Project No.: 92650
Object Code: 6170

AGREEMENT FOR GEOTECHNICAL SERVICES
Contract Number LCF 18/19-05

This **AGREEMENT** is made as of October 9, 2018 between the **La Cañada Unified School District,** hereinafter identified as the "**DISTRICT**", and **Allan E. Seward Engineering Geology, Inc.,** hereinafter identified the "**GEOTECHNICAL ENGINEER"** for geotechnical engineering services, subsurface investigation for horizontal directional drilling for a sewer line extension at Palm Crest Elementary School located at 5025 Palm Drive, La Cañada, CA 91011.

1 PART 1

1.1 COMPENSATION

1.1.1 The District shall compensate the Geotechnical Engineer for actual work performed in accordance with the full Terms and Conditions of this Agreement on a Time and Materials basis for services completed as follows:

SERVICES	AMOUNT
Task 1: Preparatory Work	$2,095
Task 2: Field Investigation	$4,488
Task 3: Laboratory Testing	$3,085
Task 4: Geologic & Geotechnical Analysis	$3,476
Task 5: Geotechnical Report	$4,888

TOTAL NOT TO EXCEED AMOUNT FOR ALL SERVICES is $18,032

1.2 ENUMERATION OF AGREEMENT

1.2.1 This Agreement represents the entire and integrated agreement between the District and the Geotechnical Engineer and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by written instrument signed by both District and Geotechnical Engineer. This Agreement is also comprised of the documents listed below.

a. Preliminary Sewer Plan & Profile dated 07-27-2018 by Radfall Company;
b. Allan E. Seward Engineering Geology proposal dated 9/20/2018

1.3 PROJECT TEAM

1.3.1 The District:

1.3.1.1 Program Manager is: Harold Pierre, P.E., (818) 952-8077, hpierre@linikcorp.com.

1.3.1.4 The District's Program Manager (respective to the phase of the Project) shall be authorized to act on the District's behalf with respect to all aspects of the Project. The District or the District's Designated Representative shall render decisions in a timely manner in order to avoid unreasonable delay in the orderly and sequential progress of the Geotechnical Engineer's services.

1.3.1.5 NOT USED.

1.3.1.6 The Geotechnical Engineer shall communicate with the District through the District's Program Manager.

1.3.2 The Geotechnical Engineer:

1.3.2.1 Designated Representative is: Kevin P. Callahan, Principal Geotechnical Engineer, (661) 294-0065, kcallahan@sewardgeo.com.

1.3.2.2 The Geotechnical Engineer's Designated Representative shall be authorized to act on the Geotechnical Engineer's behalf with respect to the Project and to bind the Geotechnical Engineer and the Geotechnical Engineer's consultants.

1.4 GENERAL TERMS AND CONDITIONS

1.4.1 The District and Geotechnical Engineer shall cooperate with one another to fulfill their respective obligations under this Agreement. Both parties shall endeavor to maintain good working relationships among all members of the Project Team.

1.4.2 Licensing Requirements. By signature on this Agreement, the declaration is made by the Geotechnical Engineer is professionally qualified, registered, and licensed to practice in the State of California. In accordance with California law, the Geotechnical Engineer shall sign and stamp all Documents.

1.4.3 The Geotechnical Engineer shall be responsible for the professional quality, technical accuracy, and coordination of all concepts, programming, reports, designs, drawings, specifications, and other services furnished under this Agreement. The Geotechnical Engineer shall, without additional compensation, correct or revise any errors, deficiencies, or omissions in concepts, programming, reports, designs, drawings, specifications, estimates, and other services.

1.4.4 The District's review, approval, acceptance, or payment for services shall not be interpreted or construed to operate as a waiver of any rights or cause for action arising out of the Geotechnical Engineer's performance of services under this Agreement. The Geotechnical Engineer shall remain liable to the District as allowed by law for any and all costs and/or damages caused by the Geotechnical Engineer's negligent performance of any of the services furnished under this Agreement.

1.4.5 Rights & Remedies. The rights and remedies of the District allowed by law are in addition to any rights and remedies provided in this Agreement.

1.4.6 Relationship. The relationship of the Geotechnical Engineer to the District under this Agreement is that of an Independent Contractor. The Geotechnical Engineer (or the Geotechnical Engineer's consultants) is not an employee of the District, is not carrying out the regular business of the District, and is not subject to the same employment regulations as applicable to employees of the District. Each of the parties will be solely and entirely responsible for their own acts and the acts of their employees. No benefits, special considerations, or employer/employee-type provisions are provided by the District to the Geotechnical Engineer, the Geotechnical Engineer's employees, or the Geotechnical Engineer's consultants, or the consultants' employees.

1.4.7 Successors and Assigns. The District and the Geotechnical Engineer each bind themselves, their partners, successors, legal representatives, and assigns to the other party to this Agreement and to the partners, successors, legal representatives and assigns of such other party in respect to all covenants of this Agreement. Neither the District nor the Geotechnical Engineer shall assign or transfer his interest in the Agreement without written consent of the other.

1.4.8 Records and Documentation:

1.4.8.1 The Geotechnical Engineer and the Geotechnical Engineer's consultants shall be aware

that all documentation, including electronic correspondence, in the District's possession is a public record and the District is obligated to make all such records available upon request by any party or individual unless such records meet statutory requirements or California Administrative Rules for confidentiality.

1.4.8.2 The District shall have access to all records, correspondence, and files of the Geotechnical Engineer, its employees, engineers, and consultants pertaining to the Project. This access shall be continuing and survive the termination of the Contract for either cause or convenience. Such records shall be kept in a generally recognized format for a period of three (3) years from the date of termination of this Agreement or Final Acceptance of the Project by the District. All records shall be available to the District, or its authorized representative. The District does not consider documents, files, and records in the Geotechnical Engineer's possession or the Geotechnical Engineer's consultants' possession to be public records unless determined to be so by law or unless they come into the District's possession.

1.4.9 The Geotechnical Engineer warrants that he has not employed or retained any person, partnership, or corporation, other than a bona fide employee or principle owner working for the Geotechnical Engineer to solicit or acquire the Project described in this Agreement.

1.4.10 Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the District or Geotechnical Engineer.

1.5 RESPONSIBILITIES OF THE PARTIES

1.5.1 District Responsibilities:

1.5.1.1 Unless otherwise provided under this Agreement, the District shall provide information in a timely manner regarding requirements and parameters of the Project. The District shall furnish a preliminary project program setting forth the District's objectives, schedule, constraints and criteria, including necessities and relationships, special equipment, systems and site requirements.

1.5.1.2 The District shall examine documents submitted by the Geotechnical Engineer and shall render decisions pertaining thereto.

1.5.1.3 The District shall furnish the services of consultants other than those designated as part of the Geotechnical Engineer's responsibility or authorize the Geotechnical Engineer to furnish them as a change in service or scope.

1.5.1.4 The District shall furnish testing, inspections, and reports as necessary for the Project such as structural, mechanical, chemical, and other laboratory tests, inspections, and reports or authorize the Geotechnical Engineer to furnish them as a change in service or scope.

1.5.1.5 The District shall furnish accounting and auditing services as may be necessary for the Project as he may require to ascertain how or for what purposes the Geotechnical Engineer has used the funds paid under the terms of this Agreement.

1.5.1.6 If the District observes or otherwise becomes aware of any error, fault, omission, or defect in the Project or non-conformance with the documentation or Plans and Specifications, he shall give prompt notice thereof to the Geotechnical Engineer.

1.5.2 Geotechnical Engineer's Responsibilities:

1.5.2.1 The Geotechnical Engineer's services shall be performed as expeditiously as is consistent with professional skill and care, orderly progress of the Project, and in accordance with the Project Schedule.

1.5.2.2 The Geotechnical Engineer shall maintain the confidentiality of information specifically designated as confidential by the District, unless withholding such information would violate the law or create the risk

of significant harm to the public. The Geotechnical Engineer shall require similar agreements of the Geotechnical Engineer's consultants to maintain the confidentiality of information specifically designated as confidential by the District.

1.5.2.3 Except with the District's knowledge and express written permission, the Geotechnical Engineer shall not engage in any activity, or accept any employment, other agreement, interest, or contribution that would reasonably appear to compromise the Geotechnical Engineer's professional judgment with respect to this Project.

1.5.2.4 The Geotechnical Engineer is expressly prohibited from participating in or bidding on any part of the Contract for Construction or multiple construction contracts, if any, let by the District.

1.5.2.5 The Geotechnical Engineer shall review laws, codes, and regulations applicable to the Geotechnical Engineer's services. The Geotechnical Engineer shall respond in the design of the Project to requirements imposed by governmental authorities having jurisdiction over the Project.

1.5.2.6 The Geotechnical Engineer shall be entitled to rely on the accuracy and completeness of services and information furnished by the District. The Geotechnical Engineer shall provide prompt written notice to the District if the Geotechnical Engineer becomes aware of any errors, omissions, or inconsistencies in such services or information.

2 PART 2

2.1 GEOTECHNICAL INVESTIGATION REQUIREMENTS

2.1.1 TIME: Subject to limitations stated in this Agreement, the specified Geotechnical Investigation shall be completed and the drawing(s) and report(s) delivered to the District within forty-five (45) calendar days upon the District's execution of this Agreement or authorization from the District to proceed.

