

CASE NO. 687-AM-11

SUPPLEMENTAL MEMORANDUM

Champaign June 16, 2011

County

Department of Petitioners:

**PLANNING &
ZONING**

**Philip W. and Sarabeth F. Jones
175N CR1600E
Villa Grove, IL**

Site Area:

Approx. 12.69 acres

Brookens

Administrative Center

1776 E. Washington Street

Urbana, Illinois 61802

Time Schedule for Development:

Immediate

(217) 384-3708 Prepared by:

John Hall

Zoning Administrator

Request: Amend the Zoning Map to change the zoning district designation from CR Conservation Recreation to AG-1 Agriculture.

Location: An approximately 12.69 acre tract of land that is located in the North Half of the South Half of the Northeast Quarter of Section 27 of Crittenden Township and located on the west side of Illinois Route 130 (CR1600E) and 1,328 feet south of the intersection of Illinois Route 130 and CR 200N and County Highway 16 and commonly known as the property at 175N CR1600E, Villa Grove.

STATUS

This is the first meeting for this case. This memo documents an assessment of the suitability of the subject property for the CR District. The assessment indicates that the subject property is not well suited to be in the CR District.

SUITABILITY OF THE SUBJECT PROPERTY FOR THE CR DISTRICT

The map amendment petition (application) requires the petitioner to indicate what error in the present Ordinance is to be corrected by the proposed amendment and items 4 and 5 of the Finding of Fact restate the petitioner's assertions as to that error. Disregarding the petitioner's assertions related to agriculture, the petition states that the property has overall elevation higher than the Base Flood Elevation and some topographic information is provided to that affect. The purpose and intent of the CR District (see item 8.A.(1) of the Finding of Fact) suggest that there are additional factors that should be considered.

It is not known if the drafters of the Zoning Map had any formal documentation of the factors that underlay the CR Conservation Recreation Zoning District that was adopted in 1973. If there was formal documentation it has not survived to this day. At the time there was no modern Soil Survey nor was there a flood insurance rate study with floodplain maps and the only topographic information available for the entire County used a contour interval (difference in ground elevation) of five feet. More and better information is available today with which to evaluate the suitability of the subject property for the CR District.

The following are the significant factors relevant to indentifying "the natural and scenic areas generally along the major stream networks of the County":

- **1973 Land Cover.** The CR District was planned in 1973 and thus was based on the pattern of vegetation that existed at that time. Attachment A is a copy of the Supervisor of Assessments 1973 Aerial photo of the subject property and vicinity. Comparing this aerial photo to the 2008 aerial photo that is the basis of the Land Use Case Map is difficult given the difference in contrasts between the two photos. However, after some consideration it is clear that the vegetative land cover in 1973 was very almost the same as it is today on the subject property and vicinity.

Except for a small area of permanent vegetation at the west end, the subject property was nearly all farmland in 1973 and remains so today.

- **Stream Related Soils.** The modern Champaign County Soil Survey identified soils that are found in flood plains (formerly bottomlands) and stream terraces. Attachment B is an excerpt from the 2001 Champaign County Soil Survey of the subject property and vicinity indicating stream-related soils (bottomland soils and stream terrace soils) and soils developed primarily under forest conditions. Note that the designation of soils developed primarily under forest conditions is not from the Soil Survey but from other Natural Resources Conservation Service (NRCS) data.

More than half of the area of the subject property consists of stream related soils.

- **Topography.** Topography (the surface of the ground) is generally the clearest indication of the major stream networks in the County particularly at locations further downstream where the river valley has the best defined form. Attachment C is a copy of the LIDAR topographic contours at two feet intervals for the subject property and vicinity on top of the 2008 aerial photo. The contours indicate that the stream valley is clearly defined only on the south side and not well defined on the north side of the stream.

The subject property appears to be nearly flat.

- **Area Below the Base Flood Elevation.** The area below the Base Flood Elevation is the actual 100-year flood plain. Attachment D is a copy of the LIDAR topographic contours at two feet intervals for the subject property and vicinity on top of the 2008 aerial photo with the 654 contour highlighted to approximate the Base Flood Elevation of 654.5 feet Mean Sea Level.

Approximately the western 350 feet of the subject property appear to be less than one foot below the Base Flood Elevation. However, the topographic survey prepared for Phillip Jones by Wayne Ward Engineering dated November 22, 2010, that was included with the Preliminary Memorandum for Case 688-S-11 is more accurate and indicates that only about the west 185 feet of the subject property is below the Base flood Elevation

The above factors can then be analyzed as follows:

- **All four factors are overlaid** (combined) into a Draft Composite Sketch Map of CR District Suitability Factors for Subject Property and Vicinity (Attachment E). The outline of the existing CR District has also been included.

Note that the existing CR District does not include all of the area below the Base Flood Elevation but is much larger than the area of vegetated land cover. Also note that the part of the subject property that is below the Base Flood Elevation also consists of stream related soils.

- **The Areas Most Suitable for the CR District are the areas that combine the most critical combinations of the four factors.** The identification of exactly what are the critical combinations of the four factors is essentially a policy decision for which there is no existing guidance. The Draft Sketch Map in Attachment F would be the starting point based on the existing purpose and intent of the CR District.

Note the subject property has not been included in the areas most suitable for the CR District.

Note that actual mapping of a new CR District could include a minimum buffer of up to 100 feet around the areas of critical combinations and should also include some amount of land to regularize the boundaries of any new District.

BEST PRIME FARMLAND IN THE VICINITY

The Soil Survey for the of the subject property and vicinity was reviewed to determine how close the subject property is to “best prime farmland”. The Champaign County Land Resource Management Plan defines “best prime farmland” as soil with a Relative Value (based on the Champaign County LESA System) of 85 or greater. Attachment G indicates that a little less than the eastern 1/3 of the subject property consists of best prime farmland and is consistent with the Natural Resource Report by the Champaign County Soil and Water Conservation District. Note that the east end of the subject property (which borders the AG-1 District) also borders best prime farmland.

ATTACHMENTS

- A Draft 1973 Land Cover for Subject Property and Vicinity**
- B Stream Related Soils for Subject Property and Vicinity**
- C Topography for Subject Property and Vicinity**
- D Area Below Base Flood Elevation for Subject Property and Vicinity**
- E Draft Composite Sketch Map of CR District Suitability for Subject Property and Vicinity With Existing CR District**
- F Draft Sketch Map of Areas Most Suitable for CR District for Subject Property and Vicinity**
- G Best Prime Farmland Soils for Subject Property and Vicinity**

