



DEPARTMENT OF COMMUNITY DEVELOPMENT SERVICES

Planning Division

m e m o r a n d u m

TO: The Urbana Plan Commission

FROM: Robert Myers, AICP, Planning Manager

DATE: September 2, 2009

SUBJECT: Case No. 2117-SU-09: Request by the Urbana & Champaign Sanitary District for a Special Use Permit to expand the existing wastewater treatment facility at 1100 E. University Avenue in the CRE, Conservation-Education-Recreation Zoning District.

Introduction

The Urbana & Champaign Sanitary District (UCSD) is requesting a Special Use Permit to expand their existing wastewater treatment plant. The property is zoned CRE, Conservation-Education-Recreation Zoning District, and Table V-1 of the Urbana Zoning Ordinance permits a “sewage treatment plant or lagoon” in CRE districts with a Special Use Permit. Consequently, expansion of the existing wastewater treatment plant requires Special Use approval by the Urbana City Council.

Background

In February 2001, the Urbana & Champaign Sanitary District issued a multi-volume Long Range Facility Plan based upon work completed by Consoer Townsend Envirodyne Engineers, Inc. This planning effort was the first completed by the District in over 25 years and addressed the District’s facilities planning area, interceptor sewer service area plan, treatment facilities long range plan, and a financial plan. An executive summary of this Plan is attached for reference.

In 2001, the Urbana Plan Commission and City Council conducted an extensive review of the Long Range Facility Plan in terms of its technical, land use planning, and financial implications. While there were concerns on the part of the City about the financial planning and equity of the fee recovery systems for the Long Range Facility Plan, the technical and land use planning aspects of the Plan were determined to be in the best interests of the City. On September 4, 2001, the Urbana City Council approved a resolution (No. 2001-09-026R, copy attached) endorsing the facilities planning area, interceptor sewer service area plan, and treatment facilities long-range components of UCSD’s plan.

On November 5, 2001, The Urbana City Council adopted an agreement to amend the Woodland (Ambucs) Park Plan, allowing UCSD to use certain parcels for sanitary treatment facilities or for storing or holding waste materials, subject to Special Use procedures. At least 600 feet must be maintained between the storage pad and the nearest residence.

In 2002, UCSD applied for, and the City Council approved, a Special Use Permit (Plan Case 1846-SU-02) for planned upgrades to the UCSD’s existing wastewater treatment plant in northeast Urbana. While the entire subject property was included in the Special Use Permit approval, that approval contemplated six specific improvements as referenced below.

- Roof cover for biosolids storage pad
- New electric generator building
- Anaerobic digester equipment building addition (900 s.f.)
- Septage and Sludge Receiving Facility (below grade and enclosed)
- Relocate and replace gas flare
- New interior access drive

In September 2007, UCSD presented the Urbana City Council with an update on their plans for the wastewater treatment plant. Because the site plan has changed since the 2002 Special Use Permit approval, a new SUP is necessary.

In August 2009, and in conformance with the approved Long Range Facilities Plan, UCSD submitted a Special Use Permit application for their next phase of improvements to their Urbana treatment plant. The following synopsis shows the current status of planned improvements. The current Special Use Permit application would apply to Phases IIIB and IV.

| | | |
|------------|--|--------------------|
| Phase I | northeast treatment plant | completed in 2005 |
| Phase II | southwest treatment plant (Champaign) | completed in 2005 |
| Phase IIIA | disinfection system improvements (interior only) | completed |
| Phase IIIB | 2010 improvements (described below) | pending |
| Phase IV | long-range improvements | approximately 2020 |

Specifically, the following additions or modifications to the approved site plan are proposed under the request. Per the applicant, each of the proposed improvements is based upon a specific recommendation developed in UCSD’s Long Range Facilities Plan. For a description of each, please refer to the application. All of the following improvements will require site plan changes other than the tertiary filters, lower end lift station, and supervisory control system improvements.

Phase IIIB

- New headworks facility. New building, 75’ x 60’. Will replace existing open tankage.
- Excess flow clarifier and pumping station. New 100’ diameter open tank.
- Tertiary filters. Interior improvements only.
- Anaerobic digester improvements. New 65’ diameter tank with closed top.
- Employee facility. New building, 70’ x 90’.
- Vehicle storage building. Replaces existing building.

- Administration building addition
- Site utility, grading and paving. Replaces and expands parking by adding about 7,000 s.f.
- Lower end lift station. Interior improvements only.
- Supervisory control system improvements. Interior improvements only.

Phase IV

- Additional nutrient removal tanks
- Additional activated sludge final clarifier

Description of the Site and Surrounding Properties

The subject property is approximately 54 acres in area, which includes Ambucs (formerly Woodland Park (31 acres). It is located north of University Avenue/U.S. 150 and is bounded by the Urbana Armory to the west, Chief Shemauger Park and residential/industrial properties to the north, the Landscape Recycling Center to the east, and single and two-family houses to the southwest. The Comprehensive Plan designation for the site is Institutional for the sanitary facility and Recreation-Public for Ambucs Park.

The subject property and several of the surrounding properties are zoned CRE, Conservation-Recreation-Education. The residential properties to the southwest of the subject property are zoned R-3, Single and Two-Family Residential. The Saline Ditch borders the subject property along its entire northern boundary and provides a degree of separation for properties to the north, which are currently in residential and industrial uses and located in unincorporated Champaign County. The residential properties to the north are zoned County R-3, Two Family Residence. The auto salvage yard to the northeast is zoned County I-2, Light Industrial.

The following chart identifies the Comprehensive Plan designation, current zoning, and current land use of the site and surrounding properties.

Survey of Comprehensive Plan Designation, Zoning, and Land Use

| | Existing Land Use | Zoning | Future Comprehensive Plan Land Use Designation |
|-------|--|--|---|
| Site | public and quasi-public (UCSD wastewater treatment plant) | CRE (Conservation-Recreation-Education) | Institutional |
| North | Industrial (auto salvage), residential, and Public and Quasi-Public (Chief Shemauger Park) | CRE County I-2 (Light Industrial) County R-2 (Single Family Residence) | Residential Parks/ Recreation |
| South | public and quasi-public (Ambucs Park) and single and two-family residential | CRE City R-3 (Single and Two-Family Residential) | Parks/Recreation to south Residential to southwest |
| East | public and quasi-public (Police firing range and landscape recycling center) | CRE City IN (Industrial) | Industrial |
| West | public and quasi-public (National Guard Armory) | CRE | Institutional |

2005 Comprehensive Plan

The 2005 Comprehensive Plan indicates the future land use designation of the subject property as “Institutional” with the notation “Urbana-Champaign Sanitary District Treatment Plant.” The plan defines Institutional uses as follows:

“Institutional. Institutional uses generally include, public, quasi-public, and private uses, such as governmental, educational, medical, religious, or university facilities as well as cemeteries. Institutional uses may range from single buildings to campuses.”

Additionally, the following goals and objectives from the 2005 Comprehensive Plan are pertinent.

Goal 16.0 Ensure that new land uses are compatible with and enhance the exhibiting community.

Objective

- 16.4 Coordinate with utility and service providers on future planning for roadway improvements, sanitary sewer extensions, water lines, treatment facilities and other utilities.

Goal 17.0 Minimize incompatible land uses.

Objective

- 17.1 Establish logical locations for land use types and mixes, minimizing potentially incompatible interfaces, such as industrial uses near residential areas.
- 17.2 Where land use incompatibilities exist, promote development and design controls to minimize concerns.

Goal 33.0 Provide maximum service and dependable utilities.

Objective

- 33.1 Work with utility providers to ensure dependable, affordable, high quality services to the Urbana community.
- 33.3 Continue regular capital improvement programs to correct utility deficiencies.
- 33.4 Plan for future needs of the community to ensure residents have safe and reliable utilities.

Goal 38.0 Ensure that future annexations or developing municipal territory has adequate municipal services.

Objective

- 38.2 Provide for improvements and expansion in community services to keep pace with changing trends, population growth, and increased demands.

Development Regulations

The proposed additions would meet all applicable zoning regulations, including setbacks, floor area ratio, open space ratio, and maximum height. Since the wastewater treatment facility is located on a zoning lot, the development regulations apply to the entire site, and internal setback requirements do not apply. The open space ratio of 0.55 would continue to be met with the proposed expansion. In terms of stormwater runoff due to new buildings, City staff has determined that onsite detention will not be required because of the property’s proximity to Saline Ditch. For properties adjoining water bodies, it is often most advantageous to move water quickly downstream in advance of peak water flows.

Discussion

Requirements for a Special Use Permit

According to Section VII-6 of the Urbana Zoning Ordinance, an application for a Special Use Permit shall demonstrate the following:

1. *That the proposed use is conducive to the public convenience at that location.*

Wastewater treatment is a basic, vital public service, and its location is dictated by topography and watercourses. Very few locations such as this can easily site wastewater treatment facilities. Additionally, because a wastewater treatment plant has been located at this site for 85 years, improvements here will preserve the public's long-term capital investments at this site. The proposed improvements are designed to meet current and projected future wastewater treatment needs, improve efficiency and functionality, comply with highly regulated environmental standards, and lessen noise and odor. Consequently, the improvements reflected in the attached site plan are conducive to the public convenience.

2. *That the proposed use is designed, located, and proposed to be operated so that it will not be unreasonably injurious or detrimental to the district in which it shall be located, or otherwise injurious to the public welfare.*

In terms of conflicts with other land uses, the property is buffered by Ambucs Park and a highway-oriented industrial district to the south, Saline District to the north, the Landscape Recycling Center to the east, and the National Guard Armory property to the west. Although single-family residences are located to the north and southwest, a distance separation is provided, and the programmed improvements are intended to lessen noise and odor. Too, the treatment plant's location at this site for 85 years should be a consideration in that it preceded nearby residential uses. The proposed improvements are in fact designed to reduce existing noise levels and eliminate odor potential. All above-grade improvements are confined to the area already occupied by the existing facility and should not create a nuisance to surrounding properties.

3. *That the proposed use conforms to the applicable regulations and standards of, and preserves the essential character of, the district in which it shall be located, except where such regulations and standards are modified by Section VII-7.*

A "Sewage Treatment Plant or Lagoon" is permitted as a Special Use in the CRE District. The proposed facility is designed to meet applicable regulations and standards, including for setbacks, open space ratio, floor area ratio, and building height. The proposed improvements are additions to or relocations of existing processes and operations in use at the treatment facility. No new operations or processes will be added due to these improvements. The proposed use conforms with the 2005 Urbana Comprehensive Plan's future land use designation of "Institutional."

Consideration

The Plan Commission must determine whether the reasons set forth in the application, and the evidence adduced during the public hearing, justify the granting of the special use permit, and whether the proposed use will be in harmony with the general purpose and intent of the Zoning Ordinance, and will not be unreasonably injurious or detrimental to the district in which it shall be located, or otherwise injurious or detrimental to the public welfare.

In addition, the Plan Commission shall make a recommendation to the City Council for or against the proposed special use, and may also recommend such additional conditions and requirements on the operation of the proposed use as are appropriate or necessary for the public health, safety, and welfare, and to carry out the purposes of this Ordinance, including but not limited to the following:

1. Regulate the location, extent, and intensity of such use;
2. Require adherence to an approved site plan
3. Require landscaping and the screening of such use by means of fences, walls, or vegetation;
4. Stipulate a required minimum lot size, minimum yards, and maximum height of buildings and structures;
5. Regulate vehicular access and volume, and the design and location of parking and loading areas and structures;
6. Require conformance to health, safety, and sanitation requirements as necessary;
7. Regulate signs and outdoor lighting;
8. Any other conditions deemed necessary to effect the purposes of this Ordinance.