2.1.2 Access and Protection of Property. The Geotechnical Engineer shall contact the Agency for information regarding access to the site and shall take all reasonable precautions to prevent damage to property, visible and concealed, and shall reasonably restore the site to the condition existing prior to the Geotechnical Engineer's entry, including, but not limited to, repair of curbs, sidewalks, lawns and plantings unless otherwise agreed to with the District.

2.1.3 Geotechnical Investigation and Reports. Services may include but are not limited to test borings, test pits, determinations of soil bearing values, percolation tests, evaluations of hazardous materials, soil corrosion/resistivity tests, including necessary operations for anticipating subsoil conditions, with reports and appropriate recommendations unless such services are specifically provided by the District.

2.1.3.1 Reports and Drawing Requirements. The Geotechnical Engineer shall sign and seal each report and/or drawing and certify to the best of the geotechnical engineer's knowledge, information, and belief that all information thereon is true and accurately shown. Drawings and drawing files shall contain written scale, graphic scale, North arrow (oriented to the top of the sheet), legend of symbols and abbreviations used on the drawing(s), and all dimensions and elevations in English units.

2.1.3.2 Investigation.

2.1.3.2.1 The geotechnical engineer shall perform borings and subsurface investigations in accordance with accepted geotechnical engineering practices and in the quantity and location as coordinated with the District, or the District's Architect/Engineer, in order to determine the subsurface soil strata, obtain representative samples for laboratory analysis, investigate the in-situ soil conditions, and investigate the subsurface water conditions.

2.1.3.2.2 All samples shall be classified in accordance with ASTM D-2488, "Standard Practice for Description and Identification of Soils."

2.1.3.2.3 Testing shall be performed in accordance with:

2.1.3.2.3.1 Standard Test Method for Penetration Test and Split Barrel Sampling of Soils, ASTM D-1586;

2.1.3.2.3.2 Thin-Walled Tube Sampling of Soils, ASTM D-1587;

2.1.3.2.3.3 Moisture Content Tests, ASTM D-2116;

2.1.3.2.3.4 Atterberg Limits, ASTM D-4318;

2.1.3.2.3.5 Sieve/Grain Size Analysis Tests, ASTM D-422 and C-136;

2.1.3.2.3.6 Consolidation/Swell, ASTM D-2438 and D-4546;

2.1.3.2.3.7 Shear Strength, ASTM D-2850, D-4767, and D-2166;

2.1.3.2.3.8 California bearing ratio, ASTM D 1883;

2.1.3.2.3.9 Proctor, ASTM D-698 and D-1557; and,

2.1.3.2.3.10 Corrosion tests such as resistivity, pH, and sulfates.

2.1.3.2.4 Percolation tests shall be performed in accordance with the California governing agency's currently accepted practices and procedures.

2.1.3.2.5 Other methods of investigation may be used upon prior approval of the District. Such methods include test pits, rotary borings, had auger borings, subsurface strata delineation or other generally accepted geophysical methods.

2.1.3.3 Reports. Reports shall provide descriptive information of the scope of the investigation describing the tasks and analysis performed along with the following:

2.1.3.3.1 Sub-surface investigation. General description of the samples taken, locations, elevations, the testing methods performed, site geology, subsurface soils profiles, and groundwater observations.

2.1.3.3.2 Laboratory Investigations. General description of the examinations and classification of tests performed.

2.1.3.3.3 Design and Construction Recommendations. General description of the Project to be constructed with loading information obtained from the District or the District's Architect/Engineer. The geotechnical engineer shall perform a historical search regarding any previous construction on the site. The Report shall provide design criteria and make recommendations as appropriate for the Project in accordance with the attached proposal.

3 PART 3

3.1 OWNERSHIP OF DOCUMENTS

3.1.1 All documents developed under this Agreement are and shall become the property of the District whether the Project for which they are made is or is not executed. It is understood and agreed that the District and the District's Architect/Engineer is permitted to reproduce the drawings and distribute the prints in connection with the use or disposition of the property without incurring obligation for

additional compensation to the Geotechnical Engineer.

3.1.2 The signing of this Agreement shall constitute a complete transfer of ownership, intellectual property and copyright of all documents from the Geotechnical Engineer to the District upon Substantial Completion of the Project. Such transfer shall not be construed by the Geotechnical Engineer as a grant for usage nor can it be revoked by the Geotechnical Engineer.

3.1.3 The District agrees to indemnify and hold harmless the Geotechnical Engineer from any and all claims, demands and causes of action of any kind or character arising as a result of reuse of the documents developed under this Agreement.

3.1.4 The District is restricted from using the Geotechnical Engineer's license seal/stamp in any form or manner as part of any reuse of documents developed under this Agreement. The Geotechnical Engineer may not remove its license seal/stamp from the Contract Documents used to construct the Project but may do so from electronic and hardcopy Record Drawings delivered to the District.

3.1.5 The Geotechnical Engineer shall have the right to include photographic or artistic representations of the design of the Project among the Geotechnical Engineer's promotional and professional materials. The Geotechnical Engineer shall be given reasonable access to the completed Project to make such representations. However, the Geotechnical Engineer's materials shall not include the confidential or proprietary information regardless of whether or not the District has previously advised the Geotechnical Engineer in writing of the specific information considered by the District to be confidential or proprietary.

3.2 INSURANCE

3.2.1 The Geotechnical Engineer, at its own cost, shall obtain and maintain during the term of this Agreement all insurance policies required pursuant to this Article. The District shall be named as an additional insured with respect to all such insurance except professional liability and Workers' Compensation Insurance. The insurance policies required pursuant to this Agreement shall be issued by one or more insurers licensed to do business in this State and having an A.M. Best Company rating of not less than an "A-9." Prior to commencing the Geotechnical Services, the Geotechnical Engineer shall provide to the District copies of all insurance policies required pursuant to this Article, together with duly authorized and executed certificates of insurance evidencing that such insurance policies are in effect ("Certificates of Insurance"). The Certificates of Insurance name the District as an additional insured and shall expressly require that the insurer notify the District not less than thirty (30) days prior to any cancellation, termination, reduction in coverage, or expiration without renewal of any such insurance policy. Language therein to the effect that the insurer shall "endeavor" to provide such notices shall not be acceptable. The District shall review the insurance policies and Certificates of Insurance required pursuant to this Paragraph to determine whether they comply with the requirements of this Agreement. The Geotechnical Engineer shall provide updated Certificates of Insurance to the District for each renewal of an insurance policy required pursuant to this Article. Any failure by Geotechnical Engineer to comply with the provisions of this Article shall be deemed a material breach of this Agreement.

1. Workers Compensation Insurance. The Geotechnical Engineer shall obtain and maintain Workers' Compensation Insurance as required by the Labor Code and Employer's Liability Insurance with coverage in an amount not less than five hundred thousand dollars ($500,000).

2. Professional Liability Insurance. The Geotechnical Engineer shall obtain, and shall maintain until at least five (5) years after filing of the Notice of Completion, Professional Liability Insurance with coverage in an amount of not less than one million dollars ($1,000,000.00).

3. General Liability Insurance. The Geotechnical Engineer shall obtain and maintain during the term of the Agreement a policy of commercial general liability insurance, written on an "occurrence" basis, providing coverage with a combined single limit of not less than two million dollars ($2,000,000) for all activities conducted by Geotechnical Engineer pursuant to this Agreement ("Liability

Policy"). The Liability Policy shall contain a cross-liability endorsement and a waiver of the insurer's rights of subrogation. The Liability Policy shall include limited coverage for the contractual liability assumed by the Geotechnical Engineer pursuant to this Agreement. The Liability Policy shall be primary with respect to any insurance or self-insurance programs covering the District, its Board members, officers, employees, agents and consultants.

4. Automobile Liability Insurance. The Geotechnical Engineer shall obtain and maintain during the term of this Agreement policies of business automobile liability insurance with a combined single limit of not less than one million dollars ($1,000,000) per occurrence. Such insurance shall include coverage for owned, hired and non-owned automobiles.

3.2.2 Consultant Insurance. All engineers, experts and other consultants employed by or under contract to the Geotechnical Engineer in connection with this Agreement shall be required to independently comply with the insurance standards and requirements set forth in Paragraph 3.2.1 of this Article, unless other standards or requirements are approved by the District in writing. Unless such other insurance standards or requirements are approved in writing by the District, the Geotechnical Engineer 's agreements with its consultants shall contain provisions making them subject to the requirements set forth in Paragraph 3.2.1 of this Article.

The Geotechnical Engineer shall procure and maintain through termination or Final Acceptance of the Project, Workers Compensation Coverage and commercial liability insurance for protection from claims, actions, damages, and liabilities due to or arising out of bodily injury, automobile accidents, personal injury, sickness, disease, death, or other incidents for himself and all his employees and from claims, action, damages, and liability to or destruction of property arising out of services provided under this Agreement.

