

Jo Daviess County

LAND EVALUATION SITE ASSESSMENT

Adopted July 11, 2006
By the Jo Daviess County Board

As approved by the
Illinois Department of Agriculture,
Bureau of Land & Water Resources
&
USDA-Natural Resources Conservation Services

LAND EVALUATION AND SITE ASSESSMENT (LESA) SYSTEM

- 1. PURPOSE AND INTENT.** The Land Evaluation and Site Assessment (LESA) System has been designed to provide a rational objective process for assisting local officials in making farmland conversion decisions through the local zoning process. The system will be used by the staff of Jo Daviess County, the Natural Resources Conservation Service (NRCS), and the Jo Daviess County Soil and Water Conservation District (SWCD) when reporting to local hearing bodies and elected officials concerning petitions to allow the conversion of farmland to non-agricultural uses.
 - A. The system contains two (2) separate but related reports as follows:
 - i. Land Evaluation - an evaluation of soil properties and their relative desirability for agricultural use (100 points maximum); and
 - ii. Site Assessment - an assessment of other factors relating to the site that should be considered before farmland is converted to other uses (200 points maximum).
- 2. SCORING OF THE LESA SYSTEM.** Scoring of the LESA system will be done by Zoning Administrator using data from various sources.
- 3. POINT SYSTEM.** The system has been designed to provide for the assignment of a maximum of 300 points which would indicate maintaining land for agricultural use to 0 points which would indicate conversion of land to other uses is generally acceptable. The following breakdown should be used in evaluating land for rezoning from Agricultural to other non-AG related uses.
 - A. Point values of 200 and above indicate that the site is a prime location for agricultural retention.
 - B. Point values above 165 up to 200 indicate that the site may be suitable for non-agricultural related uses depending on other factors.
 - C. Point values of 165 and under indicate that the site is generally suitable for non-agricultural related uses.
 - D. Point values are not intended to be bright-line cut-off limitations. Every project proposed will be considered in the context of its unique characteristics. Other factors to be considered include, but are not limited to, compatibility with the Jo Daviess County Comprehensive Plan, and evidence provided at the public hearing.

In addition, certain soils, such as those in Agricultural Group 9, although yielding a very low LESA score, may not be appropriate for any structural development.

The National Flood Insurance Program and Flood Insurance Rate Maps (FIRM), as established by the Federal Emergency Management Agency (FEMA), shall also be considered, as shall any adopted local Land Resource Management Plan, when assigning points to LESA factors.

4. FACTORS TO BE CONSIDERED. The factors to be considered and the points assigned to each factor are listed below:

A. Land Evaluation

The land evaluation section of the system is designed to provide a value for a specific site based on the agricultural production capabilities of the soil. The maximum score is 100 points. The higher the score, the higher the agricultural production capabilities of the soils in the proposed site, and the less suitable the site is for non-agricultural use.

All land in Jo Daviess County has been classified and mapped by soil series, (see Glossary). The results of this classification are documented in the Soil Survey of Jo Daviess County, Illinois. Soil productivity is indicated in the “University of Illinois – Supplement to Soil Productivity in Illinois” Bulletin 810 (Average Management)

The land evaluation score for any site is obtained by referring to Table 1 - “Soils of Jo Daviess County, Illinois – List of Soil Series and Evaluations.” The score is determined as follows:

- i. A breakdown of the number of acres of each soil series in the proposed site is obtained from SWCD.
- ii. Refer to Table 1 - “Soils of Jo Daviess County, Illinois – List of Soil Series and Evaluations” to obtain the “LE score” for each soil series present in the proposed site.
- iii. Multiply the “LE score” by the number of acres of that soil series present in the proposed site. This provides the “Acreage x LE score value.” (Soil Acreage x LE Score = Value)
- iv. Total all the “Acreage x LE score values” for the proposed site and then divide by the total number of acres in the proposed site. This provides the final Land Evaluation score. (Total Acreage ÷ Total Value = LE Score)

(Total Acreage – To get total acreage you must add all of the soil type acreages together)
(Total Value – To get total value you must add all of the values together)

A sample calculation is provided following Table 1.