Recommended Findings

1. In 2001, the Urbana & Champaign Sanitary District (UCSD) adopted a Long Range Facilities Plan, and which was formally endorsed by the Urbana City Council through Resolution No. 2001-09-026R.
2. On August 6, 2009, UCSD applied for a Special Use Permit to allow improvements to their existing wastewater treatment plant specified for Phases IIIB and IV of their approved Long Range Facilities Plan.
3. The subject property is located in the CRE, Conservation-Recreation-Education Zoning District. Table V-1 of the Urbana Zoning Ordinance permits a “sewage treatment plant or lagoon” in CRE districts with a Special Use Permit.
4. The proposed use will be in harmony with the general purpose and intent of the Zoning Ordinance, and will not be unreasonably injurious or detrimental to the district in which it will be located, or otherwise injurious or detrimental to the public welfare.
5. The proposed wastewater treatment plant improvements at this location are conducive to the public convenience.

6. The proposed improvements should not pose a detriment to the district in which it is proposed to be located. The proposed improvements are compatible with the existing land use pattern and are furthermore designed to reduce existing noise levels and eliminate odor potential.
7. The proposed improvements conform to the applicable regulations and standards of, and preserves the essential character of, the CRE district in which it shall be located.
8. The proposed addition is consistent with the 2005 Comprehensive Plan’s future land use designation of “Institutional”, as well as the plans goals and objectives.

Options

In Plan Case No. 2117-SU-09, the Plan Commission may recommend that the City Council:

1. Approve a Special Use Permit as submitted in the application.
2. Approve a Special Use Permit, with any conditions deemed appropriate or necessary for the public health, safety, and welfare, and to carry out the purposes of the Zoning Ordinance.
3. Deny a Special Use Permit.

Staff Recommendation

Based on the evidence presented in the discussion above, and without the benefit of considering additional evidence that may be presented at the public hearing, staff recommends that the Plan Commission recommend **APPROVAL** of the proposed Special Use Permit as presented, with the **CONDITION** that the proposed improvements generally conform to the attached site plan.

Attachments: Exhibit A: Location and Land Use Map
Exhibit B: Existing Zoning Map
Exhibit C: Future Land Use Map
Exhibit D: Special Use Permit Application with site plan
Exhibit E: Resolution Regarding the Urbana & Champaign Sanitary District Long Range Plan (Resolution No. 2001-09-026R)
Exhibit F: UCSD Draft Long Range Plan – Executive Summary

cc: Michael R. Little, P.E.
Urbana & Champaign Sanitary District
1001 E University Ave
Urbana, IL 61801

Brad Bennett, Urbana Public Works

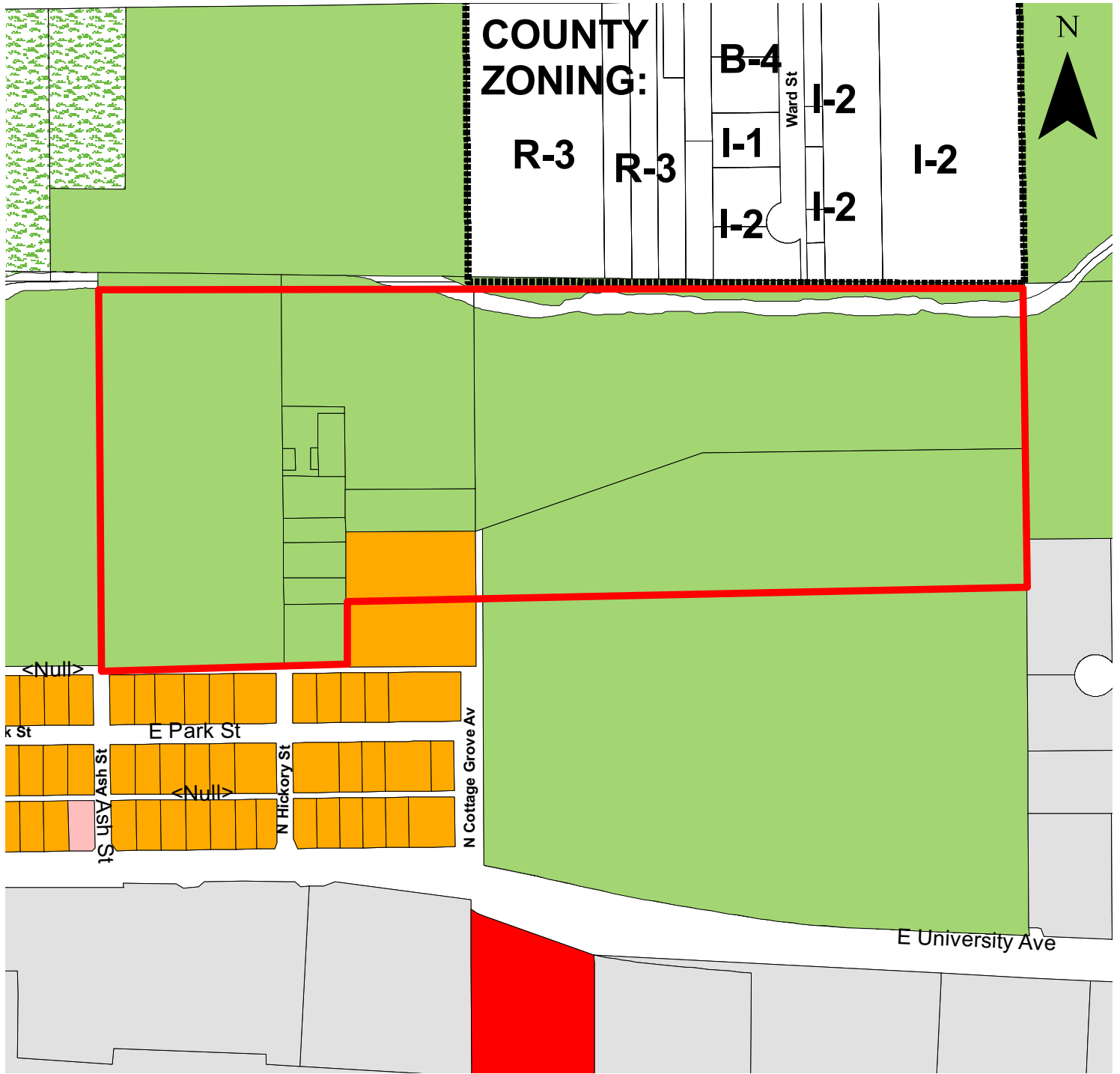
EXHIBIT A: Location & Land Use Map



Plan Case: 2117-SU-09
Subject: Special Use Permit to Make
Improvements to a Sewage Treatment Plant
Location: 1100 W University Ave, Urbana
Petitioner: Urbana & Champaign Sanitary District

 Subject Property

EXHIBIT B: Existing Zoning Map



Plan Case: 2117-SU-09
 Subject: Special Use Permit to Make Improvements to a Sewage Treatment Plant
 Location: 1100 W University Ave, Urbana
 Petitioner: Urbana & Champaign Sanitary District

Legend

| | |
|-----|----|
| IN | B1 |
| CRE | B3 |
| R3 | AG |

EXHIBIT C: Future Land Use Map



Plan Case: 2117-SU-09
Subject: Special Use Permit to Make
Improvements to a Sewage Treatment Plant
Location: 1100 W University Ave, Urbana
Petitioner: Urbana & Champaign Sanitary District

Prepared 8/25/2009 by Community Development Services - jme



Application for Special Use Permit

Plan Commission

APPLICATION FEE - \$150.00

The Applicants are responsible for paying the cost of legal publication fees as well. The fees usually run from \$75.00 to \$125.00. The applicant is billed separately by the News-Gazette.

DO NOT WRITE IN THIS SPACE - FOR OFFICE USE ONLY

Date Request Filed 08-06-2009 Plan Case No. 2117-SU-09
Fee Paid - Check No. 044564 Amount \$150.00 Date 08-06-2009

PLEASE PRINT OR TYPE THE FOLLOWING INFORMATION

A SPECIAL USE PERMIT is requested in conformity with the powers vested in the Plan Commission to recommend to the City Council under Section VII-6 of the Urbana Zoning Ordinance to allow (insert proposed use)

See attached Description of Use and Proposed Site Plan

on the property described below.

1. Location of Subject Site 1100 E. University Ave.
2. PIN # of Location 91-21-09-326-001 91-21-09-306-001 91-21-09-306-017
3. Name of Applicant/Petitioner(s) Urbana & Champaign Sanitary District Phone 367-3409

Address 1100 E. University Ave. Urbana Illinois 61802
(street/city) (state) (zip)

Property interest of Applicant(s) Owner
(owner, contract buyer, etc)

4. Name of Owner(s) same as Applicant Phone _____
Address _____
(street/city) (state) (zip)

If there are additional owners, please attach extra pages to the application.

5. Name of Professional Site Planner(s) AECOM Phone (312) 938-0300

Address 303 E. Wacker Dr. Chicago Illinois 60601
(street/city) (state) (zip)

6. Name of Architect(s) same Phone _____

Address _____
(street/city) (state) (zip)

7. Name of Engineers(s) same Phone _____

Address _____
(street/city) (state) (zip)

8. Name of Surveyor(s) Sodemann & Associates, Inc. Phone (217) 352-7688

Address 340 N. Neil St. Champaign Illinois 61820
(street/city) (state) (zip)

If there are additional consultants, please attach extra pages to application.

DESCRIPTION, USE, AND ZONING OF PROPERTY: Attach an additional sheet if necessary

Legal Description See attached Legal Description

Lot Size 650 feet x 1,560 feet = 23 acres more or less

Zoning Designation CRE

Proposed Use of Property wastewater treatment facility

AUG - 6 2009

REASONS FOR REQUEST FOR APPLICATION FOR SPECIAL USE PERMIT

NOTE: The following information must be provided in order to process the application. If additional space is needed, attach extra pages to application.

1. Explain how the proposed use is conducive to the public convenience at the location of the property.

See attached Reasons for Request

2. Explain how the proposed use is designed, located and proposed to be operated, so that it will not be unreasonably injurious or detrimental to the district in which it shall be located, or otherwise injurious or detrimental to the public welfare.

See attached Reasons for Request

3. Explain how the proposed use conforms to the applicable regulations and standards of and preserves the essential character of the district in which it shall be located.

See attached Reasons for Request

WHEREFORE, petitioner prays that this petition be heard by the Urbana Plan Commission and the Application for Special Use Permit be granted.

Respectfully submitted this 5th day of August, 2009.

Michael Little
Signature of Applicant

STATE OF ILLINOIS }
 }
CHAMPAIGN COUNTY }

I, Jane Hogan being first duly sworn on oath, deposes and says, that Michael Little is the same person named in and who subscribed the above and foregoing petition, that Michael Little has read the same and knows the contents thereof, and that the matters and things therein set forth are true in substance and in fact as therein set forth.

Subscribed and sworn to before me this 5th day of August, 2009.

