

REVISED

#### **GRIFFIN STRUCTURES FEE PROPOSAL**

# FRISBIE PARK EXPANSION PROJECT CITY OF RIALTO

02/21/18

Griffin Structures' Fee Proposal is based on all reasonable costs necessary to perform Construction Management, Inspection, Materials Testing, Value Engineering, and Constructability Review services for the City of Rialto's Frisbie Park Expansion Project. For these requisite services, Griffin Structures proposes the following Not to Exceed Fee:

Phase 1: Preconstruction Services: \$ 59,325 Phase 2: Construction Management Services \$ 630,165

Total \$ 689,490

All proposed hourly rates are fully burdened and include overhead, profit, taxes, and benefits. Special Inspections hours are priced as Prevailing Wage. The hours identified for each individual employee and task are estimates only and are not to be construed as not to exceed hours for any individual task, phase, or time period. We reserve the right to reallocate hours between staff members and tasks to accomplish the overall objectives and requirements of the project.

Services are based on the attached Fee Schedule, Resource Allocation Schedule, which provides detail on the allocation of hours, and the attached proposal from Leighton Group. Any extension of the schedule or services may result in additional fee, in good faith negotiation with the City.

#### APPROACH TO FEE AND PROJECT SCHEDULE

This proposal assumes a start of Pre-Construction services on April 1<sup>st</sup>, 2018, start of Construction on August 1, 2018, with a construction completion date of July 1<sup>st</sup>, 2019 (12 months). This proposal also assumes 1 month of Project Closeout in August of 2019. In an attempt to bring cost efficiencies to this project and thus provide the City with a competitive Fee Structure, we have based our proposal on the following approach:

**Jon Hughes** will serve as the Principal in Charge for the duration of the project and will provide as-needed leadership to the project team to deliver a successful project to the City. Currently we estimate applying 10 hours per month for the duration of the project AT NO CHARGE TO THE CITY. This results in a total of 170 hours, equal to \$41,650 of VLAUE ADDED SERVICE to the City.

**Robert Echavarria** will serve as the Project Executive. As a Landscape designer with extensive experience with Sports Parks, Robert brings added value to the team by bringing a design perspective and deep operational understanding to the project. This proposal allocates 10 hours per month of Robert's time toward this effort for a total of 170 hours.

**Lance Solomon** will serve as Project Manager and daily point of contact for the entire duration of the project. Lance's hours are allocated in the following manner:

<u>Pre-Construction</u>: Lance will provide Constructability Review, Value Engineering, and Bid Support during the Pre-Construction portion of the project. Additionally, Lance will work closely with the City and the Contractor to insure the mobilization efforts are undertaken in a manner that provides protection of existing assets, insures public safety, and achieves the highest productivity for the start of construction. For these services we have allocated 185 hours.

<u>Construction</u>: During construction Lance will be deployed full time to this project. This level of effort will provide the City with the scope of services listed herein, and provide the City with the highest level of Project Management service. This results in an hourly allocation of 172 hours per month, for a total of 2064 hours.

<u>Post-Construction</u>: This proposal anticipates 1 month of project closeout for which we have allocated 90 hours of Lance's time.

**Jay Helekar** will serve as Estimator / Value Engineering specialist. As head of our estimating service, and Consistent with the requirements of the RFP, Jay will bring added value to the project with his expertise in estimating, market conditions, and unit pricing. For this level of effort, we have allocated 40 hours of Jay's time.

Ed Che / Leighton Group will provide Special Inspections and Testing services. For a detailed breakdown of hours, rates, and services, please see the attached the proposal form Leighton Group included herein. To bring added value to the City, Griffin includes this proposal at cost, WITH NO MARK UP to the City

#### **QUALIFICATIONS AND EXCLUSIONS**

- 1. On-site trailer rental, furniture, utilities, and sanitary facilities for our field staff (Project Management team) are excluded. We assume that offices will be provided as part of the construction site trailer(s) being provided by the City's contractor.
- 2. Costs for all permits required for the project are excluded. It is assumed that the City will pay for all permitting fees, assessments, easements, school fees, and other agency or governmental fees or costs to support the design and construction the project. We have not included any permit related fees within our fee proposal.
- 3. Costs for surveying, construction staking, environmental and hazardous materials surveys, and all remediation costs are excluded
- 4. Software licenses or user fees for specific project management software being required by either the City or their contractor(s) is excluded.
- 5. Cost of bulk blueprinting for plans and specifications for use by the contractors and subcontractors is excluded. Funds included in reimbursable expenses are for Griffin printing costs alone.
- 6. Wage Compliance Program including Certified Payroll auditing, field interviews, or reporting is excluded. Based on State Law SB 854, it is assumed that the Dept. of Industrial Relations (DIR) will manage this effort at the State level. Griffin will enforce the Contractor registration requirements stipulated by the DIR.

- 7. Independent or third-party testing companies such as Roofing, Peer Reviews, LEED, or other specialized third-party oversight services other than those listed herein are excluded.
- 8. Commissioning requirements required by Cal Green (Title 24) are excluded. Griffin will manage the commissioning process, but we have not included a commissioning agent, nor development of commissioning specifications
- 9. Hourly rates are valid through December of 2019 and will escalate by CPI annually thereafter.
- 10. No FF&E or OS&E is included in this proposal
- 11. 24-hour surveillance is included as an ADD ALTERNATE, as requested by the City. Progress photos during construction to be taken intermittently concurrent with CM presence on the respective site.
- 12. Construction Manager will review all RFI's, Submittals, and Substitutions for completeness, approvals to be executed by the designer of record.
- 13. For document tracking control, Griffin has included the use of "Submittal Exchange" for managing construction documentation, and based the hours allocated in this proposal accordingly. The cost of "Submittal Exchange" is included here as a reimbursable expense.
- 14. This proposal does not include a formal independent Inspector of Record (IOR). Rather, based on our understanding of the scope requirements of the RFP, it is our assumption that the Construction Manager will also perform Quality Assurance Inspections concurrent with construction management duties. All City Building Dept. Permit Inspections are assumed to be performed by the City Building Dept.
- 15. Insurance costs are included as a reimbursable expense, and will be billed monthly at the rate of \$8 per \$1,000.
- 16. At no cost to the Owner, and subject to Internal Revenue Code 179d, (Deduction for Energy Efficient Commercial Buildings) Owner agrees to allocate any applicable tax credits to construction manager (Griffin Structures) as may be relevant to 'public entity' projects.
- 17. CASp review and inspection services are provided at cost, with no mark up. Scope of services include; review of 95% complete construction documents for ADA compliance, provide redline review markup on construction drawing set indicating non-compliant access issues, and participate in five site visits at four hours each during construction to review ADA compliance issues. All services will be provided by a California DSA Certified Access Specialist.
- 18. The labor rates provided represent a blended rate for Construction Management, Inspections, and Administrative support. As such they are offered as an overall cost reduction approach to provide savings to the City in lieu of providing 3 separate individuals to perform each of the tasks identified above. Nevertheless, in an effort to demonstrate our commitment to the City and the success of this project, we are offering to reduce our Construction Manager rate from \$190/hr. to \$185/hr.
- 19. Video monitoring scope includes two (2) security cameras, 24 hour recording, 2 weeks of storage, hosted data storage in the cloud, \$4,000 refundable deposit. Cost of system is for 12 months of service, additional services will be billed at \$550/month.