B. Site Assessment

Agricultural economic viability of a site cannot be measured in isolation from existing and impending land use needs of Jo Daviess County. The Site Assessment process provides a system for identifying important factors, other than soils, that affect the economic viability of a site for agricultural uses.

This section describes each of Site Assessment factors to be considered when a change to another land use is proposed in an area zoned Agricultural (AG), under the provisions of the Jo Daviess County Zoning Ordinance.

Based upon current land use data, land use regulations, site inspection and other pertinent information, a point value is determined by analyzing each site assessment factor and selecting a number value that best reflects the quality of the property in question. The maximum number of points is 200. The higher the score, the higher the value of the proposed site for agriculture, and the less suitable it is for non-agricultural use.

**5. LAND EVALUATION: TABLE 1 -- SOILS OF JO DAVIESS COUNTY, IL
– LIST OF SOIL SERIES AND EVALUATIONS. (See next page)**

Map Symbol	Soil Series	Slope %	Land Cap	Hydric Soils	Imp. Farmland Determination	P.I.	Relative Value	PI+ Relative value	LE Score	Total Acres	% Acres	Ag Group
41B	MUSCATINE	1-3	2E	I	PRIME	129	98	227	100	6,305	1.6	
68	SABLE	0-2	2W	H	P2	126	98	224	99	965	0.2	
36B	TAMA	2-5	2E	I	PRIME	122	98	220	97	10,790	2.7	
7430B	RADDLE, RARELY FLOODED	1-4	2E	I	PRIME	121	98	219	96	2,180	0.6	1
8284	TICE, OCCASIONALLY FLOODED	0-2	2W	I	PRIME	118	98	216	95	2,290	0.6	1
61B	ATTEREBERRY	1-3	2E	I	PRIME	116	98	214	94	3,040	0.8	1
3077	HUNTSVILLE, FREQUENTLY FLOODED	0-2	2W		P3	114	98	212	93	1,280	0.3	1
										26,850		
386B	DOWNS	2-5	2E	I	PRIME	118	87	205	90	11,700	3	1
8070	BEAUCOUP, OCCASIONALLY FLOODED	0-2	2W	H	P2	116	87	203	89	2,515	0.6	1
8415	ORION, OCCASIONALLY FLOODED	0-2	2W	I	PRIME	116	87	203	89	4,590	1.1	2
8239	DORCHESTER, OCCASIONALLY FLOODED	0-2	2W	I	PRIME	113	87	200	88	4,220	1	2
3451	LAWSON, FREQUENTLY FLOODED	0-2	3W	I	P3	124	75	199	88	4,440	1.1	2
278B	STRONGHURST	1-3	2E	I	P2	110	87	197	87	1,040	0.3	2
										28,505		
3333	WAKELAND, FREQUENTLY FLOODED	0-2	2W	I	P5	114	75	189	83	6,220	1.6	2
572B	LORAN	3-7	2E	I	PRIME	106	75	181	80	1,285	0.3	2
279B	ROZETTA	2-5	2E	I	PRIME	105	75	180	79	12,084	3.1	2
280B2	FAYETTE	2-5	2E		PRIME	103	75	178	78	6,285	1.6	2
419B2	FLAGG	2-5	2E	I	PRIME	101	75	176	78	550	0.1	2
274B2	SEATON	2-5	2E		PRIME	101	75	176	78	505	0.1	2
8366	ALGANSEE, OCCASIONALLY FLOODED	0-2	3W	I	PRIME	89	85	174	77	440	0.1	2
731B	NASSET	2-5	2E		PRIME	99	75	174	77	640	0.2	3
565B	TELL	2-5	2E		PRIME	98	75	173	76	455	0.1	3
745B	SHULLSBURG	3-7	2E	I	PRIME	98	75	173	76	690	0.2	3
172	HOOPESTON	0-2	2S	I	PRIME	97	75	172	76	395	0.1	3
753B	MASSBACH	2-5	2E		PRIME	97	75	172	76	1,150	0.3	3
732B	APPLERIVER	2-5	2E	I	PRIME	92	75	167	74	1,090	0.3	3
87A	DICKINSON	0-3	2S		PRIME	92	75	167	74	430	0.1	3
429B2	PALSGROVE	2-5	2E		PRIME	87	75	162	71	1,580	0.4	3
261	NIOTA	0-2	2W	H	P2	87	75	162	71	555	0.1	3
175B	LAMONT	1-7	3E		PRIME	85	75	160	70	515	0.1	3
										34869		
36C	TAMA	5-10	3E		IMPORTANT	118	74	192	85	685	0.2	3
386C2	DOWNS	5-10	3E	I	IMPORTANT	109	74	183	81	8,625	2.2	3

