



Quality Alert

Failed wall 2



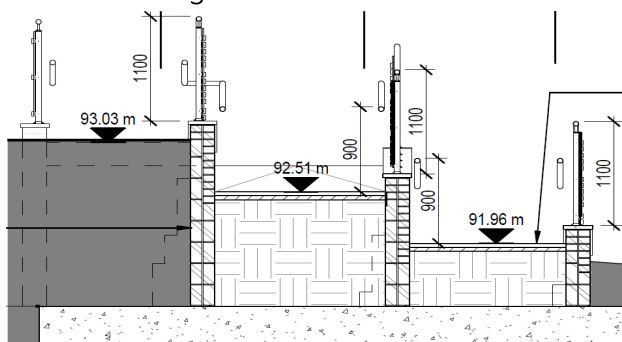
Initial inspection found the following:

1. Debonded brickwork
2. Extensive horizontal and vertical / stepped cracking
3. The grout used to retain the balustrade posts was crumbling and holding moisture (expanding grout used)
4. The balustrade post have been set into a 225 mm wall structure
5. No Substructure drainage behind the wall was installed at the time of build

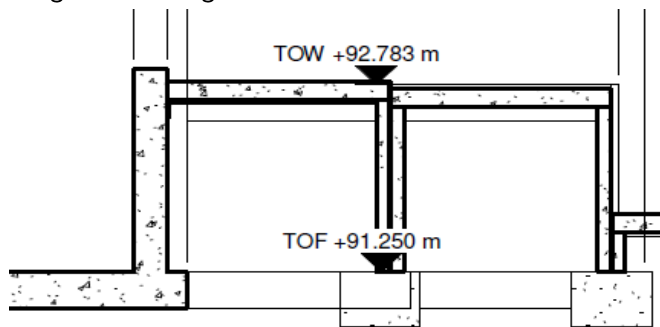
Review of the wall design and evidence collated found the following:

1. The wall has been built mainly to the Architect detail instead of the structural engineers drawing
2. The structural engineers drawing showed a different installation all together
3. When the install was questioned with the structural engineer it was deemed as unsound and needs redesigning.
4. No evidence found of agreed changes to the wall design
5. Some drain holes were cored in later but do not pass through into the substrate
6. Drainage channel was installed to the ramp to capture surface water

Architect design



Engineers design



Outcome: The wall is to be rebuilt at cost to Morgan Sindall's

This advice should be used, where the above is applicable, and the information discussed with your team highlighting the following points:

- Fully understanding the design before proposing changes and the consequences of those changes
- Ensure the changes are agreed through the change control process
- Ensure the changes are collated and issued as, as built

Toolbox Talk Packages (put an 'x' next to the related work packages):

X	Brickwork / Blockwork		Doors & Windows		Roof	X	Drainage		Frames		Roads, Paths, Pavings & Surfacing		Site preparation works
X	Substructure		FFE		Flooring		Internal walls & partitions, Ceilings		Joinery / General Carpentry		Painting		Fire & Lightning protection
	Walling (Tiling)		Electrical installations		Services / Systems		Water installations		DFMA (Offsite Manufacture)	X	Design		Miscellaneous

