RESPONSE TO RFP FOR
ENGINEERING AND DESIGN SERVICES FOR
LOPEZ CANYON PARK, UNINCORPORATED LOS ANGELES COUNTY FOR
THE MOUNTAINS RECREATION AND CONSERVATION AUTHORITY

Prepared by
BREEN Engineering Incorporated
Proposal for Engineering Services - Revision 1

PROJECT: Lopez Canyon Park, Unincorporated Los Angeles County - MRCA
REQUESTED BY: Mountains Recreation and Conservation Authority (MRCA)– Brian Baldauf
SUBMITTED BY: Breen Engineering, Inc. (BEI) – Sarah Curran
DATE REQUESTED: August 23, 2013

I. PROJECT DESCRIPTION:
The project consists of Engineering and Design Services to permit and construct new trailhead parking and picnic area as described in the Request for Proposals, August 23, 2013.
The project is located at Lopez Canyon Park.
The following is Breen Engineering Inc (hereafter referred to as BEI) understanding of the scope of work and is for Civil, MEP, Structural and Geotechnical engineering as well as architectural support services as needed.

II. SCOPE OF WORK:
General:

1) Scope of work includes the following:
   • Demolition plan for 2-3 ancillary structures. (Asbestos abatement is not included at this time.)
   • Grading, Drainage and Erosion Control Plans for the new parking lot, ADA path, trailhead connector, entry road and loop widening, and removal of concrete swales.
   • Layout and Paving Plan (Site Dimension and Paving Plan) for improvements noted above.
   • ADA plans and details for parking and walks, including required signage.
   • Site Utilities Plan for storm drain and domestic water services.
   • Electrical and Layout Plan for new motorized gates and lighting.
   • Design of new gate at park entry. Includes specifications for gate and structural design, as well as architectural support services for gate selection.
   • Los Angeles County plan and approval processing as required to permit the project.
   • New portable restroom on a pre-fabricated vault.
   • Preparation of additional drawings and general division 1 specifications as necessary to publicly bid the project.
   • Construction Administration services as required, including response to RFIs, Submittal Review and Site Inspections.

Civil Engineering - Construction Documents and Administration:

1) **Topographic Survey Scope of Work:** Topographic surveys in CAD format to supplement the existing Aerial Survey will be prepared by Penco Engineering as a sub consultant to BEI and are included as follows:
CAD files for the existing Aerial Survey will be used as the basis to re-establish project horizontal and vertical control for the project.

Ground specific field locations and elevations will be obtained for areas indicated in the attached Exhibit “A”.

The existing Aerial Map will be amended to create a current Site Specific Topographic Survey Map. Mapping shall include the following:

- A scale of 1”=20’;
- One foot Contours;
- Fifty foot grid elevations;
- Hardscape areas;
- Street cross sections for two roadways lying east and west of the proposed parking lot;
- ADA paths of travel from the northeasterly corner of the barn building to the westerly roadway;
- Locations (tree type, trunk size and drip line limits) and elevations at base of tree as required to design and permit the new septic system.

2) BEI Civil will perform two site visits during the design phase.

3) BEI Civil will prepare the overall site plan and submit for plot plan approval by Los Angeles County Department of Regional Planning.

4) A Standard Urban Stormwater Mitigation Plan (SUSMP) and Low Impact Development (LID) plan may be required by Department of Public Works, Building and Safety Division, Grading Section. If required, BEI Civil will prepare the plan as required. A separate line item has been included in our fees below for that purpose.

5) Grading Plans will be submitted for approval to Los Angeles County Department of Public Works, Building and Safety Division.

6) Site Utilities to be designed by include Domestic Water and Storm Drain Utilities.

7) BEI will prepare Hydrology and Hydraulic Calculations for storm drain design.

8) Since the project site is less than 1 acre, a SWPPP and NOI will not be required.

9) No public street improvements or public utilities extensions are anticipated or included at this time.

10) We assume that sufficient water service is available for onsite connection. If offsite improvement plans are required, beyond new service connections, we can provide a fee for preparation of those plans at that time.

11) Specifications will be prepared using BEI Standard CSI Specifications.

12) Construction Administration will include responding to RFIs, reviewing submittals, and providing record drawings at project closeout. This includes four site visits during construction.

13) Onsite Drawings to be provided will be as follows using 30 by 42 size sheets:

- Title Sheet
- Civil Details
- Site Demolition Plan
14) Drawings will be prepared in AutoCAD 2D format.
15) **Geotechnical Scope of Work:** BEI will consult with Byer Geotechnical, Inc to perform a geologic and soils engineering exploration to prepare professional geologic and geotechnical reports as required for the projects:
   - Six to seven test pits to depths of 3 to 10 feet are planned for the exploration.
   - Bulk and undisturbed samples of the earth materials will be collected from the test pits and laboratory tested.
   - A formal report will be prepared that contains recommendations for design of grading plans, foundations, retaining walls, if any, temporary and permanent slopes, and drainage control. The report will provide a slope stability analysis and contain recommendations for seismic design and corrosion protection.
   - It is assumed that there is an existing water service on site, which can be used for the percolation testing.

