**ITEM: MOT 00-04123** 

## VILLAGE OF DOWNERS GROVE REPORT FOR THE VILLAGE COUNCIL WORKSHOP APRIL 20, 2010 AGENDA

SUBJECT:	TYPE:		SUBMITTED BY:		
		Resolution			
		Ordinance			
	✓	Motion	Nan Newlon, P.E.		
Hydrant Flow Testing		Discussion Only	Director of Public Works		

#### SYNOPSIS

A motion is requested authorizing the execution of a contract for hydrant flow testing services in the amount of \$39,150 with M.E. Simpson Co., Inc. of Valparaiso, Indiana.

#### STRATEGIC PLAN ALIGNMENT

The Five Year Plan and Goals identifies *Top Quality Village Infrastructure and Facilities*.

#### **FISCAL IMPACT**

The FY10 Budget includes \$43,000 in the Water Fund for contractual hydrant flow testing services.

#### RECOMMENDATION

Approval on the April 20, 2010 consent agenda.

#### **BACKGROUND**

This program involves utilizing a technical service provider to conduct inspection activities and flow testing for 870 of the Village's 2,600 fire hydrants. According to American Water Works Association (AWWA) standards, "To ensure that a hydrant will work correctly when it is needed, a periodic testing and maintenance program must be followed. All hydrants should be inspected regularly, at least once a year, to ensure their satisfactory operation."

This work also provides the necessary data to color code fire hydrants using standardized colors in accordance with National Fire Protection Association (NFPA) standards for available fire flow. Fire Departments have found this to be the most efficient means to convey this important information to engine companies in that the colors give a reasonably accurate picture as to how the hydrant should perform. The Fire Department, or any other department responding under auto-aid or mutual aid would have a quick indicator as to which tactics they should employ and how best to supply themselves with water as well as how much water would be available from the closest hydrant.

A Request for Proposals (RFP) seeking services from a qualified vendor to provide the hydrant flow testing program was issued in February. The RFP was published in accordance with established procurement procedures. Three proposals were received with pricing summarized in the table below.

Vendor	<b>Cost Proposal</b>	Cost Per	
		Hydrant	
M.E. Simpson Co., Inc., Valparaiso, Indiana	\$39,150	\$45	
Dawn Companies, Inc., Joliet, Illinois	\$40,020	\$46	
Wachs Water Services, Buffalo Grove, Illinois	\$120,060	\$138	

Proposals were evaluated based upon the vendor's general approach and plans to meet the requirements of the RFP, the experience and qualifications of the vendor and personnel assigned to the project, and the vendor's current and past performance on projects of similar scope and size, and the costs proposed by the vendor to perform the requirements on the RFP. Based on this review, staff believes the proposal submitted by M.E. Simpson best meets the needs of the Village. They have been performing this work for several area communities such as Highland Park, Orland Park, Westmont, LaGrange Park and Glencoe for several years and have produced accurate results.

#### **ATTACHMENTS**

Contract Form Campaign Disclosure Certificate Contractor Evaluation Form Resolution

### IV. PROPOSAL/CONTRACT FORM

\*\*\*THIS PROPOSAL WHEN ACCEPTED AND SIGNED BY AN AUTHORIZED SIGNATORY OF THE VILLAGE OF DOWNERS GROVE SHALL BECOME A CONTRACT BINDING UPON BOTH PARTIES.

Entire Block Must Be Completed When A Submitted Bid Is To Be Considered For Award

BIDDER:	
M.E. Simpson Co., Inc.	Date: 2/26/2010
Company Name	
7.00	johnnyv@mesimpson.com
3406 Enterprise Ave.	Email Address
Street Address of Company	
Valparaiso, IN 46383	John H. Van Arsdel Contact Name (Print)
City, State, Zip	· ·
(000) 255 3527	(800) 255-1521
(800) 255-1521	24-Hour Telephone
Business Phone	Jun H. Van Woold
(888) 531-2444	Signature of Officer, Partner or
Fax	Sole Proprietor
•	John H. Van Arsdel, Vice President
APPROXIME TO COMMENT	Print Name & Title
Panula S. Hood	
Signature of Corporation Secretary	
VILLAGE OF DOWNERS GROVE:	
Authorized Signature	ATTEST:
Title	Signature of Village Clerk
•	
Date	Date

In compliance with the specifications, the above-signed offers and agrees, if this Proposal is accepted within 90 calendar days from the date of opening, to furnish any or all of the services upon which prices are quoted, at the price set opposite each item, delivered at the designated point within the time specified above.

#### CAMPAIGN DISCLOSURE CERTIFICATE

Any contractor, proposer, bidder or vendor who responds by submitting a bid or proposal to the Village of Downers Grove shall be required to submit with its bid submission, an executed Campaign Disclosure Certificate, attached hereto.

The Campaign Disclosure Certificate is required pursuant to the Village of Downers Grove Council Policy on Ethical Standards and is applicable to those campaign contributions made to any member of the Village Council.

Said Campaign Disclosure Certificate requires any individual or entity bidding to disclose campaign contributions, as defined in Section 9-1.4 of the Election Code (10 ILCS 5/9-1.4), made to current members of the Village Council within the five (5) year period preceding the date of the bid or proposal release.

By signing the bid documents, contractor/proposer/bidder/vendor agrees to refrain from making any campaign contributions as defined in Section 9-1.4 of the Election Code (10 ILCS 5/9-1.4) to any Village Council member and any challengers seeking to serve as a member of the Downers Grove Village Council.

Under penalty	y of perjury, I declare:	
	within the last five (5) years.  Signature	John H. Van Arsdel Print Name  ontributed a campaign contribution to a current thin the last five (5) years.
	To whom contribution was made: Year contribution made:	·
	Signature	Print Name

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# Village of Downers Grove Contractor Evaluation

Contractor: M.E. Simpson Co., Inc.
Project: <u>Hydrant Flow Testing for Main Capacity</u>
Primary Contact: Randy Lusk
Time Period: Proposals were due 3/10/09 and a contract was awarded on 4/4/09.
On Schedule (allowing for uncontrollable circumstances): X yes $\square$ no
<b>Provide details if early or late completion</b> : The contractor finished the project on November 9, 2009. A full report and access to the Pro Hydrant Software was delivered to us on November 30, 2009.
Change Orders (attach information if needed): None
<b>Difficulties / Positives</b> : This year's project cost \$39,150 to flow and test 871 hydrants from 75 <sup>th</sup> to 61 <sup>st</sup> . M.E. Simpson was very careful in operating hydrants and developing a flushing plan. They delivered door hanger cards as notification prior to flushing. We had no water quality (rusty water) complaints from any residents in the flushing area. I addition to the flushing and operating of the hydrants, they were also classified by flow capacity using the National Fire Protection Association (NFPA) rating. This year's program reported that 744 out of the 871 hydrants flushed (86%) tested with the higher ranking at 1,500 gallons per minute or greater.
Interaction with public:
X excellent  good  average  poor
The Village received one complaint due to minor street flooding. No calls were received regarding damage to property, low water pressure or discolored water.
General Level of Satisfaction with work:
X Well Satisfied   Satisfied   Not Satisfied
Should the Village contract with this vendor in the future? X Yes \( \square \) No
Reviewer: <u>Dave Bird, Water Division Manager</u>
Dated: <u>12/04/2009</u>

www.mesimpson.com

Phone: (800) 255-1521 Fax: (888) 531-2444

3406 Enterprise Avenue Valparaiso, IN 46383

March 1, 2010

Ms. Theresa H. Tarka Purchasing Assistant Village of Downers Grove 801 Burlington Avenue Downers Grove, IL 60515

Dear Ms. Tarka,

M.E. Simpson Co., Inc. is pleased to present our response for the request to propose on RFP-0-8-2010/TT "Hydrant Flow Testing For Main Capacity" for the Village of Downers Grove, Illinois.

M.E. Simpson Co., Inc. is a **Technical Service Company** performing services designed to aid a utility in improving accountability, increasing revenues, heightening your distribution system performance and optimizing your distribution system data, records and mapping programs. As a part of our services we also manufacture the Polcon® flow and pressure monitoring equipment.

This **Proposal** is being submitted as follows:

- **Required Documents**
- Firm History
- Related Project Experience, References
- **♦** Employee Qualifications, Project Staffing
- **Project Understanding and Approach**
- **Scope of Services, Proposed Schedule**
- **Proposal Fee**
- **Hydrant Flow Test Report Examples**

We thank you for your consideration and this opportunity to acquaint you with our Fire Hydrant Flow Testing Services and offer this proposal. If there are any inquiries regarding this proposal, please do not hesitate to contact us. We look forward to hearing from you soon.

Sincerely yours,

John H. Van Arsdel

John H. Van aredel

Vice President

1	Required Documents
2	Firm History
3	Related Project Experience, References
4	Employee Qualifications, Project Staffing
5	Project Understanding and Approach
6	Scope of Services/Proposed Schedule
7	Proposal Fee
8	Hydrant Report Example



## REQUEST FOR PROPOSAL

Name of Proposing Company:	 <u> </u>

Project Name:

Hydrant Flow Testing Services

Proposal No.:

RFP-0-8-2010/TT

Proposal Due:

March 1, 2010, 3:30, p.m.

Pre-Proposal Conference:

NA

#### Required of All Proposers:

Deposit: No

Letter of Capability of Acquiring Performance Bond: No

## Required of Awarded Contractor:

Performance Bond/Letter of Credit: No

Certificate of Insurance: Yes

Legal Advertisement Published:

February 15, 2010

Date Issued:

February 15, 2010

This document consists of 34 pages.

Return original and two duplicate copies of proposal in a sealed envelope marked with the Proposal Number as noted above to:

THERESA H. TARKA
PURCHASING ASSISTANT
VILLAGE OF DOWNERS GROVE
801 BURLINGTON AVENUE
DOWNERS GROVE, IL 60515
PHONE: 630/434-5530
FAX: 630/434-5571
www.downers.us

The VILLAGE OF DOWNERS GROVE will receive proposals Monday thru Friday, 8:00 A.M. to 5:00 P.M. at the Village Hall, 801 Burlington Avenue, Downers Grove, IL 60515.

#### SPECIFICATIONS MUST BE MET AT THE TIME THE PROPOSAL IS DUE.

The Village Council reserves the right to accept or reject any and all proposals, to waive technicalities and to accept or reject any item of any proposal.

The documents constituting component parts of this contract are the following:

- I. REQUEST FOR PROPOSALS
- II. TERMS & CONDITIONS
- III. DETAILED SPECIFICATIONS
- IV. PROPOSAL/CONTRACT FORM

DO NOT DETACH ANY PORTION OF THIS DOCUMENT. INVALIDATION COULD RESULT. Proposers MUST submit an original, and 2 additional paper copies of the total proposal. Upon formal award of the proposal, the successful Proposer will receive a copy of the executed contract.

#### L REQUEST FOR PROPOSALS

- 1. GENERAL
- 1.1 Notice is hereby given that Village of Downers Grove will receive sealed proposals up to March 1, 2010, 3:30 p.m.
- 1.2 Proposals must be received at the Village of Downers Grove by the time and date specified. Proposals received after the specified time and date will not be accepted and will be returned unopened to the Proposer.
- 1.3 Proposal forms shall be sent to the Village of Downers Grove, ATTN: Theresa Tarka, in a sealed envelope marked "SEALED PROPOSAL". The envelope shall be marked with the name of the project, date, and time set for receipt of proposals.
- 1.4 All proposals must be submitted on the forms supplied by the Village and signed by a proper official of the company submitting proposal. Telephone, email and fax proposals will not be accepted.
- 1.5 By submitting this proposal, the proposer certifies under penalty of perjury that they have not acted in collusion with any other proposer or potential Proposer.
- 2. PREPARATION OF PROPOSAL
- 2.1 It is the responsibility of the proposer to carefully examine the specifications and proposal documents and to be familiar with all of the requirements, stipulations, provisions, and conditions surrounding the proposed services.
- 2.2 No oral or telephone interpretations of specifications shall be binding upon the Village.

  All requests for interpretations or clarifications shall be made in writing and received by the Village at least five (5) business days prior to the date set for receipt of proposals. All changes or interpretations of the specifications shall be made by the Village in a written addendum to our proposer's of record.
- 2.3 In case of error in the extension of prices in the proposal, the hourly rate or unit price will govern. In case of discrepancy in the price between the written and numerical amounts, the written amount will govern.
- 2.4 All costs incurred in the preparation, submission, and/or presentation of any proposal including any proposer's travel or personal expenses shall be the sole responsibility of the proposer and will not be reimbursed by the Village.
- 2.5 The proposer hereby affirms and states that the prices quoted herein constitute the total cost to the Village for all work involved in the respective items and that this cost also includes all insurance, royalties, transportation charges, use of all tools and equipment, superintendence, overhead expense, all profits and all other work, services and conditions necessarily involved in the work to be done and materials to be furnished in accordance

with the requirements of the Contract Documents considered severally and collectively.

#### 3. PRE-PROPOSAL CONFERENCE

- 3.1 A pre-proposal conference may be offered to provide additional information, inspection or review of current facilities or equipment, and to provide an open forum for questions from proposers. This pre-proposal conference is not mandatory (unless stated "Required" on the cover of this document), but attendance by proposers is strongly advised as this will be the last opportunity to ask questions concerning the proposal.
- 3.2 For those unable to attend the meeting, questions may be posed in writing to the Village (faxed and emailed questions are acceptable), but must be received by the Village prior to the scheduled time for the pre-proposal conference. Questions received will be considered at the conference. An addendum may be issued as a result of the pre-proposal conference. Such an addendum is subject to the provisions for issuance of an addendum as set forth in the section titled "Addenda".

#### 4. MODIFICATION OR WITHDRAWAL OF PROPOSALS

- 4.1 A Proposal that is in the possession of the Village may be altered by a letter bearing the signature or name of person authorized for submitting a proposal, provided that it is received prior to the time and date set for the bid opening. Telephone, email or verbal alterations of a proposal will not be accepted.
- 4.2 A Proposal that is in the possession of the Village may be withdrawn by the proposer, up to the time set for the proposal opening, by a letter bearing the signature or name of person authorized for submitting proposals. Proposals may not be withdrawn after the proposal opening and shall remain valid for a period of ninety (90) days from the date set for the proposal opening, unless otherwise specified.

#### 5. SECURITY FOR PERFORMANCE

5.1 The awarded contractor, within thirteen (13) calendar days after acceptance of the proposer's proposal by the Village, shall furnish security for performance acceptable to the Village when required under the documents. Such security shall be either a satisfactory performance bond (bonding company must be licensed to do business in Illinois) or a letter of credit on the form provided by the Village and available from the Village's Purchasing Manager. Any bond shall include a provision as will guarantee faithful performance of the Illinois Prevailing Wage Act, 820 ILCS 130/1 et seq. NOTE: As evidence of capability to provide such security for performance, each proposer shall submit with the proposal either a letter executed by its surety company indicating the proposer's performance bonding capability, or a letter from a bank or savings and loan within twenty-five miles of the corporate boundaries of the Village indicating its willingness and intent to provide a letter of credit for the proposer.

#### 6. DELIVERY

6.1 All proposal prices are to be quoted, delivered F.O.B. Village of Downers Grove, 801 Burlington, Downers Grove, IL 60515.

#### 7. TAX EXEMPTION

7.1 The Village is exempt from Illinois sales or use tax for direct purchases of materials and supplies. A copy of the Illinois Sales Tax Exemption Form will be issued upon request. Our federal identification will also be provided to selected vendor.

#### 8. RESERVED RIGHTS

8.1 The Village of Downers Grove reserves the exclusive right to waive sections, technicalities, irregularities and informalities and to accept or reject any and all proposals and to disapprove of any and all subcontractors as may be in the best interest of the Village. Time and date requirements for receipt of proposal will not be waived.

#### II. TERMS AND CONDITIONS

#### 9. VILLAGE ORDINANCES

9.1 The successful proposer will strictly comply with all ordinances of the Village of Downers Grove and laws of the State of Illinois.

#### 10 USE OF VILLAGE'S NAME

10.1 The proposer is specifically denied the right of using in any form or medium the name of the Village for public advertising unless express permission is granted by the Village.

#### 11. SPECIAL HANDLING

11.1 Prior to delivery of any product which is caustic, corrosive, flammable or dangerous to handle, the Proposer will provide written directions as to methods of handling such products, as well as the antidote or neutralizing material required for its first aid before delivery. Proposer shall also notify the Village and provide material safety data sheets for all substances used in connection with this contract which are defined as toxic under the Illinois Toxic Substances Disclosure to Employees Act.

#### 12. INDEMNITY AND HOLD HARMLESS AGREEMENT

12.1 To the fullest extent permitted by law, the Proposer shall indemnify, keep and save harmless the Village and its agents, officers, and employees, against all injuries, deaths, losses, damages, claims, suits, liabilities, judgments, costs and expenses, which may arise directly or indirectly from any negligence or from the reckless or willful misconduct of the Proposer, its employees, or its subcontractors, and the Proposer, and the Proposer, its employees, or its subcontractors, and the Proposer shall at its own expense, appear, defend and pay all charges of attorneys and all costs and other expenses arising therefrom or incurred in connection therewith, and, if any judgment shall be rendered against the Village in any such action, the Proposer shall, at its own expense, satisfy and discharge the same. This Agreement shall not be construed as requiring the Proposer to indemnify the Village for its own negligence. The Proposer shall indemnify, keep and save harmless the Village only where a loss was caused by the negligent, willful or reckless acts or omissions of the Proposer, its employees, or its Subcontractors.

#### 13. NONDISCRIMINATION

- 13.1 Proposer shall, as a party to a public contract:
  - (a) Refrain from unlawful discrimination in employment and undertake affirmative action to assure equality of employment opportunity and eliminate the effects of past discrimination;
  - (b) By submission of this proposal, the Proposer certifies that he is an "equal opportunity employer" as defined by Section 2000(e) of Chapter 21, Title 42, U.S. Code Annotated and Executive Orders #11246 and #11375, which are incorporated herein by reference. The Equal Opportunity clause, Section 6.1 of the Rules and Regulations of the Department of Human Rights of the State of Illinois, is a material part of any contract awarded on the basis of this proposal.
- 13.2 It is unlawful to discriminate on the basis of race, color, sex, national origin, ancestry, age, marital status, physical or mental handicap or unfavorable discharge for military service. Proposer shall comply with standards set forth in Title VII of the Civil Rights Act of 1964, 42 U.S.C. Secs. 2000 et seq., The Human Rights Act of the State of Illinois, 775 ILCS 5/1-101et. seq., and The Americans With Disabilities Act, 42 U.S.C. Secs. 1210l et. seq.

#### 14. SEXUAL HARASSMENT POLICY

- 14.1 The proposer, as a party to a public contract, shall have a written sexual harassment policy that:
  - 14.1.1 Notes the illegality of sexual harassment;
  - 14.1.2 Sets forth the State law definition of sexual harassment;
  - 14.1.3 Describes sexual harassment utilizing examples;
  - 14.1.4 Describes the Proposer's internal complaint process including penalties;
  - 14.1.5 Describes the legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Human Rights Commission and how to contact these entities; and
  - 14.1.6 Describes the protection against retaliation afforded under the Illinois Human Rights Act.