Jane F Hogan
Notary Public

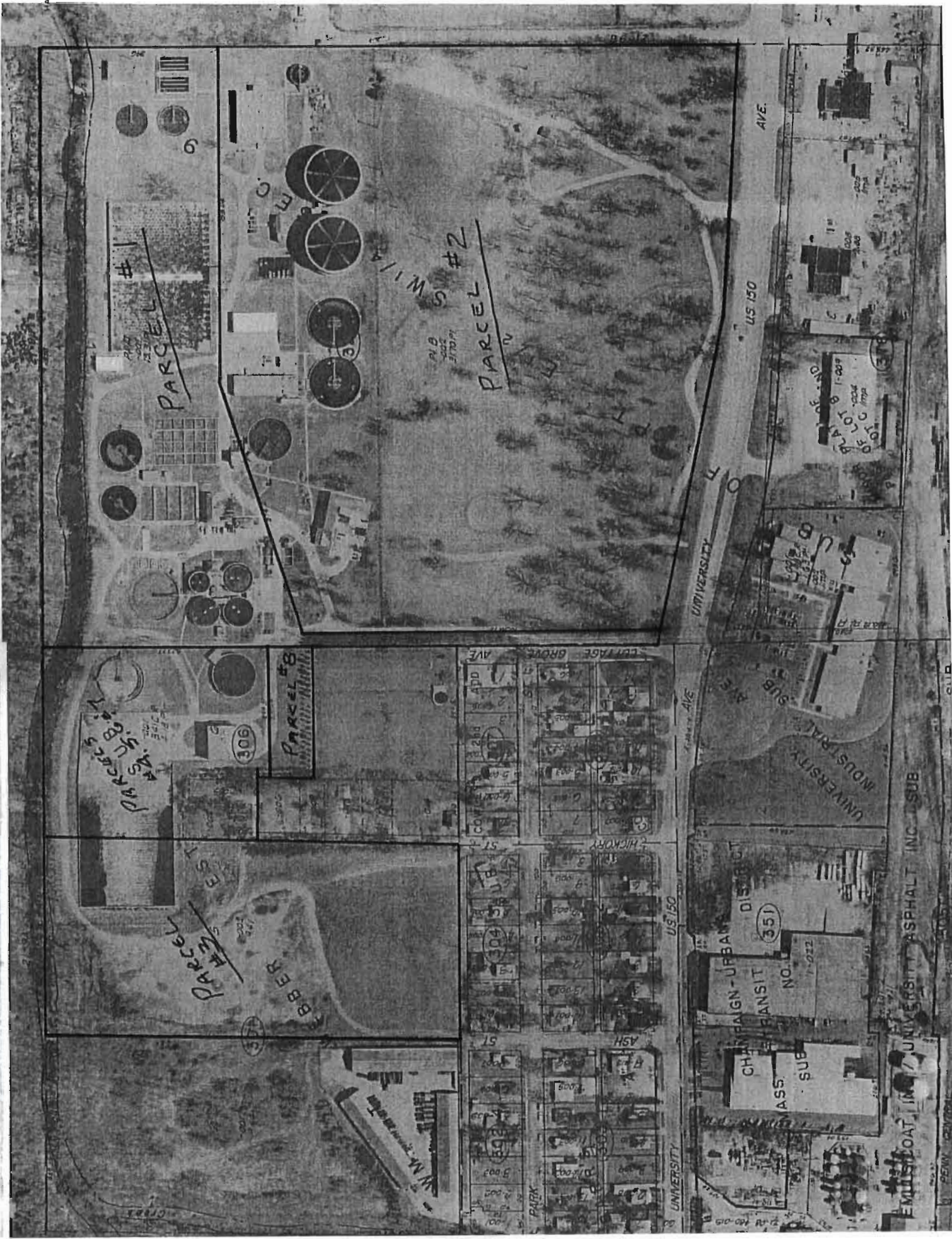


Signature of Applicant Michael Little

Petitioner's Attorney (if applicable) Erwin Martinkus & Cole, LLC – Mike McCormick

Address P.O. Box 1098, Champaign, IL 61824-1098

Telephone (217) 351-4040



Urbana & Champaign Sanitary District
Northeast Treatment Plant
Legal Descriptions

Parcel #1

Lot "A" of a Subdivision of all of that portion of the E $\frac{1}{2}$ of SW $\frac{1}{4}$ of Sec. 9, Twp. 19 N. R. 9 East of the 3rd P. M. which lies North of the right of way of the C.C.C. & St. Louis Railway Company. Said Lot "A" containing 13.68 acres of land as shown by plat of same recorded in Plat Record A, page 305, except highway right-of-way conveyed in Book 229, Page 538, in the Recorder's Office of Champaign County, Illinois, described as follows to-wit:

(From the Southwest corner of Lot 1 Block 1 of E. Barr's Subdivision of Lots 4 and 5 of a subdivision of W $\frac{1}{2}$ SW $\frac{1}{4}$ Sec. 9, Twp. 19 N. R. 9 East of the 3rd P. M. Champaign County, Illinois, measure South 30 feet thence South 89 degrees 46 minutes East 1055.7 feet thence South 71 degrees 26 minutes East 278.2 feet to place of beginning A.

From the place of beginning A measure North 42.2 feet to point B thence South 71 degrees 26 minutes East 17.4 feet to point C thence South 84.4 feet to point D thence North 71 degrees 26 minutes West 17.4 feet to point E thence North 42.2 feet to place of beginning A.

The above described tract of land is a part of Lot A of a Subdivision of the E $\frac{1}{2}$ SW $\frac{1}{4}$ Sec. 9, Twp. 19 N. R. 9 East of the 3rd P. M. Champaign County, Illinois, and containing 0.03 acres more or less.)

Parcel #2

Lot B of a Subdivision of the E $\frac{1}{2}$ SW $\frac{1}{4}$ Sec. 9, Twp. 19 N. R. 9 East of the 3rd P. M. Champaign County, Illinois, except highway right-of-way conveyed in Book 229, Page 350, in the Recorder's Office Champaign County, Illinois, described as follows, to-wit:

(From the Southeast corner of Sec. 9, Twp. 19 N. R. 9 East of the 3rd P. M. Champaign County, Illinois, measure North 655.1 feet thence North 67 degrees 09 minutes West 658.7 feet thence North 86 degrees 46 minutes West 203 feet thence North 17 feet to place of beginning A.

From the place of beginning A measure North 86 degrees 46 minutes West 1320.0 feet to the point B thence North 121.4 feet to the point C thence South 71 degrees 26 minutes East 124.2 feet to point D thence around a curve to the left having a radius of 1389.5 feet and tangent at D to the last described Course C-D for 492.2 feet to point E thence South 86 degrees 46 minutes East 721.4 feet to the point "F" thence South 23 feet to place of beginning.

The above described tract is a part of the S $\frac{1}{2}$ Lot B of a Subdivision of the E $\frac{1}{2}$ SW $\frac{1}{4}$ Sec. 9, Twp. 19 N. R. 9 East of the 3rd P. M. Champaign County, Illinois, and containing 0.91 acres more or less.)

Parcel #3

The North Nine and Forty-one Hundredths Acres (9.41) of Lot Five (5), (except the South Five Hundred Twenty-two (522) feet of the East Fifteen (15) Feet of the North Nine and Forty-one Hundredths (9.41) acres of Lot Five (5)), of a Subdivision of the West Half ($W\frac{1}{2}$) of the Southwest Quarter ($SW\frac{1}{4}$) of Section Nine (9), Township Nineteen (19) North, Range Nine (9) East of the Third Principal Meridian, being a Subdivision of the Estate of William T. Webber, deceased, as shown by Old Letter Book "A", page 244 of the Records of Champaign County, Illinois, situated in the City of Urbana, in Champaign County, Illinois.

Parcel #4

All that part of Lot Six (6) of a sub-division of the West Half ($W\frac{1}{2}$) of the Southwest Quarter ($SW\frac{1}{4}$) of Section Nine (9), Township Nineteen (19) North, Range Nine (9) East of the Third Principal Meridian (except the West 140.5 feet more or less thereof) lying North of a line 420 feet North of and parallel to the North line of the alley in Cowley's Second Addition to the City of Urbana,

Parcel #5

The West 3 acres of the North 932 feet excepting the South 620 feet thereof of Lot 6 of a Subdivision of the West Half of the Southwest Quarter of Section 9, Township 19 North, Range 9 East of the Third Principal Meridian as made by the commissioners appointed to divide the estate of William T. Webber, deceased, being the West 3 acres of that part of Lot 6 lying North of Cowleys Second Addition to Urbana, all situated in the Southwest Quarter of Section 9, Township 19 North, Range 9 East of the Third Principal Meridian,

Parcel #6

West 30 feet of the South 151 feet of the North 478 feet of Lot 6 of a Subdivision of the West Half ($W\frac{1}{2}$) of the Southwest Quarter ($SW\frac{1}{4}$) of Section 9, Township 19 North, Range 9 East of the 3rd Principal Meridian, being a subdivision of the Estate of William T. Webber, Deceased, as shown in Old Letter Book A, page 244, in the Recorder's Office of Champaign County, Illinois; and also the North 53 feet of the South 522 feet of the East 15 feet of the North 9.41 Acres of Lot 5 of a Subdivision of the West Half of the Southwest Quarter of Section 9, Township 19 North, Range 9 East of the 3rd Principal Meridian, being a subdivision of the Estate of William T. Webber, Deceased, as shown in Old Letter Book A, page 244, of the Record of Champaign County, Illinois,

All situated in Champaign County, Illinois.

It is recited that Ernest G. Brown is one and the same person as Ernest Brown, the grantee, in Documents No. 764737 and 764738 recorded in the Office of the Recorder of Deeds, Champaign County, Illinois.

Parcel #7

Beginning at a point 454 feet North of the Southwest Corner of the West 3 acres of the North 932 feet of Lot 6 of a Subdivision of the $W\frac{1}{2}$ of the $SW\frac{1}{4}$ of Section 9, Township 19 N, R 9 East of the 3rd P. M. as made by the Commissioners in the Estate of William T. Webber, thence East 140 feet, thence North 166 feet, thence West 140 feet, thence South 166 feet to the place of beginning except the following described three tracts:

Beginning at a point in the West line of the West 3 acres of the North 932 feet of Lot 6 of a Subdivision of the $W\frac{1}{2}$ of the $SW\frac{1}{4}$ of Section 9, Township 19 N, R 9 East of the 3rd P. M., as made by the Commissioners in the Estate of William T. Webber 469 feet North of the Southwest corner of said tract, thence North 50 feet, thence East 30 feet, thence South 50 feet, thence 30 feet to the point of beginning, situated in Champaign County, Illinois.

Beginning 463 feet South of the Northwest corner of Lot 6 of a subdivision of the $W\frac{1}{2}$ of the $SW\frac{1}{4}$ of Section 9, Township 19 N, R 9 East of the 3rd P. M., as made by the Commissioners in the Estate of William T. Webber; thence 60 feet east to the true point of beginning thence North 50 feet, thence East 20 feet to the West line of property sold to Clarence Tatman, Jr., thence South along the West line of said property 50 feet, thence West 20 feet to the true point of Beginning. Also a right of way across the South 15 feet of the North 478 feet of the West $80\frac{1}{2}$ feet of said Lot 6 for ingress and egress to said premises, situated in Champaign County, Illinois, except the South 151 feet of the East 60 feet, situated in Champaign County, Illinois.

Parcel #8

A part of Lot 6 of Wm. T. Webber Est. Sub. being in the Southwest Quarter (SW $\frac{1}{4}$) of Section Nine (9), Township Nineteen (19) North, Range Nine (9) East of the Third Principal Meridian, in the City of Urbana, Champaign County, Illinois, more particularly described as follows:

Commencing at the Northeast Corner, Northwest Quarter (NW $\frac{1}{4}$), Southwest Quarter (SW $\frac{1}{4}$), Section Nine (9), Township Nineteen (19) North, Range Nine (9) East, also being the Northeast Corner of Said Lot Six (6); thence running Southerly along the East Line of Lot Six (6) of said Wm. T. Webber Est. Sub., a distance of 503.77 feet to the True Point of Beginning; thence continuing Southerly along the East Line of Said Lot Six (6), a distance of 100.00 feet; thence Westerly along a Line parallel with and 320.00 feet North of the South Line of Said Lot Six (6) to a point on the West Line of Said Lot Six (6); thence Northerly along the West Line of Said Lot Six (6), a distance of 100.00 feet, thence Easterly along a Line being the North Line of a tract of land deeded to Theodore J. Burgin, Jr., Said Line being parallel to and 420.00 feet North of the South Line of Said Lot Six (6), a distance of 300.49 feet to the True Point of Beginning. Containing 0.69 acres, more or less.

Urbana & Champaign Sanitary District
Northeast Treatment Plant
Petition for Special Use Permit Amendment
Description of Use and Proposed Site Plan

DESCRIPTION OF USE

Each of the proposed improvements is based upon a specific recommendation developed in the District's Long Range Facilities Planning Report (LRFPR), the design aspects of which were approved by the Urbana Plan Commission in August 2001 and by the Urbana City Council in September 2001, and LRFPR Update 2007, the design aspects of which were presented to the Urbana City Council in September 2007.

The needed improvements identified in the LRFPR and Update were divided into four phases. Phase I at the District's Northeast Plant, and Phase II at the District's Southwest Plant were completed as part of the District's 2005 Improvements project. A Special Use Permit was approved by the City of Urbana in 2003 for the Phase I project. Phase III was subdivided in IIIA-Disinfection System Improvements and IIIB-2010 Improvements. Phase IIIA has been completed and only affected equipment upgrades inside existing buildings and structures and did not require any modifications to the existing Northeast Plant site. Phase IIIB involves major process upgrades and requires modifications to the Northeast Plant site as described below. Phase IV are anticipated future improvements that are anticipated to take place about the year 2020.

