RECOMMENDED ACTION:

Adopt Resolution No. 2008-008 approving and authorizing execution of a professional services agreement with Brown & Caldwell, Inc., to provide professional engineering and design services for the Buena Vista Lift Station Forcemain (VC4), Project No. 5508.

ITEM EXPLANATION:

On April 1, 2007, a break occurred on the Buena Vista Lift Station Forcemain Reach VC4, near the intersection of Jefferson Street and Marron Road. The City staff completed a preliminary assessment of the forcemain and recommended that the forcemain be replaced.

On September 11, 2007, the City Council approved an appropriation of funds to design the replacement forcemain pipe. The project would consist of a parallel forcemain and also improvements to the existing forcemain including a slip liner, valve improvements, and redundancy features to enhance reliability of the forcemain delivery system.

The City issued a request for proposals to perform preliminary and final design. Proposals were received from four consulting teams. The SOQ's were evaluated based on firm experience, project team, and project approach, consistent with Carlsbad Municipal Code section 3.28.070. Based on the ranking of the proposals by the selection committee, staff is recommending that the City execute a professional services agreement with Brown & Caldwell, Inc.

The subject agreement consists of a scope of work and fee for the preliminary engineering-alignment/alternatives study and design services, including preparation of final plans, specifications, and an engineering cost estimate (PS&E) for construction of the project.

ENVIRONMENTAL IMPACT:

The planning phase of the project is statutorily exempt from the requirements of the California Environmental Quality Act (CEQA) per Section 15262, Feasibility and Planning Studies, of the State CEQA Guidelines and will not have any adverse significant impact on the environment. The project will be subject to CEQA upon the selection of the alignments and a CEQA document and Notice of Determination will be processed and filed prior to adoption of the project's plan and advertisement for construction.
FISCAL IMPACT:

The Engineer’s Estimate for the first phase costs of the Buena Vista Lift Station Forcemain Improvement Project is shown in Table 1.

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>ESTIMATED COSTS</th>
<th>FUNDING SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary Design Report, Environmental Review and Permits</td>
<td>$156,511</td>
<td>Sewer</td>
</tr>
<tr>
<td>Final Design, Plans and Specifications</td>
<td>$298,645</td>
<td>Replacement Funds</td>
</tr>
<tr>
<td>Engineering Staff</td>
<td>$44,844</td>
<td></td>
</tr>
<tr>
<td><strong>PROJECT TOTAL COST</strong></td>
<td><strong>$500,000</strong>*</td>
<td></td>
</tr>
<tr>
<td><strong>CURRENT APPROPRIATION</strong></td>
<td><strong>$500,000</strong>*</td>
<td></td>
</tr>
<tr>
<td><strong>ADDITIONAL APPROPRIATION REQUIRED</strong></td>
<td><strong>NONE</strong></td>
<td></td>
</tr>
</tbody>
</table>

*The actual cost will be split between the Cities of Vista and Carlsbad; 89.6% and 10.4%, respectively. Carlsbad will invoice Vista for their share of the work.

From the agreement with the City of Vista, their share of the Preliminary Design Report for Reach VC4 of the Vista Carlsbad Interceptor Sewer system is 89.6 percent and Carlsbad’s share is 10.4 percent. In accordance with Section 6.1 of the agreement between Vista and Carlsbad, a Preliminary Design Report is first required on a project detailing the improvements to be made and their associated cost. Upon acceptance of the findings in the Preliminary Design Report, a Project Agreement shall be prepared to identify specific improvements, including cost sharing. The Project Agreement must be approved and accepted by each agency before final design can begin. Staff at the City of Vista indicated that they are in agreement with proceeding on this project at this time and will be making a recommendation to their City Council for full project funding.

The cost associated with the subject agreement is $455,156. Sufficient funds are available for the completion of the project design. An engineer’s cost estimate for construction will be completed as part of the design phase and any necessary revisions to the project budget, including additional appropriation for construction costs, will be done as part of the FY 2008-09 CIP process. The project is funded by the Sewer Replacement Fund.

EXHIBITS:

1. Location Map.


DEPARTMENT CONTACT: David Ahles, (760) 602-2748, dahle@ci.carlsbad.ca.us
RESOLUTION NO. 2008-008

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CARLSBAD, CALIFORNIA, TO APPROVE PROFESSIONAL SERVICES AGREEMENT WITH BROWN & CALDWELL, INC., BUENA VISTA LIFT STATION FORCENMAIN (VC4), PROJECT NO. 5508.

WHEREAS, the City Council of the City of Carlsbad, California, has determined it necessary and in the public interest for the City of Carlsbad to enter into an agreement with Brown & Caldwell, Inc., Buena Vista Lift Station Forcemain (VC4), Project No. 5508; and

WHEREAS, Public Works staff solicited, received, and reviewed four proposals for professional engineering services consistent with Carlsbad Municipal Code Section 3.28.070; and

WHEREAS, subsequent to a review of the proposals, staff recommends Brown & Caldwell, Inc., as the most qualified consultant for the project; and

WHEREAS, City staff and Brown & Caldwell have negotiated fees for the sum of $455,156 to provide engineering services for the design of the project, as described in this professional services agreement; and

WHEREAS, $500,000 in Sewer Replacement Funds have been appropriated in the Capital Improvement Program for Project No. 5508 sufficient to fund this professional services agreement; and

WHEREAS, an Agreement dated February 26, 2002, titled “Agreement for Ownership, Operation and Maintenance of the Vista/Carlsbad Interceptor Sewer” calls for the City of Vista’s share in the cost of the Preliminary Design Report to be 89.6 percent and Carlsbad’s share to be 10.4 percent.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Carlsbad, California, as follows:

1. That the above recitations are true and correct.

2. That the agreement with Brown & Caldwell, Inc., for professional engineering services for Project No. 5508 is hereby approved.

