

# INFRASTRUCTURE

## **INFRASTRUCTURE:      TRANSPORTATION VISION**

### **IDENTIFYING TRANSPORTATION AND CIRCULATION STRATEGIES**

As time changes, so do the transportation needs of the City. As Vandalia grows, natural and man-made barriers, (e.g., bluffs, flood plains, railroads, and physical structures), will guide and limit expansion. The strategies to be pursued in the transportation section include:

**IF-1. DEVELOP AN EFFECTIVE AND EFFICIENT COLLECTOR AND ARTERIAL TRANSPORTATION SYSTEM.**

**IF-2. MAKE VANDALIA AN INTEGRAL PART OF ILLINOIS' TRANSPORTATION NETWORK.**

### **TACTICS TO BE IMPLEMENTED**

For the most part, the eastern transportation network is well established and adequately serves the needs of the community. However, attention should be given to where the City is developing - mainly westward towards the interchange and northward towards the Lake. Transportation systems must be connected and developed to meet emerging needs and demands brought on by economic, social, and political changes.

Transportation criteria should be established to ensure that an effective and efficient network is available. It should be ensured that proposed streets from subdivision proposals or annexation agreements are compatible and aid in establishing a coordinated transportation network.

A quality transportation network is one which provides direct and quick access to various sectors of the City. There should be at least two different routes of access to every portion of the City, such as to the CBD, the industrial areas, I-70, and the Lake. Having two access routes will reduce the probability of a destination being inaccessible. If one route is closed and an emergency situation occurs there is an alternate route available.

New streets, extensions, and improvements could alleviate congestion that may be caused by an over utilization of streets. Congestion can be avoided by directing traffic onto streets that can accommodate more traffic.

In addition, new streets, extensions, and improvements should ease the burden on streets that are not designed to handle heavy traffic volumes. By designating truck routes which are appropriately surfaced, the burden on roads not designed to equip such heavy volumes would be lessened, reducing the need for resurfacing and maintenance, and as a result lessening the costs to the City. (e.g., Fifth Street between Gallatin and Orchard).

**IF-1. DEVELOP AN EFFECTIVE COLLECTOR AND ARTERIAL TRANSPORTATION SYSTEM**

### **COMPLETE A COMPREHENSIVE TRANSPORTATION PLAN AND RESERVE THE RIGHT-OF-WAYS ON THE CITY'S OFFICIAL MAP**

Whether or not financial resources are available to meet future transportation demands,

the opportunities to expand or improve must be reserved. This includes reserving the right-of-ways for potential road and street expansions and improvements.

Ordinances should be established to prevent development from impairing Vandalia's transportation system. Such impairments may include the building of structures (such as homes) at the end of the streets, preventing possible street extensions.

It is imperative to establish a strong collector and arterial network on the western portion of the City to link with the already established eastern collector and arterial transportation network. Planned streets and roads should be designated on the City's official map and included in the capital improvements program, given legal standing if ever challenged.

Various users of the City's transportation system should be consulted when drawing up the comprehensive transportation plan. Such groups include: local officials; city or county highway engineers; the planning commission; the police department; and the Illinois Department of Transportation. The transportation plan should be consistent with the Community's comprehensive land use plan, as well as the area's overall economic development, and environmental goals and objectives.

#### **INITIATE CONSTRUCTION OF STREET EXTENSIONS**

Below are the specific transportation recommendations to be considered and included in the transportation plan and on the City's official map. A few of these recommendations are mentioned in the revised version (1970) of the original Comprehensive Plan (1963), completed by Harland Bartholomew and Associates and are felt to be necessary to develop an effective transportation network (see figure IF-1).

##### **Coles Street**

Coles Street's central location lends itself as a major north-south connecting link. It is recommended that this street be extended to the south so that Coles Street connects to Carlyle Road. This improvement should be made as the area develops.

##### **Hickory Ridge Road**

Hickory Ridge Road should serve as the western outer most north-south street of the City. It is recommended that Hickory Ridge Road extend from IL Route 140 to US 40. This extension would then provide a major circulation route around future residential and commercial sectors of Vandalia as they are developed.

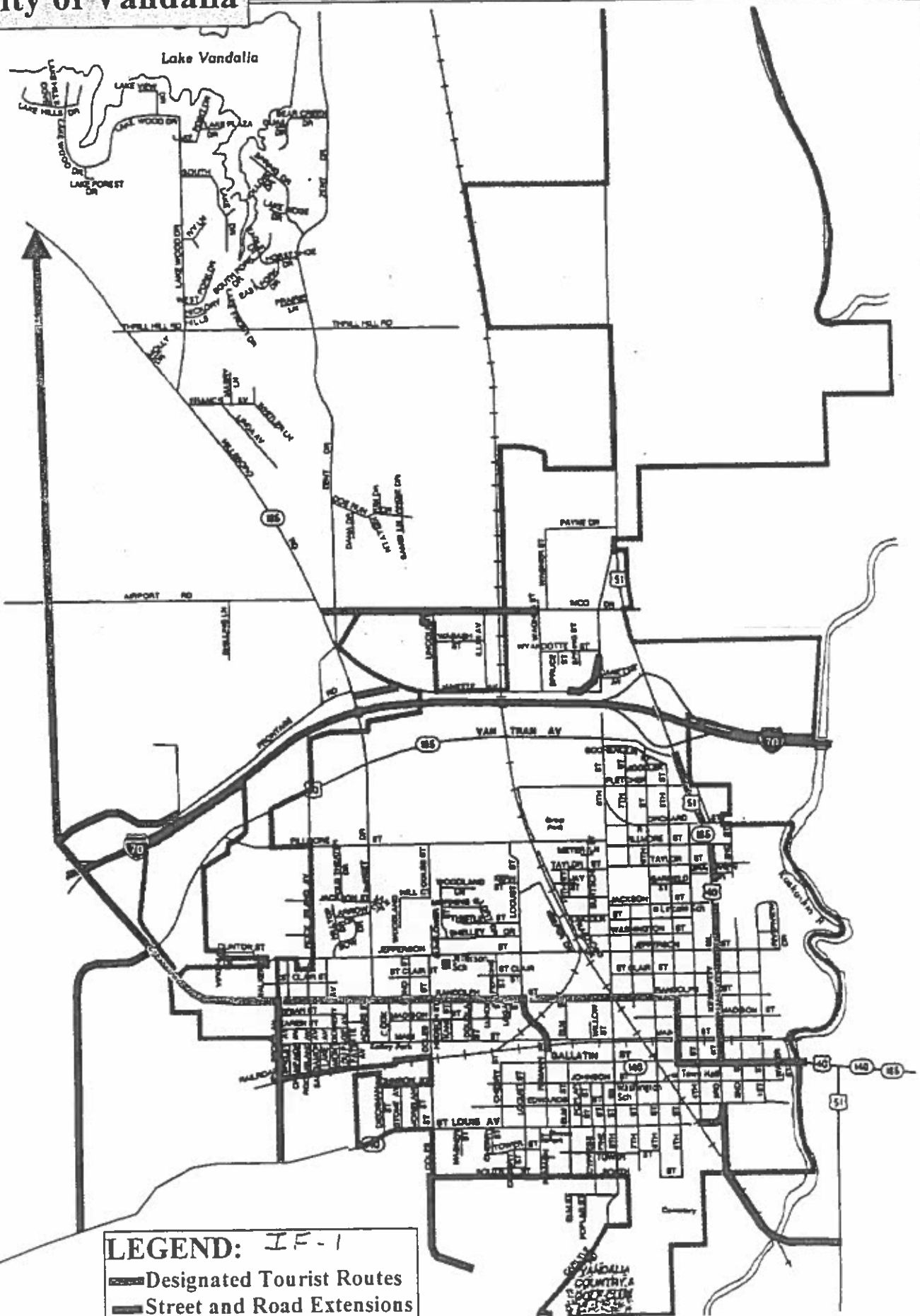
##### **St. Louis Avenue**

Connecting St. Louis Avenue to Kennedy Boulevard (US 51) from Fifth Street will provide an outer loop around the southern edge of the City and quick access from and to I-70.

