Table 1 Response to Agency Submissions

Issues Summary		Hanson's Response
Environment Protection Authority (EPA)		
Environment Protection Licence	An environment protection licence under the *Protection of the Environment Operations Act 1997* may be required for this facility.	Agreed.
Air Quality – Construction	The EPA review of the air assessment supports the conclusion that dust impacts on surrounding sensitive receptors caused by construction works are generally negligible and low.	Noted.
Air Quality – Operation	The EPA review of the air assessment supports the conclusion that particulate matter, Nitrogen Dioxide, and Sulphur Dioxide caused by facility operations, vehicle exhaust, and berthed ships shall not exceed the EPA air quality criteria as defined in the Approved Methods for Modelling and Assessment of Air Pollutants in NSW (EPA 2017).	Noted.
Air Quality – Operation (Ships)	The EPA acknowledges that 1 January 2020 has been set as the global implementation date under MARPOL for a significant reduction in the sulphur content of the fuel oil used by ships, from 3.5% to 0.5%. The EPA recommends that Hanson commit to an interim requirement for ships berthing at the Concrete Batching Plant to use low sulfur until 1 January 2020 (should operations commence before this date), unless the ship operator can demonstrate that this is not technically feasible for a particular ship.	Ships berthing at the Concrete Batching Plant will be required to use low sulfur fuel .
Noise – Construction	The EPA notes that the accompanying Notes to Tables 14 and 15 of the Noise Impact Assessment (NIA) introduces a 'negligible', 'moderate', and 'appreciable' rating for residual noise impacts above the relevant Interim Construction Noise Guideline (ICNG) noise management levels. This is inconsistent with the ICNG where specific actions are detailed where the noise management level is exceeded (ICNG, Table 2). The NIA mitigation actions should align with the ICNG specific actions. The EPA recommends that the proponent: • proposes mitigation actions for during construction that align with the ICNG specific actions, and • presents detailed information on feasible and reasonable mitigation to manage construction noise from the proposal, and also cumulative construction noise impacts from the neighbouring Glebe Island Multi-User Facility.	Refer to Supplementary Acoustic Report in **Appendix C**.
Noise – Operation	The EPA notes the NIA suggestion to apply a noise management precinct approach in the assessment of operational noise from this proposal. The EPA requests further specific detail on how the proposed noise management precinct will function in accordance with Section 2.8 of the NPfI,	Refer to Supplementary Acoustic Report in **Appendix C**.
	The EPA notes that the NIA predicts a 2 dB exceedance of the sleep disturbance noise level at Pyrmont (Table 19). Although this is classified as a negligible increase, the events are associated with truck start ups and compressed air releases, with the potential to occur frequently. The exceedance is justified by referencing an external building façade criteria of 63 dB(A) for a development at Jackson's Landing (Pyrmont). The EPA does not consider this appropriate as a justification for residual noise impacts because feasible and reasonable	Refer to Supplementary Acoustic Report in **Appendix C**.

	mitigation should be investigated at the noise source, and transmission path before any consideration of mitigation at the receiver. The EPA requests that Hanson: • carry out a detailed assessment of maximum noise level events as required by and in accordance with Section 2.5 of the NPfI, • provide detailed information on feasible and reasonable mitigation measures to address the predicted 2 dB exceedance of the sleep disturbance noise level at Pyrmont.	
	It is unclear to the EPA whether the proponent has used the noise mitigation design at the façade of properties at Pyrmont to justify increasing the noise amenity trigger levels at that location, in turn permitting higher operational noise levels. If this is the intent of Table 8 and the accompanying Notes 6 and 7, the EPA considers such an approach to be inappropriate. Also, Notes 5 and 7 to Table 8, which gives the amenity and intrusiveness noise levels and resulting project trigger noise levels, suggest these have been influenced by façade noise attenuation design levels at Jackson's Landing, Pyrmont. It is inappropriate for these to be used to derive assessment criteria or to justify an increase in noise emissions, and is inconsistent with the NPfI. The NIA must derive project noise trigger levels in accordance with the NPfI. Although there is a case to be made about façade noise levels in the context of discussion about the impact, and feasible and reasonable mitigation to manage that impact, façade mitigation should not be used to justify a higher noise trigger level setting. Project noise trigger levels should be revised in accordance with the NPfI. The EPA notes that beneath Table 8, the NIA quotes how the NPfI characterises residual noise impacts. However, this implies that it can be interpreted as a means of assessing the significance of operational noise against a noise trigger level. This is not as intended, which is to guide decision making around what constitutes feasible and reasonable mitigation	Refer to Supplementary Acoustic Report in **Appendix C**.
	The EPA notes that Section 6.2.1 of the NIA refers to mitigation which has been identified and applied to the modelled noise sources used in the operational noise model detailed in Table 13. These assumed mitigation measures should be detailed.	Refer to Supplementary Acoustic Report in **Appendix C**.
	The EPA notes that Section 6.2.2 of the NIA provides no evidence to support its claim that no corrections are required for annoying noise characteristics, and requests further evidence to support the claim.	Refer to Supplementary Acoustic Report in **Appendix C**.
	Confirm that the source sound power levels (SWLs) and assumptions on the number of deliveries / volume of concrete represent the maximum capacity of the proposal.	Refer to Supplementary Acoustic Report in **Appendix C**.
Noise – Operation (Ships)	The EPA recognises that Glebe Island is a long-standing working port but anticipates changes in vessel movements associated with the proposed development may have significant operational noise impacts on nearby sensitive receivers. The EPA's expectation is that noise from vessels at berth must be assessed in the NIA against the requirements of the NPfI, including: • provide information on SWLs from potential vessels to be used for loading/unloading, and other types of loading/unloading equipment, e.g. crane and bucket, other than the CSL Rhine, • make clear whether the modelled noise sources from loading/unloading include noise from the vessel, or just the loading/unloading activities, and	Refer to Supplementary Acoustic Report in **Appendix C**.

