



AGENDA ITEM EXECUTIVE SUMMARY

| | | | |
|---|---|--|--|
| Agenda Item: | Geneva East Subdivision Sanitary Sewer Rehabilitation | | |
| Presenter & Title: | Bob VanGyseghem, Superintendent of Water & Wastewater | | |
| Date: | December 7, 2020 | | |
| <i>Please Check Appropriate Box:</i> | | | |
| <input checked="" type="checkbox"/> | Committee of the Whole Meeting | <input type="checkbox"/> | Special Committee of the Whole Meeting |
| <input checked="" type="checkbox"/> | City Council Meeting | <input type="checkbox"/> | Special City Council Meeting |
| <input type="checkbox"/> | Public Hearing | <input type="checkbox"/> | Other - |
| Associated Strategic Plan Goal/Objective: ES-II, ES-III, EMS-II | | | |
| Estimated Cost: \$761,065.80 | | Budgeted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Other Funding? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Executive Summary: | | | |
| <p>The Fiscal Year 2020-21 Budget allocated funds for the rehabilitation of sanitary sewers. Based on recommendations in the Deuchler Engineering Report for the Geneva East Subdivision, bid specifications were drafted for cured-in-place lining; grouting of joints & connections; manhole rehabilitation; and the construction of a new manhole to improve the flow from the lift station to the sanitary sewer on Westfield Course. The work described completes all of the recommended improvements in the Deuchler report for the publicly owned portion of the sanitary system in the Geneva East Subdivision. Rehabilitation of other areas outside of the subdivision are also included in the bid. Four bids were received with the low bid provided by Visu-Sewer of Illinois in the amount of \$691,878.00. A 10% contingency budget is recommended to be included in the overall not-to-exceed amount to account for any unforeseen field changes that may occur. Any field changes (Change Orders) must be approved by the City Administrator to be applied to the contingency.</p> | | | |
| Attachments: <i>(please list)</i> | | | |
| <ul style="list-style-type: none"> • Resolution • Bid Summary • Deuchler Engineering Memorandum • Maps | | | |
| Voting Requirements: | | | |
| <p><i>This motion requires 6 affirmative votes for passage.</i></p> <p><i>The Mayor may vote on three occasions: (a) when the vote of the aldermen or trustees has resulted in a tie; (b) when one half of the aldermen or trustees elected have voted in favor of an ordinance, resolution, or motion even though there is no tie vote; or (c) when a vote greater than a majority of the corporate authorities is required by state statute or local ordinance to adopt an ordinance, resolution, or motion.</i></p> | | | |
| Recommendation / Suggested Action: <i>(how the item should be listed on agenda)</i> | | | |
| <p>Recommend Resolution No. 2020-97 authorizing the City Administrator to execute a contract with Visu Sewer of Illinois at a total cost not to exceed \$761,065.80.</p> | | | |

RESOLUTION NO. 2020-97
RESOLUTION AUTHORIZING EXECUTION OF
Contract for Geneva East Subdivision Sanitary Sewer Rehabilitation

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GENEVA, KANE COUNTY, ILLINOIS, as follows:

SECTION 1: That the City Administrator is hereby authorized to execute, on behalf of the City of Geneva, a contract with Visu-Sewer of Illinois, for Geneva East Subdivision Sanitary Sewer Rehabilitation.

SECTION 2: This Resolution shall become effective from and after its passage as in accordance with law.

PASSED by the City Council of the City of Geneva, Kane County, Illinois, this ____ day of _____, 2020

AYES: __ NAYS: __ ABSENT: __ ABSTAINING: __ HOLDING OFFICE: __

Approved by me this ____ day of _____, 2020.

Mayor

ATTEST:

City Clerk

November 16, 2020

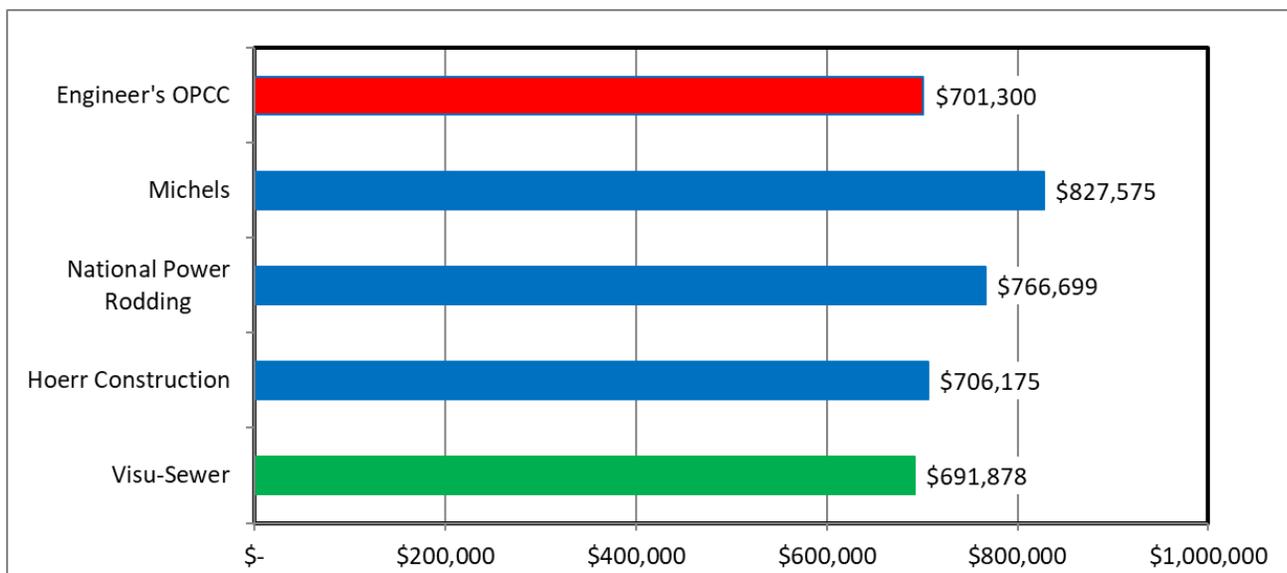
Mr. Bob VanGyseghem
 Superintendent of Water & Wastewater
 City of Geneva
 1800 South Street
 Geneva, IL 60134

RE: Geneva East Sanitary Sewer Rehabilitation
 Engineer's Review of Bids
 Deuchler Job No. 190-19012-00-1577

Bob,

Bids were opened for the Geneva East Sanitary Sewer Rehabilitation project on November 16, 2020. A total of four bids were submitted for the project as summarized in the table below. Deuchler Engineering has reviewed the bids and found Visu-Sewer to be the low responsive bidder at \$691,878.00.

The following is a summary of the Bids:



The review of the bid documents submitted by Visu-Sewer was complete and accurate. We have worked on many projects with Visu-Sewer and can verify their qualifications to perform the proposed work.

It is our recommendation that the City of Geneva award the above referenced project to the low bidder for the amount of \$691,878.00.

Thank you for the opportunity to be of service to the City. We look forward to the successful completion of the Geneva East Sanitary Sewer Rehabilitation project.

If you have any questions concerning this material, please contact the undersigned.

Very Truly Yours,

Bobby Peters, P.E.
Project Manager

cc: John Frerich, Deuchler

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| ITEM DESCRIPTION | REHAB CODE |
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| IN PAVEMENT CHIMNEY REHAB | A |
| OFF PAVEMENT CHIMNEY REHAB | B |
| INTERNAL CHIMNEY SEALING | C |
| FURNISH NEW LID AND FRAME | E |
| GROUT BOTTOM 18" | L |
| GROUT ENTIRE MANHOLE | N |
| REPLACE BENCH AND TROUGH | R |
| CEMENTITIOUS COAT | U |



ILLINOIS DESIGN FIRM
184.001830
230 WOODLAWN AVENUE
AURORA, IL 60506
PH: 630-897-4651
FAX: 630-897-5696
www.deuchler.com

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VERIFY SCALE:
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| FIELD BOOK NO.: | N/A | APPROVED: | BP |

**CITY OF GENEVA, ILLINOIS
GENEVA EAST SANITARY SEWER REHABILITATION
MANHOLE REHABILITATION**

SHT **1**
OF **11**

CLIENT REVIEW SET - 10-23-2020

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**CITY OF GENEVA, ILLINOIS
GENEVA EAST SANITARY SEWER REHABILITATION
MANHOLE REHABILITATION**

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| GROUT ENTIRE MANHOLE | N |
| REPLACE BENCH AND TROUGH | R |
| CEMENTITIOUS COAT | U |

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CITY OF GENEVA, ILLINOIS
GENEVA EAST SANITARY SEWER REHABILITATION
MANHOLE REHABILITATION

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**CITY OF GENEVA, ILLINOIS
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SEWER GROUTING**

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**CITY OF GENEVA, ILLINOIS
GENEVA EAST SANITARY SEWER REHABILITATION
SEWER GROUTING**

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CITY OF GENEVA, ILLINOIS
GENEVA EAST SANITARY SEWER REHABILITATION
CIPP LINING

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**CITY OF GENEVA, ILLINOIS
GENEVA EAST SANITARY SEWER REHABILITATION
CIPP LINING**

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**CITY OF GENEVA, ILLINOIS
GENEVA EAST SANITARY SEWER REHABILITATION
CIPP LINING**

SHT **8**
OF **11**

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Contractor's Name: Visu-Sewer of Illinois, LLC

PROJECT NO. 190-19012-00

Address/ City, State: 9014 S. Thomas Ave., Bridgeview, IL 60455

Telephone: (708) 237-0340

Fax: (708) 237-0360

Contract Documents

For

GENEVA EAST

SANITARY SEWER REHABILITATION



2020

| | |
|---|--|
|  <p><i>Robert Peters</i></p> <p>DATE: 5-15-2020 EXP: 11-31-2021</p> |  <p><i>[Signature]</i></p> <p>DATE: 5-15-2020 EXP: 4-30-2021</p> |
| <p>ROBERT J PETERS, P.E. DEUCHLER ENGINEERING CORP. PROFESSIONAL ENGINEER 062-071743</p> <p>RESPONSIBLE FOR ALL DRAWINGS AND SPECIFICATIONS</p> | <p>DEUCHLER ENGINEERING CORP. PROFESSIONAL DESIGN FIRM CORPORATION</p> |

Deuchler Engineering Corp.
230 Woodlawn Avenue
Aurora, IL 60506

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II. PLAN/PROFILE AND EXHIBITS

CITY OF GENEVA
GENEVA EAST SANITARY SEWER REHABILITATION

BIDDING DOCUMENTS

SECTION 00020

ADVERTISEMENT FOR BIDS

**GENEVA EAST SANITARY SEWER REHABILITATION
CITY OF GENEVA
2020**

Sealed **Bids** submitted in duplicate in a sealed envelope with the words "Geneva East Sanitary Sewer Rehabilitation" clearly marked on it, will be received by the City of Geneva, Illinois until **10:00 A.M. Monday November 16, 2020** at the office of the City Administrator, 22 South First Street, Geneva, IL, 60134 and will be publicly opened and read aloud at that time. The proposed project consists of Sanitary Sewer Lining, Grouting, Manhole Rehabilitation and Construction, and all appurtenant construction in accordance with the Plans and Specifications for said work, and traffic control.

The Contractor and sub-Contractors shall pay not less than the current prevailing wages at the time of the signing of the contract as found by the Department of Labor or as determined by the Court of Appeal, to all his/her employees performing work under the Contract. A signed certification stating the above as well as the fact that the bidder is not barred from bidding as a result of a violation of either Section 33E-3 or 33E-4 of Chapter 38, Illinois Revised Statutes, 1987 (as amended) must be submitted by the successful bidder as part of this contract.

A digital copy of Instructions for Bidders, Bid Form, Plans, and Specifications is available of the City of Geneva website: <https://www.geneva.il.us/>

All **Bids** shall be submitted in accordance with the Instructions for Bidders and shall be accompanied by a **10% Bid** guarantee consisting of a bid bond, as provided for under terms of said Instructions for Bidders and Specifications. Complete instructions for filing Bids are included in the Instructions for Bidders.

The City reserves the right to reject any or all **Bids** and waive technicalities.

City of Geneva, Illinois
Stephanie Dawkins
City Administrator

Dated this 30th day of October, 2020

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SECTION 00100

INSTRUCTIONS FOR BIDDERS

GENEVA EAST SANITARY SEWER REHABILITATION CITY OF GENEVA 2020

Certain additional terms used in these Instructions for Bidders have the meanings indicated below which are applicable to both the singular and plural thereof.

Bidder - one who submits a Bid directly to Owner as distinct from a sub-bidder, who submits a bid to a Bidder.

Issuing Office - the office from which the Bidding Documents are to be issued and where the bidding procedures are to be administered.

Successful Bidder - the lowest, responsible and responsive Bidder to whom Owner (on the basis of Owner's evaluation as hereinafter provided) makes an award.

Article 1. Qualifications of Bidders

- 1.1 To demonstrate qualifications to perform the Work, each Bidder must be prepared to submit within five days after Bid opening, upon Owner's request, detailed written evidence such as financial data, previous experience, present commitments, and other such data as may be called for. **Each Bid must contain evidence of Bidder's qualification to do business in the state where the Project is located or covenant to obtain such qualification prior to award of the contract.**

The investigation of a Bidder will seek to determine whether the organization is adequate in size, has had previous experience and whether available equipment and financial resources are adequate to assure Owner that the Work will be completed in accordance with the terms of the Agreement. The amount of other work to which the Bidder is committed may also be considered.

- 1.2 In evaluating Bids, Owner will consider the qualifications of only those Bidders whose Bids are in compliance with the prescribed requirements.
- 1.3 Owner reserves the right to reject any Bid if the evidence submitted by, or the investigation of, such Bidder fails to satisfy Owner that such Bidder is properly qualified to carry out the obligations of the Contract Documents and to complete the Work contemplated therein.
- 1.4 Owner may consider the qualifications and experience of Subcontractors and other persons and organizations (including those who are to furnish the principal items of material or

equipment) proposed for those portions of the Work as to which the identity of Subcontractors and other persons and organizations must be submitted as described herein.

Article 2. Copies of Contract Documents

- 2.1 Complete sets of Contract Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Contract Documents.
- 2.2 The Owner and Engineer, in making copies of Contact Documents available, do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant for any other use.

Article 3. Examination of Contract Documents and Site

- 3.1 Before submitting a Bid, each Bidder must (a) examine the Contract Documents, including Addenda, thoroughly, (b) visit the project sites to become familiar with local conditions that may in any manner affect cost, progress or performance of the work, (c) become familiar with Federal, State and local laws, ordinances, rules and regulations that may in any manner affect cost, progress or performance of the Work, (d) study and carefully correlate Bidder's observations with the requirements of the Contract Documents, and (e) satisfy themselves of the accuracy of the estimated quantities in the Bid Schedule.
- 3.2 Before submitting a Bid, Bidders may, at their own expense, make such investigations and tests as they may deem necessary to determine their Bid for performance of the Work in accordance with the time, price and other terms and conditions of the Contract Documents.
- 3.3 On request, Owner will provide each Bidder access to the site to conduct such investigations and tests as each Bidder deems necessary for the submission of a Bid.
- 3.4 The lands upon which the work is to be performed, rights-of-way for access thereto and other lands designated for use by Contractor in performing the work are identified in the Specifications, Special Provisions or on the Drawings.
- 3.5 The submission of a Bid will constitute an incontrovertible representation that the Bidder has complied with every requirement of this Article 3 and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the Work.

Article 4. Interpretations

- 4.1 All questions about the meaning or intent of the Contract Documents shall be received in writing by Deuchler Engineering Corporation, 230 Woodlawn Avenue, Aurora, Illinois, 60506 (Fax: 630/897-5696), at least five (5) days before the date set herein for the opening of bids. Questions received by the Engineer less than five (5) business days prior to the date for opening of Bids will not be answered.

- 4.2 Written clarifications or interpretations will be issued by Addenda not later than two days before the bid opening date. Only questions answered by formal written Addenda will be binding. Oral and other clarifications or interpretations will be without legal effect. Addenda will be sent by delivery service with return receipt requested or by FAX, to all parties recorded as having received the Contract Documents.
- 4.3 Bidders are responsible for determining that they have received all Addenda issued.

Article 5. Bid Security

- 5.1 Each Bidder shall deposit with his Bid a Bid guarantee consisting of a **bid bond** executed by the Bidder in an amount not less than **10%** of the total amount of the Bid submitted. Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the PROJECT is located. The bid security shall act as a guarantee that in case the Bidder's proposal is accepted, the Bidder shall within ten (10) days after the date of such acceptance and notification thereof, deliver to the Owner a contract signed and executed by the Contractor and a responsible bonding company acceptable to and written upon forms prepared or approved by the Owner.

Article 6. Bid Form

- 6.1 Each Bid shall be submitted on the Bid Form on the pages included in the Contract Documents. The Bid Form must be submitted on the color paper provided in the Contract Documents: blue paper for Section 00300, pink paper for the bid security. The remainder of Items 3-4 listed in the Bidder's Checklist on page 9 of Section 00100 may be submitted on white paper. The Bid Form shall be removed and submitted separately. All blank spaces for Bid prices must be filled in with the unit price of the item or the lump sum for which the Bid is made.
- 6.2 Bid Forms shall be completed in ink or by typewriter. The Bid price of each item on the form shall be stated in figures.
- 6.3 Bids by corporations shall be executed in the corporate name by the president or a vice-president (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown below the signature.
- 6.4 Bids by partnership shall be executed in the partnership name and signed by a partner, whose title shall appear under the signature. The official address of the partnership shall be shown below the signature.
- 6.5 All names shall be typed or printed below the signature.
- 6.6 The Bid shall contain an acknowledgment of receipt of all Addenda (the numbers of which shall be filled in on the Bid Form).

- 6.7 The address to which communications regarding the Bid are to be directed shall be shown.
- 6.8 A Bid which includes for any item a Bid Price that is abnormally low or high may be rejected as unbalanced.
- 6.9 A conditional or qualified Bid will not be accepted.

Article 7. Receipt of Bids

- 7.1 Sealed Bids will be received by the City of Geneva, Illinois, on the 16th day of November, 2020, up to the hour of 10:00 o'clock A.M., Prevailing Time, and then at said office PUBLICLY OPENED AND READ ALOUD.
- 7.2 Each Bid must be submitted in a sealed envelope addressed to Ms. Stephanie Dawkins, City Administrator, City of Geneva. Each sealed envelope containing a Bid must be plainly marked on the outside as "GENEVA EAST SANITARY SEWER REHABILITATION", and the envelope should bear on the outside the name of the Bidder and their address. If forwarded by mail, the sealed envelope containing the Bid must be enclosed in another envelope, addressed to the City Administrator at 22 South First Street, Geneva, Illinois 60134.
- 7.3 Owner may consider informal any Bid not prepared and submitted in accordance with the provisions hereof.
- 7.4 Bidders are cautioned that it is the responsibility of each individual bidder to assure that their bid is in the possession of the responsible official, or the designated alternate, prior to the stated time and at the place of the Bid Opening. Owner is not responsible for bids delayed by mail and/or delivery services, of any nature.

Article 8. Modification and Withdrawal of Bids

- 8.1 Bids may be modified only by an appropriate document duly executed (in the manner that a Bid must be executed) and delivered to the place where Bids are to be submitted at any time prior to the opening of Bids.
- 8.2 Bids may be withdrawn prior to the scheduled time (or authorized postponement thereof) for the opening of Bids.
- 8.3 Any Bid received after the time and date specified shall not be considered. No Bid may be withdrawn for a period of 90 days after the actual date of the opening of the Bids. Should there be reasons why the contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the Owner and the Bidder.
- 8.4 If the Bidder modifies, limits, restricts or subjects his Bid to conditions that would change the requirements of the Plans and Specifications, this would be considered a conditional or qualified bid and the Bid will not be accepted.

Article 9. Performance, Payment and Other Bonds

- 9.1 A Performance Bond and a Payment Bond, each in the amount of 100 percent of the Contract Price, with a corporate surety approved by the Owner will be required for the faithful performance of the contract.
- 9.2 All Bonds required as Contract Security shall be furnished with the executed Agreement.
- 9.3 Attorneys-in-fact who sign Payment Bonds and Performance Bonds must file with each Bond a certified and effective dated copy of their power of attorney.

Article 10. Award of Contract

- 10.1 The Contract will be awarded to the lowest responsive, responsible and eligible Bidder (Successful Bidder) for the project determined by the Owner to be in the Owner's best interest.

Responsive Bidders will provide bids for the unit or lump sum price for each item set forth on the Bid Form, and for each alternate project feature addition. Responsive Bidders may also provide bids for each alternate equipment manufacturer listed as described in the Bid Form and selected by the Bidder.

The term "lowest responsive, responsible and eligible Bidder" as used herein shall mean the Bidder whose Bid is the lowest of those Bidders possessing the skill, ability and integrity necessary to the faithful performance of the Work, and submits a Bid meeting all requirements.

- 10.2 The Contract will be awarded on the basis of material and equipment described in the Contract Documents without consideration of possible substitute or "or equal" items. Whenever it is indicated in the Contract Documents that a substitute or "or equal" item of material or equipment may be furnished or used by the Bidder, if acceptable to the Engineer, application for such acceptance will not be considered by the Engineer until after the "effective date of the Agreement."
- 10.3 Owner reserves the right to reject any and all Bids, to waive any and all informalities if it is in Owner's best interest to do so, and the right to disregard all nonconforming, nonresponsive or conditional Bids.
- 10.4 Owner also reserves the right to reject the Bid of any Bidder that Owner considers to be unqualified relative to Article 1 above.
- 10.5 If the Contract is to be awarded, Owner will give the Successful Bidder a Notice of Award within 5 days, after the actual date of the opening of the Bids.
- 10.6 The party to whom the contract is awarded will be required to execute the Agreement and obtain the Performance Bond, Payment Bond, and required insurance within ten (10) calendar days from the date of when the Notice of Award is delivered to the Bidder. The

Notice of Award shall be accompanied by the necessary Agreement and Bond forms.

Article 11. Execution of Agreement

- 11.1 When Owner gives a Notice of Award to the Successful Bidder, it will be accompanied by at least five unsigned copies of the Agreement and all other applicable Contract Documents. Within 5 days, excluding Saturdays, Sundays and legal holidays, after the date of receipt of such notification Contractor shall execute and return all copies of the Agreement and all other applicable Contract Documents to Owner.
- 11.2 The Owner within ten (10) days after receipt of acceptable Performance Bond, Payment Bond, required insurance, and Agreement signed by the party to whom the Agreement was awarded shall sign the Agreement and return to such party an executed duplicate of the Agreement. Should the Owner not execute the Agreement within such period, the Bidder may send Written Notice to withdraw their signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the Owner.
- 11.3 The Notice to Proceed shall be issued within ten (10) days of the execution of the Agreement by the Owner. Should there be reasons why the Notice to Proceed cannot be issued within such period, the time may be extended by mutual agreement between the Owner and Contractor. If the Notice to Proceed has not been issued within the ten (10) day period or within the period mutually agreed upon, the Contractor may terminate the Agreement without further liability on the part of either party.
- 11.4 In case of failure of the Bidder to execute and provide all agreements, bonds and insurance as required by the Contract Documents, the Owner may at their option consider the Bidder in default, and the amount of the security submitted with the Bid shall be forfeited as liquidated damages. However, nothing shall be construed herein to prevent the Owner from electing to claim and prove damages in excess of the bid security.
- 11.5 Because time is of the essence regarding the work under this contract, the Contractor shall initiate work within 10 days of the receipt of the Notice to Proceed by the Contractor.

Article 12. Safety and Health Regulations

- 12.1 This project is subject to the Safety and Health Regulations (CFR 29, Part 1926 and all subsequent amendments) as promulgated by the U.S. Department of Labor on June 24, 1974 and CFR 29, Part 1910, General Industry Safety and Health Regulations Identified as Applicable to Construction.
- 12.2 The Successful Bidder shall comply with the Department of Labor Safety and Health Regulations for Construction promulgated under the Occupational Safety and Health Act of 1970 (PL-91-596) and under Section 107 of the Contract Work Hours and Safety Standards Act (PL-91-54).
- 12.3 The Successful Bidder shall have a competent person or persons, as required under the Occupational Safety and Health Act on the Site to inspect the work and to supervise the

conformance of the Work with the regulations of the Act.

Article 13. Prevailing Wages for Kane County

13.1 The prevailing wage rates from Kane County, Illinois shall apply.

Article 14. Nondiscrimination in Employment

14.1 Contracts for work under this Project will obligate the Contractor and Subcontractors not to discriminate in employment practices.

14.2 The Contractor assures the Owner that they are an "Equal Opportunity Employer" as defined by Federal and State laws and regulations and agrees to comply with the Illinois Employment Practice Commission Equal Opportunity Clause as required by Article II of the Illinois FEPC Rules and Regulations, which is considered to be part of any contract or purchase agreement.

14.3 The Contractor certifies that the firm has a written sexual harassment policy defining sexual harassment as required in Section 2-105 of the IL. Human Rights Act 775 ILCA 5/1-105 et.seq.

Article 15. State Sales Tax

15.1 Sales tax will not have to be paid on equipment and material purchased for this project.

Article 16. Liquidated Damages

16.1 Provisions for Liquidated Damages are set forth in the Agreement

Article 17. General

17.1 The Contract Documents contain the provisions required for the construction of the Project. Information obtained from an officer, agent, employee of the Owner, or any other person shall not affect the risks or obligations assumed by the Contractor, or relieve them from fulfilling any of the conditions of the Contract.

17.2 The low Bidder shall submit the names of the major subcontractors (contracts in excess of \$5,000). Failure to comply with this requirement may make the Bidder non-responsive as determined by the Owner. The Owner shall receive the list of the subcontractors by 2:00 P.M., prevailing time, on the day after Bids are received by the Owner, at the offices of the Engineer, Deuchler Engineering Corporation, 230 Woodlawn Avenue, Aurora, IL 60506; FAX (630) 897-5696.

17.3 Certification that Contractor is not barred from public contracting due to bid-rigging or bid rotation convictions must accompany the Bid.

17.4 The lands upon which the work is to be performed, rights-of-way and easements for access

thereto and other lands designated for use by Contractor in performing the Work are identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment, or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by the Contractor.

17.5 Attached is a checklist of items that must be submitted with the Bid.

**GENEVA EAST SANITARY SEWER REHABILITATION
CITY OF GENEVA
2020**

Bidder's Checklist of Items to Assist with Bid Submittal

1. **Bid Security:** 10% of the Bid, attach to last page of Bid Form Section 00300
2. **Completed Bid Form**
 1. All names filled in appropriate blanks.
 2. Acknowledge receipt of Addenda.
 3. Price Schedule filled out.
 4. Bid Signed by Officers.
3. **Completed Sections 00310, 00315, 00320**
 - a. Drug Free Workplace Certification – Section 00310
 - b. Certification of Compliance with Safety Regulations – Section 00310
 - c. Certification of No Tax Delinquency and No Tax Default – Section 00310
 - d. Certification of Compliance with Sexual Harassment Policies – Section 00310
 - e. Certification of Non-Segregated Facilities – Section 00310
 - f. Anti-Bid Rigging Certification – Section 00315
 - g. Certification of Debarment, Suspension and Other Responsibility Matters – Section 00320
4. **Completed Affidavit of Experience Section 00330**
5. **List of Subcontractors by 2:00 p.m. the day after receipt of bids, Section 00300 - Page 6**
6. **Completed Affidavit of Litigation History Section 00335**

END OF SECTION

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SECTION 00300

BID FORM

**GENEVA EAST SANITARY SEWER REHABILITATION
CITY OF GENEVA
2020**

Proposal of VISU-SEWER OF ILLINOIS, LLC
(hereinafter called "BIDDER"), organized and existing under the laws of the State of Illinois, doing business as A CORPORATION (insert "A Corporation," "A Partnership," or "An Individual," as applicable) to the City of Geneva (hereinafter called "Owner").

- I. The undersigned BIDDER proposes and agrees, if this bid is accepted, to enter into an agreement with the Owner in the form in the Bidding Documents to perform and furnish all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.
- II. BIDDER accepts all of the terms and conditions of the Advertisement for Bids and Instructions for Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 90 days after the Bid opening, or for such longer period of time that BIDDER may agree to in writing upon request of Owner.
- III. In submitting this Bid, BIDDER represents, as more fully set forth in the Agreement, that:
 - A. BIDDER has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged.

| Addendum No. | Addendum Date |
|--------------|-----------------|
| <u>1</u> | <u>11/10/20</u> |
| <u>2</u> | <u>11/12/20</u> |
| _____ | _____ |
| _____ | _____ |

- B. BIDDER has visited the site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, performance, and furnishing of the Work.
- C. BIDDER is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.

- D. BIDDER has carefully studied all reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site. BIDDER acknowledges that Owner and Engineer do not assume responsibility for the accuracy or completeness of information or data shown or indicated in the Bidding Documents with respect to Underground Facilities at or contiguous to the Site.
 - E. BIDDER is aware of the general nature of Work to be performed by Owner and others at the site that relates to Work for which this Bid is submitted as indicated in the Bidding Documents.
 - F. BIDDER has correlated the information known to BIDDER, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents and all additional examinations, investigations, explorations, test studies, and data with the Bidding Documents.
 - G. BIDDER has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that BIDDER has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to BIDDER.
 - H. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work for which this Bid is submitted.
- IV. By submission of the bid, each BIDDER further certifies, and in the case of a joint bid each party thereto certifies as to his own organization, that in connection with the bid:
- A. The prices in the bid have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
 - B. Unless otherwise required by law, the prices which have been quoted in the bid have not knowingly been disclosed by the bidder, prior to opening, directly or indirectly to any other bidder or competitor; and
 - C. No attempt has been made or will be made by the bidder to induce any other person or firm to submit or not to submit a bid for the purpose of restricting competition.
- V. Each person signing the Bid certifies that:
- A. They are the person in the BIDDER's organization responsible within that organization for the decision as to the prices being bid and that he has not participated, and will not participate, in any action contrary to (4) above; or

B. They are not the person in the BIDDER's organization responsible within that organization for the decision as to the prices being bid, but that they have been authorized to act as an agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to (4) above, and as their agent shall so certify; and shall also certify that he has not participated, and will not participate, in any action contrary to (4) above.

VI. BIDDER will complete the Work in accordance with the Bidding Documents for the following price(s):

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNITS | UNIT PRICE | COST |
|----------|--|----------|------------|---------------------|------------|
| 1 | Pre - Construction Cleaning and Televising | 17,500 | LF | 3.00 | 52,500.00 |
| 2 | Cured-in-Place Pipelining (8") | 4,200 | LF | 28.00 | 117,000.00 |
| 3 | Cured-in-Place Pipelining (10") | 200 | LF | 63.50 | 12,700.00 |
| 4 | Lateral Reinstatements | 86 | EACH | 100.00 | 8,600.00 |
| 5 | Air Test Mainline Joint (8") | 1,500 | EACH JOINT | 60.00 | 90,000.00 |
| 6 | Air Test Mainline Joint (12") | 110 | EACH JOINT | 60.00 | 6,600.00 |
| 7 | Air Test Mainline Joint (18") | 350 | EACH JOINT | 61.00 | 21,350.00 |
| 8 | Grout Mainline Joint (8") | 1,100 | EACH JOINT | 1.00 | 1,100.00 |
| 9 | Grout Mainline Joint (12") | 75 | EACH JOINT | 2.00 | 150.00 |
| 10 | Grout Mainline Joint (18") | 220 | EACH JOINT | 2.00 | 440.00 |
| 11 | Air Test Service Connection (5-foot) | 100 | EACH | 415.00 | 41,500.00 |
| 12 | Grout Service Connection (5-foot) | 100 | EACH | 1.00 | 100.00 |
| 13 | In Pavement Chimney Rehab | 22 | EACH | 2,940.00 | 64,680.00 |
| 14 | Off Pavement Chimney Rehab | 73 | EACH | 1,575.00 | 114,975.00 |
| 15 | Internal Chimney Sealing | 59 | EACH | 840.00 | 49,560.00 |
| 16 | Furnish New Lid and Frame | 8 | EACH | 630.00 | 5,040.00 |
| 17 | Grout Bottom 18" | 24 | EACH | 600.00 | 14,400.00 |
| 18 | Grout Entire Manhole | 21 | EACH | 750.00 | 15,750.00 |
| 19 | Replace Bench and Trough | 7 | EACH | 2,310.00 | 16,170.00 |
| 20 | Cementitious Coat | 14 | EACH | 2,670.00 | 37,380.00 |
| 21 | Vacuum Testing | 6 | EACH | 525.00 | 3,150.00 |
| 22 | 6" DIP Class 52 | 10 | LF | 210.00 | 2,100.00 |
| 23 | 4" x 6" Increaser DIP Class 52 | 1 | EACH | 630.00 | 630.00 |
| 24 | 6" 45 Degree Elbow DIP Class 52 | 1 | EACH | 630.00 | 630.00 |
| 25 | Sewer Main Connection to Ex. Manhole | 1 | EACH | 4,200.00 | 4,200.00 |
| 26 | 4' Dia. MH, Type A, w/Frame and Solid Lid | 1 | EACH | 4,000.00 | 4,000.00 |
| 27 | Grass Restoration | 20 | SY | 26.25 | 525.00 |
| 28 | Abandon Existing 4" DIP Forcemain Pipe | 1 | LS | 4,200.00 | 4,200.00 |
| 29 | Removal and Replacement 8" DIP Pipe with 8" SDR-26, ASTM D-3034 Sanitary Sewer | 8 | LF | 231.00 | 1,848.00 |
| | | | | Total Amount of Bid | 691,878.00 |

*Quantities are estimated and may be adjusted/reduced to zero in the field.

NOTES:

1. OWNER RESERVES THE RIGHT TO DELETE ANY BID ITEMS WHICH ARE NOT IN THE BEST INTEREST OF THE OWNER. THE OWNER ALSO HAS THE RIGHT TO REDUCE ANY QUANTITIES IN ORDER TO KEEP THE PROJECT UNDER THE BUDGETED VALUE FOR THE FISCAL YEAR.
2. **BIDDER agrees that the Work will be Substantially Complete 120 Days after the Notice to Proceed and will meet Final Completion 150 Days after the Notice to Proceed.**
3. BIDDER accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work on time.
4. The Owner reserves the right to reject all Bids.
5. Accompanying this Bid is a Bid Security in the amount of \$ TEN PERCENT OF AMOUNT BID, which is hereby tendered in accordance with the requirements of the Instructions to Bidders and the Specifications.
6. In the event that this Bid is accepted and an award of contract is made to the undersigned BIDDER, the undersigned does hereby covenant and agree to deliver to the Owner the signed and executed Contract and Bonds as specified in the Instructions for Bidders and the Specifications.
7. The undersigned further agrees to begin work within ten (10) days after the execution and acceptance of the Contract, and thereafter to carry on the work diligently and continuously in such manner as to insure final completion and delivery to the Owner of the entire work or equipment under contract in accordance with the provisions of the Contract.

Witness my Hand(s) and Seal _____ this 11th day of NOVEMBER, 2020.

If an individual, sign
and give address

Address _____

If a partnership, sign all
individual names and give
address of each partners

Partnership Name
Address _____

Name and Addresses
of Individual Partners

If a corporation, officers
duly authorized should sign,
attach corporate seal

VISU-SEWER OF ILLINOIS, LLC
Corporate Name

Address

9014 S. THOMAS AVENUE BRIDGEVIEW, IL
60455

By *Keith M. Alexander*
KEITH M. ALEXANDER, PRESIDENT

Attest:

James S. Serketic
Secretary
JAMES S. SERKETICH

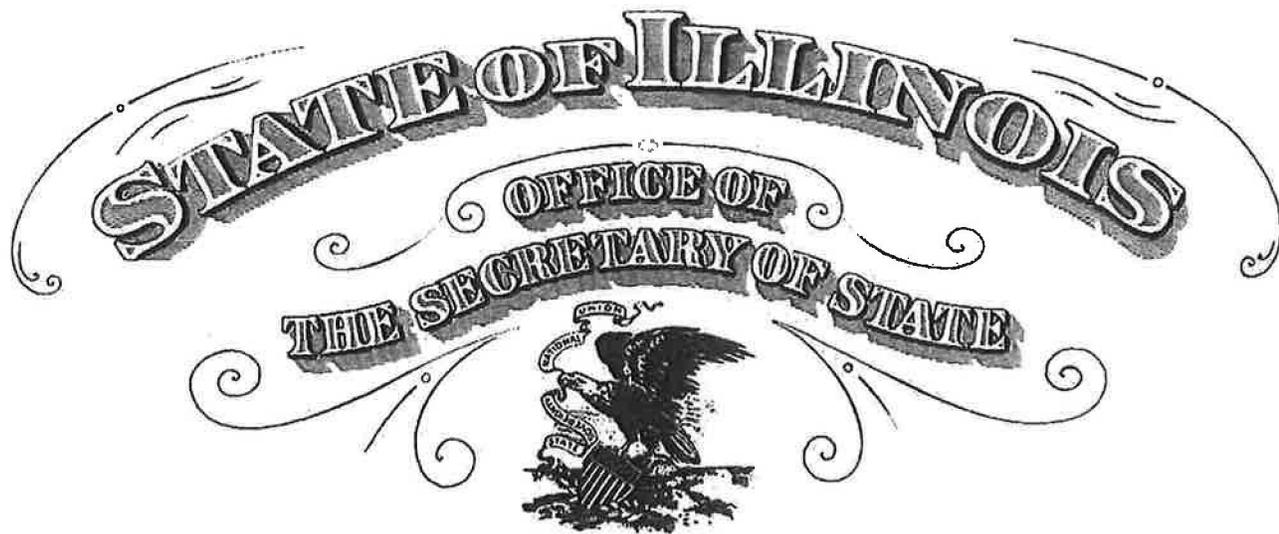
Corporate Seal

Subcontracted Work

**To be submitted the day after Bids are received by 2:00 p.m.,
prevailing time, to the Engineer, Deuchler Engineering Corp., 230 S.
Woodlawn Avenue, Aurora, IL.**

File Number

0102903-7



To all to whom these Presents Shall Come, Greeting:

I, Jesse White, Secretary of State of the State of Illinois, do hereby certify that I am the keeper of the records of the Department of Business Services. I certify that

VISU-SEWER OF ILLINOIS, LLC, A WISCONSIN LIMITED LIABILITY COMPANY HAVING OBTAINED ADMISSION TO TRANSACT BUSINESS IN ILLINOIS ON OCTOBER 20, 2003, APPEARS TO HAVE COMPLIED WITH ALL PROVISIONS OF THE LIMITED LIABILITY COMPANY ACT OF THIS STATE, AND AS OF THIS DATE IS IN GOOD STANDING AS A FOREIGN LIMITED LIABILITY COMPANY ADMITTED TO TRANSACT BUSINESS IN THE STATE OF ILLINOIS.

In Testimony Whereof, I hereto set my hand and cause to be affixed the Great Seal of the State of Illinois, this 17TH day of FEBRUARY A.D. 2020 .



Authentication #: 2004801164 verifiable until 02/17/2021
Authenticate at: <http://www.cyberdriveillinois.com>

Jesse White

SECRETARY OF STATE

Merchants Bonding Company (Mutual)

Bid Bond

KNOW ALL MEN BY THESE PRESENTS, that we
Visu-Sewer of Illinois, LLC, 9014 S. Thomas Ave., Bridgeview, IL 60455

as Principal, hereinafter called the Principal, and Merchants Bonding Company (Mutual)

a corporation duly organized under the laws of the State of IA
as Surety, hereinafter called the Surety, are held and firmly bound unto CITY OF GENEVA

as Obligee, hereinafter called the Obligee, in the sum of

TEN Percent of Amount of Bid -----Dollars (\$ 10 %),
for the payment of which sum well and truly be made, the said Principal and the said Surety, bind
ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by
these presents.

WHEREAS, the Principal has submitted a bid for GENEVA EAST SANITARY SEWER REHABILITATION
2020

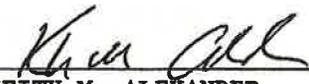
NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into
a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be
specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such
Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the
failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee
the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for
which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this
obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this 16TH day of NOVEMBER, 2020



(Witness)
JAMES S. SERKETICH
CORPORATE SECRETARY

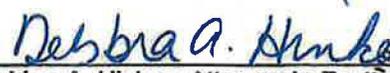
Visu-Sewer of Illinois, LLC
(Principal) (seal)



KEITH M. ALEXANDER (Title)
PRESIDENT
Merchants Bonding Company (Mutual)
(Surety) (seal)



(Witness)



Debra A. Hinkes, Attorney-in-Fact
(Title)



MERCHANTS
BONDING COMPANY
POWER OF ATTORNEY

Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations of the State of Iowa (herein collectively called the "Companies") do hereby make, constitute and appoint, individually, Debra A Hinkes; Pamela M Hineman; Robert M Tortelli

their true and lawful Attorney(s)-in-Fact, to sign its name as surety(ies) and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

This Power-of-Attorney is granted and is signed and sealed by facsimile under and by authority of the following By-Laws adopted by the Board of Directors of Merchants Bonding Company (Mutual) on April 23, 2011 and amended August 14, 2015 and adopted by the Board of Directors of Merchants National Bonding, Inc., on October 16, 2015.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof."

"The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner-Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 11th day of February, 2020.



MERCHANTS BONDING COMPANY (MUTUAL)
MERCHANTS NATIONAL BONDING, INC.

By *Larry Taylor*
President

STATE OF IOWA
COUNTY OF DALLAS ss.

On this 11th day of February 2020, before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC.; and that the seals affixed to the foregoing instrument are the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.



Polly Mason
Notary Public

(Expiration of notary's commission does not invalidate this instrument)

I, William Warner, Jr., Secretary of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., do hereby certify that the above and foregoing is a true and correct copy of the POWER-OF-ATTORNEY executed by said Companies, which is still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this 16TH day of NOVEMBER, 2020.



William Warner Jr.
Secretary

SECTION 00310

GENERAL CERTIFICATIONS

The undersigned, as duly-authorized representative of the Contractor, hereby certifies to the City of Geneva, that regarding this project known as **GENEVA EAST SANITARY SEWER REHABILITATION**.

The Following General Certifications are required:

- **Drug Free Workplace Certification**
 - **Certification of Compliance with Safety Regulations**
 - **Certification of No Tax Delinquency and No Tax Default**
 - **Certification of Compliance with Sexual Harassment Policies**
 - **Certification of Non-Segregated Facilities**
-

1. DRUG FREE WORKPLACE CERTIFICATION

The Contractor ensures that they operate a drug free environment and that drugs are not allowed in the workplace or satellite locations as well as City of Geneva project locations in accordance with the Drug Free Workplace Act of January, 1992.

2. CERTIFICATION OF COMPLIANCE WITH SAFETY REGULATIONS

The Contractor is fully aware of and able to comply with all Local, State, and Federal Safety and other Laws, Codes, and Regulations applicable for the construction of the Project.

