for equipment. Per staff's calculations, the larger red box was measured at 80 by 225 feet, and the smaller box was measured at 15 by 92 feet. The total proposed asphalt grindings (impervious area) are roughly 19,380 square feet. Please note that at 20,000 square feet, your development will trigger the stormwater detention requirements of the Stormwater Management Ordinance. Please revise your site plan to include the dimensions of the asphalt grindings such that it can be confirmed if detention requirements are being triggered or not. Should your CUP be granted, you will need to apply for a stormwater management permit as the addition of the asphalt grindings will constitute a hydrologic disturbance greater than 5,000 square. Any development that has a hydrologic disturbance greater than 5,000 square feet requires a stormwater management permit. Any revisions to the site plan that are required based on other department comments (e.g., environmental health, building) may require additional review from the Water Resources Division.

4/8/2026

Randall Schenck
randy@patriotpropertyservice.com

RE: Health Review #: 1003112
Pin #: 04-22-300-011
Location: 4617 US HWY 12, RICHMOND IL 60071

Dear Mr. Schenck,

The above referenced file has been reviewed for compliance with the Public Health Ordinance for McHenry County. This letter will serve as a follow-up to the Department's review of the submitted information regarding the proposal.

The proposed asphalt grinding parking lot and driveway located South of the existing building is not in conflict with the private sewage disposal system (PSDS) or water well.

The proposed use of the property as a landscaping business with 8 employees would not exceed the estimated design capacity of the existing PSDS, which was installed under permit E1162 and designed for an estimated daily sewage flow of 450 gallons per day. The estimated daily sewage flow for 8 employees is 120 gallons per day.

You have indicated there is no sign at the property. Any future addition of a sign or structure in the area of the PSDS would require review by this Department. Barriers are required for a driving area less than 5' away from the PSDS. The currently present boulders will be accepted as barriers at this time, and no expansion or parking outside of the currently paved area North of the building is allowed. No storage of offsite-generated landscape waste or vehicle maintence is proposed at the property.

Therefore, the proposed asphalt grinding parking lot and driveway and the use of the property as a landscaping business meets requirements of the Public Health Ordinance for McHenry County. A copy of the site plan submitted to the Department illustrating the location of above noted proposed structure and applicable setback distances to the private sewage disposal system and water well has been enclosed for your review and records.

The Department's review has been to determine compliance with the Public Health Ordinance for McHenry County only and it does not supersede any other governmental requirements. You must consult with the local building authority regarding any building, zoning and stormwater requirements that may apply to this proposal.

Please feel free to contact the Department should you have any questions.

Respectfully,

Celine Taylor

Celine Taylor
Private Sewage Program Supervisor
Enclosure; Copy of site plan provided by the property owner

McHenry County
Department of Planning & Development
2200 North Seminary Ave.
Woodstock, IL 60098
plandev@mchenrycountyil.gov
815.334.4560

SP26-0001
April 15, 2026

Building Requirements: Reviewed by – J-T Bowers, Plans Examiner II

1) The narrative does not indicate the use of any accessory structures for the storage area. Do note that accessory structures, such as roofed structures or concrete block roofed structures, do require building permits.
2) Changes of use, occupancy, and hazard levels would be considered Commercial Alterations. If there have been any changes to the use of the existing structure, then a Commercial Alterations permit will be required.
3) ***[2021 IFC 503.2.1]*** Fire apparatus access roads and paths shall be not less than 20'-0"clear.
    a. The Richmond Fire Protection District will have final approval on any requests for clearance reductions.
4) ***[2021 IFC 503.2.3]*** The fire apparatus access road shall be of suitable material and composition to support a fire apparatus.
    a. The Department of Planning and Development shall defer to the Richmond Fire Protection District for approval of the material and specifications of the fire apparatus road.
5) ***[2021 IFC 503.2.4]*** The required turning radius of a fire apparatus access road shall be determined by the fire code official.
    a. The Department of Planning and Development shall defer to the Richmond Fire Protection District for final approval of the configurations and dimensions of turnaround area(s) along the fire apparatus access road(s).
6) ***[Current Illinois Accessibility Code 208.2]*** The minimum required accessible parking spaces shall comply with Table 208.2. Where more than one parking facility is provided on a site, the number of accessible spaces provided on the site shall be calculated according to the number of spaces required for each parking facility.
    a.

Table 208.2 Parking Spaces	
Total Number of Parking Spaces Provided in Parking Facility	**Minimum Number of Required Accessible Parking Spaces**
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2 percent of total
1001 and over	20, plus 1 for each 100, or fraction thereof, over 1000

7) ***[Current Illinois Accessibility Code 502.2]*** The site plan does not differentiate vehicle parking spaces and access aisles. Vehicle parking spaces shall have an adjacent access aisle complying with 502.3.

GENERAL PERMIT REQUIREMENTS: Additional Codes to follow

1) Permit submittals shall demonstrate compliance with the current building codes and amendments adopted by McHenry County. Prior to application, verify the current adopted codes:
    a. 2021 International Building Code w/McHenry County Amendments
    b. 2020 National Electric Code w/McHenry County Amendments
    c. 2021 International Mechanical Code w/McHenry County Amendments
    d. 2021 International Fire Code w/McHenry County Amendments
    e. 2021 International Fuel Gas Code w/McHenry County Amendments
    f. The Illinois Plumbing Code
    g. The Illinois Accessibility Code
    h. Illinois Energy Conservation Code

This would be a pole barn split into three areas. One for hay storage, two for equipment storage, and three for an apartment for a horse caretaker (ag employee housing).

The apartment for the caretaker would be roughly 1200 SF, the garage would be 1200 SF, and the haybarn would be 2400 SF. The purpose of the caretaker is to care for and watch the horses, since we won't be living on site. We want to take into consideration that the caretaker could be someone with a small family. We do not have anyone in mind for this position yet.

Approval Standards for Conditional Use

(McHenry County Unified Development Ordinance §16.20.040E)

This form must be completed for requests for Conditional Use(s). Yes and No answers are insufficient, please provide a minimum of one (1) or two (2) sentence explanation. If there is insufficient room (650 character limit), please provide a separate response page.

1. Please describe how the conditional use meets all applicable standards of UDO §16.56 (Use Standards) and §16.60 (Site Development Standards).

   The conditional use application for the storage barn meets the applicable standards of UDO 16.560.30 subpart C for Agriculture Employee Housing. The conditional use application also meets the applicable standards of the UDO 16.60 site development standards as the section relates to Agricultural Uses.

2. Is the conditional use (compatible with the existing or planned future development of the area?

   The conditional use is compatible with the existing A1- Agriculture Zoning of the area.

3. Is the conditional use detrimental to or endanger the public health, safety, morals, comfort, or general welfare of the area?

   The conditional use is not detrimental to or endanger the public health, safety, morals, comfort, or general welfare of the area due to the structures consistency with applicable UDO sections and other agricultural buildings in the county.

4. Will the conditional use be injurious to the use and enjoyment of other property in the area?

   The conditional use will not be injurious to the use and enjoyment of other property in the area. Adjacent property owners will be unaffected by the conditional use building since it is in accordance with applicable sections of the UDO. Also, the proposed building is located in a strategic location that is far from any structures or residential homes on adjacent parcels.

5. Will the conditional use substantially diminish and impair property value in the area?

   The conditional use will not substantially diminish or impair property value in the area, the conditional use building is not anticipated to create any detrimental impacts to adjacent properties as it will not create excessive noise or smell pollution and the visual impact to adjacent sites is minimal.

6. Are adequate utilities, access roads, drainage, and other necessary facilities provided?

   Yes, adequate utilities, access roads, drainage, and other facilities will be provided for the conditional use agriculture employee housing building.

7. Has conditional use operation been designed to provide ingress and egress to minimize traffic congestion and hazard on the public streets?

   Yes, coordination has been completed with the McHenry County Highway Department to provide a safe and practical egress and ingress point to the site.

8. Will the conditional use conform to the applicable standards of the underlying zoning district?

   Yes, the conditional use will conform to the applicable standards of the underlying zoning district, A1-Agriculture.

9. Will the conditional use be reasonably in the interest of the public welfare?

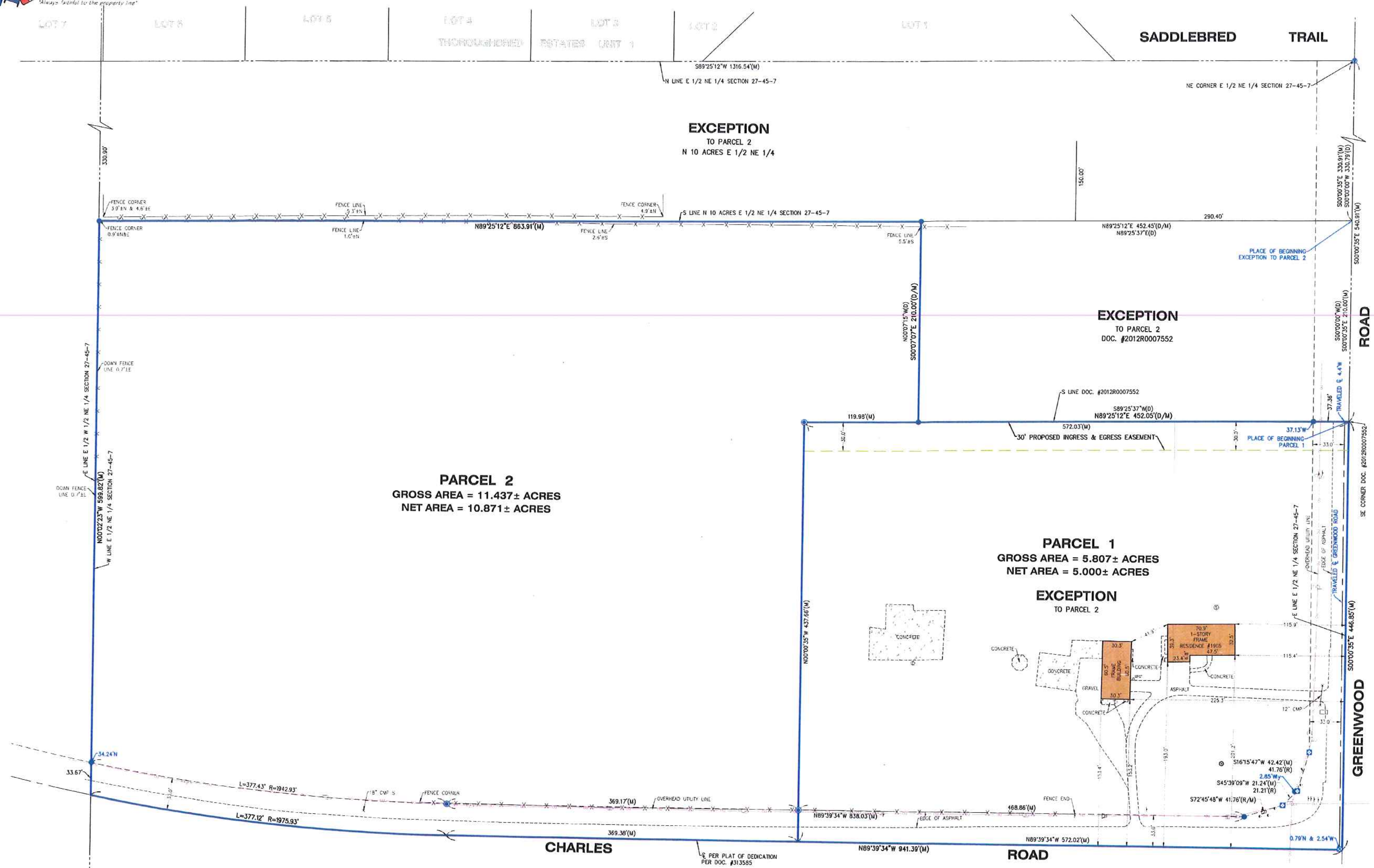
   The conditional use will be reasonably in the interest of the public welfare.

10. Will there be adequate measures taken to provide protection to groundwater recharge and groundwater quality?

    Adequate measures will be taken to provide protection to groundwater recharge and groundwater quality as required by the UDO.

Vanderstappen
Land Surveying, Inc.
www.vanderstlsi.com
1316 N. Madison St.
Woodstock, Illinois 60098
ph. 815-337-8310 fax 815-337-8314
"Always faithful to the property line"

PLAT OF SURVEY



GROSS AREA = 17.244± ACRES
NET AREA = 15.871± ACRES

50' 0' 50' 100'
SCALE: 1" = 50'

LEGAL DESCRIPTION:

PARCEL 1:

Part of the East Half of the Northeast Quarter of Section 27 lying North of the centerline of Charles Road in Township 45 North, Range 7 East of the Third Principal Meridian, being described as follows: Commencing at the Northeast corner of said East Half; thence South 00 degrees 00 minutes 35 seconds East along the East line of said East Half, 540.91 feet to the Southeast corner of the lands described in Document No. 2012R0007552 and the Place of Beginning; thence continuing South 00 degrees 00 minutes 35 seconds East along said East line, 446.85 feet to the centerline of Charles Road as dedicated by Document No. 313585; thence North 89 degrees 39 minutes 34 seconds West along said centerline, 572.02 feet; thence North 00 degrees 00 minutes 35 seconds West parallel with the East line of said East Half, 437.66 feet to the South line of said lands described in Document No. 2012R0007552 extended Westerly; thence North 89 degrees 25 minutes 12 seconds East along said South line and said line extended, 572.03 feet to the Place of Beginning, in McHenry County, Illinois.

PARCEL 2:

The East Half of the Northeast Quarter of Section 27 lying North of the centerline of the highway known as Charles Road, in Township 45 North, Range 7 East of the Third Principal Meridian, (excepting therefrom the North 10 acres thereof, also excepting therefrom the following described parcel: part of the East Half of the Northeast Quarter of Section 27, Township 45 North, Range 7 East of the Third Principal Meridian, described as follows: Commencing at the Northeast corner of said East half; thence South 00 degrees 00 minutes 00 seconds West along the East line of said East Half, 330.79 feet to the South line of the North 10.0 acres of said East half for the Place of Beginning; thence continuing South 00 degrees 00 minutes 00 seconds West along the South line of said East Half, 210.00 feet; thence South 89 degrees 25 minutes 37 seconds West, 452.05 feet; thence North 00 degrees 07 minutes 15 seconds West, 210.00 feet to the South line of the North 10.0 acres of said East Half; thence North 89 degrees 25 minutes 37 seconds East along said South line, 452.49 feet to the Place of Beginning, also excepting therefrom the following described parcel: Part of the East Half of the Northeast Quarter of Section 27 lying North of the centerline of Charles Road in Township 45 North, Range 7 East of the Third Principal Meridian, being described as follows: Commencing at the Northeast corner of said East Half; thence South 00 degrees 00 minutes 35 seconds East along the East line of said East Half, 540.91 feet to the Southeast corner of the lands described in Document No. 2012R0007552 and the Place of Beginning; thence continuing South 00 degrees 00 minutes 35 seconds East along said East line, 446.85 feet to the centerline of Charles Road as dedicated by Document No. 313585; thence North 89 degrees 39 minutes 34 seconds West along said centerline, 572.02 feet; thence North 00 degrees 00 minutes 35 seconds West parallel with the East line of said East Half, 437.66 feet to the South line of said lands described in Document No. 2012R0007552 extended Westerly; thence North 89 degrees 25 minutes 12 seconds East along said South line and said line extended, 572.03 feet to the Place of Beginning), in McHenry County, Illinois.

