

RESOLUTION NO. 2017-09-065R

**A RESOLUTION APPROVING AN INTERGOVERNMENTAL AGREEMENT
(Agreement for sewer system modeling)**

WHEREAS, the City of Urbana, Illinois (“Urbana”) and the City of Champaign, Illinois (“Champaign”) are municipal corporations and a home-rule units of local government pursuant to Article VII, Section of the Illinois Constitution of 1970; and

WHEREAS, the Urbana & Champaign Sanitary District is a municipal corporation is a municipal corporation and a unit of local government (“Sanitary District”); and

WHEREAS, Section 10 of Article VII of the Illinois Constitution of 1970 and the Illinois Intergovernmental Cooperation Act, 5 ILCS 220/1 *et seq.* enables Urbana, Champaign and the Sanitary District to enter into agreements among themselves and provide authority for intergovernmental cooperation; and,

WHEREAS, Urbana, Champaign and the Sanitary District seek to enter into an Intergovernmental Agreement appended hereto and made a part hereof which, if executed, will provide for joint modeling of the their sanitary sewer system (the “Agreement”); and

WHEREAS, Urbana, Champaign and the Sanitary District have determined that it would be advantageous to undertake a joint sanitary sewer remodeling project which, if undertaken, will benefit the health, safety and public welfare; and

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Urbana, Champaign County, Illinois, as follows:

Section 1.

An Intergovernmental Agreement by and between Urbana, Champaign and the Sanitary District for the joint modeling of sanitary sewers in substantially the form in the Exhibit appended hereto and incorporated herein by reference shall be and the same is hereby authorized and approved.

Section 2.

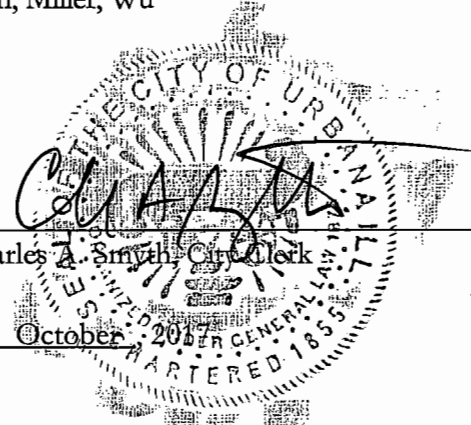
The Mayor of the City of Urbana, Illinois, shall be and hereby is authorized to execute on behalf of the City of Urbana, Illinois and deliver to the City Clerk of the City of Urbana, Illinois, for attestation the said Agreement in substantially the form appended hereto and made a part hereof.

PASSED BY THE CITY COUNCIL this 2nd day of October, 2017.

AYES: Ammons, Brown, Hazen, Jakobsson, Miller, Wu

NAYS:

ABSTENTIONS:



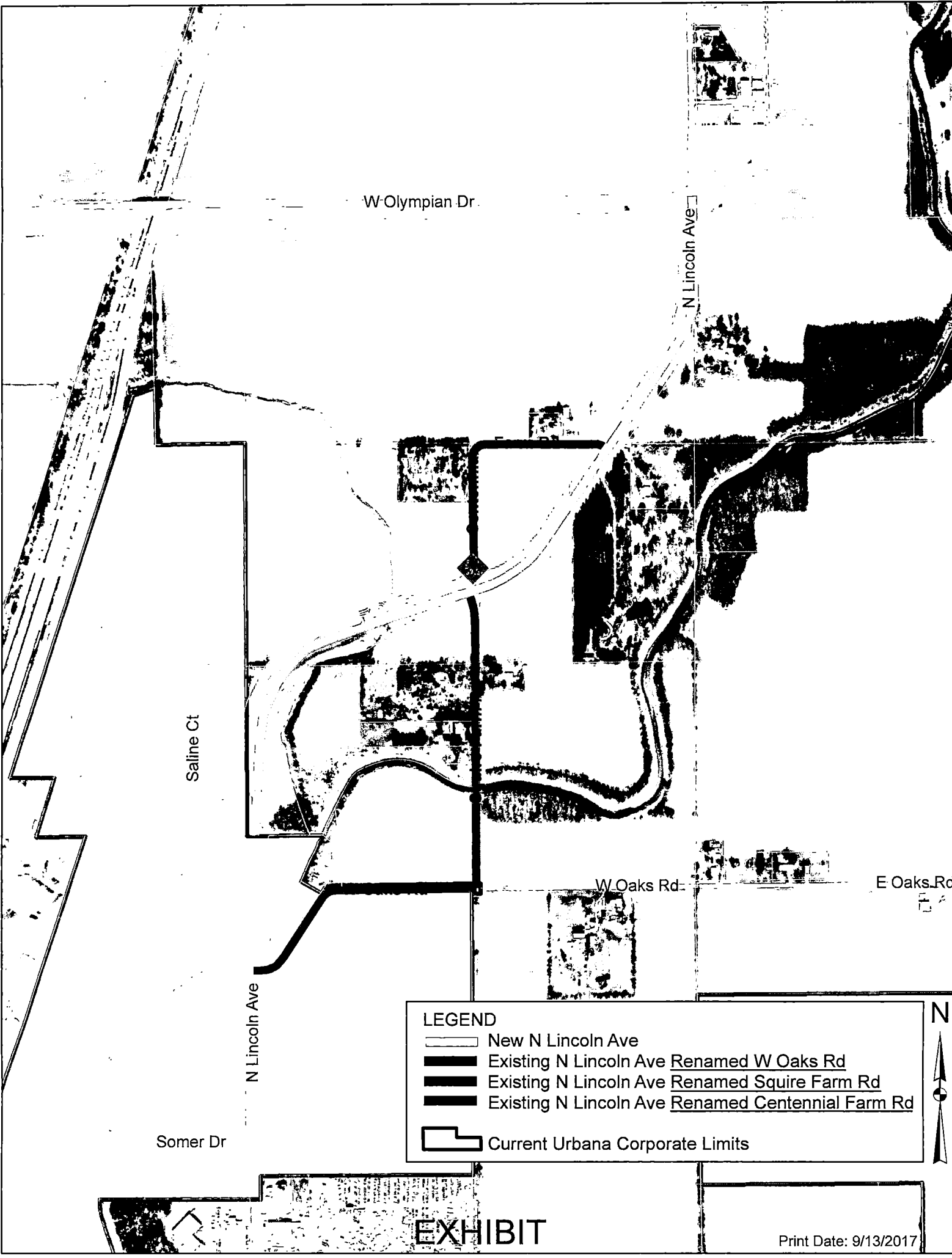
Charles A. Smyth

Charles A. Smyth, City Clerk

APPROVED BY THE MAYOR this 4th day of October, 2017

Diane Wolfe Marlin

Diane Wolfe Marlin, Mayor



W-Olympian Dr.

N Lincoln Ave

Saline Ct

N Lincoln Ave

Somer Dr

W Oaks Rd

E Oaks Rd

LEGEND

-  New N Lincoln Ave
-  Existing N Lincoln Ave Renamed W Oaks Rd
-  Existing N Lincoln Ave Renamed Squire Farm Rd
-  Existing N Lincoln Ave Renamed Centennial Farm Rd
-  Current Urbana Corporate Limits



EXHIBIT

Print Date: 9/13/2017

SEWER MODELING IGA EXHIBIT

Innovyze
605 E. Huntington Dr., Suite 205
Monrovia, CA 91016

April 7, 2017

Mr. Rob Schaffer, PE
Project Engineer
Urbana and Champaign Sanitary District
1100 E. University Avenue
Urbana, IL 61803

RE: Letter Proposal for InfoSWMM Hydraulic Model Implementation Services

Dear Mr. Schaffer:

This letter proposal is provided at your request. We understand the Urbana and Champaign Sanitary District (District) is interested in the development of an updated wastewater collection system model, and interested in contracting with Innovyze Implementation Services for said model development. Innovyze is pleased to provide this proposal to meet this goal.

Based on a preliminary review of the available data, we have listed steps to project completion and associated deliverables. Each of these sections is described in detail as attached. The software to be used in the hydraulic modeling is the latest version of InfoSWMM.

Task	Lump Sum Cost	Duration*
1: Existing Systems Review	\$11,000	20 BD
2: InfoSWMM Model Build from GIS	\$9,000	15 BD
3: Model Develepment and Validation	\$12,000	40 BD
4: Project Summary Report, MUM, and Knowledge Transfer	\$10,000	25 BD
5: Basic InfoSWMM Training	--	--
Total	\$42,000	100 BD

*Innovyze time only, does not include District's time; BD – Business Days.

Upon receipt of your authorization and the requested information, we can complete the project within four months for a lump sum fee of **\$42,000**. This schedule assumes that all of the District's reviews will be conducted and replied to within five day periods.