Attachment A Draft 1973 Land Cover for Subject Property and Vicinity

Cases 687-AM-11 & 688-S-11

JUNE 16, 2011



Champaign
County
Department of

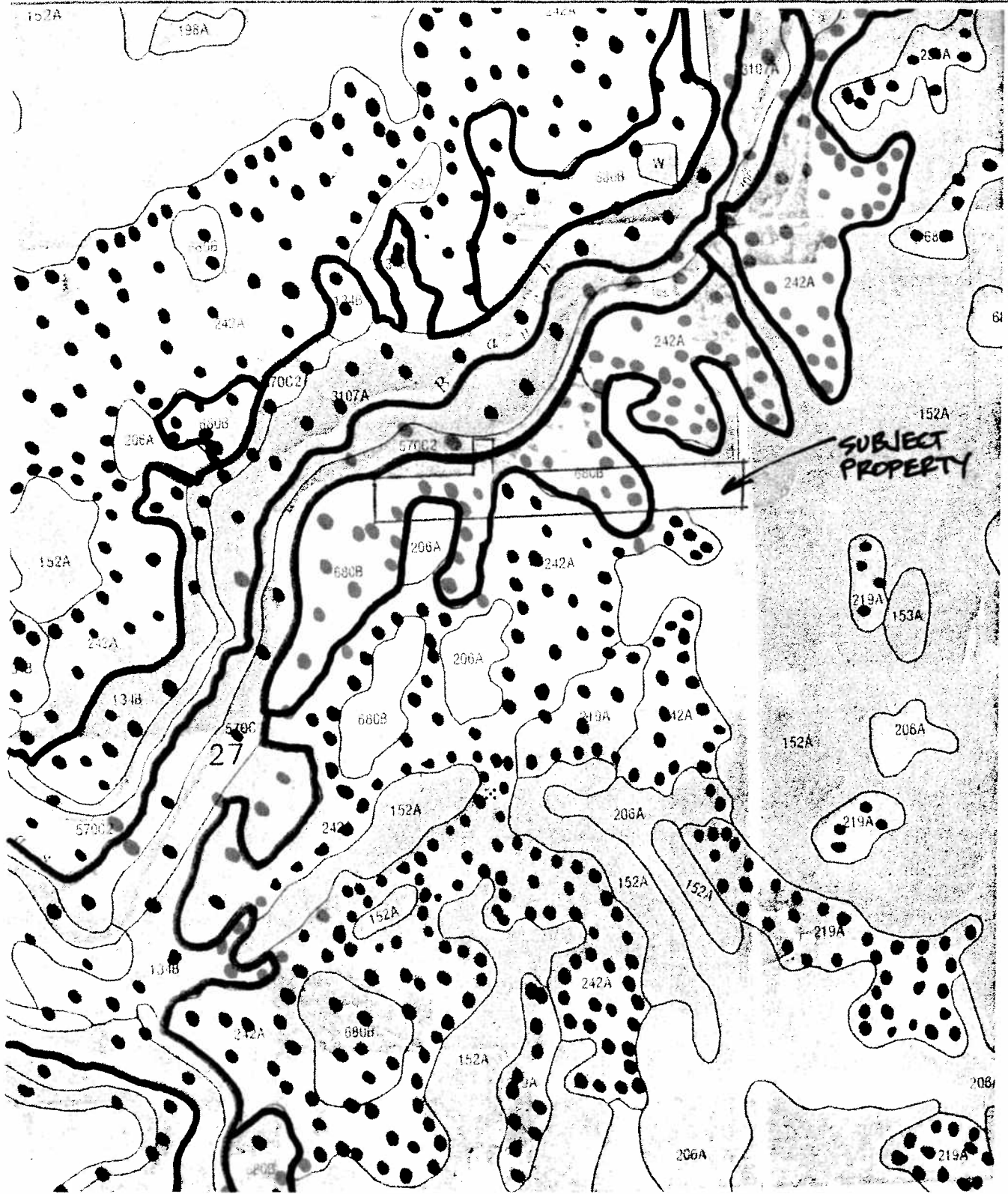
PLANNING &
ZONING



Attachment B Stream Related Soils for Subject Property and Vicinity

Cases 687-AM-11 & 688-S-11

JUNE 16, 2011



SUBJECT PROPERTY



STREAM RELATED SOILS

WOODLAND SOILS

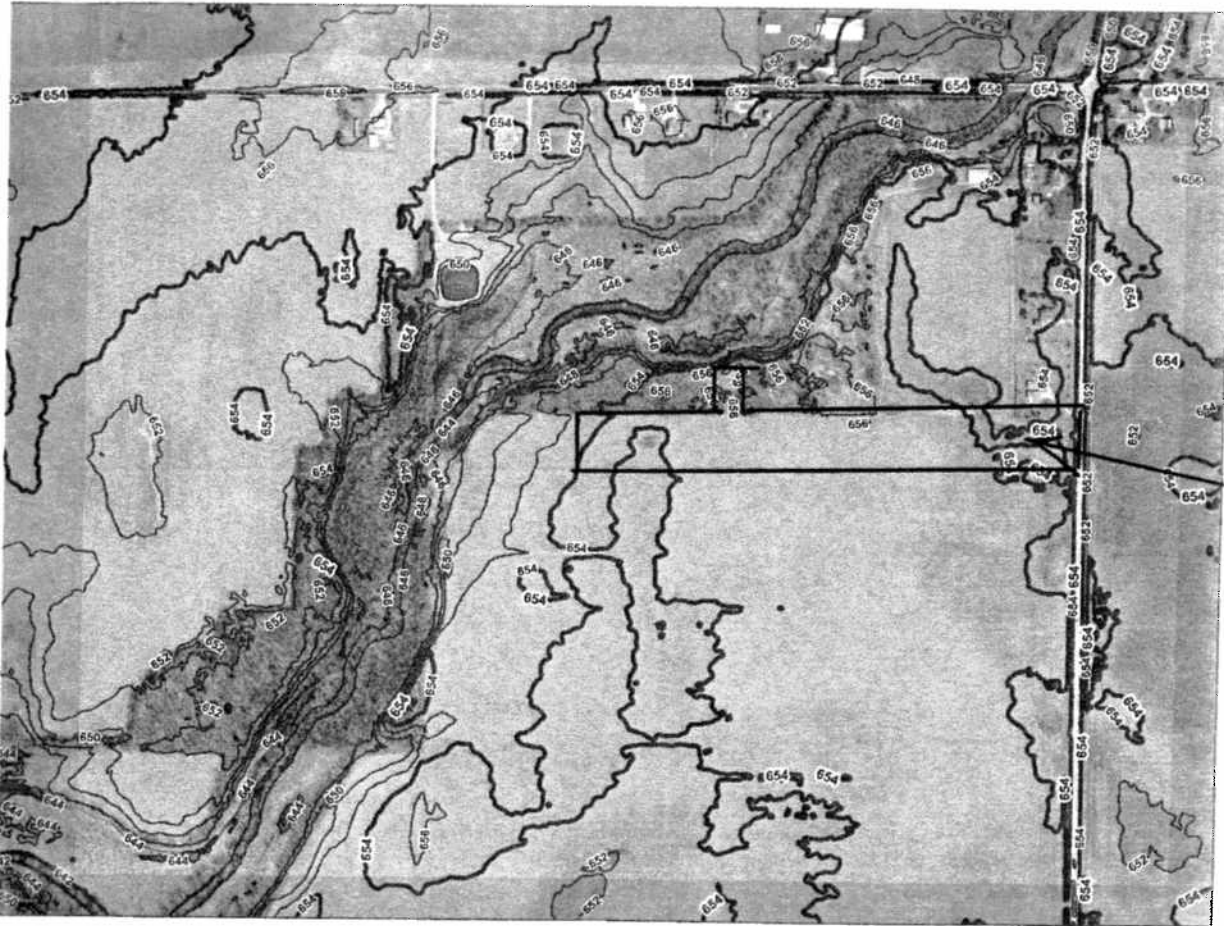


Champaign County
Department of
PLANNING & ZONING

Attachment C Topography for Subject Property and Vicinity

Cases 687-AM-11 & 688-S-11

JUNE 16, 2011



SUBJECT
PROPERTY



0' 800'

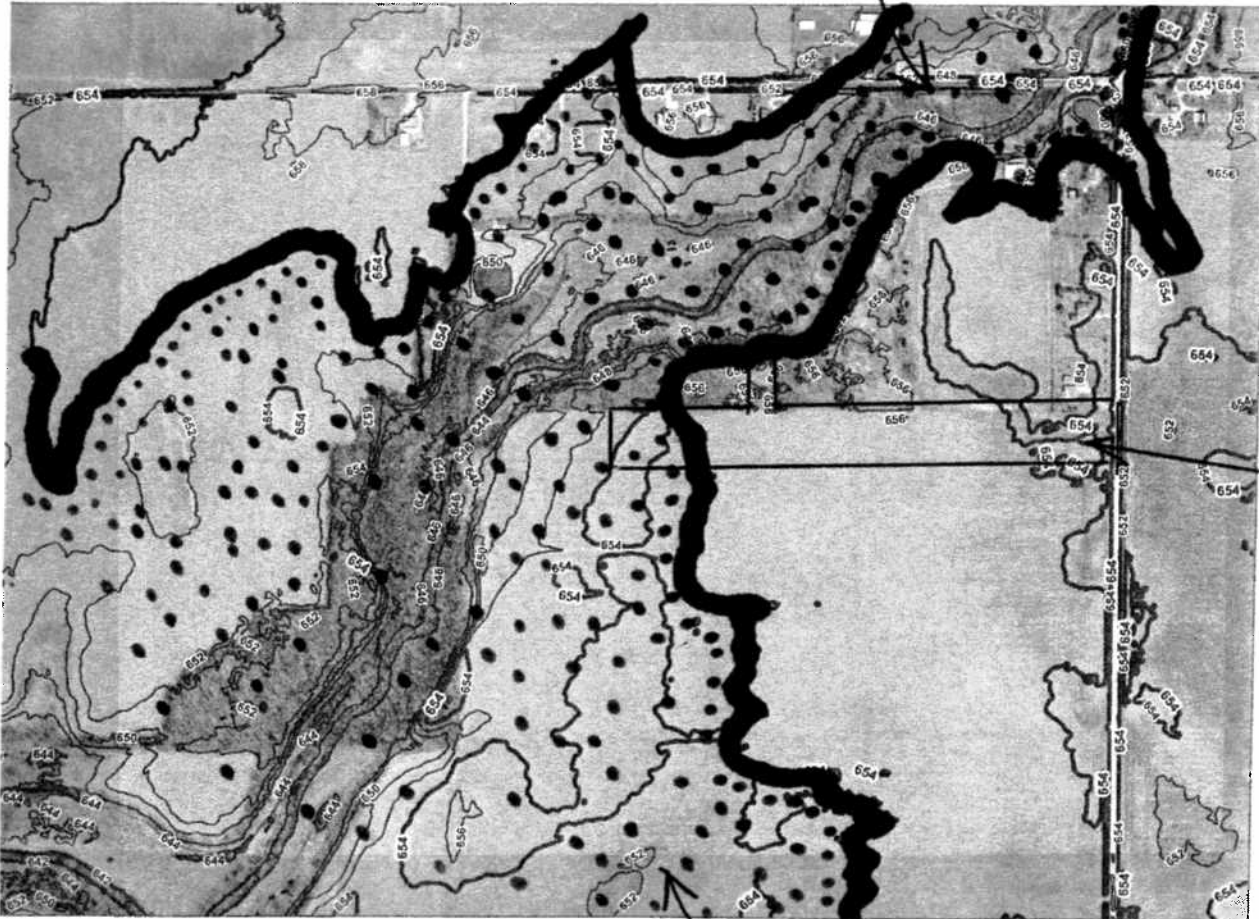
Champaign
County
Department of
**PLANNING &
ZONING**

Attachment D Area Below Base Flood Elevation for Subject Property and Vicinity

Cases 687-AM-11 & 688-S-11

JUNE 16, 2011

AREA BELOW BASE FLOOD
ELEVATION



SUBJECT
PROPERTY

AREA BELOW BASE FLOOD
ELEVATION (645.5')

City of
Department of

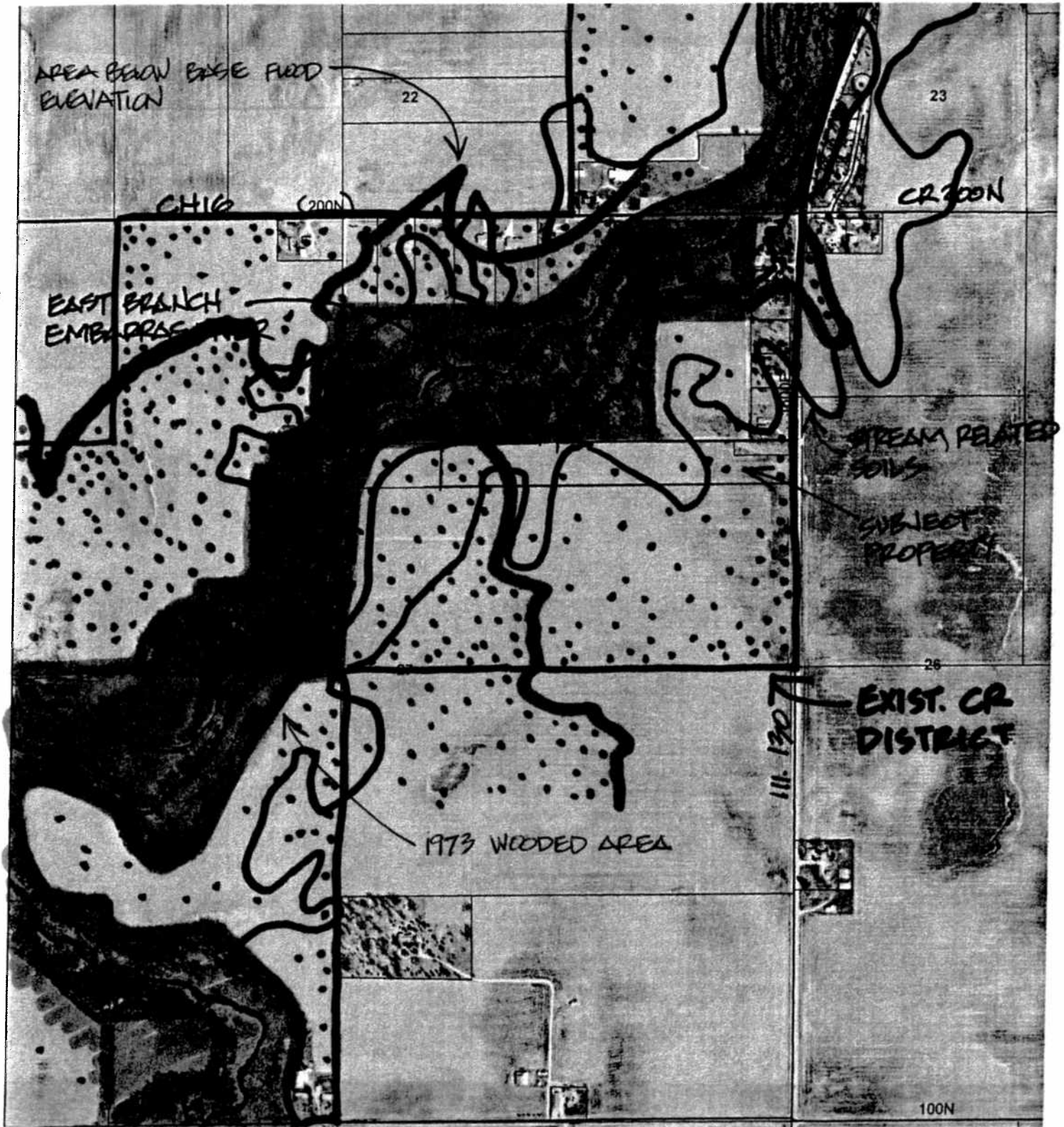
PLANNING &
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Attachment E Draft Composite Sketch Map of CR District Suitability

Cases 687-AM-11 & 688-S-11

JUNE 16, 2011



Chicago
County
Department of
PLANNING &
ZONING

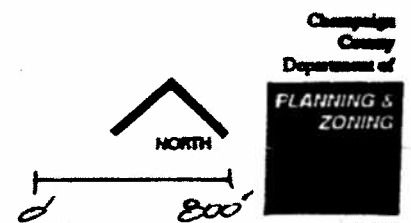
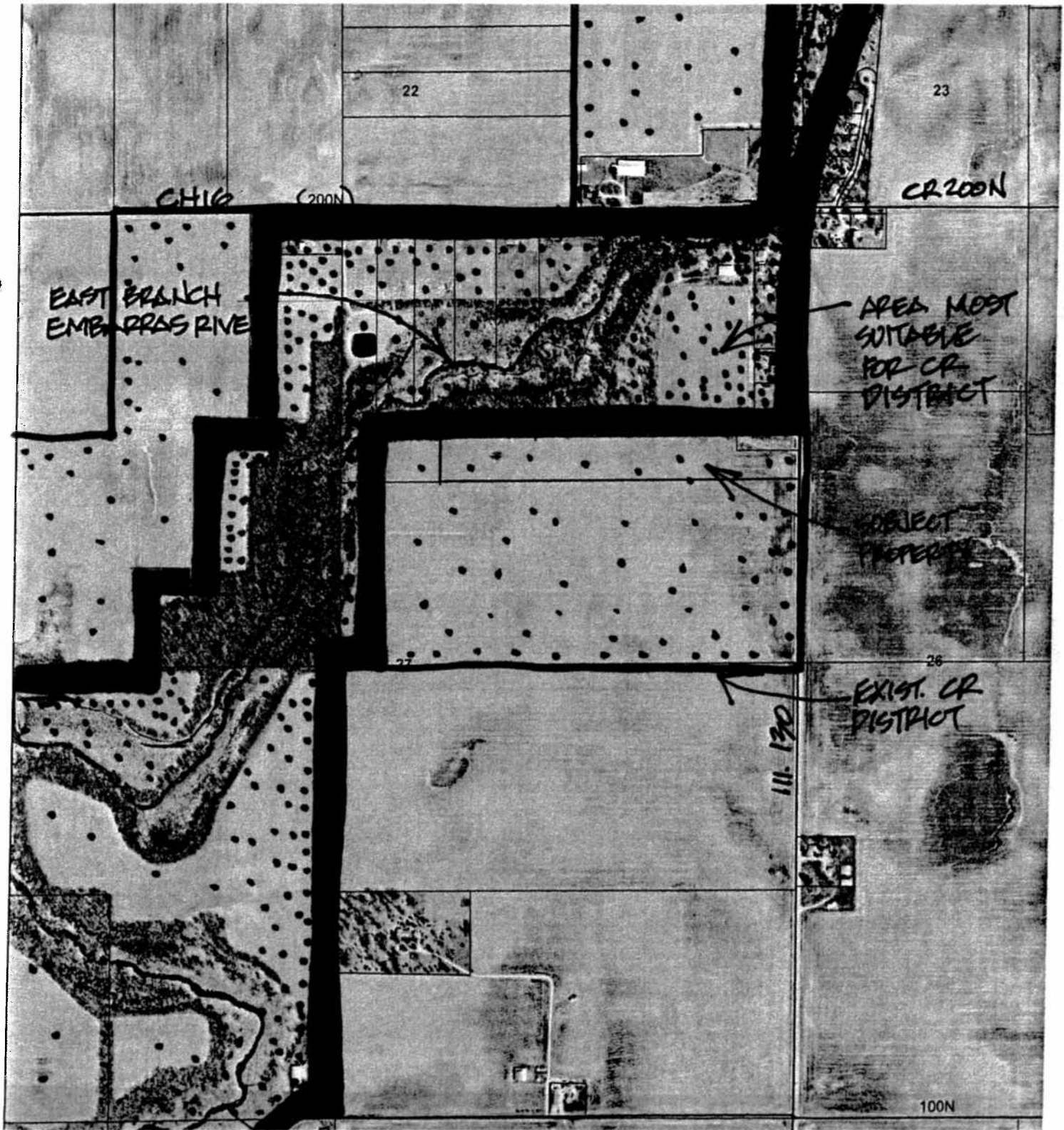


