

**TOWN OF TIMNATH, COLORADO  
RESOLUTION NO. 47, SERIES 2016**

**A RESOLUTION APPROVING THE CONSTRUCTION PHASE  
OF THE OLD TOWN IMPROVMENTS PHASE 2 – NORTH PROJECT**

**WHEREAS**, the Town Council of the Town of Timnath (“Town”) pursuant to C.R.S. § 31-15-103, has the power to pass resolutions; and

**WHEREAS**, the Town has included this project in its 2016 Capital Improvement Projects; and

**WHEREAS**, the Town Council is familiar with the Project and finds it to be in the best interest of the Town, its residents, and the general public to proceed with construction;

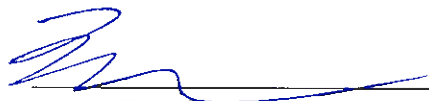
**NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF TIMNATH, COLORADO as follows:**

**Section 1. Approval**

The required agreements and expenditure of funds up to \$1,242,820 from CIP and \$240,000 from School Funds is hereby approved for the construction of the Summerfields Crossing project. The required agreements may be finalized the Town Manager in consultation with the Town Planner, Engineer, Legal Counsel, and other applicable staff or consultants.

**INTRODUCED, MOVED, AND ADOPTED BY THE TOWN COUNCIL OF THE TOWN OF TIMNATH, ON JUNE 14, 2016.**

**TOWN OF TIMNATH, COLORADO**

  
Bryan Voronin, Mayor Pro Tem

**ATTEST:**



Milissa Peters, CMC  
Town Clerk



May 2, 2016

Town of Timnath  
c/o TST, Inc.  
748 Whalers Way  
Fort Collins, Colorado 80525



Attn: Mr. Eric Fuhrman, P.E. ([efuhrman@tstinc.com](mailto:efuhrman@tstinc.com))

Re: Proposal for Construction Observation and Testing  
Timnath Old Town Improvements  
Town of Timnath, Colorado

Mr. Fuhrman:

We are pleased to submit this proposal to provide construction observation and testing services for the Old Town Improvements Phase 2 - North Project in Timnath, Colorado. Based on our review of the Preliminary Plan Set, and the Bid Schedule within the Project Manual provided to us by TST, Inc., we understand this project consists of the widening of existing local streets, roll-over curb and gutter with attached walks, storm sewer with connection to existing, sanitary sewer main with connections to existing, sanitary service connections to properties, and relocation of existing utility services.

We provide herein a brief introduction of Earth Engineering Consultants, LLC (EEC) to the Town of Timnath, TST, Inc., and to the project design team. EEC is a full service geotechnical engineering consulting firm and an accredited construction materials testing company by AASHTO/CCRL in bituminous mixtures, soils, aggregate and Portland cement concrete. EEC is accredited and complies with laboratories meeting ASTM E329 "Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction" criteria. R18 accreditation documentation is available upon request for your review or can be viewed by visiting their website at <http://www.amrl.net> for current accreditation status.

We understand the work to be completed by EEC personnel for this project includes observation and field density testing of embankment material, water lines, inlet structures, reinforcement observations, testing of subgrade and aggregate base course preparation, and testing of cast-in-place concrete for foundation systems for the various structures. Our outlined work scope/cost estimate is attached to this proposal and is based on the estimated quantity take-offs/bid tabulation documents presented within the documents provided to us.

4396 GREENFIELD DRIVE  
WINDSOR, COLORADO 80550  
(970) 545-3908 FAX (970) 663-0282  
[www.earth-engineering.com](http://www.earth-engineering.com)

Timnath Old Town Improvements Phase 2 - North  
Town of Timnath, Colorado  
May 2, 2016  
Page 2

The field observation and testing services by EEC would be performed by Level II and Level III engineering technicians. Those technicians would be directly supervised by a Colorado registered professional engineer. Consulting regarding geotechnical and materials questions which arise during construction can be provided by the project engineer; however, those services are not included in our cost estimate.

