

**MINUTES OF MEETING – Construction Reference Group (CRG)  
Murdoch Drive Connection  
Meeting #5**

<b>Date:</b>	Monday 28 <sup>th</sup> May 2018		<b>Time:</b>	18:00-20:00		<b>Location:</b>	Lakeside Recreation Centre, Cnr Farrington Road and Bibra Drive, North Lake	
<b>Distribution:</b>	All CRG members and meeting visitors							
<b>Attendees:</b>	Nicole Robins	NR	Elected member, City of Melville	Con Abbott	CA	Leeming resident		
			Leeming resident	Andrew Wildy	AW	Murdoch University		
	Sally Osborne	SO	Cockburn Community Wildlife Corridor Inc – Committee member	Felicity Bairstow	FB	Cockburn Community Wildlife Corridor Inc – Committee member		
	Phil Glew	PG	Bateman resident	Mick McCarthy	MMc	City of Melville		
	Chris Stowe	CSt	Bibra Lake Residents Association	John Amanatidis	JA	Bibra Lake resident		
	Samantha Hardwood	SH	Murdoch Chase resident	Jorelle Little	JL	CRG Executive Officer		
	Jadranka Kiurski	JK	City of Cockburn	Linton Pike	LP	CRG Chairperson		
<b>Visitors:</b>	Shane McCarney	SM	Design Manager, MRIA	Jarrid Burton	JBu	Construction Manager, MRIA		
	John Robertson	JR	Project Manager, MRIA/Main Roads WA					
<b>Apologies:</b>	Kimberley Broztl	KB	Manager Engineering, City of Melville	James Nicholson	JN	Booragoon resident		
	Dr Jonathan Tan	JT	Bateman resident, local General Practitioner	Chris White	CW	Executive member, Transport Infrastructure Council of Western Australia		
	Terry Pearce	TP	Project Director, MRIA/Main Roads WA	Mark Ashby	MA	Principal, Kennedy Baptist College		
	Decima Johns	DJ	Bibra Lake resident	James (Jim) Nicholson	JN	Booragoon resident		
	Kim Sadlier	KS	Success Residents Group	Christine Cooper	CC	President, Bibra Lake Residents Group		
	Cam Bartram	CB	Ardross resident	Kevin Wragg	KW	Bibra Lake resident		

**NO. ITEM / DETAILS**

**1 PREVIOUS MINUTES AND ACTIONS ARISING**

Comment was invited on the previous minutes to identify proposed changes or omissions:  
 The following changes were requested:

- Con asked that comments made by Terry Pearce at the previous meeting made it clear that the design is now fixed and that was not evident in the minutes. It was confirmed that Terry did report that the project scope and concept design is now finalised.
- CRG members agreed to note the change in these minutes but not modify and reissue the previous minutes.

Two changes were made to the CRG membership as follows:


- Felicity Bairstow will be included as a CRG member in addition to Joe Branco with either to attend future CRG meetings. One to attend.
- To ensure a Murdoch Chase representative is on the invite/communication list for CRG meetings, Sam Harwood and Jillian Reid will be the nominated representatives for Murdoch Chase in addition to John Goncalves. One to attend.

Actions arising from previous meeting were discussed as follows:

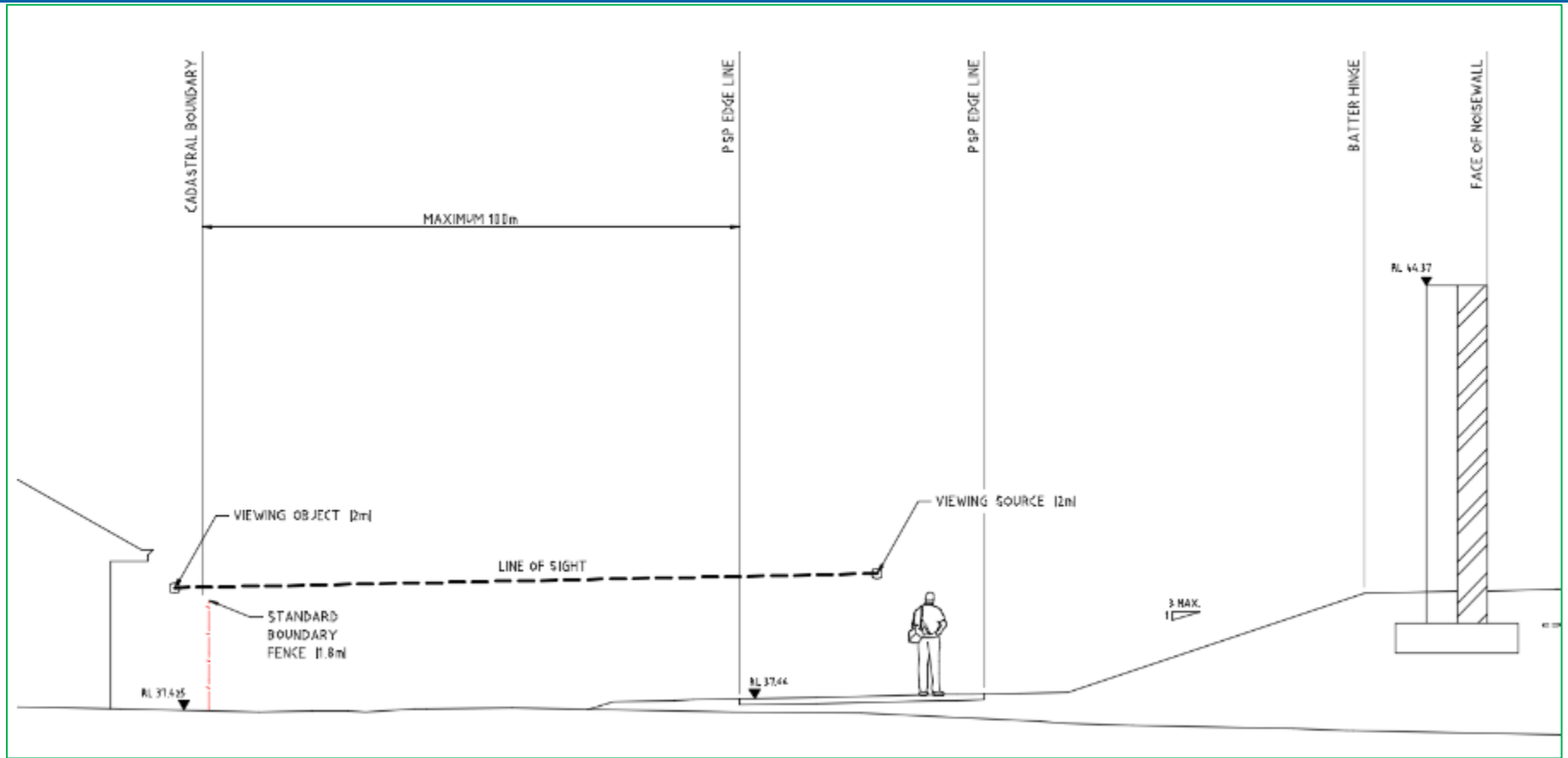
	TOPIC	ACTION	RESPONSIBILITY	COMMENT AT 28 MAY MEETING
Understanding design		Develop cross sections of various locations around the project as a community information resource (Bibra Lake already complete, include Murdoch Chase and Leeming)	Jorelle	Work is underway and we are working to address identified gaps. Cross-sections are being crafted into a more user-friendly format and will be released via the project website.
		Provide overview of lighting plans at next CRG meeting	Shane	Lighting information will be provided later in this meeting.
		Review if any value in reporting historical traffic data – report at next CRG	Shane	We have reviewed traffic data with Main Roads and have traffic information from 1998 to now. The annual growth rate is between 2 and 4% with 3% per annum on average. Changes in vehicle numbers over time are contextual and vary somewhat from link to link. The traffic count on Farrington Road west of the freeway near Murdoch was 24,300vpd in 1998, the 2017 count information was 33,600 vpd (1.7% annual traffic growth) East of freeway there was 17,900 vpd in 1998 with 20,000 vpd in 2017 (0.6% annual traffic growth) Baseline count information over time for Farrington Road was requested by Con.