INGRESS & EGRESS EASEMENT:

The North 30.00 feet of that part of the East Half of the Northeast Quarter of Section 27 lying North of the centerline of Charles Road in Township 45 North, Range 7 East of the Third Principal Meridian, being described as follows: Commencing at the Northeast corner of said East Half; thence South 00 degrees 00 minutes 35 seconds East along the East line of said East Half, 540.91 feet to the Southeast corner of the lands described in Document No. 2012R0007552 and the Place of Beginning; thence continuing South 00 degrees 00 minutes 35 seconds East along said East line, 446.85 feet to the centerline of Charles Road as dedicated by Document No. 313585; thence North 89 degrees 39 minutes 34 seconds West along said centerline, 572.02 feet; thence North 00 degrees 00 minutes 35 seconds West parallel with the East line of said East Half, 437.66 feet to the South line of said lands described in Document No. 2012R0007552 extended Westerly; thence North 89 degrees 25 minutes 12 seconds East along said South line and said line extended, 572.03 feet to the Place of Beginning, in McHenry County, Illinois.

LEGEND	
	CLEAN OUT
	DOWN GUY
	FLARED END SECTION
	FOUND IRON BAR
	FOUND IRON PIPE
	FOUND MONUMENT
	FOUND ROW MARKER
	FOUND RR SPIKE
	GAS VALVE
	LIGHT
	MAIL BOX
	SEPTIC LID
	SET IRON BAR
	SIGN
SPGT	SPIGOT
	TV RISER
	UTILITY POLE
	WELL
(D)	DEED
(R)	RECORD
(M)	MEASURE

CLIENT: RICK FORESTER
DRAWN BY: SES CHECKED BY: TVA
SCALE: 1"=50' SEC. 27 T. 45 R. 7 E.
BASIS OF BEARING: ASSUMED
P.I.N.: 08-27-200-013
JOB NO.: 240661 I.D. MBS
FIELDWORK COMP.: 08/21/24 BK.___ PG.___
ALL DISTANCES SHOWN IN FEET AND DECIMAL PARTS THEREOF CORRECTED TO 68° F. REF: 160473

NOTE: Only those Building Line Restrictions or Easements shown on a Recorded Subdivision Plat are shown hereon unless the description ordered to be surveyed contains a proper description of the required building lines or easements.

- No distance should be assumed by scaling.
- No underground improvements have been located unless shown and noted.
- No representation as to ownership, use, or possession should be hereon implied.
- This Survey and Plat of Survey are void without original embossed or colored seal and signature affixed.

Compare your description and site markings with this plat and AT ONCE report any discrepancies which you may find.

STATE OF ILLINOIS)
) S.S.
COUNTY OF McHENRY)

In my professional opinion, and based on my observations, I hereby certify that we have surveyed the premises above described, and that the plat hereon is a true representation of the said survey. This professional service conforms to the current Illinois minimum standards for a boundary survey.

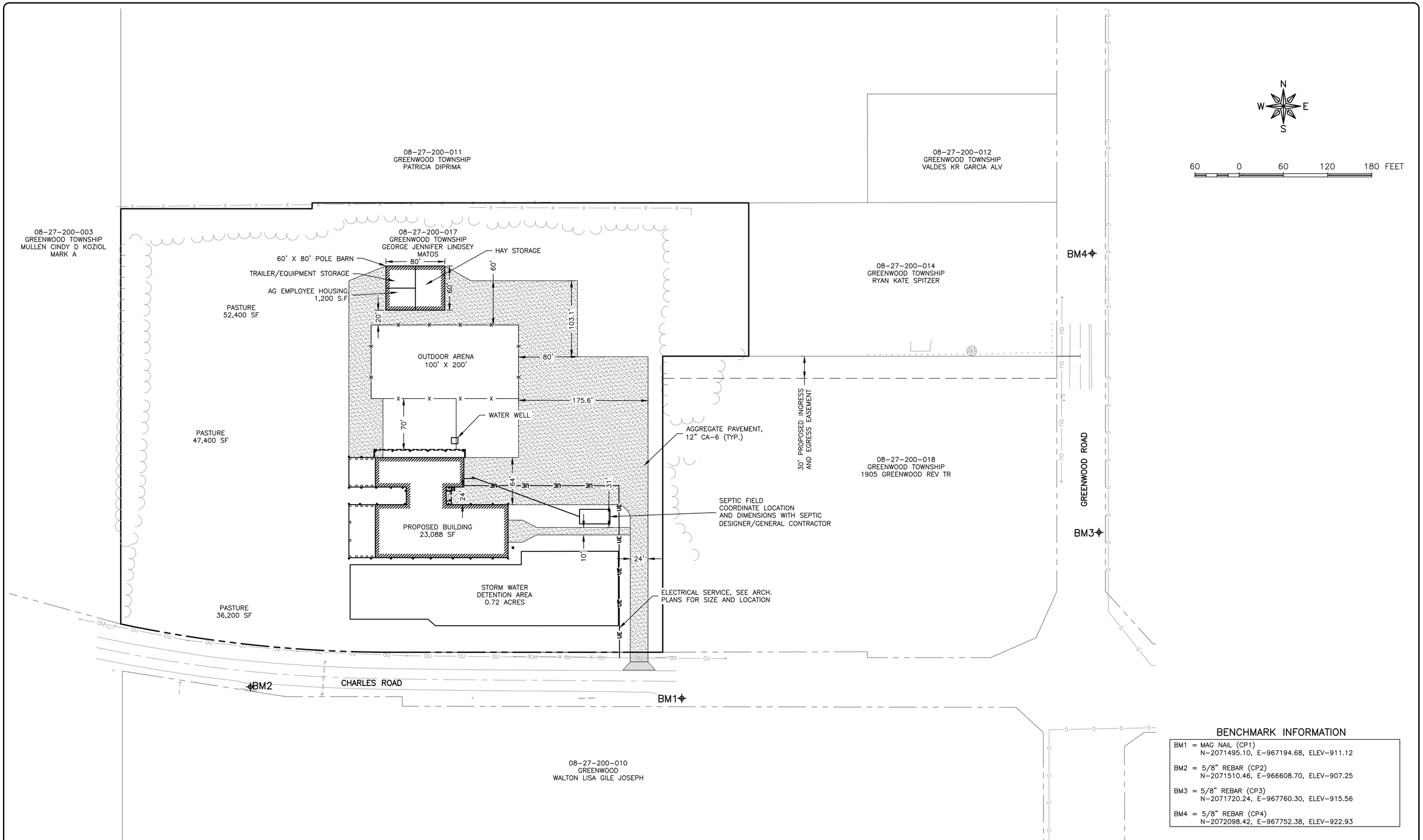
Dated at Woodstock, McHenry County, Illinois 08/29 A.D., 20 24.

Vanderstappen Land Surveying Inc.
Design Firm No. 184-002792

TERRY L. VAN ALSTINE 035-003055 PROFESSIONAL LAND SURVEYOR STATE OF ILLINOIS EXP. 11/30/2024 WOODSTOCK, ILLINOIS

By: __________
Illinois Professional Land Surveyor No. 3055

Y:\PLATS\2024\0600-0799\240661_V-240661\240661-MBS-LOCAL.dwg-Layout1-8/29/2024 3:51 PM



BENCHMARK INFORMATION

BM1 = MAG NAIL (CP1)
N-2071495.10, E-967194.68, ELEV-911.12

BM2 = 5/8" REBAR (CP2)
N-2071510.46, E-966608.70, ELEV-907.25

BM3 = 5/8" REBAR (CP3)
N-2071720.24, E-967760.30, ELEV-915.56

BM4 = 5/8" REBAR (CP4)
N-2072098.42, E-967752.38, ELEV-922.93

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL
ILLINOIS DESIGN FIRM NO. 184-003525
ILLINOIS
IOWA
WISCONSIN

PLOT DATE: 3/18/26

OWNER/DEVELOPER:
MORTON BUILDINGS, INC
252 WEST ADAMS STREET
MORTON, IL 61550

PROJECT AND LOCATION:
SITE DEVELOPMENT
WOODSTOCK, ILLINOIS

DRAWN BY: JM
APPROVED BY: JTS
DATE: 12/04/2025
SCALE: AS NOTED

REVISIONS

REV. NO.	DESCRIPTION	DATE

DRAWING:
OVERALL SITE AND UTILITY PLAN

SET TYPE: PERMIT SET
G:\C3D\26\26058\26058 Design.dwg, OVERALL SITE PLAN

JOB NUMBER:
26058

SHEET NUMBER:
7 of 18

McHENRY-LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT

NATURAL RESOURCES INFORMATION REPORT

26-028-4811

April 2, 2026

This report has been prepared for:
George Matos

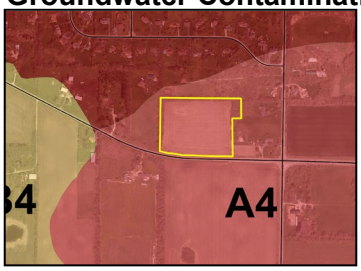
PREPARED BY:
McHENRY-LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT
1648 S. EASTWOOD DR.
WOODSTOCK, IL 60098
PHONE: (815) 338-0444
www.mchenryswcd.org

EXECUTIVE SUMMARY OF NRI REPORT #26-028-4811

It is the opinion of the McHenry-Lake County Soil and Water Conservation District Board of Directors that this report as summarized on these pages are pertinent to the requested zoning change.

Picture 1: Looking northwest from southeast corner of parcel.

Groundwater Contamination Potential and Recharge Areas:



Aquifer Sensitivity Map (*This is the area beneath the soil profile down to bedrock)
The Geologic features map indicates the parcel is comprised of A4 geologic limitations which has a high aquifer contamination potential.

Sensitive Aquifer Recharge Areas (Includes the soil profile and underlying geology).
The Sensitive Aquifer Recharge Map indicates 9.5 acres of the parcel is within an area designated as Sensitive Aquifer Recharge (red areas on map).

Soil Leachability Map (This is only the soil profile within the parcel from the surface down to approx. 5 feet).
The Soil Leachability Index indicates the entire parcel is comprised of high leaching potentials for fertilizers (identified in red).

Soil Permeability Map (This is only the soil profile within the parcel from the surface down to approx. 5 feet. Soil permeability is a reflection of the speed in which water (with or without pollutants) can move through the soil profile.)
The USDA-NRCS Soil Survey Map of the area indicates 1.4 acres or 12.4% of the parcel contains highly permeable soils that allow water to rapidly move through the soil profile.

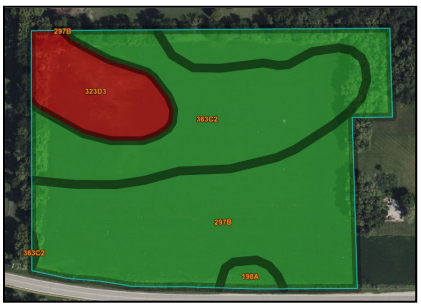
Soil Limitations (This evaluates the parcel from the surface down to approximately 5 feet.):

Septic Limitations
The NRCS Soils Survey indicates there are no very limited soils on the parcel.

Small Commercial Building Limitations
Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The NRCS Soils Survey indicates 1.4 acres or 12.4% of the parcel contains very limited soils for small commercial buildings (identified in red).

Dwellings Without Basements
Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The NRCS Soils Survey indicates there are no very limited soils for dwellings without basements.

Erosion Ratings
The NRCS Soils Survey indicates 5.1 acres or 44.9% of the parcel contains highly erodible soils.



Prime Farmland Soils
The Natural Resources Conservation Service (NRCS) Soil Survey indicates 10.0 acres or 87.5% of the parcel is comprised of prime farmland soils (identified in green).

Hydric Soils
The NRCS Soil Survey indicates there are no hydric soils on the parcel.

Floodplain Information:

The Flood Insurance Rate Map
Indicates the parcel is outside of the 100-year floodplain.

Flood of Record Map (Hydrologic Atlas)
The Flood of Record Map for this area indicates there has been no previous flooding on the parcel.

Wetland Information:

USDA-NRCS Wetland Inventory
The NRCS Wetlands Inventory indicates there are no wetlands on the parcel.

ADID Wetland Inventory
The ADID Wetland Study indicates there are no wetlands on the parcel.

Flooding Frequency
The NRCS Soil Survey indicates that flooding in not probable. The chance of flooding is nearly 0% in any year. Flooding occurs less than once in 500 years.

Ponding Frequency
The NRCS Soil Survey indicates that ponding is not probable. The chance of ponding is nearly 0% in any year.

Cultural Resources: None identified

Preserved or Recognized Ecological Sites: None identified

Woodlands: There are mature trees throughout the parcel boundaries.

Agricultural Areas: Office Maps indicate there are no State designated agricultural areas on the parcel in question.

Land Evaluation Site Assessment (LESA)
The Land Evaluation Score for the parcel is 80. A Site Assessment was not completed.

NATURAL RESOURCE INFORMATION REPORT (NRI)

NRI Report Number	26-028-4811
Applicant's Name	George Matos
Size of Parcel	11.4 acres
Zoning Change	A-1 Conditional Use
Parcel Index Number(s)	08-27-200-017
Common Location	Undefined
Contact Person	Applicant

Copies of this report or notification of the proposed land-use change were provided to:	***yes***	***no***
The Applicant	x	
The Applicant's Legal Representation/Consultant		x
The Village/City/County Planning and Zoning Department or Appropriate Agency	x	

Report Prepared By: *Spring M. Duffey* Position: *Executive Director*

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PURPOSE AND INTENT

The purpose of this report is to inform officials of the local governing body and other decision-makers with natural resource information. This information may be useful when undertaking land use decisions concerning variations, amendments or relief of local zoning ordinances, proposed subdivision of vacant or agricultural lands and the subsequent development of these lands. This report is a requirement under Section 22.02a of the Illinois Soil and Water Conservation Districts Act.

The intent of this report is to present the most current natural resource information available in a readily understandable manner. It contains a description of the present site conditions, the present resources, and the potential impacts that the proposed change may have on the site and its resources. The natural resource information was gathered from standardized data, on-site investigations and information furnished by the petitioner. This report must be read in its entirety so that the relationship between the natural resource factors and the proposed land use change can be fully understood.

Due to the limitations of scale encountered with the various resource maps, the property boundaries depicted in the various exhibits in this report provide a generalized representation of the property location and may not precisely reflect the legal description of the PIQ (Parcel in Question).

This report, when used properly, will provide the basis for proper land use change decisions and development while protecting the natural resource base of the county. It should not be used in place of detailed environmental and/or engineering studies that are warranted under most circumstances, but in conjunction with those studies.

The conclusions of this report in no way indicate that a certain land use is not possible, but it should alert the reader to possible problems that may occur if the capabilities of the land are ignored. Any questions on the technical data supplied in this report or if anyone feels that they would like to see more additional specific information to make the report more effective, please contact:

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PARCEL LOCATION

Location Map for Natural Resources Information Report # 26-028-4811

In the Northeast Quarter of Section 27, Township 45 North, Range 7 East, on 11.4 acres. This parcel is located on the north side of Charles Road, west of the intersection of Charles Road, Greenwood Road, and IL Route 120, McHenry County, IL.

ARCHAEOLOGIC/CULTURAL RESOURCES

Simply stated, cultural resources are all the past activities and accomplishments of people. They include the following: buildings; objects made or used by people; locations; and less tangible resources, such as stories, dance forms, and holiday traditions. The Soil and Water Conservation District most often encounters cultural resources as historical properties. These may be prehistoric or historical sites, buildings, structures, features, or objects. The most common type of historical property that the Soil and Water Conservation District may encounter is non-structural archaeological sites. These sites often extend below the soil surface, and must be protected against disruption by development or other earth moving activity if possible. Cultural resources are *non-renewable* because there is no way to "grow" a site to replace a disrupted site.

