

---

**From:** Marguerite [mailto:mermeling@myvine.com]  
**Sent:** Monday, October 20, 2008 5:58 AM  
**To:** Scott McCullough  
**Subject:** Requests for Chapter 7

Scott,

I couldn't figure out how to make an attachment. so it arrives this way.  
10/20/08

Dear Scott,

Please accept these suggestions and concerns to integrate into Chapter 7. Thanks for the consideration in advance.

Marguerite Ermeling

Page 7-1 P4 4<sup>th</sup> line: "co-locational" criteria needs to be grammatically correct or given a definition. I can't find it as a word in the dictionary.

Page 7-2 P7 2<sup>nd</sup> line: This line reads that you are asking industrial and business development to consider "Whenever possible" (optional by their terms?) the retention of open space etc. Since these concerns are held important by the community, then it is the community's job to establish and clearly set their importance in text. Recommendation: It is important to consider and include retention of open space for a variety of purposes including but not limited to wildlife habitat and ecological functions, recreational opportunities, and to serve as visual impact mitigation for surrounding areas.

P7-2 P8 The term 'sound' is used here and in several other paragraphs to reference site planning and design principles. What and where is the definition of sound?  
Recommendation: As new areas evolve, development proposals/plans should be for compatible industries and businesses, and should employ attractive design principles and elements to minimize negative impacts on surrounding properties and neighborhoods. I think that is what was intended?

P7-3 3<sup>rd</sup> sentence Santa Fe Industrial Area. The area north of Lakeview Road may alternately develop with more traditional industrial uses. Is this paragraph saying that the large warehouses, distributorships and energy plant are non traditional industrial uses?

P7-4 and 7-5 discussion under Location Criteria for Industrial Developments is a duplication of P7-14 Policy 2.1

P7-5 2nd P: recommendation to sentence: The site specific criteria to be substantially met and included on site plans or development plans are as follows:

Identification and preservation of...  
On site natural storm water management...  
Demonstration of available and adequate utilities.....  
Compatibility with...  
Be annexed....

Question: If a site can't meet all of the specific criteria (implied by the adverb substantially) which ones are ok not to be a criteria? Can they not be annexed? Not have on site storm water? Not demonstrate adequate and available utilities, infrastructure etc? Not be compatible to existing and future zoning and land use patterns? It seems that a community would want the criteria met if it thought it was important enough to have criteria in the first place. Can they have 3 out of 5 their choice?

P7-5 last sentence under Farmland clarification recommendation: Portions of the site pose some challenges related to environmental clean-up from the prior use before re-development occurs. It is a site well suited for industrial uses, warehouse and distribution and Office research. Drop 'collaborative park setting' since this has no meaning or definition in this context. Or explain.

P7-6 Airport 1<sup>st</sup> P 2<sup>nd</sup> to last sentence: As this area evolves into a community gateway, development proposals are also encouraged to employ 'sound' site planning and design principles to make this area an attractive one. 'Sound' = ? vs 'unsound' site planning? Is unsound site planning possible to accept? Recommendation: As this area will be a community gateway, development proposals/plans should be appropriate and compatible industries and businesses, and include attractive design details and landscape elements to minimize negative impacts on surrounding properties and neighborhoods.

Page 7-7 2<sup>nd</sup> sentence I-70 and K-10: Recommendation: Slope; minimal (0-3% with some 3-7% and higher. The proposed area contains roughly 150 acres and lies outside of the 100-year flood. The adjacent and nearby land uses are rural farms and rural residential. It may be possible to develop the site to a limited extent prior to the availability of urban services; however, intense development should wait until such time that the land is annexed and urban services are able to be provided. The area will be an important future economic development area for the Lawrence/Lecompton communities because of its prime location near the I-70 interchange. As this area will be a gateway to both Lawrence and Lecompton communities, development proposals/plans should be appropriate and compatible industries and businesses, and include attractive design details and landscape elements to minimize negative impact on surrounding properties and neighborhoods. This site is appropriate for warehouse and distribution, work-live campus type centers, industrial/business/research parks, and industrial uses.

Page 7-7 K-10 and Highway 40: Modify last sentence for continuity Recommendation: As this area will be a gateway to the city of Lawrence, development proposals/plans should be appropriate and compatible industries and businesses, and include attractive design details and landscape elements to minimize negative impact on surrounding properties and neighborhoods. This site is suited for warehouse and distribution, work-live campus type centers, industrial/business/research parks, and industrial uses.

P7-8 2<sup>nd</sup> P from bottom: typo: produces should be produces.

P7-8: It seems that the discussion on High quality Ag land should be in policy section or at least given a title and #.

! Any development site under any land use category at a gateway should include the sentence from the Lawrence- New Employment-related Areas: Developments occurring at gateways to the community are required to be of high quality design and visual character utilizing best management practices for the site planning and design. Such developments are intended to promote an integrated and contextual design approach that minimizes unnecessary impacts, such as noise, odor, glare, or other similar intrusions to the community and surrounding neighborhoods.

P7-12 Policy 1.1 a: Remove Lawrence Chamber of Commerce as it goes without saying at the moment. Recommendation: Actively market developable sites in a manner which will stabilize long-term employment patterns.

P7-12 Policy 1.2 a: add 'new development'; Establish design guidelines and standards for 'new development', and redevelopment of existing sites and facilities to ensure high quality development.

b: change first word from encourage to Employ

c: change 4th word from techniques to principles

P7-12 Policy 1.3 a: 3<sup>rd</sup> word appropriates (how is this quantified or defined?).  
The sentence stands well without it.

P7-15 Policy 2.4 b: Again the word "appropriate" has no meaning without a way to determine its value. Recommendation is to drop it or try "versatile"

P7-17 Policy 3.1 a: add to the sentence: Require industrial, office research and warehouse/distribution facilities and redevelopment of existing such sites to have a positive impact on neighboring land uses through the use of natural separations, broad landscaped yards, and /or other means of buffering including design techniques and details, and mitigated lighting.

P7-17 Policy 3.1 d 1 b: Sound is used here with' sound traffic engineering principle's and again has no real definition.

P7-18 Policy 3.1 d 4 a: Recommend: Change Encourage to Use creative and extensive landscaping elements , building design techniques, natural topography and vegetation, and mitigated lighting to buffer between differing intensities of land uses.

