

ASSESSMENT REPORT

Section 75W Modification Genesis Waste Facility (MP 06_0239 MOD 5)

1. BACKGROUND

This report is an assessment of a request to modify Project Approval (MP 06_0239 MOD 5) for the Genesis Waste Facility and Landfill under section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The request seeks approval for the construction of an enclosure for sorting waste with mobile machinery before it is sent to the automated processing unit on the site.

1.1 Site history – Project Approvals

The Genesis Waste Facility and Landfill was originally granted Ministerial approval under Part 3A of the EP&A Act on 22 November 2009. The approved facility involves:

- a throughput capacity of up to 2 million tonnes of non-putrescible waste per year;
- crushing, grinding and separating works to process waste material;
- a materials processing centre (MPC), which recovers recyclable material from co-mingled commercial, industrial, construction and demolition waste;
- landfilling in the quarry void of up to 700,000 tonnes of non-putrescible waste per year (including asbestos and other hazardous waste); and
- stockpiles for 50 tonnes of tyres and 20,000 tonnes of green-waste.



Figure 1 – Project Location

The Ministerial approval has been modified on four occasions under section 75W of the EP&A Act. In summary, the modifications to the Ministerial approval include:

- an electric conveyor and chute from the MPC to the landfill in the quarry void;
- a correction to the site's legal description;
- changes to the final landform and site infrastructure to improve site operations; and
- amended operating hours for the MPC to 10pm.

The conditions of the project approval were also the subject of an appeal in the Land and Environment Court by Blacktown City Council (Council) in November 2010. The appeal was settled in conciliation conferencing before the matter proceeded to a hearing. The conciliation conference resulted in the Minister's conditions for stormwater and developer contributions being replaced. The replacement conditions were more specific and included stormwater engineering specifications and contribution dollar amounts. Council's appeal followed its adoption of stormwater and contributions plans for the area, which were not available at the time of the Minister's original determination.

The Ministerial approval was enacted and the approved operation commenced on 8 June 2012. It is also the subject of an Environment Protection Licence (EPL) issued by the Environment Protection Authority (EPA).

1.2 Site and surrounding land uses

The site is legally described as Lots 1 and 4 in DP 1145808. It is irregularly shaped and has an area of 61.32 hectares (ha), which is dominated by a 30 ha quarry void. Vehicular access to the site is via Honeycomb Drive, which connects to Old Wallgrove Road and then to the WestLink M7 (formerly the M7 Motorway).

The site is located within the Eastern Creek Employment Lands of the Western Sydney Employment Area. The site is zoned IN1-General Industrial under *State Environmental Planning Policy (Western Sydney Employment Area) 2009*.

To the west of the site, is a large tract of publicly owned land. To the north, south and east of the site are industrial and warehouse uses.

The closest residential area is located at Minchinbury approximately 400 metres (m) north of the approved operation, on the other side of the M4 Western Motorway. Dwellings at Erskine Park are located approximately 1,300 m to the west of the approved operation.

1.3 Approved operation

The approved operation accepts non-putrescible waste from construction, demolition, commercial and industrial sources for resource recovery and landfill. Waste is delivered to the site in trucks with varying capacity from 1-tonne to 40-tonnes. Upon arrival at the site, vehicles are weighed at the weigh station, whilst their payload classifications are verified by visual inspections against the drivers' waste classification documents.

Depending on classification and composition, the waste is directed to a crushing and screening plant (for segregated hard-fill materials), the MPC (for mixed waste), or directly to the landfill (for waste such as asbestos). The layout of the approved operation is shown at **Figure 2**.

The MPC is an enclosed facility housing feedstock stockpiles, mobile machinery, and a large materials processing unit (see **Figure 3**). Mixed waste is stockpiled within the MPC where it is first segregated as much as possible by the mobile plant. In particular, larger items of metal or wood, which are too large for the processing unit, are removed from the feedstock and processed separately.