3. That the Mayor of the City of Carlsbad is hereby authorized and directed to execute the agreement with Brown & Caldwell, Inc., for and on behalf of the City of Carlsbad.
PASSED, APPROVED AND ADOPTED at a Regular Meeting of the City Council of the City of Carlsbad on the 15th day of January, 2008, by the following vote to wit:

AYES: Council Members Lewis, Kulchin, Hall, Packard and Nygaard.

NOES: None.

ABSENT: None.

CLAUSE A LEWIS, Mayor

ATTEST:

LORRAINE M. WOOD, City Clerk (SEAL)
AGREEMENT FOR DESIGN SERVICES FOR
THE BUENA VISTA LIFT STATION FORCE MAIN (VC-4)
(BROWN & CALDWELL, INC.)

THIS AGREEMENT is made and entered into as of the ___________ day of
________________, 200#, by and between the CITY OF CARLSBAD, a municipal
*city*), and BROWN & CALDWELL, INC., a corporation, ("Contractor").

RECITALS

A. City requires the professional services of a civil engineering firm that is
experienced in sewer force main design.

B. Contractor has the necessary experience in providing professional
services and advice related to sewer force main design.

C. Selection of Contractor is expected to achieve the desired results in an
expedited fashion.

D. Contractor has submitted a proposal to City and has affirmed its
willingness and ability to perform such work.

NOW, THEREFORE, in consideration of these recitals and the mutual covenants
contained herein, City and Contractor agree as follows:

1. SCOPE OF WORK
City retains Contractor to perform, and Contractor agrees to render, those services (the
"Services") that are defined in attached Exhibit "A", which is incorporated by this
reference in accordance with this Agreement's terms and conditions.

2. STANDARD OF PERFORMANCE
While performing the Services, Contractor will exercise the reasonable professional
care and skill customarily exercised by reputable members of Contractor's profession
practicing in the Metropolitan Southern California Area, and will use reasonable
diligence and best judgment while exercising its professional skill and expertise.

3. TERM
The term of this Agreement will be effective for a period of two (2) years from the date
first above written.

4. TIME IS OF THE ESSENCE
Time is of the essence for each and every provision of this Agreement.

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5. **COMPENSATION**
The total fee payable for the Services to be performed during the Agreement term will be defined in attached Exhibit "B", which is incorporated by this reference in accordance with this Agreement’s terms and conditions, to a not-to-exceed value of four hundred fifty five thousand one hundred fifty six dollars ($455,156). No other compensation for the Services will be allowed except for items covered by subsequent amendments to this Agreement. The City reserves the right to withhold a ten percent (10%) retention until City has accepted the work and/or Services specified in Exhibit "A". Incremental payments, if applicable, should be made as outlined in attached Exhibit "A".

6. **STATUS OF CONTRACTOR**
Contractor will perform the Services in Contractor's own way as an independent contractor and in pursuit of Contractor's independent calling, and not as an employee of City. Contractor will be under control of City only as to the result to be accomplished, but will consult with City as necessary. The persons used by Contractor to provide services under this Agreement will not be considered employees of City for any purposes.

The payment made to Contractor pursuant to the Agreement will be the full and complete compensation to which Contractor is entitled. City will not make any federal or state tax withholdings on behalf of Contractor or its agents, employees or subcontractors. City will not be required to pay any workers' compensation insurance or unemployment contributions on behalf of Contractor or its employees or subcontractors. Contractor agrees to indemnify City within thirty (30) days for any tax, retirement contribution, social security, overtime payment, unemployment payment or workers' compensation payment which City may be required to make on behalf of Contractor or any agent, employee, or subcontractor of Contractor for work done under this Agreement. At the City's election, City may deduct the indemnification amount from any balance owing to Contractor.

7. **SUBCONTRACTING**
Contractor will not subcontract any portion of the Services without prior written approval of City. If Contractor subcontracts any of the Services, Contractor will be fully responsible to City for the acts and omissions of Contractor's subcontractor and of the persons either directly or indirectly employed by the subcontractor, as Contractor is for the acts and omissions of persons directly employed by Contractor. Nothing contained in this Agreement will create any contractual relationship between any subcontractor of Contractor and City. Contractor will be responsible for payment of subcontractors. Contractor will bind every subcontractor and every subcontractor of a subcontractor by the terms of this Agreement applicable to Contractor's work unless specifically noted to the contrary in the subcontract and approved in writing by City.

8. **OTHER CONTRACTORS**
The City reserves the right to employ other Contractors in connection with the Services.
9. **INDEMNIFICATION**
Contractor agrees to indemnify and hold harmless the City and its officers, officials, employees and volunteers from and against all claims, damages, losses and expenses including attorneys fees arising out of the performance of the work described herein caused by any negligence, recklessness, or willful misconduct of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

The parties expressly agree that any payment, attorney's fee, costs or expense City incurs or makes to or on behalf of an injured employee under the City's self-administered workers' compensation is included as a loss, expense or cost for the purposes of this section, and that this section will survive the expiration or early termination of this Agreement.

10. **INSURANCE**
Contractor will obtain and maintain for the duration of the Agreement and any and all amendments, insurance against claims for injuries to persons or damage to property which may arise out of or in connection with performance of the services by Contractor or Contractor's agents, representatives, employees or subcontractors. The insurance will be obtained from an insurance carrier admitted and authorized to do business in the State of California. The insurance carrier is required to have a current Best's Key Rating of not less than "A-:V".