NO.		ITEM / DETAILS		ACTION: Shane
		Ascertain radius of loops on Leech Highway	Terry	This information was provided by email last week.
Air quality		Share link to Roe8 Environmental Impact Assessment (EPA) with minutes	Jorelle	This information was included in the previous minutes.
Traffic		Discuss traffic modelling re intersection Hope Road and Bibra Drive with Technical Working Group this week	Shane	<p>This information was presented previously at an earlier CRG meeting and is available from those minutes. CRG concern was expressed at problems when trying to turn right from Hope Road to Bibra Drive with traffic volumes increasing.</p> <p>The current traffic count is 6,200 vpd with 6,900 vpd forecast in 2021 if no changes were made. The forecast is 7,800 vpd as a result of the approved concept and 9,600 vpd forecast in 2031.</p> <p>The right turn access is not impacted by this project and is seen as being out of project scope.</p> <p>All forecasts comply with target objectives for the resultant target level of service.</p> <p>Is there ground truthing of traffic forecasts? Yes, but with lag usually.</p> <p>The roundabout will assist in providing improved access solutions.</p>
Noise		Review and report on requirements of post construction noise modelling – report to next meeting	John Robertson	<p>Post construction noise monitoring occurs immediately after construction and annually for a period of three years.</p> <p>Is the baseline noise data from data collection for modelling available to this group? The report is not yet finalised and Padraic has previously provided some noise heat maps. We can include this as a future Agenda item.</p> <p>CRG members asked the Project Team to explain the visuals in more detail – the key data sought is - where was noise measured, what were those measures and how do the forecasts for the future compare with more detailed information and noise modelling mapping provided prior to the meeting.</p> <p style="text-align: right;"><b>ACTION: Shane</b></p>
Public Transport		Transit plans / bus routes / pedestrian access – send with minutes	Shane	This task is now complete.
Communication		Include transit plans / bus routes / pedestrian access in	Jorelle	<p>Work is underway to do so with the June Newsletter currently being developed.</p> <p>The rationale for the removal of the freeway pedestrian overpass will also be included.</p>

NO. ITEM / DETAILS			
		next newsletter (June); rational for removal of pedestrian overpass (visual intrusion) to be included in newsletter	CRG member comment – this route is regularly used by family members with access across Murdoch Drive diminished. Information on public transport usage would be useful.
		Reiterate hours of construction in next construction update email	Jorelle This was done in the last weekly update and will remain a tag line in the future.
		Metronet query and interface. More information on the likely impacts of Thornlie to Cockburn rail link would be useful	John Robertson There is no direct project interface impacting upon these works to be managed. The Thornlie to Cockburn Rail Link information will be provided later in this meeting.
Communication		Ensure Felicity Bairstow receives minutes and is satisfied with follow up actions resulting from last CRG – Hope Road traffic and Fauna underpass	Jorelle This is done and there is community interest in fauna underpasses with the functionality of some of the proposed new fauna underpasses questioned. It would be good to follow up with Community Corridor Group if possible. The desire for that group will be to create an east-west fauna link if possible. <b>ACTION: Jorelle via Felicity</b>
		Pass on Harry Gough's concerns re traffic volumes	Shane There are currently around 15,000 vpd on Murdoch Drive north of South St. With no change to the current configuration traffic volumes are forecast to increase to 22,600 in 2021 or 22,700 in 2021 with this project with little direct effect resulting from this project.
Clearing		Develop drawing to show trees tagged to be maintained around project (particularly Bibra Lake) – share via email with CRG update	Revel /Jorelle The road was marked today and the survey pegs were removed subsequently by an unknown person. We will be tagging trees next week instead with white tags used to identify trees to be retained. CRG members expressed a desire to retain as many trees as possible.