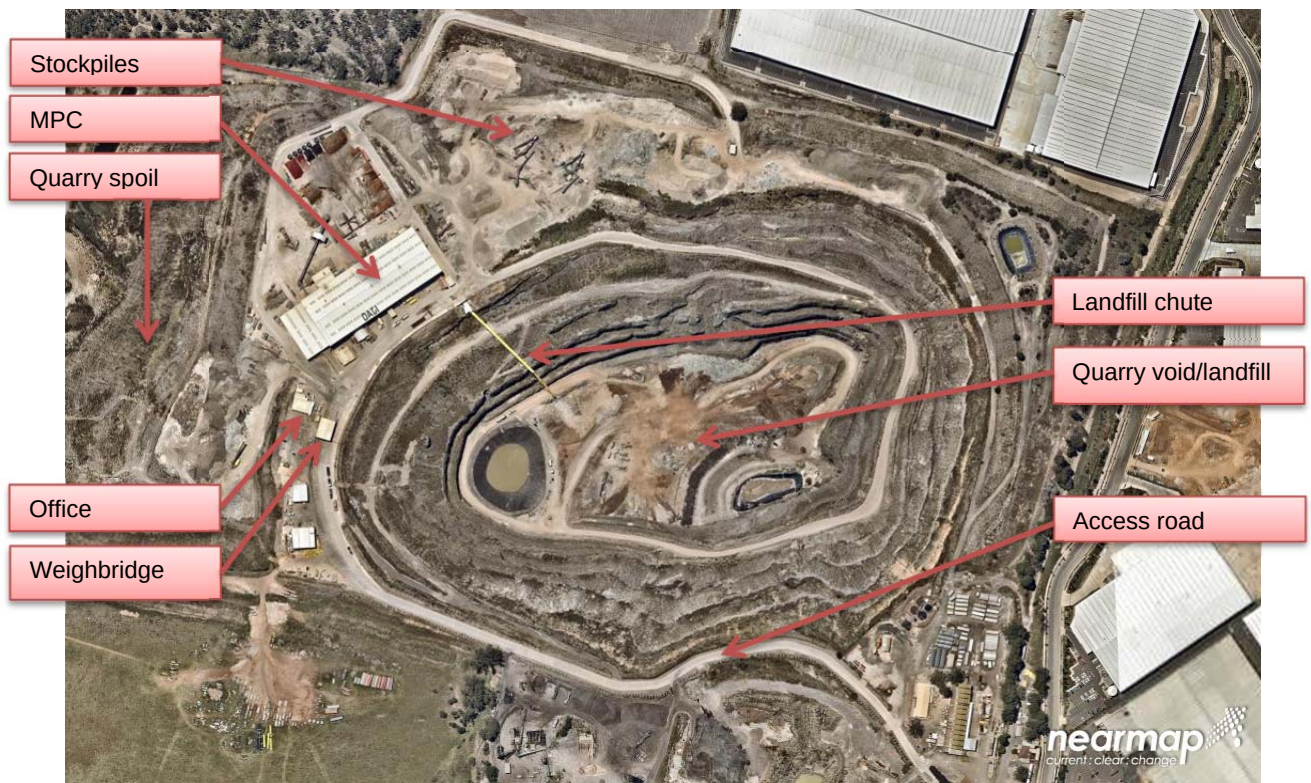


Figure 2 – Layout of the approved operation

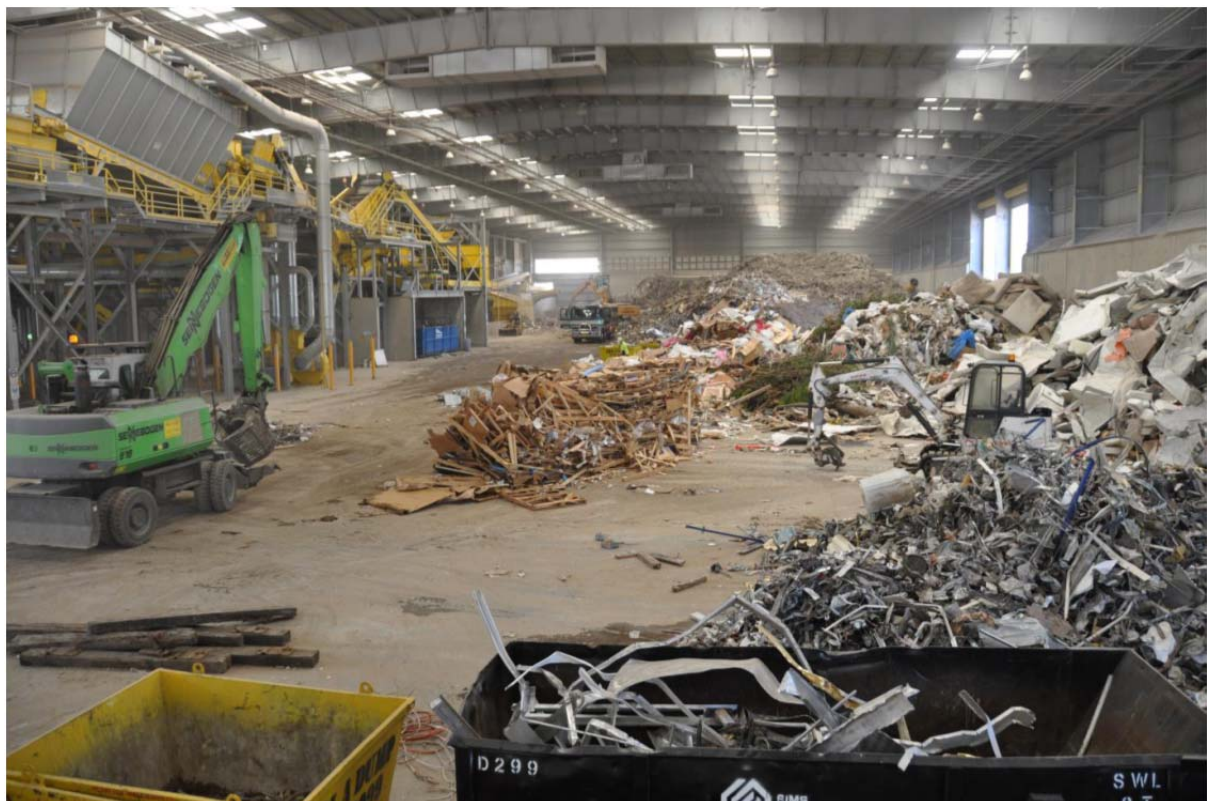


Figure 3 – Inside the MPC facility showing the materials processing unit on the left

The mixed waste is then fed to the materials processing unit. This unit integrates up to 52 processes, which progressively convey, sort and separate the feedstock into re-usable components for stockpiling using electro-magnetic separators, graders, sieves and physical

sorters. The recovered material is conveyed directly from the processing unit to stockpiles immediately outside the MPC using materials conveyors.

2. PROPOSED MODIFICATION

The modification proposal involves the construction of a pre-sort enclosure to provide additional floor area for segregating incoming waste before it is processed through the materials processing unit in the MPC (see **Figure 4**).

