

# TRI INDEPENDENT GEOTECHNICAL LABORATORY SERVICES

## Schedule of Fees and Services

*Please contact for project specific proposals*



**GTS**  
A TRI Environmental Company  
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The TRI Environmental Group operates world-class, independent, third-party, AASHTO - accredited geotechnical laboratory in Austin, Texas and in Coraopolis, Pennsylvania. TRI is unassociated with any manufacturing, engineering/consulting or construction company, thus establishing the independence of all staff and test results generated. TRI is non-competitive with our clients and assists them in achieving success.

Our laboratories boast one of the broadest ranges of soil, aggregate and rock strength testing capabilities in the world. Technical capability, custom service, safety, comprehensive reporting are just a few of the things our clients can count on to ensure project success

| TEXAS AND PENNSYLVANIA               | PENNSYLVANIA-SPECIFIC      | TEXAS-SPECIFIC                    |
|--------------------------------------|----------------------------|-----------------------------------|
| Shear strength                       | Corrosion / Analytical     | Leachate Permeation               |
| 1-D Consolidation / Swell / Collapse | Cement and Concrete        | Direct Simple Shear (DSS)         |
| Hydraulic Conductivity               | Aggregates / Gravel / Sand | Constant Rate of Strain (CRS)     |
| Classification & Compaction          | Fly Ash / Bottom Ash       | Large Diameter Triaxial Testing   |
| Large Scale Direct Shear             | Fire Resistive Materials   | Geosynthetic Pullout and Friction |
| Rock Mechanics                       | Steel & Blast Furnace Slag | Geosynthetic Filtration           |
| Thermal Properties                   |                            | Geosynthetic Puncture             |

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**Effective 07/01/2026**

**Expiration 12/31/2026**

This fee schedule is applicable only to clients who have completed credit applications, are on NET-30 terms, and have maintained good standing by keeping their accounts current. All information within this Fee Schedule, including fees, terms, and financial details, is CONFIDENTIAL. The Client agrees not to disclose this information to third parties and to use it solely for the purpose of the agreed-upon services. See Page 6 for Standard Operating Procedures, Sending Samples to the Laboratory, Contaminated Samples, and Standard Terms.

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| Shear strength – single specimen compression, 3/8-inch (-) |                                           |            | PA-Intact | PA-Remold | TX-Intact | TX-Remold | Bulk    | Length | Jar |
|------------------------------------------------------------|-------------------------------------------|------------|-----------|-----------|-----------|-----------|---------|--------|-----|
| 1.                                                         | Unconfined Compression                    | ASTM D2166 | \$114     | \$151     | \$85      | \$151     | 2.5-gal | 6-inch | 10  |
| 2.                                                         | Q-TYPE   Unconsolidated-Undrained (Total) | ASTM D2850 | \$142     | \$256     | \$114     | \$179     | 2.5-gal | 6-inch | 10  |