3. CERTIFICATION OF NO TAX DELIQUENCY AND NO TAX DEFAULT

The Contractor is not currently delinquent in the payment of any tax administered by or owed to the Illinois Department of Revenue, or otherwise in default upon any such tax as defined under 65 ILCS 5/11-42.1-1, or if it is:

- a. It is contesting its liability for the tax or the amount of tax in accordance with procedures established by the appropriate Revenue Act; or
- b. It has entered into an agreement with the Department of Revenue for payment of all taxes due and is currently in compliance with that agreement.

4. CERTIFICATION OF COMPLIANCE WITH SEXUAL HARASSMENT POLICIES

The Contractor has a written sexual harassment policy in place in full compliance with all applicable state and local laws and policies.

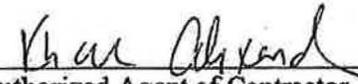
5. CERTIFICATION OF NON-SEGREGATED FACILITIES

The federally assisted construction contractor certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The federally assisted construction contractor certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The federally assisted construction contractor agrees that a breach of this certification is a violation of the Equal Opportunity clause in this contract. As used in this certification, the term 'segregated facilities' means any waiting rooms, work areas, restrooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom or otherwise. The federally assisted construction contractor agrees that (except where he has obtained identical certifications from proposed subcontractors for specific time periods) he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause, and that he will retain such certification in his files.

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

Subscribed and sworn to:


Notary Public, LISA E. SCHULZE
WAUKESHA COUNTY, WI
MY COMMISSION EXPIRES 2/20/2023 WISCONSIN
before me this 16TH day of NOVEMBER, 2020.


Authorized Agent of Contractor
KEITH M. ALEXANDER
PRESIDENT
Title

VISU-SEWER OF ILLINOIS, LLC
Company

NOVEMBER 16, 2020
Date

SECTION 00315

CERTIFICATION OF COMPLIANCE WITH CRIMINAL CODE OF 1961

WHEREAS, a conviction for the offense of bid-rigging or bid rotating bars a person or entity from bidding on public contracts (720 ILCS 5/33D-11), and

WHEREAS, Section 33E-11 of the Criminal Code (720 ILCS 5/33E-11) requires bidders and contractors to certify on a form provided by the unit of local government or school district that they are not barred from public contracting due to bid-rigging or bid rotating convictions.

I, KEITH M. ALEXANDER, do hereby certify that:
Name

1. I am PRESIDENT of the VISU-SEWER OF ILLINOIS, LLC
Position Firm

and have authority to execute this certification on behalf of the firm;

2. This firm is not barred from bidding on or entering into public contracts due to having been convicted of bid-rigging or bid rotating under paragraphs 720 ILCS 5/33E-11 of the Illinois Criminal Code. The undersigned also certifies that no officers or employees of the bidder or contractor have been so convicted and that the bidder or contractor is not the successor company or a new company created by the offices or owners of one so convicted. It is further certified that any such conviction occurring after the date of this certification will be reported to the above named public body, in writing, with seven (7) days of such conviction, if it occurs during any bidding process, contract term or otherwise prior to entering into any contract therewith.

Name of Firm VISU-SEWER OF ILLINOIS, LLC

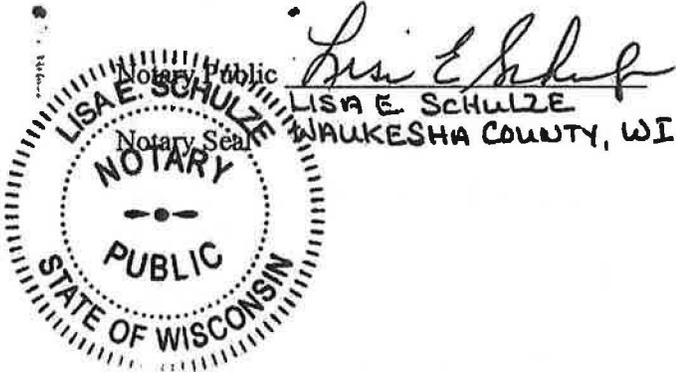
Signature *Keith M. Alexander*

Title KEITH M. ALEXANDER
PRESIDENT

Date NOVEMBER 16, 2020

Corporate Seal (where appropriate)

On this 16TH day of NOVEMBER, 2020, before me appeared
(Name) KEITH M. ALEXANDER to me personally known, who, being duly
sworn, did execute the foregoing affidavit, and did state that he or she was properly authorized
by VISU-SEWER OF ILLINOIS, LLC
(Name of Firm)
to execute the affidavit and did so as his or her free act and deed.



Commission Expires 2/21/2023

CERTIFICATION:

CONTRACTOR

BY:

Keith M. Alexander

NAME:

KEITH M. ALEXANDER

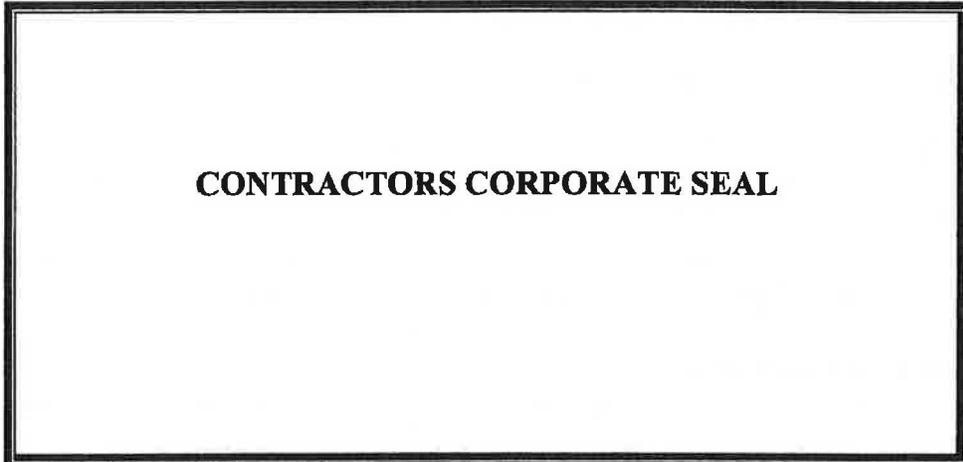
(PRINCIPAL)

TITLE:

PRESIDENT

ADDRESS:

W230N4855 BETKER DR. PEWAUKEE, WI 53072



ATTEST

BY:

Lisa E. Schulze

NAME:

LISA E. SCHULZE my commission Expires 2/21/2023 (NOTARY PUBLIC)

ADDRESS:

W230N4855 BETKER DR. PEWAUKEE, WI 53072



Visu-Sewer of Illinois, LLC
2010-2019
National Liner Reference Listing

| | | | | | |
|----------------------------|-------------------------------|-------------------------------------|---|---|---|
| Jan-19 19004I IL JOB | 15" | 391 | Grant Park, IL | Village of Grant Park 106 Taylor Street Grant Park, IL 60940 John Henson 708-846-1560 cell | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Feb-19 19016I IL JOB | 12" | 255 | Glenview, IL | Lima Excavating Contractors, Inc. 5419 Hayden Lane Ringwood, IL 60072 Earl Newton 815-529-1733 cell | Todd Bonk Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Mar-19 19027I IL JOB | 12" | 255 | Chicago, IL | Lenny Hoffman Excavating 3636 Lake Avenue Wilmette, IL 60091 Pat Clarke 773-269-7339 cell | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Mar-19 19028I IL JOB | 8" 12" | 111 76 | South Elgin, IL | Wlninger Excavating, Inc. 1211 Deer Street Yorkville, IL 60560 Patrick Wlninger 630-364-8785 cell | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Mar-19 19058I IL JOB | 6" 8" 10" 15" 18" | 850 6,964 898 1,251 522 | Deerfield, IL | Village of Deerfield 465 Elm Street Deerfield, IL 60015 Justin Keenan 847-719-7482 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Apr-19 19059I IL JOB | 10" 12" | 745 872 | Huntley, IL | Village of Huntley 10987 Main Street Huntley, IL 60142 Jason Irvin 847-515-5264 office | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Apr-19 18064I IL JOB | 8" 10" | 1,760 2,515 | IL Route 31 & Huntley Rd Carpentersville, IL | Plote Construction, Inc. 1100 Brandt Drive Hoffman Estates, IL 60192 Ryan Carey 847-695-9300 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| May-19 19021I IL JOB | 8" 8" 12" 15" | 124 170 825 655 | East Chicago, IN | Walsh & Kelly, Inc. 1700 East Main Street Griffith, IN 46319 Ryan Kosiba 219-712-9163 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Jun-19 19047I IL JOB | 18" | 507 | Streator, IL | City of Streator 204 South Bloomington Street Streator, IL 61364 Jeremy Palm 815-672-2517 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |

Visu-Sewer of Illinois, LLC
2010-2019
National Liner Reference Listing

| | | | | | |
|----------------------------|------------------|-------------------|--------------------------|---|---|
| Jun-19 19069I IL JOB | 12" 15" | 136 305 | Gurnee, IL | Landmark Contractors, Inc. 11916 Main Street Huntley, IL 60142 CJ Graves 847-732-5476 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Jun-19 19090I IL JOB | 8" 12" | 4,955 1,284 | Winnetka, IL | Village of Winnetka 1390 Willow Road Winnetka, IL 60093 Mike Rivard - Sewer Foreman 847-716-3264 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Jul-19 19080I IL JOB | 8" | 920 | Golf, IL | Village of Golf 1 Briar Road Golf, IL 60025 Brian Wesoloski - Gewalt Hamilton 847-821-8235 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Jul-19 19125I IL JOB | 12" | 73 | Forest Park, IL | Uno Construction 6037 Brookbank Downers Grove, IL 60516 Santino Nardulli 773-675-0108 cell | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Jul-19 19126I IL JOB | 8" | 130 | Countryside, IL | City of Countryside 5550 East Avenue Countryside, IL 60525 Mike Hartigan 708-473-1292 cell | Todd Bonk Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Aug-19 19091I IL JOB | 10" 18" | 625 325 | Kankakee, IL | City of Kankakee 850 N Hobbie Kankakee, IL 60901 Alan Arengto 815-933-0447 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Aug-19 19108I IL JOB | 8" 12" 24" | 320 727 387 | Elgin, IL | Landmark Contractors, Inc. 11916 Main Street Huntley, IL 60142 CJ Graves 847-732-5476 cell | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Aug-19 19093I IL JOB | 8" 10" | 952 16 | Township of Palatine, IL | Township of Palatine 721 S. Quentin Road Palatine, IL 60067 Ben Metzler - RHMG Engineers 847-362-5959 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |

Visu-Sewer of Illinois, LLC
2010-2019
National Liner Reference Listing

| | | | | | |
|----------------------------|-------------------------|------------------------------|---------------------|---|---|
| Aug-19 190861 IL JOB | 24" | 550 | Deerfield, IL | A Lamp Concrete Contractors 1900 Wright Blvd. Schaumburg, IL 60193 Frank Aiello 630-780-7690 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Aug-19 190941 IL JOB | 8" 10" | 302 212 | Des Plaines, IL | DIMEo Brothers 720 Richard Lane Elk Grove Village, IL 60007 Mark DIMEo 847-640-2240 office | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Aug-19 190831 IL JOB | 8" 12" 15" | 250 370 331 | Des Plaines, IL | John Neri Construction Company Inc. 770 Factory Road Addison, IL 60101 Anthony Neri 630-514-1778 cell | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Aug-19 190921 IL JOB | 8" | 1,226 | Cary, IL | Village of Cary 655 Village Hall Dr. Cary, IL 60013 Scott Fish 847-452-3036 office | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Aug-19 191601 IL JOB | 15" | 134 | Evanston, IL | Walsh Construction 929 Adams St Chicago, IL 60607 Will Scott 773-354-8111 cell | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Aug-19 191001 IL JOB | 8" 10" 21" 24" | 6,471 1,591 863 648 | Glenview, IL | Village of Glenview 2500 East Lake Avenue Glenview, IL 60026 Tim Schwister 847-904-4422 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Sep-19 191541 IL JOB | 8" | 1,388 | Carpentersville, IL | Bolder Contractors 316 Cary Point Drive Cary, IL 60013 Rod Renkins 847-236-0785 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Sep-19 191891 IL JOB | 8" | 580 | Glenview, IL | Lenny Hoffman Excavating 3636 Lake Avenue Wilmette, IL 60091 Pat Clarke 773-269-7339 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |

Visu-Sewer of Illinois, LLC
2010-2019
National Liner Reference Listing

| | | | | | |
|----------------------------|-------------------------|--------------------------------|-------------------|---|---|
| Oct-19 19124I IL JOB | 8" 10" 12" 15" | 7,493 2,109 893 1,800 | Aurora, IL | City of Aurora 44 E Downer Place Aurora, IL 60507 Kurt Muth 630-256-3232 | Todd Bunk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Oct-19 19152I IL JOB | 10" | 328 | Midlothian, IL | Village of Midlothian 14801 S. Pulaski Road Midlothian, IL 60445 Joe Sperry 708-396-3185 | Todd Bunk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Nov-19 19117I IL JOB | 14" Force Main | | Tinley Park, IL | Village of Tinley Park 16250 S. Oak Park Avenue Tinley Park, IL 60477 Andrew Pufundt 847-417-7187 call | Todd Bunk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Nov-19 19192I IL JOB | 15" | 456 | North Chicago, IL | EMCO Chemical Distributors, Inc. 8601 95th Street Pleasant Prairie, WI 53158 BJ Korman 847-421-9256 call | Todd Bunk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Nov-19 19110I IL JOB | 8" 10" | 3,227 539 | Glencoe, IL | Village of Glencoe 675 Village Court Glencoe, IL 60022 Dave Mau, DPW 847-835-4111 office | Todd Bunk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Nov-19 19150I IL JOB | 8" | 90 | Aurora, IL | RW Collins Co. 7225 W. 86th Street Chicago, IL 60638 Thomas Cook 708-670-4708 | Todd Bunk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Nov-19 19151I IL JOB | 8" 10" 12" 15" | 10,750 1,197 827 478 | Schaumburg, IL | Village of Schaumburg 101 Schaumburg Court Schaumburg, IL 60193-1899 Anna Kesler (Engineer) 847-923-6654 | Todd Bunk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Nov-19 19210I IL JOB | 18" | 155 | Gurnee, IL | Campanella & Sons, Inc. 39207 Magnetics Blvd P. O Box 32 Wadsworth, IL 60083 Austin Zupec 847-336-9698 | Todd Bunk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |

Visu-Sewer of Illinois, LLC
2010-2019
National Liner Reference Listing

| | | | | | |
|----------------------------|-------------------------|------------------------------|-----------------|---|---|
| Nov-19 191701 IL JOB | 8" 12" | 702 629 | Des Plaines, IL | John Nerl Construction Company, Inc. 7225 W. 66th Street Chicago, IL 60638 Anthony Nerl 630-514-1778 cell | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Jan-18 171721 IL JOB | 8" 10" 15" 18" | 2,626 777 1,007 417 | Northbrook, IL | Village of Northbrook 655 Huehl Road Northbrook, IL 60062 Jim Frantz 847-664-4115 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Jan-18 180041 IL JOB | 8" 10" | 3,864 885 | Winfield, IL | Village of Winfield 27W465 Jewell Road Winfield, IL 60190 Nathan Dornfield - Rempe-Sharpe 630-232-0827 office | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Mar-18 180211 IL JOB | 8" 10" 12" 15" | 785 463 350 1,649 | Deerfield, IL | Village of Deerfield 465 Elm Street Deerfield, IL 60015 Justin Keenan 847-719-7462 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Mar-18 180221 IL JOB | 12" | 170 | Hometown, IL | City of Hometown 4331 Southwest Highway Hometown, IL 60456 Mark 708-237-9199 cell | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Mar-18 180031 IL JOB | 8" 10" | 1,075 2,872 | Wheaton, IL | City of Wheaton 303 W. Wesley St. Wheaton, IL 60187-0727 Russell Peacock 630-260-2040 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Apr-18 180051 IL JOB | 8" | 12,150 | Schaumburg, IL | Village of Schaumburg 101 Schaumburg Court Schaumburg, IL 60193-1899 Mike Litwin (DPW Director) 847-923-6654 | Mike Blazejovsky Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| May-18 172201 IL JOB | 10" 18" | 1,547 879 | Portage, IN | Portage Commons Shopping Center 5974 US-6 Portage, IN 46368 Peggy Billeck 708-753-2314 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| May-18 180591 IL JOB | 10" 15" | 1,488 220 | Des Plaines, IL | Orange Crush, LLC 321 S Center Street Hillside, IL 60455 | Pete Baumann Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |

Visu-Sewer of Illinois, LLC
2010-2019
National Liner Reference Listing

| | | | | | |
|----------------------------|------------------|---------------------|-------------------------------------|--|---|
| Jul-18 18065I IL JOB | 8" 10" | 1,271 1,732 | Hodgkins, IL | Village of Hodgkins 8990 Lyons Street Hodgkins, IL 60525 Vern Millsap 708-579-6700 office 708-243-0408 cell | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Jul-18 18028I IL JOB | 8" | 2,457 | Huntley, IL | Village of Huntley 10987 Main Street Huntley, IL 60142 Jason Irvin 847-515-5284 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Jul-18 18073I IL JOB | 8" | 1,389 | Cary, IL | Village of Cary 655 Village Hall Drive Cary, IL 60013 Scott Fish 847-452-3036 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Jul-18 18111I IL JOB | 8" | 1,078 | New Trier Township, Winnetka, IL | Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 Dave Alexander 262-695-2340 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Jul-18 18124I IL JOB | 8" | 210 | Hampshire, IL | Village of Hampshire 234 S State St Hampshire, IL 61929 David Starrett 847-683-9489 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Jul-18 18127I IL JOB | 8" | 470 | Justice, IL | Performance Constr & Engineering 217 W. John Street Plano, IL 60505 Lonnie Avery 630-918-1237 cell | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Aug-18 18140I IL JOB | 12" | 440 | Darien, IL | Acqua Corporation 1415 S Ardmore Avenue Villa Park, IL 60181 Alex Rendina 630-417-7881 cell | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Aug-18 18142I IL JOB | 15" | 160 | Lake Forest, IL | DiMeo Brothers, Inc. 720 Richard Lane Elk Grove Village, IL 60007 John DiMeo 847-702-3635 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Aug-18 18143I IL JOB | 30" 36" | 130 971 | Munster, IN | Munster Development 1149 W 175th Street Homewood, IL 60430 Tony Grabelle 708-878-9966 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Aug-18 18088I IL JOB | 8" 10" 12" | 1,165 377 379 | Des Plaines, IL | Orange Crush, LLC 321 Center Street Hillside, IL 60162 Al Kolodzick 847-878-4001 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |

Visu-Sewer of Illinois, LLC
2010-2019
National Liner Reference Listing

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|----------------------------|-------------------------|------------------------------|------------------|--|---|
| Aug-18 18101I IL JOB | 8" | 2,570 | Harvard, IL | City of Harvard 201 West Diggins Street Harvard, IL 60033 Steve Santeler 815-943-6488 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Aug-18 18110I IL JOB | 18" | 354 | Maywood, IL | Village of Maywood 40 Madison Street Maywood, IL 60153 Bill Peterhansen, Hancock Eng. 847-878-3515 cell | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Oct-18 18109I IL JOB | 8" 10" | 5,642 1,817 | Northbrook, IL | Mission Brook Sanitary District 3505 Cornflower Trail Northbrook, IL 60085 Bob Blackstone 847-272-2956 | Josh Regner Visu-Sewer, Incorporated W230 N4855 Belker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Oct-18 18114I IL JOB | 8" 10" 15" | 2,132 281 481 | Wheaton, IL | City of Wheaton P O Box 727 Wheaton, IL 60187 Tina Walters 630-260-2184 | Josh Regner Visu-Sewer, Incorporated W230 N4855 Belker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Oct-18 18186I IL JOB | 8" | 300 | Wheaton, IL | Wheaton Sanitary District 1S649 Schaffner Road Wheaton, IL 60187 Steve Beach 630-668-1515 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Nov-18 18105I IL JOB | 8" 10" 12" 15" | 7,500 850 2,750 600 | Des Plaines, IL | Des Plaines Public Works 1111 Joseph Schwab Road Des Plaines, IL 60016 Tim O'Malley tomalley@desplaines.org | Shaun Ritter Visu-Sewer, Incorporated W230 N4855 Belker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Nov-18 18167I IL JOB | 8" 10" | 2,864 163 | Homewood, IL | Village of Homewood 17755 S. Ashland Ave. Homewood, IL 60430 Eric Fritz - Utility Supervisor 708-206-2910 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Nov-18 18170I IL JOB | 10" 21" | 453 211 | Libertyville, IL | Campenella & Sons, Inc. 39207 Magnetics Blvd Wadsworth, IL 60083 847-336-9698 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Nov-18 18057I IL JOB | 8" 10" 12" | 5,233 314 992 | Aurora, IL | Fox Metro Water Reclamation District 1135 S. Lake Street Montgomery, IL 60538 Kelth Zollers 630-301-8810 office | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Nov-18 18188I IL JOB | 12" | 1,100 | Burnham, IL | Village of Burnham 14450 S. Manistee Avenue Burnham, IL 60633 Martin King 815-412-2023 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |

Visu-Sewer of Illinois, LLC
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|----------------------------|------------------|-------------------------|------------------|---|---|
| Nov-18 181871 IL JOB | 8" 10" | 4,990 805 | Crystal Lake, IL | City of Crystal Lake 100 W. Woodstock Street Crystal Lake, IL 60014 Andrew Resek 815-459-2020 x 4011 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Dec-18 182141 IL JOB | 18" | 353 | Berwyn, IL | Uniquis Plumbing 9408 W. 47th Street Brookfield, IL 60513 Jim Nolan 708-207-2689 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Dec-18 182151 IL JOB | 10" | 316 | Deerfield, IL | Braeside Community Management 1240 Meadow Rd, 4th Floor Northbrook, IL 60062 Lori Gordon 847-504-8005 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Feb-17 170101 IL JOB | 8" | 60 | Oak Brook, IL | C. J. Erickson Plumbing Co. 4141 W. 124th Place Alsip, IL 60803 Dan Kloos 708-259-3524 cell | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Mar-17 170161 IL JOB | 8" 10" | 2,566 205 | Lisle, IL | Village of Lisle 4907 Yackley Avenue Lisle, IL 60532 Eric Kucin 630-271-4173 office | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Mar-17 170291 IL JOB | 12" | 53 | Streamwood, IL | TBS Excavating 31W325 Shoger Drive Naperville, IL 60564 Kevin Kane 630-499-1844 office | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Mar-17 170311 IL JOB | 8" | 425 | Geneva, IL | Madeline Roth 520 Ray Street Geneva, IL 60542 Madeline Roth 630-251-0307 office | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Mar-17 170091 IL JOB | 18" | 376 | Crown Point, IN | City of Crown Point 705 Industrial Blvd. Crown Point, IN 46307 Bob Csanyhi, Robinson Eng. 219-525-4881 office | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Apr-17 170141 IL JOB | 8" 10" 12" | 5,432 1,290 2,704 | Deerfield, IL | Village of Deerfield 465 Elm Street Deerfield, IL 60015 Justin Keenan 847-719-7462 office | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Apr-17 170371 IL JOB | 15" | 162 | Woodridge, IL | Village of Woodridge 1 Plaza Drive Woodridge, IL 60517 Bill Berland 630-297-2193 cell | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |

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|----------------------------|-------------------------|-------------------------------|---------------------|--|---|
| Apr-17 17015I IL JOB | 8" 10" 12" 15" | 15,700 310 2,380 240 | Hoffman Estates, IL | Village of Hoffman Estates 1900 Hassel Road Hoffman Estates, IL 60169 Mark Dachsteiner 815-444-3300 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Apr-17 17030I IL JOB | 8" | 2,506 | Deerfield, IL | Copenhaver Construction Company 75 Kopple Drive Gilberts, IL 60136 Chuck Polito 847-428-6696 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| May-17 17077I IL JOB | 24" | 185 | Kankakee, IL | City of Kankakee 850 N. Hobbie Kankakee, IL 60901 Randy Collins 815-953-8442 office | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| May-17 17022I IL JOB | 48" | 625 | Elgin, IL | Martam Construction Co. 1200 Gasket Drive Elgin, IL 60120 Rich Sipek 847-608-6800 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| May-17 17043I IL JOB | 8" | 2,200 | Dyer, IN | Town of Dyer 516 Edmond Drive Dyer, IN 46311 David Proud 219-865-4222 | Jake Gaudynski Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| May-17 17048I IL JOB | 8" 10" 12" | 3,654 399 111 | Yorkville, IL | United City of Yorkville 800 Game Farm Road Yorkville, IL 60560 Jule Morrison - Eng w/EEI 630-466-6701 | Pete Baumann Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| May-17 17068I IL JOB | 9" 12" | 1,094 581 | Kenilworth, IL | Village of Kenilworth 419 Richmond Rd. Kenilworth, IL 60043 Sean Feeney 847-561-3360 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| May-17 17071I IL JOB | 8" 10" 12" | 315 340 3,257 | LaGrange Park, IL | Village of LaGrange Park 447 North Catherine Avenue LaGrange Park, IL 60526 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| May-17 17074I IL JOB | 12" 15" | 793 1,133 | River Forest, IL | Village of River Forest 400 Park Avenue River Forest, IL 60305 Jeff Loster - Village PE 708-714-3551 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Jul-17 17069I | 8" 9" 10" | 2,114 739 441 | Winnetka, IL | Village of Winnetka 1390 Willow Road Winnetka, IL 60093 Susan Chen - Asst. Vlg Eng 847-716-3532 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |

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|----------------------------|--------------------------|----------------------------|-------------------------|--|---|
| Jul-17 17070I | 8" 12" | 6,334 378 | Northfield, IL | Village of Northfield 1800 Winnetka Road Northfield, IL 60093 Dick Knudson 847-784-3584 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Jul-17 17072I | 8" 10" | 732 830 | La Grange Highlands, IL | La Grange Highlands Sanitary District 5900 Willow Springs Road La Grange Highlands, IL 60525 George Braam 312-520-7702 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Jul-17 17073I | 12" | 196 | Glendale Heights, IL | Performance Constr & Engineering 217 W John Street Plano, IL 60545 Lonnle Avery 615-433-0080 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Aug-17 17075I IL JOB | 8" | 1,475 | Huntley, IL | Village of Huntley 10987 Main Street Huntley, IL 60142 Jason Irvin 847-515-5284 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Aug-17 17044I IL JOB | 8" 10" 12" | 7,208 252 200 | McHenry, IL | City of McHenry 1415 Industrial Drive McHenry, IL 60050 Troy Strange 815-383-2125 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Aug-17 17099I IL JOB | 8" | 1,271 | Cary, IL | Village of Cary 655 Village Hall Drive Cary, IL 60013 Scott Fish 847-452-3036 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Sep-17 17154I IL JOB | 8" 12" 18" | 5,339 2,818 1,190 | Oak Forest, IL | City of Oak Forest 15440 S. Central Avenue Oak Forest, IL 60452 Dartene Milanowicz - Assist Dir PW 708-535-4090 office | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Sep-17 17156I IL JOB | 12" 15" 18" 21" | 1,243 411 230 342 | Schaumburg, IL | Alamp Concrete Contractors, Inc. 1900 Wright Blvd. Schaumburg, IL 60193 John Traversa 847-891-6000 office | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Sep-17 17181I IL JOB | 8" | 133 | Dyer, IN | Gatlin Plumbing 1111 E. Main Street Griffith, IN 46319 Matt Murphy 219-924-6972 office | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Oct-17 17180I IL JOB | 6" | 265 | Schaumburg, IL | Plum Grove Woodlands San Dist 2274 Thorntree Lane Palatine, IL 60067 Catherine Buckley (Kate) RJN 630-682-4700 | Tom Woods Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |

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|----------------------------|--------------------------|--------------------------------|---------------------|---|---|
| Oct-17 17155I IL JOB | 12" 15" 18" 24" | 1,200 1,073 661 1,280 | East Chicago, IN | Walsh & Kelly, Inc. 1700 E. Main Street Griffith, IN 46319 Sam Mandon - Project Manager 219-924-5900 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Dec-17 17224I IL JOB | 8" | 791 | Glenwood, IL | Village of Glenwood 135 Rebecca Street Glenwood, IL 60425 Patrick McAneney 708-753-2314 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Jan-16 16002I | 8" | 3,795 | Crystal Lake, IL | City of Crystal Lake 100 W. Woodstock Street Crystal Lake, IL 60014 Matt Victorine 815-356-3700 ext 4040 | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 phone 708-237-0360 fax |
| Feb-16 16005I IL JOB | 8" 10" 12" | 8,267 5,076 99 | Woodridge, IL | Village of Woodridge 5 Plaza Drive Woodridge, IL 60517 Tim Farrell, Asst. DPW 847-515-5285 | Jake Gaudynski Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Mar-16 16017I IL JOB | 10" 12" | 275 125 | Highwood, IL | City of Highwood 554 Bank Lane Highwood, IL 60040 Jack Harding, DPW 847-433-2680 | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 phone 708-237-0360 fax |
| Mar-16 16003I IL JOB | 8" 10" | 3,910 970 | Countryside, IL | South Lyons Township Sanitary Dist. 475 West 55th St., Suite 107 Countryside, IL 60525-3565 Rodney Phillippi-Robinson Eng. 815-412-2025 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Apr-16 16041I IL JOB | 8" | 286 | Elgin, IL | Schroeder Asphalt Services, Inc. 11022 S. Grant Hwy. Marengo, IL 60152 John Rocco, Schroeder Asphalt 847-980-9778 cell | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 phone 708-237-0360 fax |
| May-16 16019I IL Job | 8" 10" 24" | 1,880 2,680 808 | Deerfield, IL | Alamp Concrete Contractors, Inc. 1900 Wright Blvd. Schaumburg, IL 60193 Jon Poff 847-891-6000 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| May-16 16051I IL Job | 10" | 1,388 | Round Lake Park, IL | Berger Excavating Contractors, Inc. 1205 Garland Road Wauconda, IL 80084 Steve Conroy 847-528-6457 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| May-16 16050I IL Job | 8" 15" 18" | 3,358 355 536 | Deerfield, IL | Village of Deerfield 485 Elm Street Deerfield, IL 60015 Justin Keenan 847-719-7462 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |

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|----------------------------|-----------|--------------|---------------------------|---|---|
| May-16 16040I IL JOB | 8" 10" | 2,155 432 | South Chicago Heights, IL | Village of South Chicago Heights 3317 Chicago Road South Chicago Heights, IL 60411 Rick Wehrle, DPW 708-522-3859 cell | Shaun Ritter Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| May-16 16067I IL JOB | 12" | 53 | Batavia, IL | Conley Excavating and Construction 1555 Gramercy Place Morris, IL 60450 Mark Conley 815-942-1905 | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 phone 708-237-0360 fax |
| May-16 16032I IL JOB | 15" | 165 | Mount Prospect, IL | Martam Construction, Inc. 1200 Gasket Drive Elgin, IL 60120 Justin Arnold 847-608-6800 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 phone 708-237-0360 fax |
| May-16 16052I IL JOB | 8" | 2,258 | Fox Lake, IL | Village of Fox Lake 66 Thillen Drive Fox Lake, IL 60020 Lenard Lynn 830-220-9839 cell | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 phone 708-237-0360 fax |
| Jun-16 16068I IL JOB | 8" | 426 | Highwood, IL | City of Highwood 17 Highwood Avenue Highwood, IL 60040 Molly Keane 847-432-1924 | Randy Belanger Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Jun-16 16053I IL JOB | 24" | 963 | Aurora, IL | City of Aurora 44 E. Downer Place Aurora, IL 60507-2067 Jason Bauer 630-256-3239 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Jul-16 16087I IL JOB | 8" | 780 | Elgin, IL | J Congdon Sewer Services 170 Alexandra Way #A Carol Stream, IL 60188 Marino Gerardi 630-510-2434 Office | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Jul-16 16054I IL JOB | 48" | 486 | Glenwood, IL | Village of Glenwood 13 S. Rebecca Street Glenwood, IL 60425 Patrick McAneny 708-753-2314 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Jul-16 16070I IL JOB | 8" | 2,325 | Elgin, IL | Triggi Construction, Inc. 1975 Powis Road West Chicago, IL 60186-0235 Art Merkelz 630-584-4490 office | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Jul-16 16081I IL JOB | 8" | 725 | Highland Park, IL | Lenny Hoffman Excavating, Inc. 3636 Lake Avenue Wilmette, IL 60091 Scott Wlilikka 847-256-3800 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |

Visu-Sewer of Illinois, LLC
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|----------------------------|---|---|---------------------------------|---|---|
| Jul-16 16083I IL JOB | 12" | 2,107 | Des Plaines, IL | Orange Crush, LLC 321 S. Center Street Hillside, IL 60455 Dan Ahern 708-544-9440 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Jul-16 16109I IL JOB | 10" | 40 | Barrington, IL | Village of Barrington 200 S. Hough Street Barrington, IL 60010 Phil Freund 847-323-7708 office | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 phone 708-237-0360 fax |
| Jul-16 16086I IL JOB | 8" | 1,083 | Joliet, IL | City of Joliet 150 W. Jefferson Street Joliet, IL 60432 Allison M.W. Swisher, P.E. 815-953-8352 cell | Peter Baumann Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Jul-16 16055I IL JOB | 8" 10" 12" | 13,124 240 800 | Naperville, IL | City of Naperville 400 S. Eagle Street Naperville, IL 60540 Tony Conn 630-774-5324 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Aug-16 16113I IL JOB | 8" | 635 | Dearfield, IL | Berger Excavating Contractors, Inc. 1205 Garland Road Wauconda, IL 60084 Jeremy Rose 847-526-5457 | Randy Belanger Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Sep-16 16006I IL JOB | 8" 8" 10" 12" san 12" strn 15" | 524 2,382 262 573 15 549 | Yorkville, IL | United City of Yorkville 800 Game Farm Road Yorkville, IL 60580 Nadla Simek - Inspector 630-486-0704 cell | Jake Gaudynski Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Sep-16 16126I IL JOB | 8" 10" | 4,743 404 | Winfield, IL | Village of Winfield 27W485 Jewell Road Winfield, IL 60190 Dan Watson Rempa Sharpe 630-232-0827 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Sep-16 16152I IL JOB | 8" | 375 | Elgin, IL | J Congdon Sewer Services 170 Alexandra Way #A Carol Stream, IL 60188 Marino Gerardi 630-510-2434 office | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 phone 708-237-0360 fax |
| Oct-16 16151I IL JOB | 8" | 210 | Libertyville, IL | Village of Libertyville Department of Public Works 200 East Cook Avenue Libertyville, IL 60048-2090 Paul Kendzior 847-918-2100 | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 phone 708-237-0360 fax |
| Oct-16 16150I IL JOB | 8" 10" 12" 15" | 3,772 1,176 825 410 | North Maine Township (Glenview) | Aqua Illinois 322 N. Gilbert Street Danville, IL 61832 Jonathan Keim 217-442-3063 phone 217-304-3492 cell | Todd Bonk Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 phone 708-237-0360 fax |

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|----------------------------|--------------------------------|-----------------------------------|-----------------------------------|--|---|
| Nov-16 16154I IL JOB | 8" 10" 12" 15" 18" | 151 316 1,009 674 427 | Evanston, IL | City of Evanston 2100 Ridge Road, Suite 4200 Evanston, IL 60201-2798 Paul Moyano 847-448-8217 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Belker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Nov-16 16202I IL JOB | 8" 10" 12" 15" | 1,710 2,696 2,605 291 | Wheaton, IL | City of Wheaton 303 W. Wesley Street Wheaton, IL 60187-0727 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Belker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Dec-16 16189I IL JOB | 12" 15" 20" | 40 367 146 | Aurora, IL | City of Aurora 44 E. Downer Place Aurora, IL 60507-2067 Kurt Muth 630-256-3200 | Pete Baumann Visu-Sewer, Incorporated W230 N4855 Belker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Feb-15 15004I IL JOB | 8" 10" 12" | 803 514 1,017 | Lisle, IL | Village of Lisle 925 Burlington Avenue Lisle, IL 60532 Eric Kucin 630-271-4173 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Belker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Feb-15 15013I IL JOB | 8" | 5,741 | North Aurora, IL | Village of North Aurora 25 East State Street North Aurora, IL 60542 Mike Glock 630-897-1457 x 230 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Belker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Feb-15 15014I IL JOB | 12" | 287 | Buffalo Grove, IL | Alliance Contractors 1166 Lake Avenue Woodstock, IL 60098 815-338-5900 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Belker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Mar-15 15011I IL JOB | 8" | 140 | 3450 Hobson Road Woodridge, IL | Woodridge School District 7200 Janes Avenue Woodridge, IL 60517 John Erickson 630-969-7168 | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Apr-15 15040I IL Job | 6" 8" 10" | 76 144 782 | Bloomingtondale, IL | Village of Bloomingtondale 201 South Bloomingtondale Road Bloomingtondale, IL 60108-1487 Ken Lindhorn 630-671-5830 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Belker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Apr-15 15022I IL JOB | 8" 12" | 7,719 237 | Berkeley, IL | Village of Berkeley 5819 Electric Avenue Berkeley, IL 60163 Bob Larem 708-448-8840 | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |

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|----------------------------|---------------------------------------|--|---------------------|---|---|
| Apr-15 15032I IL Job | 8" 10" 12" | 803 514 1,017 | Bourbonnais, IL | Village of Bourbonnais 200 Main Street Bourbonnais, IL 60914 | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 708-237-0360 |
| May-15 15009I IL JOB | 18" | 165 | Aurora, IL | D Construction, Inc. 1488 S. Broadway Coal City, IL 60416 Troy Partilla 815-634-2555 | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 708-237-0360 |
| May-15 15070I IL JOB | 8" 10" | 4,844 1,620 | Yorkville, IL | United City of Yorkville 800 Game Farm Road Yorkville, IL 60560 Julie Morrison 630-466-6700 | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 708-237-0360 |
| May-15 15057I IL JOB | 8" 10" 12" | 1,715 689 896 | Schiller Park, IL | Village of Schiller Park 9526 West Irving Park Road Schiller Park, IL 60176-1984 Mario Jos, Wtr & Swr Superint. 847-917-8334 cell | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 708-237-0360 |
| May-15 15048I IL JOB | 9" 12" | 1,631 533 | River Forest, IL | Village of River Forest 400 Park Avenue River Forest, IL 60305 Jeff Loster - Village PE 708-714-3551 | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 708-237-0360 |
| Jun-15 15081I IL JOB | 8" 10" 12" 15" 21" 27" | 515 650 9,611 5,787 585 402 | Elmhurst, IL | City of Elmhurst 209 N. York Street Elmhurst, IL 60126 Chris Kragel 630-530-3008 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Belker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Jun-15 15066I IL JOB | 8" | 670 | Winthrop Harbor, IL | Village of Winthrop Harbor DPW: 940 West Broadway Winthrop Harbor, IL 60096 Tim Neargarder 817-872-5275 | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 708-237-0360 |
| Jun-15 15071I IL JOB | 6" 8" 10" 12" | 350 2,970 413 395 | Highwood, IL | Glenbrook Excavating & Concrete, Inc. 1350 North Old Rand Road Wauconda, IL 60084 Donny Adkins 847-833-0343 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Belker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Jul-15 15080I IL Job | 24" | 189 | Hinsdale, IL | PirTano Construction Company 1766 Armitage Court Addison, IL 60101 John Dennin 630-330-1428 cell | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 708-237-0360 |
| Aug-15 15087I IL JOB | 16.5mm | 328 | La Grange, IL | J. A. Johnson Paving Company 1025 Addison Court Arlington Heights, IL 60005 Joe Tatone 847-343-4656 cell | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 708-237-0360 |

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|----------------------------|---------------------------------------|--|-------------------|--|---|
| Aug-15 15134I IL JOB | 8" 10" 12" 15" | 575 325 300 1,230 | Deerfield, IL | Village of Deerfield 465 Elm Street Deerfield, IL 60015 Tyler Dickinson 847-317-2490 office | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 708-237-0360 |
| Sep-15 15135I IL JOB | 8" 12" 15" 18" 21" 24" | 3,071 569 269 932 448 150 | Streamwood, IL | Village of Streamwood 301 E. Irving Park Road Streamwood, IL 60107 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Sep-15 15136I IL JOB | 12" 15" 18" | 209 176 132 | Downers Grove, IL | C. J. Erickson Plumbing Co. 4141 W. 124th Place Alsip, IL 60803 Dan Kloos 708-259-3524 cell | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Sep-15 15078I IL JOB | 10" | 174 | Des Plaines, IL | Orange Crush LLC 321 Center Street Hillside, IL 60455 Al Kolodzik 847-878-4001 cell | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Oct-15 15074I IL JOB | 12" | 1,495 | Elmwood Park, IL | Cerniglia Construction 3421 Lake Street Melrose Park, IL 60160 Louie Napolitano 708-343-8586 phone | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Oct-15 15137I | 10" 12" | 1,270 680 | Westchester, IL | K-Five Construction Corporation 13769 Main Street Lemont, IL 60439 Rick Splant, Project Manager 630-257-5600 | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Oct-15 15164I | 8" | 790 | Northlake, IL | City of Northlake 55 East North Avenue Northlake, IL 60164 William Loftus Christopher Burke Eng. 847-823-0500 | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Oct-15 15173I IL JOB | 15" | 318 | Batavia, IL | Martam Construction, Inc. 1200 Gasket Drive Elgin, IL 60120 Dave Holland 847-608-6800 | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Oct-15 15177I IL JOB | 8" | 117 | Hinsdale, IL | MVP Plumbing 1995 Aucutt Road Montgomery, IL 60538 Joel Redman 630-897-6000 | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Nov-15 15163I | 8" | 2,670 | Libertyville, IL | Village of Libertyville 600 North Avenue Libertyville, IL 60048 Will Denton - Strand Assoc. 815-744-4200 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |

