



Republic of Maldives

EMPLOYER'S REQUIREMENT

for

**Remedial Work and Completion of
105 Housing Units at
Hdh.Kulhudhuffushi**

**Ministry of National Planning, Housing and Infrastructure
Issued on: January 2021**

1.0 Employers Requirement

Scope of Works

- a) This project includes 105 Housing units terminated at different stages of construction. The structure of all the Housing units is completed.
- b) 20 blocks, comprising of 100 housing units are located at site A and 1 block comprising of 5 Housing units are located at Site B as per the location plan given in annex 1A and annex 1B.
- a) The stages are categorized based on the progress of work as per annex 2.

CATEGORY	QTY
GREEN	32
YELLOW	6
BROWN	12
CYAN	20
MAGENTA	23
RED	7
PURPLE	5

- a) Progress of each of these housing units is presented in annex 3.
- b) Design of 100 Housing units and 5 housing units are different.
- c) A typical floor plan (Type A) for 100 Housing units is given in annex 4. Floor plans may vary. Bidders are to check and verify the floor plan and give price as per the as built.
- d) Typical floor plan (Type B) for 5 Housing units should be submitted by the Contractor after doing an assessment.
- e) The Works shall be carried out in accordance with the approved drawings, Bill of Quantities and standard technical specifications
- f) The Contractor shall be responsible for acquiring all the materials required for the completion of the housing units.
- g) 105 housing unit completions is a continuation of a partially completed structures, thus the Contractor is required to do a detailed assessment of the remaining works.
- h) Contractor is required to submit detailed drawings for the existing structures. The contractor shall submit the raw soft copies of all the below mentioned detailed design documents
 - (i) Architectural drawings

- (ii) Electrical drawings including wiring diagrams, lighting fixtures, control panels, etc.
 - (iii) Mechanical, including air conditioning and/or ventilation systems
 - (iv) Plumbing layout including pipe diagrams and schedules, fixtures, etc.
- i) Contractor is required to propose appropriate solutions and submit work methodology for repair of the existing structures which includes mould remediation, cracks, corrosion of exposed steel bars and repair of damp patches.
 - j) Contractor is required to remove all fixed elements of the units which are not complying structural standards
 - k) All purlins and rafters which are defected must be removed and replaced with an appropriate material and specification
 - l) All existing roofing sheets must be removed and replaced with Lysaght brand roofing sheets or equivalent specification
 - m) All Rockwool insulations must be removed and replaced with an appropriate material and specification
 - n) All aesthetic wooden panels are to be removed.
 - o) Finishing works are to be carried out as per sub-clauses below
 - p) An elementary Bill of Quantities for the housing units are required to be submitted by the bidders as per the format attached at annex 5
 - q) Final drawings, detailed BOQ and technical specifications shall be provided by the Contractor and shall include provisions for all civil, architectural, structural, electrical, plumbing and firefighting disciplines, once detailed drawings are approved by the employer.
 - r) Contractor is required to remove and transport all construction waste and debris including the existing construction waste and debris to a waste management facility such as K.Thilafushi

1.1 Specific requirements:

- 1. Connection of utilities (electricity, water & sewerage) to that main lines shall be included for each individual units
- 2. Site clearing and demarcation of work zones and bypasses. Contractor is required to remove and transport all construction waste and debris including the existing construction waste and debris to a waste management facility instructed by the Island Council.

General guideline:

- a) **Electrical installation:** Wiring for lighting and power shall be concealed conduit except for spaces within DB's closet and area above false ceiling, which shall be exposed conduit/trunking. In each housing unit minimum of three electric sockets in each room and one data/media and telephone points shall be provided. All electrical wiring shall be in accordance with the guidelines set out by the State Electric Company Ltd (STELCO).
- b) **Fire Rating:** structural members and walls are to be designed to accommodate the requirement of the local fire department.
- c) **Fire Protection System:** Portable fire extinguishers
- d) **Site Visit:** The Bidder, at the Bidder's own responsibility and risk, is encouraged to visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.
- e) **Supervision, inspection & test plan:** the supervision, inspection and testing of the materials and works shall be carried out in accordance to normal industrial standards and practice, specifications, manuals and guidelines used in Maldives and as approved by MHUD.
- f) **Earthing System:** shall be installed in accordance with the requirement of BS Code of Practice BS 7430, IEC 62305 and Rules and Regulations of "STELCO" and "MEA" to provide a low impedance earthing systems and connections for equipment earthing.
- g) **Approval of Materials and Systems**
The materials and systems to be used in the building shall be approved by the Employer prior to use or installation.
- h) **Luminaires**
Adequate lighting shall be installed and the illumination levels shall generally be in accordance to international IES and IEC standards.

