AGREEMENT TO PERFORM PROFESSIONAL ENGINEERING SERVICES

This agreement for professional engineering services ("Agreement") is made and entered in this 20th day of February, 2013 ("Effective Date"), by and between the City of Redlands, a municipal corporation ("City)" and Dudek ("Consultant"). City and Consultant are sometimes individually referred to herein as a "Party" and, together, as the "Parties." In consideration of the mutual promises contained herein, City and Consultant agree as follows:

ARTICLE 1 – ENGAGEMENT OF CONSULTANT

- 1.1 City hereby engages Consultant to perform engineering services for City (the "Services").
- 1.2 The Services shall be performed by Consultant in a professional manner, and Consultant represents that it has the skill and the professional expertise necessary to provide the Services to City at a level of competency presently maintained by other practicing professional consultants in the industry providing like and similar types of Services.

ARTICLE 2 – SERVICES OF CONSULTANT

- 2.1 The Services that Consultant shall perform are more particularly described in Exhibit "A," entitled "Scope of Services," which is attached hereto and incorporated herein by reference.
- 2.2 Consultant shall comply with applicable federal, state and local laws and regulations in the performance of the Services.

<u>ARTICLE 3 – RESPONSIBILITIES OF CITY</u>

- 3.1 City shall make available to Consultant information in its possession that may assist Consultant in performing the Services.
- 3.2 City designates Greg Brooks, Project Manager II, as City's representative with respect to performance of the Services, and such person shall have the authority to transmit instructions, receive information, interpret and define City's policies and decisions with respect to performance of the Services.

ARTICLE 4 – PERFORMANCE OF SERVICES

4.1 Consultant shall perform and complete the Services in a prompt and diligent manner. Services shall be completed within one hundred fifty (150) calendar days after the Effective Date of this Agreement.

<u>ARTICLE 5 – PAYMENTS TO CONSULTANT</u>

- The total compensation for Consultant's performance of the Services shall not exceed the amount of one hundred forty two thousand eight hundred ninety four dollars (\$142,894.00). City shall pay Consultant on a time and materials basis based upon the hourly rates shown in Exhibit "B," entitled "Rate Schedule." Exhibit "B" is attached hereto and incorporated herein by this reference.
- 5.1 Consultant shall submit monthly invoices to City describing the Services performed during the preceding month. Consultant's invoices shall include a brief description of the Services performed, the dates the Services were performed, the number of hours spent and by whom, and a description of reimbursable expenses related to the project. City shall pay Consultant no later than thirty (30) days after receipt and approval by City of Consultant's invoice.
- 5.2 All notices shall be given in writing by personal delivery or by mail. Notices sent by mail should be addressed as follows:

CityConsultantDudek, PresidentGreg BrooksFrankDudek, PresidentProject Manager II31878 Camino CapistranoCity of RedlandsSuite2001270 W Park Avenue, Bldg ASan Juan Capistrano, CA 92675Redlands, CA 92373San Juan Capistrano

When so addressed, such notices shall be deemed given upon deposit in the United States Mail. Changes may be made in the names and addresses of the person to whom notices and payments are to be given by giving notice pursuant to this section 5.2.

ARTICLE 6 – INSURANCE AND INDEMNIFICATION

- 6.1 Insurance required by this Agreement shall be maintained by Consultant for the duration of its performance of the Services. Consultant shall not perform any Services unless and until the required insurance listed below is obtained by Consultant. Consultant shall provide City with certificates of insurance and endorsements evidencing such insurance prior to commencement of the Services. Insurance policies shall include a provision prohibiting cancellation or modification of the policy except upon thirty (30) days prior written notice to City.
- 6.2 Consultant shall secure and maintain Workers' Compensation and Employer's Liability insurance throughout the duration of its performance of the Services in accordance with the laws of the State of California, with an insurance carrier acceptable to City as described in Exhibit "C," entitled "Workers' Compensation Insurance Certification," which is attached hereto and incorporated herein by this reference.