	clarify the modelled scenarios by providing noise contour maps of all scenarios in the NIA clearly showing the location of noise sources, buildings, structures, terrain, and receivers.	
Stormwater – Operation	The EPA notes review of the watercycle management plan supports the conclusion in the EIS conclusion that stormwater run-off can comply with the water quality provisions and objectives of the Leichhardt Development Control Plan (DCP) 2013.	Noted
Inner West Council		
Cumulative Impacts	The EIS must be revised to address the failure to incorporate Council's Secretary's Environmental Assessment Requirements (SEARs) request for inclusion of cumulative impacts of all developments in the Bays Precinct during both construction and operational phases, including the Glebe Island Multi-User Facility.	The EIS has addressed the relevant SEARs, including where possible the assessment of the cumulative impacts of the proposal with other known projects for which information is available in and around the Bays Precinct.
	The proposal should take into consideration the construction of all major infrastructure projects in the immediate vicinity of the proposed facility over approximately the next ten years including West Connex, Western harbour Tunnel and M4-M5 Link (should the latter two projects proceed). The possible construction of elements of the Bays State Significant Precinct (SSP) over the same period that may incorporate mixed use development including residential uses, as well as public domain connections and adaptive reuse of the State-listed heritage White Bay Power Station should also be included in the EIS to minimise and mitigate any adverse impacts upon local residents. To achieve this Council requests the following: • No access to the subject site must be provided via Robert Street, Rozelle. • Assurance is sought that the M4-M5 Link White Bay Stabling Yard must not gain access to Robert Street under any circumstances, including relief access, due to likely additional heavy vehicle traffic in residential areas in the southern sections of Balmain Peninsula, reduced access to the cruise passenger terminal and increased conflict and reduction in safety at the Robert Street/Mullens Street intersection. • A request for further traffic modelling be undertaken to take in to consideration all the construction and proposed major transport infrastructure projects in the immediate vicinity of the proposed multi-user facility over the next ten years including West Connex and the Western harbour Tunnel to determine full cumulative impact and to realistically analyse the deterioration of level of service and the operation of the adjacent road network. • A detailed Construction Management Plan for the whole of the Bays Precinct should be prepared in consultation with Inner West and City of Sydney Councils to provide a coordinated and staged approach to the delivery of The Bays precinct in a manner which minimises detrimental impacts on sensitive areas within Sydney's Inner West. • To ensure pedestrian safety and residential amenity restrict heavy vehicles from travelling to and from the site via Annandale, Leichhardt and Forest lodge. A coordination group, including representatives from the Inner West and City of Sydney Councils and Transport for NSW/Sydney Buses, should be established to oversee and advise on traffic management measures during the overlapping construction phases of the Bays Precinct, M4M5 Link and Western harbour Tunnel (should the latter two projects proceed).	Hanson can accept that there will be no site access via Robert Street. Hanson cannot accept the limitation of restricting heavy vehicles from travelling to and from the site via Annandale, Leichhardt and Forest lodge as many of these vehicles will be servicing projects and development sites in and around these suburbs. The most direct and efficient legal route is appropriate for concrete trucks. In the vast majority of cases these routes will be via the arterial road network and will minimise local roads. The remaining of these requests by Council are directed towards the NSW Government and are not within Hanson's control. Hanson will work proactively with the NSW Government agencies, and with any coordination group that is established, in terms of managing cumulative traffic issues.

Noise and Air Pollution (operations phase).	Council requests that the air and noise pollution impacts from both light and heavy vehicles and water vessels associated with the operation of the facility be minimised by requiring them to meet the highest emission standards.	Hanson's vehicle fleet is modern and regularly updated to ensure that acoustic and air quality emissions are reduced as far as feasibly possible.
Heritage	The Heritage Impact Statement (HIS) must be expanded to identify and describe the impacts on the remaining elements (including potential elements) of the former (first) Glebe Island Bridge, its embankments and potential archaeological evidence, including a site plan with proposed new structures overlaid on a drawing of existing state significant items.	Refer to Updated Heritage Impact Statement in **Appendix G**.
	All fabric of state heritage significant associated with both the former and current Glebe Island Bridge should be conserved and opportunities should be explored for erection of heritage interpretation.	Refer to Updated Heritage Impact Statement in **Appendix G**.
	The significance of the potential archaeology has not been adequately addressed. It is unclear why the first bridge has such a low level of significance in relation to the second bridge, yet both created a major route to the Sydney Markets. The level of heritage significance ascribed within the HIS (Appendix C) to the former Glebe Island Bridge given its historical, technical and associational significance should be reviewed and revised.	Refer to Updated Heritage Impact Statement in **Appendix G**.
Cycling Access	The EIS must be revised to address the permanent re-opening of the Glebe Island Bridge for an active transport route between Balmain/Rozelle and Pyrmont/Sydney CBD.	The proposed development would not prevent the permanent re-opening of the Glebe Island Bridge for an active transport route between Balmain/Rozelle and Pyrmont/Sydney CBD.
Public Access	Public access to the Sydney harbour foreshore and increasing access are stated objectives for both Council and the NSW government, including within Sydney Regional Environmental Plan No. 26 – City West. Council requests that the final proposed design examine opportunities to allow for public access to the Harbour foreshore for both pedestrians and cyclists, minimising the alienation of the community from the foreshore while ensuring the potential operations of the facility are not compromised and public safety in ensured.	Due to the nature of the proposed activities it would be an unacceptable risk to allow pedestrians and cyclists to access the foreshore via the Hanson site. As noted in Section 4.3.2 of the Response to Submissions, the site is located within an area identified within the *Glebe Island and White Bay Masterplan 2000* as a Secure Area a Restricted Zone of Glebe Island.
City of Sydney		
Cumulative Impacts	Cumulative impacts of the proposed operation need to be aggregated and taken into account in the assessment: • Ships docking and ship's engines running during port time • Lighting and hours of port handling areas and ships in port • Trucks arriving, idling and leaving plant facilities • Operations between ships berth and batching plant handling facilities • Operations and containment of the batching plant itself	Refer to Supplementary Acoustic Report in **Appendix C**.
Drawings	Limited in detail and are not of standard expected with a development application. (e.g. no heights nominated for the silos and other tall structures, no materials and finishes, no north point etc).	The drawings are sufficient for understanding the nature and extent of the proposed development. If required by DPE, Hanson can provide more detailed drawings prior to commencement of construction.

Noise	Given proposed 24 hours operation, all activities should be fully enclosed in the proposed building. Building should be fully acoustically insulated to prevent escape of offensive noise. Further preventative and mitigation measures should be applied including shore-to-ship power.	All materials handling and batching activities will take place within the building, which will be appropriately acoustically treated. For further discussion, refer to Supplementary Acoustic Report in **Appendix C**.
Lighting	The night time lighting measures including directional and adjustable lighting should be implemented to reduce lighting impacts on surrounding properties and Sydney Observatory.	Design of night-time lighting will include directional and adjustable lighting to minimise off-site impacts and reduce glow effect.
Visual	Landscaping and public art strategies should be required to mitigate the visual impacts of the proposal. Public art should not include advertisements.	Hanson is willing to include landscaping and public art where appropriate.
Air Quality	The implementation of mitigation measures and ongoing monitoring should be included as part of any approval.	Noted and agreed.
Management Plans	Operational management plans addressing the above potential impacts should be implemented and kept on site to minimise compliance issues. Surrounding residents should be provided with copies of the plan(s) and the details and procedures for complaint management.	Hanson will prepare an Operational Environmental management Plan which can be made available to the community, and will implement a complaints management procedure.
Heritage	Details of the proposed '7.8m high green wall' should be considered so as to appropriately reference the character of the site and area. Excavation has the potential to expose piles or other remains from first Glebe Island Bridge.	The green wall is a measure to mitigate landscape and visual impacts. The extent and design of the green wall can be informed by the heritage context.
	An appropriate monitoring condition should be included as part of any consent to prevent damage to any encountered relics.	Hanson would accept a Heritage monitoring conditions during excavation.
Heritage Council via the Heritage Division, Office of Environment & Heritage		
Archaeology	The EIS included an assessment indicating the potential for archaeological resources to be present within the vicinity of the proposed silos. The potential archaeological resources are associated with sections along the former alignment of Glebe Island Bridge across the harbour and the western abutments. Remains associated with the first bridge are likely to include former piles and other associated structural remains that may have been deposited onto the former foreshore or seabed area when it was removed from the site. The assessment indicated the proposed excavation below the current hardstand has potential to encounter the tops of former piles or relics not removed as part of the later reclamation works. The assessment indicated that these remains would have high research value to yield information relating to the construction techniques associated with the construction of the bridge, and recommended the preparation of an historical archaeological monitoring program concurrent to the excavation works including an Archaeological Research Design and Methodology (ARDM) for archaeological monitoring and a recording procedure of any remains or relics that are uncovered. However, the ARDM was not included as part of the EIS. The EIS should be supplemented with an ARDM prepared by a suitability qualified and experienced historical archaeologist, and prepared in accordance with Heritage Council of NSW guidelines including Archaeological Assessments 1996 and Assessing Significance for Historical Archaeological	Refer to Updated Heritage Impact Statement in **Appendix G**.

