

INDUSTRIAL

CORRIDOR

MASTER PLAN – OCTOBER 8, 1986

(Maps Revised February 2009)

INDUSTRIAL CORRIDOR

WARSAW CITY PLAN COMMISSION

KOSCIUSKO COUNTY AREA PLAN COMMISSION

OCTOBER 8, 1986

OVERVIEW

The following report is a Master Plan of the Industrial Corridor area. Before we outline the corridor of development, we should take some time to explain what exactly a master plan is and what purpose it serves.

A Master Plan is a comprehensive plan outlining the means to develop a large parcel of ground. It should not be confused with a site plan or plat which is a meticulous layout of a parcel of ground (usually much smaller than 1,500-acres provided in our corridor) by an engineer.

Site plans and plats accomplish different goals than a Master Plan. While site plans and plats deal with the specific development, the Master Plan deals with broad community goals. It should be noted that the corridor's Master Plan will operate on the same concepts that the City's Master Plan does. The best way to illustrate this is to look at how a drainage layout is handled in the Master Plan versus a site plan's drainage schematic. In a Master Plan, drainage basins, watersheds, and legal ditches are all identified. Topographical maps are used to also identify low areas that act as pockets for water. These areas are identified so that the overall drainage integrity of the area can be monitored. By identifying drainage areas the Plan Commission can refer to the Master Plan during preliminary plat hearings or site layout review. The benefits of this type of plan are obvious. It allows the development of different tracts of land (under different ownership) to be done in an orderly and beneficial manner for the entire community. The community issues that are identified comprehensively as this include drainage, transportation, environmental, and housing.

In a site plan a much smaller area is studied so that industrial site needs can be addressed. This means that the water runoff from a building and its parking lot is studied to see how it should be directed into the Drainage Master Plan of the community. All site plans and plats tie into a Master Plan.

A Master Plan will identify and suggest the best development strategy for a tract of ground. In this case, it's for the Industrial Corridor. The concepts of the study are then in the hands of the Plan Commission and Board of Zoning Appeals to instigate during a plat process or site plan review.

HISTORY

A good starting point of any study is the basic question of “How did this come about?” The Industrial Corridor concept was ignited by a number of different sources. Back in 1984, the City recognized the impending shortage of industrial ground. Suitable industrial growth areas were then being examined. Meanwhile, the County started to experience an increase in pressure for “spot” zoning for industrial use. This too was due to a shortage of industrial zoned land. This started mushrooming to the point where there was a significant number of industrial zoning petitions being presented before the County Plan Commission. Between the City’s need and the growing conflict in the County, an alliance was born between the City of Warsaw and the Kosciusko County Area Plan Commission. The two Plan Commissions, with their staff, sat down and hammered out a game plan at resolving the shortage of industrial zoned ground. One important point that the Plan Commissions would like to make known is that they do not expect this to be the only industrial tract in the county.

The Area Plan Commission welcomes any effort by other towns in the County aimed at increasing or creating industrial tracts. The first Industrial Corridor meeting was initiated by Warsaw’s Mayor, Jeff Plank. This initiated a series of meetings aimed at resolving the lack of industrial ground. The first meetings were just between the Warsaw and Kosciusko County Plan Commissions. Then the Commissioners and Warsaw City Council members were brought into the special meetings. The final stop was a meeting with the property owners from the target area. This meeting featured planning officials, government figureheads, and property owners.

Discussion at these meeting entailed the rationale used for choosing the Industrial Corridor site and the use of long term planning to prevent future problems of drainage, transportation, and environmental concerns. The brunt of the questions from the citizens pertained to issues such as the City’s involvement (when it came to annexation), drainage, environmental issues, and traffic flow to and from the area. All of these questions were addressed at those meetings and will be discussed in further depth later in this study.

After the initial meetings with the property owners and governmental leaders, it was decided to attempt to get the actual property owners to petition to re-zone the area. This decision was made by the public leaders with the rationale that it would prevent the private sector from perceiving the rezoning as an attempt by the government sector to force an unwanted rezoning upon the community. With this in mind, the City and County Planning Departments set out to collect signatures for the 1,500-acre rezoning. State statute requires that within a tract of ground, at least 51% of the property owners must give their written consent for a rezoning. After six months of follow-up meetings between planners and property owners in the Industrial Corridor, well over 51% of the required property owners signed the petition. Once the needed percentage of property owners was acquired, the public meeting date of October 13, 1986 was formally advertised.

CONSEQUENCES OF ZONING CHANGE

Probably the first and foremost area of concern when it comes to the consequences of zoning change is the impact it will have on property taxes. For an interpretation on the property tax assessment, we went to the County Assessor and asked for her input on the impact of the rezoning on tax rates. The effect of the rezoning on taxes would be non-existent. The taxation rate for property tax in Kosciusko County is affected by the improvements on the property. In other words, unimproved property will continue to be assessed the way it has been in the past. An example is that a farmed piece of ground in the Industrial Corridor will continue to be taxed at its current rate. Likewise, if a business were to locate on a piece of agriculturally zoned ground, its taxation rate would change to one of industrial. Rezoning will not affect taxation in itself; rather it will be the improvements that follow up the rezoning (firms relocating to the area). This is significant in that the basic ideology of the Industrial Corridor is that farmers will be allowed to continue farming if they so desire. If the taxation rate were to increase with rezoning, the burden of the industrial tax rate would be too great for the farmer to withstand. The rezoning will only add another resale option for the farmer.

The next consequence of the rezoning is the impact on the farming operation by the new zoning classification. The new classification of light industrial would make a farming operation a non-conforming use. This means that by County Ordinance, if a farmer were to request a permit to put up another building to expand his operations, he would be required to have a hearing before the Board of Zoning Appeals.

Though this may sound like a barrier to the farmer that would prefer to farm his ground instead of developing it industrially; it in fact will not be. The farmer will experience a Board that will be open to encourage a farmer to continue his operation. In order to fully understand this, one has to back up to the earlier public meetings conducted between the board members (many who are farmers) that farming should not be discouraged by the rezoning. This was pointed out due to the fact that it is unrealistic that all 1,500-acres would instantly be developed industrially. The board knew that the reasoning could not affect the current farming operations and still be successful. The decision was then made to simply permit farming to continue and to allow each individual property owner the option of either selling off or continuing his operation. Though a hearing may be required to expand a farming operation, the hearing will be before a board that is very sensitive to the farmers' needs. In no way will there be an attempt to choke out the current farming operations so that the county can have an inventory of industrial ground. The board's feelings are that due to the amount of acreage involved, and due to the amount of possible expansion area around the Corridor site, there will be ample industrial ground available for development by willing land owners.

One possible solution to this problem would be to expand the light industrial district criteria to include many of the farming activities that take place. These farming activities could be then classified as permitted uses within the industrial district. This concept will need to be studied as to its practicality. It will be definitely viewed as a voluntary market approach for the farmers involved.

The next question that must be asked is what does the light industrial district permit? We already know that farming operations can continue, and that the boards will look favorably upon the expansion of farming operations. The allowed uses in a light industrial district are listed as follows in the Kosciusko County Zoning Ordinance complete with a description.

2.8 Industrial District: The Industrial District is to provide suitable space for existing industries as well as for future industrial expansion. This District is subdivided into two classifications:

2.81 Light Industrial: This use requires both buildings and open areas for manufacturing, fabricating, processing, storage or disposing of raw materials, manufactured products or wastes, which are not injurious to vegetation; and which are not noxious or offensive due to the emission beyond the limits of the premises upon which that industry is located.

LIGHT INDUSTRIAL DISTRICT “LI”

PERMITTED USES

EXCEPTIONS

- | | |
|------------------------------------|---------------------------------|
| 1. Research and Testing Laboratory | 1. Motels |
| 2. Offices | 2. Planned Unit Developments |
| 3. Warehouses | 3. Restaurants |
| 4. Parking Lots | 4. Truck and Railroad Terminals |
| 5. Light Manufacturing | 5. Supply Yards |
| 6. Essential Services & Structures | 6. Agriculture |
| 7. Accessory Uses | 7. Fire Stations |
| 8. Wholesale Businesses | 8. Municipal Buildings |
| 9. Public Utility Buildings | 9. Water & Sewage Treatment |
| 10. Greenhouse & Nurseries | |

When looking at the list you will also notice that there is a list of Special Exceptions allowed in an industrial district. What this means is these are uses that must have Board of Zoning Appeals approval before they can go into operation. These types of uses will have special hearings to ensure that the business fits in with the environment and does not negatively impact the adjacent property owners.