The pre-sort enclosure would house a range of mobile excavators and loaders and essentially duplicate the waste segregating activities already occurring within the MPC.

The modification proposal does not increase the approved waste input limits for the site. The Proponent states the pre-sort enclosure is necessary to improve the operating efficiency of the materials processing unit, as the current facilities within the existing MPC have not allowed it to achieve its full approved operating capacity.

To construct the enclosure, the Proponent would remove 123,300m³ of quarry spoil from the site, which was stockpiled during the former quarry operation (see **Figure 5**). These earthworks would take place over 10 weeks with the excavated material redistributed on the spoil pile and profiled so as not to affect site drainage (see **Figure 6**).

The proposed modification is described in detail in the Proponent's Section 75W Report dated 18 March 2015 (see **Appendix B**) and shown in **Figure 4, 5 and 6**.

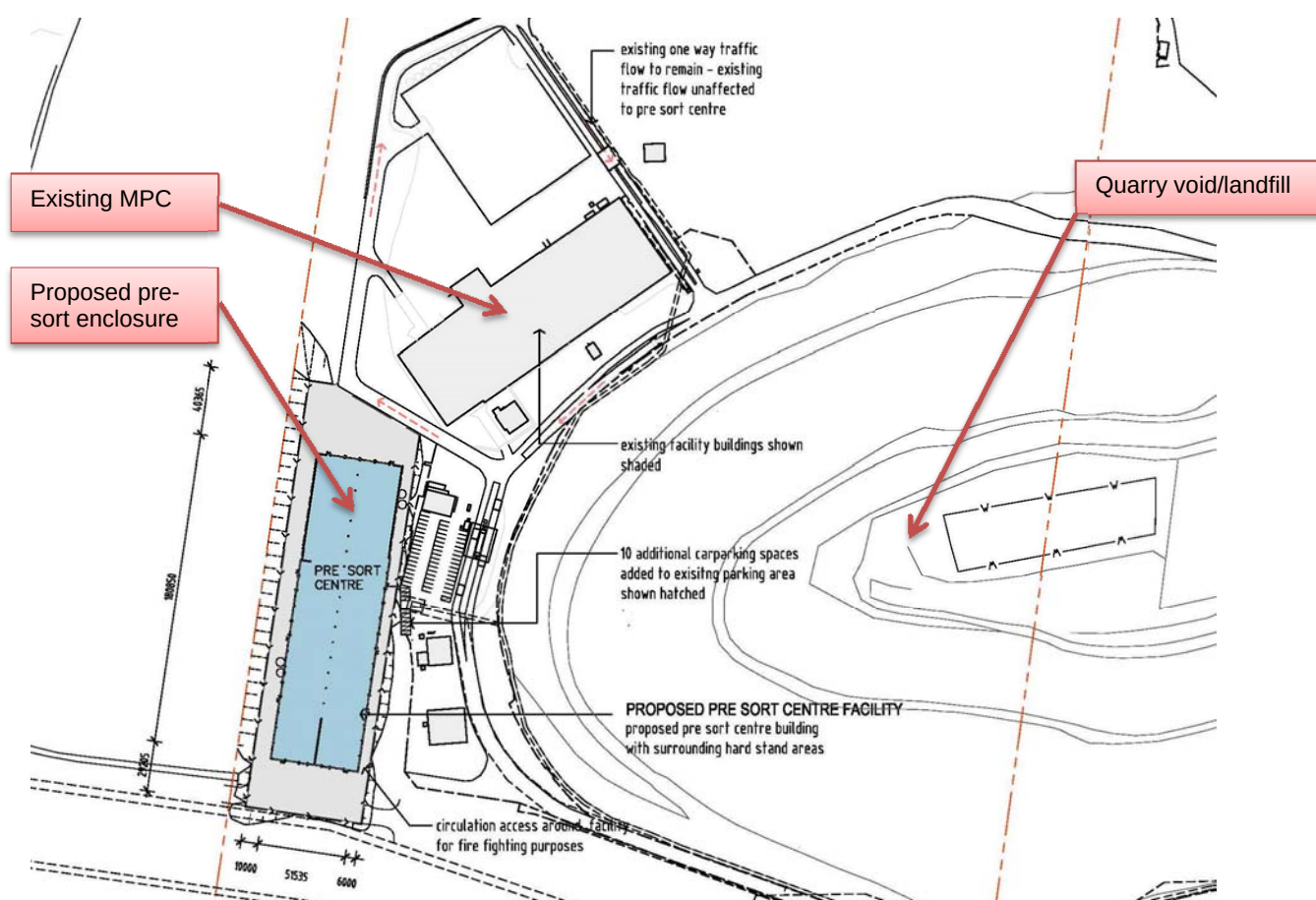


Figure 4 – Proposed pre-sort enclosure

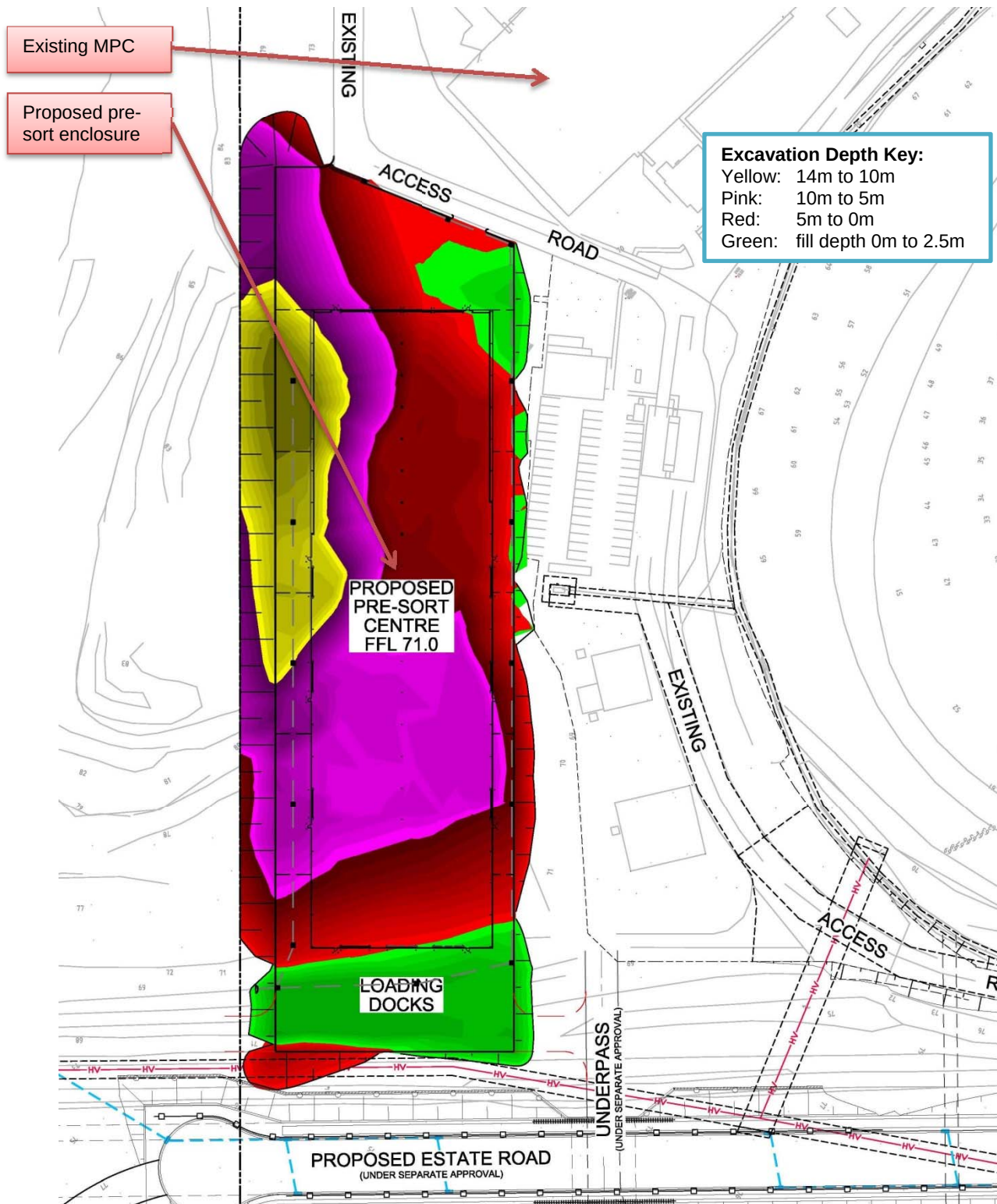


Figure 5 – Proposed earthworks for the pre-sort enclosure

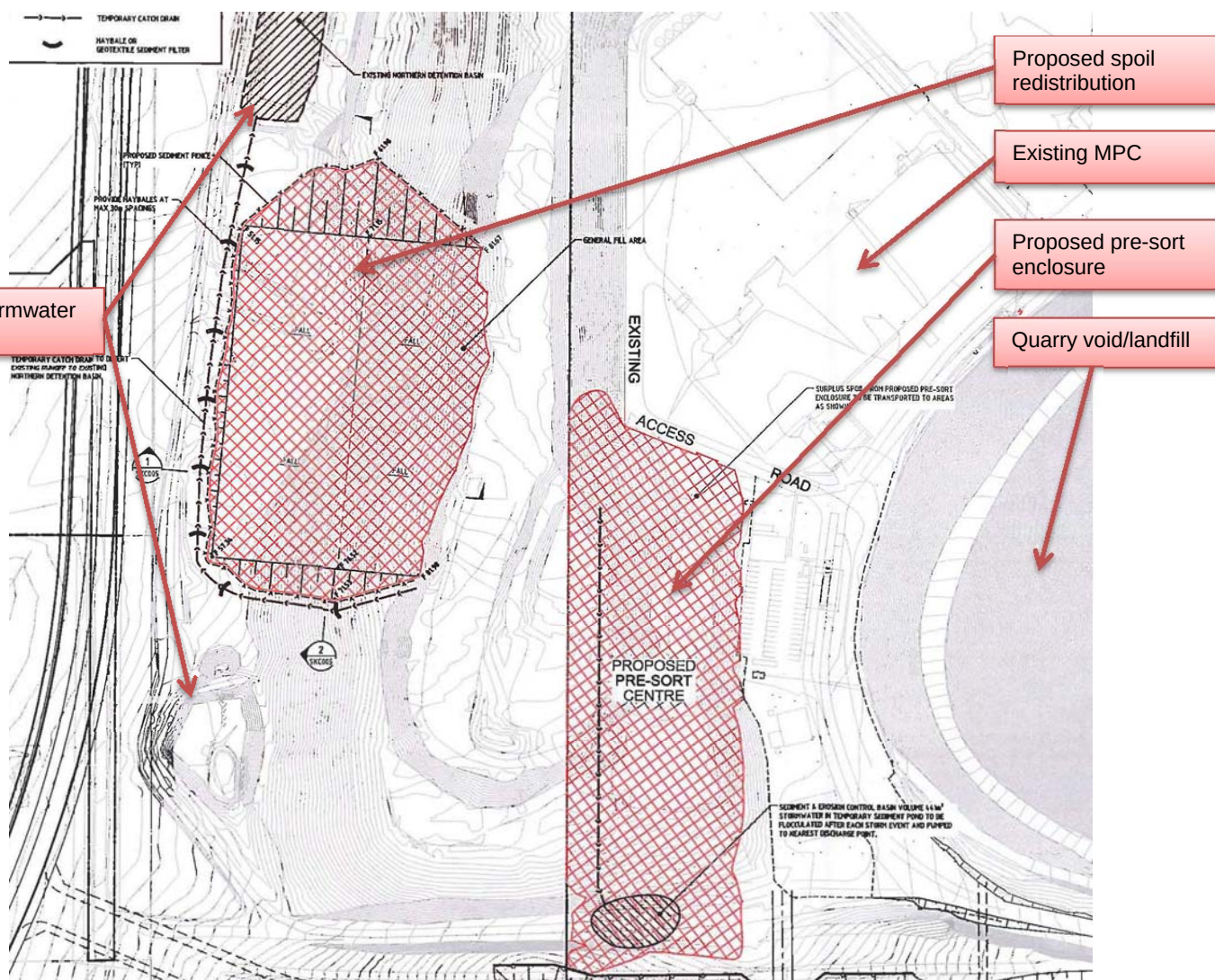


Figure 6 – Location of redistributed spoil

3 STATUTORY CONTEXT

3.1 Approval Authority

The Minister for Planning was the approval authority for the original application and is consequently the approval authority for the proposed modification.

However, as reportable political donations were made by the Proponent, the proposed modification will be determined by the Planning Assessment Commission (the Commission) in accordance with the Minister's Instrument of Delegation, dated 14 September 2011.

3.2 Modification request (Section 75W)

The Genesis facility was originally approved under Part 3A of the EP&A Act. Although Part 3A was repealed on 1 October 2011, the project remains a 'transitional Part 3A project' under Schedule 6A of the Act. Therefore, the proposed modification must be determined under section 75W of the EP&A Act.