Sitting Room / Dining Room / Kitchen / Toilets	300 - 500 lux
Garbage Area	200 lux
Store Room	200 lux

Corridor / Lobby	150 lux
Premises within Landscaped area	100-150 lux at working plane of 0.2m

1.2 Expected Schedule of Finishes

Materials, fixtures and fittings used on exterior walls and surfaces shall be weather-proof, external finishing materials, including fixtures and fittings.

Roofing sheets should be of “Lysaght” brand or of any equivalent material and specification

All the major materials, fixtures and fittings shall be submitted to the Client for approval prior to installation or application.

1. Bedrooms

Walls shall have preparatory sealer and two coats of emulsion paint finish equivalent to Nippon brand

Ceiling shall be smoothed and finished with preparatory sealer and two coats of emulsion paint equivalent to Nippon Brand.

Floors shall be of Homogenous Porcelain tiles of size 600mm x 600mm. Skirting of Homogenous Porcelain tiles should be provided.

2. Toilets

Interior of walls shall have ceramic wall tiling of size 300mm x 600mm.

A suspended Fibrous plaster board ceiling, concealing the plumbing pipeline shall be smoothed and finished with preparatory sealer and two coats emulsion paint equivalent to Nippon Paint

Floors shall be of non-slippery homogeneous tile finish of size 300mm x 600mm.

Toilets shall have adequate waterproofing.

Windows: Powder coated aluminum frame with tinted frosted glass

Doors: PVC doors

3. Sitting/Kitchen and Dining / Common Areas

Walls shall have preparatory sealer and two coats of emulsion paint finish equivalent to Nippon brand

Ceiling should be a suspended Fibrous plaster board

Floors shall be of Homogenous Porcelain tiles of size 600mm x 600mm. Skirting of Homogenous Porcelain tiles should be provided.

Windows: Powder coated aluminum frame with tinted frosted glass

Doors: Timber door frame with timber panels

4. Laundry

Walls shall have ceramic wall tiling (300mm x 600mm) up to 1.8m high from floor finish level. The rest of the walls may be paint finished with preparatory sealer and two coats of emulsion paint equivalent to Nippon brand.

Floors shall be of homogeneous porcelain tile finish of size 600mm x 600mm

5. Garbage area, Common area, Store Room, Outdoor area, Entrance

Walls shall have preparatory sealer and two coats of emulsion paint finish equivalent to Nippon brand

Ceiling of entrance/parking area should be of a suspended ceiling of fibrous plaster board.

Ceiling of Garbage room shall be smoothed and finished with preparatory sealer and two coats of emulsion paint equivalent to Nippon Brand

Location/ Area	Floor	Skirting	Wall	Ceiling	Partition	Doors/window
Garbage area	Homogeneous tiles (600mm x 600mm) + 2 coats of waterproofing (brush bond)	-	Homogeneous/Porcelain tiles (300mm x 600mm)	Fibrous plaster board ceiling	Brick wall	Powder coated aluminum frame with aluminum panels
Store Room / Common Area	Homogeneous porcelain tile finish of size 600mm x 600mm		Wall sealer and two coats of emulsion paint finish equivalent to Nippon brand	Fibrous plaster board ceiling	Brick wall	Powder coated aluminum frame with aluminum panels
Outdoor tiled area	Homogeneous tiles (600mm x 600mm)	Homogeneous	Ceramic wall tiles	Fibrous plaster	Concrete / Brick	Powder coated aluminum frame

	600mm) + 2 coats of waterproofing (brush bond)	tiles	(300mm x 600mm)	board ceiling	wall	with tinted / clear glass
Entrance	Epoxy flooring system		Matte wall paint	Fibrous plaster board ceiling	Brick wall	Powder coated aluminum frame with tinted / clear glass

1.3 Additional Information

1. Final price should be inclusive of the import duty for any imported construction material, equipment, machinery, etc.
2. The price also should include electricity and water required for the project.
3. Project costing - The project is a lump sum contract. The Contractor shall submit a work breakdown schedule within ten working days from project award, indicating the price break down and the durations for each task. The work breakdown schedule will then be used as a basis for measuring the works completed in order to issue the interim payments.
4. It is contractors' responsibility to allow for and obtain all the permits required from regulatory authorities / service providers etc.
5. Demolition waste and debris shall be transported to designated waste management site.
6. Finalized work schedule- The contractor shall submit a finalized work schedule within 10 days from the date of receipt of the Letter of Acceptance.

