



AGENDA REPORT

Meeting Date: August 31, 2010

Item Number: G-9

To: Honorable Mayor & City Council

From: Shana Epstein, Environmental Utilities Manager
Kevin Watson, Water Operations Manager

Subject: APPROVAL OF AN AGREEMENT BETWEEN THE CITY OF BEVERLY HILLS AND M.E. SIMPSON CO., INC. FOR FIRE HYDRANT FLOW TESTING, MAINTENANCE AND DATA COLLECTION SERVICES; AND

APPROVAL OF A BLANKET PURCHASE ORDER IN THE NOT-TO-EXCEED AMOUNT OF \$155,000.00 TO M.E. SIMPSON FOR THE SERVICES.

Attachments: 1. Agreement

RECOMMENDATION

It is recommended that the City Council approve the "Agreement between the City of Beverly Hills and M.E. Simpson Company, Inc., for fire hydrant flow testing, maintenance and data collection services" and approve a blanket purchase order in the not-to-exceed amount of \$155,000.00 including contingency amount of \$22,680.00 for Fiscal Year 2010-2011.

INTRODUCTION

The City of Beverly Hills maintains 1,345 fire hydrants located in the City of Beverly Hills and City of West Hollywood. In order to maintain adequate fire protection the fire hydrants must be properly maintained and flow tests performed on a regular basis.

DISCUSSION

On April 22, 2010, the City of Beverly Hills received proposals from four vendors for fire hydrant flow testing, maintenance, and data collection services. Proposals were opened and reviewed by staff to determine compliance with the insurance requirements and for general compliance with the overall RFP requirements. Based on proposals

received, M.E. Simpson Company, Inc. submitted the lowest and most responsible proposal.

M.E. Simpson Company, Inc. is a technical service company. Their services are designed to aid water utilities in improving accountability and increasing revenues by maximizing distribution system performance and utilizing distribution system data, records and mapping programs. The results of the bids are as follows:

Vendor	Hydrant
M.E. Simpson	\$87.00 each
Wachs	\$195.00 each
Mueller	\$269.00 each
DCSE	\$276.00 each

An agreement has also been reached with the MEA Union to allow this work.

FISCAL IMPACT

Funds are available in the water enterprise fund.

Funds for this project are provided as follows:

Budget Unit	Account #	Description of Fund Source/Account #	Amount
8006003	73030	Fire hydrant flow test, & maintenance	\$155,000.00



Scott Miller
Finance Approval



for David Gustavson
Approved By

Attachment 1

Agreement

**AGREEMENT BETWEEN THE CITY OF BEVERLY HILLS AND M.E. SIMPSON CO.,
INC. FOR FIRE HYDRANT FLOW TESTING, MAINTENANCE AND DATA
COLLECTION SERVICES**

NAME OF CONTRACTOR: M.E. Simpson Co., Inc.

RESPONSIBLE PRINCIPAL OF CONTRACTOR: Michael D. Simpson
Chief Executive Officer

CONTRACTOR'S ADDRESS: 3406 Enterprise Avenue
Valparaiso, IN 46383

CITY'S ADDRESS: City of Beverly Hills
455 N. Rexford Drive
Beverly Hills, CA 90210
Attention: Shana Epstein
Environmental Utilities Manager

COMMENCEMENT DATE: Upon City's execution of this Agreement

TERMINATION DATE: Upon satisfactory completion of all services
required under this Agreement

CONSIDERATION: Not to exceed \$155,000 which includes a
Contingency fee in the amount of \$22,680 for
additional work and is based on the unit costs set
forth in Exhibit B

AGREEMENT BETWEEN THE CITY OF BEVERLY HILLS AND M.E. SIMPSON CO.,
INC. FOR FIRE HYDRANT FLOW TESTING, MAINTENANCE AND DATA
COLLECTION SERVICES

THIS AGREEMENT is made by and between the City of Beverly Hills (hereinafter called "CITY"), and M.E. Simpson Co., Inc. (hereinafter called "CONTRACTOR").

RECITALS

A. CITY desires to have certain services and/or goods provided as set forth in Exhibit A (the "Scope of Work"), attached hereto and incorporated herein.

B. CONTRACTOR represents that it is qualified and able to perform the Scope of Work.

NOW, THEREFORE, the parties agree as follows:

Section 1. CONTRACTOR's Scope of Work.

CONTRACTOR shall perform the Scope of Work described in Exhibit A, CITY's Request for Proposals, and Exhibit A-1, CONTRACTOR's proposal attached hereto and incorporated herein, in a manner satisfactory to CITY and consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. CONTRACTOR shall not paint fire hydrants. In the event of a conflict between the terms set forth in Exhibit A and the terms of Exhibit A-1, Exhibit A shall prevail. CITY shall have the right to order, in writing, changes in the Scope of Work. Any changes in the Scope of Work by CONTRACTOR must be made in writing and approved by both parties. The cost of any change in the Scope of Work must be agreed to by both parties in writing.

Section 2. Time of Performance.

CONTRACTOR shall commence its services under this Agreement upon receipt of a written notice to proceed from CITY. CONTRACTOR shall complete the performance of services by the Termination Date set forth above and/or in conformance with the project timeline established by the City Manager or his designee.

Section 3. Compensation.

(a) Compensation

CITY agrees to compensate CONTRACTOR for the services and/or goods provided under this Agreement, and CONTRACTOR agrees to accept in full satisfaction for such services, a sum not to exceed the Consideration set forth above and more particularly described in Exhibit B, attached hereto and incorporated herein.

(b) Expenses

The amount set forth in paragraph A shall include reimbursement for all actual and necessary expenditures reasonably incurred in the performance of this Agreement

(including, but not limited to, all labor, materials, delivery, tax, assembly, and installation, as applicable). There shall be no claims for additional compensation for reimbursable expenses.

(c) **Additional Services.**

City may from time to time require CONTRACTOR to perform additional services not included in the Scope of Services. Such requests for additional services shall be made by City in writing and agreed upon by both parties in writing.

Section 4. Method of Payment. Unless otherwise provided for herein, CONTRACTOR shall submit to City a detailed invoice, on a monthly basis or less frequently, for the services performed pursuant to this Agreement. Each invoice shall itemize the services rendered during the billing period and the amount due. Within 30 days of receipt of each invoice, CITY shall pay all undisputed amounts included on the invoice. CITY shall pay CONTRACTOR said Consideration in accordance with the schedule of payment set forth in Exhibit B, attached hereto and incorporated herein.

Section 5. Independent Contractor. CONTRACTOR is and shall at all times remain, as to CITY, a wholly independent contractor. Neither CITY nor any of its agents shall have control over the conduct of CONTRACTOR or any of CONTRACTOR's employees, except as herein set forth. CONTRACTOR shall not, at any time, or in any manner, represent that it or any of its agents or employees are in any manner agents or employees of CITY.

Section 6. Assignment. This Agreement shall not be assigned in whole or in part, by CONTRACTOR without the prior written approval of CITY. Any attempt by CONTRACTOR to so assign this Agreement or any rights, duties or obligations arising hereunder shall be void and of no effect.

Section 7. Responsible Principal(s)

(a) CONTRACTOR's Responsible Principal set forth above shall be principally responsible for CONTRACTOR's obligations under this Agreement and shall serve as principal liaison between CITY and CONTRACTOR. Designation of another Responsible by CONTRACTOR shall not be made without prior written consent of CITY.

(b) CITY's Responsible Principal shall be the City Manager or his designee set forth above who shall administer the terms of the Agreement on behalf of CITY.

Section 8. Personnel. CONTRACTOR represents that it has, or shall secure at its own expense, all personnel required to perform CONTRACTOR's Scope of Work under this Agreement. All personnel engaged in the work shall be qualified to perform such Scope of Work.

Section 9. Permits and Licenses. CONTRACTOR shall obtain and maintain during the Agreement term all necessary licenses, permits and certificates required by law for the provision of services under this Agreement, including a business license.

Section 10. Interests of CONTRACTOR. CONTRACTOR affirms that it presently has no interest and shall not have any interest, direct or indirect, which would conflict in any manner with the performance of the Scope of Work contemplated by this Agreement. No person having any such interest shall be employed by or be associated with CONTRACTOR.

Section 11. Insurance.

(a) CONTRACTOR shall at all times during the term of this Agreement carry, maintain, and keep in full force and effect, insurance as follows:

(1) A policy or policies of Comprehensive General Liability Insurance, with minimum limits of Two Million Dollars (\$2,000,000) for each occurrence, combined single limit, against any personal injury, death, loss or damage resulting from the wrongful or negligent acts by CONTRACTOR.

(2) A policy or policies of Comprehensive Vehicle Liability insurance covering personal injury and property damage, with minimum limits of One Million Dollars (\$1,000,000) per occurrence combined single limit, covering any vehicle utilized by CONTRACTOR in performing the Scope of Work required by this Agreement.

(3) Workers' compensation as required by the state of California.

(b) CONTRACTOR shall require each of its sub-contractors to maintain insurance coverage which meets all of the requirements of this Agreement.

(c) The policy or policies required by this Agreement shall be issued by an insurer admitted in the State of California and with a rating of at least a B+;VII in the latest edition of Best's Insurance Guide.

(d) CONTRACTOR agrees that if it does not keep the aforesaid insurance in full force and effect CITY may immediately terminate this Agreement or, if insurance is available at a reasonable cost, CITY may take out the necessary insurance and pay, at CONTRACTOR's expense, the premium thereon.