Based on the outlined scope of work, we have estimated the cost to provide construction observation and testing services on an hourly rate concept and in general accordance with the project specifications and testing frequencies. Additional cost savings could be realized if multiple tasks, (i.e., field density tests, concrete testing, sample pick-up and site observations, etc.) are performed during one trip. For this project we have estimated the cost to be on the order of about \$15,820 for the construction materials testing and site observation services as described herein. Our intent is to provide the CMT/QC site observation and testing services from our local Windsor office, which is approximately 15 miles round trip to the project site.

We put this proposal/scope of services estimate together based on our understanding of the project, estimated quantities provided within the project documents, and the required testing services/frequencies per the Town of Timnath, and/or Larimer County specifications. It should be noted that the testing frequencies and associated costs provided herein were not based on a project specific CDOT Form 250 or local agency document.

EEC will only charge the general contractor and/or assignee, for the testing services performed and the time duration to performed the services as required, (i.e., if we have indicated 20 to 40 hours of testing services for any one element, and we only provide 10 to 15 hours or so of services because of excellent communication services by the client, general contractor, any sub-contractors, and EEC, you will only get charged the 10 to 15 hours or so, plus multi-tasking trips and services can provide greater dividends as well). Combining trips to perform backfill within the utility trenches, subgrade, or ABC field density testing for the various site improvement elements, could reduce the number of trips, and hours involved for these elements.

The stated estimate does not include contingencies for weather problems, design difficulties or other construction difficulties which may arise. Invoices will be based on the actual units of work performed using the rates shown on the attached estimate. We recommend an allowance be provided in the budget for additional unanticipated testing.

Timnath Old Town Improvements Phase 2 - North  
Town of Timnath, Colorado  
May 2, 2016  
Page 3

We appreciate the opportunity to be of service to you on this project. Our General Conditions for providing the outlined services are attached and are considered a part of our proposal. If you have any questions concerning this proposal, or if we can be of further service to you in any other way, please do not hesitate to contact us.

Very truly yours,  
Earth Engineering Consultants, LLC



Gary J. Higgins  
Project Manager

Reviewed by:



David A. Richer, P.E.  
Senior Project Engineer

- Attachments: EEC's AASHTO/AMRL Accreditation Certificate
- EEC's CMT/QC Estimate
- EEC's 2015 Hourly Rate and Unit Price Fee Schedule
- EEC's – General Conditions for Testing Services

**NOTICE TO PROCEED**

ACCEPTED BY: \_\_\_\_\_  
(Individual)

FOR: \_\_\_\_\_  
(Company)

DATE: \_\_\_\_\_

Earth Engineering Consultants, LLC

Estimated Work Scope with Associated Cost Estimate (BID SCHEDULES)