Landowners with historical properties on their land have ownership of that historical property. However, the State of Illinois owns all of the following: human remains, grave markers, burial mounds, and artifacts associated with graves and human remains.
Non-grave artifacts from archaeological sites and historical buildings are the property of the landowner. The landowner may choose to disturb a historical property, but may not receive federal or state assistance to do so. If an earth moving activity disturbs human remains, the landowner must contact the county coroner within 48 hours.

Office maps do not indicate historical features on the parcel in question. (PIQ)

ECOLOGICALLY SENSITIVE AREAS

What is Biological Diversity and Why Should it be Conserved?[1]

Biological diversity, or biodiversity, is the range of life on our planet. A more thorough definition is presented by botanist Peter H. Raven: "At the simplest level, biodiversity is the sum total of all the plants, animals, fungi and microorganisms in the world, or in a particular area; all of their individual variation; and all of the interactions between them. It is the set of living organisms that make up the fabric of the planet Earth and allow it to function as it does, by capturing energy from the sun and using it to drive all of life's processes; by forming communities of organisms that have, through the several billion years of life's history on Earth, altered the nature of the atmosphere, the soil and the water of our Planet; and by making possible the sustainability of our planet through their life activities now." (Raven 1994)

[1]Taken from *The Conservation of Biological Diversity in the Great Lakes Ecosystem: Issues and Opportunities*, prepared by the Nature Conservancy Great Lakes Program 79W. Monroe Street, Suite 1309, Chicago, IL 60603, January 1994

It is not known how many species occur on our planet. Presently, about 1.4 million species have been named. It has been estimated that there are perhaps 9 million more that have not been identified. What is known is that they are vanishing at an unprecedented rate. Reliable estimates show extinction occurring at a rate several orders of magnitude above "background" in some ecological systems. (Wilson 1992, Hoose 1981)

The reasons for protecting biological diversity are complex, but they fall into four major categories.

First, loss of diversity generally weakens entire natural systems. Healthy ecosystems tend to have many natural checks and balances. Every species plays a role in maintaining this system. When simplified by the loss of diversity, the system becomes more susceptible to natural and artificial perturbations. The chances of a system-wide collapse increase. In parts of the midwestem United States, for example, it was only the remnant areas of natural prairies that kept soil intact during the dust bowl years of the 1930s. (Roush 1982)

Simplified ecosystems are almost always expensive to maintain. For example, when synthetic chemicals are relied upon to

control pests, the target species are not the only ones affected. Their predators are almost always killed or driven away, exasperating the pest problem. In the meantime, people are unintentionally breeding pesticide-resistant pests. A process has begun where people become perpetual guardians of the affected area, which requires the expenditure of financial resources and human ingenuity to keep the system going.

A second reason for protecting biological diversity is that it represents one of our greatest untapped resources. Great benefits can be reaped from a single species. About 20 species provide 90% of the world's food. Of these 20, just three, wheat, maize and rice-supply over one half of that food. American wheat farmers need new varieties every five to 15 years to compete with pests and diseases. Wild strains of wheat are critical genetic reservoirs for these new varieties.

Further, every species is a potential source of human medicine. In 1980, a published report identified the market value of prescription drugs from higher plants at over $3 billion. Organic alkaloids, a class of chemical compounds used in medicines, are found in an estimated 20% of plant species. Yet only 2% of plant species have been screened for these compounds. (Hoose 1981)

The third reason for protecting diversity is that humans benefit from natural areas and depend on healthy ecosystems. The natural world supplies our air, our water, our food and supports human economic activity. Further, humans are creatures that evolved in a diverse natural environment between forest and grasslands. People need to be reassured that such places remain. When people speak of "going to the country," they generally mean more than getting out of town. For reasons of their own sanity and well being, they need a holistic, organic experience. Prolonged exposure to urban monotony produces neuroses, for which cultural and natural diversity cure.

Historically, the lack of attention to biological diversity, and the ecological processes it supports, has resulted in economic hardships for segments of the basin's human population.

The final reason for protecting biological diversity is that species and natural systems are intrinsically valuable. The above reasons have focused on the benefits of the natural world to humans. All things possess intrinsic value simply because they exist.

Biological Resources Concerning the Subject Parcel

As part of the Natural Resources Information Report, staff checks office maps to determine if any nature preserves are within 500 feet of the parcel in question. If there is a nature preserve in the area, then that resource will be identified as part of the report. The SWCD recommends that every effort be made to protect that resource. Such efforts should include, but are not limited to erosion control, sediment control, stormwater management, and groundwater monitoring.

Office maps indicate** there are no biologic preserves within 500 feet of the **parcel in question. (PIQ)

WOODLANDS

Existing mature trees should be preserved whenever possible. Woodlands provide a large number of benefits such as wildlife habitat, erosion control, air and water quality improvements, as well as aesthetic values. Construction activities can indirectly destroy trees. Oak trees are particularly susceptible to long term, permanent damage caused by construction activities and require special consideration. It is also recommended that invasive non-native species be removed whenever possible.

Native woodlands are no longer a common occurrence throughout much of McHenry County. Although forests originally covered nearly 40% of Illinois, today only about 12% of the state is forested, with most of this being secondary growth (Ill. Natural History Survey Reports, Nov/Dec 1993, No. 324). The composition of Illinois forests has changed markedly over the past three decades. 97% of the timberland is classified as hardwood forest. The forest acreage continues to increase from 4.2 million acres in 1985 to 4.3 million acres in 1998. (IL Forest Development Council News, IL DNR, Winter 2001/Volume 2, No. 1). Oak-hickory forests, which had made up half of the acreage, have declined by 14%, and make up 2.1 million acres. This decline is largely a result of wildfire suppression that allows maples to take over. Thus, the acres of maple-beech forest have risen more than 40-fold from 1962 to 1985, to one quarter of the total forest area, 696 thousand acres. Dutch elm disease and the conversion of forested bottomlands to agriculture have resulted in huge declines in the elm-ash-cottonwood forests, 906 thousand acres, falling from one third - one sixth of the Illinois forest area. Elm accounts for the greatest number of individual trees – 412 million. Other species groups with more than 100 million trees include hickory, red oak, sugar/black maple, ash, hackberry, and black cherry.

Woodlands provide many benefits such as wildlife habitat, erosion control, air and water quality improvements, and aesthetic values. Forests are responsible for much of the biological diversity in the state. Many species are dependent upon forests for food & shelter, including threatened/endangered species.

One of the most serious problems facing Illinois forests is the invasion of exotic plants and animals. Some of the most damaging plants includes European buckthorn, multiflora rose, honeysuckle, purple loosestrife, and garlic mustard.

Many trees, particularly hardwoods (especially oaks) are extremely sensitive to construction-induced disturbances. The area most susceptible to damage is within the "drip radius," the ground surface directly beneath the leafy canopy of the tree. Many trees have an extensive system of feeder roots, located within one foot of the surface, and supply the tree with the majority of its moisture and nutrient needs.

Construction activities can negatively impact trees in several different ways. Earth-moving activities that stockpile soil near trees can suffocate tree roots that, although buried, require oxygen. Vehicle traffic can compact the soil to a point where the roots no longer function effectively. Grading activities for road cuts and foundations can cause a localized drop in the water table, placing the trees under stress. The placement of pavement or stormwater management facilities near established trees can also radically change soil moisture. The removal of the accumulated organic materials normally present on a woodland floor, and the subsequent establishment of turf lawns, can drastically affect the soil temperature and nutrient balance. Injury to the bark of a tree can increase the chance of the tree being subjected to a potentially harmful disease.

If existing trees are to be maintained in a healthy state, the appropriate planning is necessary. Someone with a working knowledge of forestry should assess existing trees to determine which trees should be protected. Some tree species are not considered desirable due to their aggressive growth, behavior, and limited value to local wildlife. Proper management of woodlands and open space includes the selective elimination of such trees and replacement by more desirable species. **Trees that are to be saved should be marked and protected with snow fencing or similar material, installed around the drip radius, to prevent root damage,** and vehicle traffic should

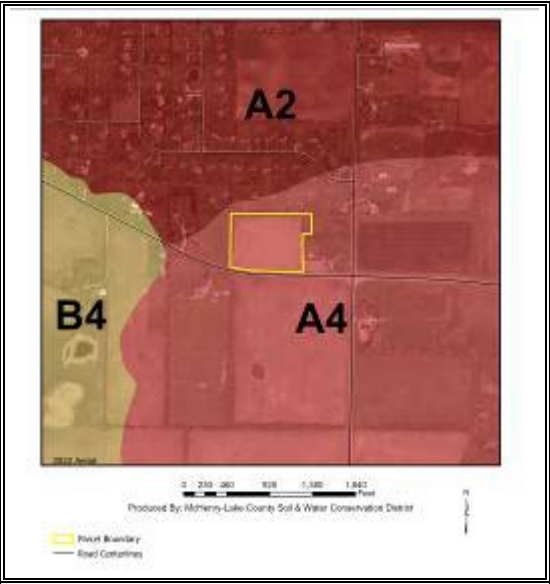
be minimized around the drip line. Contractors should be informed of the intention to preserve trees and be expected to conduct their work accordingly.

Tree damage resulting from construction activities may not be apparent for a number of years. While it is recognized that some tree loss is unavoidable, this should be minimized to the extent possible. It is highly recommended that trees lost to development activity be replaced by younger specimens of the native trees now found on the PIQ.

GEOLOGIC INFORMATION

Geology and the Proposed Land Use

As density of septic systems increases, the concern for pollution potential of local groundwater rises. Local geology plays an important role in determining the pollution potential. Groundwater pollution potential is an important factor when determining a specific area's suitability for a given land use. The local geology, is an important element of the natural resource base. This information, when compared to soils information, gives a clearer picture of conditions on this parcel.



Aquifer Sensitivity, McHenry County, Illinois (e.g., septic systems) (Vaiden et al.)

Geological data comes from the Illinois State Geological Survey Circular 559, *Geologic Mapping for Environmental Planning, McHenry County, Illinois.*

The Geologic features map indicates the parcel is comprised of A4 geologic limitations.

A-4: Geologic limitations. The potential for contaminating shallow aquifers is high. In these areas, contaminants from any source can move rapidly through these sand and gravel deposits to wells or nearby streams. In addition, this thick surficial aquifer is commonly hydraulically connected to underlying aquifers (Berg 1994). Land-use practices should be very conservative in all areas mapped as unit A. (Curran et al 1997) (Contains less than 20 feet Haeger sandy diamicton overlying 20-50 feet Henry sand and gravel.)

SENSITIVE AQUIFER RECHARGE AREAS

Developed for McHenry County in 2008 and revised in 2018 is the "McHenry County Sensitive Aquifer Recharge Areas" map. Because McHenry County is 100% reliant on groundwater and has been experiencing groundwater quantity/quality issues, the county board in 1995 authorized a groundwater investigation/report titled "County of McHenry Groundwater Resources Management Plan". Many facts in that report startled decision makers. For example, the report found that in 2000, one township was withdrawing groundwater at unsustainable rates and by 2030 if status-quo, three townships would be doing the same and that three other townships would be approaching that un-sustainability. In 2007, the County Board hired a full time Water Resources Manager and authorized the creation of the McHenry County Groundwater Task Force. The Recharge Subcommittee of the Groundwater Task Force was charged with identifying areas within the county that could be considered to have high potential for recharge of shallow groundwater and develop recommendations for protecting those areas in terms of both quantity and quality. The original main basis for the map identifying recharge is areas of high or moderately high potential for aquifer contamination as identified in the Illinois State Geological Survey's Circular 559, "Geologic Mapping for Environmental Planning, McHenry County, IL". In a meeting of the recharge subcommittee, Illinois State Geological Survey and Illinois State Water Survey, it was determined that the areas of high or moderately high potential for aquifer contamination could be qualified by using soil properties. The plan was to remove from the high and moderately high areas those soils with slow permeability, steep slopes and hydric soils that discharge groundwater. Using Table 6 of the Soil Survey of McHenry County a digital layer was developed of soil properties:

- Restricted permeability
- Slopes 4% or greater (except if the soil had excessive permeability, it was not included)

Also digitized were groundwater discharge hydric soils. NRCS Illinois Area 3 Resource Soil Scientists in 2002 developed a hydric soil recharge/flow through/discharge guide to use when designing wetland restoration. Because recharge/flow through/discharge is very complex and changes depending on the year only soils that were thought to be generally only groundwater discharge were used.

Subsequent to the original map development, 3D groundwater modeling has occurred and provided more precise groundwater flow data and thus was the basis for the 2018 map update. *(Information Courtesy of the McHenry County Groundwater Taskforce – Recharge Subcommittee.)*

The map indicates 9.5 acres of the parcel is within a Sensitive Aquifer Recharge Area.

SOILS INFORMATION

Importance of Soils Information

Soils information comes from Natural Resources Conservation Service Soil Maps and Descriptions for McHenry County. This information is important to all parties involved in determining the suitability of the proposed land use change.

Each soil polygon is given a number, which represents its soil type. The letter found after the soil type number indicates the soils slope class.

Each soil map unit has limitations for a variety of land uses such as septic systems, buildings with basements, and buildings without basements. It is important to remember that soils do not function independently of each other. The behavior of a soil depends upon the physical properties of adjacent soil types, the presence of artificial drainage, soil compaction, and its position in the local landscape.

The limitation categories (slight, moderate or severe) indicate the potential for difficulty in using that soil unit for the proposed activity and, thus, the degree of need for thorough soil borings and engineering studies. A limitation does not necessarily mean that the proposed activity cannot be done on that soil type. It does mean that the reasons for the limitation need to be thoroughly understood and dealt with in order to complete the proposed activity successfully. A severe limitation indicates that the proposed activity will be more difficult and costly to do on that soil type than on a soil type with a moderate or slight rating.

Soil survey interpretations are predictions of soil behavior for specified land uses and specified management practices. They are based on the soil properties that directly influence the specified use of the soil. Soil survey interpretations allow users of soil surveys to plan reasonable alternatives for the use and management of soils.

Soil interpretations do not eliminate the need for on-site study and testing of specific sites for the design and construction for specific uses. They can be used as a guide for planning more detailed investigations and for avoiding undesirable sites for an intended use. The scale of the maps and the range of error limit the use of the soil delineations.


Soil Map—McHenry County, Illinois
297B
363C2
323D3
297B
198A
363C2
Soil Map may not be valid at this scale.
Map Scale: 1:1,610 if printed on A landscape (11" x 8.5") sheet.
Meters
0 20 40 80 120
Feet
0 50 100 200 300
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84
N

Map Unit Symbol	Map Unit Name	Acres	Percent
198A	Elburn silt loam, cool, 0 to 2 percent slopes	0.2	1.6%
297B	Ringwood silt loam, 2 to 4 percent slopes	6.1	53.4%
323D3	Casco clay loam, 6 to 12 percent slopes, severely eroded	1.4	12.4%
363C2	Griswold loam, 4 to 6 percent slopes, eroded	3.7	32.5%
Totals for Area of Interest		**11.3**	**100.0%**

Soil Interpretations Explanation

Nonagricultural

General

These interpretative ratings help engineers, planners, and others to understand how soil properties influence behavior when used for nonagricultural uses such as building site development or construction materials. This report gives ratings for proposed uses in terms of limitations and restrictive features. The tables list only the most restrictive features. Other features may need treatment to overcome soil limitations for a specific purpose.

