

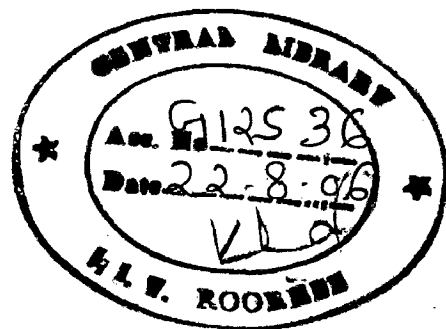
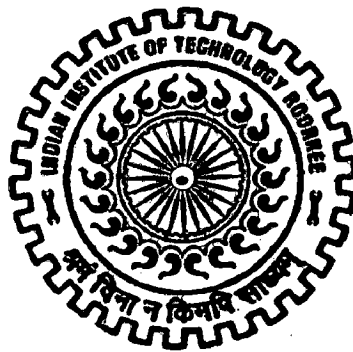
**COST MODEL FOR
A HUNDRED BED
MULTI-SPECIALITY HOSPITAL**

A DISSERTATION

*Submitted in partial fulfillment of the
requirements for the award of the degree
of*
MASTER OF ARCHITECTURE

By

R. KARTHIK



**DEPARTMENT OF ARCHITECTURE AND PLANNING
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE
ROORKEE - 247 667 (INDIA)**

JUNE, 2006

CANDIDATE'S DECLARATION

I hereby certify that the work which is being presented in thesis entitled "COST MODEL FOR A HUNDRED BED MULTI-SPECIALITY HOSPITAL" in partial fulfillment of the requirement for the award of the Degree of Masters of Architecture submitted in the Department of Architecture & Planning of the Indian Institute of Technology Roorkee is an authentic record of my own work carried out during a period from July 2005 to June 2006 under the supervision of Dr.(Mr.) P.S.Chani.

The matter embodied in thesis has not been submitted by me for the award of any other degree.


(R.KARTHIK)

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.



Dr.(Mr.) P.S.Chani
Assistant Professor
Department of Arch. & Planning
I.I.T.Roorkee
Roorkee – 247 667
INDIA

Date: 30 June 2006

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IIT Roorkee
June 2006


R.KARTHIK

Page = 283

141 pages
Table of Contents

CONTENTS

Candidate's Declaration	i
Acknowledgement	ii
Table of Contents	iii
List of Charts, Tables, Figures & Sheets	vii

CHAPTER - 1 INTRODUCTION 1-4

- 1.1 Need for the Study
- 1.2 Aim & Objectives
 - 1.2.1 Aim
 - 1.2.2 Objectives
- 1.3 Scope & Limitations
- 1.4 Research Methodology

CHAPTER - 2 LITERATURE REVIEW 5-34

- 2.1 Cost Modelling In Research
 - 2.1.1 Facilities Planning for teaching hospitals with the Development of cost model, M. Pradeep
 - 2.1.1.1 Objectives
 - 2.1.1.2 Scope
 - 2.1.1.3 Methodology
 - 2.1.1.4 Cost Modelling Technique
 - 2.1.2 Development of a cost model for cooperative Group housing schemes and an analysis of the Physical and spatial performance
 - 2.1.2.1 Objectives
 - 2.1.2.2 Scope
 - 2.1.2.3 Methodology
 - 2.1.2.4 Cost Modelling Technique
 - 2.1.2.5 Limitations
- 2.2 Review of Website
 - 2.2.1 AACE International –Technical –Cost Models- Parametric Cost Model for Buildings
- 2.3 Review of Book Referred
 - 2.3.1 Cost Modelling: Edited by Martin Skitmore & Vernon Marston, published by E&FN Spon.
- 2.4 Review of Standards
 - 2.4.1 Bureau of Indian Standards IS: 12433 (part 2)
 - 2.4.2 CPWD Plinth Area Rates with Base 100 as on 01-01-05
- 2.5 Cost Modelling Theory
 - 2.5.1 Introduction
 - 2.5.2 Objectives of cost Modelling
 - 2.5.3 The Existing Cost Models
 - 2.5.3.1 Unit Method
 - 2.5.3.2 Cube Method
 - 2.5.3.3 Storey Enclosure Method

2.5.3.4 Plinth Area Rate Method
2.5.3.5 Elemental Estimation

CHAPTER - 3	COST CENTERS IN A HOSPITAL PROJECT	35-43
3.1	Classification of Costs	
3.2	Cost Centers in a Hospital	
CHAPTER - 4	DEVELOPMENT OF A HOSPITAL PROJECT	44-90
4.1	The Planning Process	
4.2	The Medical Programme	
4.2.1	Purpose of Medical Programme	
4.3	The Functional Programme	
4.3.1	The Functions of the Hospital	
4.3.2	Analysis of Functional Programme	
4.4	The Equipment Programme	
4.4.1	Planning	
4.4.2	Utilization	
4.4.3	Evaluation	
4.4.4	Team approach	
4.4.5	Classification of Equipment in Multi-Speciality Hospital	
4.5 a)	The Design Brief	
4.5.1	Outpatient Department	
4.5.2	Clinics for Various Disciplines	
4.5.3	Emergency Department	
4.5.4	Clinical Laboratories	
4.5.5	Blood Bank	
4.5.6	Diagnostic Radiology	
4.5.7	Surgical Department	
4.5.8	The Labour and Delivery Suit	
4.5.9	General Nursing Unit	
4.5.9.1	General Wards	
4.5.9.2	Double Bed Wards	
4.5.9.3	Single Bed Ward	
4.5.10	Pediatric Nursing Unit	
4.5.11	Obstetrics Nursing Unit	
4.5.12	Intensive Care Unit	
4.5.13	Neonatal Care	
4.5.14	Central Sterile Supply Department	
4.5.15	Hospital Catering Service	
4.5.16	Hospital Laundry Service	
4.5.17	Hospital Stores and Services	
4.5.18	Activities of Medical Record Section	
4.5.19	The Central Reception	
4.5.20	The Mortuary	
4.5.21	Hospital Business Administration	
4.5 b)	Services Design Brief	
4.5.22	Electrical	
4.5.23	Elevators	
4.5.24	H.V.A.C.	

- 4.5.25 Water Supply and Sanitary System
- 4.5.26 Gas Manifold Room

CHAPTER – 5	APPROACH TO COST MODELLING FOR A MULTI-SPECIALITY HOSPITAL	91-103
	5.1 Identification of a 100-bed Multi-Specialty Hospital as a unit for Cost Modelling	
	5.2 Cost Modelling for a Hospital Building – PAR Approach	
	5.2.1 Plinth Area of Ground Floor	
	5.2.2 Plinth Area at First and Higher Floors	
	5.2.3 Galleries, mezzanine floors, lofts	
	5.3 Elemental Approach to Cost Modelling	
	5.4 Systems and sub-systems Approach to HVAC Services	
	5.5 Systems and Parametric Approach to Electrical Services	
	5.6 Parametric Approach to Central Medical Gases Supply System	
	5.7 Parametric Approach to Communications Systems	
	5.7.1 EPABX system	
	5.7.2 Nurse Call System	
	5.7.3 Closed circuit TV security port	
	5.7.4 Public Address System	
	5.8 Parametric approach to Fire Detection and Suppression System	
	5.9 Parametric Approach to Structured Cabling System for LAN	
	5.10 The Per Toilet Basis Approach to Plumbing Services	
	5.11 The Practical Approach	
CHAPTER - 6	CASE STUDIES	104 -131
	6.1 INDIAN HOSPITAL, Chennai	
	6.2 CITY HOSPITAL, Chennai	
	6.3 REX HOSPITAL, Chennai (Chosen as the Design Model)	
	6.4 Case-studies – Building Programme	
CHAPTER - 7	THE PROPOSED COST MODEL	132-283
	7.1 The Proposed Cost Model	
	7.2 Exclusions from the Cost Model	
	7.3 Assumptions for Cost Estimation	
	7.3.1 Finishes	
	7.3.2 Services	
	7.4 The Cost of Structure including Walls & Infill Panels etc.	
	7.5 Elemental Costing for Finishes, Services, Equipment & Furniture	
	7.6 The Proposed Cost Model	

	7.7	Validation of the proposed Cost Model on the Case-Studies conducted	
CHAPTER - 8		CONCLUSIONS & RECOMMENDATIONS	284-291
	8.1	The Corrections applied by way of The Proposed Cost Model over the PAR Model	
	8.2	Key Findings of the Study	
	8.3	General findings of the study	
	8.4	Recommendations of the Study	
		8.4.1 Recommendations for Project Planning	

Bibliography

LIST OF CHARTS, TABLES, FIGURES & SHEETS

CHARTS

- Chart – 1 : Research Methodology Flowchart *(page 4)*
Chart – 2 : Zoning Diagram *(page 49)*
Chart – 3 : Entrances to a Hospital *(page 56)*
Chart – 4 : Activities of Medical Record Section *(page 86)*

TABLES

- Table A : Comparative of CPWD PAR Method and AACE's Parametric Model *(Page 23)*
Table B : Cost Centers in a Hospital Project *(page 38)*
Table C : Classification of Equipment in a Multi-Speciality Hospital *(page 54)*
Table D : Access Requirements for Emergency Department *(page 63)*
Table E : Planning for a Blood Bank *(page 64)*

LIST OF FIGURES

- Figure 1: Indian hospital – Basement floor plan *(page 106)*
Figure 2: Indian hospital – Ground floor plan *(page 107)*
Figure 3: Indian hospital – First floor plan *(page 108)*
Figure 4: Indian hospital – Second floor plan *(page 109)*
Figure 5: Indian hospital – Third floor plan *(page 110)*
Figure 6: Indian hospital – Fourth floor plan *(page 111)*
Figure 7: City hospital – Basement floor plan *(page 113)*
Figure 8: City hospital – Ground floor plan *(page 114)*
Figure 9: City hospital – First floor plan *(page 115)*
Figure 10: City hospital – Second floor plan *(page 116)*

Figure 11: City hospital – Third floor plan (*page 117*)

Figure 12: REX hospital – Basement floor plan (*page 119*)

Figure 13: REX hospital – Ground floor plan (*page 120*)

Figure 14: REX hospital – First floor plan (*page 121*)

Figure 15: REX hospital – Second floor plan (*page 122*)

ANALYSIS SHEET

Analysis Sheet – 1 : Comparative Analysis of Areas
(The case-studies conducted) (*page 124*)

DATA SHEETS

Data Sheet – 1 : Finishes Schedule - CPWD Plinth Area Rates Model
(*page 145*)

Data Sheet – 2 : Desirable Finishes Schedule (*page 157*)

Data Sheet – 3 : Desirable Services Schedule (*page 217*)

Data Sheet – 4 : Instruments, Equipment & Furniture Schedule
(*page 243*)

COST SHEETS

Cost Sheet – 1 : Total Civil Works Cost (structure & finishes) - CPWD
Plinth Area Rates (*page 142*)

Cost Sheet – 2 : Cost of Finishes - CPWD Plinth Area Rates (*page 144*)

Cost Sheet – 3 : Cost of Structure only (excluding finishes cost) –
CPWD Plinth Area Rates(*page 155*)

Cost Sheet – 4 : Summary - Desirable Finishes Cost - Based On DSR-
2004/Market Rates (*page 164*)

Cost Sheet – 5 : Cost per Sqm. - Desirable Finishes (*page 165*)

Cost Sheet – 6 : Cost per Bed - Desirable Finishes (*page 166*)

Cost Sheet – 7 : Desirable Finishes Costs - Based On DSR-2004/Market
Rates (*page 167*)

Cost Sheet – 8	:	Desirable Door/Window Finishes Cost <i>(page 175)</i>
Cost Sheet – 9	:	Desirable Flooring Finishes Cost <i>(page 183)</i>
Cost Sheet – 10	:	Desirable Dado Finishes Cost <i>(page 191)</i>
Cost Sheet – 11	:	Desirable Wall Finishes Cost <i>(page 199)</i>
Cost Sheet – 12	:	Desirable Ceiling Finishes Cost <i>(page 207)</i>
Cost Sheet – 13	:	Desirable External Finish Cost <i>(page 215)</i>
Cost Sheet – 14	:	Services Cost Summary - Based On Market Rates <i>(page 227)</i>
Cost Sheet – 14 a	:	Services Cost Summary - Based On Market Rates <i>(page 227)</i>
Cost Sheet – 15	:	Desirable Services Cost per Sqm. <i>(page 228)</i>
Cost Sheet – 16	:	Desirable Services Cost Per Bed <i>(page 229)</i>
Cost Sheet – 17	:	Desirable H.V.A.C. System Cost <i>(page 230)</i>
Cost Sheet – 18	:	Desirable Electrical System Cost <i>(page 232)</i>
Cost Sheet – 19	:	Low Voltage Systems Cost <i>(page 234)</i>
Cost Sheet – 20	:	Fire Detection & Fighting Systems Cost <i>(page 236)</i>
Cost Sheet – 21	:	Sanitary & Plumbing Costs (Internal Works) <i>(page 238)</i>
Cost Sheet – 22	:	Sanitary & Plumbing Costs per Toilet Type <i>(page 241)</i>
Cost Sheet – 23	:	Cost of Toilets per Toilet Type <i>(page 242)</i>
Cost Sheet – 24	:	Instruments, Equipment & Furniture Cost Summary <i>(page 257)</i>
Cost Sheet – 25	:	Cost per Sqm. & Cost per Bed - Instruments, Equipment & Furniture <i>(page 258)</i>
Cost Sheet – 26	:	Instruments, Equipment & Furniture schedule (Detailed) <i>(page 259)</i>
Cost Sheet – 27	:	Services cost summary (detailed) <i>(page 277)</i>
SUMMARY SHEETS		
Summary Sheet – 1 :		Total Project Cost - Proposed Elemental Cost Model Format <i>(page 280)</i>
Summary Sheet – 2 :		Project Cost Per Sqm. - Proposed Cost Model <i>(page 282)</i>
Summary Sheet – 3 :		Project Cost Per Bed - Proposed Cost Model <i>(page 283)</i>

Chapter – I INTRODUCTION

1.1 Need for the study

1.2 Aim & Objectives

1.2.1 Aim

1.2.2 Objectives

1.3 Scope & Limitations

1.4 Research Methodology

Hold good for all projects.

Chapter –1 INTRODUCTION

Hospital projects have various types of budgets and sources of finance. Costing data at all stages of the project is required for the successful planning and implementation of the project.

If the funds required are more than the available funds, then the cost of money may make the project unviable. If the funds required are calculated on the lower side, then the project may stop half way in between, due to cost overruns and or non-availability of funds.

Therefore, the costing at the inception i.e. pre-feasibility and concept stage of the project is very important for the client to arrange for the funds, and to take the critical decisions on whether to go ahead with the project or to abandon it.

1.1 Need for the Study

A Cost-Model for a Hospital which would help Planners and Developers to assess its probable building cost at the inception stage.

1.2 Aim & Objectives

1.2.1 Aim

To develop a Cost Model for a 100 Bed Multi-Speciality Hospital.

1.2.2 Objectives

1. To study the theory of cost modelling and apply it in the Indian context.
2. To identify the cost centres in a hospital project and apply it in Indian context.

3. To understand the process of developing a building programme of a 100 Bed Multi-Speciality hospital.
4. To develop a methodology for constructing the Cost Model of a 100 Bed Multi-Speciality Hospital and apply it on the design model.
5. To validate the Proposed Cost Model through the case-studies conducted.
6. To draw conclusions from the study and to make recommendations for further studies on the subject.

1.3 Scope & Limitations

- The study shall cover the cost modalities for a 100-bed Multi-Speciality Hospital project, at its inception stage equipped with facilities as determined in the building programme.
- Since the Proposed Cost Model takes the aid of CPWD Plinth Area Rates and DSR (Delhi Schedule of Rates) for the cost computations of some building elements like the cost of structure the Design Model chosen is assumed to be in Delhi, India.
- The proposed Cost Model shall however include only the cost of structure, cost of finishes, cost of services and the cost of equipment and furniture.
- The building programme of the 100 bed Multi-Speciality Hospital would be based on 12 specialities namely: **Medical, Surgical, Orthopaedic, Eye, ENT, Dental, Paediatric, Skin, Family Planning, Psychiatric, Obstetrics and Gynaecology.**
- This study shall not cover issues of revenue generation and or cost recovery.

- The cost of consultants, land, external development works including external services works, working capital and preliminary & pre-operative expenses are excluded from the scope of study.

1.4 Research Methodology

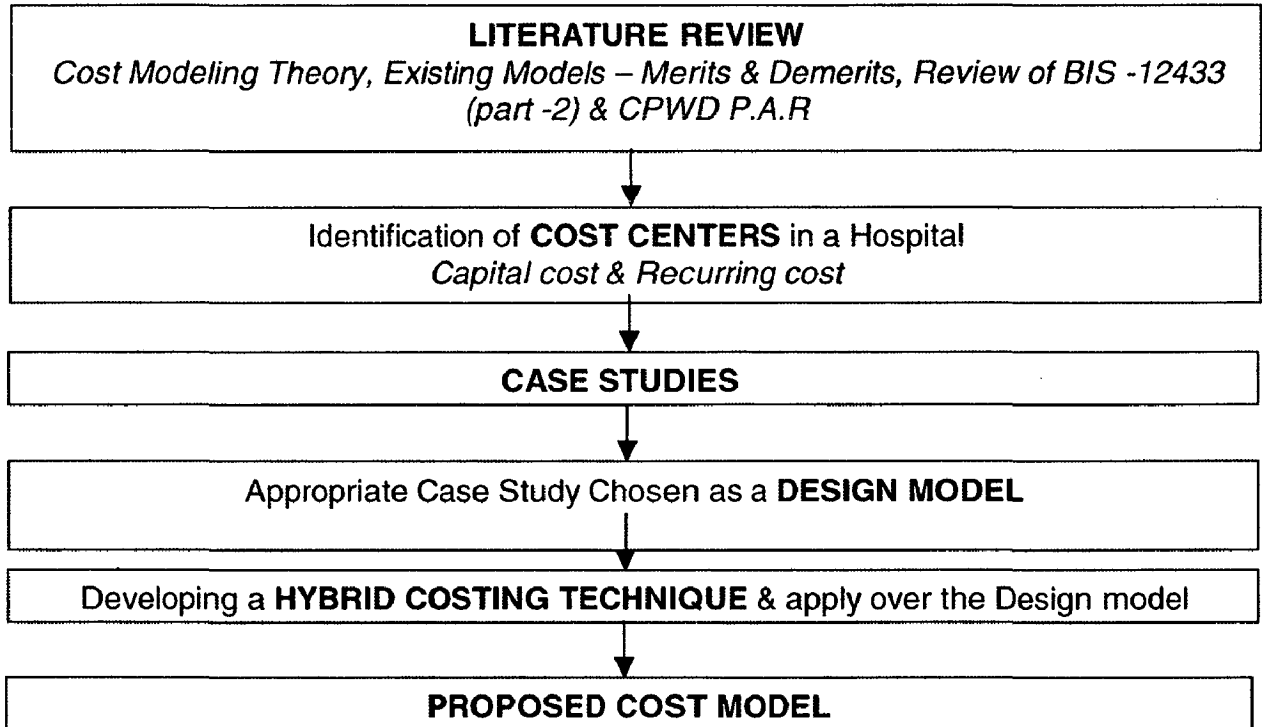


Chart 1: Research Methodology flow chart

Chapter – II LITERATURE REVIEW

2.1 COST MODELLING IN RESEARCH

2.1.1 Facilities Planning for teaching hospitals with the
Development of cost model, M. Pradeep ← ?

2.1.1.1 Objectives

2.1.1.2 Scope

2.1.1.3 Methodology

2.1.1.4 Cost Modelling Technique

2.1.2 Development of a cost model for cooperative
Group housing schemes and an analysis of the
Physical and spatial performance

2.1.2.1 Objectives

2.1.2.2 Scope

2.1.2.3 Methodology

2.1.2.4 Cost Modelling Technique

2.1.2.5 Limitations

2.2 REVIEW OF WEBSITE

2.2.1 AACE International –Technical –Cost Models-
Parametric Cost Model for Buildings

2.3 REVIEW OF BOOK REFERRED

2.3.1 Cost Modelling: Edited by Martin Skitmore & Vernon
Marston, published by E&FN Spon.

2.4 REVIEW OF STANDARDS

2.4.1 Bureau of Indian Standards IS:12433 (part 2)

2.4.2 CPWD Plinth Area Rates with Base 100 as on
01-01-05

2.5 COST MODELLING THEORY

2.5.1 Introduction

2.5.2 Objectives of cost modelling

2.5.3 The Existing Cost Models

2.5.3.1 Unit Method

2.5.3.2 Cube Method

2.5.3.3 Storey Enclosure Method

2.5.3.4 Plinth Area Rate Method

2.5.3.5 Elemental Estimation

2.1 COST MODELLING IN RESEARCH

2.1.1 Facilities Planning for Teaching Hospitals with Development of Cost Model

Project Seminar (May 1992), M. Pradeep

2.1.1.1 Objectives

- To outline and highlight the important stages of development of a teaching hospital, in terms of it's medical and functional programme.
- To understand the economics of teaching hospitals and to analyse the capital and operating costs of facilities in such a project
- The first stage involved the identification of existing hospital facilities and their space requirements.

2.1.1.2 Scope

The proposed approach is applicable mainly for teaching hospitals. All aspects of planning dealt with in this report are restricted to the cost appraisal of facilities only, which comes after the appraisal of the entire hospital.

2.1.1.3 Methodology

- In the first stage, various criteria and norms followed for medical, functional and building programme formulations are highlighted.
- The second stage involves the classification of hospital areas in terms of expenditure and revenue areas and identification of major and minor centers in this regard.

- In the third stage a detailed study of operating costs and revenue of the facilities is done to arrive at a cost model for a typical teaching hospital.
- In the last stage areas, which could be optimized, are identified and the mix of facilities to obtain the medical and functional objectives with minimum investment is dealt with.

2.1.1.4 Cost Modelling Technique

- Scope and magnitude of the project are fixed based on the Medicare needs in the catchment area, state health policy, promoters-objective and his financial capabilities.
- Based on an assessment of the objectives and needs, the medical programme mix of clinical, investigate, educational and other disciplines - is developed
- The medical program is translated into the functional programme by identifying the minimum Standard requirements, an analysis of their distribution - paying or free and single/double/suite for patient - and area assignment.
- A case study of the All India Institute of Medical Sciences is done by collecting data regarding expenditures of the departments. The study consists of-
 - Identification of Cost centers (Service, Production and Expense)
 - Collection of costs at the cost centre where they are actually incurred, and
 - Apportioning service expenses among the various consumers of the service in the ratio of the service consumed.

- Further, the expenses and income data from three hospitals (with bed strength ranging from 300 to 1615) are analyzed and the cost/bed/day is used to validate the results.

2.1.2 Development of a Cost Model for Co-operative Group Housing Schemes and an Analysis of the Physical and Spatial Performance

Thesis (January 1994), Anju Aggarwal

2.1.2.1 Objective

To develop a reliable cost model for construction of co-operative group housing schemes in Delhi.

2.1.2.2 Scope

- The scope of the Thesis work was restricted to the civil works only.
- The study is confined to co-operative group housing schemes, which are essentially low-rise (G+3) construction only.
- The cost model uses DSR '89 rates. Market rates as prevailing then have been used for items not covered by DSR.

2.1.2.3 Methodology

- The preliminary study of cost models and cooperative group housing schemes leads to the first approach for cost model development. Based on the format used in the construction industry a cost model is developed with the aim of estimating the probable costs of various items and hence of different sub-heads in civil works.
- The second approach considers the end user's viewpoint and leads to the development of the elemental cost model for elements relevant to co-

operative group housing schemes. Thereafter, an analysis of the physical and spatial performance is carried to analyze the usable areas and select components having significant bearing on the cost.

2.1.2.4 Cost Modelling Technique

The 'As Executed' quantities of the various items of work were obtained for twelve case-studies, in various parts of Delhi. All the case studies were essentially G+3 constructions and were either composite or load bearing structures.

For the Itemized Cost Model civil works are subdivided into the standard sub-heads, earthwork, concrete work, RCC work, brickwork, woodwork, steel work, flooring, roofing, finishing and miscellaneous.

Each of these subheads gets further subdivided into items of work for which unit costs quoted by the contractor are taken.

Specifications are standardized based on the criteria that the specification should figure in 6 or more case studies undertaken.

The total plinth area was calculated for each of the case studies. The total quantity of any item divided by the total plinth area gives the quantity of that item per unit area of the project. This quantity when multiplied by the unit cost gives cost for unit area. These item costs under each sub head are added up to give the subhead costs per unit area.

To get the civil works cost per unit area of construction all the subhead costs are added up.

The finalized cost model is derived from averaging the item costs of the case studies. The cost model can be updated by multiplying quantities with the item costs for the current year.

An Elemental cost model is developed, in the following manner:

- Primary, secondary and finishes components are identified for the selected elements- external and internal wall, door, window, flooring, roofing and railings. For example, for internal wall element the structure forms the primary component. Doors and window are taken as secondary components. The finish component comprises plastering and painting on both sides.
- Possible options are identified for each of the components.
- Using the above format the element cost per sqm. can be determined for the selected combination of components. The likely cost of the element can be calculated by multiplying this cost by the element area.

In area analysis, effective utilization values are determined for the different units by calculating the usable areas as a percentage of the respective plinth areas.

Some select components -external wall, internal wall, door area, window area and total openings area-which contribute significantly to the cost are taken up for analysis under the component analysis. The length or areas of these components are calculated. Statistical averages are derived resulting in the most probable values for each of the components.

Components appearing to have a relationship with one another or with the unit configuration are studied using scatter diagrams.

The plan compactness ratio is calculated for the case studies at the block level. The total plinth area of the dwelling units catered by a single staircase at each level is taken as the area of the building. The perimeter of the block at that level (dwelling units, staircase and common corridors) is calculated. The perimeter of a circle having one equal to that of the building is calculated. The Plan Compactness Ratio is determined by dividing the perimeter of the circle by the perimeter of the building, and expressed as a percentage. The closer it is to 100% more compact is the plan.

2.1.2.5 Limitations

The study is limited to the development of a cost model for Civil Works only. The parametric analysis techniques can only be applied to building types having extensive similarities, which is not the case for hospitals

2.2 REVIEW OF WEBSITE

2.2.1 AACE International - Technical - Cost Models- Parametric Cost Model for Buildings

The website is hosted by the Association for the Advancement of Cost Engineering through Total Cost Management. It lets the users try out an illustrative example of a parametric cost estimate model.

The users are advised that before using the model, they should see the sections About the Technology and About the Model for more information on the capabilities, scope, and limitations of the model methodology. A section About the Input/Parameters gives specific details concerning the input parameters to be entered in the model. The output/results of this model is a total building cost estimate, including architects fee, broken down by building system in accordance with the Construction Specification Institute's Unifomat accounts of United States of America.

The example illustrated is a working example of a parametric cost model.

A parametric cost estimating model is made up of one or more algorithms or cost estimating relationships (CERs) that translate technical and/or programmatic data (parameters) about a product or asset into cost results.

The algorithms are commonly developed from regression analysis of historical project information; however other analytical methods such as neural networks are also sometimes used.

The models are very useful for cost and value evaluations early in the project life cycle when not much is known about the project scope.

The models are limited in accuracy and usage due to the many assumptions built into the algorithms. Also, the validity of the model is usually limited to certain ranges of parameter input values.

Due to these limitations and constraints, it is incumbent upon the user to thoroughly understand the basis of a parametric model.

The cost model is made up of a set of algorithms - one for each of the "systems" that make up a building and one for the architects' fees to design the building.

The building cost accounts shown are the major divisions of the CSI Unifomat which is commonly used for parametric building cost evaluations due to their "systems" orientation.

The model is generally applicable to the typical kinds of buildings found in an industrial or commercial setting in the United States (up to 7 stories, steel or concrete structure). This includes offices, warehouses, industrial buildings, and labs.

It does not apply to residential or wood construction.

It does not cover buildings over 7 stories or monumental grade buildings with elaborate closures and finishes.

It also does not provide for clean room conditions.

The estimate does NOT include contingency.

All cost estimates should include a contingency allowance to cover for unidentified but expected cost occurrences within the project scope. Contingency is usually estimated through the application of risk analysis techniques.

The Input parameters used are:

- Case Description
- Floor Area
- Floor Height
- Number of Floors
- Percentage Area as Office
- Percentage Area as Wet Lab
- Percentage Area as Dry Lab
- Percentage Area Heated
- Percentage Area Cooled
- Number of Corners in the Building
- Structural Strength/Duty factors (Sub-structure & Super-structure)
- Exterior Closure Finish Quality
- Interior Construction Finish Quality
- Mechanical Services Quality
- Electrical Services Quality
- Escalation Factor
- Location Factor
- Local Productivity Factor

The Output/Results generated are:

- An approximate building cost estimate, including architects fee, broken down by building system in accordance with the Construction Specification Institute's Unifomat accounts. The costs include all labor and material as well as an allowance for contractor's overhead and profit.

The results exclude the following significant items:

- Excludes site improvements (land, landscaping, parking, utilities, etc.)
- excludes furnishings and production equipment
- excludes contingency allowance

The site hosts a window to “calculate” and generate the cost estimate.

2.3 REVIEW OF BOOK REFERRED

2.3.1 Cost Modelling: Edited by Martin Skitmore & Vernon Marston, published by E&FN Spon.

The book is a part of the 'Foundations of Building Economics' series that endeavors to organize the extant knowledge in the field by assembling in one place the seminal papers in building economics written to date.

The series uses building economics as a field of economics to make the best use of scarce resources in the building process.

The book under review has seminal proceedings of two major conferences on Cost Modelling. The papers are contained in five parts.

Part One: Strategies and Directions

This contains papers which contribute to the delineation of the field – i.e. what cost modelling has been and should be trying to achieve.

Part Two: Explorations in Cost Modelling

This contains papers in which new models are presented and evaluated, having a lot of analysis in a field that is largely empirical in nature and in a poor state of theoretical development.

Part Three: Cost – Product Modelling

This examines the cost implications of design alternatives through the use of product models/industrial models.

Part Four: Cost – Process Modelling

This contains aspects of the production process that is common to all contractors.

This is the newest of all fields due to its dependence on linking of latest developments in information technology for practical applications.

Part Five: Dealing with uncertainty

This contains a collection of papers relating to the general theme of uncertainty either in terms of validation or non-deterministic cost modelling.

A Glossary of Terms and a Selected Bibliography contains a list of further publications relevant to the field.

In conclusion it is stated that “The cost modelling is interesting to many people and of great potential value to clients and society in general in enabling better decisions to be made on value for money issues in construction. This could mean building three hospitals for the cost of two.”

2.4 REVIEW OF STANDARDS

2.4.1 Bureau of Indian Standards IS: 12433 (Part 2)

An attempt has been made by the Bureau of Indian Standards to rationalize the Hospital planning and development in the country by laying down standards for hospitals with different bed components and levels of patient care.

A Standard (IS 12433) has been prepared based on practices prevalent in the field in India.

This standard (Part 2) covers basic requirements for planning 100 bed Multi-Speciality Hospital in respect of medical programme, functional programme, area requirements, manpower requirements, instruments, equipment and furniture requirements and work flow. Certain essential requirements for building, services and environment have also been covered

2.4.1.1 The standard identifies that a Hospital is to have a balanced combination of the following functional areas and services:

- Entrance Area
- Ambulatory Care Area
- Diagnostic Services
- Intermediate Care Area
- Intensive Care Area
- Critical Care Area
- Therapeutic Services
- Hospital Services

- Engineering Services

- Admin. & Ancillary Services

It provides a Medical Programme to help formulate a minimum set of activities that must be under taken in order to run a Hospital.

It further provides a Functional Programme to help identify the system of spatial inter-relationship between the different sub-systems of a Hospital.

The comments of practicing hospital consultants about the IS standard seem to indicate that in the present day scenario, the standard suffers form the following lacunae:

- a) The medical programme as provided in the Standard has become obsolete and needs definite and overwhelming changes, to make it up to date with the present day requirements.

- b) Day-surgery/Day care-short stay has not been provided for in the medical programme. This is a standard service being offered by all hospitals today.

- c) Ambulatory care has to have much more turnover as it is a win-win business model for both the hospital as well as the patients, and the case-load of the other departments of the Hospital is fed by the Ambulatory Care department.

- d) The new Supreme Court Ruling has changed the sizes of blood banks to correspond to the number of units of blood transfusion taking place in the unit.

- e) With the increase in the turnover of the patients in a hospital the number of entry/exit points has also to increase in order to reduce the congestion in a hospital.

- f) The ratio of a hospitals' level of care with the number of beds is changing and number of beds is not the relevant parameter any more for the level of care being provided by the hospital.
- g) Only very critical/serious patients who need a lot of diagnostic & therapeutic support are required to stay in the hospital. The hospital also wants the beds to generate other revenue form the diagnostic, therapeutic & treatment areas
- h) Average length of stay (ALOS) of the patients has reduced a lot. The standard needs to address to this change, in the modalities of functioning of hospitals.
- i) There are a lot of new business Models for hospitals being planned in the form of
- Assisted care facilities- for chronic minimal care patients like geriatrics
 - Rehabilitation Centers, halfway homes
 - Acute case facilities
 - Day care facilities
- j) The hospitals of today have advanced imaging, diagnostic therapeutic facilities that can be accessed by paying a 'medical charge' even by those who may not be getting consultations/indoor care done in the hospital, thus requiring a change in the building programme.
- k) Just like the health care system of the government, corporate hospitals are also setting up franchise arrangements and developing their own health care delivery system and linkages with vertical networks.

2.4.2 CPWD Plinth Area Rates with Base 100 as on 01.01.05

This method provides an estimated cost of a project based on Plinth Area Rates (as developed and implemented by the central and state PWDs and public sector undertakings) for both residential and non-residential buildings.

The non-residential buildings are classified as Office buildings, Institutional buildings, & Hospital buildings.

This method has a fixed procedure and set of rules in order to ensure the adoption of a uniform method of working out plinth areas from the building plans, to ensure that the plinth area of the building presents a true picture of the covered floor area provided in the plan.

2.4.2.1 The Method

The total Plinth Area of a building is the sum total of the plan areas at every floor including the basement.

In case of non-residential buildings the area of shafts for sanitary installations, AC ducts, lifts etc. shall be included in the plinth area at all floor levels.

The area of a mumty at terrace level shall not be included in the plinth area. If a barsati is provided jointly with a mumty then the area of the barsati excluding the mumty at the terrace level shall be included in the plinth area.

Towers, turrets, domes projecting above the terrace shall not be included in the plinth area at terrace level but shall be allowed for costing purposes separately.

i. Plinth Area of Ground Floor

The plinth area of the ground floor is calculated at the plinth level, excluding the plinth offsets provided such plinth offsets are not more than two quarter inch.

In cases where the building consists of columns projecting beyond cladding, the plinth area shall be taken upon the external face of the cladding and shall not include the projections of the columns.

If open verandahs with parapets are provided at the ground floor projecting out of the building the full area shall be taken upto the outer line of the external verandah lintel and only fifty percent of the area shall be taken for the unprotected verandah or the unprotected portion of the verandah.

Open platforms (i.e. platforms without parapets) and terrace at ground floor and porches shall not be included in the plinth area but shall be allowed for separately for costing purpose.

ii. Plinth Area at First and Higher Floors

The plinth areas of first and higher floors shall be calculated at the relevant floor levels.

Architectural bands, cornices etc. shall not be included in the plinth area even though they may occur at the floor level. Vertical sun breakers or box-louvers projecting out also shall not be included in the plinth area.

In the case of projecting balconies protected to their full width by sun shades, full width roof projections, or by upper balconies, their full area shall be included in the plinth area. In the case of unprotected balconies, equivalent area to the extent of fifty percent of the area of the balconies shall be included in the plinth area.

iii. Galleries, mezzanine floors, lofts

Area of galleries, i.e. upper floor of seats in an assembly hall, auditorium, theatre etc., shall be fully included in the plinth area.

Area of mezzanine floor, i.e. an intermediate floor included between two main floors, shall be included in the plinth area, if no separate provision is made for the same.

The area of a loft, i.e. an intermediate slab just beneath the floor or roof without any direct stair case leading to it and used for storage purposes shall not be included in the plinth area.

2.4.2.2 Limitations

The last plinth area rates with a base 01.10.76 were circulated on 07.07.79. The present plinth area rates have been applicable from 01.01.92. It took 15 years for the present available rates to be published. In the year 2003 these are already more than 10 years old.

Thus, the model does not consider the latest materials, methods of construction, and the services to be incorporated in a modern building that has new functional requirements that did not exist when the PAR model was framed.

The IS Code provisions for earthquake resistant structures have changed and so have the provisions for durability of structures.

The model provides for the same rates for buildings upto 6 stories and for a maximum of 12 stories only. It may be more realistic to have costs in slabs for heights upto four stories, six stories, eight stories, ten and then twelve stories. In the present day context, the buildings are higher than twelve stories also but the PAR model does not provide for these tall buildings.

The model has a separate rate for the sub structure and the super structure. It does not provide different rates for all the earthquake resistant structures as per the latest code provisions.

The durability conditions for RCC as per the latest code are also not incorporated in the model. The model does not provide for stronger structural members to take heavier loads.

The model needs to be customized to cater for a Multi-Speciality hospital building that has the following additional services not incorporated in the PAR cost model but are functionally required in the present day context.

- Standby electricity supply
- Uninterrupted power supply
- Air-conditioning systems in essential functional areas
- Nurse call system
- Local area network (Administrative & medical)
- Cost of equipments and furniture

The CPWD PAR model may give reasonably accurate project costs if the above-mentioned parametric costs are added to get the realistic project cost estimates.

Table A: Comparative of CPWD PAR Method and AACE's Parametric Model

S.No.	CPWD PAR Model	AACE Parametric Model	Remarks
1	Is applicable for load bearing structures, composite structures and framed structures upto 6 stories high and a maximum of 12 stories	Is applicable for all non monumental structures and non-wooden structures upto 7 stories high It does not cover buildings over 7 stories or	The basis of limiting the height of structures has to have a logic and scientific reasoning that has to be explained.

		buildings over 7 stories or monumental grade buildings with elaborate closures and finishes.	
2	<p>There are three types of rates for :</p> <ul style="list-style-type: none"> - Office /college/hospital buildings - Schools and hostels - Residential buildings 	<p>Applicable to the typical kinds of buildings found in an industrial or commercial settings in the United States (up to 7 stories, steel or concrete structures) including:</p> <ul style="list-style-type: none"> - Offices - Warehouses - Industrial buildings, and - Labs <p>It does not apply to:</p> <ul style="list-style-type: none"> - Residential, or - Wood constructions 	
3		<p>There is a provision to count the number of corners in the building and account for them.</p> <p>Thus, the plan form of the building has a bearing on its cost.</p>	<p>The PAR cost model does not consider the geometry of the building in determining its cost.</p> <p>The plan compactness ratio is not considered in the PAR model.</p>
4	Extras are added for	It does not provide for	

	Operation theatres	clean room conditions	
5		<p>Floor Area:</p> <ul style="list-style-type: none"> - Wall to wall floor area counted. - Basement area counted 50% <p>Floor height:</p> <ul style="list-style-type: none"> - Total ht of bldg from base slab to roof slab / no. of floors of the building. - No of floors incl. basement 	In CPWD PAR Cost Model, Extras are added for these items.
6		<p>Input parameters.</p> <ul style="list-style-type: none"> - Percent of area as office. - Percent of area as wet lab. - Percent of area as heated. - Percent of area as cooled. - No of corners. - Structural strength/ duty factors. - Exterior closure finish quality. - Interior finish quality. - Mechanical services quality. - Electrical services quality. 	

		<ul style="list-style-type: none"> - Escalation factor. - Location factor. - Local Productivity factor. 	
7	Includes Eternal Development works Provides for optional contingency figures of 3%	The Model excludes: <ul style="list-style-type: none"> - Site Improvements - (land, landscaping, parking, utilities etc) - Furnishings & production equipment - Contingency allowance 	

2.5 COST MODELLING THEORY

2.5.1 Introduction

As with most of the principles and methods followed in construction / project management, the origin for cost models too rest with the industry. Cost models of various types have been developed over the years especially for industrial applications.

However, fair amount of work has been done by a number of organizations e.g. Means Cost Data-USA, American Construction Management Association (ACMA), Society of American Value Engineers (SAVE), Building Research Station , UK etc. in developing reliable cost models in their respective situations for specific categories of building categories covering both, the building type as well as the grade/class e.g. the illustrative example of a parametric cost estimating model hosted by the American Association of Costing Engineers (AACE).

It is further known that cost models for building types in the U.S have been developed for a particular region (state) and a set of modification factors have been provided for correct utilization in the other areas/states. Likewise, factors

have been set forth for the class of building depending purely on the specifications adopted. Variation factors for components towards the foundations (soil dependent) have been identified.

The prime purpose of any cost model is the ability to accurately predict the cost of a product or the components of a product accurately at any given time.

It is natural to assume that the cost models developed have an inherent flexibility to allow for the variations that may be imposed on the product or the components of the product due to the demands of time. It is also to be borne in mind that most of the approaches to cost modeling developed are parallel with Value Analysis and Value Engineering studies.

In simple terms, a cost model is developed through a systematic break down of cost data amongst the various components of a building.

It is reasonable to assume that such a data collected for several buildings of a similar type when normalized to a base would give reliable indicators for any future development.

A cost model's primary function, therefore, is to provide an alternative (and more reliable) method of estimation of a particular building type or its components and sub components as a function of a chosen parameter e.g. its plinth area or its volume or the amount of concrete consumed in volume etc. (the parameter being determined/chosen depending on the type of structure).

It further provides a basis for comparing one structure/building with another and analyzing the variations, if any. In other words, it attempts to isolate the points of differences so that the variations in specifications, construction, configuration and function can be objectively evaluated.

The cost model represents in a systematic manner a set of facts about costs pertaining to a particular building type.

The user interprets such data in relation to the type of specifications adopted along with the other analysis i.e. construction, configuration etc. and arrives at the most likely cost for the proposed project and can help in deriving useful conclusions which might further help in decision making.

The end result is that the cost models have a very wide and reliable range of applications and they qualify to be one of the most useful tools in the hands of project managers.

It is an essential tool of resource management that may be adopted by the planners and the programme managers in the initial stages to answer basic questions about efficiency, equity and sustainability of the provision of any service.

The cost of a health service is defined as the value of the resource inputs used to produce that service.

Thus, collection and analysis of data on programme costs, classified into different components indicates the size of funds (from all sources) likely to be required and also helps in assessing the efficiency of putting resources into providing various facilities.

“Cost Modelling” may be defined as the symbolic representation of a system, expressing the content of that system in terms of the factors, which influence its cost.

Such a model attempts to represent the significant cost items of a building or component in a form which will allow analysis and prediction of cost to be undertaken according to changes in factors such as design variable and construction methods.

Results generated by the simulation are analysed and used in the decision making process of design.

2.5.2 Objectives of Cost Modelling

The broad objectives of cost estimating models are:

- i. To appraise the client about the expected cost of the project
- ii. To facilitate budgeting and feasibility
- iii. To allow quick development of a representation of the building so that its cost can be tested and analysed
- iv. To advise the designer on the cost implications of his design decision.
- v. To establish a link between the cost control of design and the manner in which costs are generated and controlled.

2.5.3 The Existing Cost Models

2.5.3.1 Unit Method

- i. *Basis:* Single price rate based upon cost per functional unit of the building, a functional unit being, for example, a bed for a hospital building
- ii. *Application:*
 - Inception and feasibility stages of the design, especially in large or complicated buildings or projects like general hospitals.
 - Allows comparison between buildings to check that the cost is reasonable in relation to other buildings of similar nature.

- iii. *Limitations:* Makes no allowances for variation in building size, shape, style or quality. Therefore, not suitable to estimate the cost of a specific building, like hospital buildings.

2.5.3.2 Cube Method

- i. *Basis:* Single price-rate method based upon the cost per cubic meter of the building. Where the different parts of the building vary in function, they should be quantified separately. Common standards of measurement are necessary for calculations.
- ii. *Application:* Outline proposal stage of the design to get some indication of the total cost of the project. Restricted to estimating fire insurance premiums for building.
- iii. *Limitations:*
 - May prove inaccurate, as it is very difficult to assess the rate due to large number of variables. A small error in the rate when extended can make a vast error in the final sum.
 - Fails to take account of any variation in plan shape, storey height or total number of storeys each of which has an important influence on the final cost.
 - As in the unit method, it is not possible to subdivide the estimate into the cost of elements or individual items.

2.5.3.3 Storey Enclosure Method

- i. *Basis:* Areas of the external walls, floors and roof areas (effectively “enclosing” the building) are measured and multiplied by an appropriate weighting factor. The resultant figures are totalled to give number of

storey enclosure units. The number of storey enclosure units is then multiplied by a single price-rate with additions for:

- Services,
 - Abnormal foundations, and
 - External works and external services.
- ii. *Application:* First method to compensate for such factors as the height and shape of the buildings can be used during the investigation and construction design stages. Achieved only limited acceptance as it was soon superseded by the elemental costing methods.
- iii. *Limitations:*
- Requires far more calculations than the other methods
 - Historical data in the form of rates is not readily available
 - The concept of storey enclosure units is not meaningful to the client or the designer
 - Unlike the other preliminary estimates it excludes lifts and other engineering services from the calculation.

2.5.3.4 Plinth Area Rate Method

- i. *Basis:* This is a single price-rate method based on the cost per square metre of the building.

In the Plinth Area Rates (PAR), the building is classified as load bearing or R.C.C. framed structure.

Further, buildings are classified depending upon their usage into residential – Type I to V quarters and above and non-residential such as office, college, hospitals, schools and hostels.

The basic rates (per square metre of covered area) are given for building with defined number of storeys and floor height, having minimum acceptable specification. Extra costs can be added to this basic rate for special structural provision and specifications, such as additional storeys, additional floor height, special foundation systems, stronger structural members, larger modules, fire fighting and waterproofing treatment.

The cost of services – internal water supply and sanitary installations, external service connections, internal electric installations and telephone conduits – is given as a percentage of the building cost.

For lifts, the basic price is given for the specified capacity and speed. Extra cost can be added for each additional floor of travel.

For R.C.C Water tanks, rates are based on the capacity of the tank and staging height.

Rates are given in terms of per square metre for site development activities such as levelling, internal roads and path ways, water supply and distribution, sewers, storm water drains, horticulture and street lighting.

ii. *Application:*

- At the consultation stage examples of past costs can be quoted and supported with drawings to enable an appreciation of the type and quality of the proposed building.
- During the investigation stage, this technique allows a quick and reasonably accurate comparison of the likely costs of alternative schemes.

iii. *Limitations:*

- Adjustments cannot be made to allow for variations in the shape of buildings.
- Needs to be updated from time to time by revising the Cost Index, which is not very accurate, as the calculation does not account for all types of material and labour used.
- Single rates are taken upto 6-storey height whereas rate may vary from storey to storey.
- Moreover, it does not account for heights above 12 storeys.
- Does not account for different earthquake zones in case of R.C.C framed structures.
- Does not account for different sizes of modules or special structural systems.
- Does not account for interior design and built in furniture & services, which are a major component of the in building such as hospitals.
- Does not account for different types of external & internal wall finishes (richer specifications).
- Does not consider variation in quality of plumbing and electrical fittings and fixture.
- Variations in site development needs have not been accounted for. Air-conditioning costs are not accounted for although they form a major component of the cost in buildings such as hospitals, where air-conditioning is an essential functional requirement.

2.5.3.5 Elemental Estimation

- i. *Basis:* The building is considered in elements. An element is that component of a building which – irrespective of the type of construction or specification tends to perform the same function.

The form construction of each element, its material and labour content, the quality involved are all analysed and multiplied by the relevant unit quantity to arrive at the cost of the proposed element.

The summary of all elemental costs gives the project estimate

- ii. *Applications:*

- Provided sufficient information is available, can be used at all stages of the design to produce an estimate in elemental form.
- Comparisons can easily be made enabling the architect/planner to obtain any likely cost implications during the early stages of the design development.

- iii. *Limitations:*

- Correct adjustment of elements to account for any changes in specifications requires a great deal of skill.
- More time-consuming than the other methods of cost estimation.

