

**MINUTES OF MEETING – Construction Reference Group (CRG)
Murdoch Drive Connection
Meeting #6**



Date:	Monday 6 th August 2018	Time:	18:00-20:00	Location:	Metropolitan Road Improvement Alliance
Distribution:	All CRG members and meeting visitors				

Attendees:	Leeming resident (anonymous)	Leeming resident and visitor
	Sally Osborne	Cockburn Community Wildlife Corridor Inc – Committee member
	Decima	Bibra Lake resident
	Kim Sadlier	Success Residents Group
	Samantha	Murdoch Chase resident
	Charles Sullivan	City of Cockburn
	Con	Leeming resident
	Felicity Bairstow	Cockburn Community Wildlife Corridor Inc – Committee member
	Christine Cooper	President, Bibra Lake Residents Group
	Mick McCarthy	City of Melville
	Cr Tim Barling	Elected member, City of Melville
	Jorelle Little	CRG Executive Officer
	Linton Pike	CRG Chairperson
Visitors:	John Robertson	Project Manager, MRIA/Main Roads WA
	Liam Donnelly	Structures Manager, MRIA
	Glenn Parnham	Design, MRIA
	Jarrid Burton	Construction Manager, MRIA
Apologies:	Kimberley Broztl	Manager Engineering, City of Melville

	Dr Jonathan Tan	Bateman resident, local General Practitioner
	Mark Ashby	Principal, Kennedy Baptist Collage
	Chris White	Executive member, Transport Infrastructure Council of Western Australia
	Dr Maree Matthews	Principal, Bluegum Montessori School
	Joe Branco	North Lake Resident, approved representative of local indigenous families
	Cr Philip Eva	Elected member, City of Cockburn
	Yaz Mubarakai	MLA, Member for Jandakot
	Cr Nicole Robins	Elected member, City of Melville
	Thorsten	Cyclist
	John	Murdoch Chase resident
	Jillian	Murdoch Chase resident
	John	Bibra Lake resident
	Kevin	Bibra Lake resident
	Phil	Bateman Resident
	Matthew Young	Murdoch University
	Terry Pearce	Project Director, MRIA/Main Roads WA
Resigned from CRG:	James	Booragoon resident

Note: residents are listed first name only and residential location, representatives of organisations are listed in full

NO.	ITEM / DETAILS	
1	PREVIOUS MINUTES AND ACTIONS ARISING	
	<p>Comment was invited on the previous minutes to identify proposed changes or omissions:</p> <ul style="list-style-type: none"> No changes were requested by CRG members. <p>Actions arising from previous meeting were discussed as follows:</p>	
	ACTIONS ARISING FROM APRIL 2018 MEETING	FOLLOW UP REPORTED AT THIS MEETING
	Baseline traffic count information over time for Farrington Road was requested by Con.	Shane McCarney closed this out at the previous meeting. Liam Donnelly will explain how traffic modelling informs noise modelling later in this meeting.
	CRG members asked the Project Team to explain the noise modelling process in more detail – where was noise measured, what were those measures and how do the forecasts for the future compare? More detailed information and noise modelling mapping is sought.	Liam Donnelly to present as heat maps for existing and future forecasts for all areas including Leeming.
	It would be good to hold follow up fauna underpass discussions with the Community Corridor Group if possible. The desire for that group will be to create an east-west fauna link if possible.	Will close action out during tonight's presentation with Jorelle to address later in this meeting.
	Could we use LED lighting? MRWA uses Western Power/MRWA approved solutions. LED is more direct light stream and uses less energy. Could we please seek opportunities to use them here?	Glenn Parnham and Liam Donnelly to close out during this meeting.
	John (Bibra Lake) advised that a 2.4m colorbond fence on the property boundary is not supported. Shane McCarney advised that if the resident doesn't want the colorbond fence it won't be provided.	Jarrid Burton met with John (Bibra Lake) to discuss this matter. Jarrid met with John and chose to not take up the offer. Four residents consulted – three took up the offer and John declined. This issue is now closed.
	Is there a register or list of issues raised by this group and adopted into the project? Jorelle to provide at a future meeting.	Jorelle to present later this evening
	<p>What will be done road signage wise and will it be visible or produce glare reflected into homes from the aluminium backing?</p> <p>Is drainage adequate for prevailing flows to avoid localised flooding?</p>	<p>Glenn Parnham to discuss signage during this meeting. Signage is designed to relevant standards and glare from the signs within the corridor shielded by noise walls with good separation.</p> <p>Drainage will reflect targeted exceedances with design review and verification with LGA input.</p>