- 6.3 Consultant shall secure and maintain comprehensive general liability insurance with carriers acceptable to City. Minimum coverage of One Million Dollars (\$1,000,000) per occurrence and Two Million Dollars (\$2,000,000) aggregate for public liability, property damage and personal injury is required. City shall be named as an additional insured and such insurance shall be primary and non-contributing to any insurance or self-insurance maintained by City.
- 6.4 Consultant shall secure and maintain professional liability insurance throughout the term of this Agreement in the amount of One Million Dollars (\$1,000,000) per claim made.
- 6.5 Consultant shall have business auto liability coverage, with minimum limits of One Million Dollars (\$1,000,000) per occurrence, combined single limit bodily injury liability and property damage liability. This coverage shall include all Consultant owned vehicles used in connection with Consultant's provision of the Services, hired and non-owned vehicles, and employee non-ownership vehicles. City shall be named as an additional insured and such insurance shall be primary and non-contributing to any insurance or self insurance maintained by City.
- 6.6 Consultant shall defend, indemnify and hold harmless City and its elected officials, employees and agents from and against any and all claims, losses or liability, including attorneys' fees, arising from injury or death to persons or damage to property occasioned by and negligent act, omission or failure to act by Consultant, its officers, employees and agents in performing the Services.

<u>ARTICLE 7 – CONFLICTS OF INTEREST</u>

- 7.1 Consultant covenants and represents that it does not have any investment or interest in any real property that may be the subject of this Agreement or any other source of income, interest in real property or investment that would be affected in any manner or degree by the performance of Consultant's Services. Consultant further covenants and represents that in the performance of its duties hereunder, no person having any such interest shall perform any Services under this Agreement.
- 7.2 Consultant agrees it is not a designated employee within the meaning of the Political Reform Act because Consultant:

A. Does not make or participate in:

- (i) the making or any City governmental decisions regarding approval of a rate, rule or regulation, or the adoption or enforcement of laws;
- (ii) the issuance, denial, suspension or revocation of City permits, licenses, applications, certifications, approvals, orders or similar authorization or entitlements;
- (iii) authoring City to enter into, modify or renew a contract;
- (iv) granting City approval to a contract that requires City approval and to which City is a party, or to the specifications for such a contract;

- (v) granting City approval to a plan, design, report, study or similar item;
- (vi) adopting, or granting City approval of policies, standards or guidelines for City or for any subdivision thereof.
- B. Does not serve in a staff capacity with City and in that capacity, participate in making a governmental decision or otherwise perform the same or substantially the same duties for City that would otherwise be performed by an individual holding a position specified in City's Conflict of interest Code under Government Code section 87302.
- 7.3 In the event City officially determines that Consultant must disclose its financial interests, Consultant shall complete and file a Fair Political Practices Commission Form 700, State of Economic Interests with the City Clerks' office pursuant to the written instructions provided by the City Clerk.

ARTICLE 8 – GENERAL CONSIDERATIONS

- 8.1 In the event any action is commenced to enforce or interpret any of the terms or conditions of this Agreement the prevailing Party shall, in addition to any costs and other relief, be entitled to the recovery of its reasonable attorneys' fees, including fees for the use of in-house counsel by a Party.
- 8.2 Consultant shall not assign any of the Services, except with the prior written approval of City and in strict compliance with the terms, and conditions of this Agreement.
- 8.3 Project related documents, records, drawings, designs, cost estimates, electronic data files, databases and any other documents developed by Consultant in connection with its performance of the Services, and any copyright interest in such documents, shall become the property of City and shall be delivered to City upon completion of the Services, or upon the request of City. Any reuse of such documents, and any use of incomplete documents, shall be at City's sole risk.
- 8.4 Consultant is for all purposes under this Agreement an independent contractor and shall perform the Services as an independent contractor. Neither City nor of its agents shall have control over the conduct of Consultant or Consultant's employees, except as herein set forth. Consultant shall supply necessary tools and instrumentalities required to perform the Services. Assigned personnel employed by Consultant are for its account only, and in no event shall Consultant or personnel retained by it be deemed to have been employed by City or engaged by City for the account of, or on behalf of City. Consultant shall have no authority, express or implied, to act on behalf of City in any capacity whatsoever as an agent, nor shall Consultant have any authority, express or implied, to bind City to any obligation.
- 8.5 Unless earlier terminated as provided for below, this Agreement shall terminate upon completion and acceptance of the Services by City; provided, however this Agreement may be terminated by City, in its sole discretion, by providing thirty (30) days prior

