

## ASSESSMENT REPORT

### s75W Modification - Hoxton Park (Len Waters) Industrial Estate Bridge Access and Residual Lot Layout

#### 1. BACKGROUND

On 3 June 2010, the Planning Assessment Commission (PAC) approved a proposal from Mirvac Projects Pty Ltd (Mircvac) under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act), for the Hoxton Park Warehouse Project. The project is located in the Liverpool local government area (LGA) near the intersection of Cowpasture Road and the M7 Motorway (see Figure 1).

The PAC's approval of the Hoxton Park Warehouse Project included a Concept Plan and three Major Project applications, to facilitate the development of the site for industrial use.



**Figure 1: Regional Context**

The site previously formed part of the Hoxton Park Aerodrome, which ceased operations in December 2008. The former Aerodrome comprised 88 hectares of land, which since its closure, has been the subject of several strategic studies as part of Liverpool City Council's *Industrial Lands Strategy* and the

new *Liverpool Local Environmental Plan 2008* (Liverpool LEP). As a result of this strategic work, Council developed a Masterplan for the site and subsequently rezoned the area for a mix of uses, including infrastructure; industry; residential; and public recreation. This also included an environmental management buffer zone between the public recreation and industrial zones.

Also, as part of the rezoning of the site, a Voluntary Planning Agreement (VPA) was entered into between Mirvac and Council. The VPA included the requirement for Mirvac to develop a biodiversity strategy to offset the loss of vegetation as a result of the proposed development of the former Aerodrome.

Mirvac Projects Pty Ltd (Mircvac) proposes to redevelop part of the former Hoxton Park Aerodrome for warehousing and light industries, as well as other industrial uses.

The Hoxton Park Warehouse Project Concept Plan (10\_0007) approval provides for the development of 50.17 ha of land for a range of warehouses and distribution facilities, including associated infrastructure and stormwater management for the site. The approved layout for the industrial estate is shown in Figure 2.

The site is also the subject of three project approvals, which were approved concurrently with the concept plan application. These approvals include: the Stage 1 Infrastructure Project (10\_0008), the Big W Warehouse Facility Project (10\_0009); and the Dick Smith Warehouse Facility Project (10\_0010).

The site would employ in total around 1135 people once fully operational; including 525 at the Big W warehouse and 410 at the Dick Smith Warehouse, with the remainder employed in the future residual lots.

#### Second Access

Two access points were envisaged as part of the Masterplan for the rezoning of the Hoxton Park Aerodrome. The southern access was proposed to accommodate the industrial estate and the northern access for the residential areas to the north of the site. As part of the Concept Plan and Stage 1 Project application, Mirvac proposed to construct the southern main access only.

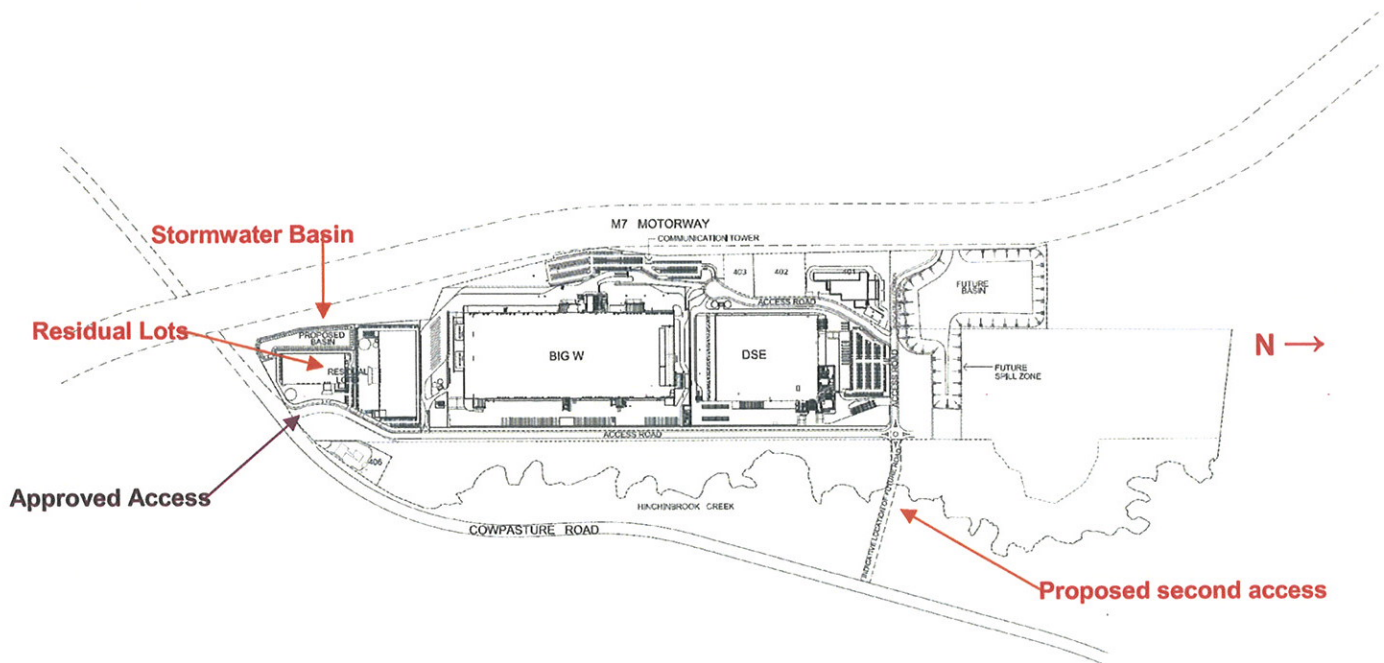
However, during the assessment of the Concept Plan it was found that the proposed southern access to Cowpasture Road would be insufficient to accommodate the high levels of traffic generated by the industrial estate and surrounding areas. The RTA advised that if the northern access is not constructed prior to the development of the industrial estate, it would result in significant delays at the southern access road intersection for vehicles exiting the site. Therefore, the Concept Plan was modified, requiring Mirvac to make provision for a second access to the site, in order to alleviate any possible congestion issues with the main access (see Figure 2).

