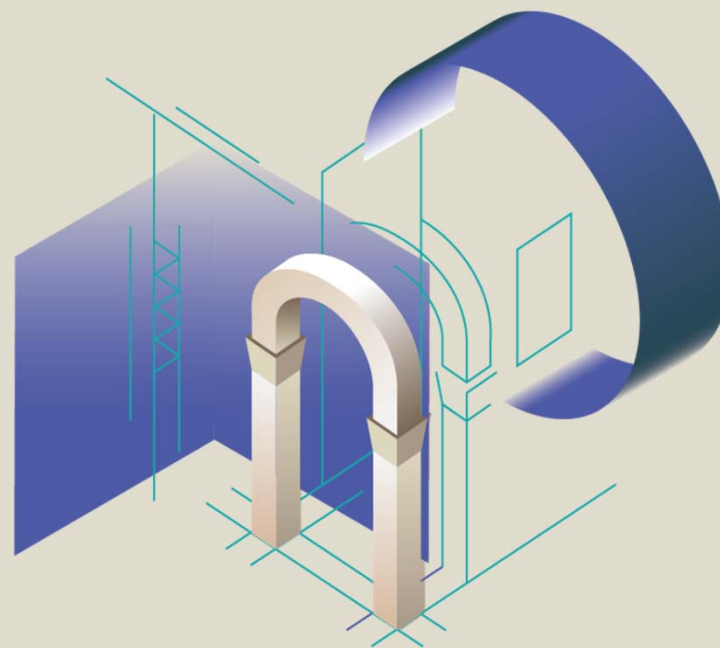


"Revolutionizing Design:  
The Potential of BIM in  
Modern Architecture for  
Public Properties"

*Rivoluzionare la  
Progettazione:  
Il Potenziale del BIM  
nell'Architettura Moderna  
per gli Immobili Pubblici*



**PATRIMONIO  
DIGITALE**

SMARTCITY

Arch. Pasquale De Pasquale

EXPO WORLD CONGRESS  
Idea Manager - Agenzia del

Demanio



AGENZIA DEL DEMANIO



L' **Agenzia del Demanio** is a public economic body responsible for the **management, rationalization and valorisation** of the state's real estate assets:  
approximately **42 thousand** assets worth **61 billion euros**.

With more than a thousand employees, it is divided into **17 Territorial Directorates** and a **General Directorate**:

The **Territorial Directorates**, present throughout the national territory, carry out the technical activities necessary for the **management and valorisation** of the State's real estate assets

The **General Directorate** is responsible for **directing, coordinating and controlling** the Agency's activities carried out by the territorial structures.



30.000

 Buildings

61 mld€

 Value





30

🏠 Heritage of historical-artistic value

%





AGENZIA DEL DEMANIO



UNI EN ISO 19650:2019

## Mission

AdD promotes, starting from 2018, the implementation of a procurement **information management system** that involves the entire life cycle of the Works, also through the application of **UNI EN ISO 19650**



**2018**

ATTIVITA' SPERIMENTALI

**Gara Pilota**

**2019**

PIANO RIDUZIONE RISCHIO SISMICO

**con Rilievo BIM >130 mln €**

**2020**

Nuovo Corpus Documentale **OpenBIM**

**NOD**

RETE REFERENTI BIM NAZIONALE

**16 Referenti**



**2021**

Premiazioni **BIM DIGITAL AWARD – DIGITAL HERITAGE**

**SmartBuilding AWARD**



**2022**

Creazione U.O **GESTIONE DIGITALE DEL PATRIMONIO IMMOBILIARE**

**32 Referenti**



**2023**

Progetti innovativi

— **Digital Twin**  
— **Facility BIM**





AdD applies the information management process **throughout the life cycle** and transmits its information requirements thanks to a **standard document corpus**, customizable for:

- **Type of property**
- **Type of service**
- **Design level**
- **Macro Uses/uses of BIM**