P7-19 Policy 3.1 d 4 d: Last sentence should be removed as it defeats every thing else stated about buffering, positive impact on neighbors, and the concept of creative and extensive landscaping encouraged in this chapter. The quality of the development can still squeak by as poor in this town because of the level of minimum building standard requirements, no architectural minimum standards and plenty of minimum only builders. The statement “Quality of site landscaping shall mirror the quality of the overall development” is not appropriate.

P7-19 Policy 3.1 d.5: Lighting: Please add that all light shall be 100% shielded not causing glare to adjacent land or neighborhoods; that no unshielded wall lamps, dusk to dawn lights may be used as street, or parking lot lights. Please encourage those lights compatible with “night skies” requirements in other communities. Excess lumens are unnecessary and have been ignored by our lighting (or lack of) good lighting policies. Many communities and even a few of our own industrial businesses and churches have incorporated better lighting in recent years. I commend them and hope we will take this opportunity to elaborate better detail and expectations in this chapter for lighting.

P7-21 Policy 4.1: Level of Service: To clarify this sentence: Recommendation: Permit the expansion of existing or new industrial-related development in areas where the Level of Service is compatible with the additional traffic generated by such development.

P7-22 Policy 4.4 Pedestrian Accesses (corrected from Access in document) and Circulation

- a. Change to include: Provide Pedshed plans for public and private development and redevelopment .

CITIZENS FOR RESPONSIBLE PLANNING

Oct. 8, 2008

Mayor Michael Dever  
City Hall  
6 E. 6th St.  
Lawrence, KS 66044

RECEIVED

OCT 08 2008

CITY MANAGERS OFFICE  
LAWRENCE, KS

Dear Mayor Dever:

The members of Citizens for Responsible Planning would appreciate your consideration of this response to the Sept. 9, 2008, letter of Mark Andersen of Barber Emerson, representing the Lawrence Airport Business Park interests.

We respect the personal agricultural experience that Mr. Andersen describes in his letter. Many of us share that experience and are, in fact, still farmers in Douglas County. But we believe that Mr. Andersen is demonstrably mistaken in several of his assertions about farmland and agriculture. As an overview, we believe that – contrary to Mr. Andersen's assertions – current evidence regarding farmland and agriculture supports the following conclusions:

- Douglas County does have an infrastructure in place for successful fruit and vegetable agriculture; rather, the expensive infrastructure for an airport business park is not in place.
- There is a growing, worldwide food shortage.
- The Conservation Reserve Program does not have a substantial reserve of Class I and Class II farmland, nor was that program created to hold excess, productive farmland in reserve.
- Douglas County and the six other counties of the eastern Kaw River region do not produce an excess of food for their citizens; rather, the seven-county region is a net food importer.
- Douglas County does not have an excess of Class I and Class II farmland.

In the pages that follow, we have tried to take the assertions, one by one, that Mr. Andersen makes and place them against information from objective, third-party sources such as the United States Department of Agriculture; the United States Agency for International Development; the Department of Horticulture, Forestry and Recreation Resources at Kansas State University; the Land Institute; the National Geographic Society; and the Kansas Department of Agriculture. In each case, we will show the sources of our data.

As a final note of introduction, we would add that, unlike Mr. Andersen, we are not paid advocates. We are community volunteers whose concern for the quality of life in Lawrence and Douglas County, both for ourselves and our children and grandchildren, has moved us to act. We support industrial development for Lawrence and Douglas County – but not at the expense of the great gift and irreplaceable natural resource of Class I and Class II soil.

The remainder of this letter documents our belief that objective agricultural experts disagree with Mr. Andersen's key assertions. For the sake of convenience, we have reprinted his assertions verbatim, provided our response and then listed the documentation from sources we believe to be objective and independent.

**“[W]e do not have the infrastructure in place to grow and export local fruits and vegetables with any degree of efficiency” (Mark Andersen).**

**RESPONSE:**

We would note, rather, that the proposed airport industrial park currently lacks the necessary, expensive utilities and transportation infrastructure. Among the 105 Kansas counties, Douglas County is a Top 10 producer of vegetable, potato, fruit and nut crops. In addition, organizations including the Lawrence Sustainability Network and Citizens for Responsible Planning are working to integrate Douglas County into a Kaw Valley food network. Finally, the biological infrastructure of Class I and Class II soils is immovable, irreplaceable and unreproducible; the proposed site of the airport business park is entirely Class I soil.

**DOCUMENTATION:**

- Douglas County ranks 7<sup>th</sup> of 105 Kansas counties for fruit- and nut-crop sales with \$94,000 in 2002 (the most recent federal data).
  - United States Department of Agriculture Census of Agriculture 2002.
- Douglas County ranks 9<sup>th</sup> of 105 Kansas counties in vegetable- and potato-crop sales with \$374,000 in 2002 (the most recent federal data).
  - United States Department of Agriculture Census of Agriculture 2002.
- Douglas County has 24 vegetable farms totaling 245 acres and 21 fruit farms totaling 143 acres.
  - Dr. Rhonda Janke, Kansas State University Department of Horticulture, Forestry and Recreation Resources, “Walking the Green Mile – The Future of Food in Kansas.”
- In 2006, consumers in Douglas, Jackson, Jefferson, Johnson, Leavenworth, Shawnee and Wyandotte Counties spent \$244,367,584 on fruits and vegetables.
  - Dr. Rhonda Janke, Kansas State University Department of Horticulture, Forestry and Recreation Resources, “Walking the Green Mile – The Future of Food in Kansas.”
- Vegetable crops have a higher net income per acre than corn, soybeans or wheat:
 

Net income per acre for vegetable production:	\$2,631
Net income per acre for corn production:	\$137
Net income per acre for soybean production:	\$138
Net income per acre for wheat production:	\$108

  - Dr. Rhonda Janke, Kansas State University Department of Horticulture, Forestry and Recreation Resources, “Walking the Green Mile – The Future of Food in Kansas.”

**“Today our nation produces a surplus of food products, and exports much of this surplus production to other countries around the world” (Mark Andersen).**

**RESPONSE:**

According to the United States Agency for International Development and the National Geographic Society, any food surpluses produced by the United States have not redressed an increasing worldwide food shortage. The U.S. federal government estimates that the worldwide food shortfall contributes to “3.5 million to 5.5 million deaths in children under five each year.” The National Geographic Society attributes the worldwide food shortage, in part, to “the diminishing quantity and quality of the world’s soil.”