Ratings come from the soil's "natural" state, that is, no unusual modification occurs other than that which is considered normal practice for the rated use. Even though soils may have limitations, an engineer may alter soil features or adjust building plans for a structure to compensate for most degrees of limitations. Most of these practices, however, are costly. The final decision in selecting a site for a particular use generally involves weighing the costs for site preparation and maintenance.

Soil properties influence development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Soil limitation ratings of slight, moderate, and severe are given for the types of proposed improvements that are listed or inferred by the petitioner as entered on the report application and/or zoning petition. The most common types of building limitation that this report gives limitations ratings for is: septic systems. It is understood that engineering practices can overcome most limitations for buildings with and without basements, and small commercial buildings. Limitation ratings for these types of buildings are not commonly provided. Organic soils, when present on the parcel, are referenced in the hydric soils section of the report. This type of soil is considered to be unsuitable for all types of construction.

Limitations Ratings

1. ***Slight*** - This soil has favorable properties for the use. The degree of limitation is minor. The people involved can expect good performance and low maintenance.
2. ***Moderate*** - This soil has moderately favorable properties for the use. Special planning, design, or maintenance can overcome this degree of limitation. During some part of the year, the expected performance is less desirable than for soils rated slight.
3. ***Severe or Very Severe***- This soil has one or more properties that are unfavorable for the rated use. These may include the following: steep slopes, bedrock near the surface, flooding, high shrink-swell potential, a seasonal high water table, or low strength. This degree of limitation generally requires major soil reclamation, special design, or intensive maintenance, which in most situations is difficult and costly.

SOIL LEACHABILITY

This interpretation is designed to evaluate the potential for nitrate-nitrogen to be transmitted through the soil profile below the root zone by percolating water under nonirrigated conditions. Leaching nitrates have the potential to contaminate shallow and deep aquifers used for drinking water. The ratings are based on inherent soil and climate properties that affect nitrate leaching and do not account for management practices, such as crop rotation and rates and timing of nitrogen fertilizer applications.

The following soil and climate factors are used in the interpretation criteria:

1. Mean annual precipitation minus potential evapotranspiration - This factor provides an estimate of the amount of water that is available to move through the soil profile on an annual basis. Potential evaporation is estimated from mean annual air temperature using an algorithm (developed by the National Soil Survey Center) that employs the Hamon potential evapotranspiration method.

2. Water travel time through the entire soil profile - This factor uses the saturated hydraulic conductivity (Ksat) and thickness of each soil horizon to estimate the number of hours that would be required for a given volume of water to move through the entire soil profile. One advantage of this method for estimating the rate of water movement is that the properties and thickness of each soil horizon are accounted for instead of using an average saturated hydraulic conductivity for the entire profile. This method accounts for subtle differences between soils in texture, structure, horizon thickness, and depth to water-restricting layers.

3. Available water capacity - This factor accounts for the cumulative amount of water available to plants that the entire soil profile can hold at field capacity to a depth of 150 cm. The more water the soil profile can hold, the less water is available for deep leaching.

4. Depth to and duration of a water table - This factor uses a water table index based on the minimum average depth to a water table and the number of months that the water table is present during the period from April through October. The factor is used to account for the loss of nitrates to the atmosphere as nitrous oxide or nitrogen gas due to denitrification under anaerobic conditions caused by water saturation. The higher the water table and the longer its duration, the larger the quantity of nitrates that would potentially be lost to the atmosphere and therefore would not be available for deep leaching.

5. Slope gradient adjusted for hydrologic soil group - The steeper the slope gradient, the higher the potential for surface runoff and the lower the amount of water available to move through the soil profile. The following adjustments are made to the slope gradient by hydrologic group to account for differences in potential for surface runoff:

Hydrologic group A-slope % x 0.75

Hydrologic group B-slope % x 0.85

Hydrologic group C-slope % x 0.95

Hydrologic group D-no adjustment

The ratings are both verbal and numerical. The ratings for Nitrate Leaching Potential, Nonirrigated Areas, are calculated as follows:

- The Mean Annual Precipitation minus Potential Evapotranspiration subrule is weighted by multiplying by 0.60.
- The Water Travel Time subrule is weighted by multiplying by 0.25.
- The Available Water Capacity subrule is weighted by multiplying by 0.15.
- The sum of these three weighted subrules results in a value between 0.00 and 1.00.
- Adjustments are then made for water table depth and duration and for slope gradient adjusted for hydrologic group. The sum of the values from these subrules is subtracted from the sum in step 4 above. The maximum reduction is 0.50 for the water table index subrule and 0.30 for the slope gradient subrule.

The following rating classes for Nitrate Leaching Potential, Nonirrigated Areas, are assigned based on the final calculation from the factors above:

Low: 0.00 to 0.25

Moderate: 0.26 to 0.50

Moderately high: 0.51 to 0.75

High: 0.76 to 1.00

The ratings indicate the potential for nitrate leaching below the root zone, based on inherent soil and climate properties. A "low" rating indicates a low potential for leaching of nitrates below the root zone. A "high" rating indicates a high potential for leaching of nitrates below the root zone. The "moderate" and "moderately high" ratings indicate intermediate potential.

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.


Nitrate Leaching Potential, Nonirrigated—McHenry County, Illinois
Soil Rating Polygons
High
Moderately high
Moderate
Low
Not rated or not available
297B
363C2
323D3
198A
Soil Map may not be valid at this scale.
Map Scale: 1:1,610 if printed on A landscape (11" x 8.5") sheet.
Meters
Feet
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

Nitrate Leaching Potential, Nonirrigated

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres	Percent
198A	Elburn silt loam, cool, 0 to 2 percent slopes	High	Elburn, cool (90%)	Water quantity available for leaching (1.00)	0.2	1.6%
				Water travel time (0.85)		
297B	Ringwood silt loam, 2 to 4 percent slopes	High	Ringwood (90%)	Water quantity available for leaching (1.00)	6.1	53.4%
				Water travel time (0.93)		
				Water holding capacity (0.14)		
			Elburn, cool (5%)	Water quantity available for leaching (1.00)		
				Water travel time (0.85)		
323D3	Casco clay loam, 6 to 12 percent slopes, severely eroded	High	Casco (85%)	Water travel time (1.00)	1.4	12.4%
				Water quantity available for leaching (0.99)		
				Water holding capacity (0.96)		
363C2	Griswold loam, 4 to 6 percent slopes, eroded	High	Griswold, eroded (90%)	Water quantity available for leaching (1.00)	3.7	32.5%
				Water travel time (0.90)		
				Water holding capacity (0.36)		
			Warsaw (10%)	Water quantity available for leaching (1.00)		
				Water travel time (1.00)		
				Water holding capacity (0.89)		

Rating	Acres	Percent
High	11.3	100.0%

SOIL PERMEABILITY

Soil permeability is the quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality.

For the purposed of the NRI Report, those soils which have “rapid” to “very rapid” permeability, have been identified as “highly permeable.”

Terms describing permeability, measured in inches per hour, are as follows:

Extremely slow ..... 0.0 to 0.01 inch
Very slow ..... 0.01 to 0.06 inch
Slow ..... 0.06 to 0.2 inch
Moderately slow ..... 0.2 to 0.6 inch
Moderate ..... 0.6 inch to 2.0 inches
Moderately rapid ..... 2.0 to 6.0 inches
Rapid ..... 6.0 to 20 inches
Very rapid ..... more than 20 inches

Highly Permeable Soils

Map Unit Symbol	Highly Permeable	Acres	Percent
198A	Elburn silt loam, cool, 0 to 2 percent slopes - No	0.2	1.6%
297B	Ringwood silt loam, 2 to 4 percent slopes - No	6.1	53.4%
323D3	Casco clay loam, 6 to 12 percent slopes, severely eroded - Yes	1.4	12.4%
363C2	Griswold loam, 4 to 6 percent slopes, eroded - No	3.7	32.5%
Total Highly Permeable		**1.4**	**12.4%**

LIMITATIONS FOR SEPTIC SYSTEMS

Rating Criteria

The septic suitability ratings used in this report are based on the USDA-NRCS Resource Soil Scientist and McHenry County SWCD Soil Scientist review of the new soil legend as it relates to the current McHenry County Soil Standards Manual. The major soil properties that effect septic field functions in McHenry County are texture, permeability, high water table and flooding.

Septic Limitations

Map Unit Symbol	Map Unit Name	Septic Limitation	Acres	Percent
198A	Elburn silt loam, cool, 0 to 2 percent slopes	Moderate	0.2	1.6%
297B	Ringwood silt loam, 2 to 4 percent slopes	Slight	6.1	53.4%
323D3	Casco clay loam, 6 to 12 percent slopes, severely eroded	Slight	1.4	12.4%
363C2	Griswold loam, 4 to 6 percent slopes, eroded	Slight	3.7	32.5%
Total Severe			**0.0**	**0.0%**

SMALL COMMERCIAL BUILDINGS

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification of the soil). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.


Small Commercial Buildings—McHenry County, Illinois
Soil Rating Polygons
Very limited
Somewhat limited
Not limited
Not rated or not available
297B
323D3
363C2
297B
198A
363C2
Soil Map may not be valid at this scale.
Map Scale: 1:1,610 if printed on A landscape (11" x 8.5") sheet.
Meters
Feet
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

Small Commercial Buildings						
Map unit symbol	**Map unit name**	**Rating**	**Component name (percent)**	**Rating reasons (numeric values)**	**Acres**	**Percent**
198A	Elburn silt loam, cool, 0 to 2 percent slopes	Somewhat limited	Elburn, cool (90%)	Shrink-swell (0.48)	0.2	1.6%
				Depth to saturated zone (0.39)		
297B	Ringwood silt loam, 2 to 4 percent slopes	Somewhat limited	Ringwood (90%)	Shrink-swell (0.01)	6.1	53.4%
			Elburn, cool (5%)	Shrink-swell (0.48)		
				Depth to saturated zone (0.39)		
323D3	Casco clay loam, 6 to 12 percent slopes, severely eroded	Very limited	Casco (85%)	Slope (1.00)	1.4	12.4%
			Will (4%)	Ponding (1.00)		
				Depth to saturated zone (1.00)		
363C2	Griswold loam, 4 to 6 percent slopes, eroded	Somewhat limited	Griswold, eroded (90%)	Slope (0.14)	3.7	32.5%
			Warsaw (10%)	Slope (0.14)		

Rating	**Acres**	**Percent**
Somewhat limited	9.9	87.6%
Very limited	1.4	12.4%

DWELLING WITHOUT BASEMENTS

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper.

The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification of the soil. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.


Dwellings Without Basements—McHenry County, Illinois
Soil Rating Polygons
Very limited
Somewhat limited
Not limited
Not rated or not available
297B
363C2
323D3
297B
198A
363C2
Soil Map may not be valid at this scale.
Map Scale: 1:1,610 if printed on A landscape (11" x 8.5") sheet.
Meters
Feet
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

Dwellings Without Basements						
Map unit symbol	**Map unit name**	**Rating**	**Component name (percent)**	**Rating reasons (numeric values)**	**Acres**	**Percent**
198A	Elburn silt loam, cool, 0 to 2 percent slopes	Somewhat limited	Elburn, cool (90%)	Shrink-swell (0.48)	0.2	1.6%
				Depth to saturated zone (0.39)		
297B	Ringwood silt loam, 2 to 4 percent slopes	Somewhat limited	Ringwood (90%)	Shrink-swell (0.01)	6.1	53.4%
			Elburn, cool (5%)	Shrink-swell (0.48)		
				Depth to saturated zone (0.39)		
323D3	Casco clay loam, 6 to 12 percent slopes, severely eroded	Somewhat limited	Casco (85%)	Slope (0.04)	1.4	12.4%
363C2	Griswold loam, 4 to 6 percent slopes, eroded	Not limited	Griswold, eroded (90%)		3.7	32.5%
			Warsaw (10%)			

Rating	**Acres**	**Percent**
Somewhat limited	7.6	67.5%
Not limited	3.7	32.5%

SOIL EROSION & SEDIMENT CONTROL

Erosion is the wearing away of the soil by water, wind, and other forces. Soil erosion threatens the Nation's soil productivity and contributes the most pollutants in our waterways. Water causes about two thirds of erosion on agricultural land. Four properties, mainly, determine a soil's erodibility:

1. Texture 2. Slope 3. Structure
4. Organic matter content

Slope has the most influence on soil erosion potential when the site is under construction. Erosivity and runoff increase as slope grade increases. The runoff then exerts more force on the particles, breaking their bonds more readily and carrying them farther before deposition. The longer water flows along a slope before reaching a major waterway, the greater the potential for erosion.

Soil erosion during and after this proposed construction can be a primary non-point source of water pollution. Eroded soil during the construction phase can create unsafe conditions on roadways, decrease the storage capacity of lakes, clog streams and drainage channels, cause deterioration of aquatic habitats, and increase water treatment costs. Soil erosion also increases the risk of flooding by choking culverts, ditches and storm sewers, and by reducing the capacity of natural and man-made detention facilities.

The general principles of erosion and sedimentation control measures include:

- reducing or diverting flow from exposed areas, storing flows or limiting runoff from exposed areas,
- staging construction in order to keep disturbed areas to a minimum,
- establishing or maintaining or temporary or permanent groundcover,
- retaining sediment on site and
- properly installing, inspecting and maintaining control measures.

Erosion control practices are useful controls only if they are properly located, installed, inspected and maintained.
The SWCD recommends an erosion control plan for all building sites, especially if there is a wetland or stream nearby.

Highly Erodible Soils (HEL)

Map Unit Symbol	HEL	Acres	Percent
198A	Elburn silt loam, cool, 0 to 2 percent slopes – Non-HEL	0.2	1.6%
297B	Ringwood silt loam, 2 to 4 percent slopes – Non-HEL	6.1	53.4%
323D3	Casco clay loam, 6 to 12 percent slopes, severely eroded - HEL	1.4	12.4%
363C2	Griswold loam, 4 to 6 percent slopes, eroded - HEL	3.7	32.5%
Total Highly Erodible Soils		**5.1**	**44.9%**

PRIME FARMLAND SOILS

Prime farmland soils are an important resource to McHenry County. Some of the most productive soils in the United States occur locally. Each soil map unit in the United States is assigned a prime or non-prime rating. Prime agricultural land does not need to be in the production of food & fiber.
Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Prime Farmland Soils

Map unit symbol	Map unit name	Rating	Acres	Percent
198A	Elburn silt loam, cool, 0 to 2 percent slopes	All areas are prime farmland	0.2	1.6%
297B	Ringwood silt loam, 2 to 4 percent slopes	All areas are prime farmland	6.1	53.4%
323D3	Casco clay loam, 6 to 12 percent slopes, severely eroded	Not prime farmland	1.4	12.4%
363C2	Griswold loam, 4 to 6 percent slopes, eroded	All areas are prime farmland	3.7	32.5%
Total Prime Farmland			**10.0**	**87.5%**


Farmland Classification—McHenry County, Illinois
Soil Rating Polygons
Not prime farmland
All areas are prime farmland
Prime farmland if drained
297B
323D3
363C2
297B
198A
363C2
Soil Map may not be valid at this scale.
Map Scale: 1:1,610 if printed on A landscape (11" x 8.5") sheet.
Meters
Feet
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

AGRICULTURAL AREAS

The Agricultural Areas Conservation and Protect Act became effective July 1, 1980. The purpose of the Act is to provide a means by which agricultural land may be protected and enhanced as a viable segment of the State's economy and as an economic and environmental resource of major importance. Established Ag Areas tend to influence adjacent and surrounding land use changes since they are voluntary in nature and petitioned before the County Board for approval. Ag Areas are considered a high commitment to agriculture. Designated Ag Areas limit land utilization to specified agricultural uses within their designated boundaries. Ag Areas allow landowners limited benefits such as immunity form locally enacted ordinances, which would limit farming operations and immunity from special tax assessments from local units of government.