## Information management of the executive phase - documentation

To structure the process,  
qualify the question and  
obtain coherent answers from  
the Operators

- **update** of the Guidelines for the production information BIMMS
- **review of information specifications** of AS-IS and DESIGN phase
- new information specification for **Safety Coordinator** and **AS-BUILT**
- new OGI templates

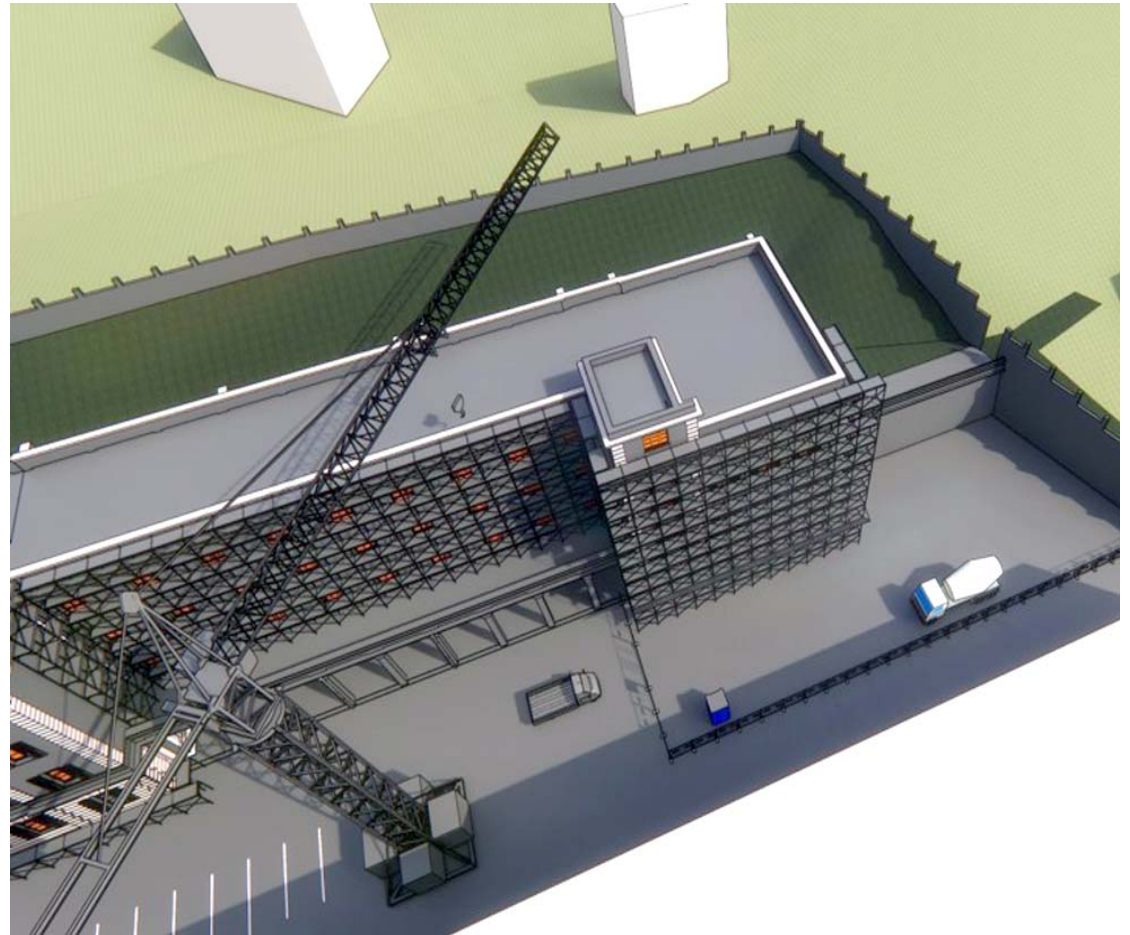