**DOCUMENTATION:**

- May 14, 2008: “We are in the midst of a global food crisis unlike other food crises we have faced; one not caused by natural disasters, conflict or any single event such as drought. It is not localized – instead it is pervasive and widespread, affecting the poor in developing countries around the world.... Experts tell us the situation underlying the crisis is not a temporary one; demand for grain is outstripping supply.... Our response is three-pronged, integrating immediate, near-term and longer-term components, all of which are needed to address the underlying causes of chronic hunger. We plan to increase our efforts in three key

areas: 1) expand humanitarian assistance, looking at the most critical needs globally; 2) attack the underlying causes of food insecurity through a significant increase in staple food production; and 3) address policy barriers and trade policies adversely impacting food prices.”

-- Henrietta H. Fore, Director of U.S. Foreign Assistance, U.S. Agency for International Development, Testimony Before the Committee on Foreign Relations, U.S. Senate, May 14, 2008.

- “Conditions of malnutrition, including micronutrient deficiencies, are directly responsible for 3.5 million to 5.5 million deaths in children under five each year.... Approximately 178 million children—or nearly one-third of the world’s children—suffered from chronic malnutrition prior to the recent food crisis.”

-- May 30, 2008, U.S. Agency for International Development, “Global Food Insecurity and Price Increase Update #3.”

- “The UN’s Food and Agriculture Organization estimates that by 2030 the world’s growing population will require 30 percent more grain than we now produce. To meet that need, healthy soil is a must.”

-- August 13, 2008, National Geographic Society, [ngm.nationalgeographic.com/geopedia/Soil](http://ngm.nationalgeographic.com/geopedia/Soil).

- “This year, food shortages, caused in part by the diminishing quantity and quality of the world’s soil, have led to riots in Asia, Africa, and Latin America.”

-- September 2008, *National Geographic Magazine*, “Our Good Earth: Can We Save It?”

**“[A]s a nation, we have such an over abundance of farm land and crop production, that we pay landowners nearly \$2 billion a year in annual subsidies not to grow crops on this excess land [through the Conservation Reserve Program].... Kansas has approximately 3.1 million acres of farm land enrolled in the CRP program” (Mark Andersen).**

#### **RESPONSE:**

The Conservation Reserve Program (CRP) is not surplus, productive farmland; rather, the program retires “highly erodible and environmentally sensitive cropland.” The CRP is not a program that holds fertile Class I and Class II soil in reserve; less than 1 percent of the CRP inventory is Class I soil.

#### **DOCUMENTATION:**

- USDA Definition of the Conservation Reserve Program: “The Conservation Reserve Program (CRP) was established by the Food Security Act of 1985 and began enrolling farmland in 1986. The program uses contracts with agricultural producers and landowners to retire highly erodible and environmentally sensitive cropland and pasture from production for 10-15 years. Enrolled land is planted to grasses, trees, and other cover, thereby reducing erosion and water pollution and providing other environmental benefits (as well as reducing the supply of agricultural commodities).”

-- United States Department of Agriculture Economic Research Service: *Agricultural Resources and Environmental Indicators*, 2006 Edition, p. 175.

- Very little of CRP land is Class I and Class II soil:

Class I soil in CRP	0.7 percent of CRP total
Class II soil in CRP	22.3 percent of CRP total
Class III soil in CRP	41.2 percent of CRP total
Class IV soil in CRP	35.8 percent of CRP total

Thus the land in CRP (planted to grasses and trees to prevent erosion) cannot replace Class I and Class II soils: 77 percent of CRP land is Class III and Class IV soil.

-- United States Department of Agriculture Economic Research Service: *Agricultural Resources and Environmental Indicators*, 2003 Edition, Chapter 4.2, p. 5.

**“[T]here is no shortage of local food production now, or in the foreseeable future” (Mark Andersen).**

**RESPONSE:**

Remarkably, of the \$2.2 billion that consumers in the seven eastern Kaw River counties annually spend on food, \$2 billion – 91 percent – goes for food produced outside the region. Our region is a net food importer. Even with its buy-local philosophy and “Miles to the Merc” program, Community Mercantile reports that, in 2008, “we have climbed to just shy of 20% of all goods purchased being locally produced” (and the Merc defines local as being within “a 200-mile radius”). Today, though Douglas County is a Top 10 vegetable producer among Kansas counties, county vegetable production does not meet county vegetable consumption. Further, even if local food production could meet local needs now and in the future, citizens of Douglas County surely would not ignore food shortages elsewhere that, as noted above, contribute to the deaths of up to 5.5 million children every year. As noted above, the U.S. Agency for International Development reports a worldwide food-production shortage – and the National Geographic Society attributes the current food supply-demand problems, in part, to “the diminishing quantity and quality of the world’s soil.” The proposed site of the airport business park is entirely Class I soil, which can help provide a solution to the problem of world hunger.

**DOCUMENTATION:**

- “Eastern Kaw River region consumers spend \$2.2 billion buying food each year, including \$1.2 billion for home use. Most of this food is produced outside the region.... [C]onsumers spend \$2 billion buying food from outside.... This loss amounts to 7 times the value of all food commodities raised in the region.”

-- Ken Meter, Aldo Leopold Center for Sustainable Agriculture at Iowa State University and Crossroads Resource Center,

[www.kansasruralcenter.org/publications/MeterOutline.pdf](http://www.kansasruralcenter.org/publications/MeterOutline.pdf).

- “[I]n reviewing all of our cost of goods sold, (our total cost of goods at wholesale price) we learned that we have climbed to just shy of 20% of all goods purchased being locally produced [ within ‘a 200-mile radius’].”

-- Sept. 21, 2008, The Community Mercantile,

<http://communitymercantile.com/mercnnotes>.

- Douglas, Jackson, Jefferson, Johnson, Leavenworth, Shawnee and Wyandotte Counties have 1,865 acres in vegetable production. That acreage can feed about 75,690 people, fewer than the 112,123 people of Douglas County.

-- Dr. Rhonda Janke, Kansas State University Department of Horticulture, Forestry and Recreation Resources, “Walking the Green Mile – The Future of Food in Kansas.”

- The United States is now a net importer of asparagus, cantaloupe, cucumbers, eggplants, garlic, onions, peas, peppers, potatoes, pumpkins, tomatoes and watermelons.

-- Dr. Rhonda Janke, Kansas State University Department of Horticulture, Forestry and Recreation Resources, “Walking the Green Mile – The Future of Food in Kansas.”