**Structural Engineering – Construction Documents and Administration**

Structural Design to include:
1) Two site visits during design to survey the existing structures to be improved.
2) Structural design of the following:
   - Potential conversion of barn into picnic shelter (separate line item);
   - Potential adaptive reuse of coop structures (separate line item);
   - Foundations for pre-engineered restroom;
   - Light pole, fence and gate post footing designs;
   - Fence repair.
3) Provide structural calculation and construction documents for scope of work above.
4) Provide response to any plan check comments related to the scope of work and revise construction documents accordingly in order to obtain county approval and permit.
5) Provide construction administration including review of shop drawings, field generated RFI's and site visits required by the client or the county. Allow maximum of (2) site visits.

**Electrical Engineering - Construction Documents and Administration:**
1) BEI will carry out site survey to document existing conditions.
2) BEI will prepare electrical lighting and power drawings.
3) BEI will prepare Title 24 calculations for indoor and outdoor lighting.
4) BEI will submit for electrical plan check and approval.
5) Construction Administration will be provided for response to RFIs and Submittal Reviews. This includes 2 site visits during construction; the final one to review constructed improvements and make a final punch list.

**Architectural Support Services:**

1) BEI’s in-house architect will provide general design support for the preparation of General Specifications for bidding, and architectural input for gate designs and repurposing of existing structures.

### III. WORK NOT INCLUDED:

Work not included shall be any engineering services not directly related to the Scope of Work defined above, including but not limited to:

- Work outside of project listed in Scope of Work
- Professional cost estimating
- Environmental Engineering – Hazardous material abatement or containment
- Landscape Design
- Irrigation Design
- Geotechnical Construction Observations

### IV. INFORMATION REQUIRED FROM CLIENT:

The Client shall provide full information regarding requirements for the Project and shall designate, when necessary, a representative authorized to act on in the Client’s behalf with respect to the Project. The Client shall review documents submitted by BEI and render decisions pertaining thereto promptly, to avoid unreasonable delay in the progress of BEI’s services. The Client shall furnish required information as expeditiously as necessary for the orderly progress of BEI’s services, and BEI shall be entitled to rely upon the accuracy and completeness thereof.

Information required includes:

- Client requirements and brief.
- Details of all the proposed new site facilities
- Specifications for Pre-engineered restroom.
V. COMPENSATION:

Compensation for the services as described in Scope of Work shall be invoiced monthly based on the percentage completion of each line item below:

<table>
<thead>
<tr>
<th>Civil Engineering</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Topographic Survey</td>
<td>$5,300</td>
</tr>
<tr>
<td>Geotechnical Report</td>
<td>$4,900</td>
</tr>
<tr>
<td>Civil Engineering Construction Documents and Agency Approval</td>
<td>$30,000</td>
</tr>
<tr>
<td>SUSMP/LID Report</td>
<td>$2,500</td>
</tr>
<tr>
<td>Construction Administration</td>
<td>$6,700</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$49,400</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Structural Engineering</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural Construction Documents and Agency Approval</td>
<td>$6,000</td>
</tr>
<tr>
<td>Construction Administration</td>
<td>$1,500</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$7,500</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electrical Engineering</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Engineering Construction Documents and Agency Approval</td>
<td>$4,500</td>
</tr>
<tr>
<td>Construction Administration</td>
<td>$2,100</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$6,600</strong></td>
</tr>
</tbody>
</table>

| Architectural Support Services (General) Subtotal       | $1,000|
| **TOTAL**                                              | **$64,500**|

Additional Line Items:

| Structural for Barn and Coop Repurposing               | 5,000 |
| Architectural for Barn and Coop Repurposing            | 1,000 |

Hourly rates for services outside the agreed Scope of Work are given below under “Extra Services”.

Reimbursable expenses shall be billed on cost basis for items such as the following:

- Expenses incurred for plotting and printing for all drawings except for in house use.
- Fees paid for securing approvals of documents prepared by BEI, and its consultants, by authorities having jurisdiction over the Project (Plan Check Fees).
- Fees and expenses for special consultants not included in the Scope of Work and for other services and data furnished on behalf of the Client.

- Expenses for express mail, delivery charges, reproduction of construction documents and technical reports.

- All travel outside Los Angeles, Riverside and Orange Counties.

All compensation for professional services earned and reimbursable expenses incurred shall be due and payable monthly upon presentation of invoices. Client concurs that time is of the essence with respect to payment of these invoices, and that timely payment is a material part of the consideration of this Agreement. A finance charge of 1.5% will accrue monthly from the date of issue on balances not paid within 60 days.

VI. EXTRA SERVICES:

Work not expressly included in the Scope of Work above shall be considered as Extra Services, and shall be compensated on an hourly basis at the rates listed below, or on an agreed upon lump sum basis.

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Billing Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal</td>
<td>$250/hr</td>
</tr>
<tr>
<td>Department Head</td>
<td>$200/hr</td>
</tr>
<tr>
<td>Engineer</td>
<td>$175/hr</td>
</tr>
<tr>
<td>Senior Designer</td>
<td>$150/hr</td>
</tr>
<tr>
<td>Designer</td>
<td>$120/hr</td>
</tr>
<tr>
<td>CADD/Drafter</td>
<td>$100/hr</td>
</tr>
<tr>
<td>Clerical</td>
<td>$75/hr</td>
</tr>
</tbody>
</table>

Any overtime required for Extra Services shall be billed at 150% of the standard billing rate. Extra Services shall not be undertaken without the written authorization of the client.