##### **US Route 40**

As the western interchange develops, particularly within the proposed industrial corridor, the extension of US 40, west of Randolph Street to the road directly west of proposed Hickory Ridge Road, will accommodate through traffic for those commercial and industrial businesses located along US 40. This extension will also delineate the western

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boundary of the proposed industrial corridor. As the western interchange evolves, this extension will also divide the southwestern zone and provide access to businesses seeking to locate in this area.

Providing a frontage road, parallel to the northern side of I-70, will benefit industrial users and connect the two industrial sectors. This extension would serve as a useful truck route with appropriate road surfacing. The extensions will have to be made from the Randolph extension to the partial extension from IL Route 185. This will then go east of IL Route 185 and connect to Janette Drive. It is also recommended that the right-angled turn at the eastern end of Janette Drive be straightened into a more gradual curve.

### **Airport Road**

The extension of Airport Road from IL Route 185 to Imco Drive will provide direct access to the airport. Industrial users will be able to connect directly with IL Route 185. This extension will also connect already established industries with industries that would locate in the northern portion of the proposed industrial corridor.

### **Randolph Extension to the Lake**

Currently IL Route 185 is the only direct road to the Lake. All other roads at one point or another intersect with IL Route 185. Therefore, extend the Randolph Extension to IL Route 185 so that there is an alternate route to the Lake in case IL Route 185 was inaccessible north of I-70. This extension would promote tourism in Vandalia, making a primary recreational feature directly accessible from the western interchange of I-70. The City should plan to acquire the right-of-way connecting the Randolph Extension to IL Route 185 if this proposal is adopted.

### **Randolph Street**

Randolph should function as the major east-west road filtering motorists off of I-70 (west) destined for Vandalia. To get from the western interchange of I-70 to the CBD, motorists should travel the most direct route-east on Randolph to Kennedy. Tourists exiting from the western interchange of I-70 should be filtered down this street instead of US 40. Traveling along Randolph rather than US 40 ensures the motorist that they are approaching the "heart of the City"; where as, US 40 presents a less scenic image of the City since it is lined with many industries.

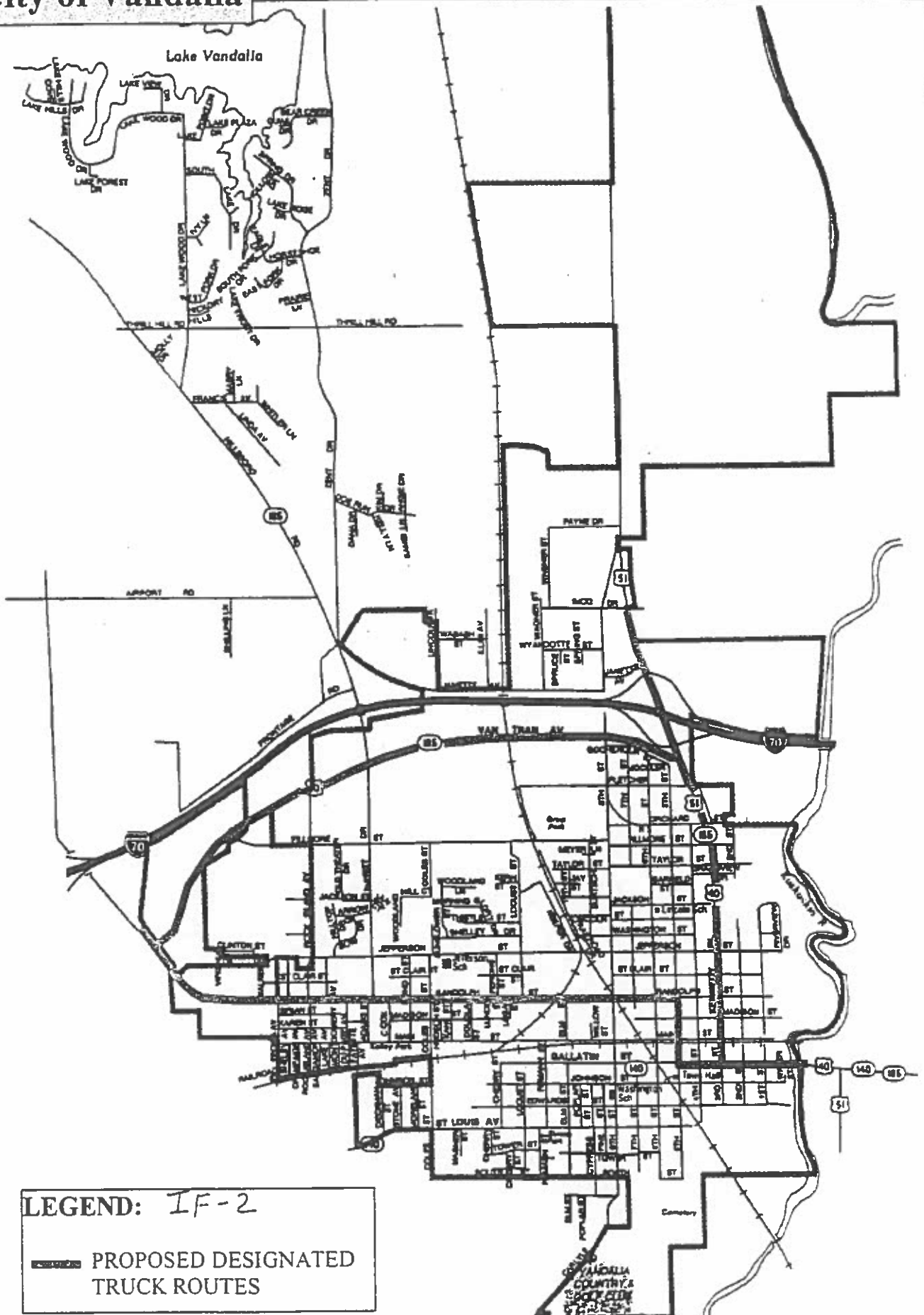
### **Locust Street**

Because Remann Street already crosses the CXS Railroad tracks, it reduces the cost of extending other adjacent north-south streets; it is recommended that Locust Street be linked to Remann Street. This extension will serve as a direct north-south link to IL Route 140. Businesses still located in the IL District could take advantage of this extension if needed and avoid the round about way that presently exists.

### **DESIGNATE AND ENFORCE TRUCK ROUTES**

As mentioned earlier, Vandalia needs to set aside designated truck routes. In doing so, the City will be able to reduce capital outlays spent on resurfacing and maintenance due to heavy traffic volume. Recommended truck routes include (refer to figure IF-2):

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- \* Janette Drive from US 51 to the Randolph Extension, including the proposed northern extension of US 40
- \* Randolph Street from US 51 to I-70 (west)
- \* Kennedy Boulevard from I-70 (east) to US 51, south of town
- \* US 40 from Randolph to Kennedy Boulevard (truck route should also include new proposed extensions of US 40 - north and south)

All truck routes should be composed of the appropriate surfacing material. It is crucial that monitoring procedures be strictly enforced to ensure that truck carriers are using the proper routes.

