

# County of San Mateo ~ Contract Amendment

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**Contract Number:**  
84700-18-D022

**Amendment Number:**  
1

Agreement between the County of San Mateo and GHD, INC.

## THE AGREEMENT IS CHANGED AS FOLLOWS:

### Agreement Amount

<b>Original Amount:</b> \$21,800	<b>Current Amount:</b> \$21,800	<b>Addition or Reduction:</b> \$18,500	<b>New Total Amount:</b> \$40,300
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### Agreement Term:

<b>Original Start Date:</b> 4/16/2018	<b>Original End Date:</b> 9/30/2018	<b>New Start Date:</b> 4/16/2018	<b>New End Date:</b> 7/31/2019
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Paragraph: 3 is hereby  added  amended as follows:

In no event shall County's total fiscal obligation under this Agreement exceed FORTY THOUSAND THREE HUNDRED DOLLARS (\$40,300).

Paragraph: 4 is hereby  added  amended as follows:

Subject to compliance with all terms and conditions, the term of this Agreement shall be from April 16, 2018 through July 31, 2019

### Other changes:

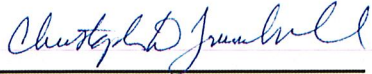
Original Exhibit A is replaced with Revised Exhibit A, (rev. 7/26/2018).

Original Exhibit B is replaced with Revised Exhibit B, (rev. 7/26/2018).

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This change is effective as of: 7/25/2018

ALL OTHER PRICES, TERMS AND CONDITIONS OF THE AGREEMENT REMAIN UNCHANGED



Contractor Signature

7/31/18

Date

Christopher Trumbull, GHD Inc

Contractor Name (please print)



Purchasing Agent Signature  
(Department Head or Authorized  
Designee)  
County of San Mateo

8-2-18

Date

D. BAZAN

Purchasing Agent Name (please print)  
(Department Head or Authorized Designee)  
County of San Mateo

Purchasing Agent or Authorized Designee Title  
(please print)

### **Exhibit A (Revised 7/26/2018)**

In consideration of the payments set forth in Exhibit B, Contractor shall provide the following services:

1. Contractor shall review available published geotechnical and geologic data applicable to the project.
2. Exploration will include six borings, each to a maximum depth of 15 feet. Proposed Exploration Locations are shown in the enclosure on Exhibit C.

Contractor shall prepare a work plan and submit it to the County at least one week prior to exploration. Contractor staff shall review the visit the site to confirm logistics for drilling and mark the drilling locations for Underground Service Alert (USA). Contractor staff shall register the proposed boring locations with USA at least 48 hours prior to the start of drilling. A drilling permit will be obtained from the County of San Mateo Department of Environmental Health.

Since the proposed Link Building is located where a current building exists, one boring (B-4) will be drilled inside the existing building (cafeteria eating area) to a maximum depth of 15 feet. Contractor shall apply for an Infection Control Permit and have a preconstruction meeting with Infection Control personnel at least one week prior to exploration to review the work plan and infection control requirements. The work site will be surrounded with air-tight fireproof plastic sheeting, taped to the floor and ceiling with two foot overlap at the seams; all seams will be sealed with duct tape. An anteroom will be constructed where all personnel will be cleaned with an industrial-rated HEPA filter vacuum prior to re-entering the atmosphere of the hospital. An adhesive mat will be used at the entrance, which will be barricaded. The HVAC system will be isolated by placing plastic bags over the vents and sealing them with duct tape. The existing concrete floor will be cored and a portable electrically-operated drill rig will be used to advance the boring and collect samples. A generator to run the drill rig will be placed outside of the hospital and power lines will be run into the work area. The hole will be backfilled with soil cuttings and the floor will be replaced with quick-set concrete. Virtually no debris will be generated, but the minor amount will be removed in air-tight containers. The floor tile removed will be replaced. This work will take place in one day, on a Saturday.

The preliminary boring locations are shown below; locations are approximate. The remainder of the borings will be drilled with truck-mounted drilling equipment with hollow stem augers. Borings B-5, B-6, and B-7 will be drilled to a maximum depth of 15 feet. Sampling for all borings will be continuous in the upper 5 feet of the borings and every five feet thereafter. Bulk samples will be collected in select borings for R-value testing. Soils shall be field-classified in general accordance with ASTM D2488.