The Department is satisfied the proposed changes are within the scope of section 75W of the EP&A Act and do not constitute a new application. The proposed pre-sort enclosure would provide additional space to segregate incoming waste to improve the operational

efficiency of the site to achieve its approved throughput limits. However, the modification does not increase the waste throughput limits.

4. CONSULTATION

Under section 75W of the EP&A Act, the Department is not required to notify or exhibit the proposed modification. However, the modification and supporting documents were made publicly available on the Department's website and the Department also referred the modification to Blacktown City Council, Environment Protection Authority, Office of Environment and Heritage and Department of Primary Industries (including Office of Water and Division of Resources and Energy) for comment. The Department did not consider it necessary to notify adjoining landowners due to the limited reach of predicted impacts associated with the proposed modification.

4.1 Submissions

The Department received submissions from all consulted public authorities, including Council. The issues raised are summarised below. Full copies of the submissions are attached at **Appendix C**. There were no public submissions.

The **Division of Resources and Energy, Office of Environment and Heritage, and Roads and Maritime Services** raised no objection to the proposal.

The **Environment Protection Authority** (EPA) initially required further details from the Proponent on dust, spoil, waste and surface water management. The EPA were satisfied with the additional information and made no further comment or recommendations.

The **Department of Primary Industries (DPI) Office of Water** initially requested additional information about groundwater interception and stormwater re-use. The Proponent advised that dewatering, if required at all, was likely to be less than the threshold for a DPI permit. In addition, water re-use from the stormwater basins will be sourced from disturbed areas while clean run-off would be diverted away from detention basins. DPI also recommended any wash-down of concrete delivery vehicles should be at least 20 m from the Jacks Creek riparian area. The Department has included a requirement for a wash-down facility in the recommended conditions of approval.

Blacktown City Council required further details on traffic and road management, noise modelling, compliance with the Project Approval in respect of precinct road construction and developer contributions, and it also raised concerns about the long-term management of stormwater from the site.

The Proponent's compliance with the Project Approval is not a matter for consideration in the Department's assessment of the current modification and it is being investigated separately by the Department. All issues identified by Council relevant to the modification proposal have been addressed by the Proponent.

4.2 Response to Submissions

The Proponent prepared a Response to Submissions (RTS) report to address issues raised in the submissions, which was first submitted on 25 May 2015. Following the Department's further consultation with the EPA, DPI and Council, the Proponent submitted a Spoil Management Plan on 10 September 2015 and a Stormwater Management Plan on 26 November 2015, which addressed all outstanding issues.

Key features of the RTS and subsequent plans include the following amendments to the proposed modification:

- temporary erosion and sediment controls around stockpiles for dust management;

- a spoil management plan for the management of spoil associated with earthworks;
- a noise wall, if required, to attenuate construction noise during earthworks (the Department has determined that a noise wall is required);
- an additional 10 car parking spaces to accommodate 10 additional employees;
- circulation access around the pre-sort enclosure for fire-fighting purposes; and
- construction materials and finishes consistent with the existing adjoining facility.