| SHEAR STRENGTH – TRIAXIAL SERIES – Three Stresses, 3/8-inch (-) |                                                                     |                            | PA-Intact | PA-Remold | TX-Intact | TX-Remold | Bulk   | Length  | Jar |
|-----------------------------------------------------------------|---------------------------------------------------------------------|----------------------------|-----------|-----------|-----------|-----------|--------|---------|-----|
| 1.                                                              | Q-TYPE   Unconsolidated-Undrained (Total Stress Envelope)           | ASTM D2850                 | \$427     | \$768     | \$340     | \$537     | 5-gal  | 24-inch | -   |
| 2.                                                              | R-Type   Consol. Undrained (Effective Stress Envelope)              | ASTM D4767                 | \$1,363   | \$1,532   | \$1,136   | \$1,342   | 5-gal  | 24-inch | -   |
| 3.                                                              | R-Type   Anisotropic Consol. Undrained (K or Ko)                    | ASTM D4767                 | -         | -         | \$1,872   | \$2,069   | 5-gal  | 24-inch | -   |
| 4.                                                              | TX Only – Multi-Stage CU                                            | ASTM D4767<br>-Modified    | -         | -         | \$1,420   | \$1,616   | -      | 8-inch  | -   |
| 5.                                                              | TX Only – Extension Testing                                         | ASTM D4767<br>-Modified    | -         | -         | QT        | QT        | 5-gal  | 24-inch | -   |
| 6.                                                              | S-Type   Consol. Drained (Effective Stress Envelope)                | ASTM D7181                 | -         | -         | QT        | QT        | 5-gal  | 24-inch | -   |
| 7.                                                              | S-Type   Anisotropic Consol. Drained (Effective Stress Envelope)    | ASTM D7181                 | -         | -         | QT        | QT        | 5-gal  | 24-inch | -   |
| 8.                                                              | PA Only – California Bearing Ratio – 1 Point (Specify placement)    | ASTM D1883                 | -         | \$216     | -         | -         | 5-gal  | -       | -   |
| 9.                                                              | PA Only – California Bearing Ratio – 3 Point (56, 25, and 10 blows) | ASTM D1883                 | -         | \$649     | -         | -         | 10-gal | -       | -   |
| 10.                                                             | PA Only – California Bearing Ratio 1 Point (Cement Amended)         | ASTM D1883                 | -         | \$270     | -         | -         | 5-gal  | -       | -   |
| 11.                                                             | TX Only – Large Scale Triaxial Testing (1-inch minus, 6-inch Diam.) | ASTM D2850<br>/D4767-D7181 | -         | -         | QT        | QT        | 15-gal | -       | -   |

| SHEAR STRENGTH – DIRECT SHEAR (Three Stresses) |                                                         |                                | Intact  | Remold  | Test notes                        | Bulk    | Length | Jar |
|------------------------------------------------|---------------------------------------------------------|--------------------------------|---------|---------|-----------------------------------|---------|--------|-----|
| 1.                                             | Direct Shear                                            | ASTM D3080                     | \$484   | \$512   | Split-spoon at \$657              | 2.5-gal | 6-inch | 10  |
| 2.                                             | TX Only – Direct Shear in Support of Interface Friction | ASTM D3080                     | -       | \$512   | With ASTM D5321/<br>D6243 testing | 10-gal  | -      | -   |
| 3.                                             | PA-Only – AASHTO Direct Shear (Residual Strength)       | AASHTO T236                    | \$540   | \$568   | Split-spoon at \$711              | 2.5-gal | 6-inch | 10  |
| 4.                                             | PA Only – Repeated Direct Shear (Residual Strength)     | ACOE IXA                       | \$1,818 | \$1,903 | 2.5-inch Diameter                 | 2.5-gal | 8-inch | 13  |
| 5.                                             | PA Only – Repeated Direct Shear (Residual Strength)     | ACOE IXA<br>(ASTM Shear Speed) | \$1,250 | \$1,335 | 2.5-inch Diameter                 | 2.5-gal | 8-inch | 13  |
| 6.                                             | Large-Scale Direct Shear of Freely Draining Aggregate   | ASTM D3080                     | -       | \$1,136 | 1-inch minus, 0.04 ipm            | 15-gal  | -      | -   |
| 7.                                             | Large-Scale Direct Shear of Cohesive/Fine Agg.          | ASTM D3080                     | -       | QT      | Displacement<br>Rate Varies       | 15-gal  | -      | -   |
| 8.                                             | TX Only – Direct Simple Shear                           | ASTM D6528                     | QT      | QT      | 2.0-inch Diameter                 | 2.5-gal | 6-inch | 10  |