Timnath Old Town Improvements Phase 2 North Project - Town of Timnath, Colorado

Item No.	Description of Work - (Based on project BID SCHEDULES provided)	Est. Plan Quantity	Plan Units	Level / Type of Service	Est. Units	Unit	Unit Rate	Total Per Item	Frequency of Testing per Project Specifications, Town of Timnath, and/or Larimer County
<b>II. Earthwork and Erosion Control:</b>									
2	Earthwork (Overlot Grading)	1,832.0	CY	Level II Technician	3.0	hours	\$59.00	\$177.00	estimate minimum 1 field density test (FDT) per 500 CY, estimate 1 to 2 lns, may vary depending upon GC's schedule as-needed
<b>III. Streets:</b>									
1	6" Aggregate Base Course	6,899.0	SY	Level II Technician	4.0	hours	\$59.00	\$236.00	estimate minimum 1 field density test (FDT) per 1000 LF lane of roadway, with 1 to 1-1/2 hours per trip for field density testing (FDT), estimate 2 to 4 trips, may vary depending upon GC's schedule, as-needed
2	6" Asphalt	6,899.0	SY	Level II Technician	8.0	hours	\$59.00	\$472.00	estimate 1 field density test (FDT) per 500 LF of asphalt per lift, with 1 to 2 hours per trip for field density testing (FDT), rolling pattern, and HMA sample pick up, estimate 6 to 10 lns, may vary depending upon GC's schedule as-needed basis
				Unit Rate	5.0	each	\$185.00	\$925.00	for bid purposes, assume at least 1 HMA exit/gradation, oil content and gradation per every 500 TONS of material, estimate 40 TONS
3	Vertical Curb & Gutter	109.0	LF	Level II Technician	1.0	hours	\$59.00	\$59.00	estimate 1 field density test (FDT) per 250 linear feet of curb & gutter, with 1 hour per trip for field density testing (FDT), may vary depending upon GC's schedule, as-needed basis
				Level II Technician	1.0	tests	\$235.00	\$235.00	estimate 1 complete ACI concrete test including slump, air, unit weight, and a minimum of 5 cylinders for compressive strength testing, 1 per 75 CY or a minimum of 1 per day, as-needed basis. For bid purposes assume 1 test, may vary depending upon GC's schedule
4	4.5' Attached Walk	109.0	LF	Level II Technician	1.0	hours	\$59.00	\$59.00	estimate 1 field density test (FDT) per 250 linear feet of sidewalk, with 1 hour per trip for field density testing (FDT), may vary depending upon GC's schedule, as-needed basis
				Level II Technician	1.0	tests	\$235.00	\$235.00	estimate 1 complete ACI concrete test including slump, air, unit weight, and a minimum of 5 cylinders for compressive strength testing, 1 per 75 CY or a minimum of 1 per day, as-needed basis. For bid purposes assume 1 test, may vary depending upon GC's schedule
5	Drive Over Curb & Gutter	424.0	LF	Level II Technician	1.0	hours	\$59.00	\$59.00	estimate 1 field density test (FDT) per 250 linear feet of curb & gutter, with 1 hour per trip for field density testing (FDT), may vary depending upon GC's schedule, as-needed basis
				Level II Technician	1.0	tests	\$235.00	\$235.00	estimate 1 complete ACI concrete test including slump, air, unit weight, and a minimum of 5 cylinders for compressive strength testing, 1 per 75 CY or a minimum of 1 per day, as-needed basis. For bid purposes assume 1 test, may vary depending upon GC's schedule
6	5' Detached Walk	113.0	LF	Level II Technician	1.0	hours	\$59.00	\$59.00	estimate 1 field density test (FDT) per 250 linear feet of sidewalk, with 1 hour per trip for field density testing (FDT), may vary depending upon GC's schedule, as-needed basis
				Level II Technician	1.0	tests	\$235.00	\$235.00	estimate 1 complete ACI concrete test including slump, air, unit weight, and a minimum of 5 cylinders for compressive strength testing, 1 per 75 CY or a minimum of 1 per day, as-needed basis. For bid purposes assume 1 test, may vary depending upon GC's schedule
7	Drive Over Curb & Gutter w/ Attached 5' Walk	2,531.0	LF	Level II Technician	4.0	hours	\$59.00	\$236.00	estimate 1 field density test (FDT) per 250 linear feet of curb & gutter, with 1 hour per trip for field density testing (FDT), may vary depending upon GC's schedule, as-needed basis
				Level II Technician	5.0	tests	\$235.00	\$1,175.00	estimate 1 complete ACI concrete test including slump, air, unit weight, and a minimum of 5 cylinders for compressive strength testing, 1 per 75 CY or a minimum of 1 per day, as-needed basis. For bid purposes assume 1 test, may vary depending upon GC's schedule
9	Access Ramps	5.0	EA	Level II Technician	5.0	hours	\$59.00	\$295.00	estimate 1 field density test (FDT) per ramp, with 1 hour per trip for field density testing (FDT), may vary depending upon GC's schedule, as-needed basis
				Level II Technician	5.0	tests	\$235.00	\$1,175.00	estimate 1 complete ACI concrete test including slump, air, unit weight, and a minimum of 5 cylinders for compressive strength testing, 1 per ramp, as-needed basis. For bid purposes assume 5 tests, may vary depending upon GC's schedule
<b>IV. Storm:</b>									
1	18" RCP Storm	56.0	LF	Level II Technician	2.0	hours	\$59.00	\$118.00	estimate 1 field density test (FDT) per 100 LF per 1.5 feet vertical of RCP trench backfill for field density testing (FDT), estimate 2 lns, may vary depending upon GC's schedule, as-needed basis
3	6" Storm Manhole	1.0	EA	Level II Technician	1.0	hours	\$59.00	\$59.00	for bid purposes assume 1 trip @ 1 hour per trip per manhole for backfill as-needed, may vary depending upon contractors schedule

