

MINUTES OF MEETING

Meeting Number 31

CLG	Toombul Community Liaison Group				
Location:	Visitor Information Centre, Lutwyche	Date:	14/06/11	Time:	6:00pm

These minutes are not intended to be a verbatim account of the CLG meeting but are a summary of the key issues raised, actions arising from the meeting and outcomes of actions raised at previous meetings.

Chaired By: Barrie Spring	Minuted By: Thiess John Holland	Distribution Date: 30.06.11
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Attendees: Denise Keim (DK), Paul Atkinson (PA), Robert Standish White (RSW), David Russo (DR), Peter Maddern (PM), Ray Duggan (RD), Toby Murdoch (TM)
Anthea Craig (AC) – TJH, Georgina Thrum (GT) – TJH David Hake (DHk) – TJH, Tim Lennon (TL) – TJH, Jamie Richters (JR) – TJH, Russ Beynon (RB) – TJH, Charles MacDonald (CMac) – BrisConnections, Louise Litchfield (LL) – CNI, Kerry Wastell (KW) - CNI, Michelle Barisic (MB) – CNI, Alex de Aboitiz (AdA) – CNI, Barrie Spring (BS) – Facilitator, Jess Duncan – minute taker
Apologies: Richard Clare (RC), Deirdre McCue (DMc) – TJH,
Not Present: Mitchell Bright (MB), Darren Bodimeade (DB)

Distribution (Method e.g. email): Email

Item	Summary
1.0	<p>MEETING OPENED</p> <p>The Facilitator opened the meeting and apologies were noted.</p>
2.0	<p>ACTION ITEMS</p> <p>Action 1 – TJH to use the access road as opposed to residential streets when decommissioning the Kalinga Park Site.</p> <p>TJH advised that it will use the construction access road as much as possible to avoid use of local roads. Updates re the demobilisation of Kalinga Park will continue.</p> <p>This action will remain on the action sheet as requested by CLG members.</p> <p>Action 2 – Re Widdop St - Follow up with road authorities about the traffic island and traffic lights.</p> <p>TJH advised that the Brisbane City Council (BCC) has provided feedback that it will take over the traffic lights as they are. TJH are awaiting further advice in regards to the pedestrian refuge island located north of the intersection and south of the Centro Toombul vehicle access point on Melton Road.</p> <p>ACTION: Action above will be changed to refer to the traffic island only.</p> <p>Action 3 – Report back to the CLG once issues with the drain (under QR) in Kalinga Park have been resolved.</p> <p>TJH advised that the design has been approved and it is currently going through the final design sign-off.</p>

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	<p>Action 4 – Inspect and carry out maintenance at Schulz Canal. TJH advised that maintenance was completed approximately two weeks ago.</p> <p>Discussions and questions arising</p> <p>A CLG Member noted that grass cutting still needs to take place upstream of the Widdop Street bridge and weeds are still growing through the East West Arterial Road noise barrier on the residents' side. The Member further advised that the embankment on the Widdop Street off-ramp has been done.</p> <p>ACTION: TJH to look into maintenance upstream of the Widdop Street bridge and along the East West Arterial Road noise barrier.</p> <p>Action 5 – Re Noise Barrier: check the thickness of the polycarbonate panels against the design; identify all relevant parts of the report pre and post installation; look at the technical issues of painting such as design life criteria. TJH advised that initial monitoring was carried out at Wongara Street as part of the EIS. This measured existing levels at 58dba La10 (18hours). The Project conditions stipulate the noise goal for the Project is 68dba La10 (18hours) and that the noise wall has been designed to comply with this condition.</p> <p>Acrylic samples 20mm thick were brought to the CLG meeting to give an indication of the colours that would be used and their opaqueness. The polycarbonate panels that have been used in the noise wall are 14mm thick.</p> <p>Modeling carried out as part of the design process indicates that six properties will not meet the noise goal by 1-2dba along the northern side of Wongara Street and these properties have been assessed for mitigation which needs to be signed off by the land owner.</p> <p>The timber infill panels could not stay as they do not meet DTMR requirements and standards PSTS15 or MR15. In determining suitable material to maintain operational noise goals polycarbonate panels were chosen. The barrier needs to have a 40 year design life.</p> <p>A CLG Member asked if TJH are still intending to paint the barrier. TJH advised that the polycarbonate panels have a 15 year warranty which is based on the colour and layer of UV protection. At present the application of the paint has a 10 year warranty. TJH is currently liaising with suppliers to make sure the warranty and design requirements are met.</p> <p>A CLG Member asked which homes are not meeting noise requirements. TJH advised they cannot identify the specific properties however three of the properties were located at the member's end of Wongara Street, and the others are at the higher end of the street. DTMR are very specific in regards to how these issues are addressed and their guidelines suggest that some form of ventilation will be used to reduce noise impacts.</p> <p>A CLG Member asked if the issue of the noise barrier rattling had been resolved. TJH advised that the issue has been resolved temporarily. In September TJH are installing the</p>

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	<p>remaining section of the noise wall where Wongara Street meets with Sandgate Road and at this time the manufacturers will return to remediate the issue permanently.</p> <p>A CLG Member asked what is causing the noise. TJH advised that an additional seal has to be added, so it may be that the initial seal was incorrectly installed.</p> <p>A CLG Member asked if the original posts were used. TJH advised that the original posts were used following a series of tests which confirmed that they were suitable and would achieve the necessary design life. This was a good outcome because any additional load required for the noise barrier would have created issues with the existing retaining wall.</p> <p>Action 6 – Detailed information for the property damage complaint escalation process to be presented at the next CLG meeting. CNI presented this process as a flow chart. This is provided as an appendix to these minutes.</p> <p>Discussions and questions arising</p> <p>A CLG Member asked what happens if CNI and the independent inspectors deem the Project to be responsible but the Project denies involvement. CNI advised that CNI is able to rectify the property damage and recover costs directly from the Project. Ultimately the Project is responsible for repairing damage that is proven to be caused as a result of the Project. The original condition report is used in this process.</p> <p>A CLG Member asked if there is an instance to date where property damage has been rectified CNI advised that it is not aware of any cases where the Project has rectified property damage, although there are still some situations that are being monitored.</p> <p>TJH asked how long the process takes. CNI advised that it is quite a detailed process that may require engagement of a structural engineer. This can take a number of weeks.</p> <p>A CLG Member asked who conducts the assessment on behalf of CNI. CNI advised that an independent Forensic Structural Engineer is engaged to conduct the assessments.</p> <p>A CLG Member asked if TJH has disputed any of the decisions made by CNI regarding property damage and how many claims have been made and if so, how many. CNI advised that there have been no disputes of CNI's investigation and findings to date and that there have not been many claims made, but noted that all claims are taken seriously.</p> <p>Action 7 – BrisConnections to advise of the final location of permanent dust monitors. BrisConnections advised that two dust monitoring stations, one located at Aviation High which is</p>