## **IF-2. MAKE VANDALIA AN INTEGRAL PART OF ILLINOIS TRANSPORTATION NETWORK**

### **ENCOURAGE THE DEVELOPMENT OF CORRIDOR 51**

Although the funding for the expansion and development of Corridor 51 is not available, lobbying efforts should be continued. If plans to extend US 51, south of Gallatin Street to where it parallels the abandoned Illinois-Central Railroad tracks before eventually connecting with US 51, south of town, are implemented, Vandalia will become a member of a major Illinois Transportation Corridor. The right-of-way that will make this extension possible should be reserved and be included in a Transportation Comprehensive Plan and the City's official map.

Completion of this project will enhance Vandalia's ability to attract industries to the City. In the long run, it is expected that the economic benefits of such a corridor will offset and exceed the cost of such an extension.

### **PREDICT THE NEEDS AND DEMANDS OF OTHER MODES OF AIR AND RAIL TRANSIT BY PRESERVING THE RIGHT-OF-WAYS**

**Air Transit** - The future of the community, especially the industrial needs, should be accommodated by the services of the airport. Presently the airport is being utilized. It is to the city's advantage to promote the services the airport has to offer to private and potential corporate users.

**Rail Transit** - Over the past decades, rail transportation has declined and has been replaced by other modes of transportation, mainly truck and air. One might be led to believe that rail transportation is a thing of the past. Actually, nothing could be further from the truth. Many of the industries that Vandalia is targeting, such as food processors and warehousing distributors, should be encouraged to locate near sites that could be connected by rail spur to the main railroad lines. These sites are identified in the INDUSTRIAL VISION of this Comprehensive Update.

If petroleum prices increase, as past trends have demonstrated, the reliance on rail transportation will become more feasible. This trend has already surfaced in Japan and most Western European Countries, where gasoline is approximately three dollars per gallon. As petroleum prices increase, the cost effectiveness of using rail becomes more justifiable. Therefore, primary rail access should be presented and maintained so that

when the demand for rail transportation increases, Vandalia will be able to supply it.

## **IDENTIFYING UTILITY STRATEGIES**

Utilities strategies help support the development strategies established in other sections of the plan. These strategies seek to provide sufficient utility capacities in an efficient manner. Although sewage and water systems have somewhat different characteristics, the strategies to be pursued are similar. They are:

IF-3. PROVIDE ADEQUATE SERVICES TO INDUSTRIAL CORRIDOR

IF-4. COORDINATE UTILITY NEEDS FOR ALL LAND USES

### **UTILITY TRENDS (WATER): PAST AND PRESENT**

#### **Water utility improvements required for industrial growth and annexation**

Industrial concerns regarding a city's water supply include quality, long-term capacity, adequate supply pressures, and uninterrupted supply. Recent improvements have been made to Vandalia's system to achieve these goals.

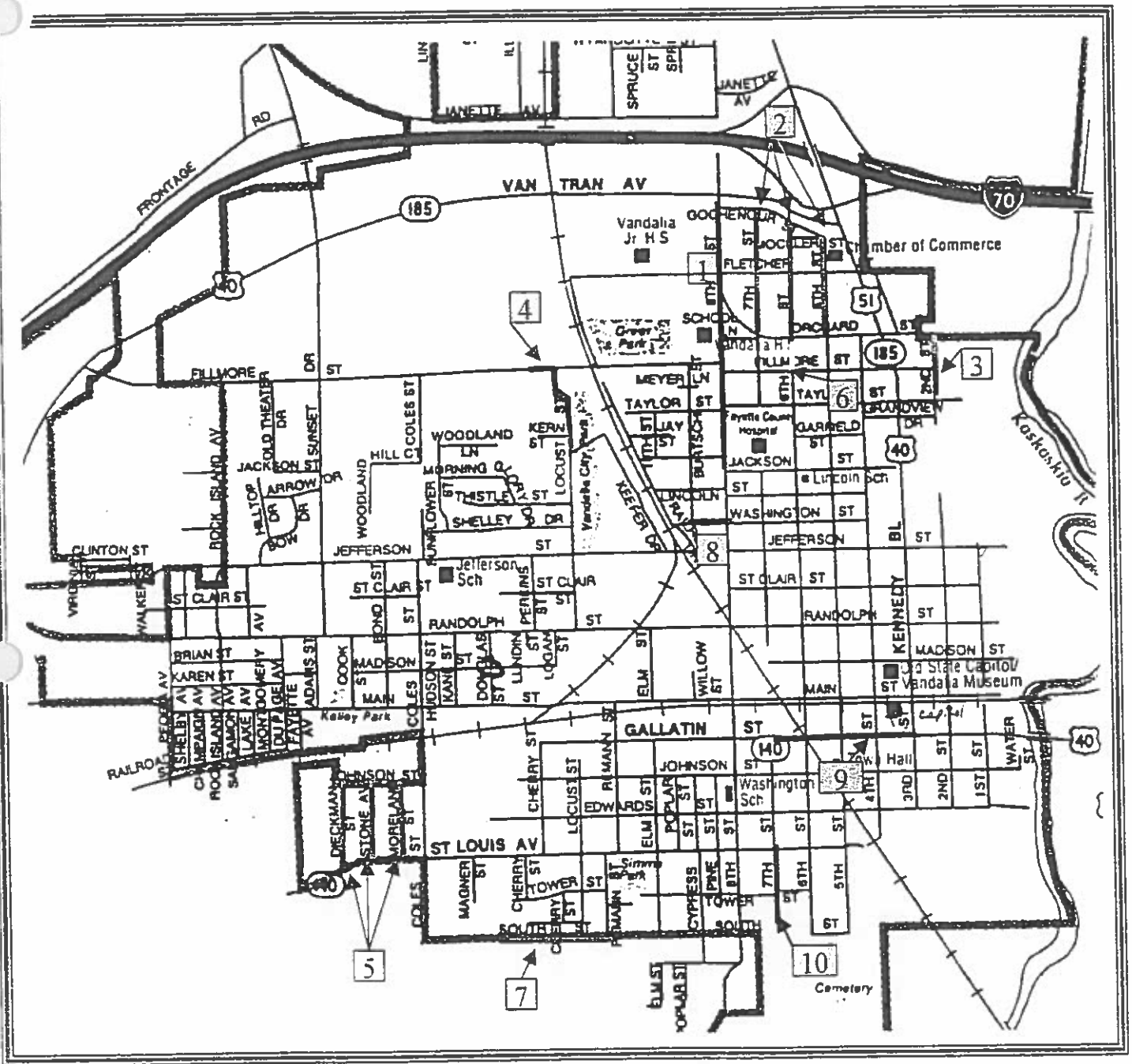
#### **WATER LINE PROJECTS** (See figure IF-6)

Some Water Line Projects to be considered under this section are listed below in order of priority:

1. North Eighth Street from Jackson Street to Gochenour Street - Replace with new line.
2. North Fifth, Sixth, and Seventh Streets from Orchard to Gochenour Street - Replace with new line.
3. East of Kennedy Boulevard - Second Street from Grandview Drive to Orchard Street - Replace with new line.
4. Locust Street and Fillmore Street - Abandon two-inch line and tie residences over onto twelve-inch line.
5. Stone Street, Moreland Street, and Dieckman Street - Abandon two-inch line and tie residences over onto new line.
6. Sixth Street - One and one-quarter inch line that runs from Fillmore Street to Orchard Street - Replace with new line.
7. South Street from Remann Street to Hall's Trailer Court - Needs to be tied over onto four-inch line.
8. Washington Street from North Eighth Street to Burtschi Street - Replace with new line for one block.
9. Gallatin Street from Third Street to Seventh Street - Replace with new



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## Water Line Projects

Figure IF-6

line.