Item No.	Description of Work - (Based on project BID SCHEDULES provided)	Est. Plan Quantity	Plan Units	Level / Type of Service	Est. Units	Unit	Unit Rate	Total Per Item	Frequency of Testing per Project Specifications, Town of Timmath, and/or Larimer County
4	15" Type R Inlet	1	EA	Level III Technician	10	hours	\$75.00	\$75.00	reinforcement observation for cast-in-place concrete mat, assume 1 trip per structure at 1 hour per trip, as-needed
				Level II Technician	20	tests	\$235.00	\$470.00	estimate 2 complete ACI concrete test including slump, air, unit weight, and a minimum of 5 cylinders for compressive strength testing. For bid purposes assume 2 tests, may vary depending upon GC's schedule
				Level III Technician	20	hours	\$75.00	\$150.00	reinforcement observation for cast-in-place concrete mat, assume 1 trip per structure at 1 hour per trip, as-needed
5	5" Type R Inlet	2	EA	Level II Technician	20	tests	\$235.00	\$470.00	estimate 2 complete ACI concrete test including slump, air, unit weight, and a minimum of 5 cylinders for compressive strength testing. For bid purposes assume 2 tests, may vary depending upon GC's schedule
<b>V. Sanitary Sewer:</b>									
1	8" Sanitary Sewer	837.0	LF	Level II Technician	8.0	hours	\$59.00	\$472.00	estimate 1 field density test (FDT) per 100 LF per 1.5 feet vertical of trench backfill for field density testing (FDT), estimate 4 to 6 trips, may vary depending upon GC's schedule, as-needed basis
3	4" Service Lateral - In R O W	415.0	LF	Level II Technician	4.0	hours	\$59.00	\$236.00	estimate 1 field density test (FDT) per 100 LF per 1.5 feet vertical of trench backfill for field density testing (FDT), estimate 3 to 5 trips, may vary depending upon GC's schedule, as-needed basis
4	4" Sanitary Manhole	4.0	EA	Level II Technician	4.0	hours	\$59.00	\$236.00	for bid purposes assume 4 trips @ 1 hour per trip per manhole for backfill as-needed, may vary depending upon contractors schedule
5	Tie To Existing Sanitary Manhole	1.0	EA	Level II Technician	1.0	hours	\$59.00	\$59.00	for bid purposes assume 1 trip @ 1 hour per trip per manhole for backfill as-needed, may vary depending upon contractors schedule
<b>VI. Sanitary Sewer Service Connections:</b>									
1	4" Service Lateral - On Lots	1,105.0	LF	Level II Technician	15.0	hours	\$59.00	\$885.00	estimate 1 field density test (FDT) per 100 LF per 1.5 feet vertical of trench backfill for field density testing (FDT), estimate 15 trips (1 trip per 60'), may vary depending upon GC's schedule, as-needed basis
2	Connect Service (House W/ Cleanout & Stub at Street)	15	EA	Level II Technician	15.0	hours	\$59.00	\$885.00	estimate 1 field density test (FDT) per 100 LF per 1.5 feet vertical of trench backfill for field density testing (FDT), estimate 15 trips (1 trip per lot), may vary depending upon GC's schedule, as-needed basis
3	Additional Inline Cleanouts	12	EA	Level II Technician	12.0	hours	\$59.00	\$708.00	estimate 1 field density test (FDT) per 100 LF per 1.5 feet vertical of trench backfill for field density testing (FDT), estimate 12 trips (1 trip per cleanout), may vary depending upon GC's schedule, as-needed basis
7	Concrete Flatwork (R&R)	11	SY	Level II Technician	1.0	tests	\$235.00	\$235.00	estimate 1 complete ACI concrete test for flatwork, including slump, air, unit weight, and a minimum of 5 cylinders for compressive strength testing, 1 per 75 CY or a minimum of 1 per day, as-needed basis. For bid purposes assume 1 test, may vary depending upon GC's schedule
<b>VII. Water:</b>									
1	Relocate - 6" PVC CS900 Water Main	74.0	LF	Level II Technician	2.0	hours	\$59.00	\$118.00	estimate 1 field density test (FDT) per 100 LF per 1.5 feet vertical of trench backfill for field density testing (FDT), estimate 1 to 2 trips, may vary depending upon GC's schedule, as-needed basis
5	Relocate - Water Meters	5.0	EA	Level II Technician	5.0	hours	\$59.00	\$295.00	estimate 4 field density test (FDT) per meter backfill, estimate 5 trips, may vary depending upon GC's schedule, as-needed basis
6	Relocate - Fire Hydrants	2.0	EA	Level II Technician	2.0	hours	\$59.00	\$118.00	estimate 4 field density test (FDT) per hydrant backfill, estimate 2 trips, may vary depending upon GC's schedule, as-needed basis
<b>VIII. Poudre School District - Timmath Elementary School:</b>									
5	Embankment (Complete In Place)	260.0	CY	Level II Technician	1.0	hours	\$59.00	\$59.00	estimate minimum 1 field density test (FDT) per 500 CY, estimate 1 to 2 trips, may vary depending upon GC's schedule, as-needed
10	Concrete Sidewalk	962.0	SF	Level II Technician	1.0	hours	\$59.00	\$59.00	estimate 1 field density test (FDT) per 250 linear feet of sidewalk, with 1 hour per trip for field density testing (FDT), may vary depending upon GC's schedule, as-needed basis
				Level II Technician	1.0	tests	\$235.00	\$235.00	estimate 1 complete ACI concrete test including slump, air, unit weight, and a minimum of 5 cylinders for compressive strength testing, 1 per 75 CY or a minimum of 1 per day, as-needed basis. For bid purposes assume 1 test, may vary depending upon GC's schedule
11	Concrete Pan	123.0	SF	Level II Technician	1.0	tests	\$235.00	\$235.00	estimate 1 field density test (FDT) per 250 linear feet of pan, with 1 hour per trip for field density testing (FDT), may vary depending upon GC's schedule, as-needed basis
12	6" Aggregate Base Course (Class 6)	140.0	TONS	Level II Technician	1.0	hours	\$59.00	\$59.00	estimate 1 complete ACI concrete test including slump, air, unit weight, and a minimum of 5 cylinders for compressive strength testing, 1 per 75 CY or a minimum of 1 per day, as-needed basis. For bid purposes assume 1 test, may vary depending upon GC's schedule