10.1 **Coverages and Limits.**
Contractor will maintain the types of coverages and minimum limits indicated below, unless City Attorney or City Manager approves a lower amount. These minimum amounts of coverage will not constitute any limitations or cap on Contractor's indemnification obligations under this Agreement. City, its officers, agents and employees make no representation that the limits of the insurance specified to be carried by Contractor pursuant to this Agreement are adequate to protect Contractor. If Contractor believes that any required insurance coverage is inadequate, Contractor will obtain such additional insurance coverage, as Contractor deems adequate, at Contractor's sole expense.

10.1.1 **Commercial General Liability Insurance.** $1,000,000 combined single-limit per occurrence for bodily injury, personal injury and property damage. If the submitted policies contain aggregate limits, general aggregate limits will apply separately to the work under this Agreement or the general aggregate will be twice the required per occurrence limit.

10.1.2 **Automobile Liability** (if the use of an automobile is involved for Contractor's work for City). $1,000,000 combined single-limit per accident for bodily injury and property damage.
10.1.3 **Workers' Compensation and Employer's Liability.** Workers’ Compensation limits as required by the California Labor Code and Employer's Liability limits of $1,000,000 per accident for bodily injury. Workers' Compensation and Employer's Liability insurance will not be required if Contractor has no employees and provides, to City’s satisfaction, a declaration stating this.

10.1.4 **Professional Liability.** Errors and omissions liability appropriate to Contractor’s profession with limits of not less than $1,000,000 per claim. Coverage must be maintained for a period of five years following the date of completion of the work.

10.2. **Additional Provisions.** Contractor will ensure that the policies of insurance required under this Agreement contain, or are endorsed to contain, the following provisions:

10.2.1 The City will be named as an additional insured on General Liability.

10.2.2 Contractor will obtain occurrence coverage, excluding Professional Liability, which will be written as claims-made coverage.

10.2.3 This insurance will be in force during the life of the Agreement and any extensions of it and will not be canceled without thirty (30) days prior written notice to City sent by certified mail pursuant to the Notice provisions of this Agreement.

10.3 **Providing Certificates of Insurance and Endorsements.** Prior to City’s execution of this Agreement, Contractor will furnish certificates of insurance and endorsements to City.

10.4 **Failure to Maintain Coverage.** If Contractor fails to maintain any of these insurance coverages, then City will have the option to declare Contractor in breach, or may purchase replacement insurance or pay the premiums that are due on existing policies in order to maintain the required coverages. Contractor is responsible for any payments made by City to obtain or maintain insurance and City may collect these payments from Contractor or deduct the amount paid from any sums due Contractor under this Agreement.

10.5 **Submission of Insurance Policies.** City reserves the right to require, at anytime, complete and certified copies of any or all required insurance policies and endorsements.

11. **BUSINESS LICENSE**
Contractor will obtain and maintain a City of Carlsbad Business License for the term of the Agreement, as may be amended from time-to-time.
12. **ACCOUNTING RECORDS**  
Contractor will maintain complete and accurate records with respect to costs incurred under this Agreement. All records will be clearly identifiable. Contractor will allow a representative of City during normal business hours to examine, audit, and make transcripts or copies of records and any other documents created pursuant to this Agreement. Contractor will allow inspection of all work, data, documents, proceedings, and activities related to the Agreement for a period of three (3) years from the date of final payment under this Agreement.

13. **OWNERSHIP OF DOCUMENTS**  
All work product produced by Contractor or its agents, employees, and subcontractors pursuant to this Agreement is the property of City. In the event this Agreement is terminated, all work product produced by Contractor or its agents, employees and subcontractors pursuant to this Agreement will be delivered at once to City. Contractor will have the right to make one (1) copy of the work product for Contractor’s records.

14. **COPYRIGHTS**  
Contractor agrees that all copyrights that arise from the services will be vested in City and Contractor relinquishes all claims to the copyrights in favor of City.

15. **NOTICES**  
The name of the persons who are authorized to give written notices or to receive written notice on behalf of City and on behalf of Contractor under this Agreement.

For City:  
Name: David Ahles  
Title: Senior Civil Engineer  
Dept: PW/Engineering  
CITY OF CARLSBAD  
Address 1635 Faraday Avenue  
Carlsbad, CA 92008  
Phone No. (760) 602-2748

For Contractor:  
Name: Ray Fakhoury  
Title: Principal-in-Charge  
BROWN & CALDWELL, INC.  
Address 9665 Chesapeake Drive, Ste. 201  
San Diego, CA 92123  
Phone No. (858) 514-8822

Each party will notify the other immediately of any changes of address that would require any notice or delivery to be directed to another address.

16. **CONFLICT OF INTEREST**  
City will evaluate Contractor’s duties pursuant to this Agreement to determine whether disclosure under the Political Reform Act and City’s Conflict of Interest Code is required of Contractor or any of Contractor’s employees, agents, or subcontractors. Should it be determined that disclosure is required, Contractor or Contractor’s affected employees, agents, or subcontractors will complete and file with the City Clerk those schedules specified by City and contained in the Statement of Economic Interests Form 700.
Contractor, for Contractor and on behalf of Contractor's agents, employees, subcontractors and consultants warrants that by execution of this Agreement, that they have no interest, present or contemplated, in the projects affected by this Agreement. Contractor further warrants that neither Contractor, nor Contractor's agents, employees, subcontractors and consultants have any ancillary real property, business interests or income that will be affected by this Agreement or, alternatively, that Contractor will file with the City an affidavit disclosing this interest.

17. GENERAL COMPLIANCE WITH LAWS
Contractor will keep fully informed of federal, state and local laws and ordinances and regulations which in any manner affect those employed by Contractor, or in any way affect the performance of the Services by Contractor. Contractor will at all times observe and comply with these laws, ordinances, and regulations and will be responsible for the compliance of Contractor's services with all applicable laws, ordinances and regulations.

