Appendix B
GHG Evaluation



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MEMO

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**Date:** October 23, 2017

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**From:** James A. Reyff

SUBJECT: GHG Emissions for Fourth & St. John GPA, San Jose, CA

Job#17-051

Illingworth & Rodkin, Inc. has modeled the greenhouse gas (GHG) emissions for the Fourth and St. John project. The project proposes an Amendment to the Envision San José 2040 General Plan (General Plan) Land Use Transportation Diagram. This General Plan Amendment is proposed to incorporate the project site into the Downtown Growth Area and to change the General Plan land use designation on the site from *Residential Neighborhood* and *Transit Residential* to *Downtown*. The project also proposes rezoning of the site from General Commercial Zoning District to Downtown Primary Commercial Zoning District. No specific development is proposed at this time.

To assess GHG emissions, the CalEEMod model was used to assess a build-out scenario that was based on the development assumptions used for the long-range GPA cumulative traffic analysis, which assumed an average development density on the project site of 337 units and commercial square footage to support 22 new jobs, after accounting for the dwelling units and employment generated by the existing General Plan land use designations on the site.

Inputs to the model included the following: 337 dwelling units entered as "Apartment High Rise," 8,800 square feet of retail as "Strip Mall," and 400 spaces as "Enclosed Parking with Elevator." Model default square footages were used. The square footage associated with 22 workers was computed assuming that there would be 2.5 employees per 1,000 square feet of commercial spaces or 22 employees divided by 2.5. The number of parking spaces conservatory assumed 1.5 spaces per dwelling units and 95 spaces for the commercial use.

Emissions in 2020 were computed as 2,474 metric tons of CO2e per year. The per-capita emissions were computed by dividing the project annual emissions by the number of residents and workers. For the proposed project, the total service population considering future residents and employees was calculated as 1,104 people<sup>1</sup>. The per-capita emissions would, therefore, be 2.24 metric tons per year. This is well below the BAAQMD 2020 per-capita threshold of 4.6 metric tons per year and likely to be below any 2030 threshold that may be identified based on current AB 32 scoping plan targets. The low per capita emissions reflect the lower emission rate that results from infill or urban multifamily residential uses. The GHG emissions from the project would, thus, be less-than-significant.

<sup>&</sup>lt;sup>1</sup> There would be 1,082 new residents (based on 337 units and 3.21 persons per household) and 22 workers.