## Safety Coordination for AdD

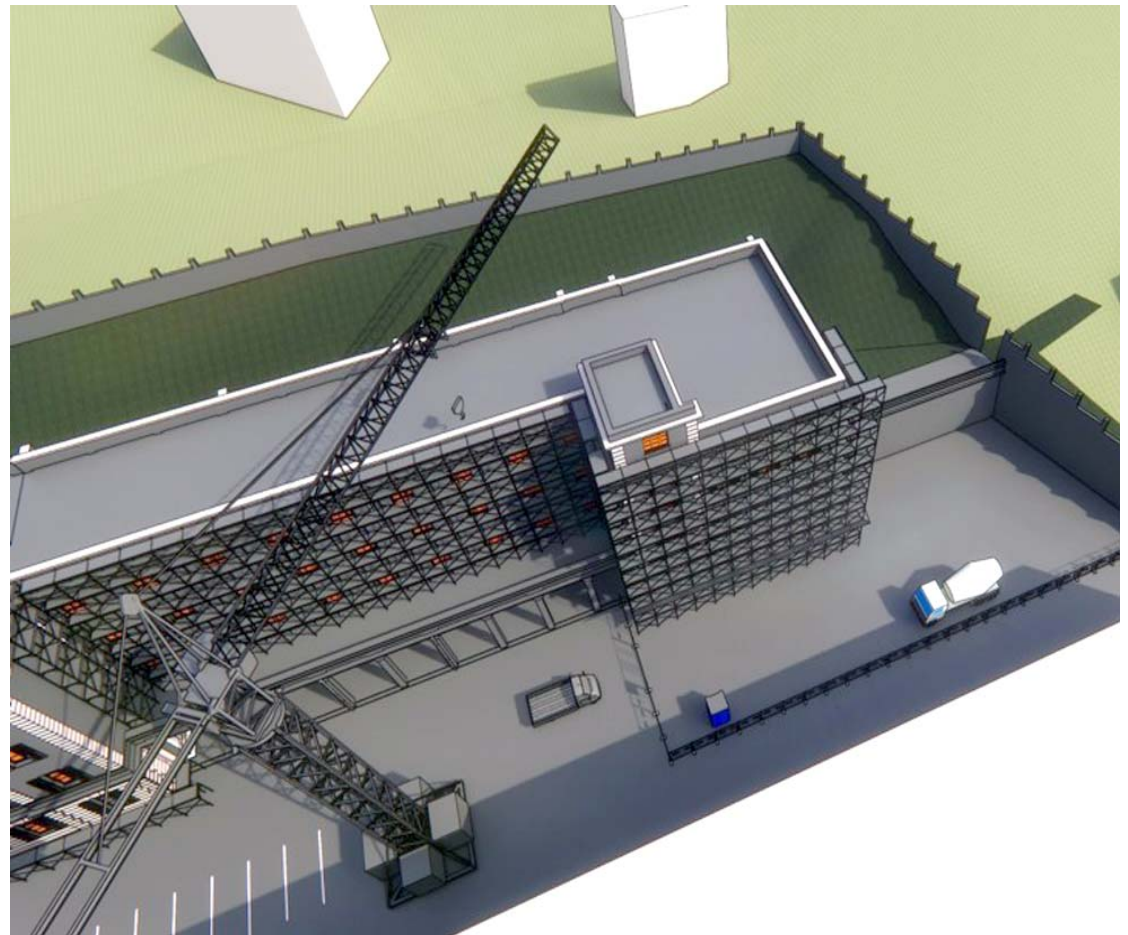
Obtain digital models, both in the design and execution phase, containing all the preparatory information for drafting the safety planning:

- identification of **construction site area(s)**.
- identification of **risks connected to the context** and the related mitigation requirements.
- definition of prevention measures used to mitigate the **risks related to processes and their interference**.