VII. OWNERSHIP OF DOCUMENTS:

The plans, specifications and other documents (including any computer models) created for this project shall be considered to be Instruments of Service, and as such shall remain the property of BEI. BEI shall retain all rights to these Instruments of Service, and they may not be used on any other project without the express written consent of BEI.

VIII. SCHEDULE:

BEI anticipates the following schedule for preliminary design, final design and agency approval:

- Preliminary Design (Geotechnical, Survey, Site Visits, Site Plan Development, DRP review) – 6 to 8 weeks
- Final Design – 6 weeks
- Agency Review – 12 weeks
ACCEPTANCE OF TERMS:  *Lopez Canyon Park*

To accept this proposal, please sign in the space allotted below, and return one (1) copy for our records. Work will commence upon receipt of signed proposal only. This proposal shall remain valid for a period of 90 days.

**BREEN ENGINEERING, INC. (BEI)**
**Sarah Curran P.E.**
*Director of Civil Engineering*

**CLIENT:**
**MRCA**

*By:* _____________________________
*By:* _____________________________

*Date:* 9/20/2013
*Date:* ___________________________

*Revised 1/9/2014*
September 20, 2013

Brian Baldauf  
Mountains Recreation and Conservation Authority (MRCA)  
Los Angeles River Center and Gardens  
570 West Avenue Twenty-six, Suite 100  
Los Angeles, CA 90065  

Re: Proposal Submittal – Lopez Canyon Park  
BREEN Engineering Incorporated

Dear Brian,

It is with pleasure that we offer our services to you for the Lopez Canyon Park trailhead improvement project. Our Engineers have extensive credits in park projects throughout Southern California, providing multi-discipline services for site grading, drainage, utilities, lighting, parking, picnic shelters and gates; all very similar in nature to your project.

I will personally manage your project, closely supported by our Project Civil Engineer, Mercedes Passanisi. Our Director of Structural Engineering, David Lee, will provide structural designs for building repurposing as well as miscellaneous footings and fence repairs. Electrical Site Design for new lighting will be provide by our Director of Building Systems, Des Mahony. Clive Williams will provide architectural support, as needed for items that would benefit from an aesthetic touch (such as the new entry gate), as well as for preparation of general specifications for bidding. Resumes for these individuals are included within this proposal document.

In addition to our talented in-house engineers, we will work with specialty firms who serve as sub consultants and close colleagues in our role as Prime Consultant. Penco Engineering will provide additional topographic survey, Byer Geotechnical will provide Geologic and Geotechnical Reports and Ahsirt Engineering will assist in the septic system design and permitting for the restroom. All three consultants have assisted us in previous park projects and we are confident in their ability to perform quality work.

All of us at BREEN Engineering especially enjoy, and look forward to, any opportunity to team on projects of this nature. We look forward to working with you again. Please let me know if you have any questions regarding the attached proposal and qualifications.

Thanks for the opportunity.

Sarah Curran  
Director of Civil Engineering  
BREEN Engineering Incorporated
Proposal for Engineering Services

PROJECT: Lopez Canyon Park, Unincorporated Los Angeles County - MRCA
REQUESTED BY: Mountains Recreation and Conservation Authority (MRCA) – Brian Baldauf
SUBMITTED BY: Breen Engineering, Inc. (BEI) – Sarah Curran
DATE REQUESTED: August 23, 2013

I. PROJECT DESCRIPTION:
The project consists of Engineering and Design Services to permit and construct new trailhead parking and picnic area as described in the Request for Proposals, August 23, 2013.

The project is located at Lopez Canyon Park.

The following is Breen Engineering Inc (hereafter referred to as BEI) understanding of the scope of work and is for Civil, MEP, Structural and Geotechnical engineering as well as architectural support services as needed.

II. SCOPE OF WORK:

General:

1) Scope of work includes the following:
   • Demolition plan for 2-3 ancillary structures. (Asbestos abatement is not included at this time.)
   • Grading, Drainage and Erosion Control Plans for the new parking lot, ADA path, trailhead connector, entry road and loop widening, and removal of concrete swales.
   • Layout and Paving Plan (Site Dimension and Paving Plan) for improvements noted above.
   • ADA plans and details for parking and walks, including required signage.
   • Site Utilities Plan for sewer, storm drain and domestic water services. A new septic tank and leach field/seepage pit system is included in the scope of work.
   • Electrical and Layout Plan for new motorized gates and lighting.
   • Design of new gate at park entry. Includes specifications for gate and structural design, as well as architectural support services for gate selection.
   • Los Angeles County plan and approval processing as required to permit the project.
   • Preparation of additional drawings and general division 1 specifications as necessary to publicly bid the project.
   • Construction Administration services as required, including response to RFIs, Submittal Review and Site Inspections.

Civil Engineering - Construction Documents and Administration:

1) Topographic Survey Scope of Work: Topographic surveys in CAD format to supplement the existing Aerial Survey will be prepared by Penco Engineering as a sub consultant to BEI and are included as follows:
   • CAD files for the existing Aerial Survey will be used as the basis to re-establish project horizontal and vertical control for the project.
• Ground specific field locations and elevations will be obtained for areas indicated in the attached Exhibit “A”.

