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MEMORANDUM

Date: January 5, 2017

To: Criseldo Mina, City of Tracy

From: Jim Nelson

Subject: **Home 2 Hotel**
Storm Drainage Assessment and Recommendations

SWC File: 2014-96T

Per the City's request, we have prepared this memorandum to summarize our assessments and recommendations relating to storm drainage capacity and storm water quality attributable to the proposed development of a new hotel and office building on a 2.55 acre site located at the northwest corner of Grant Line Road and Corral Hollow Road. As a part of preparing this memorandum, we have reviewed and considered the following information:

- City of Tracy Citywide Storm Drainage Master Plan (SDMP) and Appendices prepared by Stantec Consulting Services Inc.
- 2010 Drainage Agreement Between the City of Tracy and the West Side Irrigation District.
- Tracy Home 2 Hotel Site Plan prepared by Lee Gage & Associates, Inc.
- As-built Plans for Corral Hollow Road Widening Project (C.I.P. 73014).
- City of Tracy Drainage Utility Base Maps.
- Storm Drainage Analysis – Infill Properties Final Technical Report prepared by Storm Water Consulting, Inc.
- Multi-Agency Post-Construction Stormwater Standards Manual (Stormwater Standards Manual).
- City of Tracy Design Standards.

Our assessments and recommendations are provided below:

1. The proposed project is located within the "Westside Channel Area" served by provisions of the 2010 Drainage Agreement Between the City of Tracy and the West Side Irrigation District (WSID). As such, the proposed development may drain to an existing 72" storm drain (WSID) on the south side of Grant Line Road that ultimately discharges to the WSID Main Drain canal to the west.

2. There are two (2) existing 12" storm drain laterals having D.I.'s on the north side of Grant Line Road adjacent to or the proposed project. These 12" laterals extend to the south underneath the roadway and connect with the existing 72" storm drain (WSID). One D.I. is located just west of the Corral Hollow Road intersection and the second D.I. is located at the "common entrance" at the west end of the proposed project. The existing 12" storm drain laterals are the most viable points of connection for onsite drainage and will not require trench cutting across Grant Line Road (which is considered to be undesirable).

3. Storm water quality treatment control measures will be required with the development of this project in conformance with the City's Stormwater Standards Manual. Using a site development impervious surfaces percentage of 90% for this type of land use (per the Citywide Storm Drainage Master Plan), we have estimated that the storm water quality design volume (SDV) required for storm water quality treatment is roughly 4,379 cubic feet. Bioretention will need to be provided to achieve the SDV, and the sub-drains and overflow devices serving the bioretention areas should be connected to the existing D.I's on the north side of Grant Line Road. The incorporation of bioretention facilities into the project development in conformance with the Stormwater Standards Manual will mitigate the impact of the site development on downstream stormwater quality. Site design measures described in the Stormwater Standards Manual may be utilized to further augment storm water quality, but we do not recommend reducing the SDV requirement for the bioretention

facilities as flow attenuation will be needed in order for the site to be able to utilize the available D.I.'s on the north side of Grant Line Road as the points of outfall for onsite drainage.

4. No onsite runoff should be allowed to discharge directly to the existing D.I.'s on the north side of Grant Line Road without first discharging to the bioretention areas, to be subsequently delivered to the D.I's via the subdrains, overflow devices and D.I. connections serving the bioretention areas. This approach will mitigate the impact of the site development on downstream stormwater quantity.

5. Per information provided in the Citywide SDMP, segments of the existing 72" storm drain (WSID) in Grant Line Road will become surcharged during storms approaching a 10-year 24-hour storm and larger storms, including adjacent to the project site, under fully developed conditions for the contributing watershed. We recommend that the finished floor elevations for proposed site buildings be elevated a minimum of 1 foot above the highest top of curb elevation along the frontage of Grant Line Road adjacent to the project to provide flood protection for the site buildings in the event that surcharging occurs. Drainage should also be directed away from the proposed site buildings.

6. All or most of this property is identified as an "infill property" in the Storm Drainage Analysis – Infill Properties Final Technical Report. As such, we recommend that this project be required to pay the current Storm Drainage Impact Fees and Outfall Fees established by the City of Tracy for Infill Properties.

Cc: Al Gali, City of Tracy
Nanda Gottiparthy, SNG Associates