## Safety Coordination for AdD

- **preparations**
- **equipment, systems and machines** used on the construction site and the risks associated with their use;
- **organization of the construction site** (traffic, material storage and waste storage areas, etc.)
- **collective protection means and services** (signs, first aid, fire extinguishers, etc.)
- **emergency management systems.**
- estimate of **safety costs.**



DIGITAL CONSTRUCTION SITE

## Information requirement

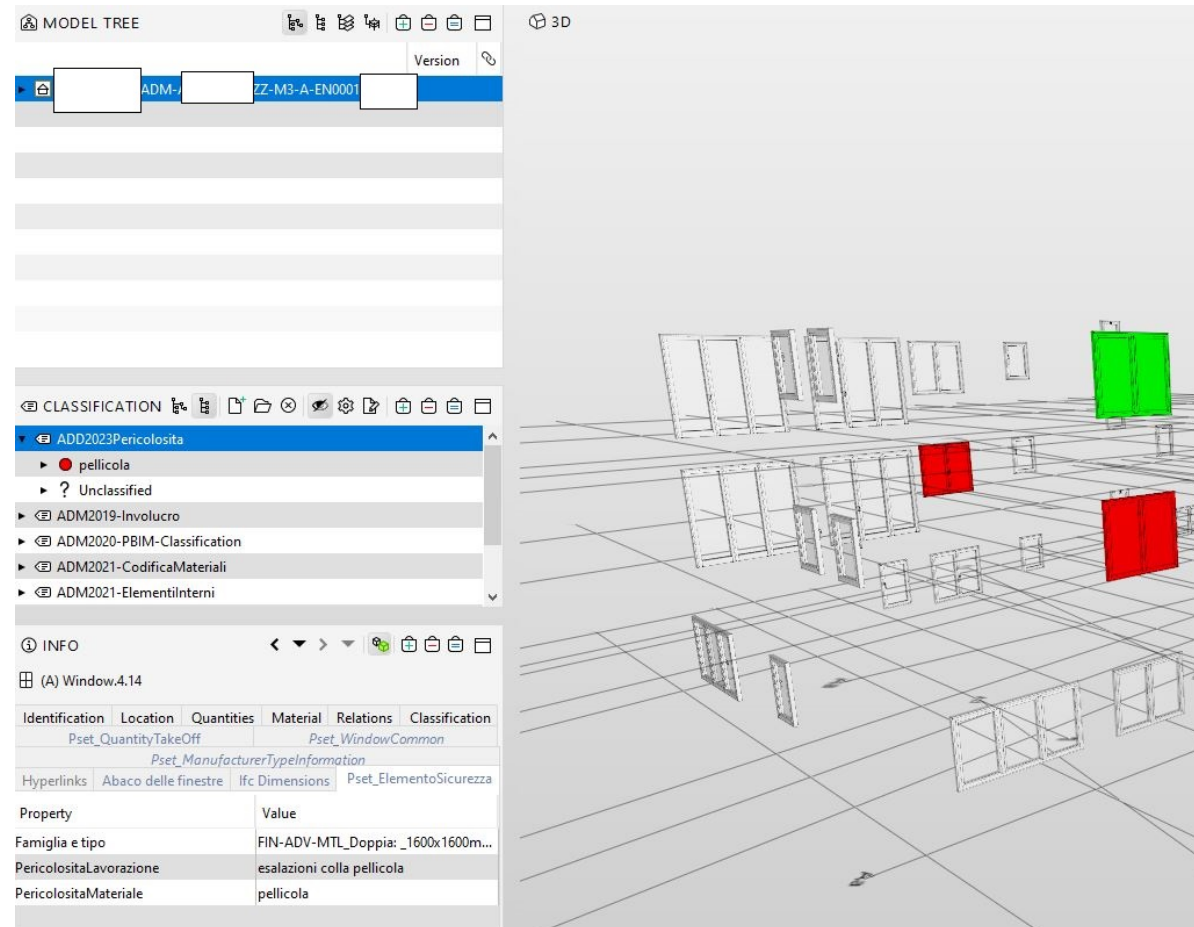
The OE (CSE) is required to **produce the Model(s) for Safety Coordination and related extraction** (ex. views from the Model, two-dimensional graphics or documents, etc.) referring to the **Milestones of the Works or specific processes** considered of particular attention by the CSP for the correct execution of the same.



