



## INFRASTRUCTURE & BUILDING DEVELOPMENT

INFRASTRUCTURE PLANNING AND DEVELOPMENT

MALDIVES POLICE SERVICE



# DESIGN & BUILD OF FIFTEEN STOREY OFFICE BUILDING

ISKANDHARU KOSHI 2 – MALE'

**DESIGN GUIDELINES**

Date: 21<sup>st</sup> June 2026



# DESIGN GUIDELINES

## 1 SITE DEVELOPMENT

- 1.1 The most impactful design decisions are often made during the site planning phase, laying the groundwork for a project that positively contributes to the lives of its residents and to its neighborhood and creating the framework for the rest of the design development.
  - 1.1.1 Design the development to take into consideration the potential negative impacts of adjacent properties, including but not limited to, overshadowing, overlooking & wind tunnel effect.
  - 1.1.2 Consider prominent view corridors and physical intersections.
  - 1.1.3 Design and orient the building to take into consideration climatic factors where there are maximum benefits to be derived from natural lighting, energy efficiency (e.g., solar heat gain) and protection from weather elements. Installation of a future solar thermal system or solar photovoltaic system must be considered and provisioned if agreed by both parties.
  - 1.1.4 Design the ground floor of the building to express the individuality of the residential and commercial units, if applicable, through architectural expression and the inclusion of entrance doors, canopies and windows addressing the street. Ensure appropriate sidewalk width is provided to accommodate the anticipated pedestrian traffic flow.
  - 1.1.5 Consider vehicular, bike, and pedestrian circulation through and around the site.
  - 1.1.6 Create well-defined public places (street, garden, park, walkway, mews, square, etc.) through the massing of built form at planning stage. Avoid creating residual, unusable spaces. This need not be provided however must be incorporated into design and provisioned on site.
  - 1.1.7 Consider the drainage of surface run off water.

## 2 BUILT FORM

- 2.1 The mass of a building—its form and size—accommodates interior program while also providing a sense of identity and presence on the street. Massing articulations, such as varied building heights and setbacks, can visually connect a building to adjacent structures and respond to a neighborhood's character and scale.
- 2.2 Thoughtful and well-designed massing can help to make even a large residential building sensitive to the pedestrian scale and feel like home. Working within zoning constraints, the mass of a building should be designed to take advantage of a site's best features, including views and connections to neighboring buildings while also mitigating any challenging conditions.



### **3 ELEVATIONS**

- 3.1 Elevations are a building's "faces" to the neighborhood, bringing together massing material and color decisions to create presence and character. While street-facing elevations can help to create a welcoming identity for the building and its residents, buildings often have visible rear and side elevations, giving additional opportunities for design.
  - 3.1.1 Consider how elevation design can help enhance the buildings character and identity both in the existing community and for its residents.
  - 3.1.2 Consider using functional components such as sunshades or window frames, to provide depth and shadow lines.
  - 3.1.3 Building services should be put away from the main street elevations and where necessary screened and with proper access for maintenance, within the elevation.
  - 3.1.4 Elevations shall respond to the environmental conditions related to their orientations.

### **4 PEDESTRIAN & VEHICULAR CIRCULATION**

- 4.1 A safe and convenient vehicular drop-off/pick-up area, with universal access, should be designed to all dwellings, facilities & services within the plot.
- 4.2 Disability access should be integrated at all pedestrian and vehicular drop off/ pick up points.
- 4.3 Locate additional site access points for loading and unloading and back of house services as far as possible from street intersections to minimize conflicts.
- 4.4 If shared pathways (for vehicles and pedestrians) are to be provided within the development, appropriate markings should be used to indicate pedestrian prominence over vehicles.
- 4.5 All pedestrian ways shall be scaled to the use and expectations of pedestrian volumes in any given location with the minimum width of the sidewalk, no less than 1.2m.
- 4.6 Any slope provided at the access ways should be less than 1:50 and with a firm and even surface.
- 4.7 Ensure that the road networks and flow of traffic within the boundary shall be designed to complement the development.
- 4.8 Design the layout of walkways to follow natural pedestrian traffic patterns with a hard surface such as concrete, unit pavers, natural stone pavers or other suitable material, to discourage routing across lawns and play areas.
- 4.9 Consider the design of garbage and move-in/out areas to ensure ability of large trucks to maneuver.



