8/10/2026

Terrill L. Tillman, AICP
Principal Planner
Pima County Development Services
201 N. Stone Avenue, 1st Floor
Tucson, AZ 85701

RE: Objection to Rezoning Application P26SP00002 – Geotechnical and Structural Concerns

Dear Ms. Tillman and Members of the Pima County Planning and Zoning Commission:

On behalf of the Mission Hill Townhomes Homeowners Association's Board of Directors ("the Board"), I am writing to formally register our objection to Rezoning Application P26SP00002 submitted by Skyline Country Club at 5200 East Saint Andrews Drive ("the Plan").

The physical and geographical constraints of the proposed construction site risk causing severe, unmitigated impacts that threaten the structural stability of the Mission Hill Townhome properties located at 5251 E. Mission Hill Drive (commonly called the "Casitas"). The Mission Hill Townhomes consist of thirty-nine (39) townhomes (in seven (7) rows) adjacent to Skyline Country Club's property.

Background:

1. The proposed development in the Plan includes a row of 12-14 three story townhomes along the western edge of a narrow ravine.

2. On the opposite lower eastern edge of the same ravine is the boundary of the Mission Hill Townhomes which are single-story structures built in 1966. They do not meet current building codes.

Adobe brick, old and thin foundations, and cantilevered decks supported by piers are vintage features of the Mission Hill Townhomes that will be exposed to potential damage.

The western-most Mission Hill Townhome in each of the 7 rows is built close to the eastern edge of the ravine, with approximate distances to the construction site directly across the ravine of a mere 150 – 225 feet (measurement differs by lane.)

3. The local geology of the ravine consists of dense, rocky terrain mixed with soil including integrated bedrock that will require aggressive subsurface excavation.

Based on initial research to date, our primary concerns center on the following potential geotechnical and structural impacts:

- **Proximity and Bedrock-Transmitted Vibration Resonance:** Since the closest Mission Hill Townhomes along the eastern edge of the ravine are positioned a mere 150 to 225 feet away from the proposed construction site on the opposite western edge of the same ravine, they are subject to damage from construction-induced earth vibrations. While the ravine separates these properties, the open chasm does not buffer ground vibrations; rather, the underlying bedrock can act as a direct conduit for high-frequency, continuous vibrations caused by heavy rock drilling and excavation. Because the Mission Hill Townhomes are built on concrete slabs, they are directly coupled to the ground. Shaking will transmit instantly into the structures, risking slab cracking, sub-slab soil compaction (creating hollow voids under the floors), and interior drywall failure.
- **High-Risk Cantilevered Decks on Piers:** The Mission Hill Townhomes have cantilevered decks supported by engineered pier systems. These structures rely entirely on the stability of the underlying bedrock. Vibration-induced shifting or micro-fracturing of the rock strata across the ravine could compromise these pier supports, potentially leading to catastrophic structural failure of the decks.
- **Dangers Involved with Blasting:**
    - **Acoustic Focusing (Air blast overpressure):** Ravine walls act like a megaphone. The shockwaves from a blast could strike the opposite rock face and bounce directly toward the Mission Hill Townhomes, amplifying the air blast overpressure. This would significantly increase window rattling and adobe brick damage compared to flat ground.
    - **Exaggerated Fly rock Trajectories:** If blasting is used, fly rock will not just fly upward—it could be launched laterally across the ravine straight toward the Mission Hill Townhomes, potentially harming people or property.
- **Delayed Impact:** One of the most concerning possibilities is the fact that damage to the Mission Hill Townhomes may not be visible for years after the construction is

complete. A slow shifting of the soil surrounding the rock and bedrock that was triggered by the close construction across the shared ravine could cause damage far into the future.

It is for these reasons that the Board objects to the Plan and asks that it be denied by the Commission.

If Pima County approves the Plan despite these risks, we request that the following conditions be attached to protect the Mission Hill Townhomes:

1. **Independent Pre-Construction Engineering Surveys:** The developer funds independent, third-party structural engineering inspections for every Mission Hill Townhome prior to any site work, establishing a legal baseline for any future damage claims.
2. **Pre and Post Construction Slope Stability Assessments:** The developer funds a licensed Arizona geotechnical engineer to perform a baseline stability analysis of both ravine slopes. The slope crests must be continuously monitored for lateral movement, cracking, and rockfall hazards throughout the excavation phase and corrective action be taken when needed.
3. **Top-of-Slope Seismograph Monitoring:** Independent, continuous seismographs be placed along the top-of-slope property lines on the Mission Hill Townhomes' side of the ravine. Peak Particle Velocity (PPV) should be strictly capped at a conservative 0.5 inches per second to prevent differential settling in the mixed-soil foundations.
4. **Require Mechanical Alternatives to Blasting:** Require the developer to use non blasting methods such as hydraulic rock splitting or heavy ripping to avoid blasting risks listed above.

