MRCA Attachment
June 5, 2013
Agenda Item

March 22, 2013
Proposal No. P-15913

Mr. Blaine Yoder
Project Director 1
TELACU Project Management
604 North Eckhoff Street
Orange, California 92868

Subject: Proposal for Geotechnical and Materials Testing and Deputy Inspection Services Marsh Park Project, Los Angeles, California.

References: Geo-Logic Associates, 2006, Geotechnical Design Report, Proposed Phase III Marsh Street Park, Los Angeles, California, dated December 4.

Geo-Logic Associates, 2012, Geotechnical Report Update, Proposed Marsh Park Los Angeles, California, dated March 15.

Dear Mr. Yoder:

Ninyo & Moore is pleased to submit this proposal for geotechnical and materials testing and deputy inspection services during construction of the Marsh Park project located at 2944 Gleneden Street in Los Angeles, California. We foresee our services as supplemental and as-requested to assist the full-time construction inspection and management team. Based on our review of the referenced geotechnical design reports, as well as the submitted grading and drainage plan, we understand that the planned project will generally consist of a new park site that will include construction of a new restroom building, picnic shelter, storage structure, trash enclosure, perimeter site wall, seat walls, and an asphalt concrete parking lot, as well as new bio-swale, utility pipeline, concrete pavement, decomposed granite and landscaping construction.

Earthwork for the project will include overexcavation and recompaction in order to provide 1 foot or more of recompacted soil below new footings and floor slabs, as well as new exterior concrete, asphalt concrete, and decomposed granite pavements.

SCOPE OF SERVICES

Based on our project understanding and our experience with similar projects, we propose to provide the following scope of services:

Geotechnical and Materials Testing

- Project coordination, management and technical support, including review of the project plans, specifications, and soils report, as well as work scheduling, and distribution of test data and daily reports.
- Field soils technician services for observation, sampling and density testing during the project rough grading, subgrade, aggregate base, asphalt concrete and decomposed granite, as well as trench and structural backfill recompaction operations.
- Preparation of field daily reports and test data sheets.
- Laboratory testing, including proctor density, sieve analysis and sand equivalent, as well as asphalt concrete hveem stability and unit weight on representative samples obtained in the field.
- Preparation and submittal of a Final Compaction Report, which includes a summary of our field density test results and presents the conclusions of our observations.

Deputy Inspection Services

- Reinforced concrete inspection services during structural reinforced concrete construction, including inspection during installation of rebar and formwork, and continuous inspection during concrete placement, including sampling and testing of concrete.
- Masonry inspection services during structural reinforced masonry construction, including sampling and testing of mortar and grout, inspection of block and rebar placement, and observation of grout placement.
- Structural steel welding, bolting, and fabrication inspection services during welding and bolting at the fabrication shop and at the site.
- Load and/or torque testing on expansion and epoxy anchor bolts.
- Preparation of progress reports, test data sheets and field memoranda to document the items inspected.
- Pick-up and transportation of construction material samples for testing at our laboratory.
- Laboratory testing, including compressive strength testing of concrete, grout, mortar and masonry composite prisms, as well as conformance testing of rebar, high strength bolts, washers and nuts.

ASSUMPTIONS

Based on the construction schedule described above and our project understanding, the following assumptions have been made in the preparation of our scope of services:

- Our services will be coordinated and scheduled as needed by our client or the project superintendent.
- Our services are subject to prevailing wage requirements.
- Concrete batch plant inspection services will not be requested.
- Masonry inspection services will be periodic.
- Fabrication shop structural steel inspection services will be periodic.
- Our estimated fee is based on the assumptions outlined above and does not include standby time or costs associated with retesting or reinspecting materials that were found not to be in compliance with the project plans or specifications. Our services will depend on the construction schedule and the contractor's operations. Hours spent that exceed those in the attached tables will be billed on a time-and-materials basis.

ESTIMATED FEE

We propose to provide geotechnical and materials testing and deputy inspection services on a time-and-materials basis in accordance with the attached Schedule of Fees and Schedule of Fees for Laboratory Testing. Our estimated fee for the scope of services described herein is presented in Table 1.

Ninyo & Moore appreciates the opportunity to provide services on this project, and we look forward to working with you on this project.