- 4.10 Vehicular pathways within the plot should be designed in a way that is safe, with minimum interruption to both pedestrian pathways and green verges within the plot and during ingress and egress.

## **5 FORM, MATERIALS & AESTHETICS**

- 5.1 Materials should be selected with local construction expertise in mind, noting that a well-designed building requires quality construction. Durable, easily maintained materials can contribute to the longevity of a building; up-front investment in materials and construction details often results in cost savings over time by reducing the need for renovations.

5.1.1 Standard of Works: the whole of materials employed in connection with the permanent work of the Contract shall be new and of the approved quality and description of their respective kinds and, except where otherwise called for, shall be of the acceptable grade described in British/Indian or other relevant Standards for such materials and shall be tested as prescribed therein.

5.1.2 Standard and code: Any approved British, Indian, American, or other International Standard or code of practice referred to in the documents relating to the Contract shall be held to be the latest edition published at the time of Contract Signing. Where Alternative Standards or codes of practice have been published in metric units, these shall take precedence over the publication in imperial units.

## **6 LANDSCAPING DESIGN**

- 6.1 Outdoor open spaces are critical amenities for residents and can also provide benefits to the general public. Extending from interior common spaces, front, and rear yards, as well as other kinds of open space, are vital design components that can help connect a new building with adjacent development and existing urban fabric.

## **7 SUSTAINABILITY GUIDELINES**

- 7.1 One of the key design aims should be to ensure that each housing scheme is economically, socially, and environmentally sustainable. As much as allowed by the provided land plots and its design guidelines designers should have regard to:

7.1.1 The scope for optimizing day lighting and solar gain for dwellings through the orientation and spacing of buildings.

7.1.2 The scope for optimizing the advantages of shelter and direct sunlight through the location and orientation of play areas, courtyards, and gardens relative to existing features both on and adjacent to the site, e.g., buildings, walls, trees, hedges.



- 7.1.3 The scope for ground shaping and landscaping to provide greater shelter and limit the extent of over shading of buildings, play areas and other areas which are intended to be extensively used by residents; and
- 7.1.4 The need to limit funneling and channeling of the wind, e.g., appropriate building spacing and orientation, avoidance of long straight building lines, avoidance of passageways through buildings.
- 7.1.5 Aim to maximize the use of existing natural drainage patterns and to limit the requirement for separate disposal of surface water offsite. The extent of new impervious surfaces should be limited so as to reduce peak surface water runoff.
- 7.1.6 The choice of materials for site works should have regard to cost, performance, durability, maintainability, and overall environmental impact.
- 7.1.7 Due regard should be had to the full lifecycle cost and environmental impact of the materials used. The potential for recycling and reuse should also be considered.
- 7.1.8 There should be a preference for material from renewable or recycled sources, where available, economic, and appropriate for the function.
- 7.1.9 The design should aim to ensure that all materials should be used efficiently with a minimum of waste.

## **8 FINISHING/SERVICES SCHEDULE**

- 8.1 This proposed finishing/services schedule is what is required by the client from the contractor. If the contractor wishes to propose any improvements/amendments, they can do so after the approval from the client. This should be finalized and approved at concept, detail drawing and services drawing stages.
- 8.2 Contractor must provide all the construction & connection details (architectural, structural & services), specifications & test reports pertaining to the proposed materials. The quality and durability of the proposed materials must be ensured and must be of ISO standards or any other equivalent standard accepted by the client.
- 8.3 Wall: Interior walls finished with wall putty and paint. Exterior wall finished with oil based outdoor paint. Toilet and kitchen area finished with tiles up to ceiling level.
- 8.4 - Ceiling: All general areas, exposed grid ceiling system/ Gypsum board (Aluminum frame). Toilets and exterior ceiling must be cement board.
- 8.5 - Counter tops: all counter tops finished in natural granite.
- 8.6 - Floor finishes: homogenous floor tiles with tile skirting
- 8.7 - Roofing: Metal roofing with lysaght roofing (min thickness 0.47mm.)
- 8.8 - Doors: Wooden doors with Door casing.
- 8.9 -Windows: Aluminum frame windows provide window curtains or blinds.