This objection letter will be supplemented as additional information is received.

Please ensure this letter is fully incorporated into the official staff report and public record for Rezoning Application P26SP00002. We also request notification of all future public hearings or required neighborhood meetings.

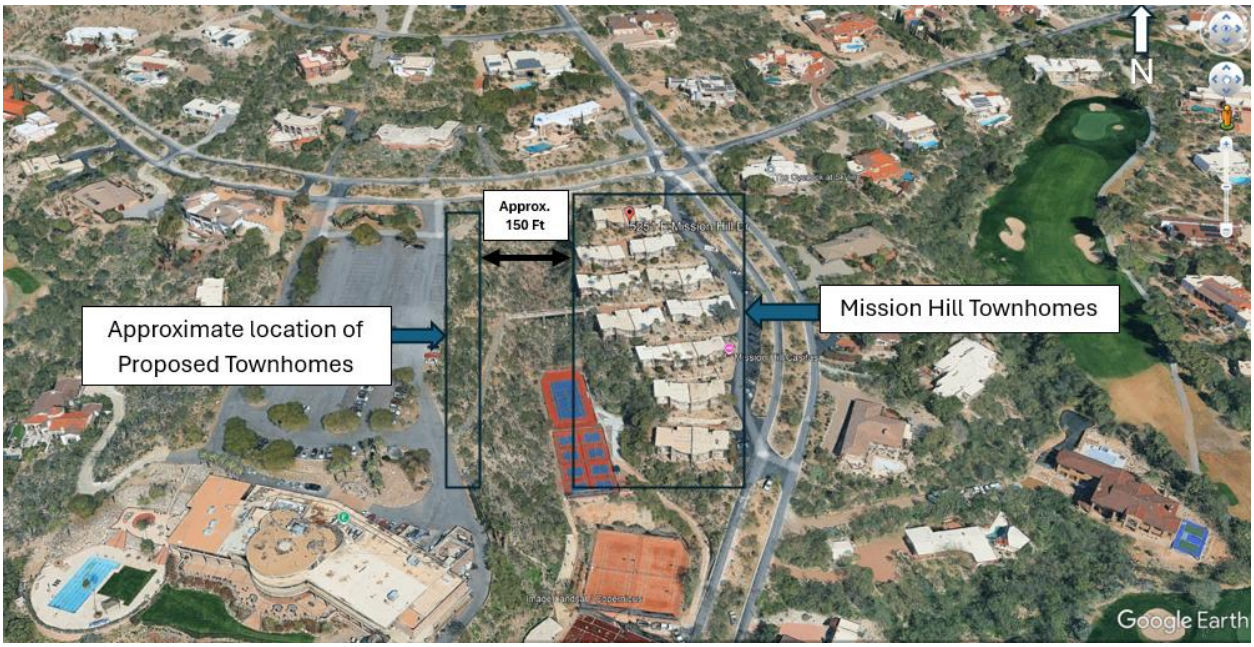
Sincerely,

Janet Emery
President, Mission Hill Townhomes Homeowners Association
5251 Mission Hill Drive
Tucson, Arizona 85718

Attachments: 5

1 – Approximate location of construction and the location of the Mission Hill Townhomes
2 – The shared ravine from the north
3 - The upper western slope of the ravine (the proposed construction site) from the lower eastern edge of the ravine (location of the Mission Hill Townhomes)
4 - Mission Hill Townhome and cantilevered deck along the eastern edge of the ravine
5 - The eastern slope of the ravine from the north (Saint Andrews Drive).

Attachment 1: Google Earth diagram looking north showing the approximate location of the proposed construction in relationship to the Mission Hill Townhomes. Note the closest approximate distance from the proposed construction site across the ravine to the Mission Hill Townhomes is a mere 150 feet.



Attachment 2: Google Earth diagram showing the ravine looking south. The ravine sides are steep. According to the Plan, the proposed townhomes would have the lowest of the three stories hanging off the upper edge of the western slope of the ravine.



Attachment 3: A view of the western (upper) slope of the ravine, from a Mission Hill Townhome on the lower eastern edge of the ravine, facing west toward the proposed construction site. Notice the steepness of the western (upper) slope of the ravine.



Attachment 4: Mission Hill Townhome and cantilevered deck along the eastern edge of the ravine, looking northeast. Note the closeness to the ravine and the pier support structure of the deck.



Attachment 5: A view of the eastern slope of the ravine from Saint Andrews Drive, looking southeast. Notice the sharp steepness of the ravine at the edge of one of the Mission Hill Townhomes.

