DCN obtains certification of excellence in BIM technical methodology, saving time and project costs

Madrid Nuevo Norte, Spain's first major BIM certified urban development project

- **BIM methodology unites the innovation applied at DCN with tools such as the so-called "zero model", a digital representation of the terrain of the four project areas as they are before starting to build, which is modified and updated in real time as the works progress**

Madrid, 11 July 2022. Madrid Nuevo Norte has become the first major urban development project to be certified in the use of BIM methodology in Spain. Distrito Castellana Norte, its main private promoter, received the certification that accredits its technical team with BIM in both project management and information development management, as well as carrying out the development of the Madrid Nuevo Norte project in accordance with the demanding standards of this technical methodology.

This accreditation (in accordance with UNE EN 19650-1:2019 and UNE EN 19650-2:2019) has been obtained after an audit process was carried out by an external auditor (SGS). It guarantees not only the use of digital tools, which DCN is pioneering, but also accredits excellence in BIM technical methodology, which saves time and costs associated with the project, efficiently improving the coordination, safety and quality of the work process in a complex project such as Madrid Nuevo Norte.

This recognition certifies that the management system has been designed to meet the requirements of the standard regulations, validating the technical team's BIM proficiency and confirming that the organisation has effectively implemented the management system, among other milestones related to coordination among the multiple parties involved in the project.

BIM is increasingly being implemented at an international level in the management of engineering and architecture projects of considerable dimensions. However, applying this methodology to a large urban development project and integrating multiple works of engineering, architecture and urbanism on a large scale in a single project, goes one step further. This is due to the magnitude and complexity of the elements involved in district-wide planning and the variety of agents, both private and public, involved in creating a new urban environment. At a European level, there are scarce examples of

large urban interventions that have comprehensively relied on this technology for their management and implementation.

Innovation applied to urban design

One of the fundamental pillars for the development of Madrid Nuevo Norte is based on innovation, combining BIM methodology with the latest technologies to guarantee the correct development of the project.

To this end, DCN has developed the so-called "zero model", a digital representation of the terrain of the four project areas as they are before construction begins, which is modified and updated in real time as the work progresses. Always thanks to BIM technology, the development of Madrid Nuevo Norte can be controlled step by step. The different teams can be coordinated and tests can be carried out directly with this "digital twin", saving both time and costs.

As a result, on the physical terrain of the project, work is undertaken only once the compatibility and correct integration of this digital model have been verified.

Future applications

BIM methodology in a big urban development project like Madrid Nuevo Norte not only facilitates the design coordinated between teams and controls the construction process, but it also brings new possibilities for the management and maintenance of the new neighbourhoods. "It is a solid base from where to begin shaping innovative applications, such as these digital twins, but it also opens the door to other technologies such as virtual reality, augmented reality, Big Data, etc.," explains Belén Piserra, DCN's Business Director.

In this way, the integration of all the information in a single virtual model, thanks to BIM, could even make it possible, once a project is concluded, to optimise, through the resultant model, the management of the energy infrastructures, irrigation and waste, equipment, transport and possible smart city initiatives.

For more information:

Leticia Alonso
+34 646592531
lalonso@dcnmadrid.com

DCN Press
+34 91 344 90 08
prensa@dcnmadrid.com