| SOIL 1-D CONSOLIDATION / SWELL / COLLAPSE |                                                          |               | Intact  | Remold  | Test notes                              | Bulk   | Length | Jar |
|-------------------------------------------|----------------------------------------------------------|---------------|---------|---------|-----------------------------------------|--------|--------|-----|
| 1.                                        | Consolidation – 24-hr Advancement                        | ASTM D2435-A  | \$1,022 | \$1,194 | 24-hr Advancement                       | 1-gal  | 4-inch | -   |
| 2.                                        | Consolidation – 100% Primary                             | ASTM D2435-B  | \$512   | \$683   | 100% Primary                            | 1-gal  | 4-inch | -   |
| 3.                                        | TX Only – Consolidation in Support of Interface Friction | ASTM D2435-B  | -       | \$673   | with ASTM D5321/<br>D6243 testing       | 10-gal | -      | -   |
| 4.                                        | One-Dimensional Swell or Collapse – 4 points (Remolded)  | ASTM D4546-A  | -       | \$1,136 | Wetting-after<br>-Loading Tests         | 5-gal  | 5-inch | -   |
| 5.                                        | One-Dimensional Swell or Collapse – 1 point              | ASTM D4546-B  | \$257   | -       | Single-Point Wet-<br>ting-after-Loading | 1-gal  | 4-inch | -   |
| 6.                                        | One-Dimensional Swell or Collapse – 1 point with D2435   | ASTM D4546-C  | \$568   | -       | Loading-af-<br>ter-Wetting Test         | 1-gal  | 4-inch | -   |
| 7.                                        | TX-Only – CRS Loading 1-D                                | ASTM D4186    | \$919   | \$988   | Requires D6913-D4318<br>Testing         | 1-gal  | 4-inch | -   |
| 8.                                        | PA Only – Consolidation (24hr)                           | AASHTO T216-A | \$1,076 | \$1,248 | 24-hr Advancement                       | 1-gal  | 4-inch | -   |
| 9.                                        | PA Only – Consolidationd (100% Primary)                  | AASHTO T216-B | \$566   | \$737   | 100% Primary                            | 1-gal  | 4-inch | -   |

| SOIL HYDRAULIC CONDUCTIVITY (PERMEABILITY) |                                                              |            | Pa-Intact | Pa-Remold | Tx-Intact | Tx-Remold | Bulk    | Length | Jar |
|--------------------------------------------|--------------------------------------------------------------|------------|-----------|-----------|-----------|-----------|---------|--------|-----|
| 1.                                         | Flex Wall Hydraulic Conductivity (2.8-Inch Diameter)         | ASTM D5084 | \$341     | \$398     | \$274     | \$339     | 1-gal   | 6-inch | -   |
| 2.                                         | Rigid Wall Hydraulic Conductivity (3-inch & 6-inch Diameter) | ASTM D2434 | -         | \$285     | -         | \$218     | 1&5-gal | -      | -   |
| 3.                                         | TX Only – Large Diameter Flex Wall Hydraulic Conductivity    | ASTM D5084 | -         | -         | -         | QT        | 5-gal   | -      | -   |
| 4.                                         | TX Only – Large Diameter Rigid Wall Hydraulic Conductivity:  | ASTM D2434 | -         | -         | -         | QT        | 15-gal  | -      | -   |