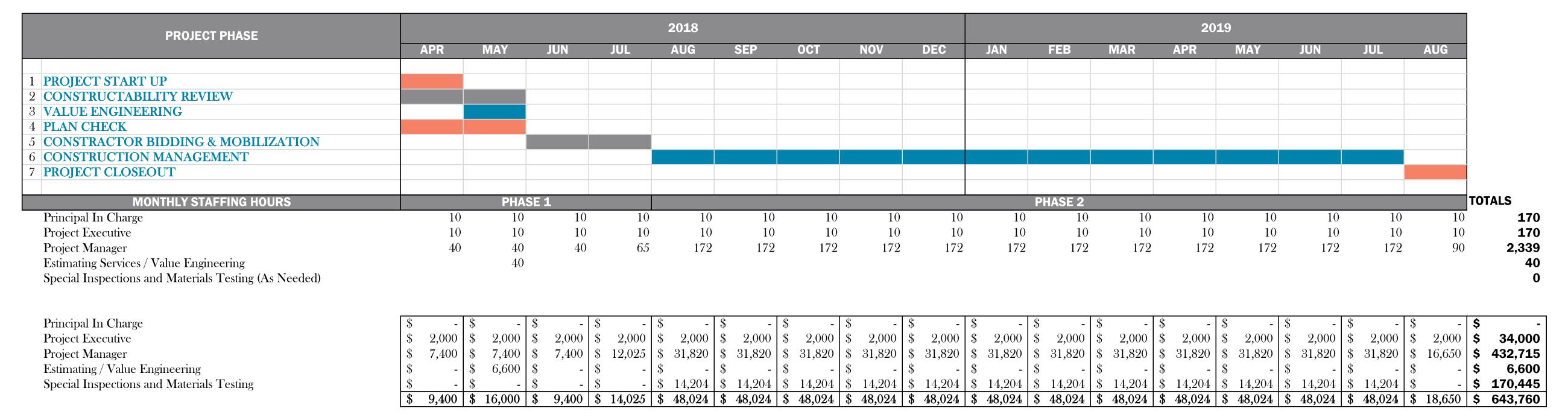
# City of Rialto Frisbie Park Expansion Project Fee Proposal REVISED

Item	TASK DESCRIPTION	PRINCIPAL IN CHARGE	PROJECT EXECUTIVE	PROJECT MANAGER	ESTIMATING - VALUE ENGINEERING	INSPECTIONS AND TESTING
No.		Jon Hughes \$245/hr.	Robert Echavarria \$200/hr.	Lance Solomon \$185/hr.	Jay Helekar \$165/hr.	Leighton Group See Attached
1	PHASE 1: PRECONSTRUCTION SERVICES	40	40	185	40	0
	Constructability Review	Incl.	Incl.	Incl.	-	-
1.2	Value Engineering	Incl.	Incl.	Incl.	Incl.	-
1.3	Bid Management	Incl.	Incl.	Incl.	-	-
1.4	Contractor Mobilization	Incl.	Incl.	Incl.	-	-
	Total Hours	40	40	185	40	0
	Subtotals	NO CHARGE	\$8,000	\$34,225	\$6,600	\$0
	PHASE 1 SUBTOTAL		·	·		\$48,825
2	Phase 1: Reimbursable Costs Total					\$10,500
2.1	ADA Compliance Review by CASp					\$9,000
2.2	Misc. Office Supplies					\$1,000
2.3	Insurance					\$500
	PHASE 1 TOTAL					\$59,325
	FRASE I TOTAL					\$39,323
	CONSTRUCTION MANAGEMENT SERVICES	120	120	2064	0	See Attached
3.1	Construction Management	Incl.	Incl.	Incl.	-	-
3.1a	Contract Administration Review Construction Schedule	Incl.	Incl.	Incl.	<del>-</del>	<del>-</del>
3.1b 3.1c	Construction Progress Meetings	Incl.	Incl.	Incl. Incl.	<u>-</u>	<u>-</u>
3.1d		Incl.	Incl.	Incl.	<u>-</u>	<u>-</u>
3.1e	RFI Coordination	Incl.	Incl.	Incl.	-	-
3.1f	Review All Change Orders	Incl.	Incl.	Incl.	-	-
3.1g	Cost Accounting Records	Incl.	Incl.	Incl.	-	-
3.1h	Cost Control System	Incl.	Incl.	Incl.	-	-
3.1i	Coordination with Other Consultants	Incl.	Incl.	Incl.	-	-
3.1j	Coordinate with Project Designer	Incl.	Incl.	Incl.	-	-
3.1k	Job Safety	Incl.	Incl.	Incl.	-	-
3.11 3.1m	Progress Payments Labor Compliance (SB 854)	Incl.	Incl.	Incl	-	-
3.1m	Compliance with Funding Requirements	Incl.	Incl.	Incl.	<u>-</u>	<u>-</u>
3.1o	Project Filing System	Incl.	Incl.	Incl.	-	-
3.1p	Neighborhood Relations	Incl.	Incl.	Incl.	-	-
3.2	Inspections	Incl.	Incl.	Incl.	-	-
3.2a	Permit Management	Incl.	Incl.	Incl.	-	-
3.2b	Field Observation Report	Incl.	Incl.	Incl.	-	-
3.2c	Storm Water Pollution Prevention Plan (SWPPP)	Incl.	Incl.	Incl.	-	- T 1
3.3 3.3a	Special Inspections and Testing  Contackwinel Inspections	Incl. Incl.	Incl.	Incl. Incl.	-	Incl. Incl.
3.3b	Geotechnical Inspections  Material Testing and Inspections	Incl.	Incl.	Incl.	<u>-</u>	Incl.
0.00	Material Testing and Inspections	THOI.	IIICI	<b>THOI</b>		THOI:
4	POST CONSTRUCTION SERVICES	10	10	90	0	0
4.1	Punch Walk	Incl.	Incl.	Incl.	-	-
4.2	Punch List	Incl.	Incl.	Incl.	-	-
4.3	Closeout Documents	Incl.	Incl.	Incl.	-	Incl.
	Total Hours	130	130	2154	0	0
	Subtotals	NO CHARGE	\$26,000	\$398,490	\$0	\$170,445
	PHASE 2: SUBTOTAL					\$594,935
5	Phase 2: Reimbursable Costs Total					\$35,230
	Submittal Exchange (Document Management System)					\$10,200
5.2	Misc. Office Supplies					\$1,100
5.3	Insurance					\$4,940
5.4	Video Monitoring					\$18,990
	PHASE 2 TOTAL					\$630,165
	I HAVE E IVIAL					<b>4000,103</b>
	GRAND TOTAL					\$689,490