NO.	ITEM / DETAILS
2	<b>THORNLIE TO COCKBURN RAIL LINK</b>
	<p>The Thornlie to Cockburn rail link does not impact upon these works with the rail corridor shown below.</p> 
3	<b>CONCEPT DESIGN</b>
	<p><b>Visual Assessment</b></p> <ul style="list-style-type: none"> <li>A visual intrusion assessment was carried out on the project. As a result of the project works there is a concern for the visual privacy from the Principal Shared Path at two locations due to level differences as shown below.</li> </ul>

NO. ITEM / DETAILS



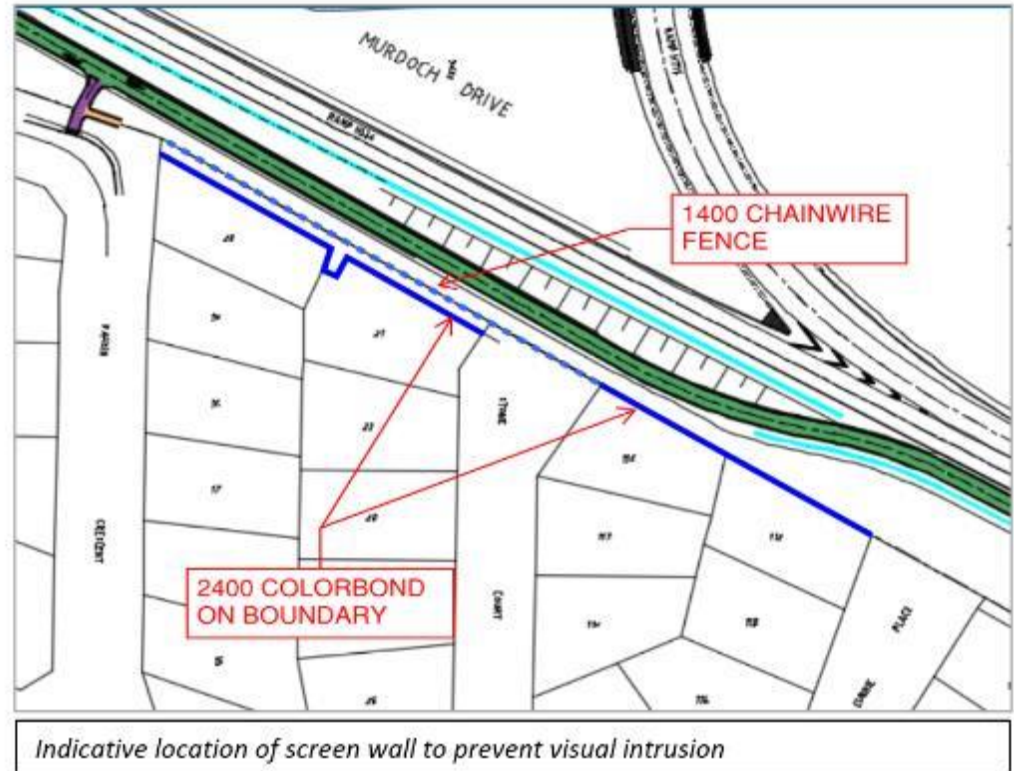
The two locations of concern are shown on the following pages.