5. ASSESSMENT

The Department has assessed the merits of the proposed modification. During this assessment, the Department has considered the:

- Proponent's Environmental Assessment and supporting documentation for the modification (see **Appendix B**);
- submissions received from the Council and public authorities (see **Appendix C**);
- the Proponent's RTS report, dated 19 May 2015, and supplementary reports see **Appendix D**);
- the original Project Approval and previous modifications; and
- the relevant provisions of the EP&A Act.

The Department considers the key assessment issues for the proposed modification are noise and surface water management. These issues are assessed below. Other issues are considered in **Table 1**.

5.1 Noise impacts

The existing Project Approval for the Genesis Waste Facility and Landfill includes noise related conditions and noise impact criteria. These conditions were last reviewed in the Department's assessment of Modification 4, which sought to extend the operating hours of the MPC from 7am to 6pm, to 6am to 10pm.

For the proposed modification, the Proponent submitted a Noise Impact Assessment prepared by Pacific Environment Limited as part of its Response to Submissions (RTS) report. The assessment reviewed the potential additional noise impacts from the operation of the pre-sort enclosure in conjunction with the operation of the remainder of the waste management facility and landfill.

The nearest residential receivers to the site are in Minchinbury, approximately 820m to the north across the M4 Motorway, and in Erskine Park, approximately 1.3 kilometers (km) to the west of the pre-sort enclosure site.

Construction noise impacts

The bulk earthworks and construction for the pre-sort enclosure would occur while the site continues to operate. The Noise Impact Assessment did not provide a quantitative assessment of potential construction noise impacts. However, the location of the pre-sort enclosure is generally shielded from sensitive receivers in Minchinbury and Erskine Park by the existing facility and M4 motorway to the north, and the quarry spoil pile to the west.

The bulk earthworks to remove and redistribute part of the quarry spoil pile for the pre-sort enclosure is estimated to occur over 10 weeks. The operation of excavators at the top of the spoil pile would be shielded from receivers by a temporary structural noise barrier. The Department has included provisions for the temporary noise barrier, to be in place before excavation begins, in the recommended conditions of approval.

The Department also notes the existing Project Approval includes restrictions on the hours of construction in accordance with the *Interim Construction Noise Guidelines* (i.e. 7am to 6pm Monday to Friday, and 8am to 4pm Saturday, with no works on Sunday or Public Holidays).

The hours would ensure the bulk earthworks do not take place during times more sensitive to noise such as evening, night and early morning periods.

The redistribution of the spoil on the western slope of the spoil pile is more difficult to acoustically screen due to the steep angle of the slope. However, with excavation activities shielded on the top of the spoil pile (to minimise cumulative impacts), the 1.1km distance from the location of the area to be filled with the spoil to potentially affected receivers to the west, the day time only occurrence and short duration of the work, the Department is satisfied unacceptable construction noise impacts are unlikely to arise from unloading and compacting the spoil.

The Proponent would continue to monitor noise on the site in accordance with the Environment Protection Licence and unexpected construction noise impacts can be managed within the licence conditions. The EPA did not raise any issues about construction or operational noise impacts for the proposed modification.

The Department's assessment concludes the construction noise impacts are unlikely to lead to unacceptable noise impacts at sensitive receivers to the west and north. The Department has included a condition of approval requiring a temporary noise barrier for machinery working at the top of the spoil pile, and notes existing conditions in the Project Approval would restrict works to standard construction hours.

Operational noise impacts

The Noise Impact Assessment prepared for the modification proposal predicted that where the existing facility was operating at the noise criteria in the existing Project Approval, the proposed pre-sort enclosure would add 0.5dB(A) to the noise emissions from the whole site (which is taken to be a 1dB(A) increase in the *NSW Industrial Noise Policy* (INP)). Therefore, the resulting cumulative noise impacts at the nearest receiver in Minchinbury would be as shown in **Table 1**.

Table 1 – Existing criteria and cumulative noise impacts

	Day LA _{eq(15 minute)} dB(A)	Evening LA _{eq(15 minute)} dB(A)	Morning Shoulder LA _{eq(15 minute)} dB(A)
Existing criteria	36	35	35
Cumulative impact	37	36	36

Due to the predicted small increase in operational noise emissions, Council recommended a full noise assessment be carried out to revisit the noise criteria in the existing Project Approval.

However, the Department considers there is sufficient information available in the Noise Impact Assessment, together with previous noise impact assessments for the site, to adequately assess the noise predictions for the current modification proposal. The Department notes:

- background noise levels are already high at all residential receivers surrounding the facility due to the proximity of the M4 motorway;
- based on previous noise impact assessments for the site, noise criteria calculated according to the INP would be no lower than 42 dB(A) at these receivers;
- as is the EPA's licensing practice, the existing noise criteria in the Project Approval were originally set at the previously predicted noise impacts, which were significantly lower than the INP criteria (i.e. background noise plus 5 dB(A)); and
- the background noise already experienced at the receivers would mean the predicted noise impacts from the proposed modification could not actually be measured.

Therefore, while the predicted noise impacts represent a 1dB(A) increase above the criteria

in the existing Project Approval, the impacts remain below the acceptable criteria in the INP and, in addition, would be un-measurable at the nearby receivers due to the existing levels of background noise generated by vehicles travelling on the M4 Motorway. The Department notes the EPA did not raise any issues with potential noise impacts. Consequently, the Department's assessment concludes the predicted noise impacts are acceptable and it has included revised noise criteria in the recommended conditions of approval.