02/21/18 Griffin Structures

# **Frisbie Park Expansion Project**

## **Resource Allocation Schedule**



Phase 1 Totals

ADA Compliance Review by CASp \$ Misc. Office Supplies \$ 1,000

Insurance \$ Phase 1 Total **59,325** 

Phase 2 Totals Submittal Exchange (Document Management System) \$

10,200 Misc. Office Supplies \$ 1,100

Insurance \$ 4,940

Video Monitoring \$ 18,990

Phase 2 Total 630,165

**GRAND TOTAL** 689,490



January 15, 2018

Proposal No. RC18-008

Griffin Structures, Inc. 2 Technology Drive, Suite 150 Irvine, California 92618

Attention: Mr. Jon Hughes

Vice President of Operations

Subject: Proposal for Special Inspection, Material Testing and

**Geotechnical Services** 

Frisbie Park Expansion Project (City Project No. 150304)

1901 North Acacia Avenue

Rialto, California

In response to your request, Leighton Consulting, Inc. (Leighton) is pleased to submit this proposal to provide special inspection and materials testing services during construction of the subject project.

#### PROJECT DESCRIPTION

Our understanding of this project is based on the RFP from the City and the 90% Progress Set plans prepared by Community Works Design Group, dated December 5, 2017. The project consists of improvements in the existing developed areas (2.2 acres) and undeveloped areas (8.5 acres). The proposed improvements for both primarily include:

- New asphalt concrete (AC) paved parking lots and driveways,
- New site retaining walls (concrete masonry unit walls),
- New prefabricated restroom building,
- New picnic shelters,
- New trellises,
- New skate park,
- New site lighting, and
- Renovation of the existing restroom.

Ancillary improvements are understood to consist of driveway aprons, underground utilities, and associated landscape. In addition, street improvements on Easton Street, adjacent to the Park, including grading, sidewalks, and street pavement are expected.

#### SCOPE OF SERVICES

Our scope of services during construction will consist of special inspection, materials testing, geotechnical services, and commensurate reporting. Geotechnical services include field compaction testing, laboratory testing, and geotechnical observations during grading. Special inspection and material testing will be performed in accordance with the plans and the California Building Code (CBC) 2016 Chapter 17 Guidelines.

Site safety is the responsibility of the contractor. Therefore, we will notify your site representative whenever we are on site. We will provide our field representatives with conventional and customary personal protection for construction sites, including a hard hat, orange vest and eye protection, and they will wear hard sole shoes. Let us know if any additional personal protection is required specific to this site and project. Before leaving the site, our field personnel will check-back-in with your field representative onsite, upon completion of activities for the day. Our *Daily Field Reports* (DFRs) will be brought to the project superintendent or designated field representative (construction manager), for them to confirm activities and hours worked each day; and for their signature on the DFR to document their confirmation and comprehension of what was reported.

Based on our understanding of this project as described in the previous section of this proposal, anticipated tasks for our scope of services will consist of the following field, laboratory and office work:

#### **Fieldwork**

Our fieldwork is expected to include the following:

- Pre-Construction Meeting: Our field project manager and field supervisor will attend a pre-construction meeting with your representatives and the contractors/subcontractors to establish points of contact, protocol for scheduling our services, and distribution lists for test results.
- Over-Excavation, Soil Compaction Observations and Testing: A soil technician
  will perform full-time or part-time observation and testing during subgrade
  preparation, trench backfill, and placement of new fill and base course for concrete
  and asphalt construction. Soil samples and base course samples will be collected



for laboratory testing to establish criteria for the acceptance. Leighton will also perform testing if we encounter variability in the source of aggregate base or soil. We will observe and document exposed excavation bottoms. If soft or yielding subgrade is exposed, we will provide geotechnical recommendations to address the issue. During fill placement, we will monitor the fill thickness, moisture-conditioning of the new fill, and compaction effort. In-place field density tests will be performed using a nuclear density gauge in accordance with ASTM D 6938 or CTM 231.

- Foundation Bearing Surface Observation: We will observe exposed bearing surfaces at the foundations to check if exposed soils are as anticipated in the project geotechnical report.
- Asphalt Concrete Pavement Observation and Testing: Full-time observation and testing services will be provided during placement of asphalt concrete so that non-conformance issues can be addressed immediately. Asphalt concrete samples will be collected in the field during placement and delivered to our laboratory for testing.
- Reinforced Concrete Special Inspection: We will provide a concrete special inspector that has been certified by International Code of Council (ICC) for rebar inspection and placement prior to concrete pour. Our inspector will perform periodic and continuous inspection, as required, of placement of reinforcing steel, epoxy dowels, post-installed anchors; and continuous inspection during placement of concrete. Inspection of the installation of epoxy dowels and post-installed anchors will be performed in accordance with ICC-ESR. The inspector will evaluate drill bit compliance, hole depth and cleanliness, product description and name, rod diameter, length embedment, material condition, ambient temperature, and adhesive shelf life and condition of packaging. We will also provide pull/torque testing of post-installed anchors, as necessary.

Our inspector will also sample fresh concrete, perform slump tests (ASTM C 143) and air content tests (ASTM C 173 or C 231) and non-shrink grout (ASTM C109) when requested by your designated field representative. We will mold four concrete compression test cylinders or three grout cubes at a sampling frequency of 50 cubic yards of concrete placed, or every 5,000 square feet or fraction thereof placed per day. After initial field curing, we will transport hardened concrete cylinders from the site to our materials laboratory for curing and testing.

- Shotcrete Special Inspection: We will provide an ICC certified special inspector during shotcrete placement. Our special inspector will also inspect the construction of the sample panels. The panels will be transported to our laboratory for coring and testing of compression cores.
- Structural Masonry Special Inspection: We will provide a masonry inspector that
  has been certified by International Code of Council (ICC) for structural masonry.
  Their work will consist of inspection during preparation of masonry prism (ASTM)



C1314); and placement of reinforcing steel, epoxy dowels, embed plates, masonry units and grout during construction of CMU walls for compliance of the approved plans and job specifications.

