DLR Group
Architecture Engineering Planning Interiors

700 South Flower St., 22nd Floor
Los Angeles, CA 90017

March 6, 2020

Mr. Carey Upton
Chief Operations Officer
Santa Monica – Malibu Unified School District
1651 16th Street
Santa Monica, CA

Re: New District Office Seismic Retrofit - Preliminary Pricing Scheme

Dear Carey,

Thank you for the opportunity to provide you with the preliminary retrofit scheme for the purpose of preliminary cost estimate for the building located at 1717 4th Street Doubletree office building in Santa Monica. We briefly reviewed the existing structural drawings provided to us. Please note the following:

- The initial report and calculations provided to us (performed by another structural engineer) did not include full evaluation of the potential seismic deficiency of the complete seismic force resisting system beyond the existing steel moment frame, such as existing diaphragm capacity, the adequacy of the seismic foundation, building lateral displacement, bracing of non-structural components, etc.
- We understand that the Proposed building is not intended to be used as educational occupancy (non-DSA).
- Existing Structural and Architectural drawings provided to us were not complete sets. The Preliminary sketches are provided based on what was made available to us.
- Adequacy of the exterior skin seismic drift joints is not reviewed/evaluated.
- Adequacy of the existing underground structure and Ground floor slab are not reviewed/evaluated.
- Adequacy of the existing diaphragm capacity is not reviewed/evaluated.
- Complete set of Structural and Architectural drawings will be required in the future, should the District desire to move forward with the full seismic evaluation and retrofit of the building. If existing Structural and Architectural drawings cannot not be made available, a testing and inspection company will need to be retained to develop the required/missing information.
- A full evaluation and retrofit design will be required at a later stage for more accurate cost estimate.
- Make allowances for the cost associated with seismic bracing of non-structural component (MEP, etc.) and/or replacement of the existing components per District's direction.
- Refer to attached sheets S2.6 and S2.18 for outline of the potential retrofit scope for a similar type building (pre-Northridge steel moment frame) that can be used for preliminary cost estimate purposes. Cost estimator should include adequate contingency provided that these sketches are not developed based on analysis but rather past experiences (approximate illustration of the potential retrofit scope).
- New braced frames are prposed (two in each direction) to strengthen the existing pre-Northridge moment frames (existing moment frames will be disregarded). The new braced frames will also address the potential lateral displacement (drift) issue considering only two moment frames are present in each direction.

- New braced frame along grid 18, between grids G & J, would block the existing door opening to Terrace. The existing door will need to be relocated.
- New gusset plates sticking above the floor slab will need to be taken into account specially for interior space planning.
- New braced frames in E-W direction (along grids E & M) may disrupt the continuity of the interior space planning.
- Proposed braced frame configuration may be single diagonal or inverted-V, (see attached sketch) based on desired architectural and interior space layout.
- Some MEP components may need to be removed to allow access for installation of new members and member welding.

We appreciate your confidence in DLR Group and the opportunity you have given us to provide you with our services. Please do not hesitate to contact me should you have any question.

Sincerely,

Nasir Navidpour, SE
Senior Associate
Structural Engineering Leader - California Region
DLR Group INC.