Map Symbol	Soil Series	Slope %	Land Cap	Hydric Soils	Imp. Farmland Determination	P.I.	Relative Value	PI+ Relative value	LE Score	Total Acres	% Acres	Ag Group
280C2	FAYETTE	5-10	3E		IMPORTANT	99	74	173	76	23,385	5.9	3
279C2	ROZETTA	5-10	3E		IMPORTANT	98	74	172	76	15,510	3.9	3
419C2	FLAGG	5-10	3E		IMPORTANT	98	74	172	76	805	0.2	3
274C2	SEATON	5-10	3E		IMPORTANT	96	74	170	75	3,050	0.8	3
280D2	FAYETTE	10-15	3E		IMPORTANT	94	74	168	74	17,905	6.1	3
576	ZWINGLE	0-2	3W	H	IMPORTANT	94	74	168	74	1,020	0.3	3
731C2	NASSET	5-10	3E		IMPORTANT	92	74	166	73	2,760	0.7	3
279D2	ROZETTA	10-15	3E		IMPORTANT	92	74	166	73	6,190	1.6	4
274D2	SEATON	10-15	3E		IMPORTANT	92	74	166	73	3,505	0.9	4
119C2	ELCO	5-10	3E		IMPORTANT	91	74	165	73	2,785	0.7	4
565C2	TELL	5-10	3E		IMPORTANT	91	74	165	73	370	0.1	4
753C2	MASSBACH	5-10	3E		IMPORTANT	90	74	164	72	4,775	1.2	4
731D2	NASSET	10-15	3E		IMPORTANT	87	74	161	71	305	0.1	4
27D2	MIAMI	10-15	4E		IMPORTANT	86	74	160	70	985	0.2	4
547C2	ELEROY	5-10	3E		IMPORTANT	86	74	160	70	5,555	1.4	4
753D2	MASSBACH	10-15	3E		IMPORTANT	85	74	159	70	985	0.2	4
429C2	PALSGROVE	5-10	3E		IMPORTANT	85	74	159	70	9,695	2.4	4
										108,895		
547D2	ELEROY	10-15	3E		IMPORTANT	81	74	155	68	10,010	2.5	4
540C2	FRANKVILLE	4-10	3E		IMPORTANT	79	74	153	67	640	0.2	4
418B	SCHAPVILLE	2-5	2E		IMPORTANT	92	57	149	66	300	0.1	4
569C2	MEDARY	3-12	3E		IMPORTANT	70	74	144	63	820	0.2	4
418C2	SCHAPVILLE	5-10	3E		IMPORTANT	83	57	140	62	1,475	0.4	4
417B	DERINDA	2-5	2E		IMPORTANT	82	57	139	61	380	0.1	5
429D2	PALSGROVE	10-15	3E		IMPORTANT	80	57	137	60	8,620	2.2	5
88B	SPARTA	1-7	4S		IMPORTANT	86	50	136	60	4,945	1.2	5
175D2	LAMONT	7-15	4E		IMPORTANT	75	57	132	58	695	0.2	5
29C2	DUBUQUE	4-10	3E		IMPORTANT	75	57	132	58	3,810	1	5
928D2	NEWGLARUS-PALSGROVE	7-15	3E		IMPORTANT	81	50	131	58	11,550	2.9	5
										43,245		
418D2	SCHAPVILLE	10-15	4E		IMPORTANT	77	50	127	56	1,560	0.4	5
53D	BLOOMFIELD	7-15	4E		IMPORTANT	76	50	126	56	715	0.2	5
88D	SPARTA	7-15	6S		IMPORTANT	80	45	125	55	235	0.1	5
417C2	DERINDA	5-10	3E		IMPORTANT	74	50	124	55	2,365	0.6	6
29D2	DUBUQUE	10-15	4E		IMPORTANT	70	50	120	53	7,220	1.8	6