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	<p>currently being installed, and the other in Kalinga Park. Both locations have been checked with DERM regarding the suitability of their locations. The process involves a review after five years to determine whether they are to remain in place or are no longer necessary due to traffic volumes. More details of their locations, equipment and processes will be presented at a future meeting.</p> <p>ACTION – BrisConnections to present further detail about permanent Air Quality Monitoring Stations.</p> <p>Discussions and questions arising</p> <p>A CLG Member noted that the positions are a long way from the Ventilation Station Outlet and asked if any baseline monitoring was carried out in Kalinga Park prior to the commencement of the Project.</p> <p>BrisConnections advised that the monitors are placed within the area outlined within the Project conditions. No monitoring has been carried out during the construction contract.</p> <p>Ambient air monitoring is being carried out from June 30, 2011 to provide background monitoring</p> <p>A CLG Member stated that the monitors are in the wrong locations when wind from the Bay is considered.</p> <p>BrisConnections advised that two monitors will be used in the Toombul area which will account for wind direction.</p> <p>Action 8 – Break down numbers between internal and external noise monitoring sessions in CLG presentations.</p> <p>TJH advised that the action was closed and the break down of numbers will be detailed in the Environment Presentation.</p> <p>Action 9 - Investigate and report back to CLG member why the lights for the Sandgate Road underpass were not working on the 10th May (evening of CLG meeting).</p> <p>TJH advised that electrical work was being undertaken at the time which required the lights to be turned off temporarily.</p> <p>Action 10 - Email the link to the hydrology reports to CLG Member.</p> <p>The facilitator advised that links to the hydrology report were included in the May 2011 CLG minutes.</p> <p>A CLG Member asked when the CLG would be able to view the detailed landscape design.</p> <p>TJH advised that now the Queensland Rail channel issue had been resolved TJH will present what they can at a future meeting.</p> <p>TJH further advised that an information session is being organised for late July and that TJH hopes to have this information available for the wider community. It may not be ready to present at the July CLG meeting.</p> <p>A CLG member noted that at the meeting the member had with the CNI Hydrologist in relation to the area east of Sandgate Road, landscaping is relevant to hydrology and nothing could be formulated until the hydrology model was determined.</p>

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	The Facilitator advised that a presentation about hydrology would be made later in the meeting.
3.0	<p>CONSTRUCTION UPDATE</p> <p>Presentation made by Russ Beynon, North Eastern Regional Director, Thiess John Holland. The presentation is provided as an appendix to these minutes.</p> <p><i>Points covered:</i></p> <p>CC430 to Sandgate Road</p> <ul style="list-style-type: none"> • View looking towards Sandgate Road where excavation is taking place <p>Excavation under the new Sandgate Road Bridge</p> <ul style="list-style-type: none"> • The temporary roundabout has now been removed and the Sandgate Road and East West Arterial Road intersection has been returned to its final configuration. • Excavation has started under the new Sandgate Road bridge • This is underneath where the temporary roundabout was located <p>Sandgate Road through to CC410</p> <ul style="list-style-type: none"> • Although an older pictures, shows the connectivity between the sections <p>East West Arterial - Trough</p> <ul style="list-style-type: none"> • Road barriers are being installed • Green Wall will be installed behind these barriers • Baskets for the Green Wall are currently being grown at a nursery and they will be ready to install shortly <p>Sandgate Road Footpaths</p> <ul style="list-style-type: none"> • Shows which sections have been completed • An outstanding issue in relation to completing the footpaths includes an APA gas main which needs to be installed along the western side of Sandgate Road north of Kedron Street, however APA they have limited resources and TJH are currently fourth on their list <p>Location of permanent noise wall – Alma Rd</p> <ul style="list-style-type: none"> • TJH has been consulting with the Department of Housing, who own the adjacent property, as well as the residents as to the best location for the wall • Based on feedback, the permanent noise wall will be placed on the property boundary • To do this, TJH need to dismantle the temporary noise wall • Work is scheduled to commence in July <p>CC410 to CC421 – Smoke Ducts</p>

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	<ul style="list-style-type: none"> The roof will be put on as soon as possible after drive through access is gained from CC421 through to the East West Arterial Road trough Corbels for the smoke duct have been installed <p>Jacking Boxes</p> <ul style="list-style-type: none"> Jacking of Box 2 is now complete and in position beneath the North Coast Railway Box 1 has been jacked approximately 15m and still has another 30m to go and is scheduled to be in place by late June / early July TJH are averaging approximately 1m per shift as TJH are not encountering the same obstructions beneath the railway as was the case with the first box Coring is taking place on the floor slab to expose the top of the piles so the base slab can be poured. Demolition work is underway at the front and back of the JB2 structure At the rear of JB2 coring and wire ropes are being used to remove the jacking raft The face of the jacking box fits under the concrete slab on the western side of the railway line <p>VSO – Mechanical & Electrical Fit Out</p> <ul style="list-style-type: none"> Installation of attenuators is complete Fans are being installed <p>Discussion and questions arising:</p> <p>A CLG Member asked if TJH intended to plant out the area once the wall was up. TJH advised the aim is to landscape directly in front of the wall however there will be some restrictions due to space.</p> <p>A CLG Member asked when the roof of the structure goes on, will it require a concrete pour and if so, would TJH use the 24hr allowance. TJH advised that they are trying to work behind themselves, so the floor will be poured as the boxes are pushed in, then the walls will be installed and the roof will be going on closer to the end of the year. Large concrete pours of 15-18 hours will be necessary throughout construction of the tunnel at this location. Work will continue in this area six days, five nights as previously advised.</p>
4.0	<p>TUNNELLING CONSTRUCTION UPDATE</p> <p>Presentation made by David Hake, TBM Construction Manager, Thiess John Holland. The presentation is provided as an appendix to these minutes.</p> <p><i>Points covered:</i></p> <p>TBM Progress as at 14 June:</p> <p>Rocksy</p> <ul style="list-style-type: none"> Excavated a further 266.86 since the last meeting, a total of 2131.36m

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	<ul style="list-style-type: none"> • 260m to go to the burial chamber <p>Sandy</p> <ul style="list-style-type: none"> • Excavated a further 348.79 since the last meeting, a total of 2027.79m • 240m to go to the burial chamber <p>Rocksy & Sandy tunnels</p> <ul style="list-style-type: none"> • Both currently tunnelling through rock • Progressed through the low point in the Kedron Caverns and are now climbing .7% • Scabblers can be seen along the roof in both tunnels • Hangers and bolts are ready to be installed for smoke ducts • Road deck flooring is in place <p>Burial Chamber:</p> <ul style="list-style-type: none"> • Lutwyche Cavern can be seen in the background • Lifting beams over the top are 40m long • 15 tonne & 20 tonne lifting cranes are in place • The burial chamber is 14m² • Props from the CC410 box are being reused • Both machines will be driven into the chamber, out onto the 2m deep steel beam and then jacked down <p>Cross Passages:</p> <ul style="list-style-type: none"> • XP28 <ul style="list-style-type: none"> ○ Excavators are forming a 2.6m cross passage through hard rock ○ Will be finished with an in-situ concrete pour • XP39 <ul style="list-style-type: none"> ○ The steel lining has been encased with shotcrete ○ In-situ concrete lining complete and it is ready for hand over to MEFT • XP41 <ul style="list-style-type: none"> ○ Lining is complete and has been handed over to MEFT who have commenced block work ○ Once cross passages are completed by the tunneling team they are handed over for MEFT with approximately one handed over to MEFT a week • XP36 <ul style="list-style-type: none"> ○ Rebar work and the waterproof lining are in place ○ Prepped and ready for the last check pour <p>Settlement Drawings were provided for the CLG Members to view.</p>