	Sites and Relics 2009. The detailed ARDM should be provided to the Heritage Council for review prior to any determination of the application.	
Maritime Archaeology	The EIS indicated the potential for remains associated with former piles and structural remains of the former Glebe Island Bridge which may have been deposited onto the former foreshore or seabed area. The documentation does not assess the impact of the proposal on submerged maritime heritage sites within the site. It is recommended that this proposal should be supported by an assessment which addresses impact to potential maritime heritage sites including a search of the maritime heritage database.	Refer to Updated Heritage Impact Statement in **Appendix G**.
Transport for NSW		
Cumulative Impacts	The intersection assessment, including the future traffic flows on the road network surrounding the site, should be updated to include the vehicles associated with other developments in the vicinity of the site, in consultation with the Sydney Coordination Office within TfNSW. Mitigation measures should be proposed to reduce the impact of the proposed development on the surrounding road network.	Refer to Supplementary Traffic Report in **Appendix E**.
Parking.	The Traffic Impact Assessment prepared to support the development application proposes measures that would promote alternatives to private vehicle mode of travel. The principles outlined in the aforementioned document are supported. The provision of a parking space for each employee as envisaged would not support the take up of alternative modes and should be reviewed.	Refer to Supplementary Traffic Report in **Appendix E**.
Traffic – Aggregate Delivery by Road.	Section 3.2.1 of the EIS states that in some instances, when aggregates are not able to be delivered by ship, they will be delivered by road. This may happen from time-to-time depending on the availability if the ship. Further information should be provided for the road only scenario, including: • The estimated frequency of road only operation are expected in an year; • Number of daily and peak hour heavy vehicle movements to and from the site; and • Assessment of traffic impacts on the road network.	Refer to Supplementary Traffic Report in **Appendix E**.
Aggregate Transport by Ship	The EIS predicts that there will be three deliveries per week and approximately 10 ships per month to move 1 million tpa of aggregates by ship primarily from Hanson's Bass Point Quarry. However, this is inconsistent with the Environmental Assessment Report for Bass Point Quarry expansion. It is requested that the applicant provides the details of the proposed ship/s and its capacity to address this inconsistency.	Refer to the Maritime Traffic, Navigation, and Safety Statement provided in **Appendix J**.
Pedestrian and Traffic Management (Construction phase)	In order to manage cumulative impacts of pedestrians and traffic TfNSW requests that the applicant be conditioned to update the Construction Pedestrian and Traffic Management Plan (CPTMP) in consultation with the Sydney Coordination Office within TfNSW, and submit a copy of the final plan to the Coordinator General, Transport Coordination for endorsement, prior to the commencement of any work. The CPTMP needs to specify, but not to be limited to, the following: • Location of the proposed work; • Haulage routes;	Noted and accepted.

	• Construction vehicle access arrangements; • Proposed construction hours; • Estimated number of construction vehicle movements, noting the peak period movements should be minimised; • Construction program; • Consultation strategy for liaison with surrounding stakeholders; • Any potential impacts to general traffic, cyclists, pedestrians and bus services within the vicinity of the site from construction vehicles during the construction of the proposed works; • Cumulative construction impacts of projects including WestConnex. Existing CPTMPs for developments within or around the development site should be referenced in the CPTMP to ensure that coordination of work activities are managed to minimise impacts on the road network; • Proposed mitigation measures. Should any impacts be identified, the duration of the impacts and measures proposed to mitigate any associated general traffic, public transport, pedestrian and cyclist impacts should be clearly identified and included in the CPTMP; and • The applicant shall provide the builder's direct contact number to small businesses adjoining or impacted by the construction work and the Transport Management Centre and Sydney Coordination Office within Transport for NSW to resolve issues relating to traffic, freight, servicing and pedestrian access during construction in real time. The applicant is responsible for ensuring the builder's direct contact number is current during any stage of construction.	
Roads & Maritime Services (RMS)		
Traffic – Right Turn at The Crescent / James Craig Road Intersection.	RMS is concerned that additional large trucks will reduce the ability for two vehicles to turn side-byside at the intersection of The Crescent / James Craig Road, leading to a reduction in capacity of the right turn movement beyond that envisaged. Additional information is requested to be provided on whether the traffic capacity of the right turn is likely to reduce based on a swept path assessment of right turning Cement, Aggregate and Concrete trucks and if so, this is to be reflected in the traffic modelling.	Refer to Supplementary Traffic Report in **Appendix E**.
Traffic – M4-M5 link.	The traffic impact assessment prepared by the Applicant notes that the M4-M5 link is likely to reduce traffic volumes on City West Link in the vicinity of the site. While this is accepted, the project is likely to be completed in 2023. The M4 East project is expected to be completed in 2019 and RMS request additional information on the impact of the intersections in the vicinity of the site considering the likely timing and opening date of the project.	Refer to Supplementary Traffic Report in **Appendix E**.
Traffic – Aggregate Delivery by Road	Section 3.2.1 of the EIS states that in some instances, when aggregates are not able to be delivered by ship, they will be delivered by road. This may happen from time-to-time depending on the availability if the ship. Further information should be provided for the road only scenario, including:	Refer to Supplementary Traffic Report in **Appendix E**.