NO.	ITEM / DETAILS	
	<p>What landscaping is proposed for the Murdoch Uni basin revegetation? The landscaping design drawing has been issued to CoM and CoC for comment. Shane to confirm that it has been sent for comment and advise Mick McCarthy subsequently.</p>	<p>The plan has been submitted.</p>
2	CONSTRUCTION UPDATE	
	<p>Jarrid Burton provided a virtual site tour using drone images from four locations identified as:</p> <ul style="list-style-type: none"> • Roe East • Baker Ct • Hope Road • Murdoch Triangle <p>Jarrid highlighted various items including:</p> <ul style="list-style-type: none"> • Ramps and abutment foundations • Various bridge locations • Service works requiring approvals • Piping for Water Corporation works • The Turkeys Nest • Underpass construction • Earthworks fill progress • PSP at sub grade level and will be used for primary access for noise wall construction • Noise wall foundation work underway with limestone blocks to follow • Accommodation works for Spanish Club including – new light towers and oval configuration • Murdoch Uni triangle clearing and earthworks • Bridge abutment locations • Mechanically stabilised earth wall foundations established in NW quadrant • 132 kV line to be relocated • Drainage basin excavation <p>Works priority</p> <ul style="list-style-type: none"> • Our main focus is around Murdoch Chase, Bibra Drive and the freeway • The bridge concrete contract will soon be awarded • Services work is progressing well – some delays experienced with 132kV line to be relocated by Xmas. 	
	Cyclist detours	

NO.	ITEM / DETAILS
3	QUESTIONS AND ANSWERS
Q	Will localised power disruption occur during the power line relocation?
A	No.
Q	Will revegetation be done in cleared areas?
A	Yes, using a wetlands mulch mix.
Q	How long will the Murdoch Chase temporary fence be in place?
A	Temporary fencing will be there for some time with a wall to be constructed over time subject to environmental approval via a Section 45C amendment.
Q	Where will the realigned 132kV power line be re-aligned to?
A	In the north western quadrant along the Farrington Road and Murdoch Drive truncation and then across Murdoch Drive.
Q	Flooding has occurred along Murdoch Drive previously in this area. Are any drainage fixes planned along the eastern side of Murdoch Drive?
A	Farrington Road is a low point and runoff flows to the new basin. The sand basin will be used for local stormwater drainage infiltration and is excavated to its full extent. It will be replanted using basin wetlands mix and local species.
Q	The block in the north eastern quadrant is for sale. What zoning would apply?
A	Mixed use / commercial is assumed but not confirmed and planning approval would be required for any development to proceed.
4	DESIGN UPDATE
	<p>Glenn Parnham provided a design update explaining that:</p> <p>Street Lighting Summary:</p> <ul style="list-style-type: none"> • Project meets appropriate standards and regulations. • Spill lighting produced from road and Principal Shared Path lighting is exempt because the lighting provides the community at large with an effective night crash counter measure, and security for people (controlling crime). <p>Regulation requirements:</p> <p>AS4282 – Control of obtrusive outdoor lighting</p> <p>AS1158 – Lighting for roads and public spaces</p> <p>We design to national standards and will mitigate light spill using spill guards at select locations. Six pole locations proposed for inclusion on eastern side of the freeway. Existing spill lighting will not be addressed for existing lighting.</p>

NO. ITEM / DETAILS

Transit Plans for 2 affected bus services.

Murdoch Drive

- Stop No. 19953 (Western side) – New bus infrastructure, relocated north by 100m.
- Stop No. 19952 (Eastern side) – Remain as existing.

Farrington Road

- Stop No. 20388 (Eastbound) – To be relocated to Murdoch Drive northbound with new infrastructure.
- Stop No. 20389 (Westbound) - Bus stop is still in use – to remain as is.

Bibra Drive

- Stop No. 20359 – To be removed.
- Stop No. 20360 – To be removed.

Glenn added that:

- We are liaising with CoM and PTA to address route changes
- Two bus stops on Bibra Drive become redundant
- The eastern Farrington Road bus stop is relocated.

CRG feedback:

- This doesn't address impacts for Murdoch Chase residents with poor access through the Spanish Club to and from the bus stop.