Please refer to the attached Proposed Site Plan-NETP for locations of improvements associated with Phase IIIB and Phase IV.

Phase IIIB – 2010 Improvements

New Headworks Facility – A new block and brick building with odor control will house fine screens, grit removal and plant flow control equipment. This facility will provide improved preliminary treatment efficiency and replace the existing open tankage.

Excess Flow Facilities – A new excess flow clarifier and pumping station will replace the existing pumping station and some obsolete tankage. These improvements will increase the plant's flow handling capability.

Tertiary Filters – The existing filter equipment will be replaced with new state of the art filters in the existing building. Existing filter equipment is worn out, cannot be maintained and is inefficient.

Anaerobic Digester Improvements – A new sludge holding tank will be constructed, together with a new block and brick pump building. These improvements will provide better sludge treatment resulting in additional methane gas production that is used to generate electricity for plant use.

Employee Facility – A new employee building providing consolidated shower, locker, lunch room, and training room will be constructed, replacing existing facilities, and providing a modern, energy efficient facility for the District's employees.

AUG - 6 2009

Vehicle Storage Building – A new vehicle storage building is proposed that will provide adequate area to store Vehicles inside out of the elements.

Administration Building Addition – An addition to the existing Administration Building is proposed that will replace the existing south wing and provide some additional office space.

Site Utility, Grading and Paving – Various site electrical, water, sewer, paving and grading improvements associated with the major improvement areas will be made.

Lower End Lift Station – Existing screening and electrical equipment will be replaced within the existing structure.

SCADA System Improvements – The plant supervisory control system will be expanded to all major process areas and the existing systems upgraded with new technology.

Phase IV – 2020 Improvements

In response to future regulatory criteria for wastewater plant discharges, the District anticipates that a future round of plant improvements will be necessary to meet more stringent effluent standards. While the exact nature of these improvements cannot be completely predicted in detail at this time, additional Nutrient Removal Tanks and an additional Activated Sludge Final Clarifier (ASFC), as shown on the Proposed Site Plan, are anticipated to be needed, together with the various support improvements associated with these major process units.

Urbana & Champaign Sanitary District
Northeast Treatment Plant
Petition for Special Use Permit Amendment

Reasons for Request

1. *Explain how the proposed use is conducive to the public convenience at the location of the property.* The proposed improvements are relatively minor changes/additions to the existing treatment facility, which has been located at this site for 85 years. The proposed improvements benefit the public in that they increase the efficiency and functionality of the existing wastewater treatment facility. The proposed improvements are based upon recommendations developed in the District's Long Range Facilities Planning Report, the design aspects of which were approved by the Urbana Plan Commission in August 2001 and by the Urbana City Council in September 2001, and the LRFPR Update 2007, the design aspects of which were presented to the Urbana City Council in September 2007.

2. *Explain how the proposed use is designed, located and proposed to be operated, so that it will not be unreasonably injurious or detrimental to the district in which it shall be located, or otherwise injurious or detrimental to the public welfare.* The proposed improvements are additions to or relocation of existing facilities already in use at this facility. The improvements have been designed to reduce existing noise levels and eliminate odor potential. All above grade improvements are confined to the area already occupied by the existing plant. The overall impact of the existing facility will be reduced by these improvements.

3. *Explain how the proposed use conforms to the applicable regulations and standards of and preserves the essential character of the district in which it shall be located.* All proposed improvements are additions to or relocation of existing process and operations in use at the treatment facility. No new operations or processes will be added due to these improvements. The essential operating characteristics of the treatment facility will not be altered in any way detrimental to the area.

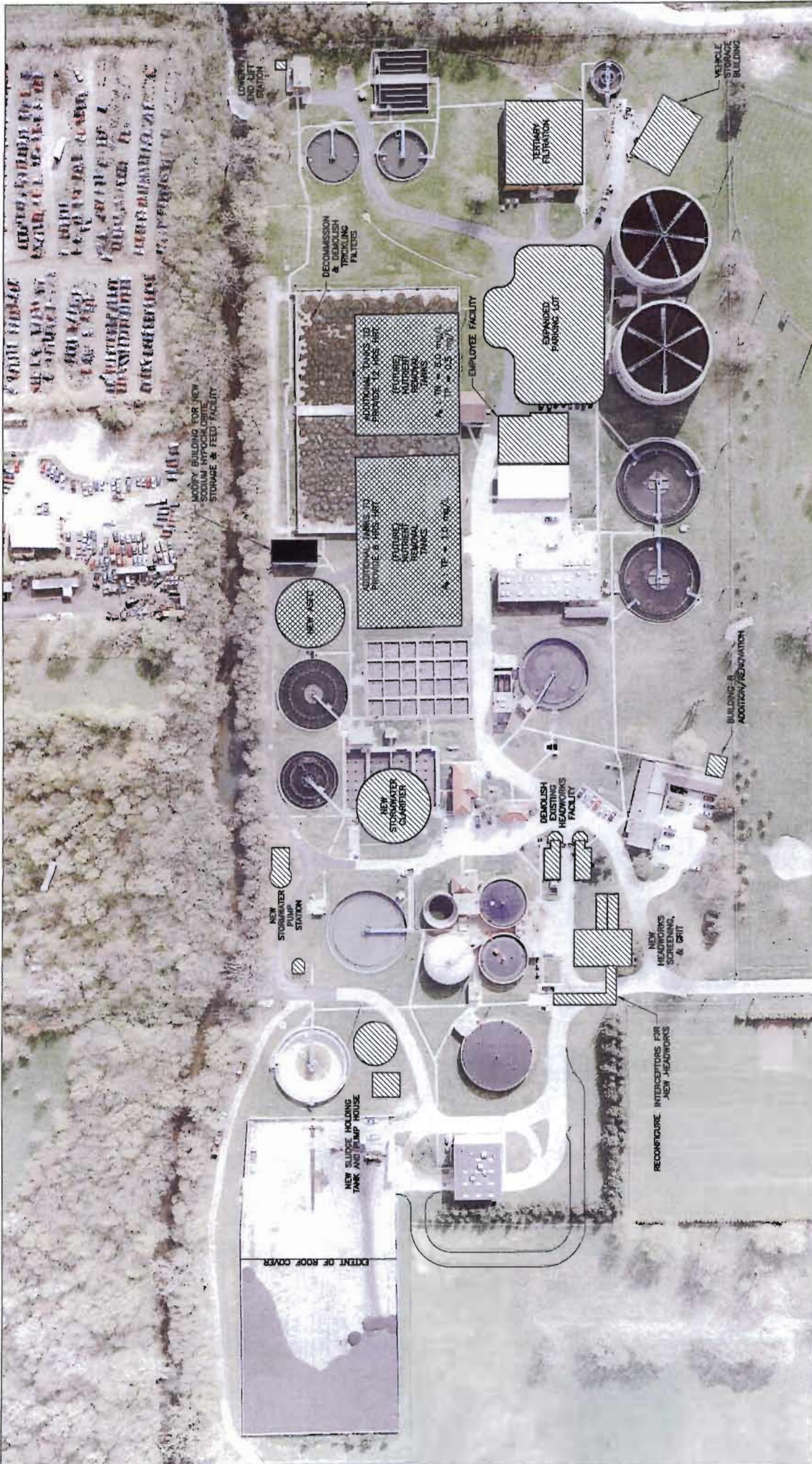


FIGURE ES.1
PHASE IIIA, IIIB AND IV
URBANA CHAMPAIGN SANITARY DISTRICT
PROPOSED SITE PLAN - NETP

- PHASE IIIA
- PHASE IIIB
- PHASE IV (FUTURE IMPROVEMENTS 2020±)

COPY

RESOLUTION NO. 2001-09-026R

**A RESOLUTION REGARDING THE URBANA & CHAMPAIGN
SANITARY DISTRICT LONG RANGE PLAN**

WHEREAS, the Urbana & Champaign Sanitary District (UCSD) has issued a Draft Long Range Facility Plan, dated December 2000, and has presented an Executive Summary of this Plan, dated April 25, 2001, to interested parties, including the City of Urbana; and

WHEREAS, the Draft Long Range Facility Plan was presented and discussed at a joint meeting of the Urbana Comprehensive Plan Steering Committee and Urbana Plan Commission on May 3, 2001 and at a special joint meeting of the Urbana City Council, Urbana Comprehensive Plan Steering Committee, and the Urbana Plan Commission on July 12, 2001; and

WHEREAS, issues raised during review of the Draft Long Range Facility Plan by the City include efficiency of expanding the Southwest Treatment Plant versus utilizing remaining capacity at the Northeast Treatment Plant; identification and analysis of alternatives to the proposed plan; the role of the Urbana & Champaign Sanitary District in growth management decisions; costs and benefits to be incurred by the residents of the Northeast Basin, including the citizens of Urbana, versus residents of the Southwest Basin; the equity of the proposed fee structure; assumptions used in developing the finance plan; and planning for future additional expansion and improvements; and

WHEREAS, recommendations to the Urbana City Council regarding endorsement of the Draft Long Range Facility Plan were considered by the Urbana Comprehensive Plan Steering Committee on August 16, 2001 and by the Urbana Plan Commission on August 23, 2001; and

WHEREAS, by a vote of 9 - 0, the Urbana Comprehensive Plan Steering Committee has recommended endorsement of the Draft Long Range Facility Plan as being consistent with the goals and objectives of the Urbana Comprehensive Plan; and

WHEREAS, by a vote of 4 - 2, the Urbana Plan Commission has recommended endorsement of the Draft Long Range Facility Plan, with the additional recommendation that the Urbana & Champaign Sanitary District evaluate future changes to their funding model to encourage efficient growth and provide for future expansion; and

WHEREAS, the Draft Long Range Facility Plan was reviewed by City of Urbana Planning and Engineering staff with respect to its effects upon the citizens of the City of Urbana, its technical soundness, and its conformity to the goals and objectives of the Urbana Comprehensive Plan; and

WHEREAS, City of Urbana planning and engineering staff have recommended that the facilities planning area, interceptor sewer service area plan, and treatment facilities long-range plan components of the Draft Long Range Facility Plan be endorsed, but that the financial plan component of the Draft Long Range Facility Plan not be endorsed and that a two-tiered funding approach for the two basins be evaluated that more nearly reflects the benefits to be derived; and

WHEREAS, City of Urbana planning and engineering staff further recommend that planning for future expansion and improvements to the Northeast Treatment Plant occur well in advance of capacity limitations and that environmentally friendly approaches and technologies be considered in current and future expansion plans; and

WHEREAS, the Draft Long Range Facility Plan will provide for reasonable and responsible improvements to the interceptor system, treatment plant processes, and treatment plant expansion needs for the entire District, including the City of Urbana; and

WHEREAS, planned improvements set forth in the Draft Long Range Facility Plan will be supportive of the relevant goals and objectives of the Urbana Comprehensive Plan; and

WHEREAS, planned improvements set forth in the Draft Long Range Facility Plan are consistent with population growth projections developed by City staff based upon the Land Use Map of the Urbana Comprehensive Plan, as amended; and

WHEREAS, the proposed financial plan component of the Draft Long Range Facility Plan would potentially pose an unfair burden upon rate payers in the Northeast Basin, including the residents of the City of Urbana, and would not be consistent with policies of the Urbana Comprehensive Plan which state that the costs of development should be assigned to those who receive its benefits; and

WHEREAS, the Urbana City Council, having duly considered all matters pertaining thereto, finds and determines that endorsement of the Urbana & Champaign Sanitary District Draft Long Range Facility Plan, with the exception of the financial plan component is in the best interest of the City of Urbana.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF URBANA, ILLINOIS, as follows:

Section 1. The City Council finds and determines that the facts contained in the above recitations are true.