• The existing Aerial Map will be amended to create a current Site Specific Topographic Survey Map. Mapping shall include the following:
  o A scale of 1”=20’;
  o One foot Contours;
  o Fifty foot grid elevations;
  o Hardscape areas;
  o Street cross sections for two roadways lying east and west of the proposed parking lot;
  o ADA paths of travel from the northeasterly corner of the barn building to the westerly roadway;
  o Locations (tree type, trunk size and drip line limits) and elevations at base of tree as required to design and permit the new septic system.

2) BEI Civil will perform two site visits during the design phase.

3) BEI Civil will prepare the overall site plan and submit for plot plan approval by Los Angeles County Department of Regional Planning.

4) A Standard Urban Stormwater Mitigation Plan (SUSMP) and Low Impact Development (LID) plan may be required by Department of Public Works, Building and Safety Division, Grading Section. If required, BEI Civil will prepare the plan as required. A separate line item has been included in our fees below for that purpose.

5) Grading Plans will be submitted for approval to Los Angeles County Department of Public Works, Building and Safety Division.

6) Site Utilities to be designed by include Domestic Water, Sewer, Septic and Storm Drain Utilities.

7) Design of the onsite sewer disposal system will be prepared by Ahsirt Engineering as a consultant to BEI and assumes adequate percolation rates and no requirements for treatment systems beyond the standard septic tank and leach field or seepage pit.

8) BEI will prepare Hydrology and Hydraulic Calculations for storm drain design.

9) Since the project site is less than 1 acre, a SWPPP and NOI will not be required.

10) No public street improvements or public utilities extensions are anticipated or included at this time.

11) We assume that sufficient water service is available for onsite connection. If offsite improvement plans are required, beyond new service connections, we can provide a fee for preparation of those plans at that time.

12) Specifications will be prepared using BEI Standard CSI Specifications.

13) Construction Administration will include responding to RFIs, reviewing submittals, and providing record drawings at project closeout. This includes four site visits during construction.

14) Onsite Drawings to be provided will be as follows using 30 by 42 size sheets:

  • Title Sheet
  • Civil Details
• Site Demolition Plan
• Site Dimension Plan
• Finish Grading Plan
• Site Utilities Plan
• Erosion Control Plan

15) Drawings will be prepared in AutoCAD 2D format.

16) **Geotechnical Scope of Work**: BEI will consult with Byer Geotechnical, Inc to perform a geologic and soils engineering exploration to prepare professional geologic and geotechnical reports as required for the projects:

• Six to seven test pits to depths of 3 to 10 feet are planned for the exploration.
• Bulk and undisturbed samples of the earth materials will be collected from the test pits and laboratory tested.
• Percolation tests will be conducted in accordance with the guidelines of the Requirements and Procedures for Onsite Wastewater Treatment Systems (OWTS) of the Los Angeles County, Department of Public Health.
• A formal report will be prepared that contains recommendations for design of grading plans, foundations, retaining walls, if any, temporary and permanent slopes, drainage control and OWTS. The report will provide a slope stability analysis and contain recommendations for seismic design and corrosion protection.
• It is assumed that there is an existing water service on site, which can be used for the percolation testing.

**Structural Engineering – Construction Documents and Administration**

Structural Design to include:

1) Two site visits during design to survey the existing structures to be improved.
2) Structural design of the following:
   • Conversion of barn into picnic shelter;
   • Adaptive reuse of coop structures;
   • Foundations for pre-engineered restroom;
   • Light pole, fence and gate post footing designs;
   • Fence repair.
3) Provide structural calculation and construction documents for scope of work above.
4) Provide response to any plan check comments related to the scope of work and revise construction documents accordingly in order to obtain county approval and permit.
5) Provide construction administration including review of shop drawings, field generated RFI’s and site visits required by the client or the county. Allow maximum of (2) site visits.

**Electrical Engineering - Construction Documents and Administration:**

1) BEI will carry out site survey to document existing conditions.
2) BEI will prepare electrical lighting and power drawings.

3) BEI will prepare Title 24 calculations for indoor and outdoor lighting.

4) BEI will submit for electrical plan check and approval.

5) Construction Administration will be provided for response to RFI’s and Submittal Reviews. This includes 2 site visits during construction; the final one to review constructed improvements and make a final punch list.

Architectural Support Services:

1) BEI’s in-house architect will provide general design support for the preparation of General Specifications for bidding, and architectural input for gate designs and repurposing of existing structures.

III. WORK NOT INCLUDED:

Work not included shall be any engineering services not directly related to the Scope of Work defined above, including but not limited to:

- Work outside of project listed in Scope of Work
- Professional cost estimating
- Environmental Engineering – Hazardous material abatement or containment
- Landscape Design
- Irrigation Design
- Geotechnical Construction Observations

IV. INFORMATION REQUIRED FROM CLIENT:

The Client shall provide full information regarding requirements for the Project and shall designate, when necessary, a representative authorized to act on in the Client’s behalf with respect to the Project. The Client shall review documents submitted by BEI and render decisions pertaining thereto promptly, to avoid unreasonable delay in the progress of BEI’s services. The Client shall furnish required information as expeditiously as necessary for the orderly progress of BEI’s services, and BEI shall be entitled to rely upon the accuracy and completeness thereof.