Our inspector will also sample fresh mortar and grout (ASTM C780 and C1019, respectively) to verify strength. After initial field curing, we will transport hardened mortar cylinders, grout prisms and masonry prisms from the site to our materials laboratory for curing and testing.

Structural Steel Field Welding and Bolting Special Inspection: We will provide inspectors that are certified by American Welding Society (AWS) as certified welding inspectors (CWIs) for field welding and high-strength bolting. Their work will consist of the inspection of all welding and installation of high-strength bolts during the field erection for compliance of the approved plans and job specifications. The CWI will make a systematic record of all welds, including a list of defective welds and a manner of correction of defects. The CWI will check the material identification, equipment, details of construction and procedures, and the welds. The welding inspector will also check the qualification of the welder.

#### **Soils Laboratory Testing**

Anticipated laboratory testing for soil testing will include gradation, expansion index, sand equivalent, maximum laboratory dry density – optimum moisture content, and R-value.

### **Materials Laboratory Testing**

Our materials laboratory testing is expected to include the following:

- Concrete/Shotcrete: Concrete laboratory curing and compressive strength testing of field-molded concrete test cylinders/shotcrete cores will be performed in general accordance with ASTM C31 and C39, respectively. Verbal and/or e-mail reports will be provided for 7-day breaks. We will provide a final one-page report summarizing compressive strength tests results for a given set of cylinders/shotcrete cores (three cylinders, plus one hold) after the 28-day breaks are completed.
- Masonry: Compression testing of mortar cylinders and grout prism test specimens molded by our representative will be performed in accordance to ASTM C270 and C1019. Masonry prisms will be tested in accordance with ASTM C1314. Verbal and/or e-mail reports will be provided for 7-day breaks if available. We will provide a final one-page report summarizing compressive strength tests results for a given set of samples after the 28-day breaks are completed.



Asphalt Concrete: We will perform Caltrans Test Method 308 to evaluate the maximum laboratory density of asphalt concrete. The test results will be utilized to evaluate the degree of AC compaction in the field.

#### Office Support, Management and Reporting

Professional and clerical support services will be provided including management, and closeout report preparation and dissemination, as follows:

- Project Management: This scope of work will consist of reviewing DFRs and laboratory test results, and preparing these reports for distribution. concerns encountered in the field and noted in daily reports, and any material tested and found to be outside project specifications, will be brought to the attention of the your designated representative(s). Supervision, quality and project management will be provided by our Civil (Materials) Engineer (PE) of Record.
- Project Closeout (Optional): If deemed necessary or required by the governing authority, we can prepare a final affidavit summarizing the material testing and special inspection provided during construction

#### SCHEDULING AND DISPATCHING

Leighton is prepared to begin our work immediately upon receipt of your written authorization to proceed. We would appreciate at least three working days advance notice for scheduling our field personnel on the first day you require our services. Work thereafter may be scheduled with a full (24 hours) one working day advance notice. We will rely on your field representative to contact us to schedule all fieldwork, and to help us avoid unproductive site visits. Calls to our dispatch (866-LEIGHTON) on weekends and holidays are not addressed until the first following working day, without prior arrangement. We anticipate our personnel will be on site periodically for both full time and part time observation and testing, as requested by your field representative. We request that you "partner-with-us" to manage our budget, by avoiding unnecessary trips to the site. We will work with your field representative to reduce standby time or unnecessary trips to the site.

#### FEES, BUDGET, TERMS AND CONDITIONS

#### Fee Schedule

Our proposed scope of services during construction will be performed on a time-andexpense basis at the unit rates listed on the attached 2017 Professional Fee Schedule (4 pages). Our hourly rates are based on the assumption that this is a California



prevailing wage project. Our fees will decrease if this project is **not** subject to California prevailing wage requirements.

#### **Budget Estimate**

A construction schedule was <u>not</u> provided at the time of preparing this proposal, so there may be significant changes in our budget based on the chosen contractor's assembly sequencing, pace and schedule.

We have estimated a budget for these services as shown on the attached Table 1, *Estimated Fees* (1-page). As shown on Table 1, we estimate that our fees to provide special inspection and materials testing during construction would be One Hundred Seventy Thousand Four Hundred and Fifty Five Dollars (\$170,455.00), based on assumptions described in this proposal. Our fees for construction services will be primarily dependent upon the contractor's and various subcontractor's operations, methods and scheduling. Therefore, our fee may vary from what is estimated on Table 1.

Actual scope and cost may vary from what was estimated, if additional time is required on site or other than described above and assumed in Table 1. If actual number of our site visits or hours requested are less-than assumed, our fee would be less-than estimated. Conversely, if there are extensive standbys or unnecessary site visits, this budget estimate may be insufficient to complete the project, and we will notify you that our budget needs to be augmented. Special inspection and materials testing not referenced in our estimated budget will be charged on a time and expense basis in accordance with our attached fee schedule.

The following assumptions have been made in estimating our costs special inspection and materials testing services during construction:

- Site Access: We assume the site will be readily accessible to our staff and equipment during construction, including free parking on site and safe access to excavations, etc.
- Overtime: This fee estimate is also based on the assumption that our field services will be performed during normal weekday daylight-hours, and does <u>not</u> include overtime. Other overtime work (over 8 hours per day and/or 40 hours per week, weekends and/or holidays) will be billed in accordance with our 2017 Professional Fee Schedule, beyond our estimated budget.



- Invoicing: We assume that our standard invoice and breakdown of fees will be acceptable for payment. A typical copy can be provided upon request.
- Relying On Provided Construction Design Documents: We rely on others to make us aware of approved plans and specifications modifications and updates. Changes to project drawings and specifications and updates to the construction schedule may affect our scope and budget.
- Exclusions From Estimate: The following are <u>not</u> expected to be required or will be performed by others, and are therefore, <u>excluded</u> from our estimate:
  - Shop fabrication of prefabricated metal building

#### **Terms and Conditions**

Attached is a Scope of Work Agreement covering the proposed services. We propose to execute this contract under the terms and conditions of the existing Master Services Agreement between Griffin Structures, Inc. and Leighton, Number C44300M. If the services are awarded to Leighton and the Scope of Work Agreement is acceptable to you, please have two copies of the Agreement executed by a duly authorized officer of your corporation and transmit them to us. We will return one fully executed copy for your records. Your assent to our beginning work before the Agreement is fully executed constitutes your agreement that the terms and conditions of this Scope of Work are acceptable to you.