Item No.	Description of Work - (Based on project BID SCHEDULES provided)	Est. Plan Quantity	Plan Units	Level / Type of Service	Est. Units	Unit	Unit Rate	Total Per Item	Frequency of Testing per Project Specifications, Town of Timmath, and/or Larimer County
13	Hot Bituminous Pavement - Grade S 100	180.0	TONS	Level II Technician	1.0	hours	\$59.00	\$59.00	estimate 1 field density test (FDT) per 500 LF of asphalt per lift with 1 to 2 hours per trip for field density testing (FDT), rolling pattern and HMA sample pick up, estimate 1 to 2 trips, may vary depending upon GC's schedule, as-needed basis
				Unit Rate	1.0	each	\$185.00	\$185.00	for bid purposes, assume at least 1 HMA ext/gradation, oil content and gradation per every 500 TONS of material
14	4-inch DR 35 PVC Sanitary Sewer Line	670.0	LF	Level II Technician	6.0	hours	\$59.00	\$354.00	estimate 1 field density test (FDT) per 100 LF per 1.5 feet vertical of trench backfill for field density testing (FDT), estimate 3 to 5 trips, may vary depending upon GC's schedule, as-needed basis
15	4-Foot Manhole	5.0	EA	Level II Technician	5.0	hours	\$59.00	\$295.00	for bid purposes assume 5 trips @ 1 hour per trip per manhole for backfill as-needed, may vary depending upon contractors schedule
<b>SUBTOTAL for BID SCHEDULE - Timmath Old Town Improvements Phase 2</b>									<b>\$13,065.00</b>
<b>Laboratory Testing Services</b>									
	Standard Proctor (on-site overburden soils for trench backfill, and/or imported material)				4	each	\$105.00	\$420.00	as materials changes
	Atterberg Limits and Mucus No. 200 Sieve Analysis				4	each	\$100.00	\$400.00	as materials changes
	Travel and Mileage - Assume 100 trips at 15 miles round trip from our Windsor office on Crossroads to the project site in Timmath (EEC WILL NOT CHARGE FOR TRAVEL time, just MILEAGE, most will be shared miles)			Level II Technician	1500.0	miles	\$0.55	\$825.00	round trip from EEC office to project site in Timmath is estimated at 15 miles, assume approximately 100 trips, may vary depending upon contractor's schedule
	Senior Project Engineer - Review, Consultation, bi-monthly progress and compliance reports, and meetings as-needed			Senior Project Engr	8.0	hours	\$140.00	\$1,120.00	assume min. of 2 hours per week for duration of this phase of the project for weekly progress meetings, consultation, summary reports and Town of Timmath project specification compliance purposes, as-needed
<b>SUBTOTAL for Laboratory Testing Services - Timmath Old Town Improvements Phase 2</b>									<b>\$2,765.00</b>
<b>TOTAL for BID SCHEDULE and Alternate - Timmath Old Town Improvements Phase 2</b>									<b>\$16,820.00</b>