	• The estimated frequency of road only operation are expected in an year; • Number of daily and peak hour heavy vehicle movements to and from the site; and • Assessment of traffic impacts on the road network.	
AUSGRID		
Electricity Supply	EIS does not address electricity supply to the development if required.	As requested by Ausgrid, Hanson will lodge a connection application to Ausgrid at the appropriate time prior to the commencement of construction.
Protection of Existing Infrastructure	DBYD plans and arrangement with Ausgrid standby person required when constructing within 2m of Ausgrid's underground transmission cables.	Hanson will ensure appropriate DBYD investigations and liaison with Ausgrid prior to undertaking works within 2m of Ausgrid infrastructure.
The Glebe Society		
Cumulative Impacts	As well as the Hanson aggregate handling and concrete batching facility the Ports authority intends to site a multi- user facility on Glebe Island to handle a range of, building materials. It is clear that the intensity of industrial activity associated with these facilities is well beyond the reasonable expectations previously held by the large numbers of nearby residents. The planned concentration of industrial related activities on Glebe Island will create major problems for the amenity of the many current and planned nearby residents. The planned redevelopment of the current fishmarket site within a few years will include almost 3000 new residential units, thus hugely increasing the numbers of residents who will be affected by the planned industrial activities on Glebe Island.	The proposal does not change the permissible land uses within the Glebe Island port.
	Because of the piecemeal planning and divided responsibility for the various major infrastructure and servicing developments underway, or planned, for the Bays and surrounding area, there is no overall analysis of their cumulative impact during construction or once completed. This is of particular significance in relation to the major and unavoidable impact on traffic at numbers of key congestion points and the adequacy of existing and planned public transport facilities. It is also highly relevant to the cumulative impact on air quality and even to the provision of critical social infrastructure. While appreciating that this concern is beyond the scope of the current approval process, it is the central issue at stake at this point in the redevelopment of the Bays Precinct. The Bays Precinct is designated a site of strategic significance. It is open to the Minister (Premier permitting) to intervene and restore the not-so-long-ago promised strategic and integrated approach to planning for this once in a century development opportunity offered by the Bays Precinct.	Commentary in relation to the statutory and strategic planning considerations relevant to the proposed development is provided in Section 4.6 of the Response to Submission.
Hours of Operation	24/7 operation of the concrete plant (and the multi user facility) is unreasonable. Even with a state of the art aggregate handling and concrete batching facility, the resulting noise from night time operation is likely to be excessive. Hours of operation should be limited so that it does not operate between 11pm and 6am.	Discussion in relation to the proposed hours of operation is provided in Section 4.8.2 of the Response to Submissions.
Noise and Pollution	Noise and pollution will emanate not only from the unloading of the aggregate and the loading and movement of trucks delivering the concrete but the movement of ships and running of ships engines and generators when berthed at the facility port. The Glebe Society recommends that ships should not be allowed to leave their engines or generators running	Hanson has considered the concept of providing shore to ship (solar) power at the Facility. However, as none of the potential vessels to be used for loading/unloading are

	while berthed at the facility port. Alternative shore to ship power facilities should be a required as part of the development and ideally could be supplied from a solar power plant on Glebe Island.	capable of connecting to such a power supply, the concept is not technically feasible or practically reasonable.
Light Pollution	The potential for excessive light pollution affecting nearby residents is significant – from berthed ships and the facility. The Glebe Society recommends that stringent conditions be imposed to minimise intrusive light pollution at night from the facility and berthed ships and associated trucking activity.	A lighting strategy has been prepared by AECOM and is provided as **Appendix I.**
Air Pollution	The major impact on air quality will come during the movement of the concrete and aggregate from ships or onto trucks if it is not stringently managed. The Glebe Society recommends that stringent requirements are imposed to ensure that raw materials associated with the facility are effectively covered or otherwise contained at all stages in the process of transport, processing and loading and unloading so that particles do not escape into the air.	Refer to Supplementary Air Quality Statement in **Appendix D**.
Visual	The proposed location of the site has generated concern from some members of the Glebe community because it will block the splendid line of view encompassing the three bridges - the Sydney Harbour Bridge, the Anzac Bridge and the old Glebe Island Bridge – that can be seen from the Glebe Foreshore adjoining the end of Glebe Point Rd. Two of these bridges are already heritage treasures; the other is acknowledged as a visually stunning piece of architecture/engineering. The Glebe Society is unaware if there are viable alternative sites for the facility on Glebe Island which would limit this loss of an unusual view. If there is any flexibility that could minimise this impact on the view, the Glebe Society suggests it be explored as a possible variation.	Refer to Supplementary Visual and Lighting Report provided in **Appendix F**.
	We are aware that community members have urged there be a requirement for the proponent or the Ports Authority to ensure the visual impact from the shoreline is as attractive as possible. The Glebe Society supports the planting of appropriate tree cover where feasible around the facility.	Refer to Supplementary Visual and Lighting Report provided in **Appendix F**.
Amenity	The Glebe Society considers that NSW Planning and Environment – and if necessary, the Minister - should take particularly strong and effective measures to minimise the negative impact on the residents and on the environment from the proposed facility.	If approved, the proposed development will be required to operation in accordance with the consent conditions applied by the Minister and the IPC. These conditions will be designed to minimise the negative impact on the residents and on the environment from the proposed facility.
BIKESydney		
Road Safety (Pedestrians and Cycling)	The proposal does not sufficiently address its impact on existing and future regional cycling links. The proposed increase in trucking traffic (55 concrete trucks) will impact active transport provision through the region, and to Glebe Island Bridge in particular; a key future link for the City West Cycle Link. To this end, the proposal should be conditioned to: • extend the existing grade-separated cycleway on the northern side of James Craig Road further east along Somerville Road to at least as far as the western approach to Glebe Island Bridge. This could be achieved by narrowing the existing vehicle travel lanes (noting that trucks are speed-limited here to 30km/h.).	Refer to Supplementary Traffic Report in **Appendix E**.

	• retro-fit the existing internal access road linking Roberts St to Sommerville Road with a separated cycleway to enable access to the Batch Plant site and also to the future Glebe Island Bridge path. This cycling corridor is essential to the future City West Cycle Link path - a future "trunk route" veloway designed to accommodate riders of all experience levels, including the elderly and children. These cycling facilities should be integrated with the cycling facilities to be delivered by the M4-M5 Link and Rozelle Interchange elements of Westconnex.	
	To mitigate the proposal's increase in truck traffic, the proposal should be conditioned to provide safer crossing and more green time for pedestrians and riders crossing James Craig Drive at its intersection with The Crescent.	Refer to Supplementary Traffic Report in **Appendix E**.
Save Our Bays Glebe		
Noise – Operation	24 x 7 Operation will generate noise from the machinery and truck movements. The hours of operation should be in line with the noise-restriction regulations under the Protection of the Environment Operations Act 1997.	Refer to Supplementary Acoustic Report in **Appendix C**.
	Any vessel located at this site CAN ONLY use their on board generators in line with the noise-restriction regulations under the Protection of the Environment Operations Act 1997.	Refer to Supplementary Acoustic Report in **Appendix C**.
Air Pollution – Operation	Any bulk materials used at this site must be covered at all times to prevent air pollution of said materials, created by wind and during loading/unloading operations	Refer to Supplementary Air Quality Statement in **Appendix D**.
Visual	The building of such a site will interfere with the architectural aesthetics of the ANZAC Memorial Bridge	Refer to Supplementary Visual and Lighting Report provided in **Appendix F**.
Traffic	Operation of the Hanson Concrete Batching Plant will generate unacceptable increases in traffic volume.	Refer to Supplementary Traffic Report in **Appendix E**.
Bays Community Coalition		
Noise and Air Quality	High noise and air quality impacts on nearby residents given the materials handling ships docking at Glebe Island's MUF will not have ship to shore electricity which will mean the ships' engines will be kept running. Hanson should be required to restrict its operations (both in receiving raw materials and loading concrete trucks) to 12 hours/day, avoiding night time operations and enabling local residents to sleep.	Discussion in relation to the proposed hours of operation is provided in Section 4.8.2 of the Response to Submissions.
	Hanson should to liaise with Ports Authority and other relevant Government agencies to install a solar power generation and storage facility at Glebe Island and require delivery ships to adapt their systems to enable shore to ship power supply**.**	Hanson has considered the concept of providing shore to ship (solar) power at the Facility. However, as none of the potential vessels to be used for loading/unloading are capable of connecting to such a power supply, the concept is not technically feasible or practically reasonable.
	Noise impacts at the residential building/s in Pyrmont closest to the facilities should be monitored and evaluated, and any increases above those listed in the EIS addressed and advised to those affected. The following mitigation measures should be applied: • A 24 hour hotline to be set up for residents to report concerns and initiating immediate investigations into each complaint received.	Refer to Supplementary Acoustic Report in **Appendix C**.