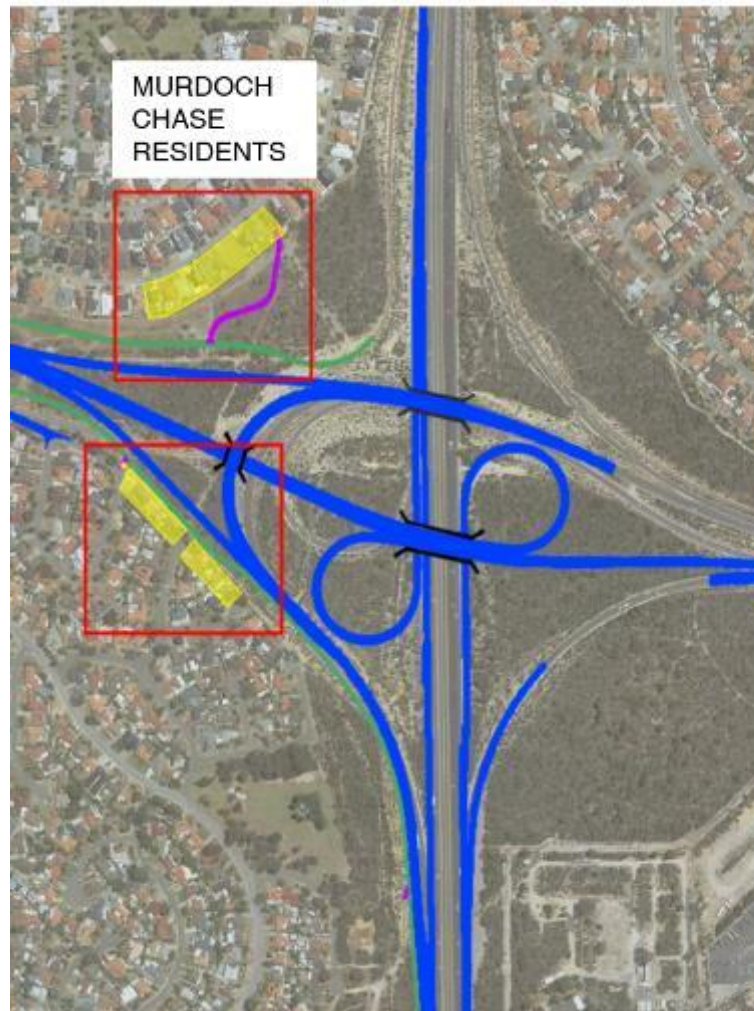


Bibra Lake Residents (south-west)

- Four residents
- ✓ Solution achieves passive surveillance for path users (CPTED)
- ✓ Chainwire fence assists in crime prevention via cul-de-sac



The colorbond fence will provide a visual screen with the chainwire fence providing a physical barrier to manage local area access with connectivity to the PSP provided at Pausin Crescent.



### Murdoch Chase Residents (north-west)

- 10 residents
- ✓ Solution provides visual screening and improves amenity
- ✓ Solution assists with environmental objectives of project



*Indicative location of vegetation to prevent visual intrusion*

There is more space available at Murdoch Chase with semi-mature trees used to provide a visual screen to the PSP.



**NO. ITEM / DETAILS**

**Street Lighting**

**Murdoch Drive Connection**

- 12.5m double outreach light poles located in the median as shown in the image
- Same as the ones on Farrington Road (250 watt high pressure sodium)

**Shared Path / Principal Shared Path Lighting**

- 7m tall single outreach light poles
- Same as the ones currently on the path network (150 watt high pressure sodium)



The indicative location of lighting poles is shown below. Shane explained that:

- Light poles are typically installed at 50m intervals.
- Light spill analysis is underway now. Further information will be provided at a future 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?
- Include as future discussion topic.