The third consequence of the rezoning will be the impact on subdividing. It would be fair to say that if a developer or farmer would sell off his property for an industrial firm that almost certainly a platting of the property would be necessary.

The procedure for platting is completely outlined in the Kosciusko County Zoning Ordinance. The plat process consists of a preliminary plat and final plat and at times the bonding of streets. During the plat process it is safe to assume that the Plan Commission will lean heavily on the recommendations of this Master Plan. These recommendations will give the Plan Commission direction on matters of drainage, traffic flow, environmental issues, and buffers needed in various areas. The plat process will also ensure that the ground is developed in an orderly manner and in a manner that is as compatible as possible with the adjacent property owners. This will lessen the impact of the industrial development in the area while maximizing the long term return in the way of land and resource use.

These same guidelines will apply to the Special Exceptions that are submitted to the Board of Zoning Appeals. In these hearings, the same matters of drainage, environmental, traffic and buffer zones will be addressed as to how they relate to the Corridor’s Master Plan. By the

Board's leaning heavily on the recommendations of this Master Plan, it will ensure proper long term planning is used throughout the Corridor.

It should be noted that in order for this Master Plan to have any kind of teeth, it will be necessary for the County Commissioners to formally accept it as the document that will guide the development of the Corridor. This document will prove invaluable in implementing long term strategy that will minimize the impact of drainage, traffic and environmental conflicts within the area. It is also suggested that when adjacent areas to the Corridor seek rezoning that the areas be implemented into the traffic, drainage, and environmental plans so that the area may grow in unison.

The fourth major area is the possibility of annexation. The City of Warsaw at some future date probably will entertain the prospect of annexing the eastern portion of the Corridor. It should be noted that the City of Warsaw at this time has no plans for annexing, by any means, the entire Corridor. Before any annexation takes place a feasibility study will occur. The outcome of the sewer study will weigh heavily in the annexation plans of the City. To fully understand the impact of annexation on the Industrial Corridor project, a number of basic theories must be discussed.

The first and foremost theory is that annexation does not mean ownership. When the City of Warsaw talks of annexing a piece of ground that does not mean they will be buying the piece of ground. The ground will still be owned by the landowner. The only difference will be the landowner will be paying the City of Warsaw taxes where he was paying the County tax rate in the past. There is a difference in the tax rates between the City and the County with the City of Warsaw being at a higher rate. The City of Warsaw will carefully analyze any annexation plans for several reasons. They must make a profit on the annexation while not putting the added hardship of extra taxes on the farmer. This hardship will be prevented in a couple of basic ways.

First, the farmers that will be annexed will be approached before the annexation takes place. The farmers will be involved personally in any annexation and it will only proceed with their approval. Secondly, the farmer's property being considered for annexation will already have interested developers. The reason for this is that if a farmer were to continue to just farm with his ground while paying city taxes; the load of paying the higher tax rate for farm ground would be too great for the farmer to bear.

To avoid this conflict when and if it does become a fact, the annexation will be approached by special legislation done at the State legislature. Under current Indiana Statute, industrial annexation can only take place under a contiguous situation. Under this situation, a municipality can extend its boundaries only if a piece of ground touches the City limits. Qualifications are that you can not extend more than four feet out for every foot that touches the current city limits. This law prohibits strip annexations that had occurred in the past where a municipality would follow a road right-of-way out to a desired area. Now the state law only allows a four to one footage ratio when the property is contiguous. The exceptions to the contiguous rule are municipal airports, municipal parks, and municipal sewage treatment plants.

There are also four other exceptions in the state for industrial park areas. In these cases, the areas were non-contiguous but were still allowed to be annexed with state legislation. If the City of Warsaw decides to annex a portion of the Corridor, it would be approached in the same manner as these other four industrial areas. The state legislature would be petitioned in an attempt to obtain the special legislation. The leap-frog method will prevent conflict with the

residential areas while still providing the City of Warsaw the opportunity to annex an industrial area.

In summation, the annexation is not an issue in the rezoning process. Annexation is an entirely separate matter to be dealt with at another time. But when looking at the Industrial Corridor and U.S. 30, annexation naturally pops up as an issue for those properties either in or around the Corridor.

Unnecessary hardship to the farmer could be avoided by some long term strategy and by using proper timing of an annexation by the City of Warsaw.

A rezoning and annexation are two entirely separate matters. An annexation has to do with the expanding jurisdiction of the City while a rezoning is simply an expansion of the permitted uses on a tract of ground. A rezoning and annexation are two entirely separate matters. Annexation does not always follow a rezoning.

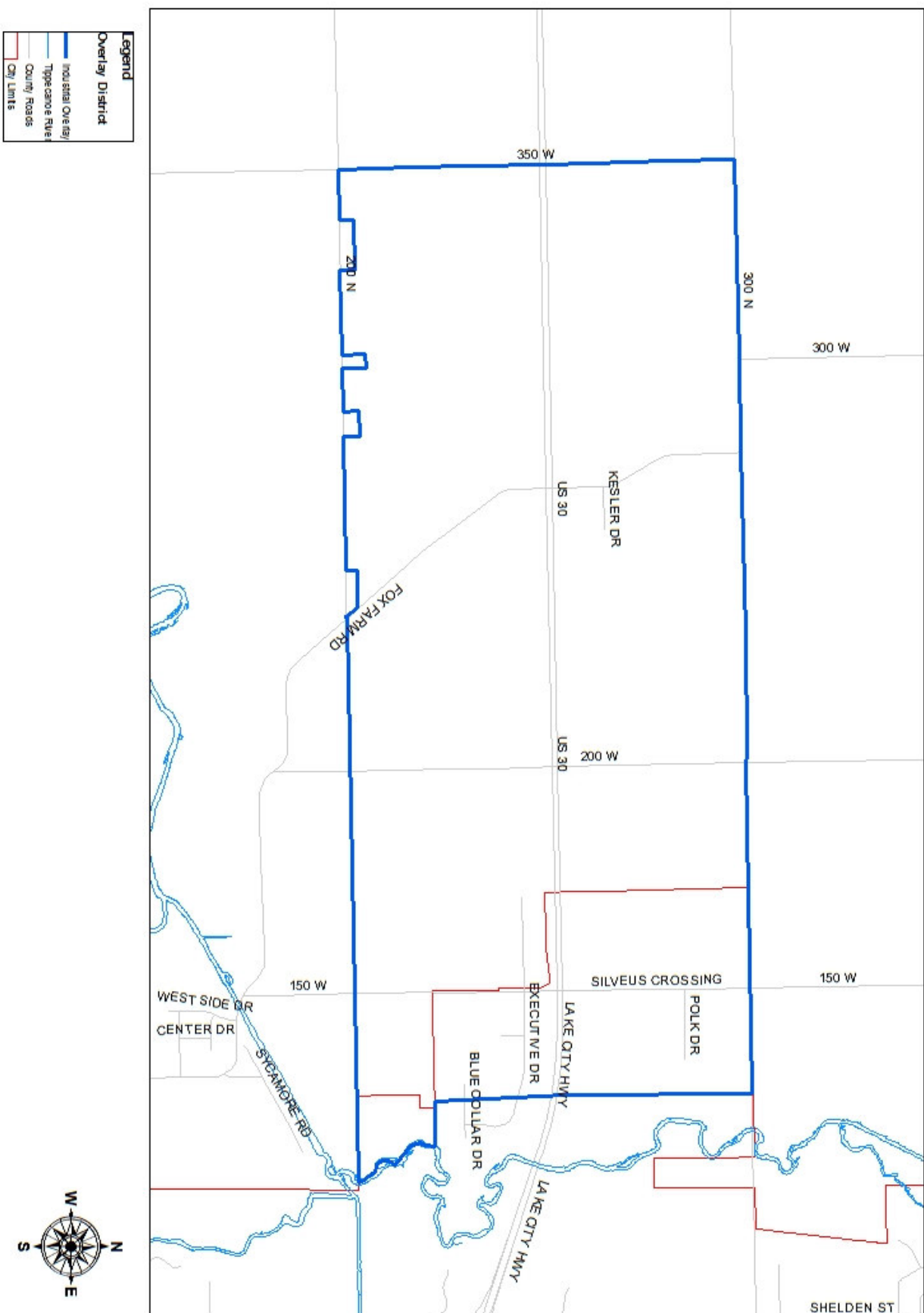
When a city considers annexation, it is much like business dealings. If the municipality properly analyses the pros and cons of an annexation, the cost benefit of such an action quickly comes to light. An example is that if a municipality is looking to annex a residential area versus an industrial area, it generally pays for that municipality to go after the industrial area. The reason being is that the residential areas potential tax revenue is not near as high once the municipality extends the required services (sewer, police, fire, etc.). When the municipality looks at either an industrial or an intense commercial development, the municipality almost always comes out ahead financially even after improvements. When the City of Warsaw looks at annexation of the Corridor, it would not be feasible to annex the whole Corridor.