#### CLOSURE

We appreciate this opportunity to be of service to Griffin Structures, Inc. If you have any questions or information that would update our scope of work, or simply wish us to proceed, please contact us at your convenience. The undersigned can be reached at (866) LEIGHTON, specifically at the phone extensions and e-mail addresses listed below.

Respectfully submitted,

LEIGHTON CONSULTING, INC.

Edward Che, PE, GE

**Project Manager** 

Extension 4283, eche@leightongroup.com

EC:Ir

Attachments: Table 1 – Estimated Fees (1-page)

Scope of Work Agreement (1-page)

2017 Professional Fee Schedule (4-pages)

Distribution: (1) addressee



#### Leighton Consulting, Inc.

#### Table 1 - Estimated Fees

#### Frisbie Park Expansion

Geotechnical Observation/Testing, Special Inspections, and Material Testing

Proposal # RC18-008

TASK DESCRIPTION		RATE	UNITS	COST
Preconstruction Meeting				
Associate		\$215.00 / hour	2	\$430.0
Field / Laboratory Supervisor		\$140.00 / hour	2	\$280.00
			SUBTOTAL	\$710.00
Geotechnical Observation, Field Testing, and Special Inspection				
	Geotech Observ. Fld. To	est		
Field Soils / Materials Tester (Prevailing wage)	Rough Grading and Overe	\$135.00 / hour	160	\$21,600.0
Field Soils / Materials Tester (Prevailing wage)	Site Work/Fine Grading	\$135.00 / hour	80	\$10,800.0
Field Soils / Materials Tester (Prevailing wage)	Foundation Excavations	\$135.00 / hour	56	\$7,560.0
Field Soils / Materials Tester (Prevailing wage)	Underground Utilities	\$135.00 / hour	40	\$5,400.0
Field Soils / Materials Tester (Prevailing wage)	Aggregate Base	\$135.00 / hour	24	\$3,240.0
Field Soils / Materials Tester (Prevailing wage)	AC Paving	\$135.00 / hour	24	\$3,240.0
Field / Laboratory Supervisor	Scheduling and Supervision	\$140.00 / hour	40	\$5,240.0 \$5,600.0
				40,000.0
Building / Construction Inspector (Provailing week)	Spcl. Insp. and Samplin		100	***
Building / Construction Inspector (Prevailing wage)	Reinforced Concrete	\$140.00 / hour	120	\$16,800.0
Field Soils / Materials Tester (Prevailing wage)	ACI Concrete Sampling	\$135.00 / hour	136	\$18,360.0
Building / Construction Inspector (Prevailing wage)	Shotcrete	\$140.00 / hour	80	\$11,200.0
Building / Construction Inspector (Prevailing wage)	Masonry	\$140.00 / hour	60	\$8,400.0
Building / Construction Inspector (Prevailing wage)	Field Welding/Bolting Stee	\$140.00 / hour	100	\$14,000.0
Building / Construction Inspector (Prevailing wage)	Post-Installed Anchors	\$140.00 / hour	16	\$2,240.0
Vehicle Usage		\$20.00 / each	520	\$10,400.0
			SUBTOTAL	\$138,840.0
Laboratory Testing - Soils				
Particle size - Sieve only 1½ inch to #200, (ASTM D6913/CTM 202)		\$135.00 / each	4	\$540.0
Expansion Index (EI, ASTM D4829)		\$130.00 / each	2	\$260.0
Sand Equivalent (SE, ASTM D2419/CTM 217)		\$105.00 / each	2	\$210.0
Modified Proctor compaction 4 inch mola (Methods A & B A51 M D1557)		\$220.00 / each	12	\$2,640.0
Modified Proctor compaction 6 inch mold (Method C ASTM D1557)		\$245.00 / each	4	\$980.0
R-Value (CTM 301) lime or cement treated soils		\$340.00 / each	6	\$2,040.0
I shoretow Teeting Meterials			SUBTOTAL	\$6,670.0
Laboratory Testing - Materials				
Concrete cylinders compression (ASTM C39 6" x 12") Compression, concrete or masonry cores (testing only) ≤o incn (A5) w		\$25.00 / each	256	\$6,400.0
C43/		\$40.00 / each	8	\$320.0
Mortar cylinders (2" by 4", ASTM C780)		\$25.00 / each	21	\$525.0
Grout prisms (3" by 6", ASTM C1019)		\$25.00 / each	21	\$525.0
CMU compression to size 8" x 8" x 16" (3 required, ASTM C140)		\$45.00 / each	9	\$405.0
Maximum density - Hveem (CTM 308) Εισκταρ α ασίινει y – (ινεσκαάγε, ρεί τηρ, Νου πίπου ποιτί μειχιποί		\$200.00 / each	6	\$1,200.0
n#inn\		\$90.00 / each	60	\$5,400.0
			SUBTOTAL	\$14,775.0
Project Administration, Management, and Technical Reporting				
Project Administrator/Word Processor		\$80.00 / hour	24	\$1,920.0
Dispatcher		\$80.00 / hour	15	\$1,200.0
Staff Engineer		\$145.00 / hour	20	\$2,900.0
Associate		\$215.00 / hour	16	\$3,440.0
			SUBTOTAL	\$9,460.0
			STIMATED COST	

#### SCOPE OF WORK AGREEMENT

This Scope of Work, effective January 15, 2018, is, upon execution of the Parties, incorporated under Master Services Agreement No. C44300M by and between Leighton Consulting, Inc. (LEIGHTON CONSULTING) and Griffin Structures, Inc. ("CLIENT").

PROJECT LOCATION: Frisbie Park, 1901 N. Acacia Avenue, Rialto, California

**DESCRIPTION OF SERVICES:** Special Inspection, Material Testing, and Geotechnical Services. See Proposal (RC18-008) dated January 15, 2018.

#### **LEIGHTON:**

Leighton Consulting, Inc. 17781 Cowan

Irvine, California 92614 Telephone: (949) 250-1421

Email: eche@leightongroup.com

Prime Contact: Mr. Edward Che

#### CLIENT:

Griffin Structures, Inc. 2 Technology Drive, Suite 150

Irvine, CA 92618

Telephone: (949) 497-9000

Email: jhurhes@griffinstructures.com
Prime Contact: Mr. Jon Hughes

**FEE:** The Services shall be undertaken on a time-and-materials basis. Based on our current knowledge, we estimate the fee for special inspection, materials testing, and geotechnical services during construction to be approximately One Hundred Seventy Thousand Four Hundred and Fifty Five Dollars (\$170,455.00). CLIENT will pay LEIGHTON CONSULTING, INC. for the Services in accordance with LEIGHTON CONSULTING, INC.'s Professional Fee Schedule (current Fee Schedule attached) in effect at the time the Services are rendered plus other direct costs at an actual cost plus an administrative charge of 20%.