	• A community reference group to be established which meet with Hanson and Port Authority management on an agreed frequency. • As part of the facility's Management Plan, a compulsory noise and dust education program should be established for employees. • Reversing beepers on the facility vehicles to be replaced with "non" audible alarms. • Start-up warning alarms on conveyor belts (both onshore and offshore, i.e. the material handling ships) to be replaced with a highly visible rotating light system. • All conveyor gantries (fixed and mobile) are to be enclosed and these enclosures lined with effective sound attenuation material. • All conveyor gantry transfer points to be enclosed and these enclosures lined with a sound attenuation material. • The installation of a pipeline from the Cement Australia silos to Hanson's Batching Plant to avoid any escape of dust in the delivery of cement as well as reduce the extra noise / air pollution caused by having to use additional trucks. • The silos should be fully enclosed, including a roof structure to reduce possible air and noise quality impacts on surrounding residents. • The proposed shipping containers installed to reduce noise should be fitted / covered with a proven noise absorption material as relying on steel containers alone will not achieve the best result.	
White Bay Stratas		
Strategic Planning.	The community has repeatedly been promised a holistic vision for the Bays Precinct. Instead the Government is currently delivering a piecemeal approach that jeopardises the protection of existing residential amenity and the future direction of development and land use in our region. A Master Plan for the whole of Bays Precinct that protects residential amenity should be completed before any additional development takes place. Without a Master Plan, ad hoc planning like this proposal for Glebe Island will continue to the detriment of the best public outcome for all stakeholders.	Commentary in relation to the statutory and strategic planning considerations relevant to the proposed development is provided in Section 4.6 of the Response to Submission.
	There is much talk about retaining a "working harbour" but anyone can walk to the nearest ferry wharf and watch the harbour at work. Many people are going about their business on the harbour every day. It provides a popular mode of transport and many recreational opportunities for all who live and work in Greater Sydney. Support for a "Working harbour" does not translate to support for re-intensifying industrial uses. We currently have a wonderful "working harbour" and do not want it returned to a heavy industrial port. What we need on Sydney Harbour is innovation not industrialisation.	Commentary in relation to the statutory and strategic planning considerations relevant to the proposed development is provided in Section 4.6 of the Response to Submission.
Cumulative Impacts.	It is impossible to assess the environmental impact of multiple proposed developments because of the current piecemeal planning approach. We require comprehensive analysis of the cumulative effects of pollution such as dust, noise, light etc. and the impact of many truck movements on our already congested roads by proposed operations using the same routes 24/7. This should be completed and shared before the public are asked to comment but ad hoc planning prevents it from happening. The cumulative assessment should include:	Cumulative impacts are discussed in Section 4.7 of the Response to Submissions

	• The use of the grounds of the heritage listed White Bay Power Station for WestConnex and Metro operations. • The proposed adjacent 24/7 Glebe Island Multi-user Facility that is expected to add 1200 or more two-way truck movements per day - heavy industrial use that will create serious noise, air and light emissions. • Use of the White Bay wharves as a potential construction site for the Western Harbour Tunnel Project.	
Noise and Air Quality	Successive NSW governments have encouraged people to reside next to land owned by Sydney Ports. These areas are now heavily populated and what were once industrial sites are now residential. Whilst other First World countries are moving industry away from populated areas and converting industrial sites into residential zones, NSW now appears to want to move heavy industry back on an unprecedented scale. In doing so, the NSW government will be exposing the wellbeing of tens of thousands of local residents to the adverse health and amenity impacts that accompany the heavy industry activities proposed for Glebe Island and surrounding areas.	Commentary in relation to the statutory and strategic planning considerations relevant to the proposed development is provided in Section 4.6 of the Response to Submission.
Bike Leichardt (affiliated with Bicycle NSW)		
Number of Cyclists	It is stated that the numbers of residents cycling to work is not known, but these figures are available from the 2016 ABS Journey to Work data, by LGA, including the former Leichhardt LGA. Data from annual bike counts in March (Super Tuesday count) by Bicycle Network for Leichhardt Council and now Inner West Council is available for Lilyfield Rd, Victoria Rd, The Crescent and Anzac Bridge approach. A count at the Beattie Bush pedestrian Bridge on the City West Link in March this year had around 800 cyclists heading to the Anzac bridge 7am to 9 am**.**	Refer to Supplementary Traffic Report in **Appendix E**.
Cycling Access	It is stated that there is "excellent cycling access" from local cycling routes. This is not correct, as there is no access from Robert St via Sydney Port access roads, and access via the shared path on James Craig Drive leads to the narrow Sommerville Rd, where the shared path ends at the roundabout and becomes a narrow footpath only. Cyclists are forced to share the road up the hill under the Anzac Bridge. James Craig Drive is locked off at the underpass of the old Glebe Island Bridge approach. It is not clear if a bike path would be offered here for cyclists to access the site. Cyclists would in any event have to negotiate the roundabout at start of Sommerville Road, which will have many heavy truck movements. Cyclists could use the Anzac Bridge approach from Victoria Rd and ramp down to Sommerville Rd, but there is no bike path after that. Cyclists again would be sharing with heavy vehicles, unless a path was built. A path from Robert St on the (possibly) western side of the Sydney Ports access road to the Hanson site would be feasible and in line with the future path from the Rozelle Railyard to the old power station and waterfront as envisaged by the UG Bays Precinct plan for a Waterfront Promenade and Westconnex Active Transport Strategy for cycleways in the old Railyards. There are strong reasons for reopening the old Glebe Island Bridge to walkers and cyclists, and access via Sommerville Rd to the raised western approach of the old bridge would be	Refer to Supplementary Traffic Report in **Appendix E**.