(e) At all times during the term of this Agreement, CONTRACTOR shall maintain on file with the City Clerk a certificate or certificates of insurance on the form set forth in Exhibit C, attached hereto and incorporated herein, showing that the aforesaid policies are in effect in the required amounts. CONTRACTOR shall, prior to commencement of work under this Agreement, file with the City Clerk such certificate or certificates. The general liability and auto liability shall contain an endorsement naming the CITY as an additional insured. All of the policies required under this Agreement shall contain an endorsement providing that the policies cannot be canceled or reduced except on thirty (30) days prior written notice to CITY, and specifically stating that the coverage contained in the policies affords insurance pursuant to the terms and conditions as set forth in this Agreement.

(f) The insurance provided by CONTRACTOR shall be primary to any coverage available to CITY. The policies of insurance required by this Agreement shall include provisions for waiver of subrogation.

(g) Any deductibles or self-insured retentions must be declared to and approved by CITY. At the option of CITY, CONTRACTOR shall either reduce or eliminate the deductibles or self-insured retentions with respect to CITY, or CONTRACTOR shall procure a bond guaranteeing payment of losses and expenses.

Section 12. Indemnification. CONTRACTOR agrees to indemnify, hold harmless and defend CITY, City Council and each member thereof, and every officer, employee and agent of

CITY, from any claim, liability or financial loss (including, without limitation, attorneys fees and costs) arising from any intentional, reckless, negligent, or otherwise wrongful acts, errors or omissions of CONTRACTOR or any person employed by CONTRACTOR in the performance of this Agreement.

Section 13. Termination.

(a) CITY shall have the right to terminate this Agreement for any reason or for no reason upon five calendar days' written notice to CONTRACTOR. CONTRACTOR agrees to cease all work under this Agreement on or before the effective date of such notice.

(b) In the event of termination or cancellation of this Agreement by CITY, due to no fault or failure of performance by CONTRACTOR, CONTRACTOR shall be paid based on the percentage of work satisfactorily performed at the time of termination. In no event shall CONTRACTOR be entitled to receive more than the amount that would be paid to CONTRACTOR for the full performance of the services required by this Agreement. CONTRACTOR shall have no other claim against CITY by reason of such termination, including any claim for compensation.

Section 14. Prevailing Wages. In accordance with the provisions of Sections 1770 et seq., of the Labor Code, the Director of the Industrial Relations of the State of California has determined the general prevailing rate of wages applicable to the work to be done. VENDOR will be required to pay to all persons employed on the project by the VENDOR sums not less than the sums set forth in the documents entitled "General Prevailing Wage Determination made by the Director of Industrial Relations pursuant to California Labor Code, part 7, Chapter 1, Article 2, Sections 1770, 1773, 1773.1." These documents can be reviewed in the office of the City Clerk or may be obtained from the State of California.

Section 15. Licenses and Permits. VENDOR agrees to maintain in effect at all times valid local, state and federal licenses and permits.

Section 16. CITY's Responsibility. CITY shall provide CONTRACTOR with all pertinent data, documents, and other requested information as is available for the proper performance of CONTRACTOR's Scope of Work.

Section 17. Information and Documents. All data, information, documents and drawings prepared for CITY and required to be furnished to CITY in connection with this Agreement shall become the property of CITY, and CITY may use all or any portion of the work submitted by CONTRACTOR and compensated by CITY pursuant to this Agreement as CITY deems appropriate.

Section 18. Changes in the Scope of Work. The CITY shall have the right to order, in writing, changes in the scope of work or the services to be performed. Any changes in the scope of work requested by CONTRACTOR must be made in writing and approved by both parties.

Section 19. Notice. Any notices, bills, invoices, etc. required by this Agreement shall be deemed received on (a) the day of delivery if delivered by hand during the receiving party's regular business hours or by facsimile before or during the receiving party's regular business hours; or (b) on the second business day following deposit in the United States mail, postage

prepaid to the addresses set forth above, or to such other addresses as the parties may, from time to time, designate in writing pursuant to this section.

Section 20. Attorney's Fees. In the event that either party commences any legal action or proceeding to enforce or interpret the provisions of this Agreement, the prevailing party in such action shall be entitled to reasonable attorney's fees, costs and necessary disbursements, in addition to such other relief as may be sought and awarded.

Section 21. Entire Agreement. This Agreement represents the entire integrated agreement between CITY and CONTRACTOR, and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by a written instrument signed by both CITY and CONTRACTOR.

Section 22. Exhibits; Precedence. All documents referenced as exhibits in this Agreement are hereby incorporated in this Agreement. In the event of any material discrepancy between the express provisions of this Agreement and the provisions of any document incorporated herein by reference, the provisions of this Agreement shall prevail.

Section 23. Governing Law. The interpretation and implementation of this Agreement shall be governed by the domestic law of the State of California.

Section 24. City Not Obligated to Third Parties. CITY shall not be obligated or liable under this Agreement to any party other than CONTRACTOR.

Section 25. Severability. Invalidation of any provision contained herein or the application thereof to any person or entity by judgment or court order shall in no way affect any of the other covenants, conditions, restrictions, or provisions hereof, or the application thereof to any other person or entity, and the same shall remain in full force and effect.

EXECUTED the _____ day of _____ 201__, at Beverly Hills, California.

CITY OF BEVERLY HILLS
A Municipal Corporation

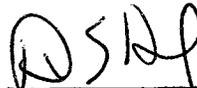
JIMMY DELSHAD
Mayor of the City of
Beverly Hills, California

ATTEST:

BYRON POPE (SEAL)
City Clerk

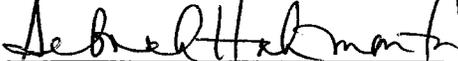
[Signatures continue]

CONTRACTOR: M.E. SIMPSON CO. INC.



DAN E. HOOD
President

APPROVED AS TO FORM:



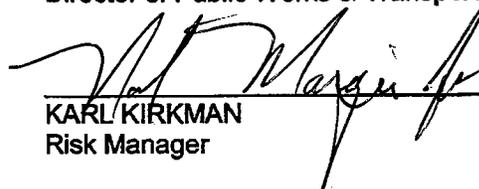
LAURENCE S. WIENER
City Attorney

APPROVED AS TO CONTENT:

JEFFREY KOLIN
City Manager



DAVID D. GUSTAVSON
Director of Public Works & Transportation



KARL KIRKMAN
Risk Manager

EXHIBIT A
CITY's Request for Proposal



CITY OF BEVERLY HILLS

REQUEST FOR PROPOSAL

for

FIRE HYDRANT MAINTENANCE AND DATA COLLECTION SERVICES

**Please Respond no later than April 22, 2010 by 2:00pm to the
City Clerk's Office
City of Beverly Hills
455 N Rexford, Rm 290
Beverly Hills, CA 90210**

I. INTRODUCTION

The City of Beverly Hills is seeking a qualified firm to be responsible for the routine annual maintenance of testing all fire hydrants within the City's boundaries. This routine maintenance shall consist of inspecting, cleaning, and clearing of weeds and debris to insure that each hydrant is in serviceable condition. More importantly, the qualified firm will be required to complete flow testing to determine the current availability of water supply in all areas of the City for fire suppression. The information derived from these tests will be recorded and maintained to be compatible with the City's Geographical Information System (GIS). Currently, there are approximately 1,300 fire hydrants and flush valves in the designated area.

As part of the overall process, the qualified firm must perform data collection services for the existing fire hydrants and flush valves. Please refer to ATTACHMENT A for collection standard details. The City utilizes GIS to generate operational maps used during an emergency and for planning of future improvements to the water system. The City currently has an underutilized asset management system called Hansen, which is being updated for greater use.

II. MAINTENANCE PROCEDURES

- a. Customer Notification
 - i. The selected firm will assist the City in developing a press release to briefly explain the fire hydrant flow testing program in the areas affected.
 - ii. The selected firm's personnel will go door to door forty-eight hours before the scheduled flow testing and hand deliver a letter that explain when the fire hydrants will be flow tested in the area and how the customers' services may be affected.
- b. General Guidelines for Testing and Flushing
 - i. Hydrant maintenance shall be performed in accordance with the American Water Works Association (AWWA) manual M-17, Chapter 5, State of California's Department of Public Health's work standards for the City's Distribution System, comply with the Regional Water Quality Control Board's

- regulations for discharges for example de-chlorination, and all Federal and State Safety Standards.
- ii. The City shall be notified prior to the commencement of any flushing or testing procedures on hydrants owned by that system. The anticipated location and duration of such activity should be given. The City shall also be notified upon completion of such activities.
 - iii. Care shall be taken to reduce discharge to minimize water loss. For the discharge that occurs, care shall be taken to reduce, to the least degree possible, the potential damage and inconvenience caused by hydrant discharge. Flush elbows or diffusers shall be used to reduce the velocity pressure of the discharge stream. Any loose debris left by hydrant discharge shall be swept or cleared from roads, streets, and drives.
 - iv. Proper de-chlorination methods for the discharge must be utilized.
 - v. Whenever operating hydrant valves, care shall be taken to open and close the valve slowly so as to reduce as much as possible, the effects of water hammer on the distribution system.
 - vi. Whenever a hydrant is opened, it should be flowed at least until the water runs clear.
 - vii. The Public Works Department shall be notified in writing daily if broken valves are found.
 - viii. Whenever hydrant maintenance is performed, the blue pavement reflector shall be checked to insure that it is in place and in good order. If reflector is damaged or missing, a new reflector shall be installed.
- c. Specific Procedures (See AWWA M- 17, Chapter 5) – Routine hydrant maintenance shall consist of the following activities:
- i. Check hydrant to make sure that it is visible from the roadway and is clear of any landscaping, plant growth, or other obstructions that could impair locating the hydrant or interfere with its use.
 - 1. Minor obstructions such as weed growth or wild plant growth should be trimmed to provide clear access to the hydrant.
 - 2. Obstructions caused by utilities, landscaping or ornamental plant growth shall be noted and reported to the City of Beverly Hills Public Works Department.
 - 3. Minor build-upon of dirt/sand, which provides insufficient ground clearance, may be removed with a shovel. Excessive build-up, or improperly installed hydrants shall be reported to the City of Beverly Hills Public Works Department on a weekly basis.
 - ii. Inspect hydrant in accordance with the procedure outlined in AWWA M-17, Chapter 5.
 - iii. Fire hydrants shall be maintained also in accordance with the manufacturer's (Jones Fire Hydrant) specifications for example proper greasing.
 - iv. Any fire hydrant that, for any reason, must be removed from service shall be reported immediately to the City of Beverly Hills Public Works Department.