3.2.3 Indemnification and Hold Harmless. For purposes of this Paragraph, the term "District" is deemed to include its Board members, officers, employees and agents. The Geotechnical Engineer hereby agrees that it shall indemnify and defend the District, and hold the District harmless, against and from any and all claims, demands, causes of action, costs, including, without limitation attorney's fees and expenses, liabilities, losses, damages and injuries of any kind (including those related to any injury to property or to the injury or death of any person) that in any manner arise out of, or result from any intentional or negligent act, error or omission of the Geotechnical Engineer or its officials, officers, employees, subcontractors, consultants or agents in connection with this Agreement or the performance of the Geotechnical Services. Any defense of the District shall be legal counsel reasonably acceptable to the District, and Geotechnical Engineer shall bear all cost, expense and risk thereof. In connection therewith, the Geotechnical Engineer shall pay or otherwise satisfy any judgment, award or decree that may be rendered against the District. The District, without jeopardizing or compromising any of its rights herein, may settle any demand, action or other legal proceeding on terms determined by the Board to be in the District's best interest, and the Geotechnical Engineer shall reimburse the District for the amount paid in settlement, together with the District's costs and expenses, including attorneys' fees and expenses, incurred in negotiating and entering into such settlement. The Geotechnical Engineer also shall reimburse the District for any and all legal expenses and costs, including attorneys' fees, incurred in enforcing the indemnity and other rights herein provided. The obligations of the Geotechnical Engineer set forth in this Paragraph shall not be deemed to be limited or restricted to insurance proceeds, if any, received by the District. The obligations of the Geotechnical Engineer set forth in this Paragraph shall survive termination of the Agreement with respect to Geotechnical Services provided prior to termination or expiration of this Agreement. However nothing above requires the Geotechnical Engineer to pay for or be responsible in any manner to the District for intentional or negligent acts of the District. The District shall indemnify and hold harmless the Geotechnical Engineer from and against all damages, claims and liability arising out of the negligent acts, errors, or omissions of the District, its officers, agents, consultants, and employees, including all judgments, awards, losses, expenses, costs and attorneys' fees.

3.2.4 Equal Opportunity Employment. The Geotechnical Engineer shall be familiar with and be responsible for and adhere to all Federal and State requirements regarding employment practices. All hiring and other employment practices of the Geotechnical Engineer shall be in accordance with Federal

Equal Employment Opportunity laws, requirements and regulations and shall be nondiscriminatory, based on merit and qualifications without regard to race, color, religion, creed, political ideas, sex, age, marital status, physical or mental handicap, or national origin.

3.2.5 Personnel Expenses pertaining to mandatory or customary contributions and benefits related to employment taxes and other statutory employee benefits, insurance, sick leave, holidays, vacations, employee retirement plans, and similar contributions are entirely the responsibility of the Geotechnical Engineer.

3.3 TERMINATION OR SUSPENSION OF THIS AGREEMENT

3.3.1 The District or Geotechnical Engineer may terminate this Agreement upon giving written notice to the other that such party has defaulted and failed to fulfill its obligations under this Agreement. The written notice must contain an itemized description and accounting of default and failure. In the event of such default, the Geotechnical Engineer or District shall allow ten (10) calendar days for corrective action or submission of a corrective action plan. The ten (10) days shall be based upon the date of receipt of the notice by the other party. Should no satisfactory corrective action be taken or acceptable corrective action plan be provided by the defaulting party, the other shall have right to terminate the Agreement.

3.3.2 The District may terminate this Agreement without cause or for convenience at any time upon giving written notice to the Geotechnical Engineer. If the Agreement is terminated without cause, the Geotechnical Engineer shall be compensated for all services rendered prior to receiving the written notice.

3.3.3 If the Geotechnical Engineer fails to fulfill his obligations and the Agreement is terminated, the District may prosecute the Project to completion by contract or other means available. The Geotechnical Engineer shall be liable to the District for any and all additional costs incurred due to the Geotechnical Engineer's failure to perform. The rights and remedies available to the District provided herein are in addition to any and all other rights and remedies provided by law or equity.

3.3.4 If the District fails to make payments to the Geotechnical Engineer in accordance with this Agreement, such failure shall be considered substantial nonperformance and cause for termination subject to the written notice provision above or, at the Geotechnical Engineer's option, cause for suspension of performance of services under this Agreement. If the Geotechnical Engineer elects to suspend services, prior to suspension of services, the Geotechnical Engineer shall also give ten (10) days written notice to the District. In the event of a suspension of services, the Geotechnical Engineer shall have no liability to the District for delay or damage caused the District because of such suspension of services. The Geotechnical Engineer shall resume services upon corrective action or submission of a corrective action plan by the District.

3.3.5 The Geotechnical Engineer cannot terminate this Agreement or suspend services if the Project is suspended or delayed by the District. The District shall notify the Geotechnical Engineer concerning any suspension or delay and may direct the Geotechnical Engineer to suspend services accordingly.

3.3.6 Any and all expenses, termination costs, anticipated overhead and profit, and consequential costs as a result of termination of this Agreement are specifically excluded and shall not be due the Geotechnical Engineer.

3.4 MISCELLANEOUS PROVISIONS

3.4.1 Election to Arbitrate. In the event of any dispute between the parties related to the interpretation or enforcement of this Agreement, the parties may agree to submit such dispute to arbitration, either binding or non-binding, for resolution by a neutral third-party arbitrator. In the event the parties elect to arbitrate any such dispute, the parties shall attempt to agree upon a retired judge of the Superior Court in and for

the County of Los Angeles. If the parties are unable to agree on an arbitrator within thirty (30) days of the receipt of a request for arbitration, they shall request that the presiding judge of the Superior Court designate an arbitrator. Any agreement to arbitrate shall specify the parties' agreement as to the procedures and rules to be followed in conducting the arbitration, which, at a minimum, shall specify that the arbitrator must adhere to and apply all substantive statutory and case law that is applicable to the dispute. The District and the Geotechnical Engineer shall each pay one-half (1/2) the cost of the arbitration and each shall be responsible for its own attorneys' fees and costs related thereto. If the parties have elected binding arbitration and either party petitions to confirm, correct, or vacate the award as provided by Chapter 4 of Title 9 of the Code of Civil Procedure (commencing with Section 1285), the prevailing party shall be entitled as part of its costs to a reasonable attorney's fee to be fixed by the court.

3.4.2 Successors and Assigns. This Agreement is binding upon and inures to the benefit of the successors, executors, administrators, and assigns of each party to this Agreement, provided, however, that the Geotechnical Engineer shall not assign or transfer by operation of law or otherwise any or all rights, burdens, duties, or obligations without prior written consent of the District. Any attempted assignment by the Geotechnical Engineer without District consent shall be invalid.

3.4.3 Governing Law. This Agreement shall be governed by the laws of the State of California. Arbitration, action or other proceeding arising from or related in any way to this Agreement shall be conducted only in the County of Los Angeles.

3.4.4 Incorporation of Recitals and Exhibits. All recitals set forth herein, and all exhibits attached hereto or referenced herein, are hereby incorporated as effective and operative parts of this Agreement.

3.4.5 Geotechnical Engineer Not Officer or Employee of District. The District hereby retains Geotechnical Engineer on an independent contractor basis. The Geotechnical Engineer shall not be deemed or construed to be an employee of the District for any purpose whatsoever, including, but not limited to, for income tax purposes, and the Geotechnical Engineer is not entitled to the rights or benefits afforded to District's employees. Except as agreed by the parties and set forth in this Agreement, the Geotechnical Engineer shall have the sole discretion to determine the manner in which it will perform the Geotechnical Services. Any additional personnel performing the Geotechnical Services on behalf of Geotechnical Engineer also shall not be deemed or construed to be employees of the District, and shall at all times be under Geotechnical Engineer's exclusive direction and control. The Geotechnical Engineer shall pay all wages, salaries, and other amounts due such personnel in connection with their performance of Geotechnical Services and as required by law. The Geotechnical Engineer shall be responsible for all reports and obligations with respect to such personnel, including, but not limited to social security taxes, income tax withholding, unemployment insurance, disability insurance, and Workers' Compensation Insurance.

3.4.6 No Third-Party Rights. The parties have entered into this Agreement solely for their own benefit, and no third party shall be entitled, directly or indirectly, to base any claim or to have any right arising from, or related to, this Agreement.

3.4.7 Time of Essence. Time is of the essence with respect to this Agreement and each provision herein.

3.4.8 Captions and References. The captions or headings set forth in this Agreement are for convenience only and in no way define, limit, or describe the scope or intent or any Article, section, subsection, paragraph, or other provision of this Agreement. Any reference in this Agreement to an Article, section, subsection or paragraph, unless specified otherwise, shall be a reference to an Article, section, subsection or paragraph of this Agreement.

3.4.9 Drafting of Agreement. In interpreting this Agreement, it shall be deemed to have been prepared by the parties jointly and no ambiguity shall be resolved against either party on the premise that it or its attorneys was responsible for drafting this Agreement or any provision hereof.

3.4.10 Entire Agreement. This Agreement sets forth the entire agreement and understanding concerning the provision by the Geotechnical Engineer to the District of Geotechnical Services for the Project, and this Agreement supersedes and replaces all prior negotiations and proposed agreements, written or oral. Each party acknowledges that the other party and the other party's agents, attorneys and other representatives have not made any promise, representation, or warranty whatsoever, express or implied, other than those contained herein to induce the execution of this Agreement and acknowledges that this Agreement has not been executed in reliance upon any promise, representation, or warranty not contained herein.

3.4.11 Severability. If any Article, section, subsection, paragraph, sentence, clause or phrase contained in this Agreement shall become illegal, null or void or against public policy, for any reason, or shall be held by a court of competent jurisdiction to be illegal, null or void or against public policy, the remaining Articles, sections, subsections, paragraphs, sentences, clauses and phrases contained in this Agreement shall not be affected thereby and shall, to the extent possible in light of the illegal, null or void language, continue in full force and effect.

