Your ref
Our ref 601315-12
File ref

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25 October 2018

Dear Ken,

[redacted]Maiden Lane – Engineering Review

Ove Arup & Partners PC is pleased to submit this proposal for engineering review services for the 161 Maiden Lane Tower project in New York City.

Project Understanding

Our project understanding is based on a meeting between Fortis and Arup on July 24th, 2018. The project consists of a slender 58-story residential tower approximately 690ft tall with a floor plate approximately 104ft x 46ft. The basic structural system consists of reinforced concrete (RC) shear walls and columns supporting RC flat slabs. Four tuned sloshing dampers are proposed for the top floors of the building to help control dynamic wind excitation impacting occupant comfort. The building rests on a 12ft mat slab foundation with no basement and employs a jet grouted soil improvement generally to around 40ft depth but with additional jet grouted secant column perimeter skirt to a depth of 70ft.

We understand that the project is currently constructed up to the 53rd floor with the curtainwall installed up to about the 20th floor. Due to some differential shifts in the floor slabs up the height of the building the curtainwall installation has come to a halt. The greatest differentials are between floors 23 and 33.

We further understand that the client is looking for a third party holistic review of the project from a façade, structural, geotech and wind perspective to help understand why the differential shifts may have occurred and to assess whether further shift should be expected. In addition, there is a desire for us to weigh in on potential ramifications of the current building geometry (assess impacts on elevator shafts, curtain wall alignment, etc) and help identify strategies to minimize impacts and allow the developer to restart construction.