#### 15. EQUAL EMPLOYMENT OPPORTUNITY

15.1 In the event of the Proposer's non-compliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act or the Rules and Regulations of the Illinois Department of Human Rights ("Department"), the Proposer may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be canceled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation. During the performance of this contract, the Proposer agrees as follows:

- 15.1.1 That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental handicap unrelated to ability, sexual orientation, sexual identity or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
- 15.1.2 That, if it hires additional employees in order to perform this contract or any portion thereof, it will determine the availability (in accordance with the Department's Rules and Regulations) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.
- 15.1.3 That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental handicap unrelated to ability, or an unfavorable discharge from military services.
- 15.1.4 That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Proposer's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations. If any such labor organization or representative fails or refuses to cooperate with the Proposer in its efforts to comply with such Act and Rules and Regulations, the Proposer will promptly so notify the Department and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations thereunder.
- 15.1.5 That it will submit reports as required by the Department's Rules and Regulations, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations.
- 15.1.6 That it will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Department for purpose of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's Rules and Regulations.
- 15.1.7 That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that such provisions will be binding upon such

subcontractor. In the same manner as with other provisions of this contract, the Proposer will be liable for compliance with applicable provisions of this clause by such subcontractors; and further it will promptly notify the contracting agency and the Department in the event any subcontractor fails or refuses to comply therewith. In addition, the Proposer will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivision or municipal corporations.

#### 16. DRUG FREE WORK PLACE

Proposer, as a party to a public contract, certifies and agrees that it will provide a drug free workplace by:

- Publishing a statement: (1) Notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance, including cannabis, is prohibited in the Village's or proposer's workplace. (2) Specifying the actions that will be taken against employees for violations of such prohibition. (3) Notifying the employee that, as a condition of employment on such contact or grant, the employee will: (A) abide by the terms of the statement; and (B) notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.
- 16.2 Establishing a drug free awareness program to inform employee's about: (1) the dangers of drug abuse in the workplace; (2) the Village's or proposer's policy of maintaining a drug free workplace; (3) any available drug counseling, rehabilitation and employee assistance programs; (4) the penalties that may be imposed upon employees for drug violations.
- 16.3 Providing a copy of the statement required above to each employee engaged in the performance of the contract or grant and to post the statement in a prominent place in the workplace.
- 16.4 Notifying the contracting or granting agency within ten (10) days after receiving notice of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction from an employee or otherwise receiving actual notice of such conviction.
- 16.5 Imposing a sanction on, or requiring the satisfactory participation in a drug abuse assistance or rehabilitation program by any employee who is so convicted as required by section 5 of the Drug Free Workplace Act.
- 16.6 Assisting employees in selecting a course of action in the event drug counseling, treatment and rehabilitation is required and indicating that a trained referral team is in place.

16.7 Making a good faith effort to continue to maintain a drug free workplace through implementation of the Drug Free Workplace Act.

#### 17. SUBSTANCE ABUSE PREVENTION ON PUBLIC WORKS PROJECTS ACT

17.1 In the event this is a public works project as defined under the Prevailing Wage Act, 820 ILCS 130/2, Proposer agrees to comply with the Substance Abuse Prevention on Public Works Projects Act, 820 ILCS 265/1 et seq, and further agrees that all of its subcontractors shall comply with such Act. As required by the Act, Proposer agrees that it will file with the Village prior to commencing work its written substance abuse prevention program and/or that of its subcontractor(s) which meet or exceed the requirements of the Act.

#### 18. PREVAILING WAGE ACT

- 18.1 Proposer agrees to comply with the Illinois Prevailing Wage Act, 820 ILCS 130/1 et seq., for all work completed under this contract. Proposer agrees to pay the prevailing wage and require that all of its subcontractors pay prevailing wage to any laborers, workers or mechanics who perform work pursuant to this contract or related subcontract. For applicable rates, go to the State of Illinois Department of Labor website and use the most current DuPage County rate.
- 18.2 Proposer and each subcontractor shall keep or cause to be kept an accurate record of names, occupations and actual wages paid to each laborer, workman and mechanic employed by the Proposer in connection with the contract. This record shall be open to inspection at all reasonable hours by any representative of the Village or the Illinois Department of labor and must be preserved for four (4) years following completion of the contract.
- 18.3 In the event this is a contract for a public works project, as defined in 820 ILCS 130/2, Proposer agrees to post at the job site in an easily accessible place, the prevailing wages for each craft or type of worker or mechanic needed to execute the contract or work to be performed.
- In the event this is a public works project as defined under the Prevailing Wage Act, 820 ILCS 130/2, any and all contractors and subcontractors must submit certified payroll records to the Village on a monthly basis. WITHOUT THIS PAPERWORK, NO INVOICE SHALL BE PAID BY THE VILLAGE. Contractors and subcontractors must also submit a statement affirming that the records are true and accurate, that the wages paid to each worker are not less than the prevailing rate, and that the contractor and subcontractor are aware that filing false records is a Class B misdemeanor. The records must include the name, address, telephone number, social security number, job classification, hours of work, hourly rate, and start and end time of work each day for every worker employed on the public work. The Village reserves the right to check the pay stubs of the workers on the job. The Village further cautions that payment for any services rendered pursuant to this contract may be predicated upon receipt of said records.

- In the event that this is a construction project where Motor Fuel tax monies or state grant monies are used in the construction, maintenance and extension of municipal streets, traffic control signals, street lighting systems, storm sewers, pedestrian subways or overhead crossings, sidewalks and off-street parking facilities, and the like, the Village will require an Apprenticeship and Training Certification, attached after the Proposer's Certification.
- 18.6 Any bond furnished as security for performance shall include a provision as will guarantee faithful performance of the Illinois Prevailing Wage Act, 820 ILCS 130/1 et seq.

#### 19. PATRIOT ACT COMPLIANCE

The Proposer represents and warrants to the Village that neither it nor any of its principals, shareholders, members, partners, or affiliates, as applicable, is a person or entity named as a Specially Designated National and Blocked Person (as defined in Presidential Executive Order 13224) and that it is not acting, directly or indirectly, for or on behalf of a Specially Designated National and Blocked Person. The Proposer further represents and warrants to the Village that the Proposer and its principals, shareholders, members, partners, or affiliates, as applicable are not, directly or indirectly, engaged in, and are not facilitating, the transactions contemplated by this Agreement on behalf of any person or entity named as a Specially Designated National and Blocked Person. The Proposer hereby agrees to defend, indemnify and hold harmless the Village, and its elected or appointed officers, employees, agents, representatives, engineers and attorneys, from and against any and all claims, damages, losses, risks, liabilities and expenses(including reasonable attorney's fees and costs) arising from or related to any breach of the foregoing representations and warranties.

#### 20. INSURANCE REQUIREMENTS

20.1 Prior to starting the work, Contractor and any Subcontractors shall procure, maintain and pay for such insurance as will protect against claims for bodily injury of death, or for damage to property, including loss of use, which may arise out of operations by the Contractor or Subcontractor or any Sub-Sub Contractor or by anyone employed by any of them, or by anyone for whose acts any of them may be liable. Such insurance shall not be less than the greater of coverages and limits of liability specified below or any coverages and limits of liability specified in the Contract Documents or coverages and limits required by law unless otherwise agreed to by the Village.

Workers Compensation	\$500,000	Statutory
Employers Liability	\$1,000,000 \$1,000,000 \$1,000,000	Each Accident Disease Policy Limit Disease Each Employee
Comprehensive General Liability	\$2,000,000	Each Occurrence

	\$2,000,000	Aggregate (Applicable on a Per Project Basis)
Commercial Automobile Liability	\$1,000,000	Each Accident
Professional Errors & Omissions (pursuant to section .9 below)	\$2,000,000 \$2,000,000	Each Claim Annual Aggregate
Umbrella Liability	\$ 5,000,000	

- 20.2 Commercial General Liability Insurance required under this paragraph shall be written on an occurrence form and shall include coverage for Products/Completed Operations, Personal Injury with Employment Exclusion (if any) deleted, Blanket XCU and Blanket Contractual Liability insurance applicable to defense and indemnity obligations and other contractual indemnity assumed under the Contract Documents. The limit must be on a "Per Project Basis"
- 20.3 Comprehensive Automobile Liability Insurance required under this paragraph shall include coverage for all owned, hired and non-owned automobiles.
- 20.4 Workers Compensation coverage shall include a waiver of subrogation against the Village.
- 20.5 Comprehensive General Liability, Employers Liability and Commercial Automobile Liability Insurance may be arranged under single policies for full minimum limits required, or by a combination of underlying policies with the balance provided by Umbrella and/or Excess Liability policies.
- 20.6 Contractor and all Subcontractors shall have their respective Comprehensive General Liability (including products/completed operations coverage), Employers Liability, Commercial Automobile Liability, and Umbrella/Excess Liability policies endorsed to add the "Village of Downers Grove, officers, officials, employees and volunteers" as "additional insureds" with respect to liability arising out of operations performed; claims for bodily injury or death brought against Village by any Contractor of Subcontractor employees, or the employees of Subcontractor's subcontractors of any tier, however caused, related to the performance of operations under the Contract Documents. Such insurance afforded to the Village shall be endorsed to provide that the insurance provided under each policy shall be Primary and Non-Contributory.
- 20.7 Contractor and all Subcontractors shall maintain in effect all insurance coverages required by the Contract Documents at their sole expense and with insurance carriers licensed to do business in the State of Illinois and having a current A. M. Best rating of no less than

- A-VIII. In the event that the Contractor or any Subcontractor fails to procure or maintain any insured required by the Contract Documents, the Village may, at its option, purchase such coverage and deduct the cost thereof from any monies due to the Contractor or Subcontractor, or withhold funds in an amount sufficient to protect the Village, or terminate this Agreement pursuant to its terms.
- All insurance policies shall contain a provision that coverages and limits afforded hereunder shall not be canceled, materially changed, non-renewed or restrictive modifications added, without thirty (30) days prior written notice to the Village. Renewal certificates shall be provided to the Village not less than five (5) prior to the expiration date of any of the required policies. All Certificates of Insurance shall be in a form acceptable to Village and shall provide satisfactory evidence of compliance with all insurance requirements. The Village shall not be obligated to review such certificates or other evidence of insurance, or to advise Contractor or Subcontractor of any deficiencies in such documents, and receipt thereof shall not relieve the Contractor or Subcontractor from, nor be deemed a waiver the right to enforce the terms of the obligations hereunder. The Village shall have the right to examine any policy required and evidenced on the Certificate of Insurance.
- 20.9 Only in the event that the Work under the Contract Documents includes design, consultation, or any other professional services, Contractor or the Subcontractor shall procure, maintain, and pay for Professional Errors and Omissions insurance with limits of not less than \$2,000,000 per claim and \$2,000,000 annual aggregate. If such insurance is written on a claim made basis, the retrospective date shall be prior to the start of the Work under the Contract Documents. Contractor and all Subcontractors agree to maintain such coverage for three (3) years after final acceptance of the Project by the Village or such longer period as the Contract Documents may require. Renewal policies during this period shall maintain the same retroactive date.
- Any deductibles or self-insured retentions shall be the sole responsibility of the Insured. At the option of the Village, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Village, its officers, officials, employees and volunteers; or the Proposer shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

#### 21. COPYRIGHT/PATENT INFRINGEMENT

21.1 The Proposer agrees to indemnify, defend, and hold harmless the Village against any suit, claim, or proceeding brought against the Village for alleged use of any equipment, systems, or services provided by the Proposer that constitutes a misuse of any proprietary or trade secret information or an infringement of any patent or copyright.

#### 22. COMPLIANCE WITH OSHA STANDARDS

22.1 Equipment supplied to the Village must comply with all requirements and standards as specified by the Occupational Safety and Health Act. All guards and protectors as well as appropriate markings will be in place before delivery. Items not meeting any OSHA

specifications will be refused.

#### 23. CERCLA INDEMNIFICATION

In the event this is a contract that has environment aspects, the Awarded Proposer shall, to the maximum extent permitted by law, indemnify, defend, and hold harmless the Village, its officers, employees, agents, and attorneys from and against any and all liability, including without limitation, costs of response, removal, remediation, investigation, property damage, personal injury, damage to natural resources, health assessments, health settlements, attorneys' fees, and other related transaction costs arising under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, 42 U.S.C.A. Sec. 9601, et seq., as amended, and all other applicable statutes, regulations, ordinances, and under common law for any release or threatened release of the waste material collected by the Awarded Proposer, both before and after its disposal.

#### 24. BUY AMERICA

- 24.1 The Contractor agrees to comply with 49 U.S.C.5323(j), the Federal Transportation Administration's (FTA) Buy America regulations at 49 C.F.R. Part 661, and any amendments thereto, and any implementing guidance issued by the FTA, with respect to this contract, when financed by Federal funds (through a grant agreement or cooperative agreement).
- As a condition of responsiveness, the Contractor agrees to submit with its Bid submission, an executed Buy America Certificate, attached hereto.

#### 25. CAMPAIGN DISCLOSURE

- 25.1 Any contractor, proposer, bidder or vendor who responds by submitting a bid or proposal to the Village of Downers Grove shall be required to submit with its bid submission, an executed Campaign Disclosure Certificate, attached hereto.
- 25.2 The Campaign Disclosure Certificate is required pursuant to the Village of Downers Grove Council Policy on Ethical Standards and is applicable to those campaign contributions made to any member of the Village Council.
- 25.3 Said Campaign Disclosure Certificate requires any individual or entity bidding to disclose campaign contributions, as defined in Section 9-1.4 of the Election Code (10 ILCS 5/9-1.4), made to current members of the Village Council within the five (5) year period preceding the date of the bid or proposal release.
- 25.4 By signing the bid documents, contractor/proposer/bidder/vendor agrees to refrain from making any campaign contributions as defined in Section 9-1.4 of the Election Code (10 ILCS 5/9-1.4) to any Village Council member and any challengers seeking to serve as a member of the Downers Grove Village Council.

#### 26. SUBLETTING OF CONTRACT

26.1 No contract awarded by the Village shall be assigned or any part sub-contracted without the written consent of the Village Manager. In no case shall such consent relieve the Awarded Proposer from their obligation or change the terms of the contract.

#### 27. TERM OF CONTRACT

27.1 The term of this contract shall be from award until December 31, 2010. This contract may be extended no more than twice for subsequent annual periods (two annual extensions) by mutual agreement of both parties, providing such agreement complies with Village purchasing policies and the availability of funds. However, if this contract is not one that is subject to extension, such information will be available in the detailed specifications or special conditions section, supra.

#### 28. TERMINATION OF CONTRACT

- 28.1 The Village reserves the right to terminate the whole or any part of this contract, upon written notice to the Awarded Proposer, for any reason and/or in the event that sufficient funds to complete the contract are not appropriated by the Village.
- 28.2 The Village further reserves the right to terminate the whole or any part of this contract, upon ten (10) days' written notice to the Awarded Proposer, in the event of default by the Awarded Proposer. Default is defined as failure of the Awarded Proposer to perform any of the provisions of this contract or failure to make sufficient progress so as to endanger performance of this contract in accordance with its terms. In the event that the Awarded Proposer fails to cure the default upon notice, and the Village declares default and termination, the Village may procure, upon such terms and in such manner as the Village may deem appropriate, supplies or services similar to those so terminated. The Awarded Proposer shall be liable for any excess costs for such similar supplies or services unless acceptable evidence is submitted to the Village that failure to perform the contract was due to causes beyond the control and without the fault or negligence of the Awarded Proposer. Any such excess costs incurred by the Village may be set-off against any monies due and owing by the Village to the Awarded Proposer.

#### 29. BILLING & PAYMENT PROCEDURES

- 29.1 Payment will be made upon receipt of an invoice referencing Village purchase order number. Once an invoice and receipt of materials or service have been verified, the invoice will be processed for payment in accordance with the Village payment schedule. The Village will comply with the Local Government Prompt Payment Act, 50 ILCS 505/1 et seq., in that any bill approved for payment must be paid or the payment issued to the Proposer within 60 days of receipt of a proper bill or invoice. If payment is not issued to the Proposer within this 60 day period, an interest penalty of 1.0% of any amount approved and unpaid shall be added for each month or fraction thereof after the end of this 60 day period, until final payment is made.
- 29.2 The Village shall review in a timely manner each bill or invoice after its receipt. If the Village determines that the bill or invoice contains a defect making it unable to process

the payment request, the Village shall notify the Proposer requesting payment as soon as possible after discovering the defect pursuant to rules promulgated under 50 ILCS 505/1 et seq. The notice shall identify the defect and any additional information necessary to correct the defect.

- 29.3 If this contract is for work defined as a "fixed public work" project under the Illinois Prevailing Wage Act, 820 ILCS 130/2, any contractor or subcontractor is required to submit certified payroll records along with the invoice. No invoice shall be paid without said records.
- 29.4 Please send all invoices to the attention of Village of Downers Grove, Accounts Payable, 801 Burlington, Downers Grove, IL 60515.

#### 30. RELATIONSHIP BETWEEN THE PROPOSER AND THE VILLAGE

30.1 The relationship between the Village and the Proposer is that of a buyer and seller of professional services and it is understood that the parties have not entered into any joint venture or partnership with the other.

#### 31. STANDARD OF CARE

- 31.1. Services performed by Proposer under this Agreement will be conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. No other representations express or implied, and no warranty or guarantee is included or intended in this Agreement, or in any report, opinions, and documents or otherwise.
- 31.2 If the Proposer fails to meet the foregoing standard, Proposer will perform at its own cost, and without reimbursement from the Village, the professional services necessary to correct errors and omissions caused by Proposer's failure to comply with the above standard and reported to Proposer within one (1) year from the completion of Proposer's services for the Project.
- Proposer during construction or equipment installation or the furnishing of Project representatives shall not make Proposer responsible for: (i) constructions means, methods, techniques, sequences or procedures; (ii) for construction safety precautions or programs; or (iii) for any construction contactor(s') failure to perform its work in accordance with contract documents.

#### 32. GOVERNING LAW

32.1 This Agreement will be governed by and construed in accordance with the laws of the State of Illinois without regard for the conflict of laws provisions. Venue is proper only in the County of DuPage and the Northern District of Illinois.

#### 33. SUCCESSORS AND ASSIGNS

33.1 The terms of this Agreement will be binding upon and inure to the benefit of the parties

and their respective successors and assigns; provided, however, that neither party will assign this Agreement in whole or in part without the prior written approval of the other. The Proposer will provide a list of key staff, titles, responsibilities, and contact information to include all expected sub Proposers.

#### 34. WAIVER OF CONTRACT BREACH

34.1 The waiver by one party of any breach of this Agreement or the failure of one party to enforce at any time, or for any period of time, any of the provisions hereof will be limited to the particular instance and will not operate or be deemed to waive any future breaches of this Agreement and will not be construed to be a waiver of any provision except for the particular instance.

#### 35. AMENDMENT

35.1 This Agreement will not be subject to amendment unless made in writing and signed by all parties.

#### 36. CHANGE ORDERS

- 36.1 The contract price is a "not-to-exceed" cost. At any time additional work is necessary or requested, and the not-to-exceed price is increased thereby, any change, addition or price increase must be agreed to in writing by all parties. The appropriate authorizing signature for the Village is the Village Manager.
- 36.2 Change orders for public works projects which authorize an increase in the contract price that is 50% or more of the original subcontract price or that authorize or necessitate any increase in the price of a subcontract under the contract that is 50% or more of the original subcontract price must be resubmitted for bidding in the same manner by which the original contract was bid. (50 ILCS 525/1)

#### 37. SEVERABILITY OF INVALID PROVISIONS

37.1 If any provisions of this Agreement are held to contravene or be invalid under the laws of any state, country or jurisdiction, contravention will not invalidate the entire Agreement, but it will be construed as if not containing the invalid provision and the rights or obligations of the parties will be construed and enforced accordingly.

#### 38. NOTICE

38.1 Any notice will be in writing and will be deemed to be effectively served when deposited in the mail with sufficient first class postage affixed, and addressed to the party at the party's place of business. Notices shall be addressed to the Village as follows:

Village Manager
Village of Downers Grove
801 Burlington Ave.
Downers Grove, IL 60515

And to the Proposer as designated in the Contract Form.