8.10 -Cell doors: all cell doors should be galvanized metal (min thickness of GI pipes 3-4mm)

8.11 All materials must be approved by the client.

## **9 DOORS AND WINDOWS**

9.1 Aluminum / UPVC doors & windows should be of 1.2mm thick & powder coated with a thickness of 60-80 microns.

9.2 All main doors should be solid wooden doors with minimum fire rating as per MNDF guideline.

9.3 Staircase doors on all level should be solid wooden doors with minimum fire rating as per MNDF guideline.

9.4 All main door Hinges must be as per supplier details. Door handles need to be preapproved, no need bolt chain and peep hole.

9.5 Glazing used for doors and windows should be safe and with a nominal thickness proportionate to the area of the panel and not less than 6mm.

9.6 All materials must be approved by the client.

9.7 For all material procured abroad, cost consideration should be given for at least 4 staff from the client side to be involved in the material selection and approval.

## **10 STRUCTURAL AND CIVIL WORKS REQUIREMENTS**

10.1 Designed life of main structure should be minimum 50 years. BS EN 1990:2002 2.3 OR as approved

10.2 The structure of the proposed design must be designed using concrete.

10.3 The design of the structure must be consistent with the intended use.

10.4 The structural design must be done in accordance with Indian/British standards or equivalent to the Maldivian Standard. The contractor must include a local registered Engineer during the design process and should get the drawings stamped by an accredited structural checker.

10.5 Necessary standards for construction to ensure the quality of workmanship and site safety during construction should be followed.

10.6 At the concept stage as a deliverable, the contractor should propose a structural system / material as well as the proposed methodology brief with reference above mentioned standard. The construction methodology and phasing, if any, shall be finalized with due deliberations by both parties.

10.7 All materials must be approved by the client.



## **11 SERVICE REQUIREMENTS**

### **11.1 ELECTRICAL INSTALLATIONS**

11.1.1 The following standards, codes of practice and regulations set by the following must apply for all works carried out.

- Maldives Energy Authority
- State Electric Company (STELCO)
- FENAKA

11.1.2 Generally, the works for the Electrical Services include, but not limited, to the following:

- Fire rated cables will be used for essential service power according to local Fire Protection Authority's requirement.
- Lighting and power system will be allocated using essential and non-essential system.
- As for the Main switchboard, it must be designed to accommodate the different load category.
- Earth leakage protection and miniature circuit breakers installed to ensure that maximum safety and convenience of maintenance is afforded to each DB's.
- For the overall safety of the installation, efficient electrical earthing and lightning protection systems
- Design, provide and install electrical network for the entire building complete in accordance with standards set by the local governing body STELCO.
- The cost shall include for: lights (LED), distribution boards, panels, switches, sockets, screws, nails, bolts, nuts, standard cable fixing or supporting clips, brackets, straps, rivets, plugs and all incidental accessories.
- The cost shall also include for trenching including excavation, maintaining faces of excavations, backfilling, compaction, appropriate cable covers, warning tape and disposal of surplus spoil.
- Rates for electrical isolators, conduits, fittings, equipment and similar items shall include for: all fixings to various building surfaces.
- Contractor shall provide all cabling, wiring, conduits, etc. within the site boundaries. Cabling, wiring, conduits etc. outside the site boundaries are not included under this Contract.
- Provide connections to the building from FENAKA/STELCO mains
- All materials should be suitable for Maldivian Environment (Marine Env.) which is locally available for ease of maintenance.



- Contractor is required to submit a proposal for the above-mentioned system during the concept stage and the drawings needed for the said.
- systems during the shop drawings submission.
- Commissioning and testing of the and electrical facilities must be carried out by the qualified M&E contractor who registered with FENAKA/STELCO and Local Authority IF required by the authorities.
- Required system shall include all the components that is required for FENAKA/STELCO approval and provided as agreed by both parties in detail drawing.
- All materials must be approved by the client.
- For all material procured abroad, cost consideration should be given for at least 4 staff from the client side to be involved in the material selection and approval.

## **11.2 AIR CONDITIONING SYSTEM & NET WORKING**

- 11.2.1 Rates shall include for: Multi-split Ceiling mount Air condition systems, screws, nails, bolts, nuts, standard cable fixing or supporting clips, brackets, straps, rivets, plugs and all incidental accessories.
- 11.2.2 Rate shall include electrical conduits, fittings, equipment and similar all fixings.
- 11.2.3 Rate shall include for all necessary electrical wiring and accessories required for completion of Air condition system and drainpipes and outdoor trenches etc.
- 11.2.4 AC Rates shall include for all necessary installation of pipe, fittings & fixtures of air conditioning system shall be executed in conformance to the manufacturers specifications, to adhere with the owner's requirement and as per the drawings and brand HITACHI or equivalent.
- 11.2.5 Networking rates should include, conduits, boxes and DBs fixing and necessary items including screws and nails etc.
- 11.2.6 All materials must be approved by the client.

