



INFORMATION SHEET

NO. S-18

DATE : December 27, 2017

SUBJECT : Structural and Geotechnical

TITLE : **Interim Guidelines and Procedures for Structural, Geotechnical, and Seismic Hazard Engineering Design Review for New Tall Buildings**

PURPOSE : To establish interim guidelines and procedures for structural, geotechnical, and seismic hazard engineering design review for new tall buildings, 240 feet or taller, located in the City's softest soils and/or liquefaction zones.

REFERENCE : 2016 San Francisco Building Code (SFBC)
AB-082 Guidelines and Procedures for Structural Design Review
AB-083 Requirements and Guidelines for the Seismic Design of New Tall Buildings using Non-Prescriptive Seismic-Design Procedures

BACKGROUND :

Currently, Administrative Bulletins AB-082 and AB-083 are being reviewed by SEAONC, whose experts may recommend to the Director and to the Building Inspection Commission the adoption of modified guidelines for future tall building safety in San Francisco. This information sheet provides interim guidelines and procedures to supplement and clarify AB-082 and AB-083.

For the purpose of this information sheet, tall buildings are defined here as buildings 240 feet or taller.

This Information Sheet is applicable to all new tall building projects located in the City's softest soils and/or liquefaction zones, as defined by the California Seismic Hazard maps, including projects under review before the foundation addendum is issued, or at the Director's discretion.

DISCUSSION :

(A) Qualification, Selection and Scope of Review for Geotechnical Reviewers:

- i. A project subject to this Information Sheet shall include two Geotechnical Reviewers on the Engineering Design Review Team unless the project will include piles/drilled piers anchored to bedrock. Only one Geotechnical Reviewer is required for a project that will anchor piles/piers to bedrock.
- ii. A qualified Geotechnical Reviewer for Engineering Design Review Teams shall be a Geotechnical Engineer (G.E.) registered in California or a Civil Engineer (C.E.) registered in California with substantially demonstrated geotechnical experience who will meet with the Engineer of Record and

with the Department of Building Inspection staff as needed throughout the design process, providing the Director with a report of the following findings after completion of the Geotechnical Reviewer's work:

- Design of shallow and/or deep foundation systems of the type proposed for the project
- Interpretation of geotechnical and geological investigations
- Soil-foundation-structure interaction under static (gravity) and seismic loading conditions
- Liquefaction, landslides, and or other geological site hazards
- Ground improvement
- Static and dynamic earth pressures
- Effects of de-watering on the project site and its vicinity
- Effects of construction-related activities on foundation performance of neighboring structures
- Foundation or Building Settlement

(B) Prior to completion of all new tall building projects, the Project Sponsor shall secure a contract with qualified Monitoring Surveyors and Instrumentation Engineers (MSIEs) to monitor the effects of settlement on the buildings and foundations of the project for a period of ten years after the issuance of CFC/TCO. A notarized legal document, completed by the Project Sponsor and recorded against title, with MSIE's contact details, shall be retained with the project's permanent records and readily retrievable within DBI's inspection records on this project. Settlement monitoring data are to be submitted annually to DBI's Building Inspection Division each year of this 10-year period. Should the settlement monitoring data exceed the project sponsor's geotechnical engineer's estimated settlement by a factor of 1.5 or more in any annual data reporting period, the project sponsor/owner is required to immediately notify DBI's Deputy Director for Inspection Services and bring this change to his/her attention for immediate additional investigation.

Tom C. Hui

12/27/17

Tom C. Hui, S.E., C.B.O.

on

Date

Director

Department of Building Inspection

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