#### 39. EMPLOYMENT OF ILLINOIS WORKERS

In the event this is a public works project as defined under the Prevailing Wage Act, 820 ILCS 130/2 Contractor and any of its subcontractors shall comply with the provisions of the Employment of Illinois Workers on Public Works Act. 30 ILCS 570/0.01.

#### 40. COOPERATION WITH FOIA COMPLIANCE

Contractor acknowledges that the Freedom of Information Act may apply to public records in possession of the Contractor or a subcontractor. Contractor and all of its subcontractors shall cooperate with the Village in its efforts to comply with the Freedom of Information Act. 5 ILCS 140/1 et.seq.

#### III. DETAILED SPECIFICATIONS

#### HYDRANT FLOW TESTING SERVICES

#### 1.0 BACKGROUND

The Village of Downers Grove's water system covers an area of approximately 16 square miles including areas outside the corporate limits of the Village, and serves a population of more than 50,000 residents. The potable water system includes 230 miles of water mains ranging in size from 4-inches to 24-inches in diameter. Within the water system there are approximately 2,600 hydrants.

#### 2.0 SPECIFICATIONS/REQUIREMENTS

The work covered under this project is to develop, plan and execute a program to flow test
approximately 870 hydrants. No flow testing shall be conducted during the Village's water
conservation period from May 15, 2010 through September 15, 2010. The Village
anticipates awarding a contract in March 2010.

#### 2.1 EMPLOYEE QUALIFICATIONS and SAFTEY

• The Village is seeking a technical services firm that can provide the service in an efficient, accurate and professional manner. As a part of this the vendor must provide experienced, courteous, professional and qualified personnel. The following are the requirements/qualifications needed by the personnel performing the work on this project.

Project Manager: The Project Manager for this project shall have a minimum of six (6) years of continuous field and supervisory experience in the areas defined within the project specifications. This person shall be on site at project startup, make periodic onsite inspections of the worksite, monitor the project progression and be available to (in communication with) the Village, the Water Manager and the Project Leader to answer questions and assist with the successful completion of this project. This person shall be trained (certified where applicable) in traffic control – technician & flagging (MUTCD Standards), confined space entry, CPR and First Aid. The Project Manager will have a minimum of an OSHA 10 Hour Card in General Industry (OSHA Standard 1910). An OSHA 30 Hour Card is preferred.

Project Leader (Lead Technician): The Project Leader for this project shall have a minimum of three (3) years of continuous field experience in the areas defined within the project specifications. The Project Leader is required to be onsite at all times during this project. This person shall be trained (certified where applicable) in traffic control – technician & flagging (MUTCD Standards), confined space entry, CPR and First Aid. The Project Leader will have an OSHA 10 Hour Card in General Industry (OSHA Standard 1910).

<u>Technician/Laborer:</u> The Technician/Laborer for this project has no minimum requirements. However, the Village prefers the Technician/Laborer to have completed training (certified where applicable) in traffic control – technician & flagging (MUTCD Standards), confined

space entry, CPR and First Aid within six (6) months of his/her hire date. The Technician/Laborer will also have an OSHA 10 Hour Card in General Industry (OSHA Standard 1910) within the same six (6) month period.

<u>Safety</u> is a major part of this project; the Village requires a safe work environment for its employees, technical service providers and the general public. The technical service provider is required to provide a safe work environment at all times during this project. The technical service provider will provide personnel trained in Confined Space Entry & Self-Rescue, First Responder First Aid, CPR and Traffic Control. While in the field on this project, the technical service provider and its employees will follow all of the necessary safety procedures to protect themselves, the Village staff and general public. <u>Two-person teams will be used at all times for Safety and Quality Assurance</u>.

Therefore, the technical service provider will adhere to the following:

- Any valves located in a "confined space" such as pit and vault installations that require entry will be treated in accordance with the safety rules regarding Confined Space Entry as is designated by the Village, the Department of Labor and OSHA. Project personnel will be trained (certified were applicable) in Confined Space Entry & Self-Rescue.
- The Project Team will follow all traffic safety rules, as is designated by the Village, The Department of Labor, OSHA and the Illinois Department of Transportation. Project personnel will be <a href="mailto:trained">trained</a> (certified were applicable) by an organization such as the AMERICAN TRAFFIC SAFTEY SERVICES ASSOCIATION (ATSSA), in Traffic Control and Safety (MUTCD Standards).
- The Project Team will follow all safety rules regarding First Responder First Aid & CPR, as is designated by the Village, the Department of Labor and OSHA. Project personnel will be trained (certified were applicable) in First Aid & CPR.
- The Project Manager and the Project Leader will be trained in accordance with OSHA Standard 1910 (General Industry) and be in possession of an OSHA 10 Hour or 30 Hour Card.

#### 2.2 EMPLOYEE TRAINING AND EDUCATION

• Proposers must have and demonstrate a training program for their personnel. This program will include classroom training as well as on the job field training regarding techniques of hydrant flow testing and hydrant flushing. Additional training in other distribution system maintenance programs needs to be a part of the general training for water distribution systems. Personnel used for the hydrant flow testing/ flushing program shall have participated in at least one year of a "training" position such as a "trainee" status, or apprenticeship program. This training shall include on the job safety training by a Certified Safety Trainer or Certified Safety Instructor. Proposer shall have documentation of their training programs including such items as written tests and field practical exams.

#### 2.3 EXPERIENCE REQUIREMENTS

The contractor shall be required before the award of any contract to show to the complete satisfaction of the Water Manager that it has the necessary facilities, ability and resources to provide the services specified herein in a satisfactory manner. The contractor shall be required to give past history and references in order to satisfy the Water Manager in regard to the contractor's qualifications. The Water Manager shall make reasonable investigations deemed necessary and proper to determine the ability of the contractor to perform the work. The Water Manager reserves the right to reject any proposal if the evidence submitted by, or investigation of, the contractor fails to satisfy the Water Manager that the contractor is properly qualified to carry out the obligations of the contract and to complete the work described herein. Evaluation of the contractor's qualifications shall include:

- 1. The ability, capacity, skill and resources to perform the work or provide the service required.
- 2. The ability of the contractor to perform the work or provide the service promptly or within the time specified, without delay or interference.
- 3. The character, integrity, reputation, judgment, experience, and efficiency of the contractor.
- 4. The quality of performance of previous hydrant flow testing contracts or services with the Village and other municipalities within the last five (5) years. At least two (2) of the municipal references must be for individual hydrant flow testing contracts in excess of 400 hydrants annually. These references must be indicated clearly in the proposal.

#### 2.4 EQUIPMENT TO BE USED

The Village will require the following equipment to be used for the hydrant flow testing work and the items listed will be on site at all times during the project. The Proposer will indicate all equipment that will be used during the Project.

- Hydrant diffusers with built in pitot gauges.
- 2-1/2" manually operated gate valves for the hydrant ports.
- Standard Hydrant wrenches (no extensions).
- FCS S-30 electronically enhanced listening device to insure Hydrants have been shut down and are not leaking after the test.
- Approved food grade grease for port and cap lubrication.
- Truck mounted Arrow Board/Signage, and warning lights on trucks.
- Traffic control equipment, including properly sized traffic cones with reflective stripes when needed or required.

All equipment listed above and any other equipment intended for use on this project will be approved by the Village, the Director of Public Works, or the Water Manager.

#### 2.5 SCOPE OF SERVICE

The Proposer will furnish all labor, material, transportation, tools, and equipment necessary to flow test the assigned hydrants in the water distribution system. A two-person team is required for the work. A one-person crew will not be considered for the work for traffic control and safety reasons. The work will consist of the following:

- The project will be conducted in accordance to the AWWA M-17 manual for "Fire Hydrants, Installation, Field Testing, and Maintenance".
- Project Personnel will meet with the Village to review the project guidelines and answer any questions on procedures.
- Any pressure zones in the distribution system will be identified on the water atlas prior to developing the Fire hydrant flow-testing program.
- Project Personnel will provide the Village an informational letter briefly explaining the
  fire hydrant flow-testing program to include with the customer's normal water bill.
   Frequently, special mailings are used for customer notification. If the proposer chooses a
  special mailing, the proposer will be responsible for the postage and printing costs.
- The Proposer will provide the Village a draft press release to be issued by the Village to briefly explain the fire hydrant flow-testing program and the areas affected. The press releases will be sent to: local newspapers, local radio stations and the Cable Company. This type of customer notification can greatly reduce the number of customer complaints about dirty water.
- Project Personnel will go door-to-door, forty eight hours in advance, and hang door
  hangers that explain when the fire hydrants will be flow-tested and flushed in the area.
  They will also note on the door hanger about the potential for discolored water and the
  potential damage to clothing. They will place a toll free number on the door hanger so
  that the water customer can call and ask questions.
- All of the fire hydrants will be recorded on the water atlas and assigned numbers, using
  the Village's existing numbering system, prior to the development of the fire hydrant
  flow-testing program. This data is critical to establishing an effective and water
  conserving fire hydrant flow-testing program.
- All of the pertinent information for each fire hydrant that is flow-tested will be
  documented. This data is critical to establishing an ongoing flow-testing and
  maintenance program. The following is a list of the information gathered.
  - o Fire Hydrant nozzle size used for each test
  - o Residual Pressure
  - o Static Pressure
  - o Flow, GPM (Gallons Per Minute)

- o The amount of time it takes to flush each Fire Hydrant
- o An estimate of the water used during the operation of each Fire Hydrant
- o Fire Hydrants that are in need of repair, painting, color coding, or have operation defects will be noted.
- o The date tested and technicians operating the Fire Hydrant
- The Fire Hydrant address or location
- All hydrant caps will be greased and fire hose and deflection tubes will be utilized, as required, to direct flushing water away from traffic, pedestrians, underground utility vaults, and private property.
- Pressure gauges will be used to determine the residual pressure during the flow-testing process while insuring that the distribution system pressure remains above 20 psi. Any incidents of the distribution system being unable to supply a residual of 20 psi in the surrounding area will be brought to the immediate attention of the Water Manager.
- After the Fire Hydrant has been flushed, Project Personnel will verify that the hydrant is seated and is draining properly. Project Personnel will also check the Fire Hydrant with a FCS S30 electronic listening device to ensure that the hydrant is not leaking. A majority of fire hydrant leaks go un-noticed because they are small leaks draining out through the drain holes at the base of the hydrant. Using the S30 will help eliminate this type of leakage.
- All pressure gauges used in the field will undergo <u>daily testing</u> against a "standard" gauge
  or test station to insure the field gauges are accurate during the flow-testing project. Any
  gauges that are found to not be within acceptable limits will be replaced with gauges that
  are within accepted standards. This will insure the observed static and residual pressures
  are accurate and reliable. The testing of gauges may need to be witnessed by assigned
  Village staff if requested.

#### 2.6 DOCUMENTATION and COMMUNICATIONS

The Proposer is expected to perform the following:

- Project Team will meet daily with assigned Village personnel to go over areas of flow testing for prior workdays and plan current day and next two days' areas to flow test.
- At the end of each day, or as requested, a list of any broken or inoperable valves or hydrants will be turned in.
- Each step of the fire hydrant flow-testing program will be identified and the hydrants used for each flow-test will be documented in a fire hydrant flow-testing report.
- Maintain a progression map to be included with the final report of the project indicating areas flow tested and areas that have been tagged for flow testing.

- The field test information will be placed in a fire hydrant database. This documentation shall allow for the flow-testing program to be repeated at a later date. This software program should be designed to be a complete system for the Village to establish an effective fire hydrant flow testing, flushing and maintenance program. The software will have to provide an inventory record system, as well as hydrant maintenance and scheduling. The software needs to include a complete hydrant flow-testing program for calculating flow test results. This program shall minimally have the capability to generate upon demand:
  - o The individual Hydrant Flow Test reports that includes the flow test data, static pressure and residual pressure, and potential flow at 20psi.
  - o A summary listing of all Hydrants with identified defects.
  - o A complete listing of all Hydrants by numerical or indexed order.
  - o A complete listing of all Hydrants by alphabetically reference to street and cross street names.
  - o All pertinent information such as port size, number of ports, flow test results, general condition of the hydrant, and color coding for the NFPA rating.
  - o Hydrant location will be documented from existing landmarks and will be a part of each Hydrant record.
- Information collected by the Project Team during the Hydrant Flow Testing program and any other information provided by the Village shall be regarded as <u>CONFIDENTIAL</u> and will not be shared without written permission from the Village.
- A Flow Testing log of activity will be included with the final report that will include the following;
  - 1.) Type of problems observed
  - 2.) Location of problems discovered
  - 3.) Total estimated water used (to be included on each flow test result)
  - 4.) Mapping errors on the water atlas
- A Final report will be prepared at the completion of the project which will include all hydrant
  flow testing reports and other problems found in the system during the course of flow testing
  that need the attention of the Village. This final report shall be made available for
  submission to the Public Works Department within twenty (20) days of the completion of the
  fieldwork.
- If requested, the Contractor shall present findings of the Flow Testing Program to the Village at a Village Council Meeting at no additional charge.

#### 2.7 ASSUMPTIONS AND SERVICES PROVIDED BY THE VILLAGE

- The Village will furnish all maps, atlases, (two copies) and records necessary to properly conduct the flow testing program.
- ♦ The Village will make available, on a reasonable but periodic basis, certain personnel with a working knowledge of the water system who may be helpful with general information about the water system. This person will not need to assist the Project Team on a full time basis.

♦ The Village will supply any other information that may make the job of flow testing easier to perform.

#### 3.0 PROPOSAL FORMAT AND SUBMISSION REQUIREMENTS

#### 3.1 Proposal Format

In order to be considered responsive, and evaluate proposals fairly and completely, each prospective vendor must follow the format set out in this RFP and provide all information requested. Proposals should be prepared simply and economically, providing a straightforward, concise description of capabilities to satisfy the requirements of the RFP. Emphasis should be on completeness and clarity of content. A detailed tabbed index in a 3-ring binder is highly suggested (do not use spiral, comb or glue binding) and must include the following:

#### 3.1.1 Introduction

Proposals must include the complete name and address of vendor and the name, mailing address, and telephone number of the person the Village should contact regarding the proposal.

 Proposals must be signed by an authorized representative confirming that the vendor will comply with all provisions in this RFP.

#### 3.1.2 Experience/Staff Resumes

- Vendor shall indicate the expertise and experience of the Vendor relative to the requirements contained in this RFP.
- Submit resumes for the individuals who will be performing the services for the Village.

Resumes shall be formatted in the following order;

- 1) Position with the Company
- 2) Role in the Project
- 3) Experience with the requirements and tasks being requested
- 4) Work history on similar projects with the company
- 5) Legal relationship of the named person with the prime contractor
- Past Experience as required in Section 2.3.

#### 3.1.3 Technical Approach/Implementation

A detailed work plan and methodology your firm would follow in performing services under the contract. Do not restate the Village's Scope of Work but rather provide the approach your firm will take and any recommendations. If your firm's approach is different than stated in the Village's Scope of Work, explain how and why. Demonstrate a complete understanding of water main capacity testing/hydrant flow testing methodologies. Describe the planned testing methodology and field approach to the project. Planned hydrant operation techniques, as well as flow analysis techniques shall be outlined. Account for potential problems to be expected and the possible techniques to be employed for solving those problems.

Provide sample reports, protocol, procedures, or spreadsheets representative of those that will be provided to the Village.

The vendor will present a schedule for the project. The schedule will highlight important milestone dates with a description of what these tasks include. Please include a Gantt-type chart depicting the project from start to final acceptance.

#### 3.1.4 Cost Proposal

In conjunction with the proposal, vendors shall also submit one (1) original and two (2) copies of the cost proposal (all costs) in a sealed and clearly marked envelope accompanying the proposal. Proposals should include an all inclusive cost per hydrant to complete the scope of services. While the level of effort may vary from hydrant to hydrant, the proposed average cost per hydrant should be based on the Contractor's past experience and expertise in this type of work.

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#### 4.0 PROPOSAL EVALUATION PROCESS

#### 4.1 Vendor Selection

A technical review committee will evaluate the proposals. Final selection will be based on the evaluation of proposals unless it is deemed necessary by the committee to conduct interviews. The firm determined best qualified to perform this project will be recommended to the Village Council for contract award. The Village of Downers Grove reserves the right to reject any and all proposals for any reason deemed appropriate by the Village.

The Village may conduct negotiations with the top vendor(s) if required to determine the acceptability of the proposal in regards to specifications, terms and conditions and cost; therefore, the proposal(s) submitted should contain the vendor's most favorable terms and conditions as well as cost with detailed specifications as proposed, since the selection and award may be made without discussion.

The Village will select the highest rated, fully qualified and best suited vendor to continue forward the project. Should the first selected vendor be unable to fulfill the terms of the contract, the Village reserves the right to enter into a contract with the 2nd selected vendor. If the Village does not find that any vendor meets the needs and requirements, the Village is not obligated to enter into agreement for hydrant flow testing services.

#### IV. PROPOSAL/CONTRACT FORM

\*\*\*THIS PROPOSAL WHEN ACCEPTED AND SIGNED BY AN AUTHORIZED SIGNATORY OF THE VILLAGE OF DOWNERS GROVE SHALL BECOME A CONTRACT BINDING UPON BOTH PARTIES.

Entire Block Must Be Completed When A Submitted Bid Is To Be Considered For Award

THILE DICK MINST DE COMPLETER MULEI A	Submitted Did 15 10 De Considered For Award
BIDDER:	
M.E. Simpson Co., Inc.	Date: 2/26/2010
Company Name	johnnyv@mesimpson.com
3406 Enterprise Ave.	Email Address
Street Address of Company	
Valparaiso, IN 46383	John H. Van Arsdel Contact Name (Print)
City, State, Zip	, ,
(800) 255-1521	(800) 255-1521 <b>24-Hour Telephone</b>
Business Phone	A. H. Ib. Gardel
(888)531-2444	Signature of Officer, Partner or
Fax	Sole Proprietor
	John H. Van Arsdel, Vice President Print Name & Title
ATTEST: If a Corporation  Pamela A Hood  Signature of Corporation Secretary	;
VILLAGE OF DOWNERS GROVE:	<u> </u>
Authorized Signature	ATTEST:
Title	Signature of Village Clerk
Date	Date

In compliance with the specifications, the above-signed offers and agrees, if this Proposal is accepted within 90 calendar days from the date of opening, to furnish any or all of the services upon which prices are quoted, at the price set opposite each item, delivered at the designated point within the time specified above.



#### **VENDOR W-9 REQUEST FORM**

The law requires that we maintain accurate taxpayer identification numbers for all individuals and partnerships to whom we make payments, because we are required to report to the LRS all payments of \$600 or more annually. We also follow the I.R.S. recommendation that this information be maintained for all payees including corporations.