3.4.12 Waiver. The failure of a party at any time to require a performance by any other party of any provision hereof shall not affect in any way the full right to require such performance at any time thereafter. The waiver of any breach of any provision of this Agreement by a party shall not be deemed to be a waiver of any preceding or subsequent breach of the same or any other provision of this Agreement.

3.4.13 Conflicting Provisions. In the event that provisions of any exhibit incorporated into this Agreement conflict in any way with the provisions set forth in this Agreement, the provisions herein shall control over the exhibits with respect to the actions and obligations of the parties and the interpretation of the parties' understanding concerning the performance of the Geotechnical Services.

3.4.14 Amendment. This Agreement may be amended or modified only by means of a writing duly approved and executed by the parties.

3.4.15 Prevailing Wages. The Geotechnical Engineer acknowledges the requirements of Labor Code Section 1770 *et seq.*, which would require the payment of prevailing wages if the Geotechnical Services or any portions thereof are determined to be a "public work" as that term is defined in the Labor Code. The Geotechnical Engineer shall defend, indemnify, and hold harmless the District, its Board members, officers, employees, agents and consultants from and against any claim or liability, including, without limitation, attorneys' fees and costs, arising from or related to any failure or alleged failure of Geotechnical Engineer to comply with Labor Code Section 1770 *et seq.*

3.4.16 Equal Opportunity Employment. The Geotechnical Engineer represents and warrants that it is an equal opportunity employer and it shall not discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, sex or age. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, promotion, demotion, transfer, recruitment or recruitment advertising, layoff or termination.

3.4.18 Counterparts. This Agreement may be executed in counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

3.4.19 Due Authority of Signators. Each individual signing this Agreement represents and warrants that he or she has been authorized by appropriate action of the party that he or she represents to enter into this Agreement on behalf of that party.

IN WITNESS WHEREOF, the District and the Geotechnical Engineer have executed this agreement the day and year first above written.

Allan E. Seward Engineering Geology, Inc.

By: _____
Signature

Eric J. Seward, V.P.
Print Name

La Cañada Unified School District

By: _____
Signature

_____
Print Name

ALLAN E. SEWARD
ENGINEERING GEOLOGY, INC.
Geological And Geotechnical Consultants

September 20, 2018 Job No: 18-2604-9 (0)

La Cañada Unified School District
4490 Cornishon Avenue
La Cañada, California 91011

Attention: Mr. Harold Pierre
Program Manager
Linik Corp. Builders Management

Subject: **Geotechnical Engineering Services**
Subsurface Investigation for Horizontal Directional Drilling
Sewer Line Extension
Palm Crest Elementary School
5025 Palm Drive
La Cañada, California 91011

Dear Mr. Pierre:

Thank you for the opportunity to present this proposal to the La Cañada Unified School District to provide Geotechnical Engineering Services for the proposed sewer line project. It is our understanding that the purpose of our investigation is to provide geotechnical design considerations and recommendations to assess feasibility of using Horizontal Directional Drilling (HDD) for the sewer line installation. The proposed scope of work is based on review of the Preliminary Sewer Plan and Profile, prepared by Radfall Company, project discussions with you, and a site visit conducted on 9/13/18. We have also included our qualifications to perform the geotechnical services outlined herein.

If you have questions regarding this proposal please do not hesitate to contact us.

Respectfully submitted,

Eric J. Seward, CEG 2110
Principal Engineering Geologist
Vice President

Kevin P. Callahan, MS, GE 2989
Principal Geotechnical Engineer

The following attachment completes this proposal:

- Schedule of Fees (valid thru December 2018)
- Schedule of Lab Fees (valid thru December 2018)
- Estimate – Choice Drilling

1.0 INTRODUCTION

1.1 General

This firm is well qualified to provide La Cañada Unified School District with the services described herein in a timely, professional, and cost-effective manner. We are familiar with the scope of the proposed improvements, general geologic and soils conditions in the vicinity, and the data and analysis required to evaluate the site relative to the proposed horizontal directional drilling. The work statement outlined herein will be performed by or under the direct supervision and guidance of a licensed Geotechnical Engineer and Certified Engineering Geologist.

1.2 Project Understanding

Based on review of the Preliminary Sewer Plan the proposed sewer line includes 6-inch PVC pipe with a pipeline route that extends approximately 700 feet from the southerly portion of the playground area, along the southwesterly portion of the property, to a tie-in with the public sewer beneath Palm Drive. The new sewer line will include tie-ins to existing private sewer lines at several connection points. The preferred construction methods for installation include open-trench and open-pit for approximately 170 feet and horizontal directional drilling (HDD) for approximately 530 feet. Shored excavations up to about 23 feet in depth are proposed at Palm Drive.

1.3 Summary of Scope of Work and Objective

The requested scope of work includes subsurface exploration in the vicinity of the proposed HDD alignment to evaluate and characterize the geologic and geotechnical conditions that may be encountered during HDD activities and to provide conclusions and geotechnical considerations for the design of the HDD operations. A geotechnical investigation report will be prepared that presents geotechnical recommendations for project planning, design, and construction.

Constraints to the proposed subsurface investigation include limited access due to low overhead clearance (trees, overhead utilities, roof overhangs, and walkway covers), sloping ground conditions at preferred drill locations, underground utilities, and school operating hours. It is our understanding that survey and geo-physical methods have been used to locate the underground utilities shown on the plan.

1.4 Exclusions

We will contact Underground Service Alert prior to our subsurface explorations. However, the locations of any and all known underground utility lines and subsurface structures should be indicated to us, on plans and on the ground. We will not be responsible for any damage that may occur to any such structures or elements as a result of our field work, nor for any consequences of

such damage, should such items not have been clearly and accurately demarcated, identified and made known to us prior to the start of any field work.

This proposal and fee estimate does not include the following items:

- The geotechnical investigation and evaluation is limited to the proposed HDD alignment and does not include the open-trench construction areas illustrated on the plan.
- Assessment of environmental conditions or contaminated soils.
- Additional services requested by you that are not covered in the scope of work in this proposal.
- Costs that may arise from post-report consultations, value engineering, construction services (site observations and testing), or attendance at meetings after the work has been completed.

2.0 QUALIFICATIONS

2.1 Company Profile

AESEGI has been providing professional soils engineering, geologic engineering, engineering analysis, quality control, quality assurance, materials inspection, and laboratory testing services as it relates to Private Development, Capital Improvement projects, Infrastructure, and Peer Review for 40 years. AESEGI has an established reputation throughout the Los Angeles and Ventura County region and we are familiar with the technical, regulatory and political climate involved in design and construction activities. AESEGI is dedicated to providing professional services to identify geologic and geotechnical constraints, document conditions with testing and inspections, and recommend appropriate mitigation to provide public safety, and to comply with the California Building Code (CBC) and applicable federal, state and local regulations.

AESEGI's extensive experience in a wide range of projects for private developers, government agencies, county, city and municipal entities, architects/engineers, construction companies, and commercial firms makes this firm uniquely qualified to perform the services described in the referenced RFQ. AESEGI staff has worked on a wide variety of facilities in which the requested geotechnical tasks are routinely performed, including residential and commercial developments, fire stations, schools, libraries, hotels, malls, bridges, roads, pipelines, tunnels, water and wastewater treatment plants, bank protection, and low-impact development improvements. A summary of recent projects completed by AESEGI is provided in the Project Experience section below. Additional reference projects can be provided upon request. As is standard in the industry, this firm carries one million dollars of Errors and Omissions Insurance.

AESEGI is a certified Small Business (SB) with the State of California and Los Angeles County Metropolitan Transport Authority (Metro) and currently employs a Professional Geotechnical Engineers and Certified Engineering Geologists that are licensed in the State of California, Laboratory and Field Technicians that hold certifications from national authorities, as well as our office support staff. Resumes of key employees to be assigned to the project are provided herein.

It is our goal to provide practical and realistic solutions to address a wide variety of geologic and geotechnical constraints that can impact development. Our combination of dedicated personnel, integrity, team work, knowledge of local conditions and regulatory review processes, attention to detail, and aspiration for excellence enables us to provide superior service in today's economic climate.

2.2 Professional Services

AESEGI's technical personnel are capable of providing the following professional services:

Geotechnical Engineering

- Value engineering/land planning
- Site exploration
- Excavation and logging of geotechnical borings and test pits
- In-situ characterization using CPT
- Characterization and mitigation of landslides and unstable slopes
- Earthquake ground motion characterization
- Site response analysis
- Evaluation and mitigation of liquefaction hazards
- Dynamic and static settlement analysis
- Remediation options for compressible & liquefiable soils
- Identification and mitigation of expansive and corrosive soils
- Design for shallow/deep foundations and earth retaining structures
- Low Impact Development (LID) investigation and design support
- Rigid, flexible, and pervious pavement design
- Earthworks recommendations

Engineering Geology

- Excavation and logging of geologic trenches
- Sampling and downhole logging of borings
- Delineation of geologic structure and landslides
- Geologic field mapping
- Aerial photo analysis
- Landslide and debris flow hazard assessments
- Assessment of building setbacks and restricted use areas
- Fault rupture hazard reports
- Ground water studies
- Water well design and construction inspection
- Subdrain design
- Geophysical surveys and rock rippability studies
- Percolation testing for on-site sewage disposal
- Forensic services
- 3rd Party review and expert witness

Construction Quality Control

AESEGI works closely with owners, engineers, architects, contractors, and public works project managers and inspectors to provide our client with a finished product that will stand up to time. Our field personnel are trained and certified to conduct geotechnical observation and construction materials testing services to verify that construction activities and products conform to approved project plans and specifications. Our field personnel observe, test, document and report on work performed by contractors involved in earthwork grading as well as foundation and retaining wall construction, street improvements, underground utilities, and soil-cement applications.