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|----------------------------|------------------|---------------------|--------------------------|---|--|
| Dec-15 15138I IL JOB | 8" 10" | 5,537 555 | Arlington Heights, IL | Elk Grove Township 2400 Arlington Heights Rd. Arlington Heights, IL 60005 Mark Toll-Daniel Creaney Company 847-480-5757 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Dec-15 15146I IL JOB | 8" | 863 | Streator, IL | Tobey's Construction & Cartage, Inc. 104 S. Park Road P. O. Box 588 Herscher, IL 60941 Jeremy Palm 815-672-2517 | Pete Baumann Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Jan-14 13155I IL JOB | 8" | 950 | South Palos Township, IL | South Palos Township 8102 W. 119th Street - Unit 1130 Palos Park, IL 60464 Greg Kamplain 815-412-2016 | Keith Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Jan-14 13176I IL JOB | 8" | 432 | Hinsdale, IL | Chicagoland Paving 225 Telsor Road Lake Zurich, IL 60047 Bill Bowes, Chicagoland Paving 847-550-9681 office | Tom Woods Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Feb-14 14017I IL JOB | 8" 10" 12" | 4,211 385 336 | North Aurora, IL | Village of North Aurora 25 East State Street North Aurora, IL 60542 Mike Glock 630-897-1457x230 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Feb-14 14003I IL JOB | 8" | 4,720 | Carpentersville, IL | Berger Excavating 1205 Garland Road Wauconda, IL 60084 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Mar-14 14039I | 8" | 35 | Bedford Park, IL | ARCO/Murray National Constr Co Inc One Oakbrook Terrace Oakbrook Terrace, IL 60181 Daniel Pratt 630-599-9100 office | Randy Belanger Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Mar-14 14030I | 8" 15" | 460 500 | Carpentersville, IL | Village of Carpentersville 1075 Tamarac Drive Carpentersville, IL 60110 Bob Cole 847-836-2464 | Patrick Dunigan Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Mar-14 14032I | 18" | 1,327 | Crete, IL | Village of Crete 524 W. Exchange Street Crete, IL 60417 Phil Hamelster 708-672-7100 | Patrick Dunigan Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Apr-14 14028I IL JOB | 6" 8" 10" | 506 176 624 | Bloomington, IL | Village of Bloomington 201 South Bloomington Road Bloomington, IL 60108-1487 Ken Lindhom 630-671-5830 office | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |

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|----------------------------|--|---------------------------------------|------------------|--|---|
| Apr-14 140511 IL JOB | 10" 12" 15" 18" 48" 66" | 90 315 190 170 700 365 | Lansing, IL | Village of Lansing, IL 10045 W. Lincoln Highway Frankfort, IL 60423-1272 Jeff Pintar, Robinson Engineers 708-210-5682 office | Curt Hoffart Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Apr-14 140541 IL JOB | 8" 10" | 3,811 602 | South Elgin, IL | Illinois American Water Company 1000 Internationale Parkway Woodridge, IL 60517 Eric LaReau 630-739-8837 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| May-14 140751 IL JOB | 8" | 4,691 | Huntley, IL | FH Paschen, S.N. Nielson 5515 N. East River Road Chicago, IL 60656 Brent Marler 773-444-3474 office | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| May-14 140711 IL JOB | 12" 15" 24" 30" | 100 280 765 119 | Chicago, IL | Benchmark Construction Co. Inc. 3349 S. Kedzie Ave. Chicago, IL 60623 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| May-14 140761 IL JOB | 36" | 106 | Chicago, IL | Cecchin Plumbing 4N275 Cavalry Dr. Bloomington, IL 60108-1487 Joe Salvato, Cecchin 630-529-4046 office | Tom Woods Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Jun-14 140861 IL JOB | 8" 10" 12" | 1,845 585 705 | Morton Grove, IL | Village of Morton Grove 7840 N. Nagle Avenue Morton Grove, IL 60053-2902 Chris Tomich 847-470-5235 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Jun-14 140901 IL JOB | 8" | 655 | Zion, IL | City of Zion 2828 Sheridan Road Zion, IL 60099 Art Hoyt, Zion W&S Supervisor 847-746-4063 | Tom Woods Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Jun-14 140931 IL JOB | 8" | 589 | Bensenville, IL | Gerardi Sewer and Water Co. 4520 N. Osage Avenue Norridge, IL 60706 Jim Gerardi 708-774-1610 | Tom Woods Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Jul-14 141001 IL JOB | 8" | 820 | Deerfield, IL | Scully Incorporated P. O. Box 363 Medinah, IL 60157 Tim Scully 847-812-4085 cell | Tom Woods Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Jul-14 141021 | 8" 10" | 614 891 | Northlake, IL | J. Congdon Sewer Service, Inc. 170-A Alexandra Way Carol Stream, IL 60188 Victor Gerardi 630-510-2434 office | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |

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|----------------------------|-------------------------|-------------------------------|--|---|--|
| Jul-14 14099I | 8" 10" 12" | 617 610 1,908 | Des Plaines, IL | Orange Crush, LLC 321 Center Street Hillside, IL 60162 Dan Ahern, Orange Crush 708-544-9440 | Tom Woods Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Aug-14 14110I | 8" 10" | 3,663 2,389 | Villa Park, IL | Village of Villa Park 20 S. Ardmore Avenue Villa Park, IL 60181 Cathy Morley - RJN 630-682-4700x354 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Sep-14 14135I IL JOB | 8" 10" 12" 15" | 11,656 660 675 2,580 | Berkeley, IL | Village of Berkeley 5819 Electric Avenue Berkeley, IL 60163 Bob Larem 708-449-8840 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Sep-14 14137I IL JOB | 8" | 384 | Hodgkins, IL | Village of Hodgkins 8990 W. Lyons Street Hodgkins, IL 60525 John Kuebrich - Novotny Eng. 630-887-8640 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Sep-14 14136I IL JOB | 8" 10" 12" | 3,939 608 344 | Deerfield, IL | Village of Deerfield 465 Elm Street Deerfield, IL 60015 | Patrick Dunigan Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Sep-14 14149I IL JOB | 8" 10" 12" 15" | 4,099 222 998 320 | Rolling Meadows, IL | City of Rolling Meadows 3900 Berdnick Street Rolling Meadows, IL 60008 Dan Seveska 847-963-0500 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Sep-14 14150I IL JOB | 15" 18" 21" | 312 1,063 622 | Oswego, IL | Fox Metro Water Reclamation District 682 State Route 31 Oswego, IL 60543 Ryan Cramer, P.E. 630-742-2333 | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Sep-14 14159I IL JOB | 8" | 326 | Carroll & Clark Street Streator, IL | City of Streator 204 S. Bloomington Street Streator, IL 61364 Jeramey Palm 815-822-0335 City Eng. | Keith Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Sep-14 14159I IL JOB | 8" | 326 | Carroll & Clark Street Streator, IL | City of Streator 204 S. Bloomington Street Streator, IL 61364 Jeramey Palm 815-822-0335 City Eng. | Keith Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Sep-14 14164I IL JOB | 8" | 1,657 | Glenwood, IL | Village of Glenwood One Asselborn Way Glenwood, IL 60425 | Patrick Dunigan Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |

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|----------------------------|--------------------------------|-------------------------------------|---------------------|---|---|
| Oct-14 14165I IL JOB | 6" 8" 12" | 150 280 2,035 | Niles, IL | Village of Niles - Finance Department 1000 Civic Center Dr. Niles, IL 60714 Earl Salthier, Jr. 847-588-7909 phone | Dave Alexander Visu-Sewer, Incorporated W230 N4855 Betker Drive Pewaukee, WI 53072 262-695-2340 Phone 262-695-2359 Fax |
| Dec-14 15003I | 8" 10" 18" 24" | 6,711 572 1,008 148 | Wheaton, IL | City of Wheaton 303 West Wesley Street Wheaton, IL 60187 Mike Jankovic 630-260-2121 | Alan Arens Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 708-237-0340 Phone 708-237-0360 Fax |
| Mar-13 13006I | 8" 10" 12" 24" | 3,742 711 382 273 | Elgin, IL | City of Elgin 150 Dexter Court Elgin, IL 60120-5555 Colby Basham 847-931-5976 office 847-530-6514 cell | Dave Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 fax |
| Mar-13 13017I | 10" 12" 15" | 325 1,349 1,048 | Lincolnwood, IL | Village of Lincolnwood 6900 N Lincoln Avenue Lincolnwood, IL 60712 Lupe Martinez - Lincolnwood DPW 847-489-5866 cell | Dave Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 fax |
| Mar-13 13026I | 15" | 309 | Chicago, IL | JP Hopkins Sewer Contractors, Inc. 84530 W 13th Street Crestwood, IL 60445 Jack Hopkins 708-415-2216 cell | Tom Woods Visu-Sewer of Illinois, LLC 9014 S Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |
| Apr-13 13013I IL JOB | 30" | 850 | Wheeling, IL | F.H. Paschen, S.N. Nielson 5515 N East River Road Chicago, IL 60556 Mike Jasek-FH Paschen 773-444-3474 Office | Alex Rossebo Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| May-13 13065I IL JOB | 8" 12" 15" 18" 24" | 187 2,033 658 2,188 614 | Mount Prospect, IL | Village of Mount Prospect 1700 West Central Road Mount Prospect, IL 60056 Luke Sharp 847-875-0883 | Dave Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| May-13 13050I IL JOB | 24" x 42" | 162 | Orland Hills, IL | Central Blacktop Company, Inc. P O Box 2080 LaGrange, IL 60525 Mike Christ, Central Project Manager 708-912-8711 cell | Tom Woods Visu-Sewer of Illinois, LLC 9014 S Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |
| May-13 13058I IL JOB | 8" 10" 12" 21" | 24,117 1,766 2,340 2,672 | Rolling Meadows, IL | City of Rolling Meadows 3900 Berdnick Street Rolling Meadows, IL 60008 Andy Witt - RJN 630-258-4738 cell | Dave Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Aug-13 13048I | 12" 24" | 475 119 | Batavia, IL | Landmark Contractors, inc. 11916 W. Main Street Huntley, IL 60142 C.J. Graves 847-732-5476 | Tom Woods Visu-Sewer of Illinois, LLC 9014 S Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |

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|------------------|---------------------------------|--|------------------------------|--|--|
| Sep-13 130491 | 15" | 2,305 | Hammond, IN | Walsh and Kelly, Inc. 1700 East Main Street Griffith, IN 56319 Mark Krachenfels 219-924-5900 office | Dave Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Oct-13 131001 | 8" 10" 12" 15" 18" | 5,983 486 12,589 2,702 1,087 | Elmhurst, IL | City of Elmhurst 209 N. York Street Elmhurst, IL 60126 Chris Kragel 630-530-3008 phone | Dave Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Oct-13 131251 | 10" 12" 15" 18" 21" | 70 715 180 370 335 | Village of Buffalo Grove, IL | Village of Buffalo Grove 50 Raupp Blvd. Buffalo Grove, IL 60089 Eric Murauskas 815-459-1260 | Patrick Dunigan Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Oct-13 131241 | 18" | 1,072 | Oak Lawn, IL | Power Construction Company, LLC 2360 Palmer Drive Schaumburg, IL 60173 Nate Adams, Power 847-417-4365 cell | Tom Woods Visu-Sewer of Illinois, LLC 9014 S Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |
| Oct-13 131101 | 12" | 237 | Berwyn, IL | Central Blacktop Company, Inc. 6160 S. East Avenue LaGrange, IL 60525 Rick Watts 708-912-8709 cell | Tom Woods Visu-Sewer of Illinois, LLC 9014 S Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |
| Nov-13 131501 | 18" | 495 | Elgin, IL | Montemayor Construction Inc. 1655 North Lancaster Road South Elgin, IL 60177 Randy Rathmann, Proj. Manager 847-477-8522 cell | Tom Woods Visu-Sewer of Illinois, LLC 9014 S Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |
| Nov-13 131391 | 24" 30" | 222 1,716 | Naperville, IL | City of Naperville, IL 1200 W. Ogden Avenue P. O. Box 3020 Naperville, IL 60566-7020 Tony Conn 630-305-5537 phone | Patrick Dunigan Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Nov-13 131481 | 27" | 483 | Montgomery, IL | Superior Excavating 25715 S. Blackberry Lane Channahon, IL 60410 Brad Hoover, Superior Excavating 815-409-0721 cell | Tom Woods Visu-Sewer of Illinois, LLC 9014 S Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |
| Nov-13 131491 | 8" | 167 | Romeoville, IL | Cecchin Plumbing 4N275 Cavalry Drive Bloomingdale, IL 60108 Joe Salvato, Cecchin Proj. Mngr. 830-330-9444 cell | Tom Woods Visu-Sewer of Illinois, LLC 9014 S Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |
| Dec-13 131481 | 27" | 459 | Montgomery, IL | Superior Excavating 25715 S. Blackberry Lane Channahon, IL 60410 Brad Hoover, Superior Excavating 815-409-0721 cell | Tom Woods Visu-Sewer of Illinois, LLC 9014 S Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |

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|------------------|--------------------------------|---|--------------------------|--|---|
| Jan-12 120021 | 8" | 1,545 | Hoffman Estates, IL | Village of Hoffman Estates 1900 Hassell Road Hoffman Estates, IL 60189 Anthony Anczar - Baxter & Woodman 708-478-2090 | Dave Alexander Visu-Sewer, Inc. W230 N4855 Belker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Jan-12 120031 | 8" 10" | 933 812 | Lombard, IL | Village of Lombard 265 East Wilson Avenue Lombard, IL 60148 Chris Welch 630-620-5740 | John Nelson Visu-Sewer, Inc. W230 N4855 Belker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Jan-12 120071 | 8" 10" 12" 15" 24" | 2,263 2,318 1,591 250 520 | Aurora, IL | Performance Pipelining, Inc. 1551 W. Norris Drive Ottawa, IL 61350 Shaun Flanery 815-433-0080 | Dave Alexander Visu-Sewer, Inc. W230 N4855 Belker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Feb-12 120101 | 8" 10" | 1,309 328 | Montgomery, IL | Village of Montgomery 52 Wheeler Road Sugar Grove, IL 60554 Julie Morrison, P.E. 630-466-6700 | Shaun Ritter Visu-Sewer, Inc. W230 N4855 Belker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Feb-12 120211 | 8" 10" 12" | 3,528 865 1,162 | West Chicago, IL | City of West Chicago 475 Main Street P. O. Box 488 West Chicago, IL 60185 Cathy Morley - RJN 630-682-4700 | Dave Alexander Visu-Sewer, Inc. W230 N4855 Belker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Mar-12 120351 | 8" | 2,176 | Army Trail/Knollwood, IL | Village of Bloomingdale, IL 201 S Bloomingdale Road Bloomingdale, IL 30108 Vern Fasse 630-671-5830 | Justin Leszczynski Visu-Sewer, Inc. W230 N4855 Belker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Mar-12 120331 | 10" | 778 | Gurnee, IL | Walsh Construction 12100 104th Street Pleasant Prairie, WI 53158 Shane Price 262-857-7110 | Shaun Ritter Visu-Sewer, Inc. W230 N4855 Belker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Apr-12 120701 | 8" | 1,700 | Geneva, IL | City of Geneva 1800 South Street Geneva, IL 60134 Pam Broviak, City Engineer 630-232-1539 | Shaun Ritter Visu-Sewer, Inc. W230 N4855 Belker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| May-12 120221 | 8" 10" 12" 15" 24" | 8,621 5,893 4,195 426 1,857 | Wilmette, IL | Village of Wilmette 1200 Wilmette Avenue Wilmette, IL 60091-0040 Scott Hilts 847-853-7660 | Dave Alexander Visu-Sewer, Inc. W230 N4855 Belker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Jun-12 120811 | 8" 10" 12" 15" 24" | 4761 1114 3549 448 449 | Des Plaines, IL | City of Des Plaines Public Works & Engineering Dept. 1111 Joseph Schwab Road Des Plaines, IL 60016 Tim Watkins 847-391-5464 | Shaun Ritter Visu-Sewer, Inc. W230 N4855 Belker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |

Visu-Sewer of Illinois, LLC
2010-2019
National Liner Reference Listing

| | | | | | |
|----------------------------|---|--|--------------------|---|--|
| Jun-12 12098I | 12" | 506 | Cicero, IL | C. J. Erickson 4141 W 124th Place Alsip, IL 60803 Tim Hopper 708-913-7712 cell 708-371-2596 phone | Tom Woods Visu-Sewer of Illinois, LLC 9014 S Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |
| Jul-12 12110I IL JOB | 8" | 2,800 | Glenview, IL | Northfield Township Road District 1928 Lehigh Avenue Glenview, IL 60026 Wally Kehr 847-724-7055 | Shaun Ritter Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Jul-12 IL JOB 12118I | 24" | 200 | Palatine, IL | MECCOR 3933 Oakton Street Skokie, IL 60076 Bill Barstrom 847-876-0202 | Tom Woods Visu-Sewer of Illinois, LLC 9014 S Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |
| Aug-12 IL JOB 12082I | 8" | 285 | Elgin, IL | River Valley Land Improvement Company 11N263 Brookside Drive Elgin, IL 60123 Jeff Glertz 847-742-4694 | Tom Woods Visu-Sewer of Illinois, LLC 9014 S Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |
| Aug-12 12129I IL JOB | 10" | 300 | Hodgkins, IL | Frank Novotny & Associates 825 Midway Drive Willowbrook, IL 60521 Jim Cainkar, Novotny 630-887-0132 | Tom Woods Visu-Sewer of Illinois, LLC 9014 S Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |
| Sep-12 12124I IL JOB | 8" 10" 12" 15" 18" 27" 27/30" | 6238 3155 945 1031 822 329 387 | Mount Prospect, IL | Village of Mount Prospect 1700 West Central Road Mount Prospect, IL 60056 Matt Overeem 847-870-5640 | Dave Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Oct-12 12113I IL JOB | 8" | 294 | Bolingbrook, IL | Illinois American Water 1000 Internationale Parkway Lisle, IL 60517 Jim Fuolla, IAW 630-392-6341 cell | Tom Woods Visu-Sewer of Illinois, LLC 9014 S Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |
| Oct-12 12159I IL JOB | 8" 12" | 8,000 380 | Sheridan, IL | Village of Sheridan 115 N Robinson Street Sheridan, IL 60551 Jeff Snape, PE 815-730-3444 | Shaun Ritter Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Nov-12 12154I | 8" 10" 12" | 1300 250 250 | Lombard, IL | Village of Lombard 255 E. Wilson Avenue Lombard, IL 60148-3931 Bill Brehm 630-464-6643 | Shaun Ritter Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |

Visu-Sewer of Illinois, LLC
2010-2019
National Liner Reference Listing

| | | | | | |
|------------------|---|---|-----------------------|--|--|
| Nov-12 121041 | 8" 10" | 21,700 500 | Elk Grove Village, IL | Elk Grove Village 901 Wellington Avenue Elk Grove Village, IL 60007 Scott Bernholdt 847-734-8045 | Shaun Ritter Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Nov-12 121691 | 14" | 650 | Hammond, IN | Hesse Construction Company Inc 10 Lincoln Avenue Calumet City, IL 60409 Brian Staresina, Hesse 219-545-1082 cell | Tom Woods Visu-Sewer of Illinois, LLC 9014 S Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |
| Dec-12 121741 | 8" | 1,197 | Tinley Park, IL | Village of Tinley Park 16250 S Oak Park Avenue Tinley Park, IL 60477 Mike Stone - Robinson Engineering 815-851-6042 cell | Dave Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Feb-11 IL JOB | 8" 10" 12" | 12,457 1,253 1,389 | Northbrook, IL | Mission Brook Sanitary District P. O. Box 2362 Northbrook, IL 60065 Eric Muraskas 815-459-1260 | Dave Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Feb-11 IL JOB | 8" 10" 12" | 1,532 718 630 | Lisle, IL | Village of Lisle 925 Burlington Avenue Lisle, IL 60532-1838 Eric Kucin 630-271-4173 | Dave Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Mar-11 IL JOB | 8" 15" | 1,169 330 | Elgin, IL | Trigg Construction, Inc. 1975 Powis Road P. O. Box 235 West Chicago, IL 60186-0235 Art Merkelz 630-584-4480 | Dave Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Apr-11 IL JOB | 10" 21" | 3150 1025 | Westchester, IL | Unique Plumbing 9408 West 47th Street Brookfield, WI 60513 Jim Nolan 708-485-8860 | Shaun Ritter Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| May-11 IL JOB | 8" | 219 | Merrionette Park, IL | Village of Merrionette Park 1120 S Kedzie Avenue Merrionette Park, IL 60803 Joe Michon 312-203-0885 | Tom Woods Visu-Sewer of Illinois, LLC 9014 S Thomas Avenue Bridgeview, IL 60455 708-237-0340 708-237-0360 Fax |
| May-11 IL JOB | 8" 10" 12" 15" 18" 21" 24" 27" | 10,653 2,184 3,078 1,477 918 314 131 330 | Mount Prospect, IL | Village of Mount Prospect 1700 West Central Road Mount Prospect, IL 60056 Matt Overeem 847-870-5640 | Dave Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |

Visu-Sewer of Illinois, LLC
2010-2019
National Liner Reference Listing

| | | | | | |
|-------------------------------|-----------------------|-----------------------|--|---|--|
| Jun-11 IL JOB | 8" | 327 | Oak Lawn, IL | Airy's Inc. 7455 W Duvan Drive Tinley Park, IL 60477 Tom Land, Airy's 708-267-8722 | Tom Woods Visu-Sewer of Illinois, LLC 9014 S Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |
| Jun-11 IL JOB | 12" | 700 | Richmond, IL | Village of Richmond 5600 Hunter Drive Richmond, IL 60071 Bill Price, Richmond Public Works 815-693-8025 | Tom Woods Visu-Sewer of Illinois, LLC 9014 S Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |
| Aug-11 IL JOB 11103I | 8" | 885 | Joy, IL | Village of Joy 200 W Main Street Joy, IL 61260 Jake Ehmke P.E. 815-777-9333 | Shaun Ritter Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Aug-11 IL JOB | 8" 10" 12" | 4,685 2,075 600 | Niles, IL | Village of Niles - Finance Dept. 1000 Civic Center Drive Niles, IL 60714 Mousa Nazzal 847-588-7900 | Dave Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Oct-11 IL JOB | 18" | 2706 | Steger, IL | Village of Steger 25 West 34th Street Steger, IL 60475 Kevin Gohackl - JAS Engineering 708-720-1000 | Keith Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Oct-11 IL JOB | 10" 12" 10"/12" | 21,162 212 300 | Elk Grove Village, IL | Elk Grove Village 901 Wellington Avenue Elk Grove Village, IL 60007 Scott Bernholdt 847-734-8045 | Shaun Ritter Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Nov-11 11148I-11 | 8" | 600 | Sheridan, IL #2 Grant Street | Village of Sheridan 115 N Robinson Street Sheridan, IL 60551-0580 Jeff Snape 815-730-3444 | Shaun Ritter Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Nov-11 11130I-11 | 8" | 2,100 | Sheridan, IL #1 IEPA Loan Project | Village of Sheridan 115 N Robinson Street Sheridan, IL 60551-0580 Jeff Snape 815-730-3444 | Shaun Ritter Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Nov-11 11158I-11 IL JOB | 8" 12" | 4310 876 | Tinley Park, IL | Village of Tinley Park 16250 S. Oak Park Avenue Tinley Park, IL 60477 Jennifer Prinz - Robinson Eng. 815-806-0300 | Dave Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Dec-11 IL JOB 11131I | 8" | 815 | Zion, IL | City of Zion 2828 Sheridan Road Zion, IL 60099 Art Hoyt, Zion W&S Supervisor 847-746-4063 | Visu-Sewer of Illinois, LLC 9014 S Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |

Visu-Sewer of Illinois, LLC
2010-2019
National Liner Reference Listing

| | | | | | |
|----------------------------|---|---|--------------------|---|---|
| Dec-11 IL JOB 111591 | 24" | 70 | Chicago, IL | Walsh Group 929 West Adams Street Chicago, IL 60607 Eric Robinson, Walsh Proj Manager 312-617-0290 cell | Tom Woods Visu-Sewer of Illinois, LLC 9014 S Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |
| Mar-10 IL JOB | 18" 18" | 4,166 18 | Sugar Grove, IL | Fox Metro Water Reclam District 882 Rt 31 Oswego, IL 60538 Lee Melcher - Walter Deuchler 630-897-4851 | Dave Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Apr-10 IL JOB | 8" 10" 12" | 3,505 134 684 | North Aurora, IL | Village of North Aurora 25 East State Street North Aurora, IL 60542 Mike Glock 630-897-1457x230 | Dave Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| May-10 IL Job | 18" | 163 | Riverdale, IL | Airy's Incorporated 7455 W. Duvan Drive Tinley Park, IL 60477 Don Blacher, Riverdale DPW 708-841-2202 | Tom Woods Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |
| May-10 IL Job | 15" | 330 | River Forest, IL | Village of River Forest 400 Park Avenue River Forest, IL 60305 Greg Kramer 708-366-8500 | Dave Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| May-10 IL Job | 8" 12" 15" 27" 30" | 834 550 1,040 1,166 701 | Glen Ellyn, IL | Martam Construction 1200 Gasket Drive Elgin, IL 60120 Jerry Kuturovatz 847-608-8800 | Dave Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Jun-10 IL JOB | 8" 10" 12" 15" 18" 21" 24" 27" | 10,486 1,325 4,215 1,323 985 299 482 390 | Mount Prospect, IL | Village of Mount Prospect 1700 West Central Road Mount Prospect, IL 60056 Matt Overøem 847-870-5640 | Dave Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Jun-10 IL JOB | 12" | 345 | Northlake, IL | Palnick Construction 205 W. Grand Avenue Bensenville, IL 60106 Pat DiTo 630-350-8412 | Tom Woods Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |
| Jun-10 IL JOB | 12" | 866 | Hinsdale, IL | Central Blacktop Co., Inc. P. O. Box 2080 LaGrange, IL 60525 Ron Schlesinger, Oper Manager 708-783-4989 | Tom Woods Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |

Visu-Sewer of Illinois, LLC
2010-2019
National Liner Reference Listing

| | | | | | |
|------------------|-------------------------|----------------------------|-----------------|--|---|
| Jul-10 IL JOB | 8" | 336 | New Lenox, IL | Village of New Lenox 301 N. Cedar Street New Lenox, IL 60451 Keith McKeen 815-485-7721 | Tom Woods Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |
| Aug-10 IL JOB | 12" | 110 | Northlake, IL | C J Erickson 4141 W 124th Place Alsip, IL 60803 Dan Kloos 708-224-4428 | Keith Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Aug-10 IL JOB | 8" 10" | 23,373 3,421 | Naperville, IL | City of Naperville 400 S. Eagle Street Naperville, IL 60540 Tony Conn 630-774-5324 | Dave Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Aug-10 IL JOB | 36" | 1,218 | Wheaton, IL | Benchmark Construction Co. 2280 Southwind Blvd. Bartlett, IL 60103 Mark Atkins 630-497-1737 | Dave Alexander Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Oct-10 IL JOB | 12" 15" | 227 350 | Park Forest, IL | Trenchless Innovations 1116 Douglas Lane Crete, IL 60417 Kevin Reid 708-710-5841 | Tom Woods Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |
| Oct-10 IL JOB | 8" 10" 12" 21" | 2300 7000 750 900 | Lansing, IL | Village of Lansing 3141 South Ridge Road Lansing, IL 60438 Bob Csanyi 708-210-5676 | Shaun Ritter Visu-Sewer, Inc. W230 N4855 Betker Drive Pewaukee, WI 53072 (262) 695-2340 (262) 695-2359 Fax |
| Nov-10 IL JOB | 12" | 85 | Blue Island, IL | Lake Plumbing, Inc. 8611 Louisiana Place Merrillville, IN 46410 Ron Hedrick, Lake Plumbing 219-616-0503 cell | Tom Woods Visu-Sewer of Illinois, LLC 9014 S. Thomas Avenue Bridgeview, IL 60455 (708) 237-0340 (708) 237-0360 Fax |
| TOTAL LF | | 847,951 | | | |

**SECTION 00335
AFFIDAVIT OF LITIGATION HISTORY**

**GENEVA EAST SANITARYS EWER REHABILITATION
CITY OF GENEVA
2020**

STATE OF WISCONSIN)
)SS
COUNTY OF WALKESHA)

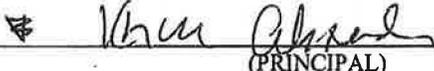
I, KEITH M. ALEXANDER, on oath state that the information presented below is a complete accounting of the last ten years of litigation history for the Contractor:

| YEAR | CASE/ DOCKET NUMBER | COURT OF JURISDICTION | INDICATE IF CONTRACTOR WAS PLAINTIFF OR DEFENDANT | INDICATE THE NAME OF THE OPPOSING PARTY or PARTIES | <u>DISPOSITION OF CASE</u> INDICATE MONETARY AWARD TO PLAINTIFF/ DEFENDANT / OR SETTLEMENT OR CURRENTLY 'ON-GOING' |
|------|---------------------------|--------------------------|---|---|--|
| | NONE | | | | |
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| | | | | | |

Add Additional pages if necessary.

CERTIFICATION:

CONTRACTOR

BY: 
(PRINCIPAL)

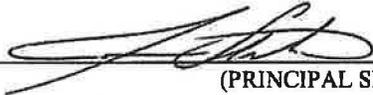
NAME: KEITH M. ALEXANDER

TITLE: PRESIDENT

ADDRESS W230 N4855 BETKER DR. PEWAUKEE, WI 53072



ATTEST

BY: 
(PRINCIPAL SECRETARY)

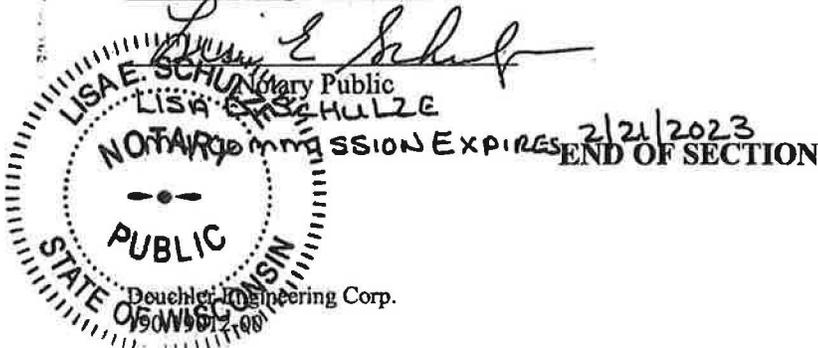
NAME: JAMES S. SERKETICH

TITLE: CORPORATE SECRETARY

ADDRESS: W230 N4855 BETKER DR. PEWAUKEE, WI 53072

SUBSCRIBED AND SWORN TO

Before me this 16TH day of
NOVEMBER, 2020.



END OF SECTION

CITY OF GENEVA
GENEVA EAST SANITARY SEWER REHABILITATION

AGREEMENT AND BONDS

SECTION 00400

AGREEMENT

GENEVA EAST SANITARY SEWER REHABILITATION
CITY OF GENEVA
2020

This Agreement, made this 5 day of January, 2021 by and between the City of Geneva, hereinafter called "Owner", and Visu-Sewer of Illinois, LLC, doing business as a Corporation, hereinafter called "Contractor."

Witnesseth: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The Contractor will commence and complete the construction of the **Geneva East Sanitary Sewer Rehabilitation**.
2. The Contractor will furnish all of the material, supplies, tools, equipment, labor, and other services necessary for the construction and completion of the Project described herein.
3. The Contractor will commence the work required by the Contract Documents within ten (10) calendar days after the date of the Notice to Proceed. The Contractor will Substantially Complete the Work **120 Days** after the Notice to Proceed and will meet Final Completion **150 Days** after the Notice to Proceed, unless the period for completion is extended otherwise by the Contract Documents.
4. The Contractor agrees to perform all of the Work described in the Contract Documents and comply with the terms therein for the sum of \$691,878.00 as shown in the Bid Form - Section 00300.
5. The term "Contract Documents" means and includes the following:
 - A. Advertisement for Bids
 - B. Instructions for Bidders
 - C. Bid Form
 - D. This Agreement
 - E. Notice of Award
 - F. Notice to Proceed
 - G. Change Order Form
 - H. Performance Bond
 - I. Payment Bond
 - J. Certificates of Insurance
 - K. Certifications (various)
 - L. Specifications prepared or issued by Deuchler Engineering Corp.
 - M. Drawings prepared by Deuchler Engineering Corp.

- N. Addenda:
No. 1, dated November 10, 2020
No. 2, dated November 12, 2020
No. _____, dated _____, 2020
No. _____, dated _____, 2020
No. _____, dated _____, 2020
- O. Any modification, including Change Orders, duly delivered after execution of Agreement.
6. The Owner will pay to the Contractor in the manner and at such times as set forth in the Special Provisions, such amounts as required by the Contract Documents.
7. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.
8. Owner and Contractor recognize that time is of the essence of this Agreement and that Owner will suffer financial loss if the Work is not completed within the times specified in paragraph 3 above, plus any extensions thereof allowed in accordance with the Contract Documents. The Contractor also recognizes the difficulties involved in proving the actual loss suffered by the Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Contractor shall pay the cost of engineering time, construction observation time, construction management time and any other costs associated with such delay for each day that expires after the time specified in paragraph 3 for Substantial Completion until the work is substantially complete. After Substantial Completion, if contractor shall neglect, refuse or fail to complete the remaining Work within the time specified in paragraph 3 for completion and readiness for final payment, contractor shall pay the cost of engineering time, construction observation time, construction management time and any other costs associated with such delay for each day that expires after the time specified in paragraph 3 for completion and readiness for final payment.

In witness whereof, the parties hereto have executed or caused to be executed by their duly authorized officials this Agreement in **quadruplicate** each of which shall be deemed an original on the date first above written.

Owner:

City of Geneva

By: *Stephanie K. Dawkins*

Name: Stephanie K. Dawkins

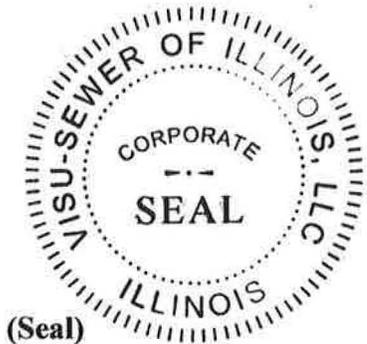
Title: City Administrator



Attest:

Name: Courtney Ware

Title: Receptionist



Contractor:

Visu-Sewer of Illinois, LLC

By: *John E. Nelson Jr*

Name: John E. Nelson Jr

Title: Power of Attorney

Attest:

Name: James S. Serketich

Title: Corporate Secretary

SECTION 00410

NOTICE OF AWARD

**GENEVA EAST SANITARY SEWER REHABILITATION
CITY OF GENEVA
2020**

To: Visu-Sewer of Illinois, LLC
9014 S. Thomas Ave.
Bridgeview, IL 60455

Date: December 21, 2020

The Owner has considered the Bid submitted by you for the above described **WORK** in response to its Advertisement for Bids and Instructions for Bidders.

You are hereby notified that your Bid has been accepted in the amount of \$691,878.00.

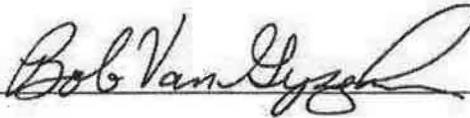
You are required by the Instructions for Bidders to execute the Agreement and furnish the required Contractor's Performance Bond, Payment Bond, and certificates of insurance within ten (10) calendar days from the date of this Notice of Award to you.

If you fail to execute said Agreement and to furnish said Bonds and certificates of insurance within ten (10) days from the date of this Notice of Award, said Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your Bid as abandoned and as a forfeiture of your Bid Bond. The Owner will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this Notice of Award to the Owner.

City of Geneva

NAME: Bob VanGyseghem



TITLE: Superintendent of Water & Wastewater

DATE: 12/21/2020

ACCEPTANCE OF NOTICE

Receipt of the above **NOTICE TO AWARD** is hereby acknowledged:

CONTRACTOR: Visu-Sewer of Illinois, LLC

By:



NAME:

John E. Nelson Jr.

TITLE:

Power of Attorney

DATE:

December 30, 2020

SECTION 00420
NOTICE TO PROCEED

GENEVA EAST SANITARY SEWER REHABILITATION
CITY OF GENEVA
2020

To: Visu-Sewer of Illinois, L.L.C.
9014 S. Thomas Ave.
Bridgeview, IL 60455

Date: Jan 5, ~~2020~~ 2021

You are hereby notified to commence WORK in accordance with the Agreement dated January 5, 2021, ~~2020~~ and you are to have the WORK Substantially Complete **120 Days** after the Notice to Proceed and meet Final Completion **150 Days** after the Notice to Proceed.

City of Geneva

NAME: Stephanell

TITLE: City Administrator

DATE: January 5, 2021

ACCEPTANCE OF NOTICE

Receipt of the above **NOTICE TO PROCEED** is hereby acknowledged:

CONTRACTOR: Visu-Sewer of Illinois, L.L.C.

NAME: _____

TITLE: _____

DATE: _____

SECTION 00530
CHANGE ORDER

Change Order No. _____

Date: _____

Agreement Date: _____

Name of Project: GENEVA EAST SANITARY SEWER REPAIRS

OWNER: CITY OF GENEVA

CONTRACTOR: _____

The following changes are hereby made to the CONTRACT DOCUMENTS:

Justification:

Change to the CONTRACT PRICE: \$ _____

Original CONTRACT PRICE: \$ _____

Current CONTRACT PRICE adjusted by previous CHANGE ORDER: \$ _____

The CONTRACT PRICE due to this CHANGE ORDER will be

(Increased) (Decreased) By : \$ _____

The new CONTRACT PRICE including this CHANGE ORDER will be \$ _____

Change to CONTRACT TIME:

The CONTRACT TIME will be (Increased) (Decreased) by _____ Calendar Days.

The Date for Completion of all work will be _____ (Date)

Approvals Required: To be effective this Order must be approved by the Federal Agency if it changes the scope or objective of the PROJECT.

Requested by: _____

Recommended by: _____

Ordered by: _____

Accepted by: _____

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SECTION 00605
PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS that:

NAME OF CONTRACTOR Visu-Sewer of Illinois, LLC

ADDRESS OF CONTRACTOR 9014 S. Thomas Ave.
Bridgeview, IL 60455

a Corporation, hereinafter called Principal, and

NAME OF SURETY Merchants Bonding Company (Mutual)

ADDRESS OF SURETY PO Box 14498, Des Moines IA 50306

hereinafter called Surety, are held and firmly bound unto the **CITY OF GENEVA**, hereinafter called **OWNER**, in the penal sum of \$691,878.00 in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the **OWNER**, dated the 22nd day of December, 2020, a copy of which is hereto attached and made a part hereof for the construction of the **GENEVA EAST SANITARY SEWER REHABILITATION**.

NOW, THEREFORE, if the Principal shall promptly make payment in all persons, firms, **SUBCONTRACTORS**, and corporations furnishing materials for or performing labor in the prosecution of the **WORK** provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such **WORK**, and all insurance premiums on said **WORK**, and for all labor, performed in such **WORK** whether by **SUBCONTRACTOR** or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the **WORK** to be performed thereunder or the **SPECIFICATIONS** accompanying the same shall in any wise affect its obligation on this **BOND**, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the **WORK** or to the **SPECIFICATIONS**.

PROVIDED, FURTHER, that no final settlement between the **OWNER** and the **CONTRACTOR** shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

In witness whereof, this instrument is executed in four (4) counterparts, each of which shall be deemed an original, this the 22nd day of December, 2020.

CONTRACTOR

BY:



Visu-Sewer of Illinois, LLC

NAME:

John E. Nelson Jr.

TITLE:

P.O.A.

ADDRESS:

9014 S. Thomas Ave., Bridgeview IL 60455



ATTEST

BY: _____
NAME: James S. Serketich
TITLE: Corporate Secretary
ADDRESS: 9014 S. Thomas Ave., Bridgeview IL 60455

WITNESS AS TO PRINCIPAL

BY: _____
NAME: Traci Van Oayen
TITLE: Senior Office Administrator
ADDRESS: 9014 S. Thomas Ave., Bridgeview IL 60455

SURETY

BY:

Debbra A. Hinkes

NAME:

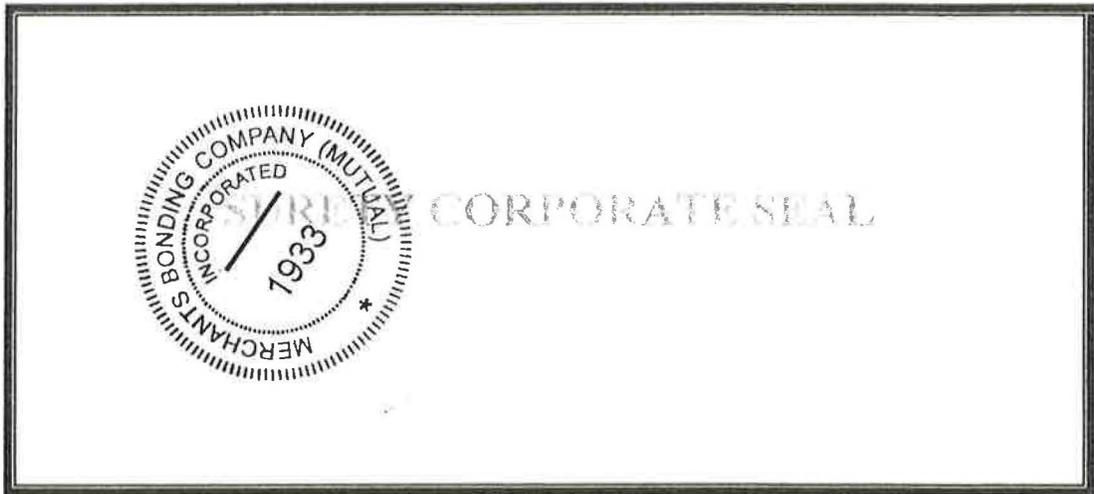
Debbra A. Hinkes, Attorney-in-Fact

(ATTORNEY IN FACT)

(ATTACH VERIFICATION OF POWER OF ATTORNEY)

ADDRESS:

PO Box 510925, New Berlin WI 53151



WITNESS AS TO SURETY

BY:

Laura J. Brehm

NAME:

Laura J. Brehm

ADDRESS:

PO Box 510925, New Berlin WI 53151

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all Partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the PROJECT is located.

SECTION 00610
PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS that:

NAME OF CONTRACTOR Visu-Sewer of Illinois, LLC

ADDRESS OF CONTRACTOR 9014 S. Thomas Ave.
Bridgeview, IL 60455

a Corporation, hereinafter called Principal, and

NAME OF SURETY Merchants Bonding Company (Mutual)

ADDRESS OF SURETY PO Box 14498, Des Moines IA 50306

hereinafter called Surety, are held and firmly bound unto the **CITY OF GENEVA** hereinafter called **OWNER**, in the penal sum of \$691,878.00, in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the **OWNER**, dated the 22nd day of December, 2020, a copy of which is hereto attached and made a part thereof for the construction of the **GENEVA EAST SANITARY SEWER REHABILITATION**.

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the **OWNER**, with or without notice of the Surety and during the one year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the **OWNER** from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the **OWNER** all outlay and expense which the **OWNER** may incur in making good any default, then his obligation shall be void; otherwise to remain in full force and effect.