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Attachment F Draft Sketch Map of Areas Most Suitable for CR District

Cases 687-AM-11 & 688-S-11

JUNE 16, 2011

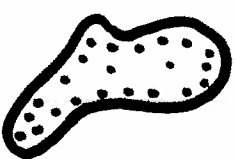
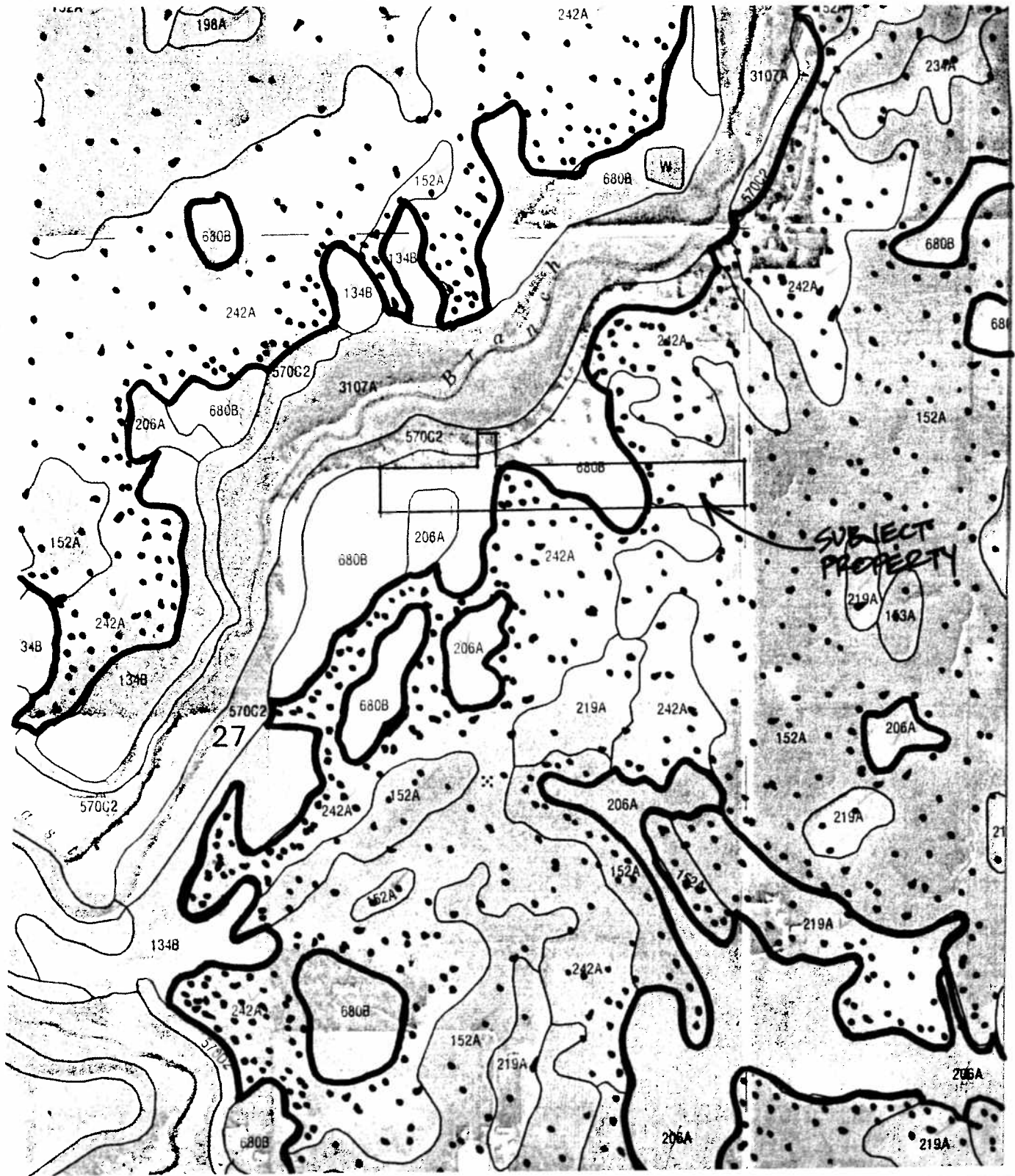


Champaign County
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Attachment G Best Prime Farmland Soils for Subject Property and Vicinity

Cases 687-AM-11 & 688-S-11

JUNE 16, 2011



BEST PRIME FARMLAND



Champaign
County
Department of
**PLANNING &
ZONING**

CASE NO. 690-AM-11

PRELIMINARY MEMORANDUM

June 16, 2011

Champaign
County
Department of

Petitioner: **Benjamin R. and Jennifer A. Shadwick**

Site Area: **5.3 acres**

Time Schedule for Development:
Immediate upon approval

Prepared by: **John Hall**
Zoning Administrator

Request: Amend the Zoning Map to allow for the use of 1 single family residential lot in the CR Conservation Recreation Zoning District by adding the Rural Residential Overlay (RRO) Zoning District

Location: An approximately 5.3 acre tract of land that is located in the West Half of the North Half of the Northeast Quarter of Section 27 of Crittenden Township and that is located approximately 2,000 feet west of the intersection of County Highway 16 and Illinois Route 130 and located on the south side of County Highway 16 (CR200N).

**PLANNING &
ZONING**

Brookens

Administrative Center
1776 E. Washington Street
Urbana, Illinois 61802

(217) 384-3708

BACKGROUND

The Champaign County Zoning Ordinance requires that the creation of more than three lots, each of which is less than 10 acres, in the rural districts after January 1, 1998, requires rezoning to the Rural Residential Overlay (RRO) Zoning District.

The subject property was this same area and configuration on June 1, 1998, and so could be divided into a total of three lots without RRO approval. The petitioner proposes to create a subdivision with 12 buildable lots (and one outlot) and so requires RRO approval for nine of the lots.

Purpose of the RRO District

The unique nature of the district and the specific considerations required for determination in each RRO request merit a brief review the Rural Residential Overlay (RRO) Zoning District is intended to identify those rural areas that are most suitable for residential development and whose development will not significantly interfere with agricultural pursuits in neighboring areas. The RRO Zoning District is an overlay zoning designation that is in addition to the pre-existing (underlying) rural zoning.

Rezoning to the RRO District is required for subdivisions with more than three lots (whether at one time or in separate divisions) and/or new streets in the AG-1, AG-2, and CR districts (the rural districts). Approval of the RRO district does not change any current requirement of the underlying districts. All other restrictions on use, setbacks, lot coverage, etc. remain in effect.

Specific Findings and Considerations Required In RRO Requests

The RRO district is established using the basic rezoning procedure except that specific considerations are taken into account in approvals for rezoning to the RRO District. The Zoning Board of Appeals must make two specific findings for RRO approval. Those findings are:

- **Suitability of the proposed site for the development of rural residences; and**
- **Impact that the proposed residential development will have on surrounding agriculture.**

The Board is required to consider the following factors in making these findings:

1. **Adequacy and safety of roads providing access to the site**
2. **Effects on nearby farmland and farm operations**
3. **Effects of nearby farm operations on the proposed residential development**
4. **The LESA (Land Evaluation and Site Assessment) score of the subject site**
5. **Effects on drainage both upstream and downstream**
6. **The suitability of the site for onsite wastewater systems**
7. **The availability of water supply to the site**
8. **The availability of emergency services to the site**
9. **The flood hazard status of the site**
10. **Effects on wetlands, historic or archeological sites, natural or scenic areas or wildlife habitat**
11. **The presence of nearby natural or man-made hazards**
12. **The amount of land to be converted from agricultural uses versus the number of dwelling units to be accommodated**

No specific standards apply to the criteria and a positive evaluation of every factor may not to be necessary for approval. The Board should feel comfortable, however, that significant potential problems that are identified are not insurmountable.

Difference between RRO Rezoning Approval and Subdivision Approval

The zoning approval for the RRO District is not the same thing as approval of the subdivision of the land. At this stage the County is considering only the suitability of the site for residential development and not the adequacy of a specific design. The division of the land into separate legal parcels for sale must still comply with the regulations of the relevant subdivision jurisdiction which in this case is the City of Urbana.

Engineering design issues are only relevant in determining whether the development of the site is practical from a public as well as private standpoint. The RRO criteria contain a number of important issues regarding suitability of the site that are not amenable to site engineering such as traffic and land use compatibility issues. When necessary to deal with concerns of suitability and compatibility, the Board may recommend specific conditions that should be imposed on the future subdivision of the land as part

of the RRO approval. Significant differences between the plan submitted for RRO designation and the Preliminary Plat required for subdivision approval would not be allowed.

For example, the Board may determine that a site has particular problems that should be addressed by some action on the part of the developer such as improving a road or ditch or with respect to the design of the subdivision

PETITIONER SUBMITTALS

Section 5.4.4 of the Zoning Ordinance requires several supporting documents for each petition for RRO rezoning. All have been received.

EXISTING LAND USE AND ZONING

Table 1 summarizes the land use and zoning on the subject property and adjacent to it.

Table 1. Land Use and Zoning In The Vicinity Of The Subject Property

Direction	Land Use	Zoning
Onsite	Farmland	CR Conservation Recreation
North	Farmland	AG-1 Agriculture
East	Single Family Residential	CR Conservation Recreation
West	Single Family Residential	CR Conservation Recreation
South	Single Family Residential / Agriculture	CR Conservation Recreation

MUNICIPAL EXTRATERRITORIAL JURISDICTION

The subject property is located within the mile and a half ETJ of the City of Urbana. Municipalities have protest rights on all map amendment cases within their mile and a half ETJ, and as such they are notified of all such cases.

COMPARISON WITH COMMON CHAMPAIGN COUNTY CONDITIONS

Attachment U summarizes the comparison of the subject property with common Champaign County conditions that are in the same Attachment.