## **11.3 HYDRAULICS & DRAINAGE**

- 11.3.1 The following standards, codes of practice and regulations set by the following must apply for all works carried out.
- Any approved standard, where applicable
  - Male' Water and Sewerage Company Pvt. Ltd. (MWSC)
  - Thai Industrial Standard (TIS) for Pipes or equivalent/compatible



- 11.3.2 Generally, the works for the Sanitary Services include, but not limited, to the following:
- Internal soil, waste, vent and anti-siphon, pipework, fittings and accessories for all toilets.
  - Domestic manholes, floor traps, gully traps and accessories.
  - Drainage system shall be directly connected to the Municipal mains.
  - Essential power supply to pump control panels c/w wirings.
- 11.3.3 Rates shall include for sockets, running joints, connectors, elbows, junctions, valves, reducers, expansion joints, back nuts and similar, incidental fittings, clips saddles, brackets, straps, hangers, screws, nails and fixing complete, including cutting and forming holes, excavating, laying pipes and backfilling trenches.
- 11.3.4 All pipe work and fittings shall be high pressure PVC.
- 11.3.5 Rates shall include for supply and fixing of all pipes.
- 11.3.6 Allow for MWSC water/sewer main connections.
- 11.3.7 Provide booster pumps and well water pump where necessary.
- 11.3.8 All materials should be suitable for Maldivian Environment (Marine Env.) which is locally available for ease of maintenance.
- 11.3.9 Contractor is required to submit a proposal for the above-mentioned system during the concept stage and the drawings needed for the said systems during the shop drawings submission.
- 11.3.10 Commissioning and testing of the and Sanitary plumbing facilities must be carried out by the qualified Cold Water and Sanitary contractor who registered with MWSC and Local Authority IF required by the authorities.
- 11.3.11 Required system shall include all the components that is required for MWSC approval and provided as agreed by both parties in detail drawing.
- 11.3.12 All materials must be approved by the client.
- 11.3.13 For all material procured abroad, cost consideration should be given for at least 4 staff from the client side to be involved in the material selection and approval.

#### **11.4 LIGHTING AND OTHER**

- 11.4.1 The illumination levels must be generally in accordance with the acceptable IES code of Practice, CIBSE code for interior lighting and lighting guide 3 (LG3) and current practices. The lighting system must be designed by arrangements of alternating circuits and selective grouping of light switching to achieve multi levels of illuminance.
- Light fixtures and control gear must be provided for general and functional lighting.



- Emergency lights for all common areas, services rooms and escape routes must be provided.
  - Battery operated emergency signs shall be provided for all common areas, services rooms and escape routes.
- 11.4.2 All electrical equipment where required must be earthed.
- 11.4.3 All materials should be suitable for Maldivian Environment (Marine Env.) which is locally available for ease of maintenance.
- 11.4.4 This proposal must be submitted during the concept stage and drawings and specifications must be submitted with the detail design submissions.
- 11.4.5 All materials must be approved by the client.
- 11.4.6 For all material procured abroad, cost consideration should be given for at least 4 staff from the client side to be involved in the material selection and approval.

## **11.5 EARTHING SYSTEM**

- 11.5.1 Earthing system must be installed in accordance with the requirement of BS Code of Practice CP 1301, and Rules and Regulations of local Energy and Power Authority.
- 11.5.2 The earthing system must comprise of neutral point earthing, copper tape interconnections and earth electrodes. Separate power system must have a common earth connection. Each of the systems below should have its own dedicated earthing system meeting their respective earthing requirements:
- Electrical system
  - Equipment frame
  - Telecommunication system
  - Lightning protection system
- 11.5.3 With the exception of Telecom's system, the rest must be integrated together by linking them with buried bare copper conductors of appropriate size. The purpose is to bring the earth resistance of the entire system to a lower value under the constraint of space available for the discharge of electric current to the ground.
- 11.5.4 The Telecom's system should be isolated from the integral system as far as possible to avoid the transfer of potential to Service Provider's electronic equipment and the telecommunication system.
- 11.5.5 Conventional lightning arrestors to be provided.
- 11.5.6 All materials must be approved by the client for all material procured abroad, cost consideration should be given for at least 4 staff from the client side to be involved in the material selection and approval.