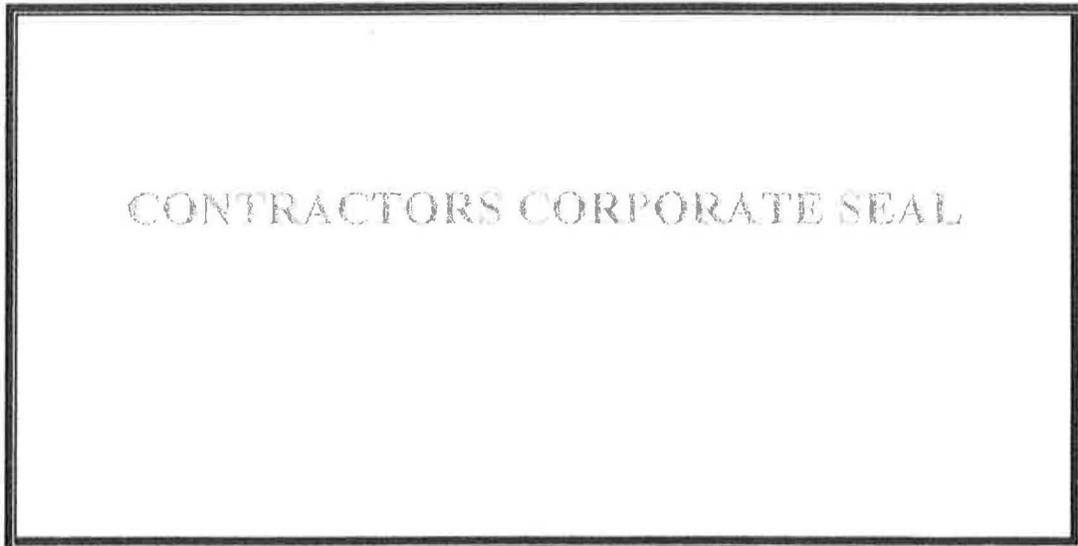
PROVIDED, FURTHER, that the said Surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the **WORK** to be performed thereunder or the **SPECIFICATIONS** accompanying the same shall in any wise affect its obligation on this **BOND**, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the **WORK** or to the **SPECIFICATIONS**.

PROVIDED, FURTHER, that no final settlement between the **OWNER** and the **CONTRACTOR** shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in 4 counterparts, each of which shall be deemed an original, this the 22nd day of December, 2020.

Any suit under this bond must be instituted before the expiration of the Statute of Limitations applicable to any claim against the contractor named herein.

BY:  **CONTRACTOR** **Visu-Sewer of Illinois, LLC**
NAME: John E. Nelson Jr.
TITLE: P.O.A.
ADDRESS: 9014 S. Thomas Ave., Bridgeview IL 60455



ATTEST

BY: 
NAME: James S. Serketich **(PRINCIPAL SECRETARY)**
TITLE: Corporate Secretary
ADDRESS: 9014 S. Thomas Ave., Bridgeview IL 60455

WITNESS AS TO PRINCIPAL

BY: 
NAME: Traci Van Oayen
TITLE: Senior Office Administrator
ADDRESS: 9014 S. Thomas Ave., Bridgeview IL 60455

SURETY

BY:

Debra A. Hinkes

NAME:

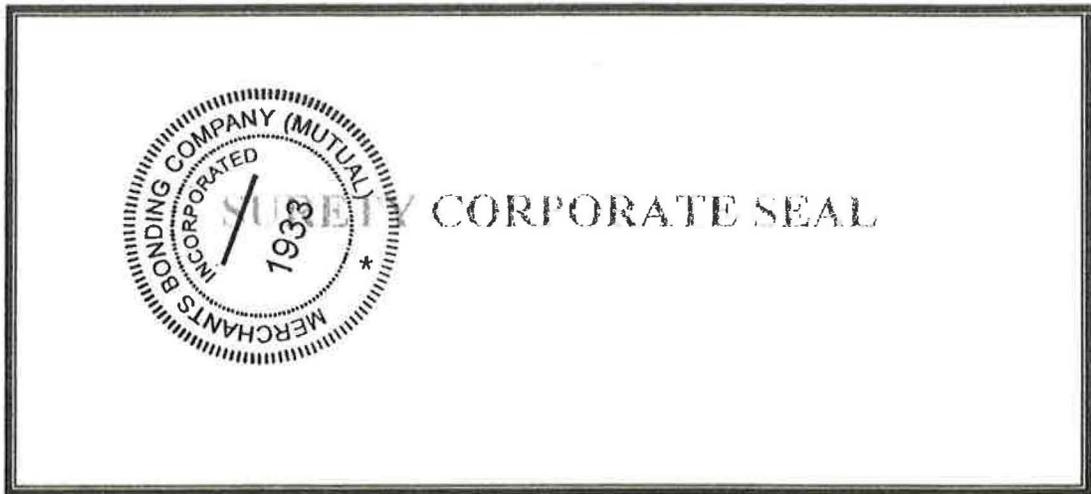
Debra A. Hinkes, Attorney-in-Fact

(ATTORNEY IN FACT)

(ATTACH VERIFICATION OF POWER OF ATTORNEY)

ADDRESS:

PO Box 510925, New Berlin WI 53151



WITNESS AS TO SURETY

BY:

Laura J. Brehm

NAME:

Laura J. Brehm

ADDRESS:

PO Box 510925, New Berlin WI 53151

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all Partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the PROJECT is located.

MERCHANTS
BONDING COMPANY™
POWER OF ATTORNEY

Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations of the State of Iowa (herein collectively called the "Companies") do hereby make, constitute and appoint, individually, Debbra A Hinkes; Pamela M Hineman; Robert M Tortelli

their true and lawful Attorney(s)-in-Fact, to sign its name as surety(ies) and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

This Power-of-Attorney is granted and is signed and sealed by facsimile under and by authority of the following By-Laws adopted by the Board of Directors of Merchants Bonding Company (Mutual) on April 23, 2011 and amended August 14, 2015 and adopted by the Board of Directors of Merchants National Bonding, Inc., on October 16, 2015.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof."

"The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner-Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 11th day of February, 2020

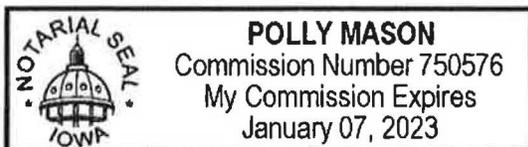


MERCHANTS BONDING COMPANY (MUTUAL)
MERCHANTS NATIONAL BONDING, INC.

By *Larry Taylor*
President

STATE OF IOWA
COUNTY OF DALLAS ss.

On this 11th day of February, 2020, before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC.; and that the seals affixed to the foregoing instrument are the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.



Polly Mason
Notary Public

(Expiration of notary's commission does not invalidate this instrument)

I, William Warner, Jr., Secretary of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., do hereby certify that the above and foregoing is a true and correct copy of the POWER-OF-ATTORNEY executed by said Companies, which is still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this 22nd day of December, 2020



William Warner Jr.
Secretary



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
12/22/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

| PRODUCER R & R Insurance Services, Inc N14 W23900 Stone Ridge Drive Waukesha WI 53188 | | CONTACT NAME: Christine Miramontes PHONE (A/C, No, Ext): (262) 574-7000 FAX (A/C, No): (262) 574-7080 E-MAIL ADDRESS: christine.miramontes@rrins.com | | | | | | | | | | | | | | | |
|---|--------|---|--|-------------------------------|--------|---|-------|---|-------|--|-------|------------------------------------|-------|------------|--|------------|--|
| INSURED Visu Sewer of Illinois LLC 9014 S Thomas Ave Bridgeview IL 60455 | | <table border="1"> <thead> <tr> <th>INSURER(S) AFFORDING COVERAGE</th> <th>NAIC #</th> </tr> </thead> <tbody> <tr> <td>INSURER A: Phoenix Insurance Co (Travelers)</td> <td>25623</td> </tr> <tr> <td>INSURER B: Travelers Property Casualty Co</td> <td>25674</td> </tr> <tr> <td>INSURER C: Travelers Indemnity Company of CT</td> <td>25682</td> </tr> <tr> <td>INSURER D: Charter Oak Fire Ins Co</td> <td>25615</td> </tr> <tr> <td>INSURER E:</td> <td></td> </tr> <tr> <td>INSURER F:</td> <td></td> </tr> </tbody> </table> | | INSURER(S) AFFORDING COVERAGE | NAIC # | INSURER A: Phoenix Insurance Co (Travelers) | 25623 | INSURER B: Travelers Property Casualty Co | 25674 | INSURER C: Travelers Indemnity Company of CT | 25682 | INSURER D: Charter Oak Fire Ins Co | 25615 | INSURER E: | | INSURER F: | |
| INSURER(S) AFFORDING COVERAGE | NAIC # | | | | | | | | | | | | | | | | |
| INSURER A: Phoenix Insurance Co (Travelers) | 25623 | | | | | | | | | | | | | | | | |
| INSURER B: Travelers Property Casualty Co | 25674 | | | | | | | | | | | | | | | | |
| INSURER C: Travelers Indemnity Company of CT | 25682 | | | | | | | | | | | | | | | | |
| INSURER D: Charter Oak Fire Ins Co | 25615 | | | | | | | | | | | | | | | | |
| INSURER E: | | | | | | | | | | | | | | | | | |
| INSURER F: | | | | | | | | | | | | | | | | | |

COVERAGES **CERTIFICATE NUMBER:** CL2031399596 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

| INSR LTR | TYPE OF INSURANCE | ADDL INSD | SUBR WVD | POLICY NUMBER | POLICY EFF (MM/DD/YYYY) | POLICY EXP (MM/DD/YYYY) | LIMITS |
|----------|---|-----------|----------|---|-------------------------|-------------------------|--|
| A | <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER: | | | CO-5968X624 #CGD604 02-19 (AI) #CGD316 02-19 (WOS) #CGT100 02-19 (PNC) | 4/1/2020 | 4/1/2021 | EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 |
| B | <input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO ALL OWNED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> SCHEDULED AUTOS NON-OWNED AUTOS | | | B10-5968X624 #CAT353 02-15 (AI/WOS) #CAT474 02-16 (PNC) | 4/1/2020 | 4/1/2021 | COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ |
| B | <input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 10,000 | | | CUP-0J357280 #EU0001 07-16 (AI/PNC/WOS) | 4/1/2020 | 4/1/2021 | EACH OCCURRENCE \$ 15,000,000 AGGREGATE \$ 15,000,000 |
| C | WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below | Y/N | N/A | UB-3K116933 | 4/1/2020 | 4/1/2021 | <input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000 |
| D | Contractors Equipment | | | 660-5167X974 | 4/1/2020 | 4/1/2021 | Leased/Rented Equipment 750,000 |
| D | Installation Floater | | | 660-5167X974 | 4/1/2020 | 4/1/2021 | Any One Jobsite/Transit 500,000 |

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Project: Geneva East Sanitary Sewer Rehabilitation.
City of Geneva and Deuchler Engineering Corp are listed as additional insured in regards to general liability when required by written contract per forms above.

| | |
|--|---|
| CERTIFICATE HOLDER City of Geneva 22 South First St Geneva, IL 60134 | CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE Thomas Scheider/DM586 |
|--|---|

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**BLANKET ADDITIONAL INSURED – AUTOMATIC STATUS
IF REQUIRED BY WRITTEN CONTRACT (CONTRACTORS)**

This endorsement modifies insurance provided under the following:
COMMERCIAL GENERAL LIABILITY COVERAGE PART

The following is added to **SECTION II – WHO IS AN INSURED:**

Any person or organization that:

- a. You agree in a written contract or agreement to include as an additional insured on this Coverage Part; and
- b. Has not been added as an additional insured for the same project by attachment of an endorsement under this Coverage Part which includes such person or organization in the endorsement's schedule;

is an insured, but:

- a. Only with respect to liability for "bodily injury" or "property damage" that occurs, or for "personal injury" caused by an offense that is committed, subsequent to the signing of that contract or agreement and while that part of the contract or agreement is in effect; and
- b. Only as described in Paragraph (1), (2) or (3) below, whichever applies:
 - (1) If the written contract or agreement specifically requires you to provide additional insured coverage to that person or organization by the use of:
 - (a) The Additional Insured – Owners, Lessees or Contractors – (Form B) endorsement CG 20 10 11 85; or
 - (b) Either or both of the following: the Additional Insured – Owners, Lessees or Contractors – Scheduled Person Or Organization endorsement CG 20 10 10 01, or the Additional Insured – Owners, Lessees or Contractors – Completed Operations endorsement CG 20 37 10 01;

the person or organization is an additional insured only if the injury or damage arises out of "your work" to which the written contract or agreement applies;

- (2) If the written contract or agreement specifically requires you to provide additional insured coverage to that person or organization by the use of:

- (a) The Additional Insured – Owners, Lessees or Contractors – Scheduled Person or Organization endorsement CG 20 10 07 04 or CG 20 10 04 13, the Additional Insured – Owners, Lessees or Contractors – Completed Operations endorsement CG 20 37 07 04 or CG 20 37 04 13, or both of such endorsements with either of those edition dates; or
- (b) Either or both of the following: the Additional Insured – Owners, Lessees or Contractors – Scheduled Person Or Organization endorsement CG 20 10, or the Additional Insured – Owners, Lessees or Contractors – Completed Operations endorsement CG 20 37, without an edition date of such endorsement specified;

the person or organization is an additional insured only if the injury or damage is caused, in whole or in part, by acts or omissions of you or your subcontractor in the performance of "your work" to which the written contract or agreement applies; or

- (3) If neither Paragraph (1) nor (2) above applies:
 - (a) The person or organization is an additional insured only if, and to the extent that, the injury or damage is caused by acts or omissions of you or your subcontractor in the performance of "your work" to which the written contract or agreement applies; and
 - (b) Such person or organization does not qualify as an additional insured with respect to the independent acts or omissions of such person or organization.

The insurance provided to such additional insured is subject to the following provisions:

- a. If the Limits of Insurance of this Coverage Part shown in the Declarations exceed the minimum limits required by the written contract or agreement, the insurance provided to the additional insured will be limited to such minimum required limits. For the purposes of determining whether

COMMERCIAL GENERAL LIABILITY

this limitation applies, the minimum limits required by the written contract or agreement will be considered to include the minimum limits of any Umbrella or Excess liability coverage required for the additional insured by that written contract or agreement. This provision will not increase the limits of insurance described in Section III – Limits Of Insurance.

- b. The insurance provided to such additional insured does not apply to:
- (1) Any "bodily injury", "property damage" or "personal injury" arising out of the providing, or failure to provide, any professional architectural, engineering or surveying services, including:
 - (a) The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders or change orders, or the preparing, approving, or failing to prepare or approve, drawings and specifications; and
 - (b) Supervisory, inspection, architectural or engineering activities.
 - (2) Any "bodily injury" or "property damage" caused by "your work" and included in the "products-completed operations hazard" unless the written contract or agreement specifically requires you to provide such coverage for that additional insured during the policy period.
- c. The additional insured must comply with the following duties:
- (1) Give us written notice as soon as practicable of an "occurrence" or an offense which may result in a claim. To the extent possible, such notice should include:
 - (a) How, when and where the "occurrence" or offense took place;
 - (b) The names and addresses of any injured persons and witnesses; and
 - (c) The nature and location of any injury or damage arising out of the "occurrence" or offense.
 - (2) If a claim is made or "suit" is brought against the additional insured:
 - (a) Immediately record the specifics of the claim or "suit" and the date received; and
 - (b) Notify us as soon as practicable and see to it that we receive written notice of the claim or "suit" as soon as practicable.
 - (3) Immediately send us copies of all legal papers received in connection with the claim or "suit", cooperate with us in the investigation or settlement of the claim or defense against the "suit", and otherwise comply with all policy conditions.
 - (4) Tender the defense and indemnity of any claim or "suit" to any provider of other insurance which would cover such additional insured for a loss we cover. However, this condition does not affect whether the insurance provided to such additional insured is primary to other insurance available to such additional insured which covers that person or organization as a named insured as described in Paragraph 4., Other Insurance, of Section IV – Commercial General Liability Conditions.

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that VISU-SEWER OF ILLINOIS, LLC, (hereinafter referred to as Corporation), by KEITH M. ALEXANDER, its President, of W230 N4855 Betker Drive, Pewaukee, County of Waukesha, State of Wisconsin, have made, constituted and appointed and by these presents do make, constitute and appoint JOHN E. NELSON JR., an employee and agent of VISU-SEWER OF ILLINOIS, LLC., the Corporation's true and lawful attorney, for it and in its name, place and stead:

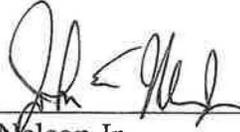
1. To exercise or perform any act, power, duty, right or obligation whatsoever that the Corporation now has, or may hereafter acquire the legal right, power, or capacity to exercise or perform, in connection with, arising from, or relating to any person, item, transaction, thing, business property, real or personal, tangible or intangible, or matter whatsoever;
2. To request, ask, demand, sue for, recover, collect, receive, to hold and possess all such sums of money, debts, dues, commercial papers, checks, drafts, accounts, deposits, legacies, bequests, devises, notes, interests, stock certificates, bonds, dividends, certificates of deposit, annuities, pension and retirement benefits, insurance benefits and proceeds, any and all documents of title, choses in action, personal and real property, intangible and tangible property and property rights, and demands whatsoever, liquidated or unliquidated as now are, or shall hereafter become, owned by, or due, owing, payable or belonging to, the Corporation or in which the Corporation has or may hereafter acquire interest, to have, use, and take all lawful means and equitable and legal remedies, procedures, and writs in its name for the collection and recovery thereof, and to adjust, sell, compromise, and agree for the same, and to make, execute, and deliver to it, on its behalf, and in its name, all endorsements, acquittances, releases, receipts, or other sufficient discharges for the same;
3. To lease, purchase, exchange, and acquire, and to agree, bargain, and contract for the lease, purchase, exchange, and acquisition of, and to accept, take, receive, and possess any real or personal property whatsoever, tangible or intangible, or interest thereon, on such terms and conditions, and under such covenants, as said attorney in fact shall deem proper;
4. To maintain, repair, improve, manage, insure, rent, lease, sell, convey, subject to liens, mortgage, subject to deeds of trust and hypothecate, and in any way or manner deal with all or any part of any real or personal property whatsoever, tangible or intangible, or any interest therein, that it now owns or may hereafter acquire, for it, in its behalf, and in its name and under such terms and conditions, and under such covenants, as said attorney in fact shall deem proper;
5. To conduct, engage in, and transact any and all lawful business of whatever nature or kind for the Corporation, on its behalf, and in its name;
6. To make, receive, sign, endorse, execute, acknowledge, deliver, and possess such applications, contracts, agreements, options, covenants, conveyances, deeds, trust deeds, security

agreements, bills of sale, leases, mortgages, assignments, insurance policies, bills of lading, warehouse receipts, documents of title, bills, bonds, debentures, checks, drafts, bills of commercial paper, receipts, withdrawal receipts and deposit instruments relating to accounts or deposits in, or certificates of deposit of, banks, savings and loan or other institutions or associations, proofs of loss, evidences of debts, releases, and satisfaction of mortgages, liens, judgments, security agreements and other debts and obligations and such other instruments in writing of whatever kind and nature as may be necessary or proper in the exercise of the rights and powers herein granted.

7. This instrument is to be construed and interpreted as a general power of attorney. The enumeration of specific items, rights, acts, or powers herein is not intended to, nor does it, limit or restrict, and is not to be construed or interpreted as limiting or restricting, the general powers herein granted to said attorney in fact.

8. The rights, powers, and authority of said attorney in fact herein granted shall commence and be in full force and effect on March 1, 2014 and such rights, powers, and authority shall remain in full force and effect thereafter until further notice.

Dated this 19th day of March, 2014



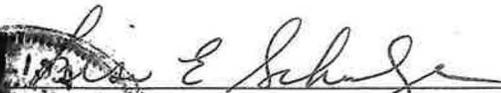
John E. Nelson Jr.

VISU-SEWER OF ILLINOIS, LLC



Keith M. Alexander, President

Subscribed & sworn to before
me this 19th day of March, 2014.



Lisa E. Schulze, Notary Public
Waukesha County., Wisconsin
My commission expires: 02/15/15



SECTION 00 91 13.01

CITY OF GENEVA
GENEVA EAST SANITARY SEWER
REHABILITATION

BID DATE: NOVEMBER 16, 2020

ADDENDUM NO. 1

DATE: November 10, 2020
FROM: Deuchler Engineering Corp.
TO: All Plan Holders
PAGES: 8 Pages

Please acknowledge receipt of this addendum by filling out the following and email a scanned copy to mrhoden@deuchler.com immediately upon receipt of this addendum. Also acknowledge receipt on Section 00 41 00 - Bid Form, page 00 41 00-1.

COMPANY NAME: VISU-SEWER OF ILLINOIS, LLC

SIGNATURE OF COMPANY REPRESENTATIVE: *Kevin Alexander*

DATE: 11/13/20

CITY OF GENEVA
GENEVA EAST SANITARY SEWER REHABILITATION
BID DATE: NOVEMBER 16, 2020

ADDENDUM NO. 1

DATE: November 10, 2020
FROM: Deuchler Engineering Corp.
TO: All Plan Holders

**THIS ADDENDUM FORMS A PART OF THE CONTRACT DOCUMENTS AND MODIFIES
THE ORIGINAL BIDDING DOCUMENTS AS NOTED BELOW.**

TABLE OF CONTENTS

- I. ADDENDA ITEMS RELATING TO CONTRACT SPECIFICATIONS.
 - II. PLAN/PROFILE AND EXHIBITS
 - III. QUESTIONS FROM BIDDERS NOT COVERED ELSEWHERE
-

I. ADDENDA ITEMS RELATING TO CONTRACT SPECIFICATIONS

A. Section 00300 - Bid Form – Section IV

- 1. **REPLACE** The Quantity of Item No. 11 “Air Test Service Connection (5-foot)” from 10 to 100. Air test and grout service connections have been added for all sections called out for CIPP lining.
- 2. **REPLACE** The Quantity of Item No. 12 “Grout Service Connection (5-foot)” from 10 to 100. Air test and grout service connections have been added for all sections called out for CIPP lining.

B. Special Provision SP-7: Hours of Work

- 1. **DELETE PARAGRAPH 4:** “At the request of the owner, this work may be conducted at night. If the work takes place at night, the “NIGHT WORK CONTINGENCY” pay item shall be paid to the contractor.”

C. Special Provision SP-23: Cured – In – Place Pipelining (Special Provisions page 29)

- 1. **REMOVE** The following language from LATERAL REINSTATEMENTS (paragraph 3) “Dye testing as described hereinafter shall be required to determine which services shall be reinstated prior to lining. Any additional non-active laterals reinstated, shall be repaired with a minimum 3-foot length CIPP spot liner including LMK end seals at both ends on the mainline.”
- 2. **ADD** the following language at the end of the same paragraph “The City will determine which laterals are active and communicate to the Contractor which laterals to leave closed. The Contractor will not be required to dye test.”

II. PLAN/PROFILE AND EXHIBITS

1. **REPLACE** pages 130-132 (sheets 6-8) with pages 4-6 of this Addendum. Air test and grout service connections have been added for all sections called out for CIPP lining.
2. **REPLACE** page 136 of the bid documents with pages 7-8 of this Addendum. Air test and grout service connections have been added for all sections called out for CIPP lining.

III. QUESTIONS FROM BIDDERS NOT COVERED ELSEWHERE

1. None

END OF SECTION




DEUCHLER
 CIVIL | STRUCTURAL | ELECTRICAL | ENVIRONMENTAL
 230 WOODLAWN AVENUE
 ALHAMBRA, IL 60009
 TEL: 830-897-4855
 FAX: 830-897-5898
 www.deuchler.com

1. ADDENDUM 1 - 11-10-2020 - REISSUE SHEET
 2.
 3.
 4.

VERIFY SCALE:
 BAR IS ONE INCH ON
 OFFICIAL DRAWINGS

| | | | |
|-----------------|--------------|-----------|-----|
| DATE: | 10-23-2020 | DESIGNED: | ADH |
| SCALE: | AS SHOWN | DRAWN: | AS |
| JOB NO.: | 190-19012-00 | CHECKED: | ADH |
| FIELD BOOK NO.: | N/A | APPROVED: | BP |

CITY OF GENEVA, ILLINOIS
GENEVA EAST SANITARY SEWER REHABILITATION
CIPP LINING

SHEET **6**
 OF **11**

CLIENT REVIEW SET - 10-23-2020



ILLINOIS DESIGN FIRM # 184.001830
 330 WOODLAWN AVENUE
 AUBURN, IL 62509
 PH: 630-897-4451
 FAX: 630-897-5498
 www.deuchler.com

- 1.
- 2.
- 3.
- 4.

VERTICAL SCALE:
 BAR IS ONE INCH OR
 OFFICIAL DRAWINGS

| | | | |
|-----------------|--------------|-----------|-----|
| DATE: | 10-23-2020 | DESIGNED: | ADH |
| SCALE: | AS SHOWN | DRAWN: | AS |
| JOB NO.: | 190-19012-00 | CHECKED: | ADH |
| FIELD BOOK NO.: | N/A | APPROVED: | BP |

CITY OF GENEVA, ILLINOIS
GENEVA EAST SANITARY SEWER REHABILITATION
CIPP LINING

SHEET **7**
 OF **11**

CLIENT REVIEW SET - 10-23-2020



Legend
 — Segments to be Lined



ILLINOIS DESIGN FIRM # 184-001830
 230 WOODLAWN AVENUE
 AURORA, IL 60506
 PH: 630-897-4881
 FAX: 630-897-5896
 www.deuchler.com

1. ADDENDUM 1 - 11-10-2020 - REISSUE SHEET
- 2.
- 3.
- 4.

VERIFY SCALE:
 BAR IS ONE INCH ON
 OPTICAL DRAWINGS

DATE: 10-23-2020
 SCALE: AS SHOWN
 JOB NO. 190-19012-00
 FIELD BOOK NO.: N/A

| | |
|-----------|-----|
| DESIGNED: | ADM |
| DRAWN: | AS |
| CHECKED: | ADM |
| APPROVED: | BP |

**CITY OF GENEVA, ILLINOIS
 GENEVA EAST SANITARY SEWER REHABILITATION
 CIPP LINING**

SHEET **8**
 OF **11**

CLIENT REVIEW SET - 10-23-2020

| From MH | To MH | Sewer Size | TV Length | # Live Services | # Capped Services | Pipe Material | CIPP Liner | Main Line Grout* | # Service Grouts | Service Grout Location 1 | Service Grout Location 2 | Service Grout Location 3 | Service Grout Location 4 | Service Grout Location 5 | Service Grout Location 6 | Service Grout Location 7 | Service Grout Location 8 | Service Grout Location 9 | Service Grout Location 10 | Service Grout Location 11 | Service Grout Location 12 | Service Grout Location 13 | Service Grout Location 14 | Service Grout Location 15 | Service Grout Location 16 |
|---------|--------|------------|-----------|-----------------|-------------------|----------------|------------|------------------|------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| 6W-M03 | 6W-M02 | 18 | 316 | 0 | 0 | CP | | X | | | | | | | | | | | | | | | | | |
| 6W-M01 | 5W-M09 | 18 | 385 | 0 | 0 | CP | | X | | | | | | | | | | | | | | | | | |
| 5W-M09 | 5W-M08 | 18 | 389 | 0 | 0 | CP | | X | | | | | | | | | | | | | | | | | |
| 5W-M07 | 5W-M04 | 18 | 313 | 0 | 0 | DI (8' Joints) | | X | | | | | | | | | | | | | | | | | |
| 5W-M04 | 5W-M02 | 18 | 94 | 0 | 0 | DI (8' Joints) | | X | | | | | | | | | | | | | | | | | |
| 5W-M02 | 4W-M18 | 18 | 398 | 0 | 0 | DI (8' Joints) | | X | | | | | | | | | | | | | | | | | |

*Approximate Joint Lengths per Pipe Material

VCP = 5'

PVC = 12'

DI = 18'

CP = 8'

**Footages are from the Dowsntream Manhole.

SECTION 00 91 13.01

CITY OF GENEVA
GENEVA EAST SANITARY SEWER
REHABILITATION

BID DATE: NOVEMBER 16, 2020

ADDENDUM NO. 2

DATE: November 12, 2020
FROM: Deuchler Engineering Corp.
TO: All Plan Holders
PAGES: 9 Pages

Please acknowledge receipt of this addendum by filling out the following and email a scanned copy to mrhoden@deuchler.com immediately upon receipt of this addendum. Also acknowledge receipt on Section 00 41 00 - Bid Form, page 00 41 00-1.

COMPANY NAME: VISU-SEWER OF ILLINOIS, LLC

SIGNATURE OF COMPANY REPRESENTATIVE: 

DATE: 11/13/20

CITY OF GENEVA
GENEVA EAST SANITARY SEWER REHABILITATION
BID DATE: NOVEMBER 16, 2020

ADDENDUM NO. 2

DATE: November 12, 2020
FROM: Deuchler Engineering Corp.
TO: All Plan Holders

**THIS ADDENDUM FORMS A PART OF THE CONTRACT DOCUMENTS AND MODIFIES
THE ORIGINAL BIDDING DOCUMENTS AS NOTED BELOW.**

TABLE OF CONTENTS

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-

I. ADDENDA ITEMS RELATING TO CONTRACT SPECIFICATIONS

A. Section 00300 - Bid Form

- 1. **REPLACE** the entire section with pages 3-9 of this addendum. The bid items and quantities were adjusted to account for the increase in service grouts outlined in Addendum 1 and to match the work described for the work to take place near 600 Westfield Course.

II. PLAN/PROFILE AND EXHIBITS

- 1. None

III. QUESTIONS FROM BIDDERS NOT COVERED ELSEWHERE

- 1. None

END OF SECTION

SECTION 00300

BID FORM

**GENEVA EAST SANITARY SEWER REHABILITATION
CITY OF GENEVA
2020**

Proposal of _____
(hereinafter called "BIDDER"), organized and existing under the laws of the State of Illinois, doing business as _____ (insert "A Corporation," "A Partnership," or "An Individual," as applicable) to the City of Geneva (hereinafter called "Owner").

- I. The undersigned BIDDER proposes and agrees, if this bid is accepted, to enter into an agreement with the Owner in the form in the Bidding Documents to perform and furnish all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.
- II. BIDDER accepts all of the terms and conditions of the Advertisement for Bids and Instructions for Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 90 days after the Bid opening, or for such longer period of time that BIDDER may agree to in writing upon request of Owner.
- III. In submitting this Bid, BIDDER represents, as more fully set forth in the Agreement, that:
 - A. BIDDER has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged.

| Addendum No. | Addendum Date |
|--------------|---------------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

- B. BIDDER has visited the site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, performance, and furnishing of the Work.
- C. BIDDER is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.

- D. BIDDER has carefully studied all reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site. BIDDER acknowledges that Owner and Engineer do not assume responsibility for the accuracy or completeness of information or data shown or indicated in the Bidding Documents with respect to Underground Facilities at or contiguous to the Site.
 - E. BIDDER is aware of the general nature of Work to be performed by Owner and others at the site that relates to Work for which this Bid is submitted as indicated in the Bidding Documents.
 - F. BIDDER has correlated the information known to BIDDER, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents.
 - G. BIDDER has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that BIDDER has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to BIDDER.
 - H. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work for which this Bid is submitted.
- IV. By submission of the bid, each BIDDER further certifies, and in the case of a joint bid each party thereto certifies as to his own organization, that in connection with the bid:
- A. The prices in the bid have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
 - B. Unless otherwise required by law, the prices which have been quoted in the bid have not knowingly been disclosed by the bidder, prior to opening, directly or indirectly to any other bidder or competitor; and
 - C. No attempt has been made or will be made by the bidder to induce any other person or firm to submit or not to submit a bid for the purpose of restricting competition.
- V. Each person signing the Bid certifies that:
- A. They are the person in the BIDDER's organization responsible within that organization for the decision as to the prices being bid and that he has not participated, and will not participate, in any action contrary to (4) above; or

B. They are not the person in the BIDDER's organization responsible within that organization for the decision as to the prices being bid, but that they have been authorized to act as an agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to (4) above, and as their agent shall so certify; and shall also certify that he has not participated, and will not participate, in any action contrary to (4) above.

VI. BIDDER will complete the Work in accordance with the Bidding Documents for the following price(s):

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNITS | UNIT PRICE | COST |
|---------------------|--|----------|------------|------------|------|
| 1 | Pre - Construction Cleaning and Televising | 17,500 | LF | | |
| 2 | Cured-in-Place Pipelining (8") | 4,200 | LF | | |
| 3 | Cured-in-Place Pipelining (10") | 200 | LF | | |
| 4 | Lateral Reinstatements | 86 | EACH | | |
| 5 | Air Test Mainline Joint (8") | 1,500 | EACH JOINT | | |
| 6 | Air Test Mainline Joint (12") | 110 | EACH JOINT | | |
| 7 | Air Test Mainline Joint (18") | 350 | EACH JOINT | | |
| 8 | Grout Mainline Joint (8") | 1,100 | EACH JOINT | | |
| 9 | Grout Mainline Joint (12") | 75 | EACH JOINT | | |
| 10 | Grout Mainline Joint (18") | 220 | EACH JOINT | | |
| 11 | Air Test Service Connection (5-foot) | 100 | EACH | | |
| 12 | Grout Service Connection (5-foot) | 100 | EACH | | |
| 13 | In Pavement Chimney Rehab | 22 | EACH | | |
| 14 | Off Pavement Chimney Rehab | 73 | EACH | | |
| 15 | Internal Chimney Sealing | 59 | EACH | | |
| 16 | Furnish New Lid and Frame | 8 | EACH | | |
| 17 | Grout Bottom 18" | 24 | EACH | | |
| 18 | Grout Entire Manhole | 21 | EACH | | |
| 19 | Replace Bench and Trough | 7 | EACH | | |
| 20 | Cementitious Coat | 14 | EACH | | |
| 21 | Vacuum Testing | 6 | EACH | | |
| 22 | 6" DIP Class 52 | 10 | LF | | |
| 23 | 4" x 6" Increaser DIP Class 52 | 1 | EACH | | |
| 24 | 6" 45 Degree Elbow DIP Class 52 | 1 | EACH | | |
| 25 | Sewer Main Connection to Ex. Manhole | 1 | EACH | | |
| 26 | 4' Dia. MH, Type A, w/Frame and Solid Lid | 1 | EACH | | |
| 27 | Grass Restoration | 20 | SY | | |
| 28 | Abandon Existing 4" DIP Forcemain Pipe | 1 | LS | | |
| 29 | Removal and Replacement 8" DIP Pipe with 8" SDR-26, ASTM D-3034 Sanitary Sewer | 8 | LF | | |
| Total Amount of Bid | | | | | |

*Quantities are estimated and may be adjusted/reduced to zero in the field.

NOTES:

1. OWNER RESERVES THE RIGHT TO DELETE ANY BID ITEMS WHICH ARE NOT IN THE BEST INTEREST OF THE OWNER. THE OWNER ALSO HAS THE RIGHT TO REDUCE ANY QUANTITIES IN ORDER TO KEEP THE PROJECT UNDER THE BUDGETED VALUE FOR THE FISCAL YEAR.
2. **BIDDER agrees that the Work will be Substantially Complete 120 Days after the Notice to Proceed and will meet Final Completion 150 Days after the Notice to Proceed.**
3. BIDDER accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work on time.
4. The Owner reserves the right to reject all Bids.
5. Accompanying this Bid is a Bid Security in the amount of \$ _____, which is hereby tendered in accordance with the requirements of the Instructions to Bidders and the Specifications.
6. In the event that this Bid is accepted and an award of contract is made to the undersigned BIDDER, the undersigned does hereby covenant and agree to deliver to the Owner the signed and executed Contract and Bonds as specified in the Instructions for Bidders and the Specifications.
7. The undersigned further agrees to begin work within ten (10) days after the execution and acceptance of the Contract, and thereafter to carry on the work diligently and continuously in such manner as to insure final completion and delivery to the Owner of the entire work or equipment under contract in accordance with the provisions of the Contract.

Witness _____ Hand(s) and Seal _____ this _____ day of _____, 2020.

If an individual, sign
and give address

Address _____

If a partnership, sign all
individual names and give
address of each partners

Partnership Name
Address _____

Name and Addresses
of Individual Partners

If a corporation, officers
duly authorized should sign,
attach corporate seal

Corporate Name
Address

By _____

Attest:

Secretary

Corporate Seal

Subcontracted Work

**To be submitted the day after Bids are received by 2:00 p.m.,
prevailing time, to the Engineer, Deuchler Engineering Corp., 230 S.
Woodlawn Avenue, Aurora, IL.**

**ATTACH BID SECURITY TO THIS PAGE
USING A PAPER CLIP.**

CITY OF GENEVA
GENEVA EAST SANITARY SEWER REHABILITATION

SPECIAL PROVISIONS

Geneva East Sanitary Sewer Rehabilitation
City of Geneva

SPECIAL PROVISIONS

The following Special Provisions supplement the General Conditions, Supplementary Conditions, "Standard Specifications for Water and Sewer Construction in Illinois, 7th Edition" (hereinafter referred to as the "Standard Specifications"), the "Standard Specifications for Road and Bridge Construction", adopted January 1, 2012, and "Supplemental Specifications and Recurring Special Provisions", adopted January 1, 2015 by the Illinois Department of Transportation (hereinafter referred to as the "I.D.O.T. Specifications"), the "Manual on Uniform Traffic Control Devices", and the "Illinois Urban Manual", included herein by reference which apply to and govern the proposed improvement.

In case of conflict with any part or parts of said General Conditions, Supplementary Conditions, Standard Specifications and I.D.O.T. Specifications, these Special Provisions shall take precedence and shall govern. In case of conflict between the Standard Specifications and the I.D.O.T. Specifications, the Standard Specifications shall take precedence and shall govern.

SP-1 EXECUTION OF CONTRACT

1. Contractor warrants that it has reviewed the Contract Documents, including any plans, specifications and reports, has inspected the project site, and has satisfied itself as to the conditions under which the Work is to be performed, including any subsurface or otherwise latent conditions. Contractor understands that the conditions it encounters may differ from those anticipated and agrees to bear the risk of such difference in conditions. Neither the time in which the Work is to be performed, nor the cost of performing such Work, shall be increased because of unforeseen or unanticipated site or project conditions.
2. The procedures, methods, and materials agreed to in the Contract Documents shall not be deviated from without the written consent of the Owner.
3. The Owner reserves the right of approval over all procedures, methods, and materials to be employed by the Contractor or its subcontractors for this Work.
4. In performing the Work hereunder, it is understood that the Contractor is acting as an independent Contractor and that its employees, agents, and representatives and those of any and all subcontractors which it retains in the Work hereunder shall not be deemed, for any purpose, to be agents, servants, and/or employees of the Engineer or Owner.

Contractor shall perform the Work as an independent Contractor and all of its employees engaged in the performance of the Work shall be supervised and controlled exclusively by the Contractor.

Contractor shall not delegate or assign the obligation of this Contract without prior written approval of the Owner.

5. Contractor warrants that its Work shall be free from defects and shall be suitable for the use intended. In the event that any deficiencies in the Contractor's Work are discovered within one year after completion of the project, Contractor shall, at its sole cost, repair or replace any defective work, including repair of any portion of the project or property damaged by repair, replacement or repetition of defective work. This warranty is in addition to any other remedy which Engineer may have for any defective work of Contractor.
6. The individual or individuals signing this Contract on behalf of the Contractor warrants that they are authorized to bind Contractor to this Contract and guarantee Contractor's performance of the Work set forth under this Contract.
7. The Owner, without prejudice to any other remedy, may correct any defects or deficiencies in the Work of Contractor at the expense of Contractor. Should any tests not otherwise required by this Contract be necessary to inspect or test the Work of Contractor, Contractor shall pay for the cost of the tests if the Work is found not to be in accordance with the requirements of this Contractor, or is otherwise defective.
8. Time is of the essence. Contractor shall schedule its work and that of its Subcontractors to meet requirements of Owner.
9. Contractor shall not divulge information concerning any portion of the Work or the results of any tests, nor shall it provide copies of any reports made pursuant to this Contract, without prior written approval of the Owner, or as required by law.
10. This Contract may be terminated by Owner on fourteen days written notice to Contractor. Contractor shall be paid for all Work performed prior to termination, less the cost of remedying any defective work performed by Contractor. The indemnification, insurance liens, and job site safety obligations survive termination of this Contract.
11. Contractor agrees to defend, indemnify and hold harmless Owner, its officials, trustees, employees, Engineer, and agents from and against any and all claims, damages, liability, suits, actions and expenses, including reasonable attorney's fees, relating to any and all losses or damages sustained by or alleged to have been sustained by any person, including employees of parties hereto, and arising or allegedly arising from Contractor's performance or failure to perform the services set forth in this Agreement and/or the Work regardless of whether or not concurrently caused by the negligence of Owner, except that Contractor shall not be required to defend, indemnify and hold harmless and indemnified Party from claims, damages or liability caused by the sole negligence or willful misconduct of the indemnified Party. In the event that any such claim, action, cause of action or lawsuit is brought or filed, the indemnified Party and its officials, trustees, employees, Engineer and agents sued thereunder, shall have the right to determine the attorney of its, his, hers or their choice to present and defend their interests in any legal or administrative action, all at the Contractor's expense pursuant to this Contract. The duration of the

indemnification hereunder shall be indefinite.

12. Contractor shall be solely responsible for the safety of persons or property on, or adjacent to, the job site. Contractor shall be responsible for his/her activity and that of any of its Subcontractors, employees or agents on the job site with respect to job site safety. Neither the professional activities nor the presence of Engineer or its employees and Subcontractors shall be understood to control the operations of others.

The Contractor shall arrange for all of its employees who will be working on the site to take any appropriate safety and health training courses applicable for the site conditions. The costs and expenses of the employees taking such course shall be paid by Contractor.

Contractor is responsible for providing, at its own expense, all personal protective clothing and equipment required for its employees to perform their Work in a safe manner and in compliance with all applicable local, state, and federal laws and regulations including, but not limited to Occupational Safety and Health Administration (OSHA) standards. Contractor is responsible for ensuring that such equipment is in good condition and is properly inspected and maintained. In cases where a Job Safety Plan or equivalent document (e.g., Health and Safety Plan) has been prepared and adopted by the Owner, Contractor must, at a minimum, use the equipment and follow the procedures described in that plan. This does not relieve the Contractor of the responsibility to provide equipment and institute procedures affording a greater degree of protection than those specified in the Job Safety Plan, if such equipment and procedures are necessary for the Contractor to perform its tasks in a safe manner and in compliance with applicable local, state, and federal regulations.

13. Contractor shall discharge at once or bond otherwise secure against all liens and attachments which are filed in connection with the services, and Contractor shall indemnify and save Engineer, and the Owner of the premises on which the services are performed, or to which the services relate, harmless from and against any and all loss, damage, liability and claims thereof resulting from such liens and attachments.
14. This is the final and complete Contract Documents between Contractor and Owner and supersedes any prior Contract Documents, whether written or oral. Should any portion of these Contract Documents be held invalid, the remaining portions shall continue as if the invalid portions had not been part of these Contract Documents.
15. The Instructions to Bidders, the Specifications and amendments thereto, the Addenda, the Proposal as accepted by the Owner, the Special Provisions, the Project Plans or Drawings, Contract, Contractor's Bonds, Notice to Proceed, Notice of Award, Advertisement for Bids, Certificates of Insurance and all certifications of Contractor regarding eligibility to enter into public contracts, certifications regarding maintenance of sexual harassment policy and certifications regarding absences of tax delinquencies shall form part of this Contract and the provision thereof shall be as binding upon the parties as if they were fully set forth herein. The Index, titles, headings, running headlines and marginal notes contained herein and in said Contract Documents are solely to facilitate various provisions of the Contract Documents and in no way affect, limit or cast light upon the interpretations

of the provisions to which they refer. Whenever the term "Contract Documents" is used, it shall mean and include this Contract, the Instructions to Bidders, the enumerated plans, specifications and amendments thereto, the Addenda, the Proposal, the Special Provisions, Insurance certificates, written Change Orders, and the Contractor's proposal incorporating all post-bid discussions and all other documents set forth herein and in the Specifications.

