# Evolution and Adaptability within Parameters Plans

The importance of a robust understanding of the parameters through which the environmental impacts of development will be assessed is well documented and supported by case law as noted in the IEMA resource article “Parameters in Environmental Assessments” by Spawforths. However, the process of construction is continuously evolving, and designs are adjusted. These adjustments can be for any number of reasons from the type of contract used for the delivery to the discovery of a previously unknown site constraint. Similarly, the preparation of the parameters plan should be an evolving process and requires a continuous dialogue between the design team, technical advisors and the team preparing the Environmental Assessment so that the parameters reflect the most current information and can influence the design as the proposal evolves. This will make the final built form better for having fewer environmental impacts.

In addition, the fixed parameters plan is often determined long before the design of the built form has been finalised. It is therefore likely that the proposed scheme will have to be altered after the Environmental Impact Assessment has taken place in order to be constructed. As such, the parameters plan needs to provide certainty but also build in flexibility through the inclusion of tolerances. The creation of development zones and maximum building heights and ground levels are a way of providing certainty about the maximum size of the proposals but allowing tolerances for the built form to move within the zone or the levels to be lower.

The inclusion of tolerances within the parameters plan provide clear guidance for the assessment whilst allowing opportunity for the design of the built form to continue to evolve within the fixed parameters.

For example, Spawforths led the preparation of the Environmental Impact Assessment (EIA) and parameters plan, whilst working for Extra MSA on the new Motorway Service Area (MSA) currently being constructed at Junction 45 of the M1 motorway. This allowed Spawforths to be at the forefront of understanding the importance of allowing the parameters plan and the built form to evolve and incorporating flexibility.

From the outset of the project it was recognised that there were constraints within the site which made it technically complex:

- The site was over sailed by overhead power lines, which required an offset to buildings
- The adjacent lake presented a risk of flooding
- The proposed MSA has specific vehicular circulation requirements
- The creation of a vehicular access to the site required the realignment of an adjacent road.
- A Bridleway crossed part of the site
- There was existing vegetation to the boundaries of the site
- The site was a former mining area
As the design proposals emerged it became clear that the built form of the development would need to be focused in a particular area of the site in order to be deliverable. The architects and design team developed initial proposals which sought to address the constraints. Spawforths then began to incorporate the proposals into the parameters plan. This parameters plan was revised as the development proposals evolved, acting as a record of the changes within the scheme. At each stage of the evolution of the parameters plan the proposed parameters were discussed by the whole team. The aim of this was to allow the evolution of the design of the scheme in order to mitigate the environmental impacts. In this way the built form and the EIA were developed together as a feedback loop, shaped by the desire to minimize the impacts. The evolving parameters plan sought to incorporate the proposals whilst also allowing the architects and the developer enough flexibility to construct the building and landform in the most efficient and suitable way when on site.

When the built form proposals were sufficiently developed, the evolution of the development proposals and the parameters were fixed to allow the preparation of the EIA. The impacts and proposed mitigation were verified during the planning application process. At this point the parameters of the built form were approved and the detailed design of the built form and the construction could commence.

However, as expected, given the complex technical constraints of the site, further adjustment of the design was required after the EIA was completed. However, the close working of the team during the preparation of the parameters plan had created suitable tolerances as the basis of the environmental assessment.

These tolerances have allowed adaptation of the proposals and the construction to continue without the delay and avoided additional cost which may have been incurred had the parameters needed to be exceeded.

Extra MSA expect to open the MSA at Junction 45 in Autumn 2019.

*Spawforths, April 2019.*

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