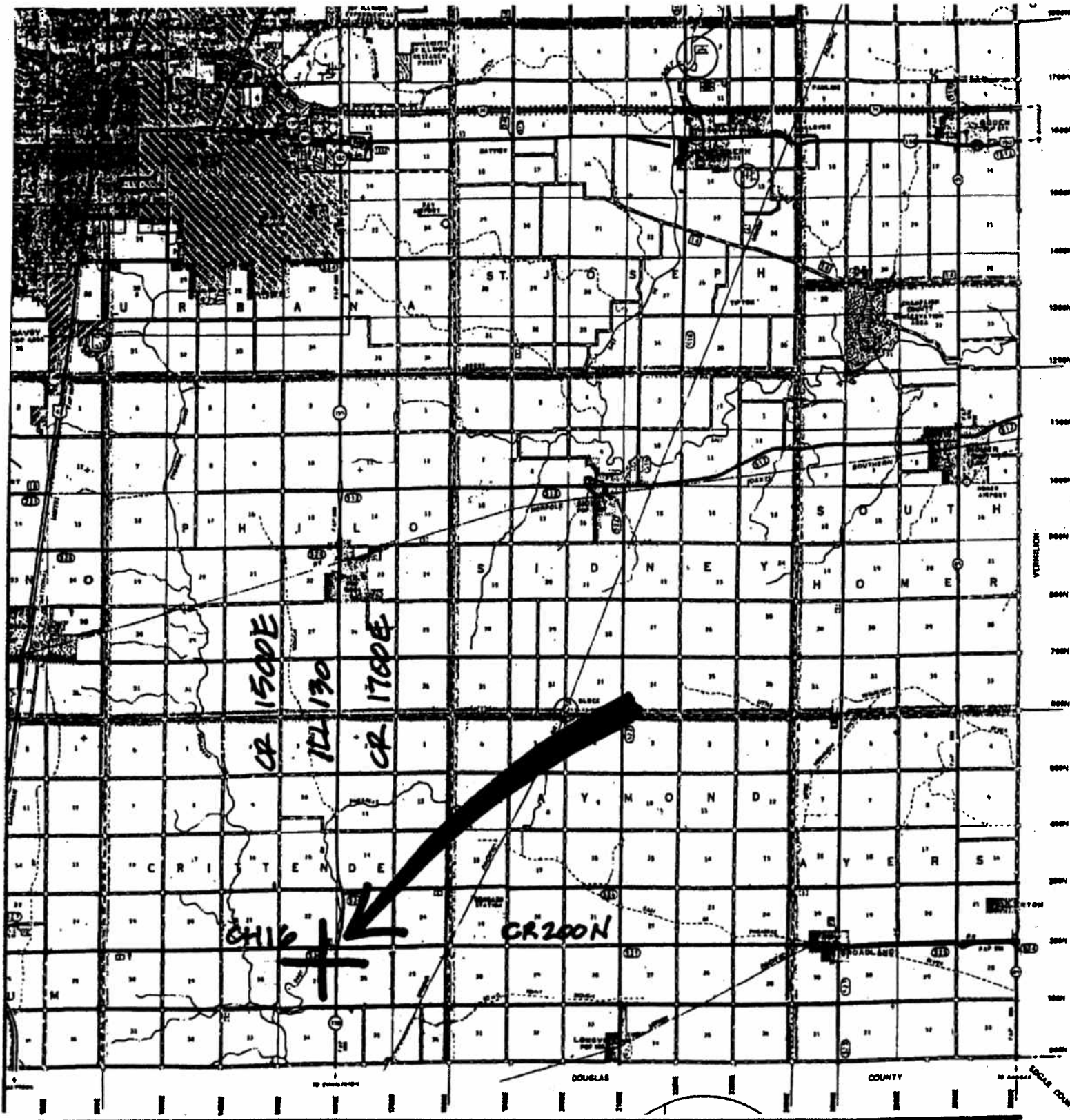
ATTACHMENTS

- A Case Maps (Location, Land Use, Zoning)
- B Excerpt of Flood Insurance Rate Map (FIRM) Community Panel Number 170894 0275 B dated March 1, 1984
- C Excerpt of Embarras River Watershed Digital Floodplain Mapping, Champaign County, Illinois. Illinois State Water Survey. August 2002.
- D Plat of Survey received April 29, 2011
- E Section 22 Natural Resources Report from CCSWCD for Justin Harrison received Feb. 19, 2008
- F Analysis of Drainage Conditions by Wayne Ward Engineering dated March 10, 2011
- G Topographic Survey received April 29, 2011
- H Topographic / Drainage Analysis Survey received April 29, 2011
- I Table of Common Conditions Influencing the Suitability of Locations for Rural Residential Development in Champaign County (included separately)
- J Comparing the Proposed Site Conditions to Common Champaign County Conditions

Attachment A Location Map

Case 690-AM-11

JUNE 9, 2011

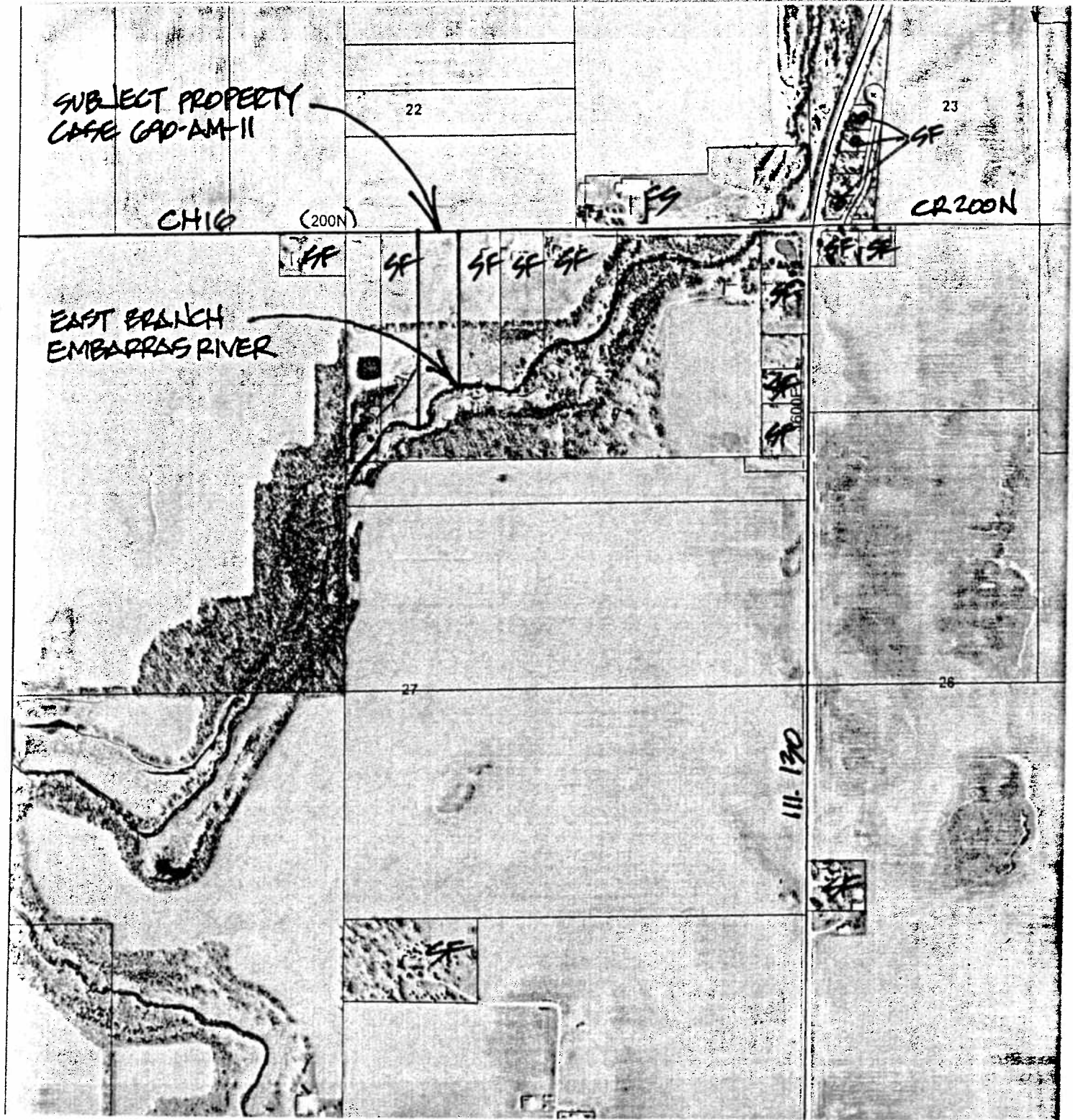


Cherokee
County
Department of
**PLANNING &
ZONING**

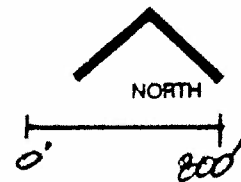
Attachment A Land Use Map

Case 690-AM-11

JUNE 9, 2011



SF	Single Family	<input type="checkbox"/>
FS	Farmstead	<input type="checkbox"/>



Champaign
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ZONING**

Attachment A Zoning Map

Case 690-AM-11

JUNE 9, 2011

SUBJECT PROPERTY CASE 690-AM-11

CH16

CR200N

111.130



Champaign
County
Department of
**PLANNING &
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AG-1 Agriculture	R-1 Single Family Residence	R-4 Multiple Family Res.	B-2 Neighborhood Business	B-5 Central Business
AG-2 Agriculture	R-2 Single Family Residence	R-5 Mobile Home Park	B-3 Highway Business	I-1 Light Industry
CR Conservation- Recreation	R-3 Two-family Residence	B-1 Rural Trade Center	B-4 General Business	I-2 Heavy Industry

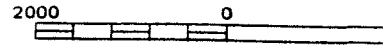
ZONE C

22

23



APPROXIMATE SCALE



SUBJECT PROPERTY
CASE 090-AM-11

ZONE A

CH 16

CR 200N



27

26

130

34

35

MISSOURI

ZONE A

ZO

653

653

NATIONAL FLOOD INSURANCE

FIRM
FLOOD INSURANCE

COUNTY OF
CHAMPAIGN
ILLINOIS
(UNINCORPORATED)

PANEL 275 OF 300

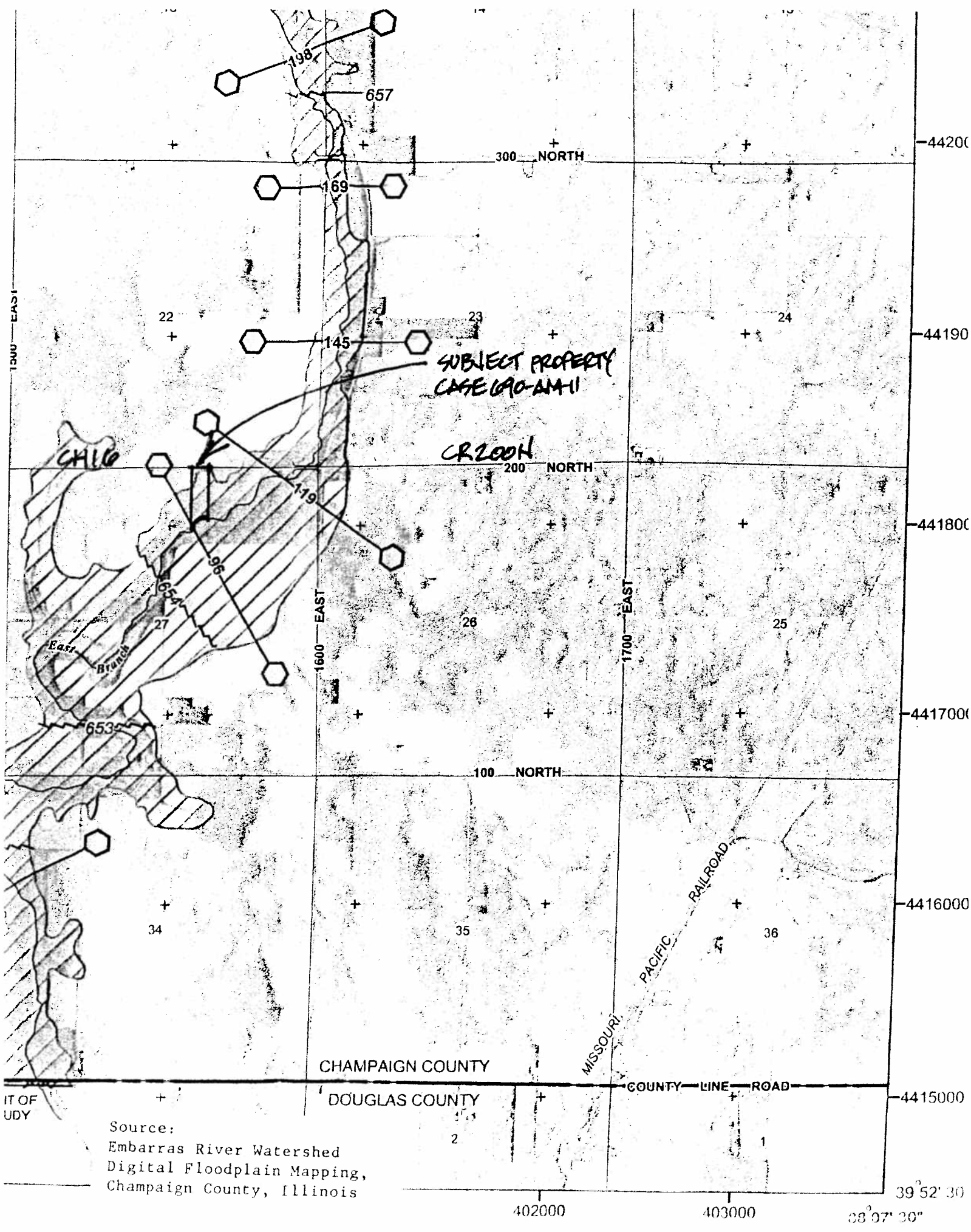
Champaign County
Planning & Zoning Department
1776 E. Washington
Urbana, Illinois 61801