Please complete the following substitute W-9 letter to assist us in meeting our I.R.S. reporting requirements. The

information below will be t possible, as failure to do s			luired to send you	a Form 1099, Ple	ase respond as soon as
BUSINESS (PLEASE PRINT	OR TYPE):				·
NAME: M.E.	Simpson Co.,	Inc.			
Address: 340	6 Enterprise	Avenue			
City:	Valparaiso				_
STATE:	Indiana				
<del>-</del>	46383				
	) 255-1521	Fax:	 (888)531-2	2444	
	35-1474720				
(If you are supplying a soc		ease give you	ır full name)		
REMIT TO ADDRESS (IF D	IFFERENT FROM ABOY				
Crry:				-	
STATE:			Z1P:		
TYPE OF ENTITY (CIRC	CLE ONE):				
Individu	-	lmited Liabil	ity Company –Ind	lividual/Solo Pro	prietor
Sole Pro	_		ity Company-Part	•	
Partners	-		ity Company-Corp	oration	
Medical		orporation			
Charitab	le/Nonprofit Go	vernment Ag	gency		
Signature:	John H. Van as	del	DATE:	2/26/201	.0_
<del>(/</del>			<del></del> _		

#### PROPOSER'S CERTIFICATION (page 1 of 3)

With regard to	RFP-0-8-2010/TT	, proposer	M.E.	Simpson	Co.,	Inc. hereby certifies
	(Name of Project)			(Name of Prop	oser)	- •
the following:				ı		

- 1. Proposer is not barred from bidding this contract as a result of violations of Section 720 ILCS 5/33E-3 (Bid Rigging) or 720 ILCS 5/33E-4 (Bid-Rotating);
- 2. Proposer certifies that it has a written sexual harassment policy in place and is in full compliance with 775 ILCS §12-105(A)(4);
- 3. Proposer certifies that not less than the prevailing rate of wages as determined by the Village of Downers Grove, DuPage County or the Illinois Department of Labor shall be paid to all laborers, workers and mechanics performing work for the Village of Downers Grove, All bonds shall include a provision as will guarantee the faithful performance of such prevailing wage clause. Proposer agrees to comply with the Illinois Prevailing Wage Act, 820 ILCS 130/1 et seq., for all work completed. Proposer agrees to pay the prevailing wage and require that all of its subcontractors pay prevailing wage to any laborers, workers or mechanics who perform work pursuant to this contract or related subcontract. Proposer and each subcontractor shall keep or cause to be kept an accurate record of names, occupations and actual wages paid to each laborer, workman and mechanic employed by the Proposer in connection with the contract. This record shall be sent to the Village on a monthly basis along with the invoice and shall be open to inspection at all reasonable hours by any representative of the Village or the Illinois Department of Labor and must be preserved for four (4) years following completion of the contract. Proposer certifies that proposer and any subcontractors working on the project are aware that filing false payroll records is a class B misdemeanor and that the monetary penalties for violations are to be paid pursuant to law by the proposer, contractor and subcontractor. The Village shall not be liable for any underpayments. If applicable: Since this is a contract for a fixed public works project, as defined in 820 ILCS 130/2, Contractor agrees to post at the job site in an easily accessible place, the prevailing wages for each craft or type of worker or mechanic needed to execute the contract or work to be performed.
- 4. Proposer certifies that it is in full compliance with the Federal Highway Administrative Rules on Controlled Substances and Alcohol Use and Testing, 49 C. F.R. Parts 40 and 382 and that all employee drivers are currently participating in a drug and alcohol testing program pursuant to the Rules.
- 5. Proposer further certifies that it is not delinquent in the payment of any tax administered by the Department of Revenue, or that Proposer is contesting its liability for the tax delinquency or the amount of a tax delinquency in accordance with the procedures established by the appropriate Revenue Act. Proposer further certifies that if it owes any tax payment(s) to the Department of Revenue, Proposer has entered into an agreement with the Department of

## PROPOSER'S CERTIFICATION (page 2 of 3)

Revenue for the payment of all such taxes that are due, and Proposer is in compliance with the agreement.

BY: laly H lay Undel	
Proposer's Authorized Agent	
3 5 - 1 4 7 4 7 2 0	
FEDERAL TAXPAYER IDENTIFICATION N	IIMBER
	V1/13/201
or	
Social Security Number	Subscribed and sworn to before me
	this $^{26}$ day of $^{\text{Feb}}$ , $20^{1}$
	day of
	Notary Public
(Fill Out Applicable Paragraph Below)	
The Proposer is a corporation organized and existing Indiana, which operates under the Legal name M.E. Simpson Co., Inc. follows:  President: Dan E. Hood	g under the laws of the State of ne of, and the full names of its Officers are as
Secretary: Pamela Hood	
Treasurer: Bernadette Simpson	
and it does have a corporate seal. (In the event that President, attach hereto a certified copy of that sect authorization by the Corporation which permits the corporation.) (b) Partnership Signatures and Addresses of All Members of Partnership	ion of Corporate By-Laws or other person to execute the offer for the

# Village of Downers Grove

# PROPOSER'S CERTIFICATION (page 3 of 3)

The partnership does business under the legal name of:	
which name is registered with the office of	in the state of
(c) Sole Proprietor The Supplier is a Sole Proprietor whose full name is:	
and if operating under a trade name, said trade name is:	
which name is registered with the office of	
•	,
5. Are you willing to comply with the Village's preceding days of the award of the contract?	g insurance requirements within 13
Insurer's Name General Insurance	
Agent Mark Behrendt	
Street Address 4208 Calumet Avenue, Suite 100,	•
City, State, Zip Code Valparaiso, IN 46384-1818	-
Telephone Number (219) 464-3511	· ·
I/We affirm that the above certifications are true and accu understand them.	rate and that I/we have read and
Print Name of Company: M.E. Simpson Co., Inc.	
Print Name and Title of Authorizing Signature: John H. V	Van Arsdel, Vice Presider
Signature: John H. Van Wielel	
Date: 2/26/2010	

# Village of Downers Grove

Apprenticesh	ip and	<b>Training</b>	Certification	
ly to federal aid projects.	Applicable	e only to mainten	ance and construction r	)

projects that use (Does not apply Motor Fuel Tax funds or state grant monies)

Name of Proposer: M.E. Simpson Co., Inc.
In accordance with the provisions of Section 30-22 (6) of the Illinois Procurement Code, the proposer certifies that it is a participant, either as an individual or as part of a group program, in the approved apprenticeship and training programs applicable to each type of work or craft that the proposer will perform with its own forces. The proposer further certifies for work that will be performed by subcontract that each of its subcontractors submitted for approval either (a) is, at the time of such bid, participating in an approved, applicable apprenticeship and training program; or (b) will, prior to commencement of performance of work pursuant to this contract, begin participation in an approved apprenticeship and training program applicable to the work of the subcontract. The Illinois Department of Labor, at any time before or after award, may require the production of a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and any or all of its subcontractors. Applicable apprenticeship and training programs are those that have been approved and registered with the United States Department of Labor. The proposer shall list in the space below, the official name of the program sponsor holding the Certificate of Registration for all of the type of work or crafts in which the proposer is a participant and that will be performed with the proposer's forces. Types of work or craft work that will be subcontracted shall be included and listed as subcontract work. The list shall also indicate any type of work or craft job category that does not have an applicable apprenticeship or training program. The proposer is responsible for making a complete report and shall make certain that each type of work or craft job category that will be utilized on the project accounted for and listed. Return this with the bid.
NA
The requirements of this certification and disclosure are a material part of the contract, and the contractor shall require this certification provision to be included in all approved subcontracts. In order to fulfill this requirement, it shall not be necessary that an applicable program sponsor be currently taking or that it wittake applications for apprenticeship, training or employment during the performance of the work of this contract.
Print Name and Title of Authorizing Signature: NA
Signature: NA
Date: NA

#### **BUY AMERICA CERTIFICATION**

Certification requirement for procurement of steel, iron, or manufactured products when Federal funds (Grant Agreement or Cooperative Agreement) are used.

#### Instructions:

Bidder to complete the Buy America Certification listed below. Bidder shall certify EITHER COMPLIANCE OR NON-COMPLIANCE (not both). This Certification MUST BE submitted with the Bidder's bid response.

Special Note: Make sure you have signed only one of the above statements - either Compilance OR Non-Compliance (not both).

Certificate of Compliance		
The bidder or offeror hereby certifies that it will meet the requirements of 49 U.S.C. 5323(j)(1), as amended, and the applicable regulations in 49 CFR Part 661.  Signature		
Company Name M.E. Simpson Co., Inc.		
Title Vice President		
Date 2/26/2010		

# Certificate of Non-Compliance The bidder or offeror hereby certifies that it cannot comply with the requirements of 49 U.S.C. 5323(j)(1), as amended, and 49 C.F.R. 661, but it may qualify for an exception pursuant to 49 U.S.C. 5323(j)(2)(A), 5323(j)(2)(B), or 5323(j)(2)(D), and 49 C.F.R. 661.7. Signature Company Name Title Date

AFTER THIS CERTIFICATE HAS BEEN EXECUTED, A BIDDER MAY NOT SEEK A WAIVER.

Note: The U.S/Canadian Free Trade Agreement does not supersede the Buy America requirement.

#### Suspension or Debarment Certificate

Non-Federal entities are prohibited from contracting with or making sub-awards under covered transactions to parties that are suspended or debarred or whose principals are suspended or debarred. Covered transactions include procurement for goods or services equal to or in excess of \$100,000.00 contractors receiving individual awards for \$100,000.00 or more and all sub-recipients must certify that the organization and its principals are not suspended or debarred.

By submitting this offer and signing this certificate, the bidder certifies to the best of its knowledge and belief, that the company and its principals:

- 1. Are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any federal, state or local governmental entity, department or agency.
- 2. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction, or convicted of or had a civil judgment against them for a violation of Federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- 3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (2) of this certification: and
- 4. Have not within a three-year period preceding this application/proposal/contract had one or more public transactions (Federal, State or local) terminated for cause or default.

If the bidder is unable to certify to any of the statements in this certification, bidder shall attach an explanation to this certification.

Company Name: M.E. Simpson Co., Inc.				
Address: 3406 Enterprise Avenue				
City: Valparaiso, IN Zip Code:	16383			
Telephone: (800) 255-1521 Fax Number: (888) 531-2444				
E-mail Address: johnnyv@mesimpson.com				
Authorized Company Signature: John W. Van Widel				
John H. Van Arsdel Vice President Print Signature Name:Title of Official:				
Date: 2/26/2010				

#### CAMPAIGN DISCLOSURE CERTIFICATE

Any contractor, proposer, bidder or vendor who responds by submitting a bid or proposal to the Village of Downers Grove shall be required to submit with its bid submission, an executed Campaign Disclosure Certificate, attached hereto.

The Campaign Disclosure Certificate is required pursuant to the Village of Downers Grove Council Policy on Ethical Standards and is applicable to those campaign contributions made to any member of the Village Council.

Said Campaign Disclosure Certificate requires any individual or entity bidding to disclose campaign contributions, as defined in Section 9-1.4 of the Election Code (10 ILCS 5/9-1.4), made to current members of the Village Council within the five (5) year period preceding the date of the bid or proposal release.

By signing the bid documents, contractor/proposer/bidder/vendor agrees to refrain from making any campaign contributions as defined in Section 9-1.4 of the Election Code (10 ILCS 5/9-1.4) to any Village Council member and any challengers seeking to serve as a member of the Downers Grove Village Council.

Under pena	alty of perjury, I declare:	
	within the last five (5) years.  Signature	John H. Van Arsdel Print Name  ontributed a campaign contribution to a current ithin the last five (5) years.
	To whom contribution was made: Year contribution made:	
	Signature	Print Name

3:\\filer\aperez\$\My Documents\\templates\RFPs\RFPSpecs2007.4.doc

#### FIRM HISTORY

#### M.E. SIMPSON CO., INC: A BRIEF HISTORY

In 1979 M.E. Simpson Co., Inc. was formed to provide "**Technical Services**" to Municipal and Private Water Utilities in the Midwest. Our company provides services in the areas of Water Meter Evaluation and Maintenance, Water Distribution System Leak Surveys, Water Distribution System Flow Measuring and Testing, Fire Hydrant Flow Testing and Flushing, Water Distribution System Valve Location and Exercising and Cross Connection Control Programs. Our purpose was to take advantage of a lack of expertise in this field and to fill this void with qualified people using the best equipment.

M.E. Simpson Co., Inc. developed its Hydrant Flow Testing program in 1995. Since that time we've improved the program to the point that it is now an asset management style program. We've also developed a Microsoft Access Hydrant database with potential fire flow calculations showing all the pertinent information needed to readily calculate fire flows from field data. Today that database has been developed into an internet based program that can be accessible by clients online.

M.E. Simpson Co., Inc. was founded by Marvin E. Simpson who had spent the twenty four years prior to 1979 working within the water works industry for a few major manufacturers of piping, valves, and water meters. The company began operations in Rochester, Indiana and moved the corporate headquarters to Valparaiso, Indiana in 1988. In 1989 the Indiana Section of the American Water Works Association honored Marvin with the "Water Wheel Award" for his outstanding service to his profession. In 1995 Marvin was honored as a lifetime Member of the American Water Works Association.

Marvin's belief in service to our Industry and our Country has established M.E. Simpson Company's commitment to community and organizations such as the United Way, Abused Women and Children, Mental Health Association, Boys and Girls Club, Kiwanis and Jaycees (Junior Chamber of Commerce) for example, as well as local Police and Fire organizations. We encourage all of our employees to be active within their own communities serving with various organizations such as the Jaycees and Kiwanis.

M.E. Simpson Co., Inc. is active in Water Works Organizations at the national and state levels such as American Water Works Association, Water Environment Federation, Water Operators Association, Rural Water Association, American Backflow Prevention Association, American Public Works Association as well as local Districts, Branches, and Suburban Groups.

Our support of these groups goes beyond Membership to truly taking an active role by allowing employees to fill elected and appointed positions as officers and committee chairpersons. M.E. Simpson Company has always taken an active role in education by making presentations at no charge at meetings, training seminars, and providing continuing education credits for water operators through the various water groups. We have presented programs on Hydrant flow testing and Unidirectional Water main Flushing, Water Meter Evaluation and Maintenance, Water Distribution System Leak Surveys, Water Distribution System Valve Location, Exercising and Computerized Mapping, and Best Management Practices for distribution system maintenance at state and national AWWA conventions.



#### FIRM HISTORY

M.E. Simpson is proud of the work we have performed and the maintenance programs that we have developed utilizing the latest technology and meeting the needs of "our customer" the Water Works Industry. We have played an important role in educating utilities about the need for and efficiency of annual maintenance programs; including the development of Pro-Hydrant®, a computer software program for fire hydrant flow testing records, Polcon Pro-Valve® our computer software program for valve location and exercising records, and the continuing development and manufacturing of the Polcon® Flow Monitoring Equipment. We have moved beyond the competition in flow / pressure recording, computerization and record management.

Our leak detections services have been employed since 1986 to now in a majority of municipalities around the Chicago metro area. Additionally, our crews have been deployed to locations across the United States, including Alaska, as well as American Samoa, the Naval Base at Guantanamo Bay, Cuba, and Sigonella, Italy at the Naval Air Stations. Our crews have the unique ability to be able to respond to individual Utility requests because of the cross training they have received performing all the services M.E. Simpson Co. Inc. provides.



#### FIRM HISTORY

#### M.E. SIMPSON CO., INC. - AVAILIBLE SERVICES

**M.E. Simpson Co., Inc.** is a **Technical Service Company.** Our services are designed to aid water utilities improve accountability and increase revenues by maximizing distribution system performance and optimizing distribution system data, records, and mapping programs. Our waste water services provide improvement to collection systems through flow monitoring, smoke testing, and manhole inspections.

- ◆ Fire Hydrant Flow Testing & Flushing flow testing hydrants for water main carrying capacity indicating correct fire flows.
- ♦ Water Loss Control Survey/Audit using the International Water Association water audit format to track water input/output of a water system.
- ▲ Large Meter Evaluation and Maintenance includes proper meter sizing, selection, testing, repair and post-test when needed for master and commercial meters.
- ♦ Water Distribution Leak Survey designed to pinpoint areas of leaks in the distribution system, document the locations and estimate losses.
- ♦ Water Distribution System Valve Assessment locating all main line valves, exercising, documenting the data, and placing information into our Polcon Pro-Valve® Database.
- ♦ Water Distribution System Flow Measuring and Testing determining "C" factors, 24-hour flow monitoring, pump curves, and district flow measurements.
- ◆ Unidirectional Water Main Flushing operating main line valves and flushing directionally to remove debris and sediment out of the distribution system.
- ◆ GPS Locating and CAD Mapping updating atlases by collecting GPS coordinates, field information, and line locating mains. The collected information is entered into updated CAD base maps.
- ◆ Sanitary Sewer and Storm Sewer Flow Monitoring installation of flow monitoring devices, maintaining and recording bi-weekly flow data to show flow patterns of the collection system.
- ◆ Smoke Testing identifying deficiencies including downspout connections, area drains, service laterals, and leaks in the sewers.
- **Manhole Inspection and Inventory** − collecting data for manhole structure conditions including line size, flow direction, and depth of invert.
- ♦ Water Service Connection Inspection and Inventory Program inspecting and inventorying commercial meter settings and backflow devices into a database.
- ◆ Polcon ® Flow and Pressure Monitoring Equipment custom manufacturing of flow monitoring and pressure measurements designed for practical field applications.



#### RELATED HYDRANT FLOW TESTING EXPERIENCE

**M.E. Simpson Co., Inc.** has been in business since 1979. The company continues to perform services for numerous Cities across Indiana, Illinois, Michigan, Wisconsin, Ohio, Arizona, California, and other regions of the United States. We have listed below; a few project examples with references. Please feel free to call any of these gentlemen and ask them about their project and our services.

#### **Hydrant Flow Testing Projects**

City of Highland Park, Illinois (2001 - 2008)

M.E. Simpson Co. has performed water main capacity and fire hydrant operating program for the City since 2001. Each year approximately 800 fire hydrants in a specified area with in the distribution system are inspected, operated and flow tested. This program is saving the City time and money in the areas of water production, distribution system maintenance, overtime and Workmen's Compensation claims. The program is also benefiting the City's hydraulic model and Fire Department's fire flow records. The project is performed on time and within budget. The annual fees are approximately \$29,000 and the program usually takes about 25 work days to complete. The schedule is set so that the flushing occurs in the spring or fall so that summer use of water by the City is not affected.

Mr. Bill Stewart
Water Superintendent
1150 Half Day Rd.
City of Highland Park, IL
(847) 926-1146
bstewart@cityhpil.org

#### City of Beverly Hills, California (2007, 2008)

M.E. Simpson Co. performed a water main capacity and fire hydrant operating program for the City. Over 1,300 fire hydrants in the distribution system were inspected, operated and flow tested in two phases. The program fees were approximately \$86,400. GPS locations of hydrants were included as a part of this program to aid in the updating of the City's GIS system. This program saved the City time and money in the areas of water production, distribution system maintenance, overtime and Workmen's Compensation claims. The program is also benefiting the City's computer model and Fire Department's fire flow records.

Mr. Kevin Watson
Utilities Director
City of Beverly Hills
455 N. Rexford
Beverly Hills, California 90210
(310) 285-2495
kwatson@beverlyhills.org



City of Bioomington, Indiana (1998 - 2008)

M.E. Simpson Co. performs an ongoing water main capacity and fire hydrant operating program for the City annually. Each year 1,200 fire hydrants out of a total of 4800 hydrants in a specified area with in the distribution system are inspected, operated and flow tested. The annual budget is approximately \$45,600. The program has benefitted the City's hydraulic computer model and Fire Department's fire flow records. Private hydrants are also included as part of this program to insure all hydrants work if/when needed.

Mr. Tom Staley
Asst. Director of Utilities
1969 S. Henderson
Bloomington, IN 47401
(812) 349-3650
staleyt@bloomington.in.gov

Village of Orland Park, Illinois (2000 - 2003, 2008-2011)

M.E. Simpson Co. performs an ongoing water main capacity testing and fire hydrant flushing program for the Village on distribution system fire hydrants. To date we have flow tested and service over 4500 fire hydrants. We found a number of closed valves along with fire hydrants that were inoperable. This program in the past has saved the Village time and money in the areas of water production, distribution system maintenance, and overtime. The program also benefited the Village's hydraulic computer model and found some water main leaks when each hydrant was listened to after flushing that helped to lower water loss. The current program approximate annual cost is \$42,000.

