Detterman, Mark, Env. Health

From: Orion Litzau <Olitzau@cornerstoneearth.com>

Sent:Monday, October 02, 2017 8:18 PMTo:Detterman, Mark, Env. HealthCc:Peter Langtry; John R. Dye

Subject: RE: Planned geotechnical work at 914 W. Grand Ave. Oakland

Attachments: 914 W. Grand Ave. exploration map.pdf; 914 W. Grand Exploration work plan.pdf

Mark,

Please disregard the attachments on the previous email. I am replacing them with the documents attached here.

Thanks,

ORION LITZAU, EIT

Senior Staff Engineer



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From: Orion Litzau

Sent: Monday, October 2, 2017 8:11 PM

To: 'Mark.Detterman@acgov.org' < Mark.Detterman@acgov.org>

Cc: Peter Langtry <plangtry@cornerstoneearth.com>; John R. Dye <jdye@cornerstoneearth.com>

Subject: Re: Planned geotechnical work at 914 W. Grand Ave. Oakland

Hi Mark,

Thanks for your email and the attached document on guidelines for backfilling Geotech borings.

The proposed work on the site will include pushing four CPTs (Cone Penetration Tests) to 50 feet and drilling two borings to between 25 and 50 feet below the existing site surface. The two borings will be drilled 8" in diameter with truck-mounted hollow stem auger drilling equipment. We will collect soil samples from our borings for visual classification, laboratory testing, and for correlation with CPT exploration data. Upon completion of the CPTS and borings, the holes will be tremie grouted with Portland cement grout. Further details of our planned work can be included on the attached site work plan. Also attached is our proposed exploration site plan.

Please let me know should you need any further information to approve the permit.

ORION LITZAU, EIT

Senior Staff Engineer



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914 W. Grand Ave. Oakland, CA October 12 and 16, 2017

CONE PENETRATION TESTING

To evaluate the site subsurface conditions, we will perform four (4) Cone Penetration Tests (CPTs) using 20-ton, truck-mounted CPT equipment. Our CPTs will extend to depths of approximately 50 feet each. The approximate locations of our exploratory CPTs are shown on the attached Proposed Exploration Location Plan; the final location and depth of all explorations may be modified in the field, as needed.

EXPLORATORY BORINGS

We will also drill, log and sample two (2) exploratory borings using conventional truck-mounted, hollow-stem auger drilling equipment. Our conventional borings will extend to depths of approximately 25 to 50 feet. We will collect soil samples from our borings for visual classification, laboratory testing, and for correlation with CPT exploration data. The approximate locations of our exploratory borings are shown on the attached Proposed Exploration Location Plan.

UTILITY CLEARANCE

We will mark our boring locations at least two working days prior to beginning our explorations as required by law, and notify the regional utility notification center – Underground Service Alert (USA), and you, so that public and private utilities can be identified and marked at the ground surface. Where practical, we will mark our locations in white paint, or otherwise designate our exploration locations, as requested by USA. Utility operators/owners are required to mark their utilities at the ground surface prior to the start of work. To reduce the risk of damaging unidentified underground utilities during drilling, we will also contract with a private utility locator. We are not responsible for damage to utilities that are not clearly identified. We also request that you forward a copy of utility location plans or drawings, if available, to aid in determining our exploration locations.

PERMITTING AND BACKFILL

Our explorations will be permitted and backfilled with cement grout in accordance with Alameda County Public Works and Alameda County Department of Environmental Health Oversight Program guidelines. Backfill procedures will be performed as follows:

After collecting data at each CPT location, the solid CPT rods will be removed from the hole, cleaned with an alcohol solution, and rinsed with distilled water. Hollow rods with a removable tip will be pushed to the final depth in the original hole, the removable tip will be forced off, and



Portland cement grout will be poured through rods. Following grouting, the grouting rods will be cleaned and rinsed as discussed above.

Following drilling and sampling at each boring, PVC tubing will be placed inside the hollow-stem augers and extended to the bottom of the hole. Portland cement Grout will be poured through the tubing as the augers are removed from the excavation.

EQUIPMENT DECONTAMINATION

As noted above, CPT rods will be cleaned after they are removed from the ground and between borings the augers will be steam cleaned. Steam cleaning rinsate will be contained in a metal tray which will be emptied into appropriately labelled DOT-rated 55-gallon drums.

DISPOSAL OF DRILL SPOILS

During drilling, drill spoils will be placed in DOT-rated 55-gallon drums. As noted above, steam cleaning rinsate will be contained in drums as well. Following exploration work, all drums will be labelled and tested. It is expected that drums will be left on-site at a location designated by the property owner for at least three weeks following testing, after which time, Cornerstone will coordinate drum transportation and disposal at an appropriate off-site facility.