Whenever such a hydrant is returned to service it shall undergo the same maintenance and testing procedure as outlined herein.

d. Flow Testing Procedure

i. Fire flow tests shall be conducted annually, in accordance with the procedure outlined in AWWA M-17, Chapter 6.

ii. Include but is not limited to the following details:

1. The Hydrant's Collection Map & Hydrant Location Index List (refer to the enclosed CD)
2. Fire hydrant nozzle size used for each test
3. Residual Pressure (Any incidents of residual pressure below 20 psi will be brought to the attention of the City immediately)
4. Static Pressure
5. Flow rate in gallons per minute (gpm)
6. The hydrant address and location
7. The amount of time it takes to flush each fire hydrant
8. An estimate of the water used during the operation of each fire hydrant
9. The date tested and technicians operating the fire hydrant
10. Hydrants that are in need of repair, painting, color coding, or have operational defects will be noted.

iii. Energy Dissipation

1. Fire hose and deflection tubes are utilized, as required, to direct flushing water away from traffic, pedestrians, underground utility vaults, and private property.

iv. Fire Hydrant Closure, Drainage and Leakage

1. After the fire hydrant has been flowed, the firm will verify that the hydrant is seated and is draining properly.
2. The firm will also check the fire hydrant with a FCS, S30, L-MIC electronic listening device or approved equal to ensure that the hydrant is not leaking.

e. Fire Hydrant Maintenance and Testing Records

The selected contractor shall be responsible for maintaining and updating the appropriate fire hydrant maintenance and testing records on the forms shown at the end of AWWA M-17, Chapter 5. Upon completion of each week's fire hydrant maintenance, the updated Fire Hydrant Master Record, Hydrant Maintenance Report, Hydrant Inspection Report, Flow Test Report, and Hydrant Test form for each hydrant inspected and tested shall be submitted in electronic format to the City of Beverly Hills Public Works Department so that it is compatible with the City's GIS and Hansen Asset Management System. The data from flow tests shall be recorded on the Flow Test Report, Hydrant Test Form, and Master Hydrant List. Any maintenance performed on the hydrant shall be recorded on the space provided on the Fire Hydrant Master Record and Hydrant Maintenance Report, along with the date the maintenance was performed. The selected contractor shall print a copy of each form and retain

these in his file. The master fire hydrant list of the Street/Hydrant Map Books will be updated instantaneously from this information.

f. **Work Schedule:**

- i. Working hours in the City of Beverly Hills are from 8am to 5pm.
- ii. Holidays consist of the following days:
 1. New Year's Day
 2. Martin Luther King Day
 3. President's Day
 4. Memorial Day
 5. Independence Day
 6. Labor Day
 7. Rosh Hashanah (observe three days including "Erev")
 8. Yom Kippur (observe two days including "Erev")
 9. Thanksgiving Day
 10. Christmas Day
- iii. Weekend Work requires special permitting, but will be necessary for some customers.
- iv. Evening Work requires special permitting, but will be necessary for some customers.

III. SUBMISSION REQUIREMENTS

The Contractor selected for this project shall be required to enter into a contract with the City in the form set forth in ATTACHMENT B.

The Contractor selected shall be required to comply with the City's insurance requirements and complete the attached Certificate of Insurance form (ATTACHMENT C) upon award of contract.

Contractors desiring to be considered for this project shall submit the following:

- A. A detailed description of the qualifications of the Contractor(s), including all sub-Contractors and employees who will work on this project to address all of the program elements.
- B. A description of previous experience related to this type of project.
- C. An outline of the specific services to be performed and the means by which the services will be performed.
- D. A time schedule for completion of the services outlined (exclusive of City review time frames).
- E. Submit the software that the firm will utilize to meet data compatibility requirements and what verstality is available to download this information into other common software formats.

F. A fee proposal based on the following:

1. A unit price to complete the tasks as described under Maintenance Procedures and a total not to exceed amount based on efficiencies if complete all the work over three years, two years and one year.
2. The unit rates will be used for monthly billings and potentially would be used to calculate fees for additional services, as may be requested/authorized by City.
3. A list of all reimbursable expense items with a not-to-exceed limit.
4. A list of any documentation or materials to be provided by the City that are deemed necessary for the Contractor to complete the project.
5. A letter of acknowledgment from the insurance carrier stating all the City's insurance provisions will be met.
6. A statement describing the nature and period of any warranty or guarantee that is applicable to the services provided.

G. Six (6) copies of the proposal must be submitted in writing and contain original signature by an authorized officer of the firm to the City Clerk's Office, 455 North Rexford Drive, Rm 290, Beverly Hills, CA 90210. Proposals must be received no later than April 22, 2010, by 2:00pm. No proposal will be accepted after this deadline.

H. Questions concerning the RFP requirements should be directed to:

Kevin Watson, Water Operations Manager
345 Foothill Road
Beverly Hills, CA 90210
310-285-2495 phone; 310-278-1838 fax

IV. PREVAILING WAGES :

In accordance with the provisions of Sections 1770 et seq., of the Labor Code, the Director of the Industrial Relations of the State of California has determined the general prevailing rate of wages applicable to the work to be done. The Contractor will be required to pay to all persons employed on the project by the Contractor sums not less than the sums set forth in the documents entitled "General Prevailing Wage Determination made by the Director of Industrial Relations pursuant to California Labor Code, Part 7, Chapter 1, Article 2, Sections 1770, 1773, 1773.1." These documents can be reviewed in the office of the City Clerk or may be obtained from the State.

V. SELECTION PROCESS

The criteria to be used in the selection process shall include:

- A. Specialized and recent experience in the type of work required by this project
- B. Record of the Firm in accomplishing projects in the required time
- C. Quality of work previously performed
- D. Professional qualifications
- E. References

VI. CITY OF BEVERLY HILLS STANDARD INSURANCE REQUIREMENTS:

Contractor's Insurance. Contractor shall procure and maintain for the duration of the contract, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work by the Contractor, his agents, representatives, employees or subcontractors, pursuant to contractor's bid or any subsequent contract. Insurance shall be of the type, in the amounts and subject to the provisions described below.

(1) **Commercial general liability coverage** at least as broad as Insurance Services Office Commercial General Liability occurrence coverage ("occurrence" form CG0001, Ed. 11/88) with a limit of not less than \$2,000,000 per occurrence. If the insurance includes a general aggregate limit, that limit shall apply separately to this contract or it shall be at least twice the required per occurrence limit.

(2) **Business automobile liability insurance** at least as broad as Insurance Services office form CA 0001 (Ed. 12/90) covering Automobile Liability, code 1 "any auto" and endorsement CA 0029 (Ed. 12/88) with a limit not less than \$1,000,000 per accident.

(3) **Workers Compensation Insurance** as required by the State of California and employers liability insurance with a limit not less than \$1,000,000 per accident.

(4) **Evidence of Coverage:**

(a) Prior to commencement of work under this contract, or within 14 days of notification of award of contract, whichever is shorter, Contractor shall file certificates of insurance with original endorsements evidencing coverage in compliance with this contract and in a form acceptable to City. The certificate shall be on the City's standard proof of insurance form.

(b) Contractor shall provide to City, on request, a complete copy, including all endorsements and riders, of any insurance policy.

(c) During the term of this agreement, Contractor shall maintain current valid proof of insurance coverage, with City at all times. Proof of renewals shall be filed prior to expiration of any required coverage and shall be provided on the City's standard proof of insurance form.

(d) Failure to submit any required evidences of insurance within the required time period shall be cause for termination for default, and shall be cause for forfeiture of this bidder's bid security, if applicable.

(e) In the event Contractor does not maintain current, valid evidence of insurance on file with City, City may, at its option, withhold payment of any moneys owed to Contractor, or which it subsequently owes to Contractor, until proper proof is filed.

(5) All insurance coverages shall be provided by insurers with a rating of B+(VII) or better in the most recent edition of Best's Key Rating Guide, Property-Casualty Edition.

(6) Each insurance policy shall be endorsed to state that coverage shall not be suspended, voided or canceled and shall not be reduced in coverage or limits except after 30 days prior written notice provided to the City. Upon prior request of the carrier, the notice period may be reduced to 10 days in the event of non-payment of premium.

(7) All liability coverages shall name the City, its City Council and every officer, agent and employee of City as additional insureds with respect to work under this bid or any subsequent contract.

(8) Contractor's insurance and any insurance provided in compliance with these specifications, shall be primary with respect to any insurance or self-insurance programs covering the City, its City Council and any officer, agent or employee of City.

(9) Where available, the insurer shall agree to waive all rights of subrogation against the City, its City Council and every officer, agent and employee of City.

(10) Any deductibles or self-insured retentions shall be declared to and must be approved by City. At the option of the City, either the insurer shall reduce or eliminate the deductibles or self-insured retentions as respects the City, or the Contractor shall procure a bond guaranteeing payment of losses and expenses.

(11) In the event that Contractor does not provide continuous insurance coverage, the City shall have the right, but not the obligation, to obtain the required insurance coverage at Contractor's cost, and the City may deduct all such costs from moneys the City owes to the Contractor or from moneys which it subsequently owes to the Contractor.

