

**CITY OF LINCOLN
PUBLIC HEARING
AGENDA
FEBRUARY 11, 2025
CITY COUNCIL CHAMBERS
700 BROADWAY STREET
6:00 PM**

- 1. Call to Order**
- 2. Sewer Presentation**
- 3. Public Participation**
- 4. Adjournment**

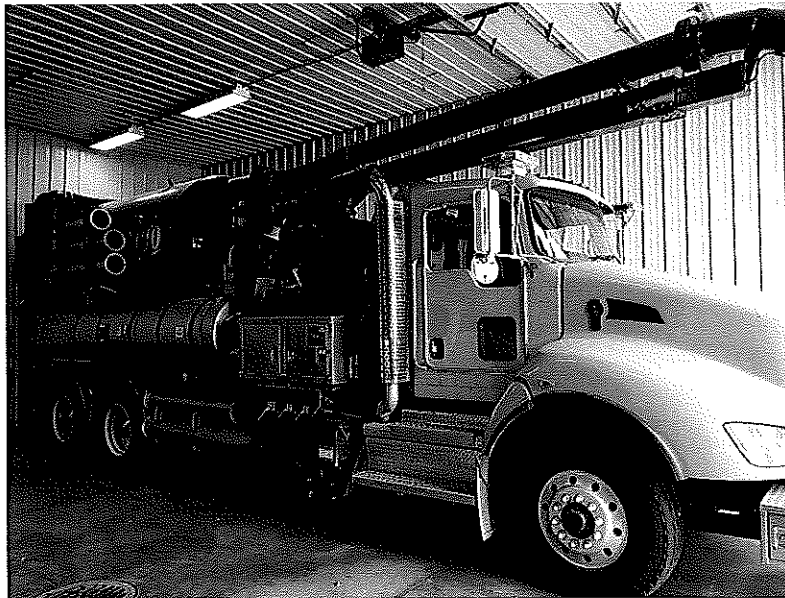
We welcome the participation of persons with disabilities at all City of Lincoln meetings. If auxiliary aid or service is required for most effective participation and communication, please notify the City Clerks' Office at 217-735-2815 or cityclerk@lincolnil.gov no later than 48 hours prior to the meeting time.

Pollution Prevention Plan

City of Lincoln

Wastewater Treatment Facility

Lincoln, Illinois



Pollution Prevention Plan
City of Lincoln
Wastewater Treatment Facility
Lincoln, Illinois

I. Introduction

The City of Lincoln's public wastewater system was most recently re-issued an NPDES permit, with an effective date of November 1st, 2019. The re-issued permit requires the City to compile a Pollution Prevention Plan that complies with the terms of the permit, and the National CSO Control Policy of 1994. This document provides the plan for these activities, in compliance with the NPDES permit requirement.

II. Description of Pollution Prevention Measures

A. General

The City's pollution prevention efforts currently consist of the following activities:

- Dedicated street sweeping
- Passage of an anti-littering ordinance to prevent littering
- Established solid waste pick-ups
- Distribution and use of trash receptacles
- Placement of drop-off type recycling containers as well as curbside pick-up recycling
- Established fertilizer, herbicide, pesticide, and de-icing programs
- Established hazardous waste collection programs

B. Street Cleaning Programs

The City sweeps the downtown combined sewer area on an as needed basis, dictated by regular visual inspections, weather permitting. The City also dedicates crews to sweeping other combined sewer areas throughout the City on an as needed basis, dictated by regular visual inspections, and as weather permits.

The City also dedicates crews to removing debris from catch basin grates and inlets during and after each significant rain event.

C. Anti-Littering and Public Education Regarding Disposal of Personal Hygiene Products, and Proper Application of Fertilizers, Pesticides, and Herbicides.

To prevent litter from being spread, the City adopted an anti-littering provision in its City Code, in 1977. The code for anti-littering is spelled out in Title 8: Public Ways and Property, Chapter 11: Park Regulations, Section 3: Refuse and Trash; which states that “ No person shall litter, or suffer or cause to be littered, any of the grounds, driveways, fountains, gardens, walkways, restrooms, shelters or other structures in parks in the City of Lincoln, by scattering or leaving paper, garbage, bottles, cans, boxes or other refuse therein, except in the receptacles provided therefore.”

The most recent educational campaign was started in March 2020, at the onset of Covid-19, and the shortage of toilet paper that coincided with it. This campaign emphasized the importance of not contributing waste to the collections system; which is not designed to be handled by the collection system.

D. Solid Waste Collection Procedures

The City’s solid waste collection is coordinated with Peoria Disposal Company (PDC). PDC and the City hold several special collections throughout the year. These collections address items that are not typically accepted during normal solid waste collection routes.

In an effort to collect refuse in the public right-of-ways, the City has placed trash receptacles in the downtown area. The receptacles help encourage the proper disposal of trash or litter items, thereby preventing it from entering the combined sewer system.

E. Recycling Efforts

Currently recycling within the City is voluntary. Curb side pick-up is provided and memorialized with the City’s franchise operator Peoria Disposal Company (PDC).

F. Efforts to Ban or Substitute for Non-Degradable Products

Currently the City has not attempted to ban non-degradable products. This issue has not been a priority, due to the fact that no complaints have been received, nor has the staff noticed an addressable amount of non-degradable items downstream of the CSO outfall.

G. Efforts to Control Product Use of Fertilizers, Pesticides, De-Icing Salts, Under the Control of the Permittee

The City's efforts to control its internal use of products such as fertilizers and pesticides include licensing all City applicators, through the Department of Agriculture, as required by law.

In order to help reduce solids deposition in the combined sewers and storm sewers the City has eliminated the use of cinders, and utilizes a calcium-chloride solid.

H. Efforts to Control Illegal Dumping

The City controls illegal dumping activities making routine patrols throughout the City, and especially in areas prone to such activities. The City also has an anti-dumping ordinance. "Title 7: Health and Sanitation, Chapter 2: Nuisances, Section 1: Enumeration of Nuisances prohibits accumulation, storage, or deposition of trash, junk, or refuse.

I. Efforts to Collect Bulk Refuse

The City coordinates yearly bulk refuse collections with the current solid waste operator Peoria Disposal Company (PDC). Residents are permitted to dispose of bulk refuse to a centralized location annually.

J. Description of Hazardous Waste Collection Programs

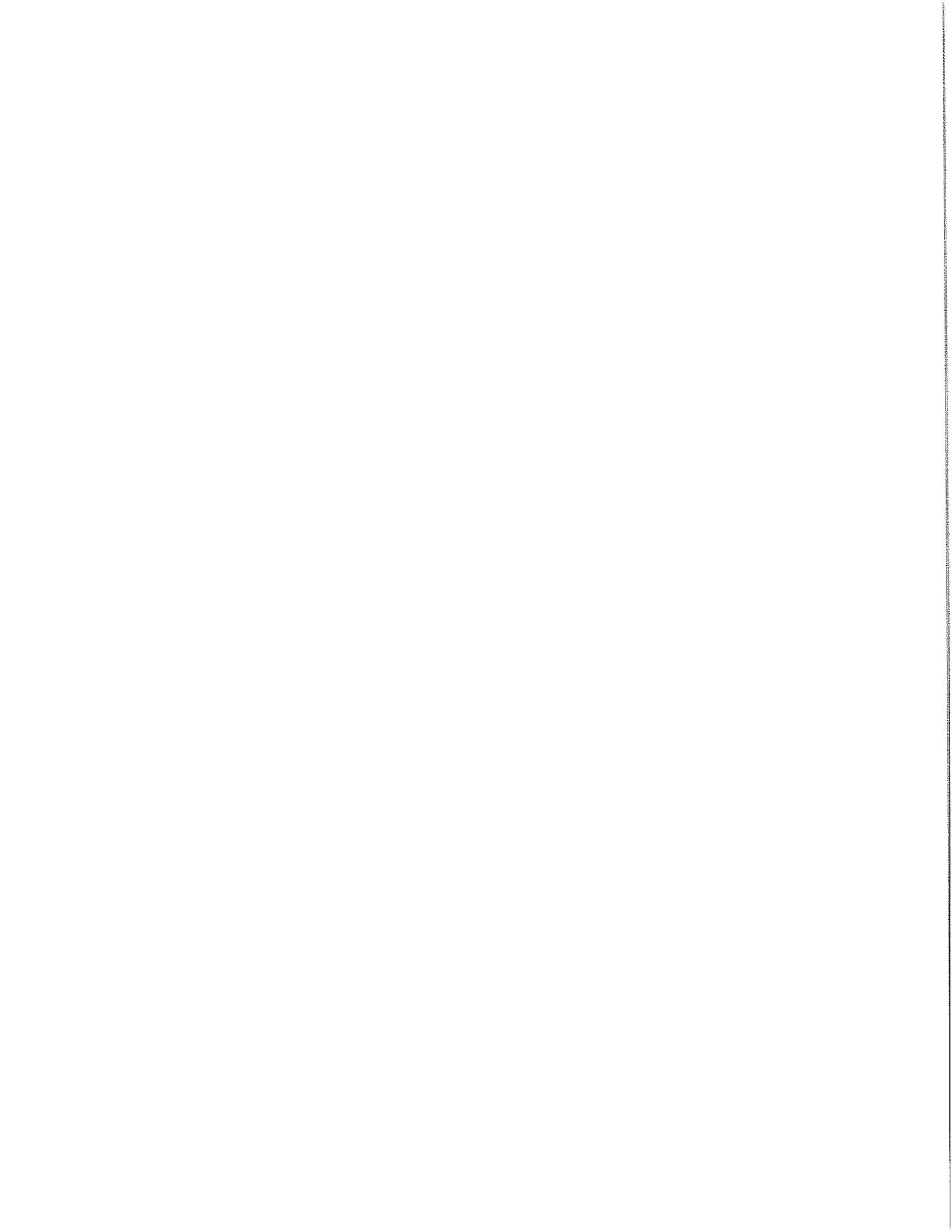
The City also coordinates hazardous waste collection with Peoria Disposal Company (PDC). The collections are sponsored on an as needed basis.

K. Water Conservation Efforts in the City Service Area

Water conservation efforts include the requirement, through the privately owned water company, that all water distributed to the system's customers, including the City facilities, be metered. The company also has a voluntary program for conservation during drought periods.

L. Pollution Prevention Activities Required of Commercial and Industrial Discharges

The City requires that all commercial and industrial contributors follow the Sewer Use ordinance that the City has adopted.



FISCAL SUSTAINABILITY PLAN

COMBINED SEWER OVERFLOW IMPROVEMENTS

LINCOLN, IL

PREPARED:
SEPTEMBER 2023

1. Introduction

This Fiscal Sustainability Plan (FSP) has been prepared for the Combined Sewer Overflow Improvements (Project) for the City of Lincoln, Illinois. The purpose of this document is to assist the City and the Wastewater Treatment Operations staff, currently Veolia North America (Veolia) with comprehensive fiscal planning for the long-term management of the assets associated with the Project.

The Project includes installation of new equipment and improvements to facility components which are past their useful life and are in need of replacement and relocation. The Project was completed to maintain compliance with their NPDES permit and meeting the requirements of the Combined Sewage Overflow (CSO) regulations. The scope of the Project includes the following:

- Construction of a 70 million gallon per day (MGD) combined sewer overflow treatment facility
- Renovation of the existing laboratory building
- Construction of a new building over the existing headworks
- Installation of new grit equipment
- Installation of new mechanisms on two secondary clarifiers

This FSP provides a fiscal plan for the maintenance, repair, and replacement for the Combined Sewer Overflow Improvements Project assets over a 20-year planning period. The FSP is considered a living document and will be updated each year to reflect current conditions of these assets.

2. Asset Inventory, Condition & Performance

2.1 Inventory of Critical Assets

An inventory of critical assets is attached as Table 1 in Appendix A. The table below provides guidance for rating the condition, probability of failure, and consequence of failure for each asset. Ratings and remaining useful life for each asset were selected based on physical inspection, consultation with equipment manufacturers, references to operation & maintenance manuals, and past experience with similar assets. Ratings were entered into the table to determine each asset's criticality, which is listed below.

ASSET CRITICALITY TABLE

Asset	Condition Ratings	Probability of Failure (PoF)	Consequence of Failure (CoF)	Criticality (PoF x CoF)
Catenary Bar Screen	1	1	3	3- Not Critical
Manual Trash Screen	1	1	3	3- Not Critical
Slide Gates	1	1	4	4- Not Critical
Axial Flow Pumps	1	1	4	4- Not Critical
Sumersible Pumps	1	1	2	2- Not Critical
Hobas Pipe	1	1	4	4- Not Critical
HDPE Pipe	1	1	1	1- Not Critical
Stainless Steel Pipe	1	1	1	1- Not Critical
Ductile Iron Pipe	1	1	1	1- Not Critical
PVC Pipe	1	1	1	1- Not Critical
RCP Pipe	1	1	1	1- Not Critical
Sumersible Mixers	1	1	1	1- Not Critical
Bubble Diffusers	1	1	1	1- Not Critical
Rotary Lobe Blower	1	1	1	1- Not Critical
Swirl Concentrator	1	1	3	3- Not Critical
Fiberglass Weirs and Baffles	1	1	2	4- Not Critical
Flow Regulator	1	1	3	4- Not Critical
Wiring and Instrumentation	1	1	3	1- Not Critical
Generator	1	1	3	3- Not Critical
PLC and Control Panel	1	1	3	3- Not Critical
Breakers	1	1	2	2- Not Critical
Precast Bridge	1	1	1	1- Not Critical
Grit Equipment	1	1	1	1- Not Critical
Flowmeter	1	1	3	3- Not Critical
Lab Equipment	1	1	1	1- Not Critical
Lab HVAC	1	1	2	2- Not Critical
Secondary Clarifier Mechanisms	1	1	4	4- Not Critical
Headworks Building	1	1	1	1- Not Critical
Headowrks HVAC	1	1	2	2- Not Critical
Valves	1	1	3	3- Not Critical
Level Sensor	1	1	4	4- Not Critical
Chemical Pump	1	1	2	2- Not Critical

2.2 Level of Service

The CSO Facility is a major facility at the wastewater plant must function during rain events. It includes back-up generator for redundancy. The pump station has alarms to notify staff of conditions that require attention.

3. Evaluation of Water and Energy Conservation Efforts

Water and energy conservation measures that were incorporated into the Project include the following:

- The influent pumps have Variable Frequency Drives (VFD) to improve efficiency through the pumping range.

4. Asset Management & Fiscal Planning

4.1 Plan for Replacement, Rehabilitation, and Improvement of Project Assets

The table below summarizes the assets scheduled for replacement, rehabilitation, or improvement over a 20-year planning period. The purpose of this table is to establish a current year budget to cover future anticipated expenses for the management of the Combined Sewer Overflow Improvements Project's assets. Costs were estimated based on original equipment costs adjusted with a 3% inflation factor to figure the cost for the year needed. These expenses are summarized in the table below:

Replacement, Rehabilitation, and Improvement Expenses Table

Description	Need	Year Needed	Inflated Cost	Annual Replacement Budget
Catenary Bar Screen	20 year useful life	2042	\$281,753.35	\$14,088.00
Manual Bar Screen	20 year useful life	2042	\$9,030.56	\$452.00
Slide Gates	20 year useful life	2042	\$300,276.29	\$15,014.00
Axial Flow Pumps	20 year useful life	2042	\$980,718.40	\$49,036.00
Submersible Pumps	20 year useful life	2042	\$277,599.30	\$13,880.00
Hobas Pipe	50 year useful life	2072	\$1,817,457.84	\$36,349.00
HDPE Pipe	50 year useful life	2072	\$252,074.60	\$5,041.00
Stainless Steel Pipe	50 year useful life	2072	\$21,919.53	\$438.00
Ductile Iron Pipe	50 year useful life	2072	\$813,214.57	\$16,264.00
PVC Pipe	50 year useful life	2072	\$346,328.58	\$6,927.00
RCP Pipe	50 year useful life	2072	\$109,597.65	\$2,192.00
Submersible Mixers	20 year useful life	2042	\$153,158.23	\$7,658.00
Bubble Diffusers	20 year useful life	2042	\$72,244.45	\$3,612.00
Rotary Lobe Blower	20 year useful life	2042	\$109,125.24	\$5,456.00
Swirl Concentrator	20 year useful life	2042	\$601,265.27	\$30,063.00
Fiberglass Weirs Baffles	20 year useful life	2042	\$424,436.14	\$21,222.00
Flow Regulator	20 year useful life	2042	\$34,556.33	\$1,728.00
Wiring and Instrumentation	10 year useful life	2032	\$16,127.00	\$1,613.00
Generator	20 year useful life	2042	\$315,888.85	\$15,794.00
PLC & Control Panel	20 year useful life	2042	\$135,458.34	\$6,773.00
Breakers	20 year useful life	2042	\$9,030.56	\$452.00
Precast Bridge	50 year useful life	2072	\$438,390.60	\$8,768.00
Grit Washer/Compactor/Classifier	20 year useful life	2042	\$167,968.34	\$8,398.00
Flowmeter and vault	20 year useful life	2042	\$72,244.45	\$3,612.00
Lab Equipment	20 year useful life	2042	\$45,152.78	\$2,258.00
Lab HVAC	20 year useful life	2042	\$108,366.67	\$5,418.00
Secondary Clarifier Mechanisms	20 year useful life	2042	\$600,445.29	\$30,022.00
Headworks Building	50 year useful life	2072	\$876,781.20	\$17,536.00
Headworks HVAC	20 year useful life	2042	\$90,305.56	\$4,515.00
Valves	20 year useful life	2042	\$28,717.17	\$1,436.00
Level Sensors	20 year useful life	2042	\$60,306.05	\$3,015.00
Chemical Pump	20 year useful life	2042	\$72,244.45	\$3,612.00

4.2 Fiscal Planning

The purpose of a fiscal plan for the replacement, rehabilitation and improvement expenses of the Combined Sewer Overflow Improvements Project is to ensure these expenses are incorporated into the City's annual budget and future rate determinations so that sufficient funding is available when needed. A combination of the following funding mechanisms is proposed to accumulate funds for future expenses for the CSO Improvements Project:

- Annual Revenues
- Increasing Utility Rates
- Municipal Bonds
- State-Revolving Fund Loans (SRF)

The City worked with its consultant to develop a rate methodology to fund future capital expenses for the CSO Improvements Project. The purpose of this fund is for future replacement of the equipment financed by the SRF loan as part of this Project. These funds will be incorporated into the City's rate study.

Since it is not anticipated that all influent pumps will fail at the same time, replacement/rebuilding of the pumps will be staggered out between 15 and 25 years at 2-year cycles. These costs will be incorporated into the rate adjustment that will be completed and implemented to support this program. Therefore, funding for these expenses should be available within the City's annual sewer budget. However, the City's rate study should be reviewed annually to ensure that sufficient revenues are available.

Proposed funding mechanisms for the replacement, rehabilitation, and improvement expenses for the CSO Improvements Project are summarized in the following Fiscal Planning Table:

Fiscal Planning Table

Description	R = Use Reserve C = Capital Expense	Alternative Funding Source
Catenary Bar Screen	R	Sewer Fund
Manual Bar Screen	R	Sewer Fund
Slide Gates	R	Sewer Fund
Axial Flow Pumps	R	Sewer Fund
Submersible Pumps	R	Sewer Fund
Piping	R	Sewer Fund
Submersible Mixers	R	Sewer Fund
Bubble Diffusers	R	Sewer Fund
Rotary Lobe Blower	R	Sewer Fund
Swirl Concentrator	R	Sewer Fund
Fiberglass Weirs Baffles	R	Sewer Fund
Flow Regulator	R	Sewer Fund
Wiring and Instrumentation	R	Sewer Fund
Generator	R	Sewer Fund
PLC & Control Panel	R	Sewer Fund
Breakers	R	Sewer Fund
Precast Bridge	R	Sewer Fund
Grit Washer/Compactor/Classifier	R	Sewer Fund
Flowmeter and vault	R	Sewer Fund
Lab Equipment	R	Sewer Fund
Lab HVAC	R	Sewer Fund
Secondary Clarifier Mechanisms	R	Sewer Fund
Headworks Building	R	Sewer Fund
Headworks HVAC	R	Sewer Fund
Valves	R	Sewer Fund
Level Sensors	R	Sewer Fund
Chemical Pump	R	Sewer Fund

APPENDIX A

**CAPACITY, MANAGEMENT, OPERATION,
AND MAINTENANCE PLAN**

**CITY OF LINCOLN
WASTEWATER TREATMENT
LINCOLN, ILLINOIS**

REVISED 4-28-14

INTRODUCTION

On April 12, 2013, the Illinois Environmental Protection Agency (IEPA) reissued the City of Lincoln its National Pollutant Discharge Elimination System (NPDES) Permit. The permit took effect on May 1, 2013.

The newly reissued permit contained a special condition requiring the City to work toward the goals of achieving no discharges from sanitary sewer overflows or basement backups and ensuring that overflows or backups, when they do occur do not cause or contribute to violations of applicable standards or cause impairment in any adjacent receiving waters. In order to achieve these goals Special Condition 18 of the City's NPDES Permit required the City to draft and submit, to the IEPA, a Capacity, Management, Operations, and Maintenance (CMOM) Plan by May, 2014.

The City has a current CMOM Plan that was submitted in July 2008. This is a copy of the revised document

The NPDES Permit requires that the CMOM Plan contain the following:

1. Measures and Activities
 - A complete map of the collection system;
 - Schedules, checklists, and mechanisms to ensure that preventative maintenance is performed and on equipment;
 - An assessment of the capacity of the collection and treatment system at critical junctions and immediately upstream of locations where overflows and backups occur or are likely to occur; and
 - Identify and prioritization of structural deficiencies in the system.
2. Design and Performance Provisions
 - Monitor the effectiveness of CMOM;
 - Upgrade the elements of the CMOM plan as necessary; and
 - Maintain a summary of CMOM activities.
3. Overflow Response Plan
 - Know where overflows and backups occur; and
 - Respond to each overflow or backup to determine additional actions such as clean up

GENERAL INFORMATION

The City of Lincoln's population has grown from 1,679, in 1860 to the current 14,504. The sewer system was first developed in the late 1800's. Currently, the City's sewer system covers 5.25 square miles and is made up of approximately 100 miles of collection system mains, 10 lift stations, 2 CSOs, excess flow treatment, and the wastewater treatment facility.

The sewer mains range in size from 8-inches to 96-inches. The construction of the mains consist of clay, concrete, plastic, brick, and rock. The system contains approximately 34 % of sewer mains that are smaller than 12-inches in diameter, 45 % that are 12-inch to 24-inch, 9 % are 27-inch to 36-inch, 4 % are 42-inch to 48-inch, 3 % are 54-inch to 60-inch, and approximately 5% of the sewer main is between 60-inch and 96-inches in diameter.

COLLECTION SYSTEM MANAGEMENT

ORGANIZATIONAL STRUCTURE

The City of Lincoln's Organizational Structure begins with the Mayor and City Council. Although the City Council functions as one governing body, it contains committees. The committees are considered the Council's working groups that bring the City's issues to the Council as a whole. Department Heads report directly to the Committee Chairperson.

Public / Private Partnership

The City of Lincoln has chosen to partner with a firm for the operation and maintenance of the entire wastewater department. American Water Contract Services (formerly EMC) is firm out of O'Fallon, Missouri that the City has contracted to supply the resources necessary to effectively and efficiently operate the wastewater department.

In this particular partnership, the City retains the ownership of all of the wastewater assets including equipment and American Water Contract Services supplies the employees to perform the operations and maintenance for the department.

The City's Organizational Chart is illustrated in Attachment A.

TRAINING

American Water Contract Services has a training reimbursement policy that all employees have the opportunity to enjoy. Most of the training that is received is on-the-job training. On-the-job training for a new employee would include:

- Equipment and associated maintenance
- Lift Station operation and maintenance

- Cleaning and televising of sewer lines
- Emergency response
- Utility locating
- Record keeping
- Safety

Safety Training

American Water Contract Services provides safety training for all employees. Other than tailgate sessions, safety training is held once each month. Throughout a year, the following topics are covered:

- Lock out / tag out
- CPR, first aid, and blood borne pathogens
- Personal protective equipment
- Chlorine and hazard communication
- Confined spaces
- Traffic control
- Trenching and shoring
- Machine and hand tools
- Ladders, cranes and slings
- Welding and cutting
- Medical and accident reporting
- Ergonomics
- Forklift and vehicle safety
- Fire safety and emergency response

COMMUNICATION AND CUSTOMER SERVICE

Internal Communication

The City Council conducts Committee of the Whole meetings the second and fourth Tuesday of each month. At that time, each Department Head has an opportunity to discuss issues with the Committee or other Department Heads. Department Heads also interact as necessary throughout each day.

The operations staff begins each week with a staff meeting on Monday morning, including the entire staff. The agenda covers time off, last week, the current week, project updates, upcoming events, miscellaneous items, and open discussion. Each day begins with a quick tailgate meeting to discuss current issues. The management staff is also available throughout each day to interact with the operations staff.

Customer Service

American Water Contract Service's Lincoln office is staffed each day during normal working hours. When a collection system call is received during normal working hours, a work order is drafted recording the caller's information and nature of the issue. An Operator is dispatched and a return call or visit is made to the caller indicating what the issue was and how it was alleviated. The Operator that handled the issue completes the work order and a copy is filed. A copy of the collection system work order has been enclosed in Attachment B.

After hours, the office's answering machine offers an emergency number that goes directly to an On-call Operator. The On-Call Operator will answer the call and respond within 20 minutes.

Back Ups

If an owner has had a basement back up and the operations staff determines that the backup was caused by an issue with the City sewer, further action is then taken in order to assess the damage that the backup has caused to the owner's property. Pictures are taken and an inventory of damaged property is created. The operations staff will document the actions taken by the staff and the home owner. The Facility Manager is asked to visit each sewer backup, if possible, in order to report to American Water Contract Service's Operations Support Center and the City Council.

Clean Up Procedures

Understanding that issues with wastewater are never pleasant, American Water Contract Services strives to be as professional and prompt as possible. Taking immediate action to mitigate the damage, dry out and clean the damaged area is essential in order to minimize the loss of property. Therefore, American Water Contract Services has established a relationship with a specific cleaning company that had agreed to make the City of Lincoln's sewer related calls a priority.