NO. ITEM / DETAILS

5 QUESTIONS AND ANSWERS

Q	Will the new bus stop be embayed?
A	Yes, with a bus shelter.
Q	Will the existing westbound route on Farrington Road have a shelter?
A	No, as it isn't impacted by these works.

6 NOISE WALLS UPDATE

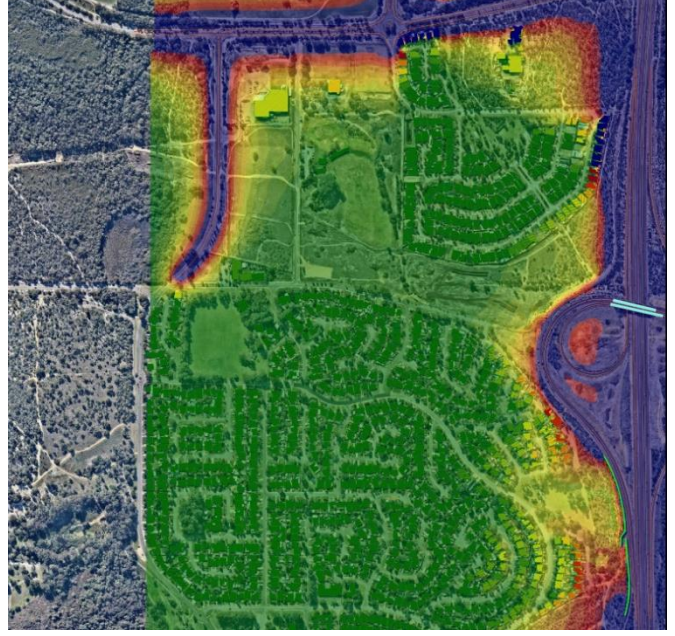
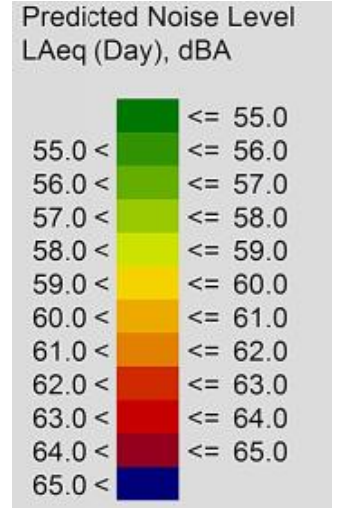
Liam Donnelly explained that:

- Noise walls are designed in accordance with State Planning Policy 5.4 *Road & Rail Transport Noise & Freight Considerations in Land Use Planning*
- MRIA is required to provide practical and reasonable measures to mitigate noise to the limit of <60 decibels (daytime)
- Modelling is conducted using current and future traffic projections and considers topography, and finally is calibrated
- Studies are required to be conducted 6 months after completion of construction to verify noise levels

Noise modelling produced the following results.