5.2 Stormwater management

The Project Approval includes existing stormwater related conditions governing the design and operation of the stormwater management system for the site. The conditions include detailed specifications for the design parameters for the system. The specifications ensure the design is consistent with the Eastern Creek Precinct Plan under *State Environmental Planning Policy 59 Central Western Sydney Regional Open Space and Residential*, which sets out stormwater systems including detention basins for a number of catchments over the site (see **Figure 6**).

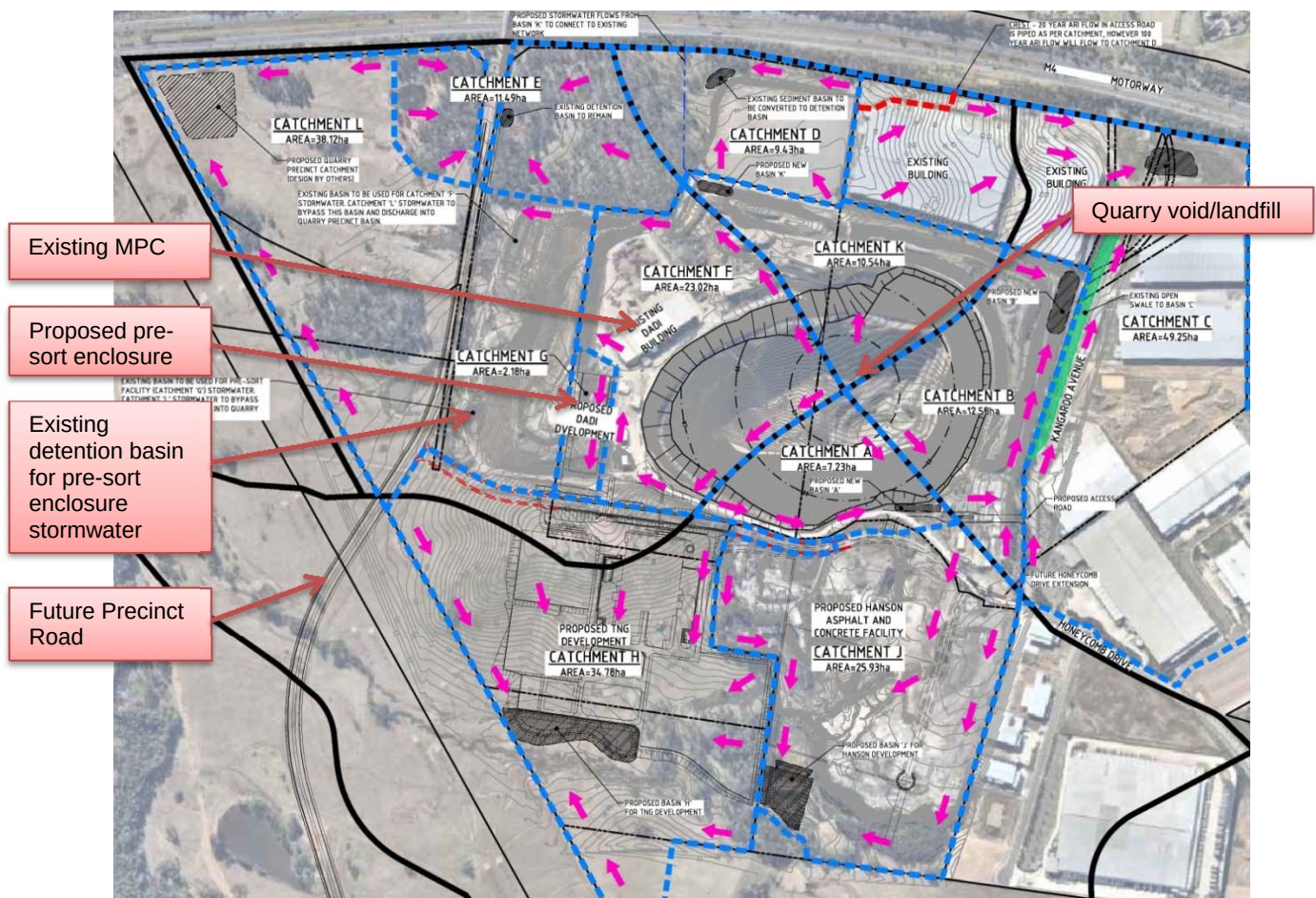


Figure 6 – Precinct surface water management including existing detention basin for the pre-sort enclosure

The proposed arrangements for the pre-sort enclosure direct stormwater to an existing detention basin in the western portion of the precinct (as shown in **Figure 6** above).

Council initially raised concerns with this arrangement as the existing detention pond is located on a separate lot to the pre-sort enclosure and any future sale of the lot may hinder stormwater management for the pre-sort enclosure. However, the Minister's approval runs with the land and will bind any future owner. The Proponent indicates these stormwater arrangements could be changed at the time the lot is sold such as by way of continued use

of the basins under a restriction on the title, or the re-direction of stormwater to other parts of the stormwater management system on the site. This will be a matter for the Proponent.

Both Council and the Department are satisfied with this approach. The existing basin may require minor augmentation so there is adequate additional capacity for the run-off from the pre-sort enclosure. Therefore, the Department has included a recommended condition of approval for an Interim Stormwater Management Plan to ensure the design of any augmentation work is carried out in consultation with Council and in accordance with Council's *Engineering Guide for Development (2005)*.