## **11.6 LIGHTNING PROTECTION SYSTEM**

- 11.6.1 To ensure safety to the building and its occupants if lightning happens to hit it directly, a lightning protection must be proposed.
- 11.6.2 This proposal must be submitted during the concept stage and drawings and specifications must be submitted with the detail design submissions.
- 11.6.3 All materials must be approved by the client.
- 11.6.4 For all material procured abroad, cost consideration should be given for at least 4 staff from the client side to be involved in the material selection and approval.

## **11.7 COMMUNICATION SERVICES**

- 11.7.1 Generally, the works for the communication services include the following:
  - Internet/Cable TV System
  - Installation of all services required for internet and cable TV.
  - All materials must be approved by the client.
- 11.7.2 Building Access Control
  - Building Access Control system is required.
  - All materials must be approved by the client.
- 11.7.3 CCTV System
  - CCTV System be installed. All services to be terminated to the respective control room.
  - CCTV installation should consider the maximum coverage that will be required for the monitoring of the facilities.
  - All materials must be approved by the client.
  - For all material procured abroad, cost consideration should be given for at least 4 staff from the client side to be involved in the material selection and approval.



# A.SUBMISSION (DELIVERABLES AND PROCEDURE)

## 1. CONCEPTUAL DESIGN SUBMISSION

The goal of this submission is to ensure that the design is according to our planning guidelines & if the building massing & overall design is up to our standards.

### 1.1 PLANNING APPROVALS

1.1.1 Planning approvals must be attained before proceeding to any detail design. The following components must be according to the planning guidelines or as approved by the employer.

- a. FSI
- b. Height /Setback
- c. Parking
- d. Footprint
- e. Max no. of floors
- f. A masterplan stating the different phases, if any, of the whole development should be submitted to MPS.

### 1.2 ARCHITECTURAL SCHEMATICS

1.2.1 Initial schematic designs should be submitted and approved by MPS before proceeding to any detail designs.

1.2.2 Architectural Schematic will include the following drawings.

- a. Design criteria narrative
- b. Detailed site plan (including traffic signs, parking & landscaping) (1:100, 1:200, and 1:500)
- c. Circulation plan (including surrounding context of site) (1:100, 1:200, and 1:500)
- d. Massing
- e. Floor plans labeled & overall dimension with floor areas (1:100)
- f. Schematic sections & elevations with dimensions & overall height (1:100)
- g. 3D renders
- h. Unit typology details
- i. Ventilation schedule



### 1.3 STRUCTURAL SCHEMATICS

- 1.3.1 Initial schematic designs should be submitted and approved by MPS before proceeding to any detail designs.
- 1.3.2 Structural Schematic will include the following drawings.
  - a. Layout plan drawing showing the structural members (such as column, beam, slabs, sheer wall. etc.) with estimated size & location. Details regarding selection of member size without effecting architectural concepts. (Details of clear heights achieved in specific locations can be highlighted)
  - b. Stating:
    - i. Pro and cons of the preferred structural system with respect to the architectural design.
    - ii. Any components in structural design which may affect the architects view and intended purpose.
    - iii. Any components in structural design which may affect the services provided in the building.
    - iv. Explain the structural system in relation to Structural stability which is suitable for the intended lifetime of the building.
- 1.3.3 Explain the Structural design including the design code, design parameters & analysis method preferred by structural design engineer, details of the software(s) to be used for design, formats of design sheets (if any).
- 1.3.4 Details of Foundation which is compatible to the required design loading (Dead, Live, Wind & Seismic) and allowable geotechnical parameters based on geotechnical investigation. It is noted that the wind speed for the design can be obtained from local metrological department.
- 1.3.5 Details of mitigation measures for termite attack.
- 1.3.6 Details of necessary field and laboratory tests to confirm the design parameters based on standard code.
- 1.3.7 Details regarding the protection for steel reinforcement (Expecting reinforcement oxidization considering costal environment) to maintain without losing its mechanical properties for intended lifetime of the building.
- 1.3.8 The method adopted to control the water penetration. (Below ground structures needs to be protected against water penetration. The method adopted to control the  
  
water penetration needs to be durable up to building lifetime as it is impossible to do any rectifications)