The owner must agree to pay for the company's services. Upon completion of services, American Water Contract Services will report to the Operation Support Center and the City. At that point, a claim can be filed with the insurance companies.

Public Notification

Before collection system repair work begins, American Water Contract Services will place a door hanger on residences and / or businesses that may be affected. The hanger will indicate type of work to be done, the date and time the work will be performed, the length of time the work will take, and a telephone number to call to answer any questions.

Public Outreach

The City has also held public notification meetings in order to solicit comments from the public on the development of the City's Combined Sewer Overflow (CSO) Operations and Maintenance Plan, the Pollution Prevention Plan, the Public Notification Plan, and the Post-Construction Monitoring Plan.

As part of the Public Notification Plan and in conjunction with the development of the CMOM Plan, the City is dedicating a portion of its web site for sewer and CSO related items.

In an effort to keep the community informed, each City Council Meeting is televised. Any member of the community has the opportunity to attend the meetings or watch them on television.

American Water Contract Services will continue provide tours of the collection system and / or treatment facility to various schools, colleges, or groups.

INFORMATION SYSTEMS

All work orders and cleaning and televising records are kept on file. A full City map is used as a "quick reference" for the areas that have cleaned and / or televised. System repairs will also be indicated.

The operations staff drafts a report for the City Council detailing the work performed each month.

SANITARY SEWER OVERFLOW (SSO) NOTIFICATION

The City of Lincoln has two SSOs that are recognized in the NPDES Permit. The SSOs are located at the Southplant Lift Station and the Palmer Street Lift Station. Neither SSO discharges to a sensitive area. Therefore, no downstream notification is performed.

When one of the SSOs experiences a discharge, the IEPA is notified by telephone within 24 hours. The SSO is also followed up by written documentation the IEPA. The documentation includes who the SSO was reported to, the reason for the SSO, weather conditions, where the SSO discharged to, corrective and preventive actions, and analytical information.

LEGAL AUTHORITY

The City of Lincoln has adopted a sewer use ordinance that provides the City legal authority over the sewer system and treatment works. The City's sewer use ordinance must be followed by any person, owner, resident, business, or governmental unit within the City limits.

The sewer use ordinance is located in Chapter 7 of the Municipal Code. The sewer use ordinance includes parameters covering:

- The required use of public sewers;
- Private sewage disposal;
- Building sewers and connections;
- The use of public sewers;
- Protection of sewage works from damage;
- Powers and authority of inspectors; and
- Penalties.

The Municipal Code can be viewed, in its entirety, at www.sterlingcodifiers.com/IL/Lincoln/index.htm. A copy of the sewer use ordinance has been included as Attachment C.

EMERGENCY PREPAREDNESS AND RESPONSE

The Emergency Response Plan (ERP) for the City of Lincoln's Wastewater Department has been developed to ensure procedures are in place to provide for the safety of the employees and general public, as well as the environment and property.

The ERP provides a description of responsibilities and the facilities, chemical storage information, and emergency procedures, including natural disasters.

SEWAGE SYSTEM OPERATION AND MAINTENANCE

In January of 2013, the City of Lincoln approved the revised CSO Operations and Maintenance Plan and the newly drafted Pollution Prevention Plan, and Public Notification Plan. At this time, each of these plans are to be reviewed by the IEPA and revised accordingly.

LIFT STATIONS

The City's sewerage system contains 10 lift stations of various styles and capacities. Each station is inspected every other day. During the inspections, electric usage is logged and the following is inspected:

- Pump and /or compressor run times;
- Wet well levels; and

- Standby power.

Maintenance on the equipment is performed per the manufacturer's specifications and each wet well is cleaned twice each year.

The operational inspections and performed maintenance is tracked using an operational software.

Each lift station contains an alarm. If the alarm is triggered, it is sent to the wastewater treatment facility, via a closed circuit telephone line, where an automatic dialer will alert the operations staff.

COMBINED SEWER OVERFLOWS

The City of Lincoln's sewerage system contains 2 CSO discharges, one at the Union Street Lift Station and the other at the Wastewater Treatment Facility. The City's NPDES Permit requires discharges from both CSOs to be monitored and reported. Discharge Monitoring Reports are completed monthly for each CSO.

Union Street CSO

Just prior to the Union Street Lift Station is a CSO diversion structure. If the lift station cannot keep up with the flow, the flow will back up in the diversion structure. When the flow backs up higher than 6 feet above the combined sewer's invert, it will flow out the 24-inch CSO directly into Brainerd's Branch.

Rubicon Diversion Dam

The CSO at the Wastewater Treatment Facility is called the Rubicon Diversion Dam. The dam is an adjustable weir that is placed after the intake points for both the treatment facility and the excess flow facility. The Rubicon Diversion Dam will back up the flow within the Rubicon in order to maximize the collection system for storage. If the flow continues to back up within the collection system, it will spill over the top of the dam's weir, creating a CSO. Just feet after flowing over the dam the CSO will meet the discharge from the excess flow facility. They will flow together for approximately one mile before reaching the Salt Creek.

WASTEWATER TREATMENT

Wastewater Treatment Facility

Dry weather flows are first treated by screening and grit removal. The flow is then pumped either to primary clarifiers or the aeration tanks. The mixed liquor then flows into the secondary clarifiers. The clarifier effluent is chlorinated and piped for approximately one mile

before reaching the receiving stream. The facility's sludge is treated with two aerobic digesters and then dewatered by either a belt press or drying beds. The sludge is then land applied.

Excess Flow Treatment

When the treatment facility receives flows that are in excess of the facility's capacity, the flow is pumped into excess flow clarifier, where it will receive primary treatment. It then flows by gravity into the excess flow chlorine contact tank, where it is disinfected. The discharge for the excess flow is just past the Rubicon Diversion Dam, which must flow approximately one mile before reaching the Salt Creek.

MAINTENANCE

Catch Basin Cleaning

The City's Street Department cleans the grating on the catch basins by hand, as necessary, during and after each rain event. The underground portion of the catch basins, which are connected to the combined system, are cleaned every fifth year, unless it is necessary to clean it due to clogging.

Scheduled Cleaning for Trunk and Interceptor Sewers

A program has been developed where the collection system has been divided into four sections. All main lines are cleaned within the specific section each year.

Sewer Inspection Schedule

The Staff periodically opens various manholes in the collection system and visually determines whether internal inspection is needed, based on accumulated debris and/or the presence of foreign materials.

Once per month, work orders are generated for the "hot spots". The "hot spots" are areas where the City has experienced issues in the past. They are cleaned monthly in order to prevent unnecessary back-ups. The Sewers are televised on an as needed basis. A formal televising program is not in place at this time.

CSO PROGRAMS

Combined Sewer Operation and Maintenance Plan

With the past year, the City has adopted the CSO O & M Plan. A summary of the plan consists of:

- A description of the City's wastewater system
- Pollution prevention efforts
- CSO locations and information

- System operation, inspection, and monitoring

Pollution Prevention Plan

Within the past year, the City has adopted the Pollution Prevention Plan (PPP). A summary of the City's pollution prevention efforts consist of the following activities:

- Dedicated street sweeping;
- Passage of an anti-littering ordinance to prevent littering;
- Established solid waste pick-ups;
- Distribution and use of trash receptacles;
- Placement of drop-off type recycling containers as well as curb-side pick-up recycling;
- Established fertilizer, herbicide, pesticide, and de-icing programs; and
- Established hazardous waste collection programs.

Post-Construction Monitoring Plan

Within the past year, the City has developed the Post-Construction Monitoring Plan. The Plan details the monitoring that will take place at the City's two CSO locations.

Combined Sewer Overflow Public Notification Plan

Within the past year, the City has developed the Public Notification Plan. The Plan indicates how the City will notify the public of CSO activities through:

- Signage
- The City's web page
- Electronic notification
- Monthly reporting

ENGINEERING

Mapping

The collection system maps are updated annually, unless otherwise necessary. The field crews document changes on small plan sets. The City Engineer compiles the changes and updates the maps.

Design and Construction

All new designs are overseen by the City Engineer and must meet the July 2009, Sixth Edition of Standard Specifications for Water and Sewer Main Construction in Illinois.

At the completion of a project, as-built drawings are kept at the treatment facility. The maps are numbered and placed into the inventory which is available for use by any of the employees.

BUDGETING

Each year the City Council is presented with the Department Head's list of prioritized projects as well as operating expenses, for the upcoming year. The Council compares the operating

expenses to the previous year's expenses and discusses each project with the Department Heads. The Council validates the operating expenses and then develops their own prioritized list.

The Wastewater Department keeps a very detailed list of maintenance and repair costs for each section of the department. Understanding the importance of preventive maintenance as well as maintenance and repair, the Wastewater Department's budget includes maintenance and repair figures in each area of the budget.

The Wastewater Department's budget is comprised of the following areas:

Capital Expense – Sewer Construction

This line includes any collection system new construction or repair expenses, with the exception of the lift stations.

Capital Expense – Collection System Equipment

Equipment for the collection system only is included in this line.

Capital Expense – Collection System Vehicles

Vehicles dedicated for the collection system only.

Electricity

Power costs for the entire wastewater department.

Contract Operations and Maintenance

This line item is the line that includes the all of the day to day expenses for the contract operating firm. Using this line the firm pays for all employee related, operating, and smaller maintenance and repair expenses, utility expenses and all employee related expenses for the wastewater department.

IEPA Fees

The Illinois Environmental Protection Agency Fees for the NPDES, Sludge, and Storm water Permits.

Capital Improvements

Each department of the City transfers a set amount of money each year into a capital improvement fund.

Storm water Improvements

Each year money is budgeted in order for the Street Department to perform maintenance and repair on the above ground portion of the storm water system.

Capital Expense – Wastewater Equipment

This line includes equipment expenses not directly related to the collection system.

Capital Expense -- Wastewater Vehicles

This line includes vehicle expenses not directly related to the collection system.

Capital Expense -- Buildings and Grounds

This line includes any building and grounds or facility maintenance including lift stations.

Attachments

Attachment A	Organizational Chart
Attachment B	Collection System Work Order
Attachment C	Sewer Use Ordinance

ATTACHMENT A

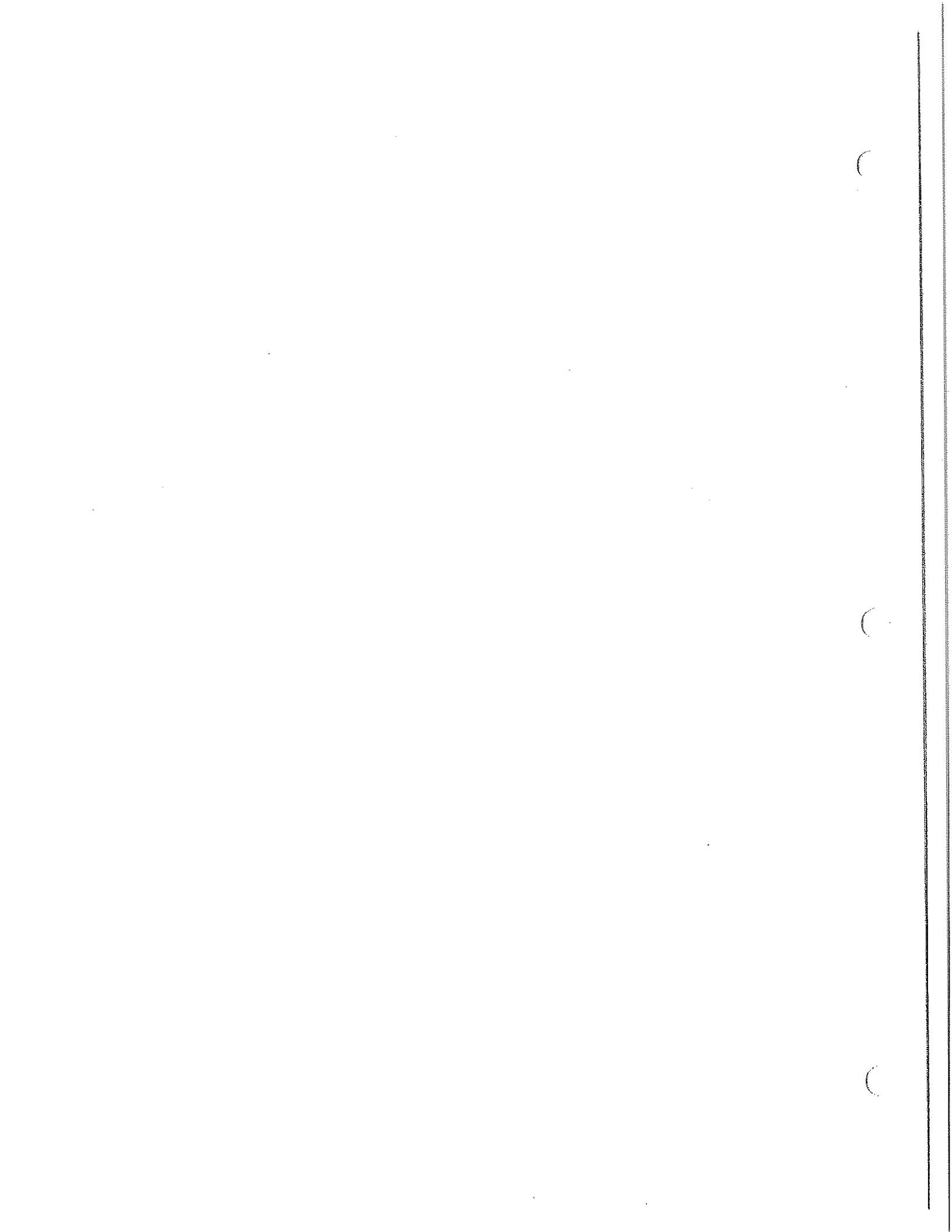
Organizational Chart

ATTACHMENT B

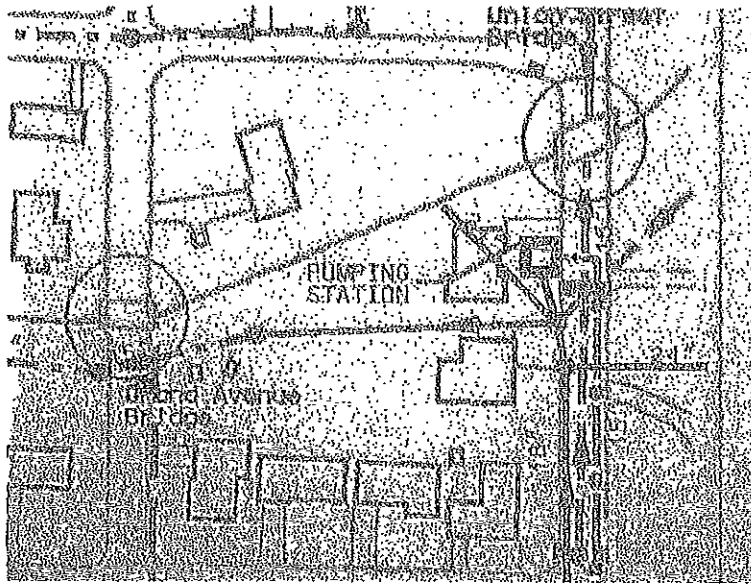
Collection System Work Order

ATTACHMENT C

Sewer Use Ordinance



COMBINED SEWER OVERFLOW OPERATIONS AND MAINTENANCE PLAN



CITY OF LINCOLN
WASTEWATER TREATMENT
LINCOLN, ILLINOIS

Revised in 2008

COMBINED SEWER OVERFLOW OPERATIONAL AND MAINTENANCE PLAN

**City of Lincoln
Wastewater Treatment
Lincoln, Illinois**

INTRODUCTION

On June 5, 1997, the Illinois Environmental Protection Agency (IEPA) accepted the City of Lincoln's (City) Combined Sewer Overflow Operational and Maintenance Plan (CSO O & M Plan) for its publicly owned wastewater system.

Included within the City's most recent NPDES Permit is a special condition requiring the CSO O & M Plan be reviewed and revised as necessary. A public information meeting, concerning the Plan, must be held before May 1, 2008 and revisions must be submitted to the IEPA before August 1, 2008.

This CSO O & M Plan is intended to supersede the original plan accepted in 1997. This plan reflects the requirements necessary to complete the CSO Operational Plan Checklist and Certification.

GENERAL INFORMATION

1. SYSTEM DESCRIPTION

The City of Lincoln's population has grown from 1,679, in 1860 to the current 15,369. The sewer system was developed in the late 1800's. Currently, the City's sewer system is made up of approximately 100 miles of collection system mains, 11 lift stations, 2 CSOs, excess flow treatment, and the wastewater treatment facility.

A. Collection System Mains

The collection system contains storm water, sanitary and combined sewer mains. Approximately 33 miles are storm water mains, 33 miles are sanitary mains, and 33 miles are combined sewer mains.

The sewer mains range in size from 8-inches to 96-inches. The construction of the mains consist of clay, concrete, plastic, brick, and rock. The system contains approximately 34 % of sewer

mains that are smaller than 12-inches in diameter, 45 % that are 12-inch to 24-inch, 9 % are 27-inch to 36-inch, 4 % are 42-inch to 48-inch, 3 % are 54-inch to 60-inch, and approximately 5% of the sewer main is between 60-inch and 96-inches in diameter.

B. Lift Stations

The City's sewerage system contains 11 lift stations of various styles and capacities. Each station is inspected by an Operator every other day. Maintenance on the equipment is performed per the manufacturer's specifications and each wet well is cleaned twice each year.

Pulaski Street Lift Station

The Pulaski Street Lift Station is dry well/wet well station that contains two; 30 horsepower, Fairbanks-Morse centrifugal pumps. Both pumps were replaced in 2005 and have a capacity of 1,000 gallons per minute each.

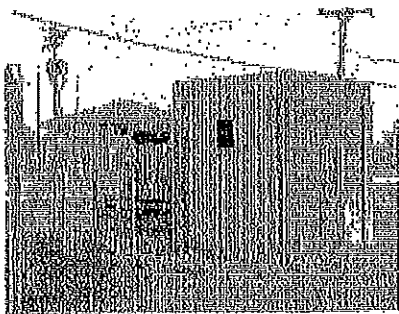
The pumps are controlled by a float switch system. The float system consists of four floats set at different levels within the wet well. The lead/lag pump is alternated automatically after each cycle.

The upper most float is used as a high water alarm. The alarm is sent to the wastewater treatment facility, via a closed circuit telephone line, where an automatic dialer will alert the personnel. Permanent standby power is located on site as well as a bypass pumping vault.

The Pulaski Street Lift Station pumps into two separate force mains. The force mains discharge into the collection system in two different locations. Therefore, if one force main is taken out of service, the station can function through the remaining force main.

Mayfair Lift Station

The Mayfair Lift Station is a wet well/dry well type station that contains two; 15 horsepower, submersible, Fairbanks-Morse pumps. The pumps have the capacity of pumping 380 gallons per minute each.



The pumps are controlled by a float switch system. The float system consists of four floats set at different levels within the wet well. The lead/lag pump is alternated automatically after each cycle.

The upper most float is used as a high water alarm. The alarm is sent to the wastewater treatment facility, via a

closed circuit telephone line, where an automatic dialer will alert the personnel. Permanent standby power is located on site.

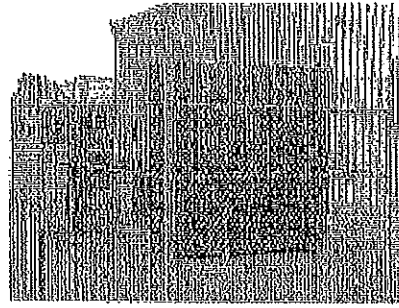
The Lift Station pumps into two separate force mains. The force mains discharge into the collection system in two different locations. Therefore, if one force main is taken out of service, the station can function through the remaining force main.

Lincolnwood Lift Station

Lincolnwood Lift Station was replaced in 2006. The station is a submersible station containing two; 20 horsepower, submersible, Flygt pumps. The pumps have the capacity of pumping 260 gallons per minute each.

The pumps are controlled by a level transducer with a back-up float system. The lead/lag pump is alternated automatically with each cycle.

The high water alarm is sent to the wastewater treatment facility, via a closed circuit telephone line, where an automatic dialer will alert the personnel. Permanent standby power is located on site as well as a bypass pumping vault.



Union Street Lift Station

The Union Street Lift Station is a submersible station containing two; 25 horsepower, Fairbanks-Morse, submersible pumps. Both pumps were replaced in 2005 and are capable of 825 gallons per minute each.

The pumps are controlled by a float switch system. The float system consists of three floats set at different levels within the wet well. The lead/lag pump is alternated manually during Operator Inspections.

The upper most float, controlling the lag pump, is also used as the high water alarm. The alarm is sent to the wastewater treatment facility, via a closed circuit telephone line, where an automatic dialer will alert the personnel. The station is also equipped with the ability to accept power from a portable generator.

The Union Street Station is the site of one of Lincoln's two CSOs. Information concerning the CSO is contained later in the O & M Plan.

Palmer Street Lift Station

The Palmer Street Lift Station is a dry well/wet style lift station that contains two; Gorman-Rupp, two speed, self-priming pumps. Each pump is rated at 2,100 gallons per minute on high speed and 1,250 gallons per minute on low speed.

A bubbler system transfers the level of the wet well into the PLC. The level of the wet well then dictates the speed of each pump. If the lead pump cannot keep up with the incoming flow it will automatically switch to high speed and the lag pump comes on at low speed until the wet well level returns to normal. The lead/lag pump is alternated automatically after each cycle.

The Palmer Street Lift Station pumps into two separate force mains. The force mains discharge into the collection system in two different locations. Therefore, if one force main is taken out of service, the station can function through the remaining force main.

The high level alarm is sent to the wastewater treatment facility, via a closed circuit telephone line, where an automatic dialer will alert the personnel. The station is also equipped with emergency power on site.

This site also contains a permitted emergency bypass. If the lift station cannot keep up with the incoming flow and the wet well and collection system reach damaging levels, a 6-inch submersible pump can be started manually. The emergency pump will pump from the station's wet well directly into Brainard's Branch.

Singleton Lift Station

The Singleton Lift Station is a Smith and Loveless Du-o-ject pneumatic ejector station. The station is capable of discharging 150 gallons per minute by using compressed air from two 5 horsepower compressors.

The high water alarm is sent to the wastewater treatment facility, via a closed circuit telephone line, where an automatic dialer will alert the personnel. The station is also equipped with ability to accept power from a portable generator.

Jefferson Street Lift Station

The Jefferson Street Lift Station is a Smith and Loveless Du-o-ject pneumatic ejector station. The station is capable of discharging 150 gallons per minute by using compressed air from two 7.5 horsepower compressors.

The high water alarm is sent to the wastewater treatment facility, via a closed circuit telephone line, where an automatic dialer will alert the personnel. The station is also equipped with the ability to accept power from a portable generator.

Kmart Lift Station

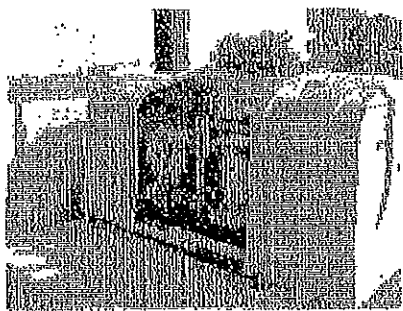
The Kmart Lift Station was replaced in 2004. The new station is a Smith & Loveless, Formula X, wet well mounted station. The station's pumps are two; 15 horsepower, centrifugal pumps, capable 250 gallons per minute each.

The pumps are controlled by a level transducer with a back-up float system. The lead/lag pump is alternated automatically with each cycle.

The high water alarm is sent to the wastewater treatment facility, via a closed circuit telephone line, where an automatic dialer will alert the personnel. The station is also equipped with the ability to accept power from a portable generator as well as bypass pumping capability.

Zion Lift Station

The Zion Lift Station was replaced in 2006. The new station is also a Smith & Loveless, Formula X, wet well mounted station. The station's pumps are two; 7.5 horsepower, centrifugal pumps, capable 150 gallons per minute each.



The pumps are controlled by a level transducer with a back-up float system. The lead/lag pump is alternated automatically with each cycle.

The high water alarm is sent to the wastewater treatment facility, via a closed circuit telephone line, where an automatic dialer will alert the personnel. The station is also equipped with the ability to accept power from a portable generator as well as a bypass pumping vault.

Burwell Lift Station

The Burwell Lift Station is a submersible station containing two; 20 horsepower, Flygt, submersible pumps. Both pumps are capable of 600 gallons per minute each.

The wet well level is transferred to the pump controls by a bubbler system. The lead/lag pump is alternated automatically after each pump cycle.

The station's alarm is sent to the wastewater treatment facility, via a closed circuit telephone line, where an automatic dialer will alert the personnel. The station is also equipped with a standby generator.

Southplant Lift Station

The Southplant Lift Station is a dry well/wet well style of station that consists of two; 20 horsepower, submersible pumps that are capable of 800 gallons per minute each.

The pumps are controlled by a float switch system. The float system consists of four floats set at different levels within the wet well. The lead/lag pump is alternated automatically after each cycle.

The highest float is the alarm float. The high water alarm is sent to the wastewater treatment facility, via a closed circuit telephone line, where an automatic dialer will alert the personnel. The station is also equipped with the ability to accept power from a portable generator.

This site also contains a permitted emergency bypass. If the lift station cannot keep up with the incoming flow and the system backs up above the high water level, the flow will spill over a weir in a manhole, outside of the wet well, and flow directly into the Salt Creek.

C. Combined Sewer Overflows

The City of Lincoln's sewerage system contains 2 CSO discharges, one at the Union Street Lift Station and the other at the Wastewater Treatment Facility (Attachment A). The City's NPDES Permit requires discharges from both CSOs to be monitored and reported. Discharge Monitoring Reports are completed monthly for each CSO.

Union Street CSO

Just prior to the Union Street Lift Station is a CSO diversion structure (Attachment B). If the lift station cannot keep up with the flow, the flow will back up in the diversion structure. When the flow backs up higher than 6 feet above the combined sewer's invert, it will flow out the 24-inch CSO directly into Brainerd's Branch. The high water alarm float at the lift station has been set at the same elevation as the invert of the CSO pipe in the diversion structure.

