# Walsh Consulting

Environmental Planning • Public Policy • Management Planning

Peter Walsh MBA DipUrbRegPl BSurv FPIA www.walshconsulting.com.au

21 May 2012

BP Australia Pty Ltd 132 McCredie Road GUILDFORD NSW 2113 Attention: Joanne Harvey (Network Development Manager – NSW/VIC)

Dear Ms Harvey

#### Comments on Proposed North West Rail Link Proposals with respect to BP Bella Vista

#### **Summary**

- 1. The development as currently proposed would bring a significant impact on accessibility to the BP Bella Vista site through removal of the important north-east ingress and egress movements, and replacement of the existing Celebration Drive/Lexington Drive roundabout with traffic signals, affecting the current site egress to Old Windsor Road. The EIS acknowledges that the changes "may lead to a reduction of trade" at the BP site. The EIS also undertakes that access to BP Bella Vista "would be relocated to provide the same level of access" (EIS p13-19). It is not clear yet how this might be achieved. Further discussions between BP and Transport NSW are required on this point, after the completion of the formal exhibition period. A site specific Traffic Management Plan is warranted.
- 2. BP Bella Vista directly abuts the edge of the main construction site for the Bella Vista Service Station box, main tunnel portal from which spoil will be excavated, and the tunnel boring machine service point. Noise, dust and vibration effects are likely to be considerable without very effective mitigation. A particular concern is in regard to fuel tank integrity given the close proximity of major construction activity. The Proponents should engage specifically with BP specialists on this issue as soon as may be practical. Stormwater management will also require close attention, and it will be important to ensure that the "high voltage power supply" required for the very adjacent tunnel boring machine does not cause residual effects. More detailed suggestions for action on each of these matters are outlined below. There will also be some visual effects which we would consider less significant.
- 3. BP shares ownership of what is intended to be a key construction vehicle accessway, land which currently provides access to the BP Bella Vista site. We understand at this stage that the proponents have not yet had contact with BP in regard to this property related matter. It is important that this dialogue be commenced to optimise opportunities for constructive dialogue on Point 1 above.

# Introduction

As requested we have undertaken an analysis of the Environmental Impact Statement (EIS) and related documentation accompanying Transport NSW's current development proposals relating to the above, with a view to an analysis of the potential impacts on BP's Bella Vista site and the reasonableness of such impacts.

We note that GTA Consultants have been commissioned to review the traffic implications on BP Bella Vista, in particular, and we have had the opportunity to review the GTA submission, and discuss these matters with Ken Hollyoak of GTA. We also appreciated the opportunity to meet with representatives of the proponents on 11 May and discuss some of our considerations. This letter provides a summary of our findings having regard to these actions. We endorse the submission of this correspondence as part of BP's response to the public exhibition process for the current NWRL proposals.

#### **Two Relevant Applications**

It is important to appreciate that there are two current applications before the Minister for Planning of relevance to BP Bella Vista, as follows:

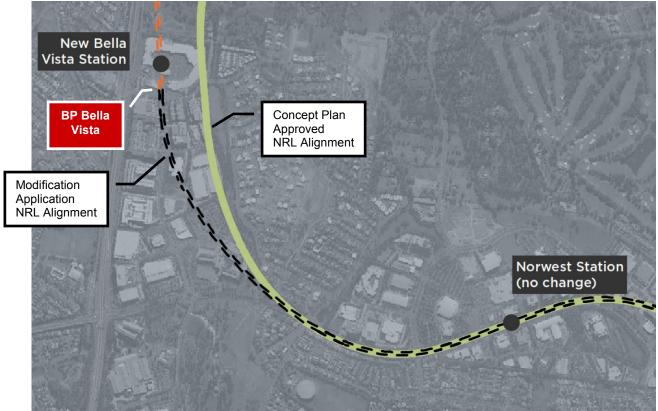
- North West Rail Link Staged State Significant Infrastructure Modification
- North West Rail Link Major Civil Construction Works.

#### **Modification Application and Siting of Bella Vista Station**

The exhibition material and the EIS prepared by Transport NSW addresses both of these applications. While for many interested parties the State Significant Infrastructure Modification proposal will not be relevant, and the major interest will be in construction aspects of the proposal, this is not the case for BP. The original Concept Plan approval of 2008 and the Modification application are entirely different in terms of the implications for the BP Bella Vista Site. In fact there was no Bella Vista Station in this approval.

**Figure 1** indicates that rather than an underground rail line at some 200m distance to the east from the BP site, which was previously approved under the Concept Plan approval, the Modification proposal would provide for a new open cut railway station immediately to the east of the BP Bella Vista site.

