

Material Takeoff Impact — 50kT vs 250kT

This document compares baseline (50,000 tonnes) and proposed (250,000 tonnes) quantities and their impact. A detailed material takeoff clarifies how much planning and mitigating measures are needed when adjusting tonnage. It supports my comment about the importance of quantified planning in construction site management.

Material / Activity	Units	Quantity @ 50kT	Quantity @ 250kT	Notes / Comments
Aggregate removed	Tonnes	50,000	250,000	Five-fold increase
Haul truck trips	Trips	1,000	5,000	Based on average load per truck
Recycled material reuse	%	10%	10%	Placeholder efficiency
Estimated debris / spoil	Tonnes	5,000	25,000	Extra material for planning
Environmental buffer needed	Meters	50	50	Same buffer assumed