written notice to Consultant (delivered by certified mail, return receipt requested) of City's intent to terminate. If this Agreement is terminated by City, an adjustment to Consultant's compensation shall be made, but (1) no amount shall be allowed for anticipated profit or unperformed Services, and (2) any payment due Consultant at the time of termination may be adjusted to the extent of any additional costs to City occasioned by any default by Consultant. Upon receipt of a termination notice, Consultant shall immediately discontinue its provision of the Services and, within five (5) days of the date of the termination notice, deliver or otherwise make available to City, copies (in both hard copy and electronic form, where applicable) of project related data, design calculations, drawings, specifications, reports, estimates, summaries and such other information and materials as may have been accumulated by Consultant in performing the Services. Consultant shall be compensated on a pro-rata basis for Services completed up to the date of termination.

- 8.6 Consultant shall maintain books, ledgers, invoices, accounts and other records and documents evidencing costs and expenses related to the Services for a period of three (3) years, or for any longer period required by law, from the date of final payment to Consultant pursuant to this Agreement. Such books shall be available at reasonable times for examination by City at the office of Consultant.
- 8.7 This Agreement, including the Exhibits incorporated herein by reference, represents the entire agreement and understanding between the Parties as to the matters contained herein, and any prior negotiations, written proposals or verbal agreements relating to such matters are superseded by this Agreement. Except as otherwise provided for herein, an amendment to this Agreement shall be in writing, approved by City and signed by City and Consultant.
- 8.8 This Agreement shall be governed by and construed in accordance with the laws of the State of California.
- 8.9 If one or more of the sentences, clauses, paragraphs or sections contained in this Agreement is declared invalid, void or unenforceable by a court of competent jurisdiction, the same shall be deemed severable from the remainder of this Agreement and shall not affect, impair or invalidate the remaining sentences, clauses, paragraphs or sections contained herein, unless to do so would deprive a Party of a material benefit of its bargain under this Agreement.

IN WITNESS WHEREOF, duly authorizes representative of the City and Consultant have signed in confirmation of this Agreement.

CITY OF REDLANDS	DUDEK
By:Pete Aguilar, Mayor	By:Frank Dudek, President
ATTEST:	
Sam Irwin, City Clerk	

Exhibit "A"

Scope of services:

TECHNICAL APPROACH & SCOPE OF WORK

I.I Background

The City of Redlands (City) is requesting proposals from qualified engineering firms to provide engineering design services (preliminary design, final design and bidding period services) for rehabilitation of the 10.6 million gallon (MG) Dearborn Reservoir (Reservoir).

The Reservoir is a hopper bottom, rectangular shaped (328-ft \times 198-ft), partially buried, constructed of reinforced concrete, and located near the intersection of Dearborn Street and Independence Avenue in the City. The floor, walls, columns and column foundations are constructed of reinforced concrete, and the roof is constructed with a 7-inch thick post-tensioned minimally reinforced two-way slab without drop panels at the column/roof interface.

THE DUDEK ADVANTAGE

The proposed Dudek/SWE project team recently completed the analysis and preliminary design for the retrofit of (23) reservoirs and design improvements for (5) of the reservoirs for San Bernardino Municipal Water Department (SBMWD). The project team is currently preparing the design improvements for (8) more of the reservoirs.

A structural assessment of the reservoir (report) was recently completed for the City (dated March 22, 2010) and accompanied the RFP. The report recommended the City consider replacement or strengthening of the reservoir roof. In addition, other reservoir component (columns, floors, walls, etc.) concerns and observations (primarily cracking of concrete and repairs to cracks) were noted, but no recommendations were made regarding these items.