Mr. John Ingram
Superintendent, Water & Sewer
Village of Orland Park
15665 South Ravinia Avenue
Orland Park, IL 60462
(708) 403-6350
JIngram@orland-park.il.us



#### Village of LaGrange Park, Illinois (2008)

M.E. Simpson Co., Inc. performed a water main capacity and fire hydrant operating program for the Village. 500 fire hydrants within the distribution system were inspected, operated and flow tested. This program saved the Village time and money in the areas of water production, distribution system maintenance, and overtime. The program has also identified problem hydrants that were able to be corrected by the Village on a timely basis. The approximate annual cost for the 2008 was \$23,000. After this program had been completed, later in the fall of 2008, M.E. Simpson Co., Inc. performed a Unidirectional Water Main Flushing Program where flushing occurred at high velocities of flow in order to clean all the water mains in the distribution system.

Mr. Rick Radde Chief Water Operator Village of LaGrange Park 447 North Catherine Ave. LaGrange Park, IL 60526 (708) 243-3524 rrade@lagrangepark.org

#### Village of Niles, Illinois (2004-2006)

M.E. Simpson Co. performed a water main capacity and fire hydrant operating program for the Village. 1,000 fire hydrants within the distribution system were inspected, operated and flow tested. This program saved the Village time and money in the areas of water production, distribution system maintenance, and overtime. The program has also identified problem hydrants that were able to be corrected by the Village on a timely basis. The approximate annual cost for the 2004-2006 was \$37,000.

Mr. Bob Pilat
Assistant Public Service Director
Village of Niles
6849 Touhy Ave.
Niles, IL 60714
(847) 588-7926
rmp@vniles.com

#### Village of Glencoe, Illinois (2006)

M.E. Simpson Co. performed a water main capacity testing and fire hydrant flushing program for the Village on their fire hydrants. We found some closed valves along with fire hydrants that were inoperable. This program saved the Village time and money in the areas of water production, distribution system maintenance, and overtime while the program also benefited the Village's Fire Department records. Furthermore, the testing and ProHydrant® database helped the Village receive a better ISO rating. The average annual cost for the project was \$25,000.

Mr. Mike Milkes Fire Chief Village of Glencoe 675 Village Court Glencoe, IL 60022 (847) 835-4112



Village of Lansing, Illinols (2002, 2004, 2006, 2007-2011)

M.E. Simpson Co. performs water main capacity and fire hydrant operating program for the Village. Each year over 300 fire hydrants in a specified area with in the distribution system are inspected, operated and flow tested. This program not only is saving the Village time and money in the areas of water production, distribution system maintenance, and overtime, but the program is also benefiting the Village's Fire Department's fire flow records. The annual costs for flow testing have been \$13,800.

Mr. David Zagorac Supervisor, Water Division Village of Lansing 3300 171st Street Lansing, IL 60438 (708) 895-7221 office (708) 774-5028 cell

Village of Westmont, Illinois (2000, 2003, 2006)

M.E. Simpson Co. performs water main capacity and fire hydrant operating program for the Village. Every third year over 1150 fire hydrants in the distribution system are inspected, operated and flow tested. This program not only is saving the Village time and money in the areas of water production, distribution system maintenance, and overtime, but the program is also benefiting the Village's Fire Department's fire flow records. The annual costs for flow testing have been \$47,150.

Mr. Mike Ramsey Water Division Supervisor Village of Westmont, Illinois (630) 829-4450 office

#### <u>ADDITIONAL REFERENCES</u>

Below are several references that use our services. Please feel free to call any of these gentlemen and ask them about our services and us.

Mr. Gale Gerber Water Superintendent Town of Nappanee, IN (574) 773-4623 ggerber 46550@yahoo.com

Mr. Scott Ham Water Superintendent Silver Creek Water Corp. Sellersburg, IN (812) 246-2889 Mr. Greg Ramon Asst. Water Services Director City of Phoenix, AZ (602) 262-6627 greg.ramon@phoenix.gov

Mr. Jerry Martin Director of Public Works City of Palos Heights, IL (708) 361-1806 jerry@palosheights.org Mr. Dan Lueder
Utilities Director
City of Cottonwood, AZ
(928) 634-8033 ex 11
dlueder@ci.cottonwood.az.us

Mr. John Crooks
Water Superintendent
City of Shakopee, MN
(952) 445-1988
jcrooks@shakopeeutilities.com

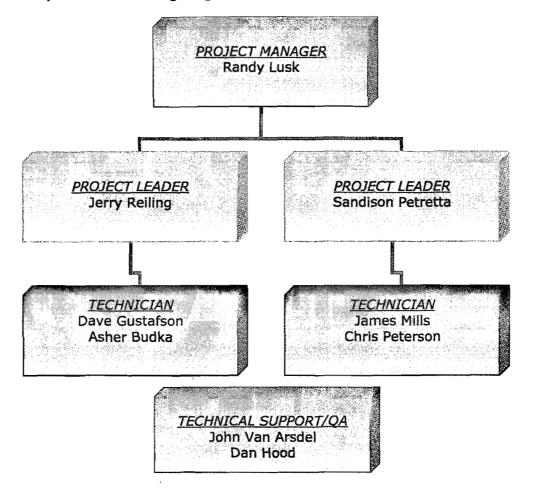


#### **PROJECT STAFFING**

The chart below outlines the **Project Team** to be used during the Hydrant Flow Testing Program for the **Utility**. One of the two Project Managers listed will lead the **Project Team** in the field. **Two-Man Project Teams will be used at <u>all times</u>** <u>during the course of the Project</u> for reasons of <u>Safety and Quality</u> **Assurance**.

The **Project Manager (Randy Lusk)** shall be on site at project startup, make periodic inspections of the worksite and oversee all work production in the field, be responsible for field reports, meet with the Utility periodically to monitor the progress of the program, and will be in communication with the Director of Utilities and the Project Leader throughout the project. He shall be responsible for the overall success of the Hydrant Flow Testing Program.

The Field Leader (Jerry Reiling and/or Sandison Petretta) will lead the Project Team in the field and will be responsible for the day to day operations of the project. Daily contact with the Director of Utilities or appointed Utility personnel shall be maintained and progress of the day to day operations discussed. The Field Leader will be responsible to report any broken hydrants, broken or closed valves, or any other problem areas that need the immediate attention of the Utility during the course of the project. This shall be done to assure direct quality control in the field for the Hydrant Flow Testing Program.





#### Qualifications of Staff for Hydrant Flow Testing Services

#### PROJECT MANAGER/SUPERVISOR RECENT HYRDANT FLOW TESTING PROJECT EXPERIENCE

#### Randy Lusk, Regional Manager-Dyer

Randy was the Project Manager for the following selected Hydrant projects. (2008 - 2009) Village of Orland Park - Orland Park, IL

Mr. John Ingram

Superintendent - Water & Sewer

Village of Orland Park

15655 South Ravinia Avenue

Orland Park, IL 60462

(708) 403-6350

(2008) Village of Countryside - Countryside, IL

Mr. Mike Hartigan

Water Plant Operator

City of Countryside

5550 East Avenue

Countryside, IL 60525

(708) 354-8827

(2008) Village of LaGrange Park - LaGrange Park, IL

Mr. Richard Radde

**Chief Water Operator** 

Village of La Grange Park

447 North Catherine Ave.

La Grange Park, IL 60526

(708) 352-2922

(2008 - 2009) *Town of Griffith* - Griffith, IN

Mr. Rick Konopasek

**Director of Public Works** 

Town of Griffith

111 N. Broad Street

Griffith, IN 46319

(219) 924-3838

(2007 - 2008) Village of Brookfield - Brookfield, IL

Mr. Kevin McCarthy

Water Department Foreman

Village of Brookfield

4545 Eberly Ave.

Brookfield, IL 60513

(708) 485-7344

(2007) Village of Westmont - Westmont, IL

Mr. Michael Ramsey

Water Division Supervisor

Village of Westmont

39 E. Burlington Ave.

Westmont, Illinois 60559-1790

(630) 829-4450

(2002-2004) Village of Lansing Water Department - Lansing, IL

Mr. Dave Zagorac

Water Superintendent

Village of Lansing

3300 171st Street

Lansing, IL 60438

(708) 895-7221



(2003) Village of Harvey - Harvey, IL

Mr. Rufus Fisher

**Director of Public Works** 

City of Harvey Water Department

51 West 149<sup>th</sup> Street

Harvey, IL 60426

(708) 311-0032

#### PROJECT LEADER RECENT HYRDANT FLOW TESTING PROJECT EXPERIENCE

#### Jerry Relling, Fleid Leader

Nick was the Project Leader for the following selected Hydrant projects.

(2008 - 2009) Village of Orland Park - Orland Park, IL

Mr. John Ingram

Superintendent - Water & Sewer

Village of Orland Park

15655 South Ravinia Avenue

Orland Park, IL 60462

(708) 403-6350

(2008) Village of Countryside - Countryside, IL

Mr. Mike Hartigan

Water Plant Operator

City of Countryside

5550 East Avenue

Countryside, IL 60525

(708) 354-8827

(2008) Village of LaGrange Park - LaGrange Park, IL

Mr. Richard Radde

**Chief Water Operator** 

Village of La Grange Park

447 North Catherine Ave.

La Grange Park, IL 60526

(708) 352-2922

(2008 - 2009) *Town of Griffith* - Griffith, IN

Mr. Rick Konopasek

**Director of Public Works** 

Town of Griffith

111 N. Broad Street

Griffith, IN 46319

(219) 924-3838

(2007 - 2008) Village of Brookfield - Brookfield, IL

Mr. Kevin McCarthy

Water Department Foreman

Village of Brookfield

4545 Eberly Ave.

Brookfield, IL 60513

(708) 485-7344

(2007) Village of Westmont - Westmont, IL

Mr. Michael Ramsey

Water Division Supervisor

Village of Westmont

39 E. Burlington Ave.

Westmont, Illinois 60559-1790

(630) 829-4450



GUARTILI IN

(2002-2004) Village of Lansing Water Department - Lansing, IL Mr. Dave Zagorac Water Superintendent Village of Lansing 3300 171st Street Lansing, IL 60438 (708) 895-7221 (2003) Village of Harvey - Harvey, IL Mr. Rufus Fisher **Director of Public Works** City of Harvey Water Department 51 West 149th Street Harvey, IL 60426 (708) 311-0032 Sandison Petretta, Field Leader Sandison was the Field Leader for the following selected Hydrant projects. (2008 - 2009) Village of Orland Park - Orland Park, IL Mr. John Ingram Superintendent - Water & Sewer Village of Orland Park 15655 South Ravinia Avenue Orland Park, IL 60462 (708) 403-6350 (2008) Village of Countryside - Countryside, IL Mr. Mike Hartigan Water Plant Operator City of Countryside 5550 East Avenue Countryside, IL 60525 (708) 354-8827 (2008) Village of LaGrange Park - LaGrange Park, IL Mr. Richard Radde **Chief Water Operator** Village of La Grange Park 447 North Catherine Ave. La Grange Park, IL 60526 (708) 352-2922 (2008 - 2009) *Town of Griffith* - Griffith, IN Mr. Rick Konopasek **Director of Public Works** Town of Griffith 111 N. Broad Street Griffith, IN 46319 (219) 924-3838 (2007 - 2008) Village of Brookfield - Brookfield, IL Mr. Kevin McCarthy Water Department Foreman Village of Brookfield 4545 Eberly Ave. Brookfield, IL 60513 (708) 485-7344



(2007) Village of Westmont - Westmont, IL

Mr. Michael Ramsey

Water Division Supervisor

Village of Westmont

39 E. Burlington Ave.

Westmont, Illinois 60559-1790

(630) 829-4450

(2002-2004) Village of Lansing Water Department - Lansing, IL

Mr. Dave Zagorac

Water Superintendent

Village of Lansing

3300 171st Street

Lansing, IL 60438

(708) 895-7221

(2003) Village of Harvey - Harvey, IL

Mr. Rufus Fisher

**Director of Public Works** 

City of Harvey Water Department 51 West 149<sup>th</sup> Street

Harvey, IL 60426

(708) 311-0032

#### TECHNICAL SUPPORT/QUALITY ASSURANCE

Dan Hood. President John H. Van Arsdel, Vice President





# Michael D. Simpson CEO

#### **Experience:**

Michael D. Simpson has been with the company since February of 1983. He completed two years at Purdue University where he studied Industrial Technology. Michael began his career with M.E. Simpson Co., Inc. as a meter technician. He implemented the company's leak detection program which has now developed into the company's Water Loss Reduction and Water Distribution Evaluation Programs.

While working for the company, Michael developed many of the techniques used today by M.E. Simpson Co., Inc. personnel when performing water loss reduction programs and water distribution system evaluations. With that experience Michael taught these special techniques to several employees. Along with that experience Michael has completed classes, as well as given lectures on hydraulics that are specifically related to the Polcon® Flow Testing equipment.

As a dedicated member of numerous organizations, he has taught classes on water loss reduction and water distribution system evaluations throughout the United States. Michael has gained invaluable experience as he has been personally responsible for over 100 water loss control and water distribution evaluation programs. Currently, as CEO of M.E. Simpson Company, Inc., Michael oversees the company as a whole and manages all daily functions of all corporate and regional offices, its personnel and financial management.

#### **Professional Certifications:**

- American Red Cross First Aid and CPR with AED Certified
- ♦ American Traffic Safety Services Association Flagging Certified
- ♦ American Traffic Safety Services Association Technician

#### **Professional Associations:**

American Water Works Association (AWWA)

Manufacturers Associate Council

Water Loss Control Committee

Illinois Section AWWA

Chair of the Water for People Committee

Indiana Section AWWA

Chair-Elect

Awarded the "Kenneth J. Miller Founders Award" for his outstanding volunteerism for Water For People.

Awarded the "Water Wheel Award" by the Indiana Section for his outstanding contributions to the water profession.

- Arizona, California-Nevada, Michigan, Minnesota, Ohio, Ontario, Texas, Wisconsin Section's of AWWA
- Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin Rural Water Associations
- **♦** Tri-State Seminar on the River

Treasurer



## Dan E. Hood President

#### **Experience:**

Dan E. Hood has been with the company since October 1985. Dan is a graduate of Purdue University where he earned his Bachelor of Science in Industrial Technology. With his experience in Industrial Technology, Dan has implemented various computer programs which are used by M.E. Simpson Company for its services which are provided to water utilities. These various programs help to improve many aspects of evaluations of water distribution systems such as leak detection, fire hydrant flow testing, and valve exercising.

Along with his formal education at Purdue University, he has attended classes on hydraulics which are specifically related to the Polcon® Flow Testing equipment, completed workshops on hydraulic modeling and has been performing flow testing since 1988. With that experience Dan became instrumental in pioneering the development of our valve location and exercising programs, the development of our Polcon Pro-Valve® software, and has trained all of our personnel in this area. With his knowledge of computers and development of the Polcon Pro-Valve® software, Dan has spent extensive time and training on integrating data gathered into existing GIS systems.

Since the start of his tenure, Dan has gained extensive experience in meter evaluation, maintenance and installation. Dan has also completed numerous classes and lectures related to the operation and maintenance of water meters and taught these techniques to our employees who continue to use the techniques today.

As a dedicated member of numerous organizations he has devoted his time and taught Water Loss Reduction and Water Distribution System Improvement classes for the Indiana Section of the AWWA and the Indiana Department of Environmental Management. As president of M.E. Simpson Co., Inc., Dan is in charge of the Midwest operations. He oversees data collection and processing, and quality control company wide. He also provides technical assistance to all M.E. Simpson Co., Inc. personnel and customer/utility personnel.

#### **Professional Certifications:**

- ♦ 10/30 Hour OSHA Certified for General Industry
- ♦ American Red Cross First Aid and CPR with AED Certified
- American Traffic Safety Services Association Flagging Certified

#### **Professional Associations:**

- Illinois Section AWWA
- Indiana Section AWWA

Past Chair (2007)

Awarded the "Water Wheel Award" by the Indiana Section for his outstanding contributions to the water profession. Recipient of the "Kenneth J. Miller – Founders Award" from Water-for-People for outstanding volunteer service.

♠ American Water Works Association (AWWA)

Recipient of the "Ambassador Award" from AWWA for membership recruitment.

Meter Madness Committee - Co-Chair Meter Standards Committee - member Section Services Committee - member

- **♦** Indiana Rural Water Association
- ♦ Wisconsin Rural Water Association
- ♠ Arizona Water Pollution Control Association (AWPCA)
- Tri-State Seminar on the River

Serving Currently - Exhibitor Committee Co-Chair

Recipient of the 2006 Outstanding Service Award.



### John H. Van Arsdel Vice President

#### **Experience:**

John H. Van Arsdel has been with M.E. Simpson Co., Inc. since May 1989. He graduated from Valparaiso University with a B.A. in Geography with an emphasis in Locational Evaluation and Research Design. He has completed water operators classes and seminars on Water Filtration and Distribution, Vulnerability Assessment Class for the Sandia Labs RAM-W method and the RAM-W "modified" for small to medium systems (currently licensed to use the Sandia Labs RAM-W Method, and licensed to teach the RAM-W "modified" for small to medium water systems), along with classes related to the operation and maintenance of water meters, system hydraulics specifically related to the Polcon® Flow Testing equipment, and backflow prevention.

John has over 20 years experience directing projects for water utilities concerning water loss prevention and audits, leak detection programs, meter evaluation and maintenance, flow testing using the Polcon® Flow Testing method (C-factors, pump curves, zone flow measurements), mainline valve assessments (location, exercising and mapping programs), and fire hydrant and main capacity flow testing programs. John has been responsible for the analysis, evaluation, and CAD updating of Water Distribution, Sanitary, and Storm Sewer Atlases using GPS locating. He developed the company's Unidirectional Main Flushing Program and Utility Atlas Updating Program. He has presented classes for continuing education credits for water operators for over twelve years to several local and state Water Works Organizations on Water Loss Reduction including Water Audits, Leak Detection, Meter Testing and Flow Testing. At 2007 ACE, he presented a paper on "Best Management Practices for Distribution System Maintenance". At 2009 ACE, he presented a paper on "Unequal sized Meters in Parallel Settings". Since 2003, he has conducted classes on Vulnerability Assessments and Emergency Response Planning for water utilities as well as conducting several VA and ERP projects.

John has maintained an active role in several water works organizations including holding offices on various Boards of Directors. As Vice President of M.E. Simpson Co., Inc., John serves as the main point of contact for client development, business sales and customer relations for the Eastern U.S.

#### **Professional Certifications:**

- ♦ 10 Hour and 30 Hour OSHA Certified for General Industry
- American Red Cross First Aid and CPR with AED Certified
- ♠ American Traffic Safety Services Association Flagging Certified

#### **Professional Associations:**

- American Water Works Association (AWWA)
   Water Loss Control Committee, Apparent Water Loss Sub Committee
- **♦** Illinois Section AWWA

2009 Board of Directors, Secretary/Treasurer 2006-2009 Chair, Membership Committee

Education Committee, Water For People Committee

- Indiana, Michigan, Wisconsin, North Carolina, South Carolina, Georgia, and Florida Sections AWWA
- **♦** Illinois Rural Water Association
- ♦ Wisconsin Rural Water Association
- North Suburban Water Works Association
   1999-2001 Past President, Past Vice President, Past Secretary
- ♦ West Shore Water Producers Association
- Water Environment Federation

#### Awards:

- ♦ 2006 and 2008 National AWWA Zenno Gorder Membership Award for recruitment
- 2006 and 2008 Diamond Pin for National AWWA membership



# Randahl E. Lusk Regional Manager Dyer, Indiana

#### **Experience:**

Randy Lusk has been with the company since November 2000. He previously worked in the retail business. Randy has attended classes and lectures on the operation and maintenance of water meters. Randy has experience in valve location, exercising and mapping, and the use of state of the art leak detection equipment. He is experienced in the operation and maintenance of water meters, fire hydrant and main capacity flow testing, and the operation of our Polcon® Flow Testing equipment.

