

ALBRECHT OVAL – NOISE MANAGEMENT PLAN

NOISE MANAGEMENT PLAN

Existing usage of Albrecht Oval 2018.

Training usage: 1,608 hrs per years

Main sport events usage: 191 hours booking but actual usage 80 hrs per years or approximately 20 events per year.

Increasing usage of Albrecht Oval

Training usage: **approx. 20% increase** from existing usage

Main sport events usage: **approx. proposal 20% to 30% increase** from existing usage: *Sharing the usage load from Traeger Park.*

CONSTRUCTION NEW BUILDING.

- Construction Noise: Construction Noise is controlled by the NT *Waste Management and Pollution Control Act* and it is recommended that the Developer contacts Department of Environment and Natural Resources (Environment Division) to determine the appropriate hours for undertaking Development Works.
- Construction standard hours of works: Monday to Saturday 7am to 7pm and between 9am and 6pm Sundays or public holidays
- Construction of the new building will take approximately 8 weeks with construction activity broken into the following periods and potential noise levels .

Stage	duration	○ peak noise	○ maximum noise at nearest neighbor
Earth works	○ 10 days	○ with noise up to 90 dBs for short periods	○ 47.5
Foundations	○ – 10 days	○ occasional angle grinder power saw to 95dB	○ 52.5
Stadium proper	○ – 100 days	○ peaking up to 95 cB when concrete trucks or angle grinder activity.	52.5
Stadium roof	○ - 30 days	○ with steel works welders grinders up to 95	○ 52.5.
Site clean up	○	○	○

Noise levels measured at work location may be as in table shown above, noise is reduced by square root of distance and a 95 dB noise would reduce at the nearest neighbour 167m away to about 52.5 dB

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OPERATING OF NEW BUILDING CONJUNCTION WITH LIGHT TOWERS

- Hours of use of the lights and building will be restricted to 4 nights per week for cricket and AFL practice and competitions; normally lights are expected to be turned off by 8pm but on exceptional competition or training nights, they will be turned off by 10pm.
- Noise levels will be controlled through hours of operation with 10 pm being the latest the lights will be permitted to operate but normally turned off by 8pm;
- Potential impact on nearby residents from exceptional use of the facility during major competitions or training programs should be advertised to the community with advice about dates, timing and numbers of people.
- Complaints about light, noise or activities may be recorded direct through the Albrecht Oval Reference Group or to ASTC staff associated with management of the Oval, on the ASTC web site, or at the ASTC office on Todd St. Complaints will be acted upon in a timely manner with appropriate feed back to the complainant following investigation.
- Monitoring of the operation and impact of the use of the new building and extended use of the oval will be ongoing and will be reviewed after three months to determine if changes need to be made to the operating schedules.