I have reviewed and agree to this scope of work.

LEIGHTON CONSULTING, INC.	GRIFFIN STRUCTURES, INC.
By (Signature)	By (Signature)
(Print Name)	(Print Name)
Date	Date

CLIENT ACKNOWLEDGES THAT IT HAS READ AND UNDERSTANDS THE DOCUMENT ENTITLED "INFORMATION FOR CLIENTS REGARDING LEIGHTON CONSULTING, INC. SERVICES"



## 2017 PROFESSIONAL FEE SCHEDULE

CLASSIFICATION	\$/HR	CLASSIFICATION	\$/HR
Technician I	85	Project Administrator/Word Processor/Dispatcher	80
Technician II / Special Inspector	95	Information Specialist	110
Senior Technician / Senior Special Inspector	105	CAD Operator	120
Prevailing Wage (field soils / materials tester) *	135	GIS Specialist	140
Prevailing Wage (Special Inspector) *	140	Staff Engineer / Geologist / Scientist	145
Prevailing Wage (Source Inspector, NDT, and Soil Remediation O&M) *	145	Senior Staff Engineer / Geologist / Scientist / ASMR	155
System Operation & Maintenance (O&M) Specialist	140	Operations / Laboratory Manager	175
Non Destructive Testing (NDT)	145	Project Engineer / Geologist / Scientist	175
Deputy Inspector	142	Senior Project Engineer / Geologist / Scientist / SMR	195
Field / Laboratory Supervisor	140	Associate	215
Source Inspector I	135	Principal	235
Source Inspector II	140	Senior Principal	275
Source Inspector III	145	* See Prevailing Wages in Terms and Conditions	

#### **GEOTECHNICAL LABORATORY TESTING**

<b>METHOD</b>	\$/TEST	METHOD	\$/TEST
CLASSIFICATION & INDEX PROPERTIES		California Bearing Ratio (CBR, ASTM D1883):	
Photograph of sample	10	- 3 point	500
Moisture content (ASTM D2216)	20	- 1 point	185
Noisture & density (ASTM D2937) ring samples	30	R-Value (CTM 301) untreated	310
Noisture & density (ASTM D2937) Shelby tube or cutting	40	R-Value (CTM 301) lime or cement treated soils	340
Atterberg limits (ASTM D4318) 3 points:	150		
- Single point, non-plastic	85	SOIL CHEMISTRY & CORROSIVITY	
- Atterberg limits (organic ASTM D2487 / 4318)	180	pH Method A (ASTM 4972 or CTM 643)	45
- Visual classification as non-plastic (ASTMD 2488)	10	Electrical resistivity – single point – as received moisture	45
Particle size:		Minimum resistivity 3 moisture content points (ASTM G187/CTM 64 pH + minimum resistivity (CTM 643)	
<ul> <li>Sieve only 1½ inch to #200, (ASTM D6913/CTM 202)</li> </ul>	135	Sulfate content - gravimetric (CTM 417 B Part II)	130 70
<ul> <li>Large sieve – 6 inch to #200 (ASTM D6913/CTM 202)</li> </ul>	175	Sulfate screen (Hach®)	30
<ul> <li>Hydrometer only (ASTM D422)</li> </ul>	110	Chloride content (AASHTO T291/CTM 422)	70
<ul> <li>Sieve + hydrometer (≤3" sieve, ASTM D422)</li> </ul>	185	Corrosion suite: minimum resistivity, sulfate, chloride, pH (CTM 643	
<ul> <li>Percent passing #200 sieve, wash only (ASTM D1140)</li> </ul>	70	Organic matter content (ASTM 2974)	65
Specific gravity-fine (passing #4, ASTM D854/CTM 207)	125		00
Specific gravity-coarse (ASTM C127/CTM 206) > #4 retained:	100	SHEAR STRENGTH	
- Total porosity - on Shelby tube sample (calculated from density & specific gravity)	165	Pocket penetrometer	15
- Total porosity - on other sample	155	Direct shear (ASTM D3080, mod., 3 points):	
Shrinkage limits (wax method, ASTM D4943)	126	- Consolidated undrained - 0.05 inch/min (CU)	285
Pinhole dispersion (ASTM D4647)	210	- Consolidated drained - <0.05 inch/min (CD)	345
Dispersive characteristics (double hydrometer ASTM D4221)	90	- Residual shear EM 1110-2-1906-IXA	50
As-received moisture & density (chunk/carved samples)	60	(price per each additional pass after shear)	00
Sand Equivalent (SE, ASTM D2419/CTM 217)	105	Remolding or hand trimming of specimens (3 points) Oriented or block hand trimming (per hour)	90
COMPACTION & PAVEMENT SUBGRADE TESTS		Single point shear	65 105
Standard Proctor compaction, (ASTM D698) 4 points:		Torsional shear (ASTM D6467 / ASTM D7608)	105 820
<ul> <li>4 inch diameter mold (Methods A &amp; B)</li> </ul>	160	·	020
<ul> <li>6 inch diameter mold (Method C)</li> </ul>	215	CONSOLIDATION & EXPANSION/SWELL TESTS	
Modified Proctor compaction (ASTM D1557) 4 points:		Consolidation (ASTM D2435):	195
<ul> <li>4 inch diameter mold (Methods A &amp; B)</li> </ul>	220	<ul> <li>Each additional time curve</li> </ul>	45
<ul> <li>6 inch diameter mold (Method C)</li> </ul>	245	- Each additional load/unload w/o time reading	40
Sheck point (per point)	65	Expansion Index (EI, ASTM D4829)	130
Relative compaction of untreated/treated soils/aggregates (CTM 216)		Swell/collapse — Method A (ASTM D4546-A, up to 10 load/unloads w/o time curves)	290
Relative density (0.1 ft mold, ASTM D4253, D4254)	235	Single load swell/collapse - Method B (ASTM D4546-B, seat, load & inundate on	nly) 105