1.4 General Design Obligations of the Contractor

1. The Contractor shall carry out, and be responsible for the design of the Works. Basic design shall be in accordance with the concept drawings provided. Detail Design shall be prepared by qualified designers who comply with the following criteria:

a) Architect

- i. A registered architect at his/her country with minimum 07 years of architectural design experience. Must have designed at least 2 buildings of similar scale within this period.

b) Civil/Structural Engineer

- i. A registered engineer at his/her country with 07 years of experience in structural design of buildings of similar scale.

c) Services Engineer

- i. Minimum bachelor's degree and 07 years of experience in service design of buildings of similar scale.

1.4.1 Tests on Completion

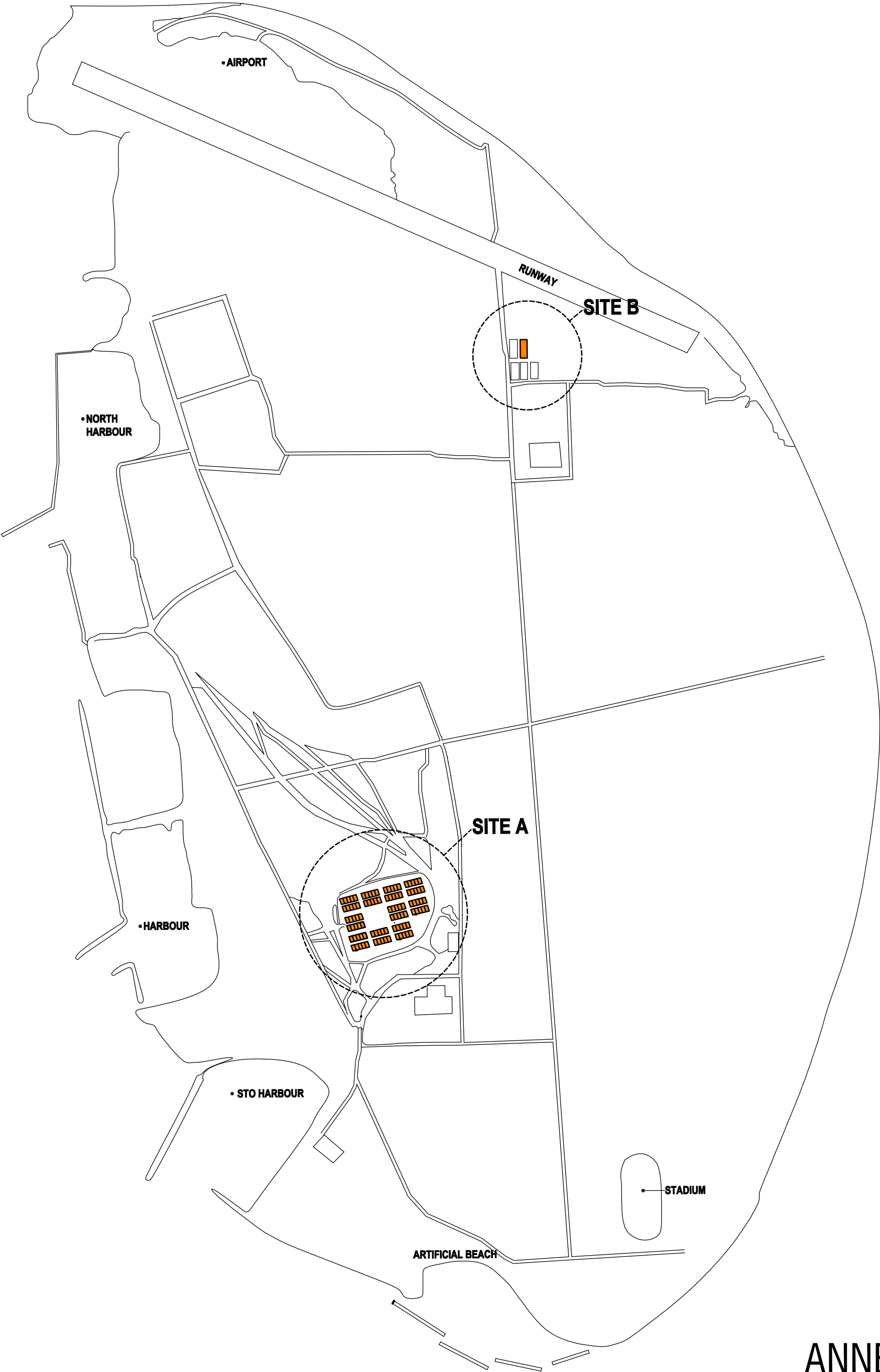
Upon completion of the building Contractor shall allow for testing of the services installed in the building as part of commissioning.

1.4.2 Contractors' Documents


The Contractor shall submit an assessment report which includes defects and work methodology for repair of the existing structures for approval of the Employer. Typical Floor layout of Type B Housing units is to be submitted. The floor plans should be to a scale of 1:100 or 1:200, and shall include the furniture layout, fixtures, fittings and the column positions. Upon completion of civil work, contractor is required to submit as-built drawings and final progress payment will be released upon approval of the as-built drawings. The materials used for construction shall be of good quality, with a design life of 50 years and where necessary design shall incorporate renewable energy and sustainable design components where practical.