It also would not be feasible to do a conventional sweeping motion of taking in the residential areas south of the Corridor on our way up to taking the Corridor ground. This would create a situation where the City would lose money providing services for the residential areas to get to the desired industrial area. At the same time, the City would be annexing unfriendly areas. The City will do everything within its power to avoid an annexation of a residential area.

At this time it could be said that it would not be economically feasible for the City to annex the entire Corridor nor would it be politically feasible for the City to do a sweeping annexation motion that would include residential areas. The threat of annexation is one of conceptual nature. If and when the City of Warsaw decides to annex, it will be an area that would be serviced most directly by the city sewer lateral extension. It is safe to assume that the annexation will take place in a relatively small corner on the eastern side of the Industrial Corridor.

In summation of all the consequences of the rezoning, a single concept stands out. The Planning Departments wish to minimize the risk to the property owners in and around the Corridor area. In order to minimize the risk, they have set up a system where there will be more opportunities to sell off the ground for industrial purposes without affecting farm operations. The Plan Commission will be acting in a manner that helps to kindle growth in the area; not one that suppresses new growth or current farm operations.

Industrial Corridor Location Map



LOCATION RATIONALE

When looking for the location for the industrial rezoning, several elements were analyzed. These elements dealt with such issues as adjacent property uses, transportation routes, drainage, and environmental concerns. Upon the examination of the above elements the Plan Commissions made their decision to rezone the 1,500-acres off of U.S. 30.

The rationale behind this location was six-fold. First and one of the most important considerations was the proximity of the site to U.S. 30 which serves as a major thoroughfare for trucks going east and west. This fact, coupled with State Road 15 intersecting U.S. 30 to the east of the corridor made for an ideal location for an industrial park site from a transportation standpoint. Especially when one takes into consideration that State Road 15 is the heaviest traveled north/south artery in the county.

Part of the rationale for extending the rezoned area to 350 West is the fact that it is currently used for truck traffic. The traffic element weighted heavily especially when the corridor's location was compared to other existing industrial parks in and around the City of Warsaw. It was found that none of these offered as positive of a traffic flow pattern as the U.S. 30 area.

The second major rationale used was the proximity of the industrial tract to the City of Warsaw. Due to its location, the possibility of sewer extension from Warsaw to the proposed tract is very possible. In selecting a site, it was felt that sewer hook-up was an important environmental criterion to be weighed. In order to have what would be considered a "grade A" industrial park, sewer hook-up must be available for perspective buyers.

Sewer availability has become an even bigger issue recently due to the mandates of the Environmental Protection Agency and the regulations governing ground water discharge. The trend in this area is one of tightening regulations especially for the discharge of waste water. With this in mind, this project preceded under the scenario of a parallel study being done on the feasibility of extending sewer up to the site.

The sewer study being conducted is a joint effort by Howard Needles, Tammen and Bergendoff and Dr. Etzel of Purdue University. The firm was hired by the City of Warsaw to look at the feasibility of extending a sewer line up 15 North. The study also includes the possibility of building a satellite plant to handle waste for a development of such possible portions as a 1,500-acre industrial tract. Purdue is assisting Howard, Needles, Tammen and Bergendoff in this study due to some of the highly technical matters involved.

The study will be examining the prospect of extending a sewer line up 15 North and then a lateral line to the edge of the industrial site. The study of the possible sewer extension is being done to service current industries located on 15 North (out of city limits) that are being mandated by the State Health Department to take care of their ground water discharge. This provides the City of Warsaw the unique opportunity to service both existing industrial needs and a future growth area with one project. The results of this study should be ready in December of 1986. The results will be complete with costs and the physical feasibility of running the desired lines. The results will also analyze the feasibility of building a satellite treatment plan near the corridor area to service the northern part of the city.

The third reason that this tract was looked at is the cost associated with the purchase of the industrial ground. Since the demand is currently higher than the supply, industrial land prices tend to be high in and around the City of Warsaw. By adding roughly 1,500-acres of industrial ground we hope to achieve some what of a price reduction. The hope of the Planning Departments is that this reduced price will help in the recruitment of industrial firms.

We also feel that the size of the tract itself will allow parcels for a greater variety of industrial firms. The firms that require sewer could locate toward the eastern half of the tract where sewer should be readily available. Those firms not requiring sewer, but being more land intensive, will be able to locate further west where the ground should be slightly cheaper since extended utilities (sewers) would not be available. The size of the tract should help in price reduction and should help in the recruitment of a wider variety of firms.

The fourth major rationale used was the potential for future expansion. When looking for a site, the Planning Departments wanted to be able to select a site that would offer future expansion potential if the need presented itself. The Industrial Corridor offers expansion both due west and due south. When looking at long term use patterns it would seem practical to allow industrial expansion basically south all the way to the river. If the demand was intense enough, the tract could be extended west for a considerable distance. The selection of this tract allowed the Plan Commission not only meet the current and short range demands for industrial ground, but to also open large tracts to provide the future needs of Warsaw and the County for some considerable years.

This serves the obvious purpose of keeping the Plan Commissions out of the “emergency” type situations that we are experiencing today.

The fifth reason has to do with the cost of industrial property. The idea here was to select property that was basically in the hands of first generation owners. First generation owner's is a term used to describe the primary owners of property. These are owners that haven't sold to land investors or developers. This means that the price will not be escalated due to the sale and resale of the same piece of property. The resale results in the inflation of property values. To rezone first generation land is to provide industrial firms and park developers with an opportunity to buy directly from the farmer for a substantial savings. It also allows the farmer to obtain a good price for his land while allowing land to become available at a cheaper price than most industrial ground available today. This will also be significant in aiding the efforts of industrial firm recruitment to the area.

The final rationale is that this site lends itself to some excellent drainage possibilities. The drainage layout will be broken down further later in this study. For now it is suffice to say that due to the county ditches, low areas, and the rivers proximity to the site, ample drainage can be provided to minimize the aggravating results of the more intense industrial development.

SOILS

For the soils analysis of the Industrial Corridor, the United States Soil Conservation Services was contacted. They were asked to study the area and to give back a report describing how buildable the soils were. The district conservationist then color coded a map depicting four different break outs depicting these soils. He then mapped these four basic breakdowns to give a visual perspective of buildable versus non-buildable soils found in the corridor. The four break outs were soils with slight limitations, soils with moderate limitations, soils with severe limitations (because of slope), and severe limitations due to wetness and low strength.

The map with the four break outs depicted is included within this study (see attachment #1). There is also an attached map showing all of the soils found in the Corridor area. Also attached is the U.S. Soil Conservation's report breaking the soils down into 35 different soil types. These soil types are then analyzed as to proficiency for commercial development and road construction (commercial development standards closely match industrial development, see attachment). Further background on soils is provided in both planning department offices.

The topography of the area starts flat on the west boundary and as it moves east it tends to slope more. This is especially prevalent on the south side of U.S. 30 where the land experiences some severe grade changes. Upon examination of the map, one also notices that the soils with the severe limitations tend to also be on the south side of U.S. 30 in two "pocket" areas.