Indemnification. Contractor agrees to indemnify, hold harmless and defend City, its City Council and each member thereof and every officer and employee of City from any and all liability or financial loss resulting from any suits, claims, losses or actions brought against and from all costs and expenses of litigation brought against City, its City Council and each member thereof and any officer or employee of City which results directly or indirectly from the wrongful or negligent actions of Contractor's officers, employees, agents or others employed by Contractor while engaged by Contractor in the performance of this work.

Attachment A

GPS COLLECTION STANDARDS

LOCATION MAP

Refer to the enclosed CD for the Hydrant Collection Map & Hydrant Location Index List.

SCOPE OF WORK – INITIAL SCOPE

PILOT PROJECT

Contractor shall propose a minimum test project to the City of Beverly Hills, (City) to demonstrate partial fulfillment of spatial accuracy requirements. The number of features are to encompass a minimum of six City blocks chosen by the direction of the City designated Project Manager.

Refer to the large field location map for the fire hydrants and associated valves for the existing and probable locations. Also shown on the map will be the pilot project perimeter, along with all known locations of designated features to be completed. All GPS routing will be per existing pressure zones as shown on field map provided.

FOR ALL PROJECT PHASES

All designated features are to be field surveyed, and no photo interpretation shall be accepted without City approval. It will be assumed that each feature will have a minimum of 1 point requiring GPS location. All existing fire hydrants and associated valves indicated on field map are to be tied with a field measurement to the nearest driveway or corner or BCR/ECR, or similar fixed, known point.

Each existing fire hydrant and associated valve shall include horizontal and vertical positioning utilizing the California Coordinated System.

The fire hydrant and associated valve shall include a top of fire hydrant and associated valve elevation. Elevations are to be provided per the NGVD 1929 Datum only.

GENERAL SURVEY PROCESS

GPS near survey accuracy is to generally adhere to the following guidelines:

- (1) Type of equipment used is to be a GPS receiver w/L2 capability/or greater to obtain +/-0.2 near survey grade spatial accuracy.
- (2) All spatial available correction filters and corrections methods are utilized to ensure accuracy of measurements.
- (3) Sufficient time shall be allowed to provide a stationary, fixed reading of the GPS point.
- (4) The methods of observation should be understood to require near survey grade accuracies or better.
- (5) To obtain these accuracies, all features may be located by either setting GPS control or using points already established. Then tying in non-GPS features with total station type instruments. This method of accuracy is to be tied to the State Plane Coordinate System both horizontally and vertically.

1.1 GENERAL GPS PROCESS SETTINGS

Position Mode	All position fixes must be determined with 4 or more satellites. Manual 3D or over determined 3D (5 satellites minimum) modes are acceptable with a sufficiently low PDOP level (6 or less) for horizontal and vertical control. One additional satellite is recommended for vertical control. <i>2D fixes (using only 3 satellites) are not acceptable. 3D positions generated from 2D fixes supplemented with user entered elevations are also not acceptable.</i>
Almanac	Acquiring the current file as of the start date of the project is recommended, although within 7-10 days is acceptable.
Elevation Mask	15 degrees above horizon.
PDOP Mask	6 or less
Signal to Noise Ratio Mask (SNR)	If this parameter setting exists, set it to the manufacturer's recommendation.
Minimum Positions for Point Features	Use the manufacturer's recommended minimum number that will enable the collector to achieve the minimum of not more than .02+- foot, 95% confidence level. For receivers routinely capable of sub-meter accuracy, a minimum of 60 total fixes, at a 1 second log rate will be collected. Alternatively, a minimum of 12 total fixes, at a 5 second log rate, can be collected. <i>Solutions based on a single fix are not acceptable.</i>
Logging Intervals	Intervals for point features will be a SUFFICIENT AMOUNT OF TIME TO OBTAIN A FIXED LOCATION . To achieve the highest accuracy of the GPS receiver, the logging rate shall be synchronized with the base station supplying the logging rate. Otherwise interpolation of points will occur, reducing the accuracy of the GPS receiver.
Logging of DOP	If the receiver allows, this parameter setting will be set to allow the logging of DOP data along with position fixes.
Altitude Reference	Height above Mean Sea Level (MSL) Indicate Geoid Model.
Vertical Datum	NGVD 1929
Projected Coordinate System:	NAD_1983_StatePlane_California_V_FIPS_0405_Feet
Projection:	Lambert_Conformal_Conic
False Easting:	6561666.66666667
False Northing:	1640416.66666667
Central Meridian:	-118.00000000
Standard Parallel 1:	34.03333333
Standard Parallel 2:	35.46666667
Latitude Of Origin:	33.50000000
Linear Unit:	Foot_US
Geographic Coordinate System:	GCS_North_American_1983
Datum	D_North_American_1983
Prime Meridian:	Greenwich
Angular Unit:	Degree

SATELLITE GEOMETRY

A minimum of four satellites are required to survey with GPS. A minimum of five satellites is recommended. The configuration of the visible satellites the receiver is able to track in relation to each other will make a significant difference in the data that is being collected. Satellite geometry is expressed as a numeric value known as Dilution of Precision (DOP). Good satellite geometry will have small DOP values while poor satellite geometry will have large DOP values.

As a guideline DOP values of six or lower are required for City of Beverly Hills GPS surveys. The ideal satellite geometry is one which has the visible satellites distributed throughout the sky. Good satellite geometry will yield a higher precision. Satellite geometry factors that must be considered when planning a GPS survey are:

1. Number of satellites available
2. Minimum elevation angle above the horizon (elevation mask)
3. Obstructions limiting satellite visibility
4. Position Dilution of Precision (PDOP)
5. Vertical Dilution of Precision (VDOP)
6. Horizontal Dilution of Precision (HDOP)
7. Geometric Dilution of Precision (GDOP)

1.2 USE OF GLOBAL POSITIONING SYSTEMS (G.P.S.)

The following is a set of minimum guidelines for the use of G.P.S. (Global Positioning Systems) recommended by the City of Beverly Hills to perform near survey grade work. Near Survey grade GPS shall be consistent with the current technology employing at least two (2) receivers. One being stationary over a known point while one or more receivers is employed to collect or stake points in the field. Each receiver must be equipped to observe both carrier phases (L1 & L2, and better), which are measured simultaneously at participating receivers.

1.3 STANDARD G.P.S. COLLECTION PARAMETER SETTINGS

Logging Intervals

Minimum stationary time per point is to be *until a fixed location occurs*. Intervals for line area features depend on the velocity at which the receiver will be traveling and the nature of the feature and the operating environment. Under normal circumstances the interval for line and area features will be set to obtain a consistent line pattern.

Satellites

There must be at least 5 satellites tracked with a sufficiently low PDOP (6 or less) for horizontal control only. A minimum of 5 satellites for horizontal and vertical control and 1 additional satellite is recommended for redundancy.

1.4 ACCURACY CHECKS

A sampling of known points within the project area should not deviate by more than ± 0.2 horizontally or vertically. *Individual physical measurements shall be made from the center of all FIRE HYDRANTS AND ASSOCIATED VALVES*. The markings shall be centered on a MINIMUM 1" DIAMETER fluorescent paint spray point on the curb at the base of the feature at the curb, and thus be measured to another fixed or unmistakable physical point.

Note this below:

For example - this measurement may be from the center at the **base of a fire hydrant** to the **beginning of a curb return**. The horizontal distance from each feature shall be recorded in a specific column in the GIS database and the column heading shall be named TO_POINT. The type of ending point used to measure to shall be recorded in a column named TIED_TO.

Some Examples of Abbreviations to use in physical verification process are shown below:

ECR = End of Curb Return
BCR = Beginning of Curb Return
FPL = Fixed Property Line
FBW = Fixed Block Wall
TL = Traffic Light

1.5 FEATURE DATABASES

All databases are to conform to the following collection Meta data outlines, and will be verified with contractor prior to start of work.

ALL VALID ATTRIBUTES RELATED TO THE FIRE FLOW TESTING OR ANY OTHER PERTINENT PROCESSES AS STATED IN THIS RFP. CONTRACTOR SHALL SUBMIT A PROPOSED OUTLINE AND EXAMPLE OF THE PROPOSED BEVERLY HILLS DATA BASE.

SURVEY META DATA PORTION

FEAT_ID – Historical feature number (from overview map)
MAIN_ST – Usually the Street the feature physically sits on
X_STREET - Nearest North, South, East, or West Street
TIED_TO – Specify the actual end point type used in the physical measurement per sample above.
PDOP VALUE-
HDOP VALUE-
CORRECTION STATUS
DATE RECORDED
TIME RECORDED
TOTAL POSITIONS
FILTERED POSITIONS
HORIZONTAL PRECISION
CORRECTED .COR FILE NAME
Z-COORDINATE – Per NGVD 1929 Datum
X-COORDINATE
Y-COORDINATE
EASTING – X Cal Coordinate
NORTHING - Y Cal Coordinate
TO_POINT – The measurement fixed to this end point
COMMENTS – Any reason feature could not be exactly located or other relevant comments

PROJECT COORDINATION OF GPS ROUTES

All GPS Routes are to be reviewed by the City prior to the start of any work. Collection will be done per the prearranged collection districts obtained from the Project manager.

FINAL GIS PROJECT DELIVERABLES

1.6. DELIVERABLES FOR GPS FIELD COLLECTION PROCESS

The City of Beverly Hills (City) shall determine the format, content and scope of the information delivered. A scope of work shall be provided by the City outlining required information. Some information that may be required could include, but not limited to:

- A. Survey notes and computations.
- B. Datum information.
- C. Basis of bearing information.
- D. Record cut sheets – if any.
- E. Field Record Drawing information.
- F. Any Cad files on compact disc (CD).
- G. Minimum number of hard copies as required by the City if any of field maps.