- 1.3.9 Assessment of the environmental conditions and the requirement which is applicable for the design with reference to code of practices. This includes, but not limited to covers to be provided for reinforcement, grade of steel, water proofing for foundation, min concrete grade with maximum water cement ratio, admixtures to be used for concrete etc. based on standards.
- 1.3.10 Minimum cement content details for different grades of concrete, in order to achieve a durable concrete for its intended lifetime.
- 1.3.11 Details regarding fire rating of the building
- 1.3.12 Members of the design team and their qualifications.

#### **1.4 BUILDING SERVICES**

- 1.4.1 Proposals for the following systems must be submitted during the conceptual submission stage.
  - a. Possible firefighting system
  - b. The Domestic Cold-Water System
  - c. Sanitary Plumbing System
  - d. Vertical Transportation Services (Lift)
  - e. Lighting and Power System
  - f. Emergency Lighting System
  - g. Earthing System
  - h. Lightning Protection System
  - i. Building Access Control
  - j. Possible garbage chute System
  - k. Emergency Electrical Supply
  - l. Network system
  - m. CCTV system



## **2. BASIC DESIGN SUBMISSION**

All drawings must be submitted in AutoCAD format.

### **2.1 PRELIMINARY ARCHITECTURAL SUBMISSION**

Preliminary Architectural submission will include the following drawings.

- a. Circulation plan (including surrounding context of site) (1:100)
- b. Floor plans (1:100)
- c. Sections (1:100)
- d. Elevations (1:100)
- e. Massing
- f. Detailed site plan with all signs, parking, & building footprints clearly marked.(1:100, 1:200, and 1:500)
- g. Detailed Landscaping plan (hardscapes & softscapes) (1:100, 1:200 and 1:500)
- h. Exterior & interior renders
- i. All relevant details

### **2.2 PRELIMINARY STRUCTURAL SUBMISSION**

Preliminary Structural submission will include the following drawings.

- a. Final submission should be checked and signed by:
  - i. Design Engineer(s) including at least one local registered Engineer.
  - ii. Accredited structural checker (with stamp)
- b. Structural Analysis Report and design calculations
- c. Soil Investigation/Geotechnical Study Report
- d. Environmental Assessment Report
- e. Specification for the materials to be used in structural works.
- f. Specific methodologies to be used for parts of work, (if any) required for construction by design.
- g. Lapping of bar, anchorage & curtailment requirement of the reinforcement has to be specified according to the design code.
- h. Structural System descriptions
- i. Plans of all floors showing structural grid and vertical circulation grid.
- j. Floor lines and rooflines and top of parapets indicated with dimensions.
- k. Foundation system
- l. Column layouts



- m. Sections and elevations
- n. Beam layouts
- o. Necessary detail drawings

### **2.3 PRELIMINARY BUILDING SERVICES**

Preliminary Building submission will include the following.

- a. Plumbing drawings (referring to the latest MWSC guidelines)
- b. Electrical drawings (referring to the latest STELCO guidelines)
- c. Fire (approved as per the latest MNDF fire guidelines)
- d. Fire protection and firefighting systems on plans
- e. Electrical load calculation
- f. Electrical services on plans Lighting calculation IF any
- g. Pressure loss and/or pipe sizing calculations including pump sizing.
- h. Mechanical rooms sizes and located on architectural drawings.
- i. Vertical shafts and riser spaces sized and indicated on architectural drawings.
- j. Networking & electrical room requirements shown on plans.
- k. Water, sewer, etc., service points shown on plans.
- l. Lighting outlined in plan.
- m. Protective services on plans

### **2.4 INTERIOR DRAWINGS**

- a. Material schedule

### **2.5 DETAILS**

- a. Large scale details of major exterior wall assemblies
- b. Typical window and door details
- c. Key areas shown including stairs, elevators, shafts and other conditions wherewall sections reveal the third dimension.
- d. Partition types and details
- e. Connection details
- f. Ventilation schedule