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	<ul style="list-style-type: none"> • Movement from the TBM's is negligible <p>Discussion and questions arising:</p> <p>A CLG Member asked the location of cross passage 39. TJH advised the location was Lewis Street</p>
5.0	<p>ENVIRONMENTAL MONITORING UPDATE</p> <p>Presentation made by Tim Lennon, Environment Coordinator, Thiess John Holland. The presentation is provided as an appendix to these minutes.</p> <p><i>Points covered:</i></p> <p>Monitoring Summary</p> <ul style="list-style-type: none"> • Internal and external monitoring sessions have been broken up <ul style="list-style-type: none"> ○ There were 20 internal sessions and 141 external sessions ○ One exceedance was recorded during this period • Six vibration monitoring sessions were undertaken with no exceedances • Three air quality monitoring sessions were undertaken with no exceedances <p>Monitoring Summary - Vibration Equipment Locations</p> <ul style="list-style-type: none"> • 104 Kedron Park Rd • 11 Park Rd • 673 Lutwyche Rd (heritage listed Church) • 663 Lutwyche Rd (Woolloowin State School) • 9 Norman Ave • 9 Isedale Street <p>Construction Noise Monitoring Results</p> <ul style="list-style-type: none"> • The noise exceedance occurred at 1/77 Stuckey Road, Clayfield. • TJH have contacted the stakeholder and are waiting to hear back from the stakeholder. <p>Discussion and questions arising:</p> <p>A CLG Member asked if vibration monitoring was undertaken around where the jacking box operations are taking place as his home is shaking, and if so where. TJH advised that vibration monitoring was undertaken at the end of Elliot Street after the Easter break. No exceedances were recorded.</p> <p>A CLG Member read the following statement:</p> <p>At the 12 April 2011 meeting of the Toombul Community Liaison Group meeting it was reported</p>

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	<p>in the Environmental Update that there were no noise exceedences recorded in the previous month.</p> <p>When we have had noise exceedences reported -- these have largely been attributed to sources external to the project including geckos in homes and domestic activities.</p> <p>It belies any rational or real world common sense to believe that living beside the nation's largest infrastructure project, and the first to be allowed by any government to work continuously at night on the surface, that the project could not be producing excessive noise.</p> <p>Thiess John Holland and Brisconnections were given approval to work at night because of its assurances it would not produce excessive noise.</p> <p>Out of sheer frustration, I requested for the Department of Environment and Resource Management to undertake noise monitoring at my home on Thursday 17 March 2011.</p> <p><i>DERM recorded non-compliances and excessive noise results which have been reported to the Coordinator-General.</i></p> <p>To my knowledge, this is the first and only occasion that DERM has conducted in home monitoring at night on the Eastern Toombul side of the project.</p> <p>What the results clearly show is that the TJH monitoring has been flawed and it has been inaccurately reporting to this group and the community.</p> <p>As a community, we also totally reject the notion that in accepting any form of mitigation, that night time noise exceedences at the source no-longer represent a non-compliance.</p> <p>Given the history of the project to date, it is unlikely the Coordinator-General will take any action, although I acknowledge that there has finally been an increased vigilance and involvement by DERM.</p> <p>It is important that this information is placed on the public record, because it clearly shows is that any contractor working on infrastructure projects cannot and should not be allowed to self monitor.</p> <p>Could this please be placed in the minutes to correct what was reported to the April meeting.</p> <p>TJH advised that it is not able to report on DERM findings, and for TJH's results to be compared with DERM's, monitoring needs to be undertaken simultaneously.</p> <p>The CLG Member noted that TJH did not report any exceedences at the time DERM recorded an exceedance.</p> <p>CNI asked if the member feels that TJH should have reported on DERM's monitoring results.</p> <p>The CLG Member advised that this was not the case. The stakeholder feels that TJH's monitoring is flawed, as DERM conducted a monitoring session at his home and that the session produced an exceedance, when very few of TJH's sessions reported an exceedance. The Member feels the process has improved since the start of the project though.</p> <p>TJH advised that the stakeholder has previously not allowed TJH access to carry out internal noise</p>

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	<p>monitoring. Would the stakeholder allow TJH access? The CLG Member declined.</p> <p>CNI advised that it is important to note, that under the conditions, reasonable and practical mitigation does count as assistance, and the member has been offered relocation.</p> <p>The Member feels that fair and reasonable mitigation should not mean the stakeholder has to move out of their home for a year. The Member rejects that because the home is mitigated it means that the government and TJH are doing the right thing.</p> <p>CNI advised that mitigation has been offered as it is recognised that at times there will be exceedances and that is why the member has been offered relocation.</p> <p>A CLG member asked if there is an independent external audit or review process of the monitoring and results carried out.</p> <p>TJH advised that an audit of its environmental system is carried out on a three and six monthly basis.</p> <p>CNI advised that it attends the internal noise monitoring sessions where possible. There is not a lot of opportunity to do this as not many residents agree to have it done.</p> <p>A CLG Member asked if TJH report the external monitoring sessions to CNI.</p> <p>CNI advised that TJH do not report external monitoring sessions to CNI as they are used as a management tool by TJH.</p> <p>A CLG Member asked why external monitoring is not recorded if the Coordinator General has indicated that monitoring can take place at the property boundary and a 10dba applied.</p> <p>TJH advised that the external noise monitoring sessions are used to identify residential properties where there may be an issue. An internal monitoring session can then be organised to validate the external noise monitoring session.</p> <p>TJH further advised that the process is ongoing and when an external exceedance or elevated noise level is recorded, TJH reports this to the site so the noise source can be identified and addressed.</p> <p>A CLG Member asked if this has been the process from the beginning of 24/7 works.</p> <p>TJH advised that although it has been slightly refined, the basic process has not changed.</p> <p>A CLG Member asked if the 10dba allowance for attenuation seems to work.</p> <p>TJH advised that attenuation can be anywhere between three and 20dba, depending on the building type. Many new places have a dba attenuation over 20.</p> <p>CNI advised that it is challenging as there is no way to verify the 10dba just by looking at the building due to the differences in building construction.</p> <p>A CLG Member asked if there was a chart that shows the attenuation of different types of building construction.</p> <p>TJH advised that there is no recognised breakdown of attenuation for different building construction.</p>