[illegible]

Table 2, Ave PI
LAND EVALUATION
 Jo Daviess County, Illinois

AGRICLUTURAL GROUP	CLASS & SUBCLAS S	FARMLAND CLASS- IFICATION	PRODUCTIVITY INDEX RANGE	ACRES	% OF TOTAL AREA	RELATIVE VALUE
1	2E, 2W	Prime	114-129	26,850	7.0	100
2	2E, 2W, 3W	Prime	110-118	28,505	7.0	91
3	2E,2S,2W,3 W, 3E	Prime	85-114	34,869	9.0	88
4	3E,3W,4E	Important	85-118	108,895	28.0	91
5	2E, 3E, 4E, 4S	Important	70-92	43,245	11.0	71
6	3E, 4E, 6S	Important	50-80	31,850	8.0	62
7	6E	None	50-78	52,660	14.0	60
8	6E, 7E, 6S, 7S	None	36-68	53,355	14.0	53
9	5W	None	0	5,871	2.0	0

Table 3, Ave. PI
Relative Values
 Jo Daviess County, Illinois

AGRICULTURAL VALUE GROUP	HIGHEST PRODUCTIVITY FOR EACH GROUP DIVIDED BY HIGHEST PRODUCTIVITY	QUOTIENT OF RELATIVE YIELD	TIMES 100	RELATIVE VALUE
1	129/129	1.00	100	100
2	118/129	0.91	100	91
3	114/129	0.88	100	88
4	118/129	0.91	100	91
5	92/129	0.71	100	71
6	80/129	0.62	100	62
7	78/129	0.60	100	60
8	68/129	0.53	100	53
9	0/129	0	100	0

6. SAMPLE CALCULATION OF LAND EVALUATION SCORE -- JO DAVIESS COUNTY, IL.

This sample is based on a hypothetical proposed site of 120 acres.

Soil series and acreage amounts for actual sites will be obtained from the Natural Resources Conservation Service.

Map Symbol	Soil Series	Number of Acres	"LE Score" from Table 1	Acreage x LE Score Value
41B	Muscatine	30	100	3,000
36B	Tama	20	97	1,940
280B2	Fayette	10	78	780
745B	Shullsburg	20	76	1,520
386C2	Downs	20	81	1,620
279D2	Rozetta	20	73	1,460
Total Acres:		120	Total Acreage x LE Score Value:	10,320

Total LE Score Value divided by Total Acres = **Final Land Evaluation Score 86**
i.e. 10,320/120

7. LAND EVALUATION SCORE SHEET

LAND EVALUATION SCORE SHEET				
Map Symbol	Soil Series	Number of Acres	"LE Score" from Table 1	Acreage x LE Score Value
Total Acres:			Total Acreage x LE Score Value:	
Total LE Score Value divided by Total Acres = Final Land Evaluation Score				
	i.e. 10,320/120			

8. SITE ASSESSMENT FACTORS, VALUES, AND DESCRIPTIONS OF FACTORS.

SA-1 FACTORS: FACTORS OTHER THAN SOIL BASED QUALITIES MEASURING LIMITATIONS ON AGRICULTURAL PRODUCTIVITY OR FARM PRACTICES.

