

RESOLUTION NO. 14-977

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BLACK DIAMOND, KING COUNTY, WASHINGTON AUTHORIZING THE MAYOR TO EXECUTE A CONTRACT WITH HWA GEOSCIENCES, INC. TO SERVE AS THE GEOTECHNICAL CONSULTANT TO THE MASTER DEVELOPMENT REVIEW TEAM

WHEREAS, in 2010, the City Council approved Master Planned Development permits for the Villages and Lawson Hills MPDs; and

WHEREAS, in 2011 the City Council approved Development Agreements for The Villages and Lawson Hills MPDs; and

WHEREAS, as part of its consideration and approval of the Development Agreements, the City also entered into a new Funding Agreement with BD Village Partners and BD Lawson Partners; and

WHEREAS, the Funding Agreement call for the establishment of a Master Development Review Team (MDRT), to consist of City Staff and outside consultants; and

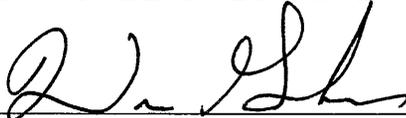
WHEREAS, the City does not have on sufficient staff resources to provide Geotechnical Services to meet the needs of the MDRT;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF BLACK DIAMOND, WASHINGTON, DOES RESOLVE AS FOLLOWS:

Section 1. The Mayor is hereby authorized to execute a 2 year contract with HWA Geosciences, Inc. to provide Geotechnical Services for the MDRT, substantially in the form attached hereto as Exhibit A.

PASSED BY THE CITY COUNCIL OF THE CITY OF BLACK DIAMOND, WASHINGTON, AT A REGULAR MEETING THEREOF, THIS 18TH DAY OF SEPTEMBER, 2014.

CITY OF BLACK DIAMOND:



Dave Gordon, Mayor

Attest:


Brenda L. Martinez, City Clerk

**CONSULTANT SERVICES CONTRACT
FOR GEOTECHNICAL ENGINEERING SERVICES
BETWEEN THE CITY OF BLACK DIAMOND AND
HWA GEOSCIENCES INC.**

THIS AGREEMENT is made by and between the City of Black Diamond, a Washington municipal corporation (hereinafter the "City"), and **HWA GEOSCIENCES Inc.**, (hereinafter the "Consultant,") a corporation organized under the laws of the State of Washington located and doing business at 21312 30th Drive SE, Suite 110, Bothell, WA 98021.

RECITALS

WHEREAS, the City does not have on sufficient staff resources to provide Geotechnical Engineering services to meet the needs of the MDRT; and

WHEREAS, the City has funding available from YarrowBay and an approved budget to fund the oversight, engineering review, inspections, development agreement enforcement and assisting the City with the regulatory role; and

WHEREAS, the Consultant has agreed to provide the services described in Exhibit A (scope of work) under the terms and conditions set forth herein;

NOW, THEREFORE, in consideration of the mutual promises set forth herein, it is agreed by and between the parties as follows:

TERMS

I. Description of Work.

The Consultant shall be prepared to assist the City with all of the work described in Exhibit A (General Scope of Work), which is attached hereto and incorporated herein by this reference. The geotechnical engineering services to be provided to the City by the Consultant shall be identified in on-call task requests for each project task for which the City requires Consultant services. No work shall be commenced by Consultant under this Agreement except pursuant to such an on call task request issued by the City in the form attached as Exhibit B, which is incorporated herein by this reference. Consultant shall perform the services described in the on-call task request in accordance with the schedule and scope of work set forth in the on-call task request (Exhibit B).

II. Payment

A. The City shall pay the Consultant an amount based on time and materials, not to exceed One Hundred Thousand Dollars (\$100,000.00) for the services described in Section I herein. This is the maximum amount to be paid under this Agreement for the work described in Exhibit A, and shall not be exceeded without the prior written authorization of the City in the form of a negotiated and executed supplemental agreement. PROVIDED, HOWEVER, the City reserves the right to direct the Consultant's compensated services under the time frame set forth in Section IV herein before reaching the maximum amount. The progress billings for the work completed shall be compensated according to the rates and charges identified in Exhibit C, which is incorporated herein by this reference.