**Earth Engineering Consultants, LLC  
FEE SCHEDULE FOR  
CONSTRUCTION OBSERVATION / MATERIALS TESTING**

**PROFESSIONAL AND TECHNICAL PERSONNEL - HOURLY RATES**

Principal Engineer (P.E.) .....	\$190.00/hr
Senior Project Engineer (P.E.) .....	140.00/hr
Project Engineer (P.E.) or Project Geologist.....	115.00/hr
Field Engineer .....	90.00/hr
Structural Steel Inspector / Non Destructive Testing (NDT) Services.....	90.00/hr
Level III Engineering Technician.....	75.00/hr
Level II Engineering Technician.....	59.00/hr
Mileage.....	(Current Federal Reimbursement Rate)

**LABORATORY TESTING - Materials FOB EEC Laboratory**

The outlined test items represent commonly requested laboratory test procedures for construction. Testing for a much greater range of procedures can be completed by EEC laboratories and fees for additional items can be provided on request.

**Soils and Aggregate**

Standard Proctor .....	\$105.00/ea
Modified Proctor.....	125.00/ea
Relative Density.....	185.00/ea
Atterberg Limits.....	60.00/ea
Moisture Content/Visual Classification .....	15.00/ea
Swell/Consolidation.....	60.00/ea
Specific Gravity	
Fine .....	\$90.00/ea
Coarse.....	90.00/ea
Minus 200 Wash .....	40.00/ea
Gradation Analysis - NOT WASHED*	
Greater than 3" maximum size .....	quoted per material
3" to 1" maximum size.....	\$120.00/ea
Less than 1" maximum size.....	80.00/ea
Hydrometer Analysis (with gradation) .....	325.00/ea
<b>*Add \$40.00 per sample for minus 200 Wash</b>	
Hveem R-Value .....	365.00/ea

**Concrete and Masonry**

Concrete Compressive Strength (includes disposable cylinders) .....	\$20.00/ea
Core Strength (2" to 6" dia, coring and trimming extra) .....	55.00/ea
Core Density .....	50.00/ea
Mortar Compressive Strength.....	25.00/ea
Grout Compressive Strength.....	50.00/ea
Hollow Prism Compressive Strength.....	150.00/ea
Solid Prism Compressive Strength .....	200.00/ea

**Asphalt**

Bitumen Content – Ignition Oven.....	\$110.00/ea
Bitumen Content & Gradation.....	185.00/ea
Core Density (Already Trimmed).....	50.00/ea
Rice Value Determination.....	75.00/ea
Volumetric Testing (3 Points w/ Rice) .....	375.00/ea



# EARTH ENGINEERING CONSULTANTS, LLC

## GENERAL CONDITIONS FOR TESTING AND OBSERVATION SERVICES

### SECTION 1: Scope of Work

EARTH ENGINEERING CONSULTANTS, LLC (EARTH ENGINEERING) shall perform the services defined in the contract and shall invoice the client for those services at the fee schedule rates. Any cost estimates stated in this contract shall not be considered as a firm figure unless otherwise specifically stated in this contract. If unexpected site conditions are discovered, the scope of work shall change, even as the work is in progress. EARTH ENGINEERING will provide these additional services at the contract fee schedule rate.