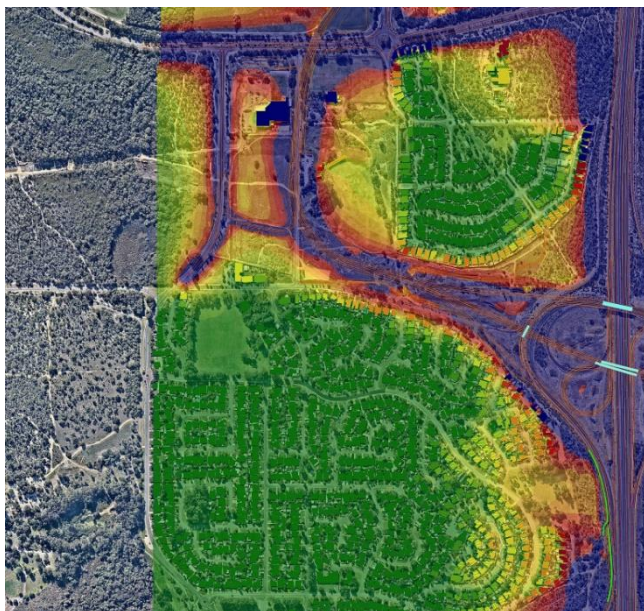


2017 Existing



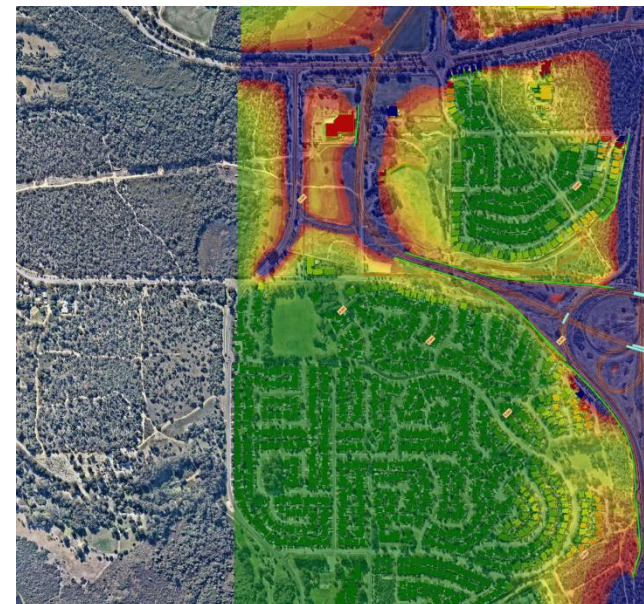
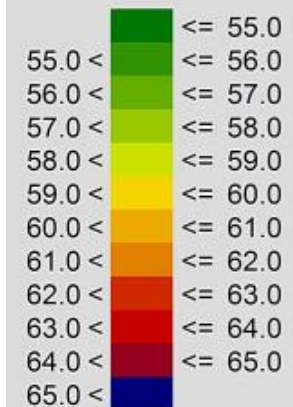
2031 Do Nothing

NO. ITEM / DETAILS



2031 No Noise Mitigation

Predicted Noise Level
LAeq (Day), dBA



2031 With Noise Mitigation

Liam added that:

- The maximum height of proposed noisewalls is 5m and will be extensively applied throughout the project area.
- ROM modelling gives us predictions for the future and identifies regional traffic flows as the basis for noise modelling to 2031 to achieve 60dBA daytime target.
- Vehicle loggers and traffic counts are done concurrently at logging points to inform subsequent noise modelling.
- After completion of construction a 6 monthly review is completed to ensure targets are met with further interventions applied if required.
- Existing noise walls are considered in the modelling
- The 2031 with noise mitigation diagram doesn't show the return walls at Murdoch Chase (subject to environmental approval). The walls would be 5m off the boundary and 4m high.
- Existing noise walls in the south western quadrant will be replaced with taller walls.
- The Lakeside site is shown in red and noise levels exceed permitted levels with mitigation required.

Leeming Noise Wall Update

- The State Government has made a commitment to provide a noise wall by 2019.
- It is intended the wall will be built within the life of this project.
- The process will include environmental approvals.

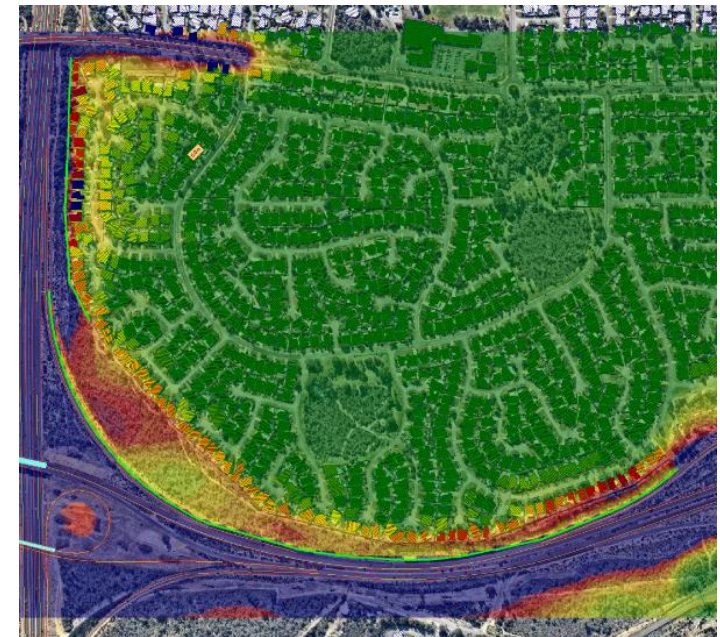
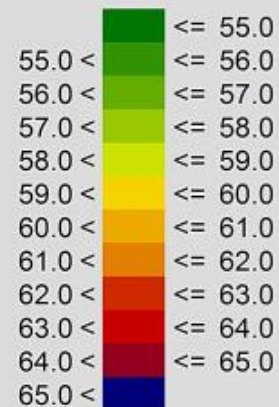
Off boundary solution:

- Previously proposed noise wall on boundary, 2.4 metres
- Opportunity identified to move the wall closer to the source
- 5 metre high noise wall on the edge of PSP recommended
 - Lower impact to local residents
 - Maintains access to bushland
 - Positive noise mitigation results
 - Lower environmental impact



2021 Existing Walls Only

Predicted Noise Level
LAeq (Day), dBA



2021 – 5m High Wall Adjacent to the PSP

NO. ITEM / DETAILS

	<p>Leeming Noise Wall Update</p> <ul style="list-style-type: none"> • The State Government has made a commitment to provide a noise wall by end of 2019. • It is intended the wall will be built within the life of this project. • The process will include environmental approvals. • Off boundary solution: <ul style="list-style-type: none"> ○ Previously proposed noise wall on boundary, 2.4 metres ○ Opportunity identified to move the wall closer to the source ○ 5 metre high noise wall on the edge of PSP recommended <ul style="list-style-type: none"> ▪ Lower impact to local residents ▪ Maintains access to bushland ▪ Positive noise mitigation results ▪ Lower environmental impact • The contract has not yet been awarded so MRIA may or may not be the team delivering construction • Two opportunities were identified – noise wall close to source (road) or noise wall close to receptor (property boundaries) • A property boundary solution was initially proposed due to space constraints, however, further investigation has identified a 5m wall close to the PSP achieves good performance with lower environmental, construction and residential property impacts. • Leeming resident (anonymous) still prefers and wants the noise wall adjacent to private property boundary to tie into existing noise walls on property boundaries south of Farrington Road.
--	---