Contractor will be aware of the requirements of the Immigration Reform and Control Act of 1986 and will comply with those requirements, including, but not limited to, verifying the eligibility for employment of all agents, employees, subcontractors and consultants that the services required by this Agreement.

18. DISCRIMINATION AND HARASSMENT PROHIBITED
Contractor will comply with all applicable local, state and federal laws and regulations prohibiting discrimination and harassment.

19. DISPUTE RESOLUTION
If a dispute should arise regarding the performance of the Services the following procedure will be used to resolve any questions of fact or interpretation not otherwise settled by agreement between the parties. Representatives of Contractor or City will reduce such questions, and their respective views, to writing. A copy of such documented dispute will be forwarded to both parties involved along with recommended methods of resolution, which would be of benefit to both parties. The representative receiving the letter will reply to the letter along with a recommended method of resolution within ten (10) business days. If the resolution thus obtained is unsatisfactory to the aggrieved party, a letter outlining the disputes will be forwarded to the City Manager. The City Manager will consider the facts and solutions recommended by each party and may then opt to direct a solution to the problem. In such cases, the action of the City Manager will be binding upon the parties involved, although nothing in this procedure will prohibit the parties from seeking remedies available to them at law.
20. **TERMINATION**

In the event of the Contractor's failure to prosecute, deliver, or perform the Services, City may terminate this Agreement for nonperformance by notifying Contractor by certified mail of the termination. If City decides to abandon or indefinitely postpone the work or services contemplated by this Agreement, City may terminate this Agreement upon written notice to Contractor. Upon notification of termination, Contractor has five (5) business days to deliver any documents owned by City and all work in progress to City address contained in this Agreement. City will make a determination of fact based upon the work product delivered to City and of the percentage of work that Contractor has performed which is usable and of worth to City in having the Agreement completed. Based upon that finding City will determine the final payment of the Agreement.

Either party upon tendering thirty (30) days written notice to the other party may terminate this Agreement. In this event and upon request of City, Contractor will assemble the work product and put it in order for proper filing and closing and deliver it to City. Contractor will be paid for work performed to the termination date; however, the total will not exceed the lump sum fee payable under this Agreement. City will make the final determination as to the portions of tasks completed and the compensation to be made.

21. **COVENANTS AGAINST CONTINGENT FEES**

Contractor warrants that Contractor has not employed or retained any company or person, other than a bona fide employee working for Contractor, to solicit or secure this Agreement, and that Contractor has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift, or any other consideration contingent upon, or resulting from, the award or making of this Agreement. For breach or violation of this warranty, City will have the right to annul this Agreement without liability, or, in its discretion, to deduct from the Agreement price or consideration, or otherwise recover, the full amount of the fee, commission, percentage, brokerage fees, gift, or contingent fee.

22. **CLAIMS AND LAWSUITS**

By signing this Agreement, Contractor agrees that any Agreement claim submitted to City must be asserted as part of the Agreement process as set forth in this Agreement and not in anticipation of litigation or in conjunction with litigation. Contractor acknowledges that if a false claim is submitted to City, it may be considered fraud and Contractor may be subject to criminal prosecution. Contractor acknowledges that California Government Code sections 12650 et seq., the False Claims Act applies to this Agreement and, provides for civil penalties where a person knowingly submits a false claim to a public entity. These provisions include false claims made with deliberate ignorance of the false information or in reckless disregard of the truth or falsity of information. If City seeks to recover penalties pursuant to the False Claims Act, it is entitled to recover its litigation costs, including attorney's fees. Contractor acknowledges that the filing of a false claim may subject Contractor to an administrative debarment proceeding as the result of which Contractor may be prevented to act as a Contractor on any public work or improvement for a period of up to five (5) years. Contractor acknowledges debarment by another jurisdiction is grounds for City to terminate this Agreement.

City Attorney Approved Version #11.28.06
23. **JURISDICTIONS AND VENUE**
Any action at law or in equity brought by either of the parties for the purpose of enforcing a right or rights provided for by this Agreement will be tried in a court of competent jurisdiction in the County of San Diego, State of California, and the parties waive all provisions of law providing for a change of venue in these proceedings to any other county.

24. **SUCCESSORS AND ASSIGNS**
It is mutually understood and agreed that this Agreement will be binding upon City and Contractor and their respective successors. Neither this Agreement or any part of it nor any monies due or to become due under it may be assigned by Contractor without the prior consent of City, which shall not be unreasonably withheld.

25. **ENTIRE AGREEMENT**
This Agreement, together with any other written document referred to or contemplated by it, along with the purchase order for this Agreement and its provisions, embody the entire Agreement and understanding between the parties relating to the subject matter of it. In case of conflict, the terms of the Agreement supersede the purchase order. Neither this Agreement nor any of its provisions may be amended, modified, waived or discharged except in a writing signed by both parties.
CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California
County of SAN DIEGO ss.

On DECEMBER 26, 2007 before me, MARY AGOSTINO, NOTARY PUBLIC
personally appeared Ray H. FAHOVEY

Name(s) of Signer(s)

☐ personally known to me
☐ proved to me on the basis of satisfactory evidence
to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

MARY AGOSTINO
NOTARY PUBLIC

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: PUBLIC WORKS CONTRACT
Document Date: 12-26-07 Number of Pages: 9

Signer(s) Other Than Named Above:

Capacity(ies) Claimed by Signer

☐ Individual
☐ Corporate Officer — Title(s):
☐ Partner — ☐ Limited ☐ General
☐ Attorney-in-Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other:

Signer is Representing: Himself
CERTIFICATE OF SECRETARY
OF
BROWN AND CALDWELL,
A CALIFORNIA CORPORATION

I, the undersigned, do hereby certify that:

1. I am the duly elected and acting Secretary of Brown and Caldwell, a California corporation, and am keeper of the corporate records and seal of said corporation.

