PRESENTATION ON
BHASHAN CHAR REHABILITATION PLAN
BANGLADESH.

PRESENTED BY
AHMED MUKTA
B.Arch; C.Build E FCABE; P.Eng (UK) MSPE
TEAM LEADER
MUKTA DINWIDDIE MACLAREN ARCHITECTS
IN ASSOCIATION WITH HR WALLING FORD.

Developer: Atlanta Housing Ltd
SITE PICTURES
FIRST PHASE:

TOTAL AREA: 1650 ACRES

FAMILY HOUSE
ONE HOUSE = 16 FAMILIES (PER FAMILY 4 PERSONS) = 64 PERSONS

PER CLUSTER = 12 HOUSES = 12 X 64 = 768 PERSONS

120 CLUSTERS = 120 X 768 = 92160 PERSONS

SHELTER
ONE SHELTER FOR EACH CLUSTER
PER SHELTER = 23 FAMILIES (PER FAMILY 4 PERSONS) = 92 PERSONS

120 SHELTERS = 120 X 92 = 11040 PERSONS

TOTAL FOR FIRST PHASE, FAMILY HOUSE & SHELTER = 92160 + 11040 = 1,03,200 PERSONS.
CLUSTER OF FAMILY HOUSES & SHELTER
FAMILY HOUSE

GROUND FLOOR PLAN
FAMILY HOUSE

GROUND FLOOR FURNITURE LAYOUT PLAN
FAMILY HOUSE

FRONT ELEVATION

BACK ELEVATION
FAMILY HOUSE

SECTION A-A
FAMILY HOUSE
SHELTER

3RD FLOOR PLAN
SHELTER

FRONT ELEVATION

OPENING FOR NATURAL VENTILATION: ALL FLOORS

MUKTA DINWIDDE MACLAREN
ARCHITECTS & ENGINEERS

BANGLADESH NAVY

CLIENT

DRAWING NO.: A-07

ISSUE DATE

SCHEME

AUTHOR CODE
SECTION: A-A
WATER SOURCE FOR BHASHAN CHAR REHABILITATION PLAN, BANGLADESH PROJECT:

FOR HOUSES

THERE WILL BE FOUR SOURCES OF WATER COLLECTION, I.E

1. RAIN WATER HARVESTING
2. SOLAR SUBMERSIBLE PUMP
3. FAUCET FROM SHELTER’S WATER RESERVER
4. POND.

RAIN WATER HARVESTING:

RAIN WATER COLLECTION FACILITY ON ROOF GUTTER. WATER FROM THIS SOURCE IS FED TO THE FILTER UNIT FOR FILTRATION. THE FILTER ELEMENT IS LOCALLY ARRANGED BY INTRODUCING SEVERAL LAYERS OF DIFFERENT TYPE OF SANDS, CHARCOAL AND SMALL STONE ETC. AFTER FILTRATION THE WATER TANK RESERVES THE WATER FOR USE IN THE FACILITY. FINALLY THEY WILL COLLECT THIS WATER THROUGH TWO TUBEWELL IN BOTH KITCHEN SEPERATELY.
**SOLAR SUBMERSIBLE PUMP (500 WATT DC):**

PUMP IS CONNECTED WITH PUMP CONTROLLER. WHEN THE OVERHEAD TANK OR RESERVE TANK IS EMPTY THEN MANUALLY TURN ON THE PUMP SWITCH. AFTER FULFILLING THE OVERHEAD AND RESERVE TANK THEN MANUALLY TURN OFF THE PUMP SWITCH.

**FAUCET FROM SHELTER’S WATER RESERVER:**

THERE ARE EIGHT FAUCETS OUTSIDE OF STAIRCASE IN EVERY SHELTER. THESE FAUCETS ARE DIRECTLY CONNECTED WITH UNDERGROUND RESERVOR TANK. THESE ARE THE DRINKING WATER SOURCE FOR HOUSES IN EMERGENCY CASE IF ABOVE MENTION TWO SYSTEMS ARE BECOME NON-OPERATIONAL/ FAILURE.

**EXAMPLE:**

![Faucet Image](image-url)
**POND:**

EVERY CLUSTER CONTAINS ONE POND. IN ADDITION THEY WILL BE ABLE TO USE THIS WATER.

**FOR SHELTER :**

THERE WILL BE TWO SOURCES OF WATER COLLECTION, I.E

OVERHEAD WATER TANK, RAIN WATER COLLECTION FILTRATION UNIT AND STAIRCASE WATER TANK
SOLAR SUBMERSIBLE PUMP.

**OVERHEAD WATER TANK, RAIN WATER COLLECTION FILTRATION UNIT AND STAIRCASE WATER TANK:**

POND AND RAIN WATER COLLECTION FACILITY ON ROOF. RAIN WATER WILL BE COLLECTED FROM ROOF & THE POND WATER WILL BE COLLECTED THROUGH SOLAR SUBMERSIBLE PUMP. WATER FROM THESE TWO SOURCES IS FED TO THE FILTER UNIT FOR FILTRATION. THE FILTER ELEMENT IS LOCALLY ARRANGED BY INTRODUCING SEVERAL LAYERS OF DIFFERENT TYPE OF SANDS, CHARCOAL AND SMALL STONE ETC. AFTER FILTRATION THE WATER TANK RESERVES THE WATER FOR USE IN THE FACILITY. THE OVERFLOW LINE OF THIS TANK FLOWS THE EXCESS AMOUNT OF WATER OF THIS TANK INTO THE WATER RESERVOIR IN THE STAIR CASE AREA.
EXAMPLE:

SOLAR SUBMERSIBLE PUMP (1000 WATT DC):

PUMP IS CONNECTED WITH PUMP CONTROLLER. WHEN THE OVERHEAD TANK OR RESERVE TANK IS EMPTY THEN MANUALLY TURN ON THE PUMP SWITCH. AFTER FULFILLING THE OVERHEAD AND RESERVE TANK THEN MANUALLY TURN OFF THE PUMP SWITCH.
THANK YOU