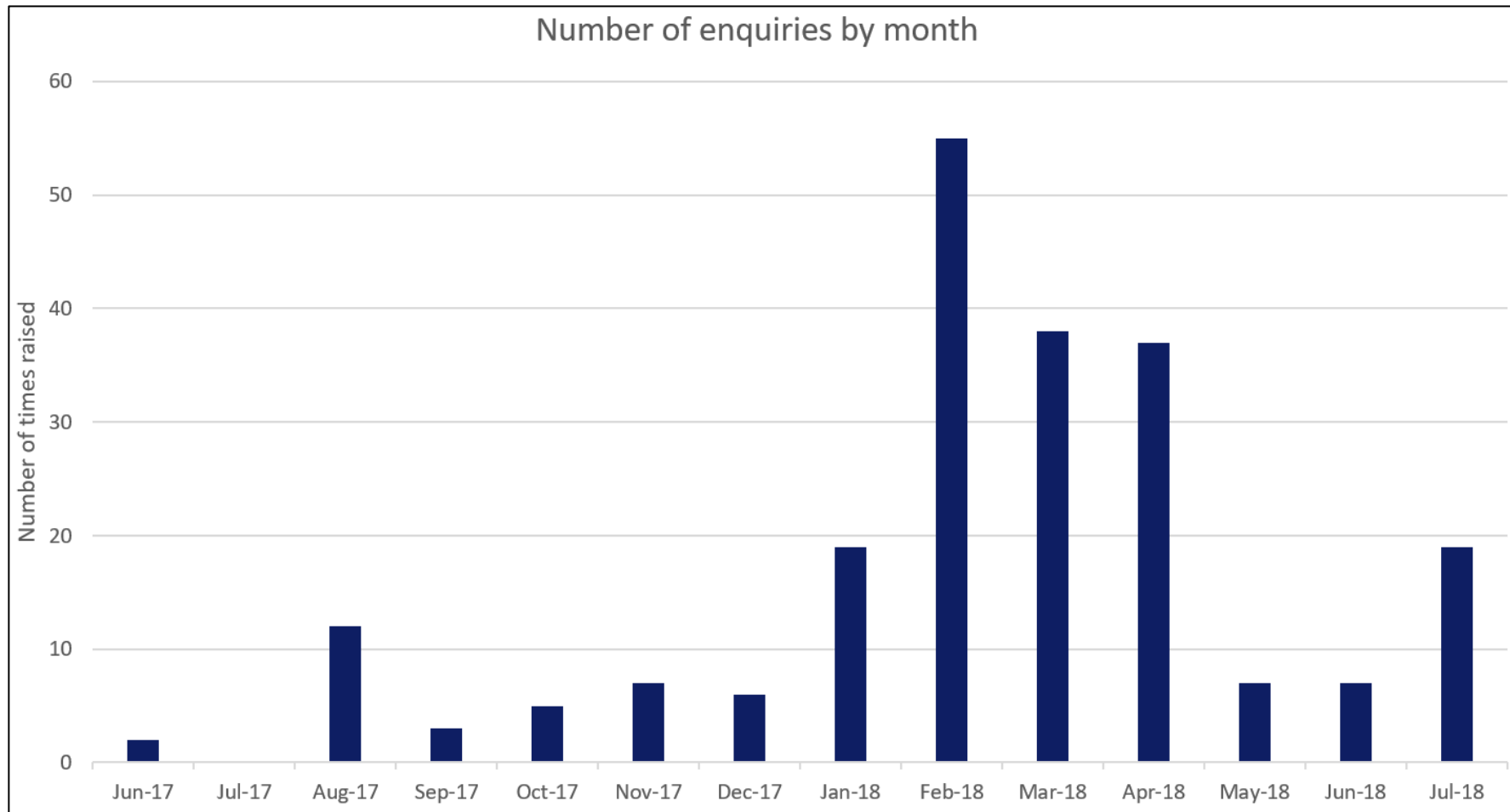
7 QUESTIONS AND ANSWERS

Q	If the maximum height noise wall is in place and found to be inadequate what other solutions would apply?
A	Possibly on property modelling or other solutions would be sought.
Q	Does modelling include the effect of planting and revegetation?
A	No, but vegetation doesn't make a material difference.
Q	What about the effect of road wearing over time?
A	A correction factor is applied to reflect the type of road surface and we use an average value for this purpose.
Q	What about houses that still exceeding target performance? Please treat people kindly with limited awareness of western extension of Roe Highway.
A	We need to explore the plots in more detail at select locations and will do what is reasonable and practical and explain the situation to affected residents.
Q	Leeming resident (anonymous) advised that still expects a noise wall on boundary.
A	Jorelle noted that not all people want a wall on their property boundary

NO.	ITEM / DETAILS
Q	How does 2.4m wall on the property boundary compare to the off boundary location?
A	<p>Both options offer similar overall noise mitigation results, with some variation for individual properties. Both options are also similar in cost. The difference that guides the recommendation is lower environmental, property and construction impacts associated with the off-boundary location.</p> <p>We do value the opinions of directly affected residents and will be discussing with individual property owners.</p> <p>Jorelle to liaise with Leeming resident (anonymous) to arrange a follow up meeting to discuss the recommended option and consultation approach.</p> <p style="text-align: right;">ACTION: Jorelle</p>
Q	Could a hybrid solution of on and off boundary options result?
A	No, as it is less effective, impractical and hard to achieve.
Q	Felicity noted that this area of land is an offset from Roe7 project and would require further offset if affected.
A	This is noted.
8	GOVERNANCE AND ENGAGEMENT
	<p>Jorelle Little explained that:</p> <p>Recent targeted engagement includes</p> <ul style="list-style-type: none"> • Leeming noise wall surveys and doorknock • Bibra Lake visual screening plans • Meetings with interfacing projects and Westcycle regarding cyclist detours • Key stakeholders regarding detours and lane closures on Roe Highway and Kwinana Freeway • Meetings with Bluegum Montessori School, Murdoch Pines Golf, Lakeside Recreation Centre, CCWC • CRG for Kwinana Freeway Widening project • 143 responses to Community sentiment surveys