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	<p>A CLG Member noted that DERM's monitoring has found 10dba to be reasonably accurate.</p> <p>A CLG Member noted that when TJH went to the CoG requesting to work at night because work would not cause excessive noise, there has been continuous exceedances and nothing has been done to pull TJH into line as there is a blanket approval to work at night and the only way to stop exceedances is to not let work happen at night.</p> <p>CNI noted that this has been discussed at length and is currently being reviewed by the Ombudsmen.</p> <p>A CLG Member asked why truck movements are not recorded as exceedances when they operate 24 hours.</p> <p>TJH advised that the goals determined by the Coordinator General apply to construction noise, not vehicles travelling on a public road, even if they are associated with construction.</p> <p>A CLG Member asked where this is stipulated.</p> <p>CNI advised that the reference relating to Construction Noise can be found in section 9D from the imposed conditions. It mentions predicted noise levels from construction works rather than transport related construction deliveries.</p>
6.0	<p>COMMUNITY RELATIONS UPDATE</p> <p>Presentation made by Anthea Craig, Community Liaison Coordinator, Thiess John Holland. The presentation is provided as an appendix to these minutes.</p> <p>Discussion and questions arising:</p> <p>A CLG Member asked why TJH liaised with Lewis Street residents about concrete deliveries and not Wongara Street residents.</p> <p>TJH advised stakeholders of the need to bring trucks along Lewis Street to access the site via the gate located at the end of the street.</p>
7.0	<p>HYDROLOGY PRESENTATION</p> <p>Presented by Alex de Aboitiz, Design Manager, City North Infrastructure. The presentation is provided as an appendix to these minutes. Key items discussed include:</p> <ul style="list-style-type: none"> • Brisbane City Council (BCC) just recently approved the hydrology model • Lewis Street and Kedron Brook are the Toombul Catchments. • Kalinga Park is a flood plain and has been built and designed as one. • What cannot be conveyed needs to be stored <p>Basic Hydrology Terms</p> <ul style="list-style-type: none"> • An example of a Q25 event is the recent rainfall event in Brisbane in January • Catchment – geographic area for flood runoff eg. Lewis Street drain

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	<ul style="list-style-type: none"> Storage – area where flood water is stored eg. Kalinga Park There was not sufficient flow through the area during the 1974 Brisbane flood which resulted in work being carried out to the park <p>Conveyance and Storage</p> <ul style="list-style-type: none"> If a reduction in conveyance occurred, the water would not be confined to Kalinga Park, it would spread out over the area <p>Kalinga Park Storage</p> <ul style="list-style-type: none"> 16 hectares which fills up very quickly versus the large catchment area along Kedron Brook <p>Eastern Connection Intricacies</p> <ul style="list-style-type: none"> This was modeled in the Environmental Impact Study for the Project Bi-model – small Eagle Junction and larger Kedron Brook Lewis Street Drain has approval connotations and is under BCC control Tidal effect at Widdop Street <p>Eastern Connection 3D view</p> <ul style="list-style-type: none"> The fully calibrated 3D model has been peer reviewed by five groups including DERM, BCC, the State Government and an independent reviewer It was well received by BCC who are looking to use this model for future understanding of Kedron Brook <p>Calibration of TUFLOW Model with May 2009 Flood</p> <ul style="list-style-type: none"> In correlation to the BCC Model <p>Comparison of TUFLOW Model with BCC and EIS Models</p> <ul style="list-style-type: none"> BCC used a 1D model, the EIS used a 2D model and TJH's model is 3D and the most developed modelling <p>Flood Mitigations</p> <ul style="list-style-type: none"> Regrading of Sandgate Road involves: <ul style="list-style-type: none"> constructing a hump Sandgate Road where the AirTrain overpass is located. This will prevent water from the road surface entering the Airport Link tunnel Water banks up at the North Coast Railway Line, AirTrain bridge and the Widdop Street bridge because of turbulence caused by bridge piers which slows the movement of water Excavation between Sandgate Road and Widdop Street <ul style="list-style-type: none"> Excavation to 1.6AHD. The marine tide is 1.05OHD The extra allowance is a directive from the BCC to allow for rising sea levels / climate change Reprofiling of the chanel will mean mangroves will not be able to grow in this area as it will be above the marine tidal zone and the water turns from brackish to fresh or on the steep slope

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	<p>included in the re-profiling</p> <ul style="list-style-type: none"> Excavation downstream of Widdop Street. This re-profiling will increase the water flow and conveyance through this area Realignment of Eagle Junction Creek. The model was revised in agreement with the North Coast Railway Line as to how the underpass would work Mangrove removal especially on the southern bank of Shultz Canal. There was little benefit removing mangroves from the northern bank. Landscaped with vegetation such as sedges which can be easily knocked down if water levels are raised. <p>Flood Level Improvements</p> <ul style="list-style-type: none"> For floods over Q100 the purpose is to make properties better or to keep them pro quo. Cannot detriment one property over another. <p>Q100 Peak Water Level Impacts</p> <ul style="list-style-type: none"> Significant improvements have been identified in the modelling <p>Discussions and Questions Arising:</p> <p>A CLG Member asked if the modelling was carried out prior to the Project conditions being developed.</p> <p>CNI advised that this was not the case. The Environmental Impact Statement was put forward to the Coordinator General for review which highlighted the significance and sensitivity of the area. The hydraulic model was used as a baseline. Since this time there have been subsequent reviews.</p> <p>The model was also submitted to the BCC which had it independently reviewed and it has now been approved.</p> <p>A CLG Member asked when the Eagle Junction realignment occurred.</p> <p>CNI advised that as approval has just been given for the Hydrology Model, this has not occurred yet. This will start once TJH has completed work in the area and moved on.</p> <p>A CLG Member asked if the mangroves would not regrow because the water is not brackish.</p> <p>CNI advised that mangroves will not grow along the banks of Schulz Canal as they will be raised above where the tidal water reaches and the banks will be steep.</p> <p>TJH must develop a maintenance regime for BCC as part of the returned works process. TJH is working with the BCC to determine a maintenance agreement that is acceptable to the BCC.</p> <p>This may involve removing 40% of mangroves over a certain height every six months to maintain flood requirements.</p> <p>A CLG Member questioned whether CNI had further feedback as to whether the Aviation High car park was identified as a storage area.</p> <p>CNI advised the outcome would be marginal and would make to no difference to flood discharge. The purpose of excavation along Schulz Canal is to move water, not to store it.</p> <p>A CLG Member asked if much of the flood plain is lost due to the Airport Link tunnel structure</p>

MINUTES OF MEETING

Meeting Number 31

CLG	Toombul Community Liaison Group				
Location:	Visitor Information Centre, Lutwyche	Date:	14/06/11	Time:	6:00pm