**“[T]here is absolutely no shortage of farm land in the State of Kansas to sustain the local production of food products.... We have an excess of local cultivated farm land” (Mark Andersen).**

**RESPONSE:**

A key point here is the difference between farmland in general and Class I and Class II soils in particular. Only 2.8 percent of the acreage in Douglas County is Class I soil. Only 11 percent of the acreage in Douglas County is Class II soil. The proposed site of the airport business park is entirely Class I soil. Protection of that naturally fertile soil is essential as the costs of fertilizer, cultivation and transportation soar – and as the world faces an increasing food shortage. The National Geographic Society reports that “a scant 3 percent of the Earth’s surface offers inherently fertile soil.” Thus the issue is not the



inventory of “farmland” in general, to which Mr. Andersen refers. The issue, rather, is the inventory of naturally fertile Class I and Class II soils.

**DOCUMENTATION:**

	<b>Acres in County</b>	<b>Acres Farmland</b>	<b>Acres Class I</b>	<b>Acres Class II</b>
<b>Douglas County</b>	303,808	201,358	8,370 2.8 %	33,053 11 %

-- Dr. Rhonda Janke, Kansas State University Department of Horticulture, Forestry and Recreation Resources, “Walking the Green Mile – The Future of Food in Kansas.”

- “A scant 3 percent of the Earth’s surface offers inherently fertile soil.”  
-- September 2008, *National Geographic Magazine*, “Our Good Earth: Can We Save It?”

**“If we continue to consume cultivated prime farm land in Douglas County for commercial and industrial uses at our present rate, it would literally take several centuries in time to convert this amount of acreage to non-agricultural purposes” (Mark Andersen).**

**RESPONSE:**

The members of Citizens for Responsible Planning agree with Mayor Dever, who, at the Sept. 9, 2008, City Commission meeting, stated that he preferred the terms “Class I” and “Class II” to the term “prime farmland,” which may mean different things to different people. As noted above, Class I soil comprises only 2.8 percent of the farmland in Douglas County; Class II comprises only 11 percent. In destroying Class I and Class II farmland, Douglas County would be spending capital rather than accruing interest by preserving an asset of increasing value: Naturally fertile, local farmland is poised to make increasing economic, environmental and quality-of-life contributions to communities. But Mr. Andersen does make a valuable point: If we continue to consume the irreplaceable resources of Class I and Class II soils, we will eventually exhaust them, seriously violating our stewardship obligations to future generations, whether that be three decades or three centuries from now.

Mr. Andersen notes that if, in the future, Lawrence were to industrialize its Class I and Class II farmland, the city could, in part, rely on “cultivated farm land in the immediately adjoining counties in close proximity to Lawrence.” Of course, that solution would work only if those areas had chosen to follow a different policy, one that preserved essential farmland.

**DOCUMENTATION:**

- “Maintaining and improving the quality of the nation’s soils can provide economic benefits in the form of increased productivity, more efficient use of nutrients and pesticides, improvements in water and air quality, and the storage of greenhouse gases.”

-- “Land and Soil Quality,” United States Department of Agriculture Economic Research Service, <http://www.ers.usda.gov/publications/arei/Ah712>.

- “Kansas has a strong agricultural tradition that predates its statehood, and it continues to be a significant contributor to the state's economic well-being. In 2006, cash receipts from farm marketings totaled more than \$10 billion, and exports of agricultural products were valued at more than \$3.2 billion.... One in five Kansans, rural and urban, works in jobs related to agriculture and food production.”

-- Kansas Department of Agriculture, <http://www.ksda.gov/statistics>.

**“[S]everal thousands of acres of prime farm land in Douglas County would always remain undeveloped and preserved, because these acres are located within existing flood plain zones, stream corridors, or other environmentally sensitive areas” (Mark Andersen).**

**RESPONSE:**

Again, with Mayor Dever, the members of Citizens for Responsible Planning prefer the specificity of “Class I” and “Class II” soils to “prime farmland.” But Mr. Andersen is correct in noting the proximity of the airport land/Class I farmland to floodplain zones. That land, in its present state, serves the community (particularly North Lawrence) well with its water-absorption abilities. As the North Lawrence Drainage Study notes, “With the ever expanding urban area and associated increases in impervious surfaces such as parking lots, the frequency with which drainage issues occur appears to be increasing.... The recommendation for future development in the watershed is to maintain the current conveyance levels in the 100-year floodplain. This will mean allowing no development in these areas that would reduce the capacity for floodplain storage, and may require the purchase of small parcels of land to set aside exclusively for ponding.” The *Lawrence Journal-World* reported that even if developers contributed \$1 million to necessary infrastructure development for the proposed airport business park, “the city would still be obligated to do about \$400,000 worth of drainage work in the area.” In 2005, the projected cost of the North Lawrence drainage project was \$41 million. Mitigation of new drainage problems from new industrial development should not supersede the city’s obligation to address current drainage needs.

The North Lawrence Improvement Association opposes the airport business park.

**DOCUMENTATION:**

- “With the ever expanding urban area and associated increases in impervious surfaces such as parking lots, the frequency with which drainage issues occur appears to be increasing.... The recommendation for future development in the watershed is to maintain the current conveyance levels in the 100-year floodplain. This will mean allowing no development in these areas that would reduce the capacity for floodplain storage, and may require the purchase of small parcels of land to set aside exclusively for ponding.”

-- North Lawrence Drainage Study, [http://www.lawrenceks.org/study\\_session\\_2006/01-11-06/01-11-06h/north\\_law\\_drain\\_executive\\_summary.html](http://www.lawrenceks.org/study_session_2006/01-11-06/01-11-06h/north_law_drain_executive_summary.html).

- “Lawrence city commissioners on Tuesday balked at a proposal for a new industrial park near the Lawrence Municipal Airport, saying the project has more questions than answers at this point.... [C]ommissioners said they wanted further study of the economics of the proposal because the city would still be obligated to do about \$400,000 worth of drainage work in the area.

-- *Lawrence Journal-World*, August 20, 2008.

- “The estimated cost of all recommendations is approximately \$41 million.”

-- North Lawrence Drainage Study, [http://www.lawrenceks.org/study\\_session\\_2006/01-11-06/01-11-06h/north\\_law\\_drain\\_executive\\_summary.html](http://www.lawrenceks.org/study_session_2006/01-11-06/01-11-06h/north_law_drain_executive_summary.html).