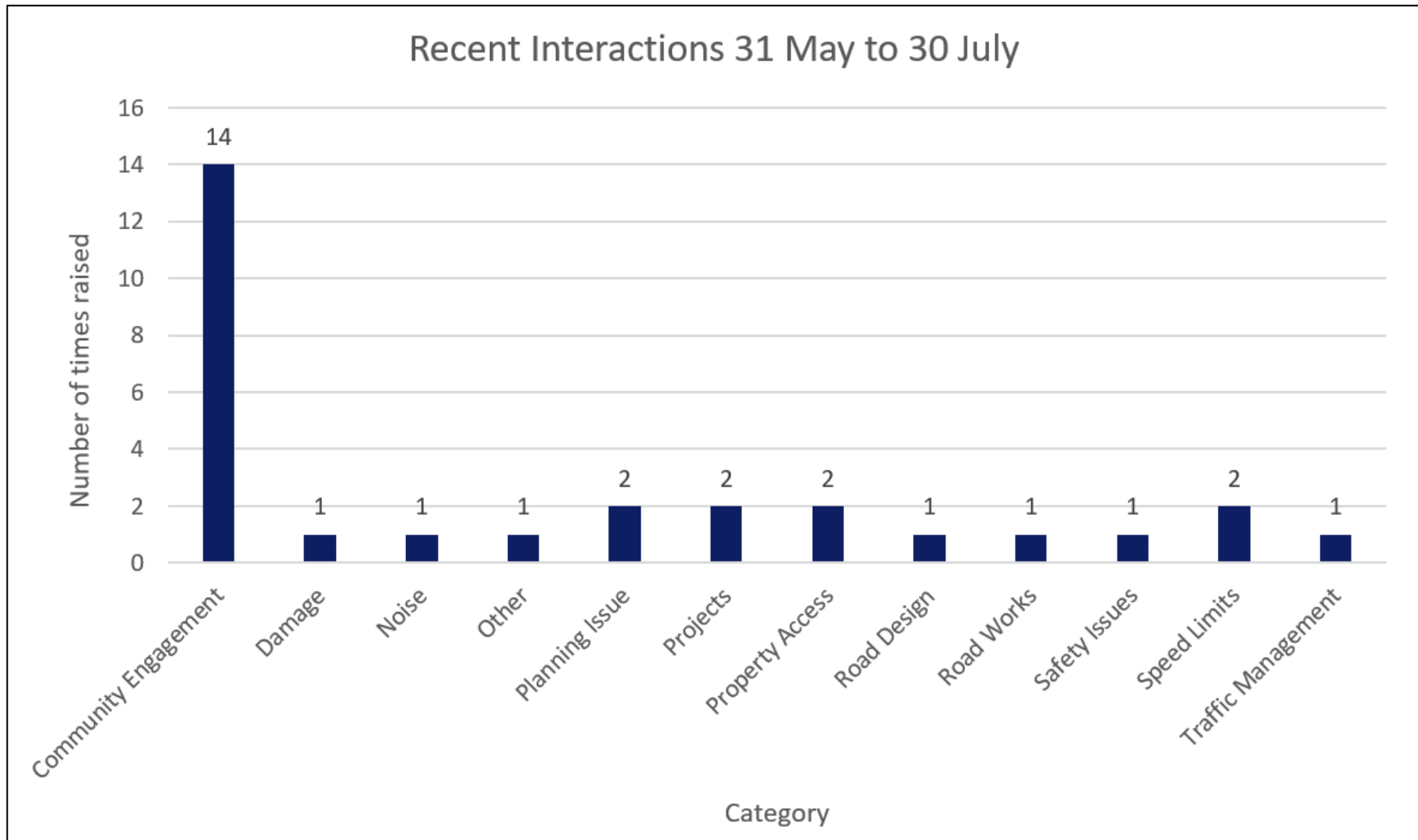
NO. ITEM / DETAILS

Community contact to date is graphed below.



NO. ITEM / DETAILS

Recent interactions and areas of interest are shown below:



Actions and responses from CRG meetings

- Design responses
 - Traffic modelling, lighting design (spill guards)
 - Urban design and flora lists endorsed
- On site responses:
 - Screening at Pausin Cres/Stone Court, construction vehicles avoid Hope Road where possible, street sweeping, tagging of trees, additional water trucks
- Communication responses:
 - Development of collateral in response – eg cross sections, fact sheets, construction updates
- Publishing minutes

Upcoming CSE activities include:

- Project newsletter, August 2018
- Construction updates via email broadcast
- Ongoing targeted communication
- Direct mail community sentiment surveys

Jorelle Little explained that:

- Met with stakeholders in lane closures and cycling network changes.
- CCWC = Cockburn Community Wildlife Corridor group
- East west wildlife corridors impractical with dewatering problems. A fauna overpass also presents maintenance problems over an electrified railway and freeway with a long trapped area to return to existing ground level. Monitoring the effectiveness of the link is another consideration.
- Kwinana Freeway Widening project separated with a discrete CRG and two contractors involved with interface meetings in place for consistency and effective comms.
- Community sentiment surveys are ongoing but have slowed response wise in more recent time.