2. At the annual meeting of the Board of Directors on February 2, 2007, the following resolution was adopted:

RESOLVED that all Brown and Caldwell officers currently appointed to serve are ratified and authorized to continue to hold their offices at the pleasure of the Board of Directors of this corporation until the next annual meeting of the Board of Directors of this corporation or until their respective successors are elected or qualified, or until their earlier resignation. A listing of current company officers is attached.

BE IT FURTHER RESOLVED that all Brown and Caldwell officers listed are authorized to financially commit the corporation in accordance with the Company procedures and policies within their respective area of responsibility or as stated in the Bylaws.

3. Ray H. Fakhoury is a Vice President of Brown and Caldwell, is so identified in the February 2, 2007, resolution referenced above, and in that capacity is duly authorized to financially commit the corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Corporation this 17th day of December, 2007.

SIGNED: ROBERT S. LEIGHTNER, Secretary

(SEAL)
EXHIBIT A

SCOPE OF WORK

CITY OF CARLSBAD

BUENA VISTA LIFT STATION FORCE MAIN (VC-4)

DESIGN ENGINEERING SERVICES

December 17, 2007

SCOPE OF SERVICES:

The project will consist of the following scope of services, as a minimum for design of the Buena Vista Lift Station Force Main (VC-4) Project. CONSULTANT’s services shall conform to the standards, criteria, and requirements of this Scope of Basic Services, and shall include preparation of plans, reports, estimates, and special provisions necessary to complete engineering design of the Project as defined herein.

CONSULTANT shall prepare final plans, specifications, and estimates, (PS&E) for construction of the Project. All deliverables shall be in English units.

The plans, designs, specifications, estimates, calculations, reports, and other documents furnished under this Scope of Services shall be a product of neat appearance, well organized, technically and grammatically correct, checked, and having the maker and checker identified. The minimum standard of appearance, organization, and content of the plans, estimates, calculations, reports, and other documents shall conform to applicable City of Carlsbad standards and manuals, except where noted herein.

CITY shall approve all changes to the Scope of Services. Changes to the Scope of Services will not be made without prior written approval from CITY. CONSULTANT will not be compensated for services provided prior to approval of a change to the Scope of Services. The CITY will not reimburse any services provided by CONSULTANT that are not covered by the Scope of Services.

The following is an itemized breakdown of the professional and technical engineering services required for preparation of the plans, specifications, and estimates for the Project.

Design Services

Task 1 - Project Management

1.1 CONSULTANT will manage this project with responsibility for the execution of the overall work effort. CONSULTANT will provide project management and administration including attending meetings, quality control/quality assurance, utility and subconsulting coordination, scheduling, budgeting, progress reporting, and invoicing.
CONSULTANT’s Project Manager will monitor and direct work activities on this project in accordance with the contracted work scope and schedule. Regular project team meetings will be held in at least monthly intervals to review work in progress.

Meetings - The Project "Kick-Off" Meeting will be held within a week of Notice to Proceed. This meeting should include representatives from, but not be limited to, City of Carlsbad Engineering Department, City of Vista, Encina Wastewater Authority, CONSULTANT, and subconsultants. The primary objective is to establish project protocol, finalize the project schedule, and identify key technical issues. Attend progress meetings following each submittal to discuss review comments. CONSULTANT shall provide agenda and meeting minutes.

CONSULTANT shall maintain close contact between the Project Manager, CITY and subconsultant personnel. All team members will be involved in development of the project schedule in order to assure proper coordination of all the required tasks.

CONSULTANT shall prepare monthly billing, (by Task), update project schedule with key submittal dates, and prepare monthly progress reports which shall be submitted to the CITY. The progress reports will discuss the progress schedule status and key technical issues. They will also include a discussion of issues requiring actions or decisions, which may impact, project deliverables.

Regular communications will be facilitated through the Project Manager. CONSULTANT’s staff and other team members will be available to meet with CITY personnel to discuss technical or administrative issues to keep the project on track.

Project management will include a Quality Control/Quality Assurance Program to review the final preparation of the plans, specifications, and estimate.

Task 2 - Field Reconnaissance, Data Collection, and Utility Search

CONSULTANT shall perform a reconnaissance survey to become familiar with the alignment corridor, develop a photographic inventory, and identify difficult construction areas. CONSULTANT shall obtain and review all available reports, right-of-way maps, drawings, and standard specifications from Carlsbad Municipal Water District (CMWD), the City of Carlsbad, the City of Vista, and from other local agencies.

CONSULTANT shall collect and review all existing and future flow information regarding pumping capacities of the Buena Vista Lift Station. The Buena Vista Lift Station currently has a pumping capacity of 21 mgd. It is anticipated that the new force main shall be capable of conveying existing and ultimate flows. The flow capacity through the use of a rehabilitated existing force main shall be verified with respect to the ability of the pumps at the Buena Vista Lift Station to convey wastewater through the rehabilitated existing force main. CONSULTANT shall verify proposed parallel force main size requirements.
2.3 CONSULTANT shall collect and review utility maps and easement information regarding abandoned, existing, and proposed utilities corresponding to the proposed pipeline alignment. It is anticipated that the pipeline alignment will be in a paved roadway of public streets except for crossing of Buena Vista Creek, and potential alignment with the Carlsbad Mall. Utility maps shall be reviewed to determine potential conflicts with the proposed pipeline. A utility search and conflict resolutions shall be coordinated with the following agencies including, but not limited to:

a. City of Vista  
b. City of Carlsbad  
c. City of Oceanside  
d. Caltrans  
e. San Diego Gas & Electric  
f. AT&T  
g. COX Communications  
h. Other local utilities

CITY will be pay any charges by the utility agencies and entity associated with provided utility maps for the purpose of locating utilities for design of the Project.