Rates for work beyond the scope of this contract and not covered by the contract fee schedule can be provided. EARTH ENGINEERING can perform additional work with verbal authorization, and will provide written confirmation of fees, if requested. All costs incurred because of delays in authorizing the addition work will be billed to the client.

Fee schedules are valid for one year following the date of the contract unless otherwise noted.

### SECTION 2: Personal Responsibility

The presence of EARTH ENGINEERING field representatives will be for the purpose of providing observation and field testing. Our work does not include supervision or direction of the actual work of the contractor, his employees or agents. The contractor for this project should be so advised. The contractor should also be informed that neither the presence of our field representative nor the observation and testing by our firm shall excuse him in any way for defects discovered in his work. It is understood that our firm will not be responsible for job or site safety of the project. Job and site safety will be the sole responsibility of the contractor unless contracted to others.

### SECTION 3: Meaning of "Observation"

The term "observation" implies only that we would observe the progress of the work we have agreed to be involved with and perform tests, from which to develop an opinion as to whether the work essentially complies with the job requirements.

### SECTION 4: Meaning of "Inspection"

The term "inspection" refers to the visual observation of construction to permit EARTH ENGINEERING, as an experienced and qualified professional, to determine that the Work, when completed by the Contractor, generally conforms to the Contract Documents. In making such inspections, EARTH ENGINEERING makes no guarantees for, and has no authority or control over, the Contractor's performance or failure to perform the Work in accordance with the Contract Documents. EARTH ENGINEERING has no responsibility for the means, methods, techniques, sequences or procedures selected by the Contractor or for the Contractor's safety precautions and programs nor for failure by the Contractor to comply with any laws or regulations relating to the performance or furnishing of the Work by the Contractor.

### SECTION 5: Accuracy of Test Locations and Elevations

The accuracy and proximity of provided survey control will affect the accuracy of in situ test location and elevation determinations. Unless otherwise noted, the accuracy of test locations and elevations will be commensurate only with pacing and approximate measurements or estimates.

### SECTION 6: Degree of Certainty of Compliance

With any manufactured product, there are statistical variations in its uniformity, and in the accuracy of tests used to measure its qualities. As compared with other manufactured products, field construction usually has wider fluctuations in both product and test results. Thus, even with very careful observation and testing, it cannot be said that all parts of the product comply with the job requirements. Our proposal is for the Scope of Services requested by our client. The degree of certainty for compliance with project specifications is much greater with full-time observation than it is with intermittent observation.

### SECTION 7: Unanticipated Hazardous Materials

It shall be the duty of the owner or his representative to advise EARTH ENGINEERING of any known or suspected hazardous substances which are or may be related to the services provided; such hazardous substances including but not limited to products, materials, by-products, wastes or samples of the foregoing which EARTH ENGINEERING may be provided or obtain performing its services or which hazardous substances exist or may exist on or near any premises upon which work is to be performed by EARTH ENGINEER'S employees, agents or subcontractors.

### SECTION 8: Reports and Invoices

EARTH ENGINEERING will furnish electronically transmitted pdf copies of the report(s) to the client and any other designated recipients (s). Hard copies can be furnished upon request.

EARTH ENGINEERING will submit invoices to the client monthly and a final bill upon completion of services. Payment is due upon presentation of invoice and is past due thirty (30) days from the invoice date. Client agrees to pay a finance charge of one and three-quarters (1¾%) per month, but not exceeding the maximum rate allowed by law, on past due accounts. If payment in full is not submitted when due, EEC may immediately cease work. EEC shall be entitled to recover attorney fees, court costs and any other cost of collection which is incurred collecting amounts due on this contract.

### SECTION 9: Ownership of documents

All reports, boring logs, field data, field notes, laboratory test data, calculations, estimates, and other documents prepared by EARTH ENGINEERING as instruments of service, shall remain the property of EEC, unless there are other contractual agreements.

### SECTION 10: Confidentiality

EARTH ENGINEERING shall hold confidential all business or technical information obtained from the client or his affiliates or generated in the performance of services under this agreement and identified in writing by the client as "confidential." EARTH ENGINEERING shall not disclose such information without the client's consent except to the extent required for 1) Performance of services under this agreement; 2) Compliance with professional standards of conduct for preservation of public safety, health, and welfare; 3) Compliance with any court order or other governmental directive and/or 4) Protection of EARTH ENGINEERING against claims or liabilities arising from performance of services under this agreement. EARTH ENGINEERING'S obligations hereunder shall not apply to information in the public domain or lawfully acquired on a non-confidential basis from others.