Chapter – 3 COST CENTERS IN A HOSPITAL PROJECT

3.1 CLASSIFICATION OF COSTS

3.2 COST CENTERS IN A HOSPITAL

Chapter – 3 COST CENTERS IN A HOSPITAL PROJECT

Costs Forecasting, allocating resources for the cost centers, appropriation of funds to the various cost centers as per the control account plan of the project, and cost control are the primary functions to be performed by the project managers.

The scientific method of budgetary controls of a project starts with the identification of the various cost centers in the project as the input indicators that may help in controlling these costs.

3.1 CLASSIFICATION OF COSTS

To estimate a programme's costs, classification of the cost components/Centers is necessary. It is of paramount importance to identify and classify all the cost centers in a project as a first step in the project planning process.

Cost centers can be classified in several ways.

These cost centers have to be classified according to the stages in the project cycle when the cost would have to be incurred. It is very important to know the total cost of a component and the stages at which these costs have to be incurred.

Thus, if the land has to be acquired from some development authority, then there would be some conditions on the time period for the development of the land and the terms and conditions on the payments to be made. There may be some money to be paid at the drop of the hammer, some moratorium and/or some monthly installments of the principal amount; and the interest component would have to be paid. This amount may be paid in equal monthly installments over along period of time. The project authorities have to decide according to the funds flow available with them as to how to make these payments.

The title of land may be used to leverage funds for the buildings, services and equipment.

The payments to be made to the consultants should also not be open ended. It should be possible to know the total maximum amount that may have to be paid to a consultant and the stages on which the payments have to be made.

An upper ceiling has to be fixed to keep the project within its budgetary allocations. Proper clauses in the consultancy agreements have to be drawn that clearly define the deliverables at each stage of the project and the amount of fees payable. This is the only way to keep a check on the quality and the amount of work being done by each consultant.

Keeping reserve funds for the unforeseen expenses and contingencies is a must for the successful completion of the project.

Cost Control is the key to the successful planning, design and implementation of the project.

3.2 COST CENTERS IN A HOSPITAL

For health care facilities, classification of costs by inputs is widely applicable and useful. It groups inputs into categories whose components have similar characteristics, and has certain other merits such as:

It involves a manageable number of categories, and these categories are general enough that they can be applied to any health care facility of a given magnitude.

It distinguishes two important categories of resources – those are used up in the course of a year and are usually purchased regularly (i.e., recurrent costs) and those that last longer than one year, such as buildings, vehicles and equipment (i.e., capital costs).

A generally used scheme of classifying costs by inputs is:

a) Capital costs

Building costs.

Equipment: All medical and office equipment.

Vehicles: Ambulances and others.

b) Recurrent costs

Personnel (all types) : Consultants, technicians, administrators etc.

Suppliers : Drugs, instruments, disposables, small equipment etc.

Electricity, water, telephones and other utilities.

Vehicle operation and maintenance : insurance, cleaning, maintenance, plumbing etc.

Training : recurrent training e.g., short term in-service courses.

Social mobilization : operation costs.

Other operating costs.

The study deals with only the capital costs of a hospital project (excluding cost of vehicles etc.) in terms of the components discussed

The classification of cost centres (as identified within the scope of this study) in a hospital project is presented as follows:

TABLE B: COST CENTRES IN A HOSPITAL PROJECT

S. No.	Cost Centers
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A Building Cost

- 1 Consultants
 - 1.01 Business Model Development- Market Survey, Attorneys, Legal Consultants
 - 1.02 Project Managers
 - 1.03 Hospital Consultants
 - 1.04 Equipment Planning, Commissioning
 - 1.05 Facility Planning, Programming
 - 1.06 Designers- Architects
 - 1.07 Designers- Structural
 - 1.08 Quantity Surveyors
 - 1.09 Designers- Services - Public Health Engineering
 - 1.10 Designers- services - H.V.A.C., B.A.S.
 - 1.11 Designers- low Voltage Systems, BMS
 - 1.12 Designers- services - Electrical, Fire Protection, etc.
 - 1.13 Facility Managers/Consultants

2 Cost Of Land

- 2.1 Site Investigations - Topographical, Geo-Technical
- 2.2 Site development- Boundary wall, External lighting
- 2.3 Site Grading, Roads, Hard and soft landscaping
 - 2.31 External drainage (soil & waste incl. manholes)
 - 2.32 Water supply piping and valves for internal & external water supply
 - 2.33 Bore wells

3 Civil Works

- 3.1 Basement-As Structural system
- 3.11 Under Ground Tanks
- 3.2 Super -Structure
- 3.21 Over Head Tanks
- 3.22 Entrance Areas
- 3.23 Ambulatory Care Areas
- 3.24 Critical Care Areas
- 3.25 Intermediate Care Areas
- 3.26 Intensive care areas
- 3.27 Diagnostic Imaging Areas
- 3.28 Therapeutic Areas
- 3.3 Internal Finishes
- 3.4 Ext glazing / Ext Finishes

4 Elevators

- 4.1 Bed Elevators (20 passengers approx.)
- 4.2 Dumb Elevators

5 H.V.A.C.

- 5.1 High Side
- 5.11 Chilling Machines, with microprocessor controls
- 5.12 Primary Chilled Water (Insulated) Pumps
- 5.13 Secondary Chilled water insulated pumps with variable speed drive
- 5.14 Condenser Water pumps
- 5.15 FRP cooling towers including standby
- 5.16 Pressurized expansion tank with air separator for chilled and hot water systems
- 5.17 Electrical panels, wiring, control wiring and copper earthing
- 5.2 Low Side
- 5.21 AHUs including automatic controls, elec. panels, wiring & copper earthing
- 5.22 AHUs for OTs with three stage filtration, heat recovery wheel, controls

- 5.23 AHUs with two stage filtration incl. automatic controls, elec. panel, wiring & Cu earthing
- 5.24 Fan coil units, incl. automatic controls and wiring upto thermostat
- 5.25 Air distribution system including grills and diffusers
- 5.26 Chilled, hot and condenser water piping including valves and fittings
- 5.27 Insulation for ducts and pipes including acoustic lining for air conditioning plant room
- 5.28 Split units (winter operation) for BAS room, EPABX room, CPU room & UPS room
- 5.29 Hot water generators and hot water pumps
- 5.3 Mechanical ventilation system
- 5.31 Mechanical ventilation system for A/c Plant Room, Plumbing plant room and toilet exhaust including AWU ducting, grilles & diffusers
- 5.32 Mechanical ventilation system for toilets
- 5.33 Staircase and elevator pressurization fans

6 Electrical Installations

- 6.1 Sub Station Equipment
 - 6.11 Vacuum Circuit Breakers
 - 6.12 Step-down outdoors oil-filled transformers
 - 6.13 Equipment earthing, H.T. cable between H.T. panel and transformers, accessories
 - 6.14 H.T. voltage stabilizer with manual bypass
- 6.2 Internal Electrification
 - 6.21 Point wiring
 - 6.22 Mains and Sub-mains (Cable)
 - 6.23 LT panels & distribution boards
 - 6.24 Rising Mains and Bus Ducts
 - 6.25 Capacitor Banks
 - 6.26 GI Earthing for Lighting protection and Cu earthing for distribution system & Medical Equipments
 - 6.27 Lighting Fixtures (only Fluorescent fixture)

7 HSD storage and supply system.

8 DG Sets for Emergency Power Generation

- 8.1 Diesel Generating sets
- 8.2 AMF panels -3 Nos.
- 8.3 Pumps, cooling tower and cooling water piping
- 8.4 Exhaust piping, residential silencers, chimney insulation
- 8.5 Catalytic converter for DG sets
- 8.6 Acoustic enclosure for D.G sets

9 U.P.S. Systems.

- 9.1 UPS, 3 phase input/3phase output with isolation transformer, voltage stabilizer &30 min. battery backup
- 9.2 UPS, 3phase input/3phase output in hot standby mode with 30 min battery back up

10 Fire Detection, Fire Protection

- 10.1 Fire alarm control panel &repeater panel
- 10.2 Smoke detectors and heat detectors
- 10.3 Control modules, monitor modules, manual call stations, hooters and strobes
- 10.4 Conduiting and cabling
- 10.5 Talk back system at emergency exits

11 Infrastructure of Telecommunication System

- 11.1 Cable form floor patch panels to telephone & data outlets
- 11.2 Face plates, patch panels, mounting boards & patch cords
- 11.3 Unarmoured CAT 5 riser cable
- 11.4 Conduiting

12 Telecom Paging

- 12.1 Nurse Call System
- 12.11 Nurse call Station consoles

12.12 Toilet & corridor modules

12.13 Bedside call points and hand modules

12.14 Conduiting & wiring

12.2 Public Address System

12.21 Head End Equipment

12.22 Speakers & Volume Control

12.23 Conduiting & wiring

13 CATV System

13.1 Head End Equipment

13.2 Conduiting & wiring

14 Security Systems, Access control, Parking management

15 Fire Fighting

15.1 Fire pumps, sprinkler pumps, jockey pump, panels and all electrical works

15.2 Fire hydrants, fire hose reel cabinets, & piping

15.3 Sprinklers & piping

15.4 Portable Fire extinguishers

16 Sanitary, Plumbing. Water Supply & Distribution Systems, W.T.P.

16.1 Sanitary fixtures and CP fittings including single liver fittings for patient toilets, staff toilets, and the elbow operated taps for doctor sinks

16.2 Internal Drainage (soil, waste & vent pipes)

16.21 Rain water pipes

16.3 Hot water system including Hot water generators, Accessories, S/S mixing tank

16.4 Pumps & equipment for water supply incl. Elec. panels, cabling, earthing & control wiring

16.5 Water treatment system (filtration and chlorine dozing)

16.6 Waste Management

16.61 Sewerage treatment plant (Civil Works)

16.62 Sewerage treatment plant (Excluding Civil Works)

16.63 Scrubber for Hot water Generators

17 Medical Gases + Head End Panels + OT pendants

17.1 Gas manifold and air compressor room with accessories

17.2 AGSS

17.3 Piped Gas distribution

18 Building Automation System

18.1 Controllers and system integration units

18.2 Central control stations consisting of personal computers and printers

18.3 Software

18.4 Sensors, transducers & transmitters

18.5 Cabling and conduiting

B EQUIPMENT, INSTRUMENTS & FURNITURE COST

- 4.1 The Planning Process
- 4.2 The Medical Programme
 - 4.2.1 Purpose of Medical Programme
- 4.3 The Functional Programme
 - 4.3.1 The Functions of the Hospital
 - 4.3.2 Analysis of Functional Programme
- 4.4 The Equipment Programme
 - 4.4.1 Planning
 - 4.4.2 Utilization
 - 4.4.3 Evaluation
 - 4.4.4 Team approach
 - 4.4.5 Classification of Equipment in a Multi-Speciality Hospital
- 4.5 a) The Design Brief
 - 4.5.1 Outpatient Department
 - 4.5.2 Clinics for Various Disciplines
 - 4.5.3 Emergency Department
 - 4.5.4 Clinical Laboratories
 - 4.5.5 Blood Bank
 - 4.5.6 Diagnostic Radiology
 - 4.5.7 Surgical Department
 - 4.5.8 The Labour and Delivery Suit
 - 4.5.9 General Nursing Unit
 - 4.5.9.1 General Wards
 - 4.5.9.2 Double Bed Wards
 - 4.5.9.3 Single Bed Ward
 - 4.5.10 Pediatric Nursing Unit
 - 4.5.11 Obstetrics Nursing Unit
 - 4.5.12 Intensive Care Unit
 - 4.5.13 Neonatal Care
 - 4.5.14 Central Sterile Supply Department
 - 4.5.15 Hospital Catering Service
 - 4.5.16 Hospital Laundry Service
 - 4.5.17 Hospital Stores and Services
 - 4.5.18 Activities of Medical Record Section
 - 4.5.19 The Central Reception
 - 4.5.20 The Mortuary
 - 4.5.21 Hospital Business Administration
- 4.5 b) Services Design Brief
 - 4.5.22 Electrical
 - 4.5.23 Elevators
 - 4.5.24 H.V.A.C.
 - 4.5.25 Water Supply and Sanitary System
 - 4.5.26 Gas Manifold Room

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CHAPTER – 4 DEVELOPMENT OF A HOSPITAL PROJECT

'Diagnosis before Treatment' and 'Survey before Planning' are the key phrases for medical architecture and planning. Health facilities planning and design is a process-oriented exercise rather than a product-oriented exercise.

A health care delivery facility is always a dynamic entity. Therefore planning and designing for such facility has to be constantly reviewed and upgraded.

A modern health facility planning exercise is multi-disciplinary in approach and inter-sectorial in character. Therefore, the coordination and harmonious interface of various specialised agencies is of supreme importance.

The practical process for the same shall be explained in this chapter to enable us to make a reliable cost model of the chosen configuration.

4.1 THE PLANNING PROCESS

The planning process starts with an **assessment of the external environment** in which the hospital is to be located.

In the U.S.A., a 'CERTIFICATE OF NEED' has to be obtained before undertaking or even contemplating any hospital project.

This 'NEED' can be established only after an **epidemiological study of the catchment area** has been conducted. This is to ascertain what specialities should the hospital have in order to best serve the community of the region.

In other words, the hospital has to be tailored to the health care needs of its locale.

Further, a **study of the existing health care delivery facilities** has also got to be undertaken to assure authorities that any fresh venture would not diminish the clientele of the existing institutions. The **paying capacity of the expected patients** has to be ascertained to plan optimally for the level of sophisticated services that the hospital may profitably provide.

For sensitive hospital planning, an account has to be taken of the **socio-cultural-political milieu** in which the hospital will have to function.

It is then that a detailed **Medical Programme** can be prepared after extensive consultations with medical specialists and hospital administrators, to chalk out a viable and practical programme.

The Medical Programme is then translated into a **Functional Programme**.

Based on the functional programme, the **Equipment Programme** is generated. The equipment plan provides room wise lists of all the fixed furniture and room wise list of the entire movable furniture and equipment for all the functional areas.

This functional programme and equipment programme would lead to the preparation of the '**Architects' Design Brief**' containing data on and specific to the particular project. The design brief would enlist all quantitative and qualitative spatial requirements, their linkages and service requirements. It would take cognisance of the various medical disciplines that the hospital has to cater to, levels of service being contemplated, kinds of equipment, choice of technology, choice of methodology and types of financing and resource generation.

The nature of funding and availability of resources would determine phasing of the project. Since even to make a miniscule part of the proposed project operational, it is imperative to have ancillary and services components; every part or phase has to be a complete, holistic entity, capable of meshing with the rest of the complex, as and when it comes up.

It may be aptly said that for a hospital – '**Form follows Funding**'.

The Architects' Design Brief, when considered in the light of Building Regulations or Byelaws applicable to the site leads to the evolution of a **Building Programme**.

4.2 THE MEDICAL PROGRAMME

The development of the medical programme is the formulation of the very basis of the hospital.

The medical programme gives the complete list of disciplines that are to be provided in the hospital in terms of clinical disciplines, investigative disciplines, educational disciplines and other disciplines.

4.2.1 Purpose of Medical Programme

The medical programme is developed to suit the objective and needs that are formulated after assessment of the category for which the hospital is meant. The minimum disciplines required by the various categories of hospitals as stipulated by the BIS is used as the basis of this study.

Occupancy: The scope of the medical programme developed, parallel with the coverage and the catchment area, helps in predicting the occupancy of the hospital down the years and evolving certain financial indicators like Break-Even Point, Cash Break-Even Point and Debt Service Coverage Ratio.

Level of service: The various clinical disciplines incorporated in the hospital along with the scope of delivery at each level of care are to be defined. Generally primary care of the order of family care, upgraded secondary care (changing with change in technology and medical practice) and selected tertiary care disciplines are provided and identified distinctly.

Choice of Technology: The choice of equipments (diagnostic and therapeutic) that the hospital is planning to house with various clinical departments is to be enumerated with respect to the level of automation (semi-automatic and automatic). A comparative analysis of the indigenous and the imported equipment of the specific new ones selected for the hospital can also be provided.

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4.3 THE FUNCTIONAL PROGRAMME

Functional programming is an analytical process in hospital planning and development. A balanced combination of the elements of medical programme is developed into a functional programme.

The programme should be having the following tasks:

- To define elementary and complex functions as well as complete procedures and to describe all the different steps in each function and procedure.
- To explain the nature, scope and forms of relationships between functional elements and groups of elements of a given facility and to indicate the occurrence, nature extent of the interactions.

4.3.1 The functions of the hospital have been classified into five groups:

- (1) Medical and Allied Disciplines
- (2) Health and Allied Services
- (3) Nursing, Paramedical, Technical and Allied Services
- (4) Engineering and Allied Services
- (5) Administrative and Ancillary Services

4.3.2 Analysis of Functional Programme

Zoning - A Multi-Speciality hospital basically consists of 5 subsystems or zones that form clusters of inter-dependent areas. These are:

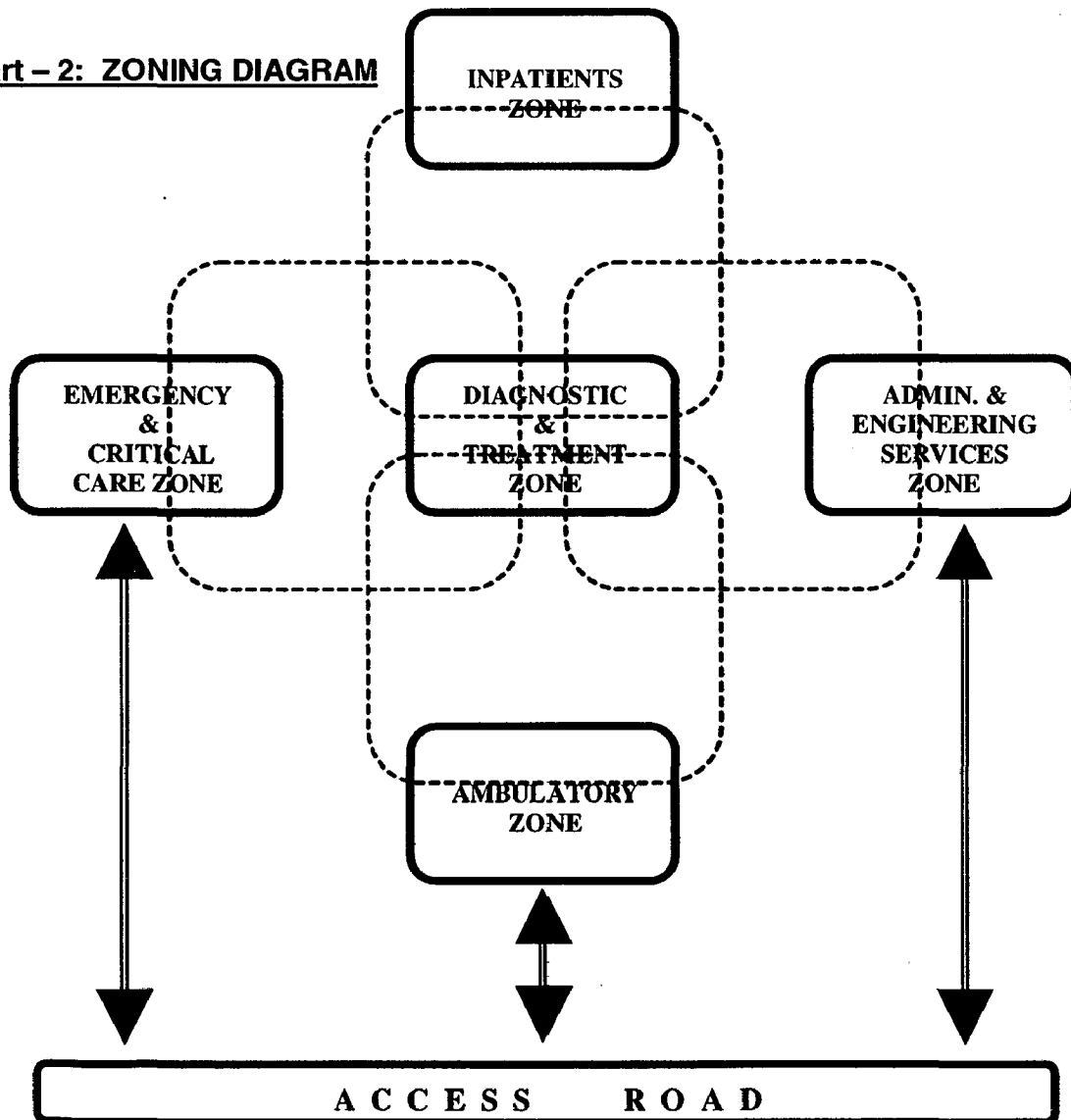
- Inpatient zone
- Out-patient zone

- Treatment and diagnostic zone
- Administrative and staff zone
- Service zone

The inpatient and outpatient areas are the two independent units. Diagnostic & treatment, Services, and Administrative are the three essential units. Diagnostic & treatment forms the linkage function between the IPD and OPD. Services area forms the industrial zone where the patients never go. Administration area adjuncts between the patients care and service area. Emergency and Critical Care Zone is a stand alone 24 –hrs. functioning zone.

The Multi-Speciality hospital of the category 100 to 200 beds houses all the units except the education and research unit.

Chart – 2: ZONING DIAGRAM



In consideration of the medical programme outlined earlier, the hospital is to have a balanced combination of the following functional areas and services which are an elaboration over the above-mentioned 5 basic hospital zones:

- Entrance area
- Ambulatory care area
- Diagnostic services.
- Intermediate care area.
- Intensive care area.
- Critical care area.
- Therapeutic services.
- Hospital services.
- Engineering services.
- Administrative / ancillary services.

For each operational unit, a functional analysis should be made which would include the following aspects wherever applicable:

- Defining the functions of the activity units.
- Daily and hourly capacity required and to be provided for.
- Distribution of service times.
- Number of staff to be accommodated in each functional unit and their task facilities.
- Flow of work and patients / personnel.



- Requirements of furniture and equipment.
- Layout of the unit as per positioning of the staff, patients and working units.
- Required links with other units.

The functional units are defined for each zone for which a further break-up of the physical facilities and activity spaces are given. To help planning within the zone itself, two other parameters guiding the layout have been identified and inputs affecting the same have been enumerated. These are:

- Services equipment affecting the layout: To consider the user requirements and working arrangements parallel to the placing of the service outlets.
- Physical environment (Temperature and illumination): Since economy rules in planning of the Multi-Speciality hospitals, reliance on natural ventilation and daylight can be placed which could partly be the deciding factor for the siting and fixing of aspect ratio for each functional unit. The requisite temperature and illumination figures given can in addition dictate the mandatory requirements for mechanical ventilation and/or artificial lighting in certain cases and the overall layout planning in effect.

4.4 THE EQUIPMENT PROGRAMME

4.4.1 Planning: Planning for the provision of medical equipment must involve the following considerations:

- ~~the population targeted by the health service,~~
- their health needs,
- the health service functions required to meet those needs,
- the health care equipment required to perform those functions

- the available resources.

The selection and procurement of medical equipment is done on the basis of the following considerations:

- it gives the best value for money, weighing lifetime cost against purchase price;
- it can be maintained continuously during its expected lifetime, in terms of its upkeep, repair and spare parts (a budget for maintenance contracts, spare stocks and information transfer must be provided); and
- it comes from reliable, reputable and experienced manufacturers.

4.4.2 Utilization: The important aspects of equipment use are as follows:

- The utilization rate of equipment must be increased through adequate manpower and logistic support.
- The period of delivery, installation and assembly of equipment must be shortened.
- Documentation about the use and maintenance of the equipment must be kept for management purpose.
- Inventory and storage methods must be improved and the operational procedures regulated.

4.4.3 Evaluation: Indices can be used to evaluate the utilization of medical equipment.

These include:

Annual rate of operation of utility = $\frac{\text{No. of annual visits} \times \text{average operational time per visit}}{\text{annual actual operational time}} \times 100$

Annual rate of = $\text{No. of annual visits} \times \text{average operational time per}$

effective time of visit/annual possible operational time X 100
Utility

Positive rate = Positive visits/ total visits X 100

Demand for = Use rate per person per year x population / rate of
equipment effective use time of equipment X possible operational
quantity

4.4.4 Team approach:

An approach involving teamwork or collective decisions must be used in ordering new equipment.

A technical committee, chaired by the hospital administrator and comprising health facilities planners, project managers, architects, doctors, nurses and paramedical & technical representatives, should review the equipment situation and plan for the needs.

The considerations of this committee should include:

- policy for health needs
- planning development
- inventory
- specification and procurement
- budgeting
- training of users and servicing staff
- spare parts
- logistics support

4.4.5 Classification of Equipment in a Multi-Speciality Hospital:

Table C: Classification of Equipment in a Multi-Speciality Hospital

Classification	Example
Use	
Diagnostic	X-Ray Machine, Microscope
Therapeutic	Ventilator, Infusion Pump
Monitoring	Cardiac Monitor, Blood Gas Analyser
Supportive	Sterilizer, Deep Freezer
Administrative	Computers
Research	Microscope, Others
Place of Manufacture	
Indigenous	Blood pressure Instrument, Suction Machine
Imported	MRI, CT Scan Devices
Technology	
Electrical	Suction Machine, Diathermy Machine
Mechanical	Blood pressure Instrument, Weighing Machine
Bio-Medical	Ventilator, Monitors
Electro-Magnetic	MRI Machine
Electronic	Defibrillator, ECG Machine
Direct patient Care	
Routine Care	Blood pressure Instrument, Suction Machine
Intensive Care	Ventilator, Infusion Pump
Resuscitative or Emergency Care	Defibrillator, Laryngoscope
Indirect Patient Care	
Diagnostic	Endoscope, Ultrasound Machine
Supportive	Sterilizer, Washing Machine
Monitoring	Cardiac Monitor, Blood Gas Analyser
Requirement	
Vital	Defibrillator, Laryngoscope
Essential	Laryngoscope, Blood Pressure Instrument

Desirable	CT Scan, Gamma Knife
Cost	
Low	Blood pressure Instrument, Suction Machine
Medium	Ventilator, Cardiac Monitor
High	MRI, Gamma Knife

The majority of hospital equipment is needed in the following areas :

- a. Patient Care Areas: Wards, ICUs, OPDs, Casualty, OT's, Dialysis etc.
- b. Department – Departmental Laboratories
- c. Supportive Departments – CSSD, Laundry, Blood Bank, Workshop, Utility Areas
- d. Hospital and Departmental Offices

Based on the aforesaid classification, the equipment may be broadly classified into items of general or specialised furniture, and equipment specifically used for diagnostic, procedural or therapeutic purposes. Based on this classification, the equipment programme is presented as an item-specific inventory of each of the spaces, along with their IS specification.

4.5 a) THE DESIGN BRIEF

4.5.1 Out-Patient Department

Overview: Outpatient care, today, is a major service encompassing a wide range of treatment, diagnostic tests and minor surgeries, some of which required hospitalization earlier.

Some facets of the outpatients are maintained separately from the inpatient services. Nevertheless the two may be integrated physically, functionally and from the clinical and administrative point of view.

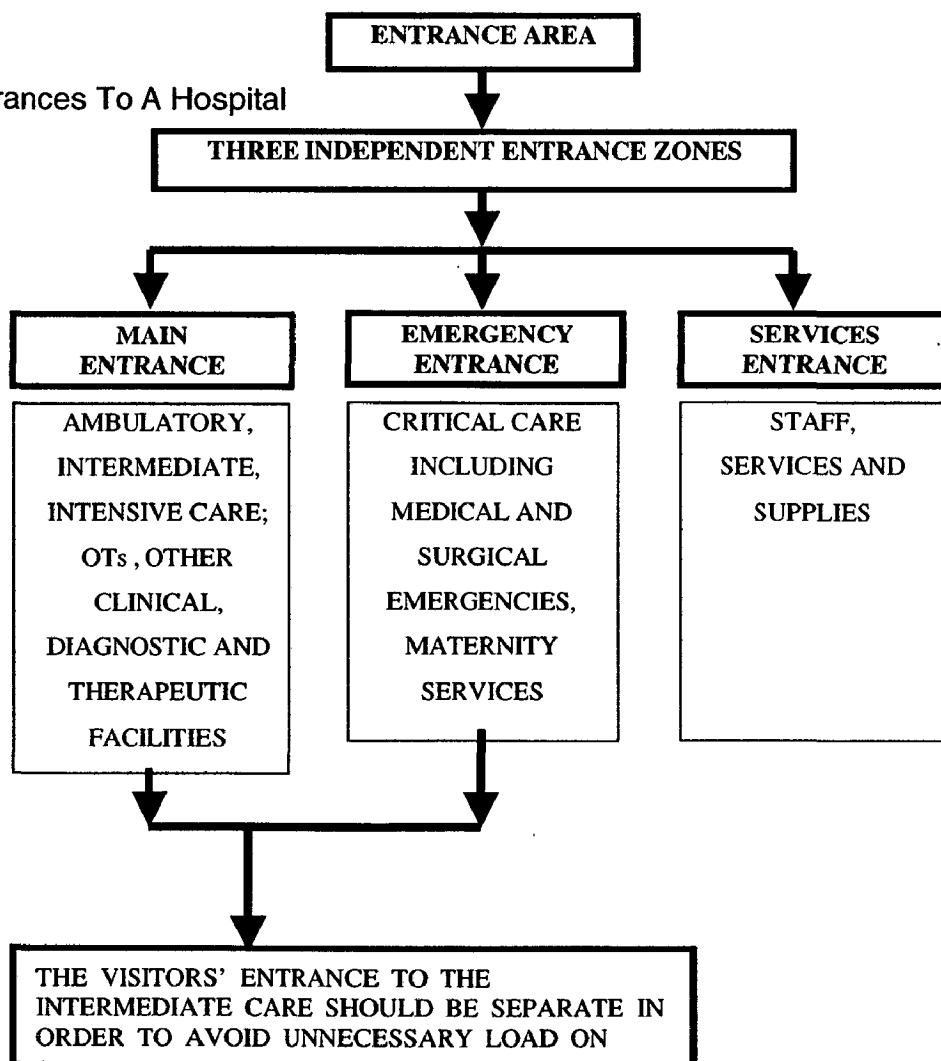
This is primarily because the patient is studied and given treatment in the outpatient department upto the time he is hospitalized as an inpatient; and then his treatment is further continued in the outpatient department if needed after discharge.

Besides as an outpatient he has his diagnostic tests and procedures in the ancillary and adjacent services, which are integral parts of the hospital.

Location:

- The O.P.D should ideally be on the ground floor, preferably with the separate entrance and adequate parking facilities.

Chart – 3: Entrances To A Hospital



- The reception area should be immediately apparent and welcoming on entering the department. It should be arranged so that easy conversation can take place between the patient and the receptionists.
- The reception point needs to adjoin the patient's record room; store & is sometimes combined with it.
- It is worth noting that people who are unfamiliar with the building like to leave it by the same route from which they have entered.
- The staff needs a way in and out independent of that used by the patients.
- It should have easy access to the laboratories, radiology, pharmacy and the physical therapy departments since the patients use practically all the diagnostic and the therapeutic departments during every visit.
- Each clinic should have its independent area, doctor's examination area and diagnostic/treatment area as required.
- Treatment rooms for minor procedures and cast work should be easily accessible from the main waiting spaces and the consultation rooms.

Design consideration:

- The O.P.D should be ideally located at the ground level but in case the nos. of clinics is more, it might need distribution between two or more floors
- The storage areas for the wheelchairs and the stretchers should be neatly alcoved and should be away from the main traffic line, but at the same time should be easily accessible.
- The lobby and the lounge provide seating arrangement for the largest foreseeable nos. of people. A large nos. of people crowding in one single area creates an impression of cold impersonality and inefficiency. To improve the atmosphere,

patients should be dispersed to the **subsidiary** or **sub-waiting area** adjacent/close vicinity to the clinics.

- **Elevators** easily accessible to the lobby are especially important for the **cardiac** and the **obstetric patients** who require immediate care in the respective areas.
- Arrangement for keeping the major portion of the O.P.D locked after the OPD hours.
- The linkage between the emergency services and the OPD for certain adjacent services such as medical records etc. to be available to the staff and the emergency patients during the evening and night shifts.
- Public areas with the provision for public telephones, patient's toilets, water coolers or drinking water fountains, inquiry counter desk, cashier booth, coffee shop/snack counter and if possible separate play area for the children.

4.5.2 Clinics for Various Disciplines

The clinics include medical, surgical, orthopedics, eye, ENT, dental, obstetrics and gynae, family planning, pediatric, skin, psychiatric etc. Each hospital may have all or few of the clinics depending upon the volume of attendance and resources available.

The cubicles for consultation and examination in all types of clinics should be provided with a doctor's chair and table, patient's stool, follower's seat, wash basin, examination couch and equipment for examination.

The treatment and dressing room should be spacious enough to accommodate a medicine chest, work counter for preparing dressings, medicine, sinks, dressing tables with screen in between and a pedal operated bins to hold the soiled material.

The clinics can be further categorized into the following:

- a) **Medical clinic:** The clinics should have facilities for cardio graphic examination.

b) Surgical clinic: The clinic should have facilities for treatment cum dressings. For convenience, this should be placed next to the consultation cum examination room.

c) Orthopedic clinic:

- The clinic includes arrangements for plaster preparation, fracture treatment besides consultation cum examination.
- For x-ray facilities, the clinic should be in close proximity to the radiological department, emergency and accident in order to make the maximum use of the equipment and reduce the circulation.
- Plaster and splint storage room is necessary for storing the plaster material, splints and therapeutic aids and for preparing the plaster, bandages etc.
- Fracture and treatment room should be spacious enough to accommodate a dressing couch and a mobile X-ray unit.
- A recovery room adjacent to the fracture and treatment room is essential.

d) Eye Clinic:

- The clinic includes the consultation-cum-refraction, minor surgery, treatment and a dark room.
- For testing the state of refractive power of the eye, room length not less than 6 meters is essential.
- Dark room should be placed close to the consultation preferably with the intercommunicating door.

e) ENT Clinic: It should have facilities for treatment and a soundproof audiometry room.

f) Dental Clinic:

- The clinic should have facilities for dental hygienist, dental workshop and the room for the patient recovery.
- Consultation-cum-examination room should serve as combined purpose room for consultation, examination, dental surgery, treatment and X-ray facilities.

g) Obstetric and Gynecological Clinic

- The clinic should include a separate reception and registration, consulting-cum-examination, and treatment.
- The clinic should be planned close to the inpatient ward unit to enable them to make use of clinics at times for ante and postnatal care.
- The clinic should also be at a convenient distance from other clinics in the OPD.
- Antenatal patients have to undergo certain formalities prior to examination by the doctors. Proximity to clinical laboratory for the purpose is essential.
- A toilet cum changing close to the treatment should also be provided.

h) Family Planning Clinic: The clinic should provide educative, preventive, diagnostic and curative facilities for obstetric and gynecological treatment, pediatric and health education.

j) Pediatric Clinic:

- The clinic should provide medical care for infants (including the newborn) and children upto the age of 12 years.
- Owing to risk of infection it is essential to isolate the clinic from other clinics.

- The clinic should be provided with a separate dressing, treatment and immunization room.

k) **Supporting Facilities:** Various clinics under OPD require supporting facilities in common which include clinical laboratory, injection room, social service department.

4.5.3 Emergency Department

Overview: The emergency department's function is to receive, stabilize and manage patients who present with a large variety of urgent and non-urgent conditions whether self or otherwise referred.

Organization:

- The unit is to be separate and distinct department
- The other important procedures of the emergency department cover the following aspects:
 - Medico-legal cases
 - Police procedure and reporting.
 - Patient brought dead or in dying condition.
 - Accident and emergency room register.
 - Medical record and release from the procedures.

Location:

- There should be **separate entrance to the department**, which should be separate from hospital main entrance and outpatient entrance & should be easily visible from the street.

- The emergency department should be located on the ground floor for ease of access, should be close to public transport, and adequately sign posted.
- Since the emergency department becomes the main entrance for the hospital during the night, **it must relate to the public and vehicular transportation.**
- The department should be close to the admission, medical records and cashier's booth.
- A good percentage of emergency patients require the X-ray. So close proximity to the radiology department is essential.
- The laboratory services including the blood bank should be accessible to emergency since a sizeable number of patients need this service. Ideally the department should have its own lab.
- The emergency department should be located in close proximity to the elevators in order to proceed to surgery without the loss of time.

Design consideration:

- The planning should allow rapid access to every space with a minimum of cross traffic.
- There must be close proximity between the Resuscitation/Acute Treatment areas for non-ambulant patients and other treatment areas for ambulant patients, as staff may require relocation at times of high workload.
- Visitor and patient access to all areas should not traverse clinical areas.
- Protection of visual, auditory and olfactory privacy is important whilst recognizing the need for observation of patients by staff.

The following table may summarize the functional relationship of this department with other departments.

Table D: Access Requirements for Emergency Department

EMERGENCY DEPARTMENT		
Direct Access	Ready Access	Access
Medical Imaging	Coronary Care Unit Intensive Care Unit Operating Theatre Pathology/Blood Bank Medical Records	Inpatient wards Pharmacy Outpatients Mortuary

4.5.4 Clinical Laboratories

Overview: Today, in larger hospitals major sections of the laboratory are specialized to the extent that they engage specialized staff and perform all the tests relating to their respective disciplines within the sections. However in the smaller hospitals some of the areas may be combined and the staff be trained to work in more than one section.

Location:

- The laboratory should be conveniently located to serve the outpatient, emergency and the admitting patients.
- It should also be easily accessible to the surgical, intensive care, obstetrics and the radiology department.

Design considerations:

- The laboratory is to be separated from areas which are open to unrestricted traffic flow.

- Adequate space is to be allocated for storage, necessary laboratory equipment, and office activities.
- The arrangement of the spaces should promote efficient operation of the laboratory and reflect a carefully thought-out route for personnel, experimental procedures, as well as proper handling of clean and contaminated materials.
- Interior surfaces of walls, floor, and ceiling are to be water resistant to facilitate cleaning.
- Windows in labs are permanently closed and sealed. When provided, safety glass is used for window/door glass.
- Bench tops are impervious to water and resistant to acids, alkalis, organic solvents, and moderate heat.
- All materials selected for the lab should satisfactorily withstand detergent, disinfectants, and decontamination with gaseous formaldehyde.
- Lab furniture is sturdy, and spaces between benches, cabinets, and equipment are accessible for cleaning.
- Each lab contains a sink for hand washing. The sink is foot, elbow, or automatically operated and is located in the containment module near the lab door.
- The perimeter wall partition of the facility shall be of solid construction and extend the full height from finished floor to the floor slab above.

4.5.5 Blood Bank

Table E: Planning for a Blood Bank

SPACE	LOCATION	FUNCTION	EQUIPMENT
Bleeding room	Off the public	To provide the beds	• Bedstead

	corridor	for bleeding the patient	<ul style="list-style-type: none"> • First aid trolley • Bed side table, chairs
Blood store	Next to bleeding room	To hold refrigerators with continuous recording devices for storing the blood (3-5 degree Celsius)	<ul style="list-style-type: none"> • Special refrigerators • Working shelf
Blood bank laboratory	Next to bleeding room	<ul style="list-style-type: none"> • To provide donor screening • To provide testing of blood donated for communicable diseases. • To provide grouping and cross matching services 	<ul style="list-style-type: none"> • Working shelves • Cabinets for storage of chemicals • Refrigerators
Bag preparation and fractionation area	Related to the bleeding room but distinct from other areas	<ul style="list-style-type: none"> • Preparation of blood collection bags. • To provide bottle centrifuge to prepare the blood fractions • To appropriate chemicals 	<ul style="list-style-type: none"> • Working shelves • Chemical storage cabinets.
Reception and record	Related to the bleeding room.	• Reception for department's visitors	• Reception counter

		<ul style="list-style-type: none"> • To generate & preserve complete records. • Collection of service charges. • Maintain donor register 	<ul style="list-style-type: none"> • Cash collection counter • Computer terminal • Cabinets, storage shelves
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4.5.6 Diagnostic Radiology

Overview: The main function of the radiological services is to assist the clinicians in the diagnosis and treatment of the diseases through the use of radiography, fluoroscopy, radioisotopes and the high voltage acceleration.

The following are the typical radiological examinations:

- Routine x-ray, normally performed by an X-ray technician, involves X-ray procedure (film procedure) of spine, neck, chest and extremities (legs, arms, hand and feet).
- Fluoroscopic procedure:
 - Common types of fluoroscopic examination are: Gastrointestinal series, barium enema, barium meal, intravenous pyelogram
 - complex fluoroscopies : These include catheterization, neurocardiology etc.
 - Mammography
 - Diagnostic ultrasound.
 - Cat-scanning (computerized axial tomography)

- MRI (magnetic resonance imaging) (not provided)

Location: The diagnostic radiology department should be located on the ground floor or first floor, easily accessible to the emergency patients, the outpatients and the inpatients and also to the operation theatre department.

It is desirable to locate the department close to the elevators and other diagnostic and treatment facilities.

The functional requirements of the department are usually best satisfied by locating the x-ray room in the end of the wing. In this location, the activity within the department will not be disturbed by through traffic to other parts of the hospital and also less shielding shall be required because of the external walls.

As the department deals with the high voltage, presence of moisture in the area should be avoided.

Design consideration:

- Flexibility in the design to provide for an increase in the volume of workload and for the expansion of the X-ray services.
- The reception control area should be located at the entrance to the department.
- Toilets, lockers and the dressing area should be the part of the waiting area. A wheel chair and the stretcher storage alcove should be within the reception control area.
- A control monitoring generator room should be located between two diagnostic or fluoroscopic rooms.
- Should have a toilet nearby.
- Dark room should be located in close proximity to the X-ray room and should have light excluding entrance and proper ventilation.

4.5.7 Surgical Department

Overview: Operating suite is technically a therapeutic aid in which the team of surgeons, the pathologists and radiologists operate upon or care for the patients.

Surgical patients are of 3 types:

- a) **Inpatients surgery patients:** The patients, who are hospitalized for surgery, the length of their stay before surgery depends upon the time needed to complete the pre and postoperative tests.
- b) **Outpatient surgery patients:** It is limited to the minor surgical procedures requiring the local anesthesia. Patients are admitted and are discharged the same day.
- c) **Ambulatory surgery patients:** It is also called the **day surgery**. Here the patient gets admitted on the same day for surgery, recovers in the recovery room, is observed in the post operative area and is discharged the same day.

The present day trend is increasingly for the ambulatory surgery.

The advantage of the outpatient and the ambulatory surgery is that the patients need not be hospitalized and consequently the minor procedures become less expensive.

Location: The best location of the surgical suit is the one, which permits a convenient and uncomplicated flow of the patients, staff and clean supplies traffic. The location of the department is decided on the following factors:

- Quiet environment
- Freedom from noise and other disturbances
- Freedom from the contamination and possible cross infection.
- Maximum protection from the solar radiation..

- Convenient relationship with surgical ward, intensive cares unit, radiology, pathology, blood bank and CSSD.

Day Surgery:

- A recovery room for holding the patients for observation after the surgery should be located adjacent to the minor surgery room.
- It should be visible from the nurse's station for supervision and observation.
- Other facilities that may be provided include the toilets, the patients change rooms, lockers, the patient preparation area, scrub and the change rooms for the doctors and the nurses.

Design consideration:

a) **Zoning** : Zoning should be done to keep the theatres free from microorganisms. There may be four well-defined zones of varying degree of cleanliness:

1. Protective zone: Containing mostly theatre supply, changing rooms, pre-anesthetist examination room and waiting area.
2. Clean zone: It includes the casualty theatres, recovery wards, plaster room, theatre pack preparation and pre-operative wards.
3. Aseptic or sterile zone: It consists of operation theatres, anesthetic and sterilizing rooms. It should provide the highest degree of antibacterial precautions.
4. Disposal or dirty zone: The soiled instruments and dressings are transacted through this area for washing and re-sterilization or disposal. It includes the sluice rooms and disposal corridor.

All soiled material both disposable and non-disposable should move without crossing the sterile and clean zone.

b) Circulation: Normally there are three types of traffic flow:

1. **Patients:** Patients are brought from the wards and should not cross the transfer area in their ward clothing, which is a great source of infection.

Changeover of trolleys should be affected at a place that links up both pre-anesthesia and recovery rooms.

2. **Staff:** The doctors, nurses, technicians and class IV staff should enter from the separate route and through a set of change rooms and through the air lock. They should communicate with the sterile corridor.

A shoe change and the gowning space near the air lock should also be there.

3. **Supplies:** All sterile goods should have the separate entry point reaching the clean corridor independently; soiled material should be taken out by exit only.

c) Safety: In order to minimize the electrical and explosive hazards, the following precautions should be provided:

- Electro-conductive flooring in operation theatres and anesthesia room. It can be achieved by brass or copper grid embedded in the suitable material floor spaced at 100 – 150 mm to ensure that the person's foot would have contact with the grid at all times.
- All crossings of the grid should be soldered together to ensure continuity of conductivity and finally the grid is to be grounded through a resistance coil.
- Provision of concealed conduit wiring circuit. Moreover electrical wiring layout should be flexible enough to take care of new developments and changing technology of medical science gadgets.

Special characteristics:

- Two OTs can share the scrub room and sub-sterilization room.
- The OT's to be linked to the conference facility
- The minimum clear height of the operation theatre should be 4 meters.
- All gases, vacuum air, electricity to come from ceilings either through the suspended or rigid columns.
- Most of the equipment in OT is on swing arms suspended from ceiling.
- Ceiling should be finished in tiles, which can be lifted out for adding more functions as desired. Ceiling should be:
 - Sound absorbent, non-porous, washable,
 - able to with stand phenol aerosol treatment,
 - fitted in the manner so as to prevent the particle fall out.
- Floors to be:
 - Seamless, hard, easy to clean, amiable to phenol treatment, non-skid,
 - should be treated with adhesives which are insoluble in water,
 - the floor should be leveled to provide self draining away from the center of the room

4.5.8 The Labour and Delivery Suite

Overview: Hospitals have the responsibility to furnish safe and efficient obstetrical care which should include the utmost safety and comfort of the mother and the newborn child.

Location: The clinical section of the obstetrical department should be located in a convenient but segregated area.

Within the clinical facilities, the labour and delivery suites should be as remote as possible but should be easily accessible from the entrance to the department so as to avoid non-related and unnecessary traffic through the suites and to provide privacy to the patients.

The facility should be close to the nursery, obstetrical nursing unit and to the vertical transport so that it is easily accessible to the patients.

The department should be close to the operating rooms or should have an operating room of its own.

Design consideration: The delivery suit is very much like the operating room, and the same general considerations of the location and control hold here.

In designing the labor and delivery suit, attention must be focused on 4 or 5 main functional areas where much of the activities take place. These are:

- preparation room,
- labor room,
- delivery room,
- recovery room, and
- support services area.

4.5.9 General Nursing Unit

Overview: While designing the nursing unit, as in any other area of the hospital operation, it is of utmost importance that the functional planning precedes the architectural drawings.

The design should result in:

- Provision of the highest quality patient care.
- Providing the most desirable patient comfort and environment
- Most effective operation of the unit
- The greatest degree of job satisfaction for nursing and medical staff
- Meeting the needs of the visitors
- The most economical operation

The **functions of a nursing care unit** can be understood by breaking the nursing care into three components:

- a) **Patient rooms:** Consists of private and semi private rooms and multi-bed general wards
- b) **Nurse control area:** The nurse control station provides workspace for the nursing staff to observe patient rooms and carry on the activities associated with the care and safety of the patients.
- c) **Work area:** The functions of the work area relate to handling materials necessary for patient care, communications and patient records, social and physical needs of the patients and the specific needs of the staff.

Location: Nursing units have the close vertical relationship and efficient communication system with the operating rooms, pharmacy, central stores, laboratory, linen and the dietary along with the engg. services.