10. South Seventh Street from St. Louis Avenue to South Street - Replace with new line - two blocks.

### **Water supplies will accommodate industrial growth**

Vandalia has two sources of water - the lake and the river. Both the lake and river are able to adequately serve the current needs of the City. Historically, there has been a problem with the water from the lake. The placement of the water intake was too low in the water column and it brought in water that could not be treated effectively. Now, with a new, higher intake installed at the lake, lake water should be as clean as river water.

The Lake Committee submits the following long-term plans for Vandalia Lake:

1. Clean the lake out to improve water capacity.
2. Improve water quality by dredging silt and working with Water and Soil Conservation.

Short-term plans:

1. Bring in rip-rap to assist in stabilizing the lake's shoreline.

Figure IF-3 indicates the major features of the water supply system.

### **Water treatment plant adequate to year 2008 given current population trend**

The original water treatment plant was built in 1951. Currently, it has a design capacity of 2,000,000 gallons per day. Given current population trends, this plant should be adequate. The existing planned capacity is expected to be adequate until at least the year 2008. This takes into account demands of all three major users of Vandalia water - residential, industrial, and commercial establishments, as well as water sold to other communities and individuals.

This projection is subject to one major constraint, however. If an industry that consumes large quantities of water locates in Vandalia and does not practice water conservation, the results of this projection could change significantly. Prior to 1976, there was an industry, which used large amounts of water. When that industry installed a water recycling system, the low slope reflects the change in water used.

### **Storage Facilities Provide Good Pressure For Industry**

Sufficient water pressure for industrial use is achieved by having excess storage. Adequate water storage is important for industrial development. The storage capacity of the City's water system is 2.5 million gallons with the addition of the new Thrill Hill storage tank.

### **Distribution System Assures Uninterrupted Supply For Northern Industrial Areas**

Currently all areas within the City are served by water lines. Those areas not annexed

within the City boundary but which receive water service are indicated on figure IF-3. Residents in these areas are billed at higher rates than City residents and, as a result, some profits are generated from this service.

Recent projects have facilitated the distribution of water to industries located in the north end of town. A new 12" pipe running from Highway 51 up Thrill Hill and then south towards the west water tower creates a loop to assure an uninterrupted supply for north end industries. Development at the west interchange will eventually need a supply network that also guarantees uninterrupted supply.

## **TACTICS TO BE IMPLEMENTED**

### **IF-3. PROVIDE ADEQUATE SERVICE TO INDUSTRIAL CORRIDOR**

As expensive as infrastructure improvements are, they are necessary for industrial growth. This is no new lesson for Vandalia. Industrial development at the western interchange area is likely to occur in the near future. That development will require the City to make such improvements. An orderly process of industrial growth about the interchange will minimize the amounts that the City must spend at any one time. However, the provision of an uninterrupted supply of water (a loop as in the northern industrial area) requires development on both sides of the interstate.

#### **PROVIDE SUPPLY LOOP FOR WEST INTERCHANGE DEVELOPMENT**

Even though industrial locations in the existing IL District are cheaper for the City (cheaper than developing new areas), areas are limited and the remaining parcels are best used for only certain types of industries (see INFILL section). For these reasons it seems likely that there will be development pressure on the southwest portion of the west interchange. This implies that utility extensions on this southwest quadrant are likely to occur very soon if efforts at industrial expansion are successful.

Providing water service to industries locating on the southern side of the interchange will require supply extensions. These extensions are likely to come from the existing 12" main that lies under Main Street. In the future, as industries locate on the north side of the west interchange, major distribution improvements would be required. The most likely route for a water line to service that area would come from the new 12" main along Highway 185.

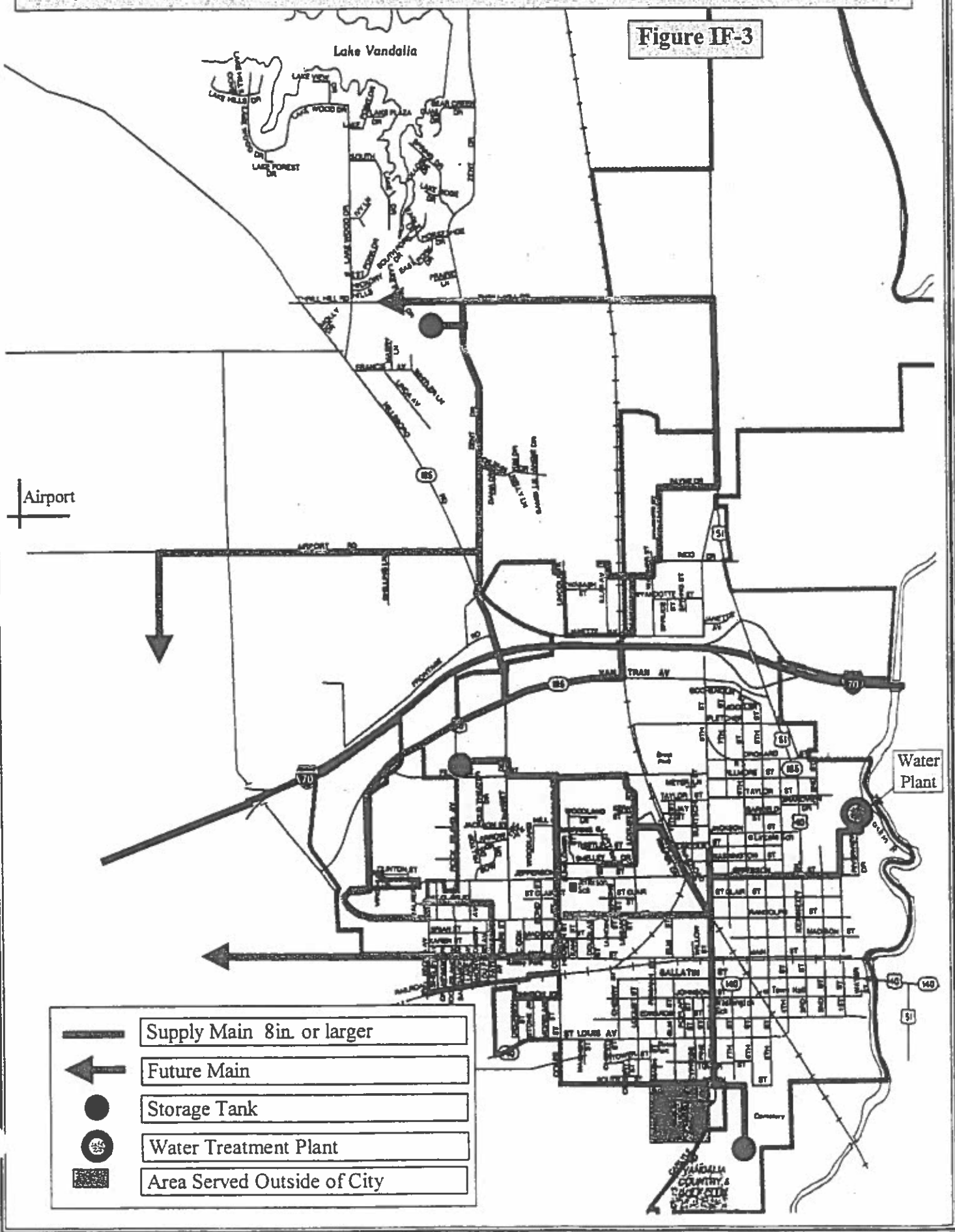
Eventually, the area should be served by a loop to insure uninterrupted supply. Connecting the mains by crossing under the interstate would create the same type of supply loop, which now exists in the northern industrial area. Completing this connection would significantly increase the costs of these extensions. Depending upon what type of industries decide to locate in the southwest quadrant, there may be a need to provide that loop before industries actually locate there. In that case, the prioritizations for development established in this report would need to be modified (see INFILL DEVELOPMENT section).