COMMUNITY-PANORAMA
170

EFFECTIVE
MARCH



Federal Emergency Management Agency



SUBJECT PROPERTY
CASE 090-AM-11

CHIC

CR200H

East Branch

MISSOURI
PACIFIC
RAILROAD

CHAMPAIGN COUNTY

DOUGLAS COUNTY

COUNTY LINE ROAD

IT OF
UDY

Source:
Embaras River Watershed
Digital Floodplain Mapping,
Champaign County, Illinois

402000

403000

08° 07' 30"

39° 52' 30"

44200

44190

441800

4417000

4416000

4415000

150000
160000
170000
180000

22

23

24

27

26

25

34

35

36

2

1

198

657

169

145

179

653

1600 EAST

1700 EAST

300 NORTH

200 NORTH

100 NORTH

1/2" IRON PIPE FOUND INSIDE MON. VAULT
NW COR. NE1/4 SEC. 27 T17N R9E 3RD P.M.

N90°00.0'W
2025.1'

RECEIVED
APR 29 2011
CHAMPAIGN CO. P & Z DEPARTMENT

- ⊙ 1/2" IRON ROD FOUND, PLASTIC CAP STAMPED D. MEYER ILS 3396"
- 1/2" IRON ROD FOUND, PLASTIC CAP STAMPED
- 1/2" IRON ROD SET W/ PLASTIC CAP STAMPED
- — — — — FORESHORTENED LINE

I hereby certify that this plat represents made by me of three tracts of la

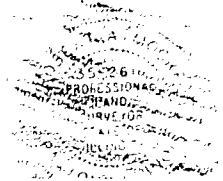
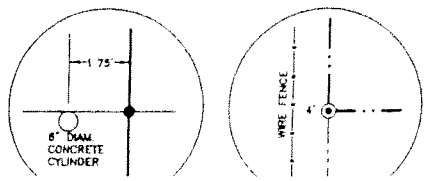
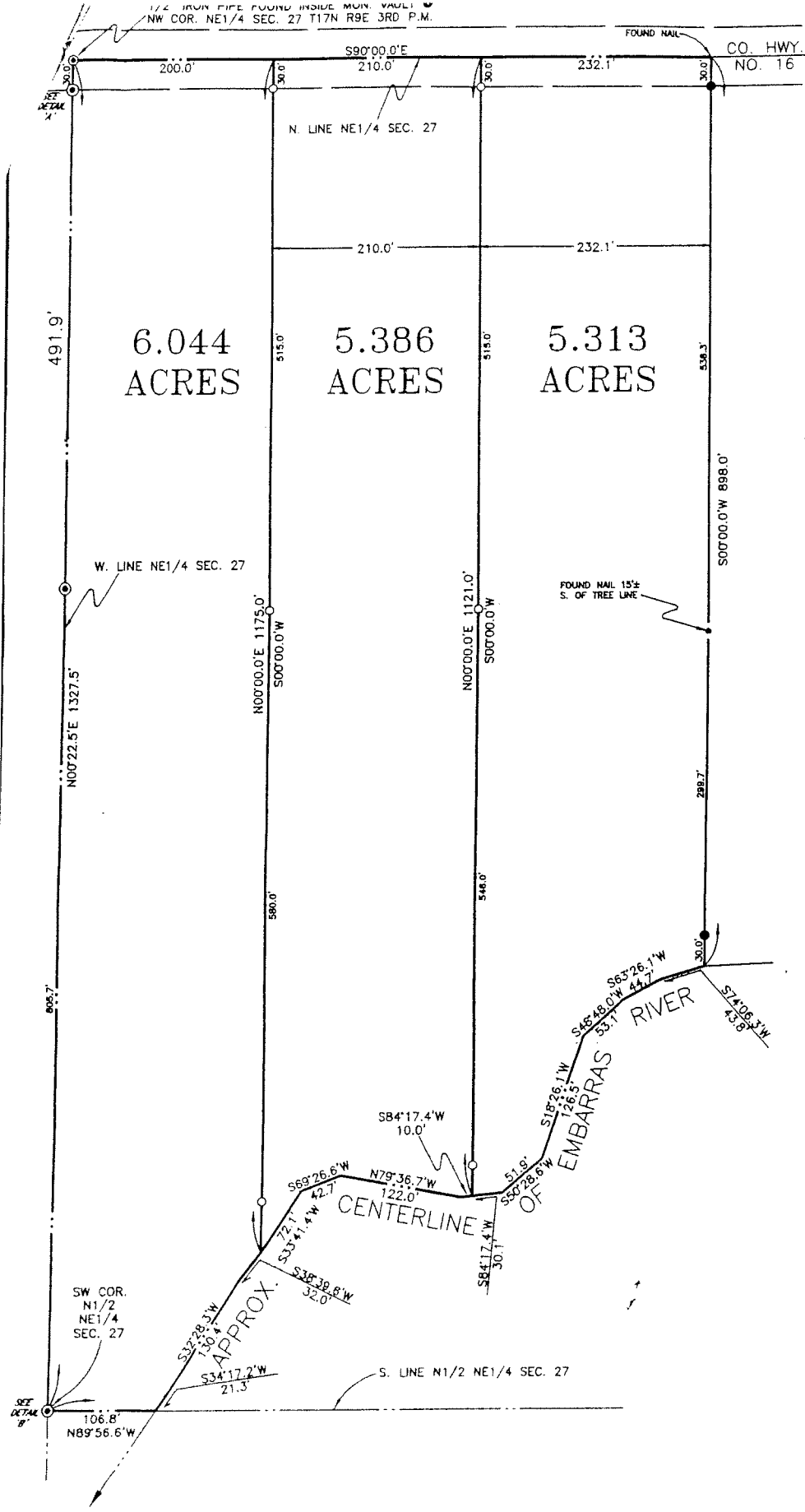
6.044 ACRE TRACT
Beginning at the Northwest corner of the Northeast Quarter of Section 27, Township 17 North of the Base Line, Range 9 East, Third Principal Meridian a distance of 90 degrees 00.0 minutes East (distance of 200.0 feet on the North Line of said Northeast Quarter; thence 1175.0 feet; thence S38°30.6'W 32.0 feet, the centerline of the Embarras River; thence S32°28.3'W 130.4 feet along said centerline; thence S34°17.2'W 21.3 feet along line; thence N89°58.6'W 108.8 feet on the South Line of the North Half of east Quarter; and thence N00°00.0'W 1175.0 feet to the point of beginning, enclosing 6.044 acres, situated in Champaign County, Illinois.

5.386 ACRE TRACT
Beginning on the North Line of east Quarter of Section 27, Township 17 North of the Base Line, Range 9 East, Third Principal Meridian a distance east of the Northwest Corner of east Quarter; thence South 90 minutes East (S90°00.0'E) 210.0 feet on the North Line; thence S00°00.0'W 10.0 feet along line of the Embarras River; thence S04°17.4'W 10.0 feet along line of the Embarras River; thence S33°41.4'W 42.7 feet along said centerline; thence S33°41.4'W 72.1 feet along said centerline; thence N00°00.0'E 1175.0 feet to the beginning; encompassing 5.386 acres in Champaign County, Illinois.

5.313 ACRE TRACT
Beginning on the North Line of east Quarter of Section 27, Township 17 North of the Base Line, Range 9 East, Third Principal Meridian a distance east of the Northwest Corner of east Quarter; thence South 90 minutes East (S90°00.0'E) 232.1 feet on the North Line; thence S00°00.0'W 43.8 feet along line of the Embarras River; thence S74°06.3'W 43.8 feet along line of the Embarras River; thence S18°28.1'W 128.5 feet along said centerline; thence S50°28.8'W 51.9 feet along line; thence S84°17.4'W 30.1 feet along centerline; and thence N00°00.0'W to the point of beginning, enclosing 5.313 acres, situated in Champaign County, Illinois.

To the best of my knowledge and best professional service conforms to the current minimum Standards of Practice applicable to surveys.

Robert A. Moore
Robert A. Moore
Illinois Land Surveyor No. 2816
License expires 11/30/2004



MOORE SURVEY
PAXTON, ILLINOIS

Champaign County Soil and Water Conservation District

2110 W. Park Court, Suite C

Champaign, IL. 61821

(217) 352-3536, Ext. 3

NATURAL RESOURCE REPORT

Development Name: None

Date Reviewed: February 8, 2008

Requested By: Justin Harrison

Address: Justin and Spring Harrison
202 North Oak Street
Villa Grove, IL 61956

RECEIVED

FEB 19 2008

CHAMPAIGN CO. P & Z DEPARTMENT

Location of Property: Part of the Northwest quarter of the Northeast Quarter of Section 27, T17N, R9E, Crittenden Township, Champaign County, IL. This is on the south side of County Road 200 North 3/8 mile west of Highway 130. The site consists of a corn field on the north and a small home with grass and trees on the south adjoining the Embarras River

The Resource Conservationist of the Champaign County Soil and Water Conservation District inspected this tract February 6, 2008.

SITE SPECIFIC CONCERNS

- 1. The area that is to be developed has 3 soil types that have severe wetness and ponding characteristics. This will be especially important for the septic system that is planned.**
- 2. Water drains from the north under the road along the east edge of the property. This flow continues to the East Branch of the Embarras River on the south side of the property. This drainageway must be kept clear to maintain its function.**
- 3. Pollution of the river is a concern due to the proximity of the houses. Extra care should be taken to minimize any possibility that runoff could carry pollutants to the river.**

SOIL RESOURCE

a) Prime Farmland:

This tract is NOT considered best prime farmland for Champaign County.

This tract has an L.E. Factor of 76; see the attached worksheet for this calculation. A portion of the tract is in corn and the south portion is not farmed. It is along the banks of the Embarras River and subject to flooding.

b) Erosion:

This area will be susceptible to erosion both during and after construction. Any areas left bare for more than 30 days, should be temporarily seeded or mulched and permanent vegetation established as soon as possible. The area is covered with corn stalks, which will minimize erosion until construction begins. Extra care should be taken during construction to minimize erosion due the proximity of the river.

c) Sedimentation:

A complete erosion and sedimentation control plan should be developed and implemented on this site prior to and during major construction activity. All sediment-laden runoff should be routed through sediment basins before discharge. No straw bales or silt fences should be used in concentrated flow areas, with drainage areas exceeding 0.5 acres. A perimeter berm could be installed around the entire site to totally control all runoff from the site. Plans should be in conformance with the Illinois Urban Manual for erosion and sedimentation control. Extra care should be taken during construction to minimize erosion due the proximity of the river.

d) Soil Characteristics:

There are three (3) soil types on this site; see the attached soil map. The soils present have moderate to severe limitations for development in their natural, unimproved state. The possible limitations include severe ponding and wetness that will adversely affect septic fields on the site.

A development plan will have to take these soil characteristics into consideration; specific problem areas are addressed below.