We appreciate your consideration of this proposal. Should you have any questions, please don't hesitate to contact me, Libby Cavanaugh at (414) 615-1975 or project manager Kevin Trott at (626) 568-6812. We look forward to hearing from you soon.

Very Truly Yours,

Erick Heath
Vice President
Director of Sales and Client Relations
Innovyze
Phone: (626) 568-6855

SEWER MODELING IGA EXHIBIT

reviewed and a list of fields to be imported to the new models plus any additional fields that are recommended for future use will be generated.

The Task 1 review will include the following:

- Unique IDs. Unique identifiers are mandatory for a hydraulic model and should be a non-changing and non-indexed field.
- Connectivity. The GIS data will be evaluated against strict hydraulic modeling requirements. This step is crucial in the development of a sustainable GIS-model connection. Connectivity issues typically include: pipes that cross but do not connect, tees that do not break perpendicular lines, parallel and potentially duplicate pipes and nodes, orphan nodes (no connecting pipes), orphan pipes (no connecting nodes), and partial connectivity (each pipe must have one upstream and one downstream “connected” node).
- Element Definitions. For example, check valves are typically stored in GIS as a node where in a model they are stored as an attribute of a pipe.
- Pipe Directionality. When connecting to pumps or control valves, each element must have at least one pipe in and one pipe out, and they must be in the proper direction.

A technical memorandum (TM1) will be provided summarizing any issues found in the GIS data and recommendations to address those issues. One or more shapefiles showing the exact location of connectivity problem areas will be created by Innovyze and provided to the District to simplify the review process.

The District will modify/revise their GIS information and resubmit the data to Innovyze for a second data review. Two reviews and two District checks are anticipated, but not necessarily required, and a minimum of one conference call will be held to enhance understanding of the District’s modeling needs with respect to the GIS data. A second report (TM2) will be provided to document any remaining issues and actions that will be taken to resolve problems.

Note – Connectivity issues discovered after the second data review will be corrected in the new model by Innovyze, and included in the documentation. During the final training workshop these remaining issues will be highlighted and discussed, and Innovyze will provide guidance on addressing similar issues in the future.

Once the final GIS data set is provided, as agreed upon by Innovyze and the District, Task 1 will be considered finished and Task 2 will begin.

Task 2: InfoSWMM Model Build from GIS

Using the District’s wastewater GIS data, a new InfoSWMM model will be created based upon current GIS lines and points. The InfoSWMM GIS Gateway feature will be utilized to set up GIS Exchange Clusters to import pertinent GIS data to the model database. Any outstanding connectivity issues discovered during this stage are typically minor, and will be fixed or addressed in the new model and documented as part of the final report.

Based on an inspection of the sewer GIS data, there may be a need to infer or assume missing data that is required for the hydraulic simulation engine to solve. This could include missing pipe diameters, and /or missing pipe inverts. Innovyze will utilize InfoSWMM tools, interpolation, and other modeling tools to address any data gaps found during the model build process. At least one conference call is anticipated to address missing data. All data that is assumed will be documented as part of the final summary report.

Task 4: Documentation and Knowledge Transfer

Innovyze will submit a project summary report describing all work completed, assumptions made, and recommended steps for future applications of the model. The report will be provided prior to the training workshop to allow review time by District staff. One set of edits will be completed following receipt of comments and a final report will be submitted.

The final report discussing the work done for the construction of the model will include information on:

- Datasets used and the fields imported from each dataset,
- Techniques used for importing data from the GIS into the model,
- Identification of what records were and were not included in the model,
- Areas where data in the model differs from that in the GIS,
- Techniques used to check the data and what kinds of corrections were made,
- List of data queries and query sets created to assist in the model build,
- Dry weather load allocation procedure, and
- Missing data that was assumed to achieve a running hydraulic model.

Innovyze will also create a Model Update Manual (MUM) to enable fast and reliable model updates. The update procedures will be created by an experienced Innovyze modeling specialist, and checked by a full QA/QC process to ensure clear instructions and successful use. The MUM will include the following six topics:

1. Preparing the model to be updated
2. Importing new features from GIS
3. GIS Connectivity Review
4. Updating existing features
5. Deleting abandoned features
6. Achieving a running model

Once the new model has been built, a half day hands-on training workshop will be held to transfer the new InfoSWMM model and review the model build process. The workshop will be attended in person by an Innovyze representative who will guide District staff through the procedures followed in the first three tasks. The workshop will also include testing of the GIS-model connection, and re-mapping required filenames and paths to support future model updates. Instructions on how to use many common InfoSWMM features will be provided by an approved Innovyze trainer. By the end of the workshop, District staff will have been exposed to the step-by-step process for future model updates.

