GREY STRUCTURE SEPCIFICATIONS

A. BASEMENT: -

- a) 9'-0" deep excavation for basement from road level in accordance with working drawings.
- b) 4" thick bajjar (1:4:8) P.C.C. pad under raft slab in basement.
- c) Earth filling around the outer wall of the basement with selected good Ghassu properly compacted.
- d) Outer wall of the basement will be 9" thick R.C.C (1:2:4) and R.C.C. Raft Slab will be 4½" thick (½" down Margala Crush will be used).
- e) Swell/Poly bar will be provided in R.C.C walls.
- f) 2 coats **Ultra-water proofing chemical** over ½" thick plaster (1:3) outside the concrete walls.
- g) Chips coat mix with cement mortar outside concrete walls of basement

B. FOUNDATIONS: -

- a) 2'-0" deep X 3'-0" wide excavations for the foundations of 9" thick walls (load bearing) and 2'-0" deep X 2'-0" wide excavations for the foundations of 4½" thick walls (non-load bearing) from the existing plot level (Natural Soil Level).
- b) Termite proofing in foundation trenches and under floor. (ability by: FMC BIFLEX)
- c) Hard core brick blasts/bajjar (1:4:8) PCC 4" thick under foundations with mixture machine.
- d) Brick masonry work in foundations and plinth with cement mortar (1:6). 1st class bricks will be used up to Rs. 11000/-per 1000 bricks as per the construction drawing.
- e) 2" thick D.P.C. (1:2:4) with two coats of water proofing chemical ULTRA and a layer of polythene sheet (two layers on external walls and one-layer internal walls).
- f) Vertical D.P.C. of cement sand plaster (1:3) with two coats of **Ultra water** proofing chemical
 - inside of external joining the two horizontal D.P.C (external walls only).
- g) Ground Floor Finish floor level would be +1'-0" from road level and side passages finish floor level will be +1'-0" from the road level.
- h) Earth filling under floors from selected good Ghassoo with properly compacted with compact machine.

i) RCC columns in porch as per structure drawing.

C. SUPER STRUCTURE for the Ground and First Floor: -

- a) All walls should be 9" & 4½" thickness as per approved drawings.
- b) Cement sand mortar (1:6) for 9" thick wall and (1:4) for 41/2" thick wall.
- c) Reinforced cement concrete (1:2:4) for slabs, beams lintels, steel staircase as per drawing etc. Composite RCC structure as per structural design.
- d) Steel reinforcement Grade 60 (deformed bars) in slabs & lintels beams of best quality (**Mughal/Kamran/Amreli**) locally made as per structure design.
- e) Clear height of rooms after final finish of Basement will be 10'-0" and Ground & First floor will be 10' high. Gray structure would be built to accommodate the final finish (tile/floor work) to achieve the clear height as per drawing.
- f) Roof R.C.C. Slab structure of both floors should be minimum of 6" thick as per construction drawings with steel layout as per design and specifications.
- g) 3" thick R.C.C. parapet will be provided up to 3'-0" high from floor/tile level.
- h) 1'-6" wide 2" thick simple windows sunshade (straight) will be provided if required.

D. PLASTER: -

½" thick cement sand mortar on walls and ceiling.

a) External walls (1:4) b) Internal walls (1:4)

c) Ceiling No Plaster work

E. FLOORING: -

- a) Compacted earth with GHASOO filling.
- b) Termite proofing spray. (Ability by FMC BIFLEX).
- c) 4½" thick hard-core brick blasts/bajjar in Ground Floor and 3" thick in First Floor.
- d) $1\frac{1}{2}$ " thick PCC (1:2:4) over brick blasts/bajjar in flooring.

F. ROOFING: -

- a) 1½" thick bricks tiles roofing over 4" thick mud and 1" cement sand mortar on the top.
- b) One layer of polythene sheet of good quality & 2 coats **Ultra-water proofing chemical** coat of over R.C.C. slab surface.

- c) Wash of tiles in 1:2 cement slurry.
- d) Round skirting along Parapets.
- e) Heat proofing treatment by as per below method.
 - Concrete Roof
 - Water Proofing System
 - Thermophore sheet (2" thick)
 - Polyethylene Sheet
 - 4" inch Mud (Minimum)
 - 1" Cement Mortar
 - Roof Tiles