The Concept Plan required Mirvac to provide detailed plans and an assessment of the potential impacts of the proposed second access off Cowpasture Road, for the approval of the Director-General.

#### Stormwater Infrastructure

The layout of the approved Concept Plan included two residual lots and a stormwater basin located in the southern corner of the site (see Figure 2). The Concept Plan approval required Mirvac to undertake further analyses of stormwater flows surrounding the site and to finalise the design of this proposed stormwater device located adjacent to the residual lots. Following revisions to the stormwater infrastructure for the site, Mirvac has proposed the construction of an underground network of pipes and box culverts in lieu of the detention basin and open channel. Due to this design change, the land set aside for the detention basin is no longer required, and therefore Mirvac has sought approval to rezone this land from SP2 Infrastructure to IN2 Light Industrial to maximize the employment generating potential of the land (refer to Section 3 of this report regarding legal advice received regarding the proposed rezoning).





*Figure 2: Approved Hoxton Park (Len Waters) Industrial Estate Layout*

## 2. PROPOSED MODIFICATION

Mirvac proposes to modify the Concept Plan (10\_0007) approval for the Hoxton Park Industrial Estate under Section 75W of the EP&A Act, to:

- allow for the development of a second access to the site off Cowpasture Road; and
- remove the stormwater basin located in the south west corner of the site, in order to facilitate the development of the area as light industrial (see Figure 3).

### Second Access

The access would include the construction of a bridge link across Hinchinbrook Creek, in accordance with condition 8 of the Concept Plan approval (see Figures 4 & 5). The bridge is proposed to be a proprietary "M-Lock" system and will span 72m across Hinchinbrook Creek. The key design parameters include:

- six equal spans of 12m in length;
- 9.6m clear width between traffic barriers;
- traffic barriers to RTA specifications;
- deck drainage by scuppers into the flood plain below; and
- the bridge deck to be supported on 585mm diameter precast concrete piles.

### Stormwater Basin

In June 2010, Mirvac submitted a revised design for the proposed stormwater infrastructure in the south-west corner of the site to the Department and Council. Council reviewed the revised design for the proposed stormwater infrastructure and was satisfied that stormwater management in the area would not be compromised as a result of the removal of the stormwater basin.

The revised design proposed the construction of an underground network of pipes and box culverts in lieu of a stormwater detention basin or an open channel. Due to this design change, the land set aside for the detention basin is no longer required; and therefore through modifications to the Concept Plan, Mirvac proposes to rezone the south-western corner of the site from SP2 Infrastructure to IN2 Light Industrial to maximize the employment generating potential of the land (see Figure 3) (the legal advice sought by the Department regarding the proposed re-zoning, is discussed in Section 3 of this report).