Design consideration: To optimize the use of skilled manpower and expensive equipment, the inpatients are grouped into the following:

- a) **Intensive care:** It is advanced intensive care by specially trained staff. It provides full equipment support for maintenance of all organ's functions and 24

hours coverage by critical care medicine (CCM) specialized physician or resident stationed in I.C.U with other consultants on call.

b) Acute Care: It is the level of care where:

- All organs or atleast one-organ system's function needs equipment support and monitoring.
- The patient is assisted in all his movements, hygiene, bath, eating and other physical functions.
- Constant, 24 hours nurse and physician supervision is provided.

c) Intermediate Care: It is the level of care where

- All organs are functioning without equipment support but only one organ system needs periodical monitoring.
- The patient is able to perform some (more than 60%) of the normal physical activities on his own, even though, he is assisted in all activities.
- Constant, 24 hours nurse and physician supervision is provided.

d) Self Care: It is the level of care where:

- All organs are functioning normally and need no equipment support or monitoring. Even when assisted, the organ system is stable.
- The patient is able to perform all his personal and general physical activities on his own.
- Nursing supervision is available on call.

The size of the nursing unit and the distribution of different categories of beds – private, semi private and multi-bed (general) should be decided during the planning stage.

4.5.9.1 General Wards

The wards where patients share service facilities are called “**general wards**”. The beds generally grouped in wards comprising 6,8,12 beds. There are generally 25-30 beds under one nursing station.

4.5.9.2 Double Bed Wards

Few 2 bed wards with attached toilets are necessary for the patients who need more care than those in general ward.

4.5.9.3 Single Bed Ward

These are the wards with attached toilets for the patients who are not or desire not to be disturbed by any movement. The deluxe/super deluxe rooms are generally under paying ward category.

The wards on the type of the patients it is going to cater to can again be categorized into the following:

4.5.10 Pediatric Nursing Unit

Overview: The pediatric nursing service encompasses the care of the children. The care of the newborns is generally done in a separate unit located in the obstetric unit.

Location

- The rooms should have ample natural sunlight without glare i.e. the orientation of the rooms shall have to be borne in the mind

- The unit should be in close proximity to the vertical transportation so as to be conveniently accessible to the other services.

4.5.11 Obstetrics Nursing Unit

Overview: The architectural units concerned in the whole process of delivery are:

- Admission suite.
- First stage labour room.
- Delivery rooms-for the second and third stage.
- Recovery room.
- Post natal or lying-in-ward

Location:

- Ideally the obstetrical wards should be located on the same floor as the labor-delivery suites and close proximity to them. This instead enhances the operational efficiency.
- The unit should also be in close proximity to the nursery (where the infants suspected of being infected are kept under observation or when they are born premature) to minimize the distance of travel and consequent exposure of babies between the nursery room and the mother's room.

Design considerations:

- The facilities for the obstetrical nursing unit are the same as the general nursing unit.
- Since ultrasound scanning has become an almost routine procedure during the antenatal period, a scanning room should be provided or proximity to the facility be maintained.

- A dayroom is desirable in the obstetrical unit.

4.5.12 Intensive Care Unit

Overview:

- To concentrate in one centralized area the critically ill and the post-operative patients for close observation and skilled nursing care by specially trained personals.
- Close personal and monitor-assisted surveillance of the critically ill patients

Location: Most of the intensive care admissions are through the emergency department and from the operation theatre following the major surgery. Therefore intensive care units should be close to the emergency department, operating rooms, recovery rooms, laboratory and radiology, and so located that the specialized team is able to respond promptly to the I.C.U emergency cells with the minimum travel time.

The I.C.U should not be far away from the general nursing units. This will reduce to the minimum the movement and the time required transferring the patients from one unit to the other, especially from the nursing unit to the I.C.U, in an emergency.

It is for this reason that I.C.U's should be located close to the vertical transportation to facilitate rapid transport of the patients and the personnel.

It should be located away from the heavy traffic and noise.

Design Consideration: Overall ICU floor plan and design should be based on patient admission patterns, staff and visitor traffic patterns, and the need for support facilities such as nursing stations, storage, clerical space, administrative and educational requirements, and services that are unique to the individual institution.

Eight to 12 beds per unit are considered best from a functional perspective each healthcare facility should consider the need for positive- and negative-pressure isolation rooms within the ICU.

Patient Areas: Patients must be situated so that direct or indirect (e.g., by video monitor) visualization by healthcare providers is possible at all times.

Central Station: A central nursing station should provide a comfortable area of sufficient size to accommodate all necessary staff functions.

Work Areas and Storage: Work areas and storage for critical supplies should be located within or immediately adjacent to each ICU.

Receptionist Area: Each ICU or ICU cluster should have a receptionist area to control visitor access. Ideally, it should be located so that all visitors must pass by this area before entering.

Special Procedures Room: If a special procedure room is desired, it should be located within, or immediately adjacent to, the ICU.

Clean and Dirty Utility Rooms: Clean and dirty utility rooms must be separate rooms that are not interconnected.

Equipment Storage: Space should be adequate enough to provide easy access, easy location of desired equipment, and easy retrieval.

Visitors' Lounge/Waiting Room: A visitors' lounge or waiting area should be provided near each ICU or ICU cluster. Visitor access should be controlled from the receptionist area. Public telephones (preferably with privacy enclosures) and dining facilities must be available to visitors.

Patient Transportation Routes: Patients transported to and from an ICU should be transported through corridors separate from those corridors used by the visiting public. When elevator transport is required, an oversized keyed elevator, separate from public access, should be provided.

Patient-modules: Patient modules should be designed to support all necessary healthcare functions. These are:

- Ward-type ICUs
- Isolation rooms

Satellite-laboratory: All ICUs must have access to 24-hr clinical laboratory services.

If the central hospital laboratory cannot provide this service, a satellite laboratory within or immediately adjacent to the ICU(s) must serve this function.

4.5.13 Neonatal Care

Overview: Traditionally, what was only the nursery has now given place to the concept of nurseries like the newborn, observation, premature, isolation, high-risk and intensive care units.

Types of nurseries:

- a) Full term nursery:** It is intended for the normal infants and should be located in the post-partum nursing unit, as close to the mothers as possible.
- b) Observation nursery:** This type of nursery is generally provided for infants suspected of infection.
- c) Premature nurseries:** It is used for infants with low birth weight and is generally located in pediatric service.

If located in the post-partum unit, as is sometimes done, common facilities of the full term nursery can be shared.

Location:

- The contemporary trend is to locate these in the pediatric service with the premature nursery as part of neonatal intensive care unit.

- The nurseries should be close to the obstetrical nursing unit as close to mother as possible.
- It should be located close to the labor-delivery suites so as to minimize the distance of travel.

Design consideration: Design adjacencies should provide for easy movement between the nursery and the mothers at feeding time and should avoid traffic through ward nurse's station.

4.5.14 Central Sterile Supply Department

Overview: The central sterile supply department (CSSD) is responsible to supply all the functional departments of the sterile goods and products. It collects all defined patient care items, receives necessary supplies, and undertakes decontamination, packaging, sterilization, storing and distribution.

Location: Accessibility to the elevators, dumbwaiters and stairs is of utmost importance in determining the location of CSSD.

Design consideration:

- The flow of work is continuous from receiving to issuing.
- The receiving and the clean areas should be physically separated from the rest of the department.
- Workflow should be planned so as to allow a separate entrance to receive soiled and contaminated material from the department, and another for issuing clean and sterile supplies and equipment.
- There should be third entrance, if necessary, to receive the materials from general stores and laundry.

- Basically there should be 3 zones organized in CSSD: the soiled area, the clean area and sterile area.

4.5.15 Hospital Catering Service

Overview: The hospital catering service is tasked to provide all the meals to all the inpatients. It also provides service for various dining areas and the pantries in the hospital. Catering forms part of the health care provisioning. In addition, the dietician provides therapeutic dietary advice, which assists the healing process.

Location:

- It should be close to the materials management department.
- The storage area should be close to the unloading dock.
- The location of the department should ensure that the noise and the cooking odors emanating from the department do not cause any inconvenience to the other departments.
- Easy access to the vertical transportation system serving the patient care units is important for the delivery of patient meals and return of utensils.
- Care should be taken that the coffee shop/snack bar is away from the main kitchen as the outpatients and their accomplice mostly visits this place.
- The department should be away from the access of the general public but should be easily accessible by the staff of the hospital.

Design Consideration:

- Cart receiving area
- Cart Making Area to provide the area for tray loading

- Cart inspection and Dispatch Area to provide area for inspecting and accounting the status of the kitchen cart when they depart for the functional areas.
- *Utensil Washing Area.* The drain ports in this area have to be properly designed so as to collect food waste from sinks, etc. adequate collection space for the waste food in the swill room should be provided.
- Pan Washing Area to provide area for washing of pans and big cooking utensils. The drain ports in this area should be specially designed to handle grease.
- Therapeutic Kitchen, to prepare special therapeutic diets.
- Main kitchen to provide the area for preparation and cooking of the bulk of the load. It is divided into 3 main areas:
 - Cooking area: Food preparation area, Food processing area, Cooking area
 - Cooked food store
 - Tray making and trolley loading area
- There should be a bakery section providing bread and other baked items.
- Machine room: To store and process, food packs and ready to eat food helpings including ice cream. It also houses the ice cubes making machine, bottle chiller and bottle cooler.
- Beverage room: To store and process the hot drinks including the tea, coffee, chocolates etc.
- LPG manifold using the industrial cylinders.
- All waste food is collected in the swill room and incinerated.
- The change rooms for the staff.

- The kitchen should be provided with the suitable air handling system with air washers to remove the odours.

4.5.16 Hospital Laundry Service

Overview: The hospital laundry service handles the following:

- Hospital linen
- Hospital employee's uniforms
- Patient's clothes

The linen in the laundry is collected in 3 lots:

- Routine dirty
- Infected
- Soiled & stained

The linen is subjected to the following treatment:

Routine dirty	:	Washing Cycle
Infected	:	Sluicing - Washing Cycle
Soiled & stained	:	Sluicing – Destaining - Washing cycle

After washing, the linen is dried, inspected, mended (and re-washed), if needed – sterilized, loaded and distributed in carts.

Location:

- The laundry should be so located so as to get ample daylight and natural ventilation.
- The laundry is one of the largest users of power, steam and water.
- Care should be taken to avoid boiler smoke to the wards.
- Laundry should be located close to the service elevators

4.5.17 Hospital Stores and Services

Overview: The main function of the hospital stores is to procure, store and maintain stocks & reserve stocks and supply all kinds of stores to the functional areas & support services.

The stores in the hospital are grouped as:

Medical stores:

Medical and surgical supplies

Pharmacy

General stores:

Furniture

Fittings and fixture

General utility items

Linen

Uniforms

Forms and stationary

Equipment stores:

Aseptic furniture

Medical equipment

Spares and reserves

Workshop equipment

Housekeeping equipment

Various service plants and their spares

House keeping equipment

Other stores:

Medical gases

Cooking gas

Fresh rations

Dry rations

Utensils

Design consideration: The stores should be given spaces in adequate scale, which includes:

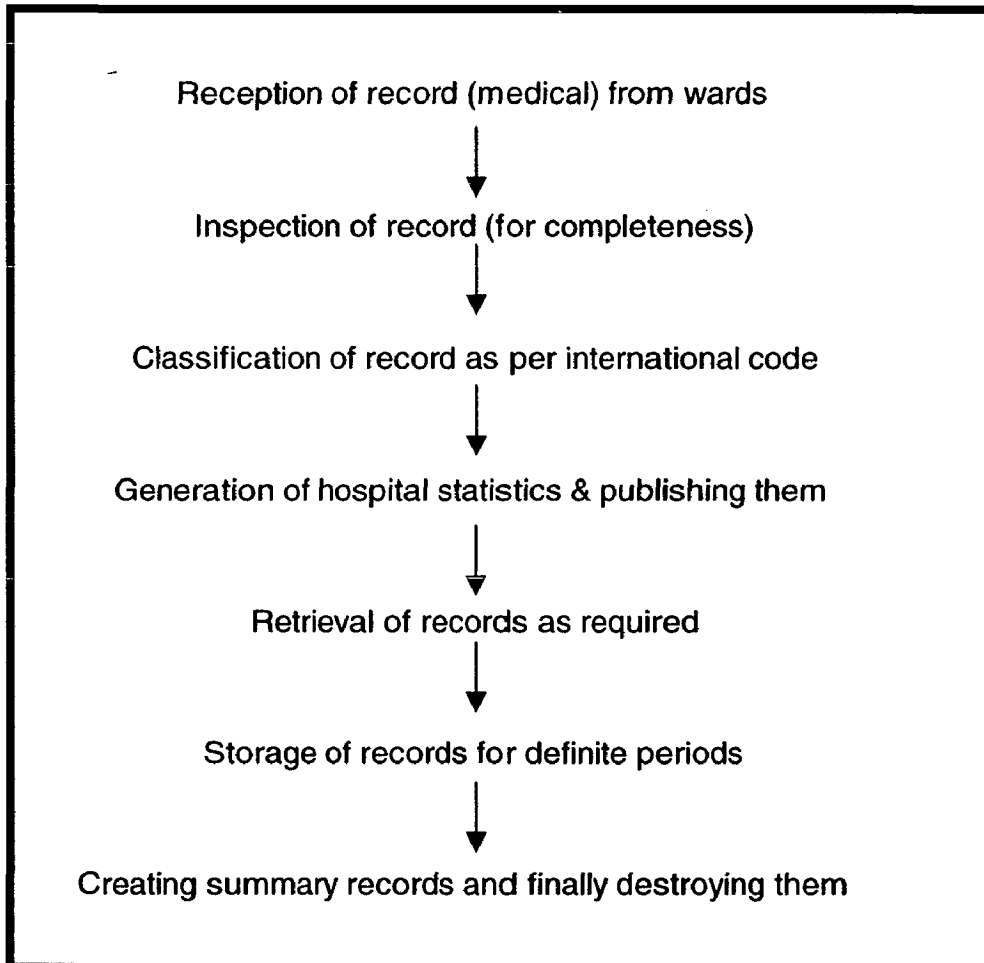
- Initial stock
- Reserve stock
- 3-15 days running stock

The kitchen stores are directly received in the kitchen.

The medical gases are directly received in the manifold room.

4.5.18 Medical Records Section

Chart – 4: Activities of Medical Record Section



4.5.19 The Central Reception

Overview: It maintains:

- Central administration and discharge register.
- An hourly updated status chart on all the patients in intensive care department, the surgical suit and the obstetrics suit through central computer or other suitable means.

- An hourly updated location chart of all the duty personnel.
- It acts as a communication nerve center and has the control over:
 - The hospital exchange (telephone/EPBAX)
 - The hospital telex/fax.
 - The hospital wireless paging system.
 - The wireless control over the ambulances.
 - The hospital wireless communication link to the local police station/ fire office.

Location: Since it interacts with O.P.D, emergency department, the obstetric suit and security, its location should provide easily walk able link to these areas.

Design consideration:

- The reception and information desk should be conveniently located for the people as they enter reception area
- Most of the visitors find it difficult to locate the toilet facilities. They should not be hidden from view but should be easily accessible to the people in the lobby.
- Direct access to the horizontal and the vertical circulation area is necessary. The elevators should not discharge the people into the main lobby but should discharge them into the recess.
- Alcoved spaces for the wheel chairs and the stretchers, out of the main traffic circulation should be easily accessible.

4.5.20 The Mortuary

Overview: Mortuary provides the facility for keeping of dead bodies and conducting autopsies- medico-legal and clinical-pathological and also the facility of identification of dead bodies under the administration of pathology department. It does not provide facilities for embalming and preservation of dead bodies.

Location: It should be so located that the dead bodies can be transported unnoticed/screened from the general public and patients.

Relatives and the mourners should have direct access to the mortuary. It should be preferably located in the separate building block or wing with access to:

- Public highway
- Hospital corridor, street
- Parking lot

The autopsy should be little removed from the emergency and inpatient areas.

4.5.21 Hospital Business Administration

Overview: This department provides administrative support through business function to the medical faculty and its functions, to ensure proper and smooth running of the hospital.

Location:

- The administrative block should be conveniently accessible to authorized visitors and to the hospital's main entrance as well as to the vertical and horizontal communication areas.
- It should be designed to avoid cross traffic from the main lobby.
- A proper medical records department should be established under medical record technician. This also helps in medical research by analyzing various data.

4.5 b) SERVICES DESIGN BRIEF

The electrical, mechanical and structural space requirements necessitate changes to the floor plans, building sections and exterior elevations, and must be taken into consideration from the onset of design.

4.5.22 Electrical Services

- Connecting the distribution systems including services capacity, location and service classification.
- Connections to the Emergency and Standby Power System (ESPS) and integration into the associated Central Monitoring and Control System (CMCS).
- Special systems design (unique shielded rooms, research and diagnostic equipment, and other equipment and designs).

4.5.23 Elevators

- Provision of the shafts for the types of elevators
- Coordination of shaft construction with the seismic detectors, elevator speed etc.
- Provision of sumps and drainage system to be given if any.

4.5.24 H.V.A.C.

- Provision of the air supply to the operation room and the labour-delivery suites
- Special procedures may require special designs.

- The place for administering anaesthesia (general) and the type of air pressure to be maintained in it.
- The varied requirements for each of the space demands for the different methods of air supply and their exhaust, which further effect the planning of the other services.

4.5.25 Water Supply and Sanitary System:

- The operation theatre should not have any toilet above it.
- The shafts which will carry the service pipes (rain water, soil pipes, water supply pipes) should be wide.

4.5.26 Gas Manifold Room

- Quantity of gases stored, if exceeding 2000 cu.ft., the manifold room should not be in the basement. Distribution network of the pipes to be considered, if it is taken as the separate entity.

CHAPTER 5 - APPROACH TO COST MODELLING FOR A 100 BED MULTI-SPECIALITY HOSPITAL

- 5.1 Identification of a 100-bed Multi-Specialty Hospital as a unit for Cost Modelling
- 5.2 Cost Modelling for a Hospital Building – PAR Approach
 - 5.2.1 Plinth Area of Ground Floor
 - 5.2.2 Plinth Area at First and Higher Floors
 - 5.2.3 Galleries, mezzanine floors, lofts
- 5.3 Elemental Approach to Cost Modelling
- 5.4 Systems and sub-systems Approach to HVAC Services
- 5.5 Systems and Parametric Approach to Electrical Services
- 5.6 Parametric Approach to Central Medical Gases Supply System
- 5.7 Parametric Approach to Communications Systems
 - 5.7.1 EPABX system
 - 5.7.2 Nurse Call System
 - 5.7.3 Closed circuit TV security port
 - 5.7.4 Public Address System
- 5.8 Parametric approach to Fire Detection and Suppression System
- 5.9 Parametric Approach to Structured Cabling System for LAN
- 5.10 The Per Toilet Basis Approach to Plumbing Services
- 5.11 The Practical Approach

CHAPTER 5 - APPROACH TO COST MODELLING FOR A 100 BED MULTI-SPECIALITY HOSPITAL

With increased competition among the health care service providers, the role of health care facilities planning and design is getting more important as the facility managers and end users are demanding perfect functional space planning, elegant ambience of the spaces that give them a non-institutional character, and efficient & effective utilization of all available resources.

Preliminary schemes may be prepared on all alternative sites after studies on the cost benefit analysis, market study and all risk assessments. Thereafter, the most appropriate site may be chosen.

Cost models aid in making these assessments.

5.1 Identification of a 100-bed Multi-Speciality Hospital as a unit for Cost Modelling

The Multi-Speciality hospital categories of referral nature as defined by the Government of India fall into the 100, 200 and 300 bed categories (with respect to the bed component).

But hospitals cannot be solely identified by their bed component. The medical facilities provided in a 100-bed hospital and those in a 200-bed hospital can be similar in nature and at times even same.

The medical and other ancillary services provided in a hospital change according to the number of patients.

Private developers consider the 100 to 200-bed category as a single block for the development of the medical programme.

Usually a Multi-Speciality hospital with adequate medical facilities and services, for 200 beds is commissioned in the initial stages, housing only 100 beds.

Depending on the availability of funds, it is later upgraded in stages to a 200-bed hospital.

Thus, this block of 100 beds category is taken up to develop the facility planning programme and the cost model, based on the functional programme as per IS:12433 (Part-2)

5.2 Cost Modelling for a Hospital Building – PAR Approach

Plinth Area Rates

This method provides an estimated cost of a project based on Plinth Area Rates (as developed and implemented by the central and state PWDs and public sector undertakings) for both residential and non-residential buildings.

The non-residential buildings are classified as Office buildings, Institutional buildings, & Hospital buildings.

This method has a fixed procedure and set of rules in order to ensure the adoption of a uniform method of working out plinth areas from the building plans, to ensure that the plinth area of the building presents a true picture of the covered floor area provided in the plan.

The total Plinth Area of a building is the sum total of the plan areas at every floor including the basement

In case of non-residential buildings the area of shafts for sanitary installations, AC ducts, lifts etc. shall be included in the plinth area at all floor levels.

The area of a mumty at terrace level shall not be included in the plinth area. If a barsati is provided jointly with a mumty then the area of the barsati excluding the mumty at the terrace level shall be included in the plinth area.

Towers, turrets, domes projecting above the terrace shall not be included in the plinth area at terrace level but shall be allowed for costing purposes separately.

5.2.1 Plinth Area of Ground Floor

The plinth area of the ground floor is calculated at the plinth level, excluding the plinth offsets provided such plinth offsets are not more than two quarter inch.

In cases where the building consists of columns projecting beyond cladding, the plinth area shall be taken upon the external face of the cladding and shall not include the projections of the columns.

If open verandahs with parapets are provided at the ground floor projecting out of the building the full area shall be taken upto the outer line of the external verandah lintel and only fifty percent of the area shall be taken for the un-projected verandah or the un-projected portion of the verandah.

Open platforms (i.e. platforms without parapets) and terrace at ground floor and porches shall not be included in the plinth area but shall be allowed for separately for costing purpose.

5.2.2 Plinth Area at First and Higher Floors

The plinth areas of first and higher floors shall be calculated at the relevant floor levels.

Architectural bands, cornices etc. shall not be included in the plinth area even though they may occur at the floor level.

Vertical sun breakers or box-louvers projecting out also shall not be included in the plinth area.

In the case of projecting balconies protected to their full width by sun shades, full width roof protections, or by upper balconies, their full area shall be included in the plinth area.

In the case of un-protected balconies, equivalent area to the extent of fifty percent of the area of the balconies shall be included in the plinth area.

5.2.3 Galleries, mezzanine floors, lofts

Area of galleries, i.e. upper floor of seats in an assembly hall, auditorium, theatre etc., shall be fully included in the plinth area.

Area of mezzanine floor, i.e. an intermediate floor included between two main floors, shall be included in the plinth area, if no separate provision is made for the same.

The area of a loft, i.e. an intermediate slab just beneath the floor or roof without any direct stair case leading to it and used for storage purposes shall not be included in the plinth area.

5.3 Elemental Approach to Cost Modelling

An element in this context can be defined as a component of a hospital building that, irrespective of the type of construction or specification, tends to perform the same function or functions. It is an easily recognisable and essential part of a hospital building.

The choice of an element (or components of an element) is a matter of individual performance but there is a considerable measure of agreement on the requirements of the fundamental functional performance.

The elemental cost model can serve as a tool for decision making. It is more easily comprehensible at the user's level and as such improves client participation in decision making.

Various items relevant in the context of hospitals are identified. Possible options and combinations along with the respective cost impacts are analysed. The

suitable option then can be selected based on the requirement and against a cost limitation.

The steps involved in the development of Elemental Cost model are :

- Identification of all relevant items for a Multi-Speciality hospital
- For each of the elements, identification of the possible components and their combinations
- Listing of all the options possible for each of the element along with their unit costs
- The cost of the element is then worked out (on a unit cost basis) based on the combination of options under the components all of which are costed on the same unit basis

From the elemental cost models different component combinations can be compared and the most cost effective option can be adopted.

In the elemental cost model, cost on unit basis for each element can be established for different component combinations.

The form of construction of each element, its material and labour content, the quality involved are all analysed and multiplied by the relevant unit quantity to arrive at the cost of the proposed element.

The summary of all elemental costs gives the project estimate.

The elemental cost for a particular set of components can be determined directly on unit basis and therefore, the consultant through the medium of elemental cost model can assist the client in deciding on one of the various possible options.

Provided sufficient information is available, elemental cost model can be used at all stages of the design to produce an estimate.

Comparisons can easily be made enabling the planners to obtain any likely cost implications during the early stages of the design.

5.4 Systems and sub-systems Approach to HVAC Services

The procedure to be adopted to calculate the cost of HVAC services is as follows:

- The spaces to be air-conditioned have to be identified.
- The areas of each of these spaces is to be measured and calculated.
- The level of air-conditioning and the quality of air-conditioning in each of these spaces has to be determined as per the requirement of each space. The total air conditioning load or tonnage has to be calculated in this way.
- Based on the total load, a schematic system has to be prepared and the costs have to be broken down to the high side cost and the low side cost.

The parametric costings are thus worked out on a per square meter cost of conditioned spaces.

The variations possible to this system could be as follows:

- The total hospital could be centrally air conditioned
- The functional areas only could be air conditioned with circulation, entrance areas and waiting areas having a return air conditioning to reduce the difference in the comfort conditions between the air conditioned and the non air conditioned areas.

The chosen system is the most effective system where:

- Only the areas having functional requirement of air conditioning have been air conditioned

- The toilet areas have been mechanically ventilated
- The lifts and staircases have the provision of pressurization to prevent the accumulation of smoke in case of fire.

5.5 Systems and Parametric Approach to Electrical Services

For calculating the cost of internal electrification, the electrical loads are calculated by first principles as follow:

- By determining the number of electrical points required for each of the functional spaces, special functional requirements are added and the connected load determined.
- The general lighting loads and the functional task lighting loads are to be added to these to get the total demand load.
- Based on these load requirements of the maximum connected load, the HT panel and the step down transformer capacities maybe determined.
- The main LT panel may also be getting the feeders from the 100% standby generators.
- The main distribution boards, sub distribution boards, rising mains, lighting fixtures, fittings, and power points as per the functional requirements have to be costed.

The costs may be broken down into high side and low side costs and cost per square meters, costs per point may be worked out for comparison with other projects of similar capacities.

5.6 Parametric Approach to Central Medical Gases Supply System

In the patients medical gases pipeline system, the reliability of the system is of paramount importance and the system shall have to be a foolproof system. There are statutory requirements of keeping all pipelines exposed i.e. surface mounted and the pressure drops within the system shall have to be monitored.

The costs of this system may be worked out as follows:

- By determining the beds that would need oxygen and suction points.
- All functional areas like treatment rooms, recovery, resuscitation rooms have to be identified to determine the no. of points for oxygen and nitrous oxide and their locations have also to be marked on the plan.
- All other functional areas that need oxygen and nitrous oxide should be identified.
- All delivery rooms, procedure rooms, operation theatre have to be provided with all the four medical gases from the ceiling mounted pendants. The costs of the PMG system has also been divided into the high side and the terminal units. The costs have been divided by the total no. of points to determine the cost per point.

5.7 Parametric Approach to Communications Systems

5.7.1 The hospital shall have a central EPABX system.

- All rooms shall have intercom points.
- All staff rooms shall have external lines.
- All waiting areas shall have external pay phone lines from where people can make calls.

5.7.2 Nurse Call System shall be installed with a nurse call button and a handset at:

- each bed side,
- patients toilets,
- consultation rooms,
- treatment rooms,
- recovery rooms, and
- spaces where the nurses' help may be required.

The cost of nurse call system has to be divided by the no. of points where the system is required to get a cost on per point basis.

5.7.3 Closed circuit TV security port

This would be provided to check the movement of the people in:

a) Public Areas such as:

- Patient Receiving Areas,
- Reception Areas,
- OPD General Waiting Areas,
- OPD Sub Waiting Areas,
- Corridors

b) Pediatric Nursery

5.7.4 Public Address System and music system has been provided in:

- General Waiting Areas,
- Sub Waiting Areas etc.

5.8 Parametric approach to Fire Detection and Suppression System

Fire detection systems have to be provided in all the functional areas of the Hospital. The fire suppression system has also to be provided in all the functional areas including the basement service areas. The total cost of the system has to be worked out and then divided by the areas where this service has been provided to get the cost per square meters cost for each of the services types.

5.9 Parametric Approach to Structured Cabling System for LAN

In today's age administrative LAN and medical LAN have become a mandatory requirement. Internet access is required by most of the consultant's in their consultation rooms, treatment rooms, procedure rooms and operation theatres.

The cost of structural cabling system has been calculated on a per square meter basis.

5.10 The Per Toilet Basis Approach to Plumbing Services

Hospital design consultants have identified six major types of toilet options for a Multi-Speciality hospital and they adopt these designs as templates on various projects.

These types are:

- 1) Wash / Utilities / Pantry : One wash hand basin / lab sink / pantry sink

- 2) Consultants / Executive toilet: wash hand basin with counter + WC
- 3) Staff toilet (ladies/gents): wash hand basin + WC + urinal for men; wash hand basin with vanity counter + WC for women (lockable WC to facilitate usage by two persons at a time)
- 4) Patients' room toilet: wash hand basin + WC + bath/shower. The door to the patients' room toilet must always open outwards, it should be possible to unlock the door from outside i.e. there must be a gap at the top and bottom of the door.
- 5) Public Toilets (ladies): bank of wash basins and WCs. One in each to be for the physically challenged. The circulation area provide in this toilet is more. The cost per square meter in this type of toilet is the minimum.
- 6) Public Toilets (gents): bank of wash basins, urinal and WCs. One in each to be for the physically challenged. The circulation area provide in this toilet is more. The cost per square meter in this type of toilet is the minimum.

Mechanical forced ventilation and proper detailing for infection control is of paramount importance in all types of toilets. Pipe shafts have to be detailed for proper maintenance.

5.11 The Practical Approach

It has been established that the PAR model of the preliminary estimate to determine the total cost of the project is an inaccurate model as it does not capture the total cost picture of the total project at the inception stage.

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The functional requirements of the different areas of the hospital require different finishes, services, furniture, and medical equipment.

The total cost picture could be captured if we account for the

- Cost of consultants
- Cost of building plus services plus equipment & furniture.
- Preoperative expenses, preliminary expenses, margin money for working capital and provision for contingencies.

The cost of building including services, furniture and equipment has been worked out as per the procedure described in this chapter.

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- 6.1 INDIAN HOSPITAL, Chennai
- 6.2 CITY HOSPITAL, Chennai
- 6.3 REX HOSPITAL, Chennai (Chosen as the Design Model)
- 6.4 Case-Studies – Building Programme

Chapter - 6 CASE - STUDIES

Three 100 bed Multi-Speciality hospitals have been chosen from Chennai, Tamilnadu, India. All the three hospitals offer similar specialities. Indian Hospital and the City Hospital are under function, REX Hospital is at the Inception stage where the building programme of the hospital, architectural Design is done. REX hospital has been chosen as the Design Model for the research and the cost model will be arrived at based on that.

6.1 INDIAN HOSPITAL

Location: Arumbakkam, Chennai

Level of Service: PRIMARY CARE (100 BEDDED)

Hospital Service: MULTISPECIALITY

Present Status: UNDER OPERATION

Architects: Hospital Designers and Developers India Pvt Ltd, Chennai

Project Management: CB RICHARD ELLIS (South Asia) Pvt Ltd, Chennai

Specialties Offered:

- Medical
- Surgical
- Orthopedic
- Eye
- ENT
- Dental
- Pediatric
- Skin
- Family planning
- Psychiatric
- Obstetrics
- Gynaecology

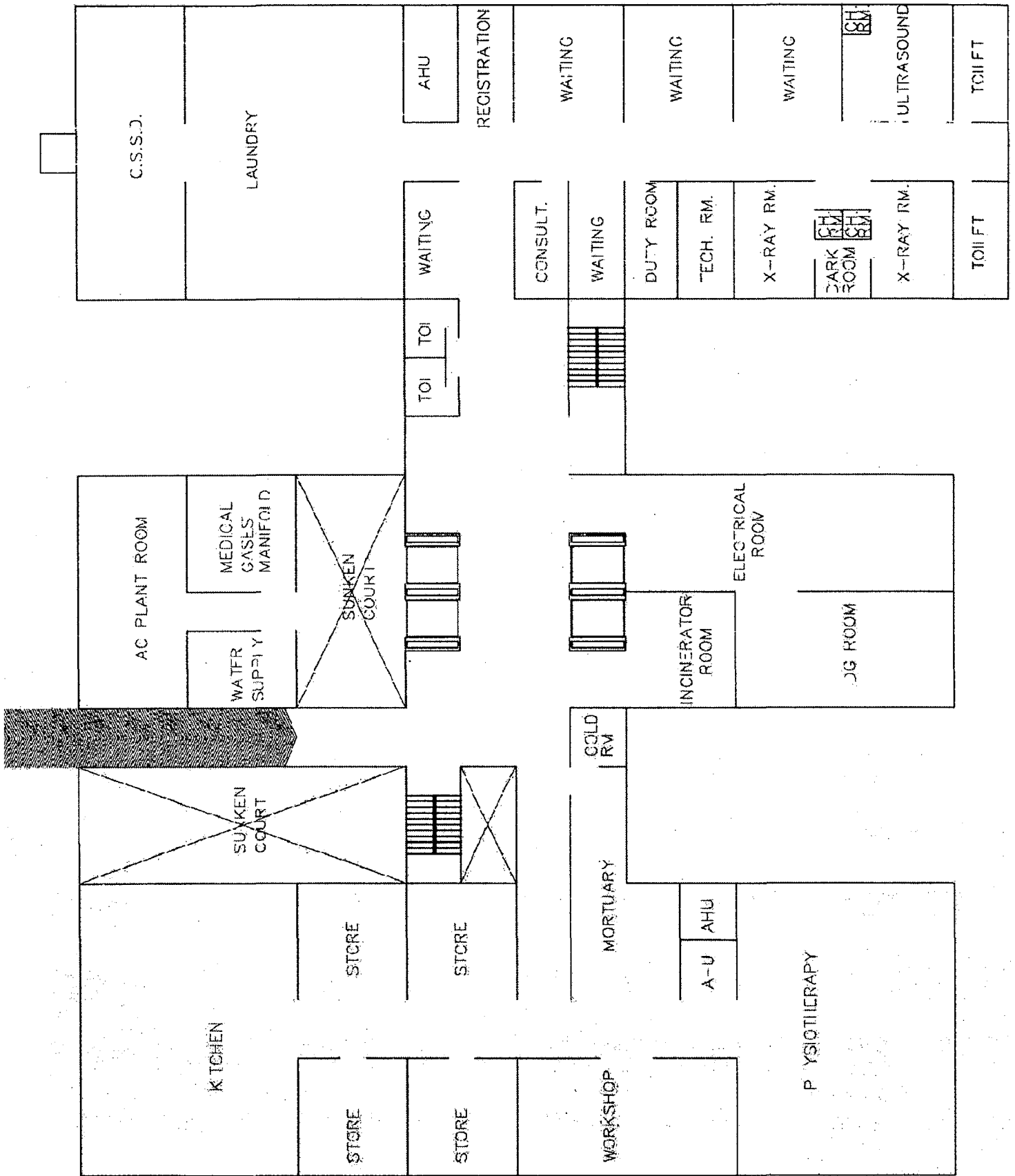
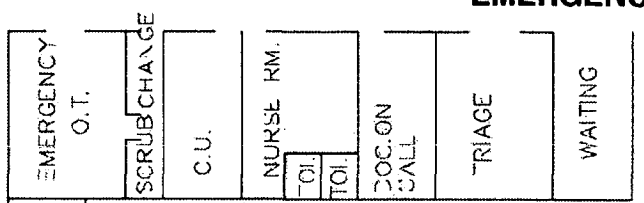
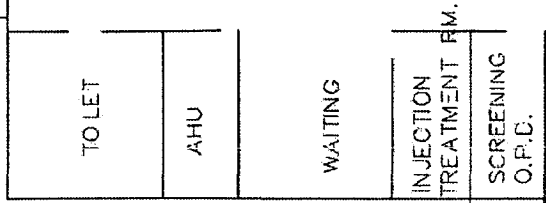
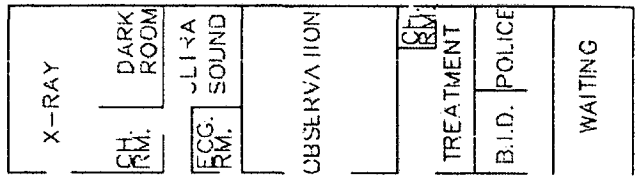
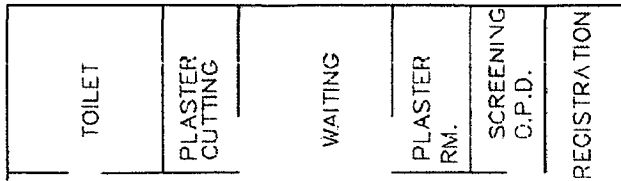
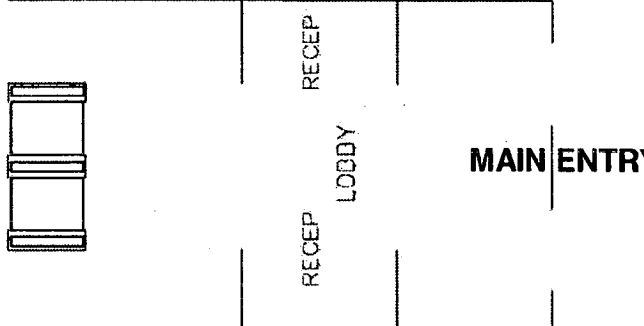
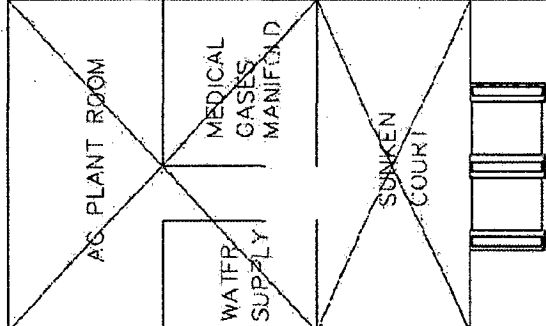
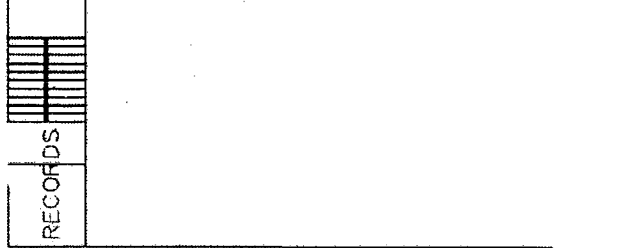
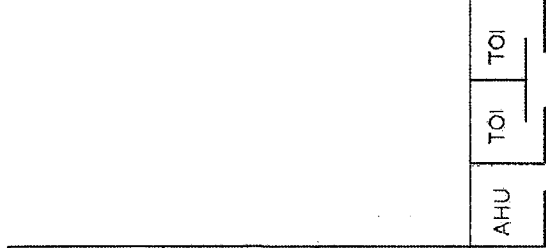


FIG 1 : INDIAN HOSPITAL - BASEMENT FLOOR PLAN

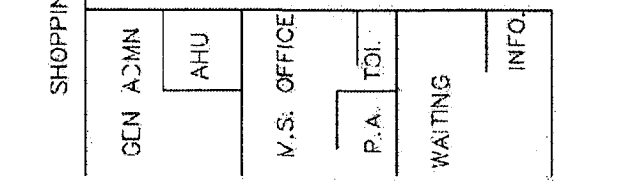
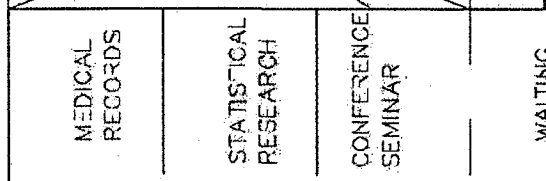
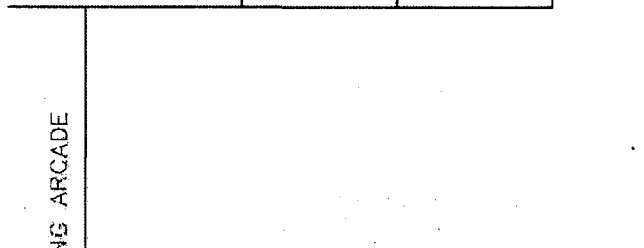
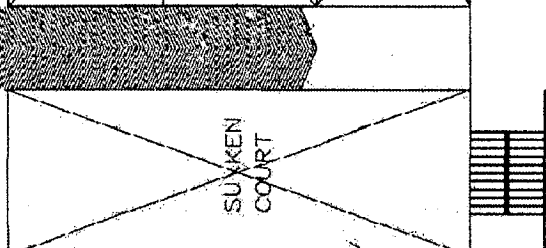
OPD ENTRY



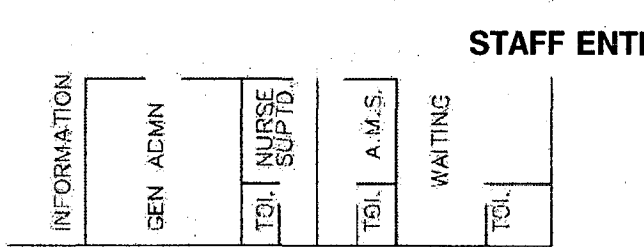
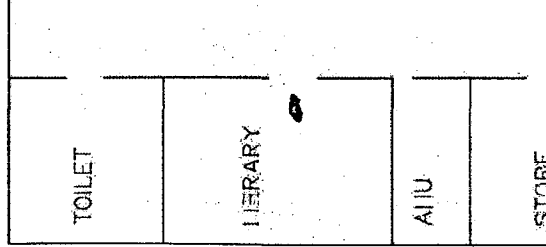
EMERGENCY



MAIN ENTRY



STAFF ENTR



VISITOR'S ENTRY

FIG 2 : INDIAN HOSPITAL - GROUND FLOOR PLAN

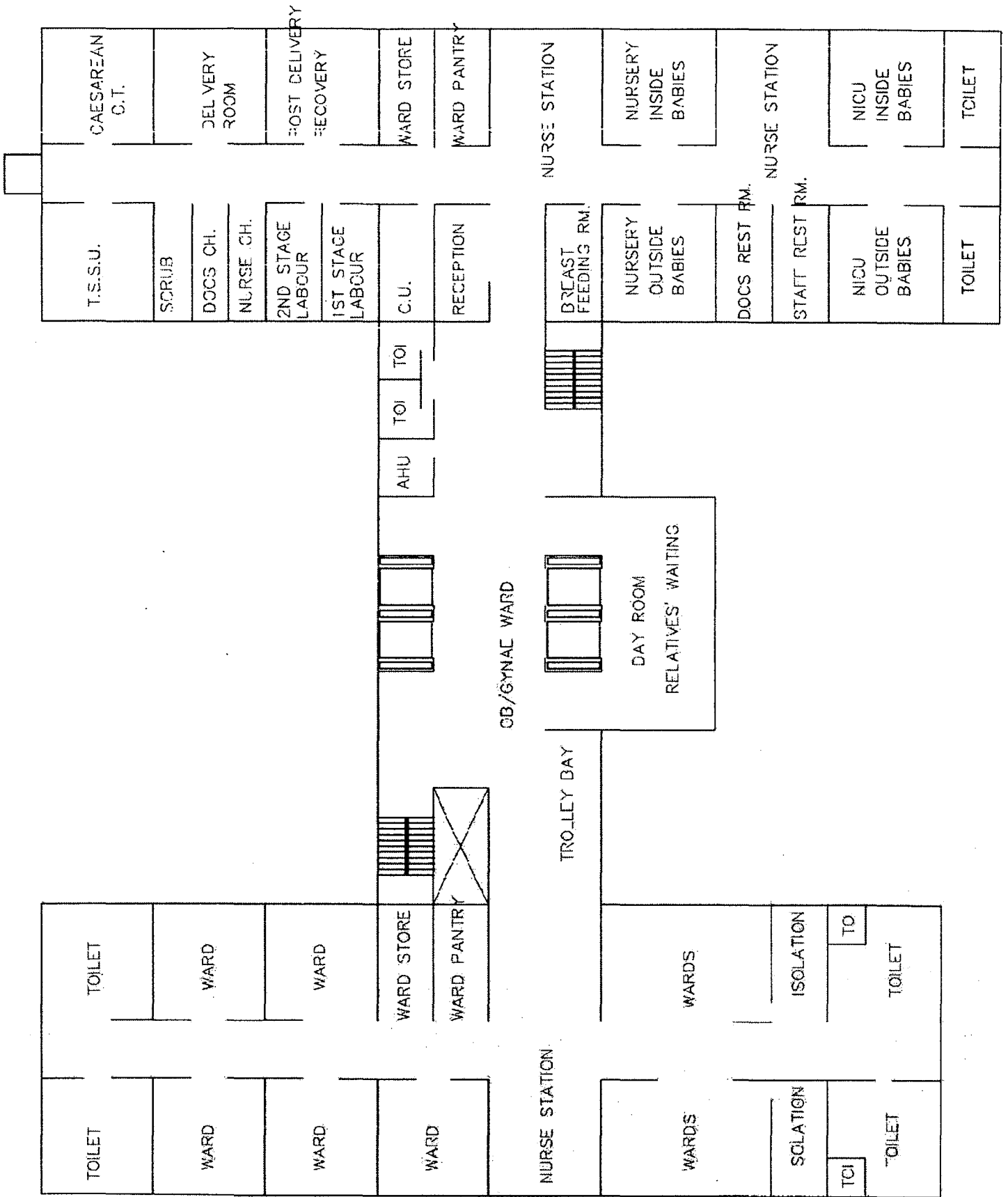


FIG 5: INDIAN HOSPITAL - THIRD FLOOR PLAN

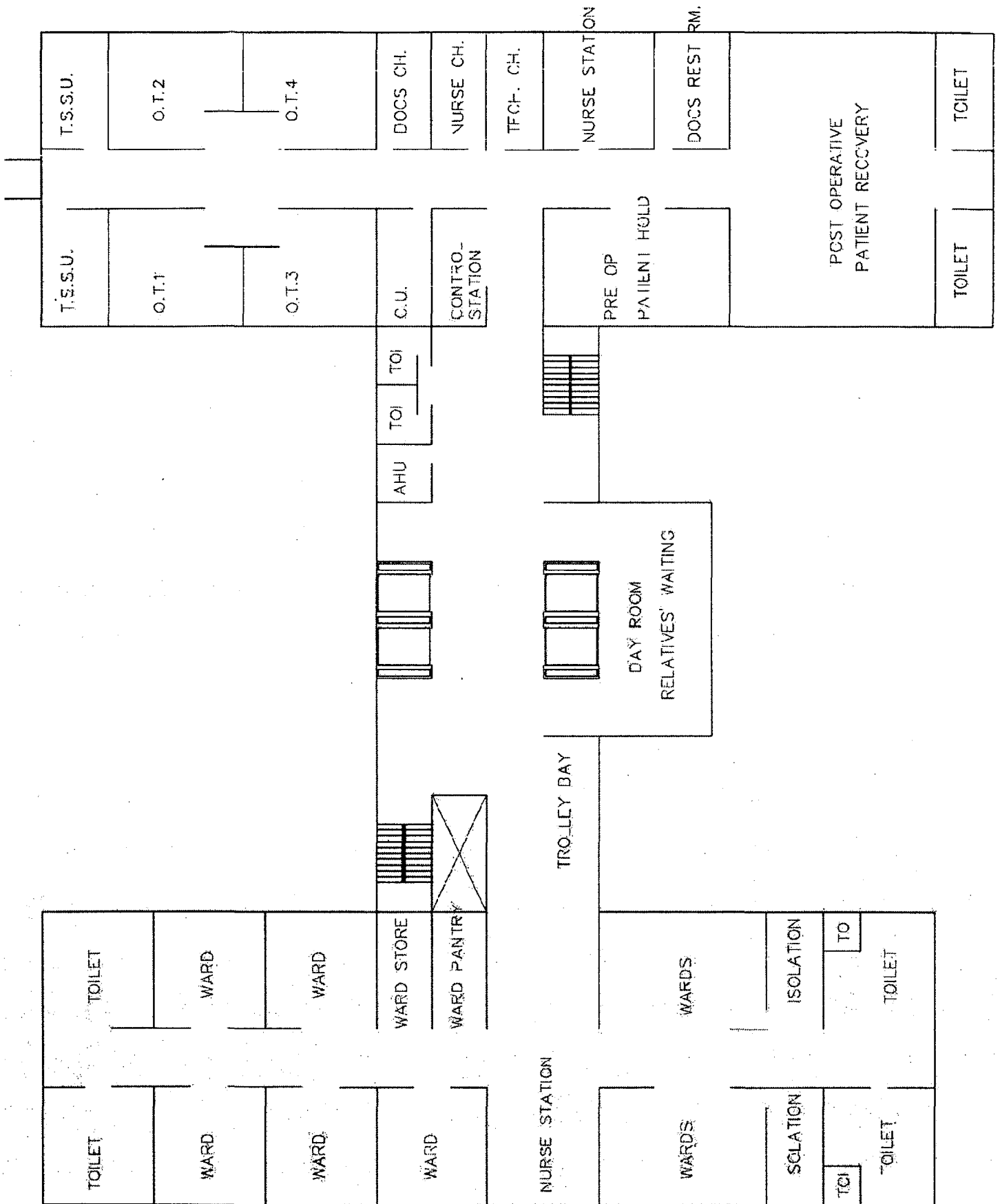


FIG 6: INDIAN HOSPITAL – FOURTH FLOOR PLAN

6.2 CITY HOSPITAL

Location: Adyar, Chennai

Level of Service: PRIMARY CARE (105 BEDDED)