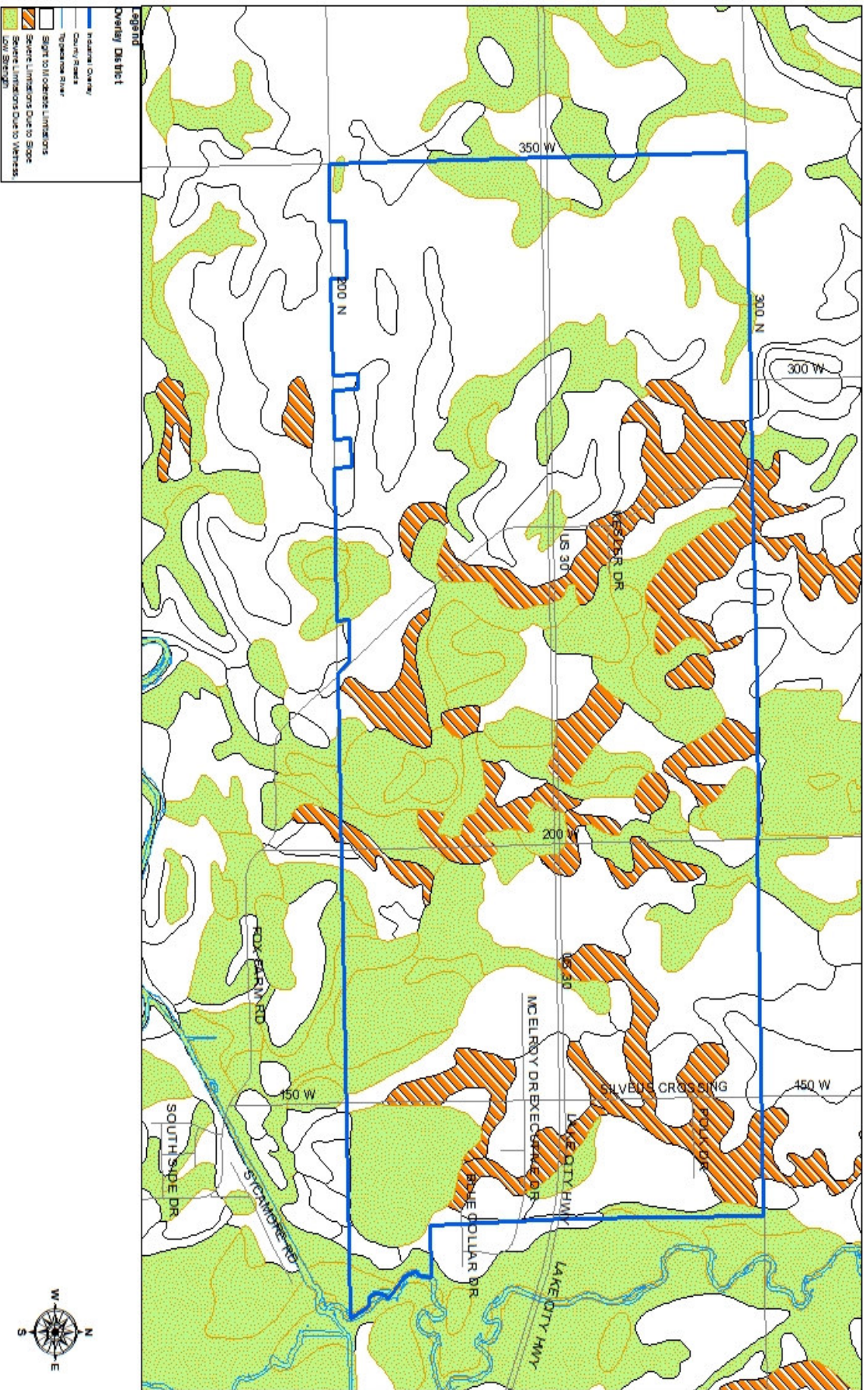
The topography of the area will present some of its own unique problems to the developer.

Some of the sites will require more site preparation or more "creative" development practices in order to fully utilize them. If these sloped areas are developed properly, development can occur in a scattered manner that will provide natural physical buffer zones between the various industrial firms. These will also serve as buffers from the adjacent farms and residential areas.

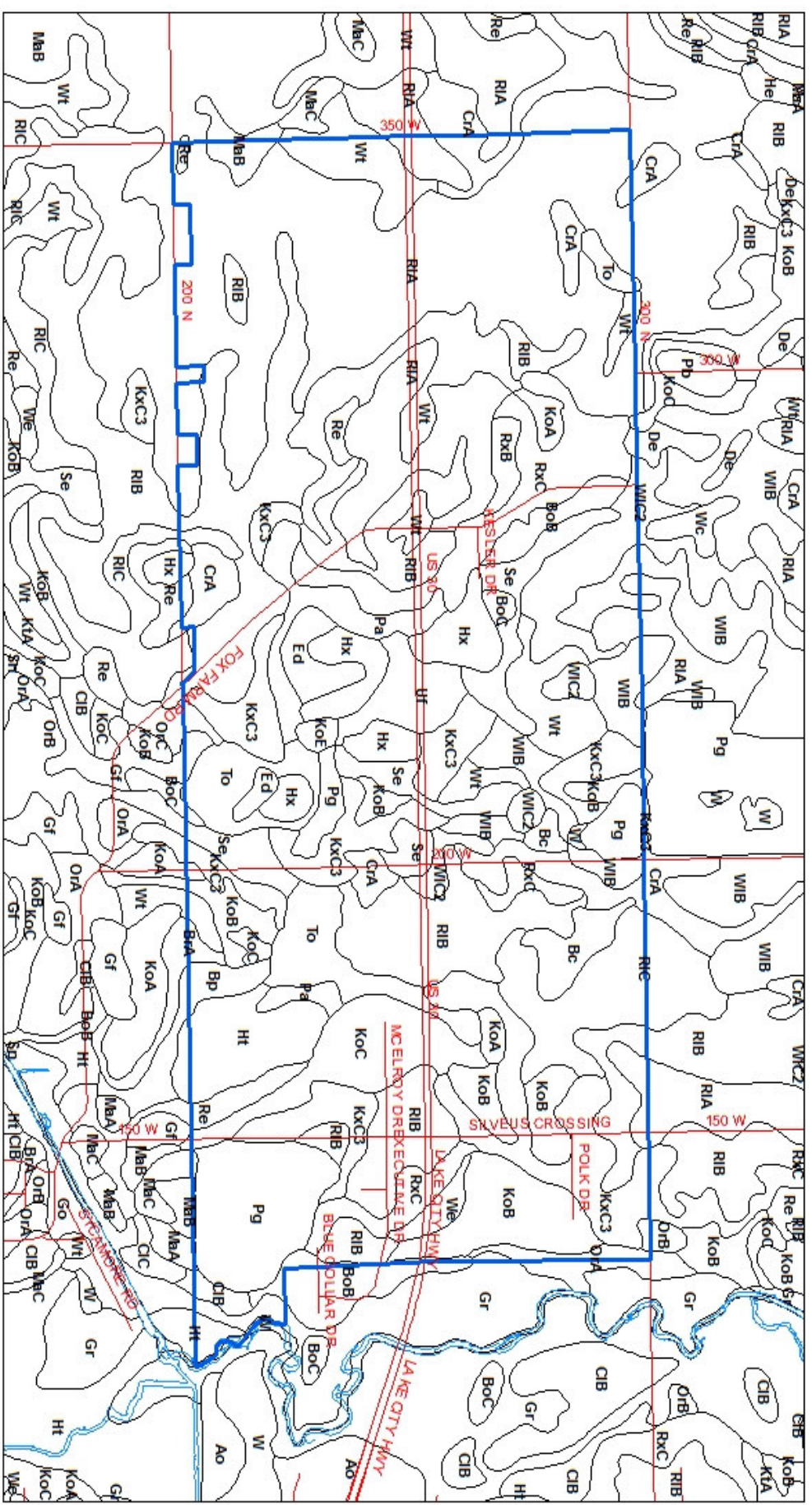
The sites based on soils, offer different degrees of on-lot sewage system development. On the western edge of the Corridor, in-ground sewage disposal systems will work for firms generating little or no wastewater other than restroom facilities. For firms requiring more intense sewage treatment, they will naturally gravitate to the eastern portion of the Corridor area where the public sewers should be available. This will prove to work out well due to many of the soils on the eastern portion are unsuitable for sewers.