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| SOIL CLASSIFICATION – ASTM |                                                   |                      | PA    | TX    | Test Notes                        | Bulk    | Length | Jar |
|----------------------------|---------------------------------------------------|----------------------|-------|-------|-----------------------------------|---------|--------|-----|
| 1.                         | Water Content                                     | ASTM D2216           | \$25  | \$31  | 110 ± 5°C                         | 1-qt    | 1-inch | 1   |
| 2.                         | Atterberg Limits (Liquid & Plastic)               | ASTM D4318           | \$86  | \$107 | 3-Point Liquid Limit              | 1-qt    | 2-inch | 1   |
| 3.                         | Sieve Analysis                                    | ASTM D6913           | \$81  | \$100 | ASTM D1140 Wash Included          | 1-qt    | 2-inch | 1   |
| 4.                         | PA Only – Sieve Analysis – Historical             | ASTM D422-63         | \$81  | –     | ASTM D1140 Wash Included          | 1-qt    | 2-inch | 1   |
| 5.                         | % Passing #200 Sieve Only                         | ASTM D1140           | \$56  | \$70  | Included with ASTM D6913          | 1-qt    | 2-inch | 1   |
| 6.                         | Hydrometer                                        | ASTM D7928           | \$86  | \$107 | Minus #200 Particle Analysis      | 1-qt    | 2-inch | 1   |
| 7.                         | Particle Size Analysis                            | Sieve and Hydrometer | \$166 | \$205 | ASTM D6913 & D7928                | 1/2-gal | 4-inch | 2   |
| 8.                         | USCS Classification                               | Sieve and Atterberg  | \$166 | \$205 | Sieve and Atterberg Limit         | 1/2-gal | 4-inch | 2   |
| 9.                         | Specific Gravity                                  | ASTM D854            | \$93  | \$115 | For Phase Relationships           | 1-qt    | 2-inch | 1   |
| 10.                        | Loss On Ignition                                  | ASTM D2974-A         | \$68  | \$85  | 440 ± 10°C (ASTM Method A)        | 1-qt    | 2-inch | 1   |
| 11.                        | PA Only – Water Displacement Method (Wax Density) | ASTM D7263-A         | \$93  | –     | Clod must be intact               | –       | –      | 1   |
| 12.                        | Lab Determination of Density (Unit Weight)        | ASTM D7263-B         | \$68  | \$85  | +D854 for void ratio and porosity | –       | –      | 1   |
| 13.                        | TX Only – Rapid Carbonate Content                 | ASTM D4373           | –     | \$172 | Percent Calcite Equivalent        | 1-qt    | 2-inch | 1   |

| SOIL CLASSIFICATION – AASHTO |                                  |                  | PA    | TX | Test Notes                 | Bulk    | Length | Jar |
|------------------------------|----------------------------------|------------------|-------|----|----------------------------|---------|--------|-----|
| 1.                           | PA Only – Water Content          | AASHTO T265      | \$25  | –  | 110 ± 5°C                  | 1-qt    | 1-inch | 1   |
| 2.                           | PA Only – Atterberg Limits       | AASHTO T89 & T90 | \$86  | –  | Liquid & Plastic           | 1-qt    | 2-inch | 1   |
| 3.                           | PA Only – Particle Size Analysis | AASHTO T88       | \$166 | –  | Sieve and Hydrometer       | 1/2-gal | 4-inch | 2   |
| 4.                           | PA Only – Specific Gravity       | AASHTO T100      | \$93  | –  | For Phase Relationships    | 1-qt    | 2-inch | 1   |
| 5.                           | PA Only – Loss On Ignition       | AASHTO T267      | \$68  | –  | 440 ± 10°C (ASTM Method A) | 1-qt    | 2-inch | 1   |

| SOIL CLASSIFICATION – USDA |                     |      | PA    | TX | Test Notes           | Bulk    | Length | Jar |
|----------------------------|---------------------|------|-------|----|----------------------|---------|--------|-----|
| 1.                         | USDA Classification | USDA | \$154 |    | Sieve and Hydrometer | 1/2-gal | 4-inch | 2   |

| SOIL COMPACTION / MOISTURE-DENSITY |                                               |                         | PA    | TX    | Test Notes                    | Bulk   | Length | Jar |
|------------------------------------|-----------------------------------------------|-------------------------|-------|-------|-------------------------------|--------|--------|-----|
| 1.                                 | Standard Proctor                              | ASTM D698               | \$193 | \$297 | PA Only – 1 Point : \$60      | 5-gal  | –      | –   |
| 2.                                 | Modified Proctor                              | ASTM D1557              | \$225 | \$313 | PA Only – 1 Point : \$70      | 5-gal  | –      | –   |
| 3.                                 | PA Only – Oversize Rock Correction            | ASTM D4718              | \$72  | –     | Bulk Density and Absorption   | –      | –      | –   |
| 4.                                 | PA Only – PADOT Proctor                       | PTM 106                 | \$193 | –     | Oversize Material Replacement | 10-gal | –      | –   |
| 5.                                 | PA Only – Cement Amended Proctor (Std or Mod) | ASTM D558 / AASHTO T134 | \$256 | –     | Prescribed Percent by Mass    | 15-gal | –      | –   |
| 6.                                 | PA Only – Lime Amended Proctor (Std or Mod)   | Industry Practice       | \$320 | –     | Prescribed Percent by Mass    | 15-gal | –      | –   |
| 7.                                 | TX Only – Relative Density                    | ASTM D4254 / ASTM D4253 | –     | \$398 | Minimum & Maximum             | 10-gal | –      | –   |