GIS DELIVERABLE SHAPEFILE FORMAT CRITERIA

All GIS information shall be delivered in ArcGIS 9.3 compatible format, and shall be compiled into ArcGIS 9.3 geodatabase format, prior to final approval.

Database shall contain all relevant shape files and attributed columns per prior agreement. Each column shall be capitalized and all lengths of columns are to be formatted to proper widths providing an efficiently executed geodatabase. For example:

TO_POINT column shall be formatted to receive text and be a maximum of 10 characters in width. And the same general formatting principles shall apply to all other relevant attribute columns. A pre job proposed database schema shall be submitted to the City of Beverly Hills Public Works & Transportation for approval prior to the start of any work. Each Attribute column shall be explained in brief as to the purpose it will serve in the database. Upon initial approval work shall commence.

DATA COLLECTION STAFF

GPS field work must be performed by staff that has had training in GPS and GIS or has a surveying or mapping background. Field staff must have a thorough understanding of GPS basic concepts, and receiver operation. How a receiver's critical parameter settings affect data collection must be very well understood. The staff must also have familiarity with the types of features that are to be located, and must be able to recognize/interpret features in the field. To achieve the City of Beverly Hills target accuracy, all collected GPS data must be differentially corrected, either in real time or in a post process step.

The collection process must be reviewed by a licensed Land Surveyor for completeness and accuracy. The collection process should be capable of being certified by the same licensed Land Surveyor prior to final submittal to ensure the integrity of the deliverable.

**Attachment C
CERTIFICATE OF INSURANCE**

This is to certify that the following endorsement is part of the policy(ies) described below:

NAMED INSURED (CONTRACTOR)

COMPANIES AFFORDING COVERAGE

ADDRESS:

- A.
- B.
- C.

COMPANY (A. B. C.)	COVERAGE	POLICY NUMBER	EXPIRATION DATE	LIMITS		AGGREGATE
				B.I.	P.D.	
	AUTOMOBILE LIABILITY	[]				
	GENERAL LIABILITY	[]				
	PRODUCTS /COMPLETED OPERATIONS	[]				
	BLANKET CONTRACTUAL	[]				
	CONTRACTOR'S PROTECTIVE	[]				
	PERSONAL INJURY	[]				
	OTHER	[]				
	EXCESS LIABILITY	[]				
	WORKERS' COMPENSATION	[]				

It is hereby understood and agreed that the City of Beverly Hills, its City Council and each member thereof and every officer and employee of the City shall be named as joint and several assureds with respect to claims arising out of the following project:

It is further agreed that the following indemnity agreement between the City of Beverly Hills and the named insured is covered under the policy: Contractor agrees to indemnify, hold harmless and defend City, its City Council and each member thereof and every officer and employee of City from any and all liability or financial loss resulting from any suits, claims, losses or actions brought against and from all costs and expenses of litigation brought against City, its City Council and each member thereof and any officer or employee of City which results directly or indirectly from the wrongful or negligent actions of Contractor's officers, employees, agents or others employed by Contractor while engaged by Contractor in the (performance of this agreement) construction of this project.

It is further agreed that the inclusion of more than one assured shall not operate to increase the limit of the company's liability and that insurer waives any right on contribution with insurance which may be available to the City of Beverly Hills.

In the event of cancellation or material change in the above coverage, the company will give 30 days' written notice of cancellation or material change to the certificate holder.

Except to certify that the policy(ies) described above have the above endorsement attached, this certificate or verification of insurance is not an insurance policy and does not amend, extend or alter the coverage afforded by the policies listed herein. Notwithstanding any requirement, term, or condition of any contract or other document with respect to which this certificate or verification of insurance may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies.

DATE: _____ BY: _____
Authorized Insurance Representative

AGENCY: _____ TITLE: _____

_____ ADDRESS: _____



CITY OF BEVERLY HILLS
REQUEST FOR PROPOSAL
for
PROFESSIONAL SERVICES
for
FIRE HYDRANT MAINTENANCE AND DATA COLLECTION
SERVICES

Please Respond no later than April 22, 2010, at 2:00 pm to the
City Clerk's Office
City of Beverly Hills
455 N Rexford Drive, Rm 290
Beverly Hills, CA 90210

ADDENDUM NO. 1

Date of Addendum: April 6, 2010

Corrections: Minimum Positions for Point Features revised (in red).

Attachment A

GPS COLLECTION STANDARDS

1.1 GENERAL GPS PROCESS SETTINGS –

Position Mode	All position fixes must be determined with 4 or more satellites. Manual 3D or over determined 3D (5 satellites minimum) modes are acceptable with a sufficiently low PDOP level (6 or less) for horizontal and vertical control. One additional satellite is recommended for vertical control. <i>2D fixes (using only 3 satellites) are not acceptable. 3D positions generated from 2D fixes supplemented with user entered elevations are also not acceptable.</i>
Almanac	Acquire current as of start date of project ids recommended, although within 7-10 days is acceptable.
Elevation Mask	15 degrees above horizon.
PDOP Mask	6 or less

Signal to Noise Ratio Mask (SNR)	If this parameter setting exists, set it to the manufacturer's recommendation.
Minimum Positions for Point Features	Use the manufacturer's recommended minimum number that will enable the collector to achieve the minimum of at least 0.2+- foot. at a 95% confidence level. <i>Solutions based on a single fix are not acceptable.</i>
Logging Intervals	Intervals for point features will be a SUFFICIENT AMOUNT OF TIME TO OBTAIN A FIXED LOCATION . To achieve the highest accuracy the GPS receiver the logging rate shall be synchronized with the base station supplying the logging rate. Otherwise interpolation of points will occur, reducing the accuracy of the GPS receiver.
Logging of DOP	If the receiver allows, this parameter setting will be set to allow the logging of DOP data along with position fixes.
Altitude Reference	Height above mean sea level (MSL) Indicate Geoid Model.
Vertical Datum	NGVD 1929
Projected Coordinate System:	NAD_1983_StatePlane_California_V_FIPS_0405_Feet
Projection:	Lambert_Conformal_Conic
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Standard Parallel 2:	35.46666667
Latitude Of Origin:	33.50000000
Linear Unit:	Foot US
Geographic Coordinate System:	GCS_North_American_1983
Datum	D_North_American_1983
Prime Meridian:	Greenwich
Angular Unit:	Degree

End of Addendum

EXHIBIT A-1

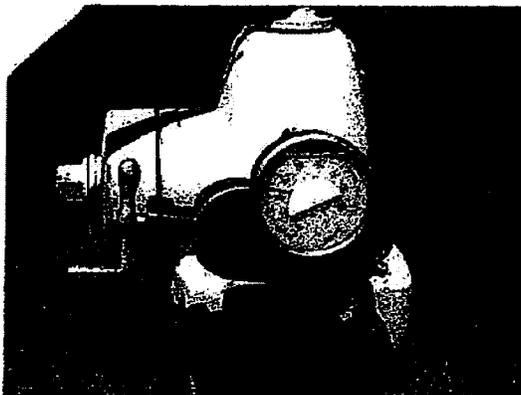
CONTRACTOR'S PROPOSAL/SCOPE OF WORK

SCOPE OF SERVICE

SCOPE OF SERVICE

The Scope of Service is understood to be the following:

M.E. Simpson Co., Inc. will furnish all labor, historical database information, materials, transportation, tools, and equipment necessary to survey the water distribution system. 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 performing the flow testing at all times.**



- ◆ M.E. Simpson Co., Inc. Personnel will **meet with the utility to review the project guidelines and answer any questions on procedures.**
- ◆ Work in an orderly and safe manner to insure protection of the local residents, Utility employees, and the Field Staff so that no **avoidable** accidents occur.
- ◆ 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.
- ◆ **M.E. Simpson Co., Inc. can provide the Utility 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 you choose a special mailing, the City will be responsible for the postage and printing costs.
- ◆ **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.
- ◆ **Each area scheduled for flow testing will have notification 48 hours in advance of flushing** to warn residents and businesses of potential discolored water. M.E. Simpson Co., Inc. project team members will go door-to-door to hand deliver an informational letter provided by the City to each residence/business as well as answer any questions if asked.

SCOPE OF SERVICE

- ◆ **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.
 - **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.**
 - **The date tested and technicians operating the Fire Hydrant will be recorded.**
 - **The Fire Hydrant address or location will be recorded.**
- ◆ **Fire hose and deflection tubes will be utilized**, as required, to direct flushing water away from traffic, pedestrians, underground utility vaults, and private property.
- ◆ **Use proper dechlorination methods for the water discharge** that meet the State of California's requirements for water discharge from fire hydrants.
- ◆ **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 S20 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 S20 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.

SCOPE OF SERVICE

- ◆ **Note the proper installation of the blue pavement reflector.** Locations where the reflector is missing will be listed as part of the maintenance list turned in to the City. Hydrant auxiliary valves will be painted with an environmentally formulated precautionary blue paint for future identification.
- ◆ **Hydrants will be made visible** by trimming weed growth around the location. If visibility is limited due to other obstructions, these locations will be documented and turned into the Utility. Excessive build-up of sand or dirt which may provide insufficient ground clearance, or hydrants which are not properly installed will be reported to the Utility on a weekly basis

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.



GPS Structure Location

Apex Land Surveying Inc. (8512 Oxley Circle, Huntington Beach, CA 92648) will be used to perform the GPS locations of the hydrants and auxiliary valves. This firm is well versed in performing GPS locations in Orange County and Los Angeles County.