Information required includes:

- Client requirements and brief.
- Details of all the proposed new site facilities
- Specifications for Pre-engineered restroom.
V. COMPENSATION:

Compensation for the services as described in Scope of Work shall be invoiced monthly based on the percentage completion of each line item below:

### Civil Engineering

<table>
<thead>
<tr>
<th>Service</th>
<th>Amount ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topographic Survey</td>
<td>5,300</td>
</tr>
<tr>
<td>Geotechnical Report</td>
<td>6,600</td>
</tr>
<tr>
<td>Onsite Sewage Disposal System Design</td>
<td>5,700</td>
</tr>
<tr>
<td>Civil Engineering Construction Documents and Agency Approval</td>
<td>32,000</td>
</tr>
<tr>
<td>SUSMP/LID Report</td>
<td>2,500</td>
</tr>
<tr>
<td>Construction Administration</td>
<td>6,700</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>58,800</strong></td>
</tr>
</tbody>
</table>

### Structural Engineering

<table>
<thead>
<tr>
<th>Service</th>
<th>Amount ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural Construction Documents and Agency Approval</td>
<td>10,000</td>
</tr>
<tr>
<td>Construction Administration</td>
<td>2,500</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>12,500</strong></td>
</tr>
</tbody>
</table>

### Electrical Engineering

<table>
<thead>
<tr>
<th>Service</th>
<th>Amount ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Engineering Construction Documents and Agency Approval</td>
<td>4,500</td>
</tr>
<tr>
<td>Construction Administration</td>
<td>2,100</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>6,600</strong></td>
</tr>
</tbody>
</table>

**Architectural Support Services Subtotal**  $2,000

**TOTAL**  $79,900

Hourly rates for services outside the agreed Scope of Work are given below under “Extra Services”.

Reimbursable expenses shall be billed on cost basis for items such as the following:

- Expenses incurred for plotting and printing for all drawings except for in house use.
- Fees paid for securing approvals of documents prepared by BEI, and its consultants, by authorities having jurisdiction over the Project (Plan Check Fees).
- Fees and expenses for special consultants not included in the Scope of Work and for other services and data furnished on behalf of the Client.
- Expenses for express mail, delivery charges, reproduction of construction documents and technical reports.
All travel outside Los Angeles, Riverside and Orange Counties.

All compensation for professional services earned and reimbursable expenses incurred shall be due and payable monthly upon presentation of invoices. Client concurs that time is of the essence with respect to payment of these invoices, and that timely payment is a material part of the consideration of this Agreement.

A finance charge of 1.5% will accrue monthly from the date of issue on balances not paid within 60 days.

VI. EXTRA SERVICES:
Work not expressly included in the Scope of Work above shall be considered as Extra Services, and shall be compensated on an hourly basis at the rates listed below, or on an agreed upon lump sum basis.

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Billing Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal</td>
<td>$250/hr</td>
</tr>
<tr>
<td>Department Head</td>
<td>$200/hr</td>
</tr>
<tr>
<td>Engineer</td>
<td>$175/hr</td>
</tr>
<tr>
<td>Senior Designer</td>
<td>$150/hr</td>
</tr>
<tr>
<td>Designer</td>
<td>$120/hr</td>
</tr>
<tr>
<td>CADD/Drafter</td>
<td>$100/hr</td>
</tr>
<tr>
<td>Clerical</td>
<td>$75/hr</td>
</tr>
</tbody>
</table>

Any overtime required for Extra Services shall be billed at 150% of the standard billing rate. Extra Services shall not be undertaken without the written authorization of the client.

VII. OWNERSHIP OF DOCUMENTS:
The plans, specifications and other documents (including any computer models) created for this project shall be considered to be Instruments of Service, and as such shall remain the property of BEI. BEI shall retain all rights to these Instruments of Service, and they may not be used on any other project without the express written consent of BEI.

VIII. SCHEDULE:
BEI anticipates the following schedule for preliminary design, final design and agency approval:

- Preliminary Design (Geotechnical, Survey, Site Visits, Site Plan Development, DRP review) – 6 to 8 weeks
- Final Design – 6 weeks
- Agency Review – 12 weeks
ACCEPTANCE OF TERMS:  Lopez Canyon Park

To accept this proposal, please sign in the space allotted below, and return one (1) copy for our records. Work will commence upon receipt of signed proposal only. This proposal shall remain valid for a period of 90 days.

BREEN ENGINEERING, INC. (BEI)  
Sarah Curran P.E.  
Director of Civil Engineering

CLIENT:
MRCA

By:   ____________________________  
By:   ____________________________  

Name/Title

Date:  9/20/2013  
Date:  ____________________________  

9/20/13  Proposal for Engineering Services  Page 7
BEI PAST AND FUTURE

Breen Engineering, Inc. (BEI) began as an MEP firm out of Paul Breen’s garage in 1997. It expanded rapidly. The company soon added an Electrical division and we moved to our first office. A few years later, we welcomed our new Civil department and, in 2004, we incorporated the business. Growth continued and the company relocated to 190th Street in Torrance, our current offices. We are proud to have expanded our engineering disciplines to include Structural Engineering. At BEI, we recognize that coordinating several engineering firms is time-consuming for clients and full of potential miscommunication headaches. Our goal is to provide high quality personal service across the full range of engineering disciplines by taking over the coordination of these disciplines internally within our firm.