- “Ted Boyle, president of the North Lawrence Improvement Association, said his group remains convinced that the development will increase drainage and traffic problems in the area.”

-- *Lawrence Journal-World*, August 16, 2008

**“[H]ow is it that farmers in the corn belt States of Iowa, Illinois, Indiana and Ohio can harvest corn yields on class III and class IV soils, that exceed the yields of corn grown in Kansas on class I and class II soils? The answer is in the recipe” (Mark Andersen).**

**RESPONSE:**

Unfortunately, the recipe that Mr. Andersen cites relies on commercially produced nitrogen fertilizer, an economically unsustainable and environmentally damaging soil

additive. The *New York Times* reported on April 30, 2008, that commercially produced nitrogen fertilizer is “vitally important in Iowa, where farmers grow more corn than in any other state and depend on fertilizer to increase yields.” But nitrogen fertilizer supplies are declining as costs soar. Commercial production of nitrogen fertilizer requires huge amounts of energy that can’t be sustained in our energy-tight world: Currently, 1 percent of annual world energy consumption goes to nitrogen-fertilizer production; 5 percent of annual worldwide natural gas consumption goes to nitrogen-fertilizer production. U.S. production capacity for nitrogen fertilizer has decreased more than 40 percent since 1999 because of energy costs. The cost of nitrogen fertilizer has increased 228 percent since 2000. Today, nitrogen fertilizer costs “are the largest single operating expense” for corn and wheat growers, according to the U.S. Department of Agriculture. Forty percent of the world’s population relies on crops produced with nitrogen fertilizer; these people “now depend on the Haber-Bosch synthesis [commercial nitrogen production] ... for their very survival.” Nobel laureate Norman Borlaug says, “This is a basic problem, to feed 6.6 billion people. Without chemical fertilizer, forget it. The game is over.”

Because nitrogen fertilizer does not fully absorb into soil, it runs into waterways and eventually creates dead zones in oceans by promoting algae growth that draws oxygen from the water. Scientists at the Louisiana Universities Marine Consortium attribute the 8,000-square-mile dead zone in the Gulf of Mexico to the use of nitrogen fertilizer in “Iowa and across the Midwest.” Worldwide, there currently are more than 400 nitrogen-induced marine dead zones.

Reduced usage of nitrogen fertilizer because of cost, availability and environmental concerns means a reduction in farmland productivity and a new threat to the food supply for 40 percent of the world’s population. This decrease in production occurs, according to the U.S. Agency for International Development, at the same time that the world needs increased productivity. As the National Geographic Society declares, “To meet that need, healthy soil is a must.”

#### **DOCUMENTATION:**

- “Fertilizer is vitally important in Iowa, where farmers grow more corn than in any other state and depend on fertilizer to increase yields.”
  - “Shortages Threaten Farmers’ Key Tool: Fertilizer,” *New York Times*, April 30, 2008, [www.nytimes.com](http://www.nytimes.com).
- “It is estimated that as much as 1 percent of the world’s total energy consumption is devoted to the process [commercial nitrogen production].”
  - Dr. Richard R. Schrock, 2005 Nobel laureate in chemistry, Frederick G. Keyes Professor of Chemistry at MIT, “Nitrogen Fix,” May 2006, *MIT Technology Review*, <http://www.technologyreview.com/article/16822>,
- “Fertilizer production currently uses only about 5 percent of the world’s natural gas production, and nonagricultural uses are already asserting greater dominance over tightening gas supplies on this continent. The escalation of gas prices in recent years has made fertilizer production far less profitable.”
  - Dr. Stan Cox, Senior Scientist, Land Institute, “Hunger for Natural Gas,” Oct. 12, 2005, <http://www.corribsos.com/index.php?id=429>.
- “The United States has lost more than 40 percent of its capacity to produce nitrogen fertilizer since 1999 because of the high cost of natural gas.”
  - “High Cost and Demand for Fertilizer Scares Farmers,” Associated Press, June 4, 2008, [http://www.usatoday.com/news/nation/2008-06-04-2854795657\\_x.htm](http://www.usatoday.com/news/nation/2008-06-04-2854795657_x.htm).
- “In part because of a global surge in demand, the price of fertilizer has skyrocketed 228 percent since 2000.”
  - “High Cost and Demand for Fertilizer Scares Farmers,” Associated Press, June 4, 2008, [http://www.usatoday.com/news/nation/2008-06-04-2854795657\\_x.htm](http://www.usatoday.com/news/nation/2008-06-04-2854795657_x.htm).
- “Increased nitrogen prices affect all crop producers, but especially corn and wheat growers, for whom nitrogen costs are the largest single operating expense.”