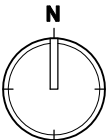
1.4.3 The Bidder shall submit the following with the bid

1. Elementary Bill of Quantities as per the given format.
2. Proposed equipment for works and work methodology.
3. Proposed Personnel as per clause 1.3
4. Preliminary work schedule - The contractor shall submit a proposed work schedule with the bid. This work schedule shall indicate the major works to be carried out under the scope of the project. The work schedule shall clearly show the proposed start and end dates for all the project stages and the total project duration proposed.



ANNEX - 1

 MINISTRY OF HOUSING AND URBAN DEVELOPMENT	AMENDMENTS:			PROJECT: REMEDIAL WORKS AND COMPLETION OF 105 HOUSING UNITS	DESIGN:	ENGINEER:
	REV #	DATE	DESCRIPTION		DRAFTING:	APPROVED BY:
					DATE: 25 JAN 2020	DRAWING NO.
					SCALE: 1:10000	A-01



JALALUDDIN
SCHOOL

5 HOUSING UNITS
(101-105)


AMEENEE MAGU

RUNWAY

AIRPORT

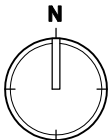


ANNEX - 1B

<div> MINISTRY OF HOUSING AND URBAN DEVELOPMENT</div>			PROJECT: REMEDIAL WORKS AND COMPLETION OF 105 HOUSING UNITS		DESIGN: DRAFTING:	ENGINEER: APPROVED BY:
AMENDMENTS:	REV #	DATE	DESCRIPTION	DRAWING TITLE: HDI, KULHUNDHUSHI LOCATION PLAN - SITE B	DATE: 25 JAN 2020 SCALE: 1:2000	DRAWING NO. A-03

AGU

BANDARA MAGU




100 HOUSING UNITS

KULHUDHUFFUSHI
REGIONAL HOSPITAL

HARBOUR

STO HARBOUR

ANNEX - 1A

<div></div> <div>MINISTRY OF HOUSING AND URBAN DEVELOPMENT</div>			AMENDMENTS:		PROJECT:	DESIGN:	ENGINEER:
REV #	DATE	DESCRIPTION	REMEDIAL WORKS AND COMPLETION OF 105 HOUSING UNITS		DRAFTING TITLE:	DRAFTING:	APPROVED BY:
			DRAWING TITLE:		DATE:		DRAWING NO.
			HHH, KULHUDHUFFUSHI LOCATION		25 JAN 2020		
			PLAN - SITE A		SCALE:		A-02
					1:5000		

ANNEX - 02

PROGRESS OF WORK FOR CATEGORIZED STAGES - REMEDIAL AND COMPLETION OF 105 HOUSING UNITS

SUMMARY OF WORKS DONE IN HDH.KULHUDHUFFUSHI

DESCRIPTION OF WORKS						
Concrete works						
Foundation						
Columns						
Floor beams						
Slab						
Roof beams						
Lintel beams						
Floor Screed						
Stairs						
Block works						
Exterior Masonry works						
Interior Masonry works						
Boundary Wall						
Plastering						
Exterior Plastering						
Interior Plastering						
Roofing Works						
Roofing frame						
Rock wool installation						
Roofing sheet installation						
Fascia board						
Gutter and downpipe						
Finishing Works						
Interior Primer Coat						
Interior Painting						
Exterior Primer Coat						
Exterior Painting						
Ceiling works (Interior)						
Ceiling works (Exterior)						
Tiling						
Doors						
Windows						
Utilities						
Plumbing						
Electrical wiring						
Installation of Electrical fittings						
Installation of Sanitary ware						
Water well work						

ANNEX - 05

REMEDIAL AND CONTINUATION OF 105 HOUSING UNITS AT HDH.KULHUDHUFFUSHI
ELEMENTARY BILL OF QUANTITIES

No	Item	Amount
1.1	Detail assesment of remaining works and submission of defects report	
1.2	Detailed drawings, Bill of quantities and Technical Specification	
1.3	Concrete works	
1.4	Masonry and Plastering works	
1.5	Doors and windows	
1.6	Ceiling Works and Wood Works	
1.7	Floor and Wall Finishes	
1.8	Painting works	
1.9	Roofing works	
2.0	Electrical Installations	
2.1	Hydraulics and Drainage	
2.2	Fire Protection System	
2.3	External works	
2.4	Additions/Omissions	
SUBTOTAL		
G.S.T 6%		
GRAND TOTAL		