Section 2. The Urbana City Council does hereby endorse the facilities planning area, interceptor sewer service area plan, and treatment facilities long-range plan components of the Draft Long Range Facility Plan.

Section 3. The Urbana City Council does not endorse the financial plan component of the Draft Long Range Facility Plan and does hereby request that the Urbana & Champaign Sanitary District evaluate and consider a two-tiered

funding approach for the Northeast and Southwest basins that more nearly reflects the benefits to be derived by the residents of each basin.

Section 4. The Urbana City Council does further recommend that planning for future expansion and improvements to the Northeast Treatment Plant occur well in advance of capacity limitations and that environmentally friendly approaches and technologies be considered in current and future expansion plans of the Urbana & Champaign Sanitary District.

PASSED by the City Council this 4th day of September,
2001.

Phyllis D. Clark
Phyllis D. Clark, City Clerk

APPROVED by the Mayor this 17th day of September,
2001.

Tod Satterthwaite
Tod Satterthwaite, Mayor

MEMORANDUM

Date: April 25, 2001
From: Dennis Schmidt
RE: UCSD's Draft Long Range Plan – Executive Summary

A. BACKGROUND

The Urbana & Champaign Sanitary District was incorporated in 1921 and its primary responsibility is to provide wastewater treatment services for the Cities of Urbana and Champaign, University of Illinois and the Village of Savoy. Specifically, the District operates and maintains two wastewater treatment plants (northeast and southwest), 25 pump stations and over 120 miles of interceptor sewers. The northeast and southwest treatment plants have a design capacity of 17.3 and 5.9 mgd (million gallons per day), respectively. In 2000, the District treated an average of 13.3 mgd at the northeast plant and 5.88 mgd at the southwest plant. In general, the southwest treatment plant service area includes Willard Airport, the Village of Savoy plus the area west of Mattis Avenue and south of Kirby Avenue to the Urbana City limits.

The Cities of Champaign and Urbana, University of Illinois and the Village of Savoy maintain their own collector sewer systems. The District's interceptors and pump stations transport wastewater from individual collection systems to one of the two treatment plants.

The District also maintains the collector sewers in subdivisions that are developed outside the corporate limits of the municipalities. Maintenance of these sewers are transferred to the municipality upon annexation.

The District's revenue and expenditures, less depreciation for FY00 were \$7,396,730.00 and \$6,876,424.00, respectively. The District's revenue is generated from a combination of user and connection fees with user fees contributing 92% of the total. The District has no bonded indebtedness. The value of fixed assets at the District's two treatment plants is over \$175,000,000.

The last increase in the District's connection fee was January 2000. The connection fee for a single-family home was increased from \$150 to \$450. This was the first increase in the connection fee since it was started in 1965.

The last increase in the District's user fee was in 1998. The Trustees approved a \$0.30 increase to be phased in over a three-year period. The final phase of the increase was implemented February, 2001. The current base user fee is \$1.08 per 100 cubic feet. Prior to 1998, the last increase in the District's base user fee was in 1987.

The District is governed by a three member Board. Current Trustees are;

- * Susan W. McGrath - President (98-01)
- * Don Flessner - Vice President/Treasurer (99-02)
- * Joseph Corley - Clerk (00-03)

B. LONG RANGE PLANNING:

The last UCSD long range planning effort was completed in 1975. This plan resulted in a \$32,000,000 construction project that was completed in 1982 that enhanced and expanded the treatment facilities at both the northeast and southwest treatment plants. The project was funded with a 75% EPA grant and a 25% local share financed with the issuance of general obligation bonds.

In 1999, the District began its current long range planning effort. Three primary factors drove the need for the current planning effort:

- 1) The District's southwest treatment plant is at capacity due to growth in that plant's drainage basin.
- 2) Much of the equipment installed as a result of the last major planning effort is over 20 years old and at or near the end of its useful life, and
- 3) Future growth could exceed the service area of the existing District interceptor and pump station system.

To facilitate the planning effort, the District divided the work into two components, service area planning and treatment facilities planning. The District elected to do the service area planning work in house with assistance from Sodemann & Associates, Inc. Consoer Townsend Envirodyne Engineers, Inc. (CTE) from Chicago, Illinois was hired to complete the long range plan for the District's treatment facilities.

A draft document for both planning efforts was completed in December 2000. An executive summary for both documents is presented below.

C. SERVICE AREA LONG RANGE PLAN:

The purpose of this long range plan was to determine how the undeveloped property between the City/Village corporate limits and the District's facility planning area limits could be sewerred. Specifically, the plan illustrates the location and cost for interceptors and pump stations that could be needed in the future to serve the areas identified by the Village/City as potential growth areas.

There is no construction time schedule for any of the lift stations and interceptor projects described in the service area long range plan. According to District policies, the District does not initiate the construction of sewer extensions. All sewer projects are developer driven. This means the developer is responsible for all costs associated with extending the sewer to the proposed development. The extended sewer is the size and depth needed to sewer the proposed development.

Occasionally, the District participates in the cost of a developer sewer extension to make the sewer a District interceptor. The sewers chosen for District participation are those that could serve larger geographic areas if the developer's sewer was deeper and the pipe size larger. In these cases, the District only pays for the sewer pipe, additional depth and over sizing.

The only interceptor sewer project included in the long range financial planning is the first phase of the southwest interceptor. This will extend an interceptor from the southwest treatment plant to the east side of I-57. The City of Champaign is acting as the developer and is responsible for an estimated \$1,411,000 of the cost to extend the sewer. The District is responsible for the interceptor's over sizing and additional depth, which calculates to an estimated cost of \$2,659,000. The City's share of the cost is based on extending an 18" sewer from the southwest treatment plant. To serve the larger geographic area, the District is enlarging the pipe to 54" in diameter.

This project is currently under design and is scheduled for construction in the fall/summer of 2001 pending receipt of a state revolving loan.

D. TREATMENT FACILITIES LONG RANGE PLAN

Needs assessment: CTE's first assignment was to help the District conduct an internal needs assessment and prepare a facilities condition report. The second phase of CTE's work involved the determination of existing and future wastewater flows and loadings for both plants. As a result of these studies a number of needs and deficiencies were identified. The following is a brief description of the more significant areas requiring improvements.

Biosolids Facilities

1. Biosolids dewatering equipment at both treatment plants, which currently consists of multiple belt filter presses, is obsolete, inefficient and worn out. Also, the sludge digestion process at the southwest plant, which is aerobic digestion, produces odors at times, consumes an excessive amount of electrical energy, and requires supplemental treatment by lime addition to produce a biosolids that can be land applied.
2. Dewatered biosolids storage pads at both plants are too small for the 20-year design life of the planning study. Also, the pads are uncovered creating problems for storage during inclement weather.

Southwest Treatment Plant

1. Raw sewage pumping facilities are inadequate for future growth.
2. Wet weather flow facilities have inadequate capacity for growth.
3. Grit and screenings removal equipment is inadequately sized and does not effectively remove the materials that are harmful to the downstream processes. This results in excessive amounts of labor necessary to remove these materials. Also, there are no facilities for washing grit and screenings prior to disposal.
4. Chemical addition for phosphorus removal creates a corrosive environment that attacks metal components throughout the plant.
5. Secondary treatment facilities are inadequate for future growth and are not energy efficient. The existing facilities employ less efficient equipment that was installed when energy was much cheaper and efficiency was not a major concern. This equipment consumes much greater amounts of electricity than the more efficient systems available today.
6. Tertiary filters are inadequate for growth and require excessive maintenance. The filter system originally installed requires significantly more maintenance than systems now available. In addition, the existing equipment has experienced excessive rates of sand loss that also increases the labor required to maintain this system.
7. Nitrification pumps have inadequate capacity for growth, and towers experience media plugging problems due to algae growth.
8. Employee facilities need rehabilitation.
9. Control systems are manual and labor intensive.

Northeast Treatment Plant

1. Grit and screenings removal equipment is inadequately sized and does not remove the materials that are harmful to the downstream processes. This results in excessive amounts of labor necessary to remove these materials. Also, there are no facilities for washing grit and screenings prior to disposal.
2. Wet weather flow facilities require expansion for future flows.
3. Tertiary filters require excessive maintenance. The filter system originally installed requires significantly more maintenance than systems now available. In addition, the existing equipment

has experienced excessive rates of sand loss that also increases the labor required to maintain this system.

4. Nitrification towers experience media plugging problems due to algae growth.
5. Anaerobic digester capacity will require expansion before end of design period.
6. Biosolids storage pad will require expansion before end of design period.
7. Control systems are manual and labor intensive.
8. Employee and administrative facilities need rehabilitation.

Project descriptions: CTE developed and evaluated alternative solutions to meet the needs and correct the deficiencies identified. The following is a brief description of the findings of those evaluations for the major project areas.

Biosolids Facilities

Two primary alternatives were first evaluated: keep solids handling facilities at both plants, or consolidate solids handling at the northeast plant. In the summer of 1999, the District conducted a full-scale, 90-day trial of a consolidated biosolids operation by trucking all of the southwest plant sludge to northeast for treatment, dewatering, storage and disposal. Based upon the positive results of this trial, the District decided that this was a viable alternative and directed CTE to include this option in their evaluations. A consolidated solids handling operation at northeast was selected. In summary, the Phase I Biosolids Consolidation project will consist of solids storage and truck loading facilities at southwest, truck unloading and storage facilities at northeast, new dewatering equipment at northeast, and a cover over the existing sludge pad at northeast.

Southwest Plant Expansion and Rehabilitation

Improvements at southwest will include a new headworks facility incorporating a new raw sewage pump station, grit removal, screening, and grit and screenings washing facilities. A new storm water clarifier will be constructed. The existing secondary treatment facility will be expanded using the tankage that was formerly aerobic digesters, with the addition of two new secondary clarifiers. The new secondary facilities will incorporate biological phosphorus removal. Nitrification pump capacity will be expanded and covers will be constructed on the towers. The existing tertiary filter system will be replaced with new equipment with expanded capacity to accommodate growth. Improved control systems will be installed to allow unmanned off shift operation and monitoring from the northeast plant. The employee facilities will be rehabilitated.

Northeast Plant Rehabilitation

Improvements at the northeast treatment plant will include new grit removal, screening and grit and screenings washing facilities. A new primary digester will be constructed, and the existing sludge storage pad will be expanded and covered. The existing tertiary filter system will be replaced with new equipment. The nitrification towers will be covered to eliminate algae growth. Improved control systems will be installed to allow reduced manning of off shift operation and monitoring of the southwest plant. The employee and administrative facilities will be rehabilitated.

Implementation plan: Listed below is the draft implementation schedule for the recommended improvements in the long range plan. The schedule consists of three projects over the twenty-year planning period.

2005 Recommended Improvements

Phase I – Biosolids Consolidation:

1. Consolidate Sludge Operations..... \$ 3,446,000.00
2. NETP - Replace Dewatering Equipment..... \$ 4,849,000.00
3. NETP - Cover Sludge Storage Pad..... \$ 3,461,000.00

| | |
|--|------------------------|
| 4. NETP - Install Flow Measurement Equipment | \$ 690,000.00 |
| SUBTOTAL | \$12,446,000.00 |
| Engineering | \$ 2,489,000.00 |
| PHASE COST | <u>\$14,935,000.00</u> |

Phase II – SWTP Expansion and Rehabilitation:

| | |
|---|------------------------|
| 1. SWTP - Replace Preliminary Treatment Equipment..... | \$ 7,844,000.00 |
| 2. SWTP - Construct Additional Storm Clarifier..... | \$ 1,620,000.00 |
| 3. SWTP - Rehabilitate Secondary Treatment Equipment..... | \$ 3,585,000.00 |
| 4. SWTP - Replace Phosphorous Process | \$ 257,000.00 |
| 5. SWTP - Expand Nitrification Pumps..... | \$ 293,000.00 |
| 6. SWTP - Expand DAF | \$ 719,000.00 |
| 7. SWTP - Rehabilitate Tertiary Filters..... | \$ 4,311,000.00 |
| 8. SWTP - Automate Plant Operations..... | \$ 2,346,000.00 |
| SUBTOTAL | \$20,975,000.00 |
| Engineering | \$ 4,195,000.00 |
| PHASE COST | <u>\$25,170,000.00</u> |
| TOTAL PROJECT COST | <u>\$40,105,000.00</u> |

The goals for the 2005 Recommended Improvements are to consolidate biosolids operations and expand/rehabilitate the southwest treatment plant. Specifically, the improvements will consolidate southwest sludge digestion, dewatering and storage to the northeast treatment plant, expand/rehabilitate sludge dewatering and storage at the northeast treatment plant and expand/rehabilitate treatment processes and controls at the southwest treatment plant.