- Review of geotechnical design and construction material submittals
- Laboratory QC testing to assess compaction characteristics of construction materials
- Observation of keyway excavations and benching
- Observation of removal bottoms, fill placement, and subgrade preparation
- In-situ density and moisture content testing of compacted materials
- Observation of foundation excavations and monitoring of driven and cast-in-place piles
- Monitoring during installation of canyon subdrains
- Monitoring during placement of retaining wall back drainage
- Monitoring of tieback installation
- Field concrete sampling and testing
- Field asphalt testing
- Piezometer installation and monitoring
- Settlement, vibration and crack monitoring
- Deputy inspection (City of Los Angeles)

Geotechnical and Materials Testing

AESEGI operates a fully equipped, in-house geotechnical testing laboratory capable of performing high quality tests to support our Quality Control/Quality Assurance programs during investigations and construction monitoring. We are an accredited materials testing laboratory with the AASHTO Accreditation Program (AAP) and are certified by the City of Los Angeles. Our laboratory maintains qualified, trained technicians, calibrated equipment, and a quality management system that meets specific AASHTO R18 and ASTM D 3740 requirements. In order to demonstrate the quality of our test results we actively participate in the AASHTO and Caltrans proficiency sample programs. Our technicians and inspectors are trained to provide laboratory and field testing services for soil, concrete, and asphalt, and also maintain certification by ACI, ICC and NICET programs.

- Classification and Index Properties
  Visual Classification, In-Situ Moisture Content and Dry Density, Atterberg Limits, Particle-Size Analysis, Sand Equivalent, Field Infiltration Rate
- Strength and Volume Change
  Direct Shear, Consolidation, Swell Potential, Expansion Index, Collapse Potential, Pocket Penetrometer, Mini-Torvane Shear
- Soil Chemistry
  Sulfate and Chloride Content of Soils, Electrical Resistivity, pH of Soils
- Earthworks
  Standard and Modified Proctor (Compaction), California Impact Compaction, R-Value
- Aggregate
  Sieve Analysis, Unit Weight and Voids, Sand Equivalent of Graded Aggregate, Moisture Content, Durability
- Concrete
  Compression Strength of Concrete Specimens
- Soil-Cement
  Moisture-Density Relations, Unconfined Compression, Wetting and Drying, Determination of Cement Content - Heat of Neutralization

2.3 Quality Assurance

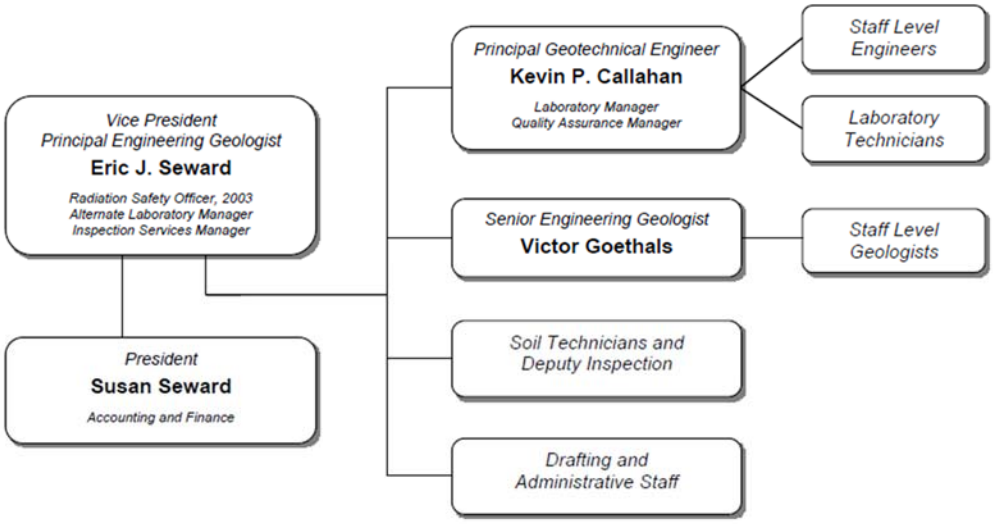
At AESEGI we recognize that quality geotechnical field and laboratory services provide value to each project and cost effective benefits to our clients. As such, we have developed a Quality Assurance Program (QAP) that implements systematic practices to ensure that the high standards of our quality requirements are consistently achieved. The QAP conforms to the requirements and criteria set forth in AASHTO Designation R18 and ASTM Standard Practice D3740 and describes the policies, personnel responsibilities, and standards that affect the quality of professional field and laboratory testing services. AESEGI personnel are committed to adhering to the objectives of the QAP in their daily work practices.

In accordance with our QAP, AESEGI employs trained technicians and maintains testing equipment that is calibrated annually by a professional calibration company. Technician training is performed and documented using in-house procedures developed by registered Geotechnical Engineers. AESEGI technicians are also required to maintain applicable certifications with regional and national authorities (i.e. ACI and NICET). Technician competency is routinely verified by monitoring of test performance by the laboratory supervisor. In order to demonstrate the quality of our test results we actively participate in applicable AASHTO and Caltrans proficiency sample programs. Samples are distributed in pairs by AASHTO to participating laboratories and specific tests are conducted on each sample in accordance with standard test methods. Test results are submitted and a final report is issued that documents the laboratories performance and includes the laboratories rating in comparison to all participating laboratories and in-house repeatability.

AESEGI is formally recognized by the AASHTO Accreditation Program (AAP) for our competence as a testing laboratory for soils and aggregates. The AAP utilizes laboratory assessments and proficiency sample programs administered by the AASHTO Re:Source. As required by the AAP, we have implemented a quality management system that meets specific AASHTO requirements and receive regularly scheduled on-site assessments by AASHTO. During these annual assessments, the competency of laboratory technical personnel is assessed through a demonstration of each test method and a review of their training records. Laboratory testing apparatus are evaluated through a check of critical dimensions, review of equipment maintenance activities and calibration records, and by observations during equipment use. A thorough review of the laboratory's quality management system is also performed. AAP is a voluntary program that we utilize to demonstrate that our testing services not only conform to specific testing standards, but are also of the highest quality. Our accreditation serves to enhance our client's confidence in our laboratory and field testing services.

2.4 Organization Chart and Assigned Staff

The organizational structure of this firm and brief resumes of key staff that will be assigned to this project are presented below.



ERIC J. SEWARD | PRINCIPAL ENGINEERING GEOLOGIST AND VICE PRESIDENT

PROFESSIONAL REGISTRATIONS

Certified Engineering Geologist, CA (CEG No. 2110)

Professional Geologist, CA (PG No. 6794)

EDUCATION

B.Sc., Geology, California State Univ., Northridge, 1992

Eric J. Seward began working for AESEGI over 20 years ago and is a Principal Engineering Geologists for the firm. He has gathered extensive experience conducting a wide variety of geologic and geotechnical investigations, specializing in complex hillside projects, landslides, fault investigations and liquefaction studies for flatland alluvial sites. During his professional career he has performed the duties of the entire staff such as, subsurface logging, laboratory testing, field monitoring and testing, which makes him well diversified in understanding and managing projects. Additional to his geologic work, Eric Seward is the company Vice President and Chief Financial Officer. He also has experience managing large grading projects and provides much of the geologic and geotechnical input at project design meetings. Eric also maintains project quality control and supervision of the entire office staff.

As Vice President, Mr. Seward's primary focus is using his considerable expertise to guide the company in its mission: *Providing Solutions*. His extensive work in the field and knowledge of applicable regulations make him proficient in providing both economically feasible and sound solutions. In addition, Mr. Seward is able to recognize the primary focus of the client. Oftentimes, projects are driven by expedience and, as such, challenges require swift resolution. Mr. Seward's extensive knowledge allows him to recognize those issues of greatest concern and resolve them expeditiously. In this, he has developed the company's main goal: to provide the best possible solutions for the client.

KEVIN P. CALLAHAN | PRINCIPAL GEOTECHNICAL ENGINEER

PROFESSIONAL REGISTRATIONS
Geotechnical Engineer, CA
(GE No. 2989)

Professional Civil Engineer, CA
(RCE No. 72202)

EDUCATION
M.S., Geotechnical Engineering, Univ. of California, Los Angeles, 2011

B.S., Civil Engineering, California State Univ., Northridge, 2004

Mr. Callahan has 15 years of professional experience providing geotechnical services for large residential subdivisions, single-family residences, commercial/industrial developments, public works capital improvements, public and private infrastructure, due diligence reviews and forensic studies. Responsibilities include business development in public and private sectors, preparation and management of proposals and budgets, attendance at meetings with clients, designers and contractors, development and performance of geotechnical investigation programs, engineering analyses and design (as it relates to slope stabilization for hillside development and landslide remediation, earthquake ground motion characterization, seismic hazard assessment, identification and remediation of liquefaction hazards, static and dynamic settlements, soil compression and swell potential, foundations and earth retaining structures, infrastructure corridors, flexible and rigid pavements, earthworks, and LID) , report preparation, and review of engineered plans and details. He also assists technician staff performing construction testing and inspection services and manages our in-house geotechnical and materials testing laboratory. Lab responsibilities include planning, organizing, and supervision of technical and administrative functions, enforcement of quality control procedures, and performance of routine and specialized testing. His hands-on experience routinely performing field and laboratory services give him a unique advantage when evaluating a site.