| ROCK MECHANICS |                                                 |                   | PA    | TX    | Test Notes                                | Bulk | Length | Jar |
|----------------|-------------------------------------------------|-------------------|-------|-------|-------------------------------------------|------|--------|-----|
| 1.             | Mohs Hardness of Rock                           | Industry Practice | \$54  |       | Resistance to Scratching                  | -    | 4-inch | -   |
| 2.             | Point Load - Per Point                          | ASTM D5731        | \$60  |       | Index for strength classification.        | -    | 4-inch | -   |
| 3.             | Point Load - 10 Points                          | ASTM D5731        | \$352 |       |                                           | -    | 4-ft   | -   |
| 4.             | Rebound Hammer                                  | ASTM D5873        | \$172 |       | Also Termed Brazilian or Indirect Tensile | -    | 4-inch | -   |
| 5.             | Splitting Tensile - Per Point                   | ASTM D3967        | \$60  |       |                                           | -    | 4-inch | -   |
| 6.             | Splitting Tensile - 10 Points                   | ASTM D3967        | \$352 |       |                                           | -    | 4-ft   | -   |
| 7.             | Unconfined Compressive Strength (UCS), NQ, NX   | ASTM D7012 "C"    | \$137 |       | See ASTM D2166 for Soil                   | -    | 8-inch | -   |
| 8.             | Modulus of Elasticity, NQ, NX                   | ASTM D7012 "D"    | \$285 |       | Axial Strain                              | -    | 8-inch | -   |
| 9.             | Modulus of Elasticity & Poisson's Ratio, NQ, NX | ASTM D7012 "D"    | \$426 |       | Axial and Radial Strain                   | -    | 8-inch | -   |
| 10.            | Slake Durability                                | ASTM D4644        | \$228 |       | Qualitative Durability Index              | -    | 1.5-ft | -   |
| 11.            | TX Only - Cherchar Abrasivity Index (CAI)       | ASTM D7625        | -     | \$228 | Saw Cut, Specify if Natural               | -    | 4-inch | -   |
| 12.            | TX Only - Punch Penetration (QT for variation)  | TRI Punch         | -     | \$398 | Spherical and Conical                     | -    | 8-inch | -   |

| THERMAL RESISTIVITY |                                     |            | PA | TX    | Test Notes          | Bulk  | Length | Jar |
|---------------------|-------------------------------------|------------|----|-------|---------------------|-------|--------|-----|
| 1.                  | Single Point Test                   | ASTM D5334 | –  | \$114 | Specify Condition   | 1-gal | 6-inch | –   |
| 2.                  | Multi-Point Test with Dry Out Curve | ASTM D5334 | –  | \$654 | Initial to Oven Dry | 1-gal | 6-inch | –   |

| DISPERSIVE CLAY SOIL TESTING (DISPERSION) |                             |            | PA | TX    | Test Notes | Bulk  | Length | Jar |
|-------------------------------------------|-----------------------------|------------|----|-------|------------|-------|--------|-----|
| 1.                                        | TX-Only – Double Hydrometer | ASTM D4221 | –  | \$285 |            | 1-gal | 6-inch | –   |
| 2.                                        | TX-Only – Pinhole           | ASTM D4647 | –  | \$352 |            | 1-gal | 6-inch | –   |
| 3.                                        | TX-Only – Crumb Test        | ASTM D6572 | –  | \$47  |            | 1-gal | 6-inch | –   |