Hospital Service: MULTISPECIALITY

Present Status: UNDER OPERATION

Architects: Vivek and Associates, Architects and Interior designers,
Chennai

Project Management: Jones Lang LaSalle (I) Pvt Ltd

Project & Development services, Chennai

Specialties Offered: - Medical

- Surgical
- Orthopedic
- Eye
- ENT
- Dental
- Pediatric
- Skin
- Family planning
- Psychiatric
- Obstetrics
- Gynecology

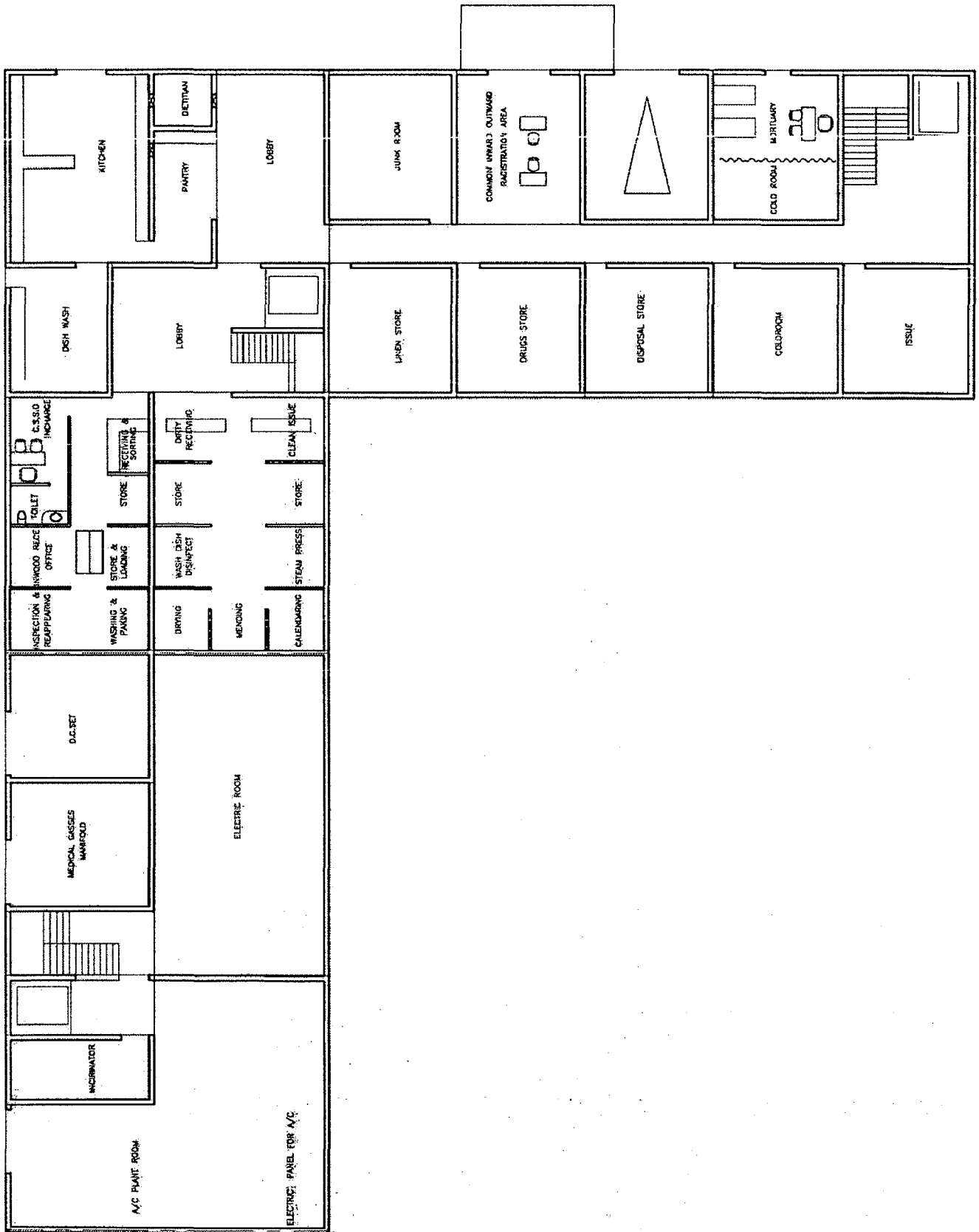


FIG 7: CITY HOSPITAL – BASEMENT FLOOR PLAN

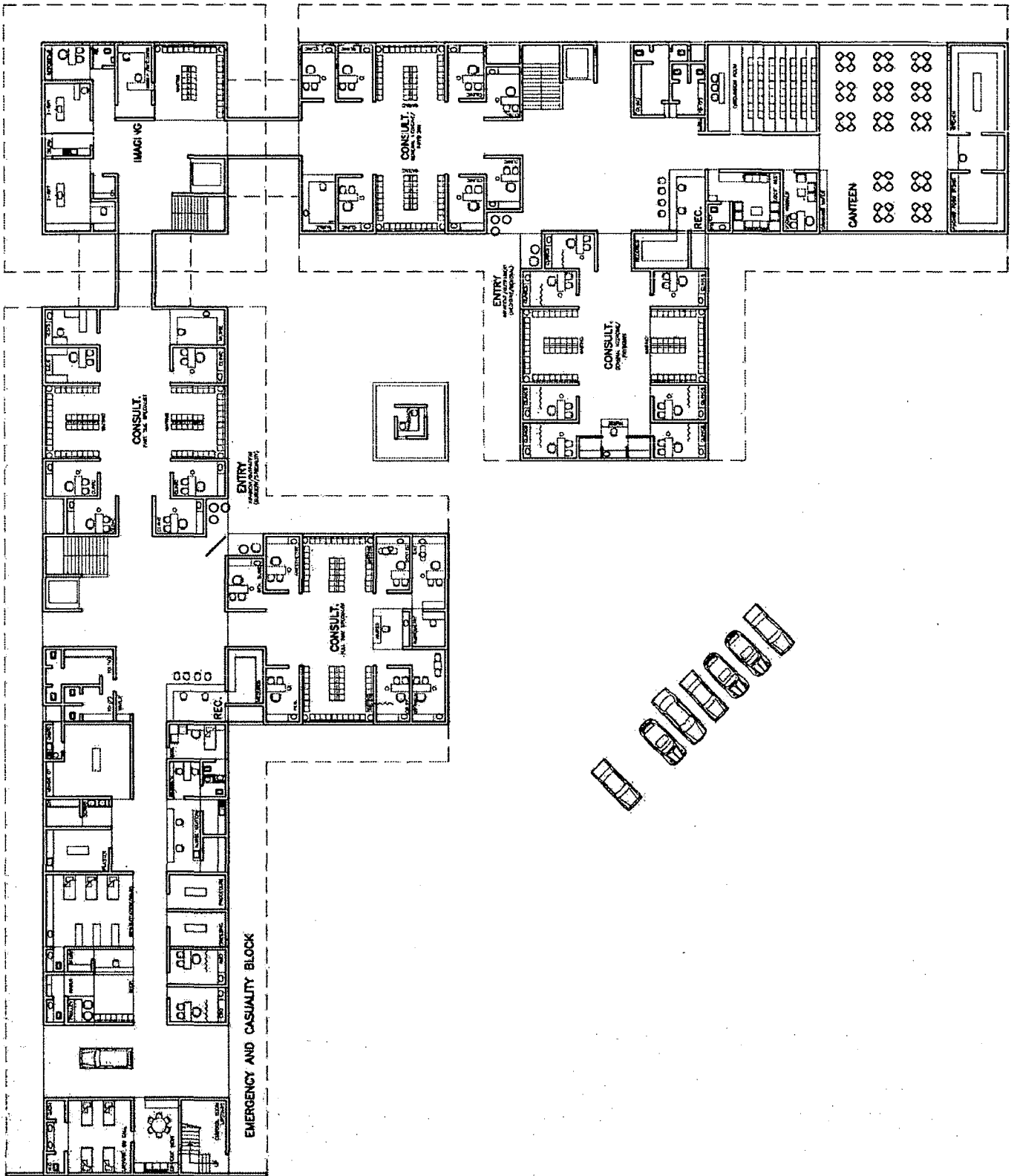


FIG 8: CITY HOSPITAL – GROUND FLOOR PLAN

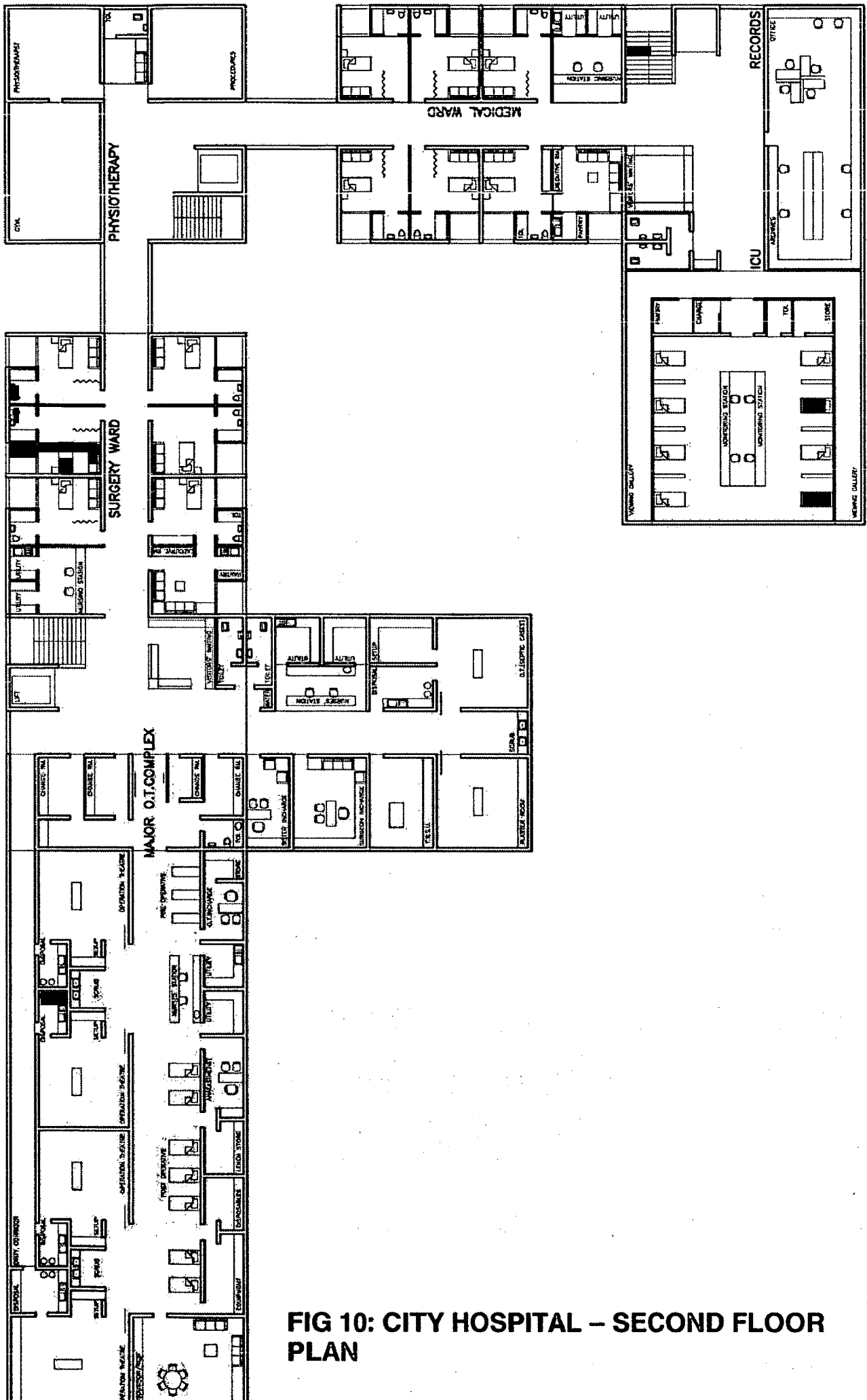


FIG 10: CITY HOSPITAL – SECOND FLOOR PLAN

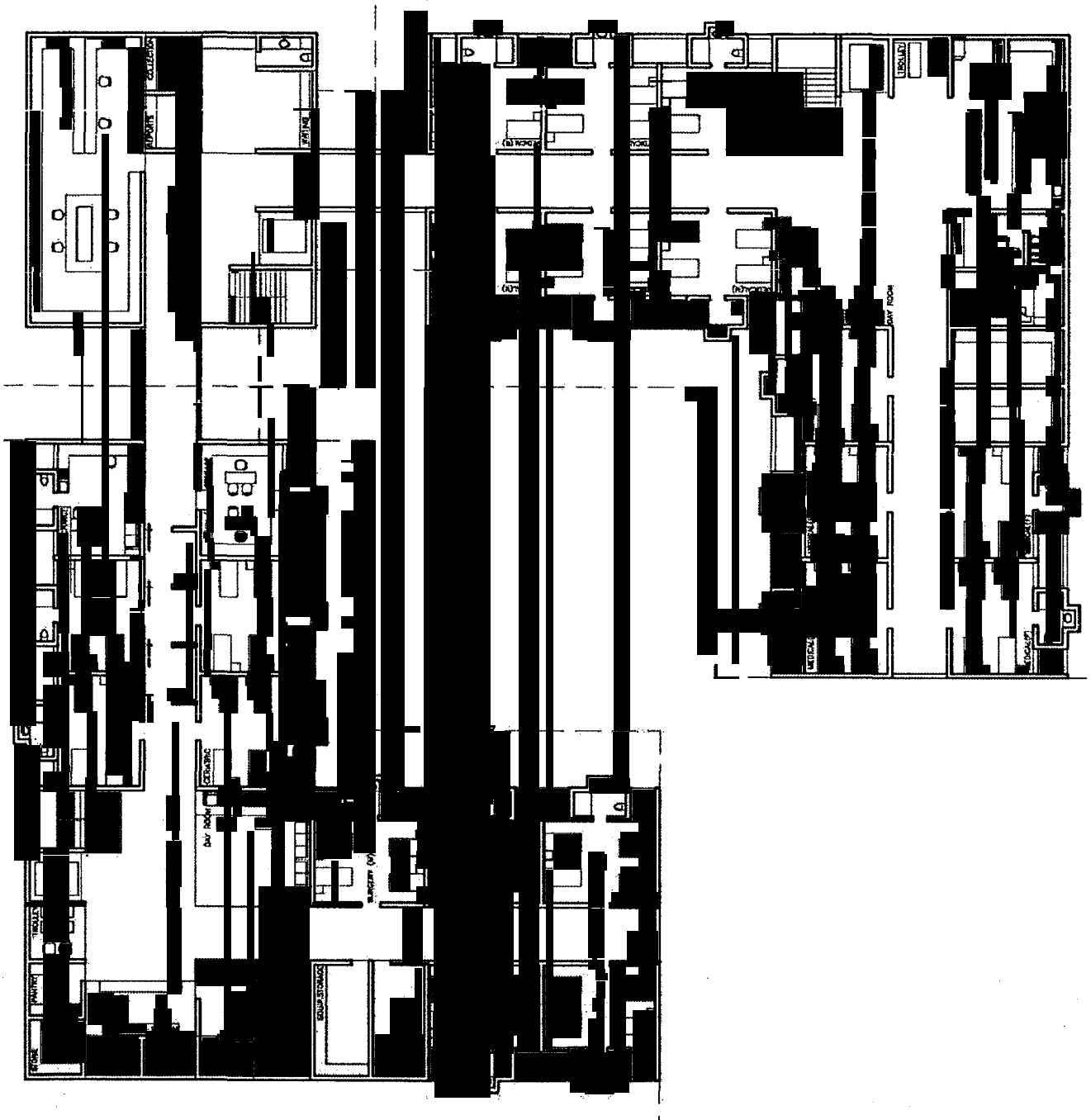


FIG 11: CITY HOSPITAL – THIRD FLOOR PLAN

6.3 REX HOSPITAL

Proposed Location: Kilpauk, Chennai

Level of Service: PRIMARY CARE (109 BEDDED)

Hospital service: MULTISPECIALITY

Present status: Inception Stage

Architects: ARCHIMEDES (I) CONSULTANCY PVT. LTD

Architects and Health care Designers

Green Park, New Delhi

Project Management: Cushman & Wakefield (I) Pvt Ltd, CHENNAI

Specialties Offered: -Medical

- Surgical

- Orthopedic

- Eye

- ENT

- Dental

- Pediatric

- Skin

- Family planning

- Psychiatric

- Obstetrics

- Gynecology

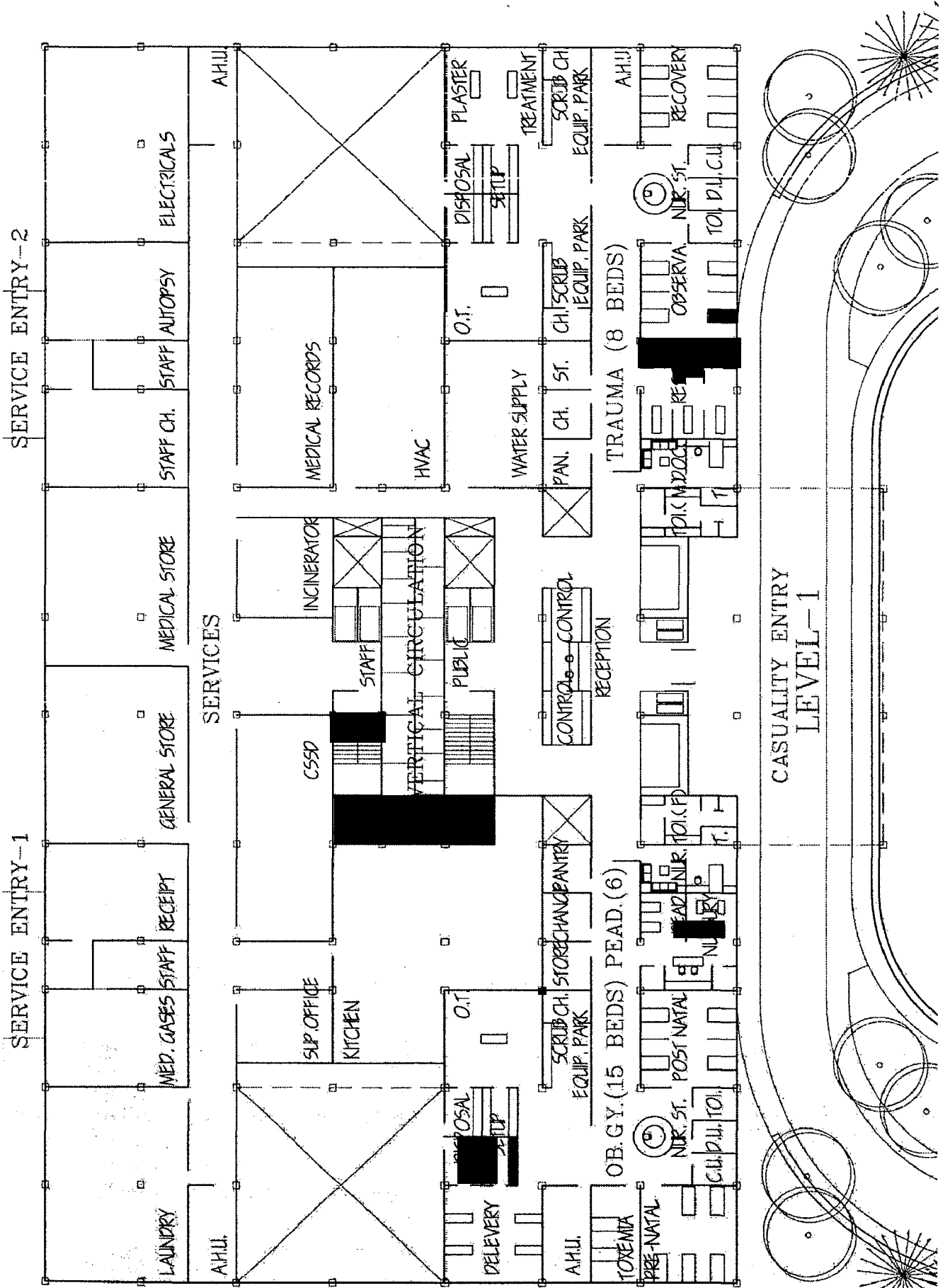


FIG 12: REX HOSPITAL - BASEMENT FLOOR PLAN

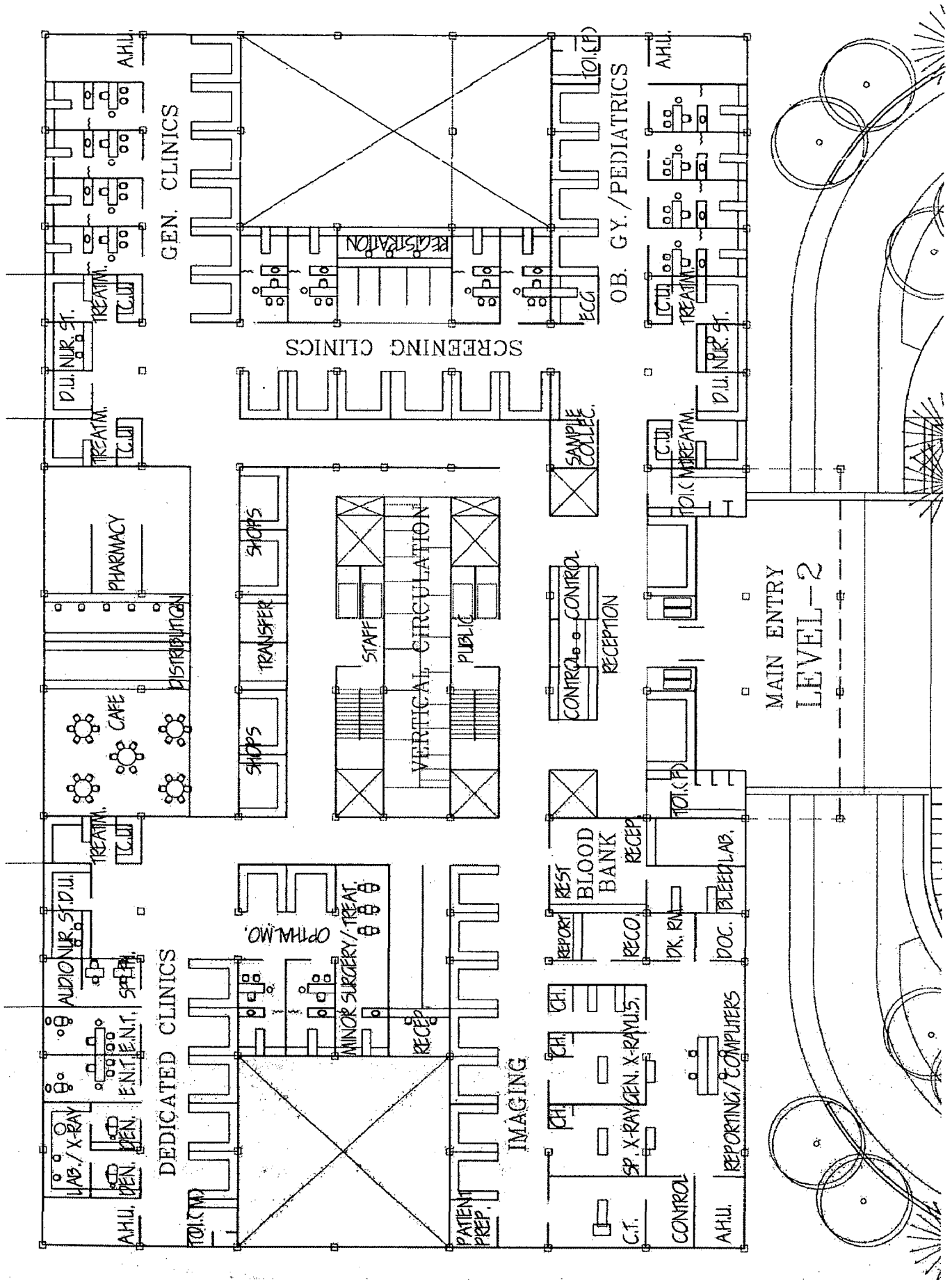


FIG 13: CITY HOSPITAL – GROUND FLOOR PLAN

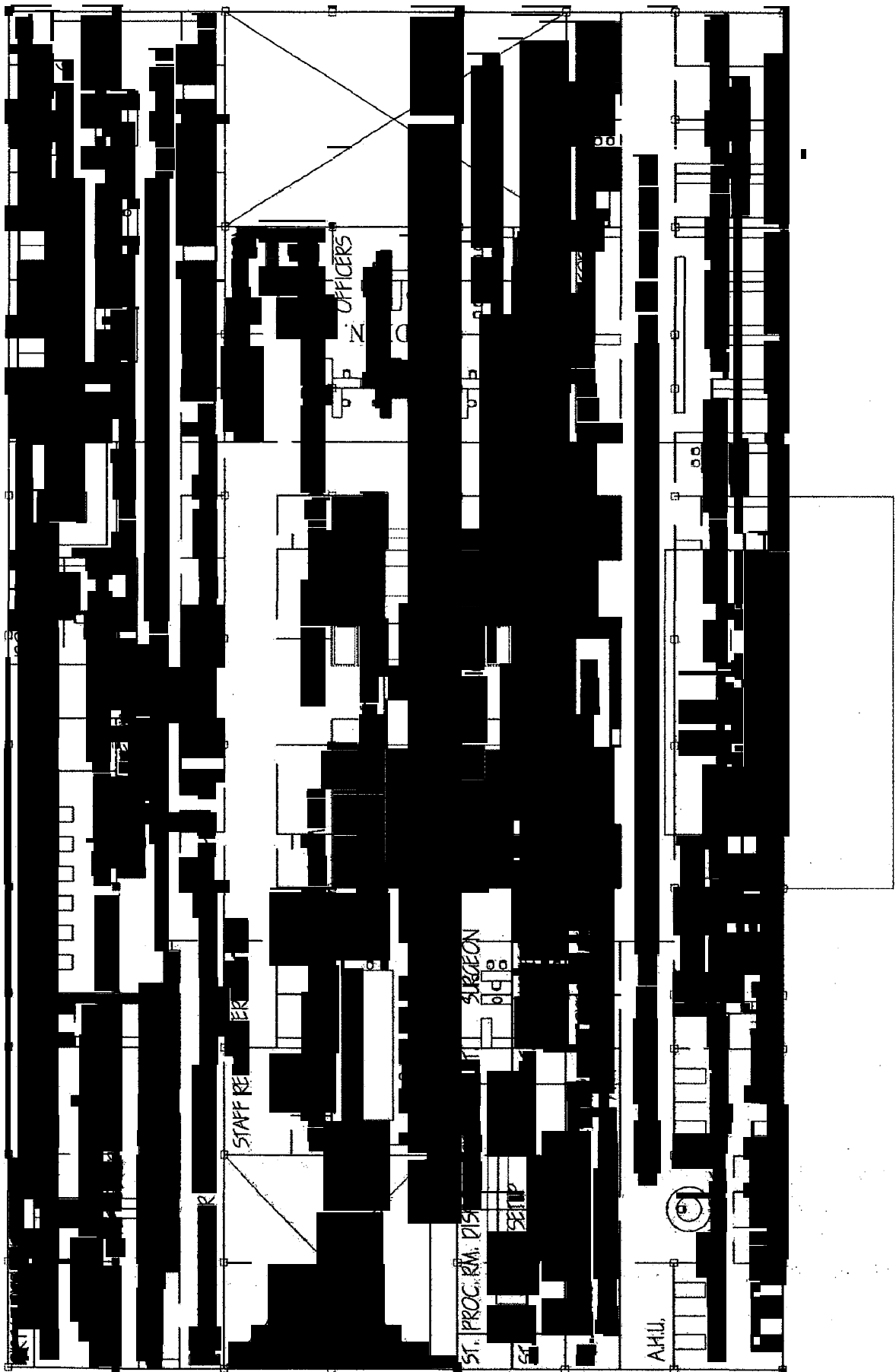


FIG 14: REX HOSPITAL – FIRST FLOOR PLAN

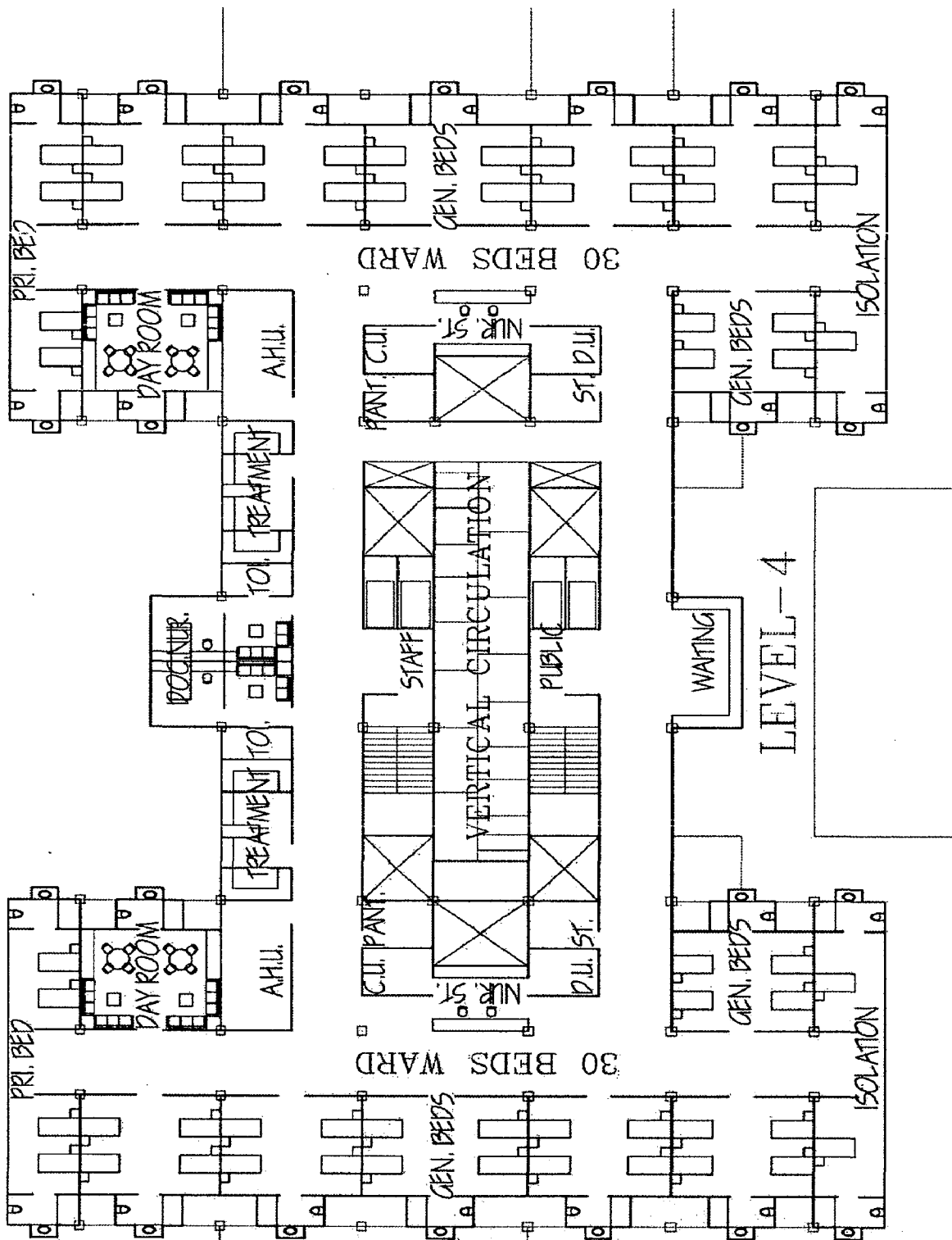


FIG 15: REX HOSPITAL – SECOND FLOOR PLAN

Note: REX Hospital, Chennai is chosen as the Design Model for the Research as the project is in the inception stage. The Proposed Cost Model (Chapter – 7) is arrived at based on its building programme. The cost calculations for the proposed

cost model take the aid of CPWD Plinth Area Rates & DSR (Delhi Schedule of Rates), so the project is assumed to be in Delhi, India.

“Please turn over to view the Building Programme for the three case-studies.”

cost model take the aid of CPWD Plinth Area Rates & DSR (Delhi Schedule of Rates), so the project is assumed to be in Delhi, India.

“Please turn over to view the Building Programme for the three case-studies.”

6.4 CASE-STUDIES - BUILDING PROGRAMME

REX HOSPITAL, Chennai				INDIAN HOSPITAL, Chennai				CITY HOSPITAL, Chennai			
S. No.	Name of Space	Level	Total Area	S. No.	Name of Space	Level	Total Area	S. No.	Name of Space	Level	Total Area
	Basement		2,902.00		Basement		1,989.00		Basement		1,282.82
	Ground Floor		2,830.00		Ground Floor		1,845.00		Ground Floor		2,782.30
	First floor		2,806.00		First floor		1,845.00		First floor		2,660.65
	Second floor		1,380.84		Second floor		1,701.00		Second floor		2,707.06
	Third Floor				Third Floor		1,701.00		Third Floor		2,176.82
	Fourth Floor				Fourth Floor		1,701.00				
	Total		9,918.84		Total		10,782.00		Total		11,609.65
AREA DISTRIBUTION											
A	ENTRANCE AREA			A	ENTRANCE AREA			A	ENTRANCE AREA		
	Main(OPD) Entrance				Main Entry				In patient/OPD (Medicine/General)	Ground fl.	14.60
	Trolley park-2	Ground fl.	9.00		Lobby	Ground fl.	108		reception	Ground fl.	14.20
	General waiting	Ground fl.	30.00		Reception	Ground fl.	36		records	Ground fl.	14.20
	Reception	Ground fl.	30.00		Records	Ground fl.	9		doctors rest	Ground fl.	24.80
	Arcade				Hospital Admin. Entry				toilet	Ground fl.	5.80
	shops-4	Ground fl.	48.00		Waiting	Ground fl.	60.75		socialworker	Ground fl.	16.50
	Pharmacy	Ground fl.	99.00		Toilet	Ground fl.	5.625		discussion room	Ground fl.	67.93
	Catetaria	Ground fl.	99.00		Information	Ground fl.	5.625		In patient/OPD (surgery/speciality)	Ground fl.	14.60
	Emergency Entrance				Visitors Entry				Reception	Ground fl.	14.20
	Trolley park-2	Basement	9.00		Information	Ground fl.	18		records	Ground fl.	14.20
	General waiting	Basement	30.00		Waiting	Ground fl.	36		Emergency & casualty Block		
	Reception	Basement	30.00		Conference/seminar	Ground fl.	36		reception & waiting	Ground fl.	19.63
	Services Entrance				Statistical Research	Ground fl.	36		store	Ground fl.	5.00
	Staff Entrance	Basement	9.00		Medical records	Ground fl.	36		trolley park	Ground fl.	5.60
		Basement	9.00		Library	Ground fl.	54		toilet public	Ground fl.	7.27
					Store	Ground fl.	36		Common in/out registration area	Basement	41.54
					OPD Entry	Ground fl.			Canteen	Ground fl.	228.45
					Registration	Ground fl.	18		Pharmacy	Ground fl.	38.81
					Emergency Entry						
					Waiting	Ground fl.	36				
					Shopping arcade	Ground fl.	45				
	Total		402.00		Total		576.00		Total		518.93
B	AMBULATORY CARE AREA			B	AMBULATORY CARE AREA			B	AMBULATORY CARE AREA		
	Screening Clinics				Screening OPD				Consultancy (gen medicine)-1		
	Exam/consultation-4	Ground fl.	72.00		Screening clinics-2	Ground fl.	36		waiting-2	Ground fl.	58.94
	registration	Ground fl.	48.00		Waiting	Ground fl.	72		Clinics-7	Ground fl.	99.40
	sub waiting	Ground fl.	60.00		Plaster Floor	Ground fl.	18		nurse station	Ground fl.	14.20
	General Clinics				Plaster Cutting	Ground fl.	18		Consultancy (gen medicine)-2		
	Exam/consultation-4	Ground fl.	72.00		Inject/Treatment room	Ground fl.	18		waiting	Ground fl.	58.94
	sub waiting	Ground fl.	54.00		General OPD	First fl.	18		Clinics-7	Ground fl.	99.40
	clean utility-2	Ground fl.	27.00		Records-2	First fl.	18		nurse station	Ground fl.	14.20
	dirty utility	Ground fl.	9.00		Registration	First fl.	18		Consultancy (part time specialist)		
	Nurse station				Waiting	First fl.	180		waiting	Ground fl.	58.94
		Ground fl.	9.00		Clinics-8	First fl.	144		General surgery	Ground fl.	14.20

AREA DISTRIBUTION				AREA DISTRIBUTION				AREA DISTRIBUTION			
S. No.	Name of Space	Level	Total Area	S. No.	Name of Space	Level	Total Area	S. No.	Name of Space	Level	Total Area
	Dedicated Clinics										
	Dental-2	Ground fl.	18.00		Treatment	First fl.	18		Anesthetist	Ground fl.	14.20
	lab/xray	Ground fl.	18.00		Injection	First fl.	18		Pediatrics	Ground fl.	14.20
	Ent-2	Ground fl.	36.00		Speciality OPD				Ob/Gyn	Ground fl.	14.20
	audio + speech	Ground fl.	18.00		Waiting	First fl.	180		ophthalmology	Ground fl.	18.00
	sub waiting	Ground fl.	45.00		Treatment-2	First fl.	36		Dentist	Ground fl.	14.20
	Ophthalmology-2	Ground fl.	36.00		Eye	First fl.	18		ENT	Ground fl.	18.00
	minor surgery/treatment	Ground fl.	42.00		Dental	First fl.	18		Audiometry	Ground fl.	9.70
	sub waiting	Ground fl.	18.00		ENT	First fl.	18		Nurse station	Ground fl.	10.43
	Treatment	Ground fl.	13.50		Pediatrics	First fl.	18		Consultancy (part time specialist)		
	clean utility	Ground fl.	4.50		Immunisation	First fl.	18		waiting	Ground fl.	58.94
	dirty utility	Ground fl.	9.00		RCH	First fl.	18		Clinics-5	Ground fl.	71.00
	Exam/consultation-4	Ground fl.	72.00		Family Planning	First fl.	18		nurse station	Ground fl.	14.20
	sub waiting	Ground fl.	36.00		Maternity	Toilet	4.5		tests	Ground fl.	14.20
	treatment-2	Ground fl.	27.00		Stores-2	Toilet	4.5		ECG	Ground fl.	14.20
	clean utility-2	Ground fl.	9.00								
	dirty utility	Ground fl.	9.00								
	Nurse station	Ground fl.	9.00								
	ECG Room	Ground fl.	9.00								
	Sample collection	Ground fl.	9.00								
	Toilet (female)	Ground fl.	18.00								
	Toilet (male)	Ground fl.	18.00								
	Total		843.00		Total		954.00		Total		703.69
C	DIAGNOSTIC SERVICES			C	DIAGNOSTIC SERVICES			C	DIAGNOSTIC SERVICES		
	Imaging				Imaging				Imaging		
	Reception	Ground fl.	18.00		Registration	Basement	18		waiting	Ground fl.	37.38
	sub waiting	Ground fl.	63.00		Waiting	Basement	18		reception records	Ground fl.	20.12
	Patient preparation	Ground fl.	9.00		Waiting	Basement	108		Toilet	Ground fl.	4.20
	CT scan	Ground fl.	27.00		Ultrasound	Basement	33.75		change	Ground fl.	4.20
	Control	Ground fl.	13.50		Change	Basement	2.25		Gen. Xray	Ground fl.	17.80
	Special Xray	Ground fl.	27.00		X Ray room-2	Basement	54		Special Xray	Ground fl.	30.24
	general Xray	Ground fl.	27.00		Dark room	Basement	4.5		Dark room	Ground fl.	8.60
	ultra sound	Ground fl.	18.00		Change-2	Basement	9		reporting	Ground fl.	12.00
	Record	Ground fl.	13.50		Technicians room	Basement	18		waiting	First fl.	37.38
	Report	Ground fl.	4.50		Duty room	Basement	18		reception & records	First fl.	20.12
	Report writing/computers	Ground fl.	81.00		Consultant	Basement	18		toilet	First fl.	4.20
	Dark room	Ground fl.	9.00		Waiting	Basement	18		change	First fl.	4.20
	Doctors room	Ground fl.	9.00						Ultrasound	First fl.	17.80
									CT scan	First fl.	24.00
									Control	First fl.	6.24
									store	First fl.	8.60
									Radiologist	First fl.	12.00
	Clinical Labs				Labs & Blood Bank	First fl.	216		Pathology lab		
	Sample collection	First fl.	18.00						Waiting	Third fl.	31.00
	Emergency lab	First fl.	18.00						Toilet	Third fl.	6.38

AREA DISTRIBUTION				AREA DISTRIBUTION				AREA DISTRIBUTION			
S. No.	Name of Space	Level	Total Area	S. No.	Name of Space	Level	Total Area	S. No.	Name of Space	Level	Total Area
	store	First fl.	18.00								
	consultant	First fl.	18.00						Sample collection	Third fl.	9.35
	records	First fl.	18.00						Reports	Third fl.	9.35
	Technician's rest room	First fl.	18.00						Lab	Third fl.	94.90
	Wash	First fl.	18.00								
	Media preparation	First fl.	18.00								
	labs	First fl.	72.00								
	Blood Bank										
	Rest	Ground fl.	36.00								
	reception	Ground fl.	4.50								
	bleed	Ground fl.	18.00								
	lab	Ground fl.	13.50								
	Total		607.50		Total		535.50		Total		420.06
D	INTERMEDIATE CARE AREA			D	INTERMEDIATE CARE AREA			D	INTERMEDIATE CARE AREA		
	Dirty Utility-2	Second fl.	13.50		Day room	Second fl.	90		General Wards	Third fl.	70.56
	Clean Utility-2	Second fl.	15.00		General Wards	Second fl.	63		Day room-2	Third fl.	19.40
	Linen Store-2	Second fl.	13.50		Trolley bay-2	Second fl.	36		Trolley park-2	Third fl.	19.40
	General Wards-(4beds x 6)x2	Second fl.	333.00		Ward store-2	Second fl.	36		Pantry-2	Third fl.	19.40
	Single Rm/Pvt.Ward/isolation-4	Second fl.	54.00		Ward Pantry-2	Second fl.	36		Store-2	Third fl.	19.40
	Nurse Station-2	Second fl.	24.00		Nurse station-2	Second fl.	72		Nurse station-2	Third fl.	56.62
	Pantry-2	Second fl.	15.00		Wards-14	Second fl.	612		Clean utility-2	Third fl.	13.00
	Double room-4	Second fl.	54.00		Isolation-4	Second fl.	72		Dirty utility-2	Third fl.	13.00
	dayroom-2	Second fl.	54.00		toilets-4	Second fl.	9		Doctor duty-2	Third fl.	37.38
	Treatment-2	Second fl.	39.00		Toilets-4	Second fl.	135		Equipment store-2	Third fl.	6.78
	patient toilet-22	Second fl.	114.84						Procedure room-2	Third fl.	38.80
	Doctors rest room	Second fl.	18.00						Medical wards (f)(5x4 beds)	Third fl.	38.80
	Toilet	Second fl.	4.50						Medical wards (m)(6x4 beds)	Third fl.	141.90
	Nurse rest room	Second fl.	18.00						Surgery wards (f)(2x4 beds)	Third fl.	170.28
	Waiting	Second fl.	4.50						Surgery wards (m)(3x4 beds)	Third fl.	56.76
			18.00						Geriatric wards (2x4 beds)	Third fl.	85.14
									Isolation wards (2x4 beds)	Third fl.	56.76
									Patient Room Toilets-20	Third fl.	56.76
									Pvt. Ward-medical	Third fl.	111.20
									Executive room	Second fl.	18.33
									pantry	Second fl.	5.00
									Nurse station	Second fl.	18.33
									Clean utility	Second fl.	4.32
									Dirty utility	Second fl.	4.32
									Single rooms-6	Second fl.	115.80
									toilets-6	Second fl.	30.00
									balconey-6	Second fl.	24.84
									Pvt. Ward-surgery		
									Executive room	Second fl.	18.33
									pantry	Second fl.	5.00
									Nurse station	Second fl.	18.33
									Clean utility	Second fl.	4.32
									Dirty utility	Second fl.	4.32

AREA DISTRIBUTION				AREA DISTRIBUTION				AREA DISTRIBUTION			
S. No.	Name of Space	Level	Total Area	S. No.	Name of Space	Level	Total Area	S. No.	Name of Space	Level	Total Area
									Single rooms-6	Second fl.	115.80
									toilets-6	Second fl.	30.00
									balconey-6	Second fl.	24.84
	Total		792.84		Total		1,125.00		Total		1,454.22
E	INTENSIVE CARE AREA			E	INTENSIVE CARE AREA			E	INTENSIVE CARE AREA		
	Dirty Utility	First fl.	7.20		Relatives waiting	Fourth fl.	90		Visitors waiting	Second fl.	19.29
	Clean Utility	First fl.	7.20		ICU				ICU		
	Sluice Room	First fl.	7.20		Trolley bay	Fourth fl.	45		viewing gallery	Second fl.	81.29
	Linen Store	First fl.	7.20		Ward store	Fourth fl.	18		pantry	Second fl.	6.50
	Patients area	First fl.	194.40		Ward Pantry	Fourth fl.	18		change	Second fl.	4.30
	Patient Monitoring	First fl.	21.60		Nurse station	Fourth fl.	36		Patients area (8 beds)	Second fl.	117.12
	Toilet	First fl.	7.20		Wards-7	Fourth fl.	288		Nurse station	Second fl.	20.52
	Change	First fl.	7.20		Isolation-2	Fourth fl.	36		toilet	Second fl.	4.30
	Equipment park-2	First fl.	16.20		toilets-2	Fourth fl.	4.5		store	Second fl.	6.50
	Pantry	First fl.	7.20		Toilets-2	Fourth fl.	67.5				
	Procedure room	First fl.	39.00		Total		603.00		Total		259.82
	Total		321.60		Total		603.00		Total		259.82
F	CRITICAL CARE AREA			F	CRITICAL CARE AREA			F	CRITICAL CARE AREA		
	Disposal-2	Basement	13.50		Triage	Ground fl.	27		resuscitation/ward	Ground fl.	44.19
	Setup (clean utility)-2	Basement	13.50		BID	Ground fl.	9		toilet	Ground fl.	3.51
	Linen Store	Basement	9.00		Police	Ground fl.	9		plaster room	Ground fl.	20.27
	Exam/Resuscitation beds	Basement	36.00		Treatment	Ground fl.	15.75		scrub	Ground fl.	5.20
	resuscitation observation	Basement	36.00		Change	Ground fl.	2.25		change	Ground fl.	7.00
	recovery	Basement	36.00		Observation	Ground fl.	36		minor OT	Ground fl.	40.12
		Basement	36.00		Doctor on call	Ground fl.	18		disposal	Ground fl.	5.70
	Nurse Station	Basement	18.00		Toilet	Ground fl.	2.25		doctor duty	Ground fl.	15.90
	Dirty Utility	Basement	6.00		Nurse room	Ground fl.	22.5		toilet	Ground fl.	3.65
	Clean Utility	Basement	6.00		Clean Utility	Ground fl.	2.25		nurse station	Ground fl.	25.00
	Toilet	Basement	6.00		Emergency OT	Ground fl.	18		clean utility	Ground fl.	6.50
	pantry	Basement	9.00		Change	Ground fl.	27		dirty utility	Ground fl.	6.50
	Change	Basement	9.00		Scrub	Ground fl.	4.5		toilet	Ground fl.	3.65
	plaster/treatment room	Basement	36.00		X Ray	Ground fl.	4.5		procedure room	Ground fl.	15.30
	O. T.	Basement	36.00		Change room	Ground fl.	21		dressing room	Ground fl.	15.30
	scrub/equipment park-2	Basement	24.00		Dark room	Ground fl.	5.625		Asst medical officer	Ground fl.	15.30
	Change-2	Basement	12.00		Ultrasound	Ground fl.	9.375		Chief medical officer	Ground fl.	15.30
	Doctors rest room	Basement	18.00		ECG room	Ground fl.	11.25				
	Toilet	Basement	2.50		Total		249.30		Total		248.39
	Total		326.50		Total		326.50		Total		248.39
G	THERAPEUTIC SERVICES			G	THERAPEUTIC SERVICES			G	THERAPEUTIC SERVICES		
	Day Care				Physiotherapy	Basement	180		Physiotherapy		
	lounge	First fl.	42.00		waiting				waiting	Second fl.	8.00
	surgeon-2	First fl.	36.00		toilet				toilet	Second fl.	5.85
	store	First fl.	9.00		physiotherapist				physiotherapist	Second fl.	38.81
	Change	First fl.	9.00		gymnasium				gymnasium	Second fl.	56.07
	Nurse Station	First fl.	18.00		procedure room				procedure room	Second fl.	38.81
	Clean utility	First fl.	6.00								