Item	Summary
	<p>in Kalinga Park.</p> <p>CNI advised that not a significant amount is lost as the flood plain starts at the North Coast railway line. The flow around the bridge is too turbulent to be consider part of the flood plain.</p> <p>A CLG Member asked if the type of material in Kalinga Park would affect water soaking away.</p> <p>CNI advised that this is more a question of Hydrogeology. There is a requirement for the water to move towards the lowest point which is Schultz Canal.</p> <p>In heavy rainfall events where there is a high volume of water, water will not soak into the ground; it generally runs over the ground surface to the lowest point. The system is designed to move water around the box to the closest drain and will be controlled by the water level in Kedron Brook.</p> <p>A CLG Member asked if the previous statement that the area was sensitive was in reference to it being environmentally sensitive and how will mangroves be kept at bay.</p> <p>CNI advised that Kedron Brook is the cleanest waterway in Brisbane. Schultz Canal is manmade and following the 1974 flood to reduce impacts some sections were straightened and channelled and it was separated from the Brisbane River.</p> <p>Re-profiling the height of Schulz Canal banks to 1.6 AHD, which is above tidal levels, will prevent the growth of mangroves. This involves excavating the canal and building up the banks.</p> <p>A CLG Member asked if the steep banks of Shultz Canal would collapse.</p> <p>CNI advised that the banks will be planted to help prevent collapse.</p> <p>A CLG Member asked about using large rocks, like the ones that are in place at Shaw Road? The Member believed that the BCC used a formula that determined the size of rocks to use versus the water flow.</p> <p>CNI advised that during a flood event there is movement of 650QMEX of water through this area which would move rocks the size of a small car. The BCC has reviewed the landscaping plan for this area and advised CNI that large rocks cannot be utilised as the directional force of the water would loosen the rocks and they would move in a flood event.</p> <p>CNI further advised that it could not comment on Shaw Road as it had not been involved with this design or implementation the design had not been reviewed.</p>
8.0	<p>GENERAL BUSINESS</p> <p>A CLG Member noted that he has had some issues with communications at home, phone lines drop out etc. and asked if it could be the result of vibrations or service relocations not being completed correctly. Telstra attended and said there have been a lot of complaints in the area.</p> <p>TJH advised they are unaware of any complaints from the service provider and noted that work carried out on the asset is done by the service provider or their preferred contractors; TJH is not involved with the work. Telstra have been carrying out work along Sandgate Road to raise their pits between Junction Road and East West Arterial Road.</p> <p>A CLG Member noted that there is a large amount of dust on the Widdop Street footpaths and the banks of Schulz Canal also need to be cleaned up. The Member feels the site is not being cleaned regularly.</p> <p>ACTION: TJH to look into dust along the Widdop Street footpaths and cleaning up the banks of Schulz</p>

MINUTES OF MEETING

Meeting Number 31

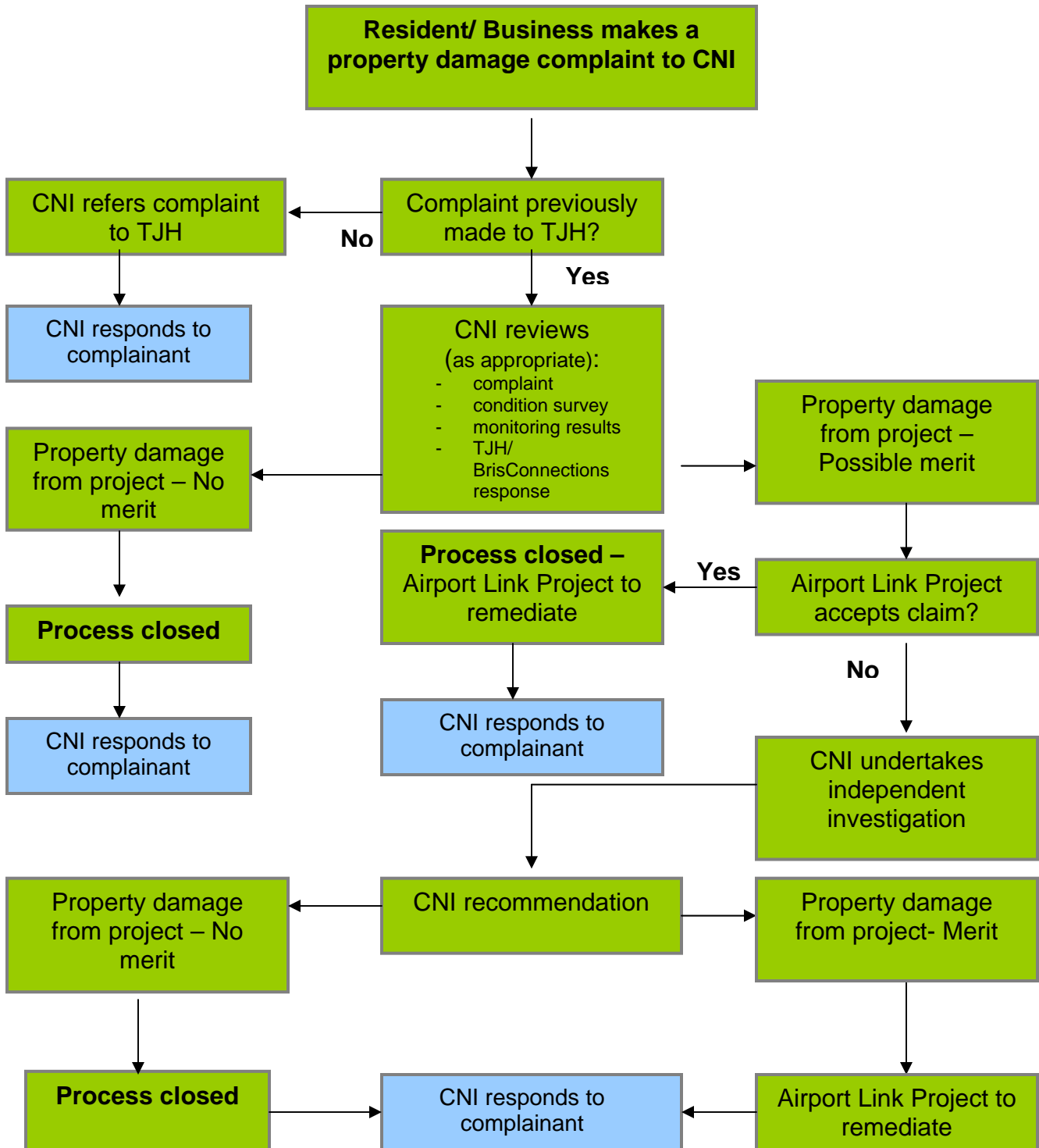
CLG	Toombul Community Liaison Group			
Location:	Visitor Information Centre, Lutwyche	Date:	14/06/11	Time: 6:00pm

Item	Summary
	<p>Canal</p> <p>The Facilitator advised that another facilitator would be filling in for the next CLG meeting. The new facilitator's details will be sent out to members.</p> <p>Members can copy both facilitators into any correspondence as the facilitator will have access to emails. The Facilitator hopes to review the draft minutes by the end of the week.</p>
	<p>Next meeting:</p> <p>Tuesday, 12 July 2011, 6pm – 8pm Visitor Information Centre, Lutwyche</p>