MONITORING OF NOISE FROM EVENTS

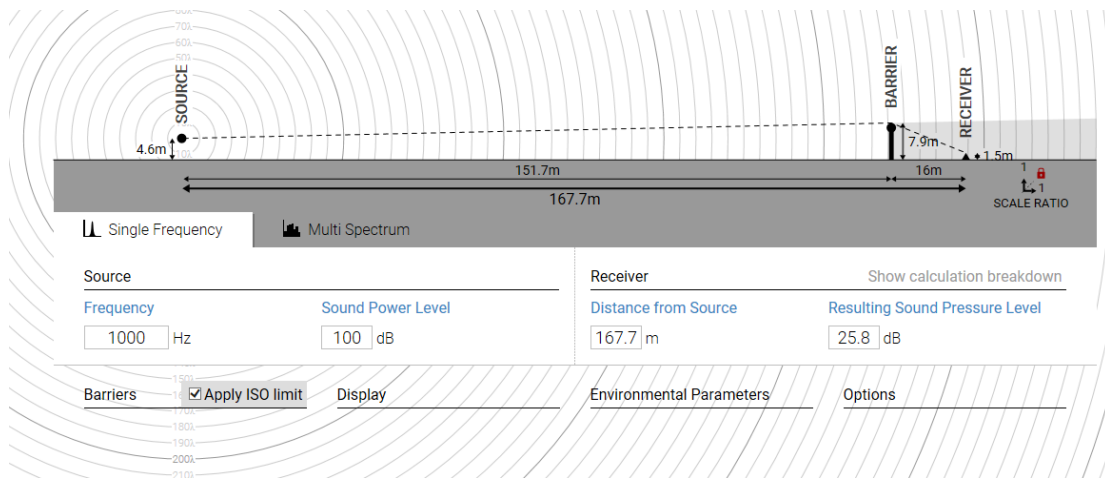
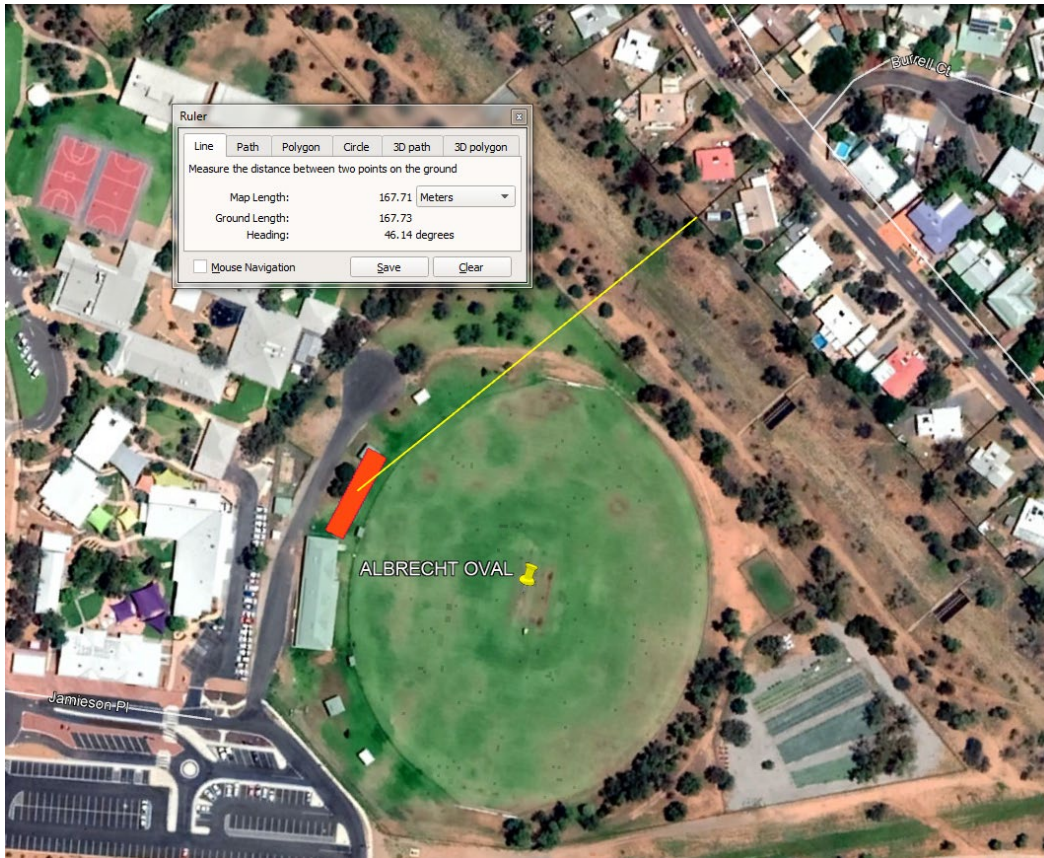
- Monitoring number of crowd and noise levels during major sport events, will be conducted at several locations around the oval and at front gates of several residents during several events before and after construction of the stadium to determine noise levels emanating from the oval.
- Impact of operation of lights and noise of utilization of the oval will also be monitored through the complaints register operated by ASTC.

An example of noise generation from a crowd and attenuation with distance is shown in the following calculation based on calculation of sound level at the nearest local resident's fence which is 167.71m from the grandstand:

The calculator allows insert barriers and changes the height of the barriers and taller is better, ie trees will reduce the noise levels significantly.