# Information requirement

It must always be verified:

- the correct **georeferencing** and federation of disciplinary and interdisciplinary models.
- the **temporal association** of the model elements in the function of the executive activities, with particular attention the identification of the most phases.



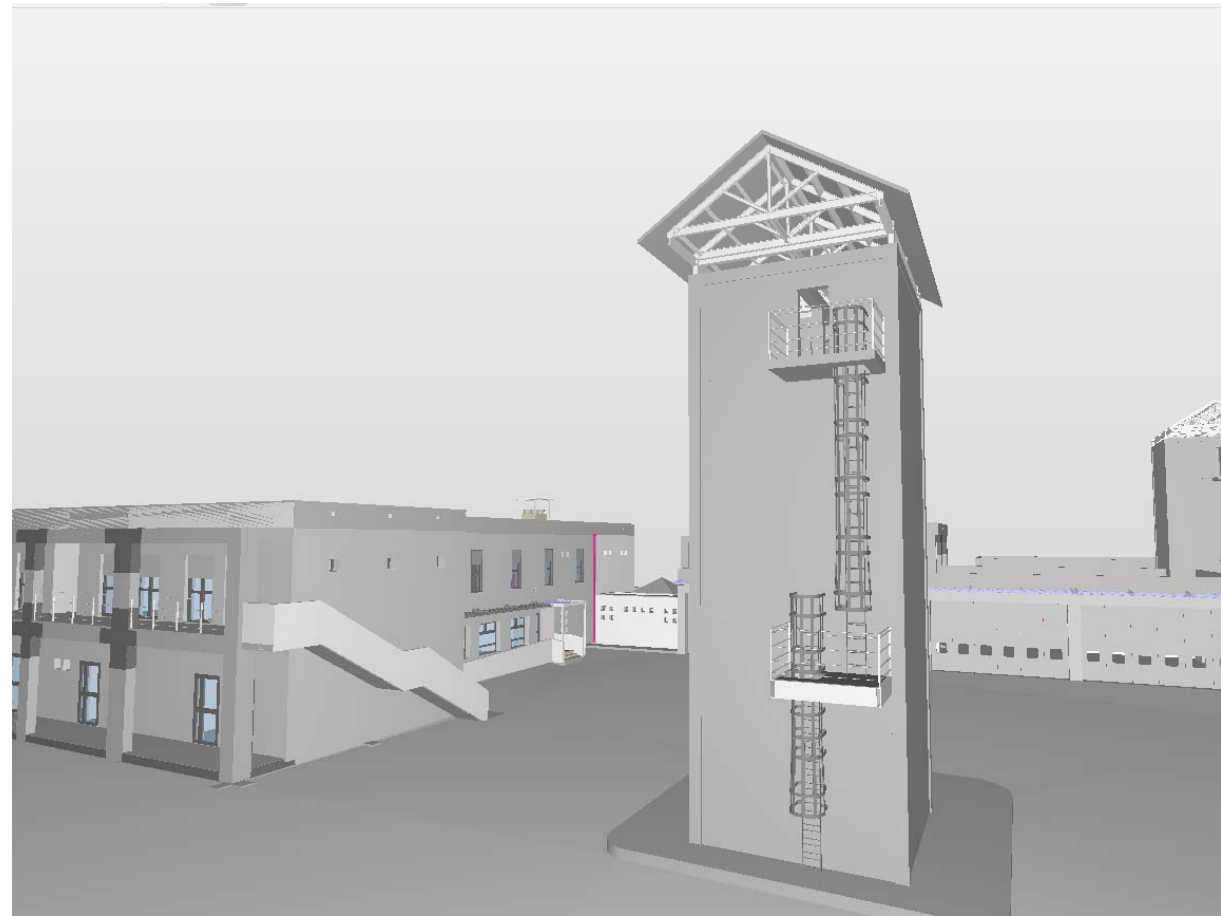
AS BUILT

## AS-BUILT for AdD

Geometric-informative representation of what is actually constructed, supplied and installed **in order to constitute a reliable database for the management of the Asset(s)** during its life cycle.

Digital models for:

- management and maintenance needs;
- plan future re-design and maintenance
- coordinate the construction elements represented and the attached certifications



## AS-BUILT Information requirements

- The Geometric Requirement Level requested is the same as the detailed design but with the actual "position" of the modeled elements
- The alphanumeric Requirement Level requested is same as the detailed design integrated with parameters mainly linked to the real information of the elements: installer; producer; outcome of tests and inspections; etc.
- The Level of Documentation Requirements requested consists of product certifications and approvals; user manuals; etc.