2.4 CONSULTANT shall arrange with utility owners mark-outs and potholing of existing utilities in areas of proposed pipeline alignment conflict. CONSULTANT shall locate facilities to determine their physical size (if possible), horizontal location and alignment (if possible) and vertical elevation at the pothole locations. Vacuum extraction technology will be utilized for the verification of existing utilities.

2.5 Following markouts and potholing of the existing utilities, CONSULTANT will field survey points set by the potholer, reference points to pothole locations, and provide coordinate and elevation data for each. This information will be presented on the construction drawings. CONSULTANT shall identify and plot on all drawings the locations of all above and below ground utilities and facilities that are along the pipeline alignment and provide recommendations to remedy conflicts.

Task 3 - Surveying, and Mapping

3.1 The City of Carlsbad completed a city-wide survey control network. The City's Survey Control Network is referenced on Record of Survey Map No. 17271 filed in the office of the San Diego County Recorder on February 8, 2002. CONSULTANT shall field verify existing survey control points and benchmarks within and adjacent to the project limits.
3.2 CONSULTANT shall develop topographic survey by photogrammetric methods for the pipeline alignments. The basis of bearings and all coordinates of data submitted to the City must be in reference to the California Coordinate System – 1983, Zone VI, 1991.35 Epoch, North American Datum of 1983 (NAD83) based on ties to the City of Carlsbad Survey Control Network monuments as published on Record of Survey Map No. 17271. For vertical control, the NGVD 29 datum is still in effect. The mapping will include 1-foot contour intervals at 1-inch = 40-feet scale and labeled California Coordinate System grid ticks. The survey will be provided in digital format with 3-dimensional elevation contours for AutoCAD software format, refer to City’s standard for digital submittal of Maps and Plans. Mapping will extend 10 feet beyond right-of-way line on each side of streets within the pipeline corridor. Photo coverage will be a minimum of 10 feet beyond right-of-way line on each side of streets within the pipeline corridor. CONSULTANT shall field check aerial survey data and shall survey invert elevations of culverts and drain pipes and elevation of top of water valve operating nuts within the mapped area.

3.3 CONSULTANT will obtain City of Carlsbad GIS mapping of parcels to superimpose existing parcel lines along the pipeline corridors on the topographic mapping. Existing rights-of-way will be mapped from street improvement plans and mapped locations of right-of-way centerline monuments. No survey ties or right-of-way analysis are included in this task.

Task 4 - Geotechnical Investigation

4.1 CONSULTANT shall prepare a separate geotechnical investigation to assist in the design and construction of the proposed pipeline and appurtenant facilities. The investigation shall include review of available information (consisting of available geotechnical reports, geological maps, and stereoscopic aerial photographs), geotechnical field reconnaissance, site visit to mark boring locations and meet with Underground Service Alert for utility clearance, acquisition of permits necessary for the boring work, traffic control for soils borings, soils borings, laboratory testing, and preparation of a geotechnical report. The report shall bear a State of California Certified Engineering Geologist or Registered Professional Engineer seal with the signature, license number, and registration certificate expiration date of the geologist or engineer responsible for the preparation of the report presenting the results of the investigation. Four hard copy of the report shall be submitted along with a printable (pdf) electronic copy.

4.2 CONSULTANT shall conduct soil borings, perform laboratory tests, and analyze test data. The field exploration program will consist of drilling, logging, and sampling test borings with a truck mounted drill rig along the proposed pipeline alignment. Proposed boring locations will be reviewed with CITY prior to drilling. Two (2) borings will be drilled to a depth of approximately 40 feet (or refusal) for the purpose of establishing a potential Horizontal Directional Drill Program under the creek near the intersection of Jefferson Street and Marron Road. Three (3) borings shall be drilled to a depth of 10 to 15 ft below the existing ground surface (or refusal) at equal intervals along the remainder of the alignment. Bulk and in-place samples of the encountered soils will be collected and transported to the laboratory for testing. Geotechnical laboratory testing shall be performed on selected samples and will consist of in-situ moisture content and dry density, grain size analyses, Atterberg limits, shear strength, and corrosivity. In the event the existence of hydrocarbons is discovered by CONSULTANT during drilling; CONSULTANT shall immediately notify the City and seal the hole. Environmental sampling and testing of the subsurface soils is not part of this work.
4.3 The geotechnical report will address geotechnical aspects of the alignment and alternatives as related to pipeline design. Design recommendations for bearing capacity, soil modulus "E", pipe flexibility, backfill and compaction requirements, pipe bedding, thrust blocks, pavement replacement will be made and included in the geotechnical report. Site conditions, earth materials, soil properties, slope stability, trenching, shoring, groundwater, excavation difficulty, liquefaction potential, anticipated corrosion potential of on-site soils, and seismology will be described and discussed.

4.4 CONSULTANT shall obtain all required permits and perform required traffic control for the purposes of geotechnical investigation drilling. The CONSULTANT may assume that the alignment is accessible for its personnel and truck mounted drilling equipment and that site access will be granted.

Task 5 - Legal Descriptions and Plats

5.1 CONSULTANT shall review City, County, and SDG&E right-of-way maps, records, to verify existing rights-of-way along the pipeline corridor. Determine additional permanent and temporary right-of-way requirements for proper construction, operation, and maintenance of the pipeline and appurtenances.

5.2 CONSULTANT shall prepare Legal Descriptions and Plats required for proper construction, operation, and maintenance of the pipeline and appurtenances.