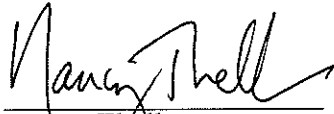
- United States Department of Agriculture Economic Research Service: "Tight Supply and Strong Demand May Raise U.S. Nitrogen Fertilizer Prices," November 2007.  
<http://www.ers.usda.gov/AmberWaves/Scripts/print.asp?page=/November07/Findings/TightSupply.htm>.
- "Intensive farming – whose increasing harvests have depended almost entirely on additional nitrogen from synthetic fertilizers – now produces basic food needs for about 2.3 billion people more than the traditional, fertilizer-free, practices did, and 2.3 billion people is almost 40% of the world's total population in 1996."
  - Dr. Vaclav Smil, University of Manitoba, *Enriching the Earth: Fritz Haber, Carl Bosch, and the Transformation of World Food Production* (Cambridge, MA: MIT Press, 2001), p. 159.
- "Forty percent (soon to be 60 percent) of the Earth's inhabitants owe their survival to natural gas, a non-renewable fossil fuel [for use in producing nitrogen fertilizer]."
  - Dr. Stan Cox, Senior Scientist, Land Institute, "Hunger for Natural Gas," Oct. 12, 2005, <http://www.corribsos.com/index.php?id=429>.
- "'This is a basic problem, to feed 6.6 billion people' said Norman Borlaug, an American scientist who was awarded a Nobel Peace Prize in 1970 for his role in spreading intensive agricultural practices to poor countries. 'Without chemical fertilizer, forget it. The game is over.'"
- "Shortages Threaten Farmers' Key Tool: Fertilizer," *New York Times*, April 30, 2008, [www.nytimes.com](http://www.nytimes.com).
- "The area of low oxygen expands over 20,720 square kilometers or 8,000 square miles of Gulf of Mexico seabed.... The intensive farming of more land, including crops used for biofuels, has definitely contributed to this high nitrogen loading rate."
  - July 28, 2008, "'Dead Zone' Again Rivals Record Size," Louisiana Universities Marine Consortium, [www.lumcon.edu/information/news](http://www.lumcon.edu/information/news)
- "Farmers in Iowa and across the Midwest use tons of nitrogen and phosphorous to make their cornfields more productive, which allows the farmers to take advantage of high corn prices resulting from growing demand from ethanol factories and developing countries. Rain always causes some fertilizer to run off farmland, but this summer's historic flooding caused even more runoff into rivers that flow into the Mississippi. One of the major dead zones is in the Gulf of Mexico. It is 8,000 square miles, nearly the size of New Jersey, according to the [Louisiana Universities Marine Consortium's] annual measurement completed in July."
  - CNN, "Gulf 'Dead Zone' Suffocating Fish and Livelihoods," August 19, 2008, <http://www.cnn.com/2008/TECH/science/08/18/dead.zone/index.html>.
- "More than 400 dead zones have been identified, from the coasts of China to the Chesapeake Bay, and the primary reason is agricultural runoff, said Robert J. Diaz, a professor at the Virginia Institute of Marine Science."
  - "Shortages Threaten Farmers' Key Tool: Fertilizer," *New York Times*, April 30, 2008, [www.nytimes.com](http://www.nytimes.com).
- "The UN's Food and Agriculture Organization estimates that by 2030 the world's growing population will require 30 percent more grain than we now produce. To meet that need, healthy soil is a must."
  - August 13, 2008, National Geographic Society, [ngm.nationalgeographic.com/geopedia/Soil](http://ngm.nationalgeographic.com/geopedia/Soil).

We greatly appreciate your patience in reading this long letter. Our purpose has been to demonstrate that Mr. Andersen's complacency about the destruction of Class I soil lacks a factual foundation. As you know, the members of Citizens for Responsible Planning oppose any

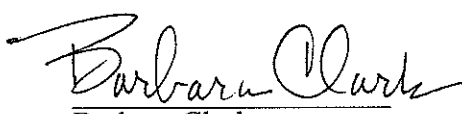
land-use strategies that would remove Class I and Class II soils from potential agricultural production. But we do not oppose industrial development and are eager to work with the City Commission, Mr. Andersen and others to determine how Lawrence and Douglas County can increase jobs and expand our tax base – without destroying an irreplaceable asset of increasing value: our Class I and Class II farmland.

Thank you very much for your service to Lawrence.

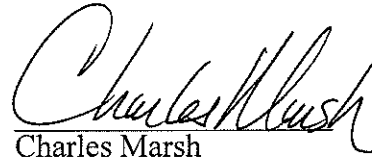
Sincerely,



Nancy Thellman



Barbara Clark



Charles Marsh



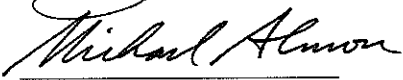
Mary Ann Stewart



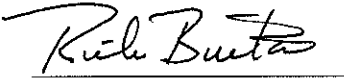
Ted Boyle



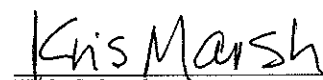
Bob Lominska



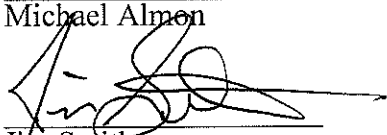
Michael Almon



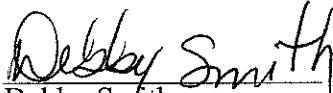
Rich Bireta



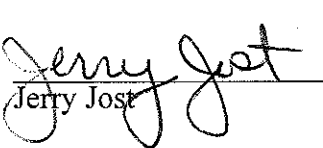
Kris Marsh



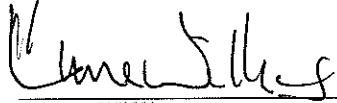
Jim Smith



Debby Smith



Jerry Jost



Lane Williams



Mercedes Taylor-Puckett

LAW OFFICES  
**BARBER EMERSON, L.C.**

1211 MASSACHUSETTS STREET

POST OFFICE BOX 667

LAWRENCE, KANSAS 66044

(785) 843-6600

FACSIMILE (785) 843-8405

Mark A. Andersen

Email: mandersen@barberemerson.com

JOHN A. EMERSON  
BYRON E. SPRINGER  
RICHARD L. ZINN  
CALVIN J. KARLIN  
JANE M. ELDREDGE  
MARK A. ANDERSEN\*  
CHERYL L. TRENHOLM\*  
TERENCE E. LEIBOLD\*  
TERRENCE J. CAMPBELL\*

\*ADMITTED IN KANSAS AND MISSOURI

MATTHEW D. RICHARDS\*  
LINDA K. GUTIERREZ  
MATTHEW S. GOUGH\*  
CATHERINE C. THEISEN  
KRISTOPHER S. AMOS

RICHARD A. BARBER  
(1911-1998)

GLEE S. SMITH, JR.  
OF COUNSEL

September 9, 2008

Via E-Mail and Regular Mail

Mayor Michael Dever  
City Hall  
6 East Sixth Street  
Lawrence, Kansas 66044

Re: *Comprehensive Plan Amendment to Horizon 2020,  
Chapter 7: Industrial and Employment Related Land Use;  
City Commission Regular Agenda Item #5, September 9, 2008*

Dear Mayor Dever:

A scheduling conflict prevents me from attending the City Commission meeting scheduled for September 9, so I am writing to offer my comments on the proposed revisions to Chapter 7 of Horizon 2020. My comments are specifically directed to the final two paragraphs of Section 1, Industrial Land Use (p. 7-8), which discuss prime farm land, as follows:

*The preservation of high-quality agricultural land, which has been recognized as a finite resource that is important to the regional economy, is of important value to the community. High-quality agricultural land is generally defined as available land that has good soil quality and an produces [sic] high yields of crops. Within Douglas County these are capability class (non-irrigated) 1 and 2, as identified by the National Resources Conservation Service.*