The proposal also requires amendments to the Stage 1: Infrastructure Project (10\_0008) approval, to reflect the modifications to the Concept Plan.

Proposed re-zoning to IN2

Approved Access

Proposed bridge crossing  
and second access

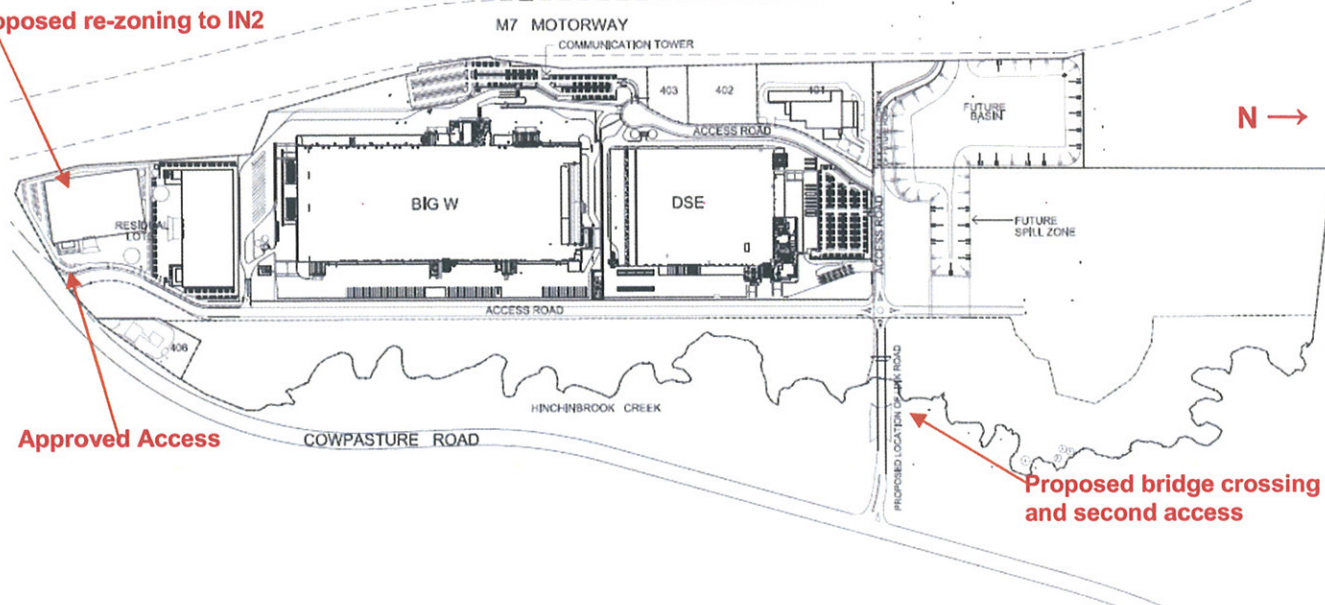


Figure 3: Proposed Hoxton Park (Len Waters) Industrial Estate Layout

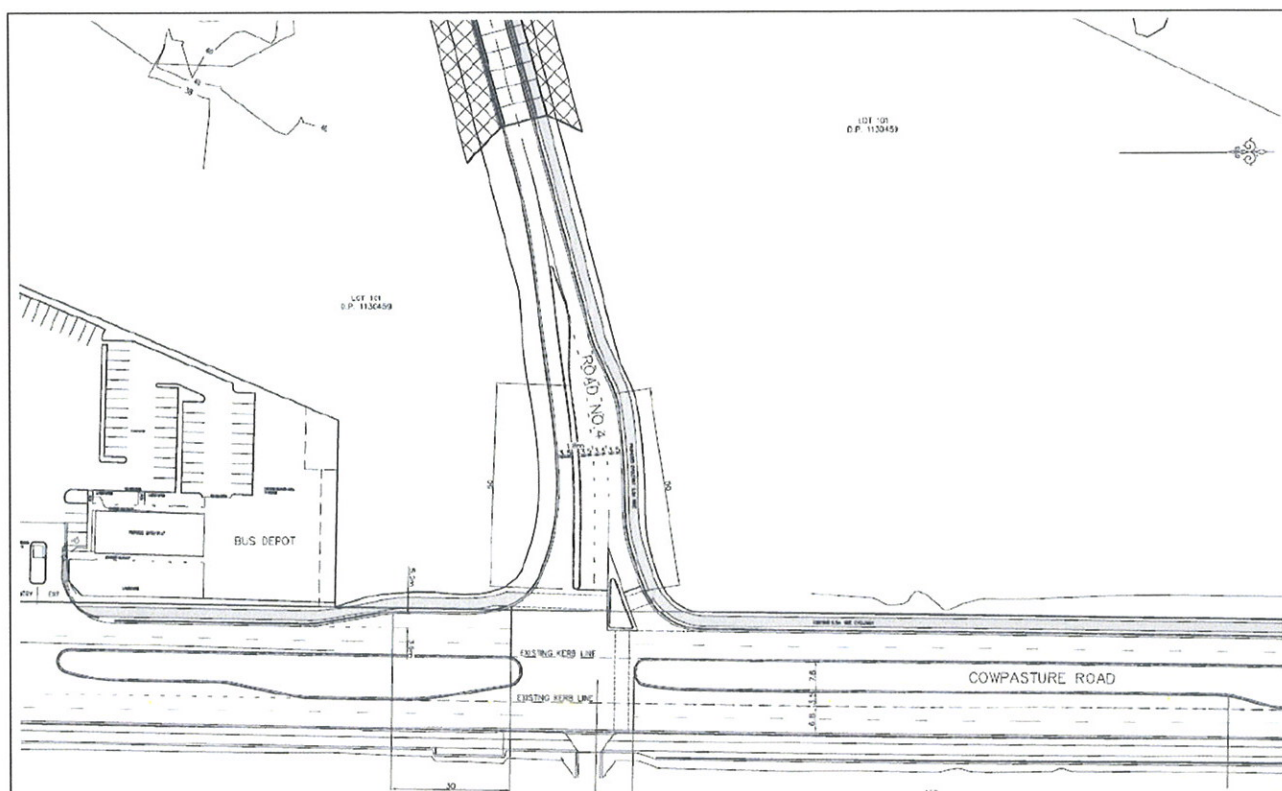
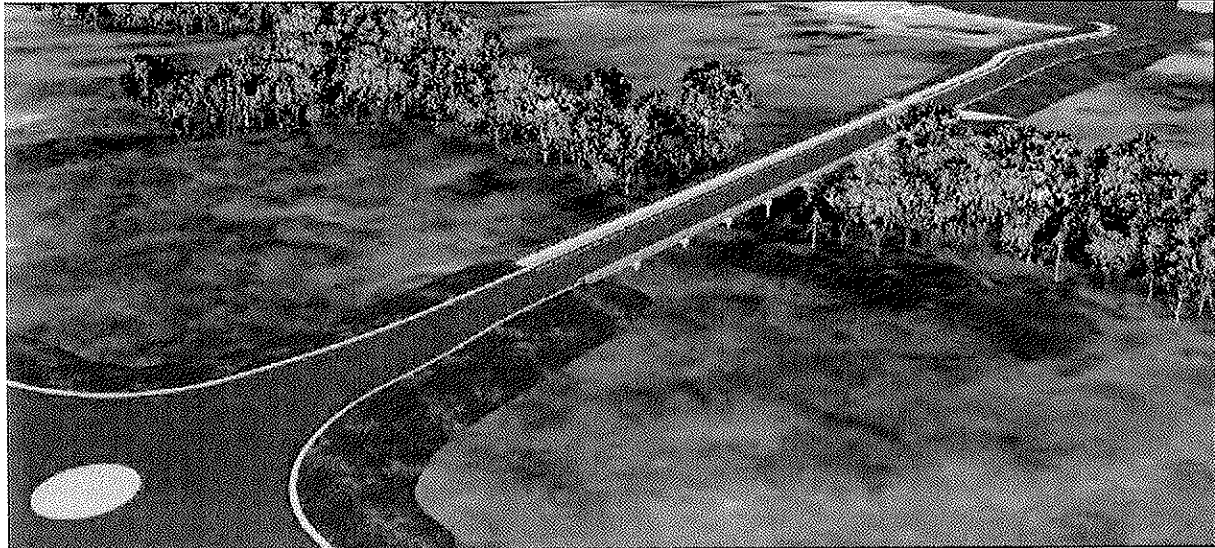


Figure 4: Proposed Intersection at Cowpasture Road



*Figure 5: Proposed Bridge Design (Photomontage)*

### 3. STATUTORY CONTEXT

#### 3.1 Approval Authority

Section 75W of the EP&A Act confers on the Minister an implicit obligation to be satisfied that the modification request falls within this section of the EP&A Act.

The Department notes that:

- the proposed modification does not seek approval for a new and different project for which approval was granted; and
- any potential impacts would be minimal and could be appropriately managed through the existing or modified conditions of approval.