### **3. DETAIL DESIGN SUBMISSION**

#### **3.1 GENERAL GUIDELINES**

- 3.1.1 This is the final drawing submission stage. Detailed drawings must be submitted in AutoCAD and PDF Format & Printed drawing sets as required to submit for final approval from the relevant authorities.
- 3.1.2 Final drawings should be submitted both in soft and hard coped in the required sizes with an application.
- 3.1.3 Drawings Submission Form with the appropriate parts filled and signed by Registered local Architect and Engineer with accredited local architectural and engineer checkers.
- 3.1.4 Minimum three (3) printed sets of the above-mentioned drawings and documents should be submitted and stamped by registered local Architect and Engineer as well as by local accredited architectural and engineer checkers.
- 3.1.5 Any other drawings or documents required for local authority approval should be approved.
- 3.1.6 The Contractor is required to submit and approve a work schedule indicating the important milestones of Design Stage considering the review period (Feedback period) within two days of signing the contract.
- 3.1.7 With the submission of the above-mentioned documents & drawings, the Employer would provide the necessary feedback. In giving feedbacks we would check whether it fits the given and required guidelines and a two-way dialogue would attain the satisfactory level of work.
- 3.1.8 Please note that 'Satisfactory Level' will be decided using the 'Method of Implementation.'

#### **3.2 ARCHITECTURAL SUBMISSION**

Architectural submission will include the following drawings.

- a. Floor plans (1:100)
- b. Sections (1:100)
- c. Elevations (1:100)
- d. Massing
- e. Detailed site plan with all signs, parking, landscaping & building footprints clearly marked. (1:100, 1:200 and 1:500)



- f. Exterior & interior renders
- g. All relevant details
- h. Ventilation schedule

### **3.3 STRUCTURAL SUBMISSION**

- a. Detailed structural drawings with all the detailing has to be submitted for relevant authority approval prior to commencement of physical works.
- b. Structural Analysis Report and design calculations
- c. Soil Investigation/Geotechnical Study Report
- d. Specification for the materials to be used in architectural and structural works.
- e. Specific methodologies to be used for parts of work, (if any) required for construction by design.
- f. Environmental Assessment report
- g. Drawings to include:
  - Plans of all floors showing structural grid and vertical circulation grid.
  - Floor lines and rooflines and top of parapets indicated with dimensions.
  - Foundation system
  - Column layouts
  - Beam layouts
  - Sections and elevations
  - Lapping of bar, anchorage & curtailment requirement of the reinforcement has to be specified according to the design code.

### **3.4 BUILDING SERVICES SUBMISSION**

All the services systems proposed during the conceptual stage must be shown on plan.

- a. Plumbing drawings (referring to the latest MWSC guidelines)
- b. Electrical drawings (referring to the latest STELCO guidelines)
- c. Fire (approved as per the latest MNDF fire guidelines)
  
- d. Electrical load calculation
- e. Mechanical rooms sizes and located on architectural drawings.
- f. Vertical shafts and riser spaces sized and indicated on architectural drawings.



- g. Network & electrical room requirements shown on plans.
- h. Water, sewer, etc., service points shown on plans.
- i. Lighting outlined in plan.
- j. Protective services on plans
- k. Fire protection and firefighting systems on plans
- l. Electrical services on plans

### **3.5 INTERIOR CONCEPT DRAWINGS**

- a. Material schedule

### **3.6 DETAILS**

- a. Large scale details of major exterior wall assemblies
- b. Typical window and door details
- c. Key areas shown including stairs, elevators, shafts and other conditions where wall sections reveal the third dimension.
- d. Partition types and details
- e. Connection details



## B. REFERENCES

### 1. Local & statutory authorities

- a. Housing Development Corporation (HDC)
- b. Ministry of National Planning, Housing & Infrastructure
- c. Male' Water & Sewerage Company Pvt Ltd (MWSC) – Water and Sanitation Authority
- d. FENAKA - Water and Sanitation Authority
- e. State Electric Company Ltd (STELCO) – Energy and Power Authority
- f. Maldives National Defense Force (MNDF) – Fire Protection Authority
- g. National Fire Protection Association (NFPA)
- h. Ministry of Environment & Energy
- i. Ministry of Health
- j. Relevant Telecom and Internet Service Provider
- k. Maldives Civil Aviation Authority (CAA)

### 2. Regulations, Standards, and code

- a. MWSC regulations
- b. STELCO regulations
- c. BS
- d. Maldives disability act