Respectfully submitted,
NINYO & MOORE

Robert M. Bigger
Senior Project Manager

A. "Tino" Rodriguez
Principal, Construction Services

RMB/CAP/AR/mlc

Attachments: Table 1 – Breakdown of Estimated Fee
Schedule of Fees
Schedule of Fees for Laboratory Testing

Distribution: (1) Addressee (via e-mail)

TABLE 1 - BREAKDOWN OF ESTIMATED FEE

PROJECT COORDINATION AND MANAGEMENT							
Senior Project Engineer/Geologist	30	hours	@	$ 127.00	/hour	$	3,810.00
Subtotal						**$**	**3,810.00**

FIELD SERVICES							
Field Technician	200	hours	@	$ 73.00	/hour	$	14,600.00
Reinforced Concrete Inspection	20	hours	@	$ 73.00	/hour	$	1,460.00
Reinforced Masonry Inspection	110	hours	@	$ 73.00	/hour	$	8,030.00
Welding & Bolting Inspection (Field)	80	hours	@	$ 73.00	/hour	$	5,840.00
Welding & Fabrication Inspection (Shop)	40	hours	@	$ 73.00	/hour	$	2,920.00
Anchor Bolt Load & Torque Testing	8	hours	@	$ 87.00	/hour	$	696.00
Sample Pick-ups	8	hours	@	$ 53.00	/hour	$	424.00
Subtotal						**$**	**33,970.00**

LABORATORY ANALYSES							
Proctor Density	4	tests	@	$ 180.00	/test	$	720.00
Sieve Analysis	2	tests	@	$ 110.00	/test	$	220.00
Sand Equivalent	2	tests	@	$ 90.00	/test	$	180.00
Hveem Stability and Unit Weight (Asphalt)	1	test	@	$ 195.00	/test	$	195.00
Compressive Strength (Concrete)	16	tests	@	$ 22.00	/test	$	352.00
Compressive Strength (Grout and Mortar)	16	tests	@	$ 30.00	/test	$	480.00
Compressive Strength (Masonry Prism)	3	tests	@	$ 110.00	/test	$	330.00
Steel Reinforcement (Bend and Tensile)	4	tests	@	$ 50.00	/test	$	200.00
High Strength Bolts (Nuts, Bolts, & Wash.)	3	sets	@	$ 120.00	/set	$	360.00
Subtotal						**$**	**3,037.00**

REPORT PREPARATION						
Principal Engineer	1	hours	@	$139.00	/hour	$139.00
Senior Project Engineer/Geologist	6	hours	@	$127.00	/hour	$762.00
Technical Illustrator	4	hours	@	$69.00	/hour	$276.00
Data Processing	4	hours	@	$44.00	/hour	$176.00
Subtotal						**$1,353.00**

TOTAL ESTIMATED FEE	**$42,170.00**

SCHEDULE OF FEES

HOURLY CHARGES FOR PERSONNEL

Principal Engineer/Geologist/Environmental Scientist	$	139
Senior Engineer/Geologist/Environmental Scientist	$	133
Senior Project Engineer/Geologist/Environmental Scientist	$	127
Project Engineer/Geologist/Environmental Scientist	$	123
Senior Staff Engineer/Geologist/Environmental Scientist	$	109
Staff Engineer/Geologist/Environmental Scientist	$	96
GIS Analyst	$	96
Field Operations Manager	$	87
Supervisory Technician*	$	87
Nondestructive Examination Technician, UT, MT, LP*	$	87
Pull Test Technician and Equipment*	$	87
Senior Field/Laboratory Technician*	$	73
Field/Laboratory Technician*	$	73
ACI Concrete Technician*	$	73
Concrete/Asphalt Batch Plant Inspector	$	73
Special Inspector, Reinforced Concrete*	$	73
Special Inspector, Pre-stressed Concrete*	$	73
Special Inspector, Reinforced Masonry*	$	73
Special Inspector, Structural Steel*	$	73
Special Inspector, Welding, AWS*	$	73
Special Inspector, Fireproofing*	$	73
Technical Illustrator/CAD Operator	$	69
Geotechnical/Environmental/Laboratory Assistant	$	53
Information Specialist	$	52
Data Processing, Technical Editing, or Reproduction	$	44