It is therefore recommended that the Director-General, under the Minister's delegation of 25 January 2010, agree that the modification request falls within section 75W of the Act and that the request can be determined.

#### Proposed Rezoning

Currently the south west corner of the site is zoned SP2 for the provision of a stormwater detention basin. As this basin is no longer required, Mirvac is seeking to develop this area as industrial. However, the industrial use is not permitted in this location due to the SP2 zoning. Therefore, Mirvac is seeking to rezone this area as IN1, via a modification to the Concept Plan approval, to accommodate the future development of the area for industrial purposes.

The Department sought legal advice regarding the proposed rezoning of the SP2 zone to IN2. The advice found that the EP&A Act does not provide a mechanism to rezone land by modifying a Concept Plan under s.75W of the EP&A Act and that only Part 3 of the Act sets out the statutory procedure for amending zones in an environmental planning instrument.

Notwithstanding, the legal advice suggested that Mirvac's proposal to rezone the south west corner of the site from SP2 to IN2 is unnecessary, as although an LEP may prohibit certain developments in particular zones, it does not prevent the Minister from granting approval for a development which may be prohibited, if the Minister has already authorised a concept plan in respect of the proposal area (see attached memo tagged B).

As a result, the Department considers that it would be sufficient to amend the Concept Plan and Stage 1 Infrastructure Project to extend the building pads of the residual lots into the SP2 zone, to allow Mirvac to develop the area for industrial purposes. As such, Mirvac has submitted revised plans extending the area of the residual lots into the area previously approved as a stormwater detention basin, to allow for the future development of the area as IN2.



Council agrees that rezoning this part of the site is unnecessary at this stage, and accepts that Mirvac would lodge an application with Council in the future, for the rezoning of that land to ensure consistency with the relevant EPI applicable.

### **3.2 Exhibition and Notification**

Under Section 75W of the EP&A Act, the Department is not required to notify or exhibit the application. Notwithstanding, the Department exhibited the modification application from **7 October 2010** until **25 October 2010**, at the Department of Planning; Natural Conservation Council; Liverpool City Library; and on the Department's website.

Further, the Department referred the proposed modification to Liverpool City Council; the Department of Environment Climate Change and Water (DECCW); NSW Office of Water (NOW); and the Roads and Traffic Authority (RTA). Consultation with other government agencies and neighbouring sites was considered unnecessary, as it was determined that the environmental impacts of the proposal would essentially remain unchanged from the previously approved projects.

**Liverpool City Council** did not object to the proposal.

**DECCW** did not object to the proposed modification, however raised concerns with the proposal to remove a small area of Cumberland Plain Woodland, which falls within an offset site established under the rezoning of the former Hoxton Park Aerodrome. DECCW recommended that the Proponent submit further information regarding the assessment of significance for the loss of Cumberland Plain Woodland, and provide evidence that avoidance and/or mitigation measures have been considered.

The **RTA** did not object to the proposed modification, however recommended a number of conditions to the proposed signalised intersection, including layout; design; the requirement for the developer to enter into a Works Authorisation Deed; and stormwater discharge from the site.

**NOW** did not object to the proposal, however raised concerns that the riparian corridor would be impacted by development of the bridge; and recommended that the bridge span the full width of the corridor, a minimum of 50m on either side of the creek. Also, NOW made a number of recommendations, including the requirement that any remaining culverts be constructed with a naturalised base and that the bridge piers are located outside the banks of the creek; as well as a recommendation regarding the location of the proposed playing fields; and the proposed location of Basin 6.

The Department has considered the submissions in the assessment provided below.

## **4. ASSESSMENT**

The Department has considered the EA, the issues raised in submissions, and Mirvac's response to these issues, in its assessment of the project. The Department identifies the key issues to be biodiversity and the protection of the riparian corridor at Hinchinbrook Creek.

These issues are considered in detail below. All other issues are summarised in Table 1.

### **4.1 Flora and Fauna**

An ecological assessment was undertaken by GHD, on behalf of Mirvac, for the construction of the proposed access road and bridge crossing.

#### Flora

Vegetation within Hinchinbrook Creek consists of River-Flat Eucalypt Forest, classified as an Endangered Ecological Community; and Cumberland Plain Woodland, which is listed as a Critically Endangered Ecological Community under the *Threatened Species Conservation Act 1995*.