Map Symbol	Name	Slope	Shallow Excavations	Basements	Roads	Septic Fields
134B	Camden Silt Loam	2-5%	Severe: cutbank cave	Moderate: shrink-swell	Severe: low strength	Moderate: percs slowly
152A	Drummer Silty Clay Loam	0-2%	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding
242A	Kendall Silt Loam	0-2%	Severe: wetness	Severe: wetness	Severe: low strength	Severe: wetness
3107A	Sawmill silty clay loam	0-2%	Severe: ponding	Severe: ponding	Severe: ponding	Severe: flooding
570C2	Martinsville Loam	5-10%	Severe: cutbank cave	Moderate: s hrink-swell	Moderate: low strength	Slight:
680B	Campton silt loam	2-5%	Severe: wetness	Severe: wetness	Severe: low strength	Severe: wetness

WATER RESOURCE

a) Surface Drainage:

Most of the water drains from the north to the south and into the Embarrass River on the south side of the property. The field north of the road drains into a culvert under the road and through the property to the south into the river. This drainageway is east of a pad that was built up for future building. No building should take place in this area and the flow must be maintained to move the water to the river.

b) Subsurface Drainage:

This site may contain agricultural tile, if any tile found care should be taken to maintain it in working order.

Wetness may be a limitation associated with the soils on this site. Installing a properly designed subsurface drainage system will minimize adverse effects. Reinforcing foundations helps to prevent the structural damage caused by shrinking and swelling of naturally wet soils.

c) Water Quality:

As long as adequate erosion and sedimentation control systems are installed as described above, the quality of water should not be significantly impacted.

CULTURAL, PLANT, AND ANIMAL RESOURCE

a) Plant:

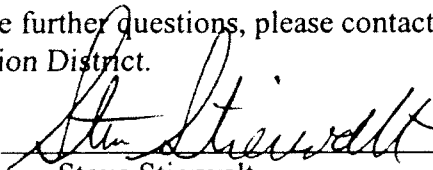
For eventual landscaping of the site, the use of native species is recommended whenever possible. Some species include White Oak, Blue Spruce, Norway Spruce, Red Oak, and Red Twig Dogwood. Extra care should be taken to maintain or increase grass planting on the south side of the property to act as a filter for water going into the river. Planting trees and grass along the river floodplain area would be desirable to maintain water quality.

b) Cultural:

The Illinois Historic Preservation Agency may require a Phase 1 Archeological Review to identify any cultural resources that may be on the site.

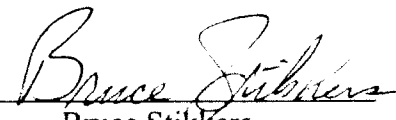
If you have further questions, please contact the Champaign County Soil and Water Conservation District.

Signed by


Steve Stierwalt

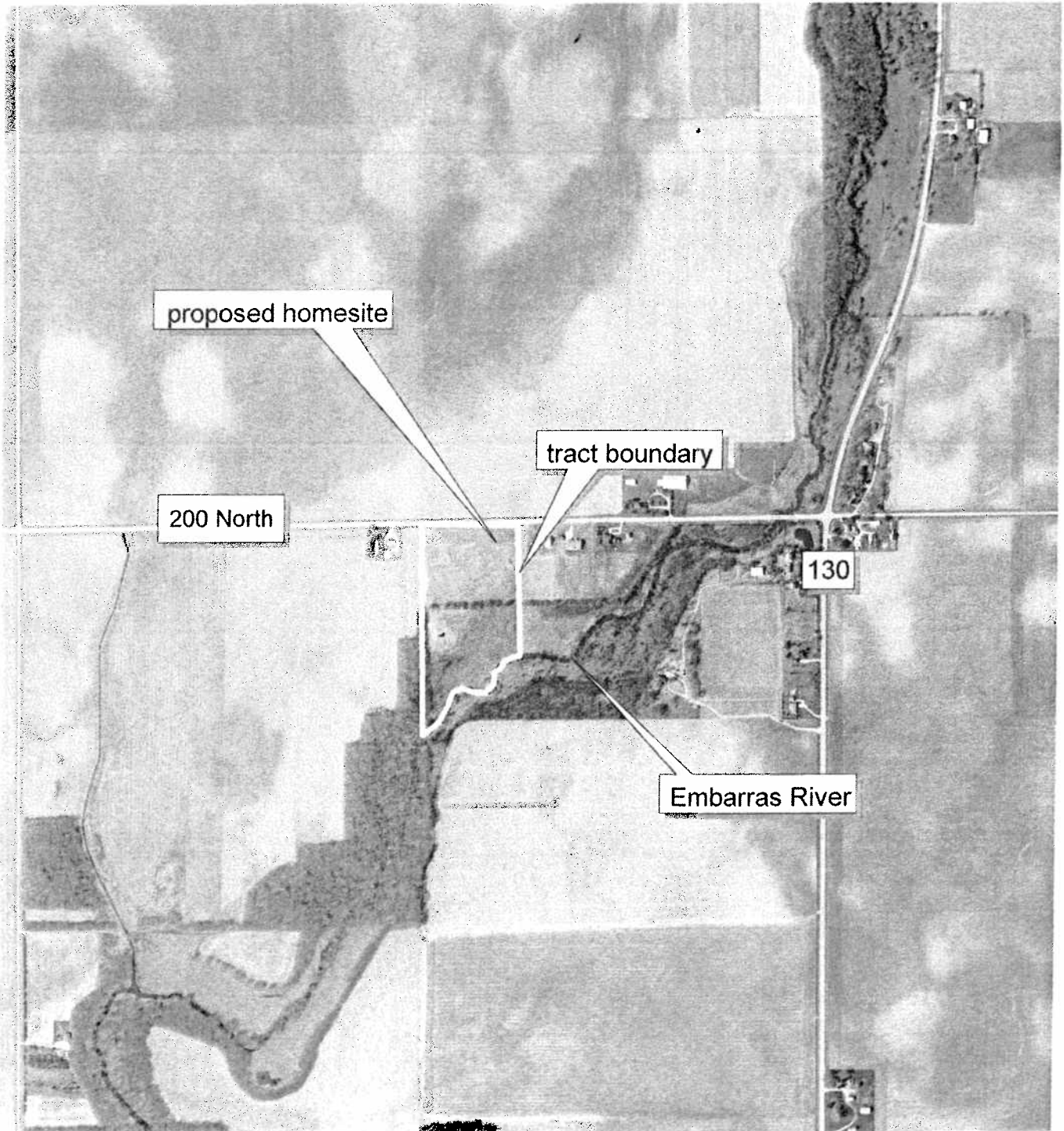
Board Chairman

Prepared by


Bruce Stickers

Resource Conservationist

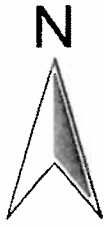
Harrison Subdivision



April 2005 photography

Champaign County SWCD
1/30/2008

Harrison Subdivision








County Road 200 North

proposed homesite

SOILS

View1

Harrisonsoils.shp

-  134B
-  152A
-  242A
-  3107A
-  570C2

T17N
R9E
Sec 27

Musym	First_Name	Sum_Acres
134B	Camden	2.5000
152A	Drummer	0.7000
242A	Kendall	4.6000
3107A	Sawmill	6.8000
570C2	Martinsville	2.1000

200 0 200 400 600 800 Feet



Champaign County SWCD
1/30/2008

Harrison Subdivision



built up area
for house

water flow from
field on north

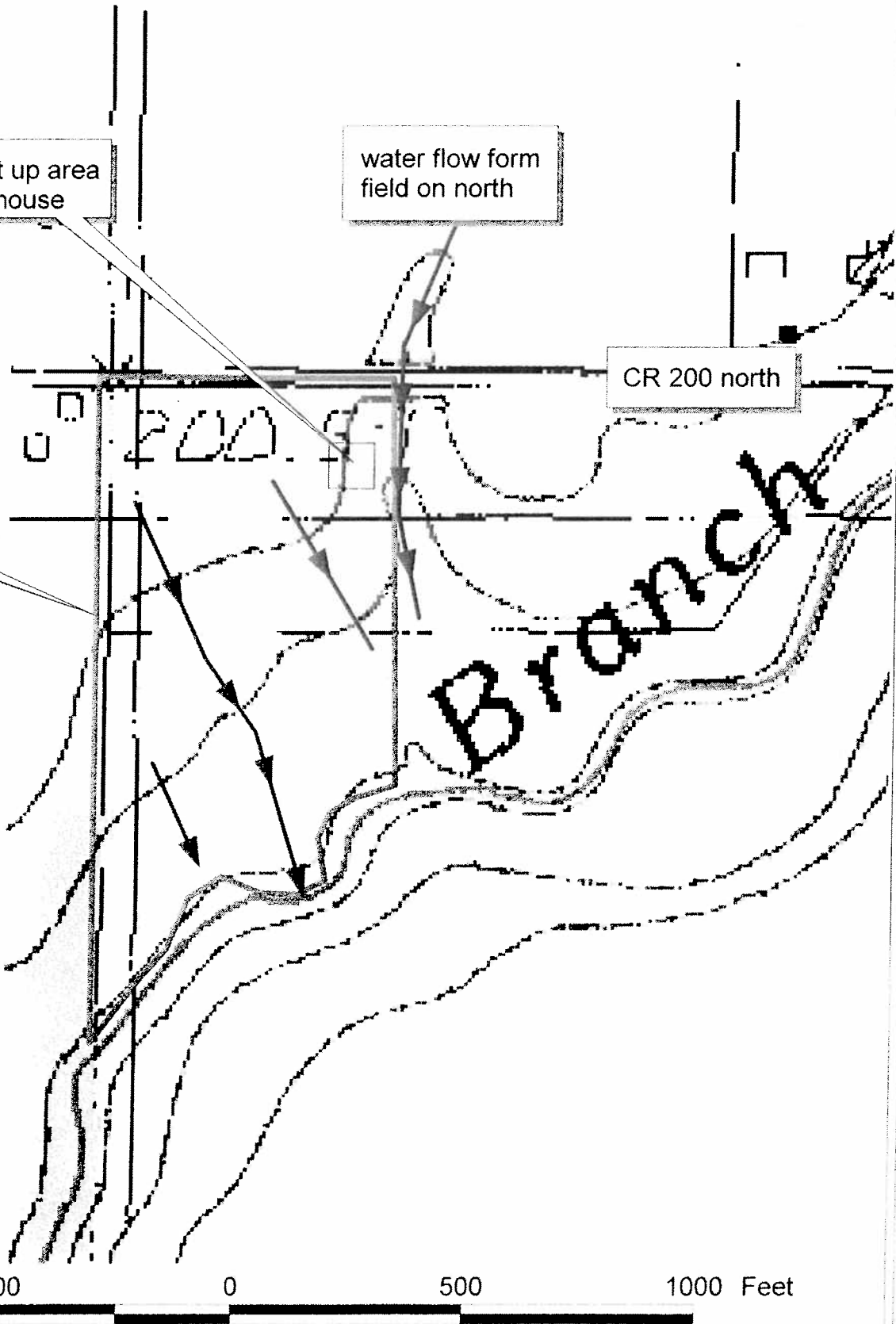
CR 200 north

property boundary

**Surface
Water
Flow**



500 0 500 1000 Feet



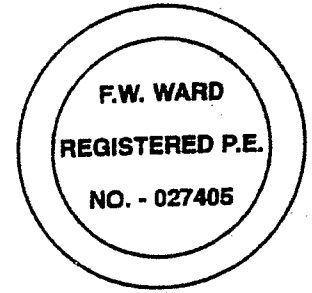


WAYNE WARD ENGINEERING

977 N COUNTY ROAD 1500 E

CAMARGO, ILLINOIS 61919

PHONE: (217) 253-2120 FAX: (217) 253-3218



**SURFACE DRAINAGE ANALYSIS OF
PARCEL 'A' (SHADWICK PROPERTY) AND
PARCEL 'C' (SOLLERS PROPERTY) OF
16.7 ACRE TRACT LOCATED IN NW¼ OF NE¼ OF
SECTION 27, T 17N, T 9E OF 3rd P.M.**

I, F. Wayne Ward, Registered Professional Engineer in the State of Illinois, entered upon Parcel "A" and Parcel "C" to survey and determine the surface drainage of the Parcels. A Plat of the resulting survey is hereby attached which indicates the ground contours on one foot internals and the direction and slope of surface drainage on the Parcels.

There is an existing natural waterway along the east property line of Parcel "A" that drains south from Road 200 North approximately 900 feet to the East Branch of the Embarrass River. All drainage from Parcel "A" flows towards and through the natural waterway.

The drainage from Parcel "C" flows naturally to the North road ditch for the north 100 feet of property, which then flows to the natural waterway mentioned above. The remaining part of Parcel "C" flows over natural ground for approximately 1200 feet toward the East Branch of the Embarrass River.