When it comes to the matter of well water, there appears to be an abundance of well water for the firms to use. Currently it does not appear to be feasible that water will be extended to the site in the form of a utility improvement. The individual firms will be forced to put in their own watering systems. In order to control insurance rates they will have to work at installing pumps to bring up their well water at a faster rate (a rate equitable to a public water system).

Industrial Corridor Soil Study



Soils within the Industrial Corridor

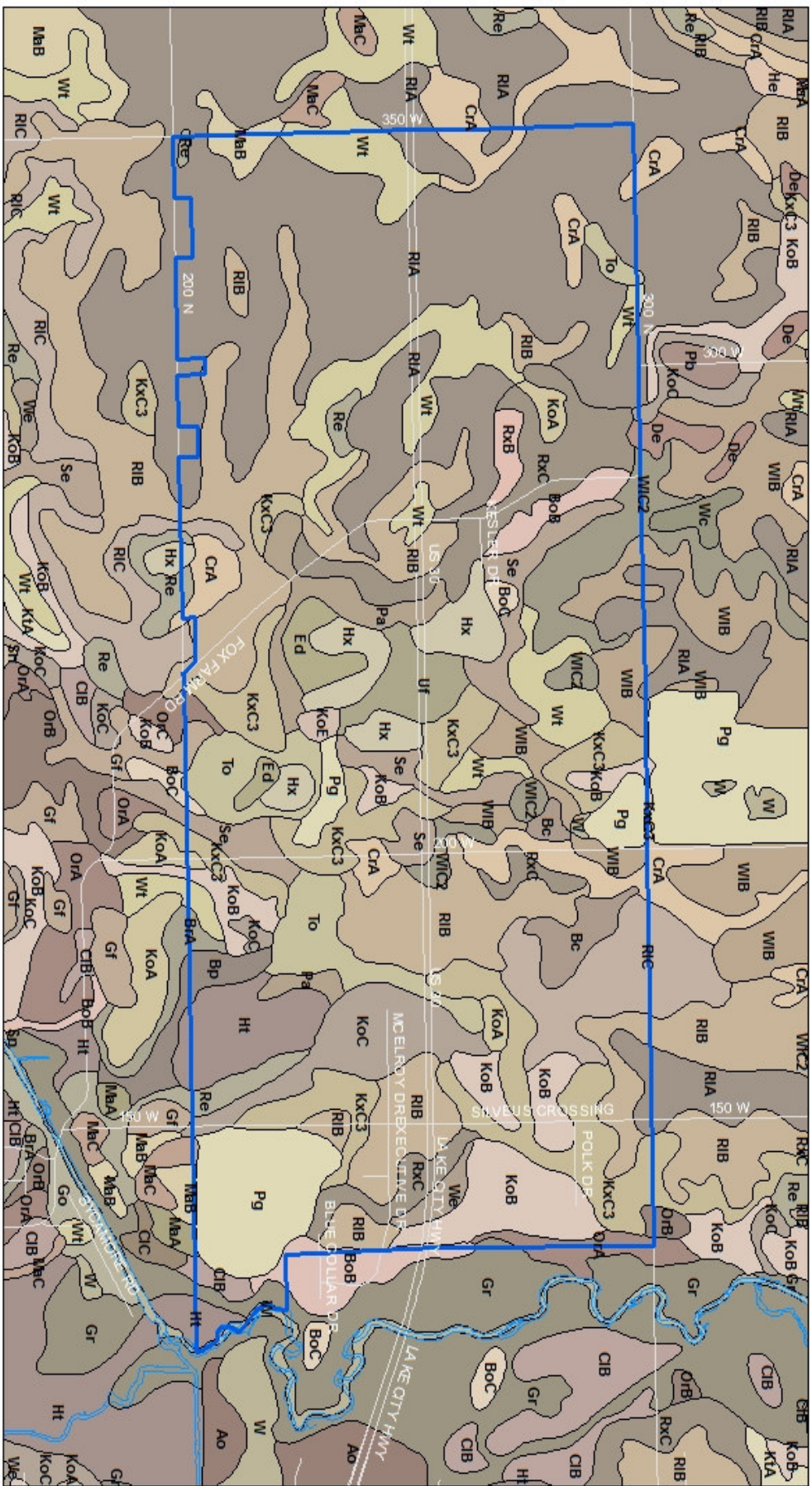


Legend

—	Overlay District
—	Industrial Corridor
—	County Road
—	Transportation Way



Soils within the Industrial Corridor



Legend

	National Overlay
	County Road
	City Limits
	Transportation Right-of-Way



SOILS LIMITATIONS FOR SMALL COMMERCIAL DEVELOPMENT

Map Unit	Small Commercial	Local Roads & Streets	Lawns & Landscaping
BoA			
BoB	MODERATE: slope	SLIGHT	MODERATE: small stones
BoC	SEVERE: slope	MODERATE: slope	MODERATE: small stones, slope
Bp	SEVERE: wetness	SEVERE: frost action	MODERATE: wetness
BxA	MODERATE: wetness	SEVERE: frost action	SLIGHT
Bz	SEVERE: ponding	SEVERE: ponding, frost action	SEVERE: ponding
ChB	SLIGHT	SLIGHT	MODERATE: large stones, droughty
CrA	SEVERE: wetness	SEVERE: frost action, low strength	MODERATE: wetness
DeA	SEVERE: wetness	SEVERE: low strength, frost action	MODERATE
Ed	SEVERE: ponding, low strength	SEVERE: ponding, frost action, low strength	SEVERE: excess humus, ponding
FoA	MODERATE: shrink/swell	MODERATE: shrink/swell, frost action	MODERATE: droughty
FoB	MODERATE: shrink/swell, slope	MODERATE: shrink/swell, frost action	MODERATE: droughty
FxC2	SEVERE: slope	MODERATE: shrink/swell, slope, frost action	MODERATE: droughty
FxC3	SEVERE: slope	MODERATE: shrink/swell, slope, frost action	MODERATE: droughty
FxD3	SEVERE: slope	MODERATE: shrink/swell, slope, frost action	MODERATE: droughty
Gf	SEVERE: ponding	SEVERE: ponding, frost action	SEVERE: ponding
Gn	SEVERE: flooding, ponding	SEVERE: ponding, flooding, frost action	SEVERE: ponding, flooding
Ht	SEVERE: ponding low strength	SEVERE: ponding, low strength, frost action	SEVERE: excess humus, ponding
Hx	SEVERE: ponding low strength	SEVERE: ponding, low strength, frost action	SEVERE: excess humus, ponding
Le	SEVERE: ponding, shrink/swell	SEVERE: low strength, ponding, frost action	SEVERE: ponding

SOILS LIMITATIONS FOR SMALL COMMERCIAL DEVELOPMENT

Map Unit	Small Commercial	Local Roads & Streets	Lawns & Landscaping
MaB2	MODERATE: shrink/swell slope	MODERATE: frost action, shrink/swell	SLIGHT
MaC2	SEVERE: slope	MODERATE: slope, frost action, shrink/swell	MODERATE: slope
MmB2	MODERATE: slope shrink/swell	MODERATE: frost action, shrink/swell	SLIGHT
MmC2	SEVERE: slope	MODERATE: slope, frost action, shrink/swell	MODERATE: slope
MoC3	SEVERE: slope	MODERATE: slope, frost action shrink/swell	MODERATE: slope
OsA	SLIGHT	MODERATE: frost action	MODERATE: droughty
OsC	SEVERE: slope	MODERATE: slope, frost action	MODERATE: droughty, slope
Pm	SEVERE: ponding, low strength	SEVERE: ponding, frost action, subsides	SEVERE: ponding, excess humus
Pt	***No interpretations given for this map unit		
Re	SEVERE: ponding	SEVERE: low strength, ponding, frost action	SEVERE: ponding
RtA	MODERATE: shrink/swell	MODERATE: low strength, frost action	SLIGHT
RtB2	MODERATE: slope, shrink/swell	MODERATE: low strength, frost action	SLIGHT
RtC3	MODERATE: slope, shrink/swell	MODERATE: low strength, frost action	SLIGHT
RxC2	SEVERE: slope	MODERATE: low strength, slope, frost action	MODERATE: slope
Se	SEVERE: ponding	SEVERE: frost action, ponding	SEVERE: ponding
Wa	SEVERE: ponding	SEVERE: ponding, frost action	SEVERE: ponding
Wm	SEVERE: ponding, wetness	SEVERE: ponding, frost action	SEVERE: ponding
Wt	SEVERE: wetness	SEVERE: frost action	MODERATE: wetness

DRAINAGE

If drainage is properly managed it can greatly minimize the negative impact of industrial runoff onto adjacent properties. In properly managing the water runoff of the Industrial Corridor two basic elements will be managed. The first element will be the county ditches. The second element will be the use of the low lying areas. These uses when coupled with the Tippecanoe River should enable the Industrial Corridor to take care of its own water runoff concerns. On the attached map (see attachment #3) you will notice that the county ditches, Tippecanoe River, and the low lying areas are marked.