The construction of the access bridge would require the removal of approximately 0.87ha of intact native woodland. The proposal would not require the removal of any threatened plant species. However, a section of the vegetation to be removed falls within an area previously established as an offset area by Council as part of the Masterplan for the redevelopment of the Hoxton Park Aerodrome (see Figure 6). In addition, whilst the alignment of the road has been designed to avoid the removal of any large and mature trees, it would require the removal of one hollow bearing tree.

Although the proposed bridge would span the Hinchinbrook Creek channel and banks, there is the potential for impacts on vegetation to occur during the construction stage. Also, once constructed,

vegetation below the bridge may be impacted in the long term through the removal of mature trees and increased shading and reduced rainfall to this area. The EA considers that due to the existing canopy the vegetation communities in this area would have already adapted to low light and moisture content, and it is therefore considered likely that the vegetation in the understory would readily persist in the environment below the proposed bridge.

### Fauna

Five threatened fauna species are known, or highly likely to occur, within the proposed bridge/road alignment, including:

- Grey-headed Flying-fox;
- Eastern Bentwing-Bat;
- Large-footed Myotis;
- Greater Broad-nosed Bat; and
- Cumberland Land Snail.

The area also contains foraging, roosting and breeding resources predicted to be used by local populations of threatened micro-bats.

The design of the M-Lock bridge with its simple pier structure (as opposed to box culverts) would continue to allow the movement of fauna along the riparian zone. GHD considers that the proposed development would be unlikely to threaten the survival of local populations or result in any significant impact to fauna species found in the area due to the small amount of vegetation to be removed as a result of the proposal.

Notwithstanding, an assessment of significance was undertaken for the project to assess the impact of the loss of EEC and potential impacts to native wildlife from the proposal. It was found that the environmental measures undertaken in the development of the bridge and road alignment may not mitigate all impacts on native flora and fauna within the proposed disturbance area; and therefore it is considered that an offset is appropriate.

A wider strategy, which provides for the offset of the loss of 0.87ha of Shale Plains Woodlands and River Flat Eucalypt Forest, has been developed by GHD and aligned with the existing off-set strategy for the site. The proposed offset area was determined in consultation with Council, and amounts to the rehabilitation and revegetation of approximately 3ha of existing vegetation along the eastern side of Hinchinbrook Creek, towards the northern end of the corridor (see Figure 6).

Both NOW and DECCW raised concerns with potential impacts to biodiversity in the area. DECCW requested further information on the assessment of significance of the impact of removing Cumberland Plain Woodland, and on what avoidance or mitigation measures had been considered in determining the position of the road alignment. Mirvac submitted additional information regarding the issues raised by DECCW. DECCW did not object to the proposal based on the information provided.

NOW raised concerns with the width of the bridge crossing and made a number of recommendations regarding Hinchinbrook Creek riparian corridor. These recommendations included: amending the design of the bridge to allow at least a 50m riparian corridor on either side of the creek; that the piers are located outside the channels and the banks of the creek; that the culverts have a naturalised base to enhance fauna movement. NOW also advised that the revegetation activities proposed to the north of the bridge crossing should not be undertaken in High Flood Risk areas, as was indicated in the letter from Council which was included in the EA.

Mirvac argue that constructing the bridge to span the entire riparian corridor is not feasible. It is further argued that the proposed design and offset allows the bridge to maintain connectivity of riparian vegetation and that the locations of the bridge piers were selected to ensure that piers were as far removed from the creek as possible. Mirvac also confirmed that in areas indicated as 'High Flood Risk' only regeneration activities would occur as recommended by NOW. The Department considers this approach acceptable in maintaining the connectivity of the riparian corridor.

As mentioned, Mirvac and Council have an existing VPA regarding the previously approved offset area developed for the rezoning of the Hoxton Park Aerodrome. As the additional proposed offset area is also on Council owned land, Mirvac has proposed to establish and maintain the offset for a period of 3 years,



after which time all management responsibilities would return to Council. Mirvac proposes that funding and maintenance requirements for on-going management for the offset area would be included in an agreement between Mirvac and Council. Council has raised no objection to undertaking ongoing maintenance and management of the offset area.



**Figure 6: Proposed Bridge Crossing Offset Area**

In addition to the offset arrangement, a Vegetation Management Plan has been prepared for the project and outlines regeneration zones along the road and bridge alignment, and identifies appropriate species for the purpose of replanting. Mirvac proposes to implement a fauna management protocol during the construction of the bridge to limit any potential fauna impacts.