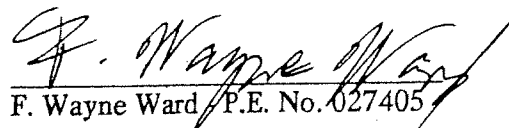
Water from Parcel "A" or Parcel "C" does not flow onto any adjoining property with the exception of the portion of the natural waterway that lies within the boundary of the adjoining property on the east.

All ground slopes have been indicated on the attached plat.

There is currently no structure on Parcel "A" and Parcel "C" has been planted with nursery stock trees, therefore, I have no knowledge of any proposed wastewater disposal system. Any sump pump discharge will be diverted to the same natural waterway that carries the surface water to the river. The quantity of discharge water would not impact the capacity or condition of the natural waterway.

The above information and the information provided on the attached plat is an accurate representation of the existing conditions of drainage on Parcel "A" (Shadwick Property) and Parcel "C" (Sollers Property) at this time.

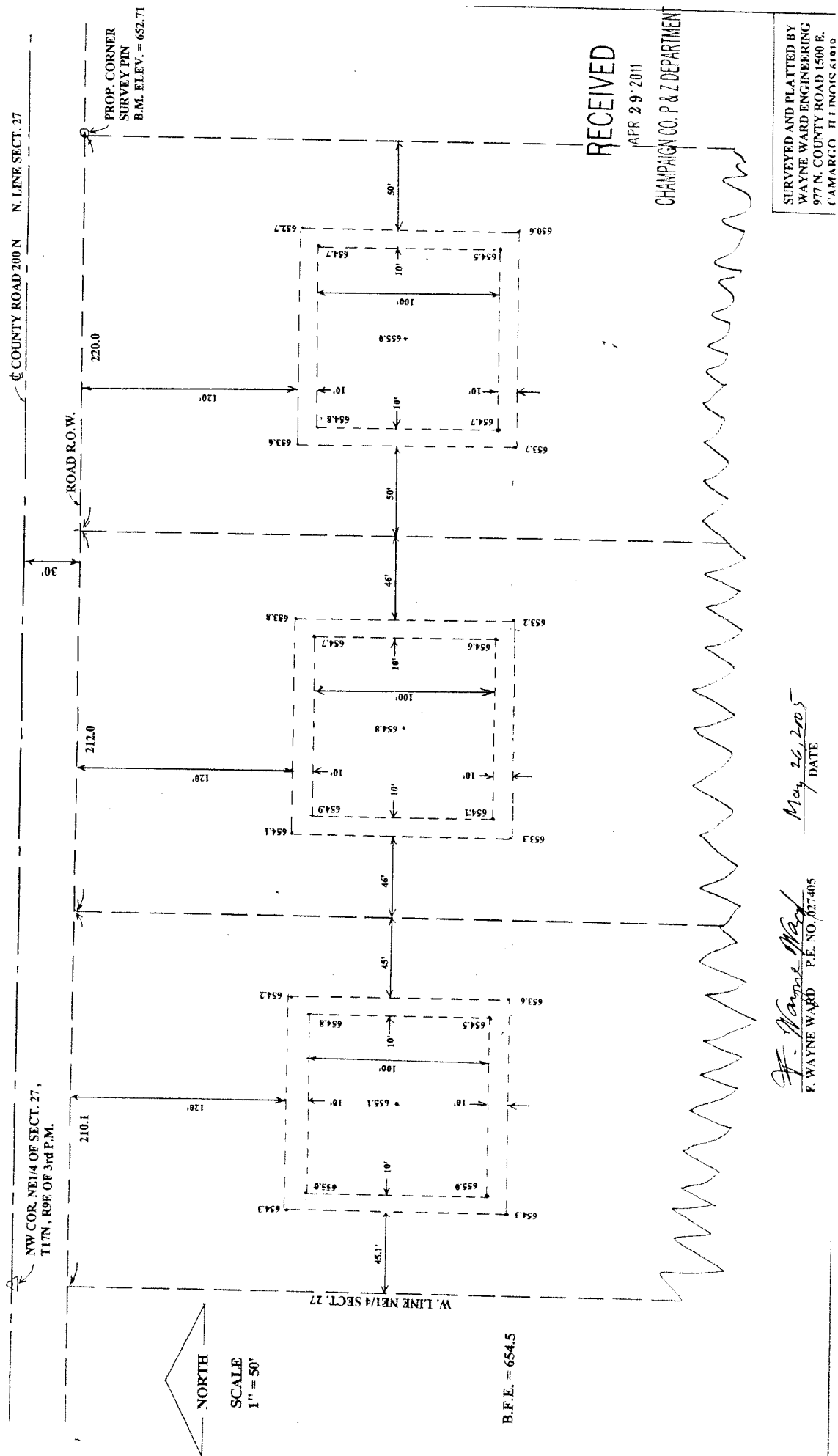
Prepared By


F. Wayne Ward P.E. No. 027405

March 10, 2011

Date

**TOPOGRAPHIC SURVEY FOR PHILLIP JONES
 LOCATED IN NW1/4 OF NE1/4 OF SECTION 27,
 T17N, R9E OF 3rd P.M. (CRITTENDEN TOWNSHIP)**

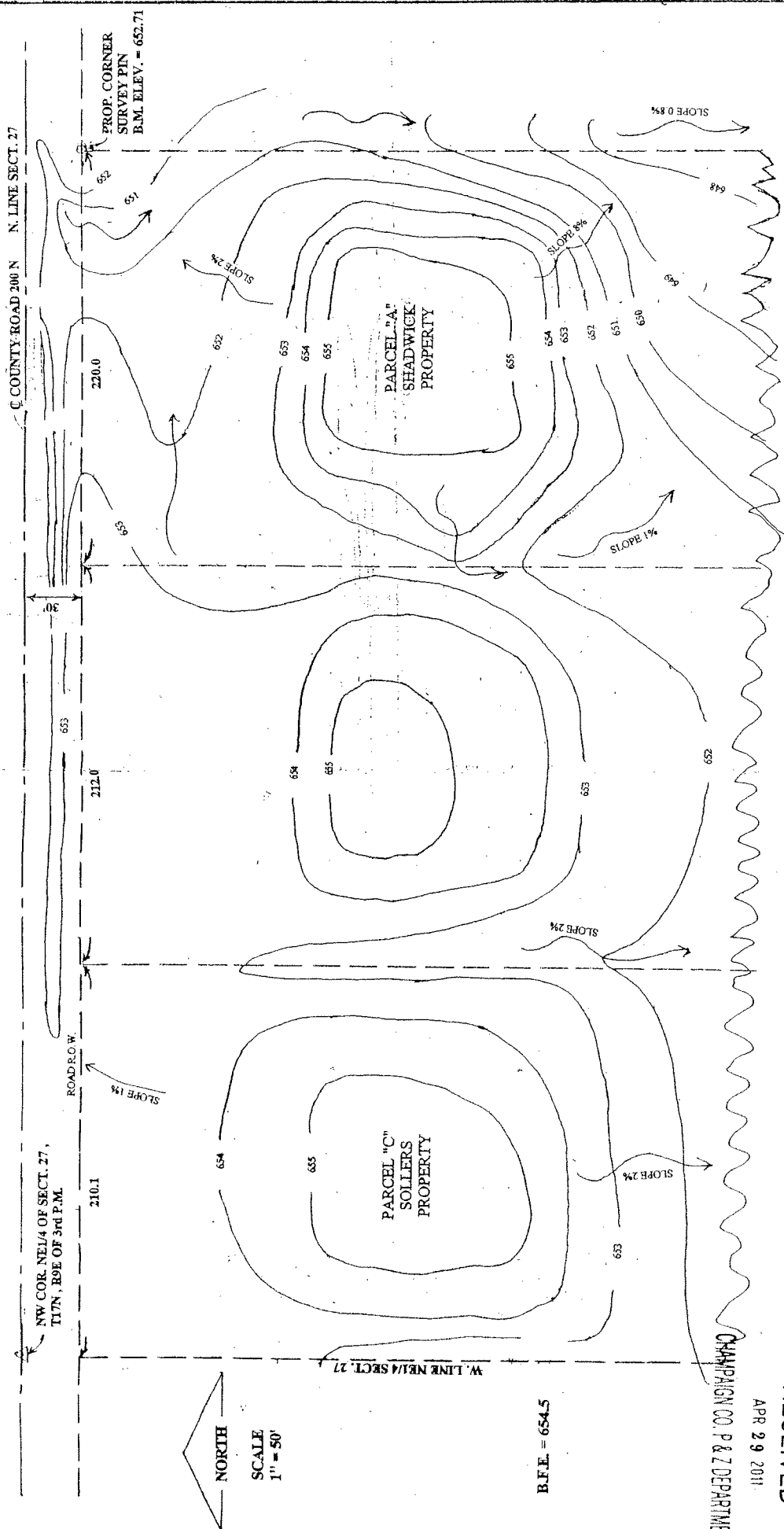


RECEIVED
 APR 29 2011
 CHAMPAIGN CO. P & Z DEPARTMENT

F. Wayne Ward
 F. WAYNE WARD P.E. NO. 027405
 May 26, 2015
 DATE

SURVEYED AND PLATTED BY
 WAYNE WARD ENGINEERING
 977 N. COUNTY ROAD 1500 E.
 CAMARCO, ILLINOIS 61010

TOPOGRAPHIC / DRAINAGE ANALYSIS SURVEY FOR
 PARCEL "A" (SHADWICK) AND PARCEL "C" (SOLLERS)
 LOCATED IN NW1/4, NE1/4, SECT. 27, T17N, R9E, 3rd PM
 CRITTENDEN TOWNSHIP, CHAMPAIGN CO., ILLINOIS



SURVEYED AND PLATTED BY
 WAYNE WARD ENGINEERING
 977 N. COUNTY ROAD 1500 E.
 CAMARGO, ILLINOIS 61919

MARCH 16, 2011
 DATE

Wayne Ward
 F. WAYNE WARD P.E. NO. 027406

CHAMPAIGN CO. P & Z DEPARTMENT

APR 29 2011

RECEIVED

B.F.E. = 654.5

NORTH
 SCALE
 1" = 50'

**Table 2. Comparing The Proposed Site Condition To Common Champaign County Conditions
Case 690-AM-11**

RRO Rezoning Factor	Conditions At The Proposed Site Are Most Comparable To The Following Common Conditions:
1) Availability of water supply	<p><input type="radio"/> More or Less Typical Conditions Reasonable confidence of water availability (area with no suspected problems of groundwater availability) and no reason to suspect impact on neighboring wells.</p>
2) Suitability for onsite wastewater systems	<p><input checked="" type="radio"/> Much Better Than Typical Conditions. About 50% of the soils have a very high suitability and only about 13% of the soils on the property have low suitability compared to the approximately 51% of the entire County that has a Low Potential. Also, according to the Champaign County Public Health Department only two of the proposed lots will need curtain drains.</p>
3) Flood hazard status	<p><input checked="" type="radio"/> Worst or Nearly Worst Conditions Entire lot is entirely within the SFHA (based on actual topography) but fill has been added to make a building pad above the Base Flood Elevation</p>
4) The availability of emergency services ⁴	<p><input checked="" type="radio"/> Much Better Than Typical Conditions. Located between two-and-half and five road miles from a fire station within the district.</p>
5) The presence of nearby natural or manmade hazards ⁵	<p><input checked="" type="radio"/> Nearly Ideal Conditions. There are no man-made hazards nearby</p>
6) Effects on wetlands, historic or archeological sites, natural or scenic areas, and/or wildlife habitat	<p><input type="radio"/> More or Less Typical Conditions Archaeological concerns may apply to a small part of the site but in general no negative effects.</p>
7) Effects of nearby farm operations on the proposed development	<p><input checked="" type="radio"/> Much Better Than Typical Conditions. Approximately half of the surrounding land use is farmland and half the perimeter of the subject property is bordered by row crop agriculture.</p>
8) The LESA score	<p>TO BE DETERMINED</p>
9) Adequacy and safety of roads providing access	<p><input checked="" type="radio"/> Nearly Ideal Conditions. Access is from a County Highway (CH16) and is less than one mile from a State Highway (Ill. 130). Access is at a location with good visibility.</p>
10) Effects on drainage both upstream and downstream	<p><input checked="" type="radio"/> Much Better Than Typical Conditions. Only about 13% of soils are "wet" soils; there is good surface drainage with adequate outlets and the property drains only a short distance over adjacent land.</p>