B. The Consultant shall submit monthly invoices to the City after such services have been performed, and a final bill upon completion of all the services described in this Agreement. The City shall pay the full amount of an invoice within sixty (60) days of receipt. If the City objects to all or any portion of any invoice, it shall so notify the Consultant of the same within fifteen (15) days from the date of receipt and shall pay that portion of the invoice not in dispute, and the parties shall immediately make every effort to settle the disputed portion.

III. Relationship of Parties

The parties intend that an independent contractor-client relationship will be created by this Agreement. As the Consultant is customarily engaged in an independently established trade which encompasses the specific service provided to the City hereunder, no agent, employee, representative or sub-consultant of the Consultant shall be or shall be deemed to be the employee, agent, representative or sub-consultant of the City. In the performance of the work, the Consultant is an independent contractor with the ability to control and direct the performance and details of the work, the City being interested only in the results obtained under this Agreement. None of the benefits provided by the City to its employees including, but not limited to, compensation, insurance, and unemployment insurance are available from the City to the employees, agents, representatives, or sub-consultants of the Consultant. The Consultant will be solely and entirely responsible for its acts and for the acts of its agents, employees, representatives and sub-consultants during the performance of this Agreement. The City may, during the term of this Agreement, engage other independent contractors to perform the same or similar work that the Consultant performs hereunder.

IV. Duration of Work

The Consultant shall perform the work according to the City's direction, as described in Section I of this Agreement. This Agreement shall be in effect for a period of two (2) years from the effective date, which is the date this Agreement is signed by both parties.

V. Termination

A. Termination of Agreement. The City may terminate this Agreement, for public convenience, the Consultant's default, the Consultant's insolvency or bankruptcy, or the Consultant's assignment for the benefit of creditors, at any time prior to completion of the work described in Exhibit A. If delivered to Consultant in person, termination shall be effective immediately upon the Consultant's receipt of the City's written notice or such date stated in the City's notice, whichever is later.

B. Rights Upon Termination. In the event of termination, the City shall pay for all services satisfactorily performed by the Consultant to the effective date of termination, as described on a final invoice submitted to the City. Said amount shall not exceed the amount in Section II above. After termination, the City may take possession of all records and data within the Consultant's possession pertaining to this Agreement, which records and data may be used by the City without restriction. Upon termination, the City may take over the work and prosecute the same to completion, by contract or otherwise.

VI. Discrimination

In the hiring of employees for the performance of work under this Agreement or any sub-contract hereunder, the Consultant, its Subcontractors, or any person acting on behalf of such Consultant or sub-consultant shall not by reason of race, religion, color, sex, national origin, or the presence of any sensory, mental, or physical disability, discriminate against any person who is qualified and available to perform the work to which the employment relates.

VII. Indemnification

The Consultant shall defend, indemnify and hold the City, its officers, officials, employees, agents and volunteers harmless from any and all claims, injuries, damages, losses or suits, including all legal Costs and attorneys' fees, arising out of or in connection with the performance of this Agreement, except for injuries and damages caused by the sole negligence of the City. The City's inspection or acceptance of any of the Consultant's work when completed shall not be grounds to avoid any of these covenants of indemnification.

Should a court of competent jurisdiction determine that this Agreement is Subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Consultant and the City, its officers, officials, employees, agents and Volunteers, the Consultant's liability hereunder shall be only to the extent of the Consultant's negligence.

IT IS FURTHER SPECIFICALLY AND EXPRESSLY UNDERSTOOD THAT THE INDEMNIFICATION PROVIDED HEREIN CONSTITUTES THE CONSULTANT'S WAIVER OF IMMUNITY UNDER INDUSTRIAL INSURANCE, TITLE 51 RCW, SOLELY FOR THE PURPOSES OF THIS INDEMNIFICATION. THE PARTIES FURTHER

ACKNOWLEDGE THAT THEY HAVE MUTUALLY NEGOTIATED THIS WAIVER. THE CONSULTANT'S WAIVER OF IMMUNITY UNDER THE PROVISIONS OF THIS SECTION DOES NOT INCLUDE, OR EXTEND TO. ANY CLAIMS BY THE CONSULTANT'S EMPLOYEES DIRECTLY AGAINST THE CONSULTANT.