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| SOIL CORROSION / ANALYTICAL – PA Only |                                     |                                | PA    | Test Notes                        | Bulk                                                                                                                                                                                                                                                                                                                                                        | Length | Jar |
|---------------------------------------|-------------------------------------|--------------------------------|-------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|
| 1.                                    | Resistivity                         | ASTM G187 / AASHTO T288        | \$182 | Two Electrode                     | For corrosion analysis, a 1-gallon bag of soil (approximately 2,000 grams) is generally sufficient for testing. However, the adequacy of the sample depends on the specific test requested and the composition of the soil.<br><br>For additional information, please reach out to our analytical laboratory, GTS, located in Pennsylvania - 1-800-853-7309 |        |     |
| 2.                                    | Resistivity                         | ASTM G57                       | \$86  | Four Electrode                    |                                                                                                                                                                                                                                                                                                                                                             |        |     |
| 3.                                    | pH                                  | G51 / ASTM D4972 / AASHTO T289 | \$18  | Acidity or Alkalinity             |                                                                                                                                                                                                                                                                                                                                                             |        |     |
| 4.                                    | Chloride                            | AASHTO T291                    | \$63  | Water-Soluble                     |                                                                                                                                                                                                                                                                                                                                                             |        |     |
| 5.                                    | Sulfate                             | ASTM C1580                     | \$211 | Water-Soluble                     |                                                                                                                                                                                                                                                                                                                                                             |        |     |
| 6.                                    | Sulfate                             | AASHTO T290                    | \$63  | Water-Soluble                     |                                                                                                                                                                                                                                                                                                                                                             |        |     |
| 7.                                    | Sulfide                             | AWWA 4500, A.4C                | \$63  | Qualitative                       |                                                                                                                                                                                                                                                                                                                                                             |        |     |
| 8.                                    | Oxidation-Reduction Potential (ORP) | ASTM G200                      | \$63  | Often w/pH and elect. resistivity |                                                                                                                                                                                                                                                                                                                                                             |        |     |
| 9.                                    | Total Sulfur                        | ASTM D4239                     | \$92  | Coal or Coke                      |                                                                                                                                                                                                                                                                                                                                                             |        |     |
| 10.                                   | Pyrite (Forms of Sulfur)            | ASTM D2492                     | \$114 | Pyritic vs Sulfate                |                                                                                                                                                                                                                                                                                                                                                             |        |     |

| WATER CORROSION – PA Only |                            |            | PA    | Test Notes                                     |
|---------------------------|----------------------------|------------|-------|------------------------------------------------|
| 1.                        | Resistivity & Conductivity | ASTM D1125 | \$154 | Quantitative Measurement of Ionic Constituents |
| 2.                        | pH                         | ASTM D1293 | \$30  | Electrometric Measurement                      |
| 3.                        | Chloride                   | ASTM D512  | \$86  | Ion-Selective Electrode                        |
| 4.                        | Sulfate                    | ASTM D516  | \$86  | Turbidimetric                                  |

| FIRE RESISTIVE MATERIALS – PA Only |                                                          |           | PA    | Test Notes           |
|------------------------------------|----------------------------------------------------------|-----------|-------|----------------------|
| 1.                                 | Material Density ( <i>Specimens provided by Client</i> ) | ASTM E605 | \$110 | Laboratory Procedure |