[http://noisetools.net/noisecalculator2?source=\[4.6\]&receiver=\[1.5,167.7\]&barrier=\[1,7.9,151.7\]](http://noisetools.net/noisecalculator2?source=[4.6]&receiver=[1.5,167.7]&barrier=[1,7.9,151.7])

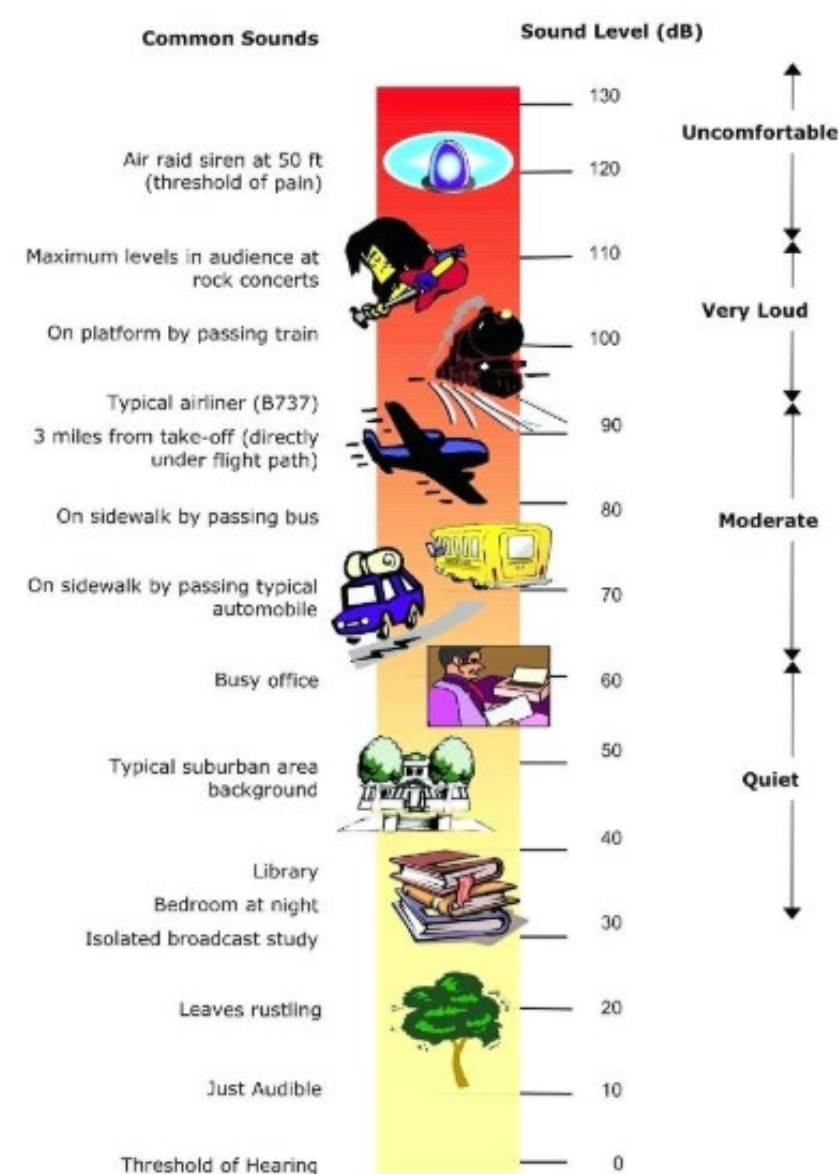
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From the result of calculation estimate noise level is 25.8dB.

Noise Levels chart below indicates the noise levels were produced from difference sources.

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Conclusions and Recommendations

Monitoring of the operation and impact of the use of the building and extended use of the oval will be on going and will be reviewed after 3 months to determine if change needs to be made to the operating schedule.

If noise levels are high near the residential streets more trees can also be planted to form a buffer for the noise and reduce noise level reaching the residents.