16. The Contract Documents are complementary, and any Work called for by any part thereof shall be executed as part of the Contract in the same manner as if called for in all parts. Therefore, all Work that may be called for in the Specifications and not shown on the Plans, shall be executed and furnished by the Contractor as if described in both of these documents. Should any work or material be required which are not denoted in the Plans, Specifications, or other Contract Documents either directly or indirectly, but which are necessary for the proper carrying out of the intent thereof, the Contractor shall perform all Work and furnish all materials as fully as if they were particularly described. Likewise, any contradictory clauses between any of the Contract Documents shall be resolved by the Engineer or Owner. The Engineer or Owner's interpretation of these contradictory clauses shall be final.
17. All work covered by the Contract is to be performed under the general direction, supervision, and responsibility of the Contractor but shall be subject to inspection and final acceptance by the Owner.

The Contractor agrees that it shall carry on said Work at its own risk until the same is fully completed and accepted, and shall, in case of any accident, destruction, or injury to the Work and/or materials before its final completion and acceptance, repair, or replace forthwith the Work and/or materials so injured, damaged, or destroyed, at its own expense and to the satisfaction of the Owner.

18. Contractor shall not subcontract the whole or any part of said Work without the written consent of the Owner having been first obtained, which consent shall not be unreasonably withheld by the Owner.
19. Contractor shall cooperate with others performing services for the Owner in connection with any Work in the same location.
20. The Contractor shall be responsible for obtaining all permits necessary for moving equipment over the city or county streets and state highways. The Contractor shall pay all charges and fees, the cost of which will be included in the Contract price for the Work.
21. The Contractor shall comply with all laws, ordinances, rules, and regulations of governmental authorities affecting the conduct of the proposed Work. Before the completion of the Contract, the Contractor shall furnish to the Owner any and all certificates of approval resulting from required inspections.
22. Contractor shall warrant that all services under this Contract will be performed in accordance with the Contract Documents and in a professional manner with the skill and care which would be exercised by qualified contractors. Contractor will perform again, at

- its own cost and expense, any portion of the services provided herein that do not meet the standards set forth in this paragraph. Contractor warrants that all equipment it provides will be in good condition when consigned to the job and that its personnel will be capable of performing the tasks to which they are assigned. Contractor further warrants that it understands the risks of exposure to waste, which are presented to persons, property, and the environment by the tasks encompassed by the Contract and that it will fully comply with all applicable federal, state, and local laws.
23. The adequacy of all safeguards is the responsibility of the Contractor. All material and services furnished by the Contractor shall be in compliance with the provisions of the Federal Occupational Safety and Health Act (OSHA) and the regulations and standards promulgated by the Secretary of Labor thereunder.
24. The Contractor agrees that due care shall be used throughout the Work; and that whenever plans, drawings, or specifications, or any of them for any part of the Work, are in its opinion faulty or at variance with each other or with any applicable rules, regulations, or ordinances, or are such as will, if followed, result in construction which is or will be unsafe, imperfect, insecure, or violative of any applicable rules, regulations, or ordinances, the Contractor shall promptly stop Work on the part of the Work affected thereby and notify the Engineer in writing of such opinion and in what respect said plans, drawings, or specifications are insufficient or improper, and shall not proceed with the part of the Work so criticized until a written order has been received from the Engineer directing what is to be done and when to proceed. Additionally, the Contractor shall:
- A. Be responsible for repairing any damage to any man-made structure, walkway, etc. arising in connection with the Work performed.
 - B. Bear the responsibility for repairing and/or replacing any equipment or materials damaged by the Contractor or any of its Subcontractors.
 - C. Post warning signs adjacent to all Work areas indicating any hazards as the construction progresses.
 - D. Provide necessary temporary lighting, wiring, globes, guard lights, barricades, or any other items required by regulations, standards, or laws established for public protection and safety or to facilitate the Work.
25. The Contractor shall be responsible for providing a level of security that will ensure control, accountability, and protection to the Work area, tools, materials, and equipment involved in the execution of this Contract.
26. The Contractor, its employees, agents, representatives, and Subcontractors shall not discuss, offer comment, or opinions concerning the Work, or disclose results without the consent of the Owner. This requirement shall apply to the Contractor with regard to disclosures to members of the general public and public and private media.
27. The Contractor shall not display any signs, posters, or other advertising matter in or on the

- Work or on or around the Site thereof without the specified approval in writing by the Owner.
28. In addition, no advertising copy mentioning the Owner or Engineer or quoting the opinions of any of its employees may be released unless such copy is approved by the Owner or Engineer before release.
 29. Contractor in performing Work shall comply and shall require compliance by its Subcontractors with all applicable laws and regulations. Contractor shall not take and is not authorized to take any action in the name of or otherwise on behalf of the Owner which would violate applicable laws or regulations. If Contractor or its Subcontractors perform any part of the Work contrary to applicable laws or regulations, any additional costs resulting therefrom shall be for Contractor's account.
 30. Contractor shall make reasonable efforts to discover any conflicts between applicable laws or regulations and job specification and shall promptly notify the Engineer of any conflicts it discovers. Contractor shall not proceed with the part of the Work in conflict without prior written notice from the Engineer that (1) the job specification has been revised to comply with the applicable laws and regulations, or (2) the Contractor has negotiated an approval or variance in the law or regulation with the appropriate governmental authority or agency. Additional costs resulting from Contractor's proceedings without such notice shall be for the Contractor's account.
 31. Contractor shall not enter into negotiations with any governmental authority or agency to develop variances or revisions to laws or regulations without the Owner's prior written approval.
 32. Contractor shall defend the Engineer and Owner from all claims, suits, or proceedings brought against the Engineer or Owner and which arise or occur by reason of any alleged violation or violations of applicable law or regulation by Contractor or its Subcontractors in the performance of Work. Contractor shall indemnify and hold the Engineer and Owner harmless from liability or penalty imposed by reason of such alleged violation or violations of applicable law or regulation.
 33. If there is a conflict between any provision of the Contract and applicable law, the latter shall prevail; but, in such event, the provisions of the Contract affected shall be curtailed and limited only to the extent necessary to conform with applicable law.
 34. If a conflict between plan sheets and special provisions arise, the special provisions shall take precedence.
 35. The Contractor shall withhold 10% retainage from each invoice. The retainage will be paid out upon final completion of the contract.

SP-2 GENERAL

All work shall conform to the Ordinances and Regulations of the City of Geneva, the Illinois Environmental Protection Agency, and other regulatory agencies having jurisdiction over this project, the Standard Specifications, and these Special Provisions. Copies of the plans and specifications must be kept on the job site. Failure to comply with this provision shall be considered cause to stop the job.

All materials used in construction shall be certified as to type and quantity by ticket, invoice, or other written means from the source of supply, except as otherwise provided for by these Special Provisions.

All work shall be constructed in accordance with the limits as shown on the drawings or as given by the Engineer. Responsibility for keeping alignment shall belong to the Contractor. Limits shall be set by the Engineer as construction progresses. The Contractor shall use limit references, as established by the Engineer, to establish his own working or construction limits as required at his own expense and shall be solely responsible for the accuracy thereof. The Contractor's work shall be subject to check and review of the Engineer. The Contractor shall safeguard all property corners, monuments, and bench marks adjacent to but not related to the work, and if required shall bear the cost of restoring these if damaged or moved during construction.

Specified coating products shall meet the minimum volatile organic compound (VOC) content limits for Architectural Coatings as specified by the Architectural Coatings Rule found at 40 CFR Part 59 (Table 1) published September 11, 1998 by the United States Environmental Protection Agency.

SP-3 PRECONSTRUCTION CONFERENCE

Following the award of the Contract, the Contractor will be required to attend a Preconstruction Conference prior to beginning work. At this time, the Contractor will be required to furnish and discuss the following:

- Written progress schedule and beginning of work
- Names of Project Manager and Field Superintendent including the name and phone number of a responsible individual who can be reached 24 hours a day
- Names of subcontractors and material suppliers
- Traffic Control
- Temporary By-Pass Pumping
- Management of groundwater
- Phasing of the Work; Access to Residents; Completion Time; Restoration
- Trench backfill material, type and source, method and compaction equipment

- Documentation of excess material disposal
- Protection of pavement and property
- Location of construction trailer and materials.

SP-4 INCIDENTAL WORK

All work shown or called for on the Plans and in the Specifications shall be incidental to the various bid items in the Proposal even though a specific item is not shown, and no additional compensation shall be made to the Contractor, unless it is indicated in the Special Provisions that additional payment will be allowed, or a unit price is provided for said work in the Bid Proposal.

SP-5 SAFETY

Add the following paragraphs to Section 7.19 of the Standard Specifications:

“The general contractor, and all subcontractors employed on this project by the general contractor, shall at all times observe safe working conditions as outlined in the Safety and Health Regulations for Construction, Department of Labor, Bureau of Labor Standards, as published in Volume 36 Number 75 of the Federal Register dated Saturday, April 17, 1971; the Occupational Safety and Health Act of 1970 (PL 91-596) and the Rules and Regulations promulgated thereunder.”

“All subcontractors employed by the general contractor, shall also observe the provisions of the Illinois Occupational Safety and Health Laws.”

“The Contractor shall be responsible for the cost of any fines levied against the Owner or the Engineer due to the Contractor’s failure to comply with any safety regulations.”

SP-6 FINAL COMPLETION

The completion date is specified on page 3 of the Bid Form (00300-03). The Contractor shall complete all Work on or before the stipulated completion date, otherwise the Owner may proceed to collect liquidated damages described herein, and as per Section 8.11 of the Standard Specifications.

When a delay occurs causing stoppage of the Work due to unforeseen causes beyond the control and without the fault or negligence of the Contractor, including, but not restricted to acts of the public enemy, governmental acts, fires, floods, epidemics, strike, extraordinary delays in delivery of materials caused by strikes, lockouts, wrecks, freight embargoes, governmental acts, or acts of God, the completion date may be extended by the Owner.

An "Act of God" means an earthquake, flood, cyclone, or other cataclysmic phenomena of nature beyond the power of the Contractor to foresee or make preparation in defense against. Storms or other natural phenomenon of normal intensity, based on U.S. Weather Bureau reports, for the particular locality and for the particular season of the year in which the Work is being prosecuted, shall not be construed as an "Act of God" and no extension of Contract time will be granted for the delays resulting therefrom.

Rain shall be granted as a delay if more than 2.0 inches of rain per 24 hours is collected by Deuchler Engineering Corp.'s rain gage.

It shall be the responsibility of the Contractor to request in writing an extension of time for each delay event. Contractor shall make no claim against Owner, and no claim shall be allowed, for any damages which may arise out of any delay caused by Owner, its agents, employees or other contractors or Subcontractors. Contractor's sole remedy for delay from Owner shall be an extension in the Contract Time.

SP-7 HOURS OF WORK

The regular 8-hour day shall be considered to begin at 7:00 A.M. and end at 3:30 P.M. with a one-half (½) hour lunch period, or such other 8-hour period as may be mutually agreed upon by the Owner and the Contractor. It is further agreed that the regular 8-hour day, as established, shall apply to all subcontractors employed on the project.

No work will be permitted to start prior to 7:00 A.M. or after 8:00 P.M. on any day including the start up of heavy equipment, without prior approval from the Owner. The normal working day shall be Monday through Friday. Work on Saturday will be allowed only after formal permission from the Owner is obtained.

No work will be permitted on Sundays and/or Holidays.

At the request of the owner, this work may be conducted at night. If the work takes place at night, the "NIGHT WORK CONTINGENCY" pay item shall be paid to the contractor.

SP-8 WORK ON PRIVATE PROPERTY

The Contractor shall provide and hang notices on doors of all residences / businesses that will be affected by the repairs. Notices shall be distributed 48 hours in advance of the work. The Contractor shall include the contact information for the onsite foreman as the primary contact for affected residents. The Contractor shall customize the notice to include the City of Geneva logo and contact information. The City shall review and approve the notice format and text at the beginning of the project prior to distribution. All work required for notification to residents shall be incidental to the contract.

The Contractor may have to access and dig on private property to properly excavate the trench. It is

unknown if easements exist to enter said private properties for the rehabilitation of the sanitary sewer. It is the responsibility of the Contractor to coordinate construction activities with the property owners.

SP-9 NOISE RESTRICTIONS

All engines and engine driven equipment used for construction shall be equipped with a sound restrictor device to prevent excessive or unusual noise during normal work hours (7 a.m. to 5 p.m.). Construction operation performed between the period of 7:00 A.M. to 5:00 P.M. on weekdays and all weekends shall be limited to the maximum of 55 dBA noise levels at a distance of 23 feet from the equipment.

SP-10 ACCESS TO RESIDENTS AND BUSINESSES

Contractor shall provide access to residents and businesses at all times, except in an unavoidable circumstance where Contractor may limit the length of closure to four (4) hours during normal working hours, and shall notify the residents, business owners, Owner and Engineer a minimum of 24 hours in advance.

The Contractor shall not close any street or driveway without prior notification and consent of the controlling agency and shall provide at least twenty-four (24) hours notice to the affected residents and businesses. In-the-event of an emergency, the Contractor shall provide immediate access to closed driveways or streets. All work must be coordinated with the businesses whos service connection is directly affected.

The Contractor shall provide to residents, businesses and motorists twenty-four (24) hours advance notice of parking restrictions with appropriate signs and/or barricades placed meeting the approval of the Engineer and controlling agency.

If the Contractor does not provide access to residents and businesses within 3 hours of notification by the Owner, the Owner shall make the necessary arrangements to construct an access to said residence and/or businesses. The cost of such access work will be deducted from any monies due to or to become due to the Contractor.

SP-11 USE OF CITY WATER

The first sentence of Section 7.12, "Use of Fire Hydrants", of the Standard Specifications shall be deleted and revised as follows:

The City will provide all water necessary for the project at no cost to the Contractor. The City will provide one hydrant meter for this project. The Contractor shall coordinate with the City for the hydrant locations and meter setup.

The Contractor must ensure that the meter / backflow prevention device is installed between the hydrant and the jet truck supply hose. Additionally, the Contractor's vehicle must have a fixed air gap, or one fabricated, in order to pass inspection. The Contractor will be held responsible for damages done to hydrants, water mains and other water appurtenances while securing water. Weekly meter readings are required to be provided to the Engineer.

SP-12 LOCATING OF EXISTING UTILITIES; NOTIFICATION TO UTILITIES

Locations of all utilities shown on the Plans are approximate and are not necessarily complete. The Contractor shall make his own investigations as to the locations of all existing underground structures, cables, and pipelines. Prior to construction, the Contractor shall contact all utility companies and arrange for location of any utilities they may have in the various areas.

The Contractor shall notify all utility companies (JULIE) including the local electrical, telephone, gas Cable T.V., City of Geneva, a minimum of 48 hours prior to beginning any construction or taking any preliminary borings. The Contractor shall then have the responsibility to determine from the public utilities the locations of underground pipes, conduits, or cables adjoining or crossing the construction area.

At the locations wherein detailed positions of these facilities become necessary to the new construction, the Contractor shall at his own expense, furnish all labor and tools either to verify and substantiate the record drawing locations or definitely establish the position of the facilities.

SP-13 TRAFFIC CONTROL AND WORKSITE PROTECTION

The Contractor shall provide all temporary enclosures, coverings, etc. for protection of the work and workmen until completion of the work; and shall provide all barricades, guards, and overhead protection in connection with the work and maintain them in satisfactory condition so long as they shall be required.

While working on Rt. 38, the Contractor must adhere to the guidelines outlined in Division 700 of IDOT's *Standard Specification for Road and Bridge Construction (Adopted April 2016)*.

The Contractor shall provide and install any other protection required to properly safeguard the Owner's property, equipment, employees and the public, including obstruction lights, as required by conditions, on equipment or structures in connection with this Contract.

Barricades, lights, signs, arrow boards and flagmen shall be provided by the Contractor in accordance with the Manual on Uniform Traffic Control Devices as printed by the Illinois Department of Transportation. Particular attention shall be given to Part VI, "Traffic Controls for Street and Highway Construction and Maintenance Operations". A copy of this document shall be in the possession of the Contractor on the job site at all times. It shall be the responsibility of the Contractor to follow the procedures on traffic control contained therein at all times.

At the preconstruction meeting the Contractor shall furnish the name of the individual in his direct employ who is to be responsible for the installation and maintenance of the traffic control for this project. If the actual installation and maintenance are to be accomplished by a subcontractor, approval of said subcontractor shall be obtained from the owner at the time of the preconstruction meeting. This shall not relieve the Contractor of the foregoing requirement for a responsible individual in his direct employ to supervise this work. The Contractor shall provide a manned telephone on a continuous 24-hour-a-day basis to receive notification of any deficiencies regarding traffic control and protection and shall dispatch men, materials and equipment to correct any such deficiencies. The Contractor shall respond to any call from the Owner concerning any request for improving or correcting traffic control devices and begin making the requested repairs within two hours from time of notification.

The Contractor shall be responsible for the proper location, installation, and arrangement of all traffic control devices. Special attention shall be given to advance warning signs during construction operations in order to keep lane assignment consistent with barricade placement at all times. The Contractor shall ensure that all traffic control devices are operational 24 hours a day, including Sundays and Holidays.

Traffic control and protection shall not be limited to the Public right-of-way, but may also be used on private properties, if necessary, upon written authorization from property owner.

Traffic Control and Worksite Protection shall be incidental to the contract.

SP-14 PROTECTION OF PROPERTY AND SURFACE STRUCTURES

The Contractor shall be responsible to take all necessary precautions to prevent surcharging or any other damage to private residences / businesses. Any damage to public or private property shall be the sole responsibility of the Contractor. Any repairs, restoration, or cleaning that is necessitated by project shall be the sole responsibility of the Contractor and shall not be paid for separately.

The Contractor is also responsible for any damage caused by their vehicles, including ruts in unpaved areas.

Shrubbery, fences, poles and all other property and surface structures not in direct conflict with the pipe laying operations shall be protected during construction operations. Any fences, poles or other manmade surface improvements not in direct conflict with the pipe laying operations which are moved or disturbed by the Contractor shall be restored to the original conditions, after construction is completed, at the contractor's expense. Any shrubbery or other vegetation beyond the limits of the right-of-way lines, easements, or construction limits shown on the Plans which are removed in order to facilitate construction operations shall be removed completely, including stumps and roots, by the Contractor and shall be replaced by the same species and size at no additional cost to the Contract. Responsibility for any damage or claims for damage caused by construction operations to shrubbery or other landscape improvements shall be assumed by the Contractor.

The Contractor is responsible for back filling the excavation to grade, spreading of pulverized

topsoil, and cleaning the area of work.

SP 15 GRASS RESTORATION

All grass areas that are disturbed due to installation of the new sanitary sewers shall be restored in accordance with Articles 21-2.05 of the Standard Specifications and with the details shown on the Plans. The work shall include the grading of trench backfill material, the spreading of pulverized top soil, the grading to obtain positive drainage, fertilizing, seeding, installing loose straw mulch, stabilizing with hydraulic mulch and watering.

Seed mix with 25% increased rate:

- 24.93% ASAP Perennial Ryegrass
- 24.46% Caddieshack Perennial Ryegrass
- 24.33% Goalkeeper Perennial Ryegrass
- 12.37% Geronimo Kentucky Bluegrass
- 12.29% Kentucky Bluegrass
- 1.34% Inert Matter
- 0.28% Crop
- 0.00% Weed

The Contractor shall replace all topsoil to the depth as it now exists. If the topsoil is less than 6" thick, the Contractor shall provide additional top soil so that a minimum of 6" is replaced. The Contractor shall seed all disturbed grass areas.

Basis of Payment

This work will be paid for at the Contract unit price per square yard for "GRASS RESTORATION", which shall include payment for top soil placement, top dressing, fertilizer, seeding, straw mulch, hydraulic mulch and watering.

SP-16 COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT

This item shall include all labor, equipment, and material necessary for the removal and replacement of combination concrete curb and gutter in accordance with the applicable portions of Sections 606 and 440 of the "Standard Specifications" at the locations as designated by the plans or as directed by the Engineer. This item shall include the removal of the existing concrete curb and gutter and roadway necessary to install new combination concrete curb and gutter, of the same type as removed, or Type B-6.12, as directed by the Engineer. All new curbs shall be placed on a three inch (3") sub-base of coarse aggregate material gradation CA-6, which shall be considered incidental to this item. The aggregate sub-base shall extend to a point six inches (6") beyond the back of curb. Hot Mix Asphalt replacement will be required as a result of this work and shall be considered incidental

to this item, 3" or as specified.

Curb and Gutter replacement shall be incidental to the contract, of the size and class specified, which shall include excavation, bedding, backfill, compaction, testing, and all other appurtenances.

SP-17 SIDEWALK (BRICK PAVER OR PCC) REMOVAL AND REPLACEMENT

This work includes furnishing all materials, equipment and labor necessary to remove and install P.C. Concrete Sidewalk at locations indicated by the Engineer and in accordance with Section 424 and Section 440 of the "Standard Specifications."

All sidewalks except driveway sidewalks shall match the current condition and thickness. All residential driveway sidewalks shall be six inches (6") thick and reinforced with 6" X 6" #10/ #10 welded wire fabric. All sidewalks through alley and commercial aprons shall be eight inches (8") thick with 6" X 6" #10/ #10 welded wire fabric. The additional concrete and fabric shall be considered incidental to the cost of this item. All sidewalks shall be placed on a three inch (3") thick sub-base aggregate material meeting Gradation CA-6, which shall be considered incidental to this item.

All sidewalks shall be installed with a 1/4 inch per foot slope toward the street. Sidewalk elevations shall be set so as to maintain a slope of 1/2 inch per foot between the sidewalk and to top of the curb whenever possible. Ramps for the handicapped shall be installed at all intersections as per State Standards.

Under no circumstance shall the Contractor stamp their name, phone number, or any other information in newly constructed concrete work.

All removal of sidewalk must be approved by the Owner or Engineer on site during construction. The cost of removing and replacing sidewalk shall be incidental to the Chimney Rehabilitation pay item. This shall include all saw-cutting and disposal of material as needed and all other incidental items required complete the work. All saw cutting shall be completed using a wet saw to control dust.

SP-18 TREE PROTECTION

The Contractor shall protect existing trees and other vegetation to remain in place against cutting, breaking or skinning of roots, skinning or bruising of bark, smothering of trees by stockpiling construction materials or excavated materials within the root zone, excess foot or vehicular traffic, or parking of vehicles within the root zone. To accomplish this, the Contractor shall provide temporary fencing to protect said trees as shown on the Plans. Any tree roots cut during excavation shall be compensated for by trimming the upper tree branches, as directed by a certified Landscape Tree Consultant approved by the Owner.

Contractor shall erect a temporary fence at tree locations around the construction area, as necessary

or as directed by the Engineer. The fence shall be similar to wood lath snow fence (48 inches) high, plastic polytype or any other type of highly visible barrier approved by the Engineer. The fence shall be supported by steel posts spaced not more than six (6) feet on center. This fence shall be properly maintained and shall remain in place until all improvements and surface restoration have been completed, unless the Engineer directs removal otherwise. All costs of this work shall be incidental to the various unit prices bid.

SP 19 ROCK EXCAVATION

No rock excavation is anticipated on this project. If rock excavation is required, payment shall be made at the unit price per cubic yard of \$100.00 and in accordance with Article 20-5.01 of the Standard Specifications. Blasting will not be permitted.

SP-20 SOIL EROSION AND SEDIMENT CONTROL

The erosion and sediment control measures shall be in accordance with the most recent edition of the Illinois Urban Manual and the standards and ordinances of the local, state and/or federal government agencies having jurisdiction over such matters. The Contractor is responsible for the for the proper implementation of, and compliance with the Storm Water Pollution Prevention Plan (SWPPP). Upon award of the contract, the Contractor must immediately submit all necessary paperwork with the IEPA modifying the Notice of Intent (NOI) and the SWPPP. The Contractor is responsible for all monitoring, maintenance and reporting required by the State of Illinois and any local governmental subdivisions. Please refer to the Special Provision regarding Site Clearing and Grubbing requirements.

1. Dewatering:

- a. Dewatering may be required to construct this project. The Contractor shall provide Dandy Products from each individual trash dewatering pump placed in or along the trench, unless other acceptable methods are approved by the Engineer.
- b. Approval of the groundwater control method plan from the Engineer, as set forth in Section 20-4.04 of the Standard Specifications, will be required before construction starts. In order to obtain approval, acceptable means of erosion control shall be provided at the discharge point of each dewatering well or discharge pipeline system such as but not limited to silt basins, rock dams, etc. or a combination of such devices, if needed. As a minimum, the erosion and sediment control measures shall be in accordance with the latest editions of the IEPA's Standards and Specifications for Soil Erosion and Sediment Control and the Illinois Urban Manual.

2. Storm Inlet Protection

- a. This system consists of a filter cloth installed across the opening of inlets (beneath the frame grate) to interceptor water borne silt and prevent the siltation of storm water structures and pipes. Storm drain inlet protection shall be installed at all storm water structures having open grates within the construction area.

- b. The Contractor shall be required to address any and all concerns of the District and to correct any deficiencies to the erosion control facilities immediately upon notification.
 - c. Contractor shall be required to remove, replace, and clean the erosion control facilities, during the course of the project, so as to keep same in acceptable working condition. All erosion control facilities shall be checked by the Contractor on a weekly basis and after each rain event of 1/2" or greater magnitude. Upon completion of the improvements, the Contractor shall remove all erosion and sediment controls installed and restore the areas to their original condition.
3. Silt Fence
- a. This system consists of a continuous barrier adjacent to the area of construction to intercept water borne silt and prevent it from leaving the area of construction. The barrier shall be of sufficient length and height to capture all construction runoff. The silt fence shall be supported on posts at least 3 ft. in length and spaced on 10 ft. centers maximum. The fabric shall be embedded a minimum of 8 inches into the ground and shall be securely attached to the posts by any approved method. Silt fence shall be installed as shown on the Plans.

Contractor shall be required to remove, replace, and clean the erosion control facilities, during the course of the project, so as to keep same in acceptable working condition. All erosion control facilities shall be checked by the Contractor on a weekly basis and after each rain event of 1/2" or greater magnitude. Upon completion of the improvements, the Contractor shall remove all erosion and sediment controls installed and restore the areas to their original condition.

The compliance and maintenance of soil erosion and sediment control shall be incidental to the contract. This item shall include all forms and compliance actions to meet the satisfaction of the Owner and other governing agencies.

SP-21 RECORD DRAWINGS

The Contractor shall keep one (1) record copy of all Specifications, Drawings, Addenda, Modifications and Shop Drawings at the site in good order and annotated to show all changes made during the construction process. These documents shall be kept current at all times and will be subject to the Engineer's review prior to approval of partial payments. These shall be available to the Engineer and shall be delivered to him for the Owner upon the completion of the Project. The Contractor's request for final payment will not be approved until said "record drawings" have been delivered to the Engineer.

The Contractor shall provide level, rod, etc. and laborer in assisting Engineer to verify changes.

SP-22 PRE-CONSTRUCTION CLEANING AND TELEVISIONING

General

This section governs all work required for sewer cleaning and sewer inspection by closed circuit televising done in preparation for cured-in-place pipelining, and grouting. Cleaning and televising shall be performed on the entire section of sewer between upstream and downstream manhole structures and shall be completed to the industry standard of 95% clean.

Notice to Residents

The Contractor shall provide and hang notices on doors of all residences / businesses with service lines connected to sewer mains to be cleaned. Notices shall be distributed 48 hours in advance of the work. The Contractor shall include the contact information for the onsite field supervisor as the primary contact for affected residents. The Contractor shall customize the notice to include City of Geneva logo and contact information. The notice shall be written in both English and Spanish. The City shall review and approve the notice format and text at the beginning of the project prior to distribution. All work required for notification to residents shall be incidental to the contract.

Damage to Property

The Contractor shall be responsible to take all necessary precautions to prevent surcharging or other damage to private residences / businesses. Any damage to public or private property caused by the cleaning or televising operation shall be the sole responsibility of the Contractor. The Contractor shall be responsible for cleaning needed as the result of sewer backups caused by the jetting operation. any repairs, restoration, or cleaning that is necessitated by project shall be the sole responsibility of the Contractor.

Equipment

The Contractor is responsible to provide and maintain all industry-standard equipment required to complete the project. Each crew shall have a vacuum / jetter combination truck equipped with a high velocity gun for washing and scouring manholes and a TV truck capable of seating a minimum of 4 people including the City and Engineer. For easement work, the Contractor shall be required to have off-road equipment as necessary to access off-street sewer areas.

A camera-mounted locating sonde, capable of operation at depths up to 20 feet, shall be required to be available each day to locate buried manholes and other defects as required by the Contract and / or as directed by the City. To accomplish the work in a timely manner, it is anticipated that two (2) complete crews will be needed for some duration of the project.

Each vactor truck must be equipped with a flexible hose in order to reach manholes located at a maximum distance of 8 feet off the edge of pavement.

If any equipment gets stuck in the sewer and needs to be dug up, the Contractor is solely responsible for the cost of the dig, complete restoration and repair of sewer and any other costs associated with the retrieval of the equipment.

1. Hydraulic Sewer Cleaning Equipment Requirements:

- a. Hydraulic sewer cleaning equipment shall be the movable dam type constructed such that a portion of the dam may be collapsed during cleaning to prevent flooding of the sewer.
- b. The movable dam shall be the same diameter as the pipe being cleaned and shall provide a flexible scraper around the outer periphery to ensure total removal of grease.
- c. The Contractor shall take special precautions against flooding prior to using sewer cleaning balls or other equipment that cannot be collapsed instantly.

2. High Velocity Hydro-Cleaning Equipment Requirements:

- a. A minimum of 700 feet of high pressure hose.
- b. Two or more high velocity nozzles capable of producing a scouring action from 10 degrees to 45 degrees in all size lines to be cleaned.
- c. A high velocity gun for washing and scouring manhole walls and floor with the capability of producing flows from a fine spray to a long distance solid stream.
- d. A 1,500-gallon minimum water tank, auxiliary engines and pumps, and a hydraulically driven hose reel.
- e. Equipment operating controls located above ground.
- f. Minimum working pressure of 1,000 pounds per square inch at a 50 gpm rate.

3. Mechanical Cleaning Equipment Requirements:

- a. Bucket Machines:
 - 1) Furnish with buckets in pairs and with sufficient dragging power to perform the work efficiently.
 - 2) Use V-belts for power transmission or have an overload device. No direct drive machines will be permitted.
 - 3) Be equipped with a take up drum and a minimum of 500 feet of cable.
- b. Rodding Machines:
 - 1) Either sectional or continuous.
 - 2) Hold a minimum of 750 feet of rod.
 - 3) The rod shall be specifically heat-treated steel.
 - 4) The machine shall be fully enclosed and have an automatic safety throw out clutch or relief valve.
- c. Lumberjack & Impact Cutters
 - 1) Lumberjack high speed low torque multi-purpose cutters
 - 2) Speeds up to 50,000 rpm
 - 3) Paikert low-speed, high-torque auger cutter

4. Closed Circuit Television Equipment

- a. Television equipment shall include television camera, television monitor, cables, power source, lights and other equipment necessary to the televising operation. The television camera shall be specifically designed and constructed for operation in connection with sewer inspection and pipe joint sealing and testing. A camera-mounted locating sonde, capable of operation at depths up to 20 feet, shall be required to be available each day to locate buried manholes and other defects as required by the Contract and / or as directed by the City.
- b. Camera and lighting quality shall be suitable to provide a clear, continuously in-focus picture of the entire inside periphery of the sewer pipe for all conditions encountered during the work. The camera shall be able to operate efficiently in 100% humidity conditions.
- c. The TV camera shall have a rotating head with a high-resolution lens, capable of spanning 360-degrees circumference and 270-degrees on horizontal axis to televise sewer lines 6-inch diameter and larger. Focal distance shall be adjustable through a range of 1 inch to infinity. The purpose of the rotating head camera is to view all service connections, and to locate all defects, as well as any questionable problem areas. The camera shall be zoom capable.
- d. The TV camera shall be equipped with remote control devices to adjust the light intensity and at a minimum one thousand (1,000) feet of continuous cable shall be provided. The camera shall be able to transmit a continuous image to the television monitor as it is being pulled through the sewer segments. Lighting system shall be adequate for quality pictures. A reflection in front of the camera may be required to enhance lighting.
- e. For manholes that may be difficult to access or where lamp holes are present in the place of manholes, the Contractor shall have available a self-propelled crawler transporter on which to mount the color television camera so as to be able to inspect the sewer as required.
- f. The TV camera shall be able to provide a continuous image of not less than ninety percent (95%) of the internal pipe surface at all times for sewers 8" through 18" in diameter and not less than eighty percent (90%) of the internal pipe surface for sewers over 18" through 48" in diameter. Maximum acceptable speed of camera through sewer shall be thirty (30) feet per minute.
- g. The camera, television monitor and other components of the video system shall be capable of producing a minimum 500 line resolution color video picture.
- h. Electronic media shall visually display and include a narrative noting:
 - 1) Date, time of day, and depth of flow;
 - 2) Sewer segment number "from manhole to manhole";
 - 3) Distance from upstream manhole'
 - 4) Locations of service connections into sewer;
 - 5) Location of obstructions, structural defects, joint deterioration, leakage or evidence thereof, and other abnormalities with respect to the sewer condition and distance in feet from the upstream manhole centerline.

- i. The remote reading footage counter shall be accurate to two-tenths of a foot over the length of the particular section being inspected and shall be mounted over the television monitor. At the ENGINEER'S discretion, the CONTRACTOR shall provide an above-ground verification of the counter's accuracy if requested.
- j. Digital images should be provided in the common format accessible by Windows Media Player or approved equal.

Sewer Cleaning

The sewer manhole sections designated for Sewer Cleaning shall be cleaned using hydraulically propelled, high-velocity jet, or mechanically powered equipment. Selection of the equipment used shall be based on the conditions of the sewer lines at the time the work commences. The equipment and methods selected shall be satisfactory to the Engineer. This item shall include the cleaning of sewer and adjacent manholes, and shall consist of root cutting, removal of dirt, grease, rocks, sand and other materials and obstructions from sewer lines and manhole troughs. If cleaning of an entire section cannot be successfully performed from one manhole, the equipment shall be set on the other manhole and cleaning again attempted. Should dirt or debris be observed and/or detected, in a manhole or sewer after cleaning, the Contractor shall re-clean said manhole and the adjacent downstream sewer segment(s) at no additional cost.

The Contractor shall perform all work in accordance with the latest OSHA confined space entry regulations.

Satisfactory precautions shall be taken to protect the sewer segments and sewer manholes from damage that might be inflicted by the improper use of cleaning equipment. Whenever hydraulically propelled cleaning tools, which depend upon water pressure to provide their cleaning force, or any tools which retard the flow of water in the sewer segment are used, precautions shall be taken to ensure that the water pressure created does not cause any damage or flooding to public or private property being served by the sewer segment involved.

The use of a vactor truck or debris catcher is required in each downstream manhole to remove the debris and prevent it from passing further downstream.

If conditions such as broken pipe and major blockages are encountered that prevent cleaning from being accomplished or where damage would result if cleaning were attempted or continued, the Contractor shall immediately notify the Engineer. The Engineer shall be notified of any conditions which warrant termination of cleaning activities.

Heavy Cleaning

Heavy cleaning shall be required where it has been determined that large deposits of debris remain in the sewer lines and complete cleaning of the segment would require more than the industry standard three (3) passes through the line with high pressure water jetting equipment. The heavy cleaning equipment to be used shall facilitate the removal of such accumulation of sediment, debris, blockages, mineral deposits, bricks, grease, etc. The pipe must be free flowing with no obstructions, in order to permit a thorough and complete examination of the condition of the sewer through internal closed-circuit color television inspection.

Bucket machines, rodding machines, lumberjacks, augers and 120 gpm or higher hydro jetting equipment can be utilized in this heavy-duty cleaning. Where bucket machines and buckets are to be used, caution should be taken that a proper sized flexible cable be used so that breakage will not occur hanging the cleaning equipment up within the sewer lines. No debris shall be allowed to pass into downstream segments during the cleaning operation.

The video inspection must begin before the heavy cleaning takes place, in order to get visual confirmation of the initial pipe condition.

Heavy cleaning will be considered incidental to this Contract item and will not be paid for separately.

Root Cutting

Root cutting shall be required where it has been determined that root growth is substantial and cutting would be required to facilitate a thorough and complete examination of the condition of the sewer through internal closed-circuit color television inspection.

The root cutting tools shall be the industry standard concave saws, flat saws, water blasters or chain knockers and shall be carefully selected to ensure no damage is caused to the sewer main or any portion of the lateral including protruding laterals. Extreme caution should be taken when operating root cutters in the sewer and a video inspection shall be on the root cutter at all times to ensure damage is not caused from root cutting.

Root cutting will be considered incidental to this Contract item and will not be paid for separately.

Debris Removal and Disposal

The Contractor shall remove all sludge, dirt, sand, rocks, grease and other solid or semisolid material resulting from the cleaning operation from the downstream manhole of the sewer segment being cleaned prior to beginning television inspection. Passing material from sewer segment to sewer segment shall not be permitted. In the event that sludge, dirt, sand, rocks, grease and other solid or semisolid material resulting from the cleaning operation are observed and/or detected, as passing to downstream sewer segment(s), the Contractor shall clean such sewer segment(s) at no additional cost.

Debris catchers or baskets will be required to be set in the channel of the downstream manhole during all cleaning operations. Additionally, a "Vactor" or similar vacuum truck must be onsite during all cleaning operations and will be required to be setup on the downstream manhole to pull debris out of the sewer during all cleaning operations. As the sewer jet or other cleaning equipment is in use, the vacuum equipment shall be running in order to prevent debris from moving further downstream. The use of the vacuum truck does not constitute heavy cleaning.

When bucket machines are being used, a suitable container shall be provided to receive the materials dumped from the buckets. The Contractor at his discretion may use an approved container (roll off) for the storage of debris removed from the line segments. All material resulting from the cleaning operations shall be removed from the site when the container has reached 3/4 of its volume, or at least once each working day and disposed of at the permitted disposal site.

Disposal of all sewer debris shall be the responsibility of the Contractor and shall be done in accordance with the Illinois Environmental Protection Agency (IEPA) and all other regulating agencies. Under no circumstances shall the removed sewage or solids be dumped onto streets or into ditches, catch basins, storm drains, sanitary, combined sewer manholes or otherwise improperly disposed. Improper disposal of sewage or solids removed from the sewers may subject the Contractor to fines imposed by the City. In addition, the Contractor may be subject to civil and/or criminal penalties for improper disposal under the law.

Removal and disposal of all sewer debris shall be incidental to this Contract item and will not be paid for separately.

All dirt, debris, roots and other material removed from the sanitary sewers shall be hauled away by the Contractor to a dump site furnished by the City at no additional cost (located at 584 Kautz Road, Geneva IL).

Internal Closed-Circuit TV Inspection

The Inspection of sewer lines by CCTV shall be performed on all lines prior to and after all rehabilitation work by trained experienced PACP certified personnel. The Contractor shall take all necessary measures to televise the internal surface of each sewer segment in its entirety.

The Contractor shall furnish all labor, electronic equipment and technicians schooled and licensed in PACP 7.0.3 format, to perform the closed-circuit television inspection of the sewers. Operation of the equipment is to be controlled from above ground with a skilled technician at the control panel in the television studio, controlling the movement of the television camera through the sewer in either direction one segment at a time.

The video operator(s) shall be Pipeline Assessment Certification Program (PACP) certified by the National Association of Sewer Service Companies (NASSCO) and will be required to show proof of PACP ID or certification before performing work on this project. Certification dates must be current including renewal every three years. Operators with expired PACP ID numbers will not be allowed to work on the project until they have undergone the renewal process. The Contractor shall provide copies of each equipment operator's Certification Number at the preconstruction conference.

The Contractor shall begin each inspection with an onscreen written and verbal explanation of the project name, a detailed description of the location, the manhole to manhole segment, the direction of flow, the direction of camera setup and date. The depth (rim-invert) measurement of each manhole shall be recorded on the PDF report as well. A continuous footage counter shall be provided during the entire inspection, and shall be used to accurately record the locations of defects, connections, or objects in the pipe. The counter shall be accurate to two tenths of a foot. Maintain verbal commentary to identify any item that is called out on the report.

All inspections shall begin and end in the center of the manhole. The start of the video shall NOT begin already in the pipe segment. At the end of each inspection, the Contractor shall pan the camera around the ending manhole to get a view of what it looks like for identification purposes as well as documenting all incoming pipes.

The camera shall be moved through the line in either direction at a uniform rate of 30 feet per

minute, stopping when necessary to ensure proper documentation of the sewer's condition. The Contractor shall take all necessary measures to televise 95% of the internal surface of each sewer segment in its entirety. If dewatering with the jet truck is required to see 95% of the pipe, this shall be done at no additional charge to the City. Lighting system shall be adequate for quality pictures. A reflection in front of the camera may be required to enhance lighting.

If any obstruction in the sewer segment such as a protruding building lateral prohibits the passage of the television camera, the Contractor shall remove the protruding portion of the tap, and shall complete the inspection of the sewer. In case the Contractor must abandon the survey due to any obstructions in the sewer segment that cannot be removed, the Contractor shall attempt to inspect the remainder of the sewer segments by making a reverse set up at the next downstream manhole. No additional payment shall be made for reverse setups. Reverse set ups shall be easily distinguishable from ordinary setups, and must be labeled as such in the header of the PDF report.

All obstructions in the sewer segment that prohibit passage of the television camera shall be immediately reported to the Engineer by the Contractor referencing the location and nature of the obstruction.

The jetter nozzle shall accompany the camera at all times. This will ensure that the maximum area of pipe is visible.

The Contractor shall be responsible for any damage to public or private property resulting from televising activities and shall repair or otherwise make whole such damage at no cost to the City.

Digital Video & Report Deliverables

Electronic media of all sections shall be provided to City together with the respective television inspection reports. TV reports shall legibly show the location of each point of significance in relation to an identified manhole. Points of significance are, but not limited to the following: private service connections, unusual conditions, roots, storm sewer connections, sags, grease, broken pipe, presence of scale and corrosion, structural failures and other discernable features.