In properly securing these drainage elements for their future use, certain precautions must be taken. These precautions include 75-foot mandatory setbacks from all county ditches. In some cases it may be necessary to establish new private ditches. It is also a possibility in these cases that 75-foot setbacks may have to be made.

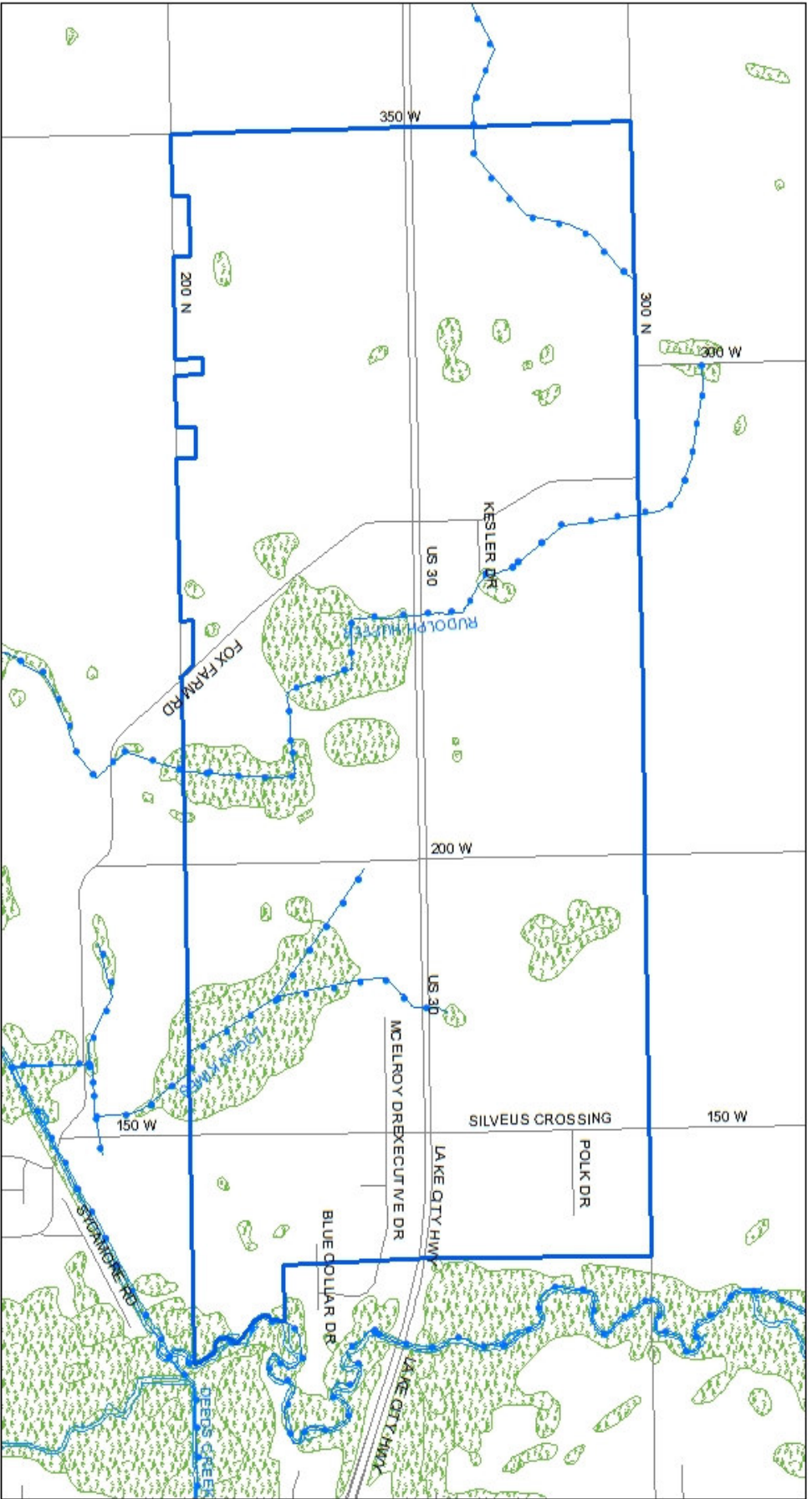
Another important area that will have to be addressed is the retention of low lying areas. When the Plan Commission addresses plats or site plans, it must be a top priority for them to maintain the natural low lying areas. These areas can be used to manage the runoff from the sites that are buildable (by soil standards). The use of these natural low lying areas will help prevent flooding by slowly releasing storm water. Protection of the low areas will help ensure that long term flooding problems are not caused by the loss of retention areas once existent in the Corridor. By taking these elements into consideration the impact of new development can be greatly reduced.

The basic doctrine of the Plan Commission should be to allow development that the soils and sites will allow. But it should also act as an agent to protect and use those low areas as buffers and drainage areas complimenting the buildable sites. This could mean that a 15-acre site may only have 5-acres that were buildable. If this is the case then the 5-acres will be allowed to be developed with the remaining 10-acres used as retention and buffer strips.

In using the natural drainage elements, dollars can be saved from not investing in infrastructure improvements (that the natural areas will just as effectively handle).

Whenever the Plan Commission or Board of Zoning Appeals looks at a plat or site plan of the Industrial Corridor, we suggest that they establish a high priority for protecting the natural drainage areas. This type of long term planning can reap the benefits mentioned earlier in this section.

Industrial Corridor Drains and Wetlands



Legend

	Industrial Corridor
	Wetlands
	Drains
	County Drain
	Topographic Drain



TRAFFIC

The most important element of the Master Plan is the traffic plan. Properly managed traffic can mean the difference between a development that is complimentary to an area and a development that creates constant conflict. The Master Plan addresses controlling traffic in the area and fixing conflicts that could exist if the traffic is improperly planned.

A point of clarification is that the Traffic Plan does not depict every road in the Corridor. In this study, the Plan Commission is recommending only one basic road. The Board is not attempting to layout every single road that can run through the Industrial Corridor areas. To do so would be to injure the flexibility of the Corridor. In order to allow developers to meet the needs of their industrial firms, they need a high degree of flexibility. This flexibility is protected by using only the minimal regulations necessary to protect the concepts of traffic management. The private developer or individual landowner still retains a high amount of flexibility in their plat design.

The first way traffic is controlled is by limiting the access points to and from the major thoroughfare (which in this case is U.S. 30).

Another way to control traffic is to have a frontage road on the north side of U.S. 30 to limit the use of the major thoroughfare. By limiting the access points and establishing a frontage road, traffic accidents are reduced while traffic flow is ensured to continue unimpeded on U.S. 30. This will also give benefits from the standpoint that traffic coming through or from other areas to the industrial firm will have fewer problems with delivery and the exportation of their goods.

The Industrial Corridor provides some unique development constraints that must be dealt with. These unique factors include low spots in soil that would not permit proper development of frontage roads. On the north side of U.S. 30 a frontage road will work well. This road will be set back roughly 600-feet from U.S. 30. The south side of the Corridor does not lend itself to a frontage road layout due to the soils.

Further recommended development standards include design standards to aid the traffic flow. There will be no additional access points other than those existing roads already in place. No additional U.S. 30 cuts will be given between the county roads for additional streets or drives. Business accesses will all be off adjacent county roads so that the proper collection and dispersion of traffic can be controlled on and off U.S. 30.