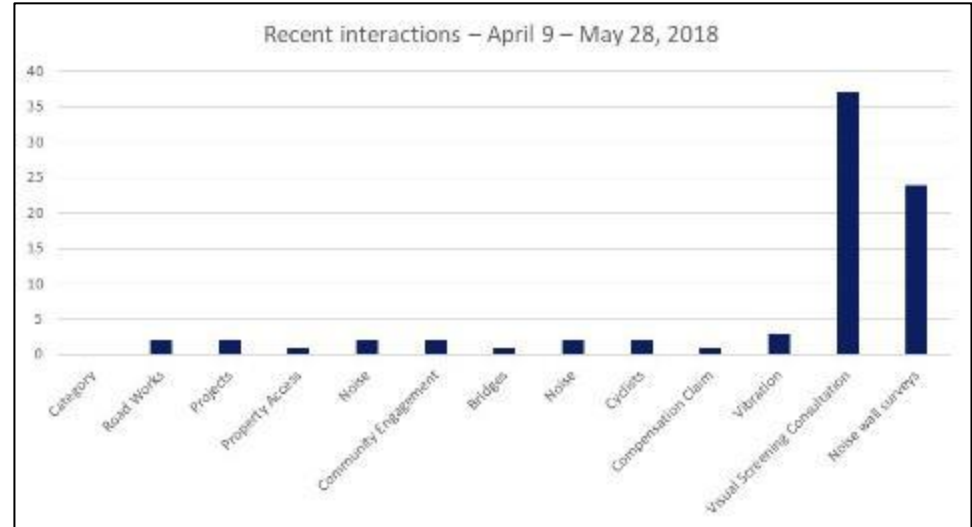
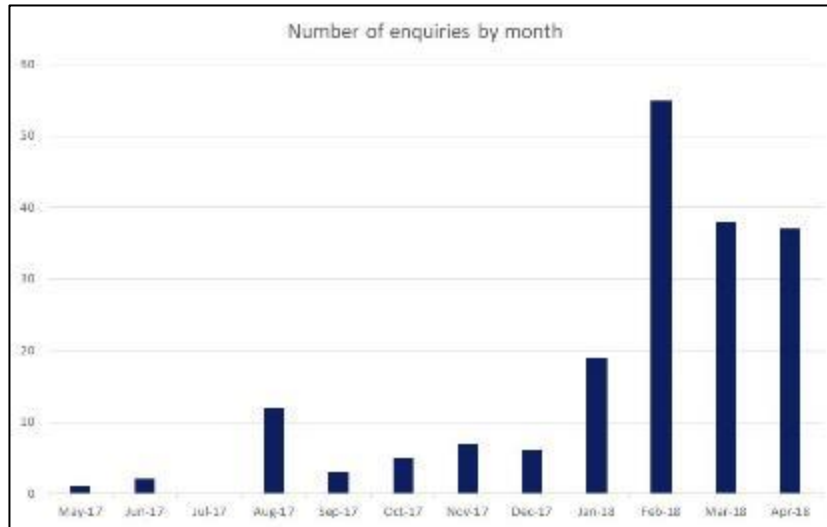
**ACTION: Jorelle**

NO.	ITEM / DETAILS
4	<b>QUESTIONS AND ANSWERS</b>
Q	Why not use a solid wall in place of the chainwire fence proposed at Pausin Crescent? What has changed with an earlier commitment to provide a solid barrier close to the PSP?
A	<p>There is a fibre optic cable in the verge that limits the use of a larger structure in this location. MRWA's Asset Management group prefers chainwire to avoid graffiti impacts too. We aim to take on board community feedback in situation like this but services were a key constraint.</p> <p>Additional potholing was completed after our initial discussions and identified the need to avoid larger wall structure resulting in the change.</p> <p>John Amanatidis advised that a 2.4m colorbond fence on the property boundary is not supported on boundary. Shane advised that if the resident doesn't want the colorbond fence it won't be provided.</p> <p style="text-align: right;"><b>ACTION: Shane and Jarrid</b></p>
Q	Where services are encountered like this what usually happens?
A	It depends on the context – embankment over structure, road or other need. Preference is to retain services in their current location where possible and design around it. The cost of service relocation is high with space often limited to do so. There is also often a significant lead time to move services even if suitable space is available.
Q	Will the PSP's be lit?
A	Yes, lighting will be provided along the PSP. The exact location remains to be determined and will be impacted by existing services and existing structures.
Q	A number of photographs of PSP's and walkway overpasses elsewhere on the freeway were previously sent to Jorelle. Why can't similar solutions be adopted here to lower the PSP to avoid the need for visual screening possibly like that adopted near Bullcreek Train station on the western side of the freeway?
A	We looked at options like these. There are transmission lines and PSP grades are difficult to establish a feasible solution. We found that the grades cannot be worked to comply with relevant standards with 3% a maximum grade to be adopted generally or 5% if landings are included.
Q	Why not adopt a cut but not covered solution for PSP's?
A	Cost, safety and security would be key considerations limiting the potential for an option like this with around a 100m section required.
Q	City of Melville use reticulation for newly planted vegetation. Will that be done here?
A	No, we don't reticulate projects of this type and make use of winter planting and water cart watering initially.