The Department is satisfied that impacts to flora and fauna have been adequately assessed. Although the construction of the bridge and link road would require the removal of approximately 0.87ha of vegetation, it is considered that through the implementation of the proposed offset strategy (at around 3.4:1) and recommended mitigation measures outlined in GHD's Ecological Assessment, impacts to biodiversity in the area are acceptable subject to the proposed management measures. The Department has included a condition requiring Mirvac to implement the offset strategy proposed, update the VPA to



include the additional offset area, and develop a vegetation management plan to the satisfaction of Council.

## 4.2 Other Issues

Other issues raised during the assessment process, and the Department's consideration of the issues are summarised in Table 1 below.

**Table 1: Consideration of Other Issues**

<b>Issue</b>	<b>Potential Impacts/Consideration</b>	<b>Recommendation</b>
<b>Stormwater</b>	<p><b>Southern Detention Basin</b></p> <ul style="list-style-type: none"> <li>▪ Currently an open drainage channel passes through the south western corner of the site, conveying flows from the M7 and upstream catchments to the existing downstream outlet under Cowpasture Road.</li> <li>▪ The Concept Plan layout identified the south-western corner of the site as SP2 Infrastructure, providing for the future development of a stormwater basin, following the finalised stormwater design for the site.</li> <li>▪ During the assessment of the original Concept Plan and Stage 1 Infrastructure Project the Department commissioned Council to undertake an assessment of the proposed stormwater management for the site. This was found to be adequate.</li> <li>▪ Notwithstanding, the Department included a condition requiring the conceptual design of the stormwater management system to be finalised in a stormwater management plan.</li> <li>▪ Subsequent to the Concept Plan and Stage 1 Infrastructure approvals, Mirvac revised the stormwater management strategy for the site. The revised design proposes to construct an underground network of pipes and box culverts, in lieu of a stormwater detention basin or an open channel.</li> <li>▪ This plan, submitted to the Department in June, was designed in consultation with Council and included the proposed underground stormwater drainage design for the south-western corner of the site.</li> <li>▪ The design allows for all runoff from 1.5 times the 1:100 year ARI storm event peak discharges being conveyed underground in the trunk drainage network, discharging into the existing concrete channel and box culverts below Cowpasture Road and then on into the regional detention basin.</li> <li>▪ Due to this, the previously proposed stormwater detention basin located in the south-western corner of the site is considered unnecessary and has been proposed for rezoning.</li> <li>▪ The Department and Council are satisfied that stormwater can be adequately managed to negate the need for the stormwater detention basin in the south-western corner of the site, and that the bridge crossing and link road would not adversely affect stormwater management or flooding in nearby areas.</li> </ul> <p><b>Bridge Crossing and Link Road</b></p> <ul style="list-style-type: none"> <li>▪ With regard to the bridge crossing, the flood assessment undertaken for the proposal found that the amount of water level rise predicted for upstream and downstream of the bridge would not impact on the residential land to the north of the industrial Estate, or the flood free status of Cowpasture Road.</li> <li>▪ However, modelling found that the bus depot site would be flood affected in the 100y 2h event.</li> <li>▪ Mirvac has committed to flood mitigation measures for the protection of the bus depot, and to reduce flow velocities which are likely to be increased by the proposed link road.</li> <li>▪ The Department and Council are satisfied that through the implementation of flood mitigation measures, the bridge and</li> </ul>	<ul style="list-style-type: none"> <li>▪ Recommended conditions require the Proponent to update any relevant stormwater or environmental management plans to include the proposed bridge crossing and link road, and to construct the flood mitigation measures recommended for the bus depot.</li> </ul>