Note – Innovyze will provide temporary InfoSWMM licenses as required for up to eight District trainees at no additional charge. The licenses will be able to run the District's InfoSWMM model.

Task 5: Basic InfoSWMM training.

Two days of hands-on instructor-led training for up to 8 people will be held at the District's office. The District will provide training facility, computers, and ArcGIS licenses for all trainees. Innovyze will provide training material, class lectures, example files, and temporary InfoSWMM licenses.

The Basic InfoSWMM course agenda will include (two days):

SEWER MODELING IGA EXHIBIT

THE DELIVERABLES DEVELOPED HEREUNDER ARE BASED SOLELY ON THE DATA MADE AVAILABLE TO INNOVYZE. INNOVYZE HAS NO LIABILITY OR RESPONSIBILITY FOR ACCURACY, COMPLETENESS, OR CORRECTNESS OF ANY DATA PROVIDED. URBANA AND CHAMPAIGN SANITARY DISTRICT RECOGNIZES THAT THE ELECTRONIC DATA FILES MAY NOT BE ADEQUATE AND ARE SUSCEPTIBLE TO ERROR AND CORRUPTION.

Acceptance

I hereby authorize Innovyze to proceed with the project as described herein. Invoicing will be lump sum based on % complete per month.

Company: Urbana and Champaign Sanitary District

Authorized Signature: _____

Name: _____

Title: _____

Date: _____

INTERGOVERNMENTAL AGREEMENT

THIS INTERGOVERNMENTAL AGREEMENT (hereinafter, “IGA”) made and entered into this ___ day of ___, 2017, by and between the URBANA & CHAMPAIGN SANITARY DISTRICT, a municipal corporation, hereinafter referred to as “UCSD”, and the CITY OF URBANA, a municipal corporation, hereinafter referred to as “City of Urbana”, and the CITY OF CHAMPAIGN, hereinafter referred to as “City of Champaign”, (collective, the “Parties”).

WITNESSETH:

WHEREAS, Section 10 of Article VII of the Illinois Constitution of 1970 and the Illinois Intergovernmental Cooperation Act, 5 ILCS 220/1 et seq. enables the parties here to enter into agreements among themselves and provide authority for intergovernmental cooperation; and,

WHEREAS, UCSD operates under a National Pollution Discharge Elimination System Permit (hereinafter, “NPDES”). Special Condition 16 provided in NPDES requires UCSD to work toward the goal of zero overflows or basement backups; and

WHEREAS, the United States Environmental Protection Agency has mandated UCSD to develop a Capacity, Management, Operations, and Maintenance (hereinafter, “CMOM”) plan. In fulfillment of the capacity assessment portion, UCSD has chosen to model portions of the sewer system; and

WHEREAS, communities tributary to the UCSD treatment facilities must periodically attest to unused capacity in their sewer system; and

WHEREAS, sanitary sewer system modeling is beneficial in providing assessments of the system’s existing performance, operational issues, hydraulic restrictions, high infiltration and inflow areas, and potential impacts of development on sanitary sewer system capacity; and

WHEREAS, sanitary sewer system modeling must be developed cooperatively since the communities’ sanitary sewer systems are interconnected with UCSD’s system; and

WHEREAS, the Intergovernmental Joint Sanitary Sewer Technical Committee (hereinafter, “JSSTC”) was established in 1992 to work cooperatively to address common problems and technical issues in the communities tributary to the UCSD; and

WHEREAS, the JSSTC has formed a modeling subcommittee that has met quarterly and will continue to meet on at least an annual basis. The subcommittee is charged with developing and maintaining a sewer model; and

WHEREAS, the communities tributary to the UCSD already map system components cooperatively using ArcGIS through the Champaign County Geographic Information System (GIS) Consortium; and

WHEREAS, the Parties seek to enter into a cooperative arrangement in order to undertake the

sanitary sewer system modeling project contemplated in this IGA.