OTHER CHARGES

Expert Witness Testimony	$	400 /hr
Concrete Coring Equipment (includes one technician)	$	160 /hr
Special Preparation of Standard Test Specimens	$	64 /hr
Inclinometer Usage	$	32 /hr
Vapor Emission Kits	$	30 /kit
Rebar Locator (Pachometer)	$	10 /hr
Nuclear Density Gauge Usage	$	0 /hr
Field Vehicle Usage	$	0 /hr
Direct Project Expenses	Cost plus 15 %	
Laboratory testing, geophysical equipment, and other special equipment provided upon request.		

NOTES (Field Services)

For field and laboratory technicians and special inspectors, regular hourly rates are charged during normal weekday construction hours. Overtime rates at 1.5 times the regular rates will be charged for work performed outside normal construction hours and all day on Saturdays. Rates at twice the regular rates will be charged for all work in excess of 12 hours in one day or on Sundays and holidays. Lead time for any requested service is 24 hours. Field Technician and Special inspection rates are based on a 4-hour minimum for the first 4 hours and an 8-hour minimum for hours exceeding 4 hours.

*Indicates rates that are based on Prevailing Wage Determination made by the State of California, Director of Industrial Relations on a semiannual basis. Our rates will be adjusted in conjunction with the increase in the Prevailing Wage Determination during the life of the project.

INVOICES

Invoices will be submitted monthly and are due upon receipt. A service charge of 1.0 percent per month may be charged on accounts not paid within 30 days.

TERMS AND CONDITIONS

The terms and conditions of providing our consulting services include our limitation of liability and indemnities as presented in Ninyo & Moore's Work Authorization and Agreement.

SCHEDULE OF FEES FOR LABORATORY TESTING
Laboratory Test, Test Designation, and Price Per Test

Soils

Atterberg Limits, D 4318, CT 204	$ 145
California Bearing Ratio (CBR), D 1883	$ 440
Chloride and Sulfate Content, CT 417 & CT 422	$ 135
Consolidation, D 2435, CT 219	$ 275
Consolidation – Time Rate, D 2435, CT 219	$ 70
Direct Shear – Remolded, D 3080	$ 290
Direct Shear – Undisturbed, D 3080	$ 250
Durability Index, CT 229	$ 150
Expansion Index, D 4829, UBC 18-2	$ 165
Expansion Potential (Method A), D 4546	$ 145
Expansive Pressure (Method C), D 4546	$ 145
Geofabric Tensile and Elongation Test, D 4632	$ 165
Hydraulic Conductivity, D 5084	$ 300
Hydrometer Analysis, D 422, CT 203	$ 190
Moisture, Ash, & Organic Matter of Peat/Organic Soils	$ 110
Moisture Only, D 2216, CT 226	$ 30
Moisture and Density, D 2937	$ 39
Permeability, CH, D 2434, CT 220	$ 230
pH and Resistivity, CT 643	$ 140
Proctor Density D 1557, D 698, CT 216, & AASHTO T-180 (Rock corrections add $80)	$ 180
R-value, D 2844, CT 301	$ 250
Sand Equivalent, D 2419, CT 217	$ 90
Sieve Analysis, D 422, CT 202	$ 110
Sieve Analysis, 200 Wash, D 1140, CT 202	$ 90
Specific Gravity, D 854	$ 90
Triaxial Shear, C.D, D 4767, T 297	$ 390
Triaxial Shear, C.U., w/pore pressure, D 4767, T 2297 per pt.	$ 330
Triaxial Shear, C.U., w/o pore pressure, D 4767, T 2297 per pt.	$ 190
Triaxial Shear, U.U., D 2850	$ 140
Unconfined Compression, D 2166, T 208	$ 100
Wax Density, D 1188	$ 90

Roofing

Built-up Roofing, cut-out samples, D 2829	$ 165
Roofing Materials Analysis, D 2829	$ 500
Roofing Tile Absorption, (set of 5), UBC 15-5	$ 190
Roofing Tile Strength Test, (set of 5), UBC 15-5	$ 190

