

Leslie Harrison Dam Upgrade Project Traffic Management Plan - Summary



June 2018



Project background

Leslie Harrison Dam is an earth fill dam on Tingalpa Creek in the Redland City Council area and is one of the 12 drinking water supply dams in the SEQ Water Grid. It was constructed in 1967/8 by (then) Redland Shire Council as an un-gated dam. The dam was upgraded in 1984 to increase the drinking water storage capacity for the growing Redlands region. This upgrade included the installation of four vertical lift gates on the spillway.

Ownership of the dam was transferred to Seqwater in 2008. In 2012/3 an independent review found safety improvements were required at Leslie Harrison Dam to meet the current Queensland Dam Safety Guidelines. The spillway gates were removed and the water level lowered in 2014/5 to reduce water pressure and loads on the dam wall to improve safety.

The Leslie Harrison Dam Upgrade will start construction in mid 2018 and will take up to 12 months to complete, subject to weather. The design for the upgrade includes:

- widening and strengthening of the dam wall
- anchoring the spillway
- improving resilience to extreme weather events and earthquakes
- modifying the water intake tower to improve flood immunity

As part of planning for construction, Seqwater commissioned an independent traffic management plan to identify suitable routes for heavy vehicles to transport materials to and from the site. This plan identified six potential routes. An internal assessment eliminated two of those as impractical, unsafe or having unacceptable impacts. Seqwater also determined the use of existing streets (known as the Willowie Cres option) would not be suitable for heavy vehicles for safety reasons but could be used for light vehicles.

An assessment of the remaining three options (known as the Dam Rd, Howlett Rd and Killarney Cres options) found all had significant impacts. The nature and severity of those impacts varied between routes, and there was no easily identifiable 'best' option.

All three options plus the Willowie Cres option were presented to the community for consultation between 29 November 2017 and 5 February 2018. Consultation included a web based interactive map, a series of dam tours, information sessions, media advertising, web content and distribution of flyers. Community feedback showed an overwhelming preference for the use of Dam Rd, and identified significant concerns with the social, environmental and traffic impacts of all routes.

Seqwater announced in April 2018 that Dam Rd would be the primary access route for heavy vehicles during construction, with a temporary bridge to be constructed over Tingalpa Creek to provide access to the construction site. Light vehicles will use the existing local streets.

Seqwater made a commitment to keep the community informed of planning and construction work, and to publish summaries of both the Traffic Management Plan and Environmental Management Plan for the works. Fulton Hogan, who have been contracted to undertake the dam upgrade works, have now completed these plans.

This document provides a summary of Traffic Management Plans for the Leslie Harrison Dam Upgrade construction project.



