I managed to catch Joe earlier this afternoon, and we ran through the calculations.

We are confident on the BIA completed to date, and that with the assumptions made are reasonable, with the site data we have, given the live, sensitive, and valuable shoe shop status

- 3.1m deep basement/dig proposed as per the Str-Eng pack
- 1.0m deep existing footings
- 0.5m distance to neighbour

All of the above, and as presented within the BIA means the 333ER critical section, falls within CAT1 damage (acceptable).

Given that the boundary wall trial pits are not a feasible option at this stage (as mentioned above the live, sensitive, and valuable shoe shop), we suggest responding to CR with a combination of the below points, to see if they would grant an **Approval in Principal** on the basis of:

- CGL believe the BIA is conservative and overestimates lateral movements (and thus horizontal strain) as the underpin installs would reduce excavation movements calculated via C760.
- The foundation inspection pits could be completed post-vacancy, or post-demolition of the existing structure.
- Residual risks would be controlled by implementation of a stringent movement monitoring and contingency plan during basement construction.
- More robust/stiffer temporary propping could be incorporated into the design to further limit lateral movements, thus the predicted movements in this BIA could be seen as conservative.
- CGL has also run a sense check on this stiffer propping arrangement, and movements at this 333ER critical section reduce the damage category closer to the CAT0-CAT1 boundary.

Kind regards
Will

William Newton
Senior Engineer
0203 096 7567|07376 344 042|
WilliamN@cgl-uk.com | www.cgl-uk.com