#ETHOD	\$/TEST	METHOD	\$/TEST
FRIAXIAL TESTS		HYDRAULIC CONDUCTIVITY TESTS	
Jnconfined compression strength of cohesive soil	135	Triaxial permeability in flexible-wall permeameter with backpressure	310
with stress/strain plot, ASTM D2166)	.00	saturation at one effective stress (EPA 9100/ASTM D 5084,	310
Inconsolidated undrained triaxial compression test on cohesive	170	falling head Method C):	
ioils (USACE Q test, ASTM D2850, per confining stress)		- Each additional effective stress	120
Consolidated undrained triaxial compression test for cohesive soils,	375	<ul> <li>Hand trimming of soil samples for horizontal K</li> </ul>	60
(ASTM D4767, CU, USACE R-bar test) with back pressure		Remolding of test specimens	65
saturation & pore water pressure measurement (per confining stress)		Permeability of granular soils (ASTM D2434)	135
Consolidated drained triaxial compression test (CD, USACE S test),			100
with volume change measurement. Price per soil type below EM		SOIL-CEMENT	
1110-2-1906(X):		Moisture-density curve for soil-cement mixtures (ASTM D558)	240
- Sand or silty sand soils (per confining stress)	375	Wet-dry durability of soil-cement mixtures (ASTM D559) 1	1,205
- Silt or clayey sand soils (per confining stress)	500	Compressive strength of molded soil-cement cylinders (ASTM	60
- Clay soils (per confining stress)	705	D1633) per cylinder <sup>1</sup>	
- Three-stage triaxial (sand or silty sand soils)	655	Soil-cement remolded specimen (for shear strength,	235
- Three-stage triaxial (silt or clayey sand soils)	875	consolidation, etc.) 1	
- Three-stage triaxial (clay soils)	1,235		
Remolding of test specimens	65	<sup>1</sup> Compaction (ASTM D558 maximum density) should also be	
		performed – not included in above price	
CONSTRUCTION M	IATERIA	LS LABORATORY TESTING	
3AMPLE TRANSPORT	\$/TRIP	Rubberized asphalt (add to above rates)	+ 25%
Pick-up & delivery (weekdays, per trip, <50 mile radius from Leighton office)	90	AGGREGATE PROPERTIES	
<b>ΛΕΤΗΟD</b>	\$/TEST	Sieve analysis (fine & coarse aggregate, ASTM C136/ CTM 202) with finer than #200 wash (ASTM C117)	135
CONCRETE STRENGTH CHARACTERISTICS		LA Rattler-smaller coarse aggregate <1.5" (ASTM C131/ AASHTO T96)	200
Concrete cylinders compression (ASTM C39) (6" x 12")	25	LA Rattler-larger coarse aggregate 1-3" (ASTM C535)	250
Concrete cylinders compression (ASTM C39) (4" x 8")	22	Durability Index (DI, CTM 229)	200
Compression, concrete or masonry cores (testing only) ≤6 inch (ASTM C4	2) 40	Cleanness value of coarse aggregate (CTM 227)	210
Frimming concrete cores (per core)	20	Unit weight of aggregate (CTM 212)	50
Flexural strength of concrete (simple beam with 3rd pt. loading, ASTI	M 85	Soundness, magnesium (ASTM C88)	225
C78/CTM 523)		Soundness, sodium	650
Flexural strength of concrete (simple beam with center pt. loading,	85	Uncompacted void content – fine aggregate (CTM 234/AASHTO T304)	130
ASTM 293/CTM 523)		Flat & elongated particles in coarse aggregate (CTM 235/ASTM D4791)	215
Non shrink grout cubes (2 inch, ASTM C109/C1107)	25	Percent of crushed particles (CTM 205/AASHTO T335)	135
Orying shrinkage (four readings, up to 90 days, 3 bars, ASTM C157)	400	Organic impurities in concrete sand (CTM 213)	60
HOT MIX ASHPALT (HMA)		Specific gravity – coarse aggregate (CTM 206)	100
Compacted AC Resistance to Moist Damage (AASHTO T283)	2,100	Specific gravity – fine aggregate (CTM 207)	125
lamburg Wheel, 4 briquettes (modified) (AASHTO T324)	900	Sand Equivalent (SE, CTM 217/AASHTO T176)	105
Gyratory Compaction (AASHTO T312)	350	Apparent specific gravity of fine aggregate (CTM 208)	130
Extraction by ignition oven, percent asphalt (ASTM D6307/CTM	150	Moisture content of aggregates by oven drying (CTM	40
382/AASHTO T308)	100	226/AASHTO T255)	
gnition oven correction/correlation values	quote	Clay lumps, friable particles (ASTM C142)	175
Extraction by centrifuge, percent asphalt (ASTM D2172)	150	MASONRY	
Gradation of extracted aggregate (ASTM D5444/CTM 202)	135	Mortar cylinders (2" by 4", ASTM C780)	25
Stabilometer value (CTM 366)	265	Grout prisms (3" by 6", ASTM C1019)	25
3ituminous mixture preparation (CTM 304)	80	Masonry cores compression, ≤6" diameter (testing only, ASTM C42)	40
Moisture content of asphalt (CTM 370)	60	CMU compression to size 8" x 8" x 16" (3 required, ASTM C140)	45
Bulk specific gravity – molded specimen or cores (ASTM D1188/	55	CMU moisture content, absorption & unit weight (6 required, ASTM C140)	40
CTM 308/AASHTO T275)		CMU linear drying shrinkage (ASTM C426)	175
Maximum density - Hveem (CTM 308)	200	CMU grouted prisms (compression test ≤8" x 8" x 16", ASTM E 447 C1314)	180
Theoretical maximum density and specific gravity of HMA (CTM	130	CMU grouted prisms (compression test > 8" x 8" x 16", ASTM E 447 C1314)	250
309/AASHTO T209)		Masonry core-shear, Title 24 (test only)	70
hickness or height of compacted bituminous paving mixture	40	, , , , , , , , , , , , , , , , , , , ,	, 0

hickness or height of compacted bituminous paving mixture specimens (ASTM 3549)

METHOD	\$/TEST	METHOD	\$/TEST
BRICK Compression (cost for each, 5 required, ASTM C67)	40	Prestressing wire, tension (ASTM A416) Sample preparation (cutting)	150 50
SLAB-ON-GRADE MOISTURE EMISSION KIT Moisture test kit (excludes labor to perform test, ASTM E1907)	60	SPRAY APPLIED FIREPROOFING Unit weight (density, ASTM E605)	60
REINFORCING STEEL  Rebar tensile test, ≤ up to No. 10 (ASTM A370)  Rebar tensile test, ≥No. 11 & over (ASTM A370)  Rebar bend test, up to No. 11 (ASTM A370)  Epoxy coated rebar/dowel film thickness (coating) test (ASTM A775)  Epoxy coated rebar/dowel continuity (Holiday) test (ASTM A775)  Epoxy coated rebar flexibility/bend test, up to No. 11 (ASTM A775)  STEEL	45 100 45 45 65 45	OTHER TESTS  Resistance Butt-Welded Hoops/Bars, up to No. 10 (CTM 670) Resistance Butt-Welded Hoops/Bars, No. 11 & over (CTM 670) Mechanical Rebar Splice (Service), up to No. 10 (CTM 670) Post-Tensioned Bars (ASTM A772) Elastometric Bearing Pads (Caltrans SS 51/SP) Joint Seal Type B, MR1"/MR2" (Caltrans SS 51/SP) 100W HPS Lighting (Caltrans RSS 86) Bearing Plates (A536)	180 240 180 420 1620 1960 1296 720
Tensile strength, ≤100,000 pounds axial load (ASTM A370)	45		

