BIM Studio
A2, 35/F, TML Tower
3 Hoi Shing Road,
Tsuen Wan, N.T.

Tel +852 3468 5250
Fax +852 3585 5599
hongkong@a-c-i-d.com
www.a-c-i-d.com

BIM Submission and Purpose

Stage	Submit format and content	Information required	Submission purpose
Early Planning stage	Topography	Contour and coordinates for project area	For sunshade study, landscape study, excavation and back fill, even sub-structure analysis
	Utilities analysis	Existing drainage and sewage system, electricity, gas and telecom system	Preparation for design of underground services
	Traffic analysis	Road map	To locate the main and secondary entrance of the building
	Build mass model to generate the preliminary area schedule	Master plan and floor plans	Preliminary area schedule could be use as early financial analysis
Design stage	Sunshade, wind, energy consumption analysis for project	Site contour, existing landscape analysis, includes tree location, species and ages	For design reference, building location and building design checking
	Excavation analysis	Site topography, master plan and building plans, levels	Excavation analysis could be used as design checking, which could help to revise the design to make sure the excavation keep at minimum level
	Landscape model, includes trees within project boundary	Site topography, site landscape report and arborist report	Could be used for landscape design, to relocate the purposed tree on the landscape model, and for visual checking
	Tree crown, roots and growth analysis	Tree species, age; dimension of tree crown and roots	Tree crown analysis for landscape design visual analysis; Tree root analysis for utilities design
	Clash detection between building and tree crown	Masterplan, building design; tree species, age and dimension of crown and roots	The clash detection will be used for landscape design
	Design options	Masterplan, preliminary architectural and landscape design	Analyze design options to achieve quality design for architecture, master planning and landscape
	Architectural BIM model: room names, function, numbers and area	Masterplan and general arrangement plan, elevations and roof design	For drawing production, material schedule and area schedule

	Architectural drawings: Masterplan, general arrangement plans, elevations and sections (up to 1:100)	Masterplan and floor plans, elevations and roof design	For tender drawings and construction drawings
	Area schedule	Masterplan, floor plan and levels	Area schedule from BIM model could provide accurate area instantly, not over or a lot less than the limitation
	Schedule of quantities	Architectural design and materials	Schedule of windows, doors or louvres, help QS to start with preliminary quantity take-off
	Structural BIM model: piling, pile cap, substructure and superstructure	Structural design for piling, pile cap, ELS, demolition plan, substructure and superstructure	For structural drawing production, export model for structural calculation
	Hoarding design	Hoarding location and height	Commercial ads on hoarding
	Export structural model	Structural design for piling, pile cap, substructure and superstructure	For structural calculation
	MEP BIM model: MVAC, P&D, FS and electrical design	MEP design for MVAC, P&D, FS and Electrical, dimension and level of ducting and pipework	All MEP elements were model to make sure the design feasibility
Detail design	Drawing production for architecture, structure and MEP	Architectural, structural and MEP design	For government submission (GBP)
	Clash detection	Architectural, structural and MEP design	Design coordination
	Spatial validation checks for headroom and working space	Architectural, structural and MEP design (all levels shall be clearly mentioned)	For building and services design, building operations and maintenance activities checking
	Drawing revision	Architectural, structural and MEP design revisions	Make sure all 2D and 3D information update and consistent
	Schedule revision	Architectural, structural and MEP design revisions	Schedule updated as per design updates will avoid the time gap between design consultant and QS
	animation	Architectural, structural, MEP and landscape design	To visualize the design in virtual reality for design checking
	Update design analysis: sunshade, landscape etc	Architectural, structural, MEP and landscape design	To design improvement
Tender / Construction	Clash detection revision	Architectural, structural and MEP design revisions	Constantly clash checking to avoid design fault to minimize unnecessary construction cost

	Drawing production	Architectural, structural and MEP design revisions	Construction drawings
	Schedule revision	Architectural, structural and MEP design revisions, material revisions	For quantity take off
	4D animation for construction sequence	Architectural, structural and MEP design revisions; construction programme and method statement	Construction sequence checking, clash between trades could be detected before commencement.
	Shop drawing	Shop drawing and method statement	Shop drawing produced from BIM model to ensure the drawing and model are consistent
	CSD	Architectural, structural, MEP drawings from contractor	test the feasibility of MEP ductwork / pipework, clash detection between MEP and Architecture / Structure
	Procurement, cash flow and payment	Contractor's design for architecture, structure and MEP, material and equipment to be used	Procurement, lead time and payment will affect the construction programme
	Construction safety check	Construction equipment	4D Construction simulation to highlight the construction sequence, while at the same time to visualize the temporary works during construction to ensure the site safety, delivery route, protective measures etc.
	Site management	Procurement schedule, lead time and site logistic planning, installation detail	To utilize the 4D Construction Simulation techniques facilitate the site planning - material storage, delivery path, hoist management and installation logistics.
Construction completed	As-built model	Contractor's architecture, structure, MEP and landscape design, and MEP equipment	Related information to be stored in the model, extra information to future facility management purpose will be added
	COBie	Material, O&M manual, warranty and maintenance information	The information will be export and re-store into model in EcoDomus for facility management purpose
Facility management	Model and COBie information re-combine in EcoDomus for facility management	Model: contractor's design for architecture, structure, MEP and related equipment, landscape design Information: information that facility management required, e.g. material, O&M manual and warranty	Extra time and human resource required for facility management because of the insufficient information, massive information could be centralize and accessible when BIM technology introduced into facility management

Marketing purpose	Perspective	Architectural, structural, MEP and landscape design, material, color selection and tree information	Generated directly from BIM model, which is tally with the construction model, minimize the possibility of argument since the inconsistency of market drawing and actual built area
	3D printing	Architectural, structural, MEP and landscape design, material, color selection and tree information	Generated directly from BIM model, which is tally with the construction model, minimize the possibility of argument since the inconsistency of market drawing and actual built area
	Animation for interior and exterior	Architectural, structural, MEP and landscape design, material, color selection and tree information	Generated directly from BIM model, which is tally with the construction model, minimize the possibility of argument since the inconsistency of market drawing and actual built area
	Color plan or isometric perspective	General arrangement plan, interior design including furniture, material and color selection	Generated directly from BIM model, which is tally with the construction model, minimize the possibility of argument since the inconsistency of market drawing and actual built area
	Sales brochure	Leasable area and material selection	Generated directly from BIM model, which is tally with the construction model, minimize the possibility of argument since the inconsistency of market drawing and actual built area
	Area schedule and unit price	Architectural design and unit price	Generated directly from BIM model, which is tally with the construction model, minimize the possibility of argument since the inconsistency of market drawing and actual built area
	Facility	Architectural, structural, MEP and landscape design	Generated directly from BIM model, which is tally with the construction model, minimize the possibility of argument since the inconsistency of market drawing and actual built area