NO.	ITEM / DETAILS
5	<b>CONSTRUCTION PROGRAM</b>
	<p>Jarrid Burton provided a brief project update using some overhead drone images of the site recently taken explaining that:</p> <ul style="list-style-type: none"> <li>• The westbound Roe Highway ramp to Kwinana Freeway southbound is nearing final level at top of windrow height;</li> <li>• The proposed bridge beam storage area to eastern side of freeway was shown;</li> <li>• Noise wall construction method discussed</li> <li>• Clearing to occur at Baker Court and Bibra Lake Dr soon;</li> <li>• Lots of Western Power service work will be done across the project site;</li> <li>• Mulch and topsoil spreading will occur in some locations soon;</li> <li>• Lots of earthworks cut is planned in the south east quadrant;</li> <li>• Work on the PSP underpass near Stone St is progressing and is likely to be finished in July 2018</li> <li>• More drone shots to follow for discussion at future CRG meetings.</li> </ul>
6	<b>QUESTIONS AND ANSWERS</b>
Q	How will noise walls be installed – what is the process?
A	<p>For the north eastern quadrant we will prepare a design and a priced option for consideration by MRWA. If approved we will then proceed.</p> <p>As a general approach we try to put the walls either close to the source or close to the receptor. For this project that will generally see noise walls placed on the road reserve/private property boundary. The new noise wall is generally built just off the boundary – around 300 or 400mms. Sometimes the existing fence remains and sometimes it is removed and side fence extended to the noise wall. We work with residents to get the best possible solution. We complete fauna trapping and relocation before commencing if fauna are present.</p>
7	<b>COMMUNITY AND STAKEHOLDER ENGAGEMENT (CSE)</b>
	<p>Jorelle Little provided an update of recent CSE activities:</p> <p><b>Targeted engagement</b></p> <ul style="list-style-type: none"> <li>– Leeming newsletter April 2018</li> <li>– Bibra Lake visual screening plans</li> <li>– Murdoch Chase visual screening plans</li> <li>– Attendance at meeting hosted by MP Peter Tinley (Murdoch Chase residents)</li> <li>– Hope Road playground flyer</li> <li>– Leeming noise wall surveys</li> </ul>

**NO. ITEM / DETAILS**

Community contact:



Upcoming CSE activities include:

**Materials in development**

- Noise walls and cross section posters
- Project newsletter, June 2018

**Ongoing engagement**

- Construction updates via email broadcast
- Ongoing targeted communication
- Community sentiment surveys (1 June 2018 launch)

**8 QUESTIONS AND ANSWERS**

Q	Are PSP users aware of the longer route that will be established as a result of this project?
A	We have worked with WestCycle and we continue to keep them up to date as a key cycling stakeholder. They also have their own cycling network communications mechanisms.



NO. ITEM / DETAILS		
9	CRG MEMBER COMMENT	
Name	Comment	ACTION
Sam Harwood	Access to public transport is problematic for our community with bus stop movements if not within reasonable walking distance – bus route changes are required as close as possible to Farrington Road. The MRIA team advised that the location of bus stops is driven by grades and the bus stop be relocated to a point around 100m south of Farrington Road on the new Murdoch Drive alignment.	
Chris Stowe	I have nothing else to add.	
John Amanatidis	Is it possible to get a relative height for bridge 1693? The MRIA team advised that it is about 1.5m below the existing ramp with a 5m tall noise wall to be provided. Other than 2.4m fence on boundary what options for privacy during construction are there? Jarrid reiterated that a temporary fence cannot be provided higher than 1.8m. Shade cloth is an additional measure provided.	
Phil Glew	I have nothing else to add.	
Con Abbott	Issues raised by this group and adopted into the project. Is there a register or list of items included? Jorelle to provide at a future meeting.	<b>Jorelle</b>
Jadranka Kiurski	I have nothing else to add.	
Nicole Robins	I have nothing else to add.	

