

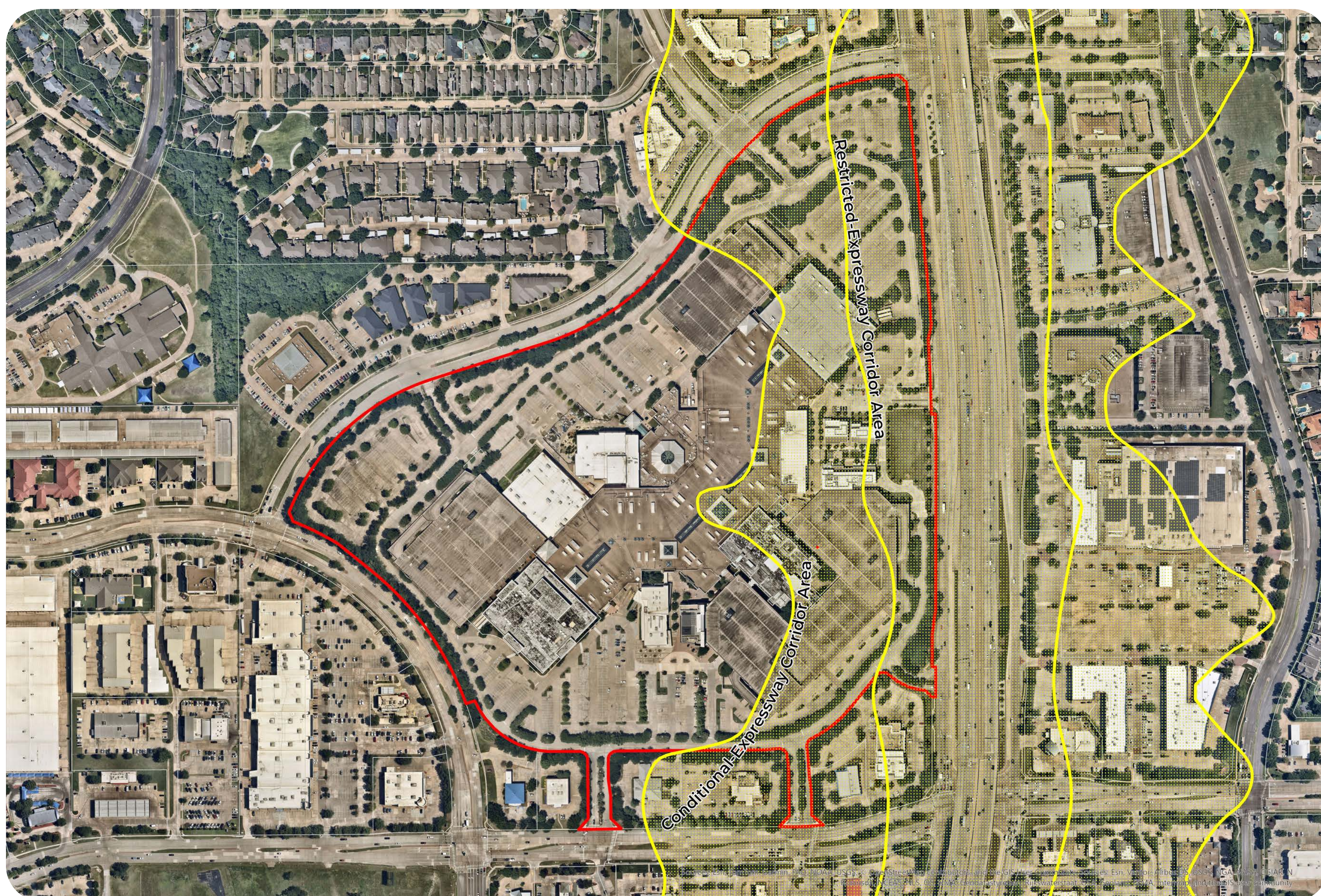
NOISE

How will noise impacts of the Willow Bend District redevelopment site be evaluated?

- » The City sets maximum allowable noise levels in the Code of Ordinances to protect nearby properties from excessive noise.
- » These standards are based on the zoning category of the property affected by the noise.
- » Permitted noise levels are measured in decibels (dB) and vary by zoning category and time of day.

Expressway Corridor Overlay District

Part of the Willow Bend District lies within this overlay zoning district. Housing units within the overlay have an additional interior noise limit of 45 dB. This serves as an added layer of noise protection in the Zoning Ordinance.