#### **Annexations typically require water extension**

##### **New Treatment Plant**

When annexation of residential areas around the lake occurs, it will be relatively easy to

Figure IF-3



service those areas from the new water tower on Thrill Hill. The provision of treated water is an incentive for those residents to seek annexation. Remembering that the primary reason for this annexation is to protect the quality of lake water by extending City sewers. Other areas to be annexed are already receiving City water so annexation represents a loss of that service premium which those households pay.

#### **UTILITY TRENDS (SEWER): PAST AND PRESENT**

##### **Excess sewage capacity exists for industrial expansion**

Having had economic development efforts hindered once due to inadequate sewage treatment facilities, Vandalia made it a goal to improve their infrastructure. In the past few years, major improvements have been made. Figure IF-5 shows the major components of the sanitary system.

##### **New Treatment Plant**

Construction of the new primary treatment plant, with a 2,000,000 gallon capacity per day, has been completed.

##### **Sanitary Collector System Expanded**

Work was begun on expanding the capacity of the sewage collector system and has been completed. At that time, the state penitentiary was annexed and a forced main was extended to it.

#### **Sewer Treatment Plant**

As of now, the handling of the waste of the City looks good for several years to come. The Sewer Plant has capabilities of processing more than the Water Plant can now produce.

The dredging of the lagoons would be the most important as far as plant capacity and loading of the lagoons. This would fall under the Long-Term Goals.

It is always possible that the E.P.A. may change the operation of the plant and the cost that would be involved is unknown.

For Short-Term Goals, the plant and other departments would benefit by a Vac Truck as cleaning out the manholes and lift stations on a regular time frame would extend the life of the pumps and capacity of the plant. Also, the Water Plant would have uses for it as well.

More manpower at the plant would be of benefit. A small sludge truck with the ability to knife the sludge into the ground would be a good mid-term goal.

Rebuilding of several of the larger pumps and replacing some of the smaller ones that have been in service for several years and are of more important uses.

As of now, the future of the Sewer Plant looks good. The plant is thirteen years old and capable of handling the flow.



A Pre-Treatment Program should be structured for the City, in case of a large industry or just an industry that would be capable of large amounts of pollution. We should be able to control what comes down the line to the plant. The Vandalia Correctional Center is a small industry that currently needs to have a pre-treatment process installed. This should be a short-term goal that is a must, as they are a large contributor of loading to the City's sewer plant.

## **TACTICS TO BE IMPLEMENTED**

### **IF-4. COORDINATE UTILITY NEEDS AMONG ALL LAND USES**

The western interchange development will also require sewer extensions. Unlike water supply, there is no loop required for effective sanitary service. However, because of the topography, sewage services will be more expensive than water because sewer extensions must include new lift stations.

Annexing in order to protect lake water from private sewage systems will be expensive. The sewer maintenance district is an inexpensive alternative.

#### **Include lake residential loads in sizing systems to serve west interchange development**

Similar to water supply, the location of new industries at the west interchange will require major system extensions. The most likely route for a collector line to serve the southwest quadrant would come from the existing 12" main along Main Street. Because of that area's topography, extending sewer lines either across (under) the interstate, or from the southwest quadrant will require lift stations (See figure IF-5).

Service to industries locating on the northern side of the interchange will require extensions from the Fillmore Street trunk line. An important factor in sizing the extensions for the northeast quadrant is the amount of development which may be routed through that lift station and piping. If residential areas around the lake are provided sewage services, that flow will likely pass through the northeast quadrant facilities. All future industrial development in the industrial corridor and the north west quadrant will also pass through these facilities. The sewer facilities should be designed to handle all of this future capacity.

#### **Annexation of nearby residential areas will require extension of sewers**

Currently, the area between Fillmore, Jefferson, and Sunset Drive is not served with sewers (See figure IF-5). When those households are annexed, they will likely demand sewage service. This service will be rather inexpensive to install compared to the western extension, however.

#### **Septic tanks around lake should be replaced with city sewers**

In the long run, the extension of the sewer collector system to the residential areas around the lake would reduce the danger that current septic tanks in those areas pose to the lake. Such an extension would likely follow annexation. The collection system for that area would either be routed down to the west interchange to a lift station, or into a lift station and forced directly east of the lake to connect into the forced main from the prison (See figure IF-5). This type of extension will be much cheaper once development



has begun in the northeast quadrant of the interchange and a lift station is in place. Because of the cost of either of these alternatives, the sewer maintenance district is an effective alternative.

### **Sewer Projects (See figure IF-7)**

#### **Manhole Replacements In Order Of Priority**

1. Sixth Street - Between Johnson Street and Edwards Street - Replace two manholes.
2. Elm Street and St. Louis Avenue - Replace manhole.
3. First Street and Madison Street - Replace manhole.
4. First Street - Between Jefferson Street and St. Clair Street - Replace manhole.
5. Sixth Street - South of St. Louis Avenue - Replace manhole.