AREA DISTRIBUTION				AREA DISTRIBUTION				AREA DISTRIBUTION			
S. No.	Name of Space	Level	Total Area	S. No.	Name of Space	Level	Total Area	S. No.	Name of Space	Level	Total Area
	Kitchen	Basement	157.50		Kitchen	Basement	180		Kitchen	Basement	120.93
									Ambulance Station		
									drivers rest	Ground fl.	23.30
									drivers call	Ground fl.	33.64
									WC & bath	Ground fl.	12.21
									control room	First fl.	26.38
									incharge	First fl.	23.61
	Total		709.50		Total		693.00		Total		738.65
I	ENGINEERING SERVICES			I	ENGINEERING SERVICES			I	ENGINEERING SERVICES		
	Electrical room	Basement	54.00		Electrical room	Basement	117		Electrical Panel room	Basement	125.61
	Water supply/Pump Room	Basement	54.00		Water supply & pumps	Basement	24				
	D.G. Room	Basement	54.00		DG room	Basement	72		DG Set	Basement	43.42
	HVAC Room	Basement	94.50		AC plant room	Basement	72		AC plant room	Basement	140.95
	AHU room(Bsmt.)-4	Basement	72.00		AHU room(Bsmt.)-3	Basement	36				
	AHU room(Gr. Floor)-4	Ground fl.	67.50		AHU room(Gr. Floor)-4	Ground fl.	54				
	AHU room(First Floor)-4	First fl.	66.00		AHU room(First Floor)-3	First fl.	45				
					AHU room(Sec. Floor)	Second fl.	9				
					AHU room(Third Floor)	Third fl.	9				
					AHU room(Fourth Floor)	Fourth fl.	9				
	Incinerator	Basement	36.00		Incinerator	Basement	45		incinerator	Basement	22.51
	Total		498.00		Total		564.00		Total		377.55
J	CORRIDORS			J	CORRIDORS			J	CORRIDORS		
	Corridors		3,127.70		Corridors		2,495.20		Corridors		3,633.82
	Elevators		80.00		Elevators		216.00		Elevators		134.25
	Ramp		352.00		Ramp		-		Ramp		-
	Staircase		156.00		Staircase		216.00		Staircase		323.40
	Total		3,715.70		Total		2,927.20		Total		4,091.27
K	TOILETS			K	TOILETS			K	TOILETS		
	Toilet (male)	Basement	15.50		Toilets public (Bsmt. fl.)		54.00		Toilets public	Ground fl.	66.40
	Toilet (female)	Basement	15.50		Toilets public (Ground fl.)		126.00		Toilets public (Admin Block)	First fl.	33.20
	Toilet (male)	Ground fl.	18.00		Toilets public (First fl.)		198.00		Toilets public (Ob/Gynae Block)	First fl.	33.20
	Toilet (female)	Ground fl.	18.00		Toilets public (Second fl.)		18.00		Toilets public (ICU Block)	Second fl.	17.13
	Toilet (male)	First fl.	27.00		Toilets public (Third fl.)		18.00		Toilets public (OT Block)	Second fl.	17.13
	Toilet (female)	First fl.	27.00		Toilets public (Fourth fl.)		18.00		Total		167.06
	Total		121.00		Total		492.00		Total		167.06
L	ADMIN & ANCILLARY			L	ADMIN & ANCILLARY			L	ADMIN & ANCILLARY		
	Staff room(entry-1)	Basement	18.00		MS office	Ground fl.	24.75		Administration		
	Staff change	Basement	54.00		Toilet	Ground fl.	4.5		Reception	First fl.	13.50
	Staff room(entry-2)	Basement	18.00		PA	Ground fl.	6.75		utilities	First fl.	14.20
	Medical Records	Basement	81.00		Asstt. MS	Ground fl.	14.625		Visitors lobby	First fl.	29.22
	Supervisor's Office	Basement	27.00		Toilet	Ground fl.	3.375		records	First fl.	14.20
	MS	First fl.	18.00		Nursing Suptd.	Ground fl.	14.625		Officers-6	First fl.	85.20
	Officers-4	First fl.	36.00		General administration-2	Ground fl.	3.375		CMO	First fl.	33.26
	Matron	First fl.	18.00				63		Sec to CMO	First fl.	13.50

AREA DISTRIBUTION				AREA DISTRIBUTION				AREA DISTRIBUTION			
S. No.	Name of Space	Level	Total Area	S. No.	Name of Space	Level	Total Area	S. No.	Name of Space	Level	Total Area
	Sub waiting-2	First fl.	13.00						toilet	First fl.	4.12
	Offices	First fl.	143.00						Matron	First fl.	18.70
	library/conference	First fl.	66.00						Asst. matron	First fl.	18.70
	Snacks	First fl.	9.00						Nursing Suptd.	First fl.	18.70
	Info.	First fl.	9.00						Conference	First fl.	77.30
									Lounge	First fl.	27.90
									toilet	First fl.	11.53
									Library	First fl.	205.61
									librarian	First fl.	15.30
									Staff Change (m)	First fl.	57.50
									Staff Change (f)	First fl.	57.50
									Records	Second fl.	105.90
									Lab incharge	Third fl.	28.38
									Toilet	Third fl.	5.56
									Admin room	Third fl.	28.38
										Third fl.	5.56
									Total	Third fl.	889.72
									Total		135.00
									GRAND TOTAL		10,782.00
									GRAND TOTAL		11,609.65

CHAPTER – 7 THE PROPOSED COST MODEL

- 7.1 The Proposed Cost Model
- 7.2 Exclusions from the Cost Model
- 7.3 Assumptions for Cost Estimation
 - 7.3.1 Finishes
 - 7.3.2 Services
- 7.4 The Cost of Structure including Walls & Infill Panels etc.
- 7.5 Elemental Costing for Finishes, Services, Equipment & Furniture
- 7.6 The Proposed Cost Model
- 7.7 Validation of the proposed Cost Model on the Case-Studies conducted

CHAPTER – 7 THE PROPOSED COST MODEL

Another model of Costing

As explained in the previous chapters, the elemental cost models are a much more rational method of cost modelling than the itemised cost models at the early stages of development of a project.

The reason why itemised cost models are used in the profession is that they have become a general practice and people have got used to them. It is just a matter of convention and practice. Thus, itemised cost models are a matter of routine, which is understood by all the traditional estimators, quantity surveyors, architects, contractors, and their vendors/sub-contractors etc.

Elemental cost modelling as a tool and technique is understood primarily by the construction managers and project managers, and is not very well established tool and technique to be used by the hospital consultants, planners, architects, and the contractors.

7.1 The Proposed Cost Model

The proposed cost model is primarily an analytical tool used to determine the amount of resources being consumed by each of the areas. A lot of managerial decisions are taken based on the data generated by this analysis. The data thus generated has been analysed and presented in the form of the enclosed work sheets.

The proposed cost model is a rich mix of the time-tested stability of the CPWD works rates for a hospital building and the vibrant character of modern building services; and medical facilities planning and design, including equipment.

A proposed 100 bed Multi-Speciality hospital (REX Hospital, Chennai) in Chennai has been chosen as the Design Model and the cost modelling approach is applied over the Design Model (REX hospital, Chennai) to arrive at the cost model. Since the cost calculations for the proposed cost model take the aid of CPWD Plinth Area Rates and the DSR (Delhi Schedule of Rates) for some elements like the calculation of structure and finishes, the design model is assumed to be in Delhi, India. The functional programme, medical programme, equipment schedule of the proposed hospital model draws its outline from the IS standard (IS12433 part 2) customized to

modern day requirements by the hospital consultants, project managers to meet the client's requirement and budget.

The list of furniture, finishes proposed and the extent and level of building services proposed for the design model of 100 bed Multi-Speciality hospital are a reflection of the present day minimum functional requirements and socially acceptable standards.

7.2 Exclusions from the Cost Model

- Cost of Consultants and Consultancy fees
- Cost of Land
- External site development & external services works
- Civil works for foundations of Transformers, DG Sets, Chiller Machines, Pumps, Cooling Towers, AHUs and Ventilation Fans
- Thermal insulation for terraces above air-conditioned areas exposed to sun
- Associated civil works for elevators like sills, architraves, hoisting beams
- All type of woodwork
- Special hospital lighting fixtures and fittings. (OT lamps included in equipment list)
- Kitchen hoods and cooking utensils
- Fax, photocopiers and other office automation accessories
- Vehicles, Ambulances etc.
- Telecom equipments like VSAT, modems etc.
- Deposits and charges for power, telephone, water, sewage and cable connections
- Miscellaneous expenditures on approvals from Govt. agencies
- Works contract tax
- Escalations
- Recurring expenditure and consumables
- Preliminary and pre-operative expenses
- Margin money for working capital

7.3 Assumptions for Cost Estimation

7.3.1 Finishes

- i. Cost of Over Head Tank included since it is proposed to be in RCC; thus built into the structure
Cost of Under Ground Tank included since it is the only mandatory RCC structure to be necessarily built in all cases.
Area wise Cost loading of structure @ plinth area proportions
2. External Finish Area @ 150% of plan area (2902 sqm.) = 4353 sqm.
Area wise Cost loading @ plinth area proportions
3. Doors/windows @ 15% of plinth area.
Anodised aluminium powder coated doors/windows @ Market rate
4. Floor finish area @ 100% plinth area
5. Ceiling finish area @ 100% plinth area
6. Wall area @ 150% plinth area (floor ht. 3.6m);
175% plinth area (floor ht. 4.2m);
187.50% plinth area (floor ht. 4.5m)
7. Paint area @ Wall area x (Ceiling ht - ht. Dado)/ ht. Wall
8. Dado area @ Wall area x ht. Dado/ ht. Wall

7.3.2 Services

1. AC Load (Tons) @ 15 sqm/ton (general areas, chambers etc.);
10 sqm/ton (procedure rooms etc.);
7.5 sqm/ton (OTs etc)
Rate = Rs. 50,000/- per ton

2. Mechanical Ventilation @ nos. as per area requirement
Rate = Rs. 30,000/- per point
3. Ceiling Fans @1nos./ 9sqm.only wherever required
Rate = Rs. 10,000/- per point
4. Light Pts. @ 150 lux (general lighting);
300 lux (consultancy/examination/observation rooms etc.);
500 lux (treatment/procedure rooms etc.)
Area x Lux level = lumens;
No. of Light pts = lumens/2250 (1 Fl. Tubelight =2250 lumens)
Rate = Rs. 10,000/- per point
5. 15 Amp (6-pin) @nos. as per area requirement
Rate = Rs. 10,000/- per point
6. 30 Amp @nos. as per area requirement
Rate = Rs. 10,000/- per point
7. UPS @nos. as per area requirement
Rate = Rs. 7,500/- per point
8. Telecom @nos. as per area requirement
Rate = Rs. 5,500/- per point
9. Fire Detectors @1 nos./ 18 sqm. all over
Rate = Rs. 6,000/- per point
10. Sprinkler @1 nos./ 9 sqm. all over
Rate = Rs. 6,500/- per point
11. PA system @1nos./36 sqm. only wherever required
Rate = Rs. 5,500/- per point

12. Nurse call @per bed, per patients toilet, per room as required
Rate = Rs. 12,000/- per point
13. Cable TV @per room wherever required
Rate = Rs. 16,000/- per point
14. CCTV @corridors, nursery, entrance
Rate = Rs. 20,000/- per point
15. Medical Gases @per bed , per area as required
Rate = Rs. 12,500/- per point
16. Elevators (L.S Rs. 8,000,000.00/-);
Area wise Cost loading @ plinth area proportions

7.4 The Cost of Structure including Walls & Infill Panels etc.:

Step – 1: By applying the CPWD plinth area rate method on the design model, the total cost of civil works (including finishes as proposed for a hospital building by CPWD) can be arrived at (refer Cost Sheet – 1).

Step – 2: Since the extent of services and finishes as proposed by the CPWD manual may not be valid and functionally accurate as per the modern building requirements, it would be safe to eliminate the same and provide a more correct set of costs for services and finishes.

The CPWD PAR identifies and specifies the various finishes proposed with respect to the different functional areas of the hospital. It is these sets of finishes that are an integral part of the cost provided for by the PAR notification.

i) Since we have a design model at hand, we can overlay the schedule of finishes as provided by CPWD in order to obtain the quantities of finishes as per CPWD PAR (refer Data Sheet – 1).

ii) The rates of these are then calculated on an elemental basis using the DSR 2002 or the Market Rates as applicable. This provides us with an accurate total cost of finishes as per CPWD PAR model, for the design (refer Cost Sheet – 2).

Step – 3: We can then arrive at the cost of the structure including walls, plaster and such components by subtracting the total cost of finishes (as per PAR specifications) from the CPWD PAR cost of civil works (refer Cost Sheet – 3).

7.5 Elemental Costing for Finishes, Services, Equipment & Furniture

i) The entire set of finishes proposed for the design model is identified and quantified on a sub-component level, based on certain assumptions, as per the design model.

ii) The elemental approach to cost modelling has been developed to calculate the cost of services, as is actually required on a functional basis.

A systems and sub-systems approach has been adopted for the HVAC services; The Systems and parametric approach has been adopted for Electrical services, Parametric approach to the costing of Communications system, Nurse Call system, Public Address system, Fire Detection and Suppression system, and LAN system has been used.

The cost of Sanitary and Plumbing services has been calculated on a per toilet basis.

The parametric approach to the costing of Central Medical Gases system has been adopted.

The cost of Instruments, Equipment and Furniture has been done on unit basis after recognizing the needs of various functional areas as per the equipment programme for a 100 bed Multi-Speciality hospital as provided by the consultants and the current medical trends.

iii) This elemental analysis is then used to arrive at the rates for each type of **Finish (refer Data Sheet 2)**; and **Services (refer Data Sheet 3)**; as also the **Equipment & Furniture proposed (refer Data Sheet 4)** in the design model of a 100 bed Multi-Speciality hospital.

The cost of desirable **Finishes (refer Cost Sheets 4 -13)**; the cost of desirable **Services (refer Cost Sheets 14-20)**, cost of **Equipment and Furniture (refer Cost Sheets 21- 23)** , cost of **Sanitary And Plumbing Services (cost sheets 24 -26)** so achieved, is a true and most appropriate picture that can be proposed at the concept stage of a hospital's development.

7.6 THE PROPOSED COST MODEL

The sum total of the cost of Structure including infill panels, cost of finishes, cost of services, and cost of equipment & furniture including the contingencies gives us the Total Project Cost (refer Summary Sheet - 1).

The proposed model is a combination of the various sets of costs identified under the heads of structure, finishes, services and equipment & furniture, as detailed in the tables above and the cost summary sheets enclosed.

The model gives the total project cost; and in its present state of development, it can be applied to determine the cost of structure, finishes, services and equipment & furniture. The cost model developed, has this inherent quality that it can be applied on schemes that are at the inception stage of development.

7.7 Validation of the proposed Cost Model on the Case Studies conducted

The proposed cost model based on the design model (REX Hospital, Chennai), need to be validated on practical grounds by comparing the same with the cost data of the 100 bed multi-Speciality hospitals under function i.e the other two case studies conducted (City hospital & Indian Hospital at Chennai) by the author as part of the research. For total cost breakdown in terms of structure, finishes, services, equipment and furniture cost, Refer table no- 1 & 2 & 3 to follow:

Cost Data - INDIAN HOSPITAL, Chennai, 100 bedded (In INR.)			
S.NO	PARTICULARS	SUB-TOTAL	(%) OF TOTAL COST
1.	CIVIL WORKS	85,800,800	28.09 %
2.	SERVICES COST	90,600,650	41.57 %
3.	EQUIPMENT & FURNITURE	58,050,000	30.34 %
	TOTAL COST	234451450	2344514.50 / Bed

Table 1: Cost Distribution, Indian Hospital, Chennai

Source: Project Managers, CB Richard Ellis, Project and Development Services, Chennai

Cost Data - CITY HOSPITAL, Chennai, 105 bedded (In INR.)			
S.NO	PARTICULARS	SUB-TOTAL	(%) OF TOTAL COST
1.	CIVIL WORKS	89,700,990	36.87 %
2.	SERVICES COST	92,500,500	38.02 %
3.	EQUIPMENT & FURNITURE	61,110,000	25.11 %
	TOTAL COST	243311490	2317252 / Bed

Table 2: Cost Distribution, City Hospital, Chennai

Source: Project Managers, Jones Lang LaSalle, Project and Development Services, Chennai

Cost Data – PROPOSED COST MODEL, 109 bedded (In INR.)			
S.NO	PARTICULARS	SUB-TOTAL	(%) OF TOTAL COST
1.	CIVIL WORKS	96,977,743.11	37.69 %
2.	SERVICES COST	95,889,610.40	37.27 %
3.	EQUIPMENT & FURNITURE	64,435,775.80	25.04%
	TOTAL COST	257,303,129.31	2360580 / Bed

Table 3: Cost Distribution, PROPOSED COST MODEL based on REX Hospital in Chennai, assumed to be in Delhi, India for cost computations.

The tabulations done above shows, in comparison to the INDIAN Hospital and CITY Hospital, the PROPOSED COST MODEL gives a higher cost (safer) of **2360580 INR. Per Bed** of the Design Model Chosen (REX Hospital, assumed to be in Delhi). So, the client or the developer referring the particular cost model to arrange for funds at the inception stage of the project will be at a safer stage to start the project.

109-BED HOSPITAL, NEW DELHI

COST OF CIVIL WORKS-BASED ON CPWD PLINTH AREA RATES

Cost of Over Head Tank included since it is proposed to be in RCC; thus built into the structure

Cost of Under Ground Tank included since it is the only mandatory RCC structure to be necessarily built in all cases

S.NO.	PARTICULARS	QUANTITY	UNIT	RATE	AMOUNT (Rs.)	REFERENCE
1.0	R.C.C. FRAMED STRUCTURE					
1.1	R.C.C. Framed Structure upto 6 stories height					
1.1.1	Floor Height 3.35 m	7,016.84	sq.m.	2,920.00	20,489,172.80	CPWD PAR
1.2	Extra for:					
1.2.1	Every 0.3m addl. ht. of floor above normal floor ht. of 3.35m					
	i) Ground Floor (3.6-3.35)x125/0.3	2,830.00	sq.m.	104.17	294,791.67	CPWD PAR
	ii) First Floor (4.2-3.35)x125/0.3	2,806.00	sq.m.	354.17	993,791.67	CPWD PAR
	iii) Second Floor (3.6-3.35)x125/0.3	1,380.84	sq.m.	104.17	143,837.50	CPWD PAR
1.2.2	Every 0.3m higher plinth over normal plinth height of 0.6m	-	sq.m.	125.00	-	CPWD PAR
1.2.3	Resisting Earthquake forces	9,918.84	sq.m.	250.00	2,479,710.00	CPWD PAR
1.2.4	Larger Modules Above 35 sq.m.	9,546.00	sq.m.	220.00	2,100,120.00	CPWD PAR
1.2.5	Termite Proof Treatment	-	sq.m.	75.00	-	CPWD PAR
1.2.6	R.C.C. Raft Foundation	2,902.00	sq.m.	440.00	1,276,880.00	CPWD PAR
1.2.7	Operation Theatre/O. T. (extra provision)	144.00	sq.m.	475.00	68,400.00	CPWD PAR
1.3	BASEMENT FLOORS					
1.3.1	Floor Ht. 3.35m, normal waterproofing with bitumen felt	2,902.00	sq.m.	4,020.00	11,666,040.00	CPWD PAR
1.4	Extra for Basement:					
1.4.1	Every 0.3 m additional height of floor above normal floor ht. Of 3.35 m = (4.5-3.35) x 490/0.3	2,902.00	sq.m.	1,878.33	5,450,923.33	CPWD PAR
1.5	WATER TANKS (R.C.C only)					
1.5.1	Overhead tank without independent staging	70,000	lts.	4.75	332,500	CPWD PAR
1.5.2	Underground Sump	150,000	lts.	4.75	712,500	CPWD PAR

S.NO.	PARTICULARS	QUANTITY	UNIT	RATE	AMOUNT (Rs.)	REFERENCE
	CIVIL COST AS/CPWD PAR 1992				46,008,666.97	
	Adding for Cost Index for 2006			2.09	96,158,113.96	
	TOTAL (A)				142,166,780.93	
	Adding 3% for Contingencies				4,265,003.43	
	TOTAL CIVIL WORKS COST			Rs.	146,431,784.35	
	TOTAL PLINTH AREA OF HOSPITAL				9,918.84	Sqm.
	COST/Sqm.			Rs.	14,762.99	per Sqm.
	TOTAL NO. OF BEDS				109	Beds
	COST/BED			Rs.	1,343,410.87	per Bed

FINISHES (CPWD PAR MODEL) COSTS - BASED ON DSR-2004

S.NO.	NAME OF SPACE	FLOOR FINISH COSTS				DADO Mosaic	WALL & CEILING COSTS			REFERENCE	
		Terrazzo/ Tile @Rs.384.45	Mosaic (White ccm.) @Rs.217.20	Mosaic (Ordinary) @Rs.180.60	Cement Concrete @Rs.133.60		Plastic Paint @Rs.30.80	Dry Distemper @Rs.19.05	White wash @Rs.4.65		
A	ENTRANCE AREA										
	Main(OPD) Entrance	26,527.05	26,715.60	22,213.80	-	34,432.99	21,171.15	2,575.32	1,885.87		Refer Data Sheet - 1
	Emergency Entrance	26,527.05	-	-	-	8,898.41	5,313.00	821.53	601.59		Refer Data Sheet - 1
	Services Entrance	-	-	-	2,404.80	-	-	-	240.64		Refer Data Sheet - 1
	Total	53,054.10	26,715.60	22,213.80	2,404.80	43,331.40	26,484.15	3,396.85	2,728.10		
B	AMBULATORY CARE AREA										
		-	91,549.80	76,122.90	-	108,715.39	-	7,575.05	6,480.86		Refer Data Sheet - 1
C	DIAGNOSTIC SERVICES AREA										
	Imaging	-	34,697.70	28,850.85	-	41,203.52	-	3,233.44	2,367.79		Refer Data Sheet - 1
	Clinical Labs	-	31,276.80	26,006.40	-	37,141.20	-	2,561.03	2,471.77		Refer Data Sheet - 1
	Total	-	65,974.50	54,857.25	-	78,344.72	-	5,794.47	4,839.56		
D	INTERMEDIATE CARE AREA										
		-	86,102.42	71,593.45	-	102,246.63	-	6,193.63	6,322.42		Refer Data Sheet - 1
E	INTENSIVE CARE AREA										
		-	34,925.76	29,040.48	-	41,474.34	-	3,067.53	2,802.90		Refer Data Sheet - 1
F	CRITICAL CARE AREA										
		-	35,457.90	29,482.95	-	42,106.26	-	2,857.50	3,098.06		Refer Data Sheet - 1
G	THERAPEUTIC SERVICES AREA										
	Day Care	-	35,512.20	29,528.10	-	42,170.74	-	2,443.16	3,014.94		Refer Data Sheet - 1
	Operation Theatre Suite	-	45,362.22	37,718.31	-	53,867.64	-	3,315.80	3,803.61		Refer Data Sheet - 1
	Delivery Suite	-	35,457.90	29,482.95	-	42,106.26	-	2,928.94	3,080.63		Refer Data Sheet - 1
	Total	-	116,332.32	96,729.36	-	138,144.63	-	8,687.90	9,899.17		
H	HOSPITAL SERVICES										
		-	77,051.70	64,067.85	-	91,498.89	-	-	8,247.94		Refer Data Sheet - 1
I	ENGINEERING SERVICES AREA										
		-	-	-	66,532.80	-	-	-	6,501.57		Refer Data Sheet - 1
J	CORRIDORS										
		-	394,837.02	328,303.71	-	1,094,027.58	-	-	30,661.93		Refer Data Sheet - 1
K	TOILETS										
		-	13,140.60	10,926.30	-	15,604.46	-	-	1,312.46		Refer Data Sheet - 1
	Total	-	407,977.62	339,230.01	-	1,109,632.04	-	-	31,974.39		
L	ADMIN & ANCILLARY AREA										
		-	55,386.00	46,053.00	-	65,770.88	-	-	5,747.40		Refer Data Sheet - 1
	GRAND TOTAL	53,054.10	997,473.62	829,391.05	68,937.60	1,821,265.17	26,484.15	37,572.94	88,642.38		

FINISHES SCHEDULE - CPWD PLINTH AREA RATES MODEL

S.NO.	NAME OF SPACE	TOTAL AREA	FLOOR FINISH AREA				DADO AREA		WALL & CEILING AREA			
			Terrazzo Tile	Mosaic (White cem.)	Mosaic (Ordinary)	Cement Concrete	Mosaic till 900	Mosaic till 2100	Plastic Paint	Dry Distemper	White wash	
A	ENTRANCE AREA											
	Main(OPD) Entrance											
	Trolley park-2	9.00	9.00					3.38		19.13		
	General waiting	30.00	30.00					11.25		63.75		
	Reception	30.00	30.00					11.25		63.75		
	Arcade											
	shops-4	48.00	24.00	24.00				-		120.00	30.00	90.00
	Pharmacy	99.00	49.50	49.50				37.13		210.38	52.59	157.78
	Cafeteria	99.00	49.50	49.50				37.13		210.38	52.59	157.78
	Sub-total	315.00	69.00	123.00	-	100.13	-	687.38	-	135.19	405.56	
	Emergency Entrance											
	Trolley park-2	9.00	9.00					3.38		22.50	5.63	16.88
	General waiting	30.00	30.00					11.25		75.00	18.75	56.25
	Reception	30.00	30.00					11.25		75.00	18.75	56.25
	Sub-total	69.00	69.00	-	9.00	9.00	-	25.88	-	172.50	43.13	129.38
	Services Entrance	9.00						-				25.88
	Staff Entrance	9.00						-				25.88
	Sub-total	18.00	-	-	18.00	-	-	-	-	-	-	51.75
	Total	402.00	138.00	123.00	18.00	126.00	-	859.88	-	178.31	586.69	
B	AMBULATORY CARE AREA											
	Screening Clinics											
	Exam/consultation-4	72.00	36.00	36.00				27.00			38.25	114.75
	registration	48.00	24.00	24.00				18.00			25.50	76.50
	sub waiting	60.00	30.00	30.00				22.50			31.88	95.63
	GeneralClinics											
	Exam/consultation-4	72.00	36.00	36.00				27.00			38.25	114.75
	sub waiting	54.00	27.00	27.00				20.25			28.69	86.06
	Treatment-2	27.00	13.50	13.50				10.13			14.34	43.03

S.NO.	NAME OF SPACE	TOTAL AREA	FLOOR FINISH AREA			DADO AREA			WALL & CEILING AREA		
			Terrazzo Tile	Mosaic (White cem.)	Mosaic (Ordinary)	Cement Concrete	Mosaic till 900	Mosaic till 2100	Plastic Paint	Dry Distemper	White wash
	clean utility-2	9.00		4.50	4.50		3.38			-	19.13
	dirty utility	9.00		4.50	4.50		3.38			-	19.13
	Nurse station	9.00		4.50	4.50		3.38			-	19.13
	Dedicated Clinics			-	-					-	-
	Dental-2	18.00		9.00	9.00		6.75			9.56	28.69
	lab/xray	18.00		9.00	9.00		6.75			9.56	28.69
	Ent-2	36.00		18.00	18.00		13.50			19.13	57.38
	audio + speech	18.00		9.00	9.00		6.75			9.56	28.69
	sub waiting	45.00		22.50	22.50		16.88			23.91	71.72
	Ophthalmology-2	36.00		18.00	18.00		13.50			19.13	57.38
	minor surgery/treatment	42.00		21.00	21.00		15.75			22.31	66.94
	sub waiting	18.00		9.00	9.00		6.75			9.56	28.69
	Treatment	13.50		6.75	6.75		5.06			7.17	21.52
	clean utility	4.50		2.25	2.25		1.69			-	9.56
	dirty utility	9.00		4.50	4.50		3.38			-	19.13
	Nurse station	9.00		4.50	4.50		3.38			4.78	14.34
	Ob./Gy./Paed. Clinics			-	-					-	-
	Exam/consultation-4	72.00		36.00	36.00		27.00			38.25	114.75
	sub waiting	36.00		18.00	18.00		13.50			19.13	57.38
	treatment-2	27.00		13.50	13.50		10.13			14.34	43.03
	clean utility-2	9.00		4.50	4.50		3.38			-	19.13
	dirty utility	9.00		4.50	4.50		3.38			-	19.13
	Nurse station	9.00		4.50	4.50		3.38			4.78	14.34
	ECG Room	9.00		4.50	4.50		3.38			4.78	14.34
	Sample collection	9.00		4.50	4.50		3.38			4.78	14.34
	Toilet (female)	18.00		9.00	9.00		6.75			-	38.25
	Toilet (male)	18.00		9.00	9.00		6.75			-	38.25
	Total	843.00	-	421.50	421.50	-	316.13	-	-	397.64	1,393.73
C	DIAGNOSTIC SERVICES AREA			-	-						
	Imaging			-	-						
	Reception	18.00		9.00	9.00		6.75			9.56	28.69

S.NO.	NAME OF SPACE	TOTAL AREA	FLOOR FINISH AREA				DADO AREA		WALL & CEILING AREA		
			Terrazzo Tile	Mosaic (White cem.)	Mosaic (Ordinary)	Cement Concrete	Mosaic till 900	Mosaic till 2100	Plastic Paint	Dry Distemper	White wash
	sub waiting	63.00		31.50	31.50		23.63		33.47	100.41	
	Patient preparation	9.00		4.50	4.50		3.38		4.78	14.34	
	CT scan	27.00		13.50	13.50		10.13		14.34	43.03	
	Control	13.50		6.75	6.75		5.06		7.17	21.52	
	Special Xray	27.00		13.50	13.50		10.13		14.34	43.03	
	general Xray	27.00		13.50	13.50		10.13		14.34	43.03	
	ultra sound	18.00		9.00	9.00		6.75		9.56	28.69	
	Record	13.50		6.75	6.75		5.06		7.17	21.52	
	Report	4.50		2.25	2.25		1.69		2.39	7.17	
	Report writing/computers	81.00		40.50	40.50		30.38		43.03	129.09	
	Dark room	9.00		4.50	4.50		3.38		4.78	14.34	
	Doctors room	9.00		4.50	4.50		3.38		4.78	14.34	
	Sub-total	319.50	-	159.75	159.75	-	119.81	-	169.73	509.20	
	Clinical Labs										
	Sample collection	18.00		9.00	9.00		6.75		10.69	32.06	
	Emergency lab	18.00		9.00	9.00		6.75		10.69	32.06	
	store	18.00		9.00	9.00		6.75		-	42.75	
	consultant	18.00		9.00	9.00		6.75		10.69	32.06	
	records	18.00		9.00	9.00		6.75		10.69	42.75	
	Technician's rest room	18.00		9.00	9.00		6.75		10.69	32.06	
	Wash	18.00		9.00	9.00		6.75		-	42.75	
	Media preparation	18.00		9.00	9.00		6.75		10.69	32.06	
	labs	72.00		36.00	36.00		27.00		42.75	128.25	
	Blood Bank										
	Rest	36.00		18.00	18.00		13.50		19.13	57.38	
	reception	4.50		2.25	2.25		1.69		2.39	7.17	
	bleed	18.00		9.00	9.00		6.75		9.56	28.69	
	lab	13.50		6.75	6.75		5.06		7.17	21.52	
	Sub-total	288.00	-	144.00	144.00	-	108.00	-	134.44	531.56	
	Total	607.50	-	303.75	303.75	-	227.81	-	304.17	1,040.77	
D	INTERMEDIATE CARE AREA										

S.NO.	NAME OF SPACE	TOTAL AREA	FLOOR FINISH AREA				DADO AREA		WALL & CEILING AREA		
			Terrazzo Tile	Mosaic (White cem.)	Mosaic (Ordinary)	Cement Concrete	Mosaic till 900	Mosaic till 2100	Plastic Paint	Dry Distemper	White wash
	Dirty Utility-2	13.50		6.75	6.75		5.06		-		28.69
	Clean Utility-2	15.00		7.50	7.50		5.63		-		31.88
	Linen Store-2	13.50		6.75	6.75		5.06		-		28.69
	General Bed Wards-(4beds x 6)x2	333.00		166.50	166.50		124.88		176.91		530.72
	Single Room/Pvt. Ward/isolation-4	54.00		27.00	27.00		20.25		28.69		86.06
	Nurse Station-2	24.00		12.00	12.00		9.00		12.75		38.25
	Pantry-2	15.00		7.50	7.50		5.63		-		31.88
	Double room-4	54.00		27.00	27.00		20.25		28.69		86.06
	dayroom-2	54.00		27.00	27.00		20.25		28.69		86.06
	Treatment-2	39.00		19.50	19.50		14.63		20.72		62.16
	patient toilet-22	114.84		57.42	57.42		43.07		-		244.04
	Doctors rest room	18.00		9.00	9.00		6.75		9.56		28.69
	Toilet	4.50		2.25	2.25		1.69		-		9.56
	Nurse rest room	18.00		9.00	9.00		6.75		9.56		28.69
	Toilet	4.50		2.25	2.25		1.69		-		9.56
	Waiting	18.00		9.00	9.00		6.75		9.56		28.69
	Total	792.84	-	396.42	396.42	-	297.32	-	325.13	-	1,359.66
E	INTENSIVE CARE AREA										
	Dirty Utility	7.20		3.60	3.60		2.70		-		17.10
	Clean Utility	7.20		3.60	3.60		2.70		-		17.10
	Sluice Room	7.20		3.60	3.60		2.70		-		17.10
	Linen Store	7.20		3.60	3.60		2.70		-		17.10
	Patients area	194.40		97.20	97.20		72.90		115.43		346.28
	Patient Monitoring	21.60		10.80	10.80		8.10		12.83		38.48
	Toilet	7.20		3.60	3.60		2.70		-		17.10
	Change	7.20		3.60	3.60		2.70		-		17.10
	Equipment park-2	16.20		8.10	8.10		6.08		9.62		28.86
	Pantry	7.20		3.60	3.60		2.70		-		17.10
	Procedure room	39.00		19.50	19.50		14.63		23.16		69.47
	Total	321.60	-	160.80	160.80	-	120.60	-	161.03	-	602.78

S.NO.	NAME OF SPACE	TOTAL AREA	FLOOR FINISH AREA			DADO AREA		WALL & CEILING AREA				
			Terrazzo Tile	Mosaic (White cem.)	Mosaic (Ordinary)	Cement Concrete	Mosaic till 900	Mosaic till 2100	Plastic Paint	Dry Distemper	White wash	
F	CRITICAL CARE AREA											
	Disposal-2	13.50		6.75	-		5.06					33.75
	Setup (clean utility)-2	13.50		6.75	6.75		5.06					33.75
	Linen Store	9.00		4.50	4.50		3.38					22.50
	Exam/Resuscitation beds											
	resuscitation	36.00		18.00	18.00		13.50				22.50	67.50

S.NO.	NAME OF SPACE	TOTAL AREA	FLOOR FINISH AREA			DADO AREA			WALL & CEILING AREA		
			Terrazzo Tile	Mosaic (White cem.)	Mosaic (Ordinary)	Cement Concrete	Mosaic till 900	Mosaic till 2100	Plastic Paint	Dry Distemper	White wash
	observation recovery	36.00		18.00	18.00		13.50		22.50		67.50
	Nurse Station	36.00		18.00	18.00		13.50		22.50		67.50
	Dirty Utility	18.00		9.00	9.00		6.75		11.25		33.75
	Clean Utility	6.00		3.00	3.00		2.25		-		15.00
	Toilet	6.00		3.00	3.00		2.25		-		15.00
	pantry	9.00		4.50	4.50		3.38		-		22.50
	Change	9.00		4.50	4.50		3.38		-		22.50
	plaster/treatment room	36.00		18.00	18.00		13.50		22.50		67.50
	O.T.	36.00		18.00	18.00		13.50		22.50		67.50
	scrub/equipment park-2	24.00		12.00	12.00		9.00		15.00		45.00
	Change-2	12.00		6.00	6.00		4.50		-		30.00
	Doctors rest room	18.00		9.00	9.00		6.75		11.25		33.75
	Toilet	2.50		1.25	1.25		0.94		-		6.25
	Total	326.50	-	163.25	163.25	-	122.44	-	150.00	-	666.25
G	THERAPEUTIC SERVICES AREA										
	Day Care										
	lounge	42.00		21.00	21.00		15.75		24.94		74.81
	surgeon-2	36.00		18.00	18.00		13.50		21.38		64.13
	store	9.00		4.50	4.50		3.38		-		21.38
	Change	9.00		4.50	4.50		3.38		-		21.38
	Nurse Station	18.00		9.00	9.00		6.75		10.69		32.06
	Clean utility	6.00		3.00	3.00		2.25		-		14.25
	Dirty utility	6.00		3.00	3.00		2.25		-		14.25
	Toilet	6.00		3.00	3.00		2.25		-		14.25
	Preparation	36.00		18.00	18.00		13.50		21.38		64.13
	change-2	12.00		6.00	6.00		4.50		-		28.50
	recovery	36.00		18.00	18.00		13.50		21.38		64.13
	Procedure room-2	24.00		12.00	12.00		9.00		14.25		42.75
	disposal-2	13.50		6.75	6.75		5.06		-		32.06
	setup-2	13.50		6.75	6.75		5.06		-		32.06

S.NO.	NAME OF SPACE	TOTAL AREA	FLOOR FINISH AREA			DADO AREA			WALL & CEILING AREA		
			Terrazzo Tile	Mosaic (White cem.)	Mosaic (Ordinary)	Cement Concrete	Mosaic till 900	Mosaic till 2100	Plastic Paint	Dry Distemper	White wash
	store-4	24.00		12.00	12.00		9.00			-	57.00
	Scrub/equipment park-2	24.00		12.00	12.00		9.00			14.25	42.75
	change-2	12.00		6.00	6.00		4.50			-	28.50
	Sub-total	327.00	-	163.50	163.50	-	122.63	-	-	128.25	648.38
	Operation Theatre Suite										
	Sterile Store	18.00		9.00	9.00		6.75			-	42.75
	Patient transfer	14.40		7.20	7.20		5.40			8.55	25.65
	Sterile Corridor	43.20		21.60	21.60		16.20			25.65	76.95
	Scrub-2	10.13		5.06	5.06		3.80			6.01	18.04
	Anaesthesia-2	10.13		5.06	5.06		3.80			6.01	18.04
	O.T.-2	70.20		35.10	35.10		26.33			41.68	125.04
	Disposal-2	24.30		12.15	12.15		9.11			-	57.71
	Setup (clean utility)-2	24.30		12.15	12.15		9.11			-	57.71
	PreOperation Area	34.20		17.10	17.10		12.83			20.31	60.92
	Change-3	22.80		11.40	11.40		8.55			-	54.15
	Anaesthisists' Room-1	13.50		6.75	6.75		5.06			8.02	24.05
	Post Operation Recovery	56.25		28.13	28.13		21.09			33.40	100.20
	Nurse Station	12.15		6.08	6.08		4.56			7.21	21.64
	Clean utility	6.08		3.04	3.04		2.28			-	14.43
	Dirty utility	6.08		3.04	3.04		2.28			-	14.43
	Rest Room	29.00		14.50	14.50		10.88			17.22	51.66
	Toilet	5.00		2.50	2.50		1.88			-	11.88
	Pantry	18.00		9.00	9.00		6.75			-	42.75
	Sub-total	417.70	-	208.85	208.85	-	156.64	-	-	174.06	817.98
	Delivery Suite										
	Disposal-2	13.50		6.75	6.75		5.06			-	33.75
	Setup(sterile store)-2	13.50		6.75	6.75		5.06			-	33.75
	Delivery room	36.00		18.00	18.00		13.50			22.50	67.50
	Patient Area										
	Pre natal	36.00		18.00	18.00		13.50			22.50	67.50
	Post natal	36.00		18.00	18.00		13.50			22.50	67.50
	Nurse Station	18.00		9.00	9.00		6.75			11.25	33.75

S.NO.	NAME OF SPACE	TOTAL AREA	FLOOR FINISH AREA				DADO AREA			WALL & CEILING AREA			
			Terrazzo Tile	Mosaic (White cem.)	Mosaic (Ordinary)	Cement Concrete	Mosaic till 900	Mosaic till 2100	Plastic Paint	Dry Distemper	White wash		
	Clean utility	6.00		3.00	3.00			2.25					15.00
	Dirty utility	6.00		3.00	3.00			2.25					15.00
	Toilet	6.00		3.00	3.00			2.25					15.00
	Scrub/equipment park	12.00		6.00	6.00			4.50				7.50	22.50
	Change	6.00		3.00	3.00			2.25					15.00
	O.T.	36.00		18.00	18.00			13.50				22.50	67.50
	Toxemia	18.00		9.00	9.00			6.75				11.25	33.75
	Pantry	9.00		4.50	4.50			3.38					22.50
	Change (Female)	9.00		4.50	4.50			3.38					22.50
	Store	9.00		4.50	4.50			3.38					22.50
	Paedatric nursery	36.00		18.00	18.00			13.50				22.50	67.50
	Nurse Rest Room	18.00		9.00	9.00			6.75				11.25	33.75
	toilet	2.50		1.25	1.25			0.94					6.25
	Sub-total	326.50		163.25	163.25			122.44				153.75	662.50
	Total	1,071.20		535.60	535.60			401.70				456.06	2,128.85
H	HOSPITAL SERVICES												
	C.S.S.D.	84.00		42.00	42.00			31.50					210.00
	Laundry	108.00		54.00	54.00			40.50					270.00
	Medical gases	54.00		27.00	27.00			20.25					135.00
	General Store	99.00		49.50	49.50			37.13					247.50
	Receipt	54.00		27.00	27.00			20.25					135.00
	Medical Store	99.00		49.50	49.50			37.13					247.50
	Autopsy	54.00		27.00	27.00			20.25					135.00
	Kitchen	157.50		78.75	78.75			59.06					393.75
	Total	709.50		354.75	354.75			266.06					1,773.75
I	ENGINEERING SERVICES AREA												
	Electrical room	54.00											155.25
	Water supply/Pump Room	54.00											155.25
	D.G. Room	54.00											155.25
	HVAC Room	94.50											271.69

S.NO.	NAME OF SPACE	TOTAL AREA	FLOOR FINISH AREA				DADO AREA		WALL & CEILING AREA		
			Terrazzo Tile	Mosaic (White cem.)	Mosaic (Ordinary)	Cement Concrete	Mosaic 900	Mosaic till 2100	Plastic Paint	Dry Distemper	White wash
	AHU room(Bsmt.)-4	72.00	-	-	-	72.00	-	-	-	-	207.00
	AHU room(Gr. Floor)-4	67.50	-	-	-	67.50	-	-	-	-	168.75
	AHU room(First Floor)-4	66.00	-	-	-	66.00	-	-	-	-	181.50
	Incinerator	36.00	-	-	-	36.00	-	-	-	-	103.50
	Total	498.00	-	-	-	498.00	-	-	-	-	1,398.19
J	CORRIDORS										
	Corridors	3,127.70	1,563.85	1,563.85	-	-	-	2,736.74	-	-	5,603.80
	Elevators	80.00	-	-	-	-	-	-	-	-	80.00
	Ramp	352.00	176.00	176.00	-	-	-	308.00	-	-	630.67
	Staircase	156.00	78.00	78.00	-	-	-	136.50	-	-	279.50
	Sub-total	3,715.70	1,817.85	1,817.85	-	-	-	3,181.24	-	-	6,593.96
K	TOILETS										
	Toilet (male)	15.50	7.75	7.75	-	-	-	5.81	-	-	38.75
	Toilet (female)	15.50	7.75	7.75	-	-	-	5.81	-	-	38.75
	Toilet (male)	18.00	9.00	9.00	-	-	-	6.75	-	-	38.25
	Toilet (female)	18.00	9.00	9.00	-	-	-	6.75	-	-	38.25
	Toilet (male)	27.00	13.50	13.50	-	-	-	10.13	-	-	64.13
	Toilet (female)	27.00	13.50	13.50	-	-	-	10.13	-	-	64.13
	Sub-total	121.00	60.50	60.50	-	-	-	45.38	-	-	282.25
	Total	3,836.70	1,878.35	1,878.35	-	-	-	3,181.24	-	-	6,876.21
L	ADMIN & ANCILLARY AREA										
	Staff room(entry-1)	18.00	9.00	9.00	-	-	-	6.75	-	-	45.00
	Staff change	54.00	27.00	27.00	-	-	-	20.25	-	-	135.00
	Staff room(entry-2)	18.00	9.00	9.00	-	-	-	6.75	-	-	45.00
	Medical Records	81.00	40.50	40.50	-	-	-	30.38	-	-	202.50
	Supervisor's Office	27.00	13.50	13.50	-	-	-	10.13	-	-	67.50
	MS	18.00	9.00	9.00	-	-	-	6.75	-	-	42.75
	Officers-4	36.00	18.00	18.00	-	-	-	13.50	-	-	85.50
	Matron	18.00	9.00	9.00	-	-	-	6.75	-	-	42.75
	Sub waiting-2	13.00	6.50	6.50	-	-	-	4.88	-	-	30.88

S.NO.	NAME OF SPACE	TOTAL AREA	FLOOR FINISH AREA				DADO AREA		WALL & CEILING AREA		
			Terrazzo Tile	Mosaic (White cem.)	Mosaic (Ordinary)	Cement Concrete	Mosaic till 900	Mosaic till 2100	Plastic Paint	Dry Distemper	White wash
	Offices	143.00	71.50	71.50		53.63			-	339.63	
	library/conference	66.00	33.00	33.00		24.75			-	156.75	
	Snacks	9.00	4.50	4.50		3.38			-	21.38	
	Info.	9.00	4.50	4.50		3.38			-	21.38	
	Total	510.00	255.00	255.00	-	191.25	-	-	-	1,236.00	
	GRAND TOTAL	9,918.84	4,592.42	4,592.42	516.00	2,114.68	3,181.24	859.88	1,972.33	19,062.88	