Borings B-8 and B-9 will be drilled to depths of two to five feet to perform percolation tests to determine the infiltration characteristics for the proposed LID features. All borings will be backfilled with drill cuttings and topped with asphalt patch.

3. Contractor shall perform geotechnical laboratory tests of the type and number as required to obtain sufficient information to prepare the geotechnical report, which shall state the standards used for the laboratory tests. The laboratory testing will include, as appropriate:
  - a. Strength tests such as direct shear and unconfined compression
  - b. Index Tests such as sieve analysis, hydrometer, Atterberg limits, moisture content, and dry density
  - c. R-Value test
4. Engineering analyses will be performed to support the recommendations, to include, as appropriate:
  - a. Evaluation of soil compressibility
  - b. Foundation and bearing capacity analyses
  - c. Retaining wall design analyses
  - d. Earthwork
  - e. Infiltration
5. A Geotechnical Investigation Report will be prepared for the project, to include the following:
  - a. Description of physical properties and characteristics of the subsurface soils, including questionable soil, expansive soil, rock, and groundwater
  - b. A plan showing the locations of borings and logs of borings
  - c. Discussion of general and local site geology
  - d. Discussion of site seismicity, potential ground shaking, and other potential seismic hazards
  - e. Discussion of the potential for liquefaction or settlement during earthquakes
  - f. A summary of all laboratory test data
  - g. Conclusions and recommendations for the following:
    - i. Impacts of questionable soils (expansive, compressible, resistant), if encountered, and mitigation
    - ii. Earthwork recommendations including site preparation, subgrade preparation, compaction, surface drainage, and erosion potential
    - iii. Excavatability of bedrock encountered
    - iv. Utility trench backfill
    - v. Foundations (bearing capacity, lateral soil resistance and base friction)
    - vi. Lateral resistance for pole foundations
    - vii. Retaining walls (lateral earth pressures, seismic increment, and drainage)
    - viii. Seismic design parameters in accordance with CBC (2016)

- ix. Exterior flatwork
  - x. Interior slabs-on-grade
  - xi. Infiltration rates
  - xii. Flexible and rigid pavements
6. Deliverable: three hard copies and one digital copy of the draft and final Geotechnical Investigation Reports, signed and sealed by a Geotechnical Engineer and Certified Engineering Geologist.
  7. Exploration effort for interior and exterior borings; Performing two seismic refraction traverses to provide data to understand the depth to excavatable rock; Consultation to define the rock characteristics across the site.
  8. A site specific seismic analysis required by CGS/ASCE-7 due to the Project being classified as a Seismic Design Category F.

#### Assumptions and clarifications

1. The two buildings are not classified as essential facilities and do not require OSHPD or CGS review.
2. County staff will block off areas for exterior drilling the day before.
3. The exterior drill sites are accessible by a truck-mounted drill rig.
4. An Industrial-rated HEPA filter vacuum is available for loan from the hospital.
5. Wet weather may delay the schedule of field services.
6. Consultations or engineering after the geotechnical report is issued are not included.
7. Any services not expressly contained in the scope of work are excluded; however, Contractor can provide additional services, if requested, per a contract amendment.

#### Project schedule

Work shall be undertaken and completed in a sequence assuring expeditious completion, but in any event, all the services in this scope of work shall be completed within the timeframe discussed below, following receipt of the authorization to proceed.

For the geotechnical investigation, the field exploration could happen as soon as three weeks after authorization. Fieldwork shall be completed in two days, one for the exterior borings and one for the interior borings, which may not be consecutive. Following the exploration, laboratory testing will take about one week to complete. The engineering analysis will be completed and the draft geotechnical report will be issued within two weeks after completion of testing. The total time for the geotechnical investigation should be less than six weeks; preliminary information can be made available after the field exploration.

**Exhibit B (Revised 7/26/2018)**

In consideration of the services provided by Contractor described in Exhibit A and subject to the terms of the Agreement, County shall pay Contractor based on the following fee schedule and terms:

In no event shall total payment for this contract exceed FIFTY THREE THOUSAND THREE HUNDRED DOLLARS (\$53,300). County shall pay Contractor within 30 days upon receipt and acceptance of invoice. Estimated costs are as follows:

Task	Budget
Geotechnical Investigation	\$20,900
HEPA Filter Rental (if needed)	\$ 900
Exploration effort	\$17,000
Seismic analysis	\$ 1,500
<b>Total</b>	<b>\$40,300</b>