How will the City review noise levels for this redevelopment and how can noise be mitigated prior to construction?

Noise Study When Needed

- » Planning staff can require a noise study when a project could generate elevated or sustained noise or sits near residential areas. The study models anticipated noise and is prepared by an acoustic engineer.

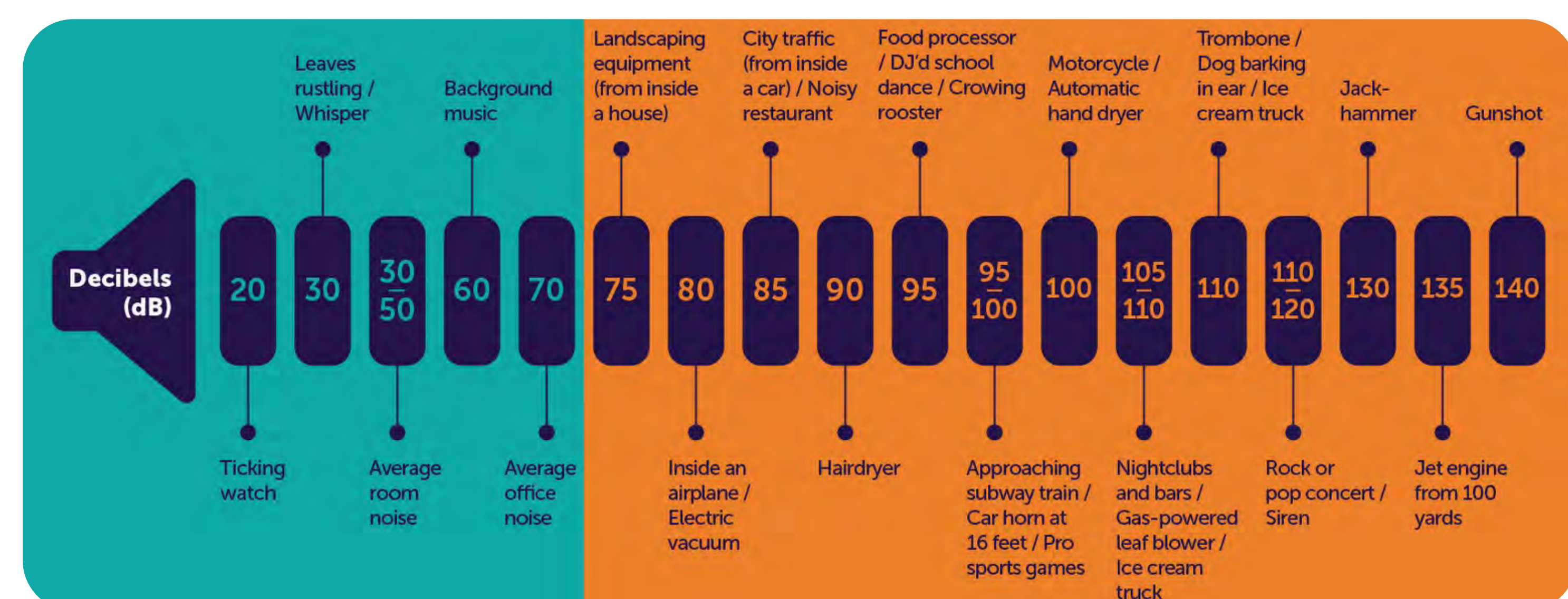
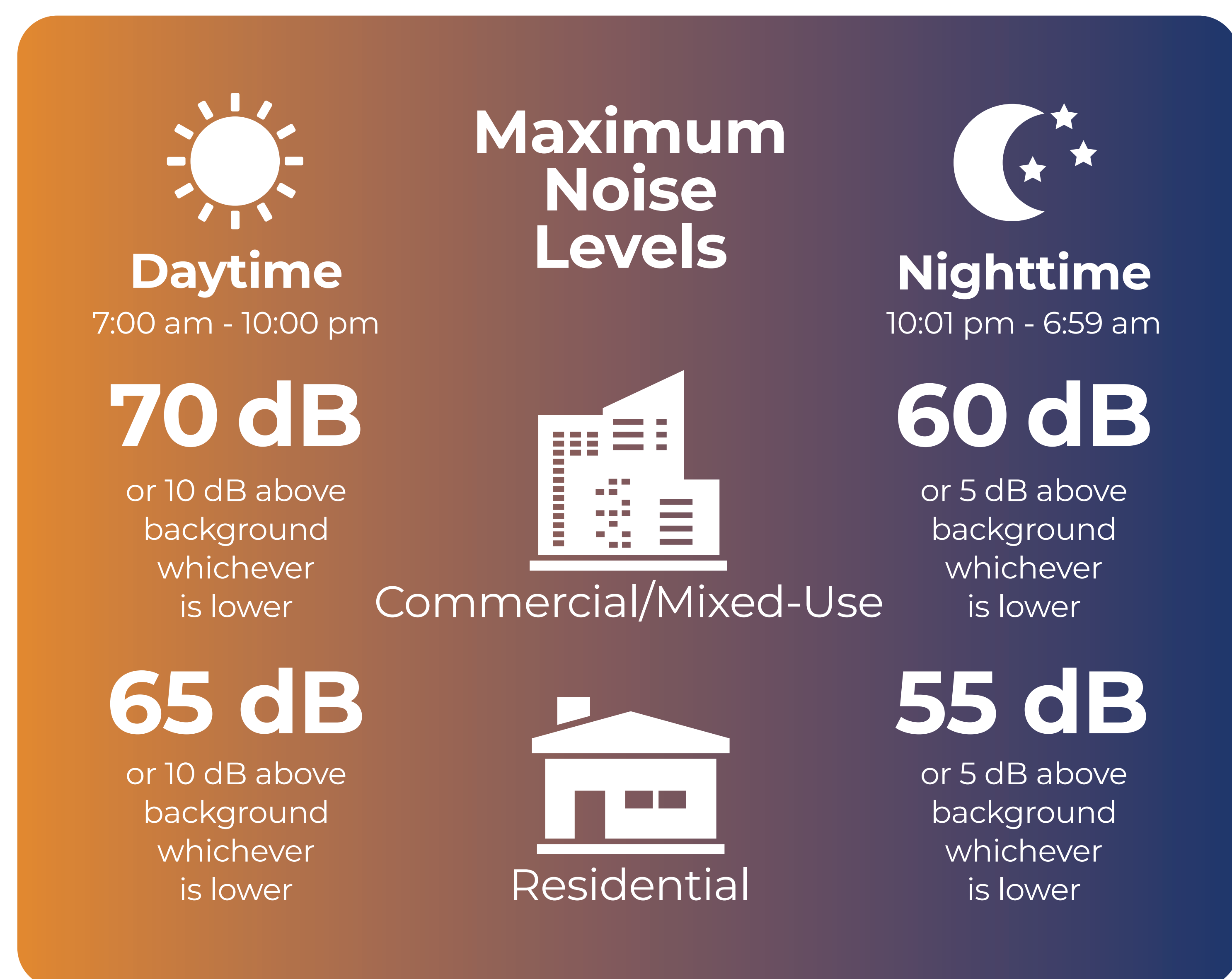
Noise Compliance Testing