COST OF STRUCTURE-BASED ON CPWD PLINTH AREA RATES

S.NO.	PARTICULARS	QUANTITY	UNIT	RATE	AMOUNT (Rs.)	REFERENCE
Refer Cost Sheet - 2 for details of finishes						
External Finish Area @ 150% of plan area (2902 sqm.) = 4353 sqm.						
Doors/windows @ 15% of plinth area						
1	R.C.C. FRAMED STRUCTURE					
1.1	R.C.C. Framed Structure upto 6 stories height					
1.1.1	Floor Height 3.35 m	7,016.84	sq.m.	2,920.00	20,489,172.80	CPWD PAR
1.2	Extra for:					
1.2.1	Every 0.3m addl. ht. of floor above normal floor ht. of 3.35m					
	i) Ground Floor (3.6-3.35)x125/0.3	2,830.00	sq.m.	104.17	294,791.67	CPWD PAR
	ii) First Floor (4.2-3.35)x125/0.3	2,806.00	sq.m.	354.17	993,791.67	CPWD PAR
	iii) Second Floor (3.6-3.35)x125/0.3	1,380.84	sq.m.	104.17	143,837.50	CPWD PAR
1.2.2	Every 0.3m higher plinth over normal plinth height of 0.6m	-	sq.m.	125.00	-	CPWD PAR
1.2.3	Resisting Earthquake forces	9,918.84	sq.m.	250.00	2,479,710.00	CPWD PAR
1.2.4	Larger Modules Above 35 sq.m.	9,546.00	sq.m.	220.00	2,100,120.00	CPWD PAR
1.2.5	Termite Proof Treatment	-	sq.m.	75.00	-	CPWD PAR
1.2.6	R.C.C. Raft Foundation	2,902.00	sq.m.	440.00	1,276,880.00	CPWD PAR
1.2.7	Operation Theatre/O.T. (extra provision)	144.00	sq.m.	475.00	68,400.00	CPWD PAR
1.3	BASEMENT FLOORS					
1.3.1	Floor Ht. 3.35 m, normal waterproofing with bitumen felt	2,902.00	sq.m.	4,020.00	11,666,040.00	CPWD PAR
1.4	Extra for Basement:					
1.4.1	Every 0.3 m additional height of floor above normal floor ht. Of 3.35 m = (4.5-3.35) x 490/0.3	2,902.00	sq.m.	1,878.33	5,450,923.33	CPWD PAR
1.5	WATER TANKS (R.C.C only)					
1.5.1	Overhead tank without independent staging	70,000	lts.	4.75	332,500.00	CPWD PAR
1.5.2	Underground Sump	150,000	lts.	4.75	712,500.00	CPWD PAR

S.NO.	PARTICULARS	QUANTITY	UNIT	RATE	AMOUNT (Rs.)	REFERENCE
	CIVIL COST AS/CPWD PAR 1992				46,008,666.97	
	Adding for Cost Index for 2006			2.09	96,158,113.96	
	TOTAL (A)				142,166,780.93	
2	FINISHES ITEMS (AS/CPWD PAR)					
2.1	DOORS & WINDOWS					
2.1.1	Pressed Steel Frames (Profile-B)	3,719.57	Mtr.	177.50	660,222.79	DSR 2004
2.1.1	Door shutters	743.91	sq.m.	825.90	614,397.75	DSR 2004
2.1.2	Steel Windows with glazing.	743.91	sq.m.	1,065.75	792,825.28	DSR 2004
2.2	FLOORING					
2.2.1	Terrazo Tile Flooring	138.00	sq.m.	384.45	53,054.10	DSR 2004
2.2.2	Cement Concrete flooring	516.00	sq.m.	133.60	68,937.60	DSR 2004
2.2.3	Mosaic Flooring in white cement	4,592.42	sq.m.	217.20	997,473.62	DSR 2004
2.2.4	Mosaic Flooring in ordinary cement	4,592.42	sq.m.	180.60	829,391.05	DSR 2004
2.3	WALL & CEILING FINISHES					
2.3.1	Internal					
2.3.1.1	Plastic Emulsion paint	859.88	sq.m.	30.80	26,484.15	DSR 2004
2.3.1.2	White wash	19,062.88	sq.m.	4.65	88,642.38	DSR 2004
2.3.1.3	Dry distemper	1,972.33	sq.m.	19.05	37,572.94	DSR 2004
2.3.1.4	Mosaic dado	5,295.92	sq.m.	343.90	1,821,265.17	DSR 2004
2.3.2	External Painting - Water proofing cement paint	4,353.00	sq.m.	23.10	100,554.30	DSR 2004
2.3.3	Door window Painting - Enamel	2,975.65	sq.m.	37.35	111,140.60	DSR 2004
	COST OF FINISHES (B)				6,201,961.73	
	TOTAL (A-B)=(C)				135,964,819.20	
	Adding 3% for Contingencies				4,078,944.58	
	COST OF STRUCTURE INCL. INFILL PANELS			Rs.	140,043,763.77	
	TOTAL PLINTH AREA OF HOSPITAL				9,918.84	Sqm.
	COST/Sqm.			Rs.	14,118.97	per Sqm.
	TOTAL NO. OF BEDS				109	Beds
	COST/BED			Rs.	1,284,805.17	per Bed

109-BED HOSPITAL, NEW DELHI

DESIRABLE FINISHES SCHEDULE

S.NO.	NAME OF AREA	FLOOR LEVEL	HT.	TOTAL AREA	FLOORING	AREA	DADO	AREA	WALLS	AREA	CEILING	AREA
Floor finish area @ 100% plinth area												
Wall area @ 150% plinth area (floor ht. 3.6m); 175% plinth area (floor ht. 4.2m); 187.50% plinth area (floor ht. 4.5m)												
Dado area @ Wall area x ht. Dado/ht. Wall												
Paint area @ Wall area x (Ceiling ht - ht. Dado)/ ht. Wall												
Ceiling finish area @ 100% plinth area												
A	ENTRANCE AREA											
	Main(OPD) Entrance											
	Trolley park-2	Ground fl.	3.6	9.00	Granite	9.00	Granite till 900	3.38	Acrylic Emulsion	6.75	Gypboard	9.00
	General waiting	Ground fl.	3.6	30.00	Granite	30.00	Granite till 900	11.25	Acrylic Emulsion	22.50	Gypboard	30.00
	Reception	Ground fl.	3.6	30.00	Granite	30.00	Granite till 900	11.25	Acrylic Emulsion	22.50	Gypboard	30.00
	Arcade											
	shops-4	Ground fl.	3.6	48.00	Kota	48.00	Kota till 100	2.00	Dry distemper	70.00	Dry distemper	48.00
	Pharmacy	Ground fl.	3.6	99.00	Kota	99.00	Kota till 100	4.13	Dry distemper	144.38	Dry distemper	99.00
	Cafeteria	Ground fl.	3.6	99.00	Kota	99.00	Glazed tiles till 900	37.13	Dry distemper	111.38	Dry distemper	99.00
	Sub-total			315.00				69.13		377.50		315.00
	Emergency Entrance											
	Trolley park-2	Basement	4.5	9.00	Granite	9.00	Granite till 900	3.38	Acrylic Emulsion	6.75	Gypboard	9.00
	General waiting	Basement	4.5	30.00	Granite	30.00	Granite till 900	11.25	Acrylic Emulsion	22.50	Gypboard	30.00
	Reception	Basement	4.5	30.00	Granite	30.00	Granite till 900	11.25	Acrylic Emulsion	22.50	Gypboard	30.00
	Sub-total			69.00				25.88		51.75		69.00
	Services Entrance	Basement	4.5	9.00	Kota	9.00	Kota till 100	0.38	Dry distemper	16.50	Dry distemper	9.00
	Staff Entrance	Basement	4.5	9.00	Kota	9.00	Kota till 100	0.38	Dry distemper	16.50	Dry distemper	9.00
	Sub-total			18.00				0.75		33.00		18.00
	Total			402.00				95.75		462.25		402.00
B	AMBULATORY CARE AREA											
	Screening Clinics											
	Exam/consultation-4	Ground fl.	3.6	72.00	Marble	72.00	Marble till 900	27.00	Acrylic Emulsion	81.00	Wash. oil bd. dist.	72.00
	registration	Ground fl.	3.6	48.00	Kota	48.00	Glazed tiles till 900	18.00	Wash. oil bd. dist.	54.00	Dry distemper	48.00
	sub waiting	Ground fl.	3.6	60.00	Kota	60.00	Glazed tiles till 900	22.50	Wash. oil bd. dist.	67.50	Dry distemper	60.00
	General Clinics											
	Exam/consultation-4	Ground fl.	3.6	72.00	Marble	72.00	Marble till 900	27.00	Acrylic Emulsion	81.00	Wash. oil bd. dist.	72.00
	sub waiting	Ground fl.	3.6	54.00	Kota	54.00	Glazed tiles till 900	20.25	Wash. oil bd. dist.	60.75	Dry distemper	54.00
	Treatment-2	Ground fl.	3.6	27.00	Marble	27.00	Marble till 900	10.13	Acrylic Emulsion	30.38	Wash. oil bd. dist.	27.00
	clean utility-2	Ground fl.	3.6	9.00	Kota	9.00	Glazed tiles till 900	3.38	Wash. oil bd. dist.	10.13	Dry distemper	9.00
	dirty utility	Ground fl.	3.6	9.00	Kota	9.00	Glazed tiles till 900	3.38	Wash. oil bd. dist.	10.13	Dry distemper	9.00
	Nurse station	Ground fl.	3.6	9.00	Marble	9.00	Marble till 900	3.38	Acrylic Emulsion	10.13	Wash. oil bd. dist.	9.00

S.NO.	NAME OF AREA	FLOOR LEVEL	HT.	TOTAL AREA	FLOORING	AREA	DADO	AREA	WALLS	AREA	CEILING	AREA
	Dedicated Clinics											
	Dental-2	Ground fl.	3.6	18.00	Marble	18.00	Marble till 900	6.75	Acrylic Emulsion	20.25	Wash. oil bd. dist.	18.00
	lab/xray	Ground fl.	3.6	18.00	Kota	18.00	Glazed tiles till 900	6.75	Wash. oil bd. dist.	20.25	Dry distemper	18.00
	Ent-2	Ground fl.	3.6	36.00	Marble	36.00	Marble till 900	13.50	Acrylic Emulsion	40.50	Wash. oil bd. dist.	36.00
	audio + speech	Ground fl.	3.6	18.00	Kota	18.00	Glazed tiles till 900	6.75	Wash. oil bd. dist.	20.25	Dry distemper	18.00
	sub waiting	Ground fl.	3.6	45.00	Kota	45.00	Glazed tiles till 900	16.88	Wash. oil bd. dist.	50.63	Dry distemper	45.00
	Ophamology-2	Ground fl.	3.6	36.00	Marble	36.00	Marble till 900	13.50	Acrylic Emulsion	40.50	Wash. oil bd. dist.	36.00
	minor surgery/treatment	Ground fl.	3.6	42.00	Marble	42.00	Marble till 900	15.75	Acrylic Emulsion	47.25	Wash. oil bd. dist.	42.00
	sub waiting	Ground fl.	3.6	18.00	Kota	18.00	Glazed tiles till 900	6.75	Wash. oil bd. dist.	20.25	Dry distemper	18.00
	Treatment	Ground fl.	3.6	13.50	Marble	13.50	Marble till 900	5.06	Acrylic Emulsion	15.19	Wash. oil bd. dist.	13.50
	clean utility	Ground fl.	3.6	4.50	Kota	4.50	Glazed tiles till 900	1.69	Wash. oil bd. dist.	5.06	Dry distemper	4.50
	dirty utility	Ground fl.	3.6	9.00	Kota	9.00	Glazed tiles till 900	3.38	Wash. oil bd. dist.	10.13	Dry distemper	9.00
	Nurse station	Ground fl.	3.6	9.00	Marble	9.00	Marble till 900	3.38	Acrylic Emulsion	10.13	Wash. oil bd. dist.	9.00
	Ob./Gy./Paed. Clinics											
	Exam/consultation-4	Ground fl.	3.6	72.00	Marble	72.00	Marble till 900	27.00	Acrylic Emulsion	81.00	Wash. oil bd. dist.	72.00
	sub waiting	Ground fl.	3.6	36.00	Kota	36.00	Glazed tiles till 900	13.50	Wash. oil bd. dist.	40.50	Dry distemper	36.00
	treatment-2	Ground fl.	3.6	27.00	Marble	27.00	Marble till 900	10.13	Acrylic Emulsion	30.38	Wash. oil bd. dist.	27.00
	clean utility-2	Ground fl.	3.6	9.00	Kota	9.00	Glazed tiles till 900	3.38	Wash. oil bd. dist.	10.13	Dry distemper	9.00
	dirty utility	Ground fl.	3.6	9.00	Kota	9.00	Glazed tiles till 900	3.38	Wash. oil bd. dist.	10.13	Dry distemper	9.00
	Nurse station	Ground fl.	3.6	9.00	Marble	9.00	Marble till 900	3.38	Acrylic Emulsion	10.13	Wash. oil bd. dist.	9.00
	ECG Room	Ground fl.	3.6	9.00	Kota	9.00	Glazed tiles till 900	3.38	Wash. oil bd. dist.	10.13	Dry distemper	9.00
	Sample collection	Ground fl.	3.6	9.00	Kota	9.00	Glazed tiles till 900	3.38	Wash. oil bd. dist.	10.13	Dry distemper	9.00
	Toilet (female)	Ground fl.	3.6	18.00	Kota	18.00	Glazed tile till 1500	11.25	Wash. oil bd. dist.	15.75	Dry distemper	18.00
	Toilet (male)	Ground fl.	3.6	18.00	Kota	18.00	Glazed tile till 1500	11.25	Wash. oil bd. dist.	15.75	Dry distemper	18.00
	Total			843.00		843.00		325.13		939.38		843.00
	C DIAGNOSTIC SERVICES											
	Imaging											
	Reception	Ground fl.	3.6	18.00	Kota	18.00	Glazed tiles till 900	6.75	Wash. oil bd. dist.	20.25	Dry distemper	18.00
	sub waiting	Ground fl.	3.6	63.00	Kota	63.00	Glazed tiles till 900	23.63	Wash. oil bd. dist.	70.88	Dry distemper	63.00
	Patient preparation	Ground fl.	3.6	9.00	Kota	9.00	Glazed tiles till 900	3.38	Wash. oil bd. dist.	10.13	Dry distemper	9.00
	CT scan	Ground fl.	3.6	27.00	Kota	27.00	Glazed tiles till 900	10.13	Wash. oil bd. dist.	30.38	Dry distemper	27.00
	Control	Ground fl.	3.6	13.50	Kota	13.50	Kota till 100	0.56	Wash. oil bd. dist.	19.69	Dry distemper	13.50
	Special Xray	Ground fl.	3.6	27.00	Kota	27.00	Glazed tiles till 900	10.13	Wash. oil bd. dist.	30.38	Dry distemper	27.00
	general Xray	Ground fl.	3.6	27.00	Kota	27.00	Glazed tiles till 900	10.13	Wash. oil bd. dist.	30.38	Dry distemper	27.00
	ultra sound	Ground fl.	3.6	18.00	Kota	18.00	Glazed tiles till 900	6.75	Wash. oil bd. dist.	20.25	Dry distemper	18.00
	Record	Ground fl.	3.6	13.50	Kota	13.50	Kota till 100	0.56	Wash. oil bd. dist.	19.69	Dry distemper	13.50
	Report	Ground fl.	3.6	4.50	Kota	4.50	Kota till 100	0.19	Wash. oil bd. dist.	6.56	Dry distemper	4.50
	Report writing/computers	Ground fl.	3.6	81.00	Kota	81.00	Kota till 100	3.38	Wash. oil bd. dist.	118.13	Dry distemper	81.00
	Dark room	Ground fl.	3.6	9.00	Kota	9.00	Kota till 100	0.38	Wash. oil bd. dist.	13.13	Dry distemper	9.00
	Doctors room	Ground fl.	3.6	9.00	Kota	9.00	Kota till 100	0.38	Wash. oil bd. dist.	13.13	Dry distemper	9.00
	Sub-total			319.50		319.50		76.31		402.94		319.50

S.NO.	NAME OF AREA	FLOOR LEVEL	HT.	TOTAL AREA	FLOORING	AREA	DADO	AREA	WALLS	AREA	CEILING	AREA
	Clinical Labs											
	Sample collection	First fl.	4.2	18.00	Acid/Alkali resist.	18.00	Acid/Alkali resist.	11.25	Wash. oil bd. dist.	20.25	Dry distemper	18.00
	Emergency lab	First fl.	4.2	18.00	Acid/Alkali resist.	18.00	Acid/Alkali resist.	11.25	Wash. oil bd. dist.	20.25	Dry distemper	18.00
	store	First fl.	4.2	18.00	Acid/Alkali resist.	18.00	Acid/Alkali resist.	11.25	Wash. oil bd. dist.	20.25	Dry distemper	18.00
	consultant records	First fl.	4.2	18.00	Kota	18.00	Kota till 100	0.75	Wash. oil bd. dist.	30.75	Dry distemper	18.00
	Technician's rest room	First fl.	4.2	18.00	Kota	18.00	Kota till 100	0.75	Wash. oil bd. dist.	30.75	Dry distemper	18.00
	Wash	First fl.	4.2	18.00	Acid/Alkali resist.	18.00	Acid/Alkali resist.	11.25	Wash. oil bd. dist.	20.25	Dry distemper	18.00
	Media preparation	First fl.	4.2	18.00	Acid/Alkali resist.	18.00	Acid/Alkali resist.	11.25	Wash. oil bd. dist.	20.25	Dry distemper	18.00
	labs	First fl.	4.2	72.00	Acid/Alkali resist.	72.00	Acid/Alkali resist.	45.00	Wash. oil bd. dist.	81.00	Dry distemper	72.00
	Blood Bank											
	Rest	Ground fl.	3.6	36.00	Marble	36.00	Marble till 900	13.50	Acrylic Emulsion	40.50	Wash. oil bd. dist.	36.00
	reception	Ground fl.	3.6	4.50	Marble	4.50	Marble till 900	1.69	Acrylic Emulsion	5.06	Wash. oil bd. dist.	4.50
	bleed	Ground fl.	3.6	18.00	Marble	18.00	Marble till 900	6.75	Acrylic Emulsion	20.25	Wash. oil bd. dist.	18.00
	lab	Ground fl.	3.6	13.50	Acid/Alkali resist.	13.50	Acid/Alkali resist.	8.44	Wash. oil bd. dist.	11.81	Dry distemper	13.50
	Sub-total			288.00	-	288.00	-	133.88	-	352.13	-	288.00
	Total			607.50	-	607.50	-	210.19	-	755.06	-	607.50
	D INTERMEDIATE CARE AREA											
	Dirty Utility-2	Second fl.	3.6	13.50	Kota	13.50	Glazed tiles till 900	5.06	Wash. oil bd. dist.	15.19	Dry distemper	13.50
	Clean Utility-2	Second fl.	3.6	15.00	Kota	15.00	Glazed tiles till 900	5.63	Wash. oil bd. dist.	16.88	Dry distemper	15.00
	Linen Store-2	Second fl.	3.6	13.50	Kota	13.50	Glazed tiles till 900	5.06	Wash. oil bd. dist.	15.19	Dry distemper	13.50
	General Wards-(4beds x 6)x2	Second fl.	3.6	333.00	Marble	333.00	Marble till 900	124.88	Acrylic Emulsion	374.63	Wash. oil bd. dist.	333.00
	Single Rm/Pvt. Ward/isolation-4	Second fl.	3.6	54.00	Marble	54.00	Marble till 900	20.25	Acrylic Emulsion	60.75	Wash. oil bd. dist.	54.00
	Nurse Station-2	Second fl.	3.6	24.00	Marble	24.00	Marble till 900	9.00	Acrylic Emulsion	27.00	Wash. oil bd. dist.	24.00
	Pantry-2	Second fl.	3.6	15.00	Kota	15.00	Glazed tiles till 900	5.63	Wash. oil bd. dist.	16.88	Dry distemper	15.00
	Double room-4	Second fl.	3.6	54.00	Marble	54.00	Marble till 900	20.25	Acrylic Emulsion	60.75	Wash. oil bd. dist.	54.00
	dayroom-2	Second fl.	3.6	54.00	Marble	54.00	Marble till 900	20.25	Acrylic Emulsion	60.75	Wash. oil bd. dist.	54.00
	Treatment-2	Second fl.	3.6	39.00	Marble	39.00	Marble till 900	14.63	Acrylic Emulsion	43.88	Wash. oil bd. dist.	39.00
	patient toilet-22	Second fl.	3.6	114.84	Kota	114.84	Glazed tile till 1500	71.78	Wash. oil bd. dist.	100.49	Dry distemper	114.84
	Doctors rest room	Second fl.	3.6	18.00	Kota	18.00	Kota till 100	0.75	Wash. oil bd. dist.	26.25	Dry distemper	18.00
	Toilet	Second fl.	3.6	4.50	Kota	4.50	Glazed tile till 1500	2.81	Wash. oil bd. dist.	3.94	Dry distemper	4.50
	Nurse rest room	Second fl.	3.6	18.00	Kota	18.00	Kota till 100	0.75	Wash. oil bd. dist.	26.25	Dry distemper	18.00
	Toilet	Second fl.	3.6	4.50	Kota	4.50	Glazed tile till 1500	2.81	Wash. oil bd. dist.	3.94	Dry distemper	4.50
	Waiting	Second fl.	3.6	18.00	Kota	18.00	Glazed tiles till 900	6.75	Wash. oil bd. dist.	20.25	Wash. oil bd. dist.	18.00

S.NO.	NAME OF AREA	FLOOR LEVEL	HT.	TOTAL AREA	FLOORING	AREA	DADO	AREA	WALLS	AREA	CEILING	AREA
	Total			792.84		792.84		316.28		872.99		732.84
E	INTENSIVE CARE AREA											
	Dirty Utility	First fl.	4.2	7.20	Kota	7.20	Glazed tiles till 900	2.70	Wash. oil bd. dist.	9.90	Dry distemper	7.20
	Clean Utility	First fl.	4.2	7.20	Kota	7.20	Glazed tiles till 900	2.70	Wash. oil bd. dist.	9.90	Dry distemper	7.20
	Sluice Room	First fl.	4.2	7.20	Kota	7.20	Glazed tiles till 900	2.70	Wash. oil bd. dist.	9.90	Dry distemper	7.20
	Linen Store	First fl.	4.2	7.20	Kota	7.20	Glazed tiles till 900	2.70	Wash. oil bd. dist.	9.90	Dry distemper	7.20
	Patients area	First fl.	4.2	194.40	Marble	194.40	Marble till 900	72.90	Acrylic Emulsion	267.30	Wash. oil bd. dist.	194.40
	Patient Monitoring	First fl.	4.2	21.60	Marble	21.60	Marble till 900	8.10	Acrylic Emulsion	29.70	Wash. oil bd. dist.	21.60
	Toilet	First fl.	4.2	7.20	Kota	7.20	Glazed tile till 1500	4.50	Wash. oil bd. dist.	8.10	Dry distemper	7.20
	Change	First fl.	4.2	7.20	Kota	7.20	Glazed tiles till 900	2.70	Wash. oil bd. dist.	9.90	Dry distemper	7.20
	Equipment park-2	First fl.	4.2	16.20	Kota	16.20	Glazed tiles till 900	6.08	Wash. oil bd. dist.	22.28	Dry distemper	16.20
	Pantry	First fl.	4.2	7.20	Kota	7.20	Glazed tiles till 900	2.70	Wash. oil bd. dist.	9.90	Dry distemper	7.20
	Procedure room	First fl.	4.2	39.00	Seamless epoxy	39.00	SS / powder coated	48.75		-	Al.clad.false ceil.	39.00
	Total			321.60		321.60		156.53		386.78		321.60
F	CRITICAL CARE AREA											
	Disposal-2	Basement	4.5	13.50	Kota	13.50	Glazed tiles till 900	5.06	Wash. oil bd. dist.	20.25	Dry distemper	13.50
	Setup (clean utility)-2	Basement	4.5	13.50	Kota	13.50	Glazed tiles till 900	5.06	Wash. oil bd. dist.	20.25	Dry distemper	13.50
	Linen Store	Basement	4.5	9.00	Kota	9.00	Glazed tiles till 900	3.38	Wash. oil bd. dist.	13.50	Dry distemper	9.00
	Exam/Resuscitation beds											
	resuscitation	Basement	4.5	36.00	Marble	36.00	Marble till 900	13.50	Acrylic Emulsion	54.00	Wash. oil bd. dist.	36.00
	observation	Basement	4.5	36.00	Marble	36.00	Marble till 900	13.50	Acrylic Emulsion	54.00	Wash. oil bd. dist.	36.00
	recovery	Basement	4.5	36.00	Marble	36.00	Marble till 900	13.50	Acrylic Emulsion	54.00	Wash. oil bd. dist.	36.00
	Nurse Station	Basement	4.5	18.00	Marble	18.00	Marble till 900	6.75	Acrylic Emulsion	27.00	Wash. oil bd. dist.	18.00
	Dirty Utility	Basement	4.5	6.00	Kota	6.00	Glazed tiles till 900	2.25	Wash. oil bd. dist.	9.00	Dry distemper	6.00
	Clean Utility	Basement	4.5	6.00	Kota	6.00	Glazed tiles till 900	2.25	Wash. oil bd. dist.	9.00	Dry distemper	6.00
	Toilet	Basement	4.5	6.00	Kota	6.00	Glazed tile till 1500	3.75	Wash. oil bd. dist.	7.50	Dry distemper	6.00
	pantry	Basement	4.5	9.00	Kota	9.00	Glazed tiles till 900	3.38	Wash. oil bd. dist.	13.50	Dry distemper	9.00
	Change	Basement	4.5	9.00	Kota	9.00	Glazed tiles till 900	3.38	Wash. oil bd. dist.	13.50	Dry distemper	9.00
	plaster/treatment room	Basement	4.5	36.00	Marble	36.00	Marble till 900	13.50	Acrylic Emulsion	54.00	Wash. oil bd. dist.	36.00
	O.T.	Basement	4.5	36.00	Seamless epoxy	36.00	SS/powder coated	40.50		-	Al.clad.false ceil.	36.00
	scrub/equipment park-2	Basement	4.5	24.00	Kota	24.00	Glazed tiles till 900	9.00	Wash. oil bd. dist.	36.00	Dry distemper	24.00
	Change-2	Basement	4.5	12.00	Kota	12.00	Glazed tiles till 900	4.50	Wash. oil bd. dist.	18.00	Dry distemper	12.00
	Doctors rest room	Basement	4.5	18.00	Kota	18.00	Kota till 100	0.75	Wash. oil bd. dist.	33.00	Dry distemper	18.00
	Toilet	Basement	4.5	2.50	Kota	2.50	Glazed tile till 1500	1.56	Wash. oil bd. dist.	3.13	Dry distemper	2.50
	Total			326.50		326.50		145.56		439.63		326.50
G	THERAPEUTIC SERVICES											
	Day Care											
	lounge	First fl.	4.2	42.00	Marble	42.00	Marble till 900	15.75	Acrylic Emulsion	57.75	Wash. oil bd. dist.	42.00
	surgeon-2	First fl.	4.2	36.00	Marble	36.00	Marble till 900	13.50	Acrylic Emulsion	49.50	Wash. oil bd. dist.	36.00

S.NO.	NAME OF AREA	FLOOR LEVEL	HT.	TOTAL AREA	FLOORING	AREA	DADO	AREA	WALLS	AREA	CEILING	AREA
	store	First fl.	4.2	9.00	Kota	9.00	Glazed tiles till 900	3.38	Wash. oil bd. dist.	12.38	Dry distemper	9.00
	Change	First fl.	4.2	9.00	Kota	9.00	Glazed tiles till 900	3.38	Wash. oil bd. dist.	12.38	Dry distemper	9.00
	Nurse Station	First fl.	4.2	18.00	Marble	18.00	Marble till 900	6.75	Acrylic Emulsion	24.75	Wash. oil bd. dist.	18.00
	Clean utility	First fl.	4.2	6.00	Kota	6.00	Glazed tiles till 900	2.25	Wash. oil bd. dist.	8.25	Dry distemper	6.00
	Dirty utility	First fl.	4.2	6.00	Kota	6.00	Glazed tiles till 900	2.25	Wash. oil bd. dist.	8.25	Dry distemper	6.00
	Toilet	First fl.	4.2	6.00	Kota	6.00	Glazed tile till 1500	3.75	Wash. oil bd. dist.	6.75	Dry distemper	6.00
	Preparation	First fl.	4.2	36.00	Marble	36.00	Marble till 900	13.50	Acrylic Emulsion	49.50	Wash. oil bd. dist.	36.00
	change-2	First fl.	4.2	12.00	Kota	12.00	Glazed tiles till 900	4.50	Wash. oil bd. dist.	16.50	Dry distemper	12.00
	recovery	First fl.	4.2	36.00	Marble	36.00	Marble till 900	13.50	Acrylic Emulsion	49.50	Wash. oil bd. dist.	36.00
	Procedure room-2	First fl.	4.2	24.00	Seamless epoxy	24.00	SS/powder coated	27.00		-	Al.clad.false cell.	24.00
	disposal-2	First fl.	4.2	13.50	Kota	13.50	Glazed tiles till 900	5.06	Wash. oil bd. dist.	18.56	Dry distemper	13.50
	setup-2	First fl.	4.2	13.50	Kota	13.50	Glazed tiles till 900	5.06	Wash. oil bd. dist.	18.56	Dry distemper	13.50
	store-4	First fl.	4.2	24.00	Kota	24.00	Glazed tiles till 900	9.00	Wash. oil bd. dist.	33.00	Dry distemper	24.00
	Scrub/equipment park-2	First fl.	4.2	24.00	Kota	24.00	Glazed tiles till 900	9.00	Wash. oil bd. dist.	33.00	Dry distemper	24.00
	change-2	First fl.	4.2	12.00	Kota	12.00	Glazed tiles till 900	4.50	Wash. oil bd. dist.	16.50	Dry distemper	12.00
	Sub-total			327.00				142.13				415.13
	Operation Theatre Suite											
	Sterile Store	First fl.	4.2	18.00	Marble	18.00	Marble till 900	6.75	Acrylic Emulsion	13.50	Gyboard	18.00
	Patient transfer	First fl.	4.2	14.40	Marble	14.40	Marble till 900	5.40	Acrylic Emulsion	10.80	Gyboard	14.40
	Sterile Corridor	First fl.	4.2	43.20	Marble	43.20	Glazed tiles till 2100	37.80	Acrylic Emulsion	10.80	Al.clad.false cell.	43.20
	Scrub-2	First fl.	4.2	10.13	Seamless epoxy	10.13	SS/powder coated	11.39		-	Al.clad.false cell.	10.13
	Anaesthesia-2	First fl.	4.2	10.13	Seamless epoxy	10.13	SS/powder coated	11.39		-	Al.clad.false cell.	10.13
	O.T.-2	First fl.	4.2	70.20	Seamless epoxy	70.20	SS/powder coated	78.98		-	Al.clad.false cell.	70.20
	Disposal-2	First fl.	4.2	24.30	Kota	24.30	Glazed tiles till 900	9.11	Wash. oil bd. dist.	33.41	Dry distemper	24.30
	Setup (clean utility)-2	First fl.	4.2	24.30	Kota	24.30	Glazed tiles till 900	9.11	Wash. oil bd. dist.	33.41	Dry distemper	24.30
	PreOperation Area	First fl.	4.2	34.20	Marble	34.20	Glazed tiles till 2100	29.93	Acrylic Emulsion	8.55	Gyboard	34.20
	Change-3	First fl.	4.2	22.80	Kota	22.80	Glazed tiles till 900	8.55	Wash. oil bd. dist.	31.35	Dry distemper	22.80
	Anaesthetists' Room-1	First fl.	4.2	13.50	Marble	13.50	Marble till 900	5.06	Acrylic Emulsion	18.56	Wash. oil bd. dist.	13.50
	Post Operation Recovery	First fl.	4.2	56.25	Marble	56.25	Marble till 900	21.09	Acrylic Emulsion	77.34	Wash. oil bd. dist.	56.25
	Nurse Station	First fl.	4.2	12.15	Marble	12.15	Marble till 900	4.56	Acrylic Emulsion	16.71	Wash. oil bd. dist.	12.15
	Clean utility	First fl.	4.2	6.08	Kota	6.08	Glazed tiles till 900	2.28	Wash. oil bd. dist.	8.35	Dry distemper	6.08
	Dirty utility	First fl.	4.2	6.08	Kota	6.08	Glazed tiles till 900	2.28	Wash. oil bd. dist.	8.35	Dry distemper	6.08
	Rest Room	First fl.	4.2	29.00	Kota	29.00	Kota till 100	1.21	Wash. oil bd. dist.	49.54	Dry distemper	29.00
	Toilet	First fl.	4.2	5.00	Kota	5.00	Glazed tile till 1500	3.13	Wash. oil bd. dist.	5.63	Dry distemper	5.00
	Pantry	First fl.	4.2	18.00	Kota	18.00	Glazed tiles till 900	6.75	Wash. oil bd. dist.	24.75	Dry distemper	18.00
	Sub-total			417.70				254.76				417.70
	Delivery Suite											
	Disposal-2	Basement	4.5	13.50	Kota	13.50	Glazed tiles till 900	5.06	Wash. oil bd. dist.	20.25	Dry distemper	13.50
	Setup(sterile store)-2	Basement	4.5	13.50	Kota	13.50	Glazed tiles till 900	5.06	Wash. oil bd. dist.	20.25	Dry distemper	13.50
	Delivery room	Basement	4.5	36.00	Seamless epoxy	36.00	SS/powder coated	40.50		-	Al.clad.false cell.	36.00
	Patient Area	Basement	4.5	36.00	Marble	36.00	Marble till 900	13.50	Acrylic Emulsion	54.00	Wash. oil bd. dist.	36.00

S.NO.	NAME OF AREA	FLOOR LEVEL	HT.	TOTAL AREA	FLOORING	AREA	DADO	AREA	WALLS	AREA	CEILING	AREA
	Post natal	Basement	4.5	36.00	Marble	36.00	Marble till 900	13.50	Acrylic Emulsion	54.00	Wash. oil bd. dist.	36.00
	Nurse Station	Basement	4.5	18.00	Marble	18.00	Marble till 900	6.75	Acrylic Emulsion	13.50	Gypboard	18.00
	Clean utility	Basement	4.5	6.00	Kota	6.00	Glazed tiles till 900	2.25	Wash. oil bd. dist.	9.00	Dry distemper	6.00
	Dirty utility	Basement	4.5	6.00	Kota	6.00	Glazed tiles till 900	2.25	Wash. oil bd. dist.	9.00	Dry distemper	6.00
	Toilet	Basement	4.5	6.00	Kota	6.00	Glazed tile till 1500	2.25	Wash. oil bd. dist.	9.00	Dry distemper	6.00
	Scrub/equipment park	Basement	4.5	12.00	Kota	12.00	Glazed tiles till 900	4.50	Wash. oil bd. dist.	18.00	Dry distemper	12.00
	Change	Basement	4.5	6.00	Kota	6.00	Glazed tiles till 900	2.25	Wash. oil bd. dist.	9.00	Dry distemper	6.00
	O.T.	Basement	4.5	36.00	Seamless epoxy	36.00	SS/powder coated	40.50		-	Al.clad.false ceil.	36.00
	Toxemia	Basement	4.5	18.00	Marble	18.00	Marble till 900	6.75	Acrylic Emulsion	13.50	Gypboard	18.00
	Pantry	Basement	4.5	9.00	Kota	9.00	Glazed tiles till 900	3.38	Wash. oil bd. dist.	13.50	Dry distemper	9.00
	Change (Female)	Basement	4.5	9.00	Kota	9.00	Glazed tiles till 900	3.38	Wash. oil bd. dist.	13.50	Dry distemper	9.00
	Store	Basement	4.5	9.00	Kota	9.00	Glazed tiles till 900	3.38	Wash. oil bd. dist.	13.50	Dry distemper	9.00
	Paediatric nursery	Basement	4.5	36.00	Marble	36.00	Marble till 900	13.50	Acrylic Emulsion	27.00	Gypboard	36.00
	Nurse Rest Room	Basement	4.5	18.00	Kota	18.00	Kota till 100	0.75	Wash. oil bd. dist.	33.00	Dry distemper	18.00
	toilet	Basement	4.5	2.50	Kota	2.50	Glazed tile till 1500	1.56	Wash. oil bd. dist.	3.13	Dry distemper	2.50
	Sub-total			326.50		326.50		171.06		333.13		326.50
	Total			1,071.20		1,071.20		567.95		1,099.31		1,071.20
H	HOSPITAL SERVICES											
	C.S.S.D.	Basement	4.5	84.00	Kota	84.00	Glazed tiles till 900	31.50	Wash. oil bd. dist.	126.00	Dry distemper	84.00
	Laundry	Basement	4.5	108.00	Kota	108.00	Glazed tile till 1500	67.50	Wash. oil bd. dist.	135.00	Dry distemper	108.00
	Medical gases	Basement	4.5	54.00	Kota	54.00	Kota till 100	2.25	Dry distemper	99.00	Dry distemper	54.00
	General Store	Basement	4.5	99.00	Kota	99.00	Kota till 100	4.13	Dry distemper	181.50	Dry distemper	99.00
	Receipt	Basement	4.5	54.00	Kota	54.00	Kota till 100	4.13	Dry distemper	99.00	Dry distemper	54.00
	Medical Store	Basement	4.5	99.00	Kota	99.00	Kota till 100	4.13	Dry distemper	181.50	Dry distemper	99.00
	Autopsy	Basement	4.5	54.00	Seamless epoxy	54.00	SS/powder coated	60.75		-	Al.clad.false ceil.	54.00
	Kitchen	Basement	4.5	157.50	Kota	157.50	Glazed tile till 1500	98.44	Wash. oil bd. dist.	196.88	Dry distemper	157.50
	Total			709.50		709.50		270.94		1,018.88		709.50
I	ENGINEERING SERVICES											
	Electrical room	Basement	4.5	54.00	Red oxide	54.00	Cem. plaster skt.till 300	6.75	Dry Distemper	94.50	Dry Distemper	54.00
	Water supply/Pump Room	Basement	4.5	54.00	Red oxide	54.00	Cem. plaster skt.till 300	6.75	Dry Distemper	94.50	Dry Distemper	54.00
	D.G. Room	Basement	4.5	54.00	Red oxide	54.00	Perf.Al.Sheet with min.wool	101.25		-	Perf.Al.Sheet with min.wool	54.00
	HVAC Room	Basement	4.5	94.50	Red oxide	94.50	Perf.Al.Sheet with min.wool	177.19		-	Perf.Al.Sheet with min.wool	94.50
	AHU room(Bsmt.)-4	Basement	4.5	72.00	Red oxide	72.00	Perf.Al.Sheet with min.wool	135.00		-	Perf.Al.Sheet with min.wool	72.00
	AHU room(Gr. Floor)-4	Ground fl.	3.6	67.50	Red oxide	67.50	Perf.Al.Sheet with min.wool	101.25		-	Perf.Al.Sheet with min.wool	67.50
	AHU room(First Floor)-4	First fl.	4.2	66.00	Red oxide	66.00	Perf.Al.Sheet with min.wool	115.50		-	Perf.Al.Sheet with min.wool	66.00

S.NO.	NAME OF AREA	FLOOR LEVEL	HT.	TOTAL AREA	FLOORING	AREA	DADO	AREA	WALLS	AREA	CEILING	AREA
	Incinerator	Basement	4.5	36.00	Kota	36.00	Glazed tile till 1500	67.50	Wash. oil bd. dist.	-	Dry distemper	36.00
	Total			498.00		498.00		711.19		189.00		498.00
J	CORRIDORS											
	Corridors		4.0	3,127.70	Kota	3,127.70	Glazed tiles till 900	1,172.89	Wash. oil bd. dist.	2,345.78	Gyboard	3,127.70
	Elevators			80.00								
	Ramp		4.0	352.00	Kota	352.00	Glazed tiles till 900	132.00	Wash. oil bd. dist.	454.67	Dry distemper	352.00
	Staircase		4.0	156.00	Kota	156.00	Glazed tiles till 900	58.50	Wash. oil bd. dist.	201.50	Dry distemper	156.00
	Sub-total			3,715.70		3,635.70		1,363.39		3,001.94		3,635.70
K	TOILETS											
	Toilet (male)	Basement	4.5	15.50	Kota	15.50	Glazed tile till 1500	9.69	Wash. oil bd. dist.	19.38	Dry distemper	15.50
	Toilet (female)	Basement	4.5	15.50	Kota	15.50	Glazed tile till 1500	9.69	Wash. oil bd. dist.	19.38	Dry distemper	15.50
	Toilet (male)	Ground fl.	3.6	18.00	Kota	18.00	Glazed tile till 1500	11.25	Wash. oil bd. dist.	15.75	Dry distemper	18.00
	Toilet (female)	Ground fl.	3.6	18.00	Kota	18.00	Glazed tile till 1500	11.25	Wash. oil bd. dist.	15.75	Dry distemper	18.00
	Toilet (male)	First fl.	4.2	27.00	Kota	27.00	Glazed tile till 1500	16.88	Wash. oil bd. dist.	30.38	Dry distemper	27.00
	Toilet (female)	First fl.	4.2	27.00	Kota	27.00	Glazed tile till 1500	16.88	Wash. oil bd. dist.	30.38	Dry distemper	27.00
	Sub-total			121.00		121.00		75.63		131.00		121.00
	Total			3,836.70		3,756.70		1,439.01		3,132.94		3,756.70
L	ADMIN & ANCILLARY											
	Staff room(entry-1)	Basement	4.5	18.00	Kota	18.00	Kota till 100	0.75	Dry Distemper	33.00	Dry Distemper	18.00
	Staff change	Basement	4.5	54.00	Kota	54.00	Kota till 100	2.25	Dry Distemper	99.00	Dry Distemper	54.00
	Staff room(entry-2)	Basement	4.5	18.00	Kota	18.00	Kota till 100	0.75	Dry Distemper	33.00	Dry Distemper	18.00
	Medical Records	Basement	4.5	81.00	Kota	81.00	Kota till 100	3.38	Dry Distemper	148.50	Dry Distemper	81.00
	Supervisor's Office	Basement	4.5	27.00	Kota	27.00	Kota till 100	1.13	Dry Distemper	49.50	Dry Distemper	27.00
	MS	First fl.	4.2	18.00	Kota	18.00	Kota till 100	0.75	Wash. oil bd. dist.	19.50	Gyboard	18.00
	Officers-4	First fl.	4.2	36.00	Kota	36.00	Kota till 100	1.50	Wash. oil bd. dist.	61.50	Dry Distemper	36.00
	Matron	First fl.	4.2	18.00	Kota	18.00	Kota till 100	0.75	Wash. oil bd. dist.	30.75	Dry Distemper	18.00
	Sub waiting-2	First fl.	4.2	13.00	Kota	13.00	Kota till 100	0.54	Dry Distemper	22.21	Dry Distemper	13.00
	Offices	First fl.	4.2	143.00	Kota	143.00	Kota till 100	5.96	Dry Distemper	244.29	Dry Distemper	143.00
	library/conference	First fl.	4.2	66.00	Kota	66.00	Kota till 100	2.75	Wash. oil bd. dist.	71.50	Gyboard	66.00
	Snacks	First fl.	4.2	9.00	Kota	9.00	Glazed tile till 900	3.38	Wash. oil bd. dist.	12.38	Dry distemper	9.00
	Info.	First fl.	4.2	9.00	Kota	9.00	Glazed tile till 900	3.38	Wash. oil bd. dist.	12.38	Dry distemper	9.00
	Total			510.00		510.00		27.25		837.50		510.00
	GRAND TOTAL			9,918.84		9,838.84		4,265.76		10,133.70		9,838.84

SUMMARY - DESIRABLE FINISHES COST - BASED ON DSR-2004/MARKET RATES (Refer Data Sheet - 6)

S.NO.	NAME OF AREA	EXTERNAL FINISH	DOORS & WINDOWS	FLOORING	DADO	WALLS	CEILING	CONTINGENCY (@3%)	TOTAL
A	ENTRANCE AREA								
	Main(OPD) Entrance	3,193.38	93,791.25	283,452.60	84,157.71	10,035.04	33,438.60	15,242.06	523,310.64
	Emergency Entrance	699.50	20,544.75	162,150.00	67,218.08	3,829.50	28,752.30	8,495.82	291,689.95
	Services & Staff Entrance	182.48	5,359.50	8,875.80	377.25	628.65	342.90	473.00	16,239.58
	Total	4,075.36	119,695.50	454,478.40	151,753.04	14,493.19	62,533.80	24,210.88	831,240.16
B	AMBULATORY CARE AREA	8,546.09	251,003.25	1,015,801.80	232,547.29	49,952.53	20,771.78	47,358.68	1,625,981.41
C	DIAGNOSTIC SERVICES								
	Imaging	3,239.00	95,131.13	157,545.45	29,192.70	11,967.24	6,086.48	9,094.86	312,256.85
	Clinical Labs & Blood bank	2,919.66	85,752.00	248,930.33	99,231.86	13,373.61	6,109.43	13,689.51	470,006.38
	Total	6,158.66	180,883.13	406,475.78	128,424.56	25,340.85	12,195.90	22,784.37	782,263.24
D	INTERMEDIATE CARE AREA	8,037.58	236,068.11	1,147,709.00	258,457.51	59,736.98	21,238.00	51,757.42	1,777,004.60
E	INTENSIVE CARE AREA	3,260.29	95,756.40	486,889.26	265,127.41	24,644.32	50,583.93	27,787.85	954,049.45
F	CRITICAL CARE AREA	3,309.96	97,215.38	413,349.95	221,769.61	23,821.76	46,859.33	24,189.78	830,515.76
G	THERAPEUTIC SERVICES								
	Day Care	3,315.03	97,364.25	410,850.90	179,686.16	22,562.51	33,961.35	22,432.21	770,172.41
	Operation Theatre Suite	4,234.52	124,370.18	547,980.52	442,137.15	17,348.92	179,781.88	39,475.59	1,355,328.75
	Delivery Suite	3,309.96	97,215.38	421,586.75	353,397.61	17,070.41	113,445.83	30,180.78	1,036,206.71
	Total	10,859.51	318,949.80	1,380,418.17	975,220.92	56,981.85	327,189.05	92,088.58	3,161,707.87
H	HOSPITAL SERVICES	7,192.70	211,253.63	398,827.05	292,741.67	24,285.94	71,887.28	30,185.65	1,036,373.91
I	ENGINEERING SERVICES	5,048.58	148,279.50	137,132.40	467,276.03	3,600.45	250,543.20	30,356.40	1,042,236.56
J	CORRIDORS	37,668.68	1,106,349.68	1,792,763.67	508,952.55	89,157.67	1,312,989.99	145,436.47	4,993,318.70
K	TOILETS	1,226.66	36,027.75	59,665.10	28,230.81	3,890.70	2,305.05	3,940.38	135,286.46
	Total	38,895.34	1,142,377.43	1,852,428.77	537,183.37	93,048.37	1,315,295.04	149,376.85	5,128,605.16
L	ADMIN & ANCILLARY	5,170.23	151,852.50	251,481.00	12,831.28	18,169.58	43,118.10	14,478.68	497,101.36
	GRAND TOTAL	100,554.30	2,953,334.61	7,944,991.57	3,543,332.66	388,075.81	2,222,215.40	514,575.13	17,667,079.48