SA-1.1. PERCENT OF LAND IN AGRICULTURE USE WITHIN ONE (1) MILE OF THE SITE BOUNDARIES

95 to 100 percent.....	15
75 to 94.99 percent.....	12
50 to 74.99 percent.....	9
25 to 49.99 percent.....	6
10 to 24.99 percent.....	3
0 to 9.99 percent.....	0

Land in agriculture includes cultivated land and farm residences; farm lots with buildings, storage, feedlots; land associated with cultivated land, used for water runoff control; pastureland, woodland, and land in CRP. Areas that are entirely agricultural in nature are more viable for agricultural use than areas that are mixed urban and agricultural uses.

SA-1.2. PERCENT OF LAND IN AGRICULTURE USE ADJACENT TO PERIMETER OF SITE

95 to 100 percent	25
75 to 94.99 percent.....	20
50 to 74.99 percent.....	15
25 to 49.99 percent.....	10
10 to 24.99 percent.....	5
0 to 9.99 percent.....	0

This factor is used to assess the short-term viability of a site due to compatibility with adjacent land uses. If there is a large amount of incompatibility, such as a subdivision next to a site, it will be more difficult to keep it for agricultural use. The percentage is determined by the ratio of agricultural land immediately adjacent to the perimeter of proposed site.

SA-1.3. SIZE OF PARENT PARCEL (FEASIBILITY FOR FARMING)

120 acres or more	15
80-119 acres	12
40-79 acres	10
20-39 acres	5
Under 20 acres	0

Larger parcels are necessary for some contemporary farming methods. Jo Daviess County does have many small parcels due to the topography of some areas. Accordingly, fewer points are assigned to smaller pieces. This factor will also discourage the development of larger parcels.

SA-1.4. AVERAGE SLOPE OF SITE

0% to 4.99%	10
5.00% to 9.99%	8
10.00% to 14.99%	5
15.00% or greater	0

This factor is used to assess the suitability of the site related to topography. Stormwater run-off and risk of flooding are chronic problems in Jo Daviess County. Low-lying flat land is often alluvial plain or flood-prone land containing prime or important farmland, but is not suitable for development.

Flat land located on ridge-tops often has thin soils or rocky outcrops. It is generally more suitable for farming, grazing or forest growth than for development requiring septic systems. Development on such ridge-top areas may also conflict with Comprehensive Plan goals for elevated areas.

SA-1.5. FINANCIAL COMMITMENT TO AGRICULTURE ON ADJACENT SITES AS MEASURED BY EQUALIZED ASSESSED VALUATION

\$250,000 or more	25
\$150,000 to \$249,999	20
\$100,000 to \$149,999	15
\$50,000 to \$99,999	10
\$25,000 to \$49,999	5
\$0 to \$24,999.....	0

This factor is intended to protect/reflect long-term financial commitments to agriculture made on adjacent sites. Commitment is measured in the aggregate total equalized assessed valuation of land, buildings, and other improvements of all adjacent agricultural sites. This measure will be obtained from the Jo Daviess County Supervisor of Assessments office.

For purposes of this factor, an “adjacent agricultural site” will mean an entire farm unit excluding the primary dwelling and home site land, and including all contiguous parcels owned by the same entity, that lie adjacent to the site.

SA-2 FACTORS: FACTORS MEASURING DEVELOPMENT PRESSURE LAND CONVERSION, OR OTHER PUBLIC VALUES SUCH AS HISTORIC OR SCENIC VALUES.

SA-2.1. DISTANCE FROM COMMUNITY SERVICES

Over 1.5 miles	15
1.5 to 1.01 miles	12
1.0 to .5 miles	10
.49 to .25 miles	5
.24 miles or less	0

A site adjacent to a city or community is less viable for agriculture than a site located many miles from basic services. The range of points drops abruptly for sites located just less than 0.5 miles from urban services.