The second design standard will be de-acceleration and turn lanes will be determined by the size of businesses that are located off the respective county road intersections. If several large businesses were located off of one exit, they would naturally require longer de-acceleration lanes. This is due to the greater number of cars and trucks exiting onto the county road.

The third design standard is that additional lanes should be added on the intersecting county roads to allow east/west turn lanes. This will give each exit a left and right turn lane to minimize the stacking of traffic back onto the county road. These additional lanes, like the ones on U.S. 30, will be placed upon need.

Again, the need will be determined by the number of employees getting off of work during peak traffic hours.

The fourth design standard is the use of a frontage road on the north side of U.S. 30. For a layout of this street see the diagram (see attachment #4). The frontage road is set back roughly 600-feet from U.S. 30 to allow proper stacking onto the county roads. The reason that this is not done is if the road were put closer to U.S. 30, you could have possible future conflict from several large firms locating in the same area. The problem would come about due to the fact that if the firms let their employees off at the same time there would be no room for stack-up traffic. This would “clog” the collector streets causing serious traffic problems.

If the frontage road were put more than 600-feet off U.S. 30 it would entice firms locating between the frontage road and U.S. 30 to obtain access directly onto the county road. This would damage the ideal traffic dispersal and collection system that the Plan Commissions would like to see in place.

If the traffic engineering is properly designed, problems would be avoided. The tricky aspect of traffic design is that the traffic problems would not crop up until a much later date when the entire Corridor has been more heavily developed. It's very deceiving in that the first firms locating in the Corridor could operate effectively under an improper site layout which conflicts with the Corridor's traffic plan. Unfortunately, the brunt of the problem would be felt at a much later date after several firms have relocated into the area and magnified the flaw.

On the south side of U.S. 30 you will notice that frontage roads are not laid out. This is due to the fact that we have two very large low lying areas.

These low lying areas are basically un-developable except for a few high sites that could be used for smaller firms. Traffic on the south side will not be nearly as concentrated as traffic on the north. With this in mind, the traffic can be properly controlled by properly managing street cuts.

If the above principles are put into affect the traffic congestion caused by the proliferation of industrial development in the corridor area will be greatly reduced. This in turn will make for a much happier marriage of the industrial firms to their existing farming or residential neighbors in the area. It should also greatly increase traffic safety by minimizing the danger of high traffic flow onto a major thoroughfare. This section outlines what we want to achieve in the way of traffic control. The next section deals with how we go about achieving this ideal traffic control.

Traffic control is accomplished by several separate different methods. The first and most common is the cut permit system. Cut permits are given through the Kosciusko County Highway Department. The State Highway Department would give cuts for anything directly on or off of U.S. 30 (streets, drives, turn lanes). The State Highway Department has already stated that additional cuts would not be allowed between the existing county roads intersecting with U.S. 30.

This is inline with the objectives we hope to achieve for traffic control in the Corridor. When it comes to county road cuts we recommend that the County Planning Department closely coordinate this activity with the County Highway Department to guarantee that the cut does not conflict with the long range traffic plan.

Street cuts will need to be watched to protect the frontage road and to prevent the placement of a drive cut too close to U.S. 30 (which could cause traffic stack problems). This study recommends that proper communication channels should be set up between these two county offices to properly manage street cuts in the Corridor.

The strategy used to ensure the construction of a frontage road on the north side of U.S. 30 is a piecemeal approach. Frontage roads are generally put in place during the plat process of an industrial park. When a developer or landowner comes in to subdivide his property the Plan Commission should review the layout to ensure that the plat's layout does not interfere with frontage road systems. This will be necessary because the frontage crosses over many different property owners. This is the time for long term comprehensive planning. The Board must ensure that one property owner's development will not jeopardize the entire frontage road concept of the Corridor.

It is the Plan Commission's duty to ensure that buildings are not constructed on possible future road right-of-way frontage. Whenever possible, roads that are used for access to several different lots in a development should be aligned with the Corridor's frontage road. If every property owner develops his property in this manner then in time, a frontage road will be piecemealed together. If the Plan Commission properly guides development a frontage road can be achieved even under the scenario of having many different landowners. When looking long term it will also benefit all of the property owners in allowing better access and better development layout for their tract. Frontage roads must also be protected during site plan submission (in the case of special exceptions).

In reviewing special exceptions, Plan Commission's must ensure that the site layout does not interfere with the Master Plan. This will only entail the Board's cross referencing of the Master Plan with the submitted site layout.

An area of concern will be how an individual sell off of property can be handled to ensure a building will not be placed upon a frontage road. This scenario can come about if a business were to come and buy 15-acres and not have any future sell off intention. What this would do is make it where the business would not be required to subdivide (come before the Board for the plat process) or submit a site plan (as is the case for a special exception). This means that the Plan Commission would have no review of the placement of the manufacturer's buildings on their site. First, it should be pointed out that this will be rare in that a high percentage of the property will be subdivided. It should also be pointed out that the frontage roads depicted on the map do not have to exactly correlate to their position on the map. It is quite possible to move these roads either north or south in order to accommodate development. The only thing that will have to be watched is that these roads are not moved too far north or south for the reasons earlier stated in this study.

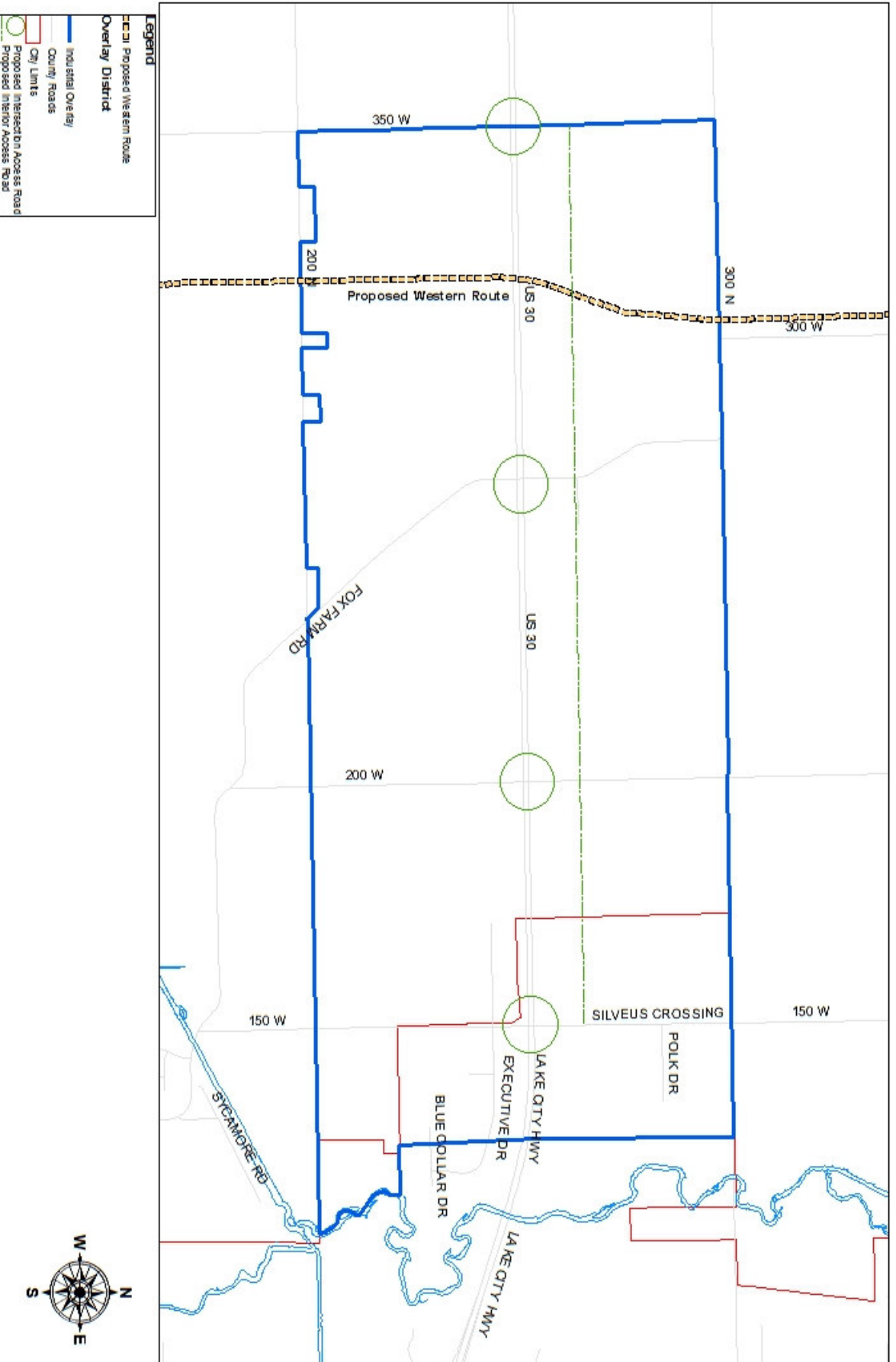
These thoroughfare roads can be moved between 100-feet to 150-feet for development. This will ensure our maintenance of long term traffic planning goals while still providing the flexibility needed for developers and landowners to subdivide their ground. If a conflict still occurs (even with the flexibility of the frontage road) we would recommend an informal hearing before the Plan Commission to discuss and look at a means of correcting the conflict.