The 2005 Recommended Improvements include \$14,194,000 and \$25,911,000 of expansion and rehabilitation needs, respectively. The improvements break down into \$13,308,000 at northeast and \$26,797,000 at southwest.

2010 Recommended Improvement

| | |
|--|------------------------|
| 1. NETP - Construct New Digester..... | \$1,413,000.00 |
| 2. NETP - Expand Sludge Storage Pad | \$2,768,000.00 |
| 3. NETP - Automate Plant Operations | \$2,999,000.00 |
| 4. NETP - Rehabilitate Preliminary Treatment Equipment | \$3,012,000.00 |
| 5. NETP - Rehabilitate Employee Facilities..... | \$1,657,000.00 |
| 6. SWTP - Rehabilitate Employee Facilities..... | \$ 232,000.00 |
| 7. NETP - Rehabilitate Stormwater Flow Channel | \$ 83,000.00 |
| SUBTOTAL | \$12,164,000.00 |
| Engineering | \$ 2,433,000.00 |
| TOTAL PROJECT COST | <u>\$14,597,000.00</u> |

The 2010 Recommended Improvements will rehabilitate northeast preliminary treatment and controls, expand/rehabilitate the northeast sludge digestion and storage facilities and rehabilitate employee facilities at both the northeast and southwest treatment plants. The 2010 Recommended Improvements break down into \$278,000 at southwest and \$14,319,000 at northeast or \$11,682,000 and \$2,915,000 of rehabilitation and expansion needs, respectively.

2015 Recommended Improvements

| | |
|---|-----------------|
| 1. NETP - Rehabilitate Lower End Lift Station | \$ 1,242,000.00 |
| 2. NETP - Cover Nitrification Towers | \$ 662,000.00 |
| 3. SWTP - Cover Nitrification Towers..... | \$ 298,000.00 |
| 4. NETP - Rehabilitate Tertiary Filters..... | \$ 9,159,000.00 |
| SUBTOTAL | \$11,361,000.00 |

| | |
|---------------------------|-------------------------------|
| Engineering | \$ 2,272,000.00 |
| TOTAL PROJECT COST | <u>\$13,633,000.00</u> |

The goal for the 2015 Improvements is to complete all remaining recommendations in the long range plan. The 2015 recommended improvements complete \$13,275,000 of rehabilitation projects at northeast and \$358,000 at southwest. There are no dollars spent in the 2015 Recommended Improvements for expansion at either plant.

Project Schedule: Following is the preliminary schedule for each of the three major projects.

2005 Improvements

Phase I

- | | | |
|----|--------------------------|---------------|
| 1. | Begin Design | April 2001 |
| 2. | Complete Design | April 2002 |
| 3. | IEPA Review and Approval | October 2002 |
| 4. | Award Contract | February 2003 |
| 5. | Notice to Proceed | March 2003 |
| 6. | Construction Complete | March 2005 |

Phase II

- | | | |
|----|--------------------------|---------------|
| 1. | Begin Design | June 2001 |
| 2. | Complete Design | January 2003 |
| 3. | IEPA Review and Approval | July 2003 |
| 4. | Award Contract | November 2003 |
| 5. | Notice to Proceed | December 2003 |
| 6. | Construction Complete | December 2005 |

2010 Improvements

- | | | |
|----|--------------------------|----------------|
| 1. | Begin Design | February 2007 |
| 2. | Complete Design | March 2008 |
| 3. | IEPA Review and Approval | September 2008 |
| 4. | Award Contract | March 2009 |
| 5. | Notice to Proceed | April 2009 |
| 6. | Construction Complete | October 2010 |

2015 Improvements

- | | | |
|----|--------------------------|----------------|
| 1. | Begin Design | February 2011 |
| 2. | Complete Design | March 2012 |
| 3. | IEPA Review and Approval | September 2012 |
| 4. | Award Contract | March 2013 |
| 5. | Notice to Proceed | April 2013 |
| 6. | Construction Complete | October 2015 |

E. FINANCIAL PLAN

Operation, Maintenance and Replacement Funds: The financial plan for the District's Operation, Maintenance and Replacement Funds, would finance a \$26,000,000 rehabilitation project in 2005, a \$11,700,000 project in 2010 and a \$13,633,000 project in 2015. The plan would also provide sufficient revenues for annual operation, maintenance and replacement expenditures.

The cash flow for the financing plan is illustrated on Table 1. The policies, goals and assumptions used to develop the cash flow are summarized below.

Policies

1. District operation, maintenance, rehabilitation and replacement expenditures for the two treatment plants will be allocated uniformly to all District users. The District will not separate expenditures per treatment facility and allocate those costs to the users tributary to the plant. There will only be one user fee versus a user fee for northeast users and a user fee for southwest users.
2. Revenues collected from the District's user fees will be primarily used for operation, maintenance, rehabilitation and replacement expenditures. Expenditures for expansion of District facilities and interceptor sewers will be primarily funded from District connection fees. The District recognizes that economic development has a benefit for the entire community. However, expansion of District facilities caused by new development should be financed primarily from fees collected from the new development.

Goals

1. The annual projected total revenue must either equal or exceed annual projected total expenditures.
2. Revenue levels were established to allow for the buildup of an annual reserve. The reserve would be available for emergencies or allow more flexibility for financing future projects. For example, the 2015 \$13,633,000 rehabilitation project could be either financed or paid for from the reserve. Table 1 illustrates paying for the project from the reserves.

Assumptions

1. Revenue

- a. The annual growth rate for categories 401-404 User Charges, 409 User Charge Line Maintenance and 415 Septic Hauling will be 2%. The annual growth rate for categories 405 Industrial Waste Treatment, 406 Industrial Sludge Disposal and 408 University of Illinois will be 1%. A \$2,000 per year annual growth was assumed for the Replacement Tax. No growth was assumed in categories 407 Service Charges, 410 Enforcement Charges and 430 Miscellaneous Receipts.
- b. The interest on the reserve will be \$100,000 per year. This interest was split between the O&M Fund (\$55,000 per year) and the Replacement Fund (\$45,000 per year).
- c. The user fee rate would increase in the following increments;
 - * Current - \$0.98 per 100 cubic feet
 - * February, 2001 - \$1.08 per 100 cubic feet
 - * February, 2004 - \$1.28 per 100 cubic feet
 - * February, 2007 - \$1.38 per 100 cubic feet
 - * February, 2010 - \$1.48 per 100 cubic feet
 - * February, 2013 - \$1.58 per 100 cubic feet
- d. The rate increase for the University of Illinois would start July 1, in the year of the increase. For example, the February, 2004 increase would start July 1, 2004 for the University.

2. Expenditures

- a. Table 1 includes the following rehabilitation projects from the long range plan;

- * 2005 improvements - \$26,000,000
- * 2010 improvements - \$11,700,000
- * 2015 improvements - \$13,633,000

Construction of the above projects will be completed and debt retirement will start in the year indicated.

- b. The 2005 & 2010 improvement projects will be financed from the State's Revolving Loan Fund with a 20 year loan at 3% interest.
- c. O&M expenditures from FY01 through FY05 will increase an average of 2.71% annually.
- d. O&M expenditures from FY06 through FY08 will remain constant due to savings in labor, utilities and chemicals resulting from improvements constructed in the 2005 project.
- e. O&M expenditures from FY09 through FY19 will increase an average of 3.0% annually.

- f. Starting in FY05, \$350,000 will be transferred annually from the O&M Fund to the Construction Fund. This contribution assumes that growth has a benefit to the entire community. The transfer will increase to \$450,000 in FY10.
- g. Expenditures for facility and sewer replacement will increase 50% from FY02 through FY19.
- h. All revenues and expenditures illustrated in Table 1 are in 2000 dollars.

Construction Fund: The financial plan for the District's Construction Fund would finance a \$14,194,000 project in 2005 and a \$2,915,000 project in 2010. The plan would also provide sufficient revenues for the debt retirement associated with interceptors that have been constructed by the District.

The cash flow for the financing plan is illustrated on Table 2. The policies, goals and assumptions used to develop the cash flow are summarized in the following sections.

Policies

- 1. The District will charge uniform connection and interceptor cost recovery fees for all new development. The fees will not be based on the location of the development i.e., whether or not the development is in the Champaign, Urbana or Savoy growth boundary areas.
- 2. Expenditures for expansion of District treatment facilities and interceptor sewers will be primarily funded from District connection and interceptor cost recovery fees.

Goals

- 1. The annual projected total revenue must to either equal or exceed annual projected total expenditures.
- 2. After FY05, revenue levels were established to maintain a \$5,000,000 reserve in the Construction Fund. This would be available for emergency repairs or to supplement debt retirement if connection or interceptor cost recovery fees do not meet projections.

Assumptions

1. Revenue

- a. Total UCSD growth for 20 years is projected at 33,500 PE or 1675 PE/year.
- b. Connection fee revenue assumes an annual growth of 1675 PE. Historically, over the last 11 years the District has sold 9511.62 connection units, this is an annual average of 864.69 units, a median of 784.58 units, a high in FY00 of 1498.08 units and a low in FY93 of 460 units. Each connection unit is equivalent to a range of 2 to 3 PE.
- c. The current connection fee is equivalent to \$150/PE or \$450 for a single family home. The connection fee would increase in the following increments;
 - * May 1, 2002 - \$230 per PE or \$690 for a single family home.
 - * May 1, 2004 - \$305 per PE or \$915 for a single family home.
 - * May 1, 2007 - \$335 per PE or \$1,005 for a single family home.
 - woe — * May 1, 2010 - \$365 per PE or \$1,095 for a single family home.
- d. Listed below are the revenue sources and percent contribution for the debt retirement associated with facility expansion. Growth projections indicate 2/3 of the connection fee revenue will be collected from the southwest basin.

| | |
|---------------------------------------|-------|
| * Interest from Construction Reserves | 19.6% |
| * Connection Fees | 52.9% |
| * User Fees | 27.5% |
- e. The interceptor cost recovery fee would be established May 1, 2002 and at a rate of \$1,400 per acre. The fee would increase when the District increases its debt retirement for interceptor sewers.
- f. The interceptor cost recovery fee revenue assumes an annual growth of 150 acres. Historically, over the last 13 years, 4081 acres have been annexed into the District. This is an annual average of 314 acres, a median of 252 acres, a high in FY98 of 784 acres and a low in FY91 of 7.7 acres.

- g. Listed below are the revenue sources and percent contribution for the debt retirement associated with interceptor expansion

| | | |
|---|-------------------------------------|-------|
| * | Interest from Construction Reserves | 17.5% |
| * | User Fees | 24.5% |
| * | Interceptor Cost Recovery Fee | 58.0% |
 - h. Starting FY05, \$350,000 annually in user fees would be transferred from the O&M Fund to the Construction Fund. This transfer would increase to \$450,000 in FY10.
 - i. Starting in FY03, the City of Champaign would contribute \$94,000 annually to debt retirement for the southwest interceptor project.
2. Expenditures
- a. The sewer debt retirement is for the Northwest Interceptor (\$175,000) and the first phase of the Southwest Interceptor (\$276,000).
 - b. The treatment debt retirement is for a \$14,194,000 expansion project in 2005 and a \$2,915,000 project in 2010.
 - c. The 2005 & 2010 expansion projects will be financed from the State Revolving Loan Fund with a 20 year loan at 3% interest.
 - d. All revenues and expenditures illustrated in Table 1 are in 2000 dollars.

