

## Saanich Guidelines for Distances and Mitigation Measures for Pickleball Courts

- Not develop pickleball courts within 50m (164') of neighbouring homes (the courts at Tolmie Park fall within in this category) unless major sound abatement is installed.
- Courts within 50 m and 110 m (350') of residential structures would require some mitigation measures (the courts at McMinn Park fall within this category).
- Courts within 152 m (500 ') to 182m (600') of residential properties or other noise sensitive areas should be reviewed by an acoustics professional during the site selection phase. For sites located in a valley, it may be necessary to consider abatement at buffer distances greater than 500 ft. (152 m) to 600 ft. (182m) feet due to additional refraction effects created in these situations.

Mitigation measures usually consist of freestanding walls, berms, or acoustical panels strategically placed to shield noise sensitive areas from the pickleball courts. To be effective, the walls etc. must block the line of sight to the paddles during play. On level terrain, this means a minimum wall height of eight feet above the playing surface. Lowering courts into the ground and using the excess soil to build a berm around the courts can reduce costs. Placing the wall on top of the berm will lower the required height of the wall itself, reducing construction costs. The wall may be constructed of various materials/acoustical absorption systems provided they have sufficient mass for effective sound insulation. Note: Graffiti would be a concern with all walls/sound panels placed in parks.

Other considerations:

- When walls are parallel to each other, reflections between them can degrade the performance of the walls significantly. In this case, sound absorbing panels must be considered on one or both walls to stop multiple reflections from amplifying the sound going over the walls -- this can double the cost of the walls.
- Court orientation also plays a role. More sound propagates in the direction of play than to the sides of the pickleball court. By positioning the courts so that the line of the net runs through the most noise sensitive area, a noticeable reduction in sound pressure level can be achieved.
- If sound mitigation is not considered when installing future pickleball courts it may result in unexpected limitations required of players and/or the municipality could have ongoing disputes with players and neighbours.

NOTE: Currently there is little information readily available on suggested distances that Pickleball Courts need to be away from houses and we have developed our guidelines based on articles published by Spendiarian & Willis Acoustics & Noise Control of Tucson, Arizona and the Vancouver Pickleball Association.

Presented to Council September 2021