

## STAFF REPORT

**DATE:** March 16, 2022

**TO:** Recreation & Park Commission

**FROM:** Dale Summersille, Parks & Community Services Director

**SUBJECT:** Arroyo Park Playground Structure (Sky Tracks)

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### **Recommendations**

Staff recommends that the Recreation and Park Commission take the following actions:

1. Receive a status update on the Sky Track; and
2. Provide feedback on alternative location options identified in the report; and
3. Acknowledge staff will solicit neighborhood feedback on the new Sky Track location within Arroyo Park before it is relocated; and
4. Support staff in engaging with the neighborhood and soliciting input on new play equipment to replace the existing Sky Track location to be installed as soon as practical after relocation of the Sky Track.

### **Fiscal Impact**

Staff is still obtaining estimates for the relocation and new equipment. The funding for the replacement and new equipment will come from Park Impact Fees.

### **Council Goals**

Goal #1 - Ensure a Safe, Healthy, Equitable Community

Goal #2 - Foster Excellence in City Services

### **Background & Analysis**

In May 2019, the Parks and Community Services Department completed the replacement of old play structures at Slide Hill Park, Covell Greenbelt and Arroyo Park. The new play structures incorporated best practices for playground design. Included in the design for Arroyo Park are two Sky Tracks (similar to those installed at Pioneer Park) that imitate the sense of flight.

Since the Sky Track was installed in Arroyo Park, the City has experienced several practical challenges with the play equipment in this specific location – namely issues with noise and vandalism. Noise issues are directly attributed to the moving/mechanical nature of the equipment and the close proximity of the equipment to nearby homes. Vandalism issues pertain directly to persistent and frequent tampering with lock mechanisms that were installed shortly after the Sky Track installation (used by City staff to lock the equipment each night and unlock the equipment each morning, 365 days a year) to curtail nighttime use of the equipment due to noise levels exceeding City Municipal Code noise standards.

An online survey was conducted in February 2020. Over 846 postcards with a QR code link were mailed to residents that live within 1,000 feet of Arroyo Park. The City received 504 responses on Survey Monkey and 2 handwritten responses were received via email. 94.39% of the respondents stated that they enjoyed the Sky Track, and 215 specific comments were made about the Sky Track. Of the 215 comments received, 197 were positive and expressed enjoyment of the Sky Tracks, 13 comments raised concerns, and 5 comments stated that the respondent had no opinion or was not familiar with the amenity. Of the comments received raising concerns about the Sky Track, most were centered on the issue of noise generation. Since noise impacts only affect the households in closer proximity to the Sky Track, it is to be expected that the vast majority of respondents would not raise noise as a concern.

To address the concerns about noise, City staff retained Bollard Acoustical Consultants, Inc. (BAC) in July 2019 to conduct a noise study. The BAC analysis concluded that the noise generated by the Sky Track at Arroyo Park was under the threshold set by the City's noise ordinance standards for daytime noise (55 decibels as measured at the nearest residence). As a result, BAC's report stated that no additional noise mitigation measures would be required of the play equipment during the day.

The BAC report did find that when used at nighttime, the equipment was in violation of the lower nighttime noise ordinance limit (50 decibels as measured at the nearest residence). Parks & Community Services staff responded to this issue with the following actions in an attempt to mitigate this compliance issue and the concerns raised in the BAC analysis:

1. Placed signage at the park as well as social media informing the public that the Sky Track is open for use from 8:00 am to sunset daily;
2. Installed additional rubber bumpers at both ends to better absorb noise from the track at each end;
3. Assigned staff to unlock the Sky Track at 8:00 am each morning and lock the Sky Track each evening at sunset utilizing chains and locks.

While the locking of the Sky Track at night has been helpful in reducing noise impacts to the nearby residences, it has presented several challenges to staff with negative impacts on neighbors and park users. The lock mechanisms have been vandalized or tampered with multiple times (cutting of locks, theft of locks and chains, rendering locks inoperable so that they cannot be re-locked at night). There have been at least 12 documented occurrences. There have also been circumstances where the Sky Track has not been locked and/or unlocked in a timely manner – attributed to turnover of staff assigned to other responsibilities at the park, and the relatively far distance of the Sky Track from the pool complex where staff are assigned to their primary duties.