#### **Professional Certifications:**

- ♦ 10 Hour OSHA Certified for General Industry
- ♦ American Red Cross First Aid and CPR with AED Certified
- ♦ American Traffic Safety Services Association Flagging Certified
- **♦** Extensive traffic control training
- **♦** Extensive confined space training

#### **Professional Associations:**

**♦** South Suburban Water Works Association

Past President

Sergeant of Arms

Secretary of the South Suburban Water Works Association

**♦** Illinois Section AWWA

Member of the Tops Ops Committee

Member of the Young Professionals

**♦** Indiana Section AWWA



Jerry D. Reiling Field Services Manager Dyer, Indiana

#### **Experience:**

Jerry Reiling has been with the company since May 1996. He is a graduate of Purdue University with a B.A. in Physical Education. Jerry previously worked in both the environmental services industries and HVAC for 10 years. He has completed classes and attended lectures on the operation and maintenance of water meters. Jerry is experienced in the following: the operation and maintenance of water meters; valve location, exercising and mapping; use of state of the art leak detection equipment, and the operation of our Polcon® Flow Testing equipment.

#### **Professional Certifications:**

- ♦ 10 Hour OSHA Certified for General Industry
- American Red Cross First Aid and CPR with AED Certified
- ♦ American Traffic Safety Services Association Flagging Certified
- **♦** Extensive traffic control training
- Extensive confined space training



Sandison J. Petretta
Project Leader
Dyer, Indiana

#### **Experience:**

Sandison Petretta has been with the company since July of 2000. He previously worked in the commercial painting industry. Sandison has attended numerous classes and lectures related to the operation, maintenance, and installation of water meters, and completed classes in plumbing. Sandison has experience in the following; maintenance and installation of water meters; valve location, exercising and mapping; fire hydrant and main capacity flow testing; and the use of state of the art leak detection equipment. He is also experienced in the use of all of our Polcon<sup>®</sup> Flow Testing equipment.

#### **Professional Certifications:**

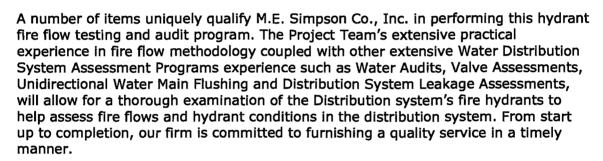
- ♦ 10 Hour OSHA Certified for General Industry
- American Red Cross First Aid and CPR with AED Certified
- ♦ American Traffic Safety Services Association Flagging Certified
- ♦ Extensive traffic control training
- Extensive confined space training

#### PROJECT UNDERSTANDING AND APPROACH

M.E. Simpson Co., Inc.'s philosophy behind water distribution system fire hydrant flow testing services as incorporated in this work plan is to provide the Utility the following benefits:

Water Pumped

- Conserve freshwater resources by reducing the amount of water used through proper hydrant flushing/flow testing
- Conserve energy and reducing treatment costs by reducing pumpage
- Help in monitoring potential system operation and maintenance problems
- Promote proper accounting and financial reporting (GASB 34)
- Reduce the risk of water shortage and customer hardship by insuring hydrants work when needed
- Ensure a sound and reliable water service for customers of the Utility



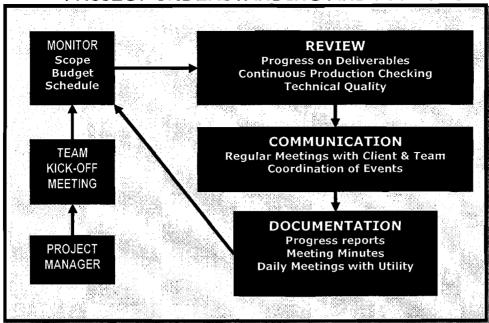
#### **Project Management Approach**

M.E. Simpson Co., Inc.'s project management approach is what leads to our proven track record to complete projects on time and within the budget established. Based on our past experience, we have developed a project approach that will insure the Utility of effective communication throughout this project.

Our project management system establishes - the single project manager - who has the responsibility and authority to act on behalf of M.E. Simpson Co., Inc. This project manager will stay with the project from beginning to the successful completion. The project manager's specific responsibilities include:

- Coordination of all activities in this project
- Establishing key decisions and review milestones during this project
- Preparing an initial project development plan identifying the schedule of work tasks and key personnel to perform the work in the field to meet the milestones and objectives
- ♦ Coordinate communications and meetings with the Utility as needed or required to review technical concepts and alternatives, soliciting staff input and coordinating activities with the project team
- Prepare periodic reports as needed and meet with the Utility on a regular basis summarizing project scheduling, progress and maintaining the project within the budget stipulated
- Oversee the execution and development of the project deliverables





Project management remains an important activity during the course of the project and does not stop with the project manager. Each project team deployed into the field is dedicated to providing the best leak survey coverage that can be attained using the state of the art leak detection equipment, tools, field experience and knowledge. Each field team will be made up of two experienced distribution system technicians that also have been crossed trained in other disciplines of water distribution system field maintenance such as distribution system flow testing, valve exercising and locational assessments, and Unidirectional water main flushing, as well as water loss control such as water meter assessments (residential, commercial, wholesale, and production meters). It is this combination of experience and knowledge that has helped shape our approach to fire flow testing and hydrant assessments in distribution systems because the technicians have the capacity to make on the spot decisions regarding any fine tuning of the fire hydrant program while in the field. They will maintain constant communication with the Utility and the project manager regarding their daily progress as well as any major issues needing immediate attention and discussion.

M.E. Simpson Co., Inc. believes the selection of our team to perform this hydrant assessment will provide the Utility with exceptional experience, sound decision making, and a level of service providing the following advantages:

- A professional hydrant assessment team with a specialized expertise in fire flow testing, hydrant audits and Unidirectional water main flushing
- An experienced team with the capacity to provide the highest quality work for the Utility
- A project approach that incorporates interim reporting and continuous input opportunities
- Innovative proven analysis techniques developed from the completion of several similar sized hydrant flow testing projects that sought the same scope and results as this project



#### Project Quality Assurance/Quality Control

Quality is of the utmost importance to M.E. Simpson Co., Inc. – not merely because of the Utility's and other client's requirements, but because it is vital to our continued success and viability. Quality management and services bring to all of us the rewards of jobs well done, satisfied Utility staff, and successful projects.

M.E. Simpson Co., Inc.'s QA/QC program is built around several key elements of M.E. Simpson Co., Inc.'s mission and values which consist of:

- ♦ Client satisfaction
- **♦** Continuous process improvement
- Open communication with the field staff and the Utility
- ▲ Team Work

The QA/QC plan for this project is very simple. No work will leave M.E. Simpson Co., Inc. until it has been verified that all the requirements and objectives of the project as well as the requirements of the project QA/QC managers have been met. During the course of the project, the project manager and/or the QA/QC manager will meet with the Utility to ensure that the work product is technically correct, but also meets the needs and expectations of the Utility.

M.E. Simpson Co., Inc.'s professional services are grounded in sound principles that meet the tests of time from past successes of hundreds of water loss projects and will satisfy the quality requirements of the Scope of Service. Each member of the project team will have a thorough understanding of the project objectives. They will apply sound methodology and principles, and are expected to produce quality, accurate and complete documents. The QA/QC procedure has been developed and implemented based on tried and proven methodologies. The prevention of poor quality service is based on four sound principles:

- Quality management of the project by using experienced personnel committed to excellence.
- Conformance to requirements by being knowledgeable of all local conditions in the field and keeping abreast of new cutting edge leak detection methods.
- Prevention of rework and errors by using teamwork in the field, cross checking the procedure every step of the way, and having data entry staff knowledgeable in all aspects of leak detection projects.
- Quality is <u>built in not added on</u>. The project management and field staff have shown that a quality service is produced when the project tasks are properly sequenced and carried out to the final termination of the program using the built in system of checks and balances.





#### Equipment to be used

The following equipment will be used for Hydrant Flow Testing work during the Hydrant Testing Program for the Utility. All material listed will be on the job site at all times.

- Hose monster® hydrant diffuser with built in pitot gauges.
- Pollard Hydrant diffusers with built in pitot gauges.
- ♦ 2-1/2" manually operated gate valves for the hydrant ports.
- Standard Hydrant wrenches (no extensions).
- ♦ FCS S-30 or "L-Mic" electronically enhanced listening device to listen for leakage and hydrants not fully closed. These devices are manufactured by Fluid Conservation Services as primary listening devices for detecting leaks in water systems.
- Food grade grease for port and cap lubrication if requested.
- <u>Calibrated</u> Static/Residual Pressure Gauges
- Truck mounted Arrow Board/Signage, and warning lights on trucks.

#### **Project Field Approach**

The **FIRE HYDRANT FLOW TEST PROGRAM** is conducted in the field by our technicians M.E. Simpson Co., Inc. will operate and flow all designated fire hydrants in the system in accordance with AWWA standards (American Water Works Association Manual M-17, "Installation, Field Testing and Maintenance of Fire Hydrants"), NFPA 25, and the NFPA chapter 291 for "Flow Testing of Fire Hydrants". The important operation, location and flow test details of the hydrant tests will be noted and compiled on our "Fire Hydrant Flow Test Report" and submitted to your office for your permanent records.

#### Fire Flow Testing

The Project team will set up the flow testing program in such a way that hydrants are operated near the water source first, then the team will move away from the water source in an organized manor to keep water discoloration and distribution disturbances to a minimum. The "flush" hydrant shall be downstream of the "residual" hydrant, thus insuring proper residual readings for full potential fire flow (re: AWWA M-17 manual, page 41).

There are a few items for consideration that the field crew will need to take into account during the flow tests. The following will be considered because without these considerations, fire flow results may be different at different times of day.

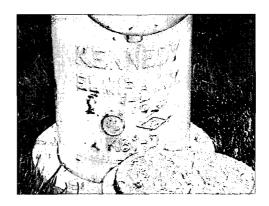
• Water main sizes - different pipe sizes affect the amount of potential fire flow available at any given location. Pipe sizes also will affect the physical layout and progress of the flow testing program.



- ♦ Water pressure on the pipe this is dependent on such issues as amount of water in the elevated storage tanks, variable speed pumps, number of pumps on line at any given moment, and local demand in areas of the distribution system at the time of the tests.
- Flow velocity in the pipe water moving through the pipe can be affected by water main C- factors, partially closed or fully closed valves. This can also have a major impact on the correct calculation of the potential available fire flow.

The success of this program will be dependent upon reviewing all available data regarding the operation of the distribution system. The following will need to be gathered; all as-built drawings of the water distribution system, all original atlases, all books, field cards, notes, computer copies of the distribution system, and valve cards, hydrant cards and a copy of a digital map of the Utility, if available. Additionally, other records such as amounts pumped into the system may need to be reviewed. The field verification of hydrant conditions and fire flow data and associated locations, along with the records being reviewed, shall yield updated fire flow performance and location records of the Utility's fire hydrants as well as supplying valuable information regarding the general condition of the distribution system.





An organized field approach to this Hydrant Assessment project will include the following:

- Introduce and maintain an interactive role with the Utility Staff for the Hydrant Assessment and Flow Testing Program. Conduct short interviews with staff about particulars of the distribution system such as problem areas prone to poor fire flow, age of pipe, pressure problems in the distribution system. This will allow for a greater understanding of how the distribution system is functioning allowing priorities to be assigned to particular segments of the work
- Divide areas of the distribution system into geographic areas that can be flow tested in progression and problems identified in an orderly fashion. This would include setting a schedule and maintaining a level of Field Staffing that will insure completion of the fire flow testing and hydrant assessments within the schedule and budget allotted. This will require all maps of the distribution system to be examined during the course of the planning sessions to formulate a workable plan of action
- ♦ Perform fire flow testing and hydrant assessments on the distribution system and document all test results, hydrant assessments in a manner that will allow a prioritized list of maintenance items to be pursued according the described "Scope of Work"



- **Identify and locate** all hydrants in a manner that will allow their positions to be known and readily re-creatable by Utility personnel upon demand
- **Document** each fire flow test and individual hydrant data to such an extent as to provide information characteristic to each specific attribute as defined by the Utility
- **Provide constant communication** with the Utility staff so hydrants with issues can be addressed in a timely manner
- Provide instruction and council to Utility staff during the course of the fire flow testing and hydrant assessments so once the program is concluded, the Utility staff will have a complete understanding of all the parameters of conducting fire flow testing and hydrant assessments with the established goal of reducing the amount of maintenance required for the fire hydrants while providing up to date data for the Utility for each and every hydrant
- **Provide daily reporting** during the course of the project as well as a final report indicating all the pertinent details regarding the hydrant assessment program.
- ♦ Provide recommendations for future fire flow testing and hydrant assessments programs such as a methodology and frequency for fire flow testing the distribution system



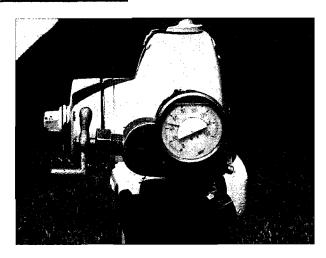


#### SCOPE OF SERVICE



The Field Scope of Service for the Hydrant Flow Testing Program is understood to be the following:

M.E. Simpson Co., Inc. will furnish all labor, material, transportation, tools, and equipment necessary to flow test hydrants in the water distribution system selected by the Utility. M.E. Simpson Co., Inc. shall be required to provide such skilled and trained personnel and equipment necessary to complete the work herein specified. There will be a minimum of Two Persons per team working on the hydrant flow testing program at all times.



- Work in an orderly and <u>safe</u> manner to insure protection of the local residents, Utility employees, and the Field Staff so that no <u>avoidable</u> accidents occur.
- All Field Staff will have readily observable identification badges worn while in the field. All vehicles used in the field will have company signs attached.
- The flow testing equipment to be used will be that which was described in the "Equipment to be used" section.
- M.E. Simpson Co., Inc. Personnel will meet with the Utility to review the project guidelines and answer any questions on procedures.
- ♦ The initial layout of the project will need to involve distribution Utility staff to help identify the flow patterns in the distribution system, flow testing from larger mains into smaller mains, from the water sources (pump stations and water storage structures), out into the system loops and dead ends.
- ♦ Any **pressure zones** in the distribution system will be identified on the water atlas prior to developing the fire hydrant flow-testing program. This will need to be done with distribution personnel prior to the start of the program.
- As a part of the hydrant flow testing program, mapping discrepancies found on the current water atlas will be noted and included as a part of the final report so the Utility can make needed corrections. This will be included as a part of the periodic reporting to the Utility, thus enabling the Utility to keep up with mapping corrections.
- ♠ A progression map shall be maintained for each section under study indicating hydrants assessed on the map. This will be especially helpful in quickly determining the work progress of the crews in the field.
- ▲ It may be necessary to conduct parts of the hydrant flow testing during "off hours" such as at night. This may be required in areas of high traffic volume where traffic may affect the ability to conduct safe flow testing, and traffic volume may affect the ability of the Project Team to be able to safely access hydrants on busy streets. The Project Team will give 24-hour advanced notice of



intent to flow test hydrants in a particular area that may require after hours work or nighttime work. This is so the Utility can plan for the area to be worked in, give notification to the Police department, as well as other Public Works Divisions as to the activity that will take place.

- M.E. Simpson Co., Inc. can issue a press release to briefly explain the fire hydrant flow-testing program and the areas effected. The press releases can be sent to; local newspapers, local radio stations and the Cable Company. This type of customer notification can greatly reduce the number of customer complaints about dirty water.
- All of the fire hydrants will be recorded on the water atlas and assigned numbers, using your existing numbering system or by creating a numbering system for you, prior to the development of the fire hydrant flow-testing program. This data is critical to establishing an effective and water conserving fire hydrant flow-testing program.
- ♦ All of the pertinent information for each fire hydrant that is flow-tested will be documented. This data is critical to establishing an ongoing flow-testing and maintenance program. The following is a list of the information gathered.
  - If requested, all Fire Hydrant caps will be greased for ease of operation
  - · Fire Hydrant nozzle size used for each test will be recorded
  - Residual Pressure will be recorded for each Fire Hydrant tested
  - Static Pressure will be recorded for each Fire Hydrant
  - Flow, GPM (Gallons Per Minute), will be recorded for each Fire Hydrant flowed
  - The amount of time it takes to flush each Fire Hydrant will be recorded. An estimate will be made of the amount of water used during the operation of each Fire Hydrant test
  - Fire Hydrants that are in need of repair, painting, color coding, or have operation defects will be noted with an estimate of repairs needed to make the hydrant operational.
  - The date tested and technicians operating the Fire Hydrant will be recorded.
  - The Fire Hydrant address or location will be recorded.
- ♦ The Project team will set up the flow testing program in such a way that hydrants are operated near the water source first, then the team will move away from the water source in an organized manor to keep water discoloration and distribution disturbances to a minimum. The "flush" hydrant shall be downstream of the "residual" hydrant, thus insuring proper residual readings for full potential fire flow (re: AWWA M-17 manual, page 41).
- Fire hose and deflection tubes will be utilized, as required, to direct flushing water away from traffic, pedestrians, underground Utility vaults, and private property.
- Pressure gauges are used to determine the residual pressure during the flow-testing process while insuring that the distribution system pressure remains above 20 psi. Any incidents of the distribution system being unable to supply a residual of 20 psi in the surrounding area will be brought to the immediate attention of the Utility Superintendent.

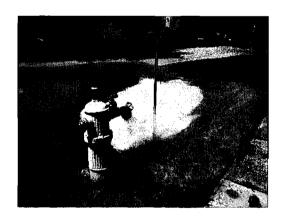


- ♦ After the Fire Hydrant has been flushed, M.E. Simpson Co., Inc. will verify that the hydrant is seated and is draining properly. We will also check the Fire Hydrant with a FCS S30 or L-Mic electronic listening device to ensure that the hydrant is not leaking. A majority of fire hydrant leaks go un-noticed because they are small leaks draining out through the drain holes at the base of the hydrant. Using the S30 or L-Mic will help eliminate this type of leakage.
- All pressure gauges used in the field will undergo daily testing against a "standard" gauge to insure the field gauges are accurate during the flow-testing project. Any gauges that are found to not be within acceptable limits will be replaced with gauges that are within accepted standards. This will insure the observed static and residual pressures are accurate and reliable.

#### Fire Hydrant Operation, Flow-Testing and Flushing

M.E. Simpson Co., Inc. takes great care when operating, flow-testing and flushing the customer's fire hydrants in their water distribution system.

Even with our years of proven experience in water system operations problems occasionally occur. Any valves or fire hydrants that break or fail during the flushing and flow-testing program will be repaired or replaced at the expense of the water Utility. M.E. Simpson Co., Inc. cannot be held responsible for possible valve or hydrant failures during their operation. M.E. Simpson Co., Inc. cannot be held responsible for damage done to the water system during fire hydrant flushing and flow testing, such as water leaks, discolored water and turbidity that can possibly occur during the flushing process. M.E. Simpson Co., Inc. cannot be held responsible for possible damage to the water utilities' individual water customer.



