Authoring

B IM replaces traditional CAD-based workflows with a more efficient content creation and documentation process. The models also enable processes such as digital fabrication by serving as the source files for machining technologies.

Design Documentation

What is it?

Design documentation is the process of translating the design intent for a building to a realistic virtual representation using a BIM authoring tool (i.e., modeling software). BIM authoring tools utilize a library of explicit 3D elements (also known as, objects or components) with embedded data, represented in the form of attributes or properties. The spatial location of the elements is automatically recorded and tracked in BIM. The relationship between these elements are governed by implicit

rules and constraints that can be modified parametrically. Design documentation using BIM replaces individual static drawings with views generated from a virtual model. Therefore, changes made in one place are automatically propagated throughout the model. The primary BIM authoring tool used at the Airport for Architecture and Engineering is Autodesk Revit and Autodesk Civil 3D®. For detailed requirements see the SFO Revit Standard.

How does it benefit stakeholders at the Airport?

- □ Efficient design documentation, changes and review
- □ Supplementary uses of design models (e.g. analysis, visualization, coordination)
- □ Availability of uniform updated design models for re-design after handover