NOW THEREFORE, IT IS AGREED BY AND BETWEEN THE PARTIES AS FOLLOWS:

- A. The foregoing recitals are made a part of this agreement.
- B. The JSSTC, with input from the Champaign County GIS Consortium, has selected Innovyze InfoSWMM, a modeling platform that works interactively with ArcGIS for sanitary sewer modeling.
- C. The UCSD, CITY OF CHAMPAIGN, AND CITY OF URBANA have purchased the Innovyze InfoSWMM software, Each Party shall be responsible for their own service and support of the software.
- D. The UCSD is designated as the maintainer of the master model data set but the CITY OF CHAMPAIGN and the CITY OF URBANA shall be permitted to maintain their own model data sets on local servers in their organizations.
- E. The Parties shall retain ownership of the data that they provide. Each Party will only be allowed to edit their own datasets.
- F. The Parties shall provide the input data needed for the model. Members shall provide model input data with the goal of providing 60% of the required model data for manholes and pipes owned by them within 5 years from the date of this IGA.
- G. The Parties agree to fund the initial model buildout by hiring Innovyze for a fee of \$42,000 to provide the services presented in the attached Exhibit. The cost share for the work performed by Innovyze shall be 1/2 UCSD (\$21,000), 1/3 City of Champaign (\$14,000), and 1/6 City of Urbana (\$7,000). The UCSD will pay the entire invoice and be reimbursed by each city within ninety (90) days of a bill from UCSD to the city indicating the sum due as provided in this paragraph.

H. Notice given hereunder shall be given to:

The UCSD at:
Executive Director
Urbana & Champaign San. Dist.
P. O. Box 669
Urbana, IL 61803

City of Urbana at:
Director of Public Works
City of Urbana
706 South Glover Avenue
Urbana, IL 61802

City of Champaign at:
Director of Public Works
City of Champaign
702 Edgebrook Dr
Champaign, IL 61820

Notice shall be deemed effective:

1. If given by First Class Mail, four (4) days after placement with the U.S. Postal Service if placed in a properly addressed and stamped envelope.
 2. If given by facsimile, the day after transmission if the sender's facsimile machine provides a printed receipt that the recipient's machine received the transmission.
 3. If given by courier service, the day after delivery if the courier service provides, whether in hardcopy or electronically, a receipt stating that delivery was made.
- I. In the event either party to this Agreement defaults (the "Defaulting Party") on any of its obligations provided in this Agreement, the other party (the "Non-Defaulting Party") shall have the right to give the Defaulting Party notice of any such default. All Notices of Default shall be in writing, describe the nature of the default and specify the paragraph of this Agreement or the exhibit designation and paragraph therein claimed to be in default. The Defaulting Party shall have seven (7) calendar days in which to (i) cure the default, (ii) provide a written statement to the Non-Defaulting Party which explains why the Defaulting Party is not in default; or (iii) provide the Non-Defaulting Party with a reasonable timetable in which to cure the default if the same cannot be cured within the said seven (7) calendar-day period.
- J. In the event of a dispute between the parties regarding any terms provided for in this Agreement or any exhibit attached hereto and made a part hereof or the performance of any obligation provided for in this Agreement, the parties shall meet face-to-face in an effort to resolve their dispute. If such face-to-face resolution effort fails, the parties to this Agreement shall agree to and shall participate in good faith in mediation. Should mediation fail, either party shall have the right to file and maintain an action in the Circuit Court for the Sixth Judicial Circuit, Champaign County, Illinois seeking the relief which the filing party deems appropriate. Any dispute regarding the construction, interpretation or application of any term contained in this Agreement or any exhibit appended hereto and any breach hereof shall be governed by the laws of the State of Illinois and City of Urbana ordinances.
- K. This Agreement shall become effective on _____ and shall be operative for a period of one (1) year from such effective date and , unless terminated at the expiration of such one (1) year period by any party giving ninety (90) days advance notice in writing to the other parties, this agreement shall continue upon the same terms and conditions for an additional term of one (1) year and so on from year to year thereafter until and unless terminated by any party giving the other parties ninety (90) days advance notice of the termination in writing.

IN WITNESS WHEREOF, the parties hereto have set their hand and seal the day and year first written above.

URBANA & CHAMPAIGN
SANITARY DISTRICT

CITY OF CHAMPAIGN:

By: _____
Its President

By: _____
Its _____

ATTEST:

ATTEST:

By: _____
Its Clerk

By: _____
Its _____

APPROVED AS TO FORM:

APPROVED AS TO FORM:

UCSD Attorney

City Attorney

SEAL

SEAL

CITY OF URBANA:

By: *Diane Wolfe Marlin*
Diane Wolfe Marlin Mayor

ATTEST:

By: _____
Charles A. Smith Clerk

APPROVED AS TO FORM:

Jim Simon City Attorney

SEAL