*At least one of the sites identified above (Airport) has some amount of high-quality agricultural land. Agri-industry businesses that would benefit from high-quality agricultural land should be encouraged to locate in these areas. Future Industrial and Employment land use sites not included on Map 7-2, Potential Locations for Future Industrial and Employment Related Development, should balance the agricultural significance on the site against the need for industrial and employment related development.*

Before I begin, and to lend some credibility to my comments regarding my appreciation of prime farm land, it is important to provide you with a brief summary of my agricultural, farm

management and agri-business background and experience. I was born and raised on a third-generation family dairy farm in Northeast Kansas, which today remains in our family. I was previously employed for several years by the *Farm Credit Banks of Northeast Kansas* (an agricultural lending institution that makes loans to farmers, ranchers and agri-businesses), with my office located in Douglas County, during which time I also managed the farming and grazing on more than one hundred thousand acres of agricultural farm land and Flint Hills pasture land in Eastern Kansas for the *Farm Credit Banks*, including several farm properties right here in Douglas County. I am a former member and officer of the *Future Farmers of America*, a former board member of the Douglas County Livestock Association, and a graduate of the Douglas County Agricultural Leadership Program. I am currently (and have been for the past 21 years) a member of the *Kansas Society of Farm Managers and Rural Appraisers*, a professional society of farm managers and rural appraisers located on the KSU campus in Manhattan, Kansas. I am also a member of the *Kansas Bar Association Executive Committee on Real Estate Law*, and a fellow of the *American College of Real Estate Lawyers*. I routinely negotiate and draft farm leases, contracts and exchange agreements throughout Kansas and Missouri, and provide farm management advice to clients of our firm.

Today our nation produces a surplus of food products, and exports much of this surplus production to other countries around the world. Most of these food stuff exports are in the form of fungible grain products, in part because we do not have the infrastructure in place to grow and export local fruits and vegetables with any degree of efficiency. With our own national population trends leveling off, and average crop yields and agricultural productivity continuing to rise, there is no shortage of local food production now, or in the foreseeable future. Furthermore, there is absolutely no shortage of farm land in the State of Kansas to sustain the local production of food products. If Douglas County were to experience a shortage of locally grown food products in our lifetime, or beyond, it will not be for the lack of available farm land, but instead would likely result from the production decisions made by individual producers who perceive (either real or imagined) a lack of the necessary markets or labor to grow and harvest fruits and vegetables. Most assuredly, it will not be for the lack of an abundance of available local farm land, prime or otherwise. The reality is that we have an excess of local cultivated farm land.

Several years ago the Food Security Act of 1985 authorized the United States Department of Agriculture (USDA) to implement what would become a very popular farm program called the *Conservation Reserve Program* (CRP). This is a voluntary program for agricultural landowners, who receive annual rental payments from the USDA to set aside their farm land for conservation purposes, and not grow crops on the farm land enrolled in the CRP program. Essentially, as a nation, we have such an over abundance of farm land and crop production, that we pay landowners nearly \$2 billion dollars a year in annual subsidies not to grow crops on this excess land. Some recent CRP program statistics, available from the USDA's website, are as follows:

Mayor Michael Dever

September 9, 2008

Page 3

- Nationally, the CRP program has approximately 34.7 million acres of farm land enrolled in the CRP program as of July 31, 2008, with fiscal year 2008 rental payments of nearly two billion dollars (\$1,943,000,000).
- Kansas has approximately 3.1 million acres of farm land enrolled in the CRP program, with fiscal year 2008 rental payments of \$122,869,000. Kansas has the third largest amount of enrolled acreage, behind only Texas (with 3.9 million acres enrolled) and Montana (with 3.3 million acres enrolled).

To put this into perspective, Douglas County covers a total area of about 475 square miles, or 304,000 acres (approximate). The amount of farm land enrolled in the CRP program in the State of Kansas (3,123,488 acres) is greater than 10 times the entire area of Douglas County. Keep in mind that the CRP program is limited primarily to cultivated acreage. Only 50% of the acreage in Douglas County is actually cultivated, so it would actually take an area 20 times the size of Douglas County to make up an equivalent amount of cultivated acreage.

To lend additional perspective to this issue, approximately 11% of Douglas County consists of cultivated prime farm land (soil capability class I and II soil types), which is about 33,500 acres, and approximately 39% of Douglas County consists of other land readily capable of cultivation (mostly soil capability class III and IV soil types), which is about 118,500 acres. If we continue to consume cultivated prime farm land in Douglas County for commercial and industrial uses at our present rate, it would literally take several centuries in time to convert this amount of acreage to non-agricultural purposes. For example, the "Airport Industrial Site" which is specifically referred to in the last two paragraphs of the proposed revisions to Chapter 7 of Horizon 2020, consists of approximately 230 acres, of which approximately 180 acres actually consists of cultivated prime farm land. If you assume a 30-year build-out for the entire Airport Industrial Site, and a comparable rate of growth and absorption of cultivated prime farm land for commercial and industrial uses into the future, Douglas County might run short of prime farm land in about 5,583 years at this rate ( $33,500/180 \times 30 = 5,583$ ). Even then, there will still be tens of thousands of acres of available farm land in Douglas County to sustain the local production of food products, as well as hundreds of thousands more acres of cultivated farm land in the immediately adjoining counties in close proximity to Lawrence. In any event, several thousands of acres of prime farm land in Douglas County would always remain undeveloped and preserved, because these acres are located within existing flood plain zones, stream corridors, or other environmentally sensitive areas, and the existing development code already preserves and prohibits the development of these areas.

The production of crops, and the generation of high crop yields, is essentially a recipe. You need more than just prime farm land. You need the proper climate, temperature range,



Mayor Michael Dever

September 9, 2008

Page 4

rainfall (or irrigation), and growing season conducive to the particular crop that you wish to grow. You also need the right equipment and quality seed, along with appropriate and timely applications of herbicides, pesticides and fertilizer chemicals (or other methods if your goal is organic production), followed by a timely harvest that is not disrupted by adverse weather conditions. The absence of any one of these ingredients at the proper moment in time will have an adverse effect on the crop. Ask yourself how it is that farmers in the corn belt States of Iowa, Illinois, Indiana and Ohio can harvest corn yields on class III and IV soils, that exceed the yields of corn grown in Kansas on class I and II soils? The answer is in the recipe. The combination of climate, growing season, weather patterns, insects, soil depths, etc. all affect the yields. In the end, the soil type is but a single ingredient in a much larger and more complex recipe. In fact, the actual soil type is less important to the ultimate crop yield than several of the other factors.