Consulting Engineers

Services:

Civil Engineering
Structural Engineering
Mechanical Engineering
Electrical Engineering
Fire and Life Safety Engineering
**OUR FIRM**

The firm today consists of a team of associates specializing in Civil, Structural, Mechanical (HVAC and Plumbing), Electrical, and Fire and Life Safety engineering services with associates who are licensed engineers in the State of California and in other States.

BEI provides work for a wide spectrum of industry clients, including the residential, medical, retail, hotel, restaurant, and educational sectors. The firm’s extensive design/project management experience includes multi-million dollar projects across the United States, including Northern and Southern California, Nevada, Arizona, Texas, Alabama, Hawaii, as well as international locations.

Recent examples include: five large high school sites for Los Angeles Unified School District, a 275-unit apartment building in Los Angeles, a new 100-acre mixed-use retail/commercial/residential site in Huntsville, Alabama, and two 200,000 square foot high-rise condominium buildings in Korea Town, Los Angeles.

**OUR PHILOSOPHY**

Whether we are assisting at the design development phase, or construction administration, we pride ourselves on being focused on producing the best quality work within the client’s budget and timeline. Because we coordinate internally across the different disciplines, we streamline the communication process in a way that takes the hassle out of projects for clients.
SERVICES

Civil Engineering
Roads, Drainage, and Site Development
Grading and Paving Design
Parking Area Design
Traffic Control
Transportation Planning
Storm Water Management Systems
Hydrologic Investigations
Storm Water Permitting

Structural Engineering
Apartments
Condominiums
Office Buildings
Retail Centers
Parking Structures
Warehouses
Schools
Laboratories
Libraries
Hotels
Industrial Buildings
Police and Fire Stations

Mechanical Engineering
Heating, Ventilation, and Air Conditioning
Plumbing Systems
Natural Gas Systems
Central Refrigeration Systems
Energy Storage (ice, chilled or hot water)
Boiler Plant Design
Fuel Storage and Distribution
Energy Management and Control Systems
Fire Protection
Fire Sprinkler Systems
High Temperature Hot Water and Steam Systems
State of California Title-24 Calculations and Analysis
Engineering Reviews
Energy Consumption Studies and Reviews
Existing Systems Analysis and Building Retrofit

Electrical Engineering
Lighting
Lighting Controls
Power and Signal System
High, Medium, and Low Voltage Distribution Systems
Special Power System
Grounding
Computer Data Distribution System
Standby and Emergency Power Systems
Telecommunication
Fire and Security Systems
State of California Title-24 Calculations and Analysis
Engineering Reviews
Due Diligence Reports

Fire and Life Safety Engineering
Detection and Alarm Systems
Smoke Evacuation and Controls
Emergency Communication Systems
Sarah Curran, P.E., LEED AP
Director of Civil Engineering

Sarah’s prior experience as a Drainage and Grading Plan Checker for Los Angeles County provides BREEN Engineering with valuable perspective when it comes to quality assurance, code compliance, flood protection and meeting current environmental regulations. Her passion for creative solutions to stormwater treatment is central to her involvement in all civil engineering design projects at BREEN. In addition to working with architects to provide pedestrian-friendly environments, Sarah has provided Civil design for many projects, including parks, public and private schools, commercial and industrial sites, medical buildings, parking structures and more.

Professional Credentials
- Civil Engineer, State of California, #C69620
- LEED Accredited Professional

Employment History
- BREEN Engineering Incorporated, Torrance, California
  Director of Civil Engineering: 2011 to Present
  Project Civil Engineer: 2006 to 2011
- County Department of Public Works, Building and Safety Division, Los Angeles, CA
  Regional Drainage and Grading Engineer: 2002 to 2006

Representative Civil Engineering Projects
- Huntington Library, Art Collections & Botanical Gardens - San Marino, CA
- Raul Perez Community Park - Huntington Park, CA
- Pine Avenue Park - Maywood, CA
- Blue Mountain Senior Villas, City Park - Grand Terrace, CA
- Maywood Avenue Park - Maywood, CA
- Monitor Avenue Park - Los Angeles, CA
- Carlton Way Pocket Park - Los Angeles, CA

Education
- B.S., Civil Engineering (Cum Laude)
  University of Vermont, 2002
Mercedes Passanisi, P.E., LEED AP
Project Civil Engineer

Before coming to BREEN Engineering, Mercedes worked as an Associate Engineer for LA County Public Works in the Geotechnical and Materials Engineering Division. She worked closely with the Design Division on utility upgrade and landslide mitigation projects, coordinated with municipalities and agencies for permits, and supported the Flood Maintenance Division. She also worked in the Environmental Permits and Assessment Section of the Programs Development Division. Her experience with multiple engineering disciplines in the public sector has provided a broad skill set, well applied to her current roster of management projects for BREEN.