NO.	ITEM / DETAILS	
	<p>Is there asbestos contamination on the project site?</p> <p>With decades of illegal dumping activity within the road reserve, asbestos has been identified at the Murdoch Drive Connection project site and as a result an Asbestos Management Plan is currently being implemented. This Plan incorporates the highest regard for safety of both the workforce and community.</p> <p>ACM found at the project site during clearing was isolated until further investigations were complete to determine the most appropriate remediation method.</p> <p>As a precautionary measure, MRIA will bury approximately 2000 cubic metres of material that contains a small percentage (less than one cubic metre in total) of ACM.</p> <p>The method considers the risk to both the community and project personnel.</p> <p>MRIA has informed the Department of Health and Department of Water and Environmental Regulation that it proposes to bury a volume of bonded asbestos on site, capped with soil cover, in accordance with Department of Health <i>Guidelines for the Assessment, Remediation and Management of Asbestos- Contaminated Sites in Western Australia (2009)</i>.</p> <p>What will be done road signage wise and will it be visible or providing glare reflected light into homes from the aluminium backing? We have a signage strategy in place to reflect relevant standards. Signs must be visible from the road and safe from a road user perspective.</p> <p>Is drainage adequate for prevailing flows to avoid localised flooding? Our drainage design is compliant with relevant standards for various design elements and various flood events. It is also independently verified by others than the Alliance and MR at various design levels of completion.</p>	Jorelle
Sally Osborne	<p>Is it possible to establish a meeting regarding wildlife access to consider concerns at existing and proposed fauna underpasses? The MRIA team thought it would be worthwhile with Faron's involvement. The two new underpasses are in cleared areas. Jorelle to arrange as offline discussion. The current approach is to maintain existing fauna connectivity.</p>	Jorelle
Felicity Bairstow	<p>Farrington Road bus stop relocation impacts for Bibra Lake users is of interest for train users. What route would we take? Could use the bus initially or walk via the PSP or Murdoch Drive.</p>	
Mick McCarthy	<p>MRWA is updating the ROM traffic model to reflect land uses proposed for the future. This may impact upon forecasts.</p> <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 subsequently.</p>	Shane
Andrew Wildy	<p>I have nothing else to add.</p>	

NO.	ITEM / DETAILS
<b>NEXT MEETING</b>	<p>Suggested Agenda topics for discussion:</p> <ul style="list-style-type: none"><li>• More coverage on Leeming area – cross sections and noise walls</li><li>• Light spill</li></ul> <p>The next meeting is scheduled for early August with direct contact in between as required via Jorelle. The next meeting will be held at the site office with space and other resources available.</p> <p style="text-align: right;"><b>ACTION: Jorelle</b></p> <p>The workshop closed at 8:05pm</p>

**ATTACHMENTS:**

1. Workshop Agenda

**ATTACHMENT ONE  
WORKSHOP AGENDA**

<b>NO.</b>	<b>ITEM / DETAILS</b>	<b>PRESENTER</b>
<b>1</b>	<b>WELCOME</b>	<b>LINTON PIKE</b>
<b>2</b>	<b>CONCEPT DESIGN</b>	<b>SHANE MCCARNEY</b>
2.1	Visual screening plans	
2.2	Lighting plans	
2.3	Crime prevention through environmental design (CPTED)	
2.4	Vegetation plans for PSPs	
<b>3</b>	<b>CONSTRUCTION PROGRAM</b>	<b>JARRID BURTON</b>
3.1	Construction milestones	
3.2	Upcoming site activities	
<b>4</b>	<b>COMMUNITY ENGAGEMENT</b>	<b>JOELLE LITTLE</b>
4.1	Key CSE activities	
4.2	Community contact	
4.3	Upcoming CSE activities	
<b>5</b>	<b>NEXT STEPS</b>	<b>LINTON PIKE</b>
5.1	CRG member comments	
5.2	Topics of interest for agenda	
5.3	Date for next meeting	<b>28 MAY 2018</b>