If you decide that it is the role of the Lawrence City Commission to protect certain soil classification types, you must also consider protecting non-prime farm land (i.e., soil capability classification types III-VIII), because these soils tend to be more fragile, environmentally sensitive, and vulnerable to erosion than prime farm land (i.e., soil capability classification types I - II). Recent dialogue about preserving class I and II soils begs the question, why is it okay to discriminate against class III-IV soils, or class V-VI soils, etc.? So what if some crops may have somewhat higher yields on class I-II soils? Is the incremental increase in crop yields so great as to warrant this level of distinction and discrimination? Most every crop grown on class I-II soils can also be grown on class III-IV soils. Please understand that you can grow fruits and vegetables on Class III-IV soils. The only difference may be the incremental crop yield, which has more to do with the irrigation potential, fertilizers, growing season, weather conditions, soil depth and soil compaction, than anything else. The soil classification is merely one of several factors that must be taken into consideration. So if the City of Lawrence is going to protect class I and II soils, why not protect class III, or class IV soils? Once you start down this path, where do you stop? From this philosophical perspective, isn't everything in nature worth protecting, and isn't everything that is being adapted and developed for human habitation and civilization worthy of being equally protected?

Real estate in every form is a valuable natural resource. The suggestion that the City of Lawrence should prioritize or characterize "prime" farm land over other forms of real estate, without further justification or empirical facts, achieves no articulated objective or goal adopted by our community. In fact it has the opposite effect because it has the potential to stop or slow down the creation of new jobs by having a negative impact on commercial and industrial growth generally. Whether a particular commercial or industrial building is constructed on land classified as class I-II soils, versus class III-IV soils, has virtually no measurable or quantifiable effect on our local sustainability, global sustainability, or environment. The relevant planning issue, if there is any issue at all, should be whether to construct the particular building in the first

Mayor Michael Dever

September 9, 2008

Page 5

place, not which soil type the building is constructed upon. Assuming that a decision is made to construct a new building somewhere in our community, the local sustainability distinction between constructing that building on class I-II soils, rather than class III-IV soils, is so marginal that it cannot be measured or quantified in any meaningful terms. However, the cost of constructing that same building (and the extension and construction of the supporting infrastructure improvements, such as sewer lines, water lines, parking, streets, etc.) is greatly reduced if the building is constructed on a fairly level site devoid of shallow subsurface rock (i.e., positive characteristics of class I-II soils). Planning for future land use and urbanization should be based upon objective criteria and facts, such as the availability and efficient extension of public services, infrastructure and roads, and the proximity and location of the property in general.

There are a number of existing non-agricultural and/or industrial uses already situated in Douglas County on prime farm land. Ironically, one of the single largest industrial users of prime farm land in Douglas County is the City of Lawrence itself. For example, the Lawrence municipal airport, Lawrence water treatment plant, and Lawrence wastewater treatment facilities are all located on prime farm land. In fact, just a few years ago, the City of Lawrence acquired several tracts of prime farm land to expand the Lawrence Municipal Airport at considerable expense, doing so under the threat of eminent domain, with the intent of encouraging commercial and industrial economic development on or about the vicinity of the Airport. More recently, the City of Lawrence used its power of eminent domain to acquire tracts of prime farm land from local farmers for the construction of the proposed Wakarusa wastewater treatment facility. In just the past few months the Kansas Turnpike Authority (the KTA) has exercised its power of eminent domain to acquire additional land (including prime farm land) to expand the Kansas Turnpike right-of-way, entrances and exits to the North and East of Lawrence. Each of these projects involved the taking and conversion of prime farm land, and they were completed with little or no protest from the community. It is not my intent to criticize these commercial and industrial uses but, quite the opposite, to point out that the occasional non-agricultural use of prime farm land is both appropriate and reasonably necessary in furtherance of sustaining human habitation and civilization in Lawrence, Kansas.

The proposed Airport Industrial Site described in Chapter 7 of Horizon 2020, is situated between the Lawrence Municipal Airport to the North, and the Kansas Turnpike along the South, and consists of the same general soil types owned by the same commercial farmers whose land was previously taken by the City and the KTA for non-agricultural purposes with little or no protest from our community. Except for the individual farmers whose land was being taken by legal force, there were virtually no protests or objections from any member of our community to the expansion of either the Lawrence Municipal Airport or the KTA, nor were there any sympathetic articles published by the press about the need to save the soil. If, as a community,

Mayor Michael Dever

September 9, 2008

Page 6

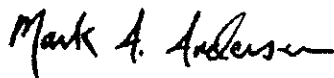
we do not object to these recent takings of prime farm land and conversions of agricultural land use by our own City and State governments, how then can we in good conscience consider imposing any different standards upon the private citizens of our community? These governmental takings of prime farm land via threat of eminent domain powers, followed by the suggestion of governmental sanction imposing certain limitations or restrictions on the future use of farm land by private individuals is patently discriminatory and impossible to fairly rationalize.

The suggestion or notion that our local land use planning guides should be revised to specifically address the preservation of "prime" farm land is without merit. In effect, all real estate is precious in some respect, be it wetlands, woodlands, prairie, pasture, upland, or prime farm land. When it comes to land uses, these artificial distinctions are mostly nothing more than catch phrases intended to reflect and, in some instances, incite individual emotions in furtherance of personal agendas. Upon close scrutiny, you will find that this prime farm land distinction is neither promoted or supported by any significant number of commercial farmers and agribusinesses in our community but, rather, by a select group of persons who generally live upon or own property in close proximity to the City limits and who stand to personally benefit and/or purportedly be negatively impacted by any further expansion or extension of the City limits.

If the final two paragraphs at the end of Section 1, Industrial Land Use (p. 7-8), in Chapter 7 of Horizon 2020, discussing prime farm land remain as drafted, they will most assuredly confuse and confound the future planning process in our community, especially as it relates to the proposed Airport Industrial Site. Assuming that this is not the intent or objective of the Lawrence City Commission, I respectfully request that these two paragraphs be deleted.

Respectfully,

BARBER EMERSON, L.C.



Mark A. Andersen

MAA:dbk

cc: Vice-Mayor Robert Chestnut (via e-mail)  
Commissioner Mike Amyx (via e-mail)  
Commissioner Sue Hack (via e-mail)  
Commissioner Boog Highberger (via e-mail)  
David Corliss, City Manager (via e-mail)