- » Developments in the Expressway Corridor Overlay must demonstrate compliance with interior noise levels before Planning and Building Inspections approve site plans and permits.
- » Building Inspections also tests mechanical equipment to ensure it complies with city standards.

Onsite generators, such as the one shown here, are tested for compliance with the City's noise regulations as part of the permitting process.



Source: Supermarket News



This chart shows the noise levels of common sounds and activities. (Source: Hearing Health Foundation)

Noise studies, such as the study conducted for the Medical City Plano expansion, are used to demonstrate that proposed development projects will not produce sound levels that could negatively impact the quality of life of neighboring residents.



Source: DPR Construction

NOISE

Noise may be mitigated through:

-  **Screening Walls**
Use walls, barriers, or landscape buffers to block or deflect noise.
-  **Noise Insulation**
Add acoustic panels and other sound-blocking materials.
-  **Building Orientation**
Position buildings to shield nearby homes or sensitive areas from noise-generating uses.

How does the City enforce noise regulations after construction?

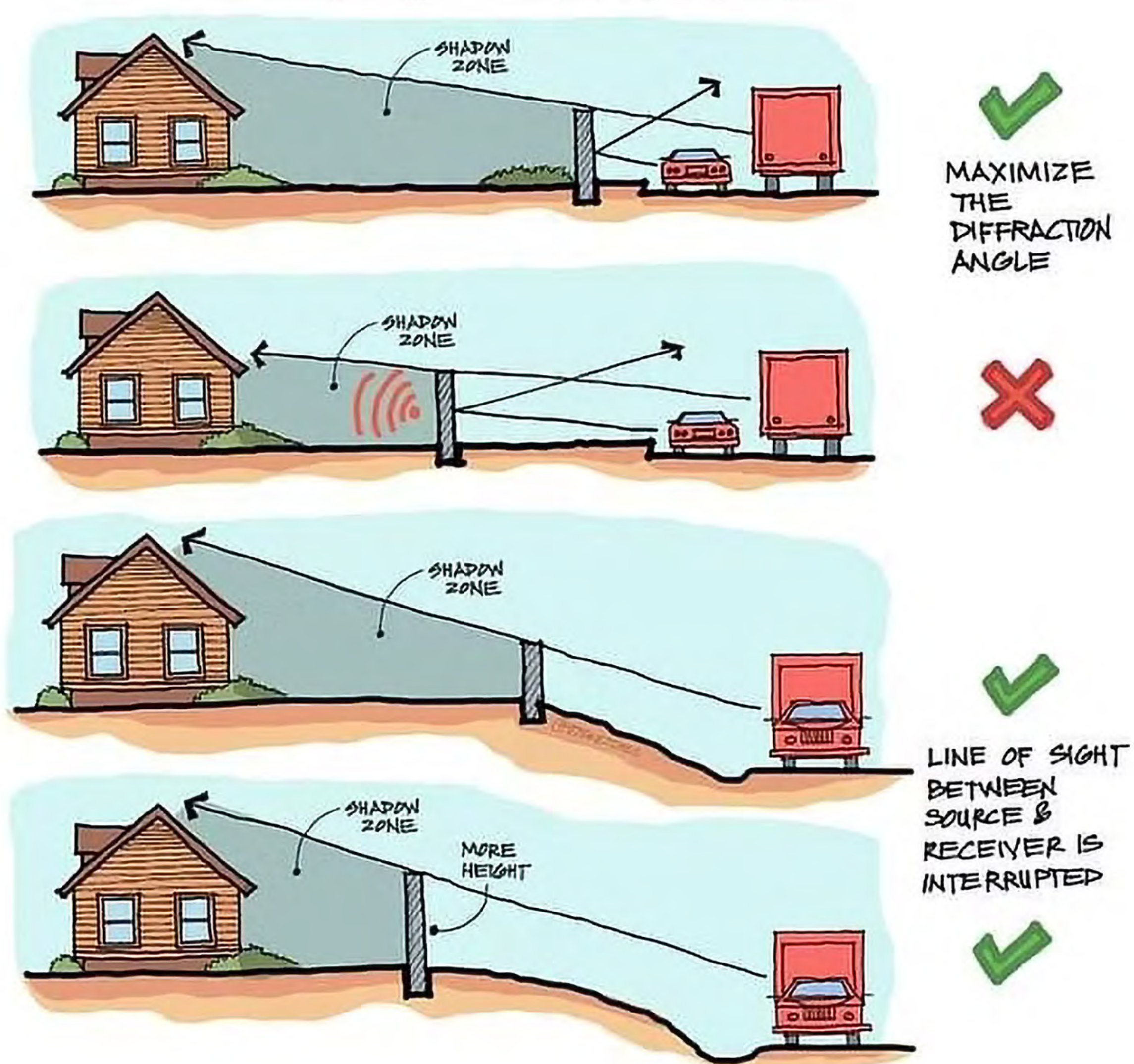
If noise exceeds permitted levels or is deemed an unreasonable nuisance, the City takes action to restore compliance and protect residents and surrounding properties.

Complaint Response

- » Environmental Health & Sustainability responds to daytime complaints.
- » Plano Police responds to evening and nighttime complaints.
- » Noise is measured with calibrated decibel meters.

Mitigation Techniques

- » Lower Volume: Reduce speaker volume to stay within permitted noise levels.
- » Add Sound Attenuation: Install sound-absorbing or sound-blocking materials to reduce noise escape.
- » Modify or Upgrade Equipment: Adjust, repair, or replace equipment to reduce operating noise.



This graphic illustrates how screening walls can be used to reduce the impact of noise-generating uses on adjacent properties. (Source: o7Sketches)



Environmental Health & Sustainability staff measure sound both indoors and outdoors to evaluate the impact of noise at properties where complaints have been reported.