G. SANITARY AND SEWERAGE INSTALLATION: -

- a) One No. Hot and One No. cold water lines which are concealed will be done of PPRC pipes.
- b) PPRC pipes in bath 25mm \emptyset , Supply lines 32mm \emptyset Thick. Tank drop and all exposed piping of
 - G.I. ILL Karachi of Medium grade pipe line $2^{\circ}\mathcal{O}$ and as per requirement. PPRC Pipes PN 20 pipes will be used.
- c) Internal sewerage pipe of 2"Ø & 3"Ø & 4"Ø uPVC as per requirement and connection to the main/external drainage will be used.
- d) External Sewerage piping of 6"Ø uPVC of good Grade connecting to main sewerage system.
- e) PVC Pipes (Popular) will be used for bath rooms, kitchens, rain water drainage and vent pipes..
- f) $\frac{3}{4}$ \mathcal{O} G.I. ILL Karachi of Medium grade pipe will be used for gas lines for all kitchens and gas installations.
- g) Inspection chambers of 9" thick brick wall over 4" thick concrete base (P.C.C) with internal plaster benching.
- h) All Sanitary and Sewerage pipping work done as per drawing provided by Architect.

H. ELECTRIAL INSTALLATION: -

- a) All electrical points will be providing according to the Electrical drawings.
- b) Telephone Exchange wiring according to the Electrical drawings
- c) CCTV Camera wiring according to the Electrical drawings
- d) P.V.C. pipes (popular Conduit) will be used in roofs and walls for Tv., Tp., and solar panel.
- e) Boxes of a selected brand (China Brand Switch Plates) will be used for all rooms, kitchen, walls and open area.
- f) Conduit piping for all AC, power points and drainage connection will be

provided properly to avoid any breakage of the wall at the time of installation of AC's but copper piping is not included in scope of work.

I. Works outside covered area/Extra Work: -

- a) One overhead water tank will be provided (11'-1%"x7'-4%") including 4%" thick RCC wall and 4%" thick brick wall and 6'-0" Max. Height from roof tile level.
- b) One underground water tank will be provided (3'-6"x5'x5' inside size) with 4½" thick RCC wall and 4½" thick brick wall.
- c) One septic tank (5'-6"x8'-3"x 5') will be provided in $4\frac{1}{2}$ " thick concrete wall and $4\frac{1}{2}$ " thick brick wall with $\frac{1}{2}$ "th. chips plaster inside.
- d) External Boundary Walls with both sides plaster.
- e) All side passage flooring ready for tile work as are the other floors as per specifications.
- f) Drive way, ramp and Porch flooring (Two sides) as are the other floors of the house (ready for tiling/final finish).
- g) Installation of the main gate and steel doors for servant quarter and toilet as per the design. However, gates and steel doors for servant quarter and toilet will be provided by the owner at his own cost.
- h) Any type of Molding/Border work is not included.

J. Basic materials used are: -

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Bricks (Awal)
Cement (Maple Leaf/D.G.)
Steel
(Mughal/Kohinoor/Amreli
Steel)
Crush (Margla ½" down)
Sand Ravi (Chanab
sand only for
plaster)
Bajjar / Brick
ballasts
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NOTES: -

- 1) Installation of Main gates, Steel Chowkat, Steel door, Window Security Girlls is included in cost projection.
- 2) All bricks will be used of 1st class (Awal) Quality and for masonry work local Good

- quality Sand will be used.
- 3) All necessary power, water and watch keeping requirement will be met by Builder during construction.
- 4) Builder will make sure that curing/watering of masonry work, Plaster, RCC structure and flooring is done properly to ensure the strength of the structure.
- 5) All dues shall be cleared by the Owner before handing over the house by Architect/Builder to the Owner.
- 6) All **Govt. Connection fees** paid by the owner (Govt. Connection i.e. Electric, Water, Sui Gas, Telephone and all types of Society dues).
- 7) Utility bills to be paid by builder during construction of gray and till handover to owner.
- 8) Water bore with motor cost will be paid by builder
- 9) Completion time of the house will be 6-7 months from the date of first payment is made.
- 10) If the owner wants to make any type of addition/alteration work, he will pay advance the cost of material, labour charges. More over the construction period will also be extended accordingly keeping in view the volume of work.
- 11) Both parties agree that Gray Structure means completion of structure of basement, Ground and First Floor with all plaster as per specifications, all water, gas, sewerage, Electricity pipes concealed as per structure drawings with Electric boxes installed in the walls/roof etc. All floors ready with PCC in place (Kacha Farash) including walk way, drive way, Garage and side gallery. Side wall ready in side plaster.

ARTICLE 4: PRICE/RATE

A: The rate for the services performed by the contractor under these work specification is **Rs.3500**= per sft for the BASEMENT, **Rs.2400**= per sft. for GROUND FLOOR and **Rs.2400**= per sft. for FIRST FLOOR.

B: The rate for the works mentioned in clause no. "I" will be charged at the amount of Rs 12 lacs.