| CEMENT PRODUCTS – PA Only |                                                     |                          | PA    | Test Notes                              |
|---------------------------|-----------------------------------------------------|--------------------------|-------|-----------------------------------------|
| 1.                        | Chloride Permeability – 3 Points                    | ASTM C1202 / AASHTO T277 | QT    | Specify Age at Time of Test             |
| 2.                        | Compressive Strength of Concrete                    | ASTM C39                 | \$21  | Molded Cylinders – Cost Per Sample      |
| 3.                        | Compressive Strength of Grout                       | ASTM C39 / ASTM C109     | \$21  |                                         |
| 4.                        | Compressive Strength of Mortar                      | ASTM C109                | \$21  | 2-in. Cube Specimens – Cost Per Sample  |
| 5.                        | Compressive Strength of Cores – 1 specimen          | ASTM C42 / C39           | \$86  | ACI 318 Series at Three Specimens/Tests |
| 6.                        | Coring Fee                                          | Industry Practice        | \$114 | 2" bit & 4" bit                         |
| 7.                        | Density, Absorption, and Voids in Hardened Concrete | ASTM C642                | \$285 | Mass-Volume Relationship                |

| AGGREGATES / GRAVEL / SAND – PA-Only |                                                    |                                  | PA               | Test Notes                                                  |
|--------------------------------------|----------------------------------------------------|----------------------------------|------------------|-------------------------------------------------------------|
| 1.                                   | Carbonate Content                                  | ASTM D3042                       | (\$356 TX \$534) | Insoluble Residue                                           |
| 2.                                   | Sieve Analysis                                     | PTM 616 / ASTM C136 / AASHTO T27 | \$121            | Particle Size Distribution                                  |
| 3.                                   | Percent Passing #200 Sieve                         | PTM 100 / ASTM C117 / AASHTO T11 | \$80             | Percent Fines                                               |
| 4.                                   | Sodium Sulfate Soundness                           | PTM 510 / ASTM C88 / AASHTO T104 | \$568            | Generally More Severe with Magnesium Sulfate                |
| 5.                                   | Magnesium Sulfate Soundness                        | ASTM C88 / AASHTO T104           | \$568            |                                                             |
| 6.                                   | Clay Lumps and Friable Particles in Aggregates     | ASTM C142 / AASHTO T112          | \$228            | Broken with the fingers into fines removable by wet sieving |
| 7.                                   | Los Angeles Abrasion – Small-Size Coarse Aggregate | ASTM C131 / AASHTO T96           | \$454            | Relative Quality and Competence                             |
| 8.                                   | Los Angeles Abrasion – Large-Size Coarse Aggregate | ASTM C535                        | \$454            |                                                             |
| 9.                                   | Flat and Elongate Particles                        | ASTM D4791                       | \$512            | Specify Dimensional Ratios                                  |
| 10.                                  | Specific Gravity and Absorption – Fine             | ASTM C128 / AASHTO T84           | \$144            | Mass-Volume Relationships                                   |
| 11.                                  | Specific Gravity and Absorption – Coarse           | ASTM C127 / AASHTO T85           | \$86             |                                                             |

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| STEEL & BLAST FURNACE SLAG – PA Only |                                                                   |                                  | PA    | Test Notes                | Bulk | Length | Jar |
|--------------------------------------|-------------------------------------------------------------------|----------------------------------|-------|---------------------------|------|--------|-----|
| 1.                                   | Bulk Density of Aggregates – Blast Only ( <i>Rodding Method</i> ) | ASTM C29 “A” / AASHTO T19 Sec 10 | \$75  | Mass-Volume Relationships |      |        |     |
| 2.                                   | Potential Expansion of Steel Slags – 1 pt                         | PTM 130                          | \$598 | PTM Proctor not included  |      |        |     |
| 3.                                   | PennDOT Proctor                                                   | PTM 106                          | \$172 | Required for Expansion    |      |        |     |