With these recurring issues described above, staff set forth to explore whether other locations within Arroyo Park might provide a better fit, ensure compliance with the noise ordinance limits at all times of day and night, reduce impacts to neighbors, and reduce issues of vandalism, all while ideally retaining the amenity within the park for people to enjoy. Having a solid understanding of the noise profile of the equipment in various locations was

key to this assessment. The City therefore commissioned a second noise analysis report from Acoustics Group, Inc. (AGI). The full report received in early March is attached to this report. AGI assessed the noise from the Sky Track in its current location in order to obtain baseline data, and also conducted modeling of noise levels at four (4) possible alternative locations within Arroyo Park. Variables considered in addition to location were time of use and characteristics of the individuals using the Sky Tracks, as detailed in the report.

AGI conducted a site visit on December 2, 2021, to observe the project site and to conduct three short-term (NM1-3) measurements to document noise levels produced during Sky Track operations. The Sky Track consists of a swing and a separate seat that are suspended on parallel tracks and riders are pushed from end to end on the track. AGI conducted extensive testing of the equipment in an attempt to mimic different intensities of equipment usage and a variety of users of different sizes and weights.



**Figure 1 – Existing Sky Track Location**

The City of Davis Municipal Code limits exterior noise levels to 55 and 50 decibels (dBA) during the daytime and nighttime, respectively. The City noise ordinance is included as an attachment to the AGI report. The AGI analysis found that noise from use of the Sky Track ranges from slightly below the Daytime Noise Standard of 55 dBA to slightly above depending upon the location of noise measurement (refer to page 6 in the Noise Study). During their testing of the equipment, AGI measured decibels as high as 57.2, 55.5, and 66.3 dBA at receptor locations NM1, NM2, and NM3, respectively.



**Figure 2 – Noise Measurement Locations**

The AGI study concluded that Sky Track noise levels may exceed both day and night City noise ordinance standards under certain circumstances. The differences between the BAC and AGI studies' findings are thought to be due to the more rigorous testing conducted by AGI, and the AGI study does not necessarily imply that the Sky Track is always in violation of the City's noise standard. The AGI study does highlight that based on real-world and reasonable use, as would be expected of such park equipment, the Sky Track likely violates the City's noise standards for both day and night at least occasionally. Therefore, staff has closed the Sky Track to operation until such time that it can be re-located to a site where it will not be in violation of noise ordinance decibel limits as measured to the nearest households surrounding Arroyo Park.

The AGI report further discusses several alternative locations for the relocation of the Sky Track. The locations evaluated are as follows (refer to Figure 3 below):



**Figure 3 – Proposed Sky Track Locations**

**Location A** – This location is on the western border of the park. This location is on a portion of the park that is actually Davis Joint Unified School District (DJUSD) property (refer to Figure 4). This site was evaluated as it had the potential to provide adequate distance to homes without interfering with the field of play for the adjacent cricket field. The Sky Track would be located 302 feet from the homes to the north and 307 feet to the south. The noise levels produced would comply with the Daytime and Nighttime Noise Standard of 55 and 50 dBA, respectively. However, the location is 126 feet west of Patwin Elementary School and the nearest exterior classroom setback would experience noise as high as 57 dBA – exceeding the city’s residential daytime noise limit standard of 55 dBA. This location would also require an agreement with DJUSD, and possible hours limitations on use during school hours, which could create similar challenges as the current location. Due to the potential impacts on classroom instruction and the likelihood of having to continue to lock the equipment at certain times of day, staff does not feel this is a viable location.



**Figure 4 Indicates DJUSD and City Property**

**Location B** – This location is near the center of the park, just east of the aquatic center. The Sky Track noise levels would comply with the Daytime and Nighttime Noise Standard of 55 and 50 dBA to all residential properties to the north, south, east and west.