SA-2.2. FIRE DISTRICT RATING CLASS

Fire District Rating of requested site:

9-or above rating	15
8 rating	12
7 rating	10
6 rating	5
1-5 rating	0

The ability to provide emergency services to the proposed site affects its suitability for non-agricultural use. The Fire District Rating score is used because it is a standardized measure of public protection capability.

SA-2.3. TRANSPORTATION ACCESSIBILITY

Private road	15
Unimproved township road	12
Improved township road	10
County highway	8
State highway	5
4-Lane highway (within 1 mile of interchange)	3
Full range: bus, rail, highway	0

Access to transportation is an important consideration in the location of all types of land uses. The location of industrial, commercial, and residential uses around existing major roads results in a more efficient movement of goods and people as well as more efficient use of local government funds. The location of urban uses along rural roads may necessitate the upgrading and widening of rural roads which results in a further loss of farmland. Traffic on rural roads leads to transportation access problems for agricultural purposes.

SA-2.4. AVAILABILITY OF CENTRAL SEWER

None within 1.5 miles	10
Sewer line within 1.5 miles.....	8
Sewer line within 0.5 miles.....	6
Sewer line within 0.25 miles.....	4
Sewer line on site	0

The availability of a public sewer system indicates a good possibility of development. If a sanitary line of sufficient capacity is available at a site, the site is less viable for agriculture than a site located several miles from the line. The range of points gives strong encouragement for development to occur within a quarter of a mile of sewer lines.

SA-2.5. SOIL SUITABILITY FOR ONSITE WASTE DISPOSAL

Severe soil limitations	25
Moderate soil limitations	20
Few soil limitations	10
Public sewer available.....	0

Development in unincorporated areas of Jo Daviess County will generally use onsite waste disposal systems. If such systems turn out to be inoperative, then prime or important agricultural land may have been used for no worthwhile purpose, and the value of investments made may be lost. Data provided in Table 12 of the Soil Survey of Jo Daviess County, Illinois [published by the U.S. Department of Agriculture, Natural Resource Conservation Service (NRCS)], will be used to determine suitability, with advice from the Jo Daviess County Soil and Water Conservation District (SWCD) representative. Data from on site soil borings and advice from the Jo Daviess County Health Department will also be considered regarding compliance with the Jo Daviess County Health Code.

SA-2.6. AVAILABILITY OF PUBLIC WATER

None within 1.5 miles	10
Water line within 1.5 miles.....	8
Water line within 0.5 miles.....	6
Water line within 0.25 miles.....	4
Water line on site	0

A site with a public water supply nearby in sufficient quantity is less viable for agriculture than a site far removed from municipal water supply. This factor is strongly favorable toward development within a quarter of a mile of the public facility.

SA-2.7. CONSISTENCY OF PROPOSED USE WITH THE COUNTY COMPREHENSIVE PLAN.

Inconsistent with plan	10
Consistent with plan.....	0

This factor is important because it considers the proposed project in the context of the county-wide land use plan and its goals and recommendations. The adopted Comprehensive Plan has both text that states official policy, and a land use plan map that interprets the policy in graphic form. Consistency with the intent of the plan should be determined when a land use change is proposed:

SA-2.8 CONSISTENCY OF PROPOSED USE WITH A MUNICIPAL COMPREHENSIVE PLAN IF PROPOSED PROJECT IS WITHIN A MILE AND HALF OF A MUNICIPALITY THAT HAS A PLAN.

Inconsistent with plan	10
Consistent with plan.....	0

This factor should also be considered with a municipal plan in mind when a proposed development is within a mile and half of a municipality with a Comprehensive Plan. (When a municipality does not have a comprehensive plan, the points will be added to SA 2.7, making that worth a possible 20 points.)