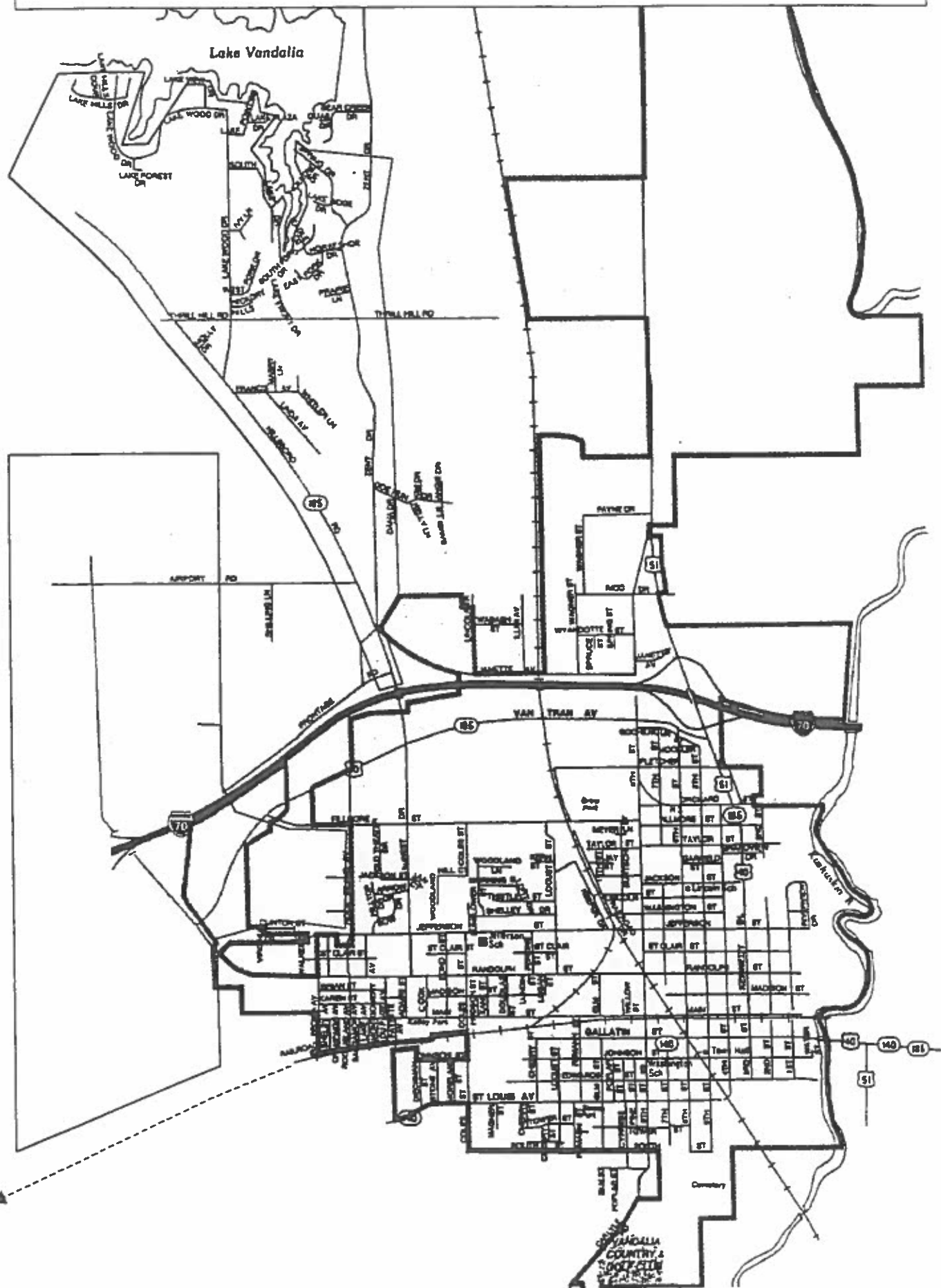
### **Sewer Line Repairs In Order Of Priority (See figure IF-8)**

1. Gallatin Street and Second Street - Settling around manhole.
2. Jefferson Street to Randolph Street - Line settling under creek west of Illinois Power Sub-Station.
3. Elm Street from Randolph Street to Main Street - Flow bad and line dirty due to line separation.
4. Madison Street - Between Elm Street and Willow Street - Flow bad and dirty due to line separation.
5. Eighth Street - South of Randolph Street - Flow dirty due to line separation.
6. Sixth Street and Madison Street going North - Flow dirty due to line separation.
7. South Fifth Street from St. Louis Avenue to South Street - Line separation.
8. Sixth Street and Madison Street - Hole under apron of street.
9. Fifth Street, East on Madison Street to alley and South to Main Street - Flow dirty and has rock in it due to line separation.

#### **CAPITAL IMPROVEMENT PLAN**

In order for the Department of Public Works and the City Council to effectively oversee

**Figure IF-5**



the maintenance and development of various sectors, facilities, and equipment mentioned in previous sections, a Capital Improvement Plan should be implemented. A Capital Improvement Plan is a planning tool that inventories all publicly owned facilities and equipment, evaluates and prioritizes their needs, and allocates funding for them over the coming years.

There are two components of a Capital Improvement Program: the Infrastructure Assessment Program and the Capital Improvement Program. An Infrastructure Assessment Program identifies public facilities and equipment, and assesses their present and potential deficiencies. A Capital Improvement Plan focuses solely on major funding decisions such as maintenance, modification, acquisition, construction, and expansion of the facilities and equipment identified by the Infrastructure Assessment Program.

The purposes of a capital improvement plan in Vandalia would be to achieve two goals:

1. To maintain an adequate infrastructure system to protect the health and safety of the residents of Vandalia.
2. To respond to residential, commercial, and industrial growth.

## **THE NEED FOR CAPITAL IMPROVEMENTS PLAN EXISTS**

### **Continual Update of Utilities**

Vandalia has realized the importance of having adequate infrastructure since it was unable to accommodate interested industries responding to Vandalia's highly publicized photo day. Since that time, Vandalia has built a new water treatment plant and sewer plant and has added to and expanded both water and sewer lines to satisfy the needs of existing and future industries. However, as discussed in the Utilities section, several of the existing lines will have to be added or replaced as Vandalia annexes residential areas west and south of the city limits and if it desires future industrial growth west along the interchange.

### **Recurring Road Repair**

Due to heavy truck traffic, streets and curbs along Janette, Orchard, and Gallatin, east of Fifth Street, are continually being resurfaced. By using concrete paving along these and other roads heavily traveled by trucks, money would be saved in the long run though the initial cost would be high. As trucks continue to use routes such as Rock Island, which are unable to accommodate their weight, maintenance costs will continue to accrue, diverting funds from other projects mentioned in the Transportation Vision.

In addition to these expenses, as public buildings, gutters, sewers, and water systems age and become outdated, they demand repair. These additional costs are not always foreseen.

Because of the major improvements made to the City's water and sewer infrastructure in the past few years, Vandalia is at a point where it can make long-term changes in how infrastructure is managed. Currently, a consultant is preparing updated utility maps to assist the City in managing infrastructure. The Public Works Director also has an informal policy of continually updating institutional knowledge of the City's infrastructure. There needs to be an integrated program to assess needed repairs of major infrastructure

elements and then make financial plans for those repairs. That program is the Capital Assessment Program.

**Street Maintenance Projects In Order Of Priority**  
(See figure IF-9)

1. Edwards Street from Seventh Street to Sixth Street - Resurface.
2. Johnson Street from Seventh Street to First Street - Resurface.
3. Sixth Street from Orchard Street to Main Street - Resurface.
4. All concrete streets East of Fifth Street to First Street - Resurface.

**Street Improvement Projects In Order Of Priority**  
(See figure IF-10)

1. North of Route 70 - Industrial Complex.
2. Coles Street from St. Louis Avenue to Railroad Bridge
3. Sunset Street from Jefferson to Route 185
4. Jefferson Street from Locust Street to Railroad Street
5. Jefferson Street from Coles Street to Randolph Street

These projects will require funding through grants and/or other sources.

**IMPLEMENTING A CAPITAL ASSESSMENT PROGRAM**

A Capital Assessment Program in Vandalia can aid public works officials to identify current and potential deficiencies in community facilities and equipment.

The first step that should be taken when developing a Capital Assessment Program is that each facility and piece of equipment should be identified and recorded in a comprehensive record on a map. Location, age, materials used in construction, maintenance history, and other pertinent information should be included. Information can be obtained from original engineering drawings, an itemized insurance list, or annual audit reports.

Once identified, the useful life of each element should be estimated. Table CD-4 lists typical life spans of various utilities.