I.2 Approach

The proposed Dudek and Simon Wong Engineering (SWE) team has reviewed the RFP and the report. Based on the review several key issues were identified and potential resolutions measures were developed as follows:

PRELIMINARY ROOF REPLACEMENT/RETROFIT OPTIONS IDENTIFIED

Option I:

Demolish and replace existing roof slab with a new reinforced concrete slab with new columns and column foundations. This option will mitigate all of the concrete defects in the existing roof. Due to heavier load of a new reinforced concrete slab with drop panels, it is likely that new columns and column foundations need to be provided to support additional vertical loads.

Advantage: A new concrete roof slab will extend the life of the entire reservoir structure. The load pattern to the exterior walls will not vary and strengthening will likely not be required.

Disadvantage: Substantial shoring or partial excavation behind the exterior walls may be required during demolition and replacement of concrete roof so exterior walls will not be overstressed roof during construction (the exterior walls will act as a cantilevered wall without the lateral support by the roof).

Option 2:

Demolish and replace existing roof slab with a new aluminum roof with new stainless steel columns. This option will mitigate all of the concrete defects in the existing roof. A light

aluminum roof will exert less vertical load on columns, however, column foundation may still need to be upsized due to wind uplift on an aluminum roof structure. The existing exterior walls and foundations will need to be strengthened because of a change in load pattern of an aluminum roof, and the exterior wall will act as a cantilevered wall without the lateral support by the roof.

Advantage: New aluminum roof will extend the life of the entire reservoir structure and a pre-fabricated aluminum roof is relatively easy to construct when compared to the other three options. **Disadvantage:** This would likely be the most expensive retrofit option because strengthening of the existing exterior walls and foundations will be required. This will also require backfill and re-compaction of the soil behind the exterior walls.

Option 3:

Demolish and replace the existing roof slab with a partially precast concrete roof slab. Cast-inplace column and roof girders will be constructed first and the precast slabs can be laid between roof girders. A topping slab may be required to tie the entire roof together to form a structural diaphragm.

Advantages: A new precast roof will extend the life of the remaining reservoir structure. Additionally, the construction duration will be shorter with this approach. **Disadvantages:** The exterior walls will require shoring or another similar mitigation measure to avoid overstressing. In addition, this option is not as durable as cast-in-place construction.

Option 4:

Retrofit the existing roof with new technology repair materials such as carbon fiber, high quality cementious repair mortars and epoxy grouting. Additional structural members may be required to support the distressed post-tensioned roof.

Advantages: May cost less to repair and retrofit than total replacement of roof slab. In addition, this options would prolong the life of the existing roof structure.

Disadvantages: This option may not address all of the defects in the existing roof. Furthermore, this repair may only extend the life of the structure a few more years and up to an estimated maximum of 10 years.

After meeting with the City, presenting the (4) options, visiting the site to observe the current condition of the reservoir, review of the existing drawings, review of the City's project budget and maximum reservoir outage duration, and conducting preliminary calculations, it was preliminarily determined that the existing reservoir roof, columns, and column footings can be retrofitted/repaired and meet the City's objectives and project constraints. Based on this, our proposal, budget and schedule reflect this approach. It was also further estimated after visiting the site, that after repair/retrofit, the City should be able to get another 25 – 40 years of service out of the this reservoir.

IT DOES NOT APPEAR THAT THE PREVIOUS STRUCTURAL ASSESSMENT INCLUDED A REVIEW PER ACI 350, ACI 318 AND THE CALIFORNIA BUILDING CODE (CBC)

In addition to development and design of a cost-effective and feasible roof replacement/repair for this project, the City should consider performing a complete and comprehensive structural assessment for the entire reservoir per the current ACI 350, ACI 318 and CBC (if one has not been performed recently). The previous report indicated there are cracks in the concrete walls, and it would be prudent to use this opportunity to perform a structural evaluation of the other reservoir components (walls, columns, footings, floors, etc.) to determine if other structural elements are in compliance with current governing codes. Structural deficiencies, if any, can be

corrected and incorporated with the design of a roof replacement/repair. A list of structural checks would be performed as listed below:

- Sloshing wave heights and freeboard requirements
- Exterior wall structural check for tank full and tank empty condition
- Wall to foundation connection
- Wall to roof connection
- Wall shear check
- Wall foundation check for vertical and lateral loads
- Columns check

Geotechnical Approach

Our approach will include a geotechnical report which includes (2) borings between 15 and 30-feet in depth, pertinent lab analyses, and a report to provide pertinent site soil characteristics for determining slosh wave height, soils loading on the reservoir walls/roof, bearing capacities, etc.

Surveying Approach

Dudek will create base files from the existing record drawings because the reservoir retrofit is contained on the body of the reservoir. Dudek will supplement the record drawing with their field measurements and other available on-line mapping.

1.3 Scope of Work

We concur with scope of work outlined in the City's RFP. Based on discussions with the City our proposed scope of services will be to prepare design and construction documents for the repair/retrofit of the reservoir roof and columns. In accordance with the in the City's RFP, we have identified the following proposed modifications and additional services:

Proposed Modifications and Additional Services

Dudek recently completed (November 2012) a nearly identical project for the San Bernardino Water Municipal Department (SBMWD) and offers the following proposed modifications and additional services based on the successful completion of that project:

- Reducing the number of submittals from four to three. The preliminary design phase will identify the upgrades for the reservoir and the majority of the upgrades will be on the inside or immediate exterior of the reservoir. Typically, more design submittals are required for multi-discipline projects where there are many variables (facility siting, grading, access, piping configuration/orientation, controls, drainage, etc.)). For this project, three submittals (75%, 100% (draft final submittal), final) appear to be sufficient. As such, Dudek has provided a budget and schedule that reflects the three submittal approach.
- Perform a seismic analysis with most recent edition of the California Building Code (2010 CBC), ACI 318 and ACI 350. This task is included in our scope of work.
- We have included a geotechnical report in our scope of work which includes (2) borings between 15 and 30-feet in depth, pertinent lab analyses, and a report to provide pertinent site soil characteristics for determining slosh wave height, soils loading on the reservoir walls/roof, bearing capacities, etc.

Assumptions, Clarifications, and Exclusions

- We estimate that (16) drawings are required and have provided budget accordingly.
- We have based our scope of work around retrofitting the roof, columns, and column footings of the Dearborn Reservoir per our discussions with the City.
- As noted herein, a seismic and structural analysis will be performed and analyze the reservoir roof, walls, columns, floors, etc. Our scope and approach includes design services and construction bid documents for retrofit of the existing post-tensioned roof, columns, and column footings. Should the walls, floors, wall footings or other reservoir components require modification/retrofit/replacement, we will notify the City and negotiate a separate scope and fee for this additional work.
- We assume that the inlet, outlet, drain piping, overflow piping, etc. do not require any modifications. The design of such modifications is not included in our scope of work.
- We assume the reservoir can be taken out of service for 5 months to perform the anticipated retrofit/rehabilitation without the design of any temporary facilities. The design of such temporary facilities is not included in our scope of work. In addition, our proposal roof retrofit is estimated to require 4 months for construction.

Exhibit "B"