VICTOR C. GOETHALS | SENIOR ENGINEERING GEOLOGIST

PROFESSIONAL REGISTRATIONS
Certified Engineering Geologist, CA
(CEG No. 1759)

Professional Geologist, CA
(PG No. 5638)

EDUCATION
B.Sc., Geology, California State Univ., Northridge, 1986

Mr. Goethals technical background represents over twenty-four years of experience in the fields of geology and engineering geology. He has been involved with numerous residential and commercial developments that range in size from single lot to 2,000-acre tracts in southern California. His experience includes distress evaluations, fault activity assessments (San Gabriel, Holser, San Andreas, Little Rock, Hitchbrook, Agua Dulce and Malibu Coast Faults), landslide and rippability studies. In addition, he has performed Phase I and II environmental assessments as well as natural gas hazard assessments in the Santa Clarita Valley and Fairfax areas of Los Angeles County. Key projects undertaken by Mr. Goethals include a hydrogeologic investigation for the Los Angeles County Sanitation District involving ground water modeling, analysis and technical recommendations; a third party geologic review of a subsurface aqueduct through the Santa Clarita area; and a geologic evaluation of a site relative to a potential source of aggregate materials. His responsibilities have included project management, field mapping, geologic grading observations, and preparation of geologic reports for essentially all phases of development. He also provides geologic input at project design meetings.

2.5 Project Experience

Recent projects that this firm has provided geologic/geotechnical investigation and design services for include, but are not limited to, the following:

SOUTHERN CALIFORNIA EDISON GO2 YARD WORK | ROSEMEAD, CA

Client: MSH Construction

Owner: Southern CA Edison

Project Dates:
January 2011 – June 2012

Assigned Staff:
Eric Seward (Principal)
Kevin Callahan (Proj. Engineer)
Jeff Hengst (Field Technician)

AESEGI provided geotechnical investigation, design and construction services for improvements to an existing Southern California Edison (SCE) Data Processing facility in Rosemead, California. Improvements to the SCE facility included the construction of three emergency power generators, subsurface utility enclosures, and associated structures. Geotechnical studies included development of earthquake ground motion response parameters based on probabilistic seismic hazard analysis, evaluation of liquefaction potential, and assessment of economical combinations of foundation design and remedial grading.

AESEGI provided quality control services during the site grading and construction phase to confirm validity of preliminary design parameters, to ensure that the geotechnical recommendations were incorporated into the grading and construction efforts, and to ensure stability of temporary excavations. These services included observation and testing of construction materials associated with removal and re-compaction of unsuitable soils beneath structure foundations, backfill behind subterranean structures, subgrade and base grade preparation, construction of asphalt and concrete pavements, and utility trench backfill. Observation of foundation excavations for conformance to report and plan specifications was also performed.

HANCOCK PARKWAY SEWAGE LIFT STATION | CASTAIC, LOS ANGELES COUNTY, CA

Client: Newhall Land & Farming

Owner: Southern CA Edison

Project Dates:
July 2012 – March 2013

Assigned Staff:
Eric Seward (Principal)
Kevin Callahan (Proj. Engineer)
Jeff Hengst (Field Technician)

AESEGI provided geotechnical observation and testing services during construction of the Hancock Parkway Sewage Lift Station located at the eastern terminus of PM 26363. The lift station included construction of a Pump Building with subterranean dry well, wet well, and emergency storage room, an at-grade Electrical Building with a generator room, electrical room, and diesel tank, associated underground utilities and vehicular pavements. Geotechnical support services included observation and recommendations to maintain stability of foundation excavations constructed below the ground water table and slope stability analyses for temporary construction excavations.

WATER SYSTEM IMPROVEMENTS FOR TRACT 52584

LA COUNTY WATERWORKS DISTRICT 36 | CASTAIC, CA

Client: SFI Los Valles LLC

Owner: LA County Waterworks Districts

Project Dates:
October 2008 – January 2010

Assigned Staff:
Eric Seward (Principal)
Kevin Callahan (Proj. Engineer)
Jeff Hengst (Field Technician)

AESEGI performed engineering geologic and geotechnical engineering services including feasibility evaluations, value engineering, and design studies for the Water System Improvements that included a new 300,000 gallon forebay tank, water well, booster pump station and 600,000 gallon water reservoir tank. AESEGI performed the quality control services for the grading operations for the forebay and booster pump station building pads, reservoir tank site, and access roads. We were also retained to perform geotechnical observation and testing related to foundations, and underground utilities.

PROPOSED NEWHALL RANCH WRP | NORTHERN LOS ANGELES COUNTY, CA

Client: Newhall Land & Farming

Owner: Newhall Land & Farming

Project Dates:
1999- 2008

Assigned Staff:
Eric Seward (Principal)
Kevin Callahan (Proj. Engineer)

AESEGI provided geotechnical services for the proposed Water Reclamation Plant (WRP) for the future Newhall Ranch Development in Northern Los Angeles County. This 21.5 acre site is located on the north side of the Santa Clara River near the Ventura County line. The plant was designed to handle 2 million gallons of sewage per day (2 MGD) and provided space for future expansion to 42 MGD. This firm conducted field investigations, laboratory testing and analyses and provided conclusions and recommendations to assist in the design of the WRP site from a geotechnical standpoint. We subsequently completed additional investigations and reports addressing Mass Grading of the site and the Site Plan prepared by CH2MHill for submittal to the Sanitation Districts of Los Angeles County for review. We also prepared reports addressing the associated soil cement bank protection along the Santa Clara River, Storm Drain Plans, and the associated Utility Corridor extending for 4 miles to the east along Highway 126.

3.0 SCOPE OF WORK

The following scope of work is defined on the basis of the information provided to us and our current understanding of the project.

1. TASK: Preparatory Work

   1.1 Coordination with the team regarding the scope and schedule of our work.

   1.2 Review of readily available geologic references, published maps and reports, and consultant reports in the vicinity of the project site that may be provided to us by others. The information pertinent to the proposed project will be compiled.

   1.3 Preparation of a Subsurface Work Program identifying locations of proposed subsurface investigations for review by the Agency project manager and applicable design team members relative to potential constraints and concerns with proposed field activities.

   1.4 Site reconnaissance to assess access for the drill rig (complete) and to mark the location of proposed subsurface explorations.

   1.5 Coordination with Underground Service Alert (USA) and pertinent team members in order to assess the locations of any buried utility lines in relation to the proposed subsurface exploration locations, including a field meeting with representatives of potentially affected utility companies. Though site utilities have been surveyed, a USA ticket is required by law.

   OUTPUT: Existing data and information will be compiled during this phase of work to define the proposed subsurface investigation. The schedule, logistics and goals of our subsurface investigation program will also be confirmed.

2. TASK: Field Investigation

   Drilling and logging of three (3) hollow-stem auger borings will be performed in the vicinity of the HDD alignment. The borings will generally be drilled to a depth of 30 feet. California drive ring samples, SPT samples, and bulk samples will be collected for laboratory testing. Our sampling program will include standard penetration test (SPT) and California drive (CD) ring samples. The drill holes will be logged and sampled by a Geotechnical Engineer (in order to document the number of blows to drive the samplers and material types encountered), backfilled with the excavated soils, and the surface repaired to match existing conditions. The soil samples will be transported to our accredited laboratory for further classification and laboratory testing. It is our understanding that this work will be performed on a Saturday.

   Note: Review of the Seismic Hazard Zones map for the Pasadena Quadrangle indicates that the subject site is not located within an area of required investigation for either liquefaction or landslide.

   OUTPUT: This phase of work will produce field data that will provide samples for laboratory testing and the basis for our analyses.

3. TASK: Laboratory Testing

   3.1 Review and visual classification of samples obtained and assignment of laboratory testing to document the density, moisture content, grain size distribution, shear strength, compressibility, moisture-density relations (modified Proctor), expansion potential, sand equivalent, and corrosivity of the in-situ soils.

   3.2 Completion of the following estimated number and types of testing:

   (12) Dry Density and Moisture Content of In-Situ Soils (CD Samples)
   (6) Percent Minus #200 Sieve
   (4) Grain-size Analysis
   (2) Direct Shear
   (1) Expansion Index
   (1) Sand Equivalent
   (1) Sulfates, Chlorides, pH & Resistivity (corrosion)

   The number of each test is estimated based on the types of soils anticipated to underlie the site and the anticipated boring depths. All of the testing will be performed in accordance with applicable ASTM and California test methods. We are an accredited materials testing laboratory with the AASHTO Accreditation Program (AAP).

   3.3 Laboratory test data reduction and geotechnical review.

   OUTPUT: The laboratory testing will provide additional data that will be used to substantiate our recommendations.

4. TASK: Geologic and Geotechnical Analysis

   4.1 Geology and Site Characterization

   - Review of the data obtained from the borings and laboratory testing.
   - Characterization of geotechnical conditions along the HDD alignment.
   - Evaluation of existing ground water conditions and historic ground water levels at the based on LACFCD water well data and published maps.
   - Preparation of a geotechnical cross section illustrating existing grade and geotechnical conditions.