The provisions of this section shall survive the expiration or termination of this Agreement.

VIII. Insurance

A. The Consultant shall procure and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the Consultant's own work including the work of the Consultant's agents, representatives, employees, sub-consultants or sub-contractors.

B. Before beginning work on the project described in this Agreement, the Consultant shall provide evidence, in the form of a Certificate of Insurance, of the following insurance coverage and limits (at a minimum):

1. Business auto coverage for any auto no less than a \$1,000,000 each accident limit, and

2. Commercial General Liability insurance no less than \$1,000,000 per occurrence with a \$2,000,000 aggregate. Coverage shall include, but is not limited to, contractual liability, products and completed operations, property damage, and employers liability, and

3. Professional Liability insurance with no less than \$1,000,000. All policies and coverage's shall be on a claims made basis.

C. The Consultant is responsible for the payment of any deductible or self insured retention that is required by any of the Consultant's insurance. If the City is required to contribute to the deductible under any of the Consultant's insurance policies, the Contractor shall reimburse the City the full amount of the deductible within 10 working days of the City's deductible payment.

D. The City of Black Diamond shall be named as an additional insured on the Consultant's commercial general liability policy. This additional insured endorsement shall be included with evidence of insurance in the form of a Certificate of Insurance for coverage necessary in Section B. The City reserves the right to receive a certified and complete copy of all of the Consultant's insurance policies.

E. Under this agreement, the Consultant's insurance shall be considered primary in the event of a loss, damage or suit. The City's own comprehensive general liability policy will be considered excess coverage with respect to defense and indemnity of the City only and no other party. Additionally, the Consultant's commercial general liability policy must provide cross-liability coverage as could be achieved under a standard ISO separation of insured's clause.

F. The Consultant shall request from his insurer a modification of the ACORD certificate to include language that prior written notification will be given to the City of Black Diamond at least 30 days in advance of any cancellation, suspension or material change in the Consultant's coverage.

IX. Exchange of Information

The City warrants the accuracy of any information supplied by it to the Consultant for the purpose of completion of the work under this Agreement. The parties agree that the Consultant will notify the City of any inaccuracies in the information provided by the City as may be discovered in the process of performing the work, and that the City is entitled to rely upon any information supplied by the Consultant which results as a product of this Agreement.

X. Ownership and Use of Records and Documents

Original documents, drawings, designs and reports developed under this Agreement shall belong to and become the property of the City. All written information submitted by the City to the Consultant in connection with the services performed by the Consultant under this Agreement will be safeguarded by the Consultant to at least the same extent as the Consultant safeguards like information relating to its own business. If such information is publicly available or is already in Consultant's possession or known to it, or is rightfully obtained by the Consultant from third parties, the Consultant shall bear no responsibility for its disclosure, inadvertent or otherwise.

XI. City's Right of Inspection

Even though the Consultant is an independent contractor with the authority to control and direct the performance, and details of the work authorized under this Agreement, the work must meet the approval of the City and shall be subject to the City's general right of inspection to secure the satisfactory completion thereof. The Consultant agrees to comply with all federal, state, and municipal laws, rules, and regulations that are now effective or become applicable within the terms of this Agreement to the Consultant's business, equipment, and personnel engaged in operations covered by this Agreement or accruing out of the performance of such operations.

XII. Consultant to Maintain Records to Support Independent Contractor Status

On the effective date of this Agreement (or shortly thereafter), the Consultant shall comply with all federal and state laws applicable to Independent contractors including, but not limited to the maintenance of a separate set of books and records that reflect all items of income and expenses of the Consultant's business, pursuant to the Revised Code of Washington (RCW) Section 51.08.195, as required to show that the services performed by the Consultant under this Agreement shall not give rise to an employer-employee relationship between the parties which is subject to RCW Title 51, Industrial Insurance.

XIII. Work Performed at the Consultant's Risk

The Consultant shall take all precautions necessary and shall be responsible for the safety of its employees, agents, and sub-consultants in the performance of the work hereunder and shall utilize all protection necessary for that purpose. All work shall be done at the Consultant's own risk, and the Consultant shall be responsible for any loss of or damage to materials, tools, or other articles used or held by the Consultant for use In connection with the work.