Task 6 - Preliminary Design Report and 30% Design Submittal

6.1 CONSULTANT shall prepare a preliminary design report for the Project. This report will include the 30% submittal of plans. The 30% submittal of plans shall be limited to plan and profile sheets of the force main alignment. The report shall include: an engineer's estimation of construction cost; the basis of pipeline design - pressure, surge, external loading; recommendations for pipe material selection; corrosion control; a discussion of the pipeline horizontal alignment; consideration to install the force main under the creeks, lagoon, or other locations using tunneling methods such as jacked casings, horizontal directional drill, or micro-tunneling; methods to inspect the force main within existing Jefferson Street Bridge over Interstate 5, and basis for other key design features. Replacement of the dual 16-inch ACP force mains within the Jefferson Street Bridge is not part of this project. In addition, a section to discuss traffic control requirements and schematics will be provided in the preliminary design report. All work done under this project must be accomplished while existing facilities are kept online. The station cannot be totally shut down, flows can be bypassed during the early morning hours of weeknights. The report shall discuss jurisdiction of relevant government agencies and permits that will be required for the project. As part of the 30% Design Submittal, 30% drawings will only include the proposed horizontal alignment for the pipelines, existing utilities, and proposed easements, and right-of-way demarcation shall be submitted. The Preliminary Design Report will include a draft Table of Contents for the technical specifications to be included in subsequent submittals. The preliminary design report will be issued only once, with comments generated by CITY being incorporated into the subsequent design submittals. Five (5) copies of the 30% Design Submittal, including preliminary design report and half-size 30 percent drawings, will be submitted to CITY.

6.2 Following submittal and review of the 30% Design Submittal and preliminary design report, CONSULTANT shall provide the CITY with a written response to all review
October 4, 2007

EXHIBIT A - SCOPE OF WORK – BUENA VISTA LIFT STATION FORCE MAIN (VC-4)
DESIGN ENGINEERING SERVICES
Page A-6

comments within three weeks of receipt of comments. Responses to comments shall indicate concurrence, offer or request clarification, and identify comments requiring resolution prior to the next design submittal.

Task 7 - Construction Drawings

7.1 CONSULTANT shall prepare and deliver to CITY the Project construction drawings. All cover sheets, sheet index, general notes, layout, profiles, construction details, and other related sheets shall be provided on CITY standard “full size” sheets. CONSULTANT shall prepare plans at 1 inch = 40 feet horizontal scale and 1 inch = 4 feet vertical scale. California Coordinate System grid ticks shall be located on the plans and labeled. CONSULTANT shall provide a benchmark description and basis of bearing for the project control survey, which will be shown on the construction drawings. CONSULTANT shall sign and stamp all construction drawings. The construction drawings will be provided in digital format using AutoCAD software with layers to follow CITY standard layers format. Pipeline plan and profile drawings will be prepared using AutoCAD with SoftDesk COGO, DTM, and Design Modules as needed for design.

7.2 CONSULTANT shall deliver submittal and review plan packages to the CITY. The number of sets of each plan will be five half size and two full size. CITY will review the plans after each submittal and transmit review comments to the CONSULTANT. CONSULTANT shall deliver the following plan packages to the CITY:

a. 70% PS&E: Construction drawings will be submitted at the 70% complete level that incorporate comments from the 30% Design Submittal and Preliminary Design Report. This requirement has been omitted per meeting with Dave Ahles, City of Carlsbad on December 5, 2007.

b. 90% PS&E: Construction drawings will be submitted at the 90% complete level that incorporate comments from the 30% construction drawings along with the CADD drawing files used to generate plots and electronic files of the specifications.

c. 100% PS&E: Construction drawings will be submitted at the 100% complete level that incorporate comments from the 90% construction drawings along with the CADD drawing files used to generate plots and electronic files of the specifications.

d. Final PS&E: Upon approval of final PS&E, CONSULTANT shall furnish CITY with approved drawings for advertising, including full size plan sheets on mylar, along with the CADD drawing files used to generate plots and electronic files of the specifications.

e. ACP Condition Assessment: A condition assessment of the dual, existing 16-inch ACP force mains within the Jefferson Street Overcrossing (O/C) at Interstate 5 will be conducted to determine the present condition of this section of line. The assessment will be limited to the following:

1. Visual, non-destructive testing (NDT) with video or photos of only the segments accessible from the three bridge deck manhole
access locations. Assume inspection personnel will not travel thru the interior diaphragms.

2. CCTV inspection from the downstream manhole west of the Jefferson Street O/C to where the force mains crown in the bridge deck or as far as feasibly possible. Visual inspection with photographs of the pipe ends where they discharge to the manhole

3. Traffic control and permits for all inspection activities

4. Letter report with findings supported by photographic and videographic results of inspection.

7.4 In addition to the plans and specifications, CONSULTANT shall include with each design submittal a technical memorandum, (TM) that will address any changes to the design since the subsequent submittal, will update the construction cost estimate as necessary, and will include calculations completed to date. The design submittal TM will bring to the attention of along with the CADD drawing files used to generate plots and electronic files of the specifications any specific issues requiring special attention.
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EXHIBIT A - SCOPE OF WORK – BUENA VISTA LIFT STATION FORCE MAIN (VC-4)
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7.5 Following submittal and review of each design submittal, CONSULTANT shall provide CITY with a written response to all review comments within two weeks of receipt of comments. Responses to comments shall indicate concurrence, offer or request clarification, and identify comments requiring resolution prior to the next design submittal.

7.6 Construction drawings shall include adequate details for pipeline connections to existing facilities, including modification to the discharge modified piping within the lift station, by-pass, valving as appropriate and tie-in to gravity structure.

7.7 Construction drawings shall include details at both ends of the force main so the new force main can be operated separately or in parallel with the existing force main.