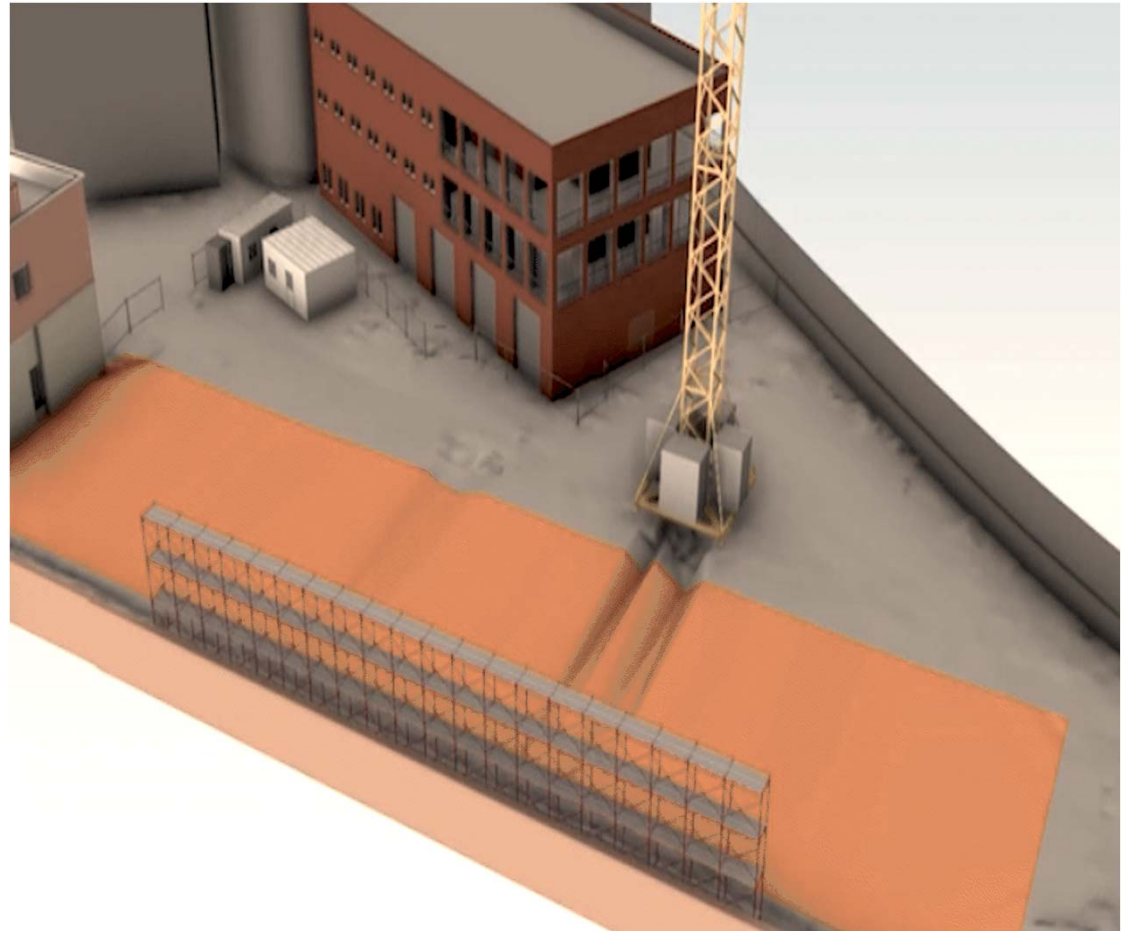


AS BUILT

## Responsabilites of the Constructor

Add requires to the contractor to **produce As-Built information models** in accordance with the company BIM process documents and according to a WBS (Work Breakdown Structure) organization of construction site activities defined and shared with the Contracting Authority.

The activity must be carried out by a qualified professional, and the constructor must provide to organize a **BIM team**.