5.5 Other Issues

Table 1: Other Issues

Assessment	Recommendation
Air quality	
- The Project Approval has air quality and odour related conditions including emissions criteria and the requirement to implement an Air Quality, Odour and Greenhouse Gas Management Plan. - The waste handled within the pre-sort enclosure is material within the existing waste stream accepted at the site and currently handled within the existing MPC. - The material typically comprises plastic, fabric, paper, glass, metals and timber, which is not inherently dusty or odorous and would not be subject to processes leading to significant air emissions. - As the building is enclosed, the Department is satisfied air quality impacts from the pre-sort enclosure would be minimal and easily managed under the existing management plan. - The bulk earthworks for the pre-sort enclosure involve disturbing a large quantity of spoil from the former quarry over a period of about 10 weeks. - The EPA initially raised an issue about the lack of protocols in the modification proposal for mitigating air emissions from the earthworks. - The Proponent provided a Spoil Management Plan in the RTS, which included such provisions as: - erosion and sediment controls; - wetting of exposed areas; and - re-vegetation on completion. - The Department considers these standard practices to be effective in managing the generation of dust from bulk earthworks. - The EPA raised no further issues with the Spoil Management Plan and construction related air quality impacts. - The Department's assessment has concluded construction and operational air quality impacts are acceptable and it recommends conditions of approval for the Proponent to update and revise the Air Quality, Odour and Greenhouse Gas Management Plan to reflect the proposed modification, and to implement the Spoil Management Plan.	Recommended conditions require the Proponent to: - carry out bulk earthworks in accordance with the Spoil Management Plan dated September 2015; and - revise the existing Air Quality, Odour and Greenhouse Gas Management Plan.
Waste management	
- The Project Approval includes a number of existing conditions governing the acceptance and handling of waste on the site. - The pre-sort enclosure would operate as an adjunct to the existing MPC, providing additional and contingency floor space for the segregation of waste before it is sent to the materials processing unit. - The EPA initially raised concern about the lack of protocols in the proposed modification about waste handling within	No additional conditions required.

Assessment	Recommendation
the pre-sort enclosure. - The Proponent advised the processes to occur in the pre-sort enclosure would be similar to those in the MPC and include: - existing waste acceptance, weighing and inspection protocols; - off-loading of material within the building (and not outside); - segregation and sorting of the material with mobile machinery; - transport of baled and packaged material off site; and - transport of residue material by truck to the MPC for processing in the materials processing unit. - The EPA raised no further issues and the Department is satisfied the existing conditions would be adequate for the pre-sort enclosure.	
Traffic and transport	
- The Project Approval includes existing conditions governing transport to the site and the construction of parking and internal roads. These conditions would apply to the pre-sort enclosure. - The modification does not increase the approved throughput of waste and consequently would not increase the volume of heavy vehicle traffic. - The pre-sort enclosure would require additional parking for staff and visitors. The Department calculates a demand for 9 spaces based on the floor area of the building under the Eastern Creek Precinct Plan. - The proposed modification includes provision for 10 spaces and the Department has included conditions to ensure these spaces are constructed.	Recommended conditions require the Proponent to: construct 10 additional car parking spaces.
Contamination	
- The Spoil Management Plan for the proposed modification was accompanied by a Preliminary Contamination Assessment of the quarry spoil prepared by Douglas Partners. The assessment was prepared for the original Project Application in April 2006, but is considered to be valid for the in-situ spoil subject to the current modification application. - The assessment examined a number of locations across the spoil pile and concluded: - concentrations of heavy metals and polyaromatic hydrocarbons are within Australian background ranges; - the material could be considered Virgin Excavated Natural Material suitable for re-use as fill; and - the assessment was limited to the top 2.8m of material and additional testing is required for deeper material. - The Spoil Management Plan includes provisions for testing of the material as excavation proceeds and for the control of dust emissions from the excavation activity. The EPA raised no issues in respect of contamination. - The Department is satisfied the spoil is suitable for relocation on the site and excavation in accordance with the Spoil Management Plan would not lead to adverse health impacts.	Recommended conditions require the Proponent to: carry out earthworks in accordance with the Spoil Management Plan.

6. CONCLUSION

The proposed modification involves construction and operation of a pre-sort enclosure. The facility would be an adjunct to the existing Materials Processing Centre on the site and it would provide additional floor space for segregating waste before the materials processing unit. The facility is intended to improve the operational efficiency of the processing unit,

which has so far been unable to achieve its approved throughput. The proposed modification would not increase the approved waste throughput limits for the site.

The Department's assessment has concluded the pre-sort enclosure can be constructed and operated generally within the terms of the existing project approval and with minimal additional impact. A 1dB(A) increase in the Project Approval noise criteria is required, and this increase remains within the acceptable criteria for the site under the *Industrial Noise Policy*. The proposal involves the redistribution of a large amount of spoil from the former quarry. This would occur under a Spoil Management Plan to minimise impacts.

The Department is satisfied, subject to conditions requiring the Spoil Management Plan to be implemented, revised noise criteria, stormwater infrastructure and the provision of additional parking, that the impacts of the proposed modification are likely to be minor. Consequently, the Department recommends approval subject to these conditions.

7. RECOMMENDATION

Under delegation of the Minister, it is RECOMMENDED the Planning Assessment Commission:

- approve the modification under section 75W of the EP&A Act; and
- sign the attached instrument (**Appendix A**).

David Mooney
Team Leader


Chris Ritchie 3/3/16
Director
Industry Assessments


Anthea Sargeant 3/3/16
Executive Director
Key Sites and Industry Assessments

APPENDIX A – NOTICE OF MODIFICATION

APPENDIX B – SECTION 75W REPORT

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=6873

APPENDIX C – SUBMISSIONS

APPENDIX D – RESPONSE TO SUBMISSIONS

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