The theoretical sewer capacity directly up stream of the Union Street diversion structure is 6.1 MGD. The normal dry weather flow from this area is calculated to be .470 MGD. The estimated population that is tributary to this CSO is 673 (Attachment C). The land use within this area is residential and general retail. The area's projected growth is limited.

There are no categorical users tributary to the Union Street CSO.

Rubicon Diversion Dam

The CSO at the Wastewater Treatment Facility is called the Rubicon Diversion Dam. The dam is an adjustable weir that is placed after the intake points for both the treatment facility and the excess flow facility. The Rubicon Diversion Dam will back up the flow within the Rubicon in order to maximize the collection system for storage. If the flow continues to back up within the collection system, it will spill over the top of the dam's weir, creating a CSO. Just feet after flowing over the dam the CSO will meet the discharge from the excess flow facility. They will flow together for approximately one mile before reaching the Salt Creek.

The theoretical sewer capacity ahead of the Rubicon Diversion Dam and the wastewater treatment facility is 330 MGD. Due to the fact that that this theoretical amount must flow into and by the treatment facility, the amount should be reduced by the 10.2 MGD that will be treated by the treatment facility and the 33.5 MGD that will be sent to excess flow for treatment. Therefore, the theoretical sewer capacity directly ahead of the Rubicon Diversion Dam is 286.3 MGD.

The population that is tributary to this CSO is 15,369. The average daily flow into the treatment facility was 3.6 MGD from May 2006 through April 2007. The projected population for this area is 16,900 by 2022. The land use within this area is residential, general retail, service retail, and light and heavy industrial.

The categorical users within this area are Abraham Lincoln Memorial Hospital, Weyerhaeuser, Precision Products, Lincoln and Logan Correctional Centers, Eaton Corporation, and Saint Gobain Containers.

D. Excess Flow Treatment

When the treatment facility receives flows that are in excess of the facility's capacity, the flow is pumped into excess flow clarifier, where it will receive primary treatment. It then flows by gravity into the excess flow chlorine contact tank, where it will be disinfected. The discharge for the excess flow is just past the Rubicon Diversion Dam, which must flow approximately one mile before reaching the Salt Creek.

E. Wastewater Treatment Facility

Dry weather flows are first treated by screening and grit removal. The flow is then pumped either to primary clarifiers or the aeration tanks. The mixed liquor then flows into the secondary clarifiers. The clarifier effluent is chlorinated and piped for approximately one mile

before reaching the receiving stream. The facility's sludge is treated with two aerobic digesters and then dewatered by either a belt press or drying beds. The sludge is then land applied.

2. RELATIONSHIP TO OTHER CSO COLLECTION ENTITIES

The City of Lincoln has only two CSOs with its system and no other municipalities, collection systems, or satellite systems are tributary to the City's system.

3. OUTSTANDING ORDERS FROM THE ILLINOIS POLLUTION CONTROL BOARD

The Illinois Pollution Control Board has not issued any orders related to the City's two CSOs.

4. OUTFALLS TO SENSITIVE AREAS

Both the Union Street CSO and the Rubicon Diversion Dam discharge to natural water ways. The stream segments do not contain sensitive areas such as bathing beaches, recreations areas, or habitats for sensitive or endangered species.

5. EFFORTS TAKEN TOWARD MINIMIZING THE DISCHARGE OF POLLUTANTS FROM THE CSO.

The City's pollution prevention efforts consist of dedicated street sweeping and leaf removal, anti-littering ordinances, established solid waste pick-ups, distribution of public trash receptacles, drop-off type recycling containers as well as curb side pick-up, established programs for hazardous waste collection, fertilizers, herbicides, and pesticides.



In an effort to minimize pollutants and CSO discharges, the City performed a sewer separation project in 1999. The project included the addition of approximately 4.5 miles of storm sewer. The new storm sewer allowed the City to make approximately 1.7 miles of combined sewer into strictly sanitary sewer. The entire project allowed a tributary area of approximately 160 acres to become separated.

The City's leaf removal program begins the first week in October and continues through mid December, weather permitting. The City picks up leaves from curb side as well as physically removing them from the streets with sweepers and loaders.

6. EFFORT TAKEN TOWARD MAXIMIZING STORAGE OF POLLUTANTS IN THE COLLECTION SYSTEM.

The City's efforts toward maximizing storage of pollutants in the collection system has been to set the only stop plank and the Rubicon Diversion Dam at as high a level as possible before basement backups occur.

The only stop plank that is in the system is placed just upstream of the wastewater treatment facility. When the flow backs up to a point of surcharging the stop plank, it spills over and flows down a concrete channel into the wastewater treatment facility. This concrete channel directs the flow into the facility's dry weather intake, the excess flow intake, or to the Rubicon Diversion Dam.

The Rubicon Diversion Dam forces the flow to back up within the concrete channel. When the channel is at capacity, the flow will spill over the Dam creating a CSO.

7. POLLUTION PREVENTION ASPECTS OF THIS OPERATIONAL PLAN

Included by reference to this O & M Plan is the Pollution Prevention Plan (PPP). The PPP's is being developed in conjunction with this O & M Plan and the content can be summarized to include the following pollution prevention measures:

- Dedicated street sweeping.
- Passage of an anti-littering ordinance to prevent littering.
- Established solid waste pick ups.
- Distribution and use of trash receptacles.
- Placement of drop-off type recycling containers as well as curb-side pick up recycling.
- Established fertilizer, herbicide, pesticide, and de-icing programs.
- Established hazardous waste collection programs.

8. EFFORTS MADE TO MONITOR CSO IMPACTS AND EFFICIENCY OF CSO CONTROLS

The Rubicon Diversion Dam is inspected daily and the Union Street CSO is inspected every other day. When a CSO event occurs, the event is logged and sampling is performed according to the City's NPDES permit.

9. PUBLIC NOTIFICATION PROGRAM

The City's most recently issued NPDES Permit contains a special condition for the development of a Public Notification Program. The program must be implemented by May 1, 2008.

10. LOCATION OF THE CSOs

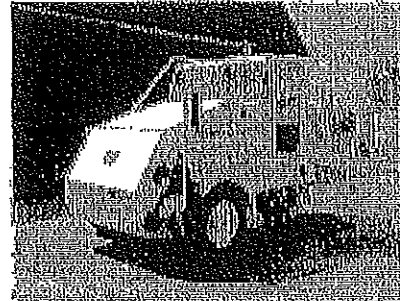
The Union Street CSO is located at the Union Street Lift Station. The latitude of the CSO is 40° 9' 38.2" North and the longitude is 89° 22' 5.2" West.

The Rubicon Diversion Dam is located at the Wastewater Treatment Facility. The latitude of the CSO is 40° 8' 11.7" North and 89° 22' 26.8" West.

MAINTENANCE

1. SCHEDULE FOR STREET CLEANING IN COMBINED SEWER AREAS

The City sweeps the downtown combined sewer area one night each week, as weather permits. The City also dedicates three days to street sweeping other combined sewer areas, as weather permits.



2. CATCH BASIN CLEANING

The City's Street Department cleans the grating on the catch basins by hand, as necessary, during and after each rain event. The underground portion of the catch basins, which are connected to the combined system, are cleaned every fifth year, unless it is necessary to clean it due to clogging.

3. SCHEDULE FOR CLEANING TRUNK AND INTERCEPTOR SEWERS

A program has been developed where the collection system has been divided into four sections. All main lines are cleaned within the specific section each year (Attachment D).

4. STOP PLANK SETTING INFORMATION

The control of the level of the combined sewer is accomplished by the elevation of the stop plank in the Rubicon. Over time, the City staff has found that the stop plank is set as high as possible without causing a number of basement back-ups.

The Rubicon Diversion Dam has been set at a level that allows the dry weather and the excess flow portion of the facility to accept design flows. Any amount past design flows will spill over the Dam creating a CSO.

It is unknown as to the last time the stop plank or Rubicon Diversion Dam was adjusted.

5. DESCRIPTION OF PROCEDURES FOR CLEANING SCREENING EQUIPMENT, VALVE REGULATION, AND REDUCTION OF SOLIDS DEPOSITION IN THE COMBINED SEWERS

The Palmer Street Lift Station and the Wastewater Treatment Facility are fitted with automatic bar screens. The screen at the Palmer Street Lift Station operates by a timer only. The screen at

the treatment facility will operate from a timer or when the head difference between the front and back of the screen reaches a specific level. During a rain event the screen will operate continuously.

There are no bypass valves at either CSO point. Therefore, no CSO valve regulation is executed.

Reduction of solids deposition in the combined sewers is explained within the Pollution Prevention Plan and the cleaning of sewers and catch basins every four years.

INSPECTIONS AND MONITORING

1. SCHEDULE FOR INSPECTING THE CSO DIVERSION STRUCTURE

The Union Street Lift Station is inspected every other day, and the Rubicon Diversion Dam is inspected daily.

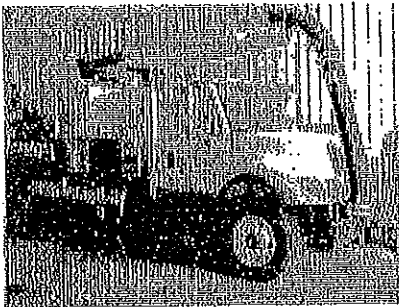
2. PUMP STATION INSPECTIONS AND PREVENTIVE MAINTENANCE

The City has 11 lift stations as well as the lift stations within the treatment facility. Each lift station is inspected every other day and the stations at the treatment facility are inspected daily. Each station is equipped with high water alarms and the treatment facility is equipped with multiple alarms. In each case an automatic dialer will contact the facility personnel.

All equipment is maintained in accordance with the manufacturer's recommendations. The wet wells and control systems are cleaned twice each year.

3. SEWER INSPECTION SCHEDULE

The Staff periodically opens various manholes in the collection system and visually determines



whether internal inspection is needed, based on accumulated debris and/or the presence of foreign materials.

Once per month, the "hot spots" are cleaned in order to prevent unnecessary back-ups.

Also a program has been developed, where main line sewers are cleaned every four years. Sewers are televised on an as needed basis. A formal televising program is not in place at this time.

4. SCHEDULE FOR INSPECTING SURFACE WATER ANTI-INTRUSION DEVICES

There are no surface water anti-intrusion devices or flap gates on any of the CSOs.

5. PROCEDURES FOR FINDING AND ELIMINATING ILLEGAL SEWER CONNECTIONS

The City's strategy for finding and eliminating illegal connections is to perform visual inspections while the crew is cleaning or televising sewers. In addition, the City's Building Official performs a final inspection on new construction.

6. PROCEDURES FOR FINDING AND ELIMINATING DRY-WEATHER OVERFLOWS

The Staff is unaware of any dry weather overflows ever occurring. The high water alarm float is set at the Union Street Lift Station so that if an overflow occurs, the personnel are notified and the Rubicon Diversion Dam is inspected daily.

ATTACHMENTS

Attachment A -- Union Street CSO and the Wastewater Treatment Facility CSO Locations

Attachment B -- Union Street Diversion Structure

Attachment C -- Tributary Area of Union Street CSO

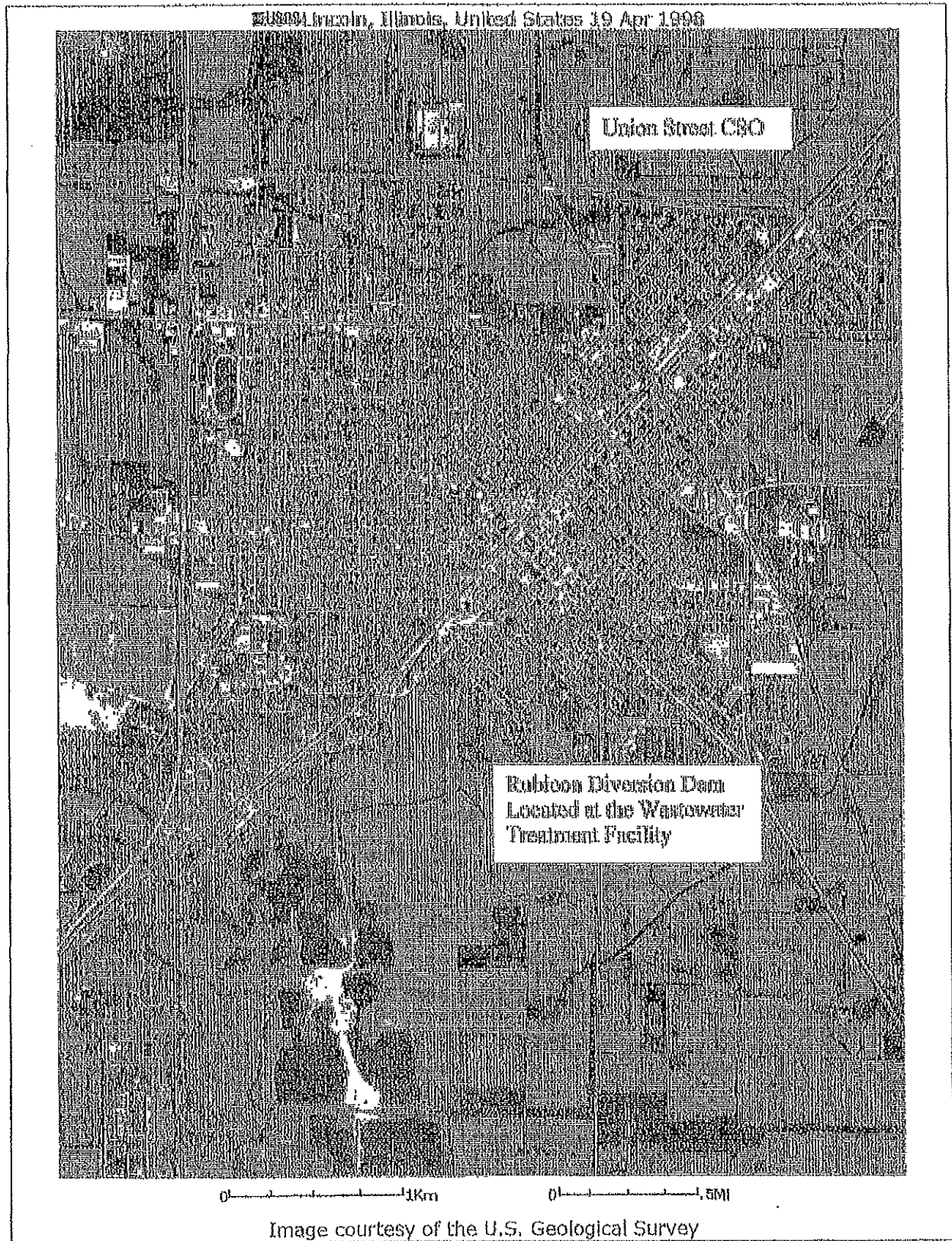
Attachment D -- Sewer System Divisions

Attachment E -- City Zoning Map

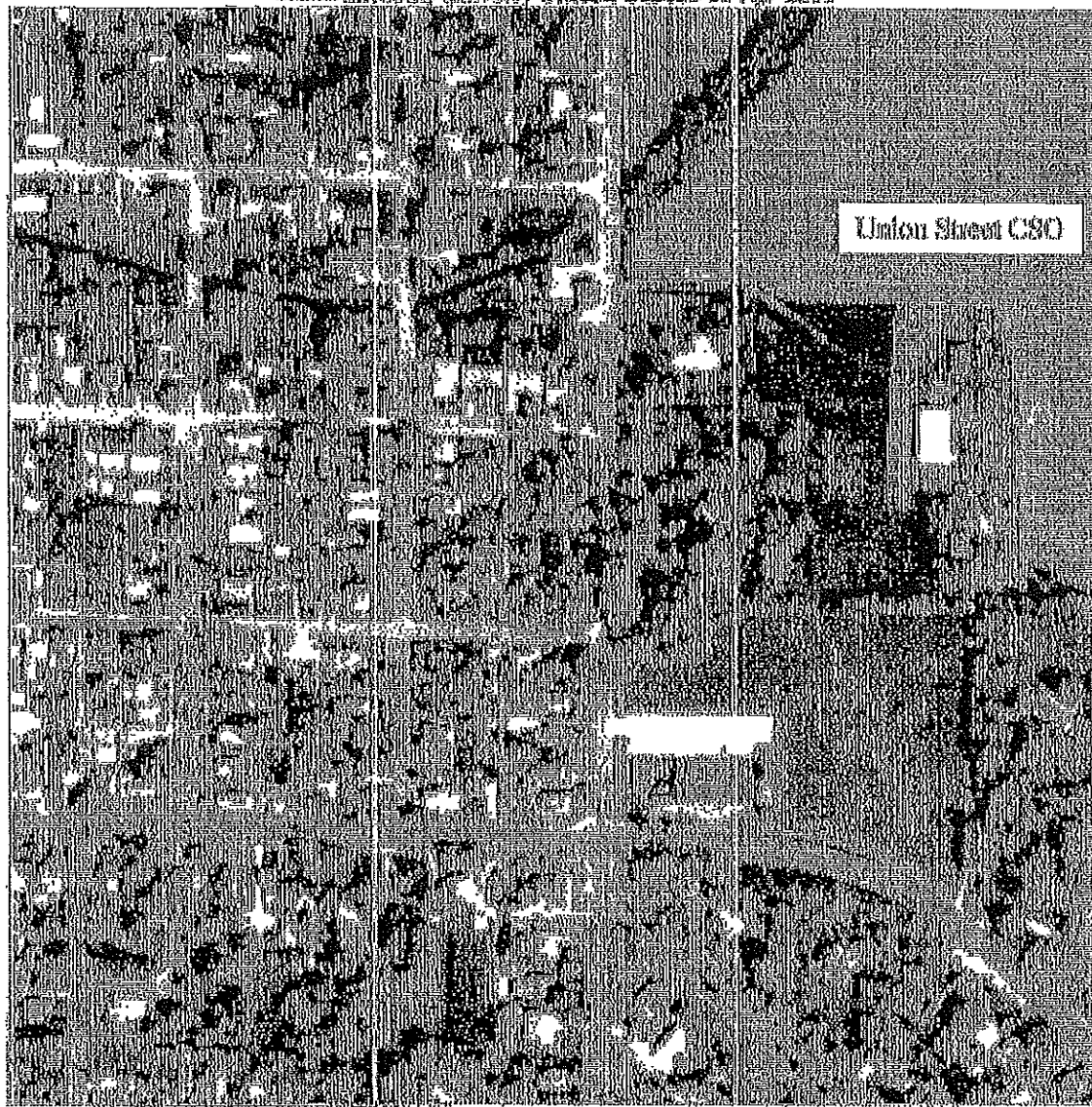
Attachment F -- Sewer System Map

ATTACHMENT A

CSO Locations



XUS001 Lincoln, Illinois, United States 19 Apr 1998

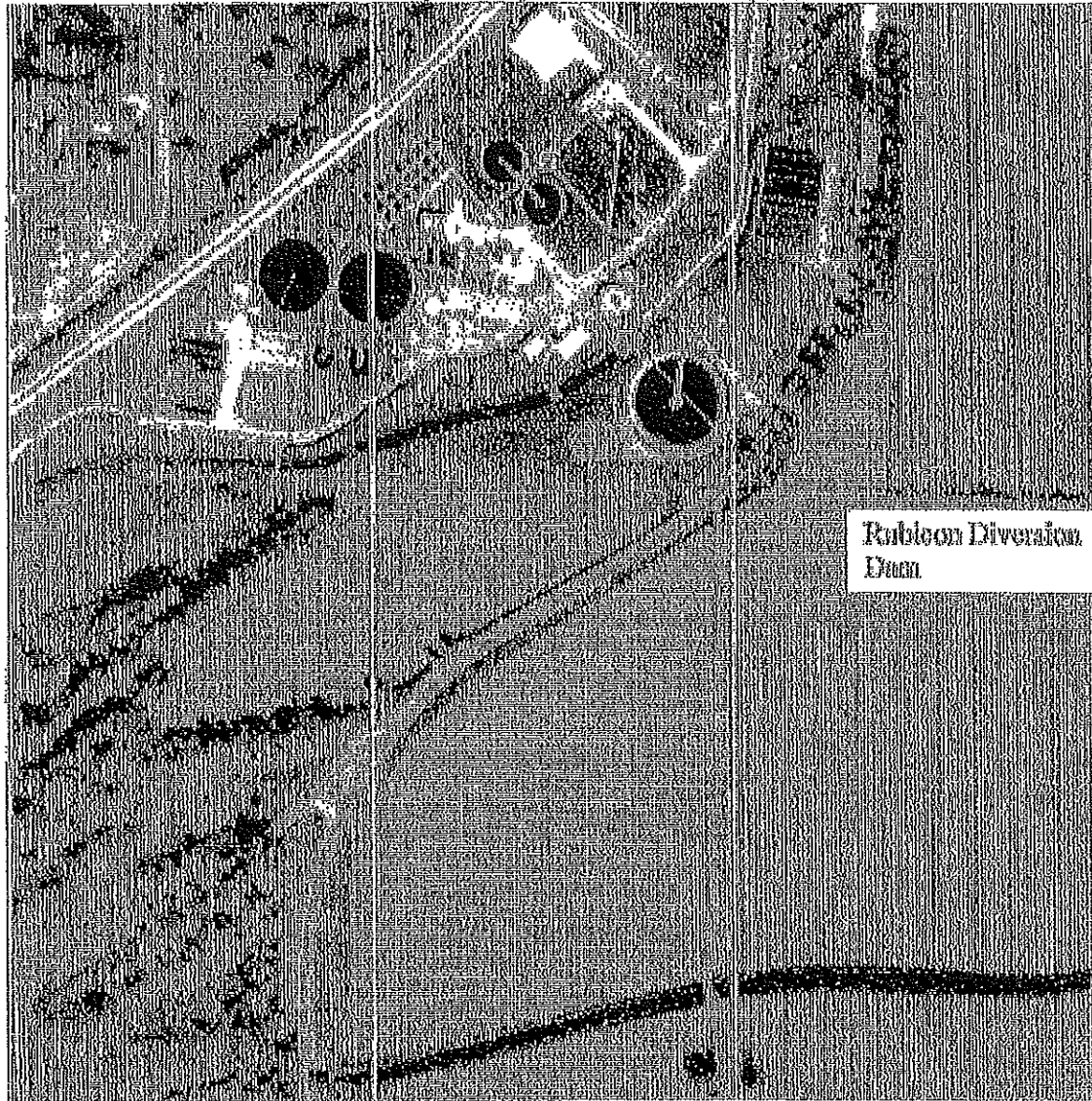


0 100M

0 100yd

Image courtesy of the U.S. Geological Survey

341533 Lincoln, Illinois, United States 19 Apr 1998



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Image courtesy of the U.S. Geological Survey