Upcoming Meetings in 2011

9 AUGUST
13 SEPTEMBER
11 OCTOBER
8 NOVEMBER
13 DECEMBER

Property Damage Complaints- CNI Process



*** We advise that this is CNI's internal generic flowchart for the management of property damage complaints. While this process is indicative of how complaints will be managed, each individual complaint will be managed on a case by case basis and this may result in different outcomes.*

BRISCONNECTIONS | airportlink northbusway airport roundabout upgrade | THISSA JOHN HAYDEN | Queensland Government

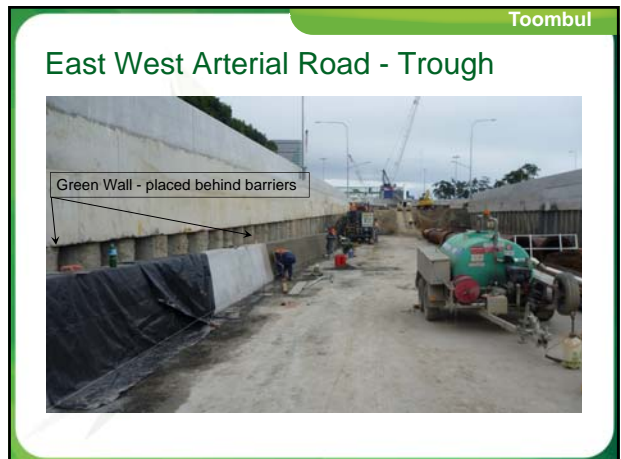
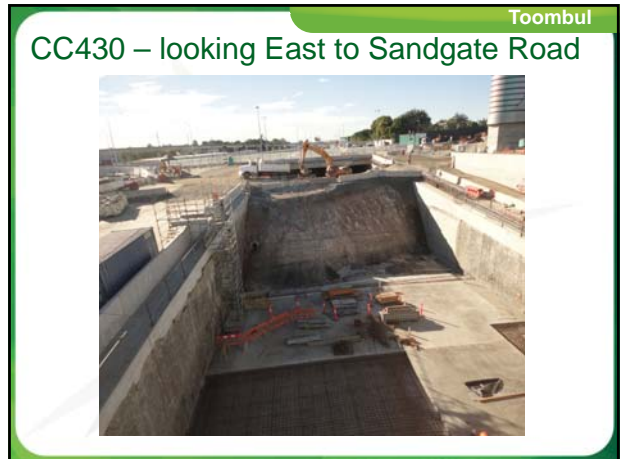
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Construction Update

Russ Beynon


14th June 2011

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Sandgate Road footpaths



The photograph shows a wide, paved footpath with a metal railing on the left side. To the right is a road. The map shows a street grid with a red line indicating 'To be completed' and a green line indicating 'Completed'. The streets shown include Sandgate Road, Alma Road, Sucky Road, and others.

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Location of permanent noise wall – Alma Rd



The aerial photograph shows a construction site with a red circle highlighting the location of a permanent noise wall. The site is surrounded by residential areas and roads, including Sandgate Road, Alma Road, and Sucky Road.

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CC410 to CC421 – Smoke Ducts



The two photographs show the interior of a tunnel under construction. The left photo shows a construction site with scaffolding and equipment. The right photo shows a long, narrow tunnel with concrete walls and a series of smoke ducts running along the length of the tunnel.

Toombul


CC410 to CC421 - Smoke Ducts



The photograph shows the interior of a tunnel under construction, focusing on the smoke ducts and construction equipment. The tunnel is large and has a high ceiling. The smoke ducts are arranged in a series of parallel lines along the length of the tunnel.

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Jacking Boxes



The photograph shows a large construction site with jacking boxes and tunneling equipment. The site is filled with concrete structures and scaffolding. The jacking boxes are used to support the tunneling equipment during construction.

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Jacking Box 1- Face of Shield



The photograph shows a tunneling machine's face of shield and jacking box. The machine is large and complex, with many moving parts. The face of shield is the front part of the machine that cuts through the rock. The jacking box is used to support the machine during construction.

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VSO – Mechanical & Electrical Fit Out



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Tunnelling Update

David Hake, TBM Manager


14th May 2011

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TBM Progress as at 14 June 2011

	Rocksy	Sandy
Excavation	2131.36m	2027.79m
Depth from surface to tunnel crown	33m	34m
Metres since last meeting	366.86m	348.79m



LEGEND:

- █ Heading
- █ Branching
- █ Invert
- █ Flood Lining
- Prior to Excavation
- Mixed Tunnel
- TBM Tunnel

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Southbound (Sandy) TBM tunnel




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Northbound (Rocksy) TBM tunnel



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TBM Burial Chamber – Lowering Beam Preparation





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Environment Update

Tim Lennon

14th May 2011

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Monitoring Summary

● Noise external ● Noise internal ● PM10 monitoring ● Dust deposition ● Vibration

	Noise		Vibration	Air quality
	Internal	External		
# of monitoring sessions	20	141	6	3
# of exceedances	1	NA	0	0
# of sessions requested & declined	4	NA	0	0

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Monitoring Summary Vibration Equipment Locations

Locations Detailed Above – 104 Kedron Park Rd, 11 Park Rd, 673 & 663 Lutwyche Rd, 9 Norman Ave & 9 Isedale Street

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Construction Noise Monitoring Results

Location	Monitoring Period	Measured Noise	COG Goal	Measured Noise	COG Goal	Comments
		L(A)eq	L(A)eq	L(A)max	L(A)max	
1/77 Stuckey St, Clayfield	2012 – 2027	45.13	40	54.9	50	Windows and doors open. Monitoring indicates elevated L _{eq} and L _{max} levels. Elevated level was due to a heavy influence from non-TJH noise source – caused by wind carrying and amplifying both TJH and Non TJH noise. Stakeholder yet to respond to consultation.
	24/05/11					
1/77 Stuckey St, Clayfield	2032 - 2047	33.15	40	40.8	50	Windows and doors closed. Monitoring indicates L _{eq} and L _{max} levels below COG goals. TJH noise sources (cranes, generators, fans) and non – TJH noise sources (train, phone) were consistent throughout.
	24/05/11					

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Community Relations Update

Anthea Craig, Community Liaison Coordinator

14th May 2011 smarter ways to move

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Toombul Community Feedback 1 – 31 May 2011

Community feedback	Total for May	Total for April	Total for March
Complaints	38	29	37
Stakeholders	24	19	26
Issues/enquiries	31	47	31
Stakeholders	25	39	26

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Toombul Community Complaints 1 – 31 May 2011

Complaint Category	Percentage
Site noise out-of-hour...	22%
Parking	22%
Mitigation	10%
Site dust	8%
General Construction	6%
Site noise	6%
Traffic Management	6%
Construction vehicle m...	4%
Site vibration	4%
Landscape/Urban Design	2%
Building Damage	2%
PUPs reinstatement	2%
Site lighting	2%
Truck noise	2%
General Enquiry	2%
spot conveyor noise (cnc)	2%

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Community Notifications

Total of 18,500 flyers distributed in May:

- May construction update
- Demolition for second jacked box (by three times)
- Sandgate Road & East West Arterial Road traffic switch
- Sandgate Road night works
- Advert in Courier Mail re changed traffic conditions due to traffic switch

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Community Relations Activities

- Doorknocks for Sandgate Rd night works
- Doorknock Wongara St residents re service relocation
- Doorknock residents along Sandgate Rd advising of Telstra work
- Liaise with residents on Lewis St and Stuckey Rd re concrete deliveries
- Liaise with residents re demolition of the headwall for the second jacking box

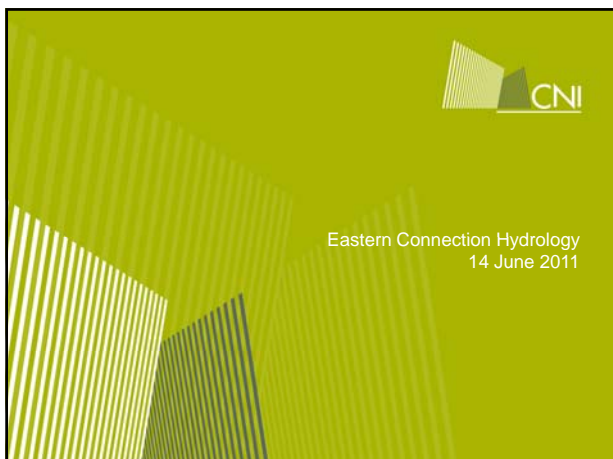
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Community Relations Activities

- Liaise with residents on Wongara & Widdop St's, Melton Rd and Walkers Way re concreting along East West Arterial Rd
- SMS alert re changed traffic conditions – 430
- Liaise with Aviation High School re permanent air-quality monitoring
- Site tour for the Australia Institute of Project Management
- Monitoring worker parking on local streets

Planning:

- Community information session planned for late July



Basic Hydrology Terms

Hydraulic Event – the storm event that caused flooding namely Q1 or ARI 1

QX – the likely return (1 in X) of a storm each year

Catchment – geographic area for flood runoff

Conveyance – flow of water through a drainage system

Storage – area where flood water is stored

CNI

Simple Flood Analysis

A flood's volume is determined by Catchment size by Rainfall amount.

Discharge of flood waters is governed by conveyance, where as flood water extents are governed by conveyance and the amount of flood storage.

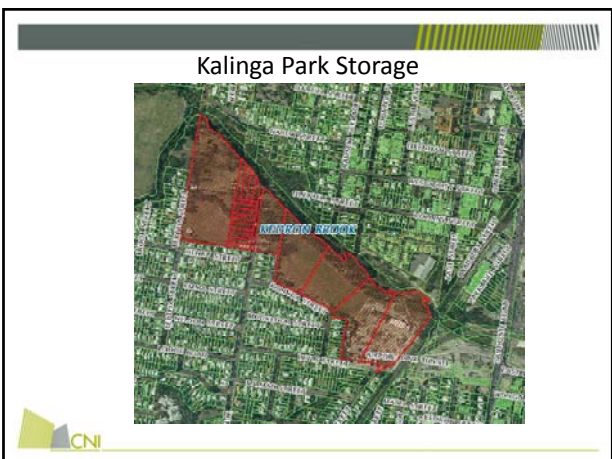
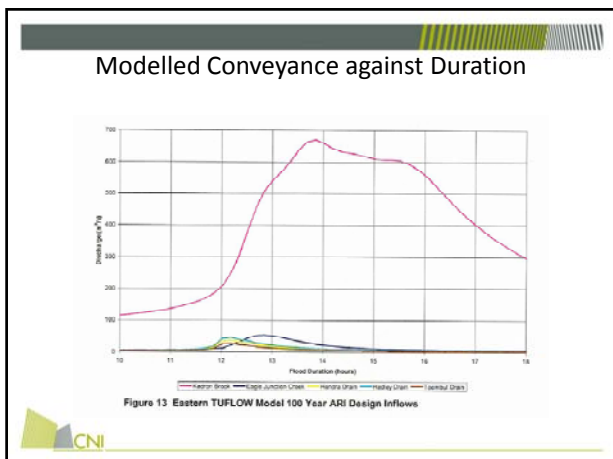
Conveyance is determined by the velocity of water by the cross sectional area of the drainage system.

CNI

Conveyance and Storage

- Conveyance for Kedron Brook is over 650 cumecs
- Kalinga Park is a large flood storage plain for Kedron Brook and Eagle Junction Creek of 160,000m²
- A reduction in conveyance of 10% would see flood levels increase over Kalinga Park by 2.5cm every minute (1.5m over an hour)
- As flood extents expand flood storage increases significantly.

CNI



Project Hydraulic Objectives

- Provide Q10,000 flood immunity to the tunnels and connection ramps
- Provide design flood immunity in accordance with relevant authorities for roads/walkways/bikeways
- No adverse impacts to any other properties up to Q100 flood events
- No adverse impact to existing drainage structure

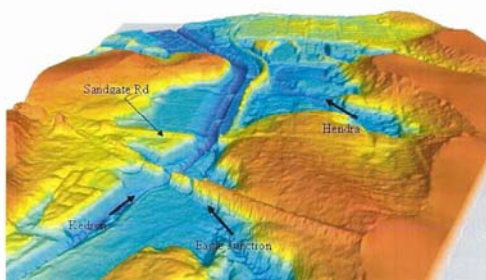


Eastern Connection Intricacies

- Eastern Connection is a bi-modal catchment with Eagle Junction Creek and Kedron Brook
- Eagle Junction Creek is a fast responsive catchment of approximately 30 minutes where as Kedron Brook responds critically for over 5 hours
- Kedron Brook's flood levels are the controlling factor for events that are in excess of Q2



Eastern Connection 3D view



Eastern Connection – Hydraulic Model

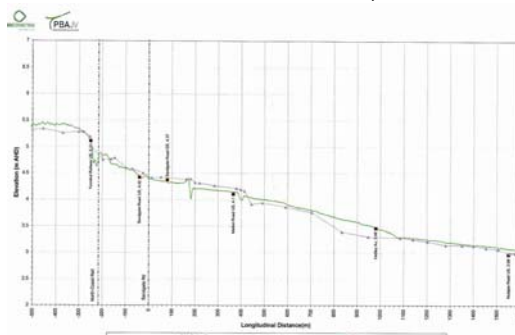
- Hydraulic Model was determined as the state of the Creek in 2007 before any project related construction was commenced, or “Existing Conditions”
- Modelling process used has been externally reviewed and accepted by BCC
- The Project's Hydraulic Model has been validated against the May 2009 Flood Event
- The Project's Hydraulic Model demonstrates that without mitigation there would be adverse impacts
- The most efficient mitigation requires significant flow conveyance increase that is achieved through excavation and vegetation removal