109-BED HOSPITAL, NEW DELHI

COST PER SQM. - DESIRABLE FINISHES

S.NO.	NAME OF AREA	AREA (Sqm.)	EXTERNAL FINISH	DOORS & WINDOWS	FLOORING	DADO	WALLS	CEILING	CONTINGENCY (@3%)	TOTAL	REFERENCE
A	ENTRANCE AREA										
	Main(OPD) Entrance	315.00	10.14	297.75	899.85	267.17	31.86	106.15	48.39	1,661.30	Refer Data Sheet - 2
	Emergency Entrance	69.00	10.14	297.75	2,350.00	974.18	55.50	416.70	123.13	4,227.39	Refer Data Sheet - 2
	Services & Staff Entrance	18.00	10.14	297.75	493.10	20.96	34.93	19.05	26.28	902.20	Refer Data Sheet - 2
	Total	402.00	10.14	297.75	1,130.54	377.50	36.05	155.56	60.23	2,067.76	
B	AMBULATORY CARE AREA	843.00	10.14	297.75	1,204.98	275.86	59.26	24.64	56.18	1,928.80	Refer Data Sheet - 2
C	DIAGNOSTIC SERVICES										
	Imaging	319.50	10.14	297.75	493.10	91.37	37.46	19.05	28.47	977.33	Refer Data Sheet - 2
	Clinical Labs & Blood bank	288.00	10.14	297.75	864.34	344.56	46.44	21.21	47.53	1,631.97	Refer Data Sheet - 2
	Total	607.50	10.14	297.75	669.10	211.40	41.71	20.08	37.51	1,287.68	
D	INTERMEDIATE CARE AREA	792.84	10.14	297.75	1,447.59	325.99	67.78	26.79	65.28	2,241.32	Refer Data Sheet - 2
E	INTENSIVE CARE AREA	321.60	10.14	297.75	1,513.96	824.40	75.63	157.29	86.41	2,966.57	Refer Data Sheet - 2
F	CRITICAL CARE AREA	326.50	10.14	297.75	1,266.00	679.23	72.96	143.52	74.09	2,543.69	Refer Data Sheet - 2
G	THERAPEUTIC SERVICES										
	Day Care	327.00	10.14	297.75	1,256.42	549.50	69.00	103.86	68.60	2,355.27	Refer Data Sheet - 2
	Operation Theatre Suite	417.70	10.14	297.75	1,311.90	1,058.50	41.53	430.41	94.51	3,244.74	Refer Data Sheet - 2
	Delivery Suite	326.50	10.14	297.75	1,291.23	1,082.38	52.28	347.46	92.44	3,173.68	Refer Data Sheet - 2
	Total	1,071.20	10.14	297.75	1,288.67	910.40	53.19	305.44	85.97	2,951.56	
H	HOSPITAL SERVICES	709.50	10.14	297.75	562.12	412.60	34.23	101.32	42.54	1,460.71	Refer Data Sheet - 2
I	ENGINEERING SERVICES	498.00	10.14	297.75	275.37	938.31	7.23	503.10	60.96	2,092.84	Refer Data Sheet - 2
J	CORRIDORS	3,715.70	10.14	297.75	482.48	136.97	23.99	353.36	39.14	1,343.84	Refer Data Sheet - 2
K	TOILETS	121.00	10.14	297.75	493.10	233.31	32.15	19.05	32.57	1,118.07	Refer Data Sheet - 2
	Total	3,836.70	10.14	297.75	482.82	140.01	24.25	342.82	38.93	1,336.72	
L	ADMIN & ANCILLARY	510.00	10.14	297.75	493.10	25.16	35.63	84.55	28.39	974.71	Refer Data Sheet - 2
	GRAND TOTAL	9,918.84	10.14	297.75	801.00	357.23	39.13	224.04	51.88	1,781.16	

109-BED HOSPITAL, NEW DELHI

COST PER BED - DESIRABLE FINISHES

S.NO.	NAME OF AREA	EXTERNAL FINISH	DOORS & WINDOWS	FLOORING	DADO	WALLS	CEILING	CONTINGENCY (@3%)	TOTAL	REFERENCE
A	ENTRANCE AREA									
	Main(OPD) Entrance	29.30	860.47	2,600.48	772.09	92.06	306.78	139.84	4,801.02	Refer Data Sheet - 2
	Emergency Entrance	6.42	188.48	1,487.61	616.68	35.13	263.78	77.94	2,676.05	Refer Data Sheet - 2
	Services & Staff Entrance	1.67	49.17	81.43	3.46	5.77	3.15	4.34	148.99	Refer Data Sheet - 2
	Total	37.39	1,098.12	4,169.53	1,392.23	132.97	573.70	222.12	7,626.06	
B	AMBULATORY CARE AREA	78.40	2,302.78	9,319.28	2,133.46	458.28	190.57	434.48	14,917.26	Refer Data Sheet - 2
C	DIAGNOSTIC SERVICES									
	Imaging	29.72	872.76	1,445.37	267.82	109.79	55.84	83.44	2,864.74	Refer Data Sheet - 2
	Clinical Labs & Blood bank	26.79	786.72	2,283.76	910.38	122.69	56.05	125.59	4,311.99	Refer Data Sheet - 2
	Total	56.50	1,659.48	3,729.14	1,178.21	232.48	111.89	209.03	7,176.73	
D	INTERMEDIATE CARE AREA	73.74	2,165.76	10,529.44	2,371.17	493.00	194.84	474.84	16,302.79	Refer Data Sheet - 2
E	INTENSIVE CARE AREA	29.91	878.50	4,466.87	2,432.36	226.09	464.07	254.93	8,752.75	Refer Data Sheet - 2
F	CRITICAL CARE AREA	30.37	891.88	3,792.20	2,034.58	218.55	429.90	221.92	7,619.41	Refer Data Sheet - 2
G	THERAPEUTIC SERVICES									
	Day Care	30.41	893.25	3,769.27	1,648.50	207.00	311.57	205.80	7,065.80	Refer Data Sheet - 2
	Operation Theatre Suite	38.85	1,141.01	5,027.34	4,056.30	159.16	1,649.38	362.16	12,434.21	Refer Data Sheet - 2
	Delivery Suite	30.37	891.88	3,867.77	3,242.18	156.61	1,040.79	276.89	9,506.43	Refer Data Sheet - 2
	Total	99.63	2,926.14	12,664.39	8,946.98	522.77	3,001.73	844.85	29,006.43	
H	HOSPITAL SERVICES	65.99	1,938.11	3,658.96	2,685.70	222.81	659.52	276.93	9,508.02	Refer Data Sheet - 2
I	ENGINEERING SERVICES	46.32	1,360.36	1,258.10	4,286.94	33.03	2,298.56	278.50	9,561.80	Refer Data Sheet - 2
J	CORRIDORS	345.58	10,150.00	16,447.37	4,669.29	817.96	12,045.78	1,334.28	45,810.26	Refer Data Sheet - 2
K	TOILETS	11.25	330.53	547.39	259.00	35.69	21.15	36.15	1,241.16	Refer Data Sheet - 2
	Total	356.84	10,480.53	16,994.76	4,928.29	853.65	12,066.93	1,370.43	47,051.42	
L	ADMIN & ANCILLARY	47.43	1,393.14	2,307.17	117.72	166.69	395.58	132.83	4,560.56	Refer Data Sheet - 2
	GRAND TOTAL	922.52	27,094.81	72,889.83	32,507.64	3,560.33	20,387.30	4,720.87	162,083.30	

DESIRABLE FINISHES COSTS - BASED ON DSR-2004/MARKET RATES

S.NO.	NAME OF AREA	DOORS & WINDOWS	FLOORING	DADO	WALLS	CEILING	REFERENCE
A	ENTRANCE AREA						
	Main(OPD) Entrance						
	Trolley park-2	2,679.75	21,150.00	8,767.58	499.50	3,750.30	Refer cost Sheet 8,9,10,11,12
	General waiting	8,932.50	70,500.00	29,225.25	1,665.00	12,501.00	Refer cost Sheet 8,9,10,11,12
	Reception	8,932.50	70,500.00	29,225.25	1,665.00	12,501.00	Refer cost Sheet 8,9,10,11,12
	Arcade						
	shops-4	14,292.00	23,668.80	1,006.00	1,333.50	914.40	Refer cost Sheet 8,9,10,11,12
	Pharmacy	29,477.25	48,816.90	2,074.88	2,750.34	1,885.95	Refer cost Sheet 8,9,10,11,12
	Cafeteria	29,477.25	48,816.90	13,858.76	2,121.69	1,885.95	Refer cost Sheet 8,9,10,11,12
	Sub-total	93,791.25	283,452.60	84,157.71	10,035.04	33,438.60	
	Emergency Entrance						
	Trolley park-2	2,679.75	21,150.00	8,767.58	499.50	3,750.30	Refer cost Sheet 8,9,10,11,12
	General waiting	8,932.50	70,500.00	29,225.25	1,665.00	12,501.00	Refer cost Sheet 8,9,10,11,12
	Reception	8,932.50	70,500.00	29,225.25	1,665.00	12,501.00	Refer cost Sheet 8,9,10,11,12
	Sub-total	20,544.75	162,150.00	67,218.08	3,829.50	28,752.30	
	Services Entrance	2,679.75	4,437.90	188.63	314.33	171.45	Refer cost Sheet 8,9,10,11,12
	Staff Entrance	2,679.75	4,437.90	188.63	314.33	171.45	Refer cost Sheet 8,9,10,11,12
	Sub-total	5,359.50	8,875.80	377.25	628.65	342.90	
	Total	119,695.50	454,478.40	151,753.04	14,493.19	62,533.80	
B	AMBULATORY CARE AREA						
	Screening Clinics						
	Exam/consultation-4	21,438.00	133,149.60	28,169.10	5,994.00	2,138.40	Refer cost Sheet 8,9,10,11,12
	registration	14,292.00	23,668.80	6,719.40	1,603.80	914.40	Refer cost Sheet 8,9,10,11,12
	sub waiting	17,865.00	29,586.00	8,399.25	2,004.75	1,143.00	Refer cost Sheet 8,9,10,11,12
	GeneralClinics						
	Exam/consultation-4	21,438.00	133,149.60	28,169.10	5,994.00	2,138.40	Refer cost Sheet 8,9,10,11,12
	sub waiting	16,078.50	26,627.40	7,559.33	1,804.28	1,028.70	Refer cost Sheet 8,9,10,11,12
	Treatment-2	8,039.25	49,931.10	10,563.41	2,247.75	801.90	Refer cost Sheet 8,9,10,11,12
	clean utility-2	2,679.75	4,437.90	1,259.89	300.71	171.45	Refer cost Sheet 8,9,10,11,12
	dirty utility	2,679.75	4,437.90	1,259.89	300.71	171.45	Refer cost Sheet 8,9,10,11,12
	Nurse station	2,679.75	16,643.70	3,521.14	749.25	267.30	Refer cost Sheet 8,9,10,11,12

S.NO.	NAME OF AREA	DOORS & WINDOWS	FLOORING	DADO	WALLS	CEILING	REFERENCE
	Dedicated Clinics						
	Dental-2	5,359.50	33,287.40	7,042.28	1,498.50	534.60	Refer cost Sheet 8,9,10,11,12
	lab/xray	5,359.50	8,875.80	2,519.78	601.43	342.90	Refer cost Sheet 8,9,10,11,12
	Ent-2	10,719.00	66,574.80	14,084.55	2,997.00	1,069.20	Refer cost Sheet 8,9,10,11,12
	audio + speech	5,359.50	8,875.80	2,519.78	601.43	342.90	Refer cost Sheet 8,9,10,11,12
	sub waiting	13,398.75	22,189.50	6,299.44	1,503.56	857.25	Refer cost Sheet 8,9,10,11,12
	Ophthalmology-2	10,719.00	66,574.80	14,084.55	2,997.00	1,069.20	Refer cost Sheet 8,9,10,11,12
	minor surgery/treatment	12,505.50	77,670.60	16,431.98	3,496.50	1,247.40	Refer cost Sheet 8,9,10,11,12
	sub waiting	5,359.50	8,875.80	2,519.78	601.43	342.90	Refer cost Sheet 8,9,10,11,12
	Treatment	4,019.63	24,965.55	5,281.71	1,123.88	400.95	Refer cost Sheet 8,9,10,11,12
	clean utility	1,339.88	2,218.95	629.94	150.36	85.73	Refer cost Sheet 8,9,10,11,12
	dirty utility	2,679.75	4,437.90	1,259.89	300.71	171.45	Refer cost Sheet 8,9,10,11,12
	Nurse station	2,679.75	16,643.70	3,521.14	749.25	267.30	Refer cost Sheet 8,9,10,11,12
	Ob./Gy./Paed. Clinics						
	Exam/consultation-4	21,438.00	133,149.60	28,169.10	5,994.00	2,138.40	Refer cost Sheet 8,9,10,11,12
	sub waiting	10,719.00	17,751.60	5,039.55	1,202.85	685.80	Refer cost Sheet 8,9,10,11,12
	treatment-2	8,039.25	49,931.10	10,563.41	2,247.75	801.90	Refer cost Sheet 8,9,10,11,12
	clean utility-2	2,679.75	4,437.90	1,259.89	300.71	171.45	Refer cost Sheet 8,9,10,11,12
	dirty utility	2,679.75	4,437.90	1,259.89	300.71	171.45	Refer cost Sheet 8,9,10,11,12
	Nurse station	2,679.75	16,643.70	3,521.14	749.25	267.30	Refer cost Sheet 8,9,10,11,12
	ECG Room	2,679.75	4,437.90	1,259.89	300.71	171.45	Refer cost Sheet 8,9,10,11,12
	Sample collection	2,679.75	4,437.90	1,259.89	300.71	171.45	Refer cost Sheet 8,9,10,11,12
	Toilet (female)	5,359.50	8,875.80	4,199.63	467.78	342.90	Refer cost Sheet 8,9,10,11,12
	Toilet (male)	5,359.50	8,875.80	4,199.63	467.78	342.90	Refer cost Sheet 8,9,10,11,12
	Total	251,003.25	1,015,801.80	232,547.29	49,952.53	20,771.78	
C	DIAGNOSTIC SERVICES						
	Imaging						
	Reception	5,359.50	8,875.80	2,519.78	601.43	342.90	Refer cost Sheet 8,9,10,11,12
	sub waiting	18,758.25	31,065.30	8,819.21	2,104.99	1,200.15	Refer cost Sheet 8,9,10,11,12
	Patient preparation	2,679.75	4,437.90	1,259.89	300.71	171.45	Refer cost Sheet 8,9,10,11,12
	CT scan	8,039.25	13,313.70	3,779.66	902.14	514.35	Refer cost Sheet 8,9,10,11,12
	Control	4,019.63	6,656.85	282.94	584.72	257.18	Refer cost Sheet 8,9,10,11,12
	Special Xray	8,039.25	13,313.70	3,779.66	902.14	514.35	Refer cost Sheet 8,9,10,11,12
	general Xray	8,039.25	13,313.70	3,779.66	902.14	514.35	Refer cost Sheet 8,9,10,11,12

S.NO.	NAME OF AREA	DOORS & WINDOWS	FLOORING	DADO	WALLS	CEILING	REFERENCE
	ultra sound	5,359.50	8,875.80	2,519.78	601.43	342.90	Refer cost Sheet 8,9,10,11,12
	Record	4,019.63	6,656.85	282.94	584.72	257.18	Refer cost Sheet 8,9,10,11,12
	Report	1,339.88	2,218.95	94.31	194.91	85.73	Refer cost Sheet 8,9,10,11,12
	Report writing/computers	24,117.75	39,941.10	1,697.63	3,508.31	1,543.05	Refer cost Sheet 8,9,10,11,12
	Dark room	2,679.75	4,437.90	188.63	389.81	171.45	Refer cost Sheet 8,9,10,11,12
	Doctors room	2,679.75	4,437.90	188.63	389.81	171.45	Refer cost Sheet 8,9,10,11,12
	Sub-total	95,131.13	157,545.45	29,192.70	11,967.24	6,086.48	
	Clinical Labs						
	Sample collection	5,359.50	11,704.50	7,714.13	601.43	342.90	Refer cost Sheet 8,9,10,11,12
	Emergency lab	5,359.50	11,704.50	7,714.13	601.43	342.90	Refer cost Sheet 8,9,10,11,12
	store	5,359.50	11,704.50	7,714.13	601.43	342.90	Refer cost Sheet 8,9,10,11,12
	consultant	5,359.50	8,875.80	377.25	913.28	342.90	Refer cost Sheet 8,9,10,11,12
	records	5,359.50	8,875.80	377.25	913.28	342.90	Refer cost Sheet 8,9,10,11,12
	Technician's rest room	5,359.50	8,875.80	377.25	913.28	342.90	Refer cost Sheet 8,9,10,11,12
	Wash	5,359.50	11,704.50	7,714.13	601.43	342.90	Refer cost Sheet 8,9,10,11,12
	Media preparation	5,359.50	11,704.50	7,714.13	601.43	342.90	Refer cost Sheet 8,9,10,11,12
	labs	21,438.00	46,818.00	30,856.50	2,405.70	1,371.60	Refer cost Sheet 8,9,10,11,12
	Blood Bank						
	Rest	10,719.00	66,574.80	14,084.55	2,997.00	1,069.20	Refer cost Sheet 8,9,10,11,12
	reception	1,339.88	8,321.85	1,760.57	374.63	133.65	Refer cost Sheet 8,9,10,11,12
	bleed	5,359.50	33,287.40	7,042.28	1,498.50	534.60	Refer cost Sheet 8,9,10,11,12
	lab	4,019.63	8,778.38	5,785.59	350.83	257.18	Refer cost Sheet 8,9,10,11,12
	Sub-total	85,752.00	248,930.33	99,231.86	13,373.61	6,109.43	
	Total	180,883.13	406,475.78	128,424.56	25,340.85	12,195.90	
	D INTERMEDIATE CARE AREA						
	Dirty Utility-2	4,019.63	6,656.85	1,889.83	451.07	257.18	Refer cost Sheet 8,9,10,11,12
	Clean Utility-2	4,466.25	7,396.50	2,099.81	501.19	285.75	Refer cost Sheet 8,9,10,11,12
	Linen Store-2	4,019.63	6,656.85	1,889.83	451.07	257.18	Refer cost Sheet 8,9,10,11,12
	General Wards-(4beds x 6)x2	99,150.75	615,816.90	130,282.09	27,722.25	9,890.10	Refer cost Sheet 8,9,10,11,12
	Single Rm/Pvt.Ward/isolation-4	16,078.50	99,862.20	21,126.83	4,495.50	1,603.80	Refer cost Sheet 8,9,10,11,12
	Nurse Station-2	7,146.00	44,383.20	9,389.70	1,998.00	712.80	Refer cost Sheet 8,9,10,11,12
	Pantry-2	4,466.25	7,396.50	2,099.81	501.19	285.75	Refer cost Sheet 8,9,10,11,12
	Double room-4	16,078.50	99,862.20	21,126.83	4,495.50	1,603.80	Refer cost Sheet 8,9,10,11,12
	dayroom-2	16,078.50	99,862.20	21,126.83	4,495.50	1,603.80	Refer cost Sheet 8,9,10,11,12

S.NO.	NAME OF AREA	DOORS & WINDOWS	FLOORING	DADO	WALLS	CEILING	REFERENCE
	Treatment-2	11,612.25	72,122.70	15,258.26	3,246.75	1,158.30	Refer cost Sheet 8,9,10,11,12
	patient toilet-22	34,193.61	56,627.60	26,793.61	2,984.40	2,187.70	Refer cost Sheet 8,9,10,11,12
	Doctors rest room	5,359.50	8,875.80	377.25	779.63	342.90	Refer cost Sheet 8,9,10,11,12
	Toilet	1,339.88	2,218.95	1,049.91	116.94	85.73	Refer cost Sheet 8,9,10,11,12
	Nurse rest room	5,359.50	8,875.80	377.25	779.63	342.90	Refer cost Sheet 8,9,10,11,12
	Toilet	1,339.88	2,218.95	1,049.91	116.94	85.73	Refer cost Sheet 8,9,10,11,12
	Waiting	5,359.50	8,875.80	2,519.78	601.43	534.60	Refer cost Sheet 8,9,10,11,12
	Total	236,068.11	1,147,709.00	258,457.51	53,736.98	21,238.00	
E	INTENSIVE CARE AREA						
	Dirty Utility	2,143.80	3,550.32	1,007.91	294.03	137.16	Refer cost Sheet 8,9,10,11,12
	Clean Utility	2,143.80	3,550.32	1,007.91	294.03	137.16	Refer cost Sheet 8,9,10,11,12
	Sluice Room	2,143.80	3,550.32	1,007.91	294.03	137.16	Refer cost Sheet 8,9,10,11,12
	Linen Store	2,143.80	3,550.32	1,007.91	294.03	137.16	Refer cost Sheet 8,9,10,11,12
	Patients area	57,882.60	359,503.92	76,056.57	19,780.20	5,773.68	Refer cost Sheet 8,9,10,11,12
	Patient Monitoring	6,431.40	39,944.88	8,450.73	2,197.80	641.52	Refer cost Sheet 8,9,10,11,12
	Toilet	2,143.80	3,550.32	1,679.85	240.57	137.16	Refer cost Sheet 8,9,10,11,12
	Change	2,143.80	3,550.32	1,007.91	294.03	137.16	Refer cost Sheet 8,9,10,11,12
	Equipment park-2	4,823.55	7,988.22	2,267.80	661.57	308.61	Refer cost Sheet 8,9,10,11,12
	Pantry	2,143.80	3,550.32	1,007.91	294.03	137.16	Refer cost Sheet 8,9,10,11,12
	Procedure room	11,612.25	54,600.00	170,625.00	-	42,900.00	Refer cost Sheet 8,9,10,11,12
	Total	95,756.40	486,889.26	265,127.41	24,644.32	50,583.93	
F	CRITICAL CARE AREA						
	Disposal-2	4,019.63	6,656.85	1,889.83	601.43	257.18	Refer cost Sheet 8,9,10,11,12
	Setup (clean utility)-2	4,019.63	6,656.85	1,889.83	601.43	257.18	Refer cost Sheet 8,9,10,11,12
	Linen Store	2,679.75	4,437.90	1,259.89	400.95	171.45	Refer cost Sheet 8,9,10,11,12
	Exam/Resuscitation beds						
	resuscitation	10,719.00	66,574.80	14,084.55	3,996.00	1,069.20	Refer cost Sheet 8,9,10,11,12
	observation	10,719.00	66,574.80	14,084.55	3,996.00	1,069.20	Refer cost Sheet 8,9,10,11,12
	recovery	10,719.00	66,574.80	14,084.55	3,996.00	1,069.20	Refer cost Sheet 8,9,10,11,12
	Nurse Station	5,359.50	33,287.40	7,042.28	1,998.00	534.60	Refer cost Sheet 8,9,10,11,12
	Dirty Utility	1,786.50	2,958.60	839.93	267.30	114.30	Refer cost Sheet 8,9,10,11,12
	Clean Utility	1,786.50	2,958.60	839.93	267.30	114.30	Refer cost Sheet 8,9,10,11,12
	Toilet	1,786.50	2,958.60	1,399.88	222.75	114.30	Refer cost Sheet 8,9,10,11,12

S.NO.	NAME OF AREA	DOORS & WINDOWS	FLOORING	DADO	WALLS	CEILING	REFERENCE
	pantry	2,679.75	4,437.90	1,259.89	400.95	171.45	Refer cost Sheet 8,9,10,11,12
	Change	2,679.75	4,437.90	1,259.89	400.95	171.45	Refer cost Sheet 8,9,10,11,12
	plaster/treatment room	10,719.00	66,574.80	14,084.55	3,996.00	1,069.20	Refer cost Sheet 8,9,10,11,12
	O.T.	10,719.00	50,400.00	141,750.00	-	39,600.00	Refer cost Sheet 8,9,10,11,12
	scrub/equipment park-2	7,146.00	11,834.40	3,359.70	1,069.20	457.20	Refer cost Sheet 8,9,10,11,12
	Change-2	3,573.00	5,917.20	1,679.85	534.60	228.60	Refer cost Sheet 8,9,10,11,12
	Doctors rest room	5,359.50	8,875.80	377.25	980.10	342.90	Refer cost Sheet 8,9,10,11,12
	Toilet	744.38	1,232.75	583.28	92.81	47.63	Refer cost Sheet 8,9,10,11,12
	Total	97,215.38	413,349.95	221,769.61	23,821.76	46,859.33	
G	THERAPEUTIC SERVICES						
	Day Care						
	lounge	12,505.50	77,670.60	16,431.98	4,273.50	1,247.40	Refer cost Sheet 8,9,10,11,12
	surgeon-2	10,719.00	66,574.80	14,084.55	3,663.00	1,069.20	Refer cost Sheet 8,9,10,11,12
	store	2,679.75	4,437.90	1,259.89	367.54	171.45	Refer cost Sheet 8,9,10,11,12
	Change	2,679.75	4,437.90	1,259.89	367.54	171.45	Refer cost Sheet 8,9,10,11,12
	Nurse Station	5,359.50	33,287.40	7,042.28	1,831.50	534.60	Refer cost Sheet 8,9,10,11,12
	Clean utility	1,786.50	2,958.60	839.93	245.03	114.30	Refer cost Sheet 8,9,10,11,12
	Dirty utility	1,786.50	2,958.60	839.93	245.03	114.30	Refer cost Sheet 8,9,10,11,12
	Toilet	1,786.50	2,958.60	1,399.88	200.48	114.30	Refer cost Sheet 8,9,10,11,12
	Preparation	10,719.00	66,574.80	14,084.55	3,663.00	1,069.20	Refer cost Sheet 8,9,10,11,12
	change-2	3,573.00	5,917.20	1,679.85	490.05	228.60	Refer cost Sheet 8,9,10,11,12
	recovery	10,719.00	66,574.80	14,084.55	3,663.00	1,069.20	Refer cost Sheet 8,9,10,11,12
	Procedure room-2	7,146.00	33,600.00	94,500.00	-	26,400.00	Refer cost Sheet 8,9,10,11,12
	disposal-2	4,019.63	6,656.85	1,889.83	551.31	257.18	Refer cost Sheet 8,9,10,11,12
	setup-2	4,019.63	6,656.85	1,889.83	551.31	257.18	Refer cost Sheet 8,9,10,11,12
	store-4	7,146.00	11,834.40	3,359.70	980.10	457.20	Refer cost Sheet 8,9,10,11,12
	Scrub/equipment park-2	7,146.00	11,834.40	3,359.70	980.10	457.20	Refer cost Sheet 8,9,10,11,12
	change-2	3,573.00	5,917.20	1,679.85	490.05	228.60	Refer cost Sheet 8,9,10,11,12
	Sub-total	97,364.25	410,850.90	179,686.16	22,562.51	33,961.35	
	Operation Theatre Suite						
	Sterile Store	5,359.50	33,287.40	7,042.28	999.00	7,500.60	Refer cost Sheet 8,9,10,11,12
	Patient transfer	4,287.60	26,629.92	5,633.82	799.20	6,000.48	Refer cost Sheet 8,9,10,11,12
	Sterile Corridor	12,862.80	79,889.76	14,110.74	799.20	47,520.00	Refer cost Sheet 8,9,10,11,12
	Scrub-2	3,014.72	14,175.00	39,867.19	-	11,137.50	Refer cost Sheet 8,9,10,11,12

S.NO.	NAME OF AREA	DOORS & WINDOWS	FLOORING	DADO	WALLS	CEILING	REFERENCE
	Anaesthesia-2	3,014.72	14,175.00	39,867.19	-	11,137.50	Refer cost Sheet 8,9,10,11,12
	O.T.-2	20,902.05	98,280.00	276,412.50	-	77,220.00	Refer cost Sheet 8,9,10,11,12
	Disposal-2	7,235.33	11,982.33	3,401.70	992.35	462.92	Refer cost Sheet 8,9,10,11,12
	Setup (clean utility)-2	7,235.33	11,982.33	3,401.70	992.35	462.92	Refer cost Sheet 8,9,10,11,12
	PreOperation Area	10,183.05	63,246.06	11,171.00	632.70	14,251.14	Refer cost Sheet 8,9,10,11,12
	Change-3	6,788.70	11,242.68	3,191.72	931.10	434.34	Refer cost Sheet 8,9,10,11,12
	Anaesthetists' Room-1	4,019.63	24,965.55	5,281.71	1,373.63	400.95	Refer cost Sheet 8,9,10,11,12
	Post Operation Recovery	16,748.44	104,023.13	22,007.11	5,723.44	1,670.63	Refer cost Sheet 8,9,10,11,12
	Nurse Station	3,617.66	22,469.00	4,753.54	1,236.26	360.86	Refer cost Sheet 8,9,10,11,12
	Clean utility	1,808.83	2,995.58	850.42	248.09	115.73	Refer cost Sheet 8,9,10,11,12
	Dirty utility	1,808.83	2,995.58	850.42	248.09	115.73	Refer cost Sheet 8,9,10,11,12
	Rest Room	8,634.75	14,299.90	607.79	1,471.39	552.45	Refer cost Sheet 8,9,10,11,12
	Toilet	1,488.75	2,465.50	1,166.56	167.06	95.25	Refer cost Sheet 8,9,10,11,12
	Pantry	5,359.50	8,875.80	2,519.78	735.08	342.90	Refer cost Sheet 8,9,10,11,12
	Sub-total	124,370.18	547,980.52	442,137.15	17,348.92	179,781.88	
	Delivery Suite						
	Disposal-2	4,019.63	6,656.85	1,889.83	601.43	257.18	Refer cost Sheet 8,9,10,11,12
	Setup(sterile store)-2	4,019.63	6,656.85	1,889.83	601.43	257.18	Refer cost Sheet 8,9,10,11,12
	Delivery room	10,719.00	50,400.00	141,750.00	-	39,600.00	Refer cost Sheet 8,9,10,11,12
	Patient Area						
	Pre natal	10,719.00	66,574.80	14,084.55	3,996.00	1,069.20	Refer cost Sheet 8,9,10,11,12
	Post natal	10,719.00	66,574.80	14,084.55	3,996.00	1,069.20	Refer cost Sheet 8,9,10,11,12
	Nurse Station	5,359.50	33,287.40	7,042.28	999.00	7,500.60	Refer cost Sheet 8,9,10,11,12
	Clean utility	1,786.50	2,958.60	839.93	267.30	114.30	Refer cost Sheet 8,9,10,11,12
	Dirty utility	1,786.50	2,958.60	839.93	267.30	114.30	Refer cost Sheet 8,9,10,11,12
	Toilet	1,786.50	2,958.60	839.93	267.30	114.30	Refer cost Sheet 8,9,10,11,12
	Scrub/equipment park	3,573.00	5,917.20	1,679.85	534.60	228.60	Refer cost Sheet 8,9,10,11,12
	Change	1,786.50	2,958.60	839.93	267.30	114.30	Refer cost Sheet 8,9,10,11,12
	O.T.	10,719.00	50,400.00	141,750.00	-	39,600.00	Refer cost Sheet 8,9,10,11,12
	Toxemia	5,359.50	33,287.40	7,042.28	999.00	7,500.60	Refer cost Sheet 8,9,10,11,12
	Pantry	2,679.75	4,437.90	1,259.89	400.95	171.45	Refer cost Sheet 8,9,10,11,12
	Change (Female)	2,679.75	4,437.90	1,259.89	400.95	171.45	Refer cost Sheet 8,9,10,11,12
	Store	2,679.75	4,437.90	1,259.89	400.95	171.45	Refer cost Sheet 8,9,10,11,12
	Paediatric nursery	10,719.00	66,574.80	14,084.55	1,998.00	15,001.20	Refer cost Sheet 8,9,10,11,12

S.NO.	NAME OF AREA	DOORS & WINDOWS	FLOORING	DADO	WALLS	CEILING	REFERENCE
	Nurse Rest Room	5,359.50	8,875.80	377.25	980.10	342.90	Refer cost Sheet 8,9,10,11,12
	toilet	744.38	1,232.75	583.28	92.81	47.63	Refer cost Sheet 8,9,10,11,12
	Sub-total	97,215.38	421,586.75	353,397.61	17,070.41	113,445.83	
	Total	318,949.80	1,380,418.17	975,220.92	56,981.85	327,189.05	
H	HOSPITAL SERVICES						
	C.S.S.D.	25,011.00	41,420.40	11,758.95	3,742.20	1,600.20	Refer cost Sheet 8,9,10,11,12
	Laundry	32,157.00	53,254.80	25,197.75	4,009.50	2,057.40	Refer cost Sheet 8,9,10,11,12
	Medical gases	16,078.50	26,627.40	1,131.75	1,885.95	1,028.70	Refer cost Sheet 8,9,10,11,12
	General Store	29,477.25	48,816.90	2,074.88	3,457.58	1,885.95	Refer cost Sheet 8,9,10,11,12
	Receipt	16,078.50	26,627.40	1,131.75	1,885.95	1,028.70	Refer cost Sheet 8,9,10,11,12
	Medical Store	29,477.25	48,816.90	2,074.88	3,457.58	1,885.95	Refer cost Sheet 8,9,10,11,12
	Autopsy	16,078.50	75,600.00	212,625.00	-	59,400.00	Refer cost Sheet 8,9,10,11,12
	Kitchen	46,895.63	77,663.25	36,746.72	5,847.19	3,000.38	Refer cost Sheet 8,9,10,11,12
	Total	211,253.63	398,827.05	292,741.67	24,285.94	71,887.28	
I	ENGINEERING SERVICES						
	Electrical room	16,078.50	13,953.60	473.51	1,800.23	1,028.70	Refer cost Sheet 8,9,10,11,12
	Water supply/Pump Room	16,078.50	13,953.60	473.51	1,800.23	1,028.70	Refer cost Sheet 8,9,10,11,12
	D.G. Room	16,078.50	13,953.60	70,875.00	-	37,800.00	Refer cost Sheet 8,9,10,11,12
	HVAC Room	28,137.38	24,418.80	124,031.25	-	66,150.00	Refer cost Sheet 8,9,10,11,12
	AHU room(Bsmt.)-4	21,438.00	18,604.80	94,500.00	-	50,400.00	Refer cost Sheet 8,9,10,11,12
	AHU room(Gr. Floor)-4	20,098.13	17,442.00	70,875.00	-	47,250.00	Refer cost Sheet 8,9,10,11,12
	AHU room(First Floor)-4	19,651.50	17,054.40	80,850.00	-	46,200.00	Refer cost Sheet 8,9,10,11,12
	Incinerator	10,719.00	17,751.60	25,197.75	-	685.80	Refer cost Sheet 8,9,10,11,12
	Total	148,279.50	137,132.40	467,276.03	3,600.45	250,543.20	
J	CORRIDORS						
	Corridors	931,272.68	1,542,268.87	437,838.90	69,669.52	1,303,312.59	Refer cost Sheet 8,9,10,11,12
	Elevators	23,820.00	-	-	-	-	
	Ramp	104,808.00	173,571.20	49,275.60	13,503.60	6,705.60	Refer cost Sheet 8,9,10,11,12
	Staircase	46,449.00	76,923.60	21,838.05	5,984.55	2,971.80	Refer cost Sheet 8,9,10,11,12
	Sub-total	1,106,349.68	1,792,763.67	508,952.55	89,157.67	1,312,989.99	
K	TOILETS						
	Toilet (male)	4,615.13	7,643.05	3,616.34	575.44	295.28	Refer cost Sheet 8,9,10,11,12

S.NO.	NAME OF AREA	DOORS & WINDOWS	FLOORING	DADO	WALLS	CEILING	REFERENCE
	Toilet (female)	4,615.13	7,643.05	3,616.34	575.44	295.28	Refer cost Sheet 8,9,10,11,12
	Toilet (male)	5,359.50	8,875.80	4,199.63	467.78	342.90	Refer cost Sheet 8,9,10,11,12
	Toilet (female)	5,359.50	8,875.80	4,199.63	467.78	342.90	Refer cost Sheet 8,9,10,11,12
	Toilet (male)	8,039.25	13,313.70	6,299.44	902.14	514.35	Refer cost Sheet 8,9,10,11,12
	Toilet (female)	8,039.25	13,313.70	6,299.44	902.14	514.35	Refer cost Sheet 8,9,10,11,12
	Sub-total	36,027.75	59,665.10	28,230.81	3,890.70	2,305.05	
	Total	1,142,377.43	1,852,428.77	537,183.37	93,048.37	1,315,295.04	
L	ADMIN & ANCILLARY						
	Staff room(entry-1)	5,359.50	8,875.80	377.25	628.65	342.90	Refer cost Sheet 8,9,10,11,12
	Staff change	16,078.50	26,627.40	1,131.75	1,885.95	1,028.70	Refer cost Sheet 8,9,10,11,12
	Staff room(entry-2)	5,359.50	8,875.80	377.25	628.65	342.90	Refer cost Sheet 8,9,10,11,12
	Medical Records	24,117.75	39,941.10	1,697.63	2,828.93	1,543.05	Refer cost Sheet 8,9,10,11,12
	Supervisor's Office	8,039.25	13,313.70	565.88	942.98	514.35	Refer cost Sheet 8,9,10,11,12
	MS	5,359.50	8,875.80	377.25	579.15	7,500.60	Refer cost Sheet 8,9,10,11,12
	Officers-4	10,719.00	17,751.60	754.50	1,826.55	685.80	Refer cost Sheet 8,9,10,11,12
	Matron	5,359.50	8,875.80	377.25	913.28	342.90	Refer cost Sheet 8,9,10,11,12
	Sub waiting-2	3,870.75	6,410.30	272.46	423.07	247.65	Refer cost Sheet 8,9,10,11,12
	Offices	42,578.25	70,513.30	2,997.04	4,653.76	2,724.15	Refer cost Sheet 8,9,10,11,12
	library/conference	19,651.50	32,544.60	1,383.25	2,123.55	27,502.20	Refer cost Sheet 8,9,10,11,12
	Snacks	2,679.75	4,437.90	1,259.89	367.54	171.45	Refer cost Sheet 8,9,10,11,12
	Info.	2,679.75	4,437.90	1,259.89	367.54	171.45	Refer cost Sheet 8,9,10,11,12
	Total	151,852.50	251,481.00	12,831.28	18,169.58	43,118.10	
	GRAND TOTAL	2,953,334.61	7,944,991.57	3,543,332.66	388,075.81	2,222,215.40	

109-BED HOSPITAL, NEW DELHI

DESIRABLE DOOR/WINDOW FINISHES COST

Anodised aluminium powder coated doors/windows @ Market rate

Doors/windows @ 15% of plinth area

S.NO.	NAME OF AREA	TOTAL AREA	DOORS / WINDOWS @ 15% PLINTH AREA	RATE (per sqm.)	AMOUNT	REFERENCE
A	ENTRANCE AREA					
	Main(OPD) Entrance					
	Trolley park-2	9.00	1.35		2,679.75	Refer Data Sheet - 2
	General waiting	30.00	4.50	1,985.00	8,932.50	Refer Data Sheet - 2
	Reception	30.00	4.50	1,985.00	8,932.50	Refer Data Sheet - 2
	Arcade					
	shops-4	48.00	7.20	1,985.00	14,292.00	Refer Data Sheet - 2
	Pharmacy	99.00	14.85	1,985.00	29,477.25	Refer Data Sheet - 2
	Cafetaria	99.00	14.85	1,985.00	29,477.25	Refer Data Sheet - 2
	Sub-total	315.00	47.25		93,791.25	
	Emergency Entrance					
	Trolley park-2	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	General waiting	30.00	4.50	1,985.00	8,932.50	Refer Data Sheet - 2
	Reception	30.00	4.50	1,985.00	8,932.50	Refer Data Sheet - 2
	Sub-total	69.00	10.35		20,544.75	
	Services Entrance					
	Staff Entrance	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
		9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	Sub-total	18.00	2.70		5,359.50	
	Total	402.00	60.30		119,695.50	
B	AMBULATORY CARE AREA					
	Screening Clinics					
	Exam/consultation-4	72.00	10.80	1,985.00	21,438.00	Refer Data Sheet - 2
	registration	48.00	7.20	1,985.00	14,292.00	Refer Data Sheet - 2
	sub waiting	60.00	9.00	1,985.00	17,865.00	Refer Data Sheet - 2
	General Clinics					
	Exam/consultation-4	72.00	10.80	1,985.00	21,438.00	Refer Data Sheet - 2
	sub waiting	54.00	8.10	1,985.00	16,078.50	Refer Data Sheet - 2
	Treatment-2					
	clean utility-2	27.00	4.05	1,985.00	8,039.25	Refer Data Sheet - 2
		9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2

S.NO.	NAME OF AREA	TOTAL AREA	DOORS / WINDOWS @15% PLINTH AREA	RATE (per sqm.)	AMOUNT	REFERENCE
	dirty utility	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	Nurse station	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	Dedicated Clinics					
	Dental-2	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	lab/xray	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Ent-2	36.00	5.40	1,985.00	10,719.00	Refer Data Sheet - 2
	audio + speech	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	sub waiting	45.00	6.75	1,985.00	13,398.75	Refer Data Sheet - 2
	Ophthalmology-2	36.00	5.40	1,985.00	10,719.00	Refer Data Sheet - 2
	minor surgery/treatment	42.00	6.30	1,985.00	12,505.50	Refer Data Sheet - 2
	sub waiting	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Treatment	13.50	2.03	1,985.00	4,019.63	Refer Data Sheet - 2
	clean utility	4.50	0.68	1,985.00	1,339.88	Refer Data Sheet - 2
	dirty utility	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	Nurse station	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	Ob./Gy./Paed. Clinics					
	Exam/consultation-4	72.00	10.80	1,985.00	21,438.00	Refer Data Sheet - 2
	sub waiting	36.00	5.40	1,985.00	10,719.00	Refer Data Sheet - 2
	treatment-2	27.00	4.05	1,985.00	8,039.25	Refer Data Sheet - 2
	clean utility-2	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	dirty utility	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	Nurse station	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	ECG Room	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	Sample collection	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	Toilet (female)	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Toilet (male)	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Total	843.00	126.45		251,003.25	
C	DIAGNOSTIC SERVICES					
	Imaging					
	Reception	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	sub waiting	63.00	9.45	1,985.00	18,758.25	Refer Data Sheet - 2
	Patient preparation	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	CT scan	27.00	4.05	1,985.00	8,039.25	Refer Data Sheet - 2
	Control	13.50	2.03	1,985.00	4,019.63	Refer Data Sheet - 2

S.NO.	NAME OF AREA	TOTAL AREA	DOORS / WINDOWS @ 15% PLINTH AREA	RATE (per sqm.)	AMOUNT	REFERENCE
	Special Xray	27.00	4.05	1,985.00	8,039.25	Refer Data Sheet - 2
	general Xray	27.00	4.05	1,985.00	8,039.25	Refer Data Sheet - 2
	ultra sound	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Record	13.50	2.03	1,985.00	4,019.63	Refer Data Sheet - 2
	Report	4.50	0.68	1,985.00	1,339.88	Refer Data Sheet - 2
	Report writing/computers	81.00	12.15	1,985.00	24,117.75	Refer Data Sheet - 2
	Dark room	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	Doctors room	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	Sub-total	319.50	47.93		95,131.13	
	Clinical Labs					
	Sample collection	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Emergency lab	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	store	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	consultant	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	records	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Technician's rest room	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Wash	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Media preparation	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	labs	72.00	10.80	1,985.00	21,438.00	Refer Data Sheet - 2
	Blood Bank					
	Rest	36.00	5.40	1,985.00	10,719.00	Refer Data Sheet - 2
	reception	4.50	0.68	1,985.00	1,339.88	Refer Data Sheet - 2
	bleed	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	lab	13.50	2.03	1,985.00	4,019.63	Refer Data Sheet - 2
	Sub-total	288.00	43.20		85,752.00	
	Total	607.50	91.13		180,883.13	
	D INTERMEDIATE CARE AREA					
	Dirty Utility-2	13.50	2.03	1,985.00	4,019.63	Refer Data Sheet - 2
	Clean Utility-2	15.00	2.25	1,985.00	4,466.25	Refer Data Sheet - 2
	Linen Store-2	13.50	2.03	1,985.00	4,019.63	Refer Data Sheet - 2
	General Wards-(4beds x 6)x2	333.00	49.95	1,985.00	99,150.75	Refer Data Sheet - 2
	Single Rm/Pvt.Ward/isolation-4	54.00	8.10	1,985.00	16,078.50	Refer Data Sheet - 2
	Nurse Station-2	24.00	3.60	1,985.00	7,146.00	Refer Data Sheet - 2
	Pantry-2	15.00	2.25	1,985.00	4,466.25	Refer Data Sheet - 2

S.NO.	NAME OF AREA	TOTAL AREA	DOORS / WINDOWS @ 15% PLINTH AREA	RATE (per sqm.)	AMOUNT	REFERENCE
	Double room-4	54.00	8.10	1,985.00	16,078.50	Refer Data Sheet - 2
	dayroom-2	54.00	8.10	1,985.00	16,078.50	Refer Data Sheet - 2
	Treatment-2	39.00	5.85	1,985.00	11,612.25	Refer Data Sheet - 2
	patient toilet-22	114.84	17.23	1,985.00	34,193.61	Refer Data Sheet - 2
	Doctors rest room	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Toilet	4.50	0.68	1,985.00	1,339.88	Refer Data Sheet - 2
	Nurse rest room	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Toilet	4.50	0.68	1,985.00	1,339.88	Refer Data Sheet - 2
	Waiting	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Total	792.84	118.93		236,068.11	
	E INTENSIVE CARE AREA					
	Dirty Utility	7.20	1.08	1,985.00	2,143.80	Refer Data Sheet - 2
	Clean Utility	7.20	1.08	1,985.00	2,143.80	Refer Data Sheet - 2
	Sluice Room	7.20	1.08	1,985.00	2,143.80	Refer Data Sheet - 2
	Linen Store	7.20	1.08	1,985.00	2,143.80	Refer Data Sheet - 2
	Patients area	194.40	29.16	1,985.00	57,882.60	Refer Data Sheet - 2
	Patient Monitoring	21.60	3.24	1,985.00	6,431.40	Refer Data Sheet - 2
	Toilet	7.20	1.08	1,985.00	2,143.80	Refer Data Sheet - 2
	Change	7.20	1.08	1,985.00	2,143.80	Refer Data Sheet - 2
	Equipment park-2	16.20	2.43	1,985.00	4,823.55	Refer Data Sheet - 2
	Pantry	7.20	1.08	1,985.00	2,143.80	Refer Data Sheet - 2
	Procedure room	39.00	5.85	1,985.00	11,612.25	Refer Data Sheet - 2
	Total	321.60	48.24		95,756.40	
	F CRITICAL CARE AREA					
	Disposal-2	13.50	2.03	1,985.00	4,019.63	Refer Data Sheet - 2
	Setup (clean utility)-2	13.50	2.03	1,985.00	4,019.63	Refer Data Sheet - 2
	Linen Store	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	Exam/Resuscitation beds					
	resuscitation	36.00	5.40	1,985.00	10,719.00	Refer Data Sheet - 2
	observation	36.00	5.40	1,985.00	10,719.00	Refer Data Sheet - 2
	recovery	36.00	5.40	1,985.00	10,719.00	Refer Data Sheet - 2
	Nurse Station	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Dirty Utility	6.00	0.90	1,985.00	1,786.50	Refer Data Sheet - 2

S.NO.	NAME OF AREA	TOTAL AREA	DOORS / WINDOWS @ 15% PLINTH AREA	RATE (per sqm.)	AMOUNT	REFERENCE
	Clean Utility	6.00	0.90	1,985.00	1,786.50	Refer Data Sheet - 2
	Toilet	6.00	0.90	1,985.00	1,786.50	Refer Data Sheet - 2
	pantry	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	Change	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	plaster/treatment room	36.00	5.40	1,985.00	10,719.00	Refer Data Sheet - 2
	O.T.	36.00	5.40	1,985.00	10,719.00	Refer Data Sheet - 2
	scrub/equipment park-2	24.00	3.60	1,985.00	7,146.00	Refer Data Sheet - 2
	Change-2	12.00	1.80	1,985.00	3,573.00	Refer Data Sheet - 2
	Doctors rest room	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Toilet	2.50	0.38	1,985.00	744.38	Refer Data Sheet - 2
	Total	326.50	48.98		97,215.38	
G	THERAPEUTIC SERVICES					
	Day Care					
	lounge	42.00	6.30	1,985.00	12,505.50	Refer Data Sheet - 2
	surgeon-2	36.00	5.40	1,985.00	10,719.00	Refer Data Sheet - 2
	store	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	Change	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	Nurse Station	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Clean utility	6.00	0.90	1,985.00	1,786.50	Refer Data Sheet - 2
	Dirty utility	6.00	0.90	1,985.00	1,786.50	Refer Data Sheet - 2
	Toilet	6.00	0.90	1,985.00	1,786.50	Refer Data Sheet - 2
	Preparation	36.00	5.40	1,985.00	10,719.00	Refer Data Sheet - 2
	change-2	12.00	1.80	1,985.00	3,573.00	Refer Data Sheet - 2
	recovery	36.00	5.40	1,985.00	10,719.00	Refer Data Sheet - 2
	Procedure room-2	24.00	3.60	1,985.00	7,146.00	Refer Data Sheet - 2
	disposal-2	13.50	2.03	1,985.00	4,019.63	Refer Data Sheet - 2
	setup-2	13.50	2.03	1,985.00	4,019.63	Refer Data Sheet - 2
	store-4	24.00	3.60	1,985.00	7,146.00	Refer Data Sheet - 2
	Scrub/equipment park-2	24.00	3.60	1,985.00	7,146.00	Refer Data Sheet - 2
	change-2	12.00	1.80	1,985.00	3,573.00	Refer Data Sheet - 2
	Sub-total	327.00	49.05		97,364.25	
	Operation Theatre Suite					
	Sterile Store	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Patient transfer	14.40	2.16	1,985.00	4,287.60	Refer Data Sheet - 2