ATTACHMENT B

Union Street Diversion Structure

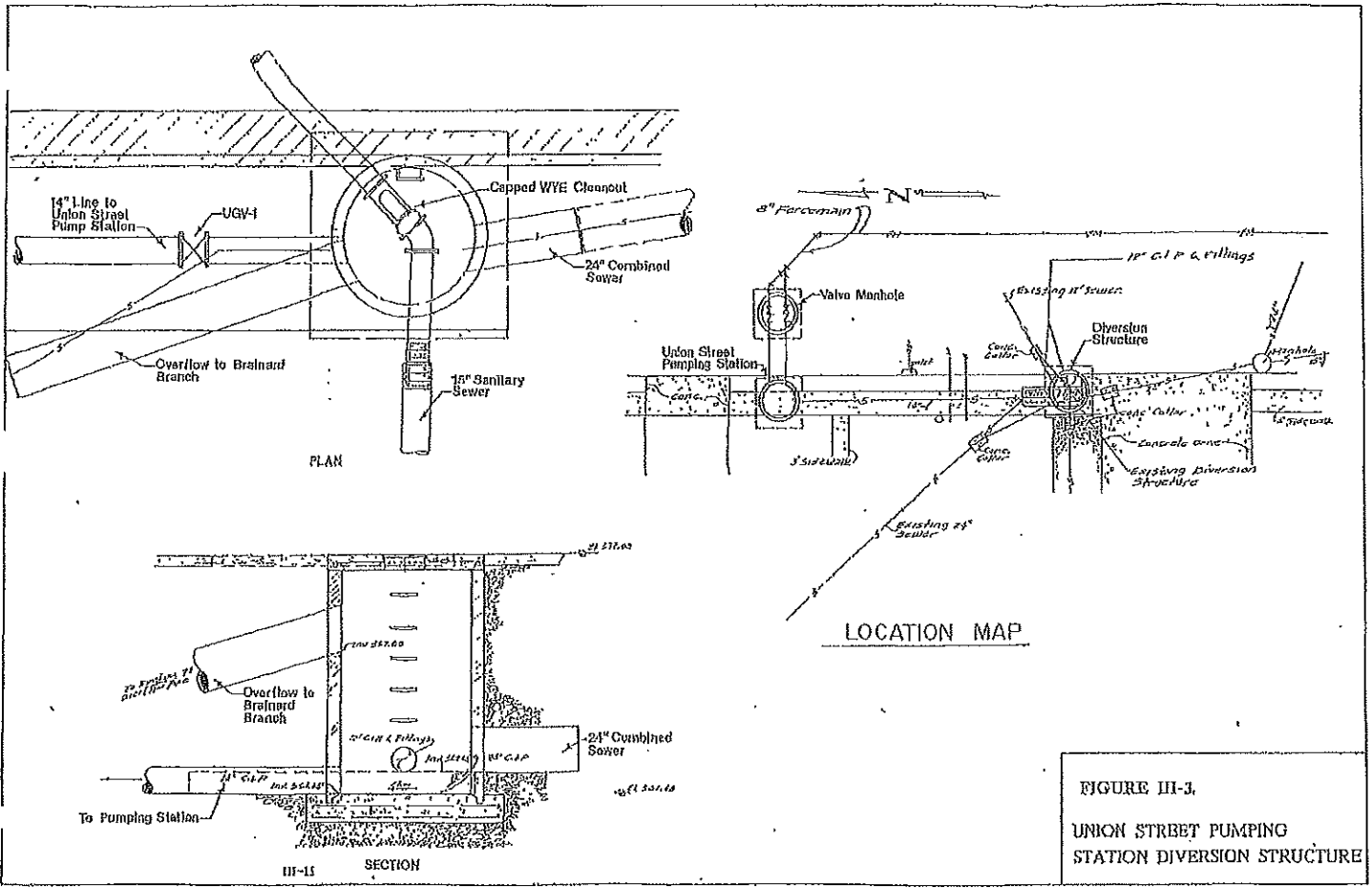


FIGURE III-3.
UNION STREET PUMPING
STATION DIVERSION STRUCTURE

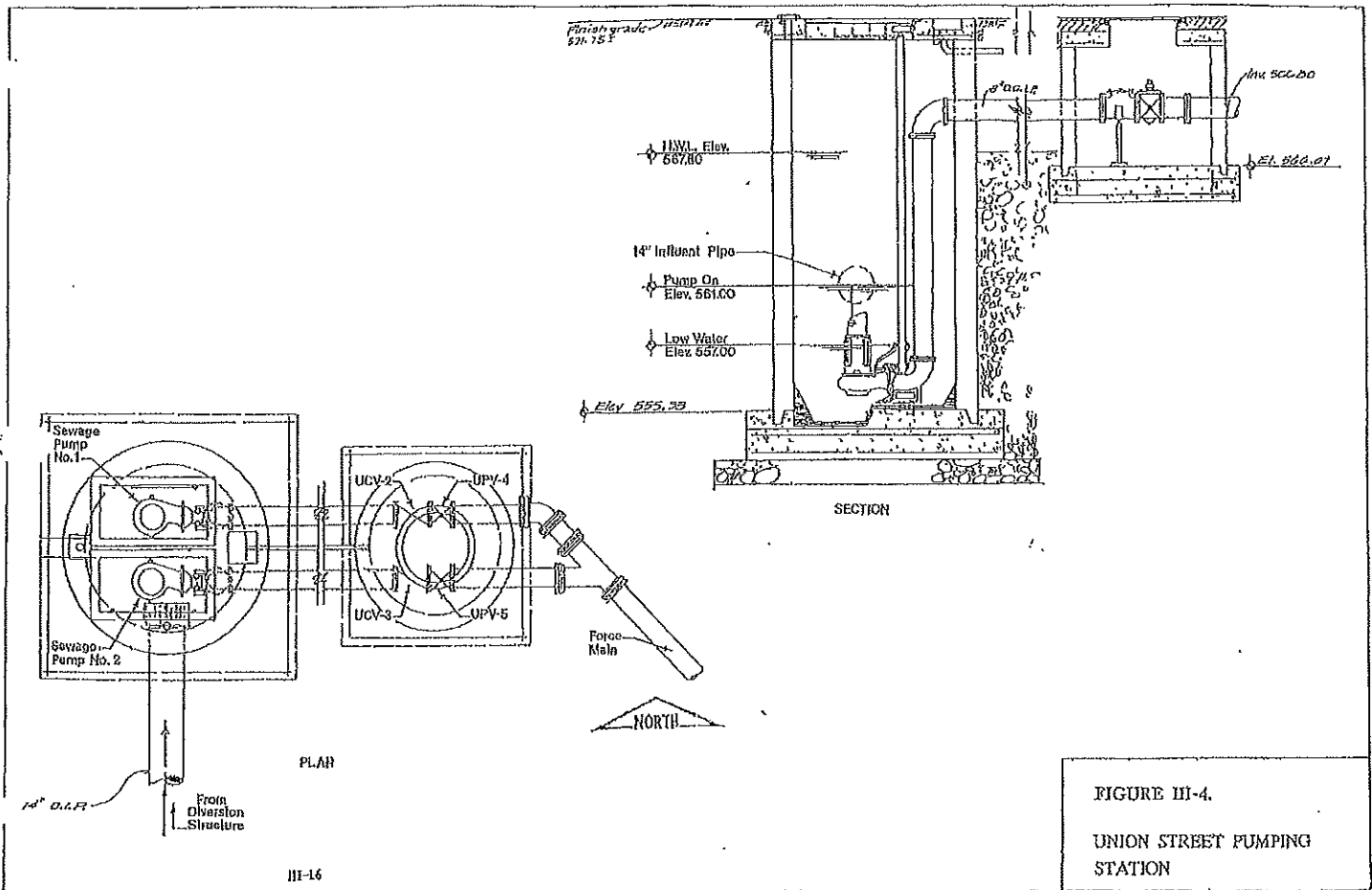
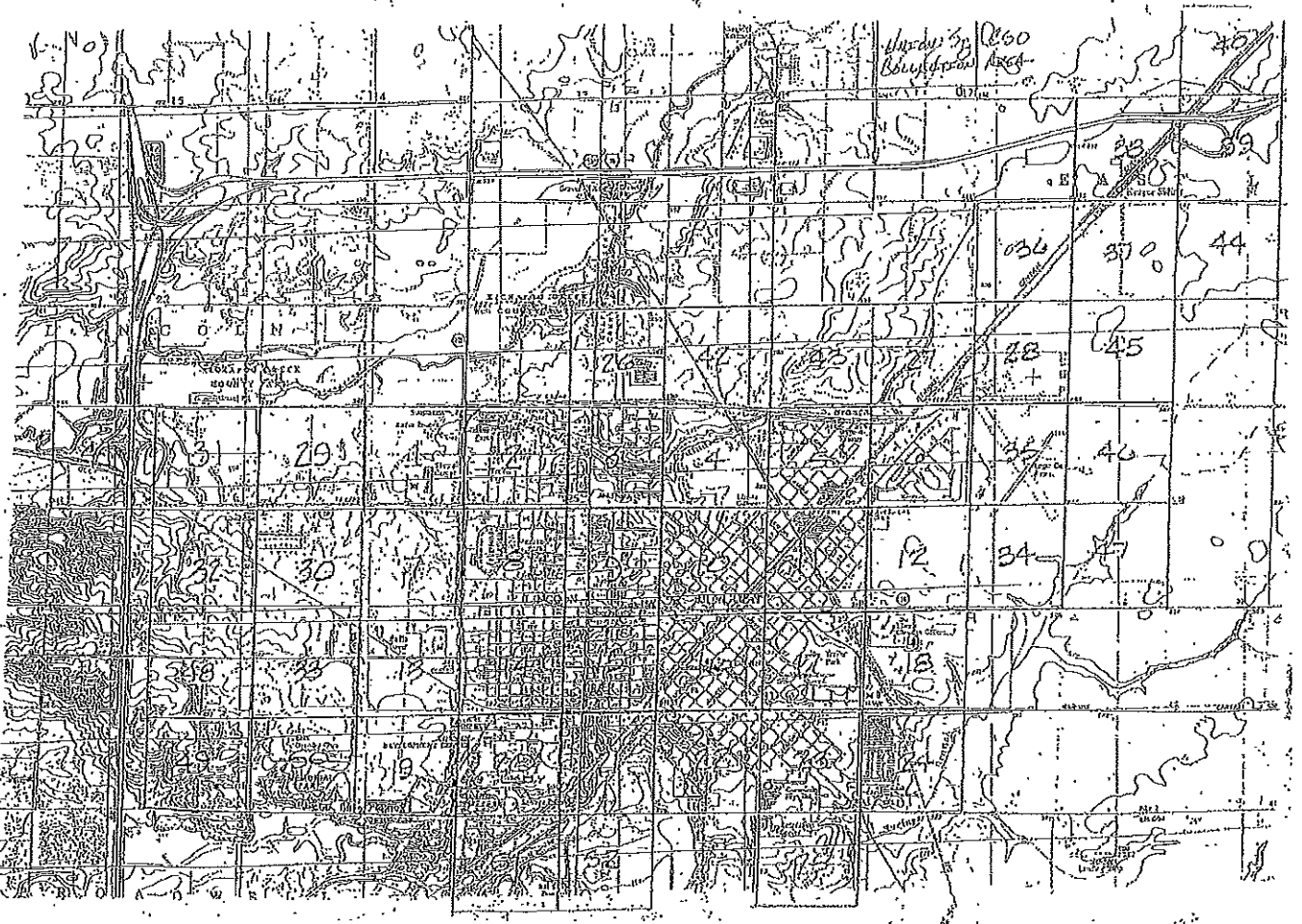


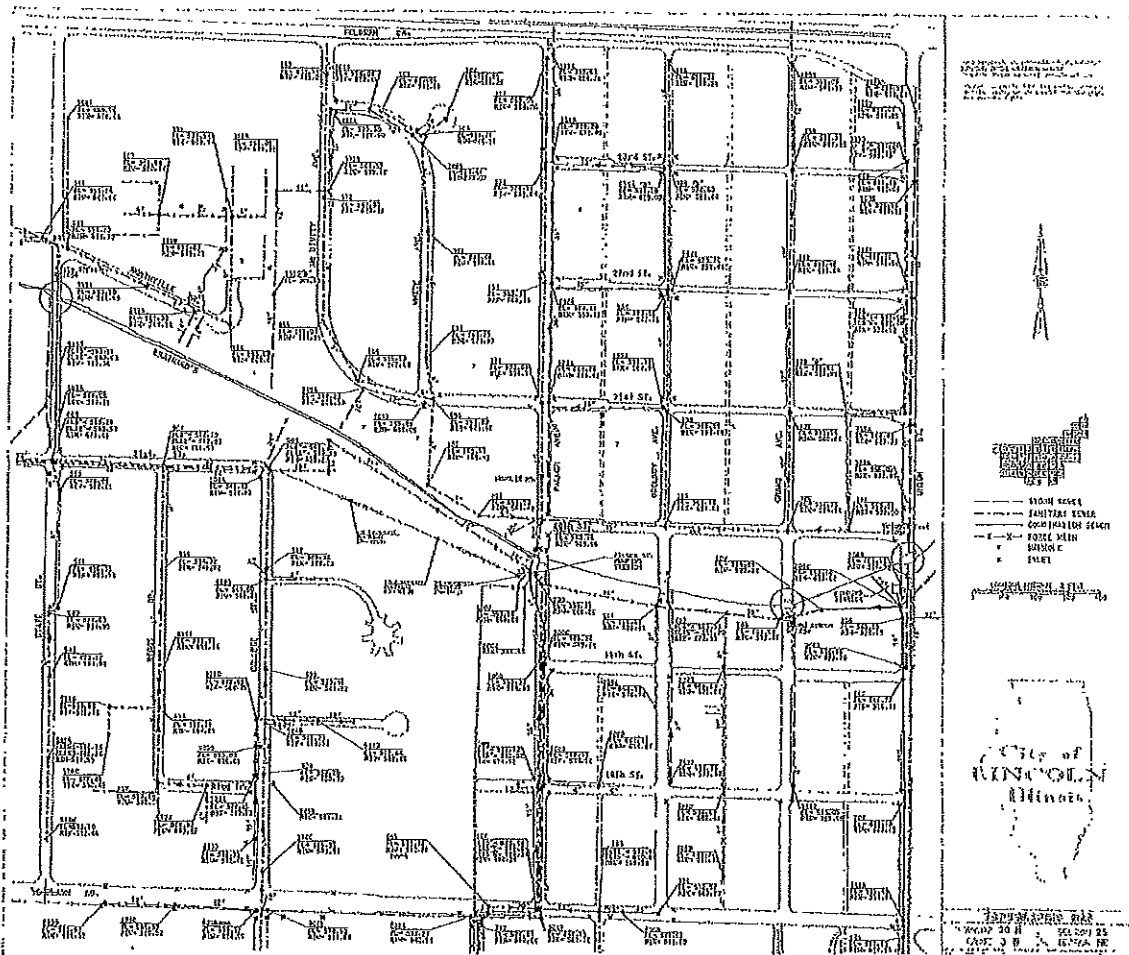
FIGURE III-4.
UNION STREET PUMPING
STATION

ATTACHMENT C

Tributary Area of Union Street CSO



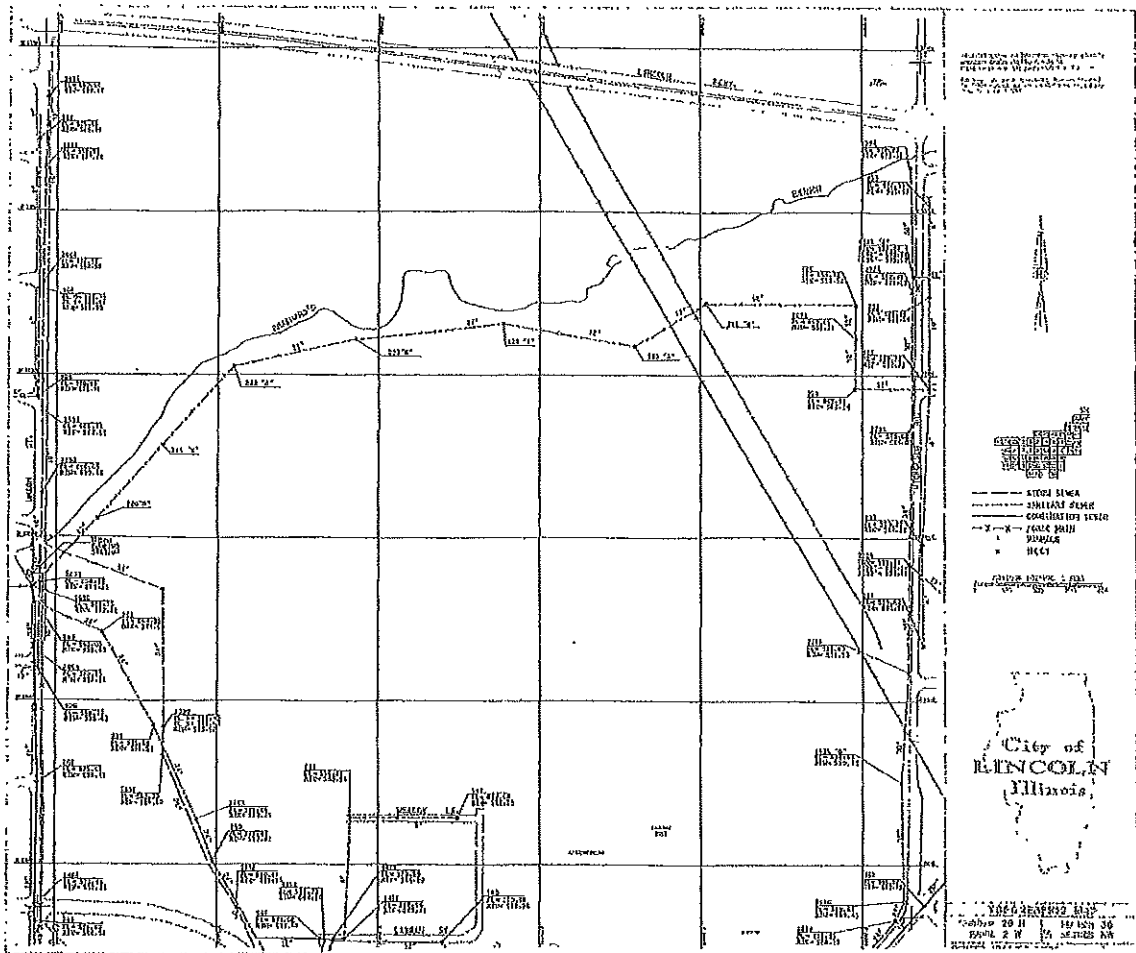
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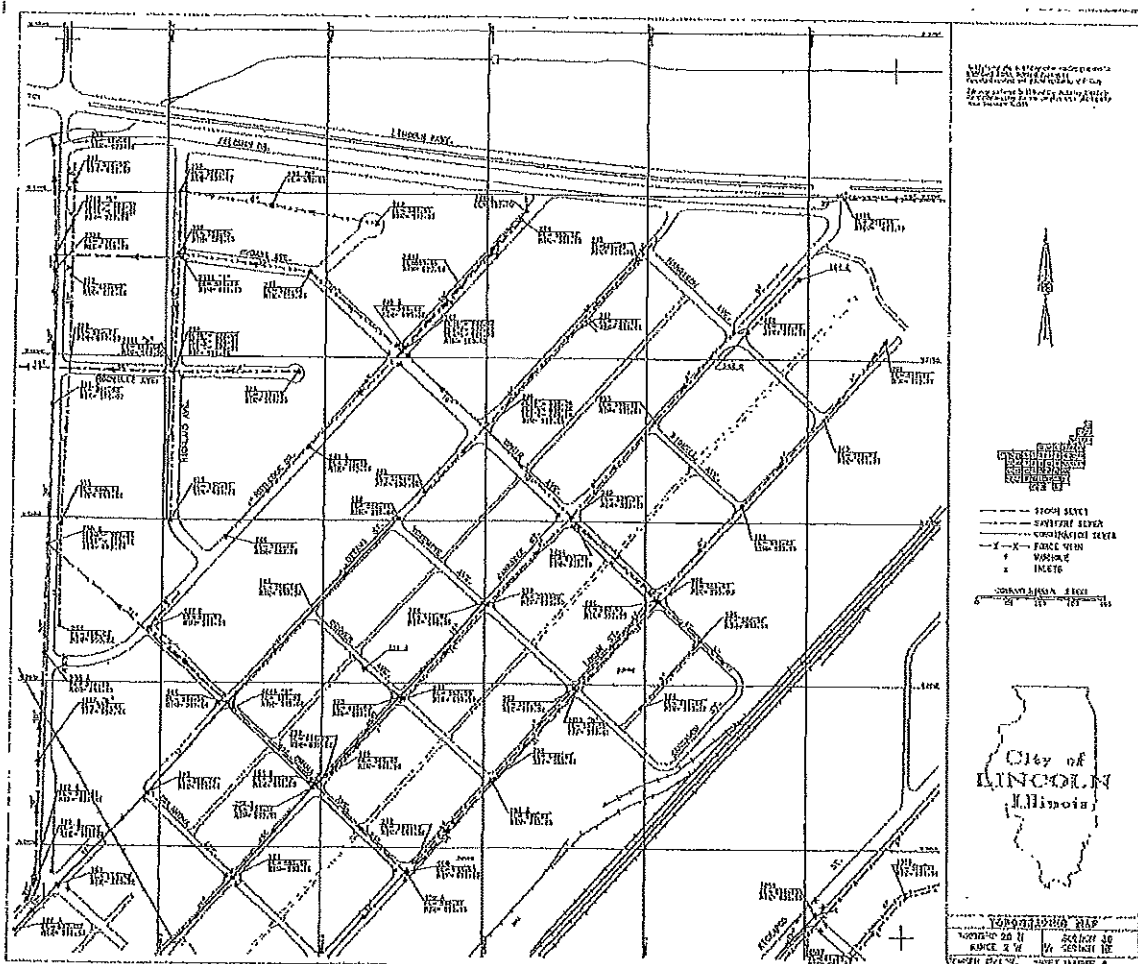
COMBINATION, SANITARY, STORM, FORCE

CITY of WINCO, Illinois

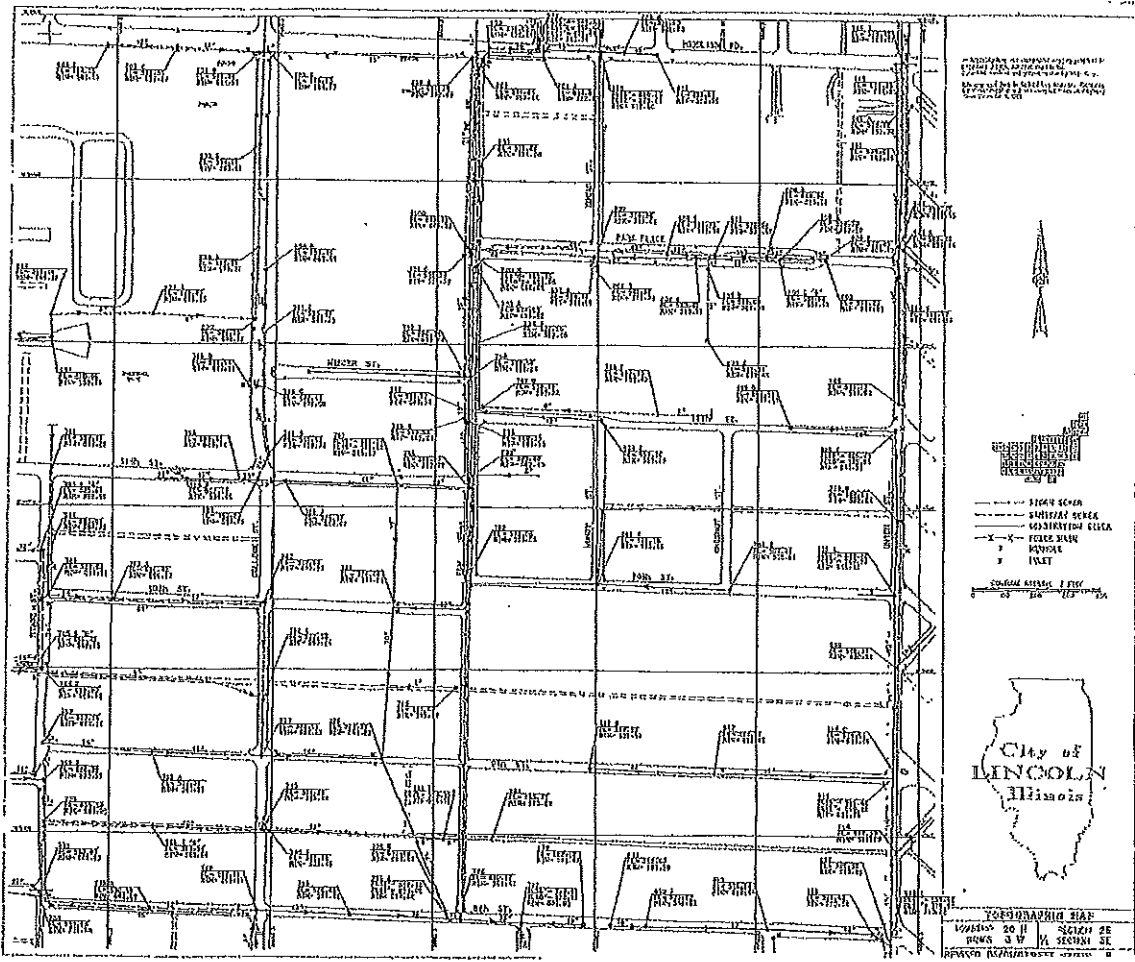
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COMBINATION. SANITARY, STORM, FORCE