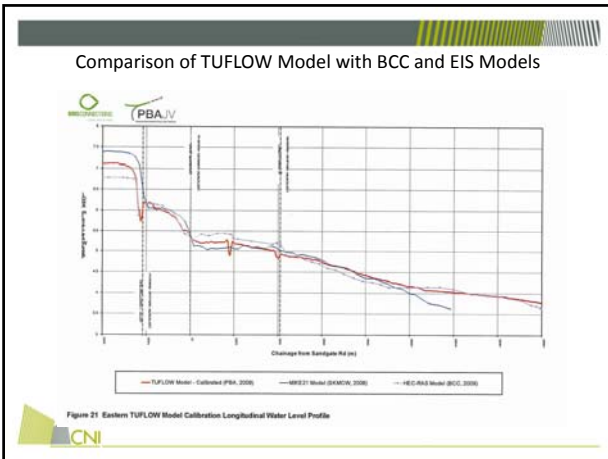


Calibration of TUFLOW Model with May 2009 Flood

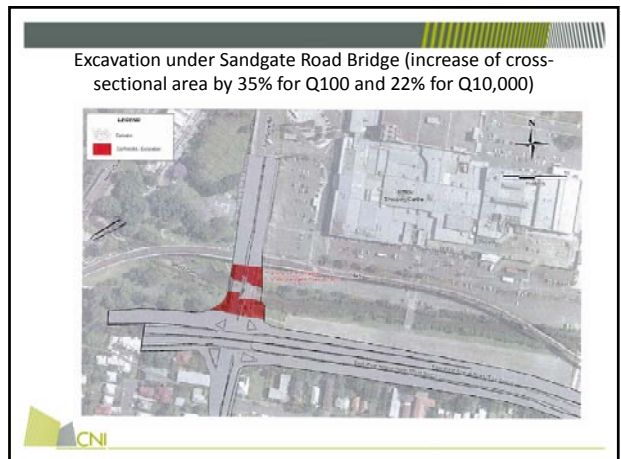
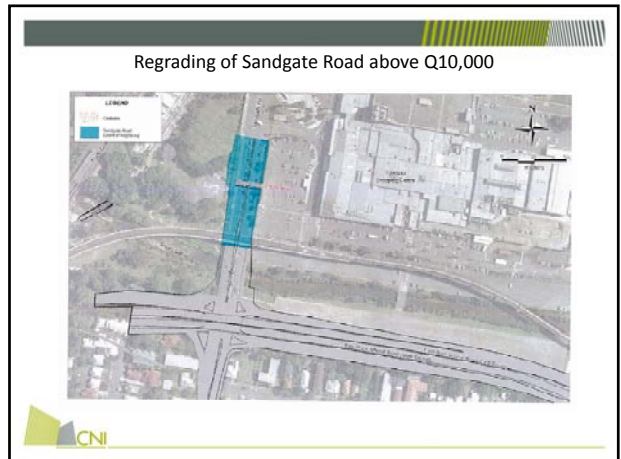
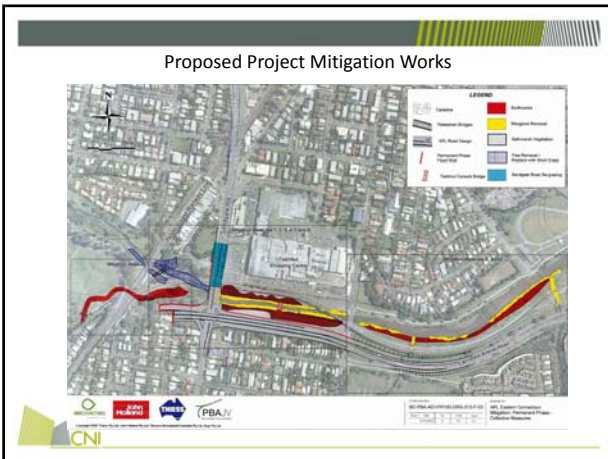


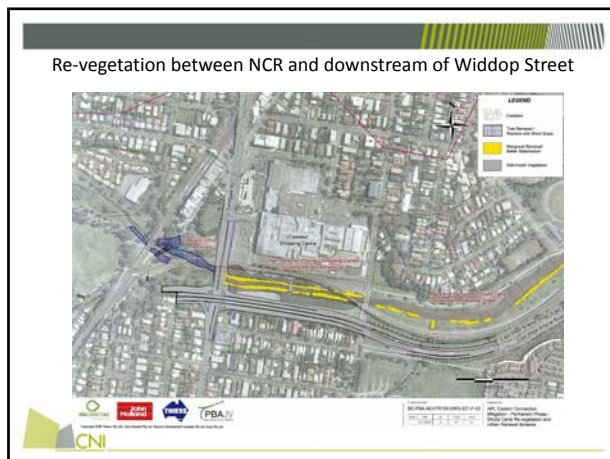
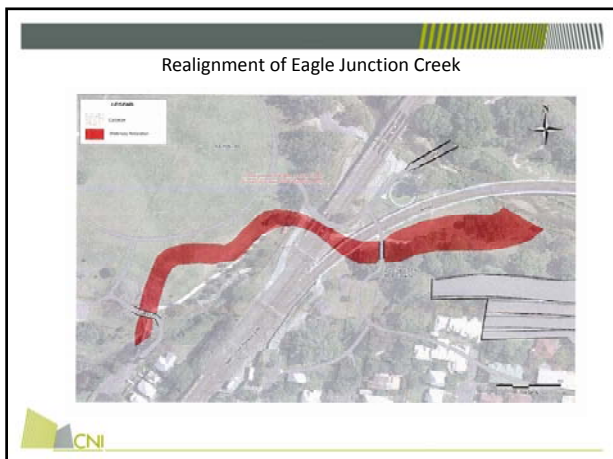
Calibration of TUFLOW Model with May 2009 Flood





- ### Flood Mitigations
1. Regrading of Sandgate Road above Q10,000
 2. Floodwall on the EWA and the tunnel portal
 3. Excavation under Sandgate Road Bridge (increase of cross-sectional area by 35%)
 4. Excavation between Sandgate Road and Widdop Street
 5. Excavation downstream of Widdop Street
 6. Realignment of Eagle Junction Creek
 7. Re-vegetation between NCR and downstream of Widdop Street





Flood Level Improvements

- Flood Levels are improved in Kedron Brook by an average of 130mm between Sandgate Road and Widdop Street, and 280mm in Kalinga Park
- Eagle Junction Creek diversion generates lower tailwater levels resulting in lower flood levels
- Table 3 from the PBA Hydrology Report summarises the hydraulic improvements at Lewis Street and Kalinga Park

Hydraulic Regime at Kalinga Park compared to existing 2007 conditions	Baseline Water/Flood Level (m) AHD	Water Level (m) AHD						
		10%	20%	50%	75%	90%	95%	100%
High Lowwater	4.271	4.152	4.087	4.076	4.086	4.096	4.106	4.116
High Lowwater Flood	5.922	5.740	5.628	5.584	5.571	5.576	5.586	5.596
High Lowwater Flood (100% 100yr ARI)	6.271	6.089	5.977	5.933	5.920	5.925	5.935	5.945