	essential. Therefore, nothing should be done that might prevent this and any positive steps that would facilitate this should be taken.	
Bicycle facilities	Regarding bicycle parking facilities (section 4.4.2), we submit that the number may be in-line with the guidance for places of work, but as cycling becomes more popular these guidelines may be inadequate. Therefore, space for future growth should be allowed. A lockable compound or covered secure bike parking may not add greatly to the cost of providing parking for all vehicles on site.	Refer to Supplementary Traffic Report in **Appendix E**.
Gunlake Concrete		
Cumulative Impacts – traffic	We note that the proposed 1 million m3 per annum plant is 3-5 times the typical plant size in Sydney, including the Blackwattle Bay plant which it appears to be replacing. In the knowledge that a further two batch plants could reasonably be anticipated in association with the adjacent Multi-User Facility so as to ensure efficient utilisation and competition, the sheer size of this plant is questionable. Whilst this is a commercial decision for the proponent, its' cumulative impacts at maximum capacity should not be used to create artificial restrictions on adjacent public and private developments. In relation to this, we believe a more rigorous understanding and assessment of capacity and consequent truck numbers (concrete and aggregate, peak, daily and annual) is required in order to ensure there is no doubling up when assessing cumulative impacts.	Refer to Supplementary Traffic Report in **Appendix E**.
	We note that the assessment of cumulative traffic impacts is only addressed in a general manner in SSD 17_8544, as the specifics of subsequent projects may not be readily available to the proponent. Gunlake is of the view that an accurate assessment of the cumulative impacts of the whole Bays Precinct (including Glebe Island) developments, together with other State Government major projects including Westconnex (M4-M5 Link), the Western Harbour Tunnel, Sydney Metro West, Glebe Island Multi-User Facility and associated batch plants, is best achieved by one central entity running a coordinated simulation model. We understand that the Bays Precinct Oversight Group is working closely with TfNSW Sydney Coordination Office, which we support given their access to existing traffic flows and data. We believe there is a clear onus on the proponent to ensure realistic inputs are provided to this central coordinator.	Refer to Supplementary Traffic Report in **Appendix E**.
	We note that the application does not address movements within the Glebe Island site itself. From an operational viewpoint, there is little detail on how a complex of batch plants, together with a shipping import terminal, will coordinate within this large site with shared entry and egress. When one proponent is proposing (extraordinarily high) peak trucking movements in excess of 286 movements (in+out) per hour, with only 55 heavy vehicle parking spaces, the risks of congestion within the site overflowing on to public roads is significant.	Refer to Supplementary Traffic Report in **Appendix E**.
Efficient Use of Berthing Capacity	Glebe Island Berths 1&2 have traditionally received over 250 (car-carrying) vessels per year. In the transition to sand and aggregate imports, these berths could reasonably facilitate 100-150 vessels per annum, or roughly 2-3 per week. With an efficient vessel size of 25-40kt, this would provide an optimal capacity of approximately 4Mtpa. However, the proponent is proposing roughly 120 ships per year for 1Mtpa, suggesting an inefficient average vessel size of 8.3kt. Whilst this may not be a problem at lower capacities, in the	This is a commercial matter that will be discussed with NSW Ports.

	event that capacity becomes constrained we trust this will be addressed in a manner that maintains the non-exclusive use of these berths and the associated developments on Glebe Island.	
Evolve* Strata		
Technical Language	The EIS does not provide the assessment in plain English, particularly in the sections dealing with noise and vibration where highly technical language continues to be used.	The EIS summarises technical reports and provides a summary of these findings. A non-technical summary is provided within the Executive Summary of the EIS.
Noise	The establishment of the plant will cause a significant increase in noise emissions (24 hours a day, 7 days a week) due to the operation of the plant itself and the associated substantial truck and ship movements. At pages 54 and 55 of the EIS, it is conceded that, for Bowman Street, Pyrmont, the predicted construction noise will exceed the maximum allowed level and that, in the operational phase, the maximum sleep disturbance limit will be exceeded. At 2 Bowman Street, the exceedances are likely to be higher due to the building's close proximity to the plant and associated shipping. The exceedances are said to be relatively minimal and will be reduced because the façade treatment of residential buildings in Jackson Landing have been conditioned to mitigate noise. This claim is not one that the Strata Committee is aware of. In addition, even if it was the case, it would be of little benefit to evolve* residents as substantial parts of the building are glazed. Moreover, such treatment would only be of assistance to the extent that the occupiers of the effected buildings kept their windows and doors shut at all times. Clearly the noise impact will be significantly greater while doors and windows remain open and on external balconies which form part of every home unit in the building. In summer months, this claim could only be maintained on the basis that residents keep their doors and windows shut and run their air conditioning units to maintain appropriate cooling levels. This will result in great expense to the residents and is hardly consistent with protecting the environment. Overall, the claim is an argument of little weight. The building also compromises open common areas which will feel the full impact of the increase in noise level.	Refer to Supplementary Acoustic Report in **Appendix C**.
Noise – Cumulative (Ships)	Like the Hanson proposal, the adjoining MUF intends to be operational 24 hrs a day, 7 days a week. Again, like the Hanson proposal, the MUF will result in ships being berthed at berths GI 1 and 2. An analysis of the MUF proposal and the Hanson proposal suggests that there will be berthed at either GI 1 or GI 2 at least one vessel each day and night and regularly up to three vessels at the same time. The EIS acknowledges the cumulative noise effect of the operation of the Hanson plant and the MUF and the associated shipping but there is no detailed analysis of what the resultant noise levels will be. However, it is reasonable to infer that the excesses that are conceded will increase significantly. Relevantly in section 8.4 of the NIA it is stated, "in particular due to the proximity between the GIB1 and the Pyrmont Residential Receivers, port facility noise levels may exceed noise planning goals established in accordance with more conventional approaches to the assessment of industrial noise sources. As described in section 4.3 while the NPfI enables the	Refer to Supplementary Acoustic Report in **Appendix C**.

	implementation of a noise management precinct with respects to ports, it does not significantly address the relevant transitory nature of ship noise which once berthed generally has limited opportunity to adjust noise emission". This further supports the contention that the noise levels emitted from the combined operation of both facilities and associated shipping will exceed acceptable levels**.**	
	It appears that in Pyrmont the ambient noise level was measured in 2012 at 22 Refinery Drive and not from any building in Bowman Street or from 2 Bowman Street, Pyrmont. 22 Refinery Drive, Pyrmont is located east of 2 Bowman Street. It is reasonable to infer that the ambient noise level at that property will be greater than at 2 Bowman Street given that that location is closer to marine berths and related facilities including berths GI7 and 8 and the White Bay berths including the White Bay cruise terminal. In addition, 22 Refinery Drive is in a "more direct line" to the ANZAC Bridge. Unlike the Bowman Street properties which are largely "tucked under" the bridge resulting in far less traffic noise being received. Background noise monitoring should be required to establish ambient noise levels in Bowman Street generally and in particular 2 Bowman Street, Pyrmont.	Refer to Supplementary Acoustic Report in **Appendix C**.
Visual	The visual impact of the proposed plant will be significant and is unacceptable. Glebe island is largely flat and provides clear views to the surrounding foreshore areas. The proposed structures will include the establishment of 6 silos with an overall height of 34m – just 200m from evolve*. The committee believes this would equate to the height of a 10 storey residential building. The total land size occupied by the site would appear to equate to two football fields. On any view this will have a significant impact. However, the EIS does not adequately or at all consider the visual impact of both the plant and the MUF and more importantly the visual impact of there being 1-3 ships berthed adjacent to both facilities. With the combined berth operations, it seems that there will be ships berthed on a daily basis and often more than one. These will be large commercial vessels with no aesthetic qualities, berthed 100m – 150m from 2 Bowman Street.	Refer to Supplementary Visual and Lighting Report provided in **Appendix F**.
Light	It is proposed that the plant (and the MUF) will operate through the night. Ships will be berthed at night and will be operational in that period. There will be significant light emissions from both the plant and the MUF. Moreover, there will be significant light emissions by vessels berthed at GI 1 and 2 (some only 100- 150 metres from the building). At page 75 it is conceded the impact of lighting at the park adjacent to 2 Bowman Street will be "high" in all respects. The impact on evolve* will be similarly "high". The light impact will be significant and is unacceptable.	Refer to Supplementary Visual and Lighting Report provided in **Appendix F**. An additional Detailed Lighting Strategy has been prepared by AECOM and is provided as **Appendix I**.
Air Quality	In its operational stage, the plant will cause an increase in dust and other emissions. The air quality report clearly concedes that for evolve* residents the predicated pollution levels will exceed maximum allowed levels. This is unacceptable and the proposal should be rejected on that basis alone.	Refer to Supplementary Air Quality Statement in **Appendix D**.
Cumulative Impacts – Air Quality	There is no prospect of ship to shore power, meaning that the vessels will have to run their generators whilst berthed. In addition to the noise effects of this there will be fumes emanating from the vessels whilst berthed. Clause 5.4 of the EIS deals with air quality and concedes that there will be three emission sources, including from berthed ships, but states that they will be within acceptable limits. However, there will be emissions contemporaneously from both the MUF and the ships adjacent to it. The EIS and the Air	Refer to Supplementary Air Quality Statement in **Appendix D**.

