

May 13, 2022

TO: Jenny Delumo, Planner 3, Department of Planning

FROM: Neville Pereira, Deputy Director, Department of Building Inspection (DBI) *NP*

SUBJECT: Review of Preliminary Geotechnical Report for 469 Stevenson Street.

The subject preliminary investigation describes subsurface soil conditions and hazards based on two borings to bedrock. It acknowledges that additional borings into bedrock as well as full compliance with AB-111 will be required and provided for the design geotechnical investigation, which will be reviewed by the EDRT as part of DBI's permit approval process, in accordance with AB-082 and AB-083.

The report provides preliminary recommendations for the proposed 27-story tower on the basis of initial design dead and live loads provided by the structural engineer of record. The report provides preliminary estimates of total settlements (2" to 3 ¾") to be expected after 50 years for a mat foundation system. Final settlement analyses will be provided in the design geotechnical investigation, which will be reviewed by the EDRT. This suggests a mat foundation is feasible, subject to the final settlement analyses. The report identifies large-diameter drilled shafts, that may or may not extend to bedrock, as also feasible. Again, subject to final analyses in the design geotechnical investigation and EDRT review.

The report provides preliminary recommendations for excavation shoring and eliminates traditional soldier pile and lagging systems as not appropriate. Due to the dewatering that will be required, an impervious system using deep soil mixed or diaphragm walls extending at least 30 ft below the bottom of the excavation is recommended. The final shoring system design is typically included in the EDRT review.

The foundation system and its acceptable performance according to code requirements is to be determined during the vetting of the design by DBI and EDRT during the detail design permitting of the construction plans when additional detailed reports, plans, and calculations are provided.

DBI's has no comments or exceptions to this preliminary report.