   4.2 Seismicity

   - Review of Alquist-Priolo Earthquake Fault Zone maps and the Ground Rupture Hazard Map for Los Angeles County presented in the Safety Element of the County General Plan.
   - Evaluation of historical seismicity.
   - Evaluation of fault rupture potential.
   - Estimation of potential peak ground accelerations that could affect the project site.

4.3 Geotechnical Evaluation

- Development of appropriate shear strength parameters for site soils.
- Preparation of geotechnical parameters and design considerations for HDD operations, including but not limited to anticipated drilling conditions, steering, HDD borehole instability, inadvertent returns of drilling fluid, drilling fluid program, drag coefficients, and borehole friction factors.
- Evaluation of expansion potential and corrosivity of soils at the site and preparation of appropriate mitigation measures.
- Preparation of general earthworks recommendations for the HDD operations, including temporary excavations, shoring, and drill pad support.

OUTPUT: The research and analyses will provide pertinent conclusions and recommendations for design and construction.

5. TASK: Preparation of a Geotechnical Report

5.1 Preparation of report text describing the scope of work completed, geologic and geotechnical conditions at the site, results of analyses, and conclusions and design consideration for the proposed HDD operations.

5.2 Preparation of pertinent figures and illustrations, including a Geotechnical Map and HDD Cross Section, Site Location Map, Regional Geologic Map, Fault Location Map, subsurface logs, and laboratory test reports.

5.3 Preparation of appendices presenting details of our field investigation, laboratory testing, ground motion analyses, and liquefaction assessment.

5.4 Duplication of one (1) hard copy and provide digital version in PDF Format.

OUTPUT: A geotechnical report will be completed that presents conclusions and recommendations for the HDD operations. This report will be provided to the team members for use in determining feasibility of HDD, as well as for the project planning, design, and construction.

4.0 GEOTECHNICAL SCHEDULE

Following authorization to proceed we will schedule the drill rig. Due to the Saturday drilling restriction it may take 3 to 4 weeks to mobilize, depending on contractor availability. Drilling operations are anticipated to be completed in one day (6 hours on site). Subsequent laboratory testing will take 1 to 2 weeks, and an additional 2 weeks for the analysis and report. It is our understanding that time is of the essence; we will work diligently to complete the scope of work outlined herein within a time-frame that meets your schedule.

5.0 COST ESTIMATE

The total cost estimated to complete the services described herein is outlined below. Our subsurface explorations will require the use of an outside services contractor. We will pay the outside services contractor directly and therefore have added a 15% service fee to their cost. It should be noted that the costs for the outside services are an estimate. Actual costs may vary depending on the subsurface conditions and the difficulty of drilling.

The services outlined herein on a Time and Expenses basis estimated not to exceed $ 18,032 and remain valid for a period of 90 days from the proposal date. Costs are broken down by task as identified in the Scope of Work section of this proposal. For each task cost, staff type classification, hourly billing rate, and estimated total is included. All billing will be according to actual time spent directly on the project, and billed at our established rates. Additional work will require an additional fee above and beyond the amounts stated here.

Task 1: Preparatory Work

SERVICE	UNIT	TOTAL UNITS	UNIT RATE ($)	TOTAL ($)
Principal	Hr	1	168	168
Associate	Hr	6	140	840
Associate (Field)	Hr	6	140	840
CAD Operator/Draftsperson	Hr	2	85	170
Reimbursables (mileage)	Mile	128	0.60	77
Subtotal Task 1				**$ 2,095**

Task 2: Field Investigation

SERVICE	UNIT	TOTAL UNITS	UNIT RATE ($)	TOTAL ($)
AESEGI Personnel				
Project Engineer (Field)	Hr	8	121	968
Outside Services				
Limited Access Rig w/ PW requirement and weekend OT rate	Hr	6	400	2,400
Limited Access Rig – Mobilization	Hr	2	200	400
15% Service Fee	--	--	--	420
Office Support and Reimbursable	--	--	--	300
Subtotal Task 2				**$ 4,488**

Task 3: Laboratory Testing

SERVICE	UNIT	TOTAL UNITS	UNIT RATE ($)	TOTAL ($)
Laboratory Tests				
Particle-size Analysis of Soils (ASTM D422)	Test	4	110	440
Material Finer #200 Sieve (ASTM D1140)	Test	6	70	420
Moisture Content & Density(ASTM D2937)	Test	12	35	420
Direct Shear (ASTM D3080)	Test	2	420	840
Expansion Index (ASTM D4829)	Test	1	325	325
Sand Equivalent (ASTM D2419)	Test	1	100	100
Minimum Electrical Resistivity (CTM 643)	Test	1	100	100
Soil pH (CTM 643)	Test	1	40	40
Sulfate Content (CTM 417)	Test	1	60	60
Chloride Content (CTM 422)	Test	1	60	60
Data Reduction				
Associate Engineer	Hr	2	140	280
Subtotal Task 3				**$ 3,085**

Task 4: Geologic and Geotechnical Analysis

SERVICE	UNIT	TOTAL UNITS	UNIT RATE ($)	TOTAL ($)
Principal	Hr	2	168	336
Associate Engineer	Hr	16	140	2,240
Associate Geologist	Hr	4	140	560
CAD Operator/Draftsperson	Hr	4	85	340
Subtotal Task 4				**$ 3,476**

Task 5: Geotechnical Report

SERVICE	UNIT	TOTAL UNITS	UNIT RATE ($)	TOTAL ($)
Principal	Hr	6	168	1,008
Associate	Hr	24	140	3,360
CAD Operator/Draftsperson	Hr	4	85	340
Clerical Staff	Hr	3	60	180
Subtotal Task 5				**$ 4,888**

Geologic/Geotechnical Task Description		**Professional Fee**
Task 1 – Preparatory Work		*$ 2,095*
Task 2 – Field Investigation		*$ 4,488*
AES Personnel	*$ 1,268*	
Outside Services	*$ 3,220*	
Task 3 – Laboratory Testing		*$ 3,085*
Task 4 – Geologic and Geotechnical Analysis		*$ 3,476*
Task 5 – Geotechnical Report		*$ 4,888*
TOTAL:		**$ 18,032**

6.0 SUB-CONTRACTORS

Our field investigation will require the use of a limited access hollow-stem-auger drill rig. We plan to use Choice Drilling, Inc. to complete the proposed borings. Background information for this sub-contractor may be provided upon request. All other services will be provided by employees of Allan E. Seward Engineering Geology, Inc.

7.0 LABOR COMPLIANCE PROGRAM

It is our understanding that the La Cañada Unified School District institutes a Labor Compliance Program (LCP) that enforces prevailing wage laws for their projects. Prevailing wage criteria will apply to outside services contractors that are sub-contracted by AESEGI to operate the equipment required for subsurface explorations.

AESEGI has been involved with several state and federally funded projects and has an understanding, acclimation and application of all pertinent LCP requirements and objectives through effective program compliance.

8.0 CONTRACT TERMS

The undersigned La Cañada Unified School Disrict (CLIENT) engages the services of the firm **Allan E. Seward Engineering Geology, Inc. (AESEGI)** (CONSULTANT) with the following terms and conditions:

1. **Billing and Payment Terms**: A retainer in the amount of **$9,000.00** is requested. Invoices will be issued, at our option, on a bi-weekly or monthly basis or when work is completed, which are due and payable upon receipt. The retainer shall be credit to the invoices as work is completed. If any invoice is not paid within 15 days, the Consultant may, without waiving any claim or right against the Client, and without liability whatsoever to the Client, suspend or terminate the performance of services. Accounts unpaid 30 days after the invoice date may be subject to a monthly service charge of 1.5%. ***The balance of the fees is due upon completion of the report.*** Client agrees to pay all collection fees, and attorney's fees, if required to secure payment of the unpaid balance.

2. **Performance**: All work performed under this agreement shall be done in a professional manner in accordance with recognized standards of the profession. Work shall begin as soon as possible following receipt of this agreement.

   Allan E. Seward Engineering Geology, Inc. shall not be responsible for its failure to perform as a result of accident, Acts of God, labor difficulties, riots, civil commotion, interference by governmental agencies or any other act reasonably beyond our control.

3. **Indemnification**: It is agreed that the undersigned will hold harmless and indemnify **Allan E. Seward Engineering Geology, Inc.** from any and all claims, demands, damages or liability arising out of or in connection with damages caused by **Allan E. Seward Engineering Geology, Inc.** or its agents to easements, and underground utilities, pipelines, or subsurface structures, unless such matters are disclosed prior to commencement of work.

   The Client agrees, to the fullest extent permitted by law, to indemnify and hold the CONSULTANT harmless from any damage, liability or cost (including reasonable attorneys' fees and costs of defense) to the extent caused by the Client's negligent acts, errors or omissions and those of his or her contractors, subcontractors or consultants or anyone for whom the Client is legally liable, and arising from the project that is the subject of this Agreement.

   The CONSULTANT is not obligated to indemnify the Client in any manner whatsoever for the Client's own negligence.