Professional Registration

- Civil Engineer, State of California, #C68440, LEED AP

Experience

- BREEN Engineering Incorporated, Torrance, CA
  Project Civil Engineer: 2008 to Present
- LA County Department of Public Works, Los Angeles, CA
  Associate Engineer: 2001 to 2007

Representative Civil Engineering Projects

- Huntington Library Education and Visitor Center - San Marino, CA
- The Forum Renovation - Inglewood, CA
- UC Riverside Student Recreation Center - Riverside, CA
- Fern Elementary School - Torrance, CA
- Riverwalk at Reseda - Los Angeles, CA
- Sage Park Housing Complex - Los Angeles, CA
- Raul Perez Community Park - Huntington Park, CA
- Marina Gateway - Marina Del Rey, CA

Education

- B.S., Civil and Environmental Engineering, UCLA, Los Angeles, CA
David Lee has over 10 years of experience in structural engineering. His experience encompasses design and management of diverse project types, including hospital facilities, churches, historical buildings, federal buildings, educational facilities, as well as renovations and seismic evaluations.

**Professional Registration**
- Civil Engineer, State of California, CE 7087
- Structural Engineer, State of California, SE 881

**Experience**
- **BREEN Engineering Incorporated**, Torrance, CA
  Structural Engineer: December 2012 to Present
- **Degenkolb Engineers**, Los Angeles, CA
  Design Engineer: 2002 to 2012

**Representative Structural Engineering Projects**
- Kaiser Permanente Los Angeles Medical Center, Los Angeles, CA
- Centinela Hospital Medical Center, Inglewood, CA
- Mercy Southwest Hospital, Bakersfield, CA
- St. Mary’s Medical Center, San Francisco, CA
- Cedars-Sinai Medical Center, Los Angeles, CA
- Holliston Methodist Church, Pasadena, CA
- Veterans Affairs West Los Angeles Campus, Los Angeles, CA
- Tri-City Medical Center, Carson, CA
- University California at Irvine Biology Vivarium Building, Irvine, CA
- Foothill College, Los Altos Hills, CA
- Arcade Building, Los Angeles, CA

**Education**
- B.S., M.S., Structural Engineering
  University of California, San Diego
Mr. Mahony joined BREEN Engineering in 2008 with 2 years of experience in electrical engineering spanning a wide variety of complex project types including healthcare, commercial offices, bank buildings, retail malls, hospitality projects, and high-rise structures. Mr. Mahony has a great deal of experience on U projects and most recently in New Zealand and Dubai. His experience in Dubai includes many high-profile projects such as 5-star hotels for Raffles Hotel and Ritz Carlton, along with numerous offices and residential towers.

**Experience**

- **BREEN Engineering Incorporated, Torrance, California**
  Director of Building Systems, 2008 to Present
- **Mahony Consulting Ltd., Wellington, New Zealand**
  Owner Director, 2006-2008
- **Hyder Consulting Middle East Ltd., Dubai**
  Design Manager Electrical, 2004-2006
- **Beca, Wellington, New Zealand**
  Senior Design Engineer, 2001-2004
- **Donald Smith Seymor Rooley, London, England**
  Associate, 1988-2001
  Electrical Contractor, 1981-1988

**Education**

- **Bachelor of Engineering Honors, Energy Engineering**
  South Bank University, London
- **BSc., Building Services Engineering, Electrical**
  South Bank University, London
- **BTEC HNC, CED Building Services Engineering**
  City of Westminster College
Clive illia's
Architectural Interior Design

Clive's international and regional architectural credentials supplement BREEN Engineering's capacity as a full service E-A designer. With experience in varied sectors, including multifamily, commercial, retail and hospitality, Clive's background matches well with BREEN's diverse engineering portfolio. Recognized for his imaginative, efficient and pleasing organization of space, Clive is a LEED Accredited Professional, well versed in green, energy-efficient design. Well known for his attention to detail, Clive is expert in ADA requirements and California Building Code. Personable and resourceful, he is a talented point of contact for BREEN's clients and an effective coordinator for our multi-disciplinary resources.

Professional Affiliations

- LEED AP Accredited
- CID Certified Interior Designer

Experience

- BREEN Engineering Incorporated, Torrance, CA
  Architectural Interior Designer - 2011 to Present
- MVA Architects, Irvine, CA
  Project Manager Designer - 2010-2012
- Withee Malcolm Architects, LLP, Torrance, CA
  Multi-Family Project Manager Designer - 1994-2000
- Innerspace Design, Long Beach, CA
  Owner Principal - 1981-1994

Representative Engineering Projects

- Multiple AT T Tenant Improvements - California
- Hilton LA - Los Angeles, CA
- Mission of Los Feliz - Los Angeles, CA

Education

- Bachelor Degree Interior Architecture and Design
  Royal Melbourne Institute of Technology, Australia
- Certificate AutoCAD
- California State University Long Beach
HUNTINGTON LIBRARY & GARDENS
San Marino, California
Multiple Projects Currently Underway:

Education and Visitor Center
Design work began in July 2010 for a new Entrance Complex at the Huntington Library. The project includes three new structures and surrounding gardens and pathways, covering approximately 13 acres. Our work included an additional 13 acres of re-grading and realignment of adjacent private roadways, visitor parking and walkways.
Architect/Client: Architectural Resources Group   Reference: James McLane

Japanese Garden
BREEN's Civil Engineering work began in June 2010 for these Design-Build improvements to the existing Japanese Garden at The Huntington Library. This project, completed in 2012, includes improvements to the original lower gardens, a new ADA pathway, new upper gardens, pond, stream and tea house to celebrate the garden’s 100th year.
Contractor: ValleyCrest Landscape Companies. Reference: Bill Ropp

