Addendum to the Previously Certified Harmony Grove Village Final Environmental Impact Report (PDS2024-STP-24-007)

Greenhouse Gas Technical Memorandum to the Harmony Grove Village Final Environmental Impact Report August 2025

This technical memorandum evaluates the Harmony Grove Village Live/Work Project (Project) modifications included in the Addendum to the Final Environmental Impact Report (FEIR) certified in February 2007 with respect to greenhouse gas (GHG) emissions.

Background

The Harmony Grove Village FEIR (SCH No. 2004071004) analyzed the environmental effects of the Harmony Grove Village Specific Plan (Specific Plan) development located on approximately 468 acres in an unincorporated portion of San Diego County (County) within the North County Metropolitan Subregional Plan planning area. The Harmony Grove Village Specific Plan area is bounded by the City of Escondido to the east and the City of San Marcos to the north-northwest. The Harmony Grove Village Specific Plan, as originally approved, consisted of a mixed-use rural residential village consisting of 742 residential dwelling units, 45,000 square feet (s.f.) of commercial/retail uses (consisting of 25,000 s.f. of general commercial and another 16,500 s.f. of live/work space in the Village Center and 3,500 s.f. of retail associated with equestrian facilities), open space and park and recreational uses, an on-site wastewater reclamation facility, and various equestrian facilities, including an equestrian ranch for horse boarding and lessons. The proposed development also incorporated a number of related amenities and facilities, including park and recreation areas, a fire station, and an on-site wastewater reclamation facility (including a pump station and wet weather storage). The FEIR was certified and approved by the County Board of Supervisors in January 2007 in accordance with the California Environmental Quality Act (CEQA).

The approved Harmony Grove Village Specific Plan designates two acres near the intersection of Country Club Drive and Country Living Way for up to 25,000 s.f. of office/retail use, with the caveat that the properties may instead be used for live/work units if there is not sufficient demand for retail and office uses. The Project applicant has determined that use of the property for office/retail is not economically viable and therefore wishes to develop live/work units at the Project site. The current proposal includes the development of up to 32 live/work units on the two acres currently designated for office/retail uses. The units would be developed as single-family home building types, with attached garages and separate entrances for the workspaces. Units would range from approximately 2,200 to 2,700 s.f. and would be compatible with the adjacent live/work homes completed and occupied at Harmony Grove Village. Both lots have been previously graded as part of overall Specific Plan development. Figure 1, Site Plan, provides the proposed site plan for the live/work units. The Project would require General Plan, Community Plan, and Specific Plan amendments with a Site Plan application to remove a Specific Plan footnote indicating that the 32 live/work units are counted within the 742 maximum residence total, and to allow individual units as condominiums on the Project site.

GHG Background

The Harmony Grove Village FEIR did not model or explicitly discuss GHG emissions. Although not discussed specifically, the topics of GHG emissions, as well as the potential effects of GHGs on climate change, were

generally known prior to certification of the Harmony Grove Village FEIR in February 2007, and the information necessary to analyze the Specific Plan's impacts with respect to this category was disclosed in the EIR. Further, the Project's proposed modifications would not result in any new or increased GHG emissions impacts when compared to the Specific Plan analyzed by the 2007 FEIR.

This approach is consistent with caselaw such as *Concerned Dublin Citizens v. City of Dublin*, in which the trial court found, "[t]he potential environmental impacts of [GHGs] were known or could have been known at the time the 2002 plan EIR was certified." Specifically, potential impacts of GHGs on climate change were known as early as the 1970s. For example, Congress enacted the National Climate Program Act, which required the President to establish a program to facilitate understanding of and response to natural and human-induced climate processes in 1978. As a result, President Carter directed the National Research Council to investigate the subject and it concluded, "If carbon dioxide continues to increase, the study group finds no reason to doubt that climate changes will result and no reason to believe that these changes will be negligible."

The United Nations Framework Convention on Climate Change (UNFCCC) was adopted on May 9, 1992. The UNFCCC objective is to "stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system." The parties to the convention have met annually since 1995 to assess progress in dealing with climate change and the regulation of GHG emissions to reduce climate change impacts was extensively debated and analyzed throughout the early 1990s. In response to the studies and analyses of this issue, the Kyoto Protocol was concluded in 1997 and established legally binding obligations for developed countries to reduce their GHGs in the period from 2008 to 2012.

In the early and mid-2000s, GHGs and climate change were also extensively discussed and analyzed in California. Senate Bill (SB) 1771 (Sher), enacted on September 30, 2000, required establishment of the "California Climate Action Registry," for the purpose of administering a voluntary GHG emission registry. In response to the transportation sector accounting for more than half of California's carbon dioxide (a key GHG) emissions, Assembly Bill (AB) 1493 was enacted on July 22, 2002, and required the California Air Resources Board to set statewide GHG emission standards for passenger vehicles and light-duty trucks. In January 2004, Executive Order S-7-04 called for development of a California Hydrogen Blueprint Plan to, among other things, reduce GHG emissions. Thus, information about the potential impacts of GHGs was widely known in 2007 when the Harmony Grove Village FEIR was certified.