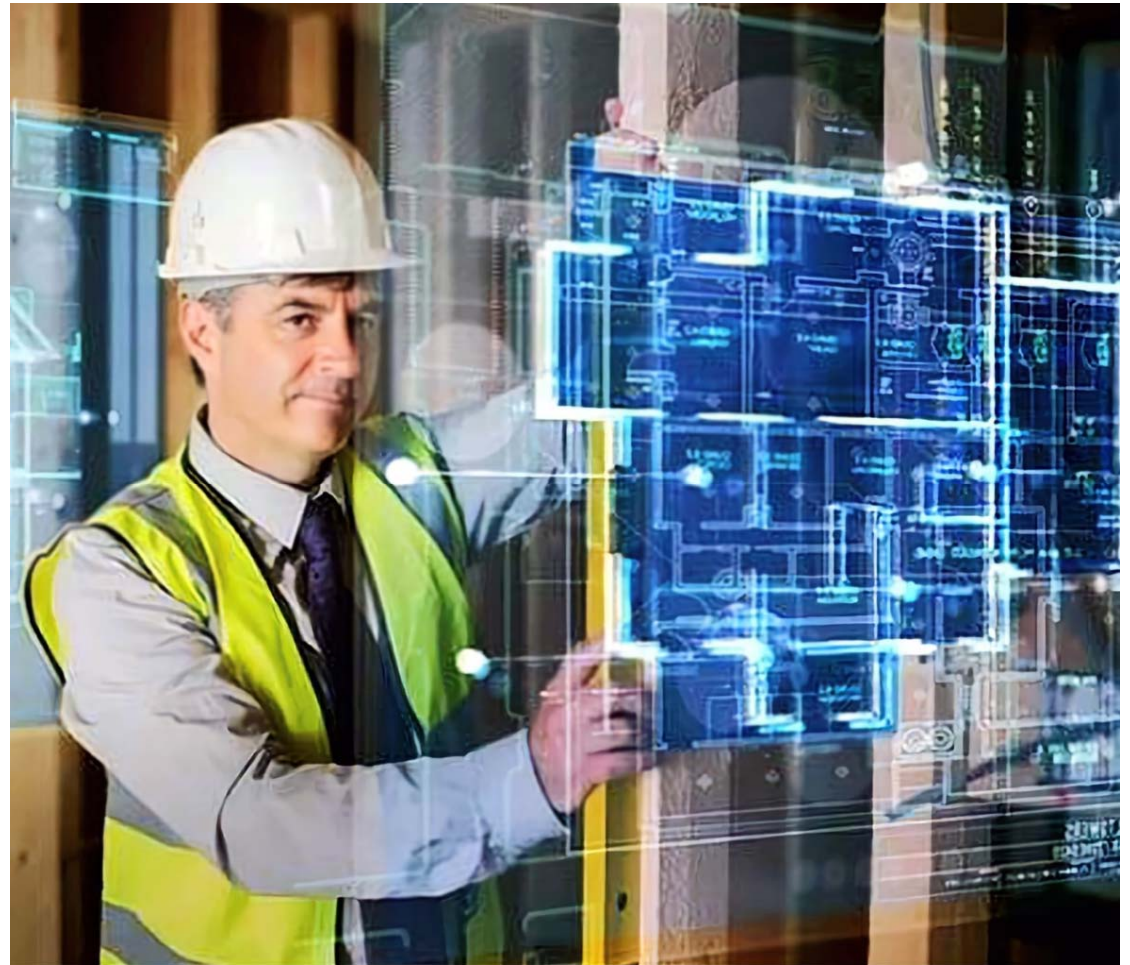


SITE MANAGER

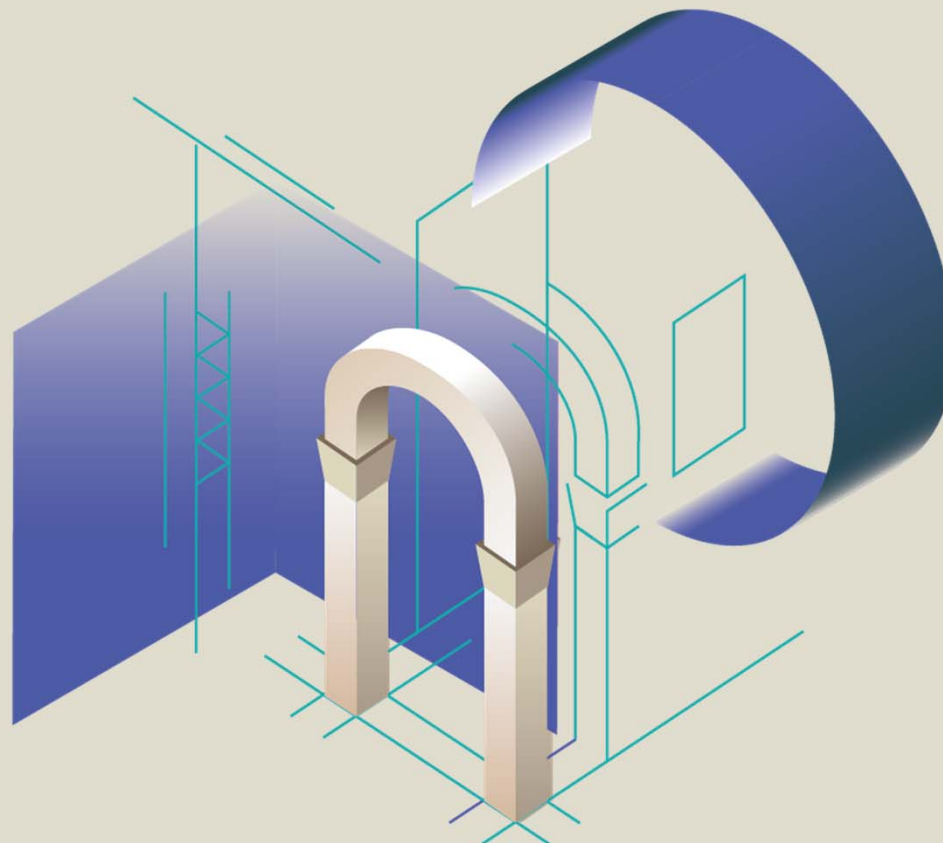
## BIM responsibilities of the Site Manager

AdD, in this first phase of development of the information management process during the works phase, requests two activities:

- **Update** of the tender-based PIM, it means **the Detailed Design**, mainly **in the case of variations**.
- **Verification of the As-Built information models** created by the Contractor during the execution phase.







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***DIGITALE***