The final area to be dealt with in the traffic plan is the specifications used for the construction of the streets. The specifications will basically be the same as they are in a plat process. All streets will have to be constructed by county specifications. It should be noted that the street designs will consider traffic flow and construction standards but also drainage schemes so as not to negatively impact the drainage scheme.

In summation, the traffic section will prove to be one of the most important areas of the Master Plan. More than ever, this will prove invaluable for the Plan Commission when reviewing site plans and plat layouts in the Industrial Corridor area. This plan should act as a steering document that guides development to occur in a quick and viable way while still retaining the long term planning concepts of reduced traffic conflict. The brunt of traffic control will fall upon the Planning Boards during site approval and plat approval.

It should be their foremost responsibility to adhere to these suggestions and to supplement them so that the long term traffic schemes are protected.

Industrial Corridor Proposed Transportation Map



- Legend**
- Industrial Overlay
 - County Roads
 - City Limits
 - Proposed Intersection Access Road
 - Proposed Interior Access Road

ENVIRONMENTAL

One major and often overlooked point is the environmental impact of a development on an area. As part of the Master Plan for the Industrial Corridor, we would like certain environmental concerns protected. Some of these concerns were addressed under the drainage plan where the protection of low areas was discussed. The safeguarding of these environmentally sensitive areas will prove invaluable for the areas ecosystem while also serving the fundamental purpose of providing drainage areas for the development.

The environmental area will also serve as a natural buffer zone for the development. This buffering will reduce the conflict of factory and traffic noise to the adjacent property owners while still maintaining an aesthetic beauty to the area. The use of these environmentally sensitive areas will provide a practical, yet aesthetically unique development of the entire Industrial Corridor area.

Certain highly sensitive areas near the Industrial Corridor include the Tippecanoe River and the Blue Heron Rookery. In the case of the Tippecanoe River, special precautions should be taken to ensure that illegal dumping will not occur into the river. Proper site plan layout plus added setbacks from the river should protect this sensitive area. If the river is used correctly it could serve to be an invaluable means to help drain the area while still adding a special aesthetic flavor to the development.

Another highly sensitive area is the Blue Heron Rookery located northeast of the Industrial Corridor. This area protects a unique wildlife setting that is rare in Indiana due to its size. With this in mind, the Industrial Corridor should move along in a manner that will not threaten this natural asset to the community.

The first recommendation that comes from the Planning Commissions is that the U.S. Fish and Wildlife should be contacted for their expert guidance. It should be noted that an attempt was made to get the U.S. Fish and Wildlife recommendations implemented in to this study. Due to several problems, the Fish and Wildlife recommendations will have to be implemented at a later date. It is our recommendation that continued efforts take place to contact the U.S. Fish and Wildlife Service for their direction.

Possible ways of preventing a negative impact on the Blue Heron Rookery are including some additional setbacks from the boundaries of the northeast part of the corridor. If the impact is severe enough the possibility of adding some further limitations on the types of industry that can be located near the Rookery can be explored. This concept could work by picking industries that create less noise and odors which in turn would minimize the conflict of the Rookery and the industrial tract. Another possibility would be the use of additional setbacks to provide a distance buffer from the Rookery.

One aspect that will lessen the environmental impact of the rezoning is the possible extension of a sanitary sewer line to the Industrial Corridor. This extension would provide waste disposal in a manner that would not harm the natural ecosystem of the area. The sewer line is not only necessary for the recruitment of various industries but also as a means to minimize the conflict between the environmental state and the desired industrial development of the area.

Environmental concerns can be dealt with both during the plat process and the Board of Zoning Appeals hearings. Further regulations may be required for certain parts of the Industrial Corridor tract when it comes to their impact on the Tippecanoe River and the Blue Heron Rookery. The recommendations for these additional regulations will come from the U.S. Fish and Wildlife Service.

UTILITIES

There is a major gas line that runs through the proposed Industrial Corridor. This gas line runs through the northwestern part of the Corridor and would offer great location benefits to those firms that heavily utilize gas. Further utilities include both R.E.M.C. and NIPSCO electric service. If the proposed development took off and was large enough, full service could be offered by both of these agencies. Currently, it would appear as though there may be conflict over who would actually service the area. This conflict will be settled between NIPSCO and R.E.M.C. Whatever the outcome, full service will be available to locating industry.

The possibility of public sewer to the area has already been outlined in an earlier section. A quick synopsis is that the City of Warsaw currently has consultants studying an extension of the sewer lines in a northerly direction. This would provide an opportunity for a lateral extension to the Industrial Corridor.

This study will also look at the feasibility of a satellite treatment plant located on the north side of town. This plan will service not only the firms further north on 15 but also any possible new firms located in the Industrial Corridor. It should be noted that there will be more known on this issue in December when the feasibility study is submitted to the City of Warsaw. From that point, the City will be able to take a serious look at the possibility of extending services to the Industrial Corridor.

When it comes to water extension to the Industrial Corridor, the prospects do not look good. The feasibility of water utilities being extended north is quite small due to cost and physical limitations.

Any public utility in the way of water extension would most likely occur after intense development of the area has occurred. The first firms will have to depend on private wells for their water. The Industrial Corridor does provide ample water supply for prospective manufacturers. It will be the burden of the firms to lay out capital for water pumps to bring the ground water up at a fast enough rate for fire protection.

In summation, the Industrial Corridor should be amply supplied with gas, electric, and hopefully sanitary sewer. Water needs will have to be met on a private well basis.

REPORT SUMMATION

The intent of the Corridor Master Plan is to give future guidance and direction for both the Plan Commission and the Board of Zoning Appeals to follow. These guidelines set the framework necessary for long term planning. These guidelines will also serve as a foundation for the adjacent future expansion areas. Above all, this document stresses flexibility for the successful recruitment of industry.

The Corridor Plan recommendations do not specifically lay out lot lines, easements, or covenants that are historically entered upon during the plat process. Yet the document cannot be so weak as to lose its original purpose, being the long term planning of traffic, drainage, and environmental concerns. It should be understood that the brunt of this responsibility will fall on the Plan Commissions. It will be up to them to enforce the full intent of this Corridor Plan, much of which represents an expansion of their past responsibility. The Plan Commission and Board of Zoning Appeals now more than ever will have to be cognizant of traffic models, retention areas for water, buffer strategy, and the importance of their roles as community educators in the ways of long term planning. These roles also engulf the County Commissioners who have the ultimate responsibility of supporting the Plan Commission. This will enable the Master Plan to keep up with the current needs and wants of the community. This updating process is the means to take into consideration any changing variables in the community that may make the plan obsolete.

The Master Plan is not by any intent supposed to become a bureaucratic regulation that in its final form only works to stunt the growth of the area. Rather, it is supposed to be a regulation that will spur development in an orderly, compatible manner.

From the Planning body of this community, we would like to give a word of caution. This rezoning is not by any means the final step of promoting controlled industrial growth in the community. For the community to take such a lethargic stand is dangerous. This Plan should instead act as the foundation and catalyst for a long term community wide effort at assisting our county in its growth plans.

With the use of planning one will find that it can indeed be the best way to promote industrial growth. Though the road of proper long term planning may be difficult, it will prove to reap benefits for future generations economically and through a more compatible and safe living environment.