GENERAL CONDITIONS  
TESTING AND OBSERVATION  
PAGE 2

**SECTION 11: Standard of Care**

Services performed by EARTH ENGINEERING under this agreement will be conducted in the manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. No other warranty, express or implied, is made or intended by the proposal for consulting services or by furnishing oral or written reports of the findings made.

The client recognizes that subsurface conditions may vary from those encountered at the location where borings, surveys or explorations are made by EARTH ENGINEERING and that the data, interpretations and recommendations of EARTH ENGINEERING are based solely upon the data available to EARTH ENGINEERING. EARTH ENGINEERING will be responsible for those data, interpretations, and recommendations, but shall not be responsible for the interpretation by others of the information developed.

**SECTION 12: Subpoenas**

The client is responsible, after notification, for payment of time charges and expenses resulting from our required response to subpoenas issued by any party in conjunction with our work. Charges are based on fee schedules in effect at the time the subpoena is served.

**SECTION 13: Limitation of Liability**

The client agrees to limit EARTH ENGINEERING'S liability to the owner and all construction contractors and subcontractors on the project arising from EARTH ENGINEERING'S professional acts, errors, or omissions, such that the total aggregate liability of EEC to all those named shall not exceed \$50,000 or EARTH ENGINEERING'S total fee for the services rendered on this project, whichever is greater. The owner further agrees to require of the contractor and his subcontractors an identical limitation of EEC's liability for damages suffered by the contractor or the subcontractor arising from EARTH ENGINEERING'S professional acts, errors, or omissions. Neither the contractor nor any of his subcontractors assumes any liability for damages to others which may arise on account of EARTH ENGINEERING'S professional acts, errors or omissions.

**SECTION 14: Insurance and Indemnity**

EARTH ENGINEERING represents that it and its staff are protected by worker's compensation insurance and that EARTH ENGINEERING has such coverage under public liability and property damage insurance policies which EARTH ENGINEERING deems to be adequate. It is the policy of EARTH ENGINEERING to require certificates of insurance from all consultants or subcontractors employed by EARTH ENGINEERING. Certificates for all such policies of insurance will be provided to client upon request in writing. Within the limits and conditions of such insurance, EARTH ENGINEERING agrees to indemnify and save client harmless from and against any loss, damage, injury or liability arising from negligent acts of EARTH ENGINEERING or its employees. EARTH ENGINEERING shall not be responsible for any loss, damage or liability beyond the amounts, limits and conditions of such insurance. EARTH ENGINEERING shall not be responsible for any loss, damage or liability arising from any acts by the client, its agents, staff or other consultants employed by others.

EARTH ENGINEERING'S compensation hereunder is not commensurate with potential risk of injury or loss that may be caused by exposures to pollution, hazardous waste or toxic or other dangerous substances or conditions. Accordingly, except as expressly provided in this contract, the client waives any claim against EARTH ENGINEERING and agrees to indemnify and save EARTH ENGINEERING, its agents, and employees harmless from any claim, liability or defence cost for injury or loss sustained by any party from such exposures allegedly arising out of or related to EARTH ENGINEERING'S performance of services hereunder.

**SECTION 15: Termination**

This agreement may be terminated by either party upon seven (7) days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof. Such termination shall not be effective if that substantial failure has been remedied before expiration of the period specified in the written notice. In the event of termination, EARTH ENGINEERING shall be paid for services performed to the termination notice date plus reasonable termination expenses. Expenses of termination or suspension shall include all direct costs of EARTH ENGINEERING required to complete analyses and records necessary to complete its files and may also include a report on the services performed to the date of notice of termination or suspension.

**SECTION 16: Assigns**

Neither the client nor EARTH ENGINEERING may delegate, assign, subwrite or transfer its duties or interest in this agreement without the written consent of the other party.

**SECTION 17: Precedence**

These Standards, Terms and Conditions shall take precedence over any inconsistent or contradictory provisions contained in any proposal, contract, purchase order, requisition, notice to proceed, or like document regarding EARTH ENGINEERING'S services.