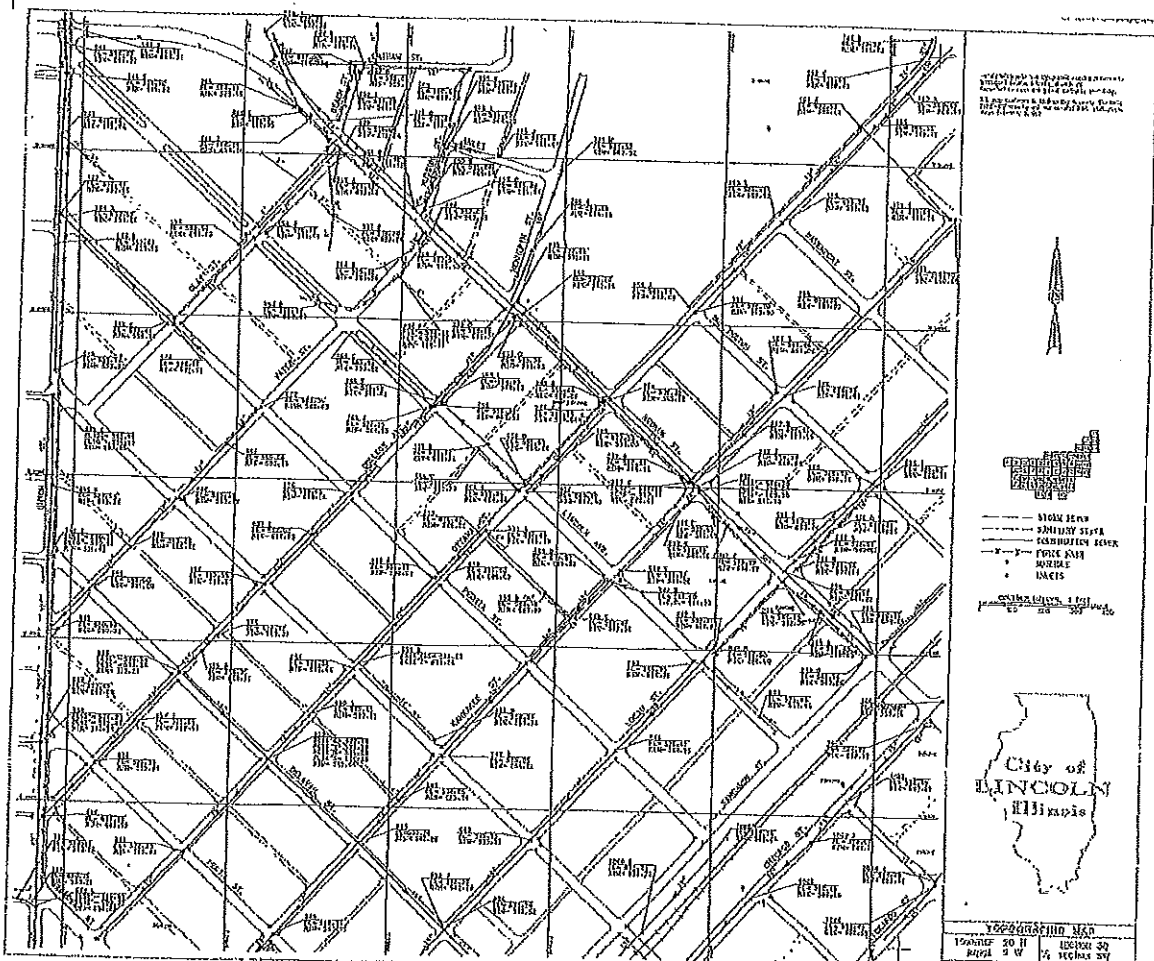
COMBINATION, SANITARY, STORM, FORCE



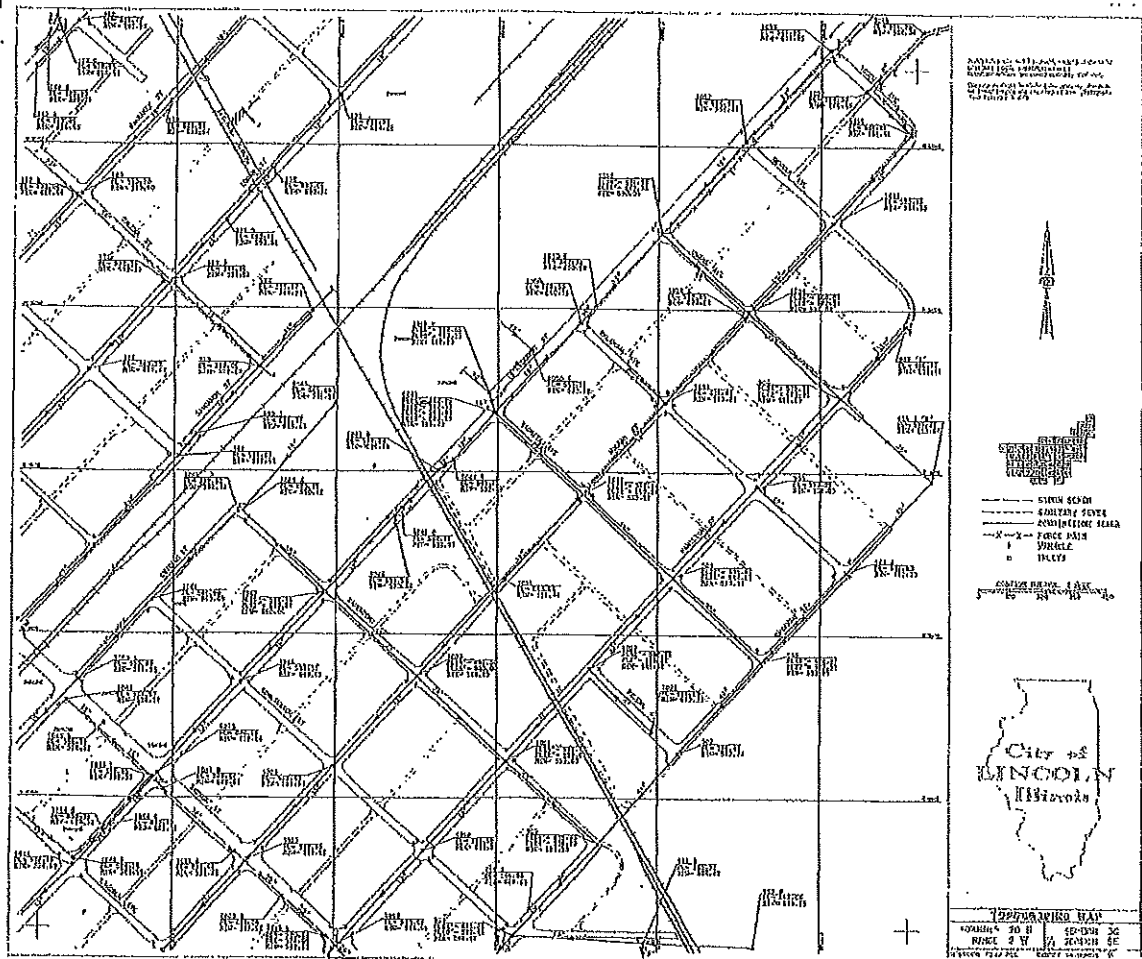
COMBINATION. SANITARY. STORM. FORCE



TERRITORIAL MAP
 SECTION 25
 TOWNSHIP 20 N
 RANGE 3 W



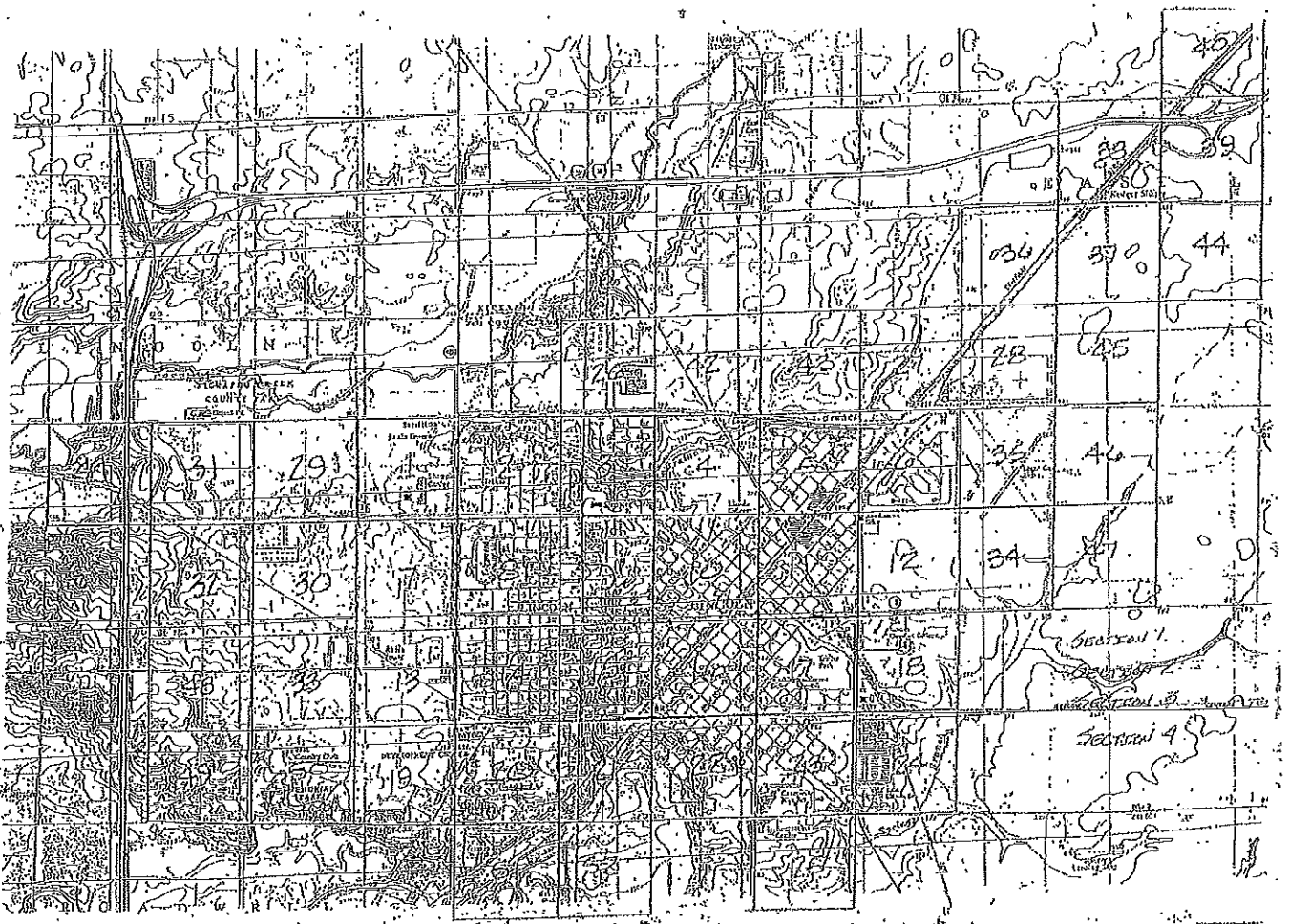
COMBINATION, SANITARY, STORM, FORCE



COMBINATION, SANITARY, STORM, FORCE

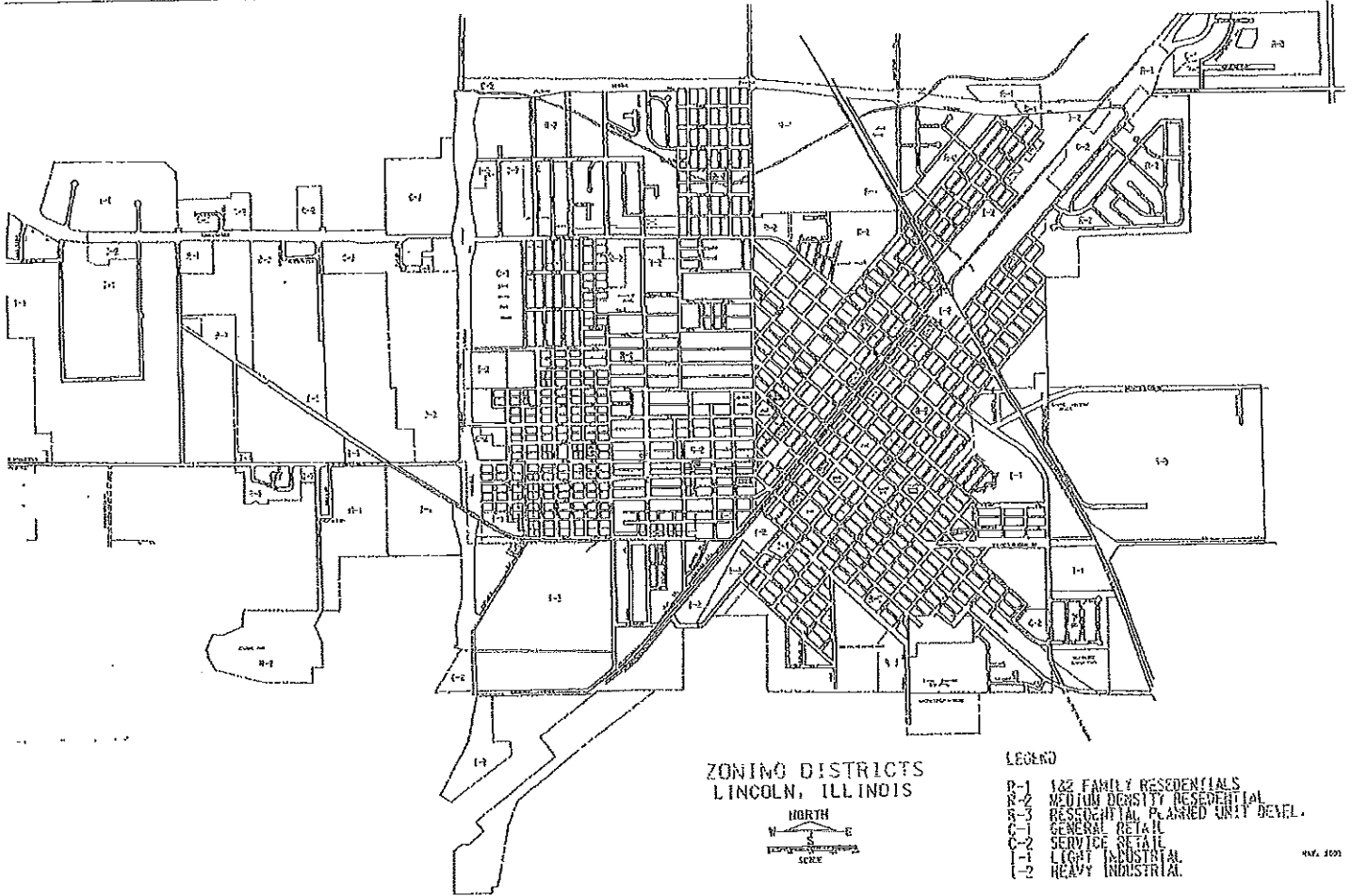
ATTACHMENT D

Sewer System Divisions



ATTACHMENT E

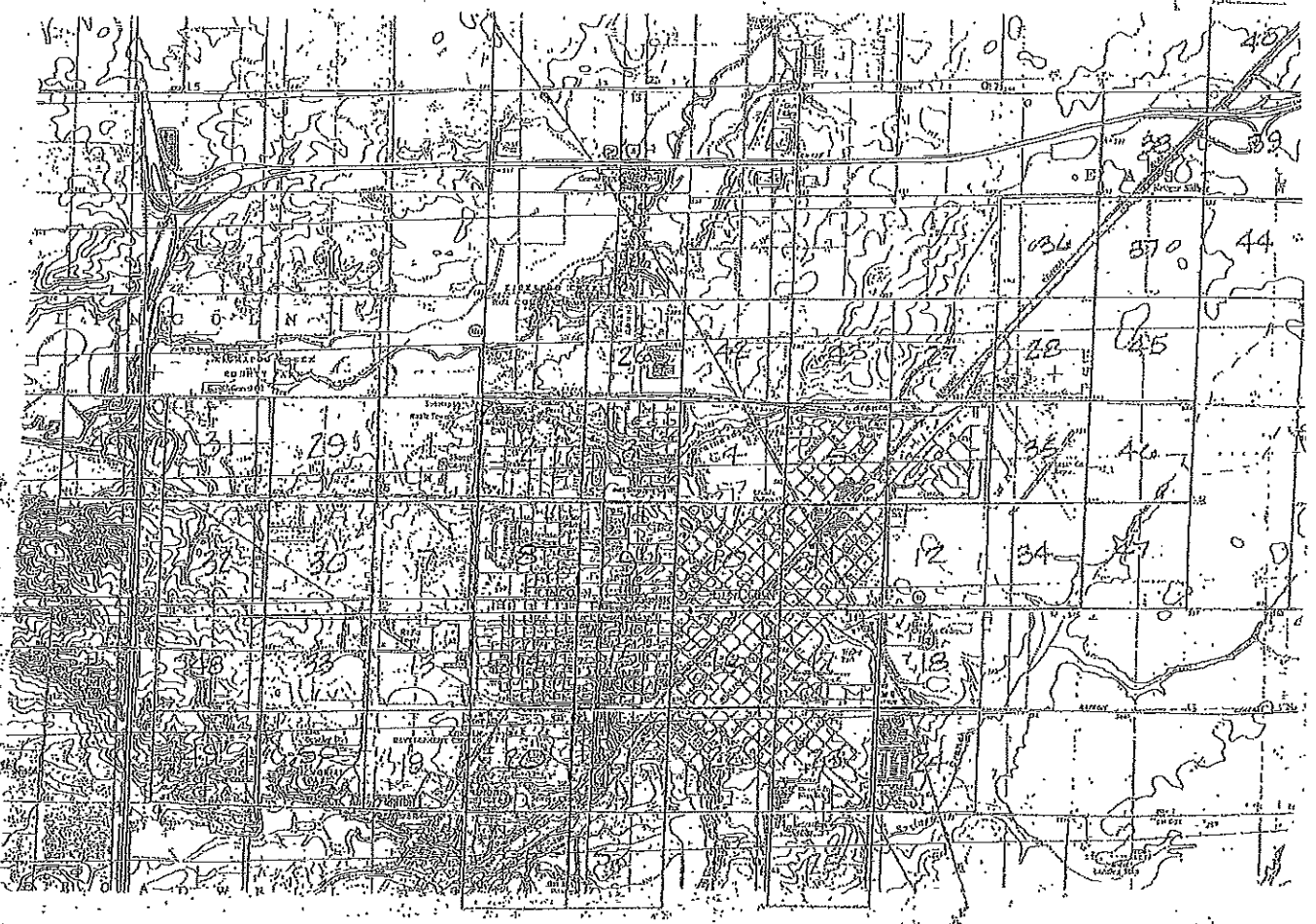
Zoning Map

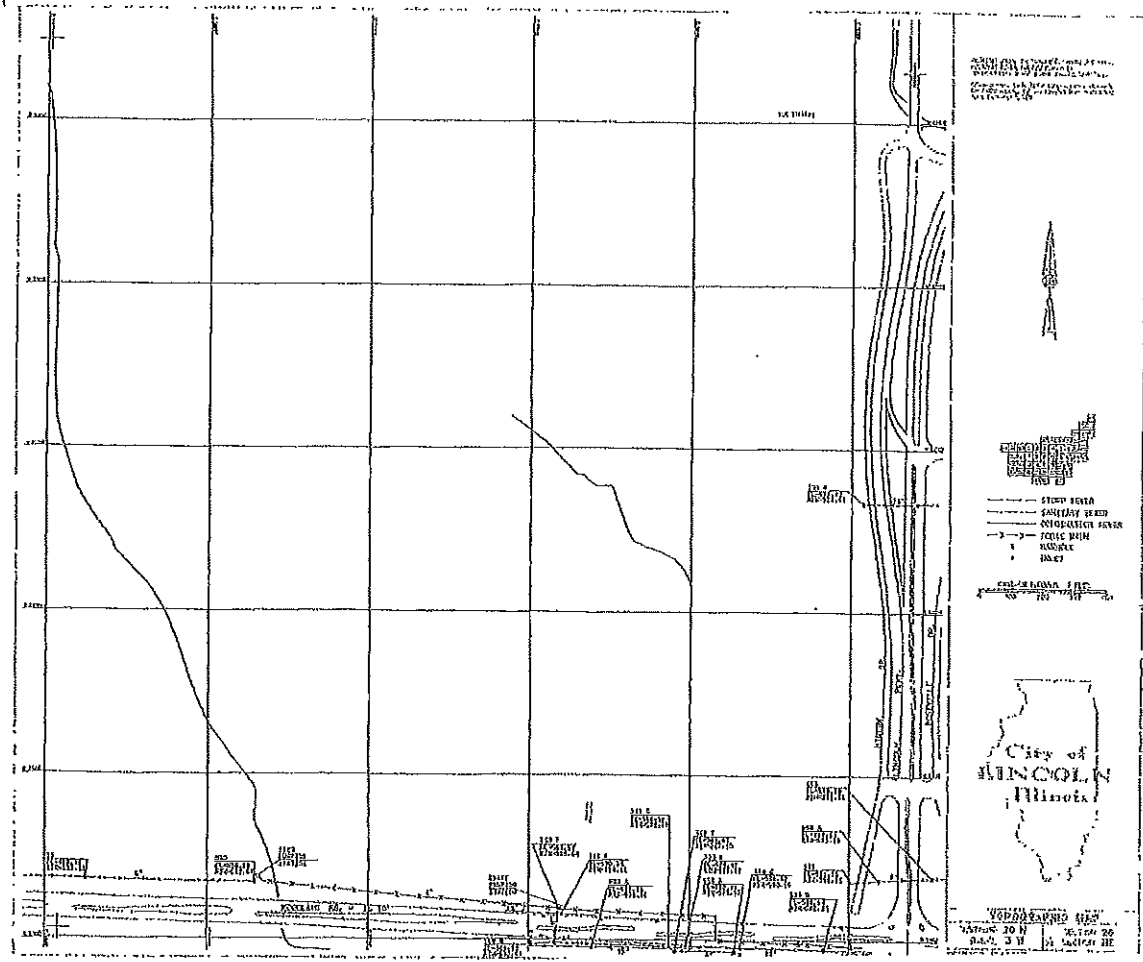


ATTACHMENT F

Sewer System Map

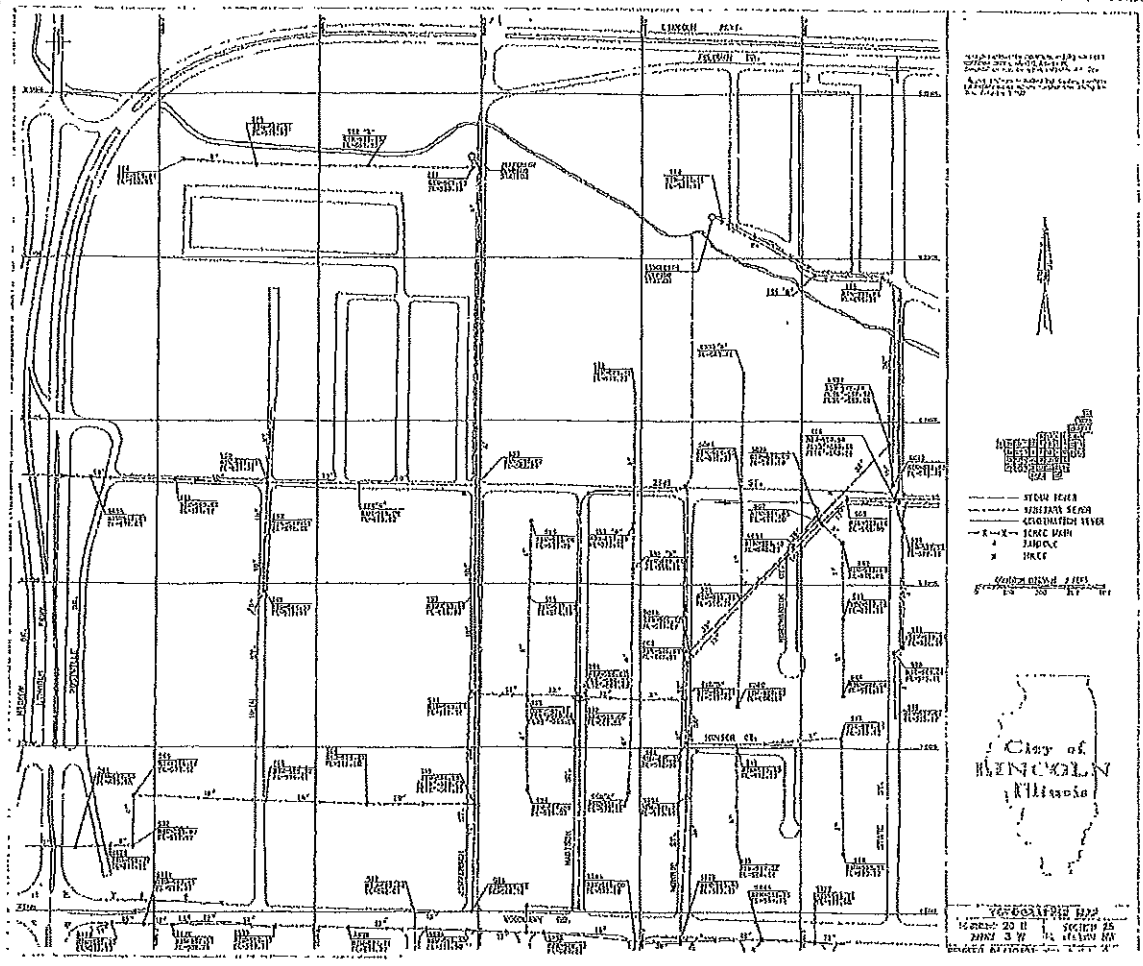
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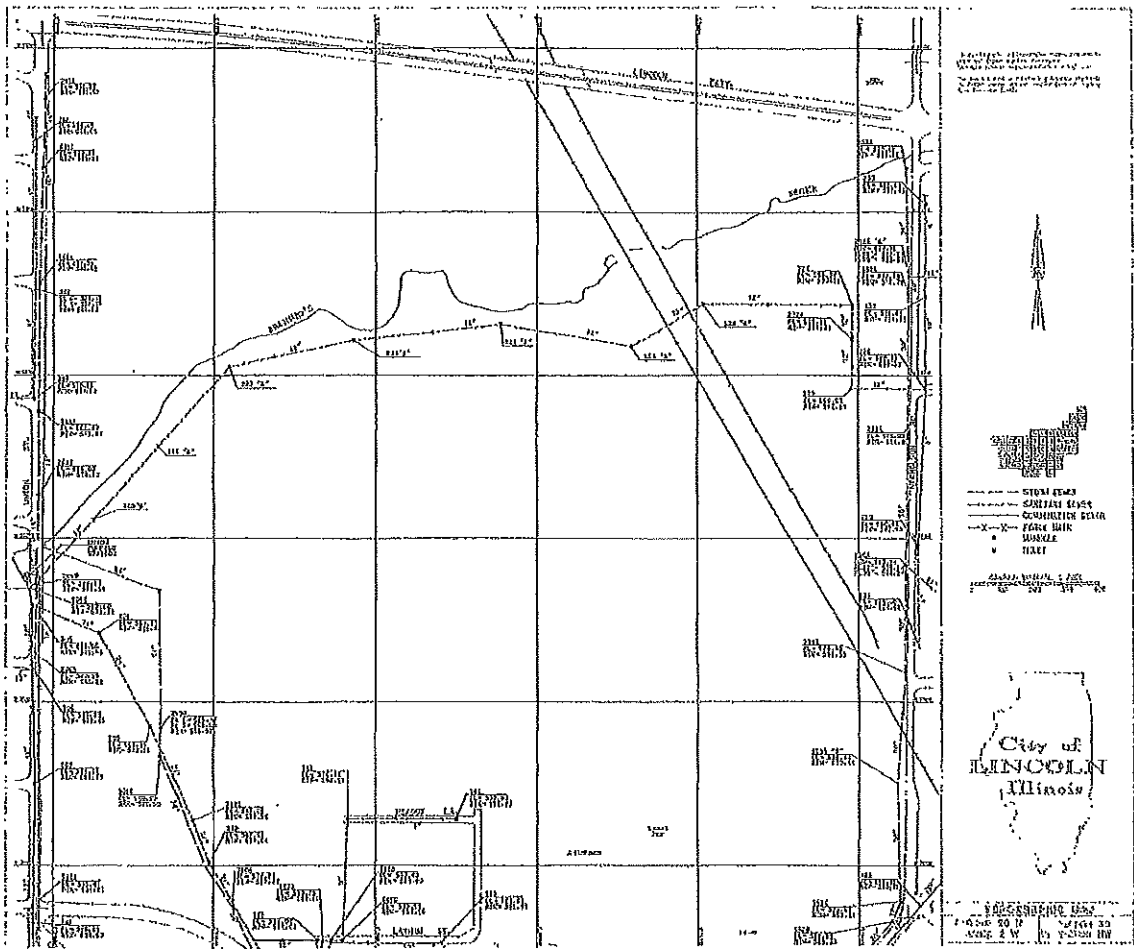
COMBINATION, SANITARY, STORM, FORCE