Office Maps indicate there are no State Designated agricultural areas on or adjacent to the parcel in question.

LAND EVALUATION & SITE ASSESSMENT (LESA)

The Land Evaluation and Site Assessment system is a tool designed to evaluate the viability of agricultural lands where changes in land-use are proposed. LESA was developed as a decision-making tool used by the Zoning Board of Appeals, City Councils or County Boards to help make unbiased decisions of proper land-use. The LESA system was developed by the USDA-NRCS and takes into consideration local conditions such as physical characteristics of the land, compatibility of surrounding land-uses, urban growth factors, and land-use policies determined by local government. LESA was designed to be used in conjunction with the county's land-use plan, zoning ordinances, and other policies being used to decide land-use changes.

Decision makers use the Land Evaluation and Site Assessment (LESA) System to determine the suitability of a land use change and/or a zoning request as it relates to agricultural land. The LESA System is a two step procedure that includes:

- Land Evaluation (LE), soils value
- Site Assessment (SA), land use

Land Evaluation (**LE**) encompasses information regarding soils found on the site and their suitability for agricultural purposes. McHenry County soils consist of 73 different soil series ranging from gravely loams to wet muck soils and from highly productive agricultural soils to high quality gravel deposits. For purposes of the Land Evaluation portion of the LESA system, each soil is assigned a relative value number, from 0 to 100, a 0 being the worst soils for crop production, 100 the best. Parcels containing higher percentages of higher valued soils will rate higher on the overall LESA score while those containing higher

percentages lowered value soils will rate lower in the overall LESA score. McHenry County SWCD provides a weighted average of the soils using a simple, mechanical, unbiased method of determining agricultural suitability of soils on site.

Site Assessment (**SA**) identifies and weighs 10 criteria, other than soils information, that contributes to the quality of a site for agricultural uses. The determination to include the specific site assessment factors directly resulted from the following:

- McHenry County Zoning Ordinance,
- 2030 Land Use Plan,
- Other adopted county policies.

In summary, the LESA evaluation addresses all factors, including soils information, together to provide a rational, consistent, and unbiased determination of the impact to agriculture from the proposed land use and zoning changes.

LAND EVALUATION (LE) WORKSHEET

Map Unit Symbol	LE Score	Acres	Percent	Weighted Ave
198A	99	0.2	1.6%	1.58
297B	89	6.1	53.4%	47.53
323D3	52	1.4	12.4%	6.45
363C2	76	3.7	32.5%	24.70
Land Evaluation Score				**80.26**

Explanation of the LE Worksheet:

Symbol: is the soil type of the polygon on the soils map.
Percentage and Acreage: the percentages of the parcel, and the area that the soil polygon represents.
LE Score: the numeric value from 0 - 100 that is assigned that soil unit
Weighted Ave: The acreage multiplied by the value of that soil unit.

SITE ASSESSMENT (SA) WORKSHEET: A Site Assessment was not completed as the underlying agricultural zoning will remain.

LAND USE PLANS

Many counties, municipalities, villages and townships have developed land-use plans. These plans are intended to reflect the existing and future land-use needs of a give community.

This parcel is within the McHenry County 2030 Land Use Plan Map and is identified as Estate.

DRAINAGE, RUNOFF AND FLOOD INFORMATION

U.S.G.S Topographic maps give information on elevations, which are important mostly to determine slopes, drainage directions, and watershed information.

Elevations determine the area of impact of floods of record. Slope information determines steepness and erosion potential. Drainage directions determine where water leaves the PIQ, possibly impacting surrounding natural resources.

Watershed information is given for changing land use to a subdivision type of development on parcels greater than 10 acres.

What is a watershed?

Simply stated, a watershed is the area of land that contributes water to a certain point. The point that we use on these reports is usually the point where water exits the parcel. The point is marked with a "O." The watershed boundary is drawn in using the following marking: (— • • —). Often times, water will flow off the parcel in two or more directions. In that case, there is a watershed break on the parcel. (— • • —), and there are two or more watersheds on the parcel.

The watershed boundary is important because the area of land in the watershed can now be calculated using an irregular shape area calculator such as a dot counter or planimiter.

Using regional storm event information, and site specific soils and land use information, the peak stormwater flow through the point marked "O" for a specified storm event can be calculated. This value is called a "Q" value (for the given storm event), and is measured in cubic feet per second (CFS).

When construction occurs, the Q value naturally increases because of the increase in impermeable surfaces. This process decreases the ability of soils to accept and temporarily hold water. Therefore, more water runs off and increases the Q value.

Theoretically, if each development, no matter how large or small, maintains their preconstruction Q value after construction by the installation of stormwater management systems, the streams and wetlands and lakes will not suffer damage from excessive urban stormwater.

For this reason, the McHenry County SWCD recommends that the developer for intense uses such as a subdivision calculate the preconstruction Q value for the exit point(s). A stormwater management system should be designed, installed, and maintained to limit the postconstruction Q value to be at or below the preconstruction value.

Importance of Flood Information

A floodplain is defined as land adjoining a watercourse (riverine) or an inland depression (non-riverine) that is subject to periodic inundation by high water. Floodplains are important areas demanding protection since they have water storage and conveyance functions which affect upstream and down stream flows, water quality and quantity, and suitability of the land for human activity. Since floodplains play distinct and vital roles in the hydrologic cycle, development that interferes with their hydrologic and biologic functions should be carefully considered.

Flooding is both dangerous to people and destructive to their properties. The following maps, when combined with wetland and topographic information, can help developers and future homeowners to "sidestep" potential flooding or ponding problems.

FIRM is the acronym for the Flood Insurance Rate Map, produced by the Federal Emergency Management Agency. These maps define flood elevation adjacent to tributaries and major bodies of water, and superimpose that onto a simplified USGS topographic map. The scale of the FIRM maps is generally dependent on the size and density of parcels in that area. (This is to correctly determine the parcel location and flood plain location.) The FIRM map has three (3) zones. A is the zone of 100 year flood, zone B is the 100 to 500 year flood, and zone C is outside the flood plain.

The Hydrologic Atlas (H.A.) Series of the Flood of Record Map is also used for the topographic information. This map is different from the FIRM map mainly because it will show isolated,

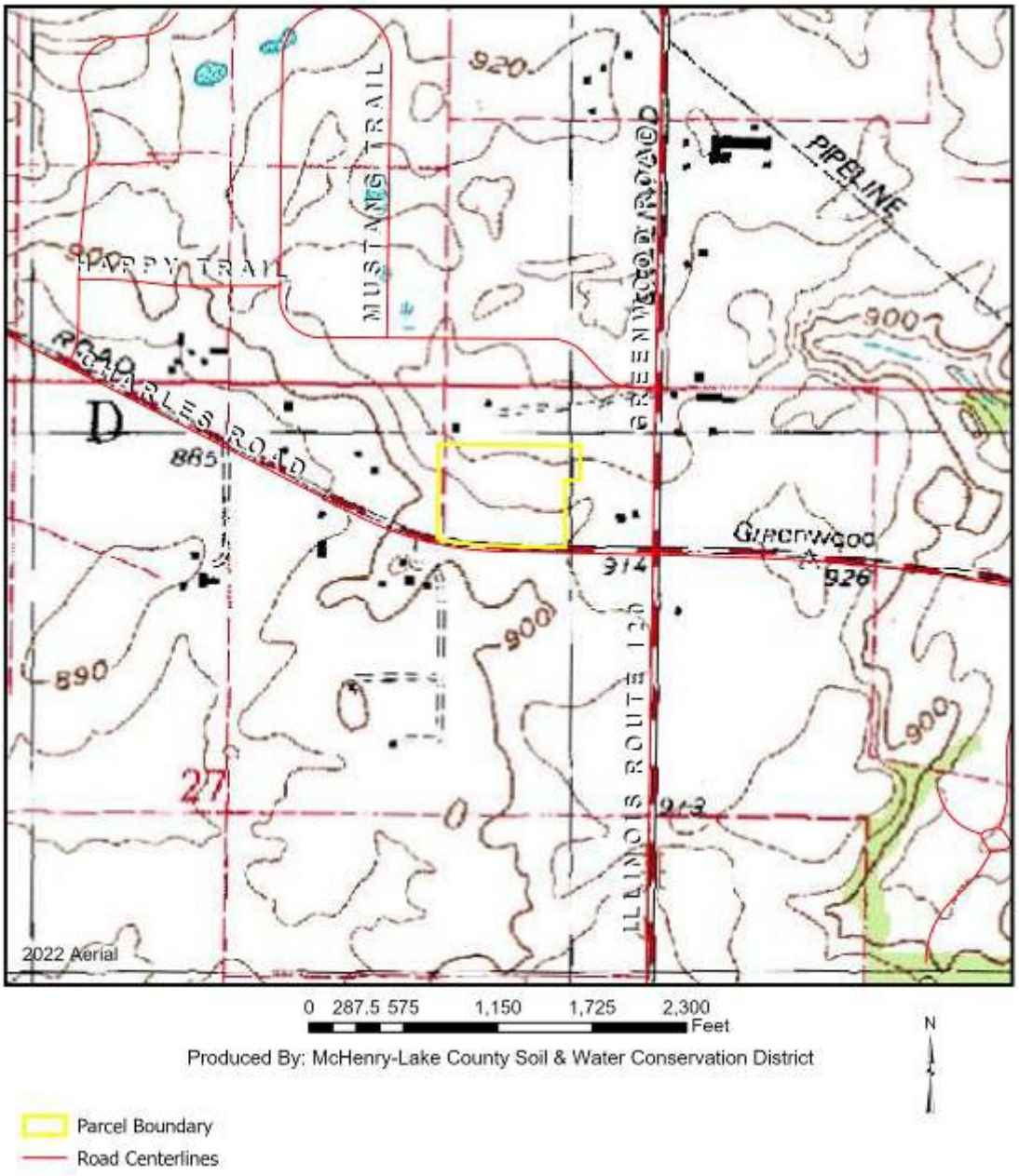
or pocketed flooded areas. McHenry County uses both these maps in conjunction with each other for flooded area determinations. The Flood of Record maps, show the areas of flood for various years. Both of these maps stress that the recurrence of flooding is merely statistical. That is to say a 100-year flood may occur twice in one year, or twice in one week, for that matter.

It should be noted that greater floods than those shown on the two maps are possible. The flood boundaries indicated provide a historic record only until the map publication date. Additionally, these flood boundaries are a function of the watershed conditions existing when the maps were produced. Cumulative changes in runoff characteristics caused by urbanization can result in an increase in flood height of future flood episodes.

Floodplains play a vital role in reducing the flood damage potential associated with an urbanizing area and, when left in an undisturbed state, also provide valuable wildlife habitat benefits. If it is the petitioner's intent to conduct floodplain filling or modification activities, the petitioner and the Unit of Government responsible need to consider the potentially adverse effects this type of action could have on adjacent properties. The change or loss of natural floodplain storage often increases the frequency and severity of flooding on adjacent property.

If the available maps indicate the presence of a floodplain on the PIQ, the petitioner should contact the IDOT-DWR and FEMA to delineate a floodplain elevation for the parcel. If a portion of the property is indeed floodplain, applicable state, county and local regulations will need to be reflected in the site plans.

Another indication of flooding potential can be found in the soils information. Hydric soils indicate the presence of drainageways, areas subject to ponding, or a naturally occurring high water table. These need to be considered along with the floodplain information when developing the site plan and the stormwater management plan. If the site does include these hydric soils and development occurs, thus raising the concerns of the loss of water storage in these soils and the potential for increased flooding in the area.

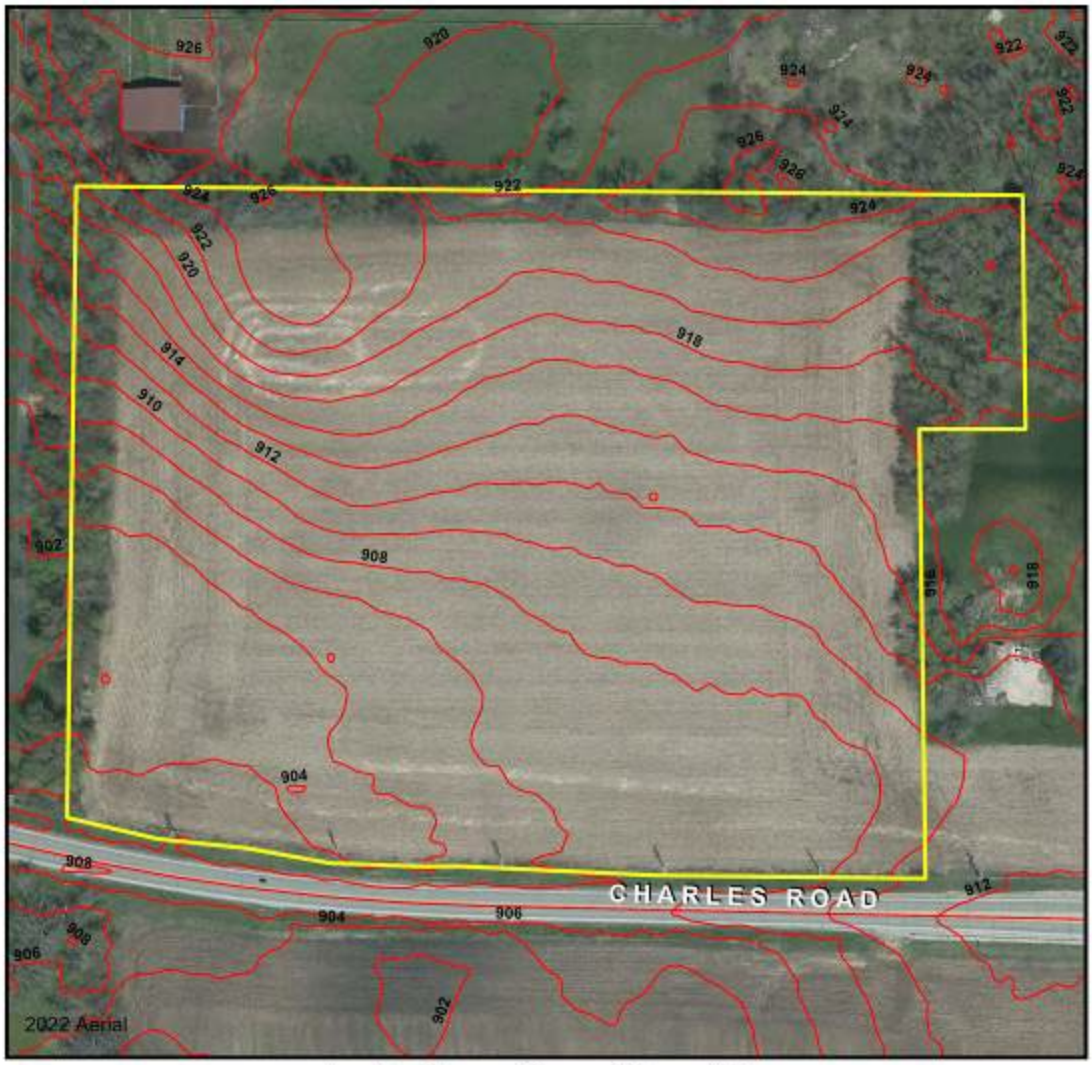


Flood of Record Map Showing Topographic Information

This parcel is located on sloping topography (slopes 0 to 12%) involving high and low areas (elevation ranges from 902' above sea level to 926' above sea level). An erosion control system should include a sedimentation basin to address these exiting concentrated flows during construction. The same area used for a sedimentation basin during construction can be used for a stormwater retention system after construction.