	Quality Assessment suggest that such emissions should be assessed separately and considered acceptable provided that emissions from each both fall within acceptable limits. Such an approach seems to be at odds with the fact that both facilities will run contemporaneously with associated shipping such that cumulative effect should be taken into account. From time to time, ships have been berthed at GI 1 or GI 2 over the last 10 years. Residents of evolve* have been affected by the fumes emanating from such vessels. Such effect will increase substantially if vessels are berthed almost on a continuous basis.	
Further Engagement	Night time operations cannot be acceptable under any circumstances, but the Committee may be prepared to further consider the daytime operation of the plant (other than on weekends and public holidays) but would seek the following: • A more plain English explanation of the methodology and analysis used to determine the more important effects e.g. noise, visual impact, air pollution, lighting. • May wish to meet with the proponent and its advisors to obtain a clearer understating of these aspects. • The possible commissioning of a fully independent report to establish the ambient noise levels at 2 Bowman Street and then the noise impact of the proposed plant with the cumulative effect of the associated shipping, the MUF and the shipping associated with the MUF.	Refer to Supplementary Acoustic Report in **Appendix C**. Discussion in relation to the proposed hours of operation is provided in Section 4.8.2 of the Response to Submissions.
Pyrmont Action Group		
Strategic Planning	Many community members are of the view that the proposal is incompatible with the relatively recent, large scale residential development to the east of the site.	Commentary in relation to the statutory and strategic planning considerations relevant to the proposed development is provided in Section 4.6 of the Response to Submission.
Noise – Hours of Operation	Operations of the ships, when in port have the potential of high noise and air quality impacts on nearby residents most likely from the ships' need to keep their engines running throughout the unloading operations. Of great concern to Pyrmont residents is the prospect of delivery of raw materials occurring 24/7. Hanson should be required to restrict its operations (both in receiving raw materials and loading concrete tankers) to 12 hours/day, avoiding night time operations.	Refer to Supplementary Acoustic Report in **Appendix C**. Discussion in relation to the proposed hours of operation is provided in Section 4.8.2 of the Response to Submissions.
Noise – Ships	To mitigate ship noise levels, we strongly support the installation of a solar power generation and battery storage facility, in partnership with the Ports Authority, to generate sufficient power to enable shore to ship energy supply at both facilities, and, possibly at other facilities on Glebe Island. This would represent an environmental offset, substantially reduce both facilities' carbon footprint, and help ameliorate some of the community angst about living close to a major industrial/port enterprise. It is also consistent with the objectives of the Bays Precinct Transformation Plan for Glebe Island and any future "technological and innovation campus".	Refer to Supplementary Acoustic Report in **Appendix C**. Hanson has considered the concept of providing shore to ship (solar) power at the Facility. However, as none of the potential vessels to be used for loading/unloading are capable of connecting to such a power supply, the concept is not technically feasible or practically reasonable.

	Hanson should liaise with Ports Authority and other relevant Government agencies to install a solar power generation and storage facility at Glebe Island and require delivery ships to adapt their systems to enable shore to ship power supply.	
Noise	Many tables in the EIS show impacts as measured from Refinery Drive, Pyrmont, which is further away from the facility/ies than the residential apartment buildings in the vicinity of Bowman Street. Noise impacts at the residential building/s in Pyrmont closest to the facilities should be monitored and evaluated, and any increases above those listed in the EIS addressed and advised to those affected.	Refer to Supplementary Acoustic Report in **Appendix C**.
	We note that a Parking Management Guide (PMG) will be prepared for the site. Such plan should contain a prohibition on trucks reversing, and on the use of loud "beepers" on the site. The PMG should be required to be developed in partnership with community representatives.	Refer to Supplementary Acoustic Report in **Appendix C**.
Noise – Cumulative	It is difficult to understand the cumulative impact of noise from the MUF and the proposed Hanson's concrete batch plant (REF p42) and Tables 9, 10 and 11 ([IS pp 54−55). It is stated in the Ports REF that "the proposed night−time amenity contribution noise level for the Project is 47 dB(A) which has been selected on the basis of it being achievable for the operations using feasible and reasonable noise mitigation while also providing an equitable noise mitigation burden for Hanson's concrete batching plant." The intrusive noise levels for the batching plant are estimated to be up to 55; amenity levels up to 62; and sleep disturbance levels up to 64 dB(A) measured from Refinery Drive, Pyrmont, the latter levels representing "an exceedance of 2−7 dBA" (EIS p78). It is unclear to the layperson what these figures mean. It is also claimed ([IS p78) that "cumulative construction noise impacts associated with WestConnex will be minimal" and no mention is made of possible noise impact from work on the Metro project. Both Hansons and the Ports Authority should clarify in layperson's terms the maximum cumulative noise levels expected at each NCA, if both facilities, WestConnex and the Metro projects are operating simultaneously and what measures will be taken to address impacts which exceed the EPA's NPfI requirements.	Refer to Supplementary Acoustic Report in **Appendix C**.
Noise – from Traffic	The EIS appears to state that the predicted Glebe Island activity would result in cumulative traffic noise levels increasing by 1dBA −4 dBA which appears to exceed the 2dBA criteria.	Refer to Supplementary Acoustic Report in **Appendix C**.
Noise – Mitigation	Hanson should be required to line the conveyor to the silos with noise insulation to muffle noise.	Refer to Supplementary Acoustic Report in **Appendix C**.
	Reference is made to the provision of additional acoustic treatments in residential buildings close to Glebe Island (EIS p25). We point out that with the doors and windows closed, noise impact is reduced, but balconies are not so enclosed resulting in loss of amenity, especially during the warm summer months, and when doors are closed use of air−conditioners is required. This results in higher energy consumption, and costs.	Refer to Supplementary Acoustic Report in **Appendix C**.
	The wall of shipping containers is unlikely to mitigate noise impacts for residents at higher levels in multi−storey apartments. It is also possible that noise will ricochet off the metal	Refer to Supplementary Acoustic Report in **Appendix C**.

