

Operational Management

1. Simplistic explanation of how the plant works

Raw materials required to make concrete

Ready mixed concrete is manufactured by mixing, in carefully controlled proportions cement, coarse and fine aggregate (gravel, crushed stone or sand) and water. Small amounts of admixtures may also be included to modify the properties of the concrete, for example to produce high strength concrete.

The batching process

The batching process involves feeding raw materials (in the desired quantities) into a mixer, where they are blended with water. Admixtures may be added, if necessary, to give the concrete specific qualities such as greater strength. The mixer is located inside the upper section of the batching tower. Once blended, the concrete is discharged into the drum of the truck mixer waiting below.

The above operation is known as a wet process because the water is added to and mixed with the raw materials in the mixer, whereas in the “dry” process water is added and mixed in the truck mixer drum itself.

The delivery process

Concrete will be delivered by road, typically in concrete mixer trucks with an 8m³ capacity.

Truck mixers will use the Melbourne Street access to enter and exit the site.

The recycling of aggregates process

A concrete reclaimer will be used to clean out each mixer truck at the end of each working day or on a change of concrete mix. The reclaimer separates coarse aggregate from fresh concrete ready for restocking and reuse as production aggregates.

Returned concrete is emptied from the truck mixer drum into a tank within the reclaimer. Grey water is added and an agitator is used to stir the resulting concrete and water mix. A screw then separates the coarser aggregate and feeds it from the reclaimer into a ground storage bay. Fine aggregate and cement are suspended within the grey water, which is directed into the wedge pit before being pumped to the grey water storage tank for reuse in the batching process.

2. Hours of operation

Hours of operation will be in line with MCC Guidance GD03 (Monday-Friday 7.30am – 6pm; Saturday 8.30am – 2pm; Sunday/Bank holidays – no work).

The hours operation relate to plant hours; staff hours; delivery times for raw materials aggregate, sand, cement, admixtures; and concrete production.

In instances when works are required outside of these hours these will be agreed and approved in writing with MCC.

3. Site parking for trucks at night and staff parking

During working hours truck mixers will park within the yard area, whilst employees and visitors will utilise the allocated parking area, situated adjacent to the Welfare facilities, as shown on Plan 4.

Truck mixers will be parked in the allocated parking area over night.