**Table 2. Comparing The Proposed Site Condition To Common Champaign County Conditions
Case 690-AM-11**

RRO Rezoning Factor	Conditions At The Proposed Site Are Most Comparable To The Following Common Conditions:
<p>LEGEND (Also see the Descriptions of Prototypical Champaign County Conditions)</p> <ul style="list-style-type: none"> ⊕ WITH NO CORRECTIVE IMPROVEMENTS, the proposed site is more or less equal to the ideal Champaign County site ☆ WITH NO CORRECTIVE IMPROVEMENTS, the proposed site is much better than typical but not equal to the ideal Champaign County site ○ WITH NO CORRECTIVE IMPROVEMENTS, the proposed site is equal to or somewhat better than the typical Champaign County site — WITH NO CORRECTIVE IMPROVEMENTS, the proposed site is worse than the typical Champaign County site — WITH NO CORRECTIVE IMPROVEMENTS, the proposed site is more or less equal to the worst Champaign County site for 	
<p>NOTES</p> <ol style="list-style-type: none"> 1. Typical Champaign County rural residential development site conditions are based on averages for the entire County except for water availability. For example, the overall average Land Evaluation is for all of the land in the County. Some factors are based on a review of data for all major rural subdivisions (such as the gross average lot size). 2. The ideal Champaign County rural residential development site conditions are based on the best possible conditions <u>for each factor</u> that can be found in rural Champaign County regardless of the amount of land that might be available and regardless of whether or not any individual site would likely ever combine ideal ratings on all factors. 3. Typical factor is based on a review of data from major rural subdivisions in the AG-1 and CR districts and does not reflect conditions found in rural residential development that occurred under the requirements of the Illinois Plat Act and without County subdivision approval. These Plat Act Developments typically take up much more land since the minimum lot size is five acres. 4. Ambulance service can presumably be further than five miles distance and be acceptable. NO STANDARD OF COMPARISON IS PROPOSED FOR EMERGENCY AMBULANCE SERVICE. 5. Any location in the County is subject to natural hazards such as tornadoes, freezing rain, etc. 	

Table Of Common Conditions¹ Influencing The Suitability Of Locations For Rural Residential Development In Champaign County

REVISED November 17, 2005

p. 1 of 4

Worst Or Nearly Worst Condition ³ ■	Much Worse Than Typical Condition ⁴ ▣	More Or Less Typical Condition ○	Much Better Than Typical Condition ⁴ ☆	Ideal Or Nearly Ideal Conditions ⁶ ☆
RRO² ZONING FACTOR: Availability of water supply				
In the area with suspected problems of groundwater availability near existing wells which have experienced reliability problems and for which no investigations have proven otherwise.	An area with suspected problems of groundwater availability and for which no investigations have proven otherwise.	Reasonable confidence of water availability (area with no suspected problems of groundwater availability) and no reason to suspect impact on neighboring wells.	?	Virtual certainty of water availability (ie, located above the Mahomet-Teays Aquifer) or where anywhere that investigations indicate availability with no significant impact on existing wells.
RRO² ZONING FACTOR: Suitability for onsite wastewater systems				
100% of site with Low or Very Low Potential for septic tank leach fields.	More than 50% of site (but less than 95%) with Low Potential for septic tank leach fields.	No more than 50% of site with Low Potential for septic tank leach fields.	More than 50% of site with at least a Moderate Potential for septic tank leach fields.	100% of site with at least a High Potential for septic tank leach fields or positive soil analysis (regardless of soil potential).
RRO² ZONING FACTOR: Flood hazard status				
Every lot is entirely within the SFHA (based on actual topography) as is the road that provides access.	Some of the proposed lots and parts of the road that provide access are in the SFHA. Some lots may require fill to have adequate buildable area above the BFE.	Small portions of the site may be in the SFHA but all lots have adequate buildable area outside of the SFHA.	?	No part of the proposed site nor the roads that provide emergency access are located in the Special Flood Hazard Area (SFHA, which is the 100-year floodplain).
RRO² ZONING FACTOR: The availability of emergency services⁷				
Located more than five road miles from a fire station within the district with an intervening railroad crossing with heavy rail traffic.	Located more than five road miles from a fire station within the district.	Located about five road miles from a fire station within the district.	Located between two-and-half and five road miles from a fire station within the district.	Located less than two-and-half road miles from the fire station within the district and with no intervening railroad grade crossings.
RRO² ZONING FACTOR: The presence of nearby natural⁸ or manmade hazards				
More than one man-made hazard is present or adjacent to the site. Access roads from fire protection station are prone to snow drifts.	One or more man-made hazards are present or adjacent to the site. Access roads from fire protection station are prone to snow drifts.	It is not unusual for a site to be close to some kind of hazard such as a pipeline, high tension electrical transmission lines, or railroad tracks. Snow drifts may block access from fire protection station.	Not close to any man-made hazard although snow drifts may block access from fire protection station.	Not close to any man-made hazard and relatively close to urbanized areas.

Table Of Common Conditions¹ Influencing The Suitability Of Locations For Rural Residential Development In Champaign County

(continued) REVISED November 17, 2005

p. 2 of 4

Worst Or Nearly Worst Condition ³ ■	Much Worse Than Typical Condition ⁴ ■	More Or Less Typical Condition ○	Much Better Than Typical Condition ⁴ ☆	Ideal Or Nearly Ideal Conditions ⁶ ★
RRO² ZONING FACTOR: Effects on wetlands, historic or archeological sites, natural or scenic areas, and/or wildlife habitat				
Significant negative effects for more than one concern.	?	Archaeological concerns may apply to a small part of the site but in general no negative effects. ⁶	?	Nothing present to be concerned about.
RRO² ZONING FACTOR: Effects of nearby farm operations on the proposed development				
Bordered by row crop agriculture on three sides and an existing livestock and/or stable operation on the fourth side.	Bordered by row crop agriculture on three sides but also close to and downwind of an existing livestock and/or stable operation.	Bordered on all sides by significant (more than a few acres) row crop agriculture so there are some incompatibilities that may lead to complaints from residences.	Bordered on no more than two sides by significant row crop agriculture	No effects because not adjacent to significant row crop agriculture nor downwind of any animal operations.
RRO² ZONING FACTOR: The LESA score				
292 to 286 (Very high rating for protection) Land Evaluation part: 100 to 98 (100% of soil in Ag. Value Groups 1 & 2; Flanagan & Drummer soils generally) Site Assessment part: 192 to 188 (See hypothetical worksheet for assumptions)	285 to 256 (Very high rating for protection) Land Evaluation part: 97 to 93 (remainder between worst & overall average) Site Assessment part: 187 to 163 (remainder between worst & overall average)	254 to 238 (Very high rating for protection) Land Evaluation part: 92 (reflects overall average for entire County) Site Assessment part: 162 to 146 (See hypothetical worksheet for assumptions)	237 to 188 (Very high rating to moderate rating for protection) Land Evaluation part: 91-85 (remainder between overall average & ideal) Site Assessment part: 145 to 103 (remainder between overall average & ideal)	186 to 121 (Moderate rating to low (170) rating for protection) Land Evaluation part: 84 to 41 ⁴ (No best prime farmland soils) Site Assessment part: 102 to 80 (Conditions intended to reflect a rural location within a municipal ETJ without sewer or water, typical urban subdivision at or near municipal boundary has site assessment of 82 to 54; see hypothetical worksheet for assumptions)

Worst Or Nearly Worst Condition ³ ■	Much Worse Than Typical Condition ⁴ □	More Or Less Typical Condition ○	Much Better Than Typical Condition ⁴ ☆	Ideal Or Nearly Ideal Conditions ⁶ ⊕
RRO² ZONING FACTOR: Adequacy and safety of roads providing access				
<p>Access for all trips is from a Township Highway that has serious deficiencies (based on existing traffic load) in terms of both pavement width and shoulder width. There may also be other deficiencies in the roadway.</p> <p>The point of access to the Township Highway is a location with serious visibility problems.</p> <p>The site is at more than five miles from a County or State highway. The intersections are uncontrolled and have visibility problems.</p>	<p>Access for all trips is from a Township Highway that has serious deficiencies (based on existing traffic load or traffic speed) in terms of both pavement width and shoulder width between the proposed site and where the road connects to a County or State Highway OR there is an uncontrolled railroad crossing between the proposed site and where the road connects to a County or State Highway.</p> <p>The site is within five miles of a County or State highway. The intersections are uncontrolled and have visibility problems. The point of access to the Township Highway has reasonable visibility.</p>	<p>Access from a Township Highway which does not have adequate shoulder width and may also have insufficient (based on either existing traffic load or traffic speed) pavement width for a small portion of the distance between the proposed site and where the road connects to a County or State Highway.</p> <p>The site is within five miles of a County or State highway. The intersections are uncontrolled and have visibility problems. The point of access to the Highway has good visibility. See discussion of Effects On Farms for farm related traffic concerns.</p>	<p>Access is from a Township Highway with no deficiencies (even including the proposed increase in ADT) between the proposed site and where the road connects to a County or State Highway.</p> <p>The intersections are uncontrolled and have visibility problems.</p> <p>Access is at a location with good visibility.</p>	<p>Access from any of the following: 1) a County Highway or 2) a Township Highway with no deficiencies (even including the proposed increase in ADT) and is less than one mile travel to a County or State Highway.</p> <p>Access is at a location with good visibility.</p> <p>Access should not be directly to a State or Federal highway because vehicle turning movements could create safety concerns.</p>
RRO² ZONING FACTOR: Effects on drainage both upstream and downstream				
<p>100% of site has wet soils that must be drained for development. Large parts of the site also pond.</p> <p>There is no natural drainage outlet for either surface or subsurface flows so offsite improvements are necessary.</p> <p>An alternative problem is the condition in which the site is bisected by a natural drainageway with large flows from upstream offsite areas which have significant effects on site development.</p>	<p>Between 90% and 100% of the site has wet soils that must be improved for development.</p> <p>Only about half of the site drains to existing road ditches. The rest of the site drains over adjacent land that is under different ownership which require offsite improvements. Ponding is a significant problem.</p>	<p>Approximately 90% of the site has wet soils that must be improved for development. There may also be large areas where ponding occurs. Most of the site drains through township road ditches that do not have adequate capacity.</p>	<p>Probably less than half of the site has wet soils.</p> <p>The site drains to Township road ditches that are more or less adequate or to other natural drainage features that have adequate capacity.</p>	<p>No wet soils so no "dry weather flows" problems OR if wet soils are present the site drains directly to a drainage district facility with adequate capacity or to a river.</p>

Table Of Common Conditions¹ Influencing The Suitability Of Locations For Rural Residential Development In Champaign County

(continued) REVISED November 17, 2005

p. 4 of 4

Worst Or Nearly Worst Condition ³ ■	Much Worse Than Typical Condition ⁴ ■	More Or Less Typical Condition ⁵ ○	Much Better Than Typical Condition ⁴ ☆	Ideal Or Nearly Ideal Conditions ⁶ ⊙
NOTES				
1. Five different "typical" conditions are identified that are representative of the range of conditions that exist in Champaign County. The characterization of these conditions are based solely on the opinions of County Staff.				
2. RRO= Rural Residential Overlay				
3. The WORST conditions are based on the worst possible conditions for each factor that can be found in rural Champaign County regardless of the amount of land that might be available and regardless of whether or not any individual site would likely ever combine "worst" ratings on all factors.				
4. MUCH WORSE THAN TYPICAL and MUCH BETTER THAN TYPICAL conditions are Staff judgements.				
5. Where possible, TYPICAL Champaign County rural residential development site conditions are based on averages for the entire County. For example, the overall average Land Evaluation is for all of the land in the County. Some factors are based on a review of data for all major rural subdivisions (such as the gross average lot size). Differences in water availability are localized and not averaged over the entire County.				
6. The IDEAL Champaign County rural residential development site conditions are based on the best possible conditions for each factor that can be found in rural Champaign County regardless of the amount of land that might be available and regardless of whether or not any individual site would likely ever combine "ideal" ratings on all factors.				
7. Ambulance service can presumably be further than five miles distance and be acceptable. NO STANDARD OF COMPARISON IS PROPOSED FOR EMERGENCY AMBULANCE SERVICE.				
8. Any location in the County is subject to natural hazards such as tornadoes, freezing rain, etc.				