TABLE 1
REVENUE & EXPENDITURE PROJECTIONS
O&M AND REPLACEMENT FUNDS
FY01 through FY19

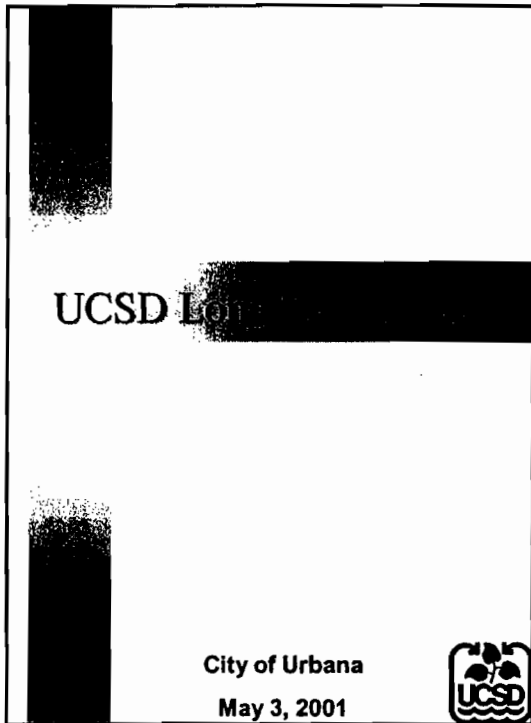
| | FY01 | FY02 | FY03 | FY04 | FY05 | FY06 | FY07 | FY08 | FY09 | FY10 |
|--------------------------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| REVENUE | | | | | | | | | | |
| 401-404 User Charges | \$5,079,849 | \$5,609,403 | \$5,721,591 | \$6,106,210 | \$7,039,636 | \$7,180,429 | \$7,467,085 | \$8,045,953 | \$8,206,872 | \$8,522,659 |
| 405 Industrial Waste Treatment | \$536,623 | \$586,755 | \$592,622 | \$626,259 | \$714,914 | \$722,063 | \$743,527 | \$793,313 | \$801,246 | \$823,919 |
| 406 Industrial Sludge Disposal | \$31,835 | \$34,809 | \$35,157 | \$37,153 | \$42,412 | \$42,836 | \$44,110 | \$47,063 | \$47,534 | \$48,879 |
| 408 User Charge Contracts | \$1,000,000 | \$1,443,333 | \$1,457,759 | \$1,472,318 | \$1,716,879 | \$1,779,993 | \$1,797,761 | \$1,934,105 | \$1,977,078 | \$1,996,787 |
| 409 User Charges Line Maint | \$228,521 | \$252,343 | \$257,390 | \$274,693 | \$316,684 | \$323,017 | \$335,913 | \$361,954 | \$369,193 | \$383,399 |
| 407 Service Charges | \$78,964 | \$50,000 | \$50,000 | \$50,000 | \$50,000 | \$50,000 | \$50,000 | \$50,000 | \$50,000 | \$50,000 |
| 410 Enforcement Charges | \$15,733 | \$5,000 | \$5,000 | \$5,000 | \$5,000 | \$5,000 | \$5,000 | \$5,000 | \$5,000 | \$5,000 |
| 415 Septic Hauling | \$27,104 | \$44,170 | \$45,053 | \$48,082 | \$55,432 | \$56,540 | \$58,798 | \$63,356 | \$64,623 | \$67,110 |
| 420 Interest Income | \$46,345 | \$55,000 | \$55,000 | \$55,000 | \$55,000 | \$55,000 | \$55,000 | \$55,000 | \$55,000 | \$55,000 |
| 430 Miscellaneous Receipts | \$10,216 | \$6,000 | \$6,000 | \$6,000 | \$6,000 | \$6,000 | \$6,000 | \$6,000 | \$6,000 | \$6,000 |
| Sub Total O&M | \$7,055,189 | \$8,086,813 | \$8,225,574 | \$8,680,714 | \$10,001,957 | \$10,220,879 | \$10,563,194 | \$11,361,744 | \$11,582,546 | \$11,958,752 |
| Replacement Tax | \$200,000 | \$202,000 | \$204,000 | \$206,000 | \$208,000 | \$210,000 | \$212,000 | \$214,000 | \$216,000 | \$218,000 |
| Interest Income Replacement | \$23,000 | \$45,000 | \$45,000 | \$45,000 | \$45,000 | \$45,000 | \$45,000 | \$45,000 | \$45,000 | \$45,000 |
| TOTAL REVENUE | \$7,278,189 | \$8,333,813 | \$8,474,574 | \$8,931,714 | \$10,254,957 | \$10,475,879 | \$10,820,194 | \$11,620,744 | \$11,843,546 | \$12,221,752 |
| EXPENDITURES | | | | | | | | | | |
| O&M | \$5,791,700 | \$5,900,000 | \$6,077,000 | \$6,259,000 | \$6,446,000 | \$6,446,000 | \$6,446,000 | \$6,446,000 | \$6,639,000 | \$6,838,000 |
| Replacement - Facilities | \$1,041,700 | \$1,000,000 | \$1,000,000 | \$1,000,000 | \$1,100,000 | \$1,100,000 | \$1,100,000 | \$1,200,000 | \$1,200,000 | \$1,200,000 |
| Replacement - Sewers | \$160,000 | \$500,000 | \$500,000 | \$500,000 | \$550,000 | \$550,000 | \$550,000 | \$600,000 | \$600,000 | \$600,000 |
| Debt Retirement | \$0 | \$0 | \$0 | \$0 | \$1,748,000 | \$1,748,000 | \$1,748,000 | \$1,748,000 | \$1,748,000 | \$2,535,000 |
| Transfer to Construction Fund | \$0 | \$0 | \$0 | \$0 | \$350,000 | \$350,000 | \$350,000 | \$350,000 | \$350,000 | \$450,000 |
| TOTAL EXPENDITURES | \$6,993,400 | \$7,400,000 | \$7,577,000 | \$7,759,000 | \$10,194,000 | \$10,194,000 | \$10,194,000 | \$10,344,000 | \$10,537,000 | \$11,623,000 |
| RESERVE | \$2,000,000 | \$2,933,813 | \$3,831,387 | \$5,004,101 | \$5,065,058 | \$5,346,937 | \$5,973,131 | \$7,249,875 | \$8,556,421 | \$9,155,173 |

| | FY11 | FY12 | FY13 | FY14 | FY15 | FY16 | FY17 | FY18 | FY19 |
|--------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| REVENUE | | | | | | | | | |
| 401-404 User Charges | \$9,148,454 | \$9,331,423 | \$9,678,829 | \$10,355,148 | \$10,562,251 | \$10,773,496 | \$10,988,966 | \$11,208,745 | \$11,432,920 |
| 405 Industrial Waste Treatment | \$875,746 | \$884,504 | \$908,439 | \$962,389 | \$972,013 | \$981,733 | \$991,550 | \$1,001,466 | \$1,011,480 |
| 406 Industrial Sludge Disposal | \$51,954 | \$52,473 | \$53,893 | \$57,094 | \$57,665 | \$58,241 | \$58,824 | \$59,412 | \$60,006 |
| 408 User Charge Contracts | \$2,138,663 | \$2,184,352 | \$2,206,249 | \$2,354,056 | \$2,402,776 | \$2,426,821 | \$2,451,077 | \$2,475,545 | \$2,500,223 |
| 409 User Charges Line Maint | \$411,550 | \$419,781 | \$435,410 | \$465,835 | \$475,151 | \$484,654 | \$494,347 | \$504,234 | \$514,319 |
| 407 Service Charges | \$50,000 | \$50,000 | \$50,000 | \$50,000 | \$50,000 | \$50,000 | \$50,000 | \$50,000 | \$50,000 |
| 410 Enforcement Charges | \$5,000 | \$5,000 | \$5,000 | \$5,000 | \$5,000 | \$5,000 | \$5,000 | \$5,000 | \$5,000 |
| 415 Septic Hauling | \$72,037 | \$73,478 | \$76,214 | \$81,539 | \$83,170 | \$84,833 | \$86,530 | \$88,260 | \$90,026 |
| 420 Interest Income | \$55,000 | \$55,000 | \$55,000 | \$55,000 | \$55,000 | \$55,000 | \$55,000 | \$55,000 | \$55,000 |
| 430 Miscellaneous Receipts | \$6,000 | \$6,000 | \$6,000 | \$6,000 | \$6,000 | \$6,000 | \$6,000 | \$6,000 | \$6,000 |
| Sub Total O&M | \$12,814,404 | \$13,062,011 | \$13,475,033 | \$14,392,060 | \$14,669,025 | \$14,925,778 | \$15,187,294 | \$15,453,662 | \$15,724,974 |
| Replacement Tax | \$220,000 | \$222,000 | \$224,000 | \$226,000 | \$228,000 | \$230,000 | \$232,000 | \$234,000 | \$236,000 |
| Interest Income Replacement | \$45,000 | \$45,000 | \$45,000 | \$45,000 | \$45,000 | \$45,000 | \$45,000 | \$45,000 | \$45,000 |
| TOTAL REVENUE | \$13,079,404 | \$13,329,011 | \$13,744,033 | \$14,663,060 | \$14,942,025 | \$15,200,778 | \$15,464,294 | \$15,732,662 | \$16,005,974 |
| EXPENDITURES | | | | | | | | | |
| O&M | \$7,043,000 | \$7,254,000 | \$7,472,000 | \$7,696,000 | \$7,927,000 | \$8,165,000 | \$8,410,000 | \$8,662,000 | \$8,922,000 |
| Replacement - Facilities | \$1,300,000 | \$1,300,000 | \$1,300,000 | \$1,400,000 | \$1,400,000 | \$1,400,000 | \$1,500,000 | \$1,500,000 | \$1,500,000 |
| Replacement - Sewers | \$650,000 | \$650,000 | \$650,000 | \$700,000 | \$700,000 | \$700,000 | \$750,000 | \$750,000 | \$750,000 |
| Debt Retirement | \$2,535,000 | \$2,535,000 | \$2,535,000 | \$2,535,000 | \$2,535,000 | \$2,535,000 | \$2,535,000 | \$2,535,000 | \$2,535,000 |
| Transfer to Construction Fund | \$450,000 | \$450,000 | \$450,000 | \$450,000 | \$450,000 | \$450,000 | \$450,000 | \$450,000 | \$450,000 |
| TOTAL EXPENDITURES | \$11,978,000 | \$12,189,000 | \$12,407,000 | \$12,781,000 | \$13,012,000 | \$13,250,000 | \$13,645,000 | \$13,897,000 | \$14,157,000 |
| RESERVE | \$10,256,577 | \$11,396,588 | \$12,733,622 | \$14,615,681 | \$2,912,706 | \$4,863,484 | \$6,682,778 | \$8,518,440 | \$10,367,414 |