11.12.11.18.21.25-25.25

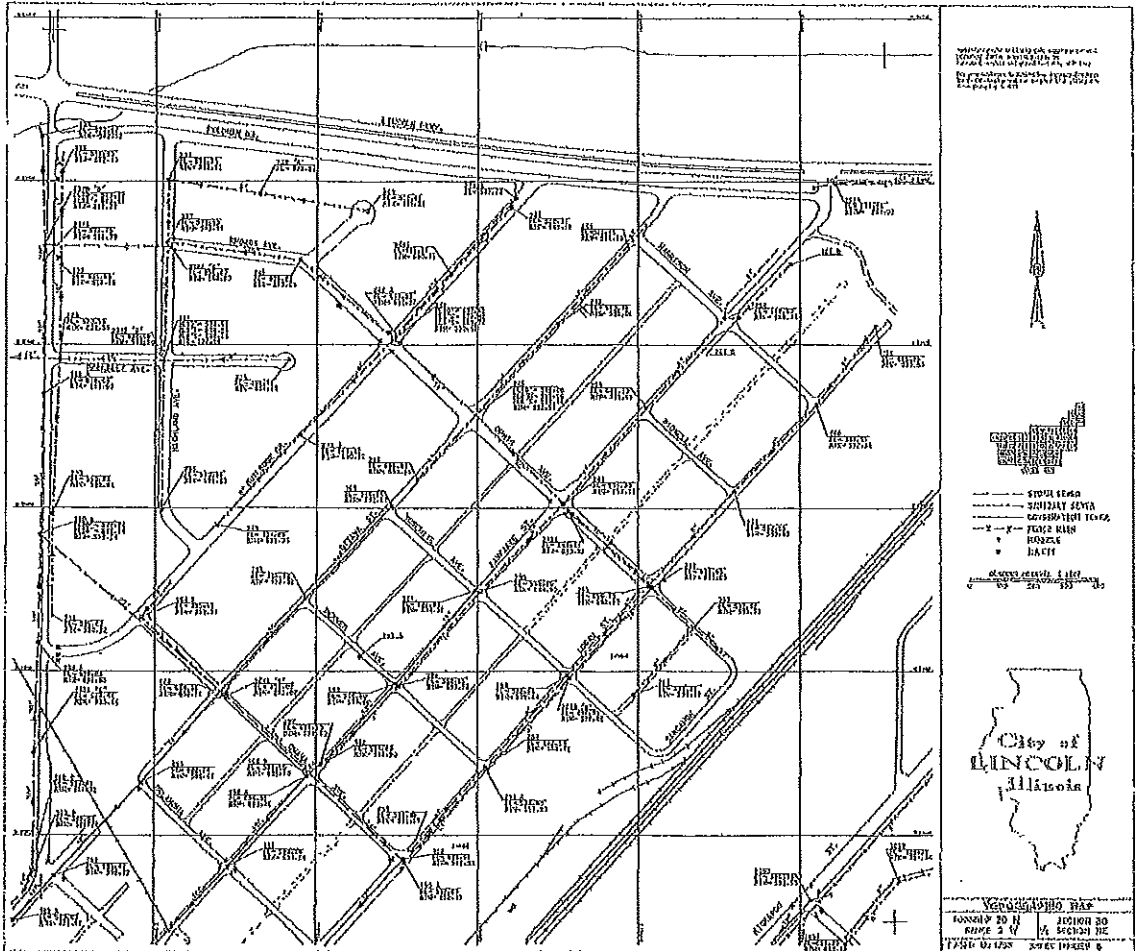


COMBINATION, SANITARY, STORM, FORCE

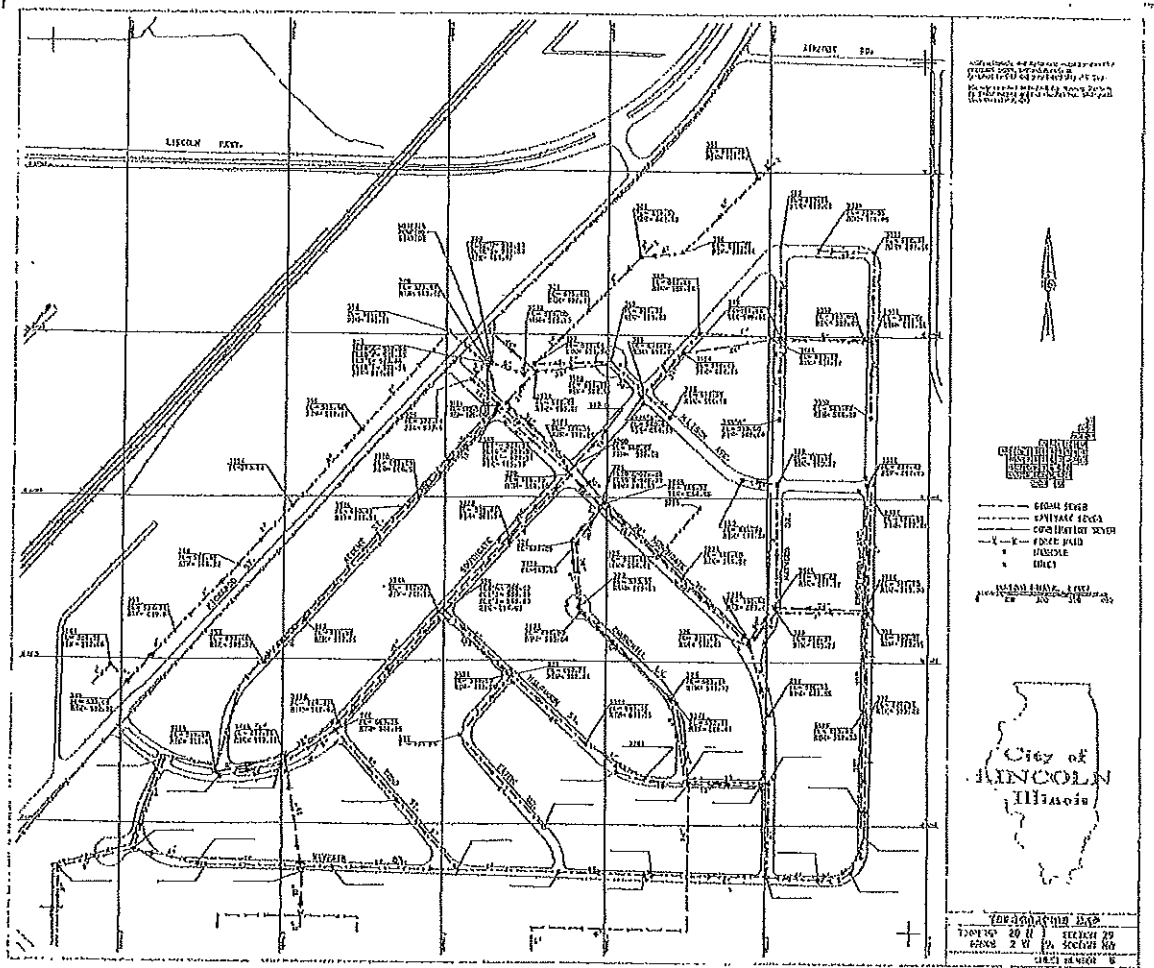
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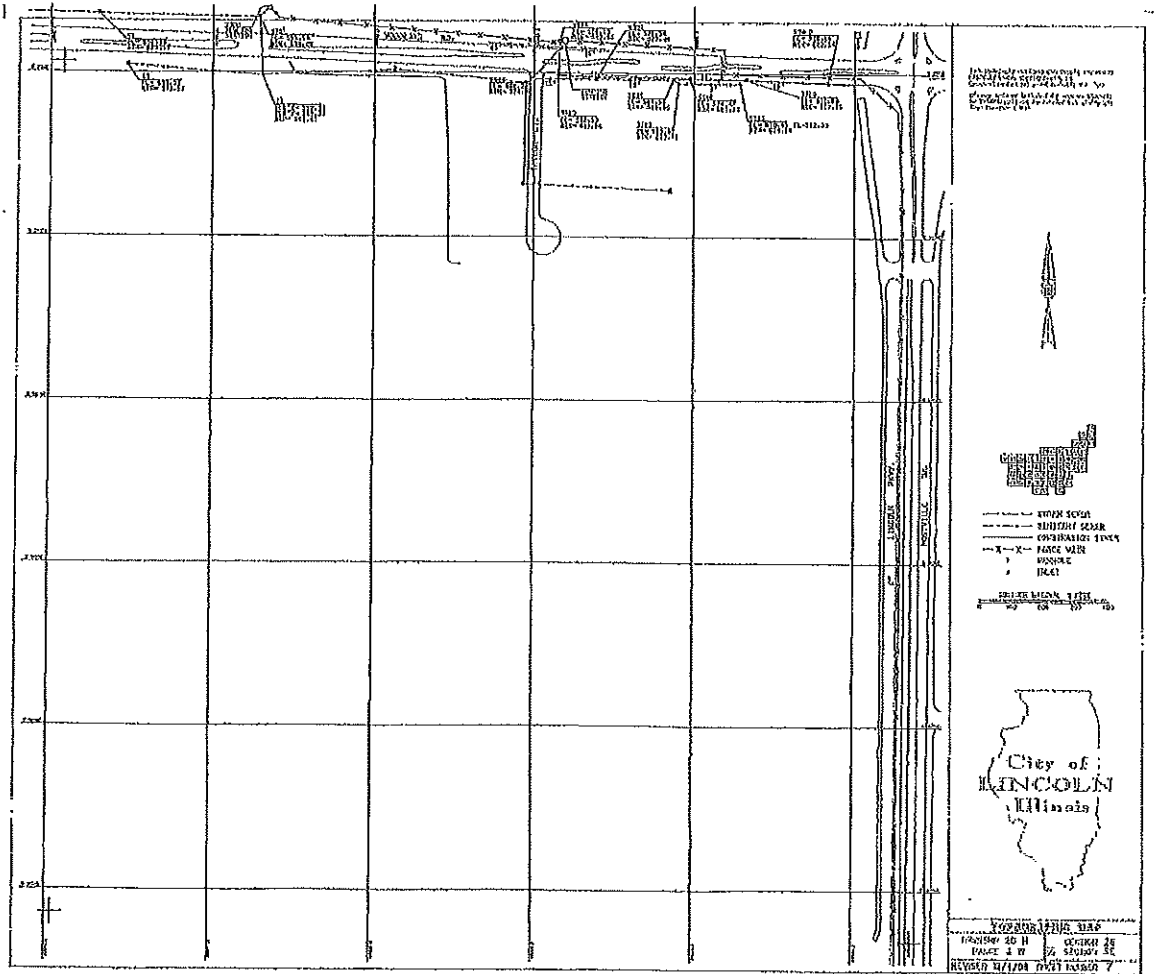
COMBINATION, SANITARY, STORM, FORCE



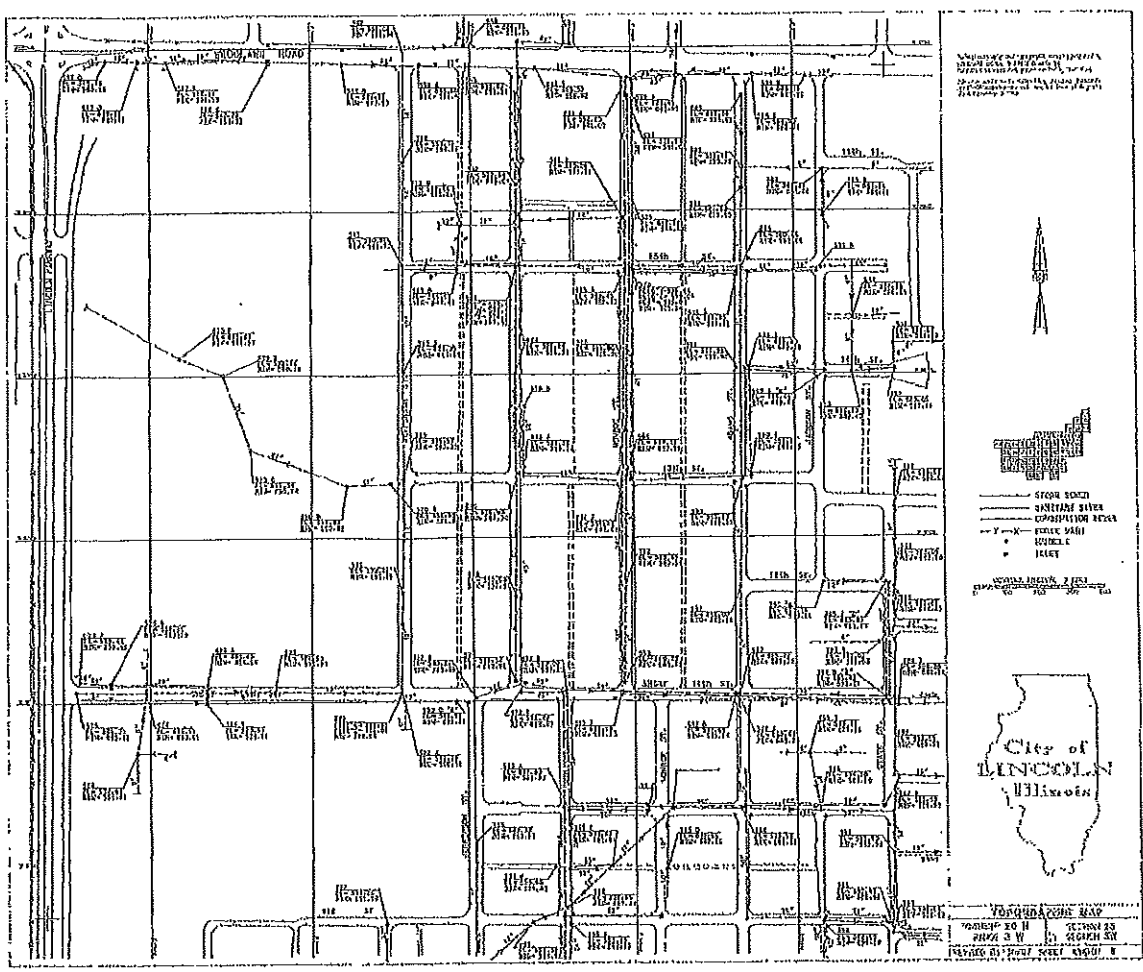
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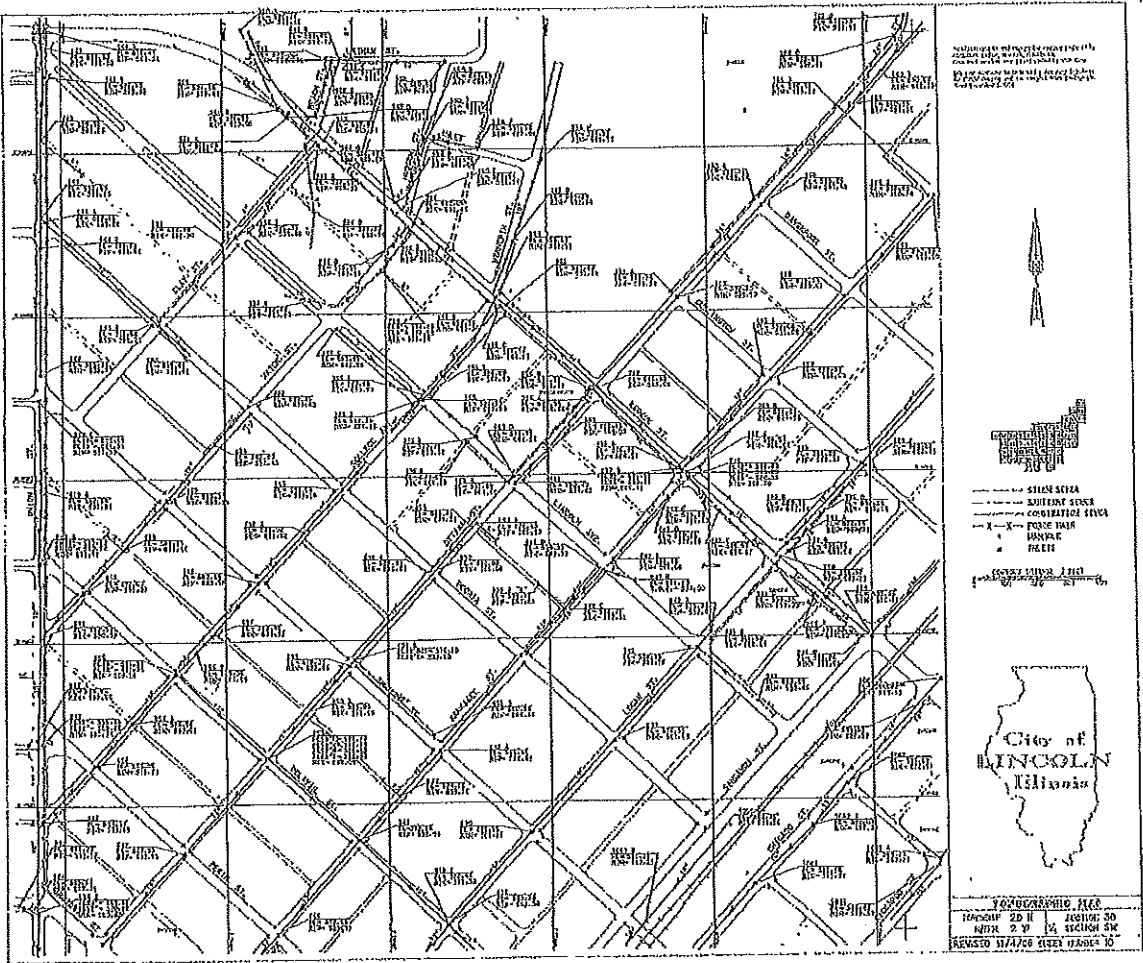
COMBINATION, SANITARY, STORM, FORCE