Community Contact

- Only 25 contacts in the last two months focusing on traffic management, information requests, cycling and complaints about vibration.
- Outcomes of previous CRG meetings:
 - Previous minutes published
 - Specific initiatives identified where influenced by the CRG.
- If anyone wishes to have their names removed from previous minutes please let Jorelle know. Leeming resident (anonymous) asked to have name excluded. The agreed protocol is to provide first name only and area, unless members specifically ask to be anonymous. Groups or organisations to have both names

ACTION: Jorelle

NO. ITEM / DETAILS		
9	QUESTIONS AND ANSWERS	
Q	What traffic modelling data is referred to in noise modelling?	
A	Local road traffic modelling was used. John Robertson to seek clarification from Road Planning (Main Roads) on the updated ROM model. ACTION: John	
Q	Farrington Road east of the freeway is still of concern with Farrington becoming a default Roe 8.	
A	This is noted as a community concern.	
Q	Can the team come to a Bibra Lake Resident Association meeting to discuss planned works and impacts for Farrington Road during construction and the rationale for it along with a next steps process with aerial drone photos a useful resource?	
A	It is difficult to work with every community group but Jorelle will work with Christine to develop a suitable response to that request. ACTION: Jorelle	
Q	Why wasn't LED lighting adopted?	
A	LED lighting is being trialled elsewhere on the network. If benefits are demonstrated then they may be subsequently adopted here. We will continue to design to the current standard/s.	
10	CRG MEMBER COMMENT	
Name	Comment	ACTION
Sam	Farrington Rd lane closures and turning bay between Allendale and Bibra Drive are of interest. What will they be like? It is to service the left in/out from Spanish Club that are eastbound.	
Tim	Nothing to add.	
Mick McCarthy	Nothing to add.	
Charles Sullivan	Charles will check bike detour controls and advise Jorelle. Jorelle to include as an advisory contact. The same applies to CoM via their TravelSmart officers	Jorelle
Felicity Bairstow	Nothing to add.	
Sally Osborne	Thanks Jorelle and MRIA team for meeting with us to discuss the wildlife underpass discussion as a positive discussion.	

NO. ITEM / DETAILS		
Leeming resident (anonymous)	Noise wall design is a sensitive issue for me. How many people were contacted and what were their responses?	Jorelle
Christine Cooper	Bibra Lake Resident Association meeting attendance would be a positive. The drone flythroughs are a great initiative to better understand what is proposed and would be a great resource at resident meetings.	
Con	CoM updated traffic modelling numbers is of interest. Can Con get the resultant outcomes for Farrington Road and Murdoch Drive from updated ROM modelling prior to the next meeting in simplified mapping format please?	John R
Kim Sadlier	Other CRG's need to complement with common messages? Yes, and we link to the other CRG's to align our efforts and messages and occasional shared meetings.	
Decima	Nothing to add.	
NEXT MEETING		
<p>Suggested Agenda topics for future discussions:</p> <ul style="list-style-type: none"> Detailed works scheduling with associated local area impacts – noise vibration, dust etc with key dates; and Individual site visits can be arranged. <p>The workshop closed at 8:00pm.</p> <p>The next meeting is scheduled Monday 5 November 2018, subject to availability.</p>		

ATTACHMENTS:

1. Workshop Agenda

**ATTACHMENT ONE
WORKSHOP AGENDA**

NO.	ITEM / DETAILS	PRESENTER
1	WELCOME	LINTON PIKE
2	CONSTRUCTION UPDATE	JARRID BURTON
2.1	Virtual site tour	
2.4	Cyclist detours (Kwinana Freeway Northbound Widening)	
3	DESIGN UPDATE	GLENN PARNHAM
3.1	Street lighting	
3.2	Transit plans	
4	NOISE WALLS UPDATE	LIAM DONNELLY
4.1	Noise modelling – Bibra Lake, North Lake	
4.2	Leeming noise wall update	
5	GOVERNANCE AND ENGAGEMENT	JORELLE LITTLE
5.1	Key CSE activities	
5.2	Community contact	
5.3	Upcoming CSE activities	
5	NEXT STEPS	LINTON PIKE
5.1	CRG member comments	
5.2	Topics of interest for agenda	
5.3	Date for next meeting	TBC