Summary Sheet
Jo Daviess County's Point System for Assessing Farmland Conversion

Jo Daviess County, Illinois <u>Site Assessment Factors</u>	<u>Max Points Per Factor</u>	<u>Total</u>
SA-1 FACTORS: Related to agricultural productivity or farm practices		
1.1. Percent of land in agriculture (within 1 mile)	15	_____
1.2. Percent of agricultural land adjacent to perimeter of site	25	_____
1.3. Size of parent parcel (feasibility for farming)	15	_____
1.4. Average slope of site	10	_____
1.5. Commitment to agriculture adjacent to site	25	_____
SA-2 FACTORS: Related to Development pressure, land conversion, or other public values		
2.1. Distance from community services	15	_____
2.2. Fire District Rating Class	15	_____
2.3. Transportation accessibility	15	_____
2.4. Availability of central sewer	10	_____
2.5. Soil suitability for on-site disposal	25	_____
2.6. Availability of public water	10	_____
2.7 Consistency with County Comp. Plan (20 Points if no Municipal plan)	10	_____
2.8 Consistency with Municipal Comp. Plan	10	_____
Total Points – Site Assessment	200	=====
Total Points – Land Evaluation	100	=====
GRAND TOTAL	300	_____

9. LESA GLOSSARY

This Glossary contains terms used in the text of this Article and terms and their abbreviations used in Table 1 – “Soils of Jo Daviess County, IL, List of Soil Series and Evaluations.” Abbreviations from Table 1 are shown in “quotation marks. ”

“Ag. Grp.”/
Agricultural Group: A rank grouping of soils by crop production capabilities. All the different soil types found in Illinois have been grouped into one of 10 different groups, with the soils in each particular group possessing similar crop production capabilities. The first group contains soils which are most productive for agricultural use, while the tenth group contains the least productive soils. This system was developed by the technical specialists on staff with the USDA Natural Resources Conservation Service state office in Champaign, Illinois.

Agricultural Land: Land used for agriculture.

Agriculture: The art or science of cultivating the ground, including harvesting of crops and rearing and management of livestock; tillage; husbandry; farming; in a broader sense, the science and art of the production of plants and animals useful to man, including to a variable extent the preparation of these products for man’s use. In this broad use it includes farming, horticulture, forestry, together with such subjects as butter and cheese making, sugar making, etc.

The use of a tract of land for agricultural purposes which includes: the growing of farm crops, truck garden crops, animal and poultry husbandry, apiculture, aquaculture, dairying, floriculture, horticulture, nurseries, tree farms, sod farms, pasturage, viticulture, and wholesale greenhouses when such agricultural purposes constitute the principle activity of the land, structures used for agricultural purposes, the growing, developing, processing, conditioning, or selling of hybrid seed corn, seed beans, seed oats, or other farm seeds.

The burden of proof that the parcel is a genuine agricultural operation is placed on the applicant.

“H” Hydric soils; wetlands may be present.

“T” Possible inclusions of hydric soils.

“Important” Farmland:	Also referred to as “Farmland of Statewide Importance.” This land is of statewide importance for the production of food, feed, fiber, forage and oilseed crops. Generally, additional farmland, that can economically produce high yields of crops when treated and managed according to acceptable farming methods. Some may produce as high a yield as prime farmlands if conditions are favorable.
“Imp. Farmland Determination”/ Important Farmland Determination:	Information in this column of Table 1 identifies the quality of the soil series in terms of the following: prime, important, P2, P3, P5 farmland. (See Glossary for definitions.) Soil series identified with the symbol * are neither prime nor important.
“Land Cap”/ Land Capability Classification:	Information in this column of Table 1 identifies soils by the Land Capability Classifications as described in the <u>Soil Survey of Jo Daviess County, IL</u> . The numeral refers to the capability class (shown here in Arabic numerals) and the letter refers to the capability subclass (see definition below).

Land Capability classes are broad groupings of soils and show, in a general way, the suitability of soils for most kinds of field crops. Capability classes are broad groupings of soil mapping units that have similar potentials and/or limitations and hazards. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. Soils are ranked into one of eight capability classes. The numerals indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 - soils have few limitations that restrict their use.