| FLY ASH / BOTTOM ASH – PA Only |                                                              |                          | PA    | Test Notes                        | Bulk      | Length | Jar |
|--------------------------------|--------------------------------------------------------------|--------------------------|-------|-----------------------------------|-----------|--------|-----|
| 1.                             | Moisture Content                                             | ASTM C311                | \$35  | 110 ± 5°C                         | 1-qt      | 1-inch | 1   |
| 2.                             | Sieve Analysis                                               | ASTM C311                | \$92  | Coarse Particle Size Distribution | 1-qt      | 2-inch | 1   |
| 3.                             | Hydrometer                                                   | ASTM C311                | \$98  | Fines Particle Size Distribution  | 1-qt      | 2-inch | 1   |
| 4.                             | Loss on Ignition                                             | ASTM C311                | \$80  | 750 ± 50°C (ASTM Method A)        | 1-qt      | 2-inch | 1   |
| 5.                             | Standard Proctor                                             | ASTM D698 / AASHTO T99   | \$341 | PA Only – 1 Point : \$120         | 10-gal    | -      | -   |
| 6.                             | Modified Proctor                                             | ASTM D1557 / AASHTO T180 | \$398 | PA Only – 1 Point : \$140         | 10-gal    | -      | -   |
| 7.                             | Rigid Wall Permeability (3” & 6” Diameter) bottom ash only   | ASTM D2434               | \$398 | 2.8-Inch Diameter                 | 1-gal     | 6-inch | -   |
| 8.                             | Flex Wall Permeability (Hydraulic Conductivity) fly ash only | ASTM D5084               | \$512 | 3-inch & 6-inch Diameter          | 1 & 5-gal | -      | -   |

| OTHER |                                                             |  | PA     | TX |                          |
|-------|-------------------------------------------------------------|--|--------|----|--------------------------|
| 1.    | PA Only – Sample Pickup Mileage Round Trip (after 50 miles) |  | \$3.62 | -  | PA Only – after 50 miles |
| 2.    | Rush Testing Surcharge                                      |  | Call   |    | Call                     |
| 3.    | Contamination Surcharge                                     |  | Call   |    | Call                     |

# TRI INDEPENDENT GEOTECHNICAL LABORATORY SERVICES

## Schedule of Fees and Services

*Please contact for project specific proposals*

### Standard Operating Procedures

This fee schedule is based on TRI's terrestrial standard operating procedures. TRI participates in specialized testing for the offshore, renewable, nuclear, and other industries that requires special handling, testing, and reporting. These projects should be discussed with TRI staff prior to engaging. TRI has in house electrical engineering, equipment development, machine shop, NIST traceable calibration equipment, that allow us to cater to these industries.

### Sending Samples to the Laboratory

Please ship samples for geotechnical testing to the attention of "Soil-Interaction" with contact information as presented on the first page of this document. Please appropriately package samples for shipping, labeling each individual sample / group of samples with their sample IDs as submitted on the COC. Please ensure that a copy of the COC is shipped with each sample. The COC copy should be packaged in such a manner as to protect it from moisture damage. If a completed and signed COC / test request form is not received, a project manager will be engaged at an hourly rate to gather this information from the client in order to initiate testing. Please be sure to include the client name, the project name as it will be used for reporting, and the parties that are to be reported to. If the billable party is different from the reporting party, please be sure to include this information as well.

### Contaminated Samples

TRI places a high value on safe work conditions for its employees and visitors. Clients are expected to disclose any and all analytical data, material safety data sheets (MSDS/SDS/PSDS), or other materials relevant to the safe handling of materials submitted to the laboratory. Packaging of these materials should indicate that they contain such potentially harmful materials to protect our receiving staff. TRI will perform a hazard analysis to determine the appropriate personal protective equipment. All work on contaminated materials requires discussions with the engineering staff and project-specific quoting.

*If a testing standard is not listed, please contact us to inquire.*

### Standard Terms

- 1- Unit costs quoted here are "not to exceed" costs within standard operating procedures.
- 2- Payment: Net 30 Days
- 3- All results will be e-mailed.
- 4- One report in PDF format will be issued.
- 5- Interim reporting is at the lab's discretion and costs and timing need to be discussed/quoted if requested.
- 6- Custom reporting will be charged at hourly rates.
- 7- Costs do not include shipping or customs fees.
- 8- Sample shipping at cost plus 30 percent.
- 9- Standard sample retention of 30 days following reporting.
- 10- Samples are assumed to be free of potentially harmful materials unless otherwise noted by the client at which point the appropriate safety precautions will need to be enacted in the laboratory.