Masonry

Brick Absorption, 24-hour submersion, C 67	$ 45
Brick Absorption, 5-hour boiling, C 67	$ 55
Brick Absorption, 7-day, C 67	$ 60
Brick Compression Test, C 67	$ 45
Brick Efflorescence, C 67	$ 45
Brick Modulus of Rupture, C 67	$ 40
Brick Moisture as received, C 67	$ 35
Brick Saturation Coefficient, C 67	$ 50
Concrete Block Compression Test, 8x8x16, C 140	$ 60
Concrete Block Conformance Package, C 90	$ 440
Concrete Block Linear Shrinkage, C 426	$ 120
Concrete Block Unit Weight and Absorption, C 140	$ 55
Cores, Compression or Shear Bond, CA Code	$ 55
Masonry Grout, 3x3x6 prism compression, UBC 21-18	$ 30
Masonry Mortar, 2x4 cylinder compression, UBC 21-16	$ 30
Masonry Prism, half size, compression, UBC 21-17	$ 110

Concrete

Cement Analysis Chemical and Physical, C 109	$ 1,650
Compression Tests, 6x12 Cylinder, C 39	$ 22
Concrete Mix Design Review, Job Spec	$ 140
Concrete Mix Design, per Trial Batch, 6 cylinder, ACI	$ 750
Concrete Cores, Compression (excludes sampling), C 42	$ 55
Drying Shrinkage, C 157	$ 250
Flexural Test, C 78	$ 50
Flexural Test, C 293	$ 55
Flexural Test, CT 523	$ 60
Gunite/Shotcrete, Panels, 3 cut cores per panel and test, ACI	$ 250
Jobsite Testing Laboratory	Quote
Lightweight Concrete Fill, Compression, C 495	$ 40
Petrographic Analysis, C 856	$ 1,100
Splitting Tensile Strength, C 496	$ 80

Reinforcing and Structural Steel

Fireproofing Density Test, UBC 7-6	$ 55
Hardness Test, Rockwell, A-370	$ 50
High Strength Bolt, Nut & Washer Conformance, set, A-32	$ 120
Mechanically Spliced Reinforcing Tensile Test, ACI	$ 95
Pre-Stress Strand (7 wire), A 416	$ 140
Chemical Analysis, A-36, A-615	$ 120
Reinforcing Tensile or Bend up to No. 11, A 615 & A 706	$ 50
Structural Steel Tensile Test: Up to 200,000 lbs. (machining extra), A 370	$ 70
Welded Reinforcing Tensile Test: Up to No. 11 bars, ACI	$ 55

Asphalt Concrete

Asphalt Mix Design, Caltrans	$ 2,200
Asphalt Mix Design Review, Job Spec	$ 150
Extraction, % Asphalt, including Gradation, D 2172, CT 310	$ 215
Film Stripping, CT 302	$ 100
Hveem Stability and Unit Weight CTM or ASTM, CT 366	$ 195
Marshall Stability, Flow and Unit Weight, T-245	$ 215
Maximum Theoretical Unit Weight, D 2041	$ 120
Swell, CT 305	$ 165
Unit Weight sample or core, D 2726, CT 308	$ 90

Aggregates

Absorption, Coarse, C 127	$ 35
Absorption, Fine, C 128	$ 35
Clay Lumps and Friable Particles, C 142	$ 100
Cleanness Value, CT 227	$ 120
Crushed Particles, CT 205	$ 140
Durability, Coarse, CT 229	$ 130
Durability, Fine, CT 229	$ 130
Los Angeles Abrasion, C 131 or C 535	$ 180
Mortar making properties of fine aggregate, C 87	$ 275
Organic Impurities, C 40	$ 55
Potential Reactivity of Aggregate (Chemical Method), C 289	$ 390
Sand Equivalent, CT 217	$ 90
Sieve Analysis, Coarse Aggregate, C 136	$ 105
Sieve Analysis, Fine Aggregate (including wash), C 136	$ 105
Sodium Sulfate Soundness (per size fraction), C 88	$ 160
Specific Gravity, Coarse, C 127	$ 75
Specific Gravity, Fine, C 128	$ 85

Special preparation of standard test specimens will be charged at the technician's hourly rate.

Ninyo & Moore is accredited to perform the AASHTO equivalent of many ASTM test procedures.