	cladding of the containers amplifying the impact. Hanson should further investigate the noise impact of operations on nearby residents and park users located at heights above the height of the container wall.	
Traffic – Cumulative	We note (EIS p 60) that traffic volumes were measured at only 3 intersections. We point out that whilst aggregate delivery truck movements and movements of concrete agitator trucks would generally use the City West Link, the M2 and the Anzac Bridge, when any of these intersections become congested, there are flow−on effects on intersections as far away as Harris St/Pyrmont Bridge Road, Bank Street/Pyrmont Bridge Road, and Victoria Road/Roberts Street. In the event that no changes are made to the infamous interchange adjacent to the current site of the Sydney Fish Markets, and the proposed trebling of visitors to the proposed new Fish Markets at Blackwattle Bay eventuates, it is inevitable that the addition of 189 (am peak) and 98 (evening peak) movements will increase the Level of Service (LOS) beyond the very limited catchment cited in the EIS (pp60 − 62), noting that the LOS "will already be operating beyond its current capacity by 2029". Contrary to the operation of the WestConnex once operational alleviating traffic on surrounding roads (EIS p62) it is our view that the discharge of traffic from the proposed Rozelle interchange will substantially increase LOS (noting that WestConnex has been unable or unwilling to provide traffic projections to Pyrmont and to the Crescent in Annandale). Additional traffic studies should be undertaken at the intersection of Victoria Road/Roberts Sts, Harris Street/Pyrmont Bridge Road, and Pyrmont Bridge Road/Bank Street intersections, taking into account the foreshadowed large increase in traffic associated with the new Sydney Fish Market and redevelopment of current Sydney Fish Market site.	Refer to Supplementary Traffic Report in **Appendix E**.
Traffic – Use of Barges	Hanson should investigate establishing ramps at Glebe Island/White Bay and at suitable sites around Sydney waterways, to enable laden concrete agitator trucks to be transported across water by barge within the delivery catchment of the plant rather than via congested roads.	The use of barges to transport pre-mixed concrete is feasible if the intended delivery site has direct foreshore access. In other situations, the time taken to load a laden concrete agitator truck onto barge, transport the barge to receiving berth, unload the concrete agitator truck, and then travel to the receiving site and dispense the concrete, will exceed the 45 minute target duration from concrete dispatch to delivery and will therefore not be a feasible method of concrete delivery.
Traffic – Public Transport	The site is not well connected to public transport, and omits reference to Sydney's Ferries Future which foreshadows a ferry service to Glebe Point, again at some time in the distant future. Such a service could include a ferry stop at White Bay/Glebe Island and Pyrmont to serve residents, visitors and workers in the Bays Precinct. Hanson should work with community representatives to make representations to TfNSW to bring forward plans to improve public transport to the Bays Precinct, including Pyrmont.	Noted.
Traffic – Cement Tankers	Hanson should be required to investigate early installation of a pipeline to Cement Australia silos to avoid road delivery of cement by tankers.	The use of a direct piped connection between the proposed development and the Cement Australia facility will be the subject to a separate commercial discussion between

		Hanson and Cement Australia. If a commercial arrangement can be reached, the local traffic impact would be likely to be slightly reduced as the requirement for cement deliveries would be removed. As noted in the exhibited TIA (Appendix H of the EIS) cement deliveries make up between1.3% and 9% of the total truck movement count and therefore, although their removal would reduce the overall traffic impact, this reduction would not be significant. The assessment undertaken in support of the proposed development cannot account for the impact of this arrangement as commercial terms have not been reached.
Air Quality	Air Quality data has been measured during 2015 and 2016 from the EPA's Rozelle monitoring station, however these measurements are likely to be unreliable due to the proximity of vegetation. Given that Pyrmont residences are closest to the site, and that wind conditions, often extreme due to funnelling between high−rise towers and cliffs, differ from those at Rozelle, we urge the immediate installation of a new monitoring station in the vicinity of the corner of Bowman and Bank Streets, Pyrmont in order to collect new and more relevant baseline data against which to assess the likely Air Quality impact on those who live close to Glebe Island.	Refer to Supplementary Air Quality Statement in **Appendix D**.
	The silos should be fully enclosed, including with a roof structure to reduce possible air quality impacts on nearby residents and park users.	The silos are proposed to be fully enclosed.
Air Quality – from Ships	Of particular concern is the possible adverse amenity impact from the emission of Sulphur dioxide from ships moored at Glebe Island during delivery of raw materials. It is noted that Federal government standards already require ships to use 0.1% Sulphur fuel while they are docked but allow 3% fuel while ships are in transit. However, standards foreshadowed by the Australian Maritime Standards regulatory body stipulates that from 2020 the maximum allowable Sulphur content in fuel will be reduced from 3% to 0.5% across Australia, in line with a global regulation set by the International Maritime Organisation. These new standards should apply to ships delivering raw materials to Glebe Island from the commencement of operations at both the concrete !patching plant and the MUF.	Refer to Supplementary Air Quality Statement in **Appendix D**.
	Hanson should clarify the level of particulate emissions from aggregate delivery ships, and take steps to mitigate adverse impacts.	Refer to Supplementary Air Quality Statement in **Appendix D**.
Visual	It will be important to involve community representatives in discussions about the visual treatment of the container wall as it presents to residents and the general public. Options may include the use of bright colours, or colours which blend into the background.	Noted.
	Hanson should undertake extensive consultation with affected communities when developing the Public Art Strategy and the urban and landscape Masterplan for the site.	Noted.
Lighting	The ambient night lighting at Glebe Island is already substantial, and it is noted (EIS p75) that the potential lighting impacts in Pyrmont will add to this form of pollution. At Waterfront Park the impact will be high; and will be moderate at Pirrama Park. However, no detailed lighting plan has yet been prepared. Whilst recommendations for impact mitigation are listed	Noted. An additional Detailed Lighting Strategy has been prepared by AECOM and is provided as **Appendix I**.

	(EIS p74), it is noted that these can be overridden by main lighting control "in the event of an incident, or compliant with class requirements". Every effort should be made to avoid light spill outside the Hanson lease boundary. Hanson should work with both the Port Authority and community representatives when developing the detailed lighting plan, to ensure that light spill makes minimal impact on affected residential areas, including from both on−shore and on−ship sources.	
Socio-economic Impact	It is possible that property values of nearby apartments will fall, as amenity impacts become apparent. To minimise this, Port Authority (as the Hanson's site lessee) should be required to implement its "3 strikes and you're out" policy if the operators of both the plant and ships making deliveries transgress any of the conditions imposed on both the operations and construction of the plant.	Refer to the discussion of the proposed 'Uncharacteristically Noisy Ship Policy' provided in Section 4.1.2 of the Response to Submissions.