XIV. Non-Waiver of Breach

The failure of the City to insist upon strict performance of any of the covenants and agreements contained herein, or to exercise any option herein conferred in one or more instances, shall not be construed to be a waiver or relinquishment of said covenants, agreements, or options and the same shall be and remain in full force and effect.

XV. Resolution of Disputes and Governing Law

Should any dispute, misunderstanding, or conflict arise as to the terms and conditions contained in this Agreement, the matter shall first be referred to the City of Black Diamond shall determine the term or provision's true intent or meaning. The City of Black Diamond shall also decide all questions which may arise between the parties relative to the actual services provided or to the sufficiency of the performance hereunder.

If any dispute arises between the City and the Consultant under any of the provisions of this Agreement which cannot be resolved by the Mayor or Administrator's determination in a reasonable time, or if the Consultant does not agree with the City's decision on the disputed matter, jurisdiction of any resulting litigation shall be filed in King County Superior Court, King County, Washington. This Agreement shall be governed by and construed in accordance with the laws of the State of Washington. The non-prevailing party in any action brought to enforce this Agreement shall pay the other parties' expenses and reasonable attorney's fees.

XVI. Written Notice

All communications regarding this Agreement shall be sent to the parties at the addresses listed on the signature page of the agreement, unless notified to the contrary. Unless otherwise specified, any written notice hereunder shall become effective upon the date of mailing by registered or certified mail, and shall be deemed sufficiently given if sent to the addressee at the address stated below:

CONSULTANT:

Attn: Arnie Sugar, L.G., L.H.G.
HWA Geosciences Inc.
21312 30th Drive SE, Suite 110

CITY:

Attn: Andrew Williamson
City of Black Diamond
P.O. Box 599

Bothell, WA 98021

24301 Roberts Drive
Black Diamond, WA 98010

With a copy to the "City Clerk" at the same address.

XVII. Assignment

Any assignment of this Agreement by the Consultant without the written consent of the City shall be void. If the City shall give its consent to any assignment, this paragraph shall continue in full force and effect and no further assignment shall be made without the City's consent.

XVIII. Modification and Severability

No waiver, alteration, or modification of any of the provisions of this Agreement shall be binding unless in writing and signed by a duly authorized representative of the City and the Consultant.

The provisions of this Agreement are declared to be severable. If any provision of this Agreement is for any reasons held to be invalid or unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity or constitutionality of any other provision.

XIX. Entire Agreement

The written provisions and terms of this Agreement, together with Exhibit A, B and C attached hereto, shall supersede all prior verbal statements of any officer or other representative of the City, and such statements shall not be effective or be construed as entering into or forming a part of or altering in any manner whatsoever, this Agreement or the Agreement documents. The entire agreement between the parties with respect to the subject matter hereunder is contained in this Agreement and any Exhibits attached hereto, which may or may not have been executed prior to the execution of this Agreement. All of the above documents are hereby made a part of this Agreement and form the Agreement document as fully as if the same were set forth herein. Should any language in Exhibits, A, B and C to this Agreement conflict with any language contained in this Agreement, then this Agreement shall prevail.

IN WITNESS WHEREOF, the parties have executed this Agreement on this 26 day of SEPT, 2014.

CONSULTANT

By: 
Arnie Sugar
Its: President

CITY OF BLACK DIAMOND

By: 
Dave Gordon, Mayor

Consultant: HWA Geosciences

APPROVED AS TO FORM:



Carol A. Morris
City Attorney's Office

ATTEST:



Brenda Martinez
City Clerk

EXHIBIT A

SCOPE OF WORK CITY OF BLACK DIAMOND GEOTECHNICAL ENGINEERING SERVICES MASTER DEVELOPMENT REVIEW TEAM

The work to be performed by HWA GeoSciences Inc. may consist of some or all of the following types of tasks, as directed by the City:

MDRT

- Participation in preliminary design meetings and other activities as a member of the Master Development Review Team (MDRT)
- Review of and preparation of written comments on submitted engineering drawings for compliance with City codes and standards and any applicable provisions of the approved MPDs.
- Coordination with other consulting professionals and staff of the MDRT
- On-site inspection during construction of individual engineering projects

COMMUNITY DEVELOPMENT

- Evaluating coal mine hazards and related studies in evaluating the levels of mine hazards throughout the City of Black Diamond in accordance with Black Diamond Municipal Code 19.10.430-450.
- Evaluating sites and soils and preparing studies for potential contamination and remediation if appropriate.