The Project Team will:

- ◆ Prior to obtaining GPS points for the hydrants, a pilot project shall be implemented to demonstrate partial fulfillment of spatial accuracy requirements. The feature locations will be selected by the City's Project Manager and will encompass a minimum of six city blocks as stipulated in the RFP.
- ◆ **Examine the utility maps** to determine the anticipated location of each hydrant and auxiliary valve.
- ◆ **Attempt to verify** the existence of all hydrants and auxiliary valves shown on the maps by visual inspection.
- ◆ **Search for hydrants and auxiliary valves** shown, but not identified by visual inspection, using a magnetic locator.

SCOPE OF SERVICE

- ◆ **Employ a combination** of recorded information, as needed to establish the location of remaining hydrants and valves.
- ◆ **All hydrants and valves will be tied** with a field measurement to the nearest driveway or corner BCR/ECR or similar point or fixed known point.
- ◆ **The Project Team shall notify the *Utility Superintendent***, of intent conduct GPS locations in specific areas. The firm shall obtain permission to perform the work, at least twenty-four (24) hours or one (1) working day in advance of the intended start of that work. All GPS routes will be subject to review by the city prior to data collection.
- ◆ **Locations of all hydrants** selected by the Utility will be gathered via GPS.
- ◆ The Project Team will work with the Utility to develop a "data dictionary" which will define the information to be collected for each attribute. The Data dictionary shall have the following but not limited to:
 - Date and time the information was gathered.
 - A unique identifying number for each attribute consistent and compatible with system presently employed by the *Utility*.
 - Location for each attribute referenced by Northing and Easting coordinates generated from the GPS location in the Utility's local State Plane Coordinate system.
 - Type of Attribute (hydrant, mainline valve, major service valve, manhole cover, etc).
 - Any other data required to be collected as part of the attribute data set as defined by the Data Dictionary. This Data Dictionary will be assembled by the Project Team and the Utility.

- ◆ **The accuracy of each GPS location will be survey grade** (sub-centimeter).
- ◆ **The location of "offset" GPS locations** shall be accomplished by use of a Leica 1203 Total Station if needed.
- ◆ **GPS locations will need to have readings** from at least five satellites in position and a reading from a local GPS beacon to be considered accurate as a differentially corrected GPS location. A cellular network or stationary receiver shall be used.
- ◆ **"PDOP" readings need to be less than 6.** "PDOP" readings greater than 6 will not be considered as accurate locations.
- ◆ **A minimum of 20 second readings** for each position shall be taken. This will insure that the locations will be within the sub-centimeter accuracy limits. Due to the nature of sub-centimeter equipment, several thousand readings can be obtained during the 20 second interval for each location.
- ◆ **Position of the GPS satellites shall be given primary consideration.** The elevation mask shall be no less than 15 degrees. If the satellites are low on the horizon, it is expected that the project team will wait until the position is better before attempting to gather the GPS position. Data collected with the satellites low on the horizon and/or poorly distributed shall not be considered valid.
- ◆ **The information collected** will be compiled into a software database with the ability to export the information into a format acceptable to the Utility such as Microsoft Access, Microsoft Excel, .DXF file, or .SHP file for use in the Utility's GIS system or CAD mapping program.
- ◆ **All locations will be differentially corrected** for accuracy by using control points during the location of GPS points for each hydrant location. A stationary beacon may be set up to allow differential correction to occur "real time" for each location. A minimum of 20 seconds for each location will be taken to insure location integrity. The control loop used will be taken from existing benchmarks or by use of a cellular network.

SCOPE OF SERVICE

Documentation of Location

M.E. Simpson Co., Inc. will provide a location report for each structure located in a book and/or a database on a CD in a format agreed upon between the Utility and M. E. Simpson Co., Inc.

- ◆ The GPS data collected will be exported into a database for Utility use
- ◆ The data collected shall include but is not limited to the following information:
 - a. *Identifying number consistent and compatible with system presently employed by the Utility.*
 - b. *Location referenced by coordinates using the California State Plane Coordinate System.*
 - c. *Location by street and cross-street names.*
 - d. *Type of structure.*
 - e. *Date and time data was collected*
 - f. **All survey meta data listed in the RFP**
 - g. *Any other location data agreed upon by the Utility and M.E. Simpson Co., Inc.*

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.
- ◆ At the end of each week's fire hydrant maintenance progression, updated Fire Hydrant Master Record, Hydrant Maintenance Report, and Hydrant Inspection Reports, Flow Tests Reports, and hydrant test forms shall be submitted in electric format to the City.
- ◆ **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 (Further details follow). 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.**

SCOPE OF SERVICE

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 CONFIDENTIAL 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;
 - **Type of problems observed**
 - **Location of same for problems discovered**
 - **Total estimated water used (to be included on each flow test result)**
 - **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 thirty (30) work days of the completion of the fieldwork.**

SCOPE OF SERVICE

PRO-HYDRANT®

In place of the Access database, M.E. Simpson Co. Inc. will provide our **Pro-Hydrant®** online database.

Pro-Hydrant® continues to be developed in house at M.E. Simpson Co., Inc. allowing us total control over the design of the product. Our program is based online in a secure server that only allows selected users access to the information through login/passwords. The advantage of this program allows you the flexibility to view your hydrant information from any where.

The data saved in Pro-Hydrant® can be read and manipulated with any other database product that supports Object Database Connectivity (ODBC). This provides flexibility to a user that needs to cross platforms.

This software was developed to keep track of all the information that is associated with the fire hydrants. There are three areas of information that are recorded in Pro-Hydrant®. The first area is the **hydrant card**. The hydrant card keeps all the information about the valve that normally doesn't change year to year including:

- ◆ Hydrant number
- ◆ Map page number
- ◆ Street name
- ◆ Cross street name
- ◆ Location
- ◆ Hydrant Make/Model/Date Stamped
- ◆ Main Size
- ◆ Lead Size
- ◆ Number of Pumpers
- ◆ Number of Hose Nozzles

The second area is the **inspection history**. As hydrants are inspected and flowed from year to year some information changes, this information is kept in ascending order by date so that the most recent information for the valve is always on top. Probably the most important piece of history information is the hydrant status. The status is used to organize the hydrants into groups. For example: a hydrant with no problems is coded "OK", a hydrant with a problem but is able to be flowed is "Usable - Minor Problem", and a hydrant that cannot be flowed is "Usable - Major Problem". The history section includes:

- ◆ Inspection Date
- ◆ Status
- ◆ Technician
- ◆ Problem Description
- ◆ Color Scheme
- ◆ Comments

SCOPE OF SERVICE

The third area is the capacity test reports. When hydrants are flowed, pressure gauges are used to determine the residual pressure during the flow testing process while insuring the distribution system pressure remains above 20 psi. 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 and recorded.

- ◆ Fire hydrant nozzle size used for each test
- ◆ Residual pressure
- ◆ Static pressure
- ◆ Flow rate in GPM (gallons per minute)
- ◆ The amount of time it takes to flush each fire hydrant
- ◆ An estimate of the water used during the operation of each fire hydrant
- ◆ The date tested and technicians operating the fire hydrant

Information alone is useless. In order to make the information worth having it must be used and Pro-Hydrant makes that easier to do. Pro-Hydrant® software pulls all the valve information together into a variety of reports. Reports include:

- ◆ Hydrant Reports
- ◆ Hydrant Listing by Number
- ◆ Hydrant Listing by Street
- ◆ Problem Hydrant List (Useful for Work Orders)

Online Database Technology Security

M.E. Simpson Co., Inc. is able to bring our online database technology to our customers with the help of Golden Technologies. By teaming with Golden Technologies, we are able to stream line database technology to our customers, allowing total control over the product and information at your fingertips.

Golden Technologies' Administrators offer the following information for the security and redundancy of the onsite Data Center located in Valparaiso, IN.
Security Elements:

- **SSL Client/Server Security** – SSL (Secure Sockets Layer) is the standard security technology for establishing an encrypted link between a web server and a browser. This link ensures that all data passed between the web server and browsers remain private and integral. SSL is an industry standard and is used by millions of websites in the protection of their online transactions with their customers.
- **Administration Software** – Golden Technologies uses a real-time custom software suite to monitor hardware and software systems. The programs are actively reviewed for both current and past data results.
- **Credit Card Authorization and Billing Security** – When applicable, Golden Technologies deploys secure credit card authorization techniques approved by the W3C.
- **Secure Cabinets** – Physical security plays an important part in the overall infrastructure of the Data Center. This includes secure server and network cabinets. Access to these units is admitted to Golden Technologies' systems administrators, with a key and is under 24/365 video surveillance. The structural integrity is steel reinforced with fire-resistant paint.
- **Building Access** – is granted only by reservation and only when accompanied by a Golden Technologies systems engineer.