In particular it is noted that the development site appears to actually encompass a key access road to the BP site (ie the northern extension of Lexington Drive) which falls within common property to the community title scheme of which BP is one of the owners. That is, and according to our advice to BP's very recent surprise, the modification application actually encompasses land to which BP has a share of ownership in.



**Figure 1:** Proposed Shift in Alignment of Rail Alignment and Location of New Station at Bella Vista (source: EIS Excerpt from Fig 6.4 – Black linemark indicates underground, Red linemark indicates aboveground)

**Figure 2** overpage shows the BP Bella Vista site and current access arrangements highlighted in black pen. For BP, the most important consideration in regard to the siting of Bella Vista station is managing the access arrangements to minimise business impacts.



**Figure 2:** BP Bella Vista Site and current access arrangements in black. (source: GTA Correspondence to BP dated 16 May 2012)

Our practice was involved in the original DA to Baulkham Hills Shire Council for BP Bella Vista site some years ago now and as we recall the business decision to locate on this site (ie without ingress or egress right turn movement opportunities at Celebration Drive due to median strip requirements) was significantly reliant on retention of the alternative north-east access via the Celebration Drive roundabout. Some of the options for this remaining are discussed below. However there is one consideration more relevant to the Concept Plan modification which we would raise. **Figure 1** on previous page (source: EIS Ch6 Fig 6.4) indicates the BP Bella Vista site at the cusp of the separation between underground and above ground work (black line marking vs red for above ground). This begs the question whether the final configuration of undergrounding or cut and cover vs open cut/above ground has been resolved, and whether the final position on the line of demarcation between undergrounding and otherwise may also be able to consider the issue of access for BP Bella Vista (and McDonalds of course which experiences many similar access issues on the face of it). The proponents (EIS p13-19) indicate a commitment to make good access to BP Bella Vista and at this stage we merely question whether this might be best addressed in the Modification Application component of the current project in regard to the demarcation point for tunnelling vs above ground work.

## **Major Civil Construction Works**

The bulk of the EIS is concerned with construction stage impacts. There are some concerns or queries which should be addressed in the assessment of the application as indicated below.

### Traffic Management

GTA examines the traffic implications in detail and we defer to this technical advice which warrants full scrutiny. The EIS notes the construction stage impacts on BP as follows:

#### Negative impacts due to construction related works

Accessibility to the McDonalds and BP service station would be significantly affected as a result of construction works. The entrance to these businesses, through the Totally Home shopping centre (to be demolished as part of the works), would be removed and relocated which may lead to a reduction in trade. However, access to these businesses would be <u>relocated to provide the same level of access</u>.

(Source EIS p13-19, our emphasis)

This undertaking is important for the operation of BP Bella Vista. However, it is not clear yet how this might be delivered. There appear to be three main options for the treatment of the residual access arrangement for BP Bella Vista, as follows:

 The current EIS proposal suggests removal of the northern arm from the roundabout as far as BP traffic is concerned. It appears this roadway would be used for construction traffic only. This would result in losses of trade to BP proportionate to the popularity of that movement. In addition traffic signals would replace the existing roundabout. This presents the worst case outcome for BP as the existing roundabout plays an important role in allowing customers to egress the site easily back onto Old Windsor Road.

- A second option would retain a roundabout at this intersection (rather than lights). It is noted that an expanded (two lane) roundabout configuration would be required. However this does seem possible given what we understand is an intention to demolish the building at the south-west corner of the existing roundabout (Bristol Decorator Centre). This would result in lesser losses to BP as the egress from the service station would still have opportunity to access Old Windsor Road.
- The third option would allow retention of the northern egress from the site and a roundabout. That is, the existing private road, or an alternative access across the Bristol Decorate Centre site would be constructed which satisfactorily managed both the construction and BP traffic.

It is acknowledged that there are complex traffic issues surrounding the construction of the Bella Vista Station site and in particular in the fact that this site will be used as a key base for tunnel excavation. However, as suggested at p13-19 of the EIS there is justification in allocating reasonable resources to think through the best access arrangements overall. This is particularly so given that BP currently holds a share of the ownership of land which is appears to be intended to be acquired for the project. The proponents have not yet indicated how they intend to deliver on the undertaking to provide the same level of access. It is recommended that this occur through the preparation of a Traffic Management Plan for the area in consultation with BP's traffic expert. This would need to occur after the exhibition period has concluded.