During construction, temporary vegetation can decrease erosion on the slopes if the area is to be mass graded.

Also, the flood of record for this area indicates previous flooding on 0% of the parcel.



0 45 90 180 270 360 Feet

N

Produced By: McHenry-Lake County Soil & Water Conservation District

Parcel Boundary
Road Centerlines
2 Ft Contours

Federal Emergency Management Agency: Flood Insurance Rate Map Panel 17111C0200J

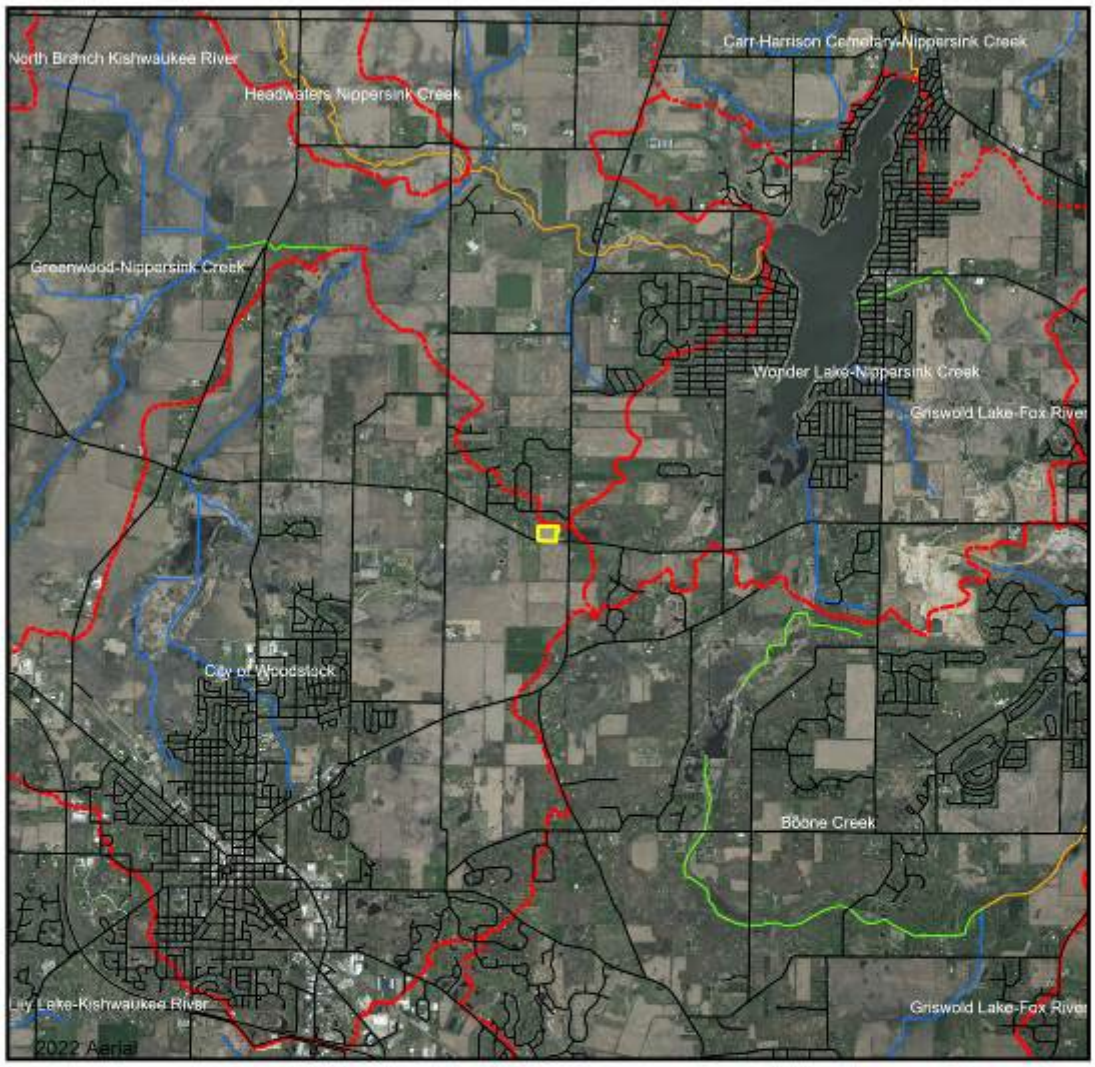
The map indicates the parcel is outside of the 100-year floodplain.

WATERSHED PLANS

Watershed and Subwatershed Information

A watershed is the area of land that drains into a specific point including a stream, lake or other body of water. High points on the Earth's surface, such as hills and ridges define watersheds. When rain falls in the watershed, it flows across the ground towards a stream or lake. Rainwater carries any pollutants it comes in contact with such as oils, pesticides, and soil. Everyone lives in a watershed. Their actions can impact natural resources and people living downstream. Residents can minimize this impact by being aware of their environment and implications of their activities, implementing practices recommended in watershed plans and educating others about their watershed.

The parcel is located within the City of Woodstock Subwatershed (HUC 12 – 071200060904) of the Nippersink Creek Watershed. The Nippersink Creek Watershed comprises 97,551.80 acres of McHenry County. In 2008 the Nippersink Creek Watershed Committee updated their Watershed Plan (originally developed in 1998) which outlines general watershed management objectives and subwatershed site specific objectives. According to the report, "Without questions, the biggest threat to the health and sustainability of the Nippersink Watershed is the rapid development of agricultural land into suburban land uses. This change in land use continues to be performed using land development methods which do not preserve the interception, infiltration, storage, and slow release of accumulated rainfall to the underlying shallow aquifers and adjacent wetlands and streams." Future impacts and impairments include: degraded water quality from development, additional channel hydromodification, loss of natural wetlands and stream corridor, and reduced groundwater recharge. Their watershed plan can be accessed on their website: http://nippersink.org/plan.htm.



0 2,1504,300 8,600 12,900 17,200
Feet

N

Produced By: McHenry-Lake County Soil & Water Conservation District

Parcel Boundary
Road Centerlines
HUC 12 Watersheds

Rivers & Streams

High Quality Streams

Stream
High Quality Aerial Score
High Quality IBI
High Quality T&E Species

WETLAND INFORMATION

Importance of Wetland Information

Wetlands function in many ways to provide numerous benefits to society. They control flooding by offering a slow release of excess water downstream or through the soil. They cleanse water by filtering out sediment and some pollutants, and can function as rechargers of our valuable groundwater. They also are essential breeding, rearing, and feeding grounds for many species of wildlife.

These benefits are particularly valuable in urbanizing areas as development activity typically adversely affects water quality, increases the volume of stormwater runoff, and increases the demand for groundwater. In an area where many individual homes rely on shallow groundwater wells for domestic water supplies, activities that threaten potential groundwater recharge areas are contrary to the public good. The conversion of wetlands, with their sediment trapping and nutrient absorbing vegetation, to biologically barren stormwater detention ponds can cause additional degradation of water quality in downstream or adjacent areas.

It has been estimated that over 95% of the wetlands that were historically present in Illinois have been destroyed while only recently has the true environmental significance of wetlands been fully recognized. America is losing 100,000 acres of wetland a year, and has saved 5 million acres total (since 1934). One acre of wetland can filter 7.3 million gallons of water a year. These are reasons why our wetlands are high quality and important.

This section contains the NRCS (Natural Resources Conservation Service) Wetlands Inventory, which is the most comprehensive inventory to date. The NRCS Wetlands Inventory is reproduced from an aerial photo at a scale of 1" equals 660 feet. The NRCS developed these maps in cooperation with U.S. EPA (Environmental Protection Agency,) and the U.S. Fish and Wildlife Service, using the National Food Security Act Manual, 3rd Edition. The main purpose of these maps is to determine wetland areas on agricultural fields and areas that may be wetlands but are in a non-agriculture setting.

The NRCS Wetlands Inventory in no way gives an exact delineation of the wetlands, but merely an outline, or the determination that there is a wetland within the outline. For the final, most accurate wetland **determination** of a specific wetland, a wetland ***delineation*** must be certified by NRCS staff using the National Food Security Act Manual (on agricultural land.) On urban land, a certified wetland delineator must perform the delineation using the ACOE 1987 Manual. *See the glossary section for the definitions of "delineation" and "determination."*

Natural Resources Conservation Service: Wetland Inventory Map.

The map indicates there are no wetlands on the parcel.

ADID (ADVANCED IDENTIFICATION OF AQUATIC RESOURCES)

Wetlands are some of the most productive and diverse ecological systems on Earth. The unique characteristics of plants, soils, and water distinguish these systems. Marshes, wet meadows, fens and bogs are some of the common wetland types found within McHenry County. There are also various streams scattered throughout the county, including several that rank among the highest quality in Illinois.

These wetlands, lakes and streams provide needed habitat and food for fish and wildlife. Diverse plants both common and rare are can be found in wetlands, and over 40 percent of Illinois' threatened and endangered plant and animal species rely on wetlands.

Wetlands have many other roles. They are critical to the control of flooding by storing vast quantities of runoff water during floods, and releasing it slowly to rivers and srteams as the floodwater recedes. This in turn helps to prevent erosion in downstream channels, aids in groundwater recharge, and stabilizes the baseflow in streams and rivers. Wetlands are also crucial in protecting water quality. Wetlands that border lakes and streams prevent erosion by holding soil in place and deflecting erosive flows and waves. They also remove sediment, nutrients, and toxic chemicals from runoff water.
Other benefits include groundwater recharge, discharge of clean water, recreation, enhancement of natural aesthetics and serve as buffers between adjacent developments.

This program designed by the EPA (Environmental Protection Agency), is intended to improve awareness of the functions and values of wetlands and other U.S. waters. It is also intended to inform landowners and developers that high quality sites may not be unsuitable for the disposal of dredged or fill material. These ADID projects can also provide guidance on the long-term protection and management of aquatic resources.

The wetland boundaries shown are not jurisdictional delineations. Any proposed drainage work in wet areas requires a certified wetland determination.

The ADID study indicates there are no wetlands on the parcel in question. (Map shown on next page.)

0 45 90 180 270 360 Feet

N

Produced By: McHenry-Lake County Soil & Water Conservation District

Parcel Boundary
Road Centerlines

ADID Wetlands
farmed wetland
high functional wetland
high quality lake
high quality wetland
lake
wetland

Rivers &
High Quality
Stream
High Quality
High Quality IBI
High Quality

Hydric Soils

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field.

These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States. Federal Register. September 18, 2002. Hydric soils of the United States.

Soils information gives another indication of flooding potential. The soils map on this page indicates the soil(s) on the parcel that the Natural Resources Conservation Service indicates as hydric. Hydric soils by definition have seasonal high water at or near the soil surface and/or have potential flooding or ponding problems. All hydric soils range from poorly suited to unsuitable for building. One group of the hydric soils, are the organic soils, which formed from dead organic material. Organic soils are unsuitable for building because of not only the high water table, but also their subsidence problems.

It is also important to add the possibility of hydric inclusions in a soil type. An inclusion is a soil polygon that is too small to appear on these maps. While relatively insignificant for agricultural use, hydric soil inclusions become more important to more intense uses such as a residential subdivision.
While considering hydric soils and hydric inclusions, it is noteworthy to mention that subsurface agriculture drainage tile occurs in almost all poorly drained and somewhat poorly drained soils. Drainage tile expedites drainage and facilitates farming. It is imperative that these drainage tiles remain undisturbed. A damaged subsurface drainage tile may return original hydrologic conditions to all of the areas that drained through the tile (ranging from less than one acre to many square miles.)

For an intense land use, such as a subdivision, the McHenry County SWCD recommends the following:

1. A topographical survey with 1 foot contour intervals to accurately define the flood area on the parcel.
2. An intensive soil survey to define most accurately the locations of the hydric soils and inclusions
3. A drainage tile survey on the area to locate the tiles that must be preserved.

In general, the District does not recommend building on hydric soils because of the unfavorable properties they exhibit and because of their long term, negative effects on the structures built.

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres	Percent
198A	Elburn silt loam, cool, 0 to 2 percent slopes	10	0.2	1.6%
297B	Ringwood silt loam, 2 to 4 percent slopes	5	6.1	53.4%
323D3	Casco clay loam, 6 to 12 percent slopes, severely eroded	4	1.4	12.4%
363C2	Griswold loam, 4 to 6 percent slopes, eroded	0	3.7	32.5%
Total Hydric			**0.0**	**0.0%**


Hydric Rating by Map Unit—McHenry County, Illinois
Soil Rating Polygons
Hydric (100%)
Hydric (66 to 99%)
Hydric (33 to 65%)
Hydric (1 to 32%)
Not Hydric (0%)
Not rated or not available
297B
363C2
323D3
198A
Soil Map may not be valid at this scale.
Map Scale: 1:1,610 if printed on A landscape (11" x 8.5") sheet.
Meters
Feet
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84
N

FLOODING FREQUENCY

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent.

"None" means that flooding is not probable. The chance of flooding is nearly 0 percent in any year. Flooding occurs less than once in 500 years.

"Very rare" means that flooding is very unlikely but possible under extremely unusual weather conditions. The chance of flooding is less than 1 percent in any year.

"Rare" means that flooding is unlikely but possible under unusual weather conditions. The chance of flooding is 1 to 5 percent in any year.

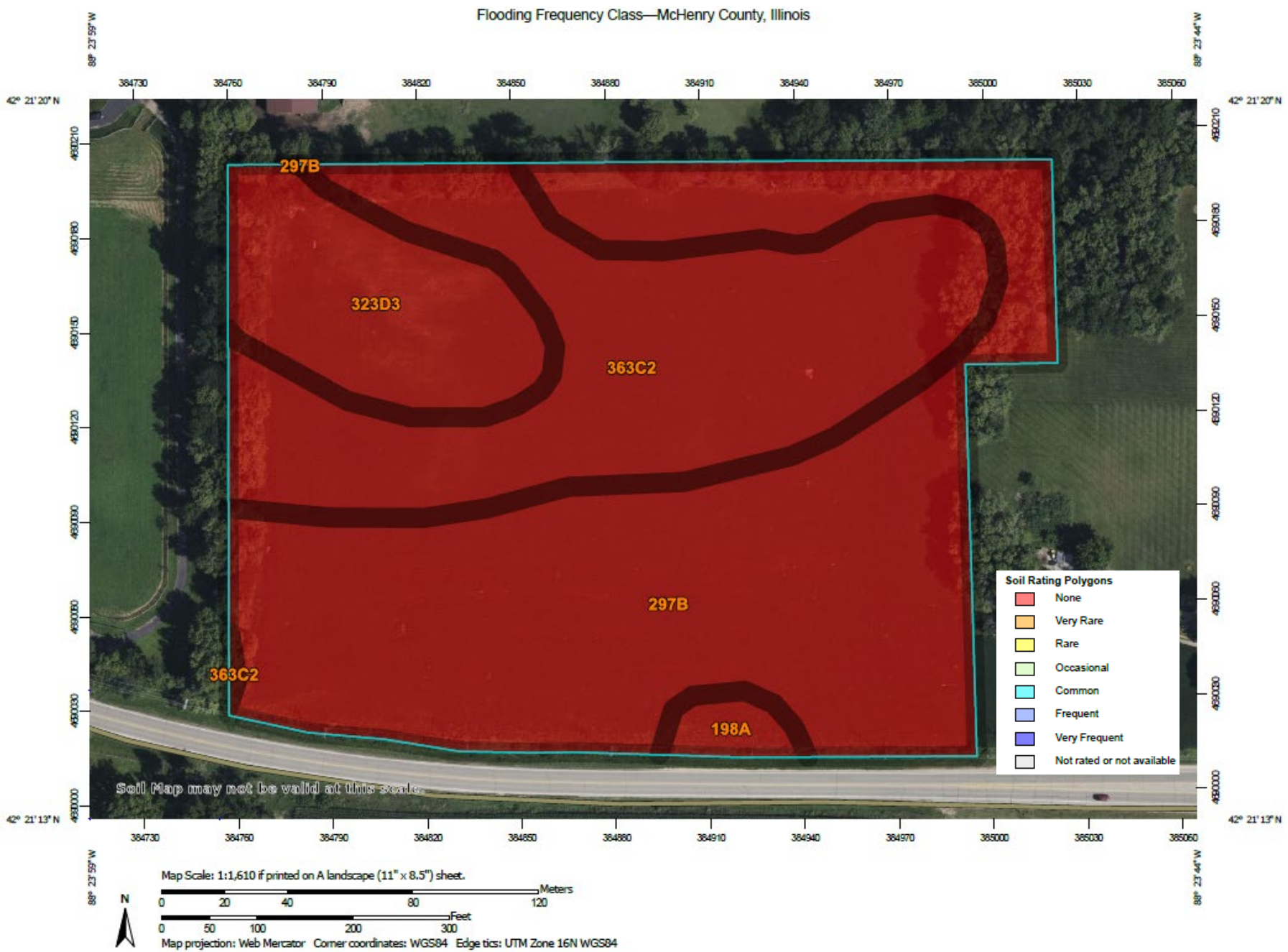
"Occasional" means that flooding occurs infrequently under normal weather conditions. The chance of flooding is 5 to 50 percent in any year.