Desert Garden
BREEN Civil provided Master Planning and Conceptual Designs beginning in May 2010 for the Huntington Desert Garden at The Huntington Library. BEI’s role included Civil Engineering Design support for the Conceptual Drawings of a new entry and conservatory at the upstream end of the Desert Garden, along with an oasis (stormwater detention/retention facility) at the downstream end, a universal access plan and gathering areas for visitors to the garden. This project is now continuing into a design development phase.
Architect/Client: Architectural Resources Group. Reference: James McLane

Chinese Garden
The project consists of Civil and Structural site improvements to accommodate Phase 2 of the Chinese Garden at the Huntington Library. Project includes grading for new access roads and gardens, garden structures, and utilities. Also included is structural design of elevated deck for new hardscape around existing trees, to be protected. Our design work began in October of 2008 and is currently under construction. Architect/Client: The Huntington Library.
Reference: Laurie Sowd.
RAUL R. PEREZ MEMORIAL PARK  
Huntington Park, California  
Completed in 2012, Raul Perez Community Park is situated in the City of Huntington Park. The surrounding region is highly developed with few vacant properties or areas of open space. The park replaced industrial buildings and will be adjacent to a new LAUSD High School. The park totals approximately 4.5 acres and includes basketball courts, playground equipment, restroom facilities, a community center, outdoor stage, soccer field, barbeque and picnic areas, walking paths, a splash pad, and on-site parking. The project involved site design providing lighting for the walkway paths, sports lighting for the soccer field and the basketball courts. Point by point Photometric calculations were required to show the entire park was illuminated per the city standards for security concerns. BREEN provided Civil and MEP services. 

PINE AVENUE PARK  
Maywood, California  
BREEN Civil prepared Demolition, Grading and Drainage Plans for the project. Structural designed fence post and light pole footings for this small (6,600 sq.ft.) residential vacant lot formerly owned by the Maywood Water Company. Design elements include a serpentine walking path, native plant gardens, shade structure, mosaic art installation and picnic tables. Design work began in 2010. Project completed in Nov. 2011. Client: Trust for Public Land. Reference: Tori Kjer

MAYWOOD AVENUE PARK  
Maywood, California  
BREEN Civil prepared Demolition, Grading and Drainage Plans for a new community pocket park on a vacant, 17,000 sq. ft. lot. In addition, BEI Structural designed fence post and light pole footings as well as a pre-fabricated restroom facility pad and footings. Improvements include trees, pre-fabricated restroom facilities, a fenced mini artificial turf sports field, a skate spot, concrete walkways, and a small playground area with seat walls. Construction will begin in late 2013. 
Client: Trust for Public Land. Reference: Tori Kjer, Trust for Public Land
BLUE MOUNTAIN SENIOR VILLAS, SENIOR CENTER & CITY PARK
Grand Terrace, California
As a consultant for Corporation for Better Housing, BEI provided full MEP and Civil Engineering design services for this new Senior Center and adjacent City Park. Site design included the incorporation of bio-swales, which traverse the City Park and provide stormwater treatment for the entire site, including the Villas, Senior Center and parking lot runoff. Construction of the site was completed in late 2009.

CARLTON WAY POCKET PARK
Los Angeles, CA
This project consists of Civil, Structural and Electrical design for a new park on a 8,172 SF lot, including playground, fitness equipment, small plaza with decorative paving, trees and benches.
Client: kornrandolph. Reference: Amy Korn

MONITOR AVENUE PARK
Los Angeles, CA
This project consists of Civil and Structural designs for a new 1.5 acre park in the city of Los Angeles. The park amenities include a skate park, walking paths, playground, picnic shelter, and abundant green space. Construction will begin in early 2014.
Client: EPT Design. Reference: Matt Lysne
ELYSIAN VALLEY BIKEWAY GREEN STREET IMPROVEMENTS
Los Angeles, CA

Working for the Mountains Recreation and Conservation Authority as a part of the 2.7-mile extension of the Glendale Narrows Bikeway, Breen designed three new bikeway entrances to provide access from the adjacent neighborhood streets, working within a very limited construction budget. In addition to providing access to the bikeway, the project also provided three distinct methods of stormwater treatment by modifying the existing catch basins at the end of each of the three streets, adding such features as a flow-through planter, filtration pre-treatment and permeable pavers. Due to the unique nature of this demonstration project, several meetings were required with the City of Los Angeles' Bureau of Engineering to explain the intent and ensure their support while processing the approvals.

Client: EPT Design Reference:

LARCH AVENUE PARK
Lawndale, CA

BREEN is currently providing Civil, Structural and Plumbing design for a new 1.5-acre neighborhood park in the City of Lawndale. Improvements will include a new tot lot and playground area, walking path, fitness equipment, grassy play area/open space, covered picnic areas, entry plaza, screen plantings, shade structures site furnishings, restroom building, gates/fencing, lighting and landscaping.

Client: EPT Design. Reference: Matt Lysne

EL SERENO ARROYO PLAYGROUND
Los Angeles, CA

Pro-Bono Civil and Electrical Engineering Services for a new park in the El Sereno area of the City of Los Angeles in partnership with the Trust for Public Land. Amenities include new fitness equipment, walking paths, greenery and playground.

Client: Trust for Public Land. Reference: Tori Kjer