	link road would not result in any significant impacts to stormwater management in the area.	
Noise	<ul style="list-style-type: none"> <li>Renzo Tonin &amp; Associates undertook a noise assessment for the construction and operation of the northern access and associated bridge link road.</li> <li>The assessment predicted traffic noise levels of 51-52dB(A) at the nearest potentially affected receivers.</li> <li>This is below the future predicted noise levels of 63dB(A), as identified in the Heggies Report for the future upgrade of Cowpasture Road.</li> <li>Therefore, no additional noise mitigation measures have been proposed for the modified development.</li> <li>The Department is satisfied that the proposed modification would not result in any significant noise emissions.</li> </ul>	<ul style="list-style-type: none"> <li>No additional conditions are recommended.</li> </ul>
Traffic	<ul style="list-style-type: none"> <li>The traffic assessment included traffic flows generated by the Hoxton Park development and other developments, including the entire Len Waters Estate and Elizabeth Hills residential area.</li> <li>The assessment found that in 2026, both the southern and the northern access intersections to Hoxton Park Estate, would operate at a B level of service, with minimal delays and spare capacity.</li> <li>The proposed northern intersection at Cowpasture Road has been designed to accommodate the turning circles of a B-double truck.</li> <li>The proposed road and intersection would be designed to comply with the relevant Australian Standards.</li> <li>The RTA supports the proposal in principle, however recommended a number of conditions regarding the design of the signalised intersection on Cowpasture Road; the requirements for the Proponent to enter into a Works Authorisation Deed; and also specified the volume of stormwater permitted to discharge into the RTA drainage system.</li> <li>The Department is satisfied that the proposed modifications would not have any significant impacts on the surrounding road network, and that the proposed second access to the site has been designed in accordance with the Concept Plan approval.</li> </ul>	<ul style="list-style-type: none"> <li>The Department has included the RTA's recommendations in the conditions of approval, including a requirement for Mirvac to construct the signalised intersection to RTA guidelines; and to enter into a Works Authorisation Deed with the RTA prior to works commencing.</li> </ul>
Visual	<ul style="list-style-type: none"> <li>A visual impact assessment was undertaken for the proposed bridge crossing and link road at two locations, including the residential areas directly to the east, and to the north of the proposed link road.</li> <li>With regard to residents located to the east of the site the assessment found that the link road would be significantly screened from view by vegetation, and that any views to the proposed bridge and link road would be primarily seen against a backdrop of dense riparian forest.</li> <li>Further, the visual impact of the development on users of Cowpasture Road is expected to be minimal.</li> <li>The assessment also includes consideration of the Council's potential future proposal to develop playing fields north of the proposed link road.</li> <li>The construction of the playing fields would require the removal of an expanse of open forest, which would "open up" views of the link road for nearby residents and users of Cowpasture Road.</li> <li>However, the bridge would be substantially softened by surrounding vegetation and is unlikely to result in any significant visual impacts, should the proposed playing fields be constructed in the future.</li> <li>With regard to the proposed residential development and neighbourhood centre to the north of the site, the link road and bridge crossing, as mentioned, would be substantially surrounded by vegetation, and therefore any visual impacts are again likely to be minimal.</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>



	<ul style="list-style-type: none"> <li>▪ The Department is satisfied that any visual impacts likely to occur as a result of the proposed bridge and link road, would be sufficiently reduced by existing and proposed vegetation.</li> </ul>	
Aboriginal Heritage	<ul style="list-style-type: none"> <li>▪ The Aboriginal Heritage Assessment found that the Hinchinbrook Creek corridor has the potential to contain items or areas of Aboriginal cultural significance.</li> <li>▪ The proposed road and bridge alignment was assessed as part of the Concept Plan application.</li> <li>▪ Although the road alignment has been amended slightly since the original design, Aboriginal stakeholder groups in the area did not find it necessary to undertake further field surveys.</li> <li>▪ The recommendations outlined in the original assessment remain relevant for the amended project.</li> <li>▪ Further, it is considered that the existing conditions of approval are sufficient in managing Aboriginal cultural heritage impacts on-site.</li> <li>▪ The Department is satisfied that the proposal would not result in any significant impacts to Aboriginal heritage values in the area.</li> </ul>	<ul style="list-style-type: none"> <li>▪ No additional conditions have been included in this regard.</li> </ul>

## 5. RECOMMENDED CONDITIONS OF APPROVAL

The Department considers that the proposal represents a minor modification of the project as approved and would not have any impacts beyond that assessed and approved.

The Department has recommended minor amendments to the Concept Plan and Stage 1 Infrastructure Project approval to include the modification application within the terms of the approval.

## 6. CONCLUSION


The Department has assessed the merits of the proposal in accordance with the requirements in Clause 8B of the EP&A Regulation.


This assessment has found that the proposed modification is minor and is unlikely to cause any significant impacts beyond that assessed and approved. Consequently, the Department believes the proposed modification is in the public interest, and should be approved.

## 7. RECOMMENDATION

It is **RECOMMENDED** that the Director-General:

- **approve** of the proposed modification under Section 75W of the EP&A Act; and
- **sign** the attached instruments (tagged A).

  
 Chris Wilson  
 Executive Director  
 Major Projects Assessment

Haley Rich  
 Mining & Industry Projects  
  
  
 Sam Haddad  
 Director-General  
 11/4/2011