Rate Schedule

DUDEK 2013 STANDARD SCHEDULE OF CHARGES

2013 STANDARD SCHEDULE OF CHARGES					
ENGINEERING SERVICES		HYDROGEOLOGICAL SERVICES			
Project Director	\$235.00/hr	Principal	\$220.00/hr		
Principal Engineer III		Sr. Environmental Engineer			
Principal Engineer II		Sr. Hydrogeologist/Sr. Proj Mgr			
Principal Engineer I		Project Manager	\$155.00/hr		
Program Manager		Associate Hydrogeologist/Engineer	\$140.00/hr		
Senior Project Manager		Hydrogeologist IV/Engineer IV			
Project Manager	\$178.00/hr	Hydrogeologist III/Engineer III			
Senior Engineer III		Hydrogeologist II/Engineer II			
Senior Engineer II		Hydrogeologist I/Engineer I			
Senior Engineer I		Technician	\$95.00/hr		
Project Engineer IV/Technician IV	\$145.00/hr	DISTRICT MANAGEMENT & OPERATIONS			
Project Engineer III/Technician III	\$130.00/hr	District General Manager	\$175.00/hr		
Project Engineer II/Technician II	\$120.00/nr	District Engineer			
Project Engineer I/Technician I		Operations Manager			
Project Coordinator		District Secretary/Accountant			
Engineering Assistant	\$75.00/11	Collections System Manager			
ENVIRONMENTAL SERVICES		Grade V Operator			
Principal	\$225.00/hr	Grade IV Operator			
Senior Project Manager/Specialist II		Grade III Operator			
Senior Project Manager/Specialist I		Grade II Operator	\$63.00/hr		
Environmental Specialist/Planner VI		Grade I Operator	\$55.00/hr		
Environmental Specialist/Planner V		Operator in Training			
Environmental Specialist/Planner IV	\$150.00/hr	Collection Maintenance Worker II			
Environmental Specialist/Planner III		Collection Maintenance Worker I	\$40.00/hr		
Environmental Specialist/Planner II	\$130.00/hr	0			
Environmental Specialist/Planner I	\$120.00/hr	OFFICE SERVICES			
Analyst		Technical/Drafting/CADD Services	01E0 00/hr		
Planning Research Assistant	\$80.00/hr	3D Graphic Artist			
COASTAL PLANNING/POLICY SERVICES		Senior Designer			
Senior Project Manager/Coastal Planner I.		Assistant Designer			
Environmental Specialist/Coastal Planner		GIS Specialist IV			
Environmental Specialist/Coastal Planner		GIS Specialist III			
Environmental Specialist/Coastal Planner IV \$160.00/hr		GIS Specialist II			
Environmental Specialist/Coastal Planner III \$150.00/hr		GIS Specialist I			
Environmental Specialist/Coastal Planner II \$140.00/hr		CADD Operator III			
Environmental Specialist/Coastal Planner I \$130.00/hr		CADD Operator II\$110.00/hr			
		CADD Operator I	\$95.00/hr		
ARCHAEOLOGICAL SERVICES		CADD Drafter	\$85.00/hr		
Senior Project Manager/Archaeologist II\$210.00/hr		CADD Technician	\$75.00/hr		
Senior Project Manager/Archaeologist I.	\$200.00/hr	SUPPORT SERVICES			
Environmental Specialist/Archaeologist		Technical Editor III	0440 00/5		
Environmental Specialist/Archaeologist					
Environmental Specialist/Archaeologist I		Technical Editor II Technical Editor I			
Environmental Specialist/Archaeologist Environmental Specialist/Archaeologist		Publications Assistant III			
Environmental Specialist/Archaeologist I		Publications Assistant II			
Archaeologist Technician II		Publications Assistant I.			
Archaeologist Technician I		Clerical Administration II			
CONSTRUCTION MANAGEMENT SERVICE		Clerical Administration I			
Principal/Manager					
Senior Construction Manager					
Senior Project Manager					
Construction Manager					
Project Manager					
Resident Engineer					
Construction Engineer					
On-site Owner's Representative					
Construction Inspector III					
Construction Inspector II	\$115.00/hr				
Construction Inspector I					
Prevailing Wage Inspector	\$135.00/hr				



Effective January 1, 2013

Exhibit "C"

WORKERS' COMPENSATION INSURANCE CERTIFICATION TO PERFORM ENGINEERING SERVICES

Every employer except the State, shall secure the payment of compensation in one or more of the following ways:

- (a) By being insured against liability to pay compensation in one or more insurer duly authorized to write compensation insurance in this State.
- (b) By securing from the Director of Industrial Relations, a certificate of consent to self-insure, either as an individual employer or as one employer in a group of employers, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his or her employees.

I am aware of the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of the work of this Agreement. (Labor Code §1861).

Dudek		
By:		
Frank Dudek, President	Date:	