SCOPE OF SERVICE

- **Hardware and Software** – Golden Technologies offers only the safest and stress tested hardware available. The servers along with the UPS systems deployed are monitored individually and closely reviewed on a bi-monthly basis in order to maintain the utmost integrity. In many cases the servers used are cloned for quick redundant recovery resulting in seamless outages. The software used for various programs maintains legal use and compliance. Golden Technologies is a certified Microsoft and Linux provider and supporter.
- **Storage Area Network** – Golden Technologies uses a robust server farm with true data redundancy and imaging software where applicable. Offsite data storage is utilized for complete security.
- **Internet Security** – Various hardware and software is used for detecting and blocking external (and internal) threats. The Golden NetGuard firewall works to systematically block and deter unwanted traffic. Additional programs of Internet security software are deployed as a secondary and tertiary layer of defense.
- **Audit Systems** – Random and periodic audits are run on the hardware and software infrastructure. This is to ensure the overall integrity of each component used in the Data Center.
- **Environmental Systems** – Golden Technologies has redundant HVAC units that are monitored with real-time remote temperature sensors. Temperatures are set for an optimal equipment running environment. In the event that the temperature exceeds or diminishes, the alarm is triggered and the appropriate steps are taken to rectify the situation.
- **Electrical Systems** – Golden Technologies has an individual circuit dedicated to the Data Center for complete itemized power consumption via the local area gas and power utility company. As a redundant layer of power, a natural gas powered generator is used for immediate and seamless energy if an outage would occur. Additional power assistance is supplied through the 25 UPS' that are deployed in the Data Center.
- **Internet Redundancy** – Four Internet T1 data lines are the primary connection to the Data Center for Internet connectivity. As a secondary measure a broadband connection is in place as a failover connection. Both lines are monitored 24/365.
- **Surveillance Systems** – Secure IP based video cameras are placed throughout the Data Center and surrounding the property. These cameras are reviewed remotely and real-time 24/365. The data from the video is kept and backed up in case of a need to review past video. No external access is available unless deemed necessary.
- **Human Monitoring** – Golden Technologies' system administrators are on call and onsite 24/365 for complete "on-guard" support. In case of an emergency a technician will notify our support group and the proper channels of issue resolution will be executed.

SCOPE OF SERVICE

If Requested, The Utility will be provided with flow information in Pro-Hydrant® a fire hydrant database. 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). **System requirements for Pro-Hydrant®** are an IBM compatible computer with a **CD ROM drive** running Windows 95 or greater (we also recommend a minimum of 32 MB of RAM), VGA display, and storage capacity of 25 megabytes for every 1000 hydrants. A Microsoft Mouse, and a Laser Printer are recommended.

M.E. Simpson Co., Inc. will provide the 2000 version of Polcon Pro-Hydrant®, software driven water hydrant database, that has the abilities to access and reproduce and edit all aforementioned hydrant location and flow testing information. This program shall minimally 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.

2000 Polcon Pro-Hydrant® shall be the current version (2000 Polcon Pro-Hydrant®) and M.E. Simpson Co., Inc. will provide the necessary software license to the *Utility* registered in their name. There is no subscription fee to be assessed to the utility for this software.

- ◆ **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 CONFIDENTIAL 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;
 - ◆ **Type of problems observed**
 - ◆ **Location of same for problems discovered**
 - ◆ **Total estimated water used (to be included on each flow test result)**
 - ◆ **Mapping errors on the water atlas**

SCOPE OF SERVICE

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.

Exceptions to the "Request for Proposals"

M.E. Simpson Co., Inc. does not paint fire hydrants. Hydrant painting has certain issues such as lead based paint that M.E. Simpson Co. is not prepared to handle nor do we have knowledge of all the environmental issues regarding hydrant painting in the State of California.

Hydrants to be Flow Tested

Approximately 1,300 Hydrants will be flow tested for the Utility. This may include private fire line hydrants on private property on unmetered fire loops per the direction of the Utility.

SCOPE OF SERVICE

Current Workloads and Commitments

M.E. Simpson Co., Inc. is committed to providing the very best quality of service to its customers. To do so require a staff that is dedicated to making sure clients get exceptional quality and value for their investment. M.E. Simpson Co., Inc., employees are encouraged to participate at various levels of involvement with waterworks organizations in an effort to remain educated to the constantly changing environment of the water business, thus, able to immediately respond to the unique needs of the clients served with cost effective reasonable solutions.

M.E. Simpson Co., Inc. has the resources available to meet current workload demands and has the ability to meet future commitments scheduled. This is possible by the availability of our Project Teams and the depth of experience of our staff. M.E. Simpson Co., Inc. has been performing distribution services since 1979. Currently the company performs Hydrant Flow Testing Services out of the home office of Valparaiso, Indiana, and six branch offices located in Indianapolis, Indiana, Wauconda, Illinois, Dyer, Indiana, Phoenix, Arizona, Savage, Minnesota, and Chicago, Illinois. These offices have been able to serve Water Utilities throughout the United States, but primarily in Indiana, Illinois, Michigan, Wisconsin, Arizona, and Minnesota.

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.

Insurance Requirements

M.E. Simpson Co. Inc. will meet all insurance requirements requested by the City. If M.E. Simpson Co., Inc. is the successful Proposer of this RFP, all required insurance forms will be sent to the City.
Our insurance carrier is:

Mark Behrendt, CPCU
General Insurance Services
600 Vale Park Rd.
North Building, Suite "F"
P.O. Box 1818
Valparaiso, IN 46384
219.464.3511
Fax 219.531.9446
mbehrendt@genins.com

SCOPE OF SERVICE



Safety 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.

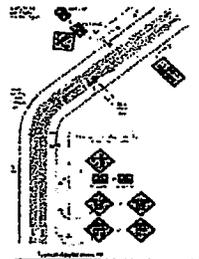
The use of a "one person" fire flow testing and hydrant assessment team is dangerous and impractical where water mains run under roadways and hydrants are close to traffic. It would be a dangerous precedent to allow a "one-person" team to access hydrants located near the roadway, park a vehicle nearby 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 **require entry** 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 trained and certified 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 trained and certified in First Responder First Aid & CPR.**
- ✦ We will follow all **traffic safety rules, designated by the Utility, The Department of Labor, OSHA, and the California Department of Transportation (per MUTCD).**
 - **All personnel are trained and certified, by the **AMERICAN TRAFFIC SAFETY 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: April 22, 2010, 2:00 pm

Notice To Proceed: within fourteen (14) days of notice to proceed

Provide Insurance Certificate: Within 10 calendar days after "Notice to Proceed".

Kick Off Meeting and Commencement of work: Within 14 days of "Notice to Proceed". 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: Assume one (2 person crew), 55 - 60days in the field for completion of field work for the hydrant flow testing. If a second 2 person crew is used the testing period will be reduced significantly to 27 - 30 working days.

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. Weekend, evening, and night time work will be necessary for some customers as well as in some areas for safety reasons. This was noted on the Request for Proposal, and as such no additional fees will be charged or awarded for hours worked outside of the normal daily work hours.

Daily Reporting: The Field staff will meet with assigned Utility staff daily or as needed and determined by the assigned Utility Manager. Hydrants needing immediate attention will be documented and submitted immediately 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.

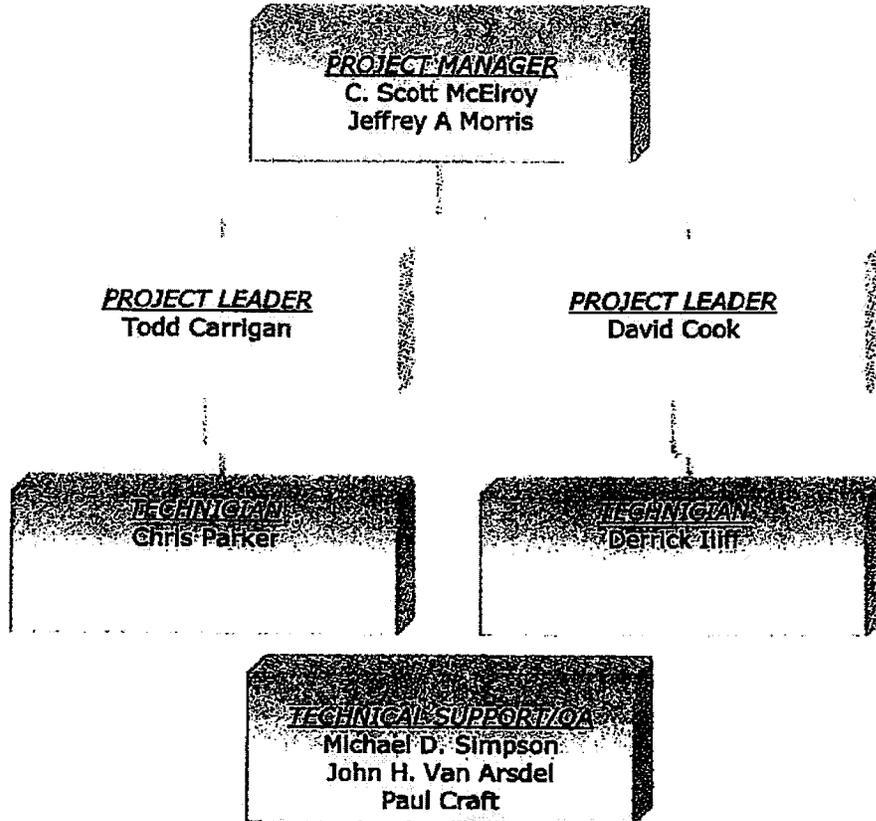
Final Reports: The final summary report will be available 30 work days after field work has been completed for the program. This report will have all the hydrant sheets printed and flow data compiled during the course of the project. The hydrant database will be available on line as well, or on a disc if requested.

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 all times during the course of the Project** for reasons of **Safety and Quality Assurance**.

The **Project Manager (C. Scott McElroy)** 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 (Todd Carrigan / David Cook)** 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.

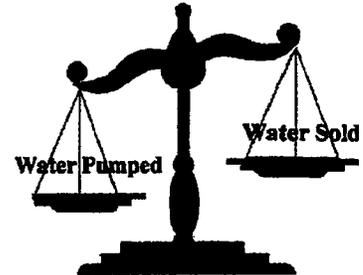


PROJECT UNDERSTANDING AND APPROACH

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:

- ◆ 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



A number of items uniquely qualify M.E. Simpson Co., Inc. in performing this hydrant fire flow testing and audit program. The Project Team's extensive practical experience in fire flow methodology coupled with other extensive Water Distribution System Assessment Programs experience such as Water Audits, Valve Assessments, Unidirectional Water Main Flushing and Distribution System Leakage Assessments, will allow for a thorough examination of the Distribution system's fire hydrants to help assess fire flows and hydrant conditions in the distribution system. From start up to completion, our firm is committed to furnishing a quality service in a timely manner.