Exhibit C

HWA GEOSCIENCES INC.

2014 BILLING RATES
(Effective 01/01/2014)

EMPLOYEE	TITLE	BILLING RATE
Sa Hong	Principal IX	\$240.00 *
Ralph Boirum	Principal IX	\$240.00 *
Arnie Sugar	Principal VIII	\$240.00 *
Steve Greene	Geologist VII	\$190.00
Bryan Hawkins	Geotechnical Engineer VI	\$160.00
Donald Huling	Geotechnical Engineer IV	\$150.00
JoLyn Gillie	Geotechnical Engineer IV	\$133.00
Norm Nielsen	Hydrogeologist IV	\$170.00
Cliff Nale	Geologist III	\$119.00
Brad Thurber	Geologist V	\$110.00
Vasily Babko	Controller	\$100.00
Desiree Rosa	Marketing coordinator	\$90.00
Tori Hesedahl	Geotechnical Engineer I	\$82.00
Sandybell Ramos	Geotechnical Engineer I	\$82.00
Daniel Coltrane	Geologist I	\$82.00
Brett Salazar	Geologist I	\$82.00
Kimberly Stilson	Geologist I	\$78.00
Tink Kinney	CAD	\$75.00
Christiana Fisk	Administrative Support	\$71.00
Jessica Herrera	Lab/Field Technician II	\$90.00
Scott Johnson	Lab/Field Technician II	\$80.00
Daniel Walton	Lab/Field Technician I	\$60.00
Jacob Thurber	Lab/Field Technician I	\$50.00
Adam Chidester	Lab/Field Technician I	\$50.00

Notes: * Represents Capped Billing Rate



HWA GEOSCIENCES INC.

www.hwageo.com

STANDARD SCHEDULE OF FEES AND CHARGES

All prices are effective January 1, 2014 and are subject to change without notice.

HWA GeoSciences Inc. holds accreditations from the American Association of State Highway and Transportation Officials (AASHTO R-18), American Association for Laboratory Accreditation (A2LA) and validation from the U.S. Army Corps of Engineers (USACE). We participate in the sample proficiency program from AMRL for soil classification, coarse and fine aggregates, Hot Mix Asphalt, California Bearing Ratio, and compaction; and CCRL for concrete.

PROFESSIONAL SERVICES

Request Labor Rate Schedule

EXPENSES

All Outside Expenses (i.e., <i>airfare, subsistence, equipment rental, materials, reproduction, etc.</i>)	Cost plus 10%
Drilling & Chemical Laboratory Subcontractors	Cost plus 15%
Mileage (per mile)	Current IRS Rate
Tests Conducted on Contaminated Soils	Cost plus 20%
Project Sample Storage Beyond 30 Days from Final Report	
Per sample, per day	\$0.50
Rush Testing	Rate plus 100%

LABORATORY TESTS

Soil Laboratory Tests

All contaminated soils will be returned to client for disposal.

Atterberg Limits

Liquid Limit and Plastic Limit (ASTM D 4318)

One Point	\$110.00
Three Point	\$150.00

California Bearing Ratio (ASTM D 1883)

(Requires Moisture/Density Relationship Test)

One Point	\$175.00
Three Point	\$450.00

Consolidation Test Incremental Loading (ASTM D 2435)

9 Loads, 0.125 TSF to 32 TSF, 4 Unloads	\$575.00
Each Additional Load	\$50.00

Consolidation Test, Controlled Strain (ASTM D 4186).....\$650.00

Grainsize Analysis

Combined Analysis (ASTM D 422)	\$230.00
Hydrometer Analysis (ASTM D 422)	\$170.00
Passing #200 Sieve (ASTM D 1140)	\$55.00
PSEP Particle Size (Less than 4 Phi)	\$260.00
Sieve Analysis-Wet (ASTM D 422)	\$95.00

Moisture/Density Relationship

Proctor - Cohesive (ASTM D 698, D 1557)	\$225.00
Proctor - Granular (ASTM D 698, D 1557)	\$210.00