"Frequent" means that flooding is likely to occur often under normal weather conditions. The chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year.

"Very frequent" means that flooding is likely to occur very often under normal weather conditions. The chance of flooding is more than 50 percent in all months of any year.

Flooding Frequency Class

Map unit symbol	Map unit name	Rating	Acres	Percent
198A	Elburn silt loam, cool, 0 to 2 percent slopes	None	0.2	1.6%
297B	Ringwood silt loam, 2 to 4 percent slopes	None	6.1	53.4%
323D3	Casco clay loam, 6 to 12 percent slopes, severely eroded	None	1.4	12.4%
363C2	Griswold loam, 4 to 6 percent slopes, eroded	None	3.7	32.5%
Total Flooding			**0.0**	**0.0%**


Flooding Frequency Class—McHenry County, Illinois
89° 23' 59" W
89° 23' 44" W
42° 21' 20" N
42° 21' 13" N
384730
384760
384790
384820
384850
384880
384910
384940
384970
385000
385030
385060
4930210
4930180
4930150
4930120
4930090
4930060
4930030
4930000
297B
323D3
363C2
297B
363C2
198A
Soil Rating Polygons
None
Very Rare
Rare
Occasional
Common
Frequent
Very Frequent
Not rated or not available
Soil Map may not be valid at this scale.
Map Scale: 1:1,610 if printed on A landscape (11" x 8.5") sheet.
N
Meters
0
20
40
80
120
Feet
0
50
100
200
300
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

PONDING FREQUENCY

Ponding is standing water in a closed depression. The water is removed only by deep percolation, transpiration, or evaporation or by a combination of these processes. Ponding frequency classes are based on the number of times that ponding occurs over a given period. Frequency is expressed as none, rare, occasional, and frequent.

"None" means that ponding is not probable. The chance of ponding is nearly 0 percent in any year.

"Rare" means that ponding is unlikely but possible under unusual weather conditions. The chance of ponding is nearly 0 percent to 5 percent in any year.

"Occasional" means that ponding occurs, on the average, once or less in 2 years. The chance of ponding is 5 to 50 percent in any year.

"Frequent" means that ponding occurs, on the average, more than once in 2 years. The chance of ponding is more than 50 percent in any year.

Ponding Frequency Class

Map unit symbol	Map unit name	Rating	Acres	Percent
198A	Elburn silt loam, cool, 0 to 2 percent slopes	None	0.2	1.6%
297B	Ringwood silt loam, 2 to 4 percent slopes	None	6.1	53.4%
323D3	Casco clay loam, 6 to 12 percent slopes, severely eroded	None	1.4	12.4%
363C2	Griswold loam, 4 to 6 percent slopes, eroded	None	3.7	32.5%
Total Ponding			**0.0**	**0.0%**


Ponding Frequency Class—McHenry County, Illinois
Soil Rating Polygons
None
Rare
Occasional
Frequent
Not rated or not available
297B
363C2
323D3
198A
297B
363C2
Soil map units may not be valid at this scale.
Map Scale: 1:1,610 if printed on A landscape (11" x 8.5") sheet.
Meters
Feet
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

WETLAND AND FLOODPLAIN REGULATIONS

PLEASE READ THE FOLLOWING IF YOU ARE PLANNING TO DO ANY WORK NEAR A STREAM (THIS INCLUDES SMALL UNNAMED STREAMS), LAKE, WETLAND OR FLOODWAY.

The laws of the United States and the State of Illinois assign certain agencies specific and different regulatory roles to protect the waters within the State's boundaries. These roles, when considered together, include protection of navigation channels and harbors, protection against flood way encroachments, maintenance and enhancement of water quality, protection of fish and wildlife habitat and recreational resources, and, in general, the protection of total public interest. Unregulated use of the waters within the State of Illinois could permanently destroy or alter the character of these valuable resources and adversely impact the public. Therefore, please contact the proper regulatory authorities when planning any work associated with Illinois waters so that proper consideration and approval can be obtained.

WHO MUST APPLY

Anyone proposing to dredge, fill, rip rap, or otherwise alter the banks or beds of, or construct, operate, or maintain any dock, pier, wharf, sluice, dam, piling, wall, fence, utility, flood plain or flood way subject to County, State or Federal regulatory jurisdiction should apply for agency approvals.

REGULATORY AGENCIES:

- **Wetlands or U.S. Waters: U.S. Army Corps of Engineers**, Chicago District,
  231 S. LaSalle St., Suite 1500
  Chicago, IL 60604
  Phone: (312) 846-5330
- **Isolated Wetlands and Floodplain: McHenry County Department of Planning & Development Stormwater Division,**
  2200 N. Seminary Ave., Woodstock, IL 60098
  Phone: (815) 334-4560
- **Flood plains: Illinois Department of Natural Resources \ Office of Water Resources**, 201 W. Center Court, Schaumburg, IL 60196-1096, phone (847).705.
- **Water Quality \ Erosion Control: Illinois Environmental Protection Agency**, Division of Water Pollution Control, Permit Section, Watershed Unit, 2200 Churchill Road, Springfield, IL 62706, phone (217).782.0610.

COORDINATION

We recommend Early coordination with the regulatory agencies BEFORE finalizing work plans. This allows the agencies to recommend measures to mitigate or compensate for adverse impacts. Also, the agency can make possible environmental enhancement provisions early in the project planning stages. This could reduce time required to process necessary approvals.

CAUTION: Contact with the United States Army Corps of Engineers is strongly advised before commencement of any work in or near a water of the United States. This could save considerable time and expense. Persons responsible for willful and direct violation of Section 10 of the River And Harbor Act of 1899 or Section 404 of the Federal Water Pollution Control Act are subject to fines ranging up to $27,500 per day of violation and imprisonment for up to one year or both.

THREATENED & ENDANGERED SPECIES

The State of Illinois provides habitat for 500 threatened and endangered species, including 356 plants and 144 animals. Twelve counties in Illinois have 50 or more endangered species, 5 of which are in northeastern Illinois. ("Endangered Species of Illinois," by the U.S. Fish & Wildlife Service, IDOC Division of Natural Heritage & Endangered Species Protection Board).

Approximately 40% of the state's listed species depend on wetlands for survival. The two main causes for species decline are the loss of habitat and the degradation of habitat. While habitat loss is the primary reason species become endangered, the effects of habitat change are not always seen overnight. It is seldom simply a case of individual animals or plants being killed. More often, habitat loss and the resulting species declines are indirectly caused and are the result of cumulative impacts over a period of time.

It is because of this slow encroachment of habitat degradation, fragmentation and loss that wildlife habitat must be looked at on a greater scale than just the site. Cumulative impacts occur because a small amount of damage is being done over here and little over there and no one is looking at the whole picture. Thus, the villages and county are strongly encouraged to look at habitat management on a regional scale.

THERE IS A POSSIBILITY FOR ENDANGERED SPECIES ON THE SITE. IF A REQUEST HAS NOT ALREADY BEEN SUBMITTED, THE PETITIONER SHOULD ASK THE ILLINOIS DEPARTMENT OF NATURAL RESOURCES TO CHECK THIS PARCEL FOR THE PRESENCE OF THREATENED OR ENDANGERED SPECIES. SHOULD ANY SUCH SPECIES BE IDENTIFIED AS UTILIZING THIS PARCEL, THE PETITIONER WILL BE NOTIFIED ACCORDINGLY. FOR MORE INFORMATION ON HOW TO REQUEST AN ENDANGERED SPECIES CHECK ON THIS PARCEL, PLEASE VISIT
www.dnrecocat.state.il.us/ecopublic.

GLOSSARY

AGRICULTURAL PROTECTION AREAS (AG AREAS) - Allowed by P.A. 81-1173. An AG AREA consists of a minimum of 350 acres of farmland, as contiguous and compact as possible. Petitioned by landowners, AG AREAS protect for a period of ten years initially, then reviewed every eight years thereafter. AG AREA establishment exempts landowners from local nuisance ordinances directed at farming operations, and designated land can not receive special tax assessments on public improvements that do not benefit the land, e.g. water and sewer lines.

AGRICULTURE - The growing, harvesting and storing of crops including legumes, hay, grain, fruit and truck or vegetable including dairying, poultry, swine, sheep, beef cattle, pony and horse production, fur farms, and fish and wildlife farms; farm buildings used for growing, harvesting and preparing crop products for market, or for use on the farm; roadside stands, farm buildings for storing and protecting farm machinery and equipment from the elements, for housing livestock or poultry and for preparing livestock or poultry products for market; farm dwellings occupied by farm owners, operators, tenants or seasonal or year around hired farm workers.

B.G. - Below Grade. Under the surface of the Earth.

BEDROCK - Indicates depth at which bedrock occurs. Also lists hardness as rippable or hard.

FLOODING - Indicates frequency, duration, and period during year when floods are likely to occur.

HIGH LEVEL MANAGEMENT - The application of effective practices adapted to different crops, soils, and climatic conditions. Such practices include providing for adequate soil drainage, protection from flooding, erosion and runoff control, near optimum tillage, and planting the correct kind and amount of high quality seed. Weeds, diseases, and harmful insects are controlled. Favorable soil reaction and near optimum levels of available nitrogen, phosphorus, and potassium for individual crops are maintained. Efficient use is made of available crop residues, barnyard manure, and/or green manure crops. All operations, when combined efficiently and timely, can create favorable growing conditions and reduce harvesting losses -- within limits imposed by weather.

HIGH WATER TABLE - A seasonal high water table is a zone of saturation at the highest average depth during the wettest part of the year. May be apparent, perched, or artesian kinds of water tables.

Water Table, Apparent - A thick zone of free water in the soil. An apparent water table is indicated by the level at which water stands in an uncased borehole after adequate time is allowed for adjustment in the surrounding soil.

Water Table, Artesian - A water table under hydrostatic head, generally beneath an impermeable layer. When this layer is penetrated, the water level rises in an uncased borehole.

Water Table, Perched - A water table standing above an unsaturated zone. In places an upper, or perched, water table is separated from a lower one by a dry zone.

DELINEATION - For Wetlands: A series of orange flags placed on the ground by a certified professional that outlines the wetland boundary on a parcel.

DETERMINATION - A polygon drawn on a map using map information that gives an outline of a wetland.

HYDRIC SOIL - This type of soil is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part (USDA Natural Resources Conservation Service 1987)

INTENSIVE SOIL MAPPING - Mapping done on a smaller more intensive scale than a modern soil survey to determine soil properties of a specific site, e.g. mapping for septic suitability.

LAND EVALUATION AND SITE ASSESSMENT (L.E.S.A.) - LESA is a systematic approach for evaluating a parcel of land and to determine a numerical value for the parcel for farmland preservation purposes.

MODERN SOIL SURVEY - A soil survey is a field investigation of the soils of a specific area, supported by information from other sources. The kinds of soil in the survey area are identified and their extent shown on a map, and an accompanying report describes, defines, classifies, and interprets the soils. Interpretations predict the behavior of the soils under different used and the soils' response to management. Predictions are made for areas of soil at specific places. Soils information collected in a soil survey is useful in developing land-use plans and alternatives involving soil management systems and in evaluating and predicting the effects of land use.

PALUSTRINE - Name given to inland fresh water wetlands

PERMEABILITY - Values listed estimate the range (in rate and time) it takes for downward movement of water in the major soil layers when saturated, but allowed to drain freely. The estimates are based on soil texture, soil structure, available data on permeability and infiltration tests, and observation of water movement through soils or other geologic materials.

PIQ - Parcel in question

POTENTIAL FROST ACTION - Damage that may occur to structures and roads due to ice lens formation causing upward and lateral soil movement. Based primarily on soil texture and wetness.

PRIME FARMLAND - Prime farmland soils are lands that are best suited to food, feed, forage, fiber and oilseed crops. It may be cropland, pasture, woodland, or other land, but it is not urban and built up land or water areas. It either is used for food or fiber or is available for those uses. The soil qualities, growing season, and moisture supply are those needed for a well managed soil economically to produce a sustained high yield of crops. Prime farmland produces in highest yields with minimum inputs of energy and economic resources, and farming the land results in the least damage to the environment.

Prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation. The temperature and growing season are favorable. The level of acidity or alkalinity is acceptable. Prime farmland has few or no rocks and is permeable to water and air. It is not excessively erodible or saturated with water for long periods and is not frequently flooded during the growing season. The slope ranges mainly from 0 to 5 percent. (Source USDA Natural Resources Conservation Service)

PRODUCTIVITY INDEXES - Productivity indexes for grain crops express the estimated yields of the major grain crops grown in Illinois as a single percentage of the average yields obtained under basic management from several of the more productive soils in the state. This group of soils is composed of the Muscatine, Ipava, Sable, Lisbon, Drummer, Flanagan, Littleton, Elburn and Joy soils. Each of the 425 soils found in Illinois are found in Circular 1156 from the Illinois Cooperative Extension Service.

SEASONAL - When used in reference to wetlands indicates that the area is flooded only during a portion of the year.

SHRINK-SWELL POTENTIAL - Indicates volume changes to be expected for the specific soil material with changes in moisture content.

SOIL MAPPING UNIT - A map unit is a collection of soil areas of miscellaneous areas delineated in mapping. A map unit is generally an aggregate of the delineations of many different bodies of a kind of soil or miscellaneous area but may consist of only one delineated body. Taxonomic class names and accompanying phase terms are used to name soil map units. They are described in terms of ranges of soil properties within the limits defined for taxa and in terms of ranges of taxadjuncts and inclusions.

SOIL SERIES - A group of soils, formed from a particular type of parent material, having horizons that, except for texture of the A or surface horizon, are similar in all profile characteristics and in arrangement in the soil profile. Among these characteristics are color, texture, structure, reaction, consistence, and mineralogical and chemical composition.

SUBSIDENCE - Applies mainly to organic soils after drainage. Soil material subsides due to shrinkage and oxidation.

