

Dear Majid,

This letter summarises the steps taken to protect the existing water main culvert within the site boundary, in compliance with Planning Condition 6.

Construction Phase Protection

During construction, the culvert was safeguarded using a steel protection plate with a compressible layer underneath. This system ensured that heavy construction loads were safely transferred to the natural ground either side of the culvert, preventing any direct pressure on the pipe or its surrounding gravel.

Engineering calculations confirm that the steel plate could safely carry the worst-case construction loads. However, recognising that United Utilities raised some concerns regarding the theoretical methodology, additional evidence was collected to provide absolute assurance of protection.

Condition Survey Evidence

To verify the culvert's integrity, condition surveys were conducted:

- **Pre-construction survey:** Sub Group, 2021
- **Post-earthworks survey:** Adien, 2025

A direct comparison of these surveys shows that no defects or changes occurred during construction. The culvert remains in the same condition as before works commenced. This physical evidence clearly demonstrates that the protective measures were effective, independent of any theoretical calculations.

Permanent (Completed Development) Situation

Once construction was completed, the steel plate was removed, and the culvert is now protected by permanent cover and the completed road structure. Vehicle loads in the finished development are significantly lower than during construction, and the final design has been reviewed and verified by our project engineers, Eastwoods CE.

Conclusion

The combination of engineering design, structural calculations, and condition survey evidence demonstrates beyond doubt that the culvert has been adequately protected throughout construction and will continue to be safeguarded in the completed development. All reasonable and verifiable steps have been taken to comply fully with Planning Condition 6.

Yours sincerely,

Henry Byfield,

Vistry Group