#### **Utility Observations**

The M.E. Simpson Co., Inc. Project Team will welcome having staff of the Utility observe field procedures while the flushing program is in progress. They will be happy to explain and demonstrate the equipment and techniques that are employed by M.E. Simpson Co., Inc. for calculations of fire flows. This may be useful for the staff of the Utility in understanding the parameters of hydrant flow testing, especially during an emergency such as a fire where proper flow is needed for the fire department.

#### FINAL REPORTS, DOCUMENTATIONS and COMMUNICATIONS

M.E. Simpson Co., Inc. will perform the following:

"Effective Communication ...
Accurate Documentation...
Insuring the success for the
Hydrant Flow Testing
Program"

- Project Team will meet daily with assigned Utility personnel to go over areas of flow testing for prior workdays and plan current day and next two days' areas to flow test.
- At the end of each day, or as requested, a list of any broken or inoperable valves or hydrants will be turned in.
- Each step of the fire hydrant flow-testing program will be identified and the hydrants used for each flow-test will be documented in a fire hydrant flow-testing report.
- Maintain a progression map to be included with the final report of the project indicating areas flow tested and areas that have been tagged for flow testing.
- ◆ The Utility will be provided with flow information in Pro-Hydrant® an online fire hydrant database or Microsoft Access 2000 or 2003. This documentation allows for the flow-testing program to be repeated at a later date. This software program is designed to be a complete system for your Utility to establish an effective fire hydrant flow testing, flushing and maintenance program. The software provides an inventory record system, hydrant maintenance and scheduling. The software includes a complete hydrant flow-testing program for calculating flow test results. Pro-Hydrant® is a hydrant record database (ODBC). This data will be available "online" to the Utility with the appropriate password and login name. The data will be maintained offsite at a secure location.

M.E. Simpson Co., Inc. can also provide the Polcon Pro-Hydrant®, software driven hydrant database, that has the abilities to access and reproduce and edit all aforementioned hydrant location and flow testing information. This program will have the capability to generate upon demand:

- The Individual Hydrant Flow Test reports that includes the flow test data, static pressure and residual pressure, and potential flow at 20psi.
- A summary listing of all Hydrants with identified defects.
- A complete listing of all Hydrants by numerical or indexed order.
- A complete listing of all Hydrants by alphabetically reference to street and cross street names.
- All pertinent information such as port size, number of ports, flow test results, general condition of the hydrant, and color coding for the NFPA rating.
- Hydrant location will be documented from existing landmarks and will be a part of each Hydrant record.



There is no subscription fee to be assessed to the Utility for this software use.

- Information collected by M.E. Simpson Co., Inc. during the Hydrant Flow Testing program and any other information provided by the Utility shall be regarded as <u>CONFIDENTIAL</u> and will not be shared without permission from the Utility.
- Develop a Flow Testing log of activity to be included with the final report that will include the following;
  - 1.) Type of problems observed
  - 2.) Location of same for problems discovered
  - 3.) Total estimated water used (to be included on each flow test result)
  - 4.) Mapping errors on the water atlas
- Prepare the final report at the completion of the project which will include all hydrant flow testing reports, other problems found in the system during the course of flow testing that need the attention of the Water Utility. This final report shall be made available for submission to the Water Department within twenty (20) work days of the completion of the fieldwork.

#### ASSUMPTIONS AND SERVICES PROVIDED BY THE UTILITY

- ◆ The *Utility* will furnish all maps, atlases, (two copies) and records necessary to properly conduct the flow testing program.
- ◆ The *Utility* will make available, on a reasonable but periodic basis, certain personnel with a working knowledge of the water system who may be helpful with general information about the water system. *This person will not need to assist the Project Team on a full time basis*, but only on an "as needed" basis.
- ◆ The Utility will supply Information regarding pressure zone boundary valves, and any other information that may make the job of flow testing easier to perform.
- ◆ The Utility will assist, if needed, to help gain entry into sites that may be difficult to enter due to security issues or other concerns.

#### HYDRANTS TO BE INVENTORIED AND TESTED

Approximately 870 fire hydrants will be inventoried and fire flow tested for the Utility out of the estimated 2600 hydrants contained in the distribution system. This will include all fire hydrants designated by the Utility. Requests to inventory and test other hydrants not listed will be agreed upon by M.E. Simpson Co. Inc. and the Utility prior to any further testing.





<u>Safety</u> is a major part of any project. M.E. Simpson Co., Inc. always provides a safe work environment for its employees. **Our staff is trained in General Industry OSHA rules, Confined Space Entry & Self-Rescue, First Responder First Aid, CPR, and Traffic Control.** 

While in the field on your project, M.E. Simpson Company and its employees will follow all of the necessary safety procedures to protect themselves, your staff and the general public.

#### M.E. Simpson Co., Inc. uses Two-Man Teams for Safety and Quality Assurance.

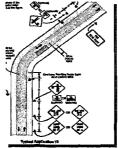
The use of a "one person" fire flow testing and hydrant assessment team is dangerous and impractical where water mains run under roadways and hydrants are close to traffic. It would be a dangerous precedent to allow a "one-person" team to access hydrants located near the roadway, park a vehicle nearby and flow test the hydrant and at the same time try to control traffic flow at that person's location in the street.

#### Therefore M.E. Simpson Co., Inc. adheres to the following:

- The Project Manager and the Field Manager will be trained in accordance with OSHA Standard 1910 (General Industry) and be in possession of an **OSHA 30 Hour Card.**
- Any work located in a "confined space" such as pit and vault installations that <u>require entry</u> will be treated in accordance with the safety rules regarding Confined Space Entry, designated by the Utility, The Department of Labor and OSHA.
  - All personnel are <u>trained and certified</u> in Confined Space Entry & Self-Rescue.
- We will follow all safety rules regarding First Responder First Aid & CPR, designated by the Utility, The Department of Labor and OSHA.
  - All personnel are <u>trained and certified</u> in First Responder First Aid & CPR.
- We will follow all traffic safety rules, designated by the Utility, The Department of Labor, OSHA, and the Illinois Department of Transportation (per MUTCD).
  - ➤ All personnel are <u>trained and certified</u>, by the AMERICAN TRAFFIC SAFTEY SERVICES ASSOCIATION (ATSSA) in Traffic Control and Safety.



ATSSA Certified
Traffic Control Personnel



Work Zone Safety Plans will be used

Current documentations of safety training and certifications can be provided for all project personnel for the Utility upon request. These certifications are current and up to date for all project personnel.



#### PROPOSED SCHEDULE

#### **PROPOSED SCHEDULE**

**Proposal due:** March 1, 2010, 3:30 pm

Notice To Proceed: Assume March 22, 2010

<u>Provide Insurance Certificate naming the Village as additionally insured:</u> Within 13 calendar days after "Notice to Proceed".

**Kick Off Meeting and Commencement of work:** Within 14 days of "Notice to Proceed" or April, 5, 2010. Meet with Utility staff to go over project goals and objectives. Field work will begin the same day or agreed upon by the Utility and M.E. Simpson Co., Inc.

Fieldwork to be completed and documented: Field work will be started no later than April 3, 2009 or as agreed upon by the Utility and M.E. Simpson Co., Inc. Assume one (2 person crew), 27 – 30 days in the field for completion of field work for the hydrant flow testing. The flow testing will not be performed between May 15, 2010, and September 15, 2010, because this is a water conservation period the Village. If necessary, field work will be completed after September 15, 2010 if unable to be completed by May 15, 2010. Additional flow testing work beyond the original 870 hydrants will be based on per unit fee and may cause a shift in the completion date.

#### **Daily Work Hours**

Normal "on site" daily work hours will be 7:00 AM to 3:30 PM. Any work that needs to be performed outside the normal work hours will be discussed with the Water Superintendent at least 24 hours in advance.

<u>Daily Reporting:</u> The Field staff will meet with assigned Utility staff <u>daily</u> or as needed and determined by the assigned Utility Manager. Hydrants needing immediate attention will be documented and submitted <u>immediately</u> for the Utility's attention. Minor repairs (such as hydrants that function but need painting, gaskets, leaks, etc) will be reported daily for scheduling of repair. Copies of hydrant sheets where hydrants need moderate to severe repair will be turned in to assigned Utility Manager daily or as agreed upon by, prioritized by severity.

**<u>Final Reports:</u>** The final summary report will be available 20 work days after field work has been completed for the program. This report will have all the hydrant sheets printed and flow data compiled during the course of the project. The hydrant database will be available on line as well, or on a disc if requested.



www.mesimpson.com

3406 Enterprise Avenue Valp<del>arais</del>o. IN 46383

Phone: (800) 255-1521 Fax: (888) 531-2444

### Proposal Fee

March 1, 2010

M.E. Simpson Co., Inc. is pleased to present our "Proposal" for a Hydrant Flow Testing Program for the Village of Downers Grove, Illinois. The Hydrant Flow Testing Program will be conducted on approximately 870 fire hydrants in the Utility's water distribution system. M.E. Simpson Co., Inc. will perform this flow testing program with one of our two man teams, with all necessary equipment, described within this document, furnished by M.E. Simpson Co., Inc. All procedures will be followed as described within this document. All travel, lodging and meals are included in the proposal price. The program will also include a complete individual hydrant flow test report, contained in our Polcon ® ProHydrant database available on line and a final comprehensive report.

A Fire Hydrant Flow Testing Program:

Approximately 870 Hydrants \$45.00 each hydrant ----- \$39,150.00

\*Additional hydrants to be flow tested beyond the original above estimate will be invoiced at a per unit cost.

We thank you for this opportunity to acquaint you with our Fire Hydrant Flow Testing services and offer this proposal. If you have further inquiries or you wish to discuss our service in more detail, do not hesitate to call us.

Sincerely Yours,

John H. Van Arsdel Vice President

John H. Van aredel



3406 Enterprise Avenue Valp<del>arais</del>o, IN 46383

Phone: (800) 255-1521 Fax: (888) 531-2444

www.mesimpson.com

November 18, 2009

Mr. Michael Bengtson Asst. Director of Utilities City of Bloomington Utilities 1969 S. Henderson Bloomington, IN 47401

Dear Mr. Michael Bengtson,

M.E. Simpson Co., Inc. is pleased to submit this report on the fire hydrant flow testing project for the City of Bloomington Utilities, conducted by our crews between June 29, 2009 and October 9, 2009. Fire-flow tests are conducted to determine pressure and flow-producing capabilities at any location within the distribution system. Primarily, the tests determine how much water is available for fighting fires; however, the tests also serve as a way to determine the general condition of the distribution system. The tests can point to an area of the distribution system that may have lower flow-carrying capacities due to tuberculation of the pipes or perhaps a closed valve. The testing also allows inspection and maintenance to occur on a regular basis.

#### **Procedure**

M.E. Simpson Co., Inc. has been contracted to fire flow test approximately one thousand four hundred eighty-two (1,482) hydrants. The logistics behind fire flow testing this number of hydrants are quite extensive. The planning, cooperation and communication between the City of Bloomington Utilities and M.E. Simpson Co., Inc. was an ongoing process throughout the project. The first step in this project was to determine the area that the flow testing would occur and to plan the hydrant by hydrant progression throughout this area. Next, the public was notified of the areas that would be tested. The utility and local fire departments were also informed of these areas. Flow testing was generally performed between 8:00 a.m. and 4:00 p.m.

#### **Area of Flow Testing**

The basic method of progression was to flow test the hydrants from the water sources (pump stations, reservoirs, etc.) outwards into the system. Flow testing started at the largest supply main toward the smaller water mains. This was to allow any discolored water to be flushed out of the flow hydrants in the most efficient manner. Also considered in this process was the fact that different pressure zones were involved. Each zone had to be flowed separately from the others.

#### Public Notification

Public notification can greatly reduce the number of customer complaints regarding dirty water. M.E. Simpson Co., Inc. used a three-fold approach to public notification. First, on Mondays an ad was placed in the Herald Times notifying residents of the general area of testing for that week. Second, approximately one day before testing was to occur a daily press release was sent out to the Herald Times, WBWB, and WTTS/WGTC. Third, the day before testing was to occur, the field crew would place door tag notifications in the area that they would be working in the next day. These tags included test dates and warnings regarding doing laundry on the test date. The tags also had M.E. Simpson Co., Inc.'s toll free number and instructions to call us with questions that were concerning the hydrant testing. M.E. Simpson Co., Inc. logged very few calls during the testing program from customers of Bloomington Utilities. Most of the calls were simple questions regarding a specific time that the crew would be in the area.

#### **Utility/Fire Department Notification**

Department notification took place before the flow testing was to occur. Broken hydrants and maintenance problems were reported as soon as possible to the control center so appropriate corrections could be made.

#### **Testing Procedure**

Three pieces of information are needed for testing a fire hydrant and the calculation of fire flow. The testing requires static pressure at the test hydrant, flow rate at the flow hydrant, and residual pressure at the test hydrant taken while the flow hydrant is flowing.

Before the static pressure can be obtained the test hydrant is inspected for safety (loose ports, caps and bolts etc.). A port cap is then removed and the hydrant is flushed to remove any debris in the hydrant, hydrant leg or water main in the area and then the hydrant is shut down. A pressure gauge is attached to the port and the hydrant is charged. A static pressure reading is then taken and recorded.

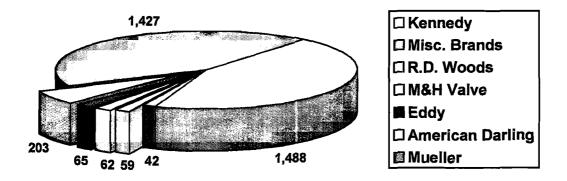
A flow hydrant is chosen in an area that will be both effective and safe. The flow hydrant chosen was always on the down stream side of the hydrants being tested. This resulted in some of hydrants being flowed and inspected only. When the technician at the test hydrant is ready he signals the technician at the flow hydrant to begin flowing. The flow hydrant technician then reports the flow readings to the test hydrant technician and the information is recorded.

While the flow hydrant is flowing, the test hydrant technician takes a residual pressure reading from the gauge on the test hydrant. This information is recorded and the test technician signals the flow hydrant technician to shut down the flow hydrant. The hydrant was then lubricated and grease was applied to all the port caps. The fire hydrant was then checked with a FCS S30 electronic listening device to ensure that the hydrant was not leaking.

This procedure is followed on all the hydrants unless there are maintenance or logistic problems that cannot be dealt with in the field at the time of the test. All the information is then brought to M.E. Simpson Co., Inc.'s office and entered into the Pro-Hydrant® database to be analyzed and documented.

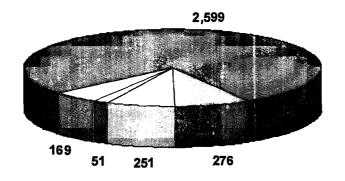
#### Fire Hydrant Flow Testing Results

M.E. Simpson Co., Inc. located and inspected one thousand four hundred eighty-two (1,482) hydrants for the City of Bloomington Utilities. The brands of hydrants in the city varied greatly. Of all 3,346 hydrants in the city, 1,488 (44%) are Kennedy hydrants. 1,427 (42%) are Mueller hydrants. 203 (6%) are American Darling hydrants. 65 (2%) are Eddy hydrants. 62 (2%) are M&H Valve Co. hydrants. 59 (1%) are R.D. Woods hydrants. 15 (less than 1%) are American Darling hydrants. 9 (less than 1%) are American AVK hydrants. 4 (less than 1%) are American Foundry hydrants. 2 (less than 1%) are Traverse City hydrants. 2 (less than 1%) are Clow hydrants. 2 (less than 1%) are Dresser hydrants. 2 (less than 1%) are Iowa hydrants. 1 (less than 1%) is an Anniston hydrant. 5 (less than 1%) hydrant brands could not be identified.

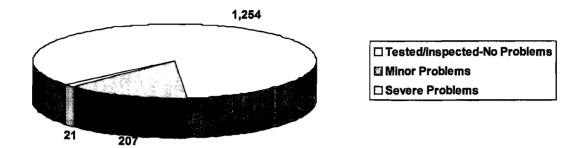


The National Fire Protection Association (NFPA) uses flow capacity to classify hydrants. Any hydrant with a rated capacity of 1,500 GPM or greater is classified "AA" (color - Blue). Any hydrant with a rated capacity of between 1,000 and 1,499 GPM is classified "A" (color - Green). Any hydrant with a rated capacity of between 500 and 999 GPM is classified "B" (color - Yellow). Any hydrant with a rated capacity less than 500 GPM is classified "C" (color - Red).

Three thousand one hundred seventy-seven (3,177) hydrants are classified following the 2009 Hydrant Flow Program. Two thousand five hundred ninety-nine (2,599) that were classified are classified "AA". Two hundred seventy-six (276) are classified "A". Two hundred fifty-one (251) are classified "B". Fifty-one (51) are classified "C". One hundred sixty-nine (169) were not classified for various reasons, including hydrants with problems or they could be dead end hydrants.



☐ Class AA ☐ Class A ☐ Class B ☐ Class C ☐ Unable to Classify One of the most important outcomes of the testing program are the problems that are found with hydrants that in some cases could be dangerous. The problems that should be corrected first are on the Unusable-Severe Problem hydrants. If a hydrant cannot be opened or a pumper port cap cannot be removed that hydrant would be classified unusable. Some problems are easily correctable and not as serious as others, these hydrants are Usable-Minor Problems. Two hundred seven (207) hydrants were categorized as Usable-Minor Problems. Twenty-one (21) hydrants were classified as being Severe/Unusable.



There were eleven (11) instances of the distribution system being unable to supply a residual pressure of 20 psi or great in the surrounding area during a test. This situation could have occurred because of tuberculation in the water mains, a closed valve or because of an inadequate water supply.

Another piece of information that is recorded during the flow test is the length of time the flow hydrant was flowed. This time is then multiplied by the flow rate to get an estimated amount of water used for the flow test. The amount of water used on any individual test is recorded on that test sheet. On average approximately 15,959 gallons of water per day was used to flow test the hydrants. The total amount of water used for this project is estimated at 702,204 gallons.

#### **Conclusion and Recommendations**

The 2009 Fire Hydrant Flow Test Program has provided the City of Bloomington Utilities with extremely important information regarding their fire hydrants. Three thousand one hundred seventy-seven (3,177) were able to be given NFPA classifications and colors following the 2009 project. One hundred sixty-nine (169) hydrants in the system were not testable and/or were not able to be given a NFPA classification because some had problems and others were located at the dead-end of water mains. The hydrants were all inspected and lubricated and the threads of the ports had grease applied.

Twenty-one (21) hydrants were reported as Unusable-Severe Problem. Two hundred seven (207) hydrants were reported as Usable-Minor Problem. Because these problems were reported as they were found, a comparison should be made between the Problem lists and what has already been fixed. We recommend the proper repairs be made to the problem hydrants and the information be updated in the Pro-Hydrant® database.

The 2009 Fire Hydrant Flow Test Program had very few logistical or public relation problems and the overall procedure was extremely successful. We thank you for the opportunity to provide the City of Bloomington Utilities with this service and we look forward to continuing the Program in the upcoming years. If you have any questions regarding this report or any other portion of the project please don't hesitate to call.