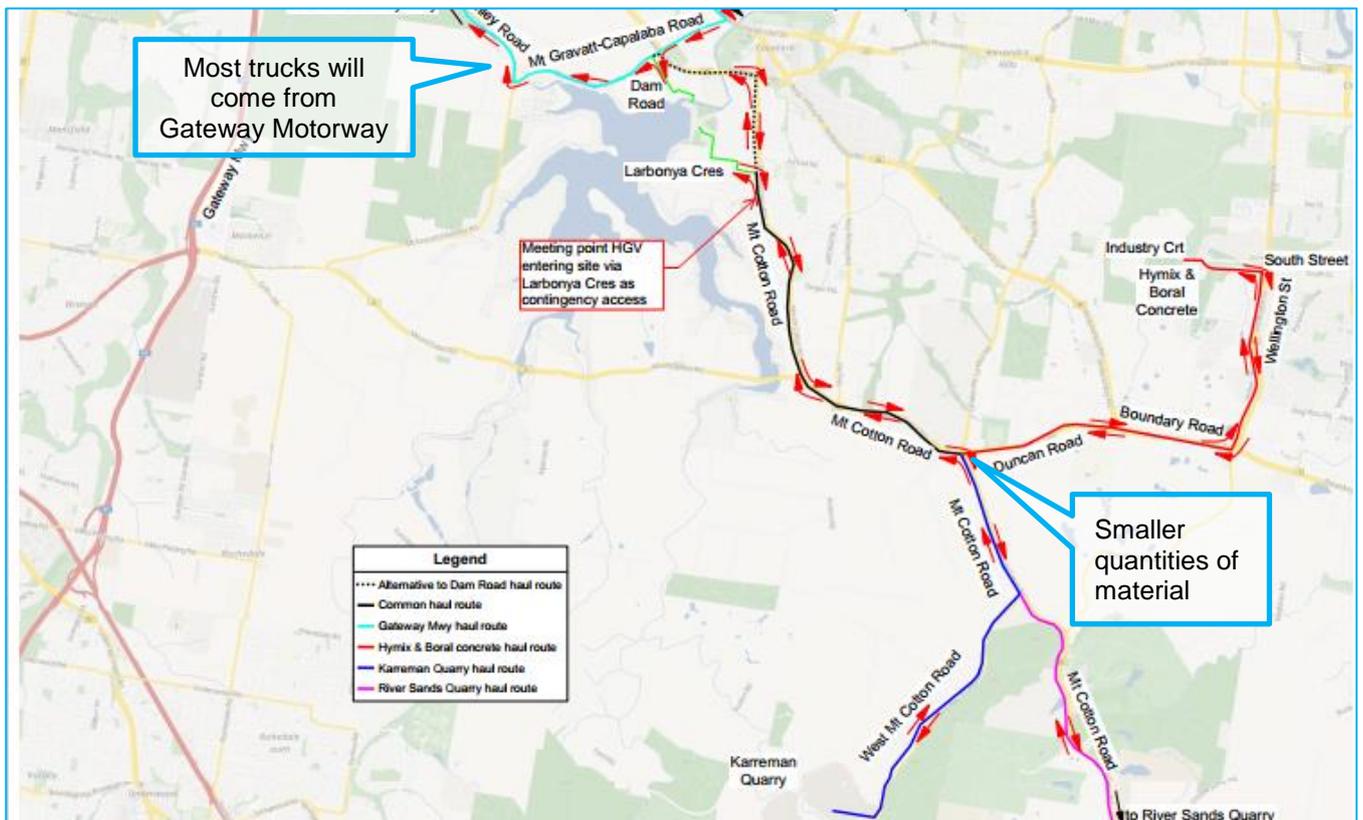
Anticipated traffic impacts

Standard work hours will be between 7am and 5:30pm, Monday to Friday and 7:30am and 2pm on Saturday. There are no expected night works on the project, although some heavy equipment may need to be transported at night due to restrictions on permits issued by the Department of Transport and Main Roads. We will notify residents if any work needs to be undertaken outside these hours.

The number of workers on site will vary depending on the work being undertaken on site. Up to 50 workers will be accessing the site each day during the busiest stage of works.

The number of trucks will also vary depending on the work being undertaken and will peak at around 80 trucks per day. Most materials will be transported by a 'truck and dog' arrangement.

The majority of project materials will be sourced from outside of the Redlands area and will be transported via the Gateway Motorway. Smaller quantities will be sourced from the Hymix / Boral concrete batching plant in Cleveland, the River Sands quarry at Carbrook and the Karreman quarry at Sheldon. The major roads to be used by haulage trucks are shown on the map below.



Access routes

Access routes for construction traffic were decided after consultation with the local community, elected representatives, Brisbane City Council, Redland City Council and the contractor. Key considerations in choosing access routes were safety, environmental impacts, traffic impacts, and impacts on local residents homes.

Heavy vehicles (trucks)

Dam Road will be the primary heavy vehicle access route during the upgrade construction. The existing maintenance access track will be sealed to reduce noise and dust.

The crossing of Tingalpa Creek will use a temporary bridge, similar to those used for humanitarian and emergency access routes. The temporary bridge will be 55m long, about the length of four and a half city buses, and will safely transport 44t trucks from Dam Road to the work site. The temporary bridge will be higher and more resilient than a typical creek crossing but will still be unsafe to use during large flood events.



Light vehicles (cars)

The existing access to the Water Treatment Plant along Larbonya Crescent and Willowie Crescent will be used by light vehicles, such as personal cars and utes, to access the construction site. Water Treatment Plant operators and material deliveries will also continue to use the existing access roads.



Contingency plan for when trucks can't use Dam Rd

There may be times when trucks can't use Dam Rd to access the site, such as if they cannot use the temporary bridge or if there are major disruptions on Mount Gravatt – Capalaba Rd. Larbonya Crescent and Willowie Crescent will be a backup contingency route for heavy vehicles to access the site if required. We do not expect to use the contingency route frequently and may not need to use it at all during the construction period.

Dam Road controls

The objectives of traffic control at the Dam Rd entrance are to maintain traffic flow on Mount Gravatt – Capalaba Rd, and to ensure all vehicles and drivers entering the construction site comply with the site safety plans.

To achieve these objectives, the following measures will be put in place:

- Vehicles will only be able to access Dam Rd by left turn in, and will only leave Dam Rd by left turn out.
- Warning signs will be erected on both Mount Gravatt – Capalaba Rd and Moreton Bay Rd at the approach to Dam Rd.
- A stop sign will be erected at the Dam Road exit, requiring all trucks leaving site to give way to traffic on Mount Gravatt – Capalaba Rd.
- The verge of Mount Gravatt – Capalaba Rd approaching Dam Rd will be graded, providing room for vehicles to slow down and queue.
- The entrance gate to Dam Rd will be moved 20m-30m along Dam Rd, providing additional room for vehicles to queue.
- The entrance gate will have signage indicating required Personal Protective Equipment and the UHF radio channel to request access to the site and instructions for movement.
- A second gate will be erected on the northern side of the temporary bridge.
- A small, secondary site office will be erected near the northern side of the temporary bridge where contractors can be inducted and receive safety briefings.
- Both gates will be locked between 6pm and 6am.



Mount Cotton Rd / Larbonya Cres / Willowie Cres controls

The objectives of traffic control on the light vehicle access route are to maintain community safety, particularly around Capalaba State College, and to minimise disruption to our neighbours on Larbonya Cres and Willowie Cres.

To achieve this, the following measures will be put in place:

- Standard site hours have been set at 7am to 5.30pm, meaning most contractors will travel outside of school zone hours.
- Contractors will not be permitted to use Larbonya Cres before 6am to minimise early morning disruption to our neighbours. The site access gate will remain locked until 6am.
- All contractors will be reminded of school zone hours and safe driving practices during site induction.
- Seqwater will work with Queensland Police Service to monitor and enforce compliance with traffic safety regulations.

Should the local road network need to be used as a contingency route to provide access to heavy vehicles, the following additional measures will be put in place:

- Limitations of the size of trucks using the access route.
- Limitations on the number of trucks per hour.
- No heavy vehicle access to the site during school zone hours (7am - 9am and 2pm – 4pm).
- Notifications to residents.
- Traffic management signage erected at entrance to Larbonya Crescent and at all corners along route.
- Large trucks will be escorted by a pilot car through local streets.