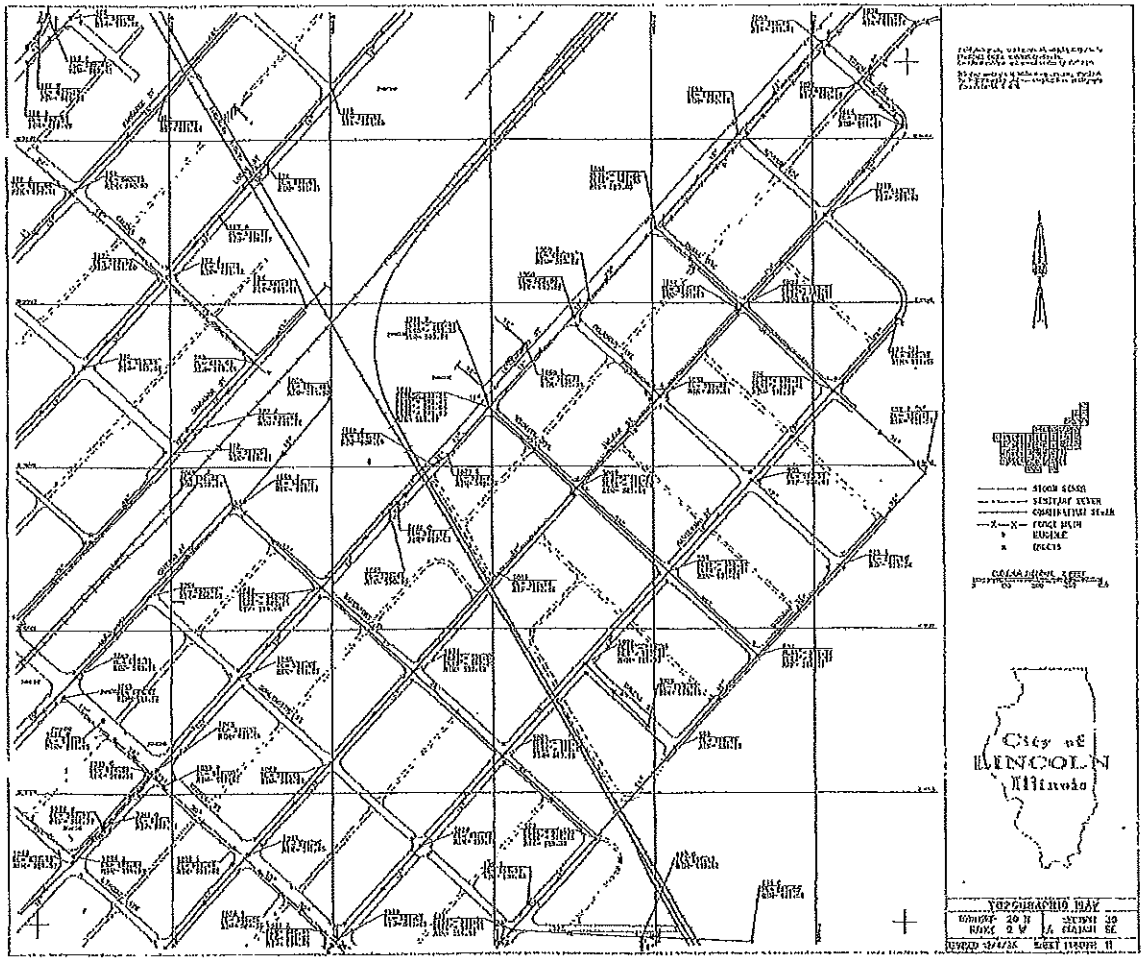
COMBINATION, SANITARY, STORM, FORCE



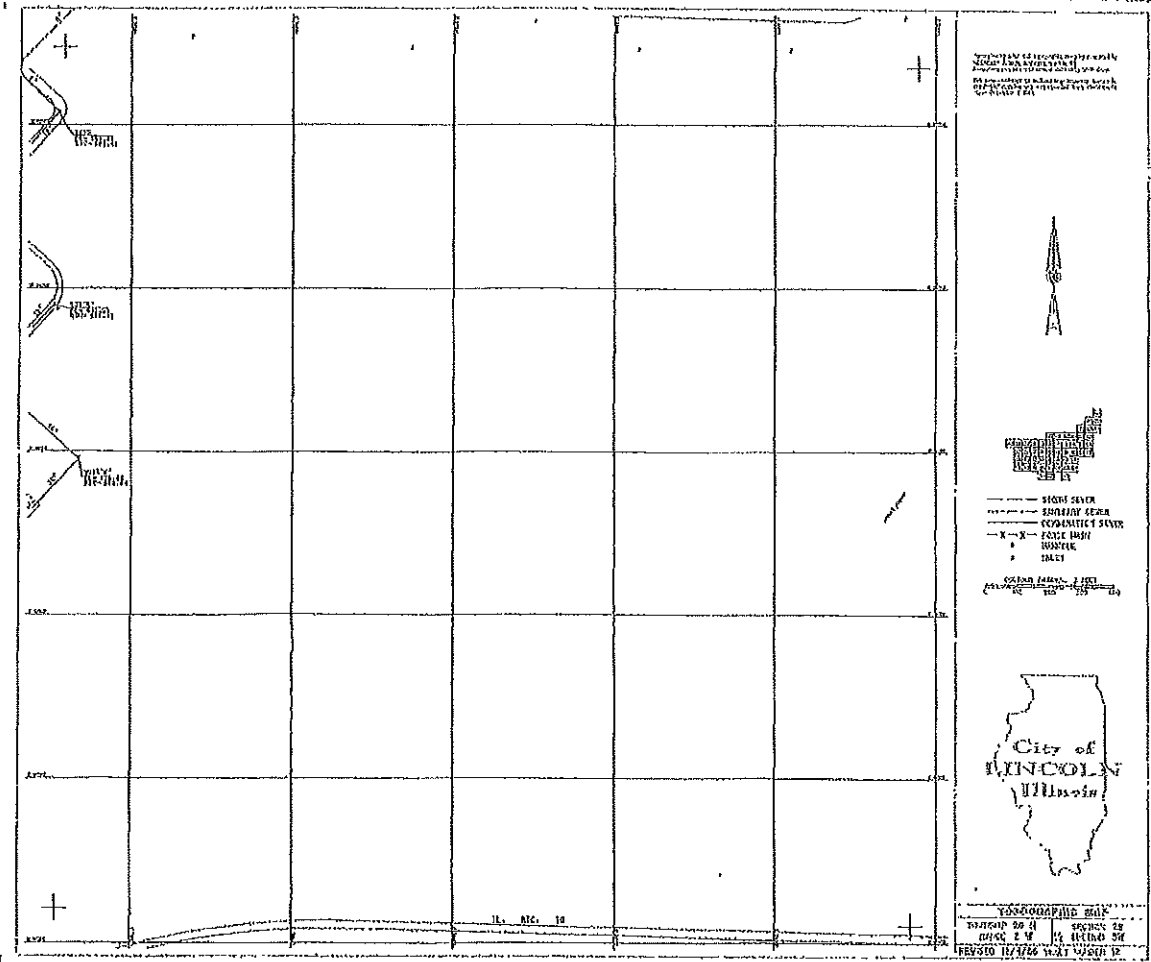
COMBINATION, SANITARY, STORM, FORCE



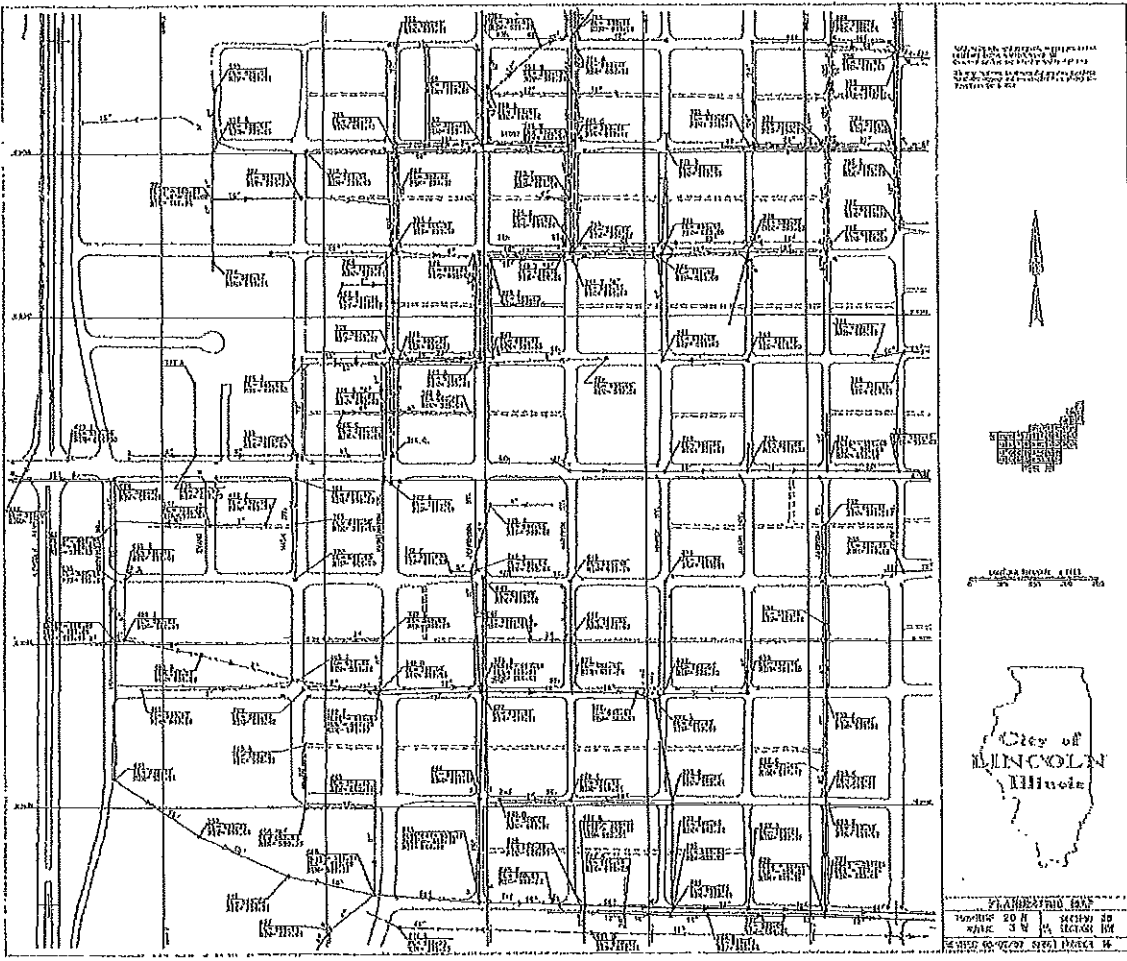
COMBINATION, SANITARY, STORM, FORCE



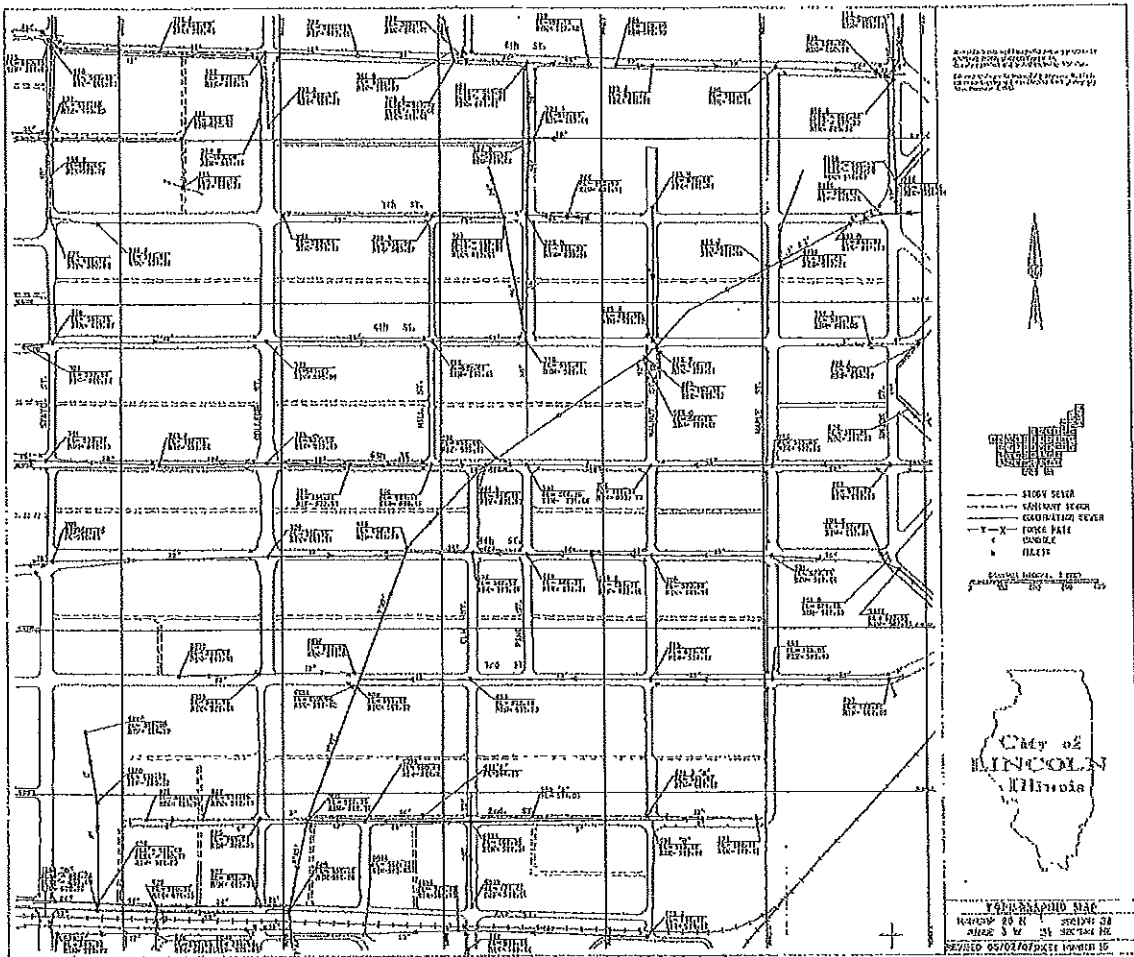
COMBINATION, SANITARY, STORM, FORCE



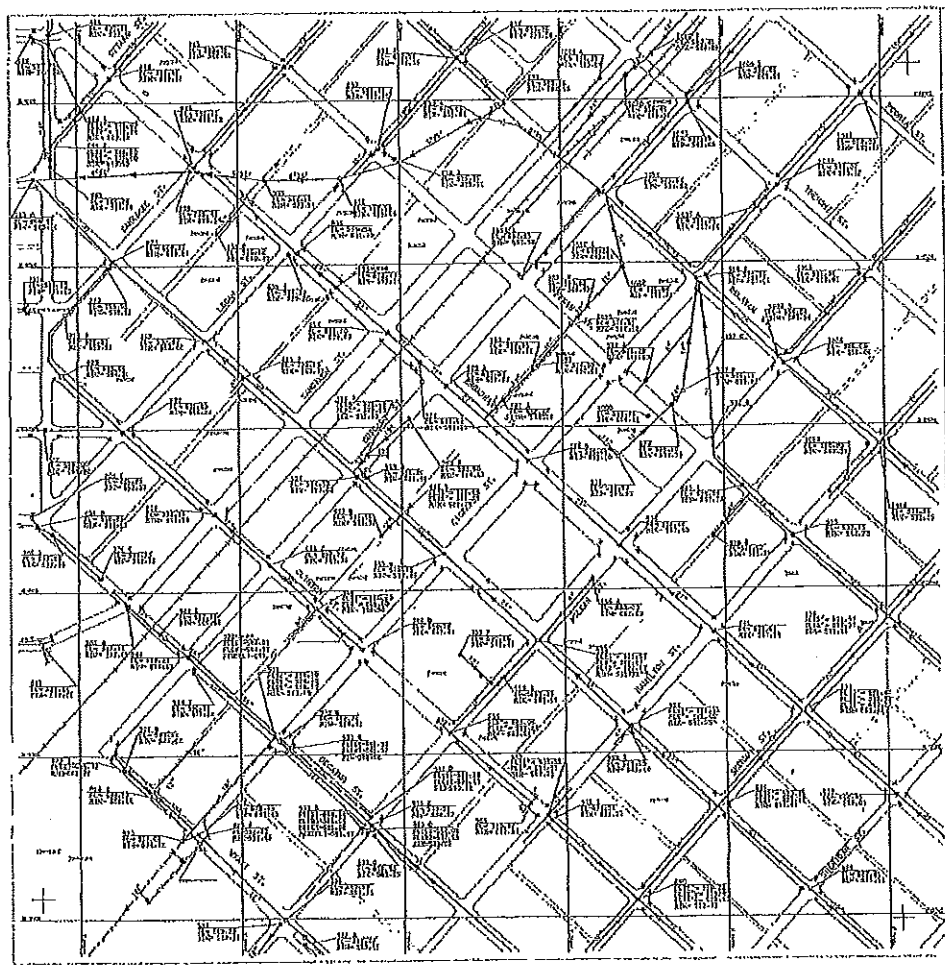
COMBINATION, SANITARY, STORM, FORCE



COMBINATION, SANITARY, STORM, FORCE



COMBINATION, SANITARY, STORM, FORCE



THE CITY OF LINCOLN, ILLINOIS
 ENGINEERED BY THE
 CIVIL ENGINEERING DEPARTMENT
 OF THE UNIVERSITY OF ILLINOIS
 AT URBANA, ILLINOIS

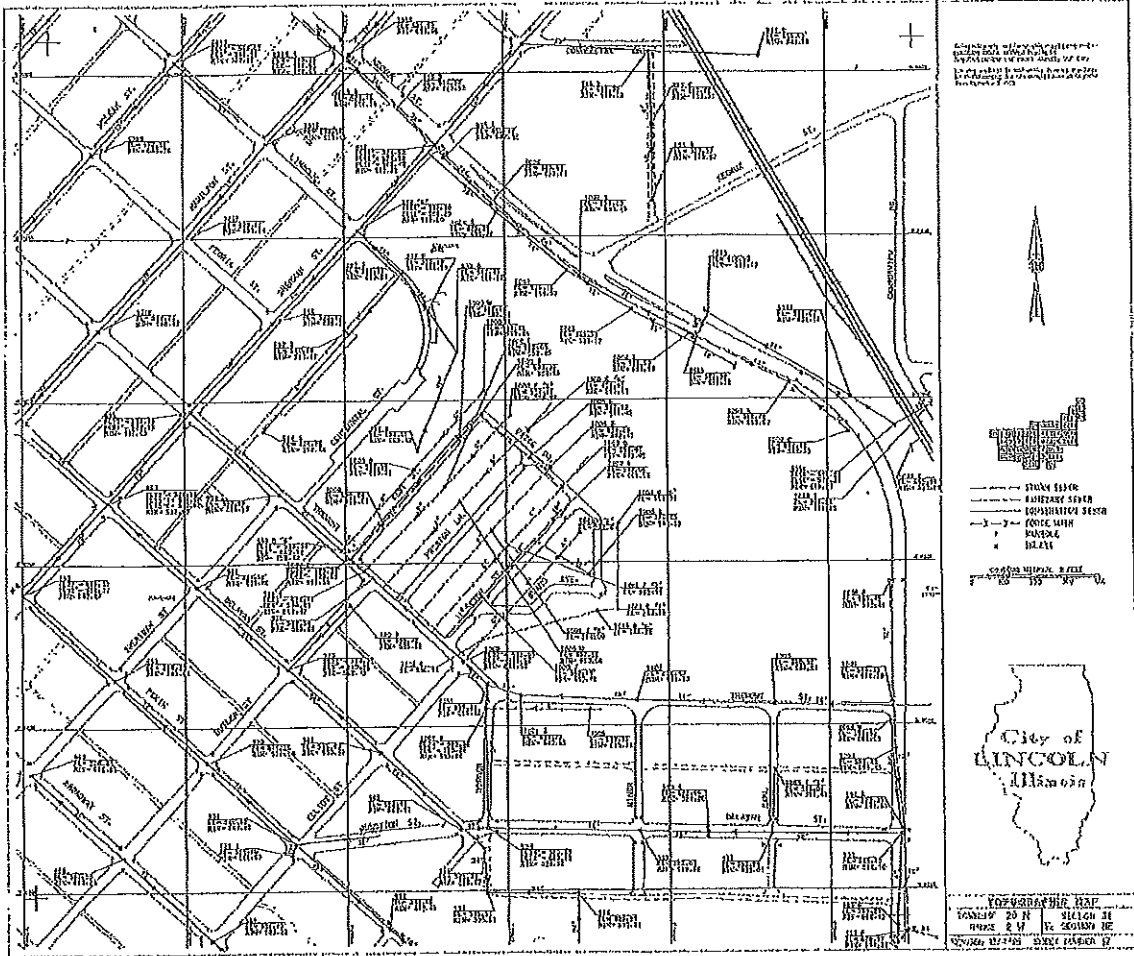
NORTH

CITY OF LINCOLN, ILLINOIS

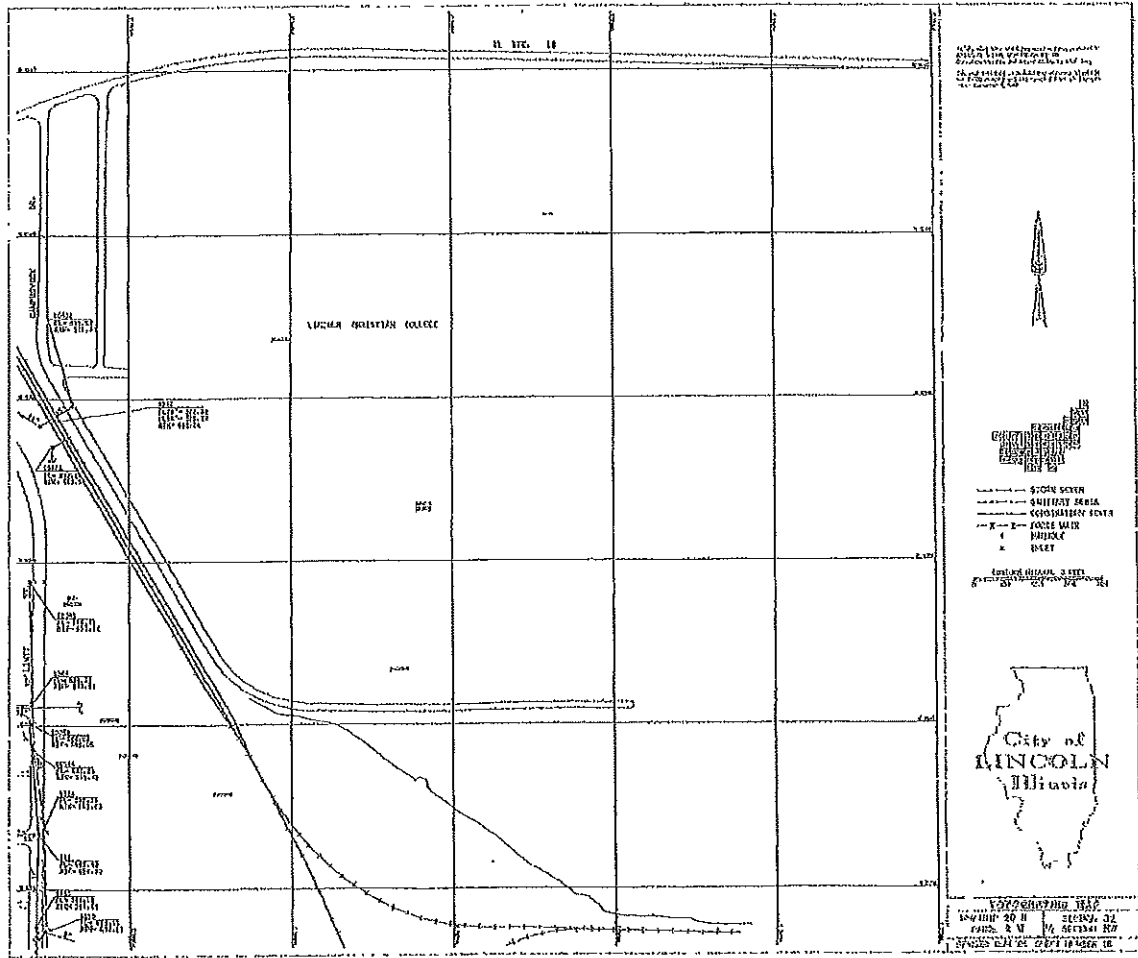
SEWER FEED
 SEWER MAIN
 SEWER BRANCH
 SEWER MANHOLE
 SEWER VALVE

CITY OF LINCOLN, ILLINOIS
 ENGINEERED BY THE
 CIVIL ENGINEERING DEPARTMENT
 OF THE UNIVERSITY OF ILLINOIS
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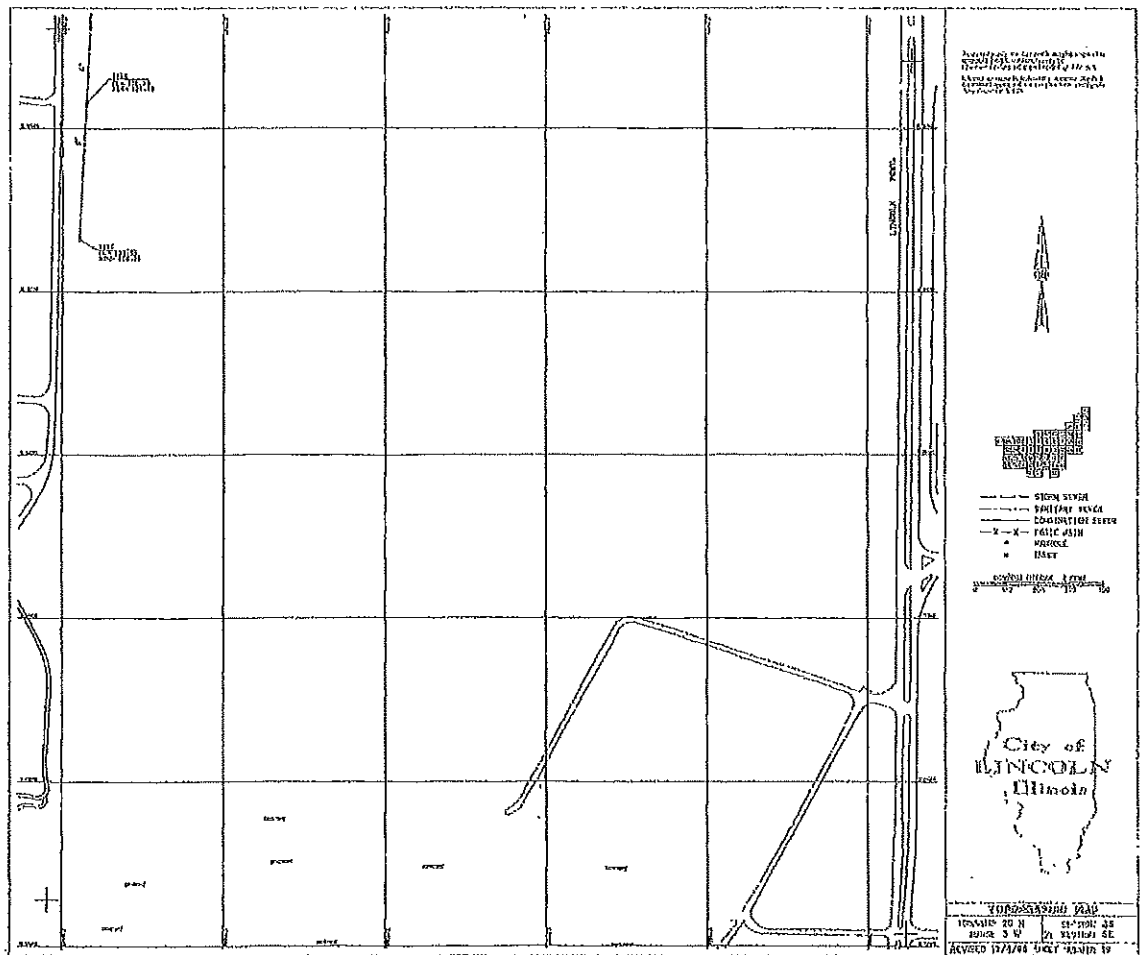
COMBINATION, SANITARY, STORM, FORCE



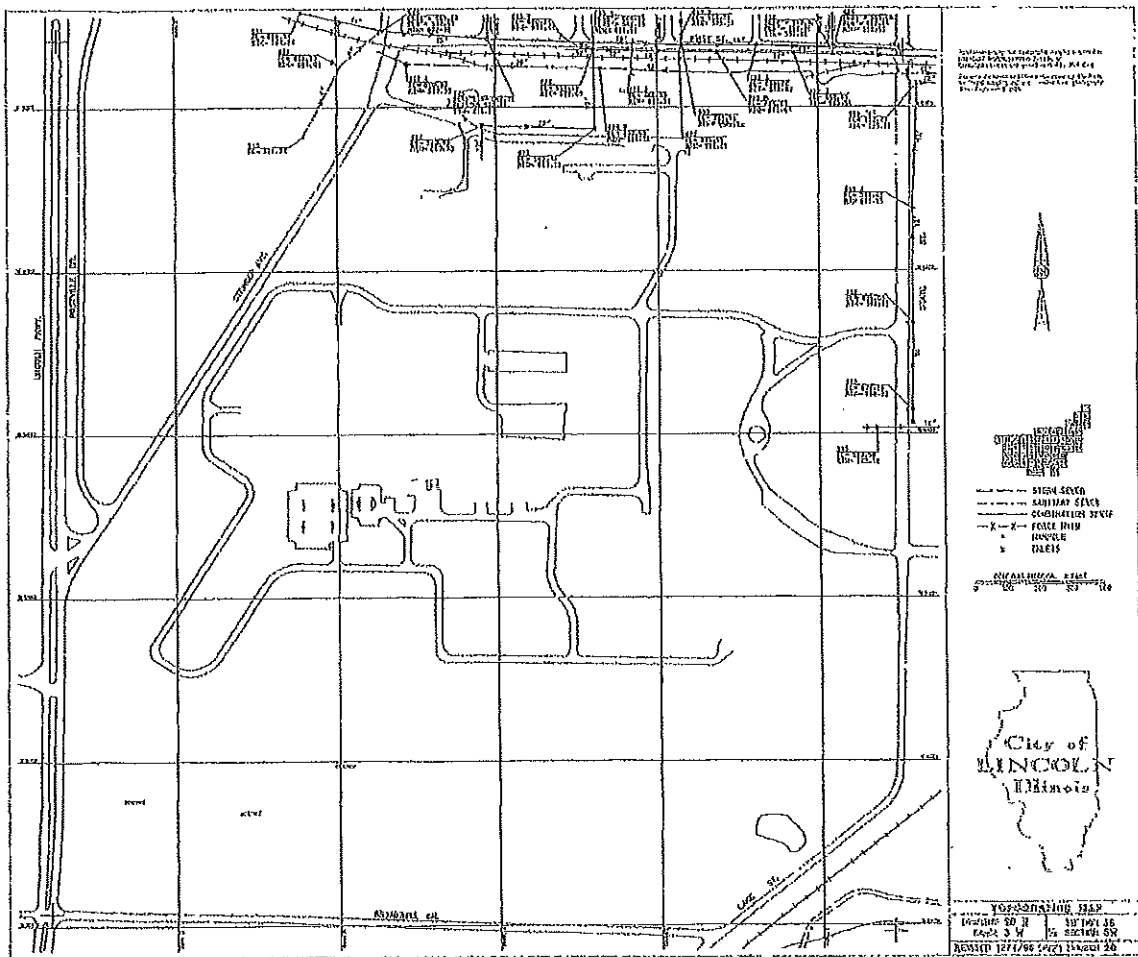
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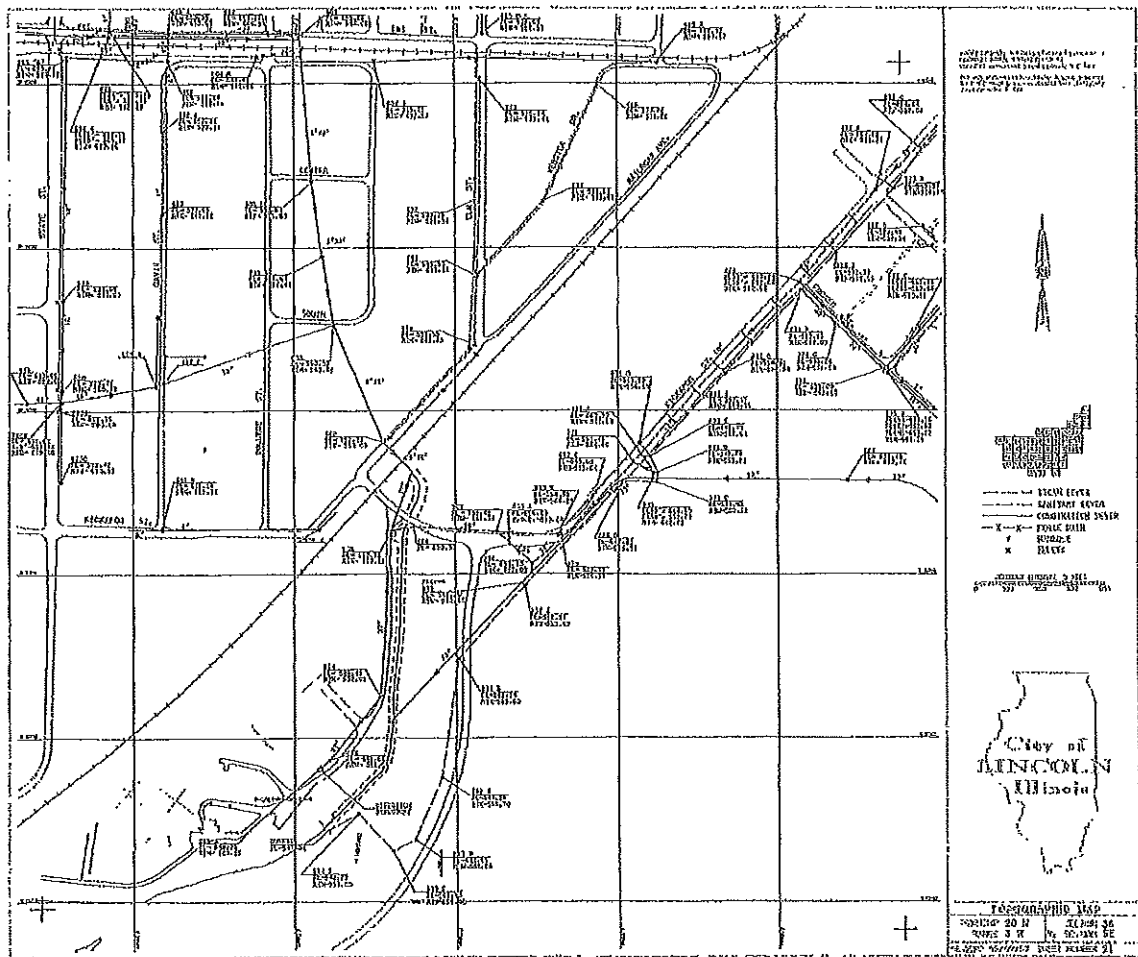
COMBINATION, SANITARY, STORM, FORCE