Based on the fact that the topic of GHG emissions was known by County decision-makers and commenting members of the public at the time that the Harmony Grove Village FEIR was certified, there is no new information that could not have been known with reasonable due diligence at that time. Therefore, the Project would not result in a new or increased significant environmental impact as a result of new information.

Summary of Project Changes (Relevant to Greenhouse Gases)

The proposed Project changes result in a land use change for a 2.9-acre area within the Harmony Grove Village Specific Plan from 25,000 s.f. of commercial retail space to up to 32 live/work dwelling units. While this analysis conservatively assumes development of all 32 units that would be allowable under the Specific Plan, the Tentative Map proposes a total of 27 units. This Project does not propose changes to other on- or off-site components of the Harmony Grove Village Specific Plan, such as the water reclamation facility, roadway improvements, or equestrian facilities.

<u>Analysis</u>

Construction

Construction of the Project would occur in the same general locations and require the same types of activities as the previously approved commercial development analyzed in the 2007 FEIR. Construction GHG emissions are anticipated to be reduced compared to what was previously analyzed due to the delay in the start of construction yielding a more modern and cleaner-burning construction equipment fleet mix than assumed in the FEIR analysis. In addition, mass grading has previously occurred on the parcels comprising the Project site; therefore, the Project would require less intensive construction activities such as fine grading, physical building construction, and application of architectural coatings. These construction activities would have also been required by the previously approved commercial use, and the Project would therefore produce similar construction-related GHG emissions. Overall, construction of the currently proposed Project would not result in new or substantially increased construction-period GHG emissions compared to what would have occurred with construction of the Specific Plan analyzed in the 2007 FEIR.

Operation

To compare the potential GHG emissions of the previously approved commercial land use analyzed in the 2007 FEIR and the currently proposed live/work units, operational emissions were assessed using the California Emissions Estimator Model (CalEEMod) Version 2022.1. Both modeled land uses were assumed to have an opening year of 2026. Operational sources of emissions include mobile, area, energy, water and wastewater, solid waste, and refrigerants. Default modeling information for the analyzed land uses provided in CalEEMod was used in the emissions calculations, except as noted below.

Operational emissions from mobile sources were based on the trip generation rates in the Substantial Conformance Review Memorandum prepared by Linscott Law & Greenspan Engineers ([LLG] 2024). The previously approved commercial use would produce 750 average daily trips (ADT), while the currently proposed Project would produce 368 ADT, resulting in a net decrease of 382 ADT (LLG 2024). Area source emissions were modeled assuming no fireplaces would be installed, consistent with the Project plans.

The estimated operational GHG emissions for the previously approved land use and the currently proposed Project are compared in Table 1, *Estimated Annual Greenhouse Gas Emissions*. The complete CalEEMod outputs are provided in Attachment A.

Table 1
ESTIMATED ANNUAL GREENHOUSE GAS EMISSIONS

Emission Source	MT CO₂e
Previously Approved Land Use	
(25,000 s.f. Commercial)	
Mobile	624.1
Area	0.4
Energy	51.5
Water and Wastewater	6.7
Solid Waste	7.3
Refrigerants	<0.1
Total Previously Approved Land Use	689.9
Emissions ¹	
Currently Proposed Land Use	
(32 Live/Work Units)	
Mobile	266.7
Area	0.5
Energy	61.0
Water and Wastewater	2.8
Solid Waste	7.8
Refrigerants	<0.1
Total Currently Proposed Land Use	338.7
Emissions ¹	
Net Emissions	-351.2

Source: CalEEMod (output data are provided in Attachment A)

MT = metric tons; CO₂e = carbon dioxide equivalent; s.f. = square feet

The proposed land use change would result in a reduction in the number of vehicle trips generated by the Project, resulting in reduced mobile source emissions compared to what was previously analyzed in the 2007 FEIR. Other sources of GHG emissions, including area, energy, water and wastewater, solid waste, and refrigerants, would generally be similar for both land uses. As shown in Table 1 above, the currently proposed Project would result in an annual reduction of approximately 351.2 metric tons (MT) of carbon dioxide equivalents (CO₂e) when compared to the previously approved commercial land use analyzed in the 2007 FEIR. Therefore, the Project's proposed land use change would not result in new or substantially increased GHG emissions compared to what would have occurred with buildout of the Specific Plan analyzed in the 2007 FEIR.

Conclusion

The Project-related modifications would not result in new or substantially increased GHG impacts compared to what would have been included in the 2007 FEIR if GHG emissions for the Specific Plan had been quantified.

¹ Totals may not sum due to rounding.