## **EQUIPMENT, SUPPLIES & MATERIALS**

		EQUIPMEN	1, 5UP	PLIES & MATERIALS		
\$/UNIT						
	//4 inch Grab plates	5	each	Manometer	\$/Ui 25	day
	/4 inch Tubing (bonded)	0.55	foot	Mileage (IRS Allowable)	0.535	mile
	/4 inch Tubing (single)	0.35	foot	Nuclear moisture and density gauge	88	day
	3/8 inch Tubing, clear vinyl	0.55	foot	Pachometer	25	day
	I-Gas meter (RKI Eagle or similar)/GEM 2000	130	day	Particulate Monitor	125	day
	Air flow meter and purge pump (200 cc/min)	50	day	pH/Conductivity/Temperature meter	55	day
	3ox of 24 soil drive-sample rings	120	box	Photo-Ionization Detector (PID)	120	day
	3rass sample tubes	10	each	Pump, Typhoon 2 or 4 stage	50	day
	Caution tape (1000-foot roll)	20	each	QED bladder pump w/QED control box	160	day
	Combination lock or padlock	11	each	Resistivity field meter & pins	50	day
	Compressed air tank and regulator	50	day	Slip / threaded cap, 2-inch or 4-inch diameter, PVC Schedule 40	15	each
	Concrete coring machine (≤6-inch-dia)	150	day	Slope inclinometer	200	day
	Consumables (gloves, rope, soap, tape, etc.)	35	day	Soil sampling T-handle (Encore)	10	day
	Core sample boxes	11	each	Soil sampling tripod	35	day
	Crack monitor	25	each	Stainless steel bailer	40	day
	Cutoff saws, reciprocating, electric (Saws All)	75	day	Submersible pump, 10 gpm, high powered Grunfos 2-inch with controller	160	day
	Disposable bailers	12	each	Submersible pump/transfer pump, 10-25 gpm	50	day
	Disposable bladders	10	each	Support service truck usage (well installation, etc.)	200	day
	Dissolved oxygen meter	45	day	Survey/fence stakes	8	each
	OOT 55-gallon containment drum with lid	65	each	Tedlar® bags	18	each
	Oouble-ring infiltrometer	125	day	Traffic cones (≤25)/barricades (single lane)	50	day
	Qual-stage interface probe	80	day	Turbidity meter	70	day
	Dynamic Cone Penetrometer	400	day	Tyvek® suit (each)	18	each
	Generator, portable gasoline fueled, 3,500 watts	90	day	Vapor sampling box	55	day
	Global Positioning System/Laser Range Finder	80	day	Vehicle usage (carrying equipment)	20	hour
	land auger set	90	day	VelociCalc	35	day
	IDPE safety fence (≤100 feet)	40	roll	Visqueen (20 x 100 feet)	100	roll
	Horiba U-51 water quality meter	135	day	Water level indicator (electronic well sounder) <300 feet deep well	l 60	day
	√lagnahelic gauge	15	day	ZIPLEVEL®	15	dav

Other specialized geotechnical and environmental testing & monitoring equipment are available, and priced per site

#### **TERMS & CONDITIONS**

- Expiration: For all classifications except those subject to prevailing wage, this fee schedule is effective through December 31, 2017 after which remaining work will be billed at then-current rates.
- Proposal Expiration: Proposals are valid for at least 30 days, subject to change after 30 days; unless otherwise stated in the attached proposal.
- Prevailing Wages: Our fees for prevailing wage work are subject to change at any time based upon the project advertised date, and changes in California prevailing wage laws or wage rates. Prevailing wage time accrued will include portal to portal travel time. Prevailing wage rates are subject to increase after June 30, 2017.
- Overtime: Overtime for field personnel will be charged at 1.5 times basic hourly rates when exceeding 8 hours up to 12 hours per 24 hour interval, and 2 times basic hourly rates when exceeding 12 hours in 24 hours or on Sunday, and 3 times basic hourly rates on California official holidays.
- Expert Witness Time: Expert witness deposition and testimony will be charged at 2 times hourly rates listed on the previous pages, with a minimum charge of four hours per day.
- Minimum Field Hourly Charges: For Field Technicians, Special Inspectors or Material Testing Services:

4 hours: 4-hour minimum charge up to the first four

hours of work

8 hours: 8-hour minimum charge for over four hours of

work, up to eight hours

- Outside Direct Costs: Heavy equipment, subcontractor fees and expenses, project-specific permits and/or licenses, project-specific supplemental insurance, travel, subsistence, project-specific parking charges, shipping, reproduction, and other reimbursable expenses will be invoiced at cost plus 20%, unless billed directly to and paid by client.
- Insurance & Limitation of Liability: These rates are predicated on standard insurance coverage and a limit of

- Leighton's liability equal to our total fees for a given project.
- Invoicing: Invoices are rendered monthly, payable upon receipt in United States dollars. A service charge of 1½-percent per month will be charged for late payment.
- Client Disclosures: Client agrees to provide all information in Client's possession about actual or possible presence of buried utilities and hazardous materials on the project site, prior to fieldwork, and agrees to reimburse Leighton for all costs related to unanticipated discovery of utilities and/or hazardous materials. Client is also responsible for providing safe and legal access to the project site for all Leighton field personnel.
- Earth Material Samples: Quoted testing unit rates are for soil and/or rock (earth) samples free of hazardous materials. Additional costs will accrue beyond these standard testing unit rates for handling, testing and/or disposing of soil and/or rock containing hazardous materials. Hazardous materials will be returned to the site or the site owner's designated representative at additional cost not included in listed unit rates. Standard turn-around time for geotechnical-laboratory test results is 10 working days. Samples will be stored for 2 months. after which they will be discarded. Prior documented notification is required if samples need to be stored for a longer time. A monthly storage fee of \$10 per bag and \$5 per sleeve or tube will be applied. Quoted unit rates are only for earth materials sampled in the United States. There may be additional cost for handling imported samples.
- Construction Material Samples: After all designated 28-day breaks for a given sample set meet specified compressive or other client-designated strength, all "hold" cylinders or specimens will be automatically disposed of, unless specified in writing prior to the 28-day break. All other construction materials will be disposed of after completion of testing and reporting.