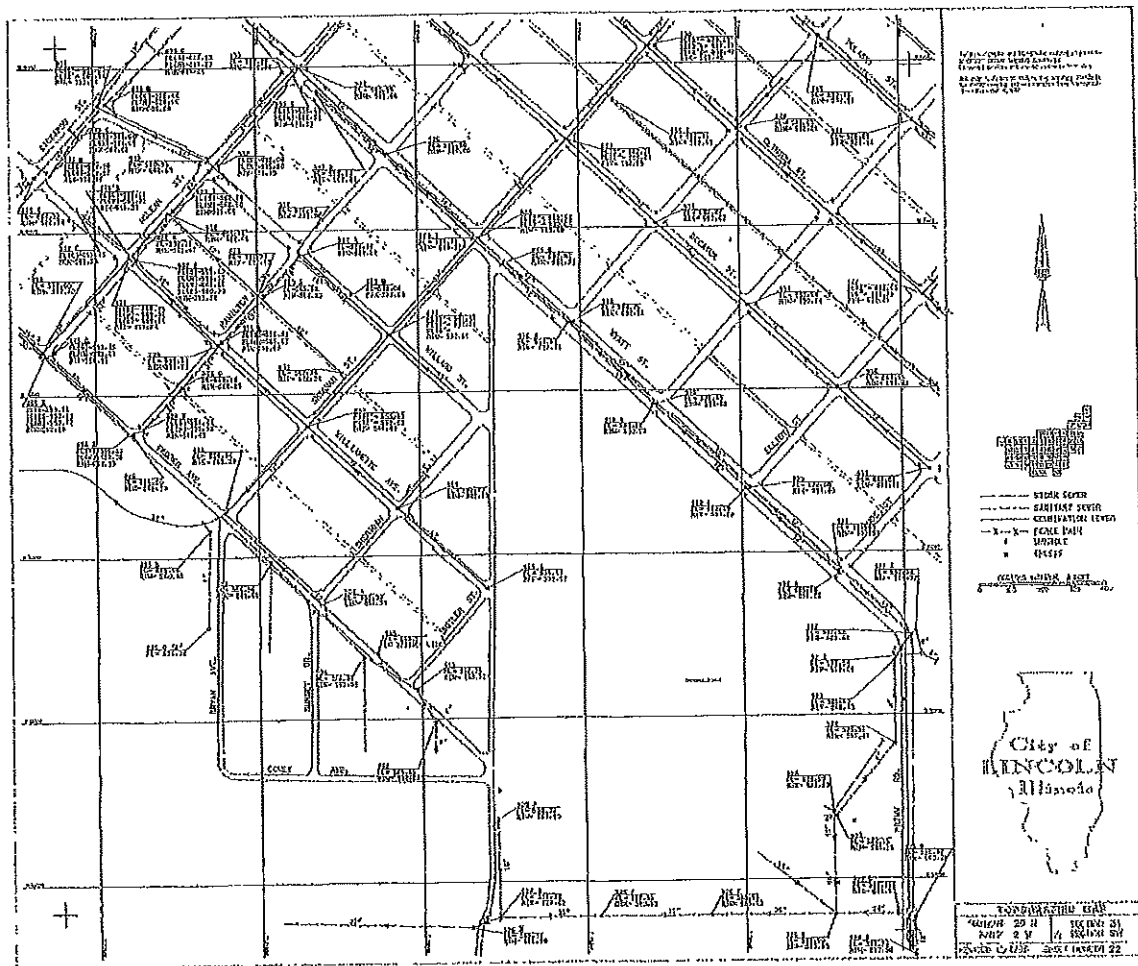
COMBINATION, SANITARY, STORM, FORCE



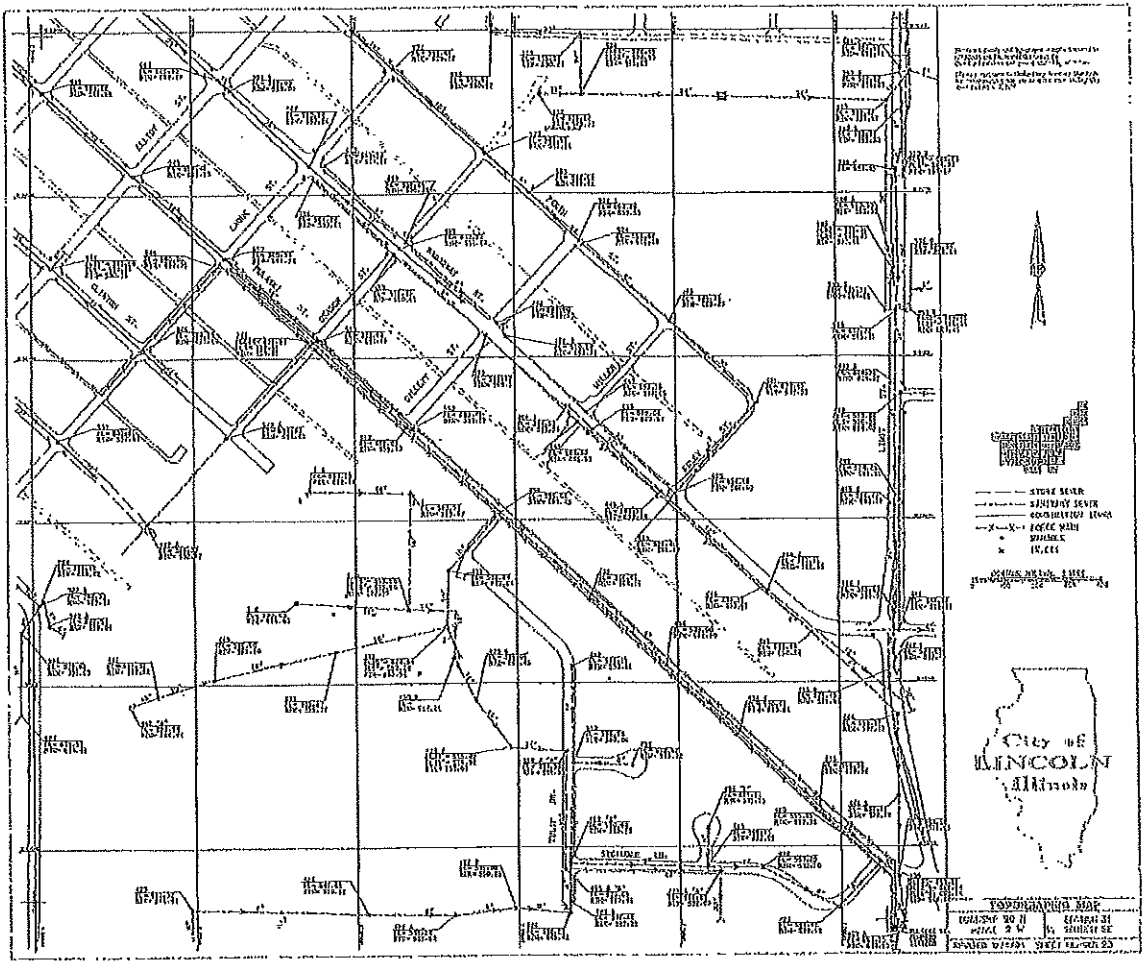
COMBINATION, SANITARY, STORM, FORCE



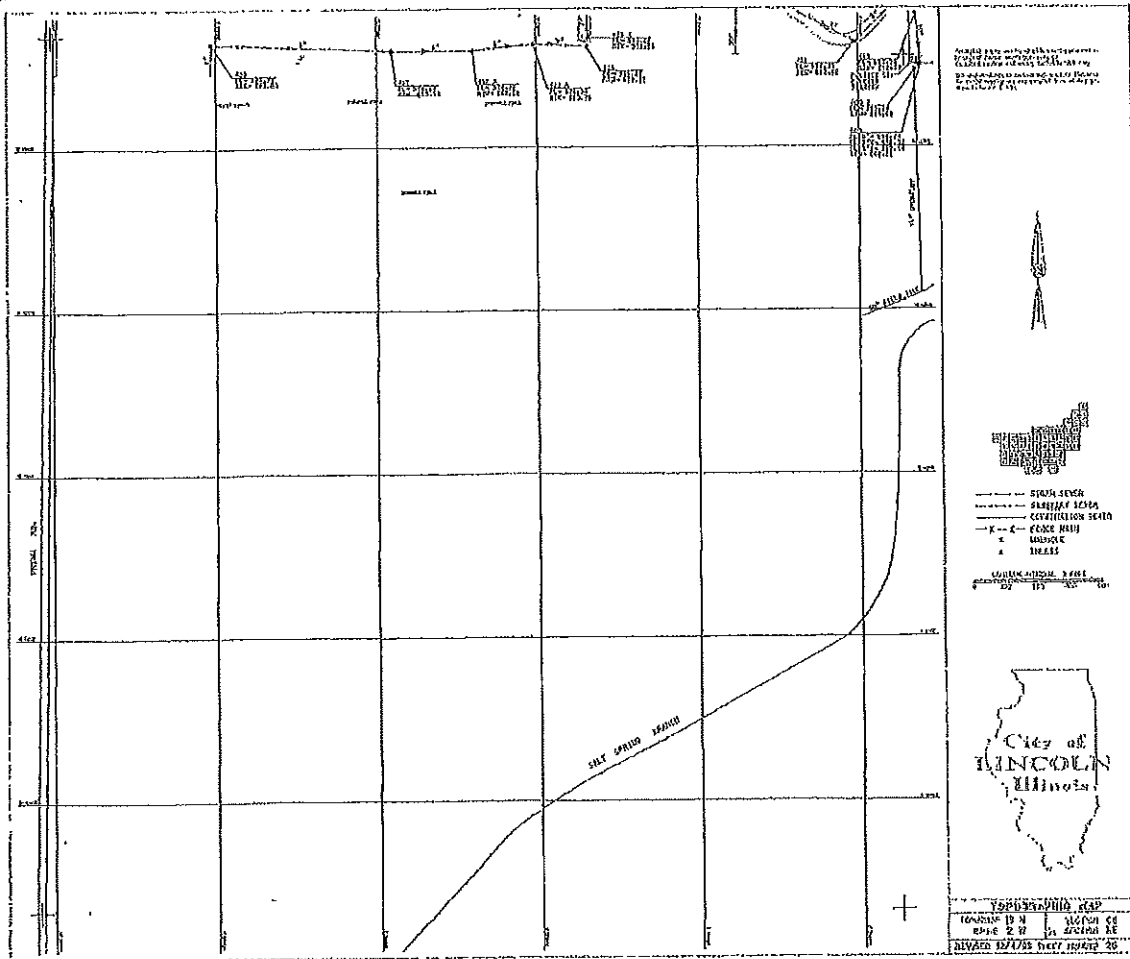
COMBINATION, SANITARY, STORM, FORCE



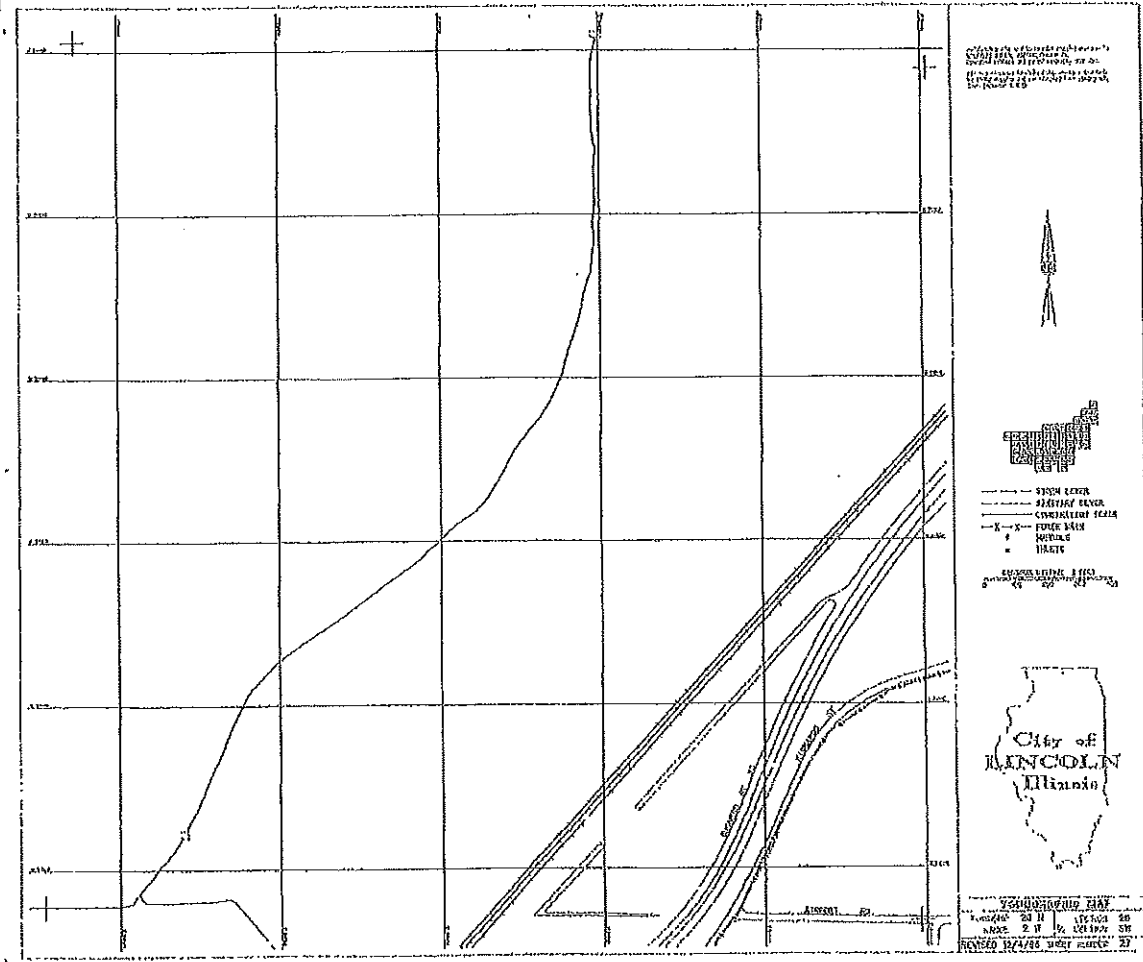
COMBINATION, SANITARY, STORM, FORCE



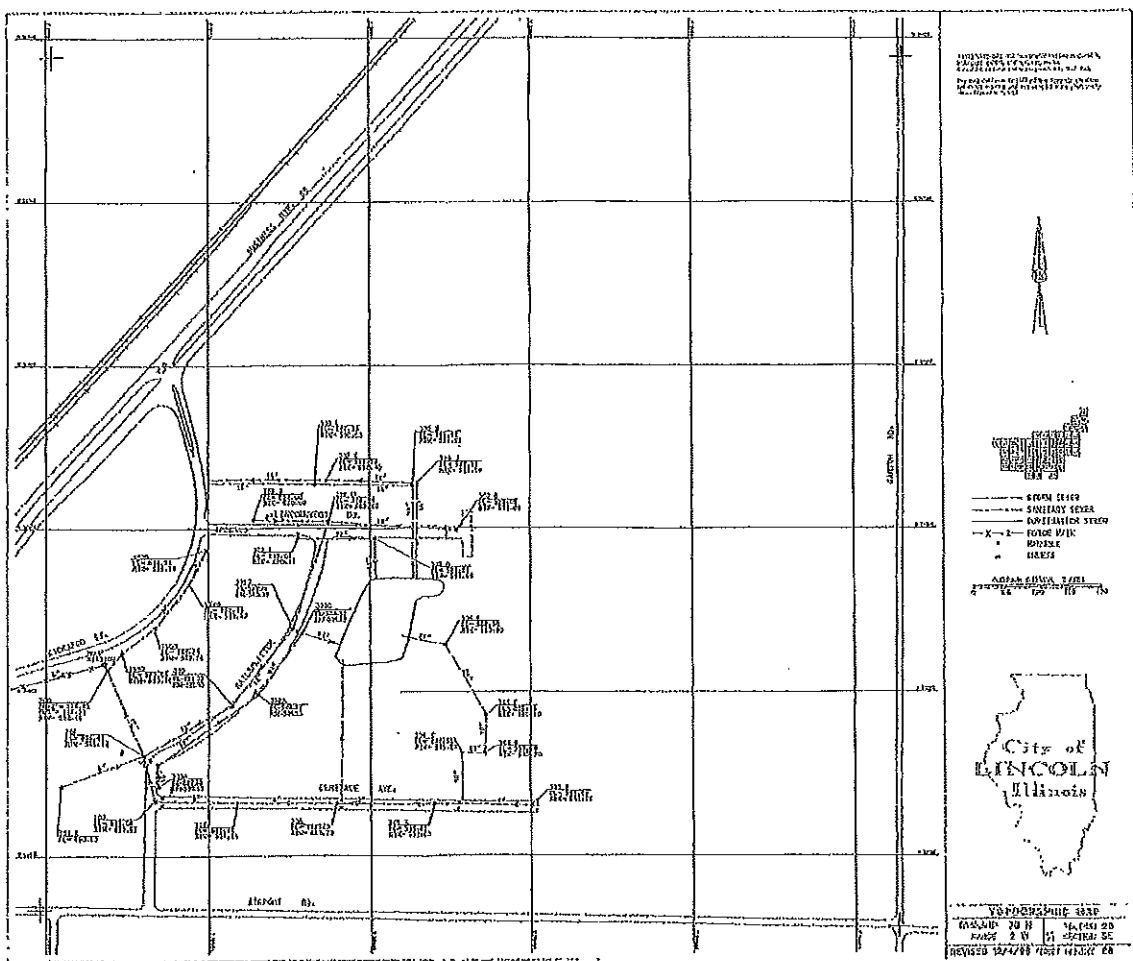
COMBINATION. SANITARY, STORM, FORCE



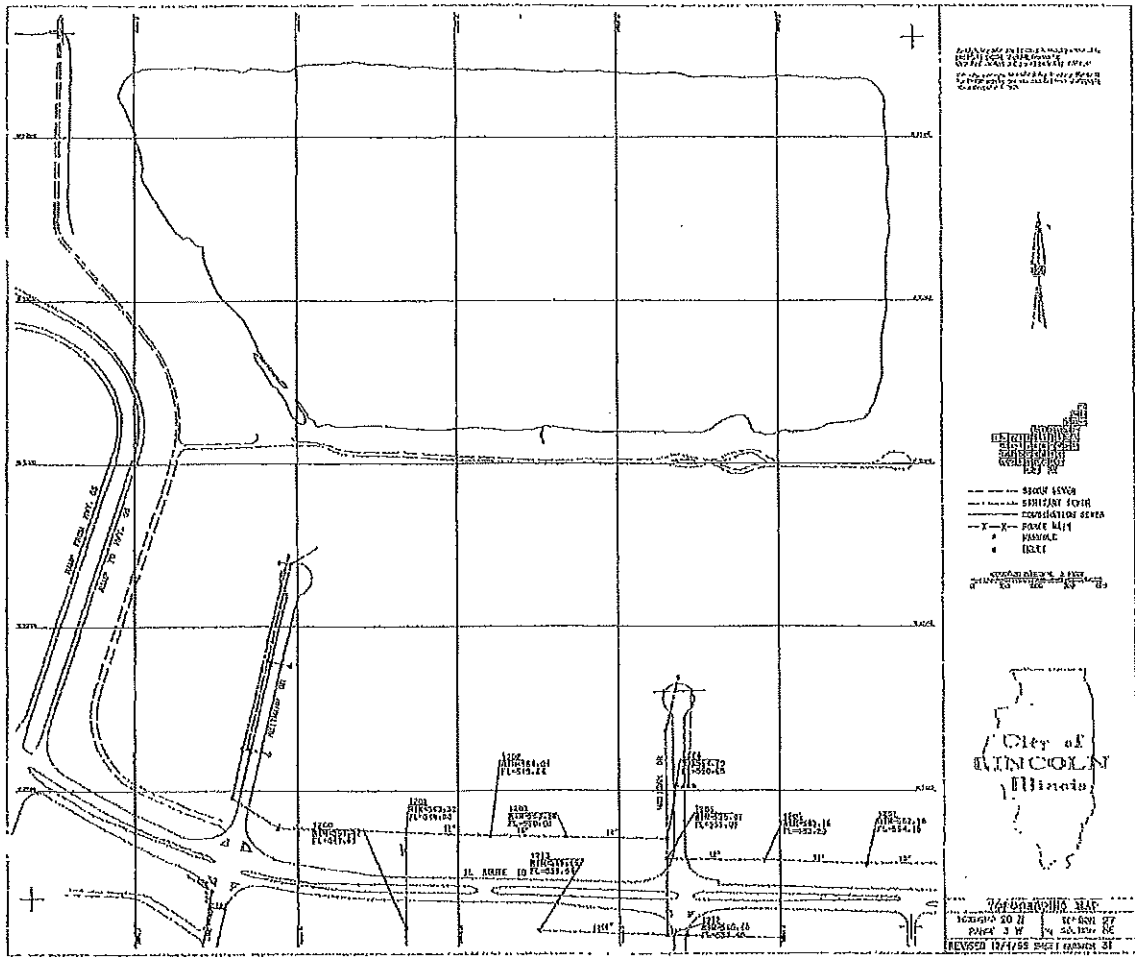
COMBINATION, SANITARY, STORM, FORCE



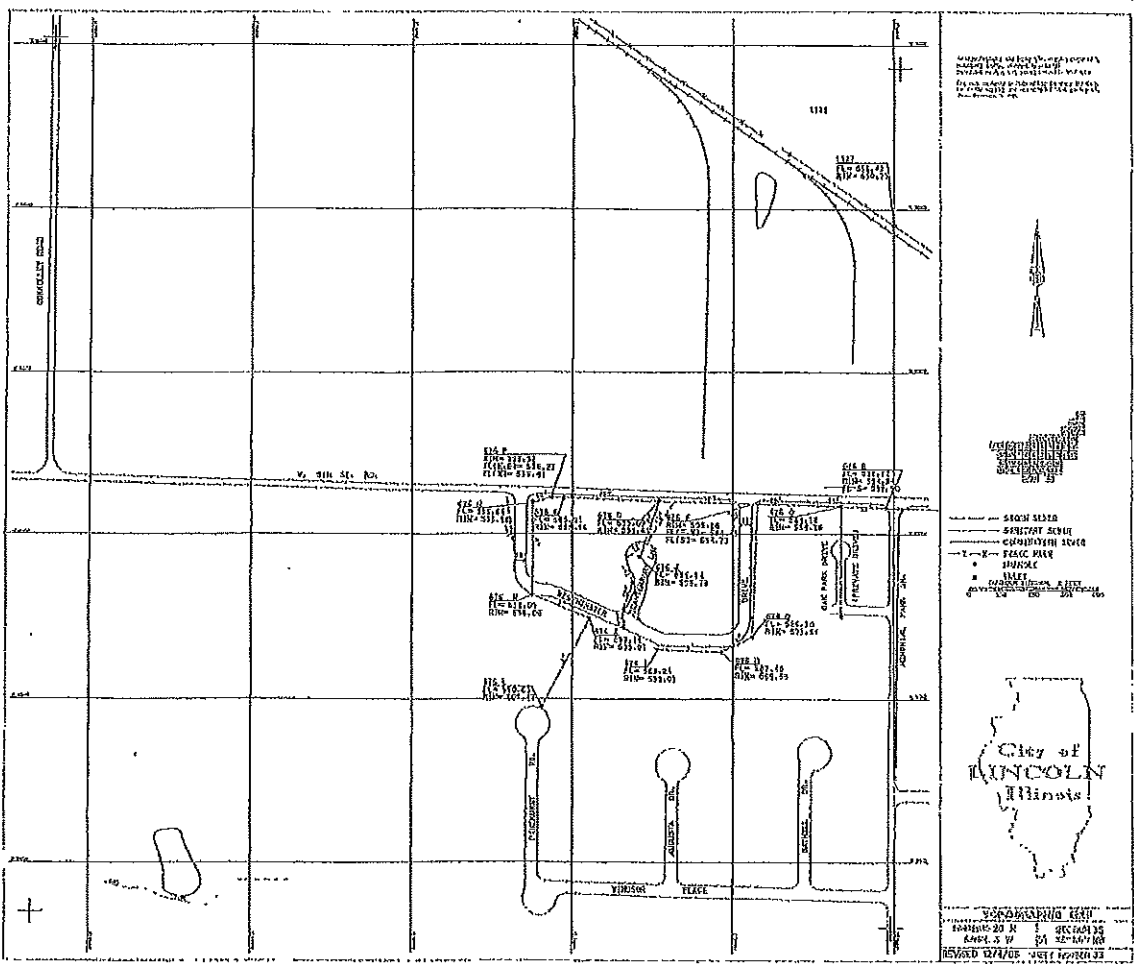
COMBINATION, SANITARY, STORM, FORCE



COMBINATION, SANITARY, STORM, FORCE



COMBINATION, SANITARY, STORM, FORCE



COMBINATION, SANITARY, STORM, FORCE

CSO OPERATIONAL PLAN CERTIFICATION AND CHECKLIST EXPLANATION

Maintenance

1. Date system stop planks last adjusted
The date the stop plank was last adjusted is unknown.

Inspections and Monitoring

1. Schedule to inspect surface water anti-intrusion devices
The system contains no anti-intrusion devices

Maps and Diagrams

1. All CSOs, treatment plant bypasses, outfalls, and their receiving waters identified
The CSOs, treatment plant bypasses, outfalls, and the receiving water are included within the mapping and diagrams. However, not all are labeled as such.
2. All control (diversion) structures, including valves, marked
The control structures and valves are included within the mapping and diagrams. However, not all are labeled as such.
3. All pump and lift stations and their capacities marked
All pump and lift stations are included within the mapping and diagrams. However, their capacities are not included.

Sewer System Characterization

1. Bottleneck in the system
There are no known bottlenecks
2. List of non-residential sewer users tributary to each overflow
There are no dischargers that discharge toxics, high strength wastewater or high volumes.
3. Percent pervious area developed and kept current for each sewerage basin
The percent pervious area has not been calculated.