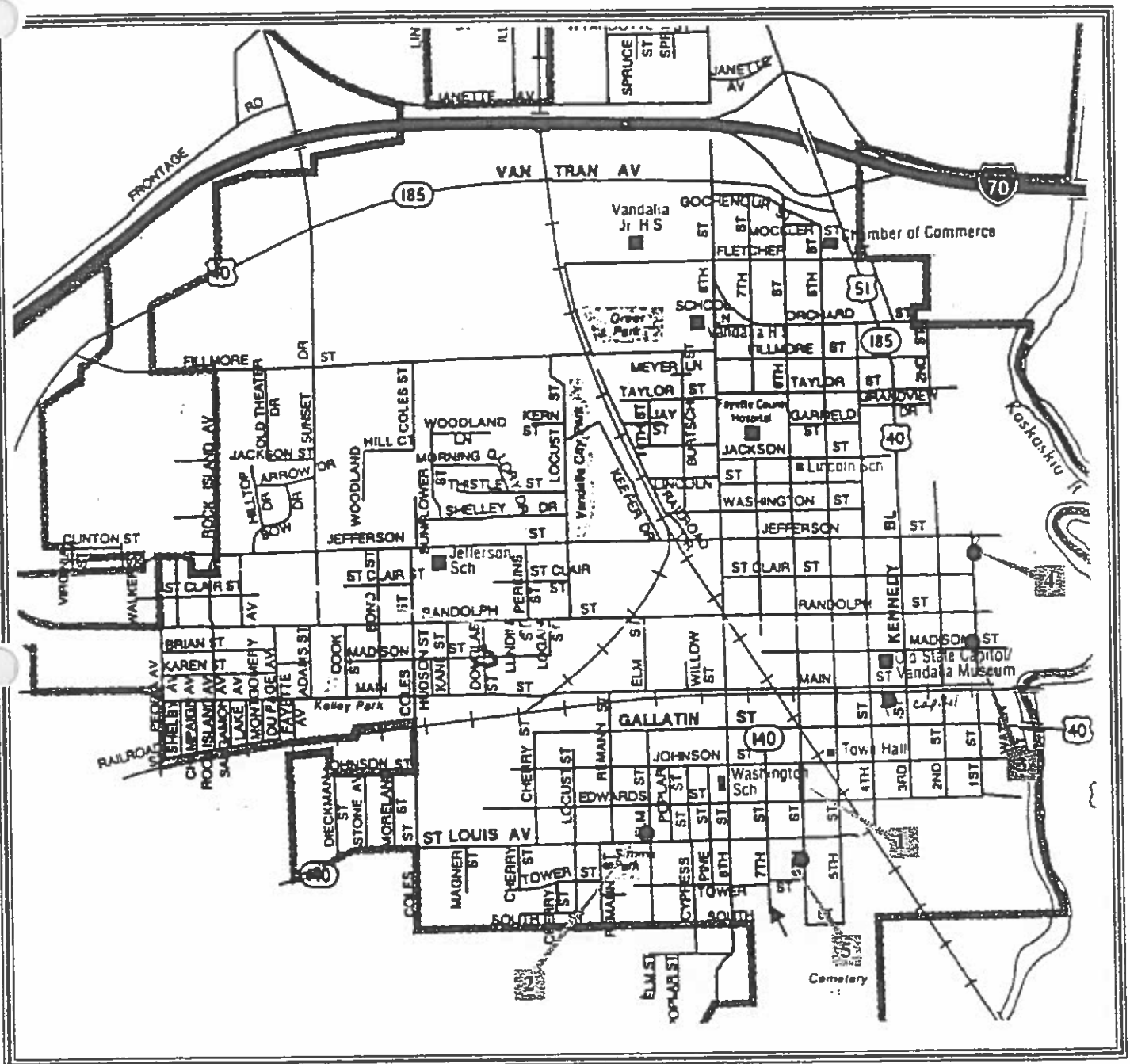
**Table CD-4**

**Life Spans of Various Utilities**

**Sanitary Sewer System**

|    |                 |          |
|----|-----------------|----------|
| 1. | Treatment Plant | 30 years |
| 2. | Pipe            | 50 years |

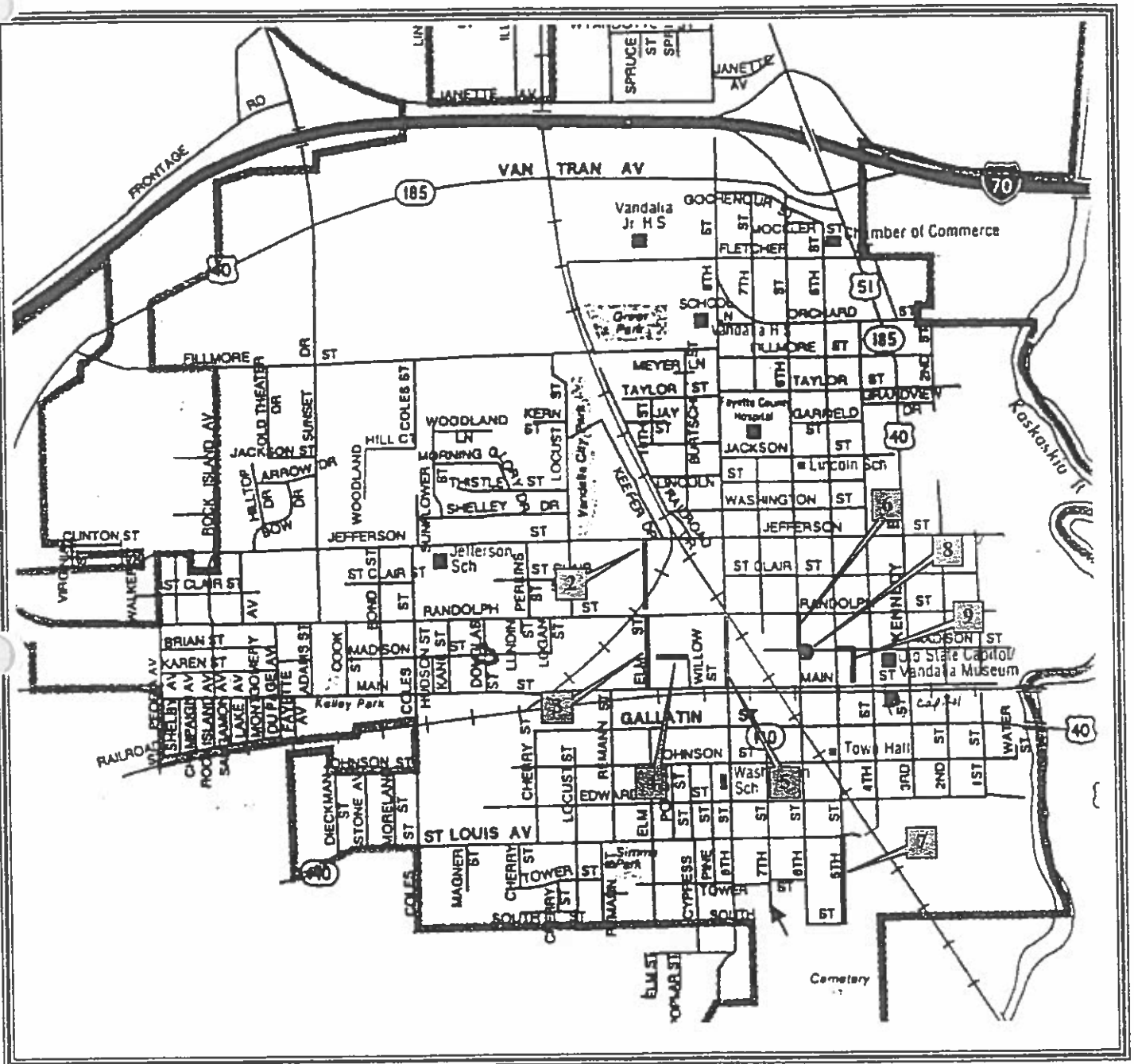
# City of Vandalia



Sewer Manhole Replacements

Figure IF-7

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Sewer Line Repairs

Figure IF-8



3. Sixth Street from Orchard Street to Main Street - Resurface.
4. All concrete streets East of Fifth Street to First Street - Resurface.

