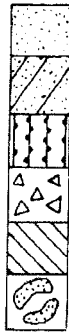


**SUBSOIL
INVESTIGATIONS**



SOIL MECHANICS DRILLING CORP.

3770 MERRICK ROAD • SEAFORD, L. I., NEW YORK 11783
(516) 221-2333 • FAX (516) 221-0254

September 19, 2014

Arverne By The Sea
190 Beach 68th Street
Arverne, NY 11530
Att: Nicholas Masem

Re: 223 Oceanside Avenue
Breezy Point, NY
Our Job #14-593

Gentlemen:

Forwarded herewith are the boring logs for drilling work completed at the above referenced site.

Also enclosed are TR-1 and TR-4 forms for filing with the Building Department.

The purpose of the subsurface investigation was to determine the nature and extent of the underlying soil deposits and determine the structural engineering characteristics of the soil at the site. Two (2) test borings were drilled to a depth of 27 feet each using truck mounted drilling equipment at the above referenced site at the locations shown on our Boring Location Plan. A 2" diameter, 2'0" long split spoon sampler was advanced into the subsurface by the use of a CME automatic 140 lb. hammer with a 30" drop. From the drops of the hammer, blow counts required to advance the split spoon sampler over each 12" interval were recorded and is shown on the boring logs. Continuous split spoon samples were taken for the top 8 feet then every 5 feet thereafter. A written description of the recovered soil samples per our geologist's visual identification of same is also presented on the logs.

The CME automatic hammer operates with an efficiency of approximately 90%. The original conventional use of rope, cathead and drop weight, on the other hand, operates with an efficiency of approximately 60%. As a consequence, the standard penetration test results obtained using the CME auto-hammer are on the order of two-thirds the value that would have been obtained had the original rope and cathead method been used. This is significant if you are using design charts for soil strength parameters based on historical data associated with the rope and cathead method. If so, you should adjust our data accordingly.

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Page 2

Our investigation revealed that the areas drilled are blanketed by 2-4 feet of loose soil fill, underlain by a loose to moderately dense naturally bedded fine sand formation with traces of silt and shell fragments extending to the deepest depths drilled.

Natural ground water was encountered within the boreholes at depths of 4'6" and 5'1" below existing grade at the time the work was done and is under tidal influence.

All natural soils below the fill are capable of supporting foundation loads of 2,000 lbs. per square foot.

Two options can be considered:

- De-watering to the natural fine sand, or
- Installing helical piles into the denser fine sand.

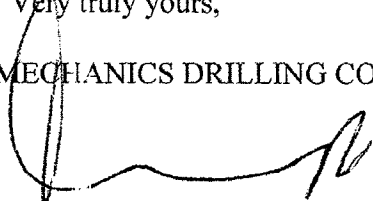
Soil samples recovered during drilling operations will be stored in our lab for a period of 30 days after which they will be destroyed. During this period we will deliver these samples to any prescribed location upon request.

If after you examine the enclosed you have any further questions, please feel free to call and discuss them with us.

Billing is enclosed.

Very truly yours,

SOIL MECHANICS DRILLING CORP.



Carl Vernick, P.E.
President

CVmlf
Encls.