Task 8 – Traffic Control and Signal Plans

8.1 CONSULTANT shall prepare traffic control plans for the construction work along the entire length of the project. CONSULTANT shall prepare traffic handling plans, which show closure of lanes, detours, and number of available lanes. Included in these plans is signing, striping, and temporary signaling as necessary. Traffic control plans will be prepared in accordance with the requirements of the City of Carlsbad. Traffic flow must be maintained on Jefferson Street north of Marron Road, however portions of Jefferson Street can be closed, except to local traffic west of the Hosp Grove Park. Final plans shall be prepared to the approval of the CITY’S Traffic Engineer.

8.2 The basic standard used for traffic control design will be the latest edition of the Caltrans Manual of Traffic Controls in Construction and Maintenance Work Zones. For those areas not addressed by the Caltrans Manual, the following standards will be referenced: San Diego’s Regional Standard Drawings, City of Carlsbad Policies, and the latest edition of the Manual on Uniform Traffic Control Devices. Traffic control shall maintain reasonable access to private and commercial driveways and shall consider pedestrians and bicyclists.

Task 9 – Specifications

13.1 CONSULTANT shall prepare contract technical specifications (Divisions 1 through 16) to construct the force main improvements. The complete package will include bid proposal, contract agreement, insurance and bid schedules, the detailed technical specifications, bond forms, general provisions, special provisions, and reference to standard specifications. CITY will provide CONSULTANT the front end documents and the general provisions for red-line markup. Five (5) sets of technical specifications shall be provided to CITY for review at each submittal beginning with the 90% submittal.

9.2 CONSULTANT shall include provisions in the specifications to provide erosion control.
Task 10 – Project Cost Estimate

10.1 CONSULTANT shall prepare a detailed construction cost estimate that represents the best estimate of the fair and reasonable price expected for each of the items of work to be performed as of the mid-point of construction. The preliminary design report construction cost estimate will be updated at each subsequent design submittal for design changes and advancements and will be included in the design submittal report.

Task 11 – Permitting

11.1 CONSULTANT shall determine jurisdictional boundaries of public agencies over and adjacent to the proposed pipeline alignment. CONSULTANT shall identify regulatory agencies, permits, fees, and anticipated lead times for permit issuance. CONSULTANT shall prepare all required encroachment permit application and submit it to the agencies and the CITY will process the necessary checks to cover the cost of permits and review fees by the various permitting agency. Permits shall be coordinated with the following agencies including, but not limited to:

a. City of Carlsbad (Coastal Development Permit)
b. Caltrans (Encroachment)
c. Resource agency permits if required

11.2 CONSULTANT shall identify requirements regarding permits to be obtained by the contractor. Additional permits to be obtained by the contractor may be required for construction activities including, but not limited to: shoring, discharge of groundwater, well-point installations, handling regulated waste, offsite material storage, grading outside of right-of-way and blasting.

Task 12 - Bidding Phase Services

Bid phase services will be provided as requested by CITY. The extent of bid phase services will be limited to the budgeted cost amount.

12.1 Provide responses to all written and telephone inquires as requested by CITY.

12.2 Prepare addenda as needed to clarify technical questions and questions asked repeatedly by bidders, to include items omitted from the original bid documents, and as instructed by CITY. Addenda must be reviewed by CITY, and signed by the Deputy City Engineer. Addenda prepared by CONSULTANT will be signed and stamped by a State of California Registered Civil Engineer.
### Task Description

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### TOTAL HOURS ABOVE $15 SUBCONSULTANT HOURS

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### BROWN AND CALDWELL

Environmental Engineers & Consultants

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### CITY OF CARLSBAD

BIUENA VISTA LIFT STATION FORCE MAIN (VC-4)
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<td>Forecemain Construction</td>
<td>90 days</td>
<td>Thu 2/5/09</td>
<td>Wed 6/10/09</td>
</tr>
<tr>
<td>33</td>
<td>Testing</td>
<td>30 days</td>
<td>Thu 6/11/09</td>
<td>Wed 7/22/09</td>
</tr>
<tr>
<td>34</td>
<td>Existing Forecemain Rehabilitation</td>
<td>60 days</td>
<td>Thu 7/23/09</td>
<td>Wed 10/14/09</td>
</tr>
<tr>
<td>35</td>
<td>Testing</td>
<td>30 days</td>
<td>Thu 10/15/09</td>
<td>Wed 11/25/09</td>
</tr>
<tr>
<td>36</td>
<td>Project Closeout</td>
<td>30 days</td>
<td>Thu 11/26/09</td>
<td>Wed 1/6/10</td>
</tr>
</tbody>
</table>
26. AUTHORITY
The individuals executing this Agreement and the instruments referenced in it on behalf of Contractor each represent and warrant that they have the legal power, right and actual authority to bind Contractor to the terms and conditions of this Agreement.

CONTRACTOR
BROWN & CALDWELL, INC., a corporation

*By: Ray Fakhoury
(sign here)
Ray Fakhoury / Vice President
(print name/title)
rfakhoury@branecbd.com
(e-mail address)

**By: 
(sign here)

(print name/title)

(e-mail address)

CITY OF CARLSBAD, a municipal corporation of the State of California

By: Claude A. Lewis
City Manager or Mayor

ATTEST:
LORRAINE M. WOOD
City Clerk

If required by City, proper notarial acknowledgment of execution by contractor must be attached. If a Corporation, Agreement must be signed by one corporate officer from each of the following two groups.

*Group A.
Chairman,
President, or
Vice-President

**Group B.
Secretary,
Assistant Secretary,
CFO or Assistant Treasurer

Otherwise, the corporation must attach a resolution certified by the secretary or assistant secretary under corporate seal empowering the officer(s) signing to bind the corporation.

APPROVED AS TO FORM:

RONALD R. BALL, City Attorney

By: Deputy City Attorney

City Attorney Approved Version #11.28.06