**Street Improvement Projects In Order Of Priority  
(See figure IF-10)**

1. North of Route 70 - Industrial Complex.
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**Table CD-4**

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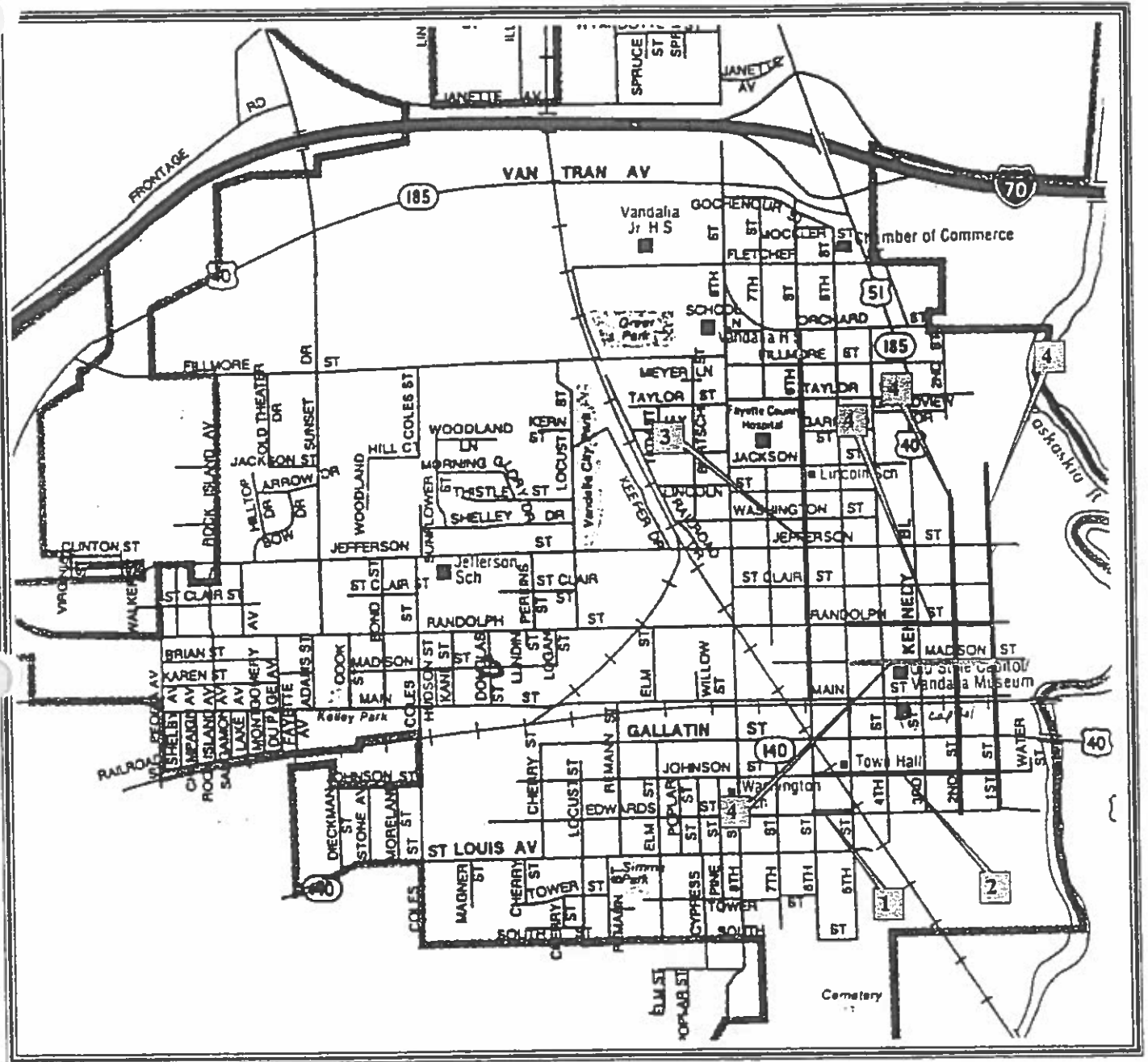
**Sanitary Sewer System**

|    |                            |          |
|----|----------------------------|----------|
| 1. | Treatment Plant            | 30 years |
| 2. | Pipe                       | 50 years |
| 3. | Life Stations              | 20 years |
| 4. | Manholes and Appurtenances | 50 years |

**Water System**

|    |                 |          |
|----|-----------------|----------|
| 1. | Water Treatment | 30 years |
| 2. | Storage         | 50 years |
| 3. | Distribution    | 50 years |
| 4. | Source          | 50 years |
| 5. | Pump Stations   | 20 years |

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## Street Maintenance Projects

Figure IF-9



- |    |                            |          |
|----|----------------------------|----------|
| 3. | Life Stations              | 20 years |
| 4. | Manholes and Appurtenances | 50 years |

#### **Water System**

- |    |                 |          |
|----|-----------------|----------|
| 1. | Water Treatment | 30 years |
| 2. | Storage         | 50 years |
| 3. | Distribution    | 50 years |
| 4. | Source          | 50 years |
| 5. | Pump Stations   | 20 years |
| 6. | Hydrants        | 20 years |

#### **Storm Drainage**

- |    |                   |          |
|----|-------------------|----------|
| 1. | Pipe and Culverts | 50 years |
|----|-------------------|----------|

#### **Streets System**

- |    |                   |          |
|----|-------------------|----------|
| 1. | Concrete Street   | 30 years |
| 2. | Bituminous Street | 15 years |
| 3. | Curb and Gutter   | 30 years |

#### **Public Buildings**

- |    |     |          |
|----|-----|----------|
| 1. | All | 50 years |
|----|-----|----------|

Once estimated, the approximate age and the components prone to premature deterioration should be identified and recorded. From this list, short-range and long-range priorities should be identified. The list of priorities should be based on long-term economic goals, future residential, commercial, and industrial growth, and land use trends. The Land Use Vision of this Comprehensive Plan and the information gathered from the Certified Cities Program can aid in this task.

### **FORMULATING A CAPITAL IMPROVEMENT PROGRAM**

From the list of projects compiled by the capital assessment program, specific, high priority projects must be selected for funding. It is best if the selection process is based on a specified list of criteria. The criteria should consider financial impacts, effects on local economic development, adherence to a local development plan, and effects on underprivileged groups.

Decisions should not be made solely by the Public Works Department or the City Council. Input from residents is as important as input from businesses and industries. Through Certified Cities Surveys, citizen input, or media coverage, the public should be informed and have a channel available to express their views. This will elicit public support and responsiveness in the long run.

Prior to the implementation of the Capital Improvement Program, a financial forecast should then be formulated. This forecast should reflect the ability of the local government to issue general obligation bond indebtedness and the availability of funds from sources other than debt issuance. In formulating the forecast, historical trends and other operating expenses should be taken into account.

The final draft of the Capital Improvement Program should include all the information discussed into a single document. This document should contain the name, location, and description of all projects, the anticipated construction date, and a list of expected benefits and costs.

The final step would be to budget and appropriate funds. Without this final step, the Capital Improvement Program becomes another document on the shelf. The budget should be adopted annually and be considered separately from the annual operating budget. Components of this budget should include long-range revenues, expenditures.