The Contractor shall provide a color digital video of all pipe line segments in “.mpeg” format on four (4) external hard drives with USB 2.0 connections. **Each video shall be named according to the “upstream manhole number – downstream number.mpg” format. For example, a pipe segment video with an upstream manhole of 12345 and downstream manhole 67890 would be named “12345 - 67890.mpg”.** Separate MPEG files and PDF reports shall be created for each manhole to manhole pipe segment inspected.

Video recordings shall be one file per sewer line section and shall be included on the external hard drives submitted. Total drives submitted for final acceptance at the end of the project shall be three (3).

The hard drives shall include a master Excel spreadsheet with hyperlinks to each video file and associated PDF report as well as a master digital database of all observation data. Two (2) copies of the digital video data and logs shall become the property of the City.

- The Master Spreadsheet shall have a record for each line segment televised to date. The spreadsheet shall be in MS Excel format and shall have hyperlinks to both the video files and the associated “.pdf” of the PACP & Pipe Segment View report for each section of sewer televised. The spreadsheet shall include the following information for each record - Upstream and Downstream Structure Numbers, Date Televised, Televised Length, Pipe Size, work performed, and links to both the Video and the “.pdf” report files.
- The Database in PACP 7.0.3 format shall detail location, type, and severity of all defects and shall be Microsoft Access V07 Database files with all tables linked by appropriate I.D. numbers, and links to video and “.pdf” report files. **All data shall be linked to the pipe segment ID number.**

The pipeline inspection shall consist of identifying a location both within the pipe segment (physical location) and within the digital recording (video frame location) for each defect or observation. The use of time codes for defect location shall NOT be deemed equivalent or acceptable. The digital recording and inspection data is to be cross-referenced for instant access to any point of interest within the digital recording. The inspection information shall include the digital recording of video and audio, segment identification information (starting manhole, date, time, etc.) including a pointer from each observation to the digital recording (video frame number), and any accompanying digital still images (JPEG or BMP).

Any out-of-focus video recordings, or portions thereof, shall be cause for rejection of the video recording and will necessitate re-televising at the Contractor's expense. Televising shall be done one section at a time. Inspections shall be performed using NAASCO's PACP version 7.0.3. The sewer pipe video inspection reports must be saved with the PACP overview report.

Audio and video observation documentation is to be provided in NASSCO PACP (V7.0.3) coding methodology database. The PACP Version 7.0.3 data base shall include all header information as well as any observations recorded. Links to the videos and the “.pdf” format of the reports shall be included within the data base. This data base shall be updated monthly and shall contain every observation from the beginning of the project through current delivery date.

The deliverable video files shall be full-color, high-resolution, and shall include all pipe surfaces above the water line. At each lateral and connected **service line**, the camera shall stop, rotate, and record a clear image of the lateral or service line to determine condition and if it is active or inactive. The inspection and database shall be fully compatible with PACP V 7.0.3 format.

Contractor shall record inspection in a PACP format. Video recordings and inspection shall visually display and include a narrative noting:

1. Date, time of day, and depth of flow
2. Sewer segment number "from manhole to manhole"
3. Direction of Flow
4. Distance from upstream manhole'
5. Locations of service connections into sewer;

6. All other information encountered during the inspection i. e obstructions, structural defects, leakage, sags, collapses etc.

The television inspection reports shall be provided both electronically in Adobe Acrobat Reader “.pdf” format as well as two bound hardcopies of the printed paper report. The file naming format shall follow a similar format to the video naming format. **Each inspection report shall be named according to the “upstream manhole number – downstream manhole number.pdf” format. For example, a pipe segment with an upstream manhole of 12345 and downstream manhole 67890 would be named “12345 - 67890.pdf”.**

The final report files, in paper and electronic “.pdf” formats, shall include a still shot image of every observation. These detailed reports shall include the following information at a minimum:

- Project Name
- System Owner Name
- Survey Customer Name
- Contractor Name, Phone Number & Address
- Surveyor’s Name & PACP Certification Number
- Date and Time of Televising
- Location (Street Name and Number)
- Address (nearest to each manhole)
- Rim to Invert Measurements (for both Upstream & Downstream Manholes)
- Pipe Segment ID Number
- Upstream Manhole Number & Downstream Manhole Number
- Drainage Area
- Weather
- Segment Length
- Joint Length
- Pipe Material
- Pipe Height (and Width if not Circular)
- Total Pipe Length
- Total Length Surveyed
- Flow Control
- Tape/Media Number
- Pre-Cleaning / Cleaning method
- Pipe condition observations (i.e. grease, roots, deposits, cracks, fractures, sags voids etc.)
- Location of all service connections (description of active vs. inactive)
- Location of all manholes
- Still shot photos of each observation
- NASSCO – Structural, O&M and Overall Ratings

Measurement:

The Contractor shall measure from center of upstream manhole to center of downstream manhole.

Basis of Payment:

Sewer cleaning and television inspection in preparation for rehabilitation work shall be paid for at the Contract Unit Price per Linear Foot for PRE-CONSTRUCTION CLEANING AND TELEVISIONING and shall include all labor and material required for cleaning sanitary sewer prior to liner installation, including all cleaning, televising, root cutting, removal and disposal of debris, removal of mineral deposits and sewerage solids, and all appurtenances required to complete the work.

SP-23 CURED – IN – PLACE PIPELINING

This work shall include the repair of defective sewer by the installation of a resin impregnated flexible felt tube in all segments as shown on the plans. The tube shall be saturated with a thermosetting resin and installed into the existing sewer using an inversion process. Curing shall be accomplished by circulating hot water or steam to cure the resin into a hard impermeable cured-in-place pipe. When cured, the liner shall be a continuous tight fitting watertight pipe-within-a-pipe.

This specification references American Society for Testing and Materials (ASTM) standard specifications, Insituform of North America, Inc. (INA), and Inliner USA, Inc., or the City approved equal, manufacturer's standards which are made a part hereof by such reference and shall be the latest edition and revision thereof.

Materials

The Tube shall consist of one or more layers of a flexible needled felt or an equivalent nonwoven or woven material, or a combination of nonwoven and woven materials, capable of carrying resin and withstanding the installation pressures and curing temperatures. The tube should be compatible with the resin system to be used on this project. The material should be able to stretch to fit irregular pipe sections and negotiate bends.

The tube should be fabricated to a size that, when installed, will tightly fit the internal circumference and the length of the original conduit. Allowances should be made for the longitudinal and circumferential stretching that occurs during placement of the tube. The tube shall be uniform in thickness and when subjected to the installation pressures will meet or exceed the designed finish wall thickness. The tube shall be marked for distance at regular intervals along its entire length, not to exceed 5 feet. Such markings shall also include the lining manufacturer's name or identifying symbol.

Any plastic film (including polyethylene, polyurethane, and polypropylene layers) applied to the tube on what will become the interior wall of the finished CIPP shall be compatible with the resin system used, translucent enough that the resin is clearly visible, firmly bonded to the felt material, and shall be capable of withstanding installation pressures and curing temperatures.

The resin system shall be a corrosion resistant polyester, vinyl ester, or epoxy and catalyst system that when properly cured meets the minimum requirements given herein or those that are to be utilized in the design of the CIPP for this project. The manufacturer shall be Insituform, Inliner USA, National Liner or an approved equal.

Sizing of the Liner

The liner shall be fabricated to a size that when installed will neatly fit the internal circumference of the sewer to be lined. Allowance for circumferential stretching of the liner during insertion shall be made as per manufacturer’s standards. The length of the liner shall be that deemed necessary by the Contractor to effectively carry out the insertion and seal the liner at the inlet and outlet points. The Contractor shall verify the lengths in the field. Individual installation runs can be made over one or more access points as determined in the field by the Contractor and approved by the Engineer.

The liner thickness shall be based on the condition of the existing pipe which shall be classified as fully deteriorated pipe and structurally unsound. The liner shall be designed to withstand all imposed loads. The liner thickness shall have sufficient wall thickness to withstand the anticipated external pressures and loads which will be imposed after installation. The design of the liner shall include considerations for ring bending, deflection, combined loading, buckling, and ovality. Liner thickness shall be based on the use of the standard flexible pipe equations, as detailed in ASTM F-1216 and shall account for the effects of ovality. A minimum cured wall thickness of 6 mm (+/- 10%) shall be used for pipes up to and including 15” and a minimum cured wall thickness of 7 mm shall be used for pipes 18” and above. The Contractor shall use wall thickness appropriate to the depth of pipe being lined. A safety factor of at least 2.0 shall be utilized.

Structural Requirements

The materials properties of the finished CIPP shall meet or exceed the following structural standards:

MINIMUM PHYSICAL PROPERTIES

| Property | ASTM Test Method | Polyester System | Filled Polyester System | Vinyl Ester System |
|-------------------------------|---------------------|---------------------|-------------------------------|-----------------------|
| Flexural Strength | D790 | 4,500 psi | 4,500 psi | 5,000 psi |
| Flexural Modulus (Initial) | D790 | 250,000 psi | 400,000 psi | 300,000 psi |
| Flexural Modulus (50 Yr) | D790 | 125,000 psi | 200,000 psi | 150,000 psi |
| Tensile Strength | D638 | 3,000 psi | 3,000 psi | 4,000 psi |

Execution

Installation shall be in accordance with standard practice for rehabilitation of existing pipelines and conduits and curing of a resin – impregnated tube ASTM F-1216. The Contractor may use either hot water or steam cure as deemed necessary for the installation, however specific installations may warrant the designation of a certain curing method and the Contractor is to allow for the installation using either technique.

The Contractor when required shall provide for the transfer of flow around the section or sections of pipe that are to be lined. The bypass shall be made by diversion of the flow at an existing upstream access point and pumping the flow into a downstream access point or adjacent system. The pump and bypass lines shall be of adequate capacity and size to handle the flow. The proposed bypassing

system shall be approved in advance by the City.

NO LINING WILL BE PERMITTED DURING PERIODS OF HIGH FLOW.

Prior to any lining of designated sanitary sewer line segments, the Contractor shall remove internal deposits and roots as necessary to assure proper liner installation. Television inspection shall be performed to verify extent of damage, and location of service connections. Cleaning and inspection shall be in accordance with these specifications

Public Notice

A public notification program shall be implemented, and shall as a minimum, require the Contractor to be responsible for contacting each home or business connected to the sanitary sewer and informing them of the work to be conducted, and when the sewer will be off-line.

The Contractor shall also provide the following:

1. Written notice to be delivered to each home or business describing the work, schedule, how it affects them, and a local telephone number of the Contractor they can call to discuss the project or any problems that could arise. The Contractor shall include the contact information for the onsite field supervisor as the primary contact for affected residents. The Contractor shall customize the notice to include City of Geneva logo and contact information. The notice shall be written in both English and Spanish. The City shall review and approve the notice format and text at the beginning of the project prior to distribution. All work required for notification to residents shall be incidental to the contract.
2. Personal contact and attempted written notice 24-48 hours prior to the beginning of work being conducted on the section of sewer relative to the residents affected.
3. Personal contact with any home or business that cannot be reconnected within the time stated in the written notice.

Flexible Liner Installation

The Contractor shall designate a location where the uncured resin in the original containers and the un-impregnated fiber felt tube will be vacuum impregnated prior to installation. The Contractor shall allow the City to inspect the materials and procedure. A resin and catalyst system compatible with the requirement of this method shall be used. The quantities of the liquid thermosetting materials shall be per manufacturer's standards to provide the lining thickness specified and shall be sufficient to fill the volume of air voids in the tube with additional allowances being made for polymerization shrinkage and the anticipated loss of any resin through cracks and irregularities in the original pipe wall.

The wet out (inversion) fiber felt tube shall be inserted through an existing manhole or other approved access point. The manufacturer's standards shall be closely followed during the elevated curing temperatures so as not to over stress the felt fiber and cause damage or failure during the cure.

If the Contractor installs a shot through an existing manhole, it is the City's intention for the Contractor to provide a liner through the manhole channel. The Contractor shall extend the liner to cover as much of the manhole channel as possible. The liner seam, along the manhole bottom,

between bench and trough, shall be sealed with an epoxy compatible with CIPP resin.

The finished cured-in-place pipe shall be continuous over the entire length of the insertion run and be as free as commercially practicable from significant defects. Any defects which will affect, in the foreseeable future, or warranty period, the integrity, maintenance, or strength of the cured-in-place pipe, including foreign inclusions, dry spots, pinholes, delaminations, wrinkles, bubbles and blisters shall be repaired at Contractor's expense, in a manner mutually agreed upon by the City and the Contractor.

End Seal

All pipes shall be fitted with a hydrophilic gasket, the "Insignia" as manufactured by LMK or equivalent, at both ends of each segment prior to installation of the liner. In addition, the liner shall be neatly cut at least 4-inches from the manhole wall to allow for filling of the annular space at the manhole opening with an epoxy resin compatible to CIPP. This epoxy resin filling, along with a hand brushed hydraulic cement topcoat, shall be applied at all manhole wall to CIPP joints to ensure a water tight seal at the manhole. The cost for this work shall be incidental to the cured-in-place pipelining.

Lateral Reinstatements

After the cured-in-place pipe has been cured, the Contractor shall reconnect the existing active branch or service lines as designated by the City. This shall be done without excavation and in the case of non-man entry pipes, from the interior of the pipelines by means of a television camera and a remote cutting device that re-establishes them to not less than 90 percent capacity and not more than 100% of the internal diameter of the lateral pipe. The surface of the opening shall be wire brushed to remove extraneous material and provide a smooth edge at each lateral connection. The intent of this project is to provide structural repairs and reduce inflow and infiltration. Only live active services shall be re-instated after lining. Dye testing as described hereinafter shall be required to determine which services shall be reinstated prior to lining. Any additional non-active laterals reinstated, shall be repaired with a minimum 3-foot length CIPP spot liner including LMK end seals at both ends on the mainline.

Testing

The Contractor shall prepare a sample for each installation of CIPP. The samples shall be restrained samples for diameters of CIPP less than 18"; and flat plate samples for diameters of CIPP 18" and larger. The flat plate samples shall be taken directly from the wet-out tube, clamped between flat plates, and cured in the downtube. The restrained samples shall be tested for thickness and initial physical properties; flat plate samples shall be tested for initial physical properties only. The Contractor shall be responsible for providing one data set for each week of installation (testing sample to be determined by the Engineer). If that data set does not meet the testing criteria, then all remaining samples for that week shall be tested for compliance and the liners not meeting the design criteria shall be rejected for payment and/or removed at the Contractor's expense.

The post-installation television inspection shall be used to confirm tightness of fit of the CIPP to the host pipe and to identify any imperfections; the finished liner shall be continuous over its entire length and to be free from visual defects such as foreign inclusions, dry spots, pinholes, delaminations, wrinkles, bubbles and blisters. All defects discovered during the post-installation television inspection shall be corrected by the Contractor at no additional cost, prior to completion of

work. After defects are corrected, the sewer shall be televised again to show effectiveness of repairs.

Basis of Payment:

Lining shall be paid for at the Contract Unit Price per Linear Foot for CURED-IN-PLACE PIPELINING of diameter specified as indicated on the Bid Schedule and designated on plans and shall include all labor, materials, and equipment, installation, curing and testing of liner, end seals and all appurtenances required to complete the work. Measurement shall be made from center of upstream manhole to center of downstream manhole. Payment for sewer televising post-liner installation shall be included in the contract bid price for the CURED-IN-PLACE PIPELINING.

Lateral reinstatements shall be paid for at the Contract Unit Price per Each for LATERAL REINSTATEMENTS and shall include all labor, materials, and equipment including verification of the lateral location, cutting of the liner, brushing of liner and all appurtenances necessary to perform the work.

SP-24 AIR TEST AND GROUT MAINLINE JOINTS

The intent of joint and connection testing is to identify those sewer joints that are not watertight and that can be successfully sealed by packer injection grouting.

The Contractor shall provide all labor, materials, tools, equipment, and incidentals as shown, specified, and required to grout pipeline joints using a packer injection method. If pipe joint lengths are different than specified in the rehabilitation schedules, the Contractor shall notify the Engineer immediately.

References

National Association of Sewer Service Companies (NASSCO) prepared Pipeline Assessment and Certification Program (PACP), TV inspection form and sewer condition codes.

ASTM F2304 Standard Practice for Rehabilitation of Sewers using Chemical Grouting

ASTM F2454 Standard Practice for Sealing Lateral Connections and lines from the Mainline Sewer Systems by Lateral Packer Method, Using Chemical Grouting

Contractor Requirements

The Contractor shall be trained in appropriate and satisfactory safety methods regarding the grouts used under this contract. These methods shall include handling, mixing, and transporting of chemical grouts. These safety procedures and measures should be provided by the grout supplier (hereinafter referred to as the Supplier or the Manufacturer(s)).

Notice to Residents

The Contractor shall provide and hang notices on doors of all residences / businesses with service lines connected to sewer mains to be grouted. Notices shall be distributed 48 hours in advance of the work. The Contractor shall include the contact information for the onsite field supervisor as the primary contact for affected residents. The Contractor shall customize the notice to include City of Geneva logo and contact information. The notice shall be written in both English and Spanish. The City shall review and approve the notice format and text at the beginning of the project prior to distribution. All work required for notification to residents shall

be incidental to the contract.

Submittals

- Equipment operating procedures and systems.
- Chemical Grout information.
 1. Description of chemical grout materials to be used (please refer hereinafter to grout characteristics);
 2. MSDS sheets for all materials to be used.
- Identification of the Manufacturers of the packers to be utilized on the project.
- Upon completion of each pipe segment, the Contractor shall submit to the Engineer a report showing the following data for each joint tested, grouted or attempted to be grouted:
 1. Identification of the sewer pipe section tested;
 2. Type of pipe material, diameter and depth of pipe to the surface at manholes;
 3. Length of pipe sections between joints;
 4. Test pressure used and duration of test;
 5. Pass/fail results for each joint/connection tested;
 6. Location stationing of each joint tested and location of any joints not tested with an explanation for not testing;
 7. Volume of grout material used on each joint;
 8. Gel set time used (cup test results from tanks);
 9. Grout mix record of the batches mixed including amount of grout and catalyst, additives and temperature of the grout solution in tanks; and
 10. Video recordings that include:
 - i. Testing and sealing operations for each joint (including inflation and deflation over the joint) displaying the final air test of joints or laterals; and
 - ii. An additional final recording, if specified, that includes inspection of the pipe after all grouting work is complete.

Testing and Grouting Equipment

The basic equipment shall consist of the following:

1. Remotely operated color television (CCTV) camera capable of pan and tilt;
2. Joint testing device referred to hereafter as a packer; and
3. Test monitoring equipment.

The equipment shall be constructed in such a way as to provide a means for introducing air under pressure into the void area created by the expanded ends of the packer pushing against the host pipe. The equipment shall also provide a means for continuously measuring, viewing and recording the actual static pressure of the test medium and grout within the void area only. The packer shall be of a diameter size nominally less than the internal diameter of the pipe, with cables at either end used to pull it through the line. The packer should be constructed in such a manner as to allow a restricted amount of sewage to flow at all times. The packer shall be expandable by air pressure. Packers shall be of low void space construction with void volume given by the packer manufacturer.

Void pressure data shall be transmitted from the void area directly to the monitoring equipment in the grouting truck or to the grouting truck via a video picture of a pressure gauge mounted on the packer and connected to the void area. All test monitoring shall be above ground and in a location to allow for simultaneous and continuous observation of the televising monitor and test monitoring equipment.

Grouting equipment shall consist of the packer and appropriate pumping and hosing systems capable of supplying an uninterrupted flow of sealing materials to completely fill the voids. Grout pumping systems shall be sized to deliver a mixed volume of grout at a minimum of three gallons per minute (3 GPM) and thirty (30) gallons of uninterrupted flow within ten (10) minutes.

The volume of mixed grout pumped must be measured and recorded for each grouted joint or connection.

The equipment shall be capable of performing the specified operations in sewers where flows do not exceed twenty-five percent (25%) of internal pipe diameter.

Grout(s) – General requirements

All grout materials must have the following features or capabilities:

1. During injection, the grout must react or otherwise perform in the presence of water (groundwater).
2. The ability to increase grout mix viscosity, density and gel strength by increased concentration of constituents or the use of approved additives.
3. The cured grout must withstand submergence in water without degradation.
4. The resultant grout formation must be homogeneous and prevent the passage of water (infiltration) through the pipe joint.
5. The grout must not be biodegradable.
6. The cured grout should be chemically stable and resistant to organics found in sewage.
7. Residual grout shall be easily removable from the sewer line to prevent blockage of the sewage flow.

Grouting materials should be handled, mixed, and stored by the Contractor in accordance with the Manufacturers' recommendations. The grouting materials shall be delivered to the site in unopened original Manufacturers' containers.

Grout(s) characteristics

Base grouts shall have the following characteristics:

1. Base grouts shall have the following characteristics:
2. A minimum of ten percent (10%) acrylamide base material by weight in the total grout mix. A higher concentration of acrylamide base material is recommended to increase strength or offset dilution during injection.
3. The capacity to tolerate some dilution and react in moving water during injection.
4. A viscosity of approximately two (2) centipoise shall be attainable. This viscosity shall also be increasable with approved additives.

5. A controllable reaction time from ten (10) seconds to one (1) hour.
6. A reaction (curing) process or method that produces a homogenous, chemically stable, non-biodegradable, firm and flexible gel.
7. The capacity to increase mix viscosity or density and gel strength by increased concentrations of the mix constituents or by the use of approved additives.
8. Product(s) and Manufacturer(s):
 - i. Avanti AV-100;
 - ii. Avanti AV-118; or
 - iii. Approved equal(s).

Additives

At the Contractors discretion according to field conditions, additives may be selected and used within the Manufacturers' recommended quantities.

Strengthening Agents

1. For joint grouting, a latex or diatomaceous earth additive may be added to increase compressive and tensile strength. The quantity of strengthening agent additive shall be as recommended by the Manufacturer and approved by the Engineer.
2. Product Manufacturer(s):
 - i. Avanti AV-257 ICOSSET; or
 - ii. Approved equal(s).

Root Inhibitors

1. When roots are present, for joint grouting, a root deterrent chemical shall be added to control root re-growth. The quantity of inhibitor shall be as recommended by the Manufacturer and approved by the Engineer.
2. Product Manufacturer(s) – Approved project Manufacturer(s) are:
 - i. Avanti AC-50W; or
 - ii. Approved equal(s).

Gel Time Modifier

A gel time extending agent may be used in accordance with the Manufacturer(s)' recommendations to extend gel time as necessary.

Miscellaneous Additive Requirements - When using non-soluble additives, the grout tanks must have mechanical mixing devices to keep the additives in suspension and maintain a uniform solution of grout and additive.

Control Tests

Packer Tests – The Contractor shall demonstrate the acceptable performance of air test(s), including:

1. To ensure the accuracy, integrity and performance capabilities of the testing equipment, a demonstration test (barrel test) shall be performed by the Contractor. The test procedures shall be as follows: After entering each pipeline segment with the test equipment, but prior to the commencement of joint testing, the Contractor shall position the test equipment on a section of

sound sewer pipe between pipe joints, and perform a test as specified. The equipment shall hold a seven to ten PSI (7-10 PSI) test pressure for a period of fifteen (15) seconds with a pressure drop of less than one PSI (<1 PSI). In the event of a failed test, the Contractor shall repair any defective equipment and re-test to verify proper operation of all equipment.

Pump Tests – At the beginning of the contract, prior to application of grout, the Contractor shall perform a pump test. This test shall determine if proper ratios are being pumped from the grout component tanks at the proper rates and shall also measure pump rates. The Contractor shall use separate containers to capture the discharges from each of the grout component hoses to simulate the actual volumes of each component through the interconnect hoses, hose reel and length of grout hose, and to confirm accuracy of the grout pump totalizer. The Contractor shall take corrective action if ratios or rates are not within the Manufacturers' recommended standards.

Grout Tests – The Contractor shall perform and record a grout gel test in the presence of the Engineer. This test shall include the recording of the grout tank solution temperature, catalyst tank solution temperature, ambient air temperature in truck, and gel time of the sample. The test shall be performed whenever the following conditions occur:

At the beginning of each day. The material in the hoses shall be recycled to the tanks and a sample shall be taken;

Whenever new batches of grout are mixed; and

Whenever the temperature in the tanks or ambient temperature have changed by more than plus or minus ten degrees Fahrenheit (+/- 10°F) from the previous gel test.

Pipe Preparation

Prior to the application of the chemical grouting materials, the Contractor shall thoroughly clean the sewer designated to receive the chemical grouting. Cleaning shall constitute removal of all loose debris and solids including which shall inhibit proper seating of the packer. If mineral deposits or protruding taps are present, said obstructions shall be removed and paid for as described elsewhere in these provisions.

The Owner shall have cleared the designated sewer line(s) of obstructions such as offset joints, protruding lateral connections, and broken pipe or crushed pipe which might otherwise prevent the use of the grouting equipment. If the CCTV inspection reveals such an obstruction, the Owner shall be notified immediately so that the obstruction can be removed.

Grout Preparation

The Contractor shall follow the Manufacturer(s)' recommendations for mixing and safety procedures.

Gel time shall be adjusted as necessary to compensate for changes in temperature in grout component tanks or hoses. The addition of dilution water to extend gel times is not acceptable unless the resulting base material exceeds ten percent (10%) by weight for solution grouts.

During the grouting process, the Contractor's grouting technician shall monitor the grout component tanks to make sure that proper ratios are being pumped. If unequal levels are noted in the tanks, the technician shall repeat the pump test as described above and correct any defective equipment.

Gel times shall be within the following formula calculations unless the Contractor's experience and/or field conditions dictate otherwise:

$$Gel\ Time = \left(\frac{Volume\ of\ Pipe\ / \ Packer\ Void\ Space\ (gal)}{Pumping\ Rate\ (gpm)} \right) \left(\frac{60\ sec}{1\ min} \right) + 20\ sec(+/-\ 5\ sec)$$

Packer/Pipe void shall be defined as the volume between the inflated packer and the inside pipe wall when the packer is inflated per manufacturer recommendations.

For example: an 8" pipe with a pack void space of .3 gallons would provide:

$$Gel\ Time = \left(\frac{.3(gal)}{3(gpm)} \right) \left(\frac{60\ sec}{1\ min} \right) + (20\ sec) = 26\ sec(+/-\ 5\ sec)$$

Testing and Grouting Defects

All sewer joints on a segment shall be tested with the following exceptions:

1. Longitudinally fractured or broken pipe, as classified by PACP, unless specifically shown or specified or directed by the Engineer;
2. Sections of the pipe with structural defects between joints; and
3. Any sections of pipe or joints that are in such poor structural condition that in the judgment of the Engineer or the Contractor, significant structural damage of the pipe would occur as a result of the pressure test.

Any structurally undamaged joint that structurally fails or breaks during testing and grouting (said tests and grouting being documented on video to have been done under normal pressure conditions) shall be the Contractor's responsibility and cost to repair.

Testing Procedure for Mainlines

Joint testing pressure shall be equal to one half (0.5) PSI per vertical foot (VF) plus two PSI (0.5 PSI per/VF + 2.0 PSI). However, test pressures shall not exceed ten (10.0) PSI without the approval of the Engineer.

The Contractor shall individually test each sewer pipe joint at the above-specified pressure (and retest after sealing) in accordance with the following air test procedure:

1. The packer shall be positioned within the pipe in such a manner as to straddle the joint to be tested.
2. The packer ends shall be expanded so as to isolate the joint from the remainder of the pipe and create a void area between the packer and the pipe joint. The ends of the testing device shall be expanded against the pipe as per manufacturers' recommendations. If all attempts to isolate the joint fail, the Contractor shall pump grout in an attempt to seal the leak around the packer end. The Contractor will not be paid the unit price for joint grouting for this activity.

3. After the void pressure is observed to be equal to or greater than the required test pressure, the air flow shall be stopped. If the void pressure decays by more than one PSI (1.0 PSI) within fifteen (15) seconds, the joint shall be determined to have failed the test and shall be sealed.

Upon completing the testing of each individual joint, the packer shall be deflated with the void pressure meter continuing to display void pressure. Should the void pressure meter fail to drop to a reading of zero-point zero PSI, plus or minus zero point five PSI (0.0 PSI +/- 0.5 PSI), the Contractor shall clean the test equipment of residual grout material or make the necessary equipment repairs to provide for an accurate void pressure reading.

Grouting – General Requirements

The Contractor shall grout all joints that failed the pressure test by the injection method. This shall be accomplished by forcing grout through a system of pumps and hoses into and through the joints of the sewer pipeline utilizing the packer then in the sewer pipe.

Joint Sealing for Mainlines

The Contractor shall position the mainline packer over the joint to be sealed with the aid of a CCTV camera in the line.

The Contractor shall pneumatically expand the packer sleeves such that they seal against the inside periphery of the pipe. This shall form a void area at the joint that shall be completely isolated from the remainder of the pipe line.

The Contractor shall then pump grout materials into this isolated area. The pump shall be operated until “refusal”. The goal of this procedure is the applying of one quarter to one half (0.25 to 0.5) gallons of grout per inch of pipe diameter per pipe joint. Refusal shall mean the joint will not accept any more grout (because it has flowed throughout the void, through any joint failure and into the surrounding soil; or gelled or filled the available void space; and formed a cohesive seal stopping further grout flow). The Contractor shall record the amount of grout pumped on the sealing log.

Upon completion of the injection, the Contractor shall deflate the packer to break away from the ring of gel formed by the packer void. The packer should then be re-inflated and the joint retested at a pressure equal to the initial test pressure. If the joint fails this air test, the Contractor shall repeat the grouting procedure at no additional cost to the Owner. This sequence of air testing, grouting and subsequent air testing should be repeated until either the joint is sealed, or it is determined that the grout consumption is too high.

If a mainline joint requires more than one (1) gallon of grout per pipe diameter inch per pipe joint, the Contractor shall modify grouting procedures. This modification shall stage grouting by pumping additional grout in up to four (4) gallon increments, waiting one (1) gel set cycle time or one (1) full minute, whichever is greater between stages. The maximum number of stages shall not exceed two (2) stages of four (4) gallons each unless approved by the Owner. The final determination to stop subsequent attempts to seal a joint shall be made jointly between the Engineer and the Contractor.

Joint Sealing Verification

The Contractor shall record grouting of joints in conjunction with the testing of joints. This shall include recording the void pressure drop continuously on video and in writing immediately before sealing, and immediately after grouting. After the packer is deflated and moved, the Contractor shall record on video the visual inspection of the joint.

Disposal

The Contractor will not be allowed to flush sealing chemicals into the downstream pipe reaches and shall dispose of unplaced and waste chemical sealing material and all equipment cleaning chemicals off-site, in accordance with IEPA requirements. The Contractor will not be allowed to discharge within the Municipal limits or in the sanitary sewer.

Post – Construction Inspection

After grouting is complete, all pipe sections shall be final inspected by means of a color CCTV system. The inspection shall be conducted as per the NASSCO Pipeline Assessment and Certification Program (PACP). Final videos shall be delivered as described POST-CONSTRUCTION TELEVISION INSPECTION.

Quality Control

The Contractor shall conduct warranty joint air testing on all of the joints and lateral connections successfully sealed in ten percent (10%) of the sewer pipe segments or a minimum of two (2) sewer line segments, whichever is greater. This work shall commence approximately eleven (11) months after substantial completion of the initial project or phase. The Engineer shall select the pipe segments to be warranty tested. The Contractor shall be provided with sixty (60) days' notice of the warranty testing. The Contractor shall conduct all warranty tests in the presence of the Engineer.

1. If more than ten percent (10%) of the warranty tested joints or lateral connections fail, the Contractor shall test an additional fifteen percent (15%) of the pipe segments or two (2) additional sewer line segments, whichever is greater. If more than ten percent (10%) of the second group of warranty tested joints or lateral connections fail, the Contractor shall test one hundred percent (100%) of the joints or lateral connections successfully sealed in the remaining untested pipe segments at no additional compensation.
2. The Contractor shall grout and/or retest all joints and lateral connections failing warranty testing at no additional compensation.
3. Joints that received more than four (4) gallons of grout per pipe-diameter inch of pipe joint are exempted from the warranty testing.

Basis of Payment

AIR TEST AND GROUT MAINLINE JOINTS shall be paid for at the Contract Unit Price per each joint tested and per each joint chemically sealed, of the diameter specified, which price and payment shall include but not be limited to minor complications and/or delays, traffic maintenance & protection, testing pipe joints, chemically sealing (including grout), immediate and warranty re-testing of pipe joints and all labor, materials, tools, fees, equipment and incidentals needed to complete work specified within this Contract.

SP-25 AIR TEST AND GROUT SERVICE CONNECTIONS

This work shall consist of testing and grouting of sanitary service connections. Locations for service connection grouting shall be identified by pressure testing all service lateral connections and then sealing the lateral connections that fail the pressure test. Locations selected shall be approved by the Engineer in advance of performing any service lateral grouting. All grouting of service laterals shall be completed prior to the final post televising of the sewer segment.

Notice to Residents / References / Contractor Requirements / Submittals / Products / Control tests / Grout preparation / Disposal / Quality Control

All these items must be in accordance with the specifications as described hereinabove in AIR TEST AND GROUT MAINLINE JOINTS.

Construction Requirements

Lateral connections selected for GROUT SERVICE CONNECTIONS shall be identified by pressure testing the service lateral connection and then sealing the lateral connections that fail the pressure test. Locations selected shall be approved by the Engineer in advance to performing any service lateral grouting. All grouting of service laterals shall be completed prior to the final post televising of the sewer segment.

For each service lateral within the project, the Contractor shall pressure test the service lateral connection and seal the failed lateral connections. For factory tees and wyes, the test and seal shall include the first joint upstream of the mainline sewer, including a minimum distance of five (5) feet from the main. For break-in connections, the test and seal shall include the break-in and the first joint upstream of the mainline sewer, also including a minimum distance of five (5) feet from the connection to the main.

The Contractor shall apply air pressure of 0.5 psig per vertical foot of sewer depth plus an additional 2.0 psig (total pressure not exceeding 10 psig). The test pressure and pipeline depth shall be recorded. If the air pressure on the lateral connection drops 1.0 psig within a 15-second time period, the connection "fails" the test and requires sealing as specified herein.

The Contractor will be required to retest failed connections after the sealing procedure is completed to verify effectiveness of the sealing. This shall be done by first deflating the packer ends until the "void" pressure meter reads zero pressure. The Contractor shall clean the equipment of residual grout. Once equipment is clean the Contractor shall re-inflate the packer ends and apply test pressure again. Grouted connections failing the pressure test shall be resealed and retested until each connection passes the air test.

Complete records shall be kept of lateral connections sealing performed in each sewer section. The records shall identify the manhole to manhole section in which the testing/sealing was done, the location and type of each lateral connection tested and/or sealed, whether there is visible evidence of infiltration and inflow at each service connection and an estimated flow rate in gallons per minute, any problems with the service connection i.e. roots, grease, etc, the test pressure before and after

sealing, the quantity of chemical sealing material used at each lateral connection in gallons, the chemical set time and materials including any additives, and the lateral connection sealing verification results. PDF reports for each sewer segment tested/sealed shall be included on the final hard-drive deliverables and shall be linked into the Master excel spreadsheet.

The Contractor shall be required at a minimum, to apply one gallon of grout per foot of sealing distance for each lateral connection. During grouting operations, the Contractor shall televise the lateral connection testing and sealing and provide one digital video file for each sewer section containing service lateral testing/sealing. This digital video file is to be included on the final hard-drive deliverable and shall be linked into the Master excel spreadsheet.

Any excess grout that remains in the sewer main shall be removed by the Contractor. The Contractor shall perform an air test on the service lateral and/or flush test from the residence to confirm that the service lateral is open for sewerage flow. The Contractor shall be solely responsible and liable for any property damages resulting from the grouting work.

Post-Construction Inspection

After grouting is complete, all pipe sections shall be final inspected by means of a color CCTV system. The inspection shall be conducted as per the NASSCO Pipeline Assessment and Certification Program (LACP). Final videos shall be delivered as described POST-CONSTRUCTION TELEVISION INSPECTION.

Measurement

Testing and grouting of service lateral will be measured for payment by count of approved service laterals tested and grouted.

Basis of Payment:

AIR TEST AND GROUT SERVICE CONNECTIONS shall be paid for at the Contract Unit Price per each service connection tested and per each service connection chemically sealed, of the length specified. No additional payment will be made for air testing, catalyst, activator, inhibitor, buffer, root control, or additive materials required to obtain the final product in place.

SP-26 CHIMNEY REHABILITATION (IN PAVEMENT OR OFF PAVEMENT)

For all chimney and frame adjustment work including replacements, adjustments, realignments and raises, the manhole adjustment rings shall be removed, replaced and sealed per the following specification. The Contractor may not reuse existing concrete rings during frame adjustment work. Frames that are indicated for adjustment and not replacement shall be removed, cleaned and sealed in accordance with the following specification. External chimney seals shall be included in this work. When the manhole is in the pavement, the Contractor shall be required to saw cut existing pavement to a minimum of a 5 foot by 5 foot square. All saw cutting shall be completed using a wet saw to control dust. This square cut shall allow for proper removal and replacement of the frame and adjustment rings and for the installation of external chimney seals.

The Contractor shall remove existing frame and cover, remove all gasket material between the cone, adjustment rings and frame, and shall wire brush clean all exposed surfaces. In addition, the Contractor shall dry all surfaces with a torch or other approved method. Existing manhole frames and covers in good condition will be cleaned and reinstalled unless specified elsewhere for replacement.

The Contractor shall remove all loose materials located at the top of the corbel and fill the voids.

Adjustment Rings

The Contractor shall replace all adjustment rings with new precast concrete rings and rubber composite adjustment rings depending on the height of adjustment as follows:

The contractor shall use precast concrete adjustment rings. Precast concrete rings shall be 2", 3", 4", 6", or 12" and shall be installed concentrically above the manhole cone.

The Contractor shall use the minimum number of rings possible for the adjustment. No shims or other leveling devices, other than leveling rings provided by the manufacturer, will be permitted.

External Chimney Seal

External chimney seals are to be installed for all frame adjustment work requiring excavation including adjustments, replacements, realignments and raises unless indicated otherwise by the Engineer. This external sealing system shall prevent leakage of water into the manhole through the frame and chimney down to the cone.

Two types of external chimney seals will be used as directed by the Engineer. The acceptable external chimney seals are:

- Infi-Shield Uni-bands, or approved equal.
- WrapidSeal Canusa-CPS or approved equal.

The Contractor shall have both types of approved seals onsite, so that where needed, a WrapidSeal can be used in lieu of Infi-Shield seal. On all precast concrete manholes, Infi-Shield shall be used. The Contractor shall obtain approval from the Engineer prior to switching from Infi-Shield to WrapidSeal.

Frame seals shall remain flexible throughout a 50-year design life, allowing repeated vertical movement of the frame of not less than 2 inches and/or repeated horizontal movement of not less than one half 1/2 inch.

The seal shall be a continuous seamless band made of high quality EPDM (Ethylene Propylene Diene Monomer) rubber with a minimum thickness of 65 mils. There shall be a preformed "L" shaped corner molded into the top of the seal. The top section and the side section will extend from the "L" shaped corner at a generally 90-degree angle to each other, wherein the seal is preformed in substantially the same shape as when attached to the manhole structure. The thickness of the "L" shaped corner extending 1" into the top section and 1" down the side section is

increased and may be at least twice the thickness of the top section reinforcing the seal at this particular area. There shall be a 2" to 3" wide strip of butyl mastic attached to the underside of top section of the seal. There shall be a 2" wide strip of butyl mastic attached to the inside of the side section at the bottom of the seal. The mastic shall be non-hardening butyl rubber sealant, with a minimum thickness of 1/8", and shall seal to the cone/top of the manhole section and over the flange of the casting frame. An aerosol primer shall be used to enhance the bond strength of the seal to the structure.

The Contractor shall excavate around the frame to a depth of at least 12 inches below the top of the cone section to allow for proper installation. The Infi-Shield Uni-Band seal sealing system shall be installed according to the manufacturer's recommendations. The top section of the seal shall extend 3" attaching to the casting base/flange with the side section covering over the entire grade adjustment ring area and onto the cone section a minimum of 2". Install external manhole chimney seal as shown on the detail, with extensions where needed to cover the entire chimney area, in accordance with the manufacturer's instructions. External chimney seals installed shall not be buried until inspected by the Engineer.

Gasket Materials

EZ-STIK or an approved equal butyl mastic sealant shall be used when rejoining the manhole frame to the precast adjustments to provide a watertight structure. The sealing compound shall be produced from blends of refined hydrocarbon resins and plasticizing compounds reinforced with inert mineral filler, and shall contain no solvents, irritating fumes, or obnoxious odors. Avoid use of overly thick gasket material such as will likely produce after-settlement of manhole frame due to long-term cold flow of gasket materials. The compound shall not depend on oxidizing, evaporation, or chemical action for its adhesive or cohesive strength. It shall be supplied in extruded rope form of suitable cross section and in such sizes to seal the joint space. The Contractor shall use two (2) complete ropes at each joint.

Interior Finish Coat

After all other adjustment work has been completed, the interior surfaces of the adjustment, from the bottom of the frame to the top of the cone section, shall have a calcium aluminate high performance mortar finish applied which is then troweled and brushed to a smooth finish. Calcium Aluminate Cement shall be Strong Seal MS-2C or approved equal.

Basis of Payment.

This item shall be paid at the Contract Unit Price per Each for CHIMNEY REHABILITATION of restoration type specified (paved or non-paved) and shall include all work necessary for the complete adjustment and sealing of each manhole frame as specified in these provisions including measurement, procurement, installation, replacement, external chimney seals, adjustment rings and restoration including but not limited to full Depth Patching, PCC Sidewalk, Seeding, Driveway Pavement and Curb and Gutter removal and replacement.

SP-27 INTERNAL CHIMNEY SEALING

Prior to installation of the internal chimney seal, the adjustment shall be rehabilitated if it has not

been replaced. The Contractor shall wire brush all loose material and remove any broken portions of the adjustment and then fill the voids with a quick setting fiber reinforced calcium aluminate corrosion resistant cement mortar grout. At each point of active leakage, injection grout such as Avanti AV-100 (for severe active infiltration) or Strong-Plug (for active infiltration) shall be used as appropriate. The adjustment is then to be patched prior to installation of wall coating or internal chimney seal as per the manufacturer's recommendations (use of proper primer). The Internal Chimney Seal shall be Raven 581 or approved equal.

For surface preparation, surfaces should be thoroughly clean and dry. Concrete and mortar must be cured at least 7 days and no frost or wet conditions can be present during installation. Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement and hardeners. Fill bug holes, air pockets and other voids with Steel-Seam FT910. After ensuring that all surfaces are clean. The chimney seal coating material shall be applied evenly by spraying over the entire chimney seal area including the frame joint area and the vertical riser of the manhole cone including all extensions to the chimney area.

Surface preparation, primer and internal chimney seal application (including recommended thickness) should be made in accordance with the manufacturer's recommendations and will take precedence over the specifications hereinabove.

The final internal chimney seal shall pass visual inspection and be completely free of pinholes or voids.