Sincerely Yours,

Jeffrey A. Morris Vice President JAM/jph

## Numerical Index

Hydrant Number	Address	Cross Street
1	Dunn Street (N)	9th Street (E)
2	Rogers Street (S)	Prospect Street (W)
3	Dunn Street (N)	7th Street (E)
5	Grant Street (N)	10th Street (E)
6	Grant Street (N)	7th Street (E)
8	Grant Street (N)	4th Street (E)
9	Lincoln Street (N)	9th Street (E)
10	Lincoln Street (N)	8th Street (E)
12	Lincoln Street (N)	6th Street (E)
14	Lincoln Street (N)	4th Street (W)
15	Washington Street (N)	10th Street (E)
16	419 Washington Street (N)	9th Street (E) (S. of)
18	Washington Street (N)	6th Street (E)
20	Washington Street (S)	4th Street (E)
21	Walnut Street (N)	10th Street (W)
22	Walnut Street (N)	9th Street (W)
23	Walnut Street (N)	8th Street (W)
24	Walnut Street (N)	7th Street (W)
25	Walnut Street (N)	6th Street (E)
26	Walnut Street (N) (W. of)	108 6th Street (E)
27	Walnut Street (N)	Kirkwood Avenue (W)
28	Walnut Street (N)	4th Street (W)
29	College Avenue (N)	9th Street (W)
30	College Avenue (N)	8th Street (W)
31	College Avenue (N)	7th Street (W)
32	College Avenue (N)	6th Street (E)
34	College Avenue (N)	Kirkwood Avenue (W)
35	College Avenue (N)	4th Street (W)
36	College Avenue (N)	3rd Street (E)
38	Morton Street (N)	8th Street (W)
39	Morton Street (N)	7th Street (W)
<b>40</b> .	Morton Street (N)	6th Street (W)
41	5th Street (Kirkwood Ave. W)	Morton Street (N)
42	Gentry Street (S)	4th Street (W)

## Street/Cross Street Index

Hydrant Number		Street	Cross Street	Owner
1310				CBU
2324				CBU
381				CBU
2990				CBU
2166				CBU
151	229	1st Street (W)		CBU
354	516	1st Street (W) (across from)		CBU
2336	1011	2nd Street (W)	Walker Street (S) (E. of)	CBU
353		2nd Street (W) (S. of)	Bloomington Hospital	CBU
3306		10th Street (E)	Across from	CBU
839		10th Street (E)	Range Road (1st hydrant W. of)	CBU
768		10th Street (E)	State Road 46 (1st hydrant E. of)	CBU
3417		10th Street (E)	Walnut Grove (E. of)	CBU
3418		10th Street (E)	Walnut Grove (W. of)	CBU
3802	2367	10th Street (E)	IU Greenhouse	CBU
763	2400	10th Street (E)		CBU
2516	3209	10th Street (E)	Building A	Fountain Park Apt
841	3209	10th Street (E)	Building A	Fountain Park Apt
843	3209	10th Street (E)	Building D	Fountain Park Apts
2517	3209	10th Street (E)	Building G	Fountain Park Apt
842	3209	10th Street (E)	Building G	Fountain Park Apts
2518	3209	10th Street (E)	Building L	Fountain Park Apt
840	3209	10th Street (E)	Building S	Fountain Park Apt
878	209	10th Street (E) (W. of)		CBU
333		10th Street (W)	Cottage Grove Avenue (W)	CBU
3607		11th Street	Lindbergh Dr.	CBU
3608	1402	11th Street		CBU
249	314	11th Street (E)		CBU
272	716A	11th Street (E)		CBU
280	915	11th Street (E)		CBU
984		12th Street (W)	Illinois Street (N) (E. of)	CBU
305	1029	12th Street (W)	Monroe Street (N) (E. of)	CBU
987	1216	12th Street (W)	Summit Street (N) (W. of)	CBU
982	1412	12th Street (W)	Illinois Street (N) (W. of)	CBU

NFPA Class AA - Blue

Reporting Period: 6/1/2009 - 11/18/2009

Hydrant Number	Street	Cross Street	Owner	Date Class
5	Grant Street (N)	10th Street (E)	CBU	09/29/09 AA
8	Grant Street (N)	4th Street (E)	CBU	09/28/09 AA
9	Lincoln Street (N)	9th Street (E)	CBU	09/29/09 AA
10	Lincoln Street (N)	8th Street (E)	CBU	09/29/09 AA
12	Lincoln Street (N)	6th Street (E)	CBU	09/29/09 AA
14	Lincoln Street (N)	4th Street (W)	CBU	09/28/09 AA
15	Washington Street (N)	10th Street (E)	CBU	09/29/09 AA
16	419 Washington Street (N)	9th Street (E) (S. of)	CBU	09/29/09 AA
18	Washington Street (N)	6th Street (E)	CBU	09/29/09 AA
20	Washington Street (S)	4th Street (E)	CBU	09/28/09 AA
48	Lincoln Street (N)	10th Street (E)	CBU	09/29/09 AA
49	Grant Street (N)	8th Street (E)	CBU	09/29/09 AA
50	Grant Street (N)	9th Street (E)	CBU	09/29/09 AA
55	Grant Street (S) (W. of)	3rd Street (E)	CBU	09/28/09 AA
57	Washington Street (S)	3rd Street (E)	CBU	09/28/09 AA
58	Dunn Street (N)	6th Street (E)	CBU	09/29/09 AA
59	Dunn Street (N)	4th Street (E)	CBU	09/28/09 AA
60	Dunn Street (N)	8th Street (W)	CBU	09/29/09 AA
63	Indiana Avenue (N)	8th Street (E)	CBU	09/29/09 AA
64	Indiana Avenue (N)	7th Street (E)	CBU	09/29/09 AA
65	indiana Avenue	4th Street (E)	CBU	09/28/09. AA
67	Fess Avenue (N)	8th Street (E)	CBU	09/29/09 AA
68	Indiana Avenue	Kirkwood Avenue	IU	07/07/09 AA
71	indiana Avenue (E. of)	Kirkwood Avenue	IU :	07/07/09 AA
72	Woodlawn Avenue (N)	8th Street (E)	CBU	09/29/09 AA
73	Kirkwood Avenue	Woodlawn Avenue (W. of)	IU .	07/08/09 AA
74	Woodlawn Avenue (W. of)	Kirkwood Avenue	ĮU	07/07/09 AA
80	Woodlawn Avenue	Kirkwood Avenue	IU .	07/08/09 AA
86	Forest Avenue (E. of)	Kirkwood Avenue	·w	07/08/09 AA

Residual Pressure Dropped to 20 psi or Below Reporting Period: 6/1/2009 - 11/18/2009

Hydrant Number	Street	Cross Street	Residual Pressure
253	Grant Street (N)	15th Street (E)	16
		10/01/09	CBU
271	1201 Fess Avenue (N)	· ·	20
		10/09/09	CBU
790	Sunrise Drive	10th Street (S. of)	20
could not fully	y open (20 psi min.)	07/02/09	. IU
791	Sunrise Drive	10th Street (S. of)	20
could not fully	y open (20 psi min.)	07/02/09	, IU
791	Sunrise Drive	10th Street (S. of)	20
could not fully	y open (20 psi min.)	07/02/09	IU
1038	1818 Jordan Avenue (N)		20
throttled back	to maintain 20 psi after initial flow recording	07/02/09	CBU
1039	1500 Jordan Avenue	Zeta Beta Tau	14
throttled back	to maintain 20 psl after initial flow recording	07/02/09	CBU
1040	Balfour Court	Jordan Avenue	17
		07/02/09	CBU
1367	1969 Henderson Street (S)		9
		07/30/09	CBU
1385	Henderson Street	Wylie Farm Road (N. of)	18
hydrant capa	city test	07/30/09	CBU
1790	Ornamental Drive (S)	Bradford Court (E)	20
		07/09/09	CBU

Severe	Problems	Reporting Period: 6/1/2	2009 - 11/18/2009
Hydrant Number	Street	Cross Street	Inspection Date
198	1300 Washington Street (S)	Driscoll Street (E)	9/8/2009
	nt during start of fireflow charged back up bu service 1:02 PM 9/8/2009	at cannot fully close	CBU
259	Dunn Street (N)	Cottage Grove Avenue (E)	9/30/2009
•	d/ unable to open service 9/30/2009 12:28 PM		CBÚ
405	1101 Fess Avenue (N)		9/9/2009
Broken open			CBU
725	1115 Jordan Avenue		7/2/2009
Out of service	e - tagged		CBU
744	Union Street	Banta Apts.	7/1/2009
	on branch over hyd 7/1/2009 10:53 AM		IU
776	Jordan Avenue (N)	Jones Avenue (E)	7/6/2009
unable to test	t (construction)		CBU
812	Jefferson Street (N)	5th Street (E)	10/2/2009
•	close/blocked with debris service 10/2/2009 10:53 AM		CBU
820	2401 3rd Street (E)		10/2/2009
Op nut seized called out of s	d/cannot turn service 10/2/2009 10:00 AM		CBU
1251	Ramble Road (E)	Oliver Drive	10/7/2009
	/unable to operate service 10/7/2009 1:18 PM		CBU
1456	Stratford Drive (S)	Wexley Road (E)	8/6/2009
Yellow jacket unable to test	nest in ground at hydrant		CBÚ
1480	Spicewood Lane (E)	Roundhill Lane (E)	8/12/2009
Op nut seized	i. Inoperable, Defective grease fitting		CBU
1552	Knightsridge Road (S)	Lampkins Ridge Road (E) (2nd hyd. S. of)	8/19/2009
Operating nut	seized		CBU
1624	3525 Tudor Lane		7/21/2009
=	ase fitting/could not close after flowing 7/21/2009 11:22 AM		CBU
1644	1140 Carnaby Street		7/21/2009
	selzed/unable to operate 7/21/2009 8:26 AM		CBU
3196	High Street (S)	Winslow Road (1st hydrant South of)	7/23/2009
Property owne	er has fenced off lane/cannot access, flow, or	maintain	CBU
			<u> </u>

7/23/2009 CBU

Winslow Road (2nd hydrant South of)

High Street (S)

Property owner has fenced off lane/cannot access, flow, or maintain

3197

Minor Problems		Reporting Period:	6/1/2009 - 11/18/2009	
Hydrant Number	Street	Cross Street	Inspection Date	
9	Lincoln Street (N)	9th Street (E)	9/29/2009	
Defective grease	e fitting		CBU	
50	Grant Street (N)	9th Street (E)	9/29/2009	
Pumper cap cra	cked and seized		CBU	
59	Dunn Street (N)	4th Street (E)	9/28/2009	
Grease fitting de	efective		CBU	
68	Indiana Avenue	Kirkwood Avenue	7/7/2009	
Oil reservoir plu	g stripped		IU	
71	Indiana Avenue (E. of)	Kirkwood Avenue	7/7/2009	
Oil reservoir plu			IU	
73	Kirkwood Avenue	Woodlawn Avenue (W. of)	7/7/2009	
Oil reservoir plu	g stripped	,	IU	
74	Woodlawn Avenue (W. of)	Kirkwood Avenue	7/7/2009	
Oil reservoir plu	· ·		11112009 IU	
83	Woodlawn Avenue (1 block E. of)	8th Street	7/7/2009	
Oil reservoir plu	•	<b>52</b> , <b>52</b> , 52, 52, 52, 52, 52, 52, 52, 52, 52, 52	7772003 IU	
139	Washington Street (S)	Wylie Street (E)	9/10/2009	
Defective grease	e fitting		CBU	
142	702 Lincoln Street (S)		9/10/2009	
Defective grease	e fitting		CBU	
149	Henderson Street (S)	1st Street (E)	9/10/2009	
Difficult to opera		• •	CBU	
185	Highland Avenue (S)	Wylie Street (E)	9/10/2009	
pumper cap seiz		. , ,	CBU	
188	Highland Avenue (S)	University Street (E)	9/10/2009	
damaged weath	- • • •	, , ,	CBU	
195	Washington Street (S)	Dodds Street (E)	9/9/2009	
Defective grease	- · · · · · · · · · · · · · · · · · · ·	. ,	CBU	
196	Washington Street (S)	Dixle Street (E)	9/9/2009	
Leaks around nu		,	CBU	
247	Lincoln Street (N)	14th Street (E)	10/1/2009	
Defective grease		· · · · · · · · · · · · · · · · · · ·	CBU	
258	Dunn Street (N)	11th Street (E)	9/30/2009	
Defective grease	• •		CBU	
268	Indiana Avenue (N)	14th Street (E)	10/1/2009	
Defective grease	` ,		10/1/2009 CBU	
269	Indiana Avenue (N)	13th Street (E)	10/1/2009	
	e blocked / Barricade bent into both nozzles	.55, 55,55, (2)	10/1/2009 CBU	

**ProHydrant® Capacity Test Report** Hydrant #8 Residual Hydrant Information Residual Hydrant ID: 59 Owner: CBU Feature ID: Address: Street: Grant Street (N) **Cross Street / Intersection:** 4th Street (E) Location: **Parkway** Sect: q45 Ortr Sect: E33SW Make: Kennedy Model: K-11 Date stamped: 1972 GPS: # of Pumper Nozzies: 1 Pumper Nozzle size: 4.5 Main size: 12 Easting: Elevation: 742 # of Hose Nozzles: 2 Hose Nozzle size: 2.5 Northina: Flow Hydrant Information Flow Hydrant ID: Owner: CBU 8 Feature ID: Address: Street: Grant Street (N) Cross Street / Intersection: 4th Street (E) Location: Parkway Sect.: q45 Qrtr Sect: E33SW Make: Kennedy Model: K-11 Date stamped: 1972 GPS:: Main size: 12 # of Pumper Nozzles: 1 Pumper Nozzle size: 4.5 Easting:

### Capacity Test Results

Hose Nozzle size: 2.5

Northing:

Test Date:9/28/2009Time of Day:13:54Technicians:DC/BSStatic Pressure:84Residual Pressure:81GPM Obtained:1155Static HGL:936.0Residual HGL:929.1Pressure Zone:Central

Class: AA Bonnet Color: Blue

# of Hose Nozzles: 2

Flow Hydrant	Diameter	Coefficient	Pitot Reading	GPM	Minutes Flowed	Estimated Usage
8	2.39	0.89	58.00	1,155	3	3,465
			Total GPM	<u>1,155</u>	Usage:	3,465

Available Flow at 20 PSI: **6,018.48**Available Flow at 25 PSI: 5.759.83

Available Flow at 30 PSI: 5,490.89

Available Flow at 35 PSI: 5,210.22

**Test Comment:** 

Elevation: 742

#### **ProHydrant®** Capacity Test Report Hydrant #9 **Residual Hydrant Information** Owner: CBU Residual Hydrant ID: 50 Feature ID: Address: Street: Lincoln Street (N) Cross Street / Intersection: 9th Street (E) **Qrtr Sect: E33SW** Location: Parkway Sect: a46 Date stamped: 1974 Make: Kennedy Model: K-11 GPS: # of Pumper Nozzles: 1 Pumper Nozzle size: 4.5 Main size: 6 Easting: Hose Nozzle size: 2.5 Elevation: 786 # of Hose Nozzles: 2 Northing: Flow Hydrant Information Owner: CBU Flow Hydrant ID: 9 Feature ID: Address: Street: Lincoln Street (N) Cross Street / Intersection: 9th Street (E) **Parkway** Sect.: q46 **Qrtr Sect: E33SW** Location:

**Capacity Test Results** 

Model: K-11

# of Pumper Nozzles: 1

# of Hose Nozzles: 2

GPS::

Easting:

Northina:

Date stamped: 1974

Pumper Nozzle size: 4.5

Hose Nozzle size: 2.5

Test Date:9/29/2009Time of Day:14:18Technicians:DC/BSStatic Pressure:78Residual Pressure:65GPM Obtained:897Static HGL:966.2Residual HGL:936.2Pressure Zone:Central

Class: AA Bonnet Color: Blue

Flow Hydrant	Diameter	Coefficient	Pitot Reading	GPM	Minutes Flowed	Estimated Usage
9	2.39	0.89	35.00	897	3	2,691
			Total GPM	897	Usage	2,691

Available Flow at 20 PSI: 2,008.34

Available Flow at 25 PSI: 1,912.91

Available Flow at 30 PSI: 1,813.24

Available Flow at 35 PSI: 1,708.67

**Test Comment:** 

Make: Kennedy

Main size: 6

Elevation: 786

**ProHydrant®** 

**Capacity Test Report** 

Hydrant #10

### Residual Hydrant Information

Residual Hydrant ID: 10 Feature ID:

Owner: CBU

Address:

Street:

Lincoln Street (N)

Cross Street / Intersection:

8th Street (E)

Location: **Parkway** 

Sect: a46

Qrtr Sect: E33SW

Make: Mueller

Model: ASR

Date stamped: 1983

GPS.

Main size: 6

# of Pumper Nozzles: 1

Pumper Nozzle size: 4.5

Easting:

Elevation: 776

# of Hose Nozzles: 2

Hose Nozzle size: 2.5

Northing:

### Flow Hydrant Information

Flow Hydrant ID:

16

Feature ID:

Owner: CBU

Address: 419 Street: Washington Street (N) Cross Street / Intersection:

9th Street (E) (S. of)

Location: **Parkway** 

Model: B-62-B

Sect.: q46

Qrtr Sect: E33SW

Make: American Darling

Date stamped: 1979 Pumper Nozzle size: 4.5

GPS::

Main size: 4 Elevation: 800 # of Pumper Nozzles: 1 # of Hose Nozzles: 2

Hose Nozzle size: 2.5

Easting: Northing:

### Capacity Test Results

Test Date: 9/29/2009

Static Pressure: 74

Static HGL: 946.9

Time of Day: 14:01 Residual Pressure: 73

Residual HGL: 944.6

Technicians: DC/BS GPM Obtained: 727

Pressure Zone: Central

Class: AA

Bonnet Color: Blue

Flow Hydrant	Diameter	Coefficient	Pitot Reading	GPM	Minutes Flowed	Estimated Usage	
16	2.39	0.89	23.00	727	5	3,636	
		<del></del>	Total GPM	727	Usage:	3,636	

Available Flow at 20 PSI:

*6,258.03* 

Available Flow at 25 PSI:

5,938.15

Available Flow at 30 PSI:

5,602.86

Available Flow at 35 PSI:

5.249.53

Test Comment:

**ProHydrant®** 

**Capacity Test Report** 

Hydrant #12

### Residual Hydrant Information

Residual Hydrant ID: 12 Feature ID:

Owner: CBU

Address:

Street: Lincoln Street (N)

Cross Street / Intersection:

6th Street (E)

Location: Sidewalk

Sect: a45

**Qrtr Sect: E33SW** 

Make: Kennedy

Model: K-11

Date stamped: 1974

GPS:

Main size: 8

# of Pumper Nozzles: 1

Pumper Nozzle size: 4.5

Easting:

Elevation: 762

# of Hose Nozzles: 2

Hose Nozzle size: 2.5

Northing:

### Flow Hydrant Information

Flow Hydrant ID:

18

Feature ID:

Owner: CBU

Address:

Street:

Washington Street (N)

Cross Street / Intersection:

6th Street (E)

Yard Location:

Sect.: q45

**Qrtr Sect: E33SW** 

Make: American Darling

Model:

Date stamped:

GPS::

Main size: 8 Elevation: 772 # of Pumper Nozzles:

# of Hose Nozzles: 2

Pumper Nozzle size: Hose Nozzle size: 2.5

Easting: Northing:

#### Capacity Test Results

Test Date: 9/29/2009

Static Pressure: 81 Static HGL: 949.1

Time of Day: 10:17 Residual Pressure: 80 Residual HGL: 946.8

GPM Obtained: 643 Pressure Zone: Central

Technicians: DC/BS

Class: AA

**Bonnet Color:** Blue

Flow Hydrant	Diameter	Coefficient	Pitot Reading	GPM	Minutes Flowed	Estimated Usage	
18	2.39	0.89	18.00	643	3	1,930	
			Total GPM	643	Usage:	1,930	

Available Flow at 20 PSI:

5.912.83

Available Flow at 25 PSI:

5,645.98

Available Flow at 30 PSI:

5,367.91

Available Flow at 35 PSI:

5,077.00

**Test Comment:**