Table 2
REVENUE & EXPENDITURE PROJECTIONS
CONSTRUCTION FUND
 FY01 through FY19

| | FY01 | FY02 | FY03 | FY04 | FY05 | FY06 | FY07 | FY08 | FY09 | FY10 |
|---------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| REVENUE | | | | | | | | | | |
| Reserve Interest | \$275,000 | \$250,000 | \$100,000 | \$50,000 | \$250,000 | \$250,000 | \$250,000 | \$250,000 | \$250,000 | \$250,000 |
| Connection Fees | \$360,000 | \$360,000 | \$385,000 | \$385,000 | \$511,000 | \$511,000 | \$511,000 | \$562,000 | \$562,000 | \$562,000 |
| User Fees | \$0 | \$0 | \$0 | \$0 | \$350,000 | \$350,000 | \$350,000 | \$350,000 | \$350,000 | \$450,000 |
| Inter. Cost Recovery Fee | \$0 | \$0 | \$210,000 | \$210,000 | \$210,000 | \$210,000 | \$210,000 | \$210,000 | \$210,000 | \$210,000 |
| Mun. Contr. to | | | | | | | | | | |
| Debt Retir. | \$0 | \$0 | \$94,000 | \$94,000 | \$94,000 | \$94,000 | \$94,000 | \$94,000 | \$94,000 | \$94,000 |
| TOTAL REVENUE | \$635,000 | \$610,000 | \$789,000 | \$739,000 | \$1,415,000 | \$1,415,000 | \$1,415,000 | \$1,466,000 | \$1,466,000 | \$1,566,000 |
| EXPENDITURES | | | | | | | | | | |
| Debt Retirement | | | | | | | | | | |
| *Sewers | \$175,000 | \$175,000 | \$451,000 | \$451,000 | \$451,000 | \$451,000 | \$451,000 | \$451,000 | \$451,000 | \$451,000 |
| *Treatment | \$0 | \$0 | \$0 | \$0 | \$955,000 | \$955,000 | \$955,000 | \$955,000 | \$955,000 | \$1,151,000 |
| TOTAL Expenditures | \$175,000 | \$175,000 | \$451,000 | \$451,000 | \$1,406,000 | \$1,406,000 | \$1,406,000 | \$1,406,000 | \$1,406,000 | \$1,602,000 |
| RESERVE | \$5,000,000 | \$2,000,000 | \$1,000,000 | \$5,000,000 | \$5,009,000 | \$5,018,000 | \$5,027,000 | \$5,087,000 | \$5,147,000 | \$5,111,000 |

| | FY11 | FY12 | FY13 | FY14 | FY15 | FY16 | FY17 | FY18 | FY19 |
|----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| REVENUE | | | | | | | | | |
| Reserve Interest | \$250,000 | \$250,000 | \$250,000 | \$250,000 | \$250,000 | \$250,000 | \$250,000 | \$250,000 | \$250,000 |
| Connection Fees | \$611,000 | \$611,000 | \$611,000 | \$611,000 | \$611,000 | \$611,000 | \$611,000 | \$611,000 | \$611,000 |
| User Fees | \$450,000 | \$450,000 | \$450,000 | \$450,000 | \$450,000 | \$450,000 | \$450,000 | \$450,000 | \$450,000 |
| Inter. Cost Recovery Fee | \$210,000 | \$210,000 | \$210,000 | \$210,000 | \$210,000 | \$210,000 | \$210,000 | \$210,000 | \$210,000 |
| Mun. Contr. to Debt Retir. | \$94,000 | \$94,000 | \$94,000 | \$94,000 | \$94,000 | \$94,000 | \$94,000 | \$94,000 | \$94,000 |
| TOTAL REVENUE | \$1,615,000 | \$1,615,000 | \$1,615,000 | \$1,615,000 | \$1,615,000 | \$1,615,000 | \$1,615,000 | \$1,615,000 | \$1,615,000 |
| EXPENDITURES | | | | | | | | | |
| Debt Retirement | | | | | | | | | |
| *Sewers | \$451,000 | \$451,000 | \$451,000 | \$451,000 | \$451,000 | \$451,000 | \$451,000 | \$451,000 | \$451,000 |
| *Treatment | \$1,151,000 | \$1,151,000 | \$1,151,000 | \$1,151,000 | \$1,151,000 | \$1,151,000 | \$1,151,000 | \$1,151,000 | \$1,151,000 |
| TOTAL Expenditures | \$1,602,000 | \$1,602,000 | \$1,602,000 | \$1,602,000 | \$1,602,000 | \$1,602,000 | \$1,602,000 | \$1,602,000 | \$1,602,000 |
| RESERVE | \$5,124,000 | \$5,137,000 | \$5,150,000 | \$5,163,000 | \$5,176,000 | \$5,189,000 | \$5,202,000 | \$5,215,000 | \$5,228,000 |



2

Background

- **UCSD Responsibilities**
 - Total Assets \$350,000,000
- **Service Area**
- **Annual Budget**
 - \$8,000,000
- **Revenue Sources**
 - User Fees
 - Connection Fees
 - Property Taxes
- **Governance**

3

Long Range Planning

- **Last Long Range Plan - 1975**
 - New Federal Regulations
 - 1982 Construction Project
 - Approx. \$32,000,000
 - 75% - IEPA & USEPA
 - 25% - G.O. Bonds

4

2000 Long Range Plan

- **Long Range Plan -- Service Area**
- **Long Range Plan -- Treatment Facilities**

5
2000 Long Range Plan

- **LRP – Service Area**
 - **Develop Plan for Future Interceptors & Pump Stations**

6
See Map
Service Area Map

7
See Map
Growth Area Map

8
See Map
Future Interceptor Map

9

2000 Long Range Plan

- **LRP - Treatment Facilities**
 - Identify Rehabilitation, Capacity and Treatment Needs

10

Initial Planning Steps

- **Existing Facilities Condition Analysis**
- **Flow and Load Analysis**

11

Biosolids Facility Deficiencies

- **Digestion Facilities at Both Plants are Inadequate for Future Growth**
- **SWTP Digestion Process is Not Cost Effective**
- **Dewatering Equipment is Obsolete and Inefficient**
- **Storage Pads are Too Small and Uncovered**

12

Treatment Plant Deficiencies

- **Grit & Screening Removal is Inefficient**
- **Grit & Screening Disposal Will Not Meet Future Regulations**
- **SWTP Chemical Phosphorus Removal Creates Corrosive Environment**

Treatment Plant Deficiencies

- SWTP Secondary Treatment System is Inadequate for Future Growth
- Tertiary Filters are Inadequate & Require Excessive Maintenance
- Nitrification Facilities are Inadequate & Experience Media Plugging

Treatment Plant Deficiencies

- Employee Facilities Need Rehabilitation
- Control Systems are Manual & Labor Intensive

Long Range Plan Recommended Improvements

| | |
|--------------|----------------------|
| NE Plant | \$ 41,000,000 |
| SW Plant | \$ 27,000,000 |
| Total | \$ 68,000,000 |

"DRAFT" Recommended Improvements -2005

| | |
|---|---------------------|
| 1. Consolidate Sludge Operations | \$ 3,446,000 |
| 2. NETP - Replace Dewatering Equipment | \$ 4,849,000 |
| 3. NETP - Cover Sludge Storage Pad | \$ 3,461,000 |
| 4. NETP - Install Flow Measurement Equip. | \$ 690,000 |
| 5. SWTP - Replace Preliminary Treat. Equip. | \$ 7,844,000 |
| 6. SWTP - Construct Add'l Storm Clarifier..... | \$ 1,620,000 |
| 7. SWTP - Rehabilitate Secondary Treat. Equip. | \$ 3,585,000 |
| 8. SWTP - Replace Phosphorous Process..... | \$ 257,000 |
| 9. SWTP - Expand Nitrification Pumps | \$ 293,000 |
| 10. SWTP - Expand DAF | \$ 719,000 |
| 11. SWTP - Rehabilitate Tertiary Filters | \$ 4,311,000 |
| 12. SWTP - Automate Plant Operations | \$ 2,346,000 |
| SUBTOTAL | \$33,421,000 |
| Engineering | \$ 6,684,000 |
| TOTAL PROJECT COST | \$40,105,000 |

17

“DRAFT” Recommended Improvements – 2010

| | |
|--|----------------------|
| 1. NETP – Construct New Digesters..... | \$ 1,413,000 |
| 2. NETP – Expand Sludge Storage Pad | \$ 2,768,000 |
| 3. NETP – Automate Plant Operations | \$ 2,999,000 |
| 4. NETP – Rehabilitate Preliminary Treat. Equip... | \$ 3,012,000 |
| 5. NETP – Rehabilitate Employee Facilities..... | \$ 1,657,000 |
| 6. SWTP – Rehabilitate Employee Facilities..... | \$ 232,000 |
| 7. NETP – Rehabilitate Stormwater Channel | \$ 83,000 |
| SUBTOTAL | \$ 12,164,000 |
| Engineering | \$ 2,433,000 |
| TOTAL PROJECT COST | \$ 14,597,000 |

18

“DRAFT” Recommended Improvements – 2015

| | |
|---|----------------------|
| 1. NETP – Rehabilitate Lower End Lift Sta. | \$ 1,242,000 |
| 2. NETP – Cover Nitrification Towers | \$ 662,000 |
| 3. SWTP – Cover Nitrification Towers | \$ 298,000 |
| 4. NETP – Rehabilitate Tertiary Filters | \$ 9,159,000 |
| SUBTOTAL | \$ 11,361,000 |
| Engineering | \$ 2,272,000 |
| TOTAL PROJECT COST | \$ 13,633,000 |

19

2005 Improvement Schedule

| | |
|--|---------------|
| Phase 1-Biosolids Consolidation | |
| 1. Begin Design | April 2001 |
| 2. Complete Design | April 2002 |
| 3. IEPA Review and Approval | October 2002 |
| 4. Award Contract | February 2003 |
| 5. Notice to Proceed | March 2003 |
| 6. Construction Complete | March 2005 |
| Phase 2-SWTP Improvement | |
| 1. Begin Design | June 2001 |
| 2. Complete Design | January 2003 |
| 3. IEPA Review and Approval | July 2003 |
| 4. Award Contract | November 2003 |
| 5. Notice to Proceed | December 2003 |
| 6. Construction Complete | December 2005 |

20

Long Range Plan Recommended Improvements

| | |
|-------------------|----------------------|
| NE Plant (Rehab) | \$ 36,000,000 |
| NE Plant (Expand) | \$ 5,000,000 |
| Total | \$ 41,000,000 |
| SW Plant (Rehab) | \$ 15,000,000 |
| SW Plant (Expand) | \$ 12,000,000 |
| Total | \$ 27,000,000 |

Funding for Rehabilitation Needs

21

- **State Revolving Loan Fund (2.905%, 20 years)**
- **O&M Savings - \$500,000 per Year**
- **User Fees**
 - **Current**
 - \$1.08 per 100 ft³
 - **Calendar Year 2004**
 - \$1.28 per 100 ft³
 - **Long Term**
 - \$0.10 per 100 ft³ Increase Every Three Years

Funding for Rehabilitation Needs

22

UCSD Typical Annual Residential User Fee

- **Current**
 - \$110.76 per Year
- **Calendar Year 2004**
 - \$131.27

Fee Comparison

23

| <u>Entity</u> | <u>Annual User Fee</u> |
|------------------------|------------------------|
| Danville | \$62.76 |
| Springfield | \$75.60 |
| Peoria | \$80.16 |
| UCSD | \$110.76 |
| Bloomington/ Normal | \$126.60 |
| Rantoul * | \$197.40 |
| Decatur | \$201.12 |
| Mahomet * | \$316.80 |

* Includes Municipal collection system Maintenance

Funding for Expansion Needs

24

- **Total Treatment Expansion Needs (20 Years) -- \$17,000,000**
- **Existing Interceptor Debt Retirement**
 - \$451,000 per year

25

Funding for Expansion Needs

- **Treatment (\$17,000,000)**
 - Construction
 - Reserve - Interest 19.6%
 - User Fees 27.5%
 - Connection Fees 52.9%

- **Interceptors (\$451,000)**
 - Construction
 - Reserve - Interest 17.5%
 - User Fees 24.5%
 - Interceptor Fee 58.0%

26

Funding for Expansion Needs

- **Connection Fee**
 - Current
 - \$450 per Single Family Dwelling Unit
 - May 2002
 - \$690 per Single Family Dwelling Unit
 - May, 2004
 - \$915 per Single Family Dwelling Unit
 - Long Term
 - 10% Increase every Three Years

27

Funding for Expansion Needs

- **Interceptor Cost Recovery Fee**
 - Current
 - \$0000.00 per Acre
 - May, 2002
 - \$1400.00 per Acre

28

Fee Comparison

| <u>Entity</u> | <u>Connection Fee</u> | <u>Other</u> |
|----------------------|-----------------------|--------------------------------|
| Peoria | _____ | \$3485 per acre |
| Decatur | _____ | \$930 per acre |
| Danville | \$120.00 | _____ |
| Rantoul | \$100.00 | \$300 flat fee |
| Springfield | \$400.00 | \$700 to \$1500 per acre |
| UCSD | \$450.00 | _____ |
| Bloomington / Normal | \$1050.00 | _____ |
| Mahomet | \$1200.00 | \$500 flat fee & \$60 per acre |