Basis of Payment

This item shall be paid at the Contract Unit Price per Each for INTERNAL CHIMNEY SEALING and shall include all labor and materials necessary to rehabilitate the adjustment and install the internal chimney seal.

SP-28 FURNISH NEW LID AND FRAME

Where indicated on the plans, the existing manhole frame and cover shall be replaced with a new frame and cover by the Contractor. The replacement of the lid and frame shall be a separate pay item from the CHIMNEY REHABILITATION pay item.

The new frame and cover shall be the standard City of Geneva frame and cover, which is East Jordan 1022-3 cover and East Jordan #1050 frame, watertight lid with seal and the words "City of Geneva" and "Sanitary" cast onto the lid. The sanitary manhole lid shall be self-sealing solid lid with watertight gasket and concealed pick hole. Frames and adjusting rings shall be joined with preformed flexible joint sealant.

The Contractor is required to measure each cover and frame that needs replacing to ensure proper fit. Where required, the existing manhole frame and cover shall be removed and returned to the Owner and a new manhole frame and cover installed and adjusted by the Contractor as directed by the Engineer.

The Contractor shall salvage and dispose all covers that are scheduled for replacement.

Basis of Payment

This item shall be paid for at the Contract Unit Price per Each for FURNISH NEW LID AND FRAME.

SP-29 GROUT ENTIRE MANHOLE & GROUT BOTTOM 18''

This work shall govern all work, materials and testing required for chemical pressure grouting of manhole defects. Manholes or sections of manholes with leaks are shown on the Manhole Rehabilitation Schedule. Manhole structure grouting includes the sealing or plugging of the manhole base, walls, corbel/cone and chimney using chemical grout sealants to eliminate leakage. Chemical grout shall be injected into the soil surrounding the manhole as needed for complete sealing resulting in a grout curtain.

Grout Entire Manhole

The Contractor shall furnish all labor, supervision, materials, equipment and testing if required for the completion of chemical grout sealing of manhole defects in accordance with the Contract Documents. Manhole grouting shall not be performed until sealing of manhole frame and grade adjustments is complete.

Equipment: The basic equipment shall consist of chemical pumps, chemical containers, injection packers, hoses, valves, and all necessary equipment and tools required to seal manholes by chemical pressure grouting. The chemical injection pumps shall be equipped with pressure meters that will provide for monitoring pressure during the injection of the chemical sealants. When necessary, liquid bypass lines equipped with pressure-regulating bypass valves will be incorporated into the pumping station.

Chemical Sealing Materials: The chemical grout shall be Avanti AV-100 or approved equal which has a documented record of satisfactory performance in sewer usage. All grouting materials shall be delivered to the job site in the original, labeled, and unopened containers. The Contractor shall submit with his bid, the brand name manufacturer of the chemical grout(s) he intends to use. The chemical grout(s) selected by the Contractor is subject to approval of the Engineer.

For protection of the manhole structure through freeze thaw cycles, the top four feet (4') of the structure shall be a urethane base grout AV-248 Low Viscosity or approved equal.

Mixing and handling of chemical grout, which may be toxic under certain conditions, shall be in accordance with the recommendations of the manufacturer and in such manner to minimize hazard to personnel. It is the responsibility of the Contractor to provide appropriate protective measures to ensure that chemicals or gels are handled by authorized personnel in the proper manner. All equipment shall be subjected to the approval of the Engineer. Only personnel thoroughly familiar with the handling of the grout material and additives shall perform the grouting operations.

Preliminary repairs: All cracked or deteriorated material shall be removed from the manhole and the Contractor shall cut and trim all roots within the manhole. The Contractor shall seal all unsealed lifting holes, unsealed step holes, pre-cast manhole section joints, and voids larger than approximately ½" in thickness with a waterproof quick-setting mortar, Strong Seal QSR; Quadex Hyperform or an approved equal in accordance with the manufacturer's specifications.

Drilling and Injection: Injection holes shall be drilled through the manhole at 120 degree angles from each other at the same plane of elevation. Rows shall be separated no more than four vertical feet, and the holes shall be staggered with the holes in the rows above and below. Provide additional injection holes near observed defects, bench and trough and at pipe seals. At all visible leaks and areas with evidence of leaks within the manhole structure, a hole shall be carefully drilled from within the manhole and shall extend through the entire manhole wall. A minimum of 6 injection holes shall be provided in the walls/cone and three injection holes at each pipe seal and at the bench/trough.

Manholes shall be grouted completely from the pipe invert to the top of the corbel or bottom of flattop. Grout shall be injected through the holes under pressure with a suitable probe. Grout ports or sealant injection devices shall be placed in these previously drilled holes in such a way as to provide a watertight seal between the holes and the injection device. A hose, or hoses, shall be attached to the injection device from an injection pump. Grouting from the ground surface shall not be allowed. Grout travel shall be verified by observation of grout to defects or adjacent injection holes. Provide additional injection holes, if necessary to ensure grout travel. Care shall be taken during the pumping operation to ensure that excessive pressures do not develop and cause damage to the manhole structure or surrounding surface features. Grout shall be injected through the lowest holes first. The procedure shall be completed until the manhole is externally sealed with grout, resulting in a chemical grout curtain.

Sealing after grouting: Upon completion of the injection, all chemical grout material shall be removed from interior surfaces of the manhole. After grouting is completed, the grout ports shall be removed, and the remaining holes shall be cleaned with a drill and filled with quick-setting hydraulic mortar and troweled flush with the surface of the manhole walls or other surfaces. The mortar used shall be a non-shrink patching mortar such as Strong Seal QSR; Quadex Hyperform or an approved equal. In addition to filling the holes the interior surface of the manhole shall be patched with a ½-inch thick quick setting mortar such as Strong Seal QSR; Quadex Hyperform or an approved equal. This coating shall cover at least 6" either side of the joint sealed or where injection holes were drilled.

Grout Bottom 18"

The procedures for Grout Bottom, 18" shall be the same as indicated above, but shall be limited to the bottom portion of the manhole. Pipe seal grouting shall include all pipe seals in the specified manhole and grouting of the bench/trough, wall/bench joint and walls to the maximum height of 18" from the crown of the pipe. Provide additional injection holes near observed defects, bench and trough and at pipe seals. At all visible leaks, a hole shall be carefully drilled from within the manhole and shall extend through the entire manhole wall. A minimum of three injection holes at each pipe seal and at the bench/trough shall be required.

Sealing after grouting manhole bottoms shall be the same as above and shall include patching with a ½" thick quick setting mortar such as Strong Seal QSR; Quadex Hyperform or an approved equal and shall cover at least 6" either side of each location sealed or where injection holes were drilled.

Grout Tests

The Contractor shall perform and record a grout gel test in the presence of the Engineer. This test shall include the recording of the grout tank solution temperature, catalyst tank solution temperature, ambient air temperature in truck, and gel time of the sample. The test shall be performed whenever the following conditions occur:

1. At the beginning of each day. The material in the hoses shall be recycled to the tanks and a sample shall be taken;
2. Whenever new batches of grout are mixed; and
3. Whenever the temperature in the tanks or ambient temperature have changed by more than plus or minus ten degrees Fahrenheit (+/- 10°F) from the previous gel test.

Final Acceptance

After the specified sealing work has been completed, the manholes shall be visually inspected by the Contractor (as required) in the presence of the Owner/Engineer and found to be acceptable. All rehabilitated manholes shall also be re-inspected for leaks one year after completion and resealed, if necessary, at no additional cost to the Owner.

Basis of Payment

The Contractor shall provide the necessary tools and equipment to complete all work as described above. Payment shall be based on the Contract Unit Price per Each for GROUT ENTIRE MANHOLE or GROUT BOTTOM 18".

SP-30 REPLACE BENCH AND TROUGH

This work item shall consist of the complete removal and reconstruction of the entire manhole bench and trough. The existing deteriorated bench and trough area shall be completely removed to a minimum depth of 12 inches below the existing invert. Care must be taken to avoid damaging other areas of the manhole structure. Loose and broken concrete shall be routinely removed from the manhole to eliminate the possibility of pieces entering the sewer lines. After removal of loose and broken concrete, CA-7, (¾-inch - 1-inch) washed limestone with no fines shall be installed to a depth of (8) eight inches as a base for the new bench and trough to be formed using Portland Cement Concrete, (PCC). Sanitary sewer service shall be maintained during bench and trough replacement. Minimum bench and trough thickness shall be 4 inches in depth.

All inverts shall be formed to the diameter of the incoming and outgoing pipe diameter up to the pipe centerline and vertical beyond that point. The invert shall be formed to a depth of one-half to two-

thirds the pipe diameter. Inverts shall be formed with a PCC mortar material and steel-trowel to produce a dense, smooth finish and shape to form a "U"- shaped channel connecting the pipelines. The new invert shall provide smooth transitions for pipes of different sizes, different elevations, and/or at different angles. The Contractor shall form benches to provide self-cleaning by sloping normally two (2) inches from manhole wall to edge of "U" channel with a smooth finish. The trough shall be troweled so that the wetted surface is smooth. The invert of the trough shall form a continuous conduit with the sewer pipe entering and leaving the manhole provided that the pipe was originally constructed or intended to be constructed in this manner. Care shall be taken to prevent the degradation of freshly poured benches and troughs.

The bench and trough shall be furnished in such a manner so that a watertight seal exists between the manhole walls, pipe, and bench/trough area. The finished bench and trough shall be cleaned of silt, debris or foreign matter of any kind.

Basis of Payment

This item shall be paid at the Contract Unit Price per Each for REPLACE BENCH AND TROUGH and shall include furnishing all labor, supervision, materials, equipment, and testing necessary to complete the work including removal of the existing defective bench and trough, and installation and sealing of the replacement bench and trough.

SP-31 CEMENTITIOUS COAT

Manhole sealing shall consist of all necessary measures to internally seal the manhole including cementitious wall coating, external or internal grouting, and reconstruction of bench/trough and shall establish structural integrity for the manhole and shall eliminate inflow and infiltration.

This work shall provide for a monolithic fiber-reinforced calcium aluminate structural cementitious spray liner applied in two ½ inch lifts intended to seal the entire manhole structure. The spray liner shall be a complete manhole reconstruction that stops inflow and infiltration, providing a leak free structure, restoring structural integrity and providing protection against corrosion.

This specification shall govern all work, materials, and equipment required for manhole rehabilitation for the purpose of eliminating infiltration, exfiltration, providing corrosion protection, repair of voids, and restoration of the structural integrity of the manhole as a result of applying a monolithic fiber-reinforced structural cementitious liner to the adjustment, cone, wall and bench surfaces of brick, block, pre-cast or poured concrete, or other masonry construction material.

Described are procedures for cleaning, preparation, application and testing. The applicator, approved and trained by the manufacturer, shall furnish all labor, equipment and materials for applying a cementitious mix to form two coats of a structural monolithic liner, with machinery specially designed for the application. All aspects of the installations shall be in accordance with the manufacturer's recommendation and per the following specifications which includes:

- A. Remove loose and unsound material
- B. Clean area to be sprayed

- C. Eliminate infiltration
- D. Repair and fill voids
- E. Repair and seal bench trough/inverts
- F. Spraying the cementitious monolithic liner

Remove loose and unsound material

Loose and protruding brick, mortar and concrete shall be removed using a mason's hammer and chisel and/or a scraper. Any loose debris on the benches, inverts or walls of the manhole shall be removed by means of a scraper and vacuum machine or other approved method as long as it is taken from the manhole and not caused to go into the sewer. Any damaged manhole steps shall be removed prior to cleaning the interior of the manhole. Place covers over invert to prevent extraneous material from entering the sewer lines before cleaning.

Clean area to be sprayed

The Contractor shall clean the interior surfaces of the manhole by removing all debris, dirt, oil, grease, remains of old coating materials, and any other extraneous materials. The Contractor shall then pressure wash (minimum 3,000 psi) the manhole walls to remove loose mortar, concrete, roots, and debris. Heavy grease build-up or unusual conditions may require hydro-blasting or chemical cleaning. Loose and protruding brick, mortar and concrete shall be removed using a mason's hammer and chisel and or scraper.

Eliminate infiltration

The following are approved for patching material: Strong Seal QSR; Quadex Hyperform; or approved equal. This quick setting fiber reinforced calcium aluminate corrosion resistant cementitious material shall be used as a patching material and is to be mixed and applied according to manufacturer's recommendations and shall have the following minimum requirements:

| | | |
|----------------------------------|-----------|---|
| Compressive Strength | ASTM C109 | >1800 psi, 1 hr >2600 psi, 24 hrs |
| Bond Calcium Aluminate Cement | ASTM C882 | >1600 psi, 28 days Sulfate resistant |
| Applied Density | | 105 lbs/ft ³ ± 5 |
| Shrinkage | ASTM C490 | 0% at 90% R. H. |
| Placement Time | | 5 to 10 minutes |
| Set Time | | 15 to 30 minutes |

Approved materials to stop visible infiltration are the following: Strong-Plug; Quadex Quad-Plug; or approved equal. This rapid setting cementitious product specifically formulated for leak control, shall be used to stop minor water infiltration and shall be mixed and applied according to manufacturer's recommendations and shall have the following minimum requirements:

| | | |
|----------------------|------------|-------------------------------------|
| Compressive Strength | ASTM C109 | >1000 psi, 1hr >2500 psi, 24 hrs |
| Sulfate Resistance | ASTM C267 | No wt loss, 15 cycles @2000 ppm |
| Freeze/Thaw | ASTM C666, | Method A 100 cycles |
| Pull Out Strength | ASTM C234 | 14,000 lbs. |
| Set Time | | <1. 0 minute |

Approved materials to stop severe active infiltration are the following: Hydrostop-Flex 40/500; Avanti AV-100; Deneef Denepox 40; or approved equal. Grouting installation shall conform to ASTM F2414-04. Grouting shall be performed anywhere where active infiltration cannot be stopped with the cementitious grout. All grouting work shall be considered incidental to the unit price bid payment item for CEMENTITIOUS MANHOLE SEALING.

Repair and fill voids

The Contractor shall fill any large voids using one of the approved patching materials. Active Leaks shall be stopped using quick-setting, specially formulated mixes, according to manufacturer's recommendations. Some leaks may require weep holes to localize infiltration during the application. After application the weep holes shall be plugged with quick setting material. After repairing and filling voids and preparations are complete, remove all loose material and wash again. Any bench or invert repairs shall be made at this time using the quick-setting patching mix.

Repair and seal bench trough/inverts

Invert repair shall be performed on all inverts with visible damage or where infiltration is present or when vacuum testing is specified. After blocking the flow through the manhole and thoroughly cleaning the invert, a quick-setting patch material shall be applied in an expeditious manner. The material shall be troweled uniformly onto the damaged invert at a minimum thickness of 1/2 inch at the invert extending out onto the bench of the manhole sufficiently to tie into the structural monolithic liner to be spray applied. The finished invert shall be smooth and free of ridges. The flow may be re-established in the manhole within 30 minutes after placement of the material.

Spraying the cementitious monolithic liner

Liner Material shall be Strong-Seal MS2-C or an approved equal and shall be made with calcium aluminate cement and shall be used according to manufacturer's recommendations in applications where there is evidence of mild sulfide conditions (substrate surface of pH 2.0 or higher). The cementitious liner shall be used to form a structural monolithic liner covering all interior manhole surfaces and shall have the following minimum requirements:

| | | |
|-----------------------|-------------------|----------------------------|
| Compressive Strength | ASTM C109 28 days | >9000 psi |
| Tensile Strength | ASTM C496 28 days | >800 psi |
| Flexural Strength | ASTM C293 28 days | >1200 psi |
| Shrinkage @90% R. H. | ASTM C596 28 days | 0% |
| Bond | ASTM C882 28 days | >2000 psi |
| Density, When Applied | | 134 ± 5lbs/ft ³ |
| Freeze/Thaw | ASTM C666 | 300 cycles no vis. damage |

During application the surface shall be clean and free of all foreign material and shall be damp without noticeable free water droplets or running water, but totally saturated just prior to application of material. Materials shall be spray applied in two lifts, at least 24 hours apart. Minimum total thickness for each pass shall not be less than ½ inch and shall be from the bottom of the frame to the invert of the manhole. The surface shall then be troweled to a relatively smooth finish being careful not to over trowel. A brush finish shall be applied to the trowel-finished surface.

After the walls are coated, the invert covers shall be removed, and the bench sprayed with excess materials applied in such a manner that a gradual slope is produced from the walls to the invert with the thickness at the invert to be no less than ½ inch. The wall/bench intersection shall be rounded to a uniform radius the full circumference of the intersection. Trough area shall be coated as required to seal all cracks and to provide a smooth surface.

The material shall have minimum of four (4) hours cure time before being subjected to active flow. Ambient conditions in the manhole are adequate for curing as long as the manhole is covered. Traffic shall not be allowed over manholes for 12 hours after reconstruction is complete. Caution shall be taken to minimize exposure of applied product to sunlight, quick surface drying and air movement. At no time should the finished product be exposed to sunlight or air movement for longer than 15 minutes before replacing the cover. In extremely hot and arid climates, the manhole should be shaded while reconstruction is in process.

No application shall be made if ambient temperature is below 40 degrees Fahrenheit. No application shall be made to frozen surfaces or if freezing is expected to occur within the substrate within 24 hours after application. If the ambient temperatures are in excess of 95 degrees Fahrenheit, precautions shall be taken to keep the mix temperatures at time of application below 90 degrees Fahrenheit. Water temperature shall not exceed 80 degrees Fahrenheit. Chill with ice if necessary.

Quality control

Final acceptance shall be made upon successfully passing:

1. Vacuum test as described under the provision VACUUM TESTING.
2. Compressive Strength test: Sample and make five test cylinders per ASTM C 31 and analyze with ASTM C 39, or as specified by contract document, for testing compressive strength from each day's work (for Vertical Infrastructure) or every 32,000 lbs. of material (for Horizontal Infrastructure). Label the cylinders with the date, location, project, and product batch numbers. The product batch numbers are located on each geopolymer material bag. Send the cylinders to a third-party laboratory or the manufacturer for verification. Test in

accordance with ASTM C 39, or as specified in contract documents. Test the geopolymer material for compressive strength at 7 days (1 cylinder) and 28 days (3 cylinders) and leave 1 cylinder for retainage. Performance and Material Testing for manholes:

i. Performance testing as directed in ASTM F 2551.

ii. Submit the following information to the engineer: Product data, including manufacturer and brand name along with laboratory test results to verify 28- day compressive strength in accordance with ASTM C 39 or ASTM C 109. The samples must be undisturbed for a period of at least 24 hours before they can be transported. The Engineer will require that samples of applied material be taken representative of each day's work of material used. Samples shall be obtained from the pump, hose or nozzle, identified, and sent to an independent test laboratory to verify 28-day compression strength testing as described in ASTM C 39 or ASTM C 109 and shall have a minimum average of the strength set forth hereinabove in Section F.

Basis of Payment

This item shall be paid at the Contract Unit Price per Each for CEMENTITIOUS COAT and shall include all labor and materials to rehabilitate the manhole as described in the above provisions.

VACUUM TESTING shall be measured and paid for separately. The compressive strength tests shall be considered incidental.

SP-32 VACUUM TESTING

This specification shall govern the vacuum testing of sanitary sewer manholes and structures and shall be used as a method of determining acceptability by the Owner, in accepting maintenance or installation of a sanitary sewer manhole or structure. Vacuum testing shall be according to ASTM C1244, except as specified otherwise herein. Other forms of testing of some manholes may be required, as deemed necessary by the Owner.

At least twenty-five percent (25%) of the total number of sanitary sewer manholes installed or receiving cementitious coating shall be vacuum tested as specified herein. Manholes to be tested shall be selected by the Engineer at the time of testing. No advance notice will be provided to the Contractor as to which manholes will be tested. If more than ten percent (10%) of the manholes tested fail the initial test, an additional twenty-five percent (25%) of the total manholes shall be tested at no additional charge. This process shall continue until a series of manholes (25% of the total) successfully test with no more than 10% initial failure or until all manholes have been tested. Additional vacuum testing required after failing the initial testing will be considered incidental to the contract and will not be paid for separately.

Manholes shall be tested after installation or rehabilitation and when all connections are in place. Lift holes, if any, shall be plugged with an approved, non-shrinkable grout prior to testing. Drop connections shall be installed prior to testing. The vacuum test shall include testing of the seal

between the cast iron frame and the concrete cone, slab or grade rings. Manhole vacuum testing shall be performed after all adjacent underground utilities have been installed and all manholes have been backfilled and finished to final grade.

All manholes found to have been damaged or disturbed prior to the final (one-year) inspection shall be corrected and vacuum tested at that time, regardless of whether or not they were originally vacuum tested. If a coating or lining is to be applied to the interior of the manhole the vacuum test must not be performed until the coating or lining has been cured according to the manufacturer's recommendations.

Procedure for testing shall be as follows:

1. Temporarily plug all pipes entering the manhole. Each plug must be installed at a location beyond the manhole/pipe gasket (i. e. outside the manhole wall), and shall be braced to prevent the plug or pipe from being drawn into the manhole.
2. The test head shall be placed inside the rim of the cast iron frame at the top of the manhole and inflated, in accordance with the manufacturer's recommendations.
3. A vacuum of at least ten inches of mercury (10" Hg) shall be drawn on the manhole. Shut the valve on the vacuum line to the manhole and shut off the pump or disconnect the vacuum line from the pump.
4. The pressure gauge shall be liquid filled, having a 3. 5-inch diameter face with a reading from zero to thirty inches of mercury.

The manhole shall be considered to pass the vacuum test if the vacuum reading does not drop more than 1" Hg (i. e. from 10" Hg to 9" Hg) during the following minimum test times for various manhole diameters.

| Depth (ft.) | Manhole Diameter (inches) | | | | | | | | |
|----------------|---------------------------|----|----|----|----|----|----|-----|-----|
| | 30 | 33 | 36 | 42 | 48 | 54 | 60 | 66 | 72 |
| | Test Time (Seconds) | | | | | | | | |
| 8 | 11 | 12 | 14 | 17 | 20 | 23 | 26 | 29 | 33 |
| 10 | 14 | 15 | 18 | 21 | 25 | 29 | 33 | 36 | 41 |
| 12 | 17 | 18 | 21 | 25 | 30 | 35 | 39 | 43 | 49 |
| 14 | 20 | 21 | 25 | 30 | 35 | 41 | 46 | 51 | 57 |
| 16 | 22 | 24 | 29 | 34 | 40 | 46 | 52 | 58 | 67 |
| 18 | 25 | 27 | 32 | 38 | 45 | 52 | 59 | 65 | 73 |
| 20 | 28 | 30 | 35 | 42 | 50 | 53 | 65 | 72 | 81 |
| 22 | 31 | 33 | 39 | 46 | 55 | 64 | 72 | 79 | 89 |
| 24 | 33 | 36 | 42 | 51 | 59 | 64 | 78 | 87 | 97 |
| 26 | 36 | 39 | 46 | 55 | 64 | 75 | 85 | 94 | 105 |
| 28 | 39 | 42 | 49 | 59 | 69 | 81 | 91 | 101 | 113 |
| 30 | 42 | 45 | 53 | 65 | 74 | 87 | 89 | 108 | 121 |

Basis of Payment:

This item shall be paid at the Contract Unit Price per Each for VACUUM TESTING and shall include furnishing all labor, supervision, materials, equipment, and testing necessary to complete the work.

SP-33 BEDDING AND BACKFILL

Granular bedding for all sewer trenches shall be crushed stone or crushed gravel, ASTM Designation Class 1A and IDOT Specifications (1004.05) CA-7 gradation and shall be placed to the width and depth as shown on the Plans. The pipe barrel shall have full bearing for its entire length. Bell holes shall be excavated for the joints. Any part of the trench excavated below grade shall be corrected to grade with same type and class of stone previously specified, unless otherwise directed by the Engineer, and in accordance with Section 20-4.05 of the Standard Specifications. The cost of furnishing and placing Granular Bedding shall be considered incidental to the cost of the conduit or structure.

Should the Engineer determine during construction that additional granular bedding is required under the pipe due to unstable soil conditions, the Contractor shall remove and dispose of such unsuitable soil and replace same with the specified coarse aggregate. This work shall be conducted as set forth in Article 20-4.05 of the Standard Specifications. Soil removal and replacement shall be incidental to the contract, which shall include excavation, disposal of unstable soil and installation of additional bedding material.

The screening and crushing of on-site sand and gravel deposits will not be allowed for reuse as bedding material.

SP-34 PIPE AND PRECAST CONCRETE STRUCTURES MATERIAL TESTS

All pipe and precast concrete structures shall be tested and inspected for compliance with the appropriate A.S.A., A.S.T.M., and Manufacturer's Specifications by a reputable Testing Company. Prior to delivering pipe and precast concrete structures to the job site, all approved pipe and precast concrete structures shall be marked by the testing company and two (2) copies of the satisfactory test reports shall be provided to the Engineer. Any pipe or concrete structures delivered to the site without proper markings or without test reports in the possession of the Engineer will be rejected for use.

SP-35 SANITARY SEWER INSTALLATION, MATERIALS, AND TESTING

This item consists of furnishing all labor, material, and equipment necessary to perform the work required under this Special Provision and in accordance with the details shown in the Plans, and as directed by the Engineer. It shall consist of hauling and distributing all pipes, castings, fittings, accessories, and shall also include the excavation of trenches to the

required depth; dewatering; sheeting, bracing and supporting the adjoining ground or structures as required by OSHA or as needed to protect adjacent structures; provide barricades, guards and warning lights, laying, cleaning and testing the pipe, tree and shrub removal and disposal, granular bedding and trench backfilling and consolidating the trenches, dewatering the underlying soil stratum; cleaning and maintaining the streets or other surfaces over the trenches; relocation of power poles and street lights and maintaining the streets or other surfaces over the trenches.

Connection to the existing sanitary sewers shall be made using CNSS non-shear sewer couplings as manufactured by Cascade Water Works Mfg. Co. or approved equal. The coupling shall be constructed with an outer shell of T-304 (ASTM A-240/ASME SA-240) stainless steel with three stainless steel heavy duty worm gear fasteners (SAE J-1508 - MIL 5059-A) permanently welded in place and passivated per ASTM A-380. The shell shall fully encircle a 40 durometer ribbed gasket made from virgin SBR (ASTM D2000) rubber formulated for sewer service. Connection to the existing sanitary service shall also be made with non-shear sewer couplings. The couplings shall be furnished with suitable bushings to correct for the difference in pipe diameters (see detail shown on the Plans).

Sanitary sewers shall be constructed and tested of the material, of the type and size as follows:

PVC Pipe Materials & Testing

1. Material

- a) All sanitary sewer pipe shall be of the following materials as called out on the Plans:
 - PVC SDR 26, ASTM D-3034 with ASTM D-3212 joints and ASTM F-477 elastomeric rubber ring gaskets and having a minimum pipe stiffness of 115 PSI.
- b) All fittings shall be made from PVC compound meeting the requirements of Type 1, Grade 1, Polyvinyl Chloride as outlined in ASTM D1784. All fittings shall match the pipe class of the mainline sewer as called out on the Plans. Only single-piece molded fittings will be allowed. Fittings that are heat fused or fabricated by heating and bending will not be allowed. All fittings shall be Harco or approved equal of the same type and classification as the main sewer line piping.

2. Laboratory Test

Contractor shall submit certified copies of all reports of tests conducted by an independent laboratory before installation of PVC Plastic Pipe.

Tests shall be conducted in accordance with Standard Method for “External Loading Properties of Plastic Pipe by Parallel-Plate Loading”, ASTM Standard D2412. Tests shall also be conducted in accordance with ASTM D3212 to demonstrate joint performance at 5% maximum diametric deflection of the spigot, as specified in 7.4 of ASTM D3212.

3. **Straightness**

Maximum allowable ordinate as measure from the concave side of the pipe shall not exceed 1/16 inch per foot of length.

4. **Internal Diameter**

Pipe shall be so constructed that the initial internal vertical diameter does not decrease by more than 5% in order to provide the complete hydraulic carrying capacity conceived by the design engineer, and to obtain the joint performance at 5% maximum diametric deflection as specified in 7.4 of ASTM D3212. Contractor’s attention is called particularly to other sections of this Specification, “Pipe Installation and Field Testing” and “Final Acceptance”.

5. **Pipe Installation and Field Testing**

Pipe shall be installed in full compliance with the Recommended Practice for “Underground Installation of Flexible Thermoplastic Sewer Pipe”, ASTM Standard D2321, except that bedding and backfill material shall be as stipulated in the Plans. In addition to the construction and testing procedures outlined in other sections of the Specifications, the Contractor shall be required to install the pipe in such a manner that the diametric deflection of the pipe shall not exceed 5% and the material surrounding the pipe be compacted to the required Standard Proctor Densities outlined in D2321. The area requiring compaction shall include the bed and sidefill material and also the material placed above the pipe for a distance of 12 inches over the top of the pipe. The Engineer may require up to 10 random compaction tests to be completed by an independent laboratory and paid for by the Owner. If any of these tests indicate that the material has not been compacted to the required density, the Contractor shall recompact said material at no additional cost to the Owner, and the Engineer shall then have the right to require additional compaction tests to insure that this or other material is compacted to the proper density without any additional cost to the Owner.

Final Acceptance:

All PVC pipelines shall be measured for vertical ring deflection at least 30 days after completion of the backfill. Maximum ring deflection of the pipeline under load shall be limited to 5 percent of the vertical internal pipe diameter. All pipe exceeding this deflection shall be considered to have reached the limits of their serviceability and shall be relaid or replaced by the Contractor at no additional cost to the Owner. The cost of all deflection testing shall be borne by the Contractor and shall be accomplished by using a deflectometer, which will produce a continuous record of pipe deflection, or by pulling a mandrel, sphere, or pin-type go/no-go device through the pipeline. The diameter of the go/no-go device shall be 95 percent of the undeflected inside diameter of the flexible pipe.

This testing shall be in addition to the televising called for and required for sanitary sewers under Article 31-1.12 of the Standard Specifications. Since the sections of sewer replacement include sanitary services, the Contractor will not be required to run an air test on these PVC sewers.

If the sewers being tested do not pass the deflection test or television test, the necessary repairs shall be made and the tests repeated until satisfactory testing is obtained. Lines and grade for sewers shall be constructed to the tolerances noted in Article 31-1.13D of the Standard Specifications. Sewers not meeting these requirements shall be repaired as directed by the Engineer unless otherwise approved.

Payment shall be made at the contract unit price per lineal foot for "SANITARY SEWER" of the size and class specified, which shall include excavation, bedding, backfill, compaction, testing, and all other appurtenances.

Ductile Iron Pipe Materials & Testing

- a) **Material:** All sanitary sewer pipe shall be of the following materials as called out on the Plans:
- Pipe: ANSI/AWWA C151/A21.51. Class 52
 - Joints: ANSI/AWWA C111/A21.11 Push on or mechanical joint, all joints to be restrained.
 - Fittings: ANSI/AWWA C153/A21.53. Compact with locking gaskets or mechanical restraint.
 - Exterior protection: Standard asphaltic coating, 1 mil
 - Interior protection: Cement lined, 1 mil bitumastic coating
- b) **Restraint:** All piping is to be mechanically restrained using locking gaskets: American Fastite Joint Pipe with Fast Grip Gasket; US Pipe Tyton Joint with Field Lok 350 Gasket; or mechanical joint restraint using EBAA Iron

Megalug.

- c) Cleaning of Forcemain: Upon completion of the newly laid forcemain, the main shall be flushed at a rate of not less than 2.5 fps, to remove any foreign matter that might be in the main.
- d) Hydroactive Tests; Pressure Tests: After the pipe has been laid and partially backfilled, the newly laid pipe shall be temporarily plugged and subjected to hydrostatic tests in accordance with Section 13 of AWWA Specification C600. The duration of the test shall be a minimum of one hour @ 150 P.S.I. and shall not vary more than 5 psi. for the duration of the testing period.
- e) Leakage Test: Upon completion of the pressure test, a leakage test shall be conducted. The duration of the test shall be a minimum of one hour at 150 psi pressure. The allowable leakage shall be determined by the formula:

$$L = \frac{SD\sqrt{P}}{164,400}$$

Where,

L = Allowable leakage in gallons per hour

S = Length of pipe line tested in feet.

D = Nominal Diameter of pipe in inches

P = Average test pressure in pounds per square inch.

Leakage is defined as the quantity of water to be supplied in the section under test which is necessary to maintain the test pressure after the pipe has been filled with water and the air exp

- f) Final Acceptance: If the DIP force main sewers being tested do not pass the pressure test or infiltration test, the necessary repairs shall be made and the tests repeated until satisfactory testing is obtained. Sewers not meeting these requirements shall be repaired as directed by the Engineer unless otherwise approved.
- g) This work shall be paid for at the contract unit price per lineal foot for “6” DIP Class 52” and per fitting “4”x6” DIP Increaser” and “6” DIP 45° Elbow”.

SP-36 SANITARY MANHOLES AND TESTING

New sanitary manholes shall be constructed of precast reinforced concrete in accordance

with the detail included in the Plans. Pipe connections to the manholes and all lift holes shall be plugged water tight with an approved non-shrink grout. All manhole components, including cast iron frame, adjusting rings, cone and barrel sections shall be sealed watertight with a minimum of two (2) one-inch wide strips of butyl rope joint sealant. Each manhole cone and barrel section joint shall also be externally sealed with a 9" wide strip of MAC WRAP with two 5/8" steel straps, as manufactured by MAR-MAC Manufacturing Co. or approved equal. The outside joints of each manhole chimney (including cast iron frame, all adjusting rings and top of manhole structure) shall also be externally sealed with Infi-Shield Uni-Bands, Canusa Wrapid Seals, Cretex external chimney seals, Internal/External Adapter Seals by Getum, Inc. or approved equal with a vertical lap and horizontal lap per manufacturer.

The new frame and cover shall be the standard City of Geneva frame and cover, which is East Jordan 1022-3 cover and East Jordan #1050 frame, watertight lid with seal and the words "City of Geneva" and "Sanitary" cast onto the lid. The sanitary manhole lid shall be self-sealing solid lid with watertight gasket and concealed pick hole. Frames and adjusting rings shall be joined with preformed flexible joint sealant.

All manhole adjustments of casting frames shall be made with precast concrete adjusting rings in the manner as set forth on the detail sheet of the Plans. No more than eight inches (8") of adjusting rings will be permitted. The number of adjusting rings required shall be held to a minimum based on standard thicknesses available.

This work shall be paid for at the contract unit price each for SANITARY MANHOLES, of the type and diameter specified, which price shall include the cost of excavation, testing, backfill, surface restoration, frame and cover and all other appurtenances.

SP-37 REMOVAL OF EXCESS EXCAVATED MATERIAL

All excess excavated material not needed for backfill shall be removed, hauled and disposed of in accordance with Federal, State and local requirements or any other applicable statute or regulation associated with the disposal of this type of waste, including the handling, manifesting, transportation and disposal of the soil as a special waste.

The Owner shall not be responsible for any cross-contamination that may occur to the soil once it is excavated and transported off of the site (i.e., by contaminated excavation equipment, contaminated trucks, etc.). The Contractor shall have total and complete responsibility for the soil once it leaves the site, including responsibility for any and all rejected loads and the soil's ultimate, legal disposition.

The Contractor shall provide a written description of how they intend to dispose, use, store or otherwise handle the excavated soil and to which permitted facility (if any) the Contractor

intends to transport the soil for disposal prior to execution of the contract by the Owner. Removed and disposal of excess excavated material shall be in accordance with one of the following methods or other method as recommended by the Contractor and approved by the Owner.

METHOD NO. 1 – DISPOSAL AT A SITE OTHER THAN A CCDD OR SOIL ONLY FACILITY

1. All excess material shall be removed, hauled and disposed of in accordance with Article 202.03 of the IDOT Specifications. Add the following to the third paragraph of Article 202.03 of the IDOT Specifications:

“The Contractor shall not conduct any generation, transportation, or recycling of construction or demolition debris, clean or general or uncontaminated soil generated during construction, remodeling, repair, and demolition of utilities, structures, and road that is not commingled with any waste, without the maintenance of documentation identifying the hauler, generator, place of origin of the debris or soil, the weight of volume of the debris or soil, and the location, owner, and operator of the facility where the debris or soil was transferred, disposed, recycled or treated. This documentation must be maintained by the Contractor for 3 years.”

2. The documentation must be similar or contain the information as shown on Form 1 of this Section.
3. The Contractor shall supply copies of all required or requested documentation to both the Owner and Engineer as generated. Failure to submit required or requested documentation may result in delaying the processing of pay requests.
4. Contractor shall obtain permission in writing from the facility and/or property owner accepting the excess excavated material and provide copy of the written permission to the Owner at the preconstruction meeting.

METHOD NO. 2 – DISPOSAL AT A CCDD OR SOIL ONLY FACILITY

1. All uncontaminated soil comingled with Clean Construction and Demolition Debris (“CCDD”) material must be certified as such in order for the soil to be disposed at a CCDD or soil only facility permitted by the Illinois Environmental Protection Agency (“Illinois EPA”). All requirements of the State of Illinois Environmental Protection Act (“Act”) and 35 IAC 1100 “Clean Construction or Demolition Debris Operations and Uncontaminated Soil Fill Operations” with regard to uncontaminated soil and/or CCDD must

be met. This includes providing and completing all forms, certifications and testing at the sole expense of the Contractor as required by statutes and regulations.

2. No guarantee is made or implied by the Owner/Engineer that a CCDD or soil only disposal facility will accept the soil for disposal. It is the Contractor's responsibility to select the CCDD or soil only facility for disposal and is the Contractor's responsibility for its proper disposal.
3. The documentation must be similar or contain the information as shown on Form 1 of this Section.
4. The Contractor shall supply copies of all required or requested documentation to both the Owner and Engineer as generated. Failure to submit required or requested documentation may result in delaying the processing of pay requests.
5. Contractor shall obtain permission in writing from the facility and/or property owner accepting the excess excavated material and provide copy of the written permission to the Owner at the pre-construction meeting.

FORM 1

CONSTRUCTION DEBRIS MANIFEST

Ticket No. _____

Contract No. _____

Generator _____

Hauler _____

Truck No. _____

Description of Material: _____

Approximate Weight of Material _____

Approximate Volume of Material _____

Disposition of Material:

Location: _____

Date: _____

Time: _____

Owner: _____

Operator: _____

SP-38 SUBSTITUTION OF MATERIALS, ACCESSORIES AND EQUIPMENT

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of the proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function and quality required. Unless the specification or description contained is followed by the words reading that no like, equivalent or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be accepted by the Engineer under the following circumstances:

- 1) "Or-equal": If in the Engineer's sole discretion an item of material or equipment proposed by the Contractor is functionally equal to that named and sufficiently similar so that no change in the related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in the Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for acceptance of proposed substitute items.
- 2) Substitute Items: If in the Engineer's sole discretion an item of material or equipment proposed by the Contractor does not qualify as an "or-equal" item under subparagraph A.1, it will be considered a proposed substitute item. The Contractor shall submit sufficient information as provided below to allow the Engineer to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. The procedure for review by the Engineer will include the following as supplemented in the Specifications and as the Engineer may decide is appropriate under the circumstances. Requests for review of proposed substitute items of material or equipment will not be accepted by the engineer from anyone other than the Contractor. If the Contractor wishes to furnish or use a substitute item of material or equipment, the Contractor shall first make written application to the Engineer for acceptance thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar in substance to that specified and be suited to the same use as that specified. The application will state the extent, if any, to which the evaluation or acceptance of the proposed substitute will prejudice the Contractor's achievement of Substantial Completion on time, whether or not acceptance of the substitute for use in the work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with the Owner for work on the Project) to adapt the design to the proposed substitute and whether or not incorporation or use of the substitute in connection with the work is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified will be identified in the application and available maintenance, repair

and replacement service will be indicated. The application will also contain an itemized estimate of all costs or credits that will result directly or indirectly from acceptance of such substitute, including cost of redesign and claims of other contracts affected by the resulting change, all of which will be considered by the Engineer in evaluating the proposed substitute. The Engineer may require the Contractor to furnish additional data about the proposed substitute.

- 3) Contractor's Expense: All data to be provided by the Contractor in support of any proposed "or-equal" or substitute item will be at the Contractor's expense.
- B. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence or procedure of construction is shown or indicated in and expressly required by the Contract Documents, the Contractor may furnish or utilize a substitute means method, technique, sequence or procedure of construction acceptable to the Engineer. The Contractor shall submit sufficient information to allow the Engineer, in the Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The procedure for review by the Engineer will be similar to that provided in subparagraph A.2.
- C. Engineer's Evaluation: The Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to paragraphs A.2 and B. The Engineer will be the sole judge of acceptability. No "or-equal" or substitute will be ordered, installed or utilized without the Engineer's prior written acceptance which will be evidenced by either a Change Order or an approved Shop Drawing. The Owner may require the Contractor to furnish, at the Contractor's expense, a special performance guarantee or other surety with respect to any "or-equal" or substitute. The Engineer will record the time required by the Engineer and Engineer's consultants in evaluating substitutes proposed or submitted by the Contractor pursuant to paragraphs A.2 and B. and in making changes in the Contract Documents (or in the provisions of any other direct Contract with the Owner for work on the Project) occasioned thereby. Whether or not the Engineer accepts a substitute item so proposed or submitted by the Contractor, the Contractor shall reimburse the Owner for the charges of the Engineer and Engineer's consultants for evaluating each such proposed substitute item.
- D. The Engineer will consider requests from the Contractor for Product substitutions no later than 15 days after the date established in the Notice to Proceed and prior to any construction. Subsequently, substitutions will be considered only when a product becomes unavailable due to no fault of the Contractor.

SP-39 POST – CONSTRUCTION CLEANING AND TELEVISION

Post-construction internal television inspection shall follow the same guidelines as PRE-CONSTRUCTION TELEVISION and shall be conducted on all sewers receiving sewer repairs, new sewer installations and sewer rehabilitation. This inspection must be done in the presence of the City or the Engineer and shall be per NASSCO standards by PACP certified operators.

Digital video inspections of the post-construction/rehabilitation television inspection for each sewer section shall be provided to the Engineer and the City as described below:

Deliverables

After the work is completed, the Contractor shall provide the City with two (2) portable USB powered external hard drives containing each video file and associated PDF report, which shall document, to the satisfaction of the Engineer, the condition of the sewer line segment both immediately before and after lining, grouting, and T-lining and that it has been installed correctly and that all of the active connections have been restored.

The hard drives shall include a master Excel spreadsheet with hyperlinks to each video file and associated PDF report as well as a master digital database of all observation data. One (1) copies of the digital video data and logs shall become the property of the CITY and one (1) copies shall remain with the Engineer.