**Location C** – This location is in the middle of the park and just east of the walkway bisecting the park. The Sky Track would be located 304 feet from the homes to the north and 307 feet from the homes to the south. The Sky Track noise levels would comply with the Daytime and Nighttime Noise Standard of 55 and 50 dBA to all residential properties to the north, south, east and west.

**Location D** – This location is near the northern boundary of the park, just east of the aquatic center. The operational noise at this location would comply with the Daytime Noise Standard, but nighttime operations would exceed the noise ordinance and would not comply with the Nighttime Standard of 50 dBA as measured to the residential properties to the north. Therefore, as with Location A, staff does not recommend further consideration of this location due to potential nighttime noise impacts.

**Staff recommendations** – Based on the analysis in the attached AGI study staff recommends that the Sky Track be relocated to either location B or C. Moving the Sky Track to either B or C location will:

1. Bring the play equipment into compliance with the City's Daytime and Nighttime Noise Ordinance decibel limits without the need to lock the equipment at certain times of day to avoid noise violations.
2. Provide easy access to all current users within Arroyo Park.
3. Be conveniently located near the aquatic center and nearer to parking and vehicle access than the current location, resulting in easier monitoring of the equipment by neighbors, police patrols, and staff, and hopefully reducing potential vandalism.
4. Provide staff with proximate access to the unit more readily.

Regardless of the noise ordinance issues, staff may still determine that the Sky Track should be locked at night in the new location to reduce after hours use. Staff recommends assessing the need to lock the equipment once relocation is completed. If locking in the new location is determined appropriate, staff working at the park would be in much closer proximity to the equipment and monitored could be readily achieved.

### **New Play Equipment**

Concurrently with relocating the Sky Track the City will pursue installation of new replacement play equipment at the current Sky Track location. Engaging with the neighbors on the new equipment is essential, and staff intends to undertake a broader and more inclusive outreach effort than what was done prior to installing the original Sky Track in order to hopefully avoid the issues and challenges that the Sky Track has generated, as described in this report. Since the installation of the Sky Track, the City's park neighborhood outreach and engagement mechanisms have been substantially enhanced, and we will employ those updated methods to determine what new play equipment will take the place of the current Sky track location. Staff plans to engage with the neighborhood and present a range of possible play equipment options, to include equipment that will cater to a range of objectives and introduce a fun, new amenity while minimizing impacts to nearby residences. Staff plans to recommend equipment that does not have a noise-generating mechanism.

### **Neighborhood Outreach**

- A sign has been placed on the Sky Track explaining it is closed, but will be relocated within Arroyo Park, and displaying a QR code and direction to the City website for more information.
- The City website (accessed by the QR code) has the report by Acoustics Group, Inc; and will have a link to the online survey when launched.
- An online survey will be prepared following the commission meeting seeking input on preference for the new location for the Sky Track, and preference for type of equipment to be installed at the original site as replacement for the Sky Track.
- The survey will be announced via postcard sent by US Mail to residences within 1,000 ft. of Arroyo Park. The survey will also be promoted on Nextdoor and on the City website. The survey will remain open for at least 15 days.

Staff is recommending the following next steps:

1. Seek any preliminary feedback from the Recreation & Park Commission on their preferred location (B or C) for the Sky Track to be relocated.
2. Conduct neighborhood outreach.

3. After the neighborhood outreach process, staff will finalize the new location, complete cost estimates, and schedule the relocation and installation of the Sky Track at the new location which is estimated to take approximately 4-6 weeks.
4. Staff will return to the commission with a recommendation for new equipment for the old Sky Track location prior to scheduling the order and installation.

Staff understands that the Sky Track equipment has been very popular and enjoyed by many park users, and we appreciate the patience of the neighborhood as this temporary closure is undertaken to implement a relocation. Ultimately, park users will be able to enjoy the Sky Track again soon, albeit in a different location within the park, and also have the added benefit of a new playground amenity with the new play equipment that will be installed. While unexpected challenges have been realized with this project, the information and insights gleaned will assist in providing improved park planning processes moving forward.

**Attachment:**

Arroyo Park Sky Track Noise Study