4. **Limit of Liability**: In recognition of the relative risks, rewards and benefits of the project to both (CLIENT) and AESEGI (CONSULTANT), the risks have been allocated such that the CLIENT agrees, to the fullest extent permitted by law, to limit the CONSULTANT's liability to the CLIENT for any and all claims, losses, costs, damages of any nature whatsoever or claims expenses from any cause or causes, including attorneys' fees and costs and expert witness fees and costs, so that the total aggregate liability of the CONSULTANT to the CLIENT shall not exceed **$180,000** or the CONSULTANT's total fee for services rendered on this project, whichever is greater. It is intended that this limitation apply to any and all liability or cause of action however alleged or arising, unless otherwise prohibited by law.

NOT APPLICABLE

5. **Termination of Services**: This Agreement may be terminated at any time by either party should the other party fail to perform its obligations hereunder. In the event of termination for any reason whatsoever, the CLIENT shall pay the CONSULTANT for all services rendered to the date of termination, and all reimbursable expense incurred prior to termination and reasonable termination expense incurred as the results of termination.

6. **Other Considerations**: Client assures that right of entry to site is granted by this agreement, and indemnifies and holds harmless this firm for any damages incurred by the clients failure to provide right of entry.

   Client agrees to pay to the firm of **Allan E. Seward Engineering Geology, Inc.** and to save the firm harmless from all reasonable costs or attorney's fees incurred by the firm in enforcing any of the provisions hereof or in defending against any claim asserted against the firm growing out of or caused hereby or by, the work done pursuant hereto.

NOT APPLICABLE

THE FOREGOING IS ACCEPTED AND APPROVED, and ALLAN E. SEWARD ENGINEERING GEOLOGY, INC. is authorized to perform the described work.

Client or Authorized Agent

_____ _____

Signature *Date*

_____

Print Name

_____

Title

This opportunity to be of service is greatly appreciated. If you would like Allan E. Seward Engineering Geology, Inc. to proceed, please sign and return this proposal and the requested retainer. Please give us a call if you have any questions regarding this proposal.

ALLAN E. SEWARD
ENGINEERING GEOLOGY, INC.
Geological And Geotechnical Consultants

SCHEDULE OF FEES

Valid thru 12/31/18

HOURLY CHARGES FOR PERSONNEL

Technical Personnel (non-prevailing wage)		
Soils Technician	$	85
LA City Deputy Grading Inspector	$	105
Technical Personnel (with prevailing wage requirement)		
Soils Technician	$	110
LA City Deputy Grading Inspector	$	125
Professional Personnel		
Staff Engineer/Geologist	$	92
Senior Staff Engineer/Geologist	$	97
Project Engineer/Geologist	$	109
Senior Project Geologist/Engineer	$	121
Associate Geologist/Engineer	$	140
Senior Associate Geologist/Engineer	$	152
Principal Geologist/Engineer	$	168
Consulting Geologist/Engineer (3rd Party Review)	$	350
Testimony at Governmental Agencies	$	235
Expert Witness/Deposition: Half Day Minimum Charge ($1320)	$	330
Laboratory Testing		
Laboratory Technician	$	75
(see Schedule of Lab Fees for routine tests)		
Office Support		
Clerical Staff	$	60
CAD Operator/Draftsperson	$	85
Other Fees		
Mileage, per mile	$	0.60
Out-of-pocket Expenses – Cost plus		20%

Basis for Charges

- Charges are based upon Time and Expenses, standard unit charges.
- Professional Services – Minimum charge will be one (1) hour.
- Field services performed between 7:00 am and 3:30 pm Monday through Friday billed as straight time. Field services performed outside of these hours, in excess of 8 hrs, or Saturdays will be billed at 1.5x the rate. Double time will be billed after 12 working hours per day, Sundays and Holidays.
- Our charge for field services is for time spent on the job site plus travel time. A minimum 2-hour charge will apply for each site visit Monday through Friday from 7:00 am to 3:30 pm. For time in excess of two hours, we will charge for the actual hours worked including travel time. A minimum 4-hour charge will apply for each site visit before or after the above work hours, and on Saturday and Sunday, including show-up, no work performed.

ALLAN E. SEWARD
ENGINEERING GEOLOGY, INC.
Geological And Geotechnical Consultants

SCHEDULE OF LAB FEES

Valid Thru December 2018

INDEX PROPERTIES

Visual Classification (ASTM D2488)	$ 15
Moisture Content (ASTM D2216)	$ 15
Moisture Content & Density (ASTM D2937)	$ 35
Liquid and Plastic Limits (ASTM D4318)	
(i) Multi - Point	$ 225
(ii) One Point & Non-Plastic	$ 100
Particle-Size Analysis of Soils (ASTM D422)	
Sieve Only (from #4 to minus #200)	$ 110
Sieve and Hydrometer	$ 185
add for coarse fraction (>#4 sieve)	$ 60
Material Finer #200 Sieve (ASTM D1140)	$ 70
Sieve Analysis of Coarse Aggregates (ASTM C136)	$ 100
Sieve Analysis of Fine Aggregates w/ wash (ASTM C136 & C117)	$ 125
Aggregate Percent Passing #200 Sieve (C117)	$ 80
Sand Equivalent (ASTM D 2419 or CA 217)	$ 100

COMPACTION

Standard Proctor Compaction (ASTM D698)	
4-inch mold, Method A & B	$ 210
6-inch mold, Method C	$ 240
Modified Proctor Compaction (ASTM D1557)	
4-inch mold, Method A & B	$ 235
6-inch mold, Method C	$ 275
Add for rock correction for above	$ 60
Moisture-Density Relations of Soil-Cement (ASTM D558)	$ 295
Add for Sample Preparation for Soil with PI>20	$ 60

STRENGTH TESTS

Direct Shear Test (ASTM D3080)	
Consolidated Drained (per point)	$ 140
Reshear (per cycle per point)	$ 50
Remolding of Specimens (per point)	$ 30
Hand Trimming of (per) Specimens	$ 40
R-Value (ASTM D2844 or CA 301)	$ 276

VOLUME CHANGE

Consolidation Test (ASTM D2435)	
Up to 14 loading/unloading Increments, & One Time Rate Curve	$ 325
Each additional loading or unloading	
Increment without Time Rate Curve	$ 22
with Time Rate Curve	$ 40
Hydro Collapse Potential (ASTM D4546)	$ 175
Swell Test (per point) (ASTM D4546)	$ 185
Remolding of Specimens (per point)	$ 30
Hand Trimming of (per) Specimens	$ 40
Expansion Index Test (ASTM D4829 or UBC-29-2)	$ 325

SOIL CHEMISTRY

Soil pH (DOT CA 643)	$ 40
Minimum Electrical Resistivity (DOT CA 643)	$ 100
Sulphate Content (DOT CA 417B)	$ 60
Chloride Content (DOT CA 422)	$ 60

CONCRETE

Compression Test (ASTM C39)	
6" x 12" and 4" x 8" cylinders	$ 30
Hold or Additional Test	$ 30
Mortar	$ 35
Grout	$ 45
Cylinder Molds with Lids	$ 8
Grout Box	$ 10
Weight per cubic foot of concrete cylinders	$ 7
Modulus of Elasticity Test- Static (ASTM C469)	$ 75
Compression Test, 2", 4", 6" Cores (ASTM C42)	$ 40
In Laboratory Core Cutting	$ 45
Cylinder Pick-up (within 30-mile radius)	
6:30 am to 5:00 pm Monday through Friday- per sample	$ 12
Before 6:30 am and after 5:00 pm and Saturday and Sundays – per sample	$ 18

OTHER TESTS

Soil Cement Compression Test (ASTM D1633)	$ 70
Wet/Dry (ASTM D559)	$ 200
Freeze/Thaw (ASTM D560)	call for quote

27825 Smyth Drive, Valencia, California 91355 (661) 294-0065 FAX (661) 294-0833

Estimate

Date	Estimate #
9/20/2018	1476

Allan E. Seward Engineering Geology, Inc.
27825 Smyth Drive
Valencia, CA 91355

Project Description	Project Manager
La Canada	Kevin Callahan

ITEM	DESCRIPTION	Qty	Unit	Rate	Total
Prevailing Wage Job	SATURDAY PREVAILING WAGE RATES APPLIED				
Mob/Demob - CME 75	Includes: Travel To / From: 5025 Palm Drive, La Canada Fuel Drill Rig / Safety Check Load / Unload tooling of Drill Rig	2	Hr	200.00	400.00
CME HT 75	Scope: Hand auger upper 5'. 3(30') borings max. SPT & CD Samples every 3' alternatively. Patchy grass surface, restore to original.	6	Hr	400.00	2,400.00

Sign_____

Total **$2,800.00**

Terms and Conditions of service apply to all projects, except for MSA contracts. Payments are due 30 days from date of invoice. Any invoice past due will be charged a 1 1/2% interest rate per month on unpaid balance. Notice of cancellation must be given before 12:00 noon the day prior to start of project. Four (4) hour minimum plus travel applies to all projects. "It is the client's responsibility to determine drilling location, purpose, requirements and all hazards on the premises. Client is to locate all utilities, tanks or other apparent hazards and advise Choice Drilling, Inc. of location and nature of same. Client shall indemnify and hold Choice Drilling, Inc. harmless from any and all claims, damages or injuries of any nature, resulting from the client's failure to comply with the terms of this Proposal and Project. Choice Drilling, Inc. shall not be responsible, in any event, for any damages or destruction of utilities, which shall include but not limit water, gas, petro

Estimate from Sean Pichinson
11029 Sutter Avenue, Pacoima, CA 91331
P: 818.899.2021 F: 818.446.4751