Class 2 - soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices.

Class 3 - soils have severe limitations that reduce the choice plants or require special conservation practices, or both.

Class 4 - soils have very severe limitations that reduce the choice of plants or that require very careful management, or both.

Class 5 - soils are not likely to erode but have other limitations, impractical to remove, that limit their use, e.g. wetness.

Class 6 – soils have severe limitations that make them generally unsuitable for cultivation.

Class 7 - soils have very severe limitations that make them unsuitable for cultivation.

Class 8 – soils and miscellaneous areas have limitations that nearly preclude their use for commercial crop production.

Land Capability
Subclass:

Subclasses are groups of capability units within classes that have the same kinds of dominant limitations for agricultural use.

They are grouped into four subclasses that indicate the type of limitation, as follows:

Subclass (e) erosion: the main hazard is the risk of erosion unless close-growing plant cover is maintained or appropriate soil conservation practices are applied.

Subclass (w) water: water in or on the soils interferes with plant growth or cultivation.

Subclass (s) shallow: soil is limited mainly because it is shallow, droughty, or stony.

Subclass (c) climate: present in some parts of the United States, and showing that the chief limitation is climate that is very cold or very dry.

“LESA Score”:

Values shown in this column of Table 1 are calculated by dividing the value for a given soil as shown in the “PI + Relative Value” column by 227, and multiplying that quotient by 100. The number 227 is the “PI + Relative Value” for the “Muscatine” soil series which is the best farmland present in Jo Daviess County.

“% Acres”
Percentage of
Acres:

Values shown in this column of Table 1 are the acres of the particular soil series, shown as a percentage of total acres in the county.

Prime Farmland:

Prime farmland is land that is 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 the highest yields with minimum inputs of energy and economic resources, and farming it 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 from 0 - 5 percent.

“P2”	Prime farmland where drained.
“P3”	Prime farmland where protected from flooding or flooding is less often than once in two years during the growing season.
“P5”	Prime farmland where drained and either protected from flooding or flooding is less often than once in two years during the growing season.
“P.I.”/ Productivity Index:	Productivity indexes for grain crops express the estimated yields of the major grain crops as percentage of the average yields obtained under basic management. Soil productivity is strongly influenced by the capacity of a soil to supply the nutrient and soil-stored water needs of a growing crop in a given climate. Source: “Average Crop Pasture, and Forestry Productivity Ratings for Illinois Soils,” Bulletin 810, August 2000, University of Illinois at Urbana-Champaign, College of Agricultural, Consumer, and Environmental Sciences, Office of Research.
“P.I. + Relative Value”	Values in this column of Table 1 are the sum of value in the “P.I.” (Productivity Index) column, plus the value in the “Relative Value” column. These items are added to ensure full consideration of both factors.
Relative Value:	<p>A relative value is assigned to each of the 10 Agricultural Group soils. The best soils in Agricultural Group 1 are assigned a value of 100. These are the soils which are best in terms of sustained agricultural production for the area being evaluated. In Illinois, they will always be Class 1 and Prime soils. Soil groups 2-10 are assigned proportionately lower relative values, with Group 10 having a relative value of zero.</p> <p>Relative values for soil groups 2-10 are determined by comparing the average yield of each group to the average yield of soil group 1. The average yield figures used were lowered according to the measures needed to overcome soil limitations such as wetness or erodibility.</p>
“Slope %”:	Slope percentage of the soil series, measured as the number of feet of fall or rise in elevation per 100 feet of distance.

“Soil Series”: The soil series consists of soils that have similar horizons in their profile. The horizons are similar in color, texture, structure, reaction, consistence, mineral and chemical composition and arrangement in the profile. The texture of the surface layer, or of the underlying material can differ within the series.

“Total Acres”: Values shown in this column of Table 1 are the total number of acres of the particular soil series in the county. The total acres of land in the county includes acres in municipalities and communities, but does not include water – rivers, streams, lakes, ponds, reservoirs etc.