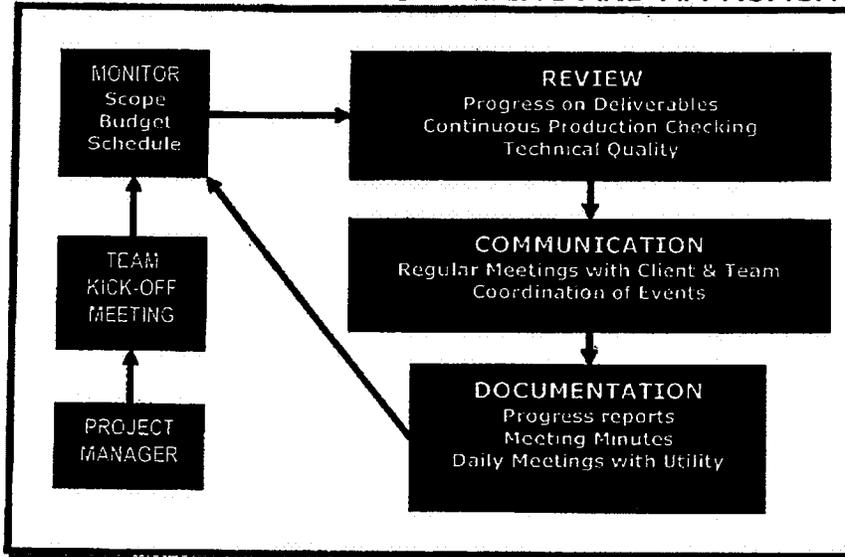
Project Management Approach

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 UNDERSTANDING AND APPROACH



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 UNDERSTANDING AND APPROACH

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.

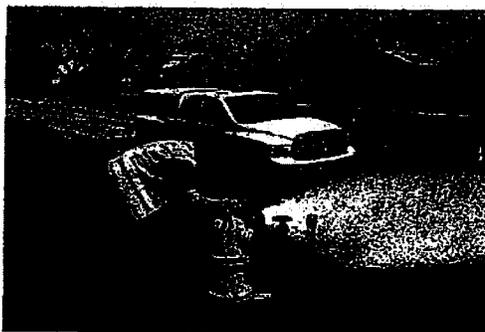
M.E. Simpson Co., Inc.'s QA/QC program is built around several key elements of M.E. Simpson Co., Inc.'s mission and values which consist of:

- ◆ Maintaining a reputation for quality performance
- ◆ 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 built in - not added on. 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.



PROJECT UNDERSTANDING AND APPROACH

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.**
- ◆ **Calibrated Static/Residual Pressure Gauges**
- ◆ **For GPS locations: 1203 Leica Total Station, Allegro CX with Carlson CE 2.5 software, GPS Altus APS 3 L1 and L2 receivers**
- ◆ **Truck mounted Arrow Board/Signage, and warning lights on trucks.**
- ◆
- ◆ **Traffic control equipment, including properly sized traffic cones with reflective stripes when required.**

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.

PROJECT UNDERSTANDING AND APPROACH

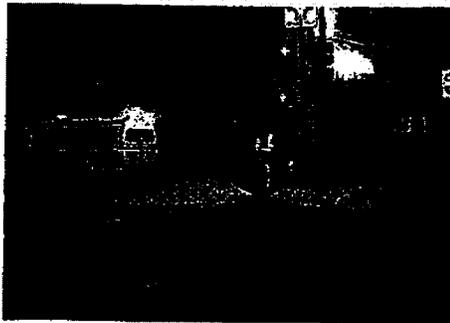
Fire Flow Testing

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.

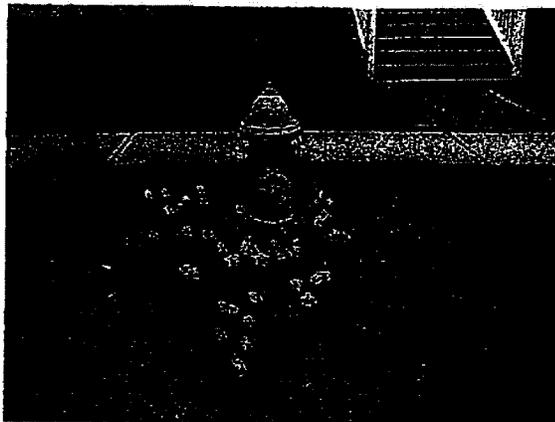
The success of this program will be dependent upon reviewing all available data regarding the operation of the distribution system. The following will need to be gathered; all as-built drawings of the water distribution system, all original atlases, all books, field cards, notes, computer copies of the 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.



PROJECT UNDERSTANDING AND APPROACH

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



PROJECT UNDERSTANDING AND APPROACH

GPS Locations Approach

M.E. Simpson Co., Inc.'s GPS Location Program will be accomplished by having Apex Land Surveyors Inc perform survey grade GPS locations for the hydrants and auxiliary valves. This will be accomplished by using GPS Altus APS 3 L1 and L2 receivers. GPS locations will be taken of each hydrant and auxiliary valve location and the position accuracy will be survey grade. The Project Team will locate all hydrants selected by the utility for location with the Altus APS 3 L1 and L2 receivers. The units used are multi-channel receivers that support the GLONASS L1/L2 signals. Data will be downloaded into .SHP file format for use in the Utility's GIS system. The GPS position data that is collected will be gathered in "real time" using correction factors from the control points taken prior to the collection of any GPS locations.



EXHIBIT B

SCHEDULE OF PAYMENT AND RATES

PAYMENT:

CONTRACTOR shall submit an itemized invoice to CITY for its services performed upon delivery of the services required by this Agreement. CITY shall pay CONTRACTOR the amount of such billing within thirty (30) days of receipt of it.

RATES:

This program is based on GPS locating, documenting, and fire flow testing approximately 1,300 fire hydrants, in the Utility's water distribution system. The fire flow testing and documentation shall be done by one of CONTRACTOR's two-man team's with all necessary equipment furnished by CONTRACTOR.

Option 1: One Year Program			
Item	Quantity	Fee	Total
2010 - 2011 Hydrants	1,300	\$87.00 each	\$113,100.00
Mobilization	1 Time	\$3,900.00	\$3,500.00
Fire Hydrant & Auxilliary Valve GPS Locations	As Needed	\$12.00 each	
Optional GPS of Water System Structures*	TBD	\$12.00 each	
		Total (Sans as needed GPS)	\$116,600.00

*CONTRACTOR can collect GPS locations for water distribution system structures in the Beverly Hills system if requested. Structures may include, but is not limited to: mainline valves, sanitary and storm sewers.

These fees are all based on approximate numbers of fire hydrants to be flow tested. The total price will change according to the actual number of fire hydrants completed. All procedures will be followed according to the above scope of services. This will include the Online Pro-Hydrant® database. (If requested Pro-Hydrant® software loaded with the updated fire hydrant data base, or Access 2000 or Access 2003) and flow testing information for all fire hydrants completed as well as a Fire Hydrant Book containing the information.



CERTIFICATE OF INSURANCE

This is to certify that the following endorsement is part of the policy(ies) described below:

NAMED INSURED

COMPANIES AFFORDING COVERAGE

- A.
- B.
- C.

ADDRESS

COMPANY (A. B. C.)	COVERAGE	POLICY NUMBER	EXPIRATION DATE	LIMITS		AGGREGATE
				B.I.	P.D.	
	<input type="checkbox"/> AUTOMOBILE LIABILITY <input type="checkbox"/> GENERAL LIABILITY <input type="checkbox"/> PRODUCTS/COMPLETED OPERATIONS <input type="checkbox"/> BLANKET CONTRACTUAL <input type="checkbox"/> CONTRACTOR'S PROTECTIVE <input type="checkbox"/> PERSONAL INJURY <input type="checkbox"/> EXCESS LIABILITY <input type="checkbox"/> WORKERS' COMPENSATION <input type="checkbox"/>					

It is hereby understood and agreed that the **City of Beverly Hills**, its City Council and each member thereof and every officer and employee of the City shall be named as joint and several assureds with respect to claims arising out of the following project or agreement:

It is further agreed that the following indemnity agreement between the **City of Beverly Hills** and the named insured is covered under the policy: Contractor agrees to indemnify, hold harmless and defend City, its City Council and each member thereof and every officer and employee of City from any and all liability or financial loss resulting from any suits, claims, losses or actions brought against and from all costs and expenses of litigation brought against City, its City Council and each member thereof and any officer or employee of City which results directly or indirectly from the wrongful or negligent actions of contractor's officers, employees, agents or others employed by Contractor while engaged by Contractor in the (performance of this agreement) construction of this project.

It is further agreed that the inclusion of more than one assured shall not operate to increase the limit of the company's liability and that insurer waives any right of contribution with insurance which may be available to the **City of Beverly Hills**.

In the event of cancellation or material change in the above coverage, the company will give **30 days** written notice of cancellation or material change to the certificate holder.

Except to certify that the policy(ies) described above have the above endorsement attached, this certificate or verification of insurance is not an insurance policy and does not amend, extend or alter the coverage afforded by the policies listed herein. Notwithstanding any requirement, term, or condition of any contract or other document with respect to which this certificate or verification of insurance may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, **exclusions and conditions** of such policies.

DATE: _____

BY: _____
Authorized Insurance Representative

AGENCY: _____

TITLE: _____
 ADDRESS _____
 : _____

RM02.DOC REVISED 10/14/96.

EXHIBIT C