#### Noise

As indicated in **Figure 3**, the BP Bella Vista site immediately abuts the major construction site in the vicinity which would emit very high noise levels (railway station construction box, tunnel boring portal, tunnel boring machine services area). BP service stations are commonly located on major roads with attendant traffic noise, and it is acknowledged that customers are not expecting the highest of amenity levels at service stations. But this presents as one of the major construction projects in Australia. As such a reasonable concern from BP is the extent to which extremely noisy activities on the site may drive away custom or introduce occupational health and safety issues for BP staff, or require special on-site actions by BP to prevent staff or customer exposure to extreme noise levels.

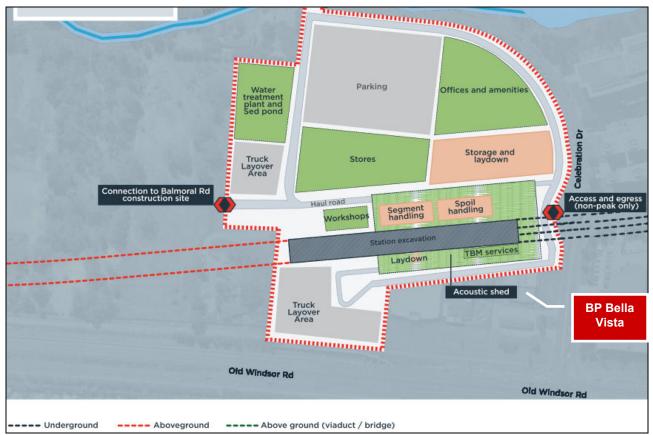


Figure 3 – Proposed Bella Vista Station Layout and BP Site

(Source EIS - Fig 7.19 – "indicative only" according to EIS with "final layouts to be determined by contractors")

The EIS includes noise impact assessment and notable mitigation proposals, including 3m acoustic screens and construction of an acoustic shed for a key component of the works. However actual noise impacts of the proposal on BP Bella Vista are unclear. The noise analysis undertaken for the project is summarised at Ch 10 of the EIS with Technical Paper 2 providing the base information for this work. The BP Bella Vista site is in "Receiver Area E" – defined as "commercial on Old Windsor Road adjacent (to the site) to the South West" (p10-42) and see **Figure 4** below.



Figure 4 – Proposed Bella Vista Station Layout and BP Site

(Source EIS – Excerpt from "Figure 10.8 Location of sensitive receivers near Bella Vista Station and Pre-cast Facilities")

The EIS work includes assessment of noise impacts on what are termed "sensitive receivers" distinguishing between "residential" and "other" (which we take to include commercial activities like BP). We raise the following points of concern in regard to the treatment of the BP Bella Vista site in this assessment.

Item	Concern
<ul> <li>The nearest assessed receiver within Receiver Area D is indicated to be a minimum of 195m from the closest location of construction activity.</li> </ul>	The BP site is immediately adjacent to the construction boundary
<ul> <li>The map at Figure 10.8 (as indicated above) marks non- residential sensitive receivers within Area D though orange markers</li> </ul>	The markers do not indicate the BP site, but a commercial site further distant than BP.
<ul> <li>Construction NMLs of 70 LAeq(15min)(dBA) are suggested (Table 10.18).</li> </ul>	Have these estimates been based on distance attenuation which would be experienced at the BP site (ie not 195m from the construction site but adjacent).
<ul> <li>Construction NMLs are indicated as "N/A" (we assume Not Applicable) for the Evening and Night Time noise periods</li> </ul>	We are advised BP Bella Vista site operates 24 hours. It is not reasonable to consider impacts after hours as not applicable as significant noise levels could cause loss of trade due to amenity concerns and bring both amenity and health effects to employees.
<ul> <li>Noise Modelling Scenarios at Table 10.19 indicate:</li> <li>Compliance for station box construction (daytime)</li> </ul>	Has the test taken account of the BP Bella Vista site's location
<ul> <li>Excedances of "less than or equal to 10 dB" for:</li> <li>establishment earthworks, and station excavation,</li> <li>compliance for station box construction (daytime),</li> <li>TBM support and pre-cast yard operations (daytime)</li> </ul>	immediately adjacent to the construction site?  As above.
<ul> <li>"N/A" for: station box construction (evening), TBM support and pre-cast yard operations (night-time)</li> </ul>	The BP Bella Vista site operates extended hours and includes outdoor activity for patrons, and is unreasonable to assume non applicability of noise impacts.