Moisture Content w/Description..... \$18.00

One-Dimensional Swell (ASTM D 4546)\$625.00

Organic Content Test (ASTM D 2974)..... \$65.00

Permeability Tests

Permeability of Granular Soils (ASTM D 2434)	\$250.00
Falling Head Test (WSDOT 605)	\$225.00
Triaxial with Back Pressure	
2 days (ASTM D 5084)	\$450.00
Each additional day	\$125.00
Triaxial with Back Pressure	
(6-in diameter) (ASTM D 5084)	\$500.00

LABORATORY TESTS (Continued)

Permeability Tests (Con't)

Estimate of Effective Porosity	\$545.00
Field Capacity (sand)	\$195.00
Sand Drainage Characteristic Curve	\$375.00
Relative Density (ASTM D 4253 / D 4254)	\$350.00
Shelby Tube Extrusion and Sample Description	\$40.00
Soil Resistivity & pH (WSDOT 417)	\$100.00
pH Only	\$35.00
Resistivity Only	\$65.00
Specific Gravity Test (ASTM D 854)	\$80.00

Strength Testing

Direct Shear Strength (per point) (ASTM D 3080)	\$160.00
Residual Shear (per point)	\$160.00
Triaxial (c-u) (ASTM D 4767)	\$550.00
with K0 Consolidation	\$750.00
Stress Path Tests	\$650.00
Triaxial (c-u) 3pts (ASTM D 4767)	\$1,200.00
Triaxial (u-u) (ASTM D 2850)	\$215.00
Unconfined Compressive Strength (ASTM D 2166)	\$110.00
Modulus and Dampening of Soils under	
Cyclic Loading (ASTM D 3999)	\$750.00
Resilient Modulus of Base/Subgrade	
(AASHTO T296)	\$500.00

Unit Weight

Cohesive Soil by Waxing (USCOE)	\$90.00
Percent of Solids Calculation	\$18.00
Porosity (includes specific gravity/unit weight)	\$100.00
Soil in Ring (ASTM D 2937)	\$38.00
Bulk Density of Solid Waste (ASTM E 1109)	\$40.00
Soil in Shelby Tube (ASTM D 2937)	\$45.00
Visual Soil Classification	\$16.00

Aggregate Quality Tests

Clay Lumps and Friable Particles (ASTM C 142)	\$90.00
Degradation Test (WSDOT 113)	\$225.00
Fracture Face Count (without sieve) (WSDOT 103)	\$40.00
Grain Size (ASTM C 136, C 117)	\$95.00
Los Angeles Abrasion (ASTM C 131, C 535)	\$195.00
Organic Impurities (ASTM C 40)	\$70.00
Percentage of Material Passing #200 Sieve (ASTM C 117)	\$55.00
Sand Equivalent (ASTM C 2419)	\$90.00
Soundness Using MgSO ₄ (ASTM C 88)	\$375.00
Specific Gravity Test	
Coarse Aggregate (ASTM C 127)	\$70.00
Fine Aggregate (minus #4 mesh) (ASTM C 128)	\$80.00
Unit Weight by Dry Rodding (ASTM C 29)	\$60.00
Uncompacted Voids Content of FA (ASTM C1252)	\$115.00

STANDARD SCHEDULE OF FEES AND CHARGES (Continued)**HWA** HWA GEOSCIENCES INC.

All prices are effective January 1, 2014 and are subject to change without notice.

Concrete and Masonry Tests

Compression Testing of Concrete Cores (includes trimming) (ASTM C 42, C 513)	\$90.00
Compression Testing of Concrete Cylinders (ASTM C 39)	\$25.00
Compression Testing of Grout and Mortar Specimens (per specimen) (UBC 21-18, 21-16)	\$18.00
Concrete Beam Flexural Strength Test (ASTM C 78)	\$90.00
Concrete Cylinder Molds	\$2.50
Concrete Cylinders Sampled and Cured (not tested).....	\$25.00
Concrete Mix Design (fixed gradation).....	\$2,000.00
Density Test	
Concrete Cylinders	\$35.00
Light Weight Concrete Cylinders	\$80.00
End Trimming of Samples (if needed).....	\$20.00
Splitting Tensile Strength Test (ASTM C 496).....	\$90.00
Shotcrete Panel (cut three cores & compression test)..	\$300.00