TERRAIN - The area or surface over which a particular rock or group of rocks is prevalent.

TOPSOIL - That portion of the soil profile where higher concentrations of organic material, fertility, bacterial activity and plant growth take place. Depths of topsoil vary between soil types.

WATERSHED - An area of land that drains to an associated water resource such as a wetland, river or lake. Depending on the size and topography, watersheds can contain numerous tributaries, such as streams and ditches, and ponding areas such as detention structures, natural ponds and wetlands.

WETLAND - An area that has a predominance of hydric soils and that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances does support, a prevalence of

hydrophytic vegetation typically adapted for life in saturated soil conditions.

REFERENCES

A Citizens' Guide to Protecting Wetlands. By The National Wildlife Federation. Washington, D.C., March 1989

Agricultural Areas Inventory
McHenry County Soil & Water Conservation District

FIRM - Flood Insurance Rate Maps for McHenry County. Prepared by FEMA - Federal Emergency Management Agency.

Flood of Record (Hydrologic Atlas) for McHenry County
U.S. Geologic Survey

Geologic Mapping for Environmental Planning, McHenry County, Illinois. Department of Natural Resources Illinois State Geological Survey, Circular 559, 1997

Geology For Planning in Boone and Winnebago Counties. State Geological Survey Division, Circular 531. 1984

Hydrologic Unit Map for McHenry County.
Natural Resources Conservation Service, United States Department of Agriculture

Hydric Soils of the United States. USDA Natural Resources Conservation Service, 1987.

Illinois Natural Areas Inventory
Illinois Department of Natural Resources

Land Evaluation and Site Assessment System. 2005. The McHenry County Department of Planning and McHenry County Soil and Water Conservation District. In cooperation with: USDS, Natural Resources Conservation Service

McHenry County Advanced Identification of Wetlands (ADID)
Northeastern Illinois Planning Commission

McHenry County Health Code relating to septic system suitability

McHenry County 2030 Land Use Plan
McHenry County Dept. of Planning and Development

McHenry County Natural Areas Inventory
McHenry County Conservation District

McHenry County, Illinois Fire Protection Districts
McHenry County Dept. of Planning and Development

McHenry County, Illinois Historic Landmarks
McHenry County Historic Preservation Committee

Natural Resources Conservation Service Wetland Inventory Map. United States Department of Agriculture

The Conservation of Biological Diversity in the Great Lakes Ecosystem: Issues and Opportunities, prepared by the Nature Conservancy Great Lakes Program 79W. Monroe Street, Suite 1309, Chicago, IL 60603, January 1994

Wetlands - The Corps of Engineers' Administration of the Section 404 Program July 1988 (GAO/RCED-88-110)

Soil Erosion by Water - United States Department of Agriculture Natural Resources Conservation Service. Agriculture Information Bulletin 513.

Soil Survey of McHenry County, Illinois Part 1 and Part 2
Natural Resources Conservation Service, United States Department of Agriculture.

McHenry County
Department of Planning & Development
2200 North Seminary Ave.
Woodstock, IL 60098
plandev@mchenrycountyil.gov
815.334.4560

Z26-0018
April 15, 2026

Building Requirements: Reviewed by – J-T Bowers, Plans Examiner II

1) The Building Division has no comments related to the construction of the proposed agricultural employee housing.

GENERAL PERMIT REQUIREMENTS: Additional Codes to follow

1) Current building codes and amendments adopted by McHenry County. Structures, other than agricultural exempt structures, are required to comply with these codes and permits for all structures must be obtained:
    a. 2021 International Building Code w/McHenry County Amendments
    b. 2020 National Electric Code w/McHenry County Amendments
    c. 2021 International Mechanical Code w/McHenry County Amendments
    d. 2021 International Fire Code w/McHenry County Amendments
    e. 2021 International Fuel Gas Code w/McHenry County Amendments
    f. The Illinois Plumbing Code
    g. The Illinois Accessibility Code
    h. Illinois Energy Conservation Code
2) ***[2021 IFC 503.2.1]*** Fire apparatus access roads and paths shall be not less than 20'-0"clear.
    a. The Woodstock Fire Protection District will have final approval on any requests for clearance reductions.
3) ***[2021 IFC 503.2.3]*** The fire apparatus access road shall be of suitable material and composition to support a fire apparatus.
    a. The Department of Planning and Development shall defer to the Woodstock Fire Protection District for approval of the material and specifications of the fire apparatus road.
4) ***[2021 IFC 503.2.4]*** The required turning radius of a fire apparatus access road shall be determined by the fire code official.
    a. The Department of Planning and Development shall defer to the Woodstock Fire Protection District for final approval of the configurations and dimensions of turnaround area(s) along the fire apparatus access road(s).

McHenry County
Department of Planning & Development
2200 North Seminary Ave.
Woodstock, IL 60098
plandev@mchenrycountyil.gov
815.334.4560

MCH
MCHENRY COUNTY · IL

Planning Division Review Comments Z26-0018

To: George Matos

From: Anna Kurtzman, Senior Planner

Date: April 8, 2026 (SPRC 4/15/26)

RE: Request for approval a Conditional Use Permit allowing for Agriculture Employee Housing within the A-1 Agriculture District

The Planning Division has considered the following documents in developing this analysis of your zoning application:

- Plat of Survey prepared by Terry Van Alstine dated August 29, 2023
- Overall Site and Utility Plan prepared by Ferh Graham, dated December 04, 2025 (Job #26058)
- Narrative description -author unknown, date of preparation unknown
- Responses to Approval Standards for Conditional Use Permit - author unknown, date of preparation unknown

Staff has the following comments:

1. The property in question is zoned A-1 Agriculture. The parcel was created in 2025 with just under eleven (11) acres. As such, it does not meet the minimum requirements for establishing a residence on the property (which requires a minimum of forty (40) acres). The minimum lot frontage requirement of three hundred thirty (330) feet met.

2. The property owner has indicated that he wants to have a portion of a proposed barn include living space for an employee. This employee would be responsible for the care of horses kept on the property.

3. Standards for Site Plan Review (Section 16.20.050D of the Unified Development Ordinance, aka UDO) are required to be met (standards are attached). The site plan needs to include the location of potable water and sanitary septic system(s). If any screening is proposed please include that on the site plan. If any external lighting is proposed, please include the location that lighting on the site plan.

4. The Principal Use standards for Agriculture Employee Housing (Section 16.56.030C of the UDO) must be met. Subsection 4 stipulates that the facilities shall be compatible with the type and outward appearance of the residences in the area which they are located. Please be prepared to demonstrate compliance of this requirement by time of the public hearing before the Zoning Board of Appeals.

5. Staff notes that several responses provided on the Approval Standards for Conditional Use could be expanded. For example, Question #1 asks HOW the Conditional Use meets the standards. The response indicates that the standard will be met but does not explain how the standard will be met. You can review and expand this document if you want or you can provide verbal testimony during the public hearing.

6. Please note that the Zoning Board of Appeals may recommend, and the County Board may approve additional standards beyond those listed in the Unified Development Ordinance.

/abk

Section 16.20.050D

D. *Standards for Site Plan Review.*

1. Each site plan submitted for review shall include the following details:

a. The location of principal and accessory structures, and all open space.

b. The location of all water supply and sanitary waste (well and septic) facilities.

c. All existing and proposed screening and landscaping.

d. All exterior lighting.

e. The location of parking lots, including required landscape islands, buffers, number of parking spaces, driveways, and internal access roads.

Depending on the complexity of the project, the required details shall be divided into multiple plan sheets as necessary to ensure legibility.

2. In addition, the following characteristics will also be considered:

a. The conformance of the site plan to adopted land use policies and the policies of the *2030 Comprehensive Plan* and this Ordinance.

b. Compliance with other applicable County ordinances.

c. The location, arrangement, size, design, and general site compatibility of structures, lighting, and signs, including:

(1) Efficient use of land that responds to the existing off-site utilities and service conditions in order to minimize the demand for additional municipal services, utilities, and infrastructure.

(2) Adequate water supply and sewage disposal in compliance with the McHenry County Public Health Ordinance.

(3) Compatibility with, and mitigation of, any potential impact upon, adjacent property.

(4) Site illumination designed and installed to minimize adverse impact on adjacent properties.

d. Landscape and the arrangement of open space or natural features designed to:

(1) Create a desirable and functional environment for motorists, pedestrians, bicyclists, and occupants of residences and businesses. To achieve such an environment, landscape may take advantage of open space design features such as bike paths, running paths, and outdoor relaxation areas.

(2) Preserve unique natural resources, including preservation and protection of existing healthy, mature trees.

(3) Protect natural resources and landscape on adjacent sites.

(4) Design drainage facilities to promote retention of water onsite and preservation of natural watercourses and patterns of drainage.

(5) Utilize plant materials suitable to withstand the climatic conditions of the County and microclimate of the site.

(6) Use of screening to buffer the impact of the development on adjacent uses and screen incompatible uses and certain site elements, creating a logical transition to contiguous lots and developments.

e. Circulation systems and off-street parking designed to:

(1) Provide adequate and safe access to the site for motor vehicles as well as alternate modes of transportation, including pedestrians and bicyclists.

(2) Minimize potentially dangerous traffic movements.

(3) Separate pedestrian and auto circulation, and provide for bicycle parking or storage insofar as practical.

(4) Minimize curb cuts by using cross-access easements and shared parking.

(5) Design off-street parking lots or garages to minimize adverse impacts on adjacent properties, particularly through the use of perimeter and interior landscape, and promote logical and safe parking and internal circulation.

(6) Clearly define pedestrian access from the parking area to the structures.

Section 16.56.030Z

C. *Agriculture Employee Housing.*

1. The following information shall be included in the application for conditional use permit:

a. Type of building proposed.

b. Type of water supply and sewage disposal systems proposed.

c. Number of inhabitants to be housed in the facility.

d. Type of business conducted on the property.

e. Time period of occupancy.

2. All facilities shall obtain and maintain any state or federal licenses required for their operation. Failure to maintain such license will result in a revocation of the conditional use permit.

3. All facilities shall be compatible with the type and outward appearance of the residences in the area in which they are located.

4. All structures shall comply with the building code and shall be maintained in good repair. All agriculture employee housing shall maintain sanitary facilities in accordance with the McHenry County Public Health Ordinance.

5. Mobile homes may be placed on a property to provide housing for (an) agricultural worker(s) subject to approval of an agricultural trailer permit, based on the following criteria:

a. The property owner shall affirm, using forms provided by the Department of Planning and Development, that occupancy of the mobile home will be limited to persons and the families of persons engaged in agricultural activities on the subject property.

b. If the property is less than five (5) acres in size, the property owner shall provide proof of agricultural income in any calendar year, consistent with the Counties Code (55 ILCS 5/5-12001 *et seq*.).

c. The permit shall expire after two (2) years or upon a change in property ownership. Within thirty (30) days of the expiration of the permit, the property owner shall remove the mobile home from the property or receive a new agricultural trailer permit.

MCHENRY COUNTY HEALTH DEPARTMENT - ENVIRONMENTAL DIVISION
2200 NORTH SEMINARY - NORTH ROUTE 47
WOODSTOCK, IL 60098 - 815-334-4585 FAX# 815-334-4637

MEMORANDUM

TO: George Matos
Staff Plat Review Committee
FROM: Celine Taylor, McHenry County Department of Health
DATE: 4/8/26
RE: Petition #: Z26-0018
PIN #: 08-27-200-017
10204 Charles Rd., Woodstock

The Department has reviewed the proposed site plan and available information to determine compliance with the Public Health Ordinance for McHenry County and has the following comments and/or questions at this time.

- The area proposed for the private sewage disposal system (PSDS) appears limited. The area for a PSDS must be selected based on a soil test to determine that your selected location has both suitable soils and enough space for both a primary and a 100% future replacement area. The Department has not received any soil information and has no comments as to whether the area is suitable or large enough for a PSDS to serve your proposal. The PSDS will also have to be 50' from the normal water level and 25' from the high water level of the stormwater detention basin, 5' from parking/driveways or less if a permanent barrier is provided to prevent trafficking, and 5' from any underground utilities.
- Clarify whether there will be employees or visitors using the restrooms, or if the restrooms are only for the people living in the apartment. This will be the difference between a residential PSDS with no replacement area required, or a non-residential PSDS with a 100% replacement area and water meter required. Also, if horse-washing water from an interior wash station will be directed to the PSDS, the PSDS must be sized to accommodate these flows and will be considered a non-residential PSDS. If water from a dehumidifier is allowed by building code to be directed to drain to daylight, it will not need to go into a PSDS.
- A water well is proposed. It must meet the setback distances for water wells, including but not limited to 50' from the septic tank, 75' from the field, 50' to a barnyard or animal confinement lot, and 75' from a manure pile. Barriers are also required for a water well less than 5' to a driving/trafficking area. If any of these sources are proposed, they must also meet the distance requirements to any neighboring water wells.
- If a separate well is proposed for animals or irrigation (a well not for drinking), it would need to meet the requirements above, plus the requirements of the non-potable well registration program, including inspections and using the non-potable well once every 30 days.

- A Health Review application or permit application with the associated fee is required for further Health Department review comments. I recommend at a minimum that you submit soil test data with the Health Review application.

If you have any questions, Department staff are available for consultation. Please contact the Department at (815) 334-4585.

McHenry County
Department of Planning & Development
2200 North Seminary Ave.
Woodstock, IL 60098
plandev@mchenrycountyil.gov
815.334.4560

MCH
MCHENRY COUNTY · IL

MEMORANDUM

TO: George Matos

FROM: Water Resources Division (Stoyan Kolev)

DATE: April 15, 2026

REGARDING: Staff Plat Review Committee Comments – Petition # Z26-0018

Based on my review of the application information provided, I have the following comments based on the McHenry County Stormwater Management Ordinance (SMO):

- The proposed site plan matches the issued stormwater management permit (SW-26-050). Water Resources has no comments. Any revisions to the site plan that are required based on other department comments (e.g., environmental health, building) may require additional review from the Water Resources Division.

McHenry County
Division of Transportation
Joseph R. Korpalski, Jr., P.E.
Director of Transportation/County Engineer

MEMORANDUM

TO: **Staff Plat Review Committee/Applicant**
McHenry County Department of Planning and Development

FROM: **McHenry County Division of Transportation**

DATE: **April 8, 2026**

SUBJECT: **Staff Plat Review Committee Comments**
Petition #Z26-0018 George Matos
PIN 08-27-200-017
Parcel Address: 10204 Charles Road
Petitioner: George Matos
Scheduled for Staff Plat Review Committee review on: April 15, 2026

With respect to the above subject project scheduled for Staff Plat Review Committee review, the McHenry County Division of Transportation (MCDOT) offers the following review comments:

Right-of-Way
As indicated on the site plan, the landowner will be required to dedicate a 70 ft half right of way along the frontage of Charles Road, prior to any permit being issued.

Site Plan
The submitted site plan depicts a proposed detention area along Charles Road; however, no supporting details are provided regarding depth or design parameters. Any berm or detention facility constructed within this area shall comply with all applicable setback requirements relative to the required right-of-way for Charles Road, which is established at seventy (70) feet from the roadway centerline (half right-of-way). The toe of any berm shall be located a minimum of ten (10) feet beyond the right-of-way line. Additionally, all detention facilities shall maintain a setback from the new right-of-way equal to one and one-half (1.5) times the depth of the detention area.
For any questions about the above comments or future submittals, please contact:

Keith McGraw
Permitting/Construction Engineer
McHenry County Division of Transportation
(815) 334-4965
kbmcgraw@mchenrycountyil.gov