Even if the BP site were consciously excluded from the analysis (eg the commercial building south of Celebration Drive and indicated by the orange dot in Figure 10.8 seen as more sensitive), it would still be reasonable for there to be information on the construction stage noise impacts on the BP site (over the extended 30 month period) to allow BP to be in a position to assess business and occupational health and safety impacts. This is not possible with the information at hand.

#### **Fuel Tank Integrity and Other Structural Considerations**

While this was not a matter for the original Concept Plan approval given that tunnelling was some 200m from the site, it is now proposed that the major station box excavation and tunnelling activities including tunnel boring machine movement, associated vibration (especially should there be a need for any blasting in this vicinity) occurring in close proximity to the underground fuel tanks at the BP Bella Vista sites. It would seem appropriate for an environmental assessment to give consideration to the management of any risk associated with this. We do note that a general suggestion in the EIS that before and after dilapidation surveys would be undertaken, however we suggest that the final approval needs to include special provisions to effect regular monitoring of BP Bella Vista fuel tanks, or an alternative specific provision to manage risk of environmental harm. In our discussions on this topic, BP technical specialists have expressed a willingness and in fact keen interest in meeting with the proponents on this particular matter as soon as may be practical. General structural risk management concerns for all BP assets will need to be managed including in relation to the vibration, earth movement associated with groundwater effects and drainage

#### **High Voltage Power Supply**

It is indicated that the tunnel boring machines will require installation of "high voltage power supply". While not experts we are aware that high voltage supply usually has particular attenuation requirements. Given the immediacy of the tunnel boring machine and its service centre it is of direct interest to BP operations that all requirements for distance attenuation and other safeguards are met both in terms of public safety and technical equipment interference.

#### Other Issues

#### Air Quality

The main issues here are dust from works, the risks associated with massive spoil removal etc (ie consider the strict controls on BP) emissions from machinery. The EIS acknowledges the potential for dust impacts in the above ground alignment from Bella Vista station. With BP Bella Vista immediately adjacent to station box construction and the tunnel entrance, and given the outdoor activity required by customers using the site, there will be adverse effects unless strict dust management procedures are implemented. Conditions to this effect would be expected.

BP Bella Vista will also be on the travel path for the spoil removal exercise associated with the works. The EIS indicates that at the Bella Vista site there will be "removal, storage and/or transport of 65,000 m3 of spoil from the station cavern excavation and 365,000 m3 from the tunnelling work". These are quite massive amounts of material and sound environmental management will be essential if impacts are to be mitigated. It is important to note that Bella Vista is one of a number of centres proposed for tunnel excavation, and the impact assessment for Bella Vista is reliant on the volumes indicated. This relies on other excavation sites relevantly being committed to their share of the excavation. That is, it is important that the Hills Centre site go ahead as a tunnelling excavation point to ensure greater impacts are not experienced at Bella Vista than has been suggested in the EIS.

#### Consultation

Consultation has no doubt been a major piece of work for this project given its large scale. As far as BP interests are concerned there has been good very recent dialogue with Rebecca Raap as Bella Vista consultation "place manager". Given the short time periods involved it was helpful also to meet a group of technical professionals at the NWRL project office on Friday 11 May. However, there remain some concerns about direct consultation with BP about the Modification Application and the construction project. The Concept Plan approval (condition 3.1(f) required:

An appropriate and justified level of consultation with relevant stakeholders including a description of how stakeholder input has been considered in decisions on design and/or mitigation;

This should be read with CoA 2.2 which requires the (then proposed) stations to be integrated with surrounded land use to minimise potential for land use conflicts. BP will be very directly impacted by this project. According to our advice BP has not up until the last number of weeks had any input into the project. The particular concern of course is in regard to the surprising effects the project will have on property which is in BP's ownership, as a current common property holder of what is proposed as a key access corridor into the

# **Walsh Consulting**

Bella Vista Station construction centre. The loss of this access, especially if the roundabout traffic movements at the Celebration/Lexington intersection are also lost will have a significant effect on BP's operations. We understand BP is submitting separately on this particular property-related point.

We note there is a future commitment to undertake consultation with business owners near stations during the design phase (SoC 45), and with sensitive design there may be some benefits, albeit suggested as "slight" in the EIS. This commitment is important and should be confirmed, but there is a concern that the design phase will be too late for this activity to occur in relation to some of the key business interests of the BP Bella Vista site. In our view there would be value on both sides if there were some commitments to working to a more sophisticated treatment of the access issues for the BP site both for construction stages and in the longer term.

Yours sincerely

Peter Walsh

Director

**Walsh Consulting**