Geosynthetics Tests

Shear/Peel Strength Test (ASTM D 4437)	\$125.00
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Asphaltic Concrete Tests

Bitumen Content by Extraction	
Extraction only (ASTM D 6307)	\$90.00
with Gradation (ASTM D 5444, D 6307).....	\$150.00
Bulk Specific Gravity and Density - SSD Method (per specimen) (ASTM D 2726).....	\$45.00
Bulk Specific Gravity and Density - Wax Method (per specimen) (ASTM D 1188).....	\$70.00
Marshall Stability & Flow Determination (3 specimens) (ASTM D 6927)	\$500.00
Percent Air Voids in Compacted or Open Bituminous Mixtures (ASTM D 3203).....	\$150.00
Rice Density (WSDOT 705)	\$90.00
TSR	\$550.00

Rock Tests

Abrasion Resistance (ASTM C 535).....	\$200.00
Ethylene Glycol Accelerated Expansion	\$200.00
Riprap Soundness (ASTM D 5240)	\$300.00
Specific Gravity and Absorption (ASTM C 127).....	\$70.00
Splitting Tensile Strength of Rock Cores (10 Discs) (ASTM D 3967)	\$220.00

EQUIPMENT CHARGES

Labor will be charged in addition to equipment charges	
Air Filters for Development (per day)	\$50.00
BK Development Pump/Surge Block (per day)	\$20.00
Bolt Tension Calibrator (per day).....	\$50.00
Carbon Filter (per day)	\$50.00
Coating Thickness Gauges (per day)	\$25.00
Combustible Gas Tech Meter (GT 302 / 3220)	
Per day	\$100.00
Per week	\$300.00

Coring Equipment Charge	Request Schedule
Data Logger and Transducers	
Per day	\$150.00
Per week	\$500.00
Dissolved Oxygen Meter	
Per day	\$95.00
Per week	\$300.00
Falling Weight Deflectometer (Hourly Rental)	
0-8hrs	\$175.00
8-40hrs.....	\$100.00
40+hrs	\$50.00
Double Ring Infiltrometer.....	\$50.00
Flow Monitoring Set	
Per day	\$105.00
Per week	\$400.00
Geomembrane Tensiometer (per day)	\$100.00
Grundfos Redi Flow II Pump and Generator	
Per day	\$100.00
Per week	\$300.00
Landfill Gas Monitoring Equipment (GEM 500)	
Per day	\$95.00
Per week	\$300.00
Level and Stadia Set.....	\$25.00
Nuclear Density Gauge (per day)	\$30.00
Per month.....	\$300.00
Peristaltic Sampling Pump	
Per day	\$50.00
Per week	\$90.00
pH-Conductivity Temperature Meter	
Per day	\$40.00
Per week	\$100.00
Photoionization Detector (Mini Rae / HNU / Microtip)	
Per day	\$100.00
Per week	\$300.00
QED Bladder Pump Controller	
Per day	\$50.00
Per week	\$90.00
Safety Equipment	
Level D (solvex gloves, disposable suit).....	\$25.00
Level C2 (above plus respirator)	\$50.00
Level C1 (above plus chemical suit)	\$95.00
Level B (above plus SCBA).....	\$300.00
Sensidyne Monitoring Equipment (<i>does not include tubes</i>)	\$15.00
Sediment Coring or Soil Sampling Kit (<i>does not include shelby tubes</i>) (per day).....	\$50.00
Torque Wrench (per day)	\$25.00
Turbidity Meter (per day)	\$40.00
Turbidity Meter (per week).....	\$150.00
UT Thickness Gauge (per day)	\$50.00
Well Probe (per day).....	\$15.00
Well Probe (per week)	\$50.00

For additional information, please contact 425.774.0106.

Bryan Hawkins, PE, for Geotechnical Services (Ext 245, bhawkins@hwageo.com)

Arnie Sugar, LG, LHG, for GeoEnvironmental & Hydrogeology Services (Ext 227, asugar@hwageo.com)

Ashley Crane for Laboratory Services (Ext 261, acrane@hwageo.com)