- The Master Spreadsheet shall have a record for each line segment televised to date. The spreadsheet shall be in MS Excel format and shall have hyperlinks to both the video files and the associated “.pdf” of the PACP & Pipe Segment View report for each section of sewer televised. The spreadsheet shall include the following information for each record - Upstream and Downstream Structure Numbers, Date Televised, Televised Length, Pipe Size, work performed, and links to both the Video and the “.pdf” files.
- The Database in PACP 7.0.3 format shall detail location, type, and severity of all defects and shall be Microsoft Access V07 Database files with all tables linked by appropriate I.D. numbers, and links to video and “.pdf” report files. **All data shall be linked to the pipe segment ID number.**

Basis of Payment:

POST-CONSTRUCTION TELEVISION INSPECTION and all deliverables shall be considered incidental to the Contract and shall not be compensated for separately.

SP-40 PCC PAVEMENT REMOVAL AND REPLACEMENT

This work shall consist of the removal and satisfactory disposal of all existing pavement and stabilized sub-base as per the applicable portions of Section 440 and Section 442 of the IDOT Standard Specifications and as shown on the Plans or as directed by the Engineer. This item applies to all designated full depth pavement removal.

This work shall consist of the removal and disposal of the existing pavement, consisting of PCC pavement, bituminous surface, sidewalk, pavers, and adjacent integral curb, where required for the construction of new pavement, storm sewers, water main, water services, and sanitary services, as shown on the Plans.

This work shall also consist of the replacement of each surface to the thicknesses and materials shown in the plan set. All surfaces and base courses shall be repaired to restore the previous condition before work begun.

The locations for "PCC Pavement Removal and Replacement" are as indicated on the plans and as directed by the Engineer.

This work is incidental to the contract and shall include all saw-cutting and disposal of material as needed and all other incidental items required complete the work. All saw cutting shall be completed using a wet saw to control dust.

SP-41 SEWER FLOW AND BYPASS PUMPING

This work shall include control of sanitary sewer flow during closed circuit television (CCTV) inspection, sewer cleaning operations, manhole rehabilitation, manhole installation and all other sewer maintenance, inspection or construction activities. The Contractor shall be fully responsible for maintaining sewer service during these operations and shall not be allowed to backup or flood any sewer system user, building or property. The Contractor shall be solely liable for property damages that result from the work being performed.

During sewer cleaning operations, only 25% of the internal pipe diameter flow or "limited sewage flow" is acceptable. Flows shall be reduced by plugging, blocking, manually operating pump stations or bypass pumping. During sewer televising operations, only 5% of the internal pipe diameter flow is acceptable. During sewer lining, sewer coatings, manhole installation, manhole rehabilitation and point repairs, no flows will be allowed.

Since complete stoppage or bypassing of flow may be required during sewer lining, point repairs and manhole rehabilitation work, the Contractor may be required to submit drawings and complete design data showing methods and equipment to be utilized in bypass and dewatering operations. The bypass plan shall include the following information:

1. Location of temporary sewer plugs and bypass discharge lines indicated on plans
2. Capacities of pumps, prime movers, and standby equipment
3. Type of standby power source
4. Traffic control plan

When pumping and bypassing is required, the Contractor shall furnish all temporary pumps, conduits, and other equipment to divert the flow of sewage around the sewer section in which work is to be performed. The bypass system shall have sufficient capacity to handle existing flow plus

CITY OF GENEVA
GENEVA EAST SANITARY SEWER REHABILITATION

PLAN/PROFILE AND EXHIBITS



| ITEM DESCRIPTION | REHAB CODE |
|----------------------------|------------|
| IN PAVEMENT CHIMNEY REHAB | A |
| OFF PAVEMENT CHIMNEY REHAB | B |
| INTERNAL CHIMNEY SEALING | C |
| FURNISH NEW LID AND FRAME | E |
| GROUT BOTTOM 18" | L |
| GROUT ENTIRE MANHOLE | N |
| REPLACE BENCH AND TROUGH | R |
| CEMENTITIOUS COAT | U |

DEUCHLER
 CIVIL | STRUCTURAL | ELECTRICAL | ENVIRONMENTAL
 230 WOODLAWN AVENUE
 ALHAMBRA, IL 60015
 PH: 630-897-4831
 FAX: 630-897-5888
 www.deuchler.com

KLING STUBBINS DESIGN FROM # 104.001850
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GRAPHIC SCALE
 BAR IS ONE INCH ON OFFICIAL DIAGRAMS
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DATE: 10-23-2020
 SCALE: AS SHOWN
 JOB NO. 100-10012-00
 FIELD BOOK NO. N/A
 DESIGNED: ADH
 DRAWN: AS
 CHECKED: ADH
 APPROVED: BP

CITY OF GENEVA, ILLINOIS
GENEVA EAST SANITARY SEWER REHABILITATION
MANHOLE REHABILITATION

SHEET
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 OF
11

CLIENT REVIEW MEET - 10-23-2020



| ITEM DESCRIPTION | REHAB CODE |
|----------------------------|------------|
| IN PAVEMENT CHIMNEY REHAB | A |
| OFF PAVEMENT CHIMNEY REHAB | B |
| INTERNAL CHIMNEY SEALING | C |
| FURNISH NEW LID AND FRAME | E |
| GROUT BOTTOM 18" | L |
| GROUT ENTIRE MANHOLE | N |
| REPLACE BENCH AND TROUGH | R |
| CEMENTITIOUS COAT | U |

DEUCHLER
 230 WOODLAWN AVENUE
 AURORA, IL 60506
 PH: 630-837-4831
 FAX: 630-837-5698
 WWW.DEUCHLER.COM

KLING STUBBINS
 184 SOUTH STATE
 AURORA, IL 60506
 PH: 630-837-4831
 FAX: 630-837-5698
 WWW.KLINGSTUBBINS.COM

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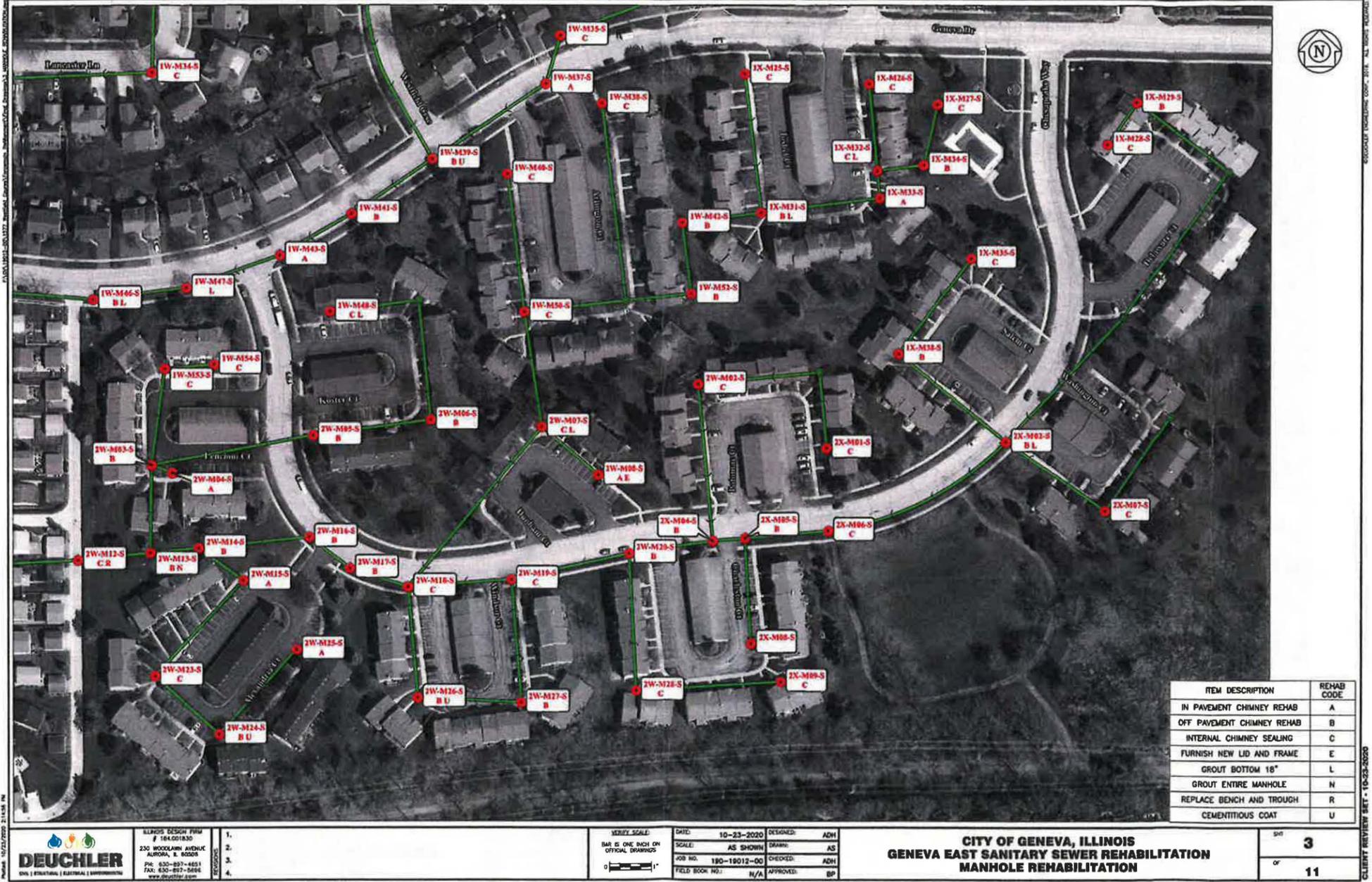
KEY SCALE:
 BAR IS ONE INCH ON
 OFFICIAL DRAWING

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|-----------------|--------------|-----------|-----|
| DATE: | 10-23-2020 | DESIGNED: | ADH |
| SCALE: | AS SHOWN | DRAWN: | AS |
| JOB NO.: | 190-19012-00 | CHECKED: | ADH |
| FIELD BOOK NO.: | N/A | APPROVED: | BP |

**CITY OF GENEVA, ILLINOIS
 GENEVA EAST SANITARY SEWER REHABILITATION
 MANHOLE REHABILITATION**

SHT **2**
 OF **11**

CLIENT REVIEW SET - 10-23-2020



| ITEM DESCRIPTION | REHAB CODE |
|----------------------------|------------|
| IN PAVEMENT CHIMNEY REHAB | A |
| OFF PAVEMENT CHIMNEY REHAB | B |
| INTERNAL CHIMNEY SEALING | C |
| FURNISH NEW LID AND FRAME | E |
| GROUT BOTTOM 18" | L |
| GROUT ENTIRE MANHOLE | N |
| REPLACE BENCH AND TROUGH | R |
| CEMENTITIOUS COAT | U |

DEUCHLER
 CIVIL | STRUCTURAL | ELECTRICAL | ENVIRONMENTAL

ILLINOIS DESIGN FIRM
 P 184.001830
 230 WOODLAND AVENUE
 AURORA, IL 60504
 PH: 630-897-4851
 FAX: 630-897-5886
 www.deuchler.com

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VERIFY SCALE:
 BAR IS ONE INCH ON
 OFFICIAL DRAWINGS

DATE: 10-23-2020
 SCALE: AS SHOWN
 JOB NO: 190-19012-00
 FIELD BOOK NO: N/A

DESIGNED: ADH
 DRAWN: AS
 CHECKED: ADH
 APPROVED: BP

**CITY OF GENEVA, ILLINOIS
 GENEVA EAST SANITARY SEWER REHABILITATION
 MANHOLE REHABILITATION**

3
 of 11

CLINITY REVIEW SET - 10-23-2020



| ITEM DESCRIPTION | REHAB CODE |
|----------------------------|------------|
| IN PAVEMENT CHIMNEY REHAB | A |
| OFF PAVEMENT CHIMNEY REHAB | B |
| INTERNAL CHIMNEY SEALING | C |
| FURNISH NEW LID AND FRAME | E |
| GROUT BOTTOM 18" | L |
| GROUT ENTIRE MANHOLE | N |
| REPLACE BENCH AND TROUGH | R |
| CEMENTITIOUS COAT | U |

DEUCHLER
 CIVIL | ELECTRICAL | MECHANICAL | ENVIRONMENTAL

ELKHORN EGRESS PATH
 # 184.001830
 230 WOODLAWN AVENUE
 GENEVA, IL 60133
 PH: 630-897-4831
 FAX: 630-897-5486
 WWW.DEUCHLER.COM

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GRAPHIC SCALE:
 BAR IS ONE INCH ON
 OFFICIAL DRAWINGS

DATE: 10-23-2020
 SCALE: AS SHOWN
 JOB NO.: 190-19012-00
 FIELD BOOK NO.: N/A

DESIGNED: ADH
 DRAWN: AS
 CHECKED: ADH
 APPROVED: BP

**CITY OF GENEVA, ILLINOIS
 GENEVA EAST SANITARY SEWER REHABILITATION
 MANHOLE REHABILITATION**

SHEET
4
 OF
11

CLIENT REVIEW SET - 10-23-2020



| ITEM DESCRIPTION | REHAB CODE |
|----------------------------|------------|
| IN PAVEMENT CHIMNEY REHAB | A |
| OFF PAVEMENT CHIMNEY REHAB | B |
| INTERNAL CHIMNEY SEALING | C |
| FURNISH NEW LID AND FRAME | E |
| GROUT BOTTOM 18" | L |
| GROUT ENTIRE MANHOLE | H |
| REPLACE BENCH AND TROUGH | R |
| CEMENTITIOUS COAT | U |

DEUCHLER
 INC. | STRUCTURE | SANITATION | ENVIRONMENT

ILLINOIS DESIGN FIRM # 184-001830
 230 WOODLAWN AVENUE
 AURORA, IL 60506
 PH: 630-887-4481
 FAX: 630-887-3498
 www.deuchler.com

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VERIFY SCALE:
 BAR IS ONE INCH ON
 OPTICAL DRAWINGS

DATE: 10-23-2020
 SCALE: AS SHOWN
 JOB NO: 190-19012-00
 FIELD BOOK NO: N/A

DESIGNED: ADH
 DRAWN: AS
 CHECKED: ADH
 APPROVED: BP

**CITY OF GENEVA, ILLINOIS
 GENEVA EAST SANITARY SEWER REHABILITATION
 MANHOLE REHABILITATION**

SHEET **5**
 OF **11**

CLIENT REVIEW SHEET - 10-23-2020



KLINGSTUBBINS DESIGN PARTNERS
 16400 WOODLAND AVENUE
 SUITE 100
 WILSONVILLE, OR 97158
 PHONE: 503-670-8821
 FAX: 503-670-8826
 WWW.DKSH.COM

1. ADDENDUM 1 - 11-10-2020 - RESOLVE SHEET
- 2.
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VERTICAL SCALE:
 1" = 10'-0" (ON OFFICIAL DRAWINGS)

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| SCALE: | AS SHOWN | DRAWN: | AS |
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| FIELD BOOK NO.: | N/A | APPROVED: | BP |

CITY OF GENEVA, ILLINOIS
GENEVA EAST SANITARY SEWER RENOVATION
CIPP LINING

SHEET **6**
 OF **11**

DATE PLOTTED: 11/10/2020 2:10:28 PM

CLIENT: KURT VONN WITZ - 10638-2020



DEUCHLER

ENVIRONMENTAL | ENGINEERING | CONSTRUCTION

ILLINOIS DESIGN FIRM
 # 184,001830
 230 WOODBURN AVENUE
 AURORA, IL 60009
 PH: 830-897-4831
 FAX: 830-897-5064
 www.deuchler.com

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VERIFY SCALE:
 DATE: 10-23-2020
 SCALE: AS SHOWN
 JOB NO: 190-18012-00
 FIELD BOOK NO: N/A

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| DRAWN: JAS |
| CHECKED: JCH |
| APPROVED: BP |

CITY OF GENEVA, ILLINOIS
GENEVA EAST SANITARY SEWER REHABILITATION
CIPP LINING

SHEET
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 OF
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10/27/2020 11:40 AM

CLIENT REVIEW SET - 10-23-2020



Legend
 — Segments to be Lined

DEUCHLER
 CIVIL | STRUCTURAL | MECHANICAL | ELECTRICAL

ILLINOIS DESIGN PROFESSIONAL ENGINEER
 # 184.001830
 230 WOODLAWN AVENUE
 AURORA, IL 60009
 PH: 630-827-4851
 FAX: 630-827-3684
 WWW.DEUCHLER.COM

1. ADDENDUM 1 - 11-10-2020 - REISSUE SHEET
- 2.
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VERIFY SCALE:
 BAR IS ONE INCH ON
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CITY OF GENEVA, ILLINOIS
GENEVA EAST SANITARY SEWER REHABILITATION
CIPP LINING

SHEET **8**
 OF **11**

11/17/2020 2:14:18 PM
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 Plot: 190-18012-00-1111-1111-1111.dwg
 Plot Date: 11/17/2020 2:14:18 PM

CLIENT REVIEW SET - 10-23-2020



Legend
 — Segments to be Grouted

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 CIVIL | SURVEYING | ELECTRICAL | ENVIRONMENTAL

BLDG DESIGN FIRM
 # 184-001830
 230 WOODLAWN AVENUE
 AUBURN, IL 62609
 PH: 630-897-4851
 FAX: 630-897-5699
 www.deuchler.com

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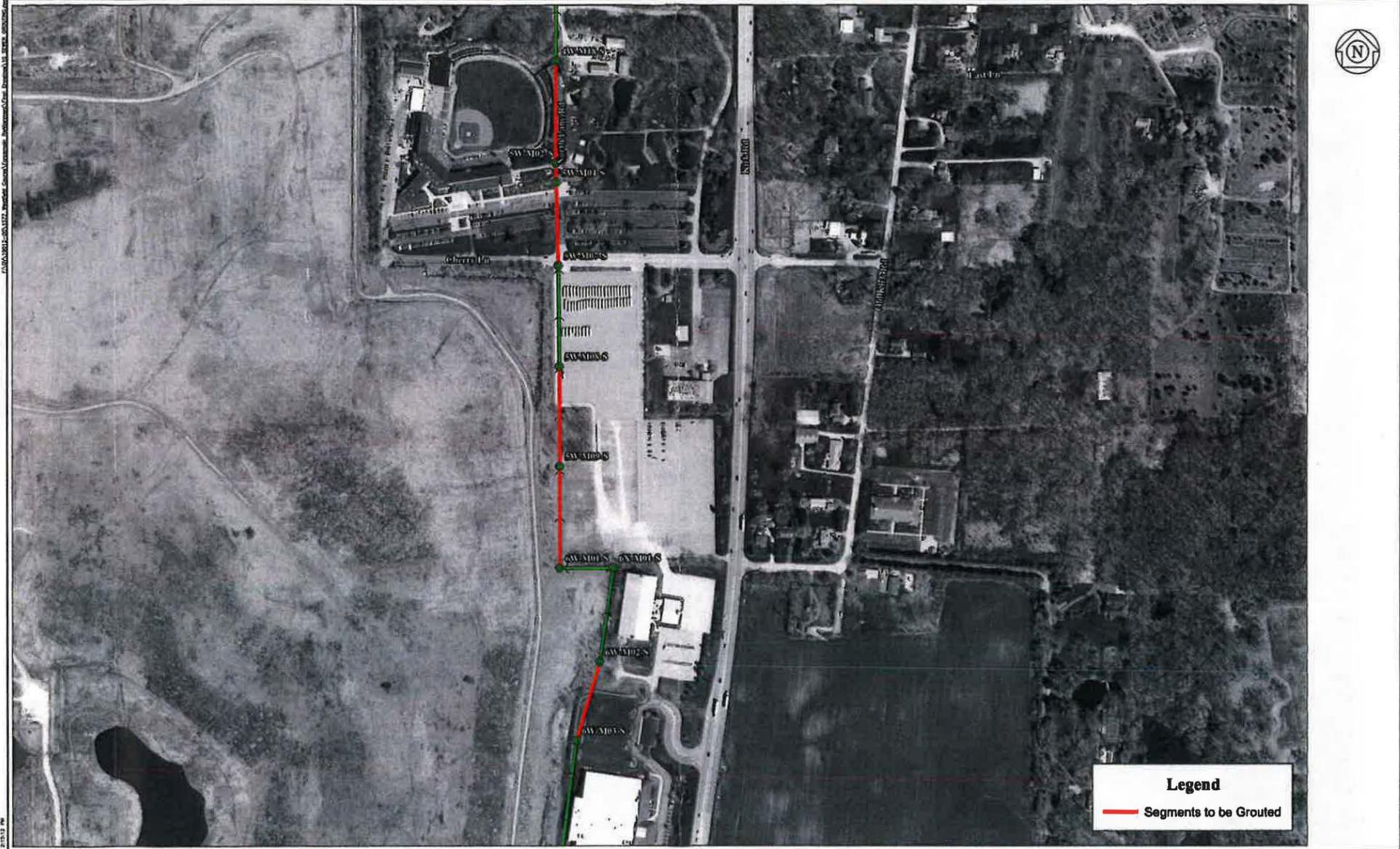
VERTICAL SCALE
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 OFFICIAL DRAWINGS

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| FIELD BOOK NO. | N/A | APPROVED | BP |

CITY OF GENEVA, ILLINOIS
GENEVA EAST SANITARY SEWER REHABILITATION
SEWER GROUTING

Sheet **9**
 of **11**

CLIENT REVIEW SET - 10-23-2020



Legend
 — Segments to be Grouted



KLINGSTUBBINS DESIGN PARTNERS
 P 184.001830
 230 WOODLAWN AVENUE
 AURORA, IL 60506
 PH: 830-897-4851
 FAX: 830-897-5098
 WWW.KSDP.COM

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VERIFY SCALE:
 BAR IS ONE INCH ON
 OFFICIAL DRAWINGS

DATE: 10-23-2020
 SCALE: AS SHOWN
 JOB NO. 190-19012-00
 FIELD BOOK NO.: N/A

DESIGNED: ADH
 DRAWN: AS
 CHECKED: ADH
 APPROVED: SP

**CITY OF GENEVA, ILLINOIS
 GENEVA EAST SANITARY SEWER REHABILITATION
 SEWER GROUTING**

SHEET **10**
 OF **11**

DATE: 10/23/2020 3:10:17 PM

CLIENT REVIEW SET - 10-23-2020

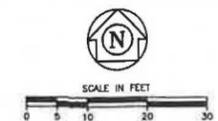
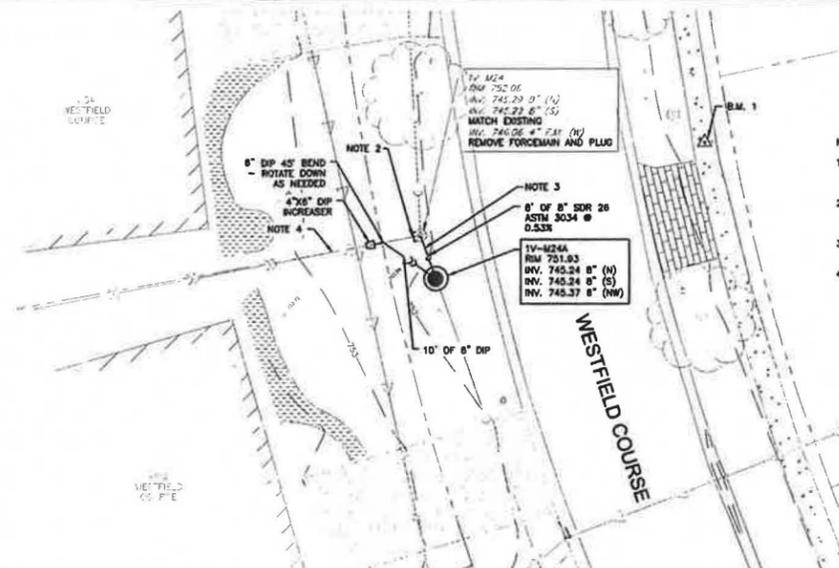
BENCHMARKS

BM-1 CHISELED "X" IN SIDEWALK IN FRONT OF 827 WESTFIELD COURSE, 12.2' SOUTHEAST OF FIRE HYDRANT AND 2.0' EAST OF WEST EDGE OF SIDEWALK. ELEVATION 752.21

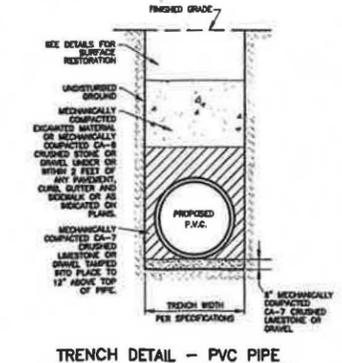
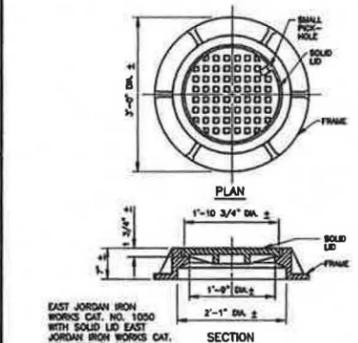
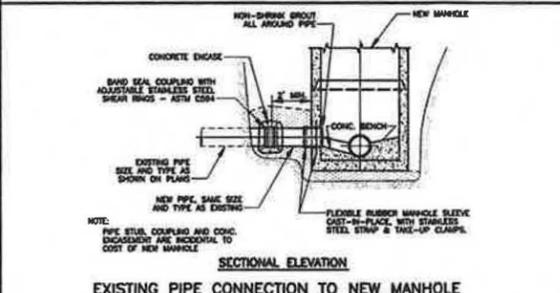
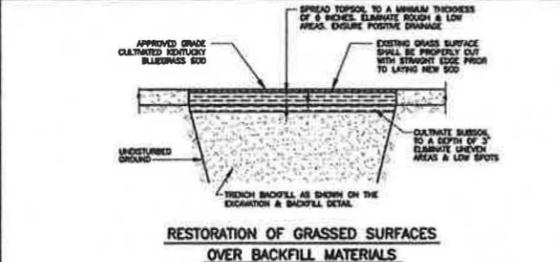
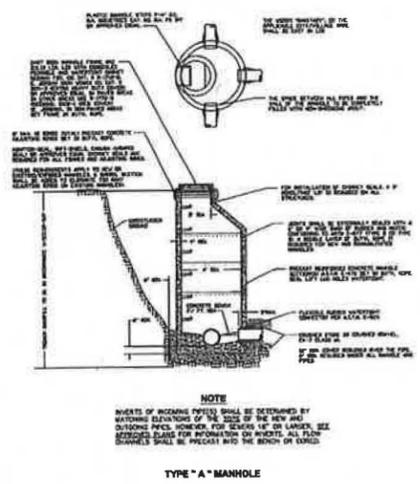
ALL BENCHMARKS ARE NAVD 88

CIVIL LEGEND

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- NOTES:**
- CONTRACTOR IS TO LOCATE ALL UTILITIES PRIOR TO PERFORMING ANY WORK. ENGINEER IS TO BE CONTACTED IF THERE ARE ANY CONFLICTS WITH PROPOSED WORK.
 - EXISTING 4" DP FORCEMAIN IS TO BE CUT AND REMOVED. FORCEMAIN ENTRANCE TO MH 1V-M24 IS TO BE MORTARED WITH NON-SHRINK GROUT.
 - EXISTING 8" DP PIPE IS TO BE REMOVED AND REPLACED WITH 8" PVC 8" DP.
 - THE CITY WILL BYPASS FORCEMAIN UNTIL 3:30 PM EVERY DAY TO ALLOW FOR WORK TO TAKE PLACE.



DEUCHLER
 CIVIL | STRUCTURAL | MECHANICAL | ELECTRICAL

LENDIS DESIGN FIRM
 # 184.001830
 230 WOODLAWN AVENUE
 ALTONA, IL 60008
 PH: 830-897-4651
 FAX: 830-897-5690
 www.deuchler.com

1. DATE: 10-23-2020
 2. SCALE: AS SHOWN
 3. JOB NO: 190-19012-00
 4. FIELD BOOK NO: N/A

DESIGNED: ADH
 DRAWN: AS
 CHECKED: ADH
 APPROVED: BP

**CITY OF GENEVA, ILLINOIS
 GENEVA EAST SANITARY SEWER REHABILITATION
 FORCEMAIN REALIGNMENT**

SHEET **11**
 OF **11**

CLIENT REVIEW SET - 10-23-2020

| From MH | To MH | Sewer Size | TV Length | # Live Services | # Capped Services | Pipe Material | CIPP Liner | Main Line Grout* | # Service Grouts | Service Grout Location 1 | Service Grout Location 2 | Service Grout Location 3 | Service Grout Location 4 | Service Grout Location 5 | Service Grout Location 6 | Service Grout Location 7 | Service Grout Location 8 | Service Grout Location 9 | Service Grout Location 10 | Service Grout Location 11 | Service Grout Location 12 | Service Grout Location 13 | Service Grout Location 14 | Service Grout Location 15 | Service Grout Location 16 |
|---------|--------|------------|-----------|-----------------|-------------------|----------------|------------|------------------|------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| 6W-M03 | 6W-M02 | 18 | 316 | 0 | 0 | CP | | X | | | | | | | | | | | | | | | | | |
| 6W-M01 | 5W-M09 | 18 | 385 | 0 | 0 | CP | | X | | | | | | | | | | | | | | | | | |
| 5W-M09 | 5W-M08 | 18 | 389 | 0 | 0 | CP | | X | | | | | | | | | | | | | | | | | |
| 5W-M07 | 5W-M04 | 18 | 313 | 0 | 0 | DI (8' Joints) | | X | | | | | | | | | | | | | | | | | |
| 5W-M04 | 5W-M02 | 18 | 94 | 0 | 0 | DI (8' Joints) | | X | | | | | | | | | | | | | | | | | |
| 5W-M02 | 4W-M18 | 18 | 398 | 0 | 0 | DI (8' Joints) | | X | | | | | | | | | | | | | | | | | |

*Approximate Joint Lengths per Pipe Material

VCP = 5'

PVC = 12'

DI = 18'

CP = 8'

**Footages are from the Dowsntream Manhole.

| MH # | ADDRESS OF MANHOLE | LOCATION OF MANHOLE | | | | | | | | | | | | MANHOLE SIZE & CONSTRUCTION | | | | | | WORK ITEMS | | | REMARKS | | | |
|--------|---|---------------------|----------|--------|----------|----------|--------|------------|----------|--------|-------|---------------|-------------|-----------------------------|-------------|----------------------------|-----------------|---------------|---------------|------------|----------|---|---------|-----------|------|-------------------------------------|
| | | PAVEMENT | | | DRIVEWAY | | | WALK | | OTHERS | | | | DIAMETER (Ft.) | DEPTH (Ft.) | TOTAL CHIMNEY HEIGHT (In.) | PRECAST MANHOLE | BLOCK MANHOLE | BRICK MANHOLE | | | | | FLAT SLAB | CONE | |
| | | ASPHALT | CONCRETE | GRAVEL | ASPHALT | CONCRETE | GRAVEL | BITUMINOUS | CONCRETE | GRASS | DITCH | CURB & GUTTER | LANDSCAPING | | | | | | | FENCE | BACKYARD | | | | | |
| 1V-M17 | 900 & 920 Westfield Course | | | | | | | X | | | | | | 4 | 6.6 | 17 | X | | | | X | B | | | | |
| 1V-M18 | 720 Westfield Course | | | | | | | X | | | | | | 4 | 6.5 | 15 | X | | | | X | B | | | | |
| 1V-M19 | 700 & 750 Westfield Course | | | | | | | X | | | | | | 4 | 6.9 | 19 | X | | | | X | B | | | | |
| 1V-M20 | 654 & 664 Westfield Course | | | | | | | X | | | | | | 4 | 6.9 | 14 | X | | | | X | B | N | | | |
| 1V-M21 | 945 & 947 Whittington Drive | | | | X | | | X | | | | | | 4 | 5.3 | 7 | X | | | | X | C | | | | |
| 1V-M22 | 940 Whittington Drive | | | | | | | X | | | | | | 4 | 5.3 | 7 | X | | | | X | C | | | | |
| 1V-M23 | 2119 Williamsburg Ave | | | | | | | X | | | | | | 4 | 5.9 | 18 | X | | | | X | C | | | | |
| 1V-M25 | 588 Westfield Course | | | | | | | X | | | | | | 4 | 7.8 | 14 | X | | | | X | B | E | | | |
| 1V-M26 | 550 & 560 Kingston Drive | | | | | | | X | | | | | | 4 | 8.7 | 7 | X | | | | X | B | | | | |
| 1V-M27 | 538 Westfield Course | | | | | | | X | | | | | | 4 | 9.5 | 14 | X | | | | X | B | | | | |
| 1V-M28 | 880 & 884 Geneva Drive | | | | | | X | X | | | | | | 4 | 6.3 | 18 | X | | | | X | N | | | | |
| 1V-M29 | 900 Geneva Drive | | | | | | X | X | | | | | | 4 | 7.3 | 12 | X | | | | X | C | L | | | |
| 1V-M30 | 924 Geneva Drive | | | | | | X | X | | | | | | 4 | 9.9 | 10 | X | | | | X | C | | | | |
| 1V-M31 | 703 Parker Court | | | | | | | X | | | | | | 4 | 13.8 | 10 | X | | | | X | B | U | | | Raise and adjust to match sidewalk. |
| 1V-M32 | 771 & 783 Parker Court | | | | | | | X | | | | | | 4 | 11.8 | 16 | X | | | | X | B | | | | |
| 1V-M33 | 735 Parker Court | | | | | | | X | | | | | | 4 | 9.4 | 9 | X | | | | X | B | L | | | |
| 1V-M34 | 701 Parker Court | | | | | | | X | | | | | | 4 | 7.5 | 9 | X | | | | X | C | | | | |
| 1V-M35 | 675 Parker Court | | | | | | | X | | | | | | 4 | 13.6 | 14.5 | X | | | | X | B | | | | |
| 1V-M36 | 626 Parker Court | | | | | | | X | | | | | | 4 | 13.1 | 9 | X | | | | X | B | U | | | |
| 1V-M37 | 612 Parker Court | | | | X | | | | | | | | | 4 | 8.0 | 19 | X | | | | X | A | N | | | In Driveway |
| 1V-M46 | 746 & 768 Parker Court | | | | | | | X | | | | | | 4 | 8.5 | 14 | X | | | | X | B | N | | | |
| 1V-M47 | 757 Parker Court | | | | | | | X | | | | | | 4 | 10.4 | 20 | X | | | | X | A | | | | Near Sidewalk |
| 1V-M48 | 915 Geneva Drive | | | | | | | X | | | | | | 4 | 9.6 | 11 | X | | | | X | N | | | | |
| 1W-M03 | 1105 Appleton Lane | | | | | | | | | | X | X | X | 4 | 9.7 | 14 | X | | | | X | C | U | | | |
| 1W-M05 | Division Street and Appleton Lane | | | | | | | X | | | | | | 4 | 8.7 | 9 | X | | | | X | B | | | | |
| 1W-M07 | 665 Nichole Lane | | | | | | | X | | | | | | 4 | 10.1 | 18 | X | | | | X | B | N | | | |
| 1W-M08 | 950 & 970 Divison Street | | | | | | | X | | | | | | 4 | 6.6 | 18 | X | | | | X | B | | | | |
| 1W-M09 | 1000 Division Street | | | | | | | X | | | | | | 4 | 7.9 | 18 | X | | | | X | L | | | | |
| 1W-M10 | 1040 Divison Street | X | | | | | | | | | | | | 4 | 9.1 | 10 | X | | | | X | A | | | | Curb nearby |
| 1W-M11 | 1130 Appleton Lane | X | | | | | | | | | | | | 4 | 8.2 | 12.5 | X | | | | X | A | E | | | |
| 1W-M12 | 1165 & 1175 Appleton Lane | | | | | | | X | | | | | | 4 | 8.2 | 9 | X | | | | X | B | | | | |
| 1W-M15 | 1006 Westfield Course | | | | | | | X | | | | | | 4 | 7.1 | 18 | X | | | | X | B | | | | |
| 1W-M16 | Parkway of Lexington Drive South of Westfield | | | | | | | X | | | | | | 4 | 7.6 | 9 | X | | | | X | B | | | | |
| 1W-M17 | Southeast Corner of Westfield and Lexington | | | | | | | X | | | | | | 4 | 7.7 | 20 | X | | | | X | B | N | | | |
| 1W-M18 | 1037 Westfield Course | | | | | | | X | | | | | | 4 | 9.4 | 16 | X | | | | X | B | L | | | |

| MH # | ADDRESS OF MANHOLE | LOCATION OF MANHOLE | | | | | | | | | | | | | MANHOLE SIZE & CONSTRUCTION | | | | | | WORK ITEMS | | | | REMARKS | | |
|--------|---|---------------------|----------|--------|----------|----------|--------|------------|----------|-------|--------|---------------|-------------|-------|-----------------------------|-------------|----------------------------|-----------------|---------------|---------------|------------|--|---|---|---------|-----------|------------------|
| | | PAVEMENT | | | DRIVEWAY | | | WALK | | | OTHERS | | | | DIAMETER (Ft.) | DEPTH (Ft.) | TOTAL CHIMNEY HEIGHT (In.) | PRECAST MANHOLE | BLOCK MANHOLE | BRICK MANHOLE | | | | | | FLAT SLAB | CONE |
| | | ASPHALT | CONCRETE | GRAVEL | ASPHALT | CONCRETE | GRAVEL | BITUMINOUS | CONCRETE | GRASS | DITCH | CURB & GUTTER | LANDSCAPING | FENCE | | | | | | | BACKYARD | | | | | | |
| 2V-M06 | Front 888 & 892 Manchester Course | | | | | | | | X | | | | | | 4 | 7.6 | 18 | X | | | | | X | B | E | | Near Landscaping |
| 2V-M07 | 960 & 972 Manchester Course | | | | | | | | X | | | | | | 4 | 7.2 | 14 | X | | | | | X | B | L | | |
| 2V-M08 | Rear 888 & 892 Manchester Course | | | | | | | | X | | | | | | 4 | 9.0 | 7 | X | | | | | X | C | N | | |
| 2W-M12 | Behind 1038 & 1040 Manchester Course | | | | | | X | | | | | | | | 4 | 11.2 | 10 | X | | | | | X | C | R | | |
| 2W-M01 | 1106 & 1108 Manchester Course | | | | | | | | X | | | | | | 4 | 10.7 | 24 | X | | | | | X | B | | | |
| 2W-M02 | 1409 Potomac Court | | | | | | | X | X | | | X | | | 4 | 14.6 | 24 | X | | | | | X | C | | | |
| 2W-M03 | 1222, 1224, and 1226 Lencioni Court | | | | | | | | X | | | X | | | 4 | 13.4 | 7 | X | | | | | X | B | | | |
| 2W-M04 | 1226 & 1228 Lencioni Court | | | | X | | | | | | | | | | 4 | 17.5 | 16 | X | | | | | X | A | | | |
| 2W-M05 | 1235 Koster Court | | | | | | | | X | | | | | | 4 | 11.2 | 11 | X | | | | | X | B | | | |
| 2W-M06 | 1225 & 1227 Koster Court | | | | | | | | X | | | | | | 4 | 10.1 | 9 | X | | | | | X | B | | | |
| 2W-M07 | 1347 Dunham Court | | | | | | | X | X | | | | | | 4 | 11.4 | 22 | X | | | | | X | C | L | | |
| 2W-M08 | 1357 Dunham Court | | | | X | | | | | | | | | | 4 | 7.9 | 14 | X | | | | | X | A | E | | |
| 2W-M09 | 1004 Britta Lane | | | | | | | | X | | | | | | 4 | 11.3 | 14 | X | | | | | X | B | | | |
| 2W-M11 | 1038 & 1040 Manchester Course | | | | | | | | X | | | | | | 4 | 10.7 | 20 | X | | | | | X | B | N | | |
| 2W-M13 | Behind 1238 & 1240 Alexandria Court | | | | | | | | X | | | | | | 4 | 15.1 | 13 | X | | | | | X | B | N | | |
| 2W-M14 | Behind 1236 Alexandria Court | | | | | | | | X | | | | | | 4 | 15.2 | 13 | X | | | | | X | B | | | |
| 2W-M15 | Parking Lot East of 1236 Alexandria Court | X | | | | | | | | | | X | | | 4 | 14.6 | 15 | X | | | | | X | A | | | |
| 2W-M16 | NW Alexandria Court and Chesapeake Way | | | | | | | | X | | | | | | 4 | 10.4 | 7 | X | | | | | X | B | | | |
| 2W-M17 | SE Alexandria Court and Chesapeake Way | | | | | | | | X | | | | | | 4 | 10.4 | 11 | X | | | | | X | B | | | |
| 2W-M18 | North of 1338 Windsor Court | | | | | | | X | | | | | | | 4 | 11.2 | 24 | X | | | | | X | C | | | |
| 2W-M19 | North of 1300 Windsor Court | | | | | | | X | | | | | | | 4 | 10.9 | 14 | X | | | | | X | C | | | |
| 2W-M20 | North 1442 Charleston Court | | | | | | | | X | | | | | | 4 | 12.7 | 16 | X | | | | | X | B | | | |
| 2W-M21 | 1014 & 1016 Manchester Course | | | | | | | | X | | | | | | 4 | 11.5 | 28 | X | | | | | X | B | | | |
| 2W-M22 | 1026 Manchester Course | X | | | | | | | | | | | | | 4 | 11.1 | 22 | X | | | | | X | A | N | | |
| 2W-M23 | 1250 & 1252 Alexandria Court | | | | X | | | | | | | | | | 4 | 12.1 | 16 | X | | | | | X | C | | | |
| 2W-M24 | 1266 & 1268 Alexandria Court | | | | | | | | X | | | | | | 4 | 10.7 | 7 | X | | | | | X | B | U | | |
| 2W-M25 | 1282 Alexandria Court | | | | X | | | | | | | | | | 4 | 9.5 | 12 | X | | | | | X | A | | | |
| 2W-M26 | 1324, 1326, and 1328 Dunston Court | | | | | | | | X | | | X | | | 4 | 10.0 | 12 | X | | | | | X | B | U | | |
| 2W-M27 | 1312 Dunham Court | | | | | | | | X | | | | | | 4 | 10.7 | 11 | X | | | | | X | B | | | |
| 2W-M28 | 1426 & 1428 Charleston Court | | | | | | | | X | | | | | | 4 | 11.9 | 16 | X | | | | | X | C | | | |
| 2W-M53 | 1004 Manchester Course | | | | | | | | X | | | | | | 4 | 8.6 | 18 | X | | | | | X | B | | | |
| 2X-M01 | 1431 Potomac Court | | | | | | | | X | | | | | | 4 | 9.7 | 22 | X | | | | | X | C | | | |
| 2X-M02 | SE Corner of Washington Court & Chesapeake Way | | | | | | | | X | | | | | | 4 | 9.7 | 7 | X | | | | | X | B | L | | |
| 2X-M04 | Across from West Drive to Potomac Court | | | | | | | | X | | | | | | 4 | 11.9 | 19 | X | | | | | X | B | | | |
| 2X-M05 | SE Corner of Chesapeake Way & Charleston Ct. East Drive | | | | | | | X | X | | | | | | 4 | 11.2 | 14 | X | | | | | X | B | | | |