S.NO.	NAME OF AREA	TOTAL AREA	DOORS / WINDOWS @15% PLINTH AREA	RATE (per sqm.)	AMOUNT	REFERENCE
	Sterile Corridor	43.20	6.48	1,985.00	12,862.80	Refer Data Sheet - 2
	Scrub-2	10.13	1.52	1,985.00	3,014.72	Refer Data Sheet - 2
	Anaesthesia-2	10.13	1.52	1,985.00	3,014.72	Refer Data Sheet - 2
	O.T.-2	70.20	10.53	1,985.00	20,902.05	Refer Data Sheet - 2
	Disposal-2	24.30	3.65	1,985.00	7,235.33	Refer Data Sheet - 2
	Setup (clean utility)-2	24.30	3.65	1,985.00	7,235.33	Refer Data Sheet - 2
	PreOperation Area	34.20	5.13	1,985.00	10,183.05	Refer Data Sheet - 2
	Change-3	22.80	3.42	1,985.00	6,788.70	Refer Data Sheet - 2
	Anaesthetists' Room-1	13.50	2.03	1,985.00	4,019.63	Refer Data Sheet - 2
	Post Operation Recovery	56.25	8.44	1,985.00	16,748.44	Refer Data Sheet - 2
	Nurse Station	12.15	1.82	1,985.00	3,617.66	Refer Data Sheet - 2
	Clean utility	6.08	0.91	1,985.00	1,808.83	Refer Data Sheet - 2
	Dirty utility	6.08	0.91	1,985.00	1,808.83	Refer Data Sheet - 2
	Rest Room	29.00	4.35	1,985.00	8,634.75	Refer Data Sheet - 2
	Toilet	5.00	0.75	1,985.00	1,488.75	Refer Data Sheet - 2
	Pantry	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Sub-total	417.70	62.66		124,370.18	
	Delivery Suite					
	Disposal-2	13.50	2.03	1,985.00	4,019.63	Refer Data Sheet - 2
	Setup(sterile store)-2	13.50	2.03	1,985.00	4,019.63	Refer Data Sheet - 2
	Delivery room	36.00	5.40	1,985.00	10,719.00	Refer Data Sheet - 2
	Patient Area					
	Pre natal	36.00	5.40	1,985.00	10,719.00	Refer Data Sheet - 2
	Post natal	36.00	5.40	1,985.00	10,719.00	Refer Data Sheet - 2
	Nurse Station	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Clean utility	6.00	0.90	1,985.00	1,786.50	Refer Data Sheet - 2
	Dirty utility	6.00	0.90	1,985.00	1,786.50	Refer Data Sheet - 2
	Toilet	6.00	0.90	1,985.00	1,786.50	Refer Data Sheet - 2
	Scrub/equipment park	12.00	1.80	1,985.00	3,573.00	Refer Data Sheet - 2
	Change	6.00	0.90	1,985.00	1,786.50	Refer Data Sheet - 2
	O.T.	36.00	5.40	1,985.00	10,719.00	Refer Data Sheet - 2
	Toxemia	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Pantry	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	Change (Female)	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	Store	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2

S.NO.	NAME OF AREA	TOTAL AREA	DOORS / WINDOWS @15% PLINTH AREA	RATE (per sqm.)	AMOUNT	REFERENCE
	Paediatric nursery	36.00	5.40	1,985.00	10,719.00	Refer Data Sheet - 2
	Nurse Rest Room	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	toilet	2.50	0.38	1,985.00	744.38	Refer Data Sheet - 2
	Sub-total	326.50	48.98		97,215.38	
	Total	1,071.20	160.68		318,949.80	
H	HOSPITAL SERVICES					
	C.S.S.D.	84.00	12.60	1,985.00	25,011.00	Refer Data Sheet - 2
	Laundry	108.00	16.20	1,985.00	32,157.00	Refer Data Sheet - 2
	Medical gases	54.00	8.10	1,985.00	16,078.50	Refer Data Sheet - 2
	General Store	99.00	14.85	1,985.00	29,477.25	Refer Data Sheet - 2
	Receipt	54.00	8.10	1,985.00	16,078.50	Refer Data Sheet - 2
	Medical Store	99.00	14.85	1,985.00	29,477.25	Refer Data Sheet - 2
	Autopsy	54.00	8.10	1,985.00	16,078.50	Refer Data Sheet - 2
	Kitchen	157.50	23.63	1,985.00	46,895.63	Refer Data Sheet - 2
	Total	709.50	106.43		211,253.63	
I	ENGINEERING SERVICES					
	Electrical room	54.00	8.10	1,985.00	16,078.50	Refer Data Sheet - 2
	Water supply/Pump Room	54.00	8.10	1,985.00	16,078.50	Refer Data Sheet - 2
	D.G. Room	54.00	8.10	1,985.00	16,078.50	Refer Data Sheet - 2
	HVAC Room	94.50	14.18	1,985.00	28,137.38	Refer Data Sheet - 2
	AHU room(Bsmt.)-4	72.00	10.80	1,985.00	21,438.00	Refer Data Sheet - 2
	AHU room(Gr. Floor)-4	67.50	10.13	1,985.00	20,098.13	Refer Data Sheet - 2
	AHU room(First Floor)-4	66.00	9.90	1,985.00	19,651.50	Refer Data Sheet - 2
	Incinerator	36.00	5.40	1,985.00	10,719.00	Refer Data Sheet - 2
	Total	498.00	74.70		148,279.50	
J	CORRIDORS					
	Corridors	3,127.70	469.16	1,985.00	931,272.68	Refer Data Sheet - 2
	Elevators	80.00	12.00	1,985.00	23,820.00	Refer Data Sheet - 2
	Ramp	352.00	52.80	1,985.00	104,808.00	Refer Data Sheet - 2
	Staircase	156.00	23.40	1,985.00	46,449.00	Refer Data Sheet - 2
	Sub-total	3,715.70	557.36		1,106,349.68	
K	TOILETS					

S.NO.	NAME OF AREA	TOTAL AREA	DOORS / WINDOWS @15% PLINTH AREA	RATE (per sqm.)	AMOUNT	REFERENCE
	Toilet (male)	15.50	2.33	1,985.00	4,615.13	Refer Data Sheet - 2
	Toilet (female)	15.50	2.33	1,985.00	4,615.13	Refer Data Sheet - 2
	Toilet (male)	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Toilet (female)	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Toilet (male)	27.00	4.05	1,985.00	8,039.25	Refer Data Sheet - 2
	Toilet (female)	27.00	4.05	1,985.00	8,039.25	Refer Data Sheet - 2
	Sub-total	121.00	18.15		36,027.75	
	Total	3,836.70	575.51		1,142,377.43	
L	ADMIN & ANCILLARY					
	Staff room(entry-1)	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Staff change	54.00	8.10	1,985.00	16,078.50	Refer Data Sheet - 2
	Staff room(entry-2)	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Medical Records	81.00	12.15	1,985.00	24,117.75	Refer Data Sheet - 2
	Supervisor's Office	27.00	4.05	1,985.00	8,039.25	Refer Data Sheet - 2
	MS	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Officers-4	36.00	5.40	1,985.00	10,719.00	Refer Data Sheet - 2
	Matron	18.00	2.70	1,985.00	5,359.50	Refer Data Sheet - 2
	Sub waiting-2	13.00	1.95	1,985.00	3,870.75	Refer Data Sheet - 2
	Offices	143.00	21.45	1,985.00	42,578.25	Refer Data Sheet - 2
	library/conference	66.00	9.90	1,985.00	19,651.50	Refer Data Sheet - 2
	Snacks	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	Info.	9.00	1.35	1,985.00	2,679.75	Refer Data Sheet - 2
	Total	510.00	76.50		151,852.50	
	GRAND TOTAL	9,918.84	1,487.83		2,953,334.61	

DESIRABLE FLOORING FINISHES COST

Floor finish area @ 100% plinth area

Refer Data Sheet - 2 for floor finish type

S.NO.	NAME OF AREA	TOTAL AREA	FLOOR TYPE (ref. Data Sheet-2)	AREA	RATE	AMOUNT	REFERENCE
A	ENTRANCE AREA						
	Main(OPD) Entrance						
	Trolley park-2	9.00	Granite	9.00	2,350.00	21,150.00	Market Rate
	General waiting	30.00	Granite	30.00	2,350.00	70,500.00	Market Rate
	Reception	30.00	Granite	30.00	2,350.00	70,500.00	Market Rate
	Arcade						
	shops-4	48.00	Kota	48.00	493.10	23,668.80	DSR 2004
	Pharmacy	99.00	Kota	99.00	493.10	48,816.90	DSR 2004
	Cafeteria	99.00	Kota	99.00	493.10	48,816.90	DSR 2004
	Sub-total	315.00				283,452.60	
	Emergency Entrance						
	Trolley park-2	9.00	Granite	9.00	2,350.00	21,150.00	Market Rate
	General waiting	30.00	Granite	30.00	2,350.00	70,500.00	Market Rate
	Reception	30.00	Granite	30.00	2,350.00	70,500.00	Market Rate
	Sub-total	69.00				162,150.00	
	Services Entrance	9.00	Kota	9.00	493.10	4,437.90	DSR 2004
	Staff Entrance	9.00	Kota	9.00	493.10	4,437.90	DSR 2004
	Sub-total	18.00				8,875.80	
	Total	402.00				454,478.40	
B	AMBULATORY CARE AREA						
	Screening Clinics						
	Exam/consultation-4	72.00	Marble	72.00	1,849.30	133,149.60	DSR 2004
	registration	48.00	Kota	48.00	493.10	23,668.80	DSR 2004
	sub waiting	60.00	Kota	60.00	493.10	29,586.00	DSR 2004
	General Clinics						
	Exam/consultation-4	72.00	Marble	72.00	1,849.30	133,149.60	DSR 2004
	sub waiting	54.00	Kota	54.00	493.10	26,627.40	DSR 2004
	Treatment-2	27.00	Marble	27.00	1,849.30	49,931.10	DSR 2004
	clean utility-2	9.00	Kota	9.00	493.10	4,437.90	DSR 2004

S.NO.	NAME OF AREA	TOTAL AREA	FLOOR TYPE (ref. Data Sheet-2)	AREA	RATE	AMOUNT	REFERENCE
	dirty utility	9.00	Kota	9.00	493.10	4,437.90	DSR 2004
	Nurse station	9.00	Marble	9.00	1,849.30	16,643.70	DSR 2004
	Dedicated Clinics						
	Dental-2	18.00	Marble	18.00	1,849.30	33,287.40	DSR 2004
	lab/xray	18.00	Kota	18.00	493.10	8,875.80	DSR 2004
	Ent-2	36.00	Marble	36.00	1,849.30	66,574.80	DSR 2004
	audio + speech	18.00	Kota	18.00	493.10	8,875.80	DSR 2004
	sub waiting	45.00	Kota	45.00	493.10	22,189.50	DSR 2004
	Ophthalmology	36.00	Marble	36.00	1,849.30	66,574.80	DSR 2004
	minor surgery/treatment	42.00	Marble	42.00	1,849.30	77,670.60	DSR 2004
	sub waiting	18.00	Kota	18.00	493.10	8,875.80	DSR 2004
	Treatment	13.50	Marble	13.50	1,849.30	24,965.55	DSR 2004
	clean utility	4.50	Kota	4.50	493.10	2,218.95	DSR 2004
	dirty utility	9.00	Kota	9.00	493.10	4,437.90	DSR 2004
	Nurse station	9.00	Marble	9.00	1,849.30	16,643.70	DSR 2004
	Ob./Gy./Paed. Clinics						
	Exam/consultation-4	72.00	Marble	72.00	1,849.30	133,149.60	DSR 2004
	sub waiting	36.00	Kota	36.00	493.10	17,751.60	DSR 2004
	treatment-2	27.00	Marble	27.00	1,849.30	49,931.10	DSR 2004
	clean utility-2	9.00	Kota	9.00	493.10	4,437.90	DSR 2004
	dirty utility	9.00	Kota	9.00	493.10	4,437.90	DSR 2004
	Nurse station	9.00	Marble	9.00	1,849.30	16,643.70	DSR 2004
	ECG Room	9.00	Kota	9.00	493.10	4,437.90	DSR 2004
	Sample collectio	9.00	Kota	9.00	493.10	4,437.90	DSR 2004
	Toilet (female)	18.00	Kota	18.00	493.10	8,875.80	DSR 2004
	Toilet (male)	18.00	Kota	18.00	493.10	8,875.80	DSR 2004
	Total	843.00				1,015,801.80	
	C DIAGNOSTIC SERVICES						
	Imaging						
	Reception	18.00	Kota	18.00	493.10	8,875.80	DSR 2004
	sub waiting	63.00	Kota	63.00	493.10	31,065.30	DSR 2004
	Patient prepa	9.00	Kota	9.00	493.10	4,437.90	DSR 2004
	CT scan	27.00	Kota	27.00	493.10	13,313.70	DSR 2004
	Control	13.50	Kota	13.50	493.10	6,656.85	DSR 2004

S.NO.	NAME OF AREA	TOTAL AREA	FLOOR TYPE (ref. Data Sheet-2)	AREA	RATE	AMOUNT	REFERENCE
	Special Xray	27.00	Kota	27.00	493.10	13,313.70	DSR 2004
	general Xray	27.00	Kota	27.00	493.10	13,313.70	DSR 2004
	ultra sound	18.00	Kota	18.00	493.10	8,875.80	DSR 2004
	Record	13.50	Kota	13.50	493.10	6,656.85	DSR 2004
	Report	4.50	Kota	4.50	493.10	2,218.95	DSR 2004
	Report writin	81.00	Kota	81.00	493.10	39,941.10	DSR 2004
	Dark room	9.00	Kota	9.00	493.10	4,437.90	DSR 2004
	Doctors room	9.00	Kota	9.00	493.10	4,437.90	DSR 2004
	Sub-total	319.50				157,545.45	
	Clinical Labs						
	Sample colle	18.00	Acid/Alkali resist.	18.00	650.25	11,704.50	DSR 2004
	Emergency k	18.00	Acid/Alkali resist.	18.00	650.25	11,704.50	DSR 2004
	store	18.00	Acid/Alkali resist.	18.00	650.25	11,704.50	DSR 2004
	consultant	18.00	Kota	18.00	493.10	8,875.80	DSR 2004
	records	18.00	Kota	18.00	493.10	8,875.80	DSR 2004
	Technician's	18.00	Kota	18.00	493.10	8,875.80	DSR 2004
	Wash	18.00	Acid/Alkali resist.	18.00	650.25	11,704.50	DSR 2004
	Media prepa	18.00	Acid/Alkali resist.	18.00	650.25	11,704.50	DSR 2004
	labs	72.00	Acid/Alkali resist.	72.00	650.25	46,818.00	DSR 2004
	Blood Bank						
	Rest	36.00	Marble	36.00	1,849.30	66,574.80	DSR 2004
	reception	4.50	Marble	4.50	1,849.30	8,321.85	DSR 2004
	bleed	18.00	Marble	18.00	1,849.30	33,287.40	DSR 2004
	lab	13.50	Acid/Alkali resist.	13.50	650.25	8,778.38	DSR 2004
	Sub-total	288.00				248,930.33	
	Total	607.50				406,475.78	
	D INTERMEDIATE CARE AREA						
	Dirty Utility-2	13.50	Kota	13.50	493.10	6,656.85	DSR 2004
	Clean Utility-2	15.00	Kota	15.00	493.10	7,396.50	DSR 2004
	Linen Store-2	13.50	Kota	13.50	493.10	6,656.85	DSR 2004
	General Wards-	333.00	Marble	333.00	1,849.30	615,816.90	DSR 2004
	Single Rm/Pvt.W	54.00	Marble	54.00	1,849.30	99,862.20	DSR 2004
	Nurse Station-2	24.00	Marble	24.00	1,849.30	44,383.20	DSR 2004
	Pantry-2	15.00	Kota	15.00	493.10	7,396.50	DSR 2004

S.NO.	NAME OF AREA	TOTAL AREA	FLOOR TYPE (ref. Data Sheet-2)	AREA	RATE	AMOUNT	REFERENCE
	Double room-4	54.00	Marble	54.00	1,849.30	99,862.20	DSR 2004
	dayroom-2	54.00	Marble	54.00	1,849.30	99,862.20	DSR 2004
	Treatment-2	39.00	Marble	39.00	1,849.30	72,122.70	DSR 2004
	patient toilet-22	114.84	Kota	114.84	493.10	56,627.60	DSR 2004
	Doctors rest room	18.00	Kota	18.00	493.10	8,875.80	DSR 2004
	Toilet	4.50	Kota	4.50	493.10	2,218.95	DSR 2004
	Nurse rest room	18.00	Kota	18.00	493.10	8,875.80	DSR 2004
	Toilet	4.50	Kota	4.50	493.10	2,218.95	DSR 2004
	Waiting	18.00	Kota	18.00	493.10	8,875.80	DSR 2004
	Total	792.84				1,147,709.00	
	E INTENSIVE CARE AREA						
	Dirty Utility	7.20	Kota	7.20	493.10	3,550.32	DSR 2004
	Clean Utility	7.20	Kota	7.20	493.10	3,550.32	DSR 2004
	Sluice Room	7.20	Kota	7.20	493.10	3,550.32	DSR 2004
	Linen Store	7.20	Kota	7.20	493.10	3,550.32	DSR 2004
	Patients area	194.40	Marble	194.40	1,849.30	359,503.92	DSR 2004
	Patient Monitorin	21.60	Marble	21.60	1,849.30	39,944.88	DSR 2004
	Toilet	7.20	Kota	7.20	493.10	3,550.32	DSR 2004
	Change	7.20	Kota	7.20	493.10	3,550.32	DSR 2004
	Equipment park-	16.20	Kota	16.20	493.10	7,988.22	DSR 2004
	Pantry	7.20	Kota	7.20	493.10	3,550.32	DSR 2004
	Procedure room	39.00	Seamless epoxy	39.00	1,400.00	54,600.00	Market Rate
	Total	321.60				486,889.26	
	F CRITICAL CARE AREA						
	Disposal-2	13.50	Kota	13.50	493.10	6,656.85	DSR 2004
	Setup (clean utili	13.50	Kota	13.50	493.10	6,656.85	DSR 2004
	Linen Store	9.00	Kota	9.00	493.10	4,437.90	DSR 2004
	Exam/Resuscitation beds					-	
	resuscitation	36.00	Marble	36.00	1,849.30	66,574.80	DSR 2004
	observation	36.00	Marble	36.00	1,849.30	66,574.80	DSR 2004
	recovery	36.00	Marble	36.00	1,849.30	66,574.80	DSR 2004
	Nurse Station	18.00	Marble	18.00	1,849.30	33,287.40	DSR 2004
	Dirty Utility	6.00	Kota	6.00	493.10	2,958.60	DSR 2004

S.NO.	NAME OF AREA	TOTAL AREA	FLOOR TYPE (ref. Data Sheet-2)	AREA	RATE	AMOUNT	REFERENCE
	Clean Utility	6.00	Kota	6.00	493.10	2,958.60	DSR 2004
	Toilet	6.00	Kota	6.00	493.10	2,958.60	DSR 2004
	pantry	9.00	Kota	9.00	493.10	4,437.90	DSR 2004
	Change	9.00	Kota	9.00	493.10	4,437.90	DSR 2004
	plaster/treatment	36.00	Marble	36.00	1,849.30	66,574.80	DSR 2004
	O.T.	36.00	Seamless epoxy	36.00	1,400.00	50,400.00	Market Rate
	scrub/equipment	24.00	Kota	24.00	493.10	11,834.40	DSR 2004
	Change-2	12.00	Kota	12.00	493.10	5,917.20	DSR 2004
	Doctors rest room	18.00	Kota	18.00	493.10	8,875.80	DSR 2004
	Toilet	2.50	Kota	2.50	493.10	1,232.75	DSR 2004
	Total	326.50				413,349.95	
	G THERAPEUTIC SERVICES						
	Day Care						
	lounge	42.00	Marble	42.00	1,849.30	77,670.60	DSR 2004
	surgeon-2	36.00	Marble	36.00	1,849.30	66,574.80	DSR 2004
	store	9.00	Kota	9.00	493.10	4,437.90	DSR 2004
	Change	9.00	Kota	9.00	493.10	4,437.90	DSR 2004
	Nurse Station	18.00	Marble	18.00	1,849.30	33,287.40	DSR 2004
	Clean utility	6.00	Kota	6.00	493.10	2,958.60	DSR 2004
	Dirty utility	6.00	Kota	6.00	493.10	2,958.60	DSR 2004
	Toilet	6.00	Kota	6.00	493.10	2,958.60	DSR 2004
	Preparation	36.00	Marble	36.00	1,849.30	66,574.80	DSR 2004
	change-2	12.00	Kota	12.00	493.10	5,917.20	DSR 2004
	recovery	36.00	Marble	36.00	1,849.30	66,574.80	DSR 2004
	Procedure room	24.00	Seamless epoxy	24.00	1,400.00	33,600.00	Market Rate
	disposal-2	13.50	Kota	13.50	493.10	6,656.85	DSR 2004
	setup-2	13.50	Kota	13.50	493.10	6,656.85	DSR 2004
	store-4	24.00	Kota	24.00	493.10	11,834.40	DSR 2004
	Scrub/equipmen	24.00	Kota	24.00	493.10	11,834.40	DSR 2004
	change-2	12.00	Kota	12.00	493.10	5,917.20	DSR 2004
	Sub-total	327.00				410,850.90	
	Operation Theatre Suite						
	Sterile Store	18.00	Marble	18.00	1,849.30	33,287.40	DSR 2004
	Patient transfer	14.40	Marble	14.40	1,849.30	26,629.92	DSR 2004

S.NO.	NAME OF AREA	TOTAL AREA	FLOOR TYPE (ref. Data Sheet-2)	AREA	RATE	AMOUNT	REFERENCE
	Sterile Corridor	43.20	Marble	43.20	1,849.30	79,889.76	DSR 2004
	Scrub-2	10.13	Seamless epoxy	10.13	1,400.00	14,175.00	Market Rate
	Anaesthesia-2	10.13	Seamless epoxy	10.13	1,400.00	14,175.00	Market Rate
	O.T.-2	70.20	Seamless epoxy	70.20	1,400.00	98,280.00	Market Rate
	Disposal-2	24.30	Kota	24.30	493.10	11,982.33	DSR 2004
	Setup (clean utility)-2	24.30	Kota	24.30	493.10	11,982.33	DSR 2004
	PreOperation Area	34.20	Marble	34.20	1,849.30	63,246.06	DSR 2004
	Change-3	22.80	Kota	22.80	493.10	11,242.68	DSR 2004
	Anaesthetists' F	13.50	Marble	13.50	1,849.30	24,965.55	DSR 2004
	Post Operation F	56.25	Marble	56.25	1,849.30	104,023.13	DSR 2004
	Nurse Station	12.15	Marble	12.15	1,849.30	22,469.00	DSR 2004
	Clean utility	6.08	Kota	6.08	493.10	2,995.58	DSR 2004
	Dirty utility	6.08	Kota	6.08	493.10	2,995.58	DSR 2004
	Rest Room	29.00	Kota	29.00	493.10	14,299.90	DSR 2004
	Toilet	5.00	Kota	5.00	493.10	2,465.50	DSR 2004
	Pantry	18.00	Kota	18.00	493.10	8,875.80	DSR 2004
	Sub-total	417.70				547,980.52	
	Delivery Suite						
	Disposal-2	13.50	Kota	13.50	493.10	6,656.85	DSR 2004
	Setup(sterile stor	13.50	Kota	13.50	493.10	6,656.85	DSR 2004
	Delivery room	36.00	Seamless epoxy	36.00	1,400.00	50,400.00	Market Rate
	Patient Area					-	
	Pre natal	36.00	Marble	36.00	1,849.30	66,574.80	DSR 2004
	Post natal	36.00	Marble	36.00	1,849.30	66,574.80	DSR 2004
	Nurse Station	18.00	Marble	18.00	1,849.30	33,287.40	DSR 2004
	Clean utility	6.00	Kota	6.00	493.10	2,958.60	DSR 2004
	Dirty utility	6.00	Kota	6.00	493.10	2,958.60	DSR 2004
	Toilet	6.00	Kota	6.00	493.10	2,958.60	DSR 2004
	Scrub/equipment	12.00	Kota	12.00	493.10	5,917.20	DSR 2004
	Change	6.00	Kota	6.00	493.10	2,958.60	DSR 2004
	O.T.	36.00	Seamless epoxy	36.00	1,400.00	50,400.00	Market Rate
	Toxemia	18.00	Marble	18.00	1,849.30	33,287.40	DSR 2004
	Pantry	9.00	Kota	9.00	493.10	4,437.90	DSR 2004
	Change (Female	9.00	Kota	9.00	493.10	4,437.90	DSR 2004
	Store	9.00	Kota	9.00	493.10	4,437.90	DSR 2004

S.NO.	NAME OF AREA	TOTAL AREA	FLOOR TYPE (ref. Data Sheet-2)	AREA	RATE	AMOUNT	REFERENCE
	Paediatric nurse	36.00	Marble	36.00	1,849.30	66,574.80	DSR 2004
	Nurse Rest Room	18.00	Kota	18.00	493.10	8,875.80	DSR 2004
	toilet	2.50	Kota	2.50	493.10	1,232.75	DSR 2004
	Sub-total	326.50				421,586.75	
	Total	1,071.20				1,380,418.17	
H	HOSPITAL SERVICES						
	C.S.S.D.	84.00	Kota	84.00	493.10	41,420.40	DSR 2004
	Laundry	108.00	Kota	108.00	493.10	53,254.80	DSR 2004
	Medical gases	54.00	Kota	54.00	493.10	26,627.40	DSR 2004
	General Store	99.00	Kota	99.00	493.10	48,816.90	DSR 2004
	Receipt	54.00	Kota	54.00	493.10	26,627.40	DSR 2004
	Medical Store	99.00	Kota	99.00	493.10	48,816.90	DSR 2004
	Autopsy	54.00	Seamless epoxy	54.00	1,400.00	75,600.00	Market Rate
	Kitchen	157.50	Kota	157.50	493.10	77,663.25	DSR 2004
	Total	709.50				398,827.05	
I	ENGINEERING SERVICES						
	Electrical room	54.00	Red oxide	54.00	258.40	13,953.60	DSR 2004
	Water supply/Pu	54.00	Red oxide	54.00	258.40	13,953.60	DSR 2004
	D.G. Room	54.00	Red oxide	54.00	258.40	13,953.60	DSR 2004
	HVAC Room	94.50	Red oxide	94.50	258.40	24,418.80	DSR 2004
	AHU room(Bsmt)	72.00	Red oxide	72.00	258.40	18,604.80	DSR 2004
	AHU room(Gr. F	67.50	Red oxide	67.50	258.40	17,442.00	DSR 2004
	AHU room(First	66.00	Red oxide	66.00	258.40	17,054.40	DSR 2004
	Incinerator	36.00	Kota	36.00	493.10	17,751.60	DSR 2004
	Total	498.00				137,132.40	
J	CORRIDORS						
	Corridors	3,127.70	Kota	3,127.70	493.10	1,542,268.87	DSR 2004
	Elevators	80.00				-	
	Ramp	352.00	Kota	352.00	493.10	173,571.20	DSR 2004
	Staircase	156.00	Kota	156.00	493.10	76,923.60	DSR 2004
	Sub-total	3,715.70				1,792,763.67	
K	TOILETS						

S.NO.	NAME OF AREA	TOTAL AREA	FLOOR TYPE (ref. Data Sheet-2)	AREA	RATE	AMOUNT	REFERENCE
	Toilet (male)	15.50	Kota	15.50	493.10	7,643.05	DSR 2004
	Toilet (female)	15.50	Kota	15.50	493.10	7,643.05	DSR 2004
	Toilet (male)	18.00	Kota	18.00	493.10	8,875.80	DSR 2004
	Toilet (female)	18.00	Kota	18.00	493.10	8,875.80	DSR 2004
	Toilet (male)	27.00	Kota	27.00	493.10	13,313.70	DSR 2004
	Toilet (female)	27.00	Kota	27.00	493.10	13,313.70	DSR 2004
	Sub-total	121.00				59,665.10	
	Total	3,836.70				1,852,428.77	
L	ADMIN & ANCILLARY						
	Staff room(entry)	18.00	Kota	18.00	493.10	8,875.80	DSR 2004
	Staff change	54.00	Kota	54.00	493.10	26,627.40	DSR 2004
	Staff room(entry)	18.00	Kota	18.00	493.10	8,875.80	DSR 2004
	Medical Records	81.00	Kota	81.00	493.10	39,941.10	DSR 2004
	Supervisor's Offi	27.00	Kota	27.00	493.10	13,313.70	DSR 2004
	MS	18.00	Kota	18.00	493.10	8,875.80	DSR 2004
	Officers-4	36.00	Kota	36.00	493.10	17,751.60	DSR 2004
	Matron	18.00	Kota	18.00	493.10	8,875.80	DSR 2004
	Sub waiting-2	13.00	Kota	13.00	493.10	6,410.30	DSR 2004
	Offices	143.00	Kota	143.00	493.10	70,513.30	DSR 2004
	library/conferenc	66.00	Kota	66.00	493.10	32,544.60	DSR 2004
	Snacks	9.00	Kota	9.00	493.10	4,437.90	DSR 2004
	Info.	9.00	Kota	9.00	493.10	4,437.90	DSR 2004
	Total	510.00				251,481.00	
	GRAND TOTAL	9,918.84				7,944,991.57	

109-BED HOSPITAL, NEW DELHI

DESIRABLE DADO FINISHES COST

Dado area @ Wall area x ht. Dado/ ht. Wall

Refer Data Sheet - 2 for dado finish type

S.NO.	NAME OF AREA	TOTAL AREA	DADO TYPE	AREA	RATE	AMOUNT	REFERENCE
A	ENTRANCE AREA						
	Main(OPD) Entrance						
	Trolley park-2	9.00	Granite till 900	3.38	2,597.80	8,767.58	DSR 2004
	General waiting	30.00	Granite till 900	11.25	2,597.80	29,225.25	DSR 2004
	Reception	30.00	Granite till 900	11.25	2,597.80	29,225.25	DSR 2004
	Arcade						
	shops-4	48.00	Kota till 100	2.00	503.00	1,006.00	DSR 2004
	Pharmacy	99.00	Kota till 100	4.13	503.00	2,074.88	DSR 2004
	Cafeteria	99.00	Glazed tiles till 900	37.13	373.30	13,858.76	DSR 2004
	Sub-tal	315.00				84,157.71	
	Emergency Entrance						
	Trolley park-2	9.00	Granite till 900	3.38	2,597.80	8,767.58	DSR 2004
	General waiting	30.00	Granite till 900	11.25	2,597.80	29,225.25	DSR 2004
	Reception	30.00	Granite till 900	11.25	2,597.80	29,225.25	DSR 2004
	Sub-tal	69.00				67,218.08	
	Services Entrance	9.00	Kota till 100	0.38	503.00	188.63	DSR 2004
	Staff Entrance	9.00	Kota till 100	0.38	503.00	188.63	DSR 2004
	Sub-tal	18.00				377.25	
	Total	402.00				151,753.04	
B	AMBULATORY CARE AREA						
	Screening Clinics						
	Exam/consultation-4	72.00	Marble till 900	27.00	1,043.30	28,169.10	DSR 2004
	registration	48.00	Glazed tiles till 900	18.00	373.30	6,719.40	DSR 2004
	sub waiting	60.00	Glazed tiles till 900	22.50	373.30	8,399.25	DSR 2004
	General Clinics						
	Exam/consultation-4	72.00	Marble till 900	27.00	1,043.30	28,169.10	DSR 2004
	sub waiting	54.00	Glazed tiles till 900	20.25	373.30	7,559.33	DSR 2004
	Treatment-2	27.00	Marble till 900	10.13	1,043.30	10,563.41	DSR 2004
	clean utility-2	9.00	Glazed tiles till 900	3.38	373.30	1,259.89	DSR 2004

S.NO.	NAME OF AREA	TOTAL AREA	DADO TYPE	AREA	RATE	AMOUNT	REFERENCE
	dirty utility	9.00	Glazed tiles till 900	3.38	373.30	1,259.89	DSR 2004
	Nurse station	9.00	Marble till 900	3.38	1,043.30	3,521.14	DSR 2004
	Dedicated Clinics					-	
	Dental-2	18.00	Marble till 900	6.75	1,043.30	7,042.28	DSR 2004
	lab/xray	18.00	Glazed tiles till 900	6.75	373.30	2,519.78	DSR 2004
	Ent-2	36.00	Marble till 900	13.50	1,043.30	14,084.55	DSR 2004
	audio + speech	18.00	Glazed tiles till 900	6.75	373.30	2,519.78	DSR 2004
	sub waiting	45.00	Glazed tiles till 900	16.88	373.30	6,299.44	DSR 2004
	Ophthalmology-2	36.00	Marble till 900	13.50	1,043.30	14,084.55	DSR 2004
	minor surgery/treatment	42.00	Marble till 900	15.75	1,043.30	16,431.98	DSR 2004
	sub waiting	18.00	Glazed tiles till 900	6.75	373.30	2,519.78	DSR 2004
	Treatment	13.50	Marble till 900	5.06	1,043.30	5,281.71	DSR 2004
	clean utility	4.50	Glazed tiles till 900	1.69	373.30	629.94	DSR 2004
	dirty utility	9.00	Glazed tiles till 900	3.38	373.30	1,259.89	DSR 2004
	Nurse station	9.00	Marble till 900	3.38	1,043.30	3,521.14	DSR 2004
	Ob./Gy./Paed. Clinics					-	
	Exam/consultation-4	72.00	Marble till 900	27.00	1,043.30	28,169.10	DSR 2004
	sub waiting	36.00	Glazed tiles till 900	13.50	373.30	5,039.55	DSR 2004
	treatment-2	27.00	Marble till 900	10.13	1,043.30	10,563.41	DSR 2004
	clean utility-2	9.00	Glazed tiles till 900	3.38	373.30	1,259.89	DSR 2004
	dirty utility	9.00	Glazed tiles till 900	3.38	373.30	1,259.89	DSR 2004
	Nurse station	9.00	Marble till 900	3.38	1,043.30	3,521.14	DSR 2004
	EKG Room	9.00	Glazed tiles till 900	3.38	373.30	1,259.89	DSR 2004
	Sample collection	9.00	Glazed tiles till 900	3.38	373.30	1,259.89	DSR 2004
	Toilet (female)	18.00	Glazed tile till 1500	11.25	373.30	4,199.63	DSR 2004
	Toilet (male)	18.00	Glazed tile till 1500	11.25	373.30	4,199.63	DSR 2004
	Total	843.00				232,547.29	
						-	
C	DIAGNOSTIC SERVICES					-	
	Imaging					-	
	Reception	18.00	Glazed tiles till 900	6.75	373.30	2,519.78	DSR 2004
	sub waiting	63.00	Glazed tiles till 900	23.63	373.30	8,819.21	DSR 2004
	Patient preparation	9.00	Glazed tiles till 900	3.38	373.30	1,259.89	DSR 2004
	CT scan	27.00	Glazed tiles till 900	10.13	373.30	3,779.66	DSR 2004
	Control	13.50	Kota till 100	0.56	503.00	282.94	DSR 2004

S.NO.	NAME OF AREA	TOTAL AREA	DADO TYPE	AREA	RATE	AMOUNT	REFERENCE
	Special Xray	27.00	Glazed tiles till 900	10.13	373.30	3,779.66	DSR 2004
	general Xray	27.00	Glazed tiles till 900	10.13	373.30	3,779.66	DSR 2004
	ultra sound	18.00	Glazed tiles till 900	6.75	373.30	2,519.78	DSR 2004
	Record	13.50	Kota till 100	0.56	503.00	282.94	DSR 2004
	Report	4.50	Kota till 100	0.19	503.00	94.31	DSR 2004
	Report writing/computers	81.00	Kota till 100	3.38	503.00	1,697.63	DSR 2004
	Dark room	9.00	Kota till 100	0.38	503.00	188.63	DSR 2004
	Doctors room	9.00	Kota till 100	0.38	503.00	188.63	DSR 2004
	Sub-total	319.50				29,192.70	
	Clinical Labs						
	Sample collection	18.00	Acid/Alkali resist.	11.25	685.70	7,714.13	DSR 2004
	Emergency lab	18.00	Acid/Alkali resist.	11.25	685.70	7,714.13	DSR 2004
	store	18.00	Acid/Alkali resist.	11.25	685.70	7,714.13	DSR 2004
	consultant	18.00	Kota till 100	0.75	503.00	377.25	DSR 2004
	records	18.00	Kota till 100	0.75	503.00	377.25	DSR 2004
	Technician's rest room	18.00	Kota till 100	0.75	503.00	377.25	DSR 2004
	Wash	18.00	Acid/Alkali resist.	11.25	685.70	7,714.13	DSR 2004
	Media preparation	18.00	Acid/Alkali resist.	11.25	685.70	7,714.13	DSR 2004
	labs	72.00	Acid/Alkali resist.	45.00	685.70	30,856.50	DSR 2004
	Blood Bank						
	Rest	36.00	Marble till 900	13.50	1,043.30	14,084.55	DSR 2004
	reception	4.50	Marble till 900	1.69	1,043.30	1,760.57	DSR 2004
	bleed	18.00	Marble till 900	6.75	1,043.30	7,042.28	DSR 2004
	lab	13.50	Acid/Alkali resist.	8.44	685.70	5,785.59	DSR 2004
	Sub-total	288.00				99,231.86	
	Total	607.50				128,424.56	
	D INTERMEDIATE CARE AREA						
	Dirty Utility-2	13.50	Glazed tiles till 900	5.06	373.30	1,889.83	DSR 2004
	Clean Utility-2	15.00	Glazed tiles till 900	5.63	373.30	2,099.81	DSR 2004
	Linen Store-2	13.50	Glazed tiles till 900	5.06	373.30	1,889.83	DSR 2004
	General Wards-(4beds x 6)x2	333.00	Marble till 900	124.88	1,043.30	130,282.09	DSR 2004
	Single Rm/Pvt.Ward/isolation-4	54.00	Marble till 900	20.25	1,043.30	21,126.83	DSR 2004
	Nurse Station-2	24.00	Marble till 900	9.00	1,043.30	9,389.70	DSR 2004
	Pantry-2	15.00	Glazed tiles till 900	5.63	373.30	2,099.81	DSR 2004

S.NO.	NAME OF AREA	TOTAL AREA	DADO TYPE	AREA	RATE	AMOUNT	REFERENCE
	Double room-4	54.00	Marble till 900	20.25	1,043.30	21,126.83	DSR 2004
	dayroom-2	54.00	Marble till 900	20.25	1,043.30	21,126.83	DSR 2004
	Treatment-2	39.00	Marble till 900	14.63	1,043.30	15,258.26	DSR 2004
	patient toilet-22	114.84	Glazed tile till 1500	71.78	373.30	26,793.61	DSR 2004
	Doctors rest room	18.00	Kota till 100	0.75	503.00	377.25	DSR 2004
	Toilet	4.50	Glazed tile till 1500	2.81	373.30	1,049.91	DSR 2004
	Nurse rest room	18.00	Kota till 100	0.75	503.00	377.25	DSR 2004
	Toilet	4.50	Glazed tile till 1500	2.81	373.30	1,049.91	DSR 2004
	Waiting	18.00	Glazed tiles till 900	6.75	373.30	2,519.78	DSR 2004
	Total	792.84				258,457.51	
	E INTENSIVE CARE AREA						
	Dirty Utility	7.20	Glazed tiles till 900	2.70	373.30	1,007.91	DSR 2004
	Clean Utility	7.20	Glazed tiles till 900	2.70	373.30	1,007.91	DSR 2004
	Sluice Room	7.20	Glazed tiles till 900	2.70	373.30	1,007.91	DSR 2004
	Linen Store	7.20	Glazed tiles till 900	2.70	373.30	1,007.91	DSR 2004
	Patients area	194.40	Marble till 900	72.90	1,043.30	76,056.57	DSR 2004
	Patient Monitoring	21.60	Marble till 900	8.10	1,043.30	8,450.73	DSR 2004
	Toilet	7.20	Glazed tile till 1500	4.50	373.30	1,679.85	DSR 2004
	Change	7.20	Glazed tiles till 900	2.70	373.30	1,007.91	DSR 2004
	Equipment park-2	16.20	Glazed tiles till 900	6.08	373.30	2,267.80	DSR 2004
	Pantry	7.20	Glazed tiles till 900	2.70	373.30	1,007.91	DSR 2004
	Procedure room	39.00	SS / powder coated	48.75	3,500.00	170,625.00	Market Rate
	Total	321.60				265,127.41	
	F CRITICAL CARE AREA						
	Disposal-2	13.50	Glazed tiles till 900	5.06	373.30	1,889.83	DSR 2004
	Setup (clean utility)-2	13.50	Glazed tiles till 900	5.06	373.30	1,889.83	DSR 2004
	Linen Store	9.00	Glazed tiles till 900	3.38	373.30	1,259.89	DSR 2004
	Exam/Resuscitation beds						
	resuscitation	36.00	Marble till 900	13.50	1,043.30	14,084.55	DSR 2004
	observation	36.00	Marble till 900	13.50	1,043.30	14,084.55	DSR 2004
	recovery	36.00	Marble till 900	13.50	1,043.30	14,084.55	DSR 2004
	Nurse Station	18.00	Marble till 900	6.75	1,043.30	7,042.28	DSR 2004
	Dirty Utility	6.00	Glazed tiles till 900	2.25	373.30	839.93	DSR 2004

S.NO.	NAME OF AREA	TOTAL AREA	DADO TYPE	AREA	RATE	AMOUNT	REFERENCE
	Clean Utility	6.00	Glazed tiles till 900	2.25	373.30	839.93	DSR 2004
	Toilet	6.00	Glazed tile till 1500	3.75	373.30	1,399.88	DSR 2004
	pantry	9.00	Glazed tiles till 900	3.38	373.30	1,259.89	DSR 2004
	Change	9.00	Glazed tiles till 900	3.38	373.30	1,259.89	DSR 2004
	plaster/treatment room	36.00	Marble till 900	13.50	1,043.30	14,084.55	DSR 2004
	O.T.	36.00	SS/powder coated	40.50	3,500.00	141,750.00	Market Rate
	scrub/equipment park-2	24.00	Glazed tiles till 900	9.00	373.30	3,359.70	DSR 2004
	Change-2	12.00	Glazed tiles till 900	4.50	373.30	1,679.85	DSR 2004
	Doctors rest room	18.00	Kota till 100	0.75	503.00	377.25	DSR 2004
	Toilet	2.50	Glazed tile till 1500	1.56	373.30	583.28	DSR 2004
	Total	326.50				221,769.61	
G	THERAPEUTIC SERVICES						
	Day Care						
	lounge	42.00	Marble till 900	15.75	1,043.30	16,431.98	DSR 2004
	surgeon-2	36.00	Marble till 900	13.50	1,043.30	14,084.55	DSR 2004
	store	9.00	Glazed tiles till 900	3.38	373.30	1,259.89	DSR 2004
	Change	9.00	Glazed tiles till 900	3.38	373.30	1,259.89	DSR 2004
	Nurse Station	18.00	Marble till 900	6.75	1,043.30	7,042.28	DSR 2004
	Clean utility	6.00	Glazed tiles till 900	2.25	373.30	839.93	DSR 2004
	Dirty utility	6.00	Glazed tiles till 900	2.25	373.30	839.93	DSR 2004
	Toilet	6.00	Glazed tile till 1500	3.75	373.30	1,399.88	DSR 2004
	Preparation	36.00	Marble till 900	13.50	1,043.30	14,084.55	DSR 2004
	change-2	12.00	Glazed tiles till 900	4.50	373.30	1,679.85	DSR 2004
	recovery	36.00	Marble till 900	13.50	1,043.30	14,084.55	DSR 2004
	Procedure room-2	24.00	SS/powder coated	27.00	3,500.00	94,500.00	Market Rate
	disposal-2	13.50	Glazed tiles till 900	5.06	373.30	1,889.83	DSR 2004
	setup-2	13.50	Glazed tiles till 900	5.06	373.30	1,889.83	DSR 2004
	store-4	24.00	Glazed tiles till 900	9.00	373.30	3,359.70	DSR 2004
	Scrub/equipment park-2	24.00	Glazed tiles till 900	9.00	373.30	3,359.70	DSR 2004
	change-2	12.00	Glazed tiles till 900	4.50	373.30	1,679.85	DSR 2004
	Sub-total	327.00				179,686.16	
	Operation Theatre Suite						
	Sterile Store	18.00	Marble till 900	6.75	1,043.30	7,042.28	DSR 2004
	Patient transfer	14.40	Marble till 900	5.40	1,043.30	5,633.82	DSR 2004

S.NO.	NAME OF AREA	TOTAL AREA	DADO TYPE	AREA	RATE	AMOUNT	REFERENCE
	Sterile Corridor	43.20	Glazed tiles till 2100	37.80	373.30	14,110.74	DSR 2004
	Scrub-2	10.13	SS/powder coated	11.39	3,500.00	39,867.19	Market Rate
	Anaesthesia-2	10.13	SS/powder coated	11.39	3,500.00	39,867.19	Market Rate
	O.T.-2	70.20	SS/powder coated	78.98	3,500.00	276,412.50	Market Rate
	Disposal-2	24.30	Glazed tiles till 900	9.11	373.30	3,401.70	DSR 2004
	Setup (clean utility)-2	24.30	Glazed tiles till 900	9.11	373.30	3,401.70	DSR 2004
	PreOperation Area	34.20	Glazed tiles till 2100	29.93	373.30	11,171.00	DSR 2004
	Change-3	22.80	Glazed tiles till 900	8.55	373.30	3,191.72	DSR 2004
	Anaesthetists' Room-1	13.50	Marble till 900	5.06	1,043.30	5,281.71	DSR 2004
	Post Operation Recovery	56.25	Marble till 900	21.09	1,043.30	22,007.11	DSR 2004
	Nurse Station	12.15	Marble till 900	4.56	1,043.30	4,753.54	DSR 2004
	Clean utility	6.08	Glazed tiles till 900	2.28	373.30	850.42	DSR 2004
	Dirty utility	6.08	Glazed tiles till 900	2.28	373.30	850.42	DSR 2004
	Rest Room	29.00	Kota till 100	1.21	503.00	607.79	DSR 2004
	Toilet	5.00	Glazed tile till 1500	3.13	373.30	1,166.56	DSR 2004
	Pantry	18.00	Glazed tiles till 900	6.75	373.30	2,519.78	DSR 2004
	Sub-total	417.70				442,137.15	
	Delivery Suite						
	Disposal-2	13.50	Glazed tiles till 900	5.06	373.30	1,889.83	DSR 2004
	Setup(sterile store)-2	13.50	Glazed tiles till 900	5.06	373.30	1,889.83	DSR 2004
	Delivery room	36.00	SS/powder coated	40.50	3,500.00	141,750.00	Market Rate
	Patient Area						
	Pre natal	36.00	Marble till 900	13.50	1,043.30	14,084.55	DSR 2004
	Post natal	36.00	Marble till 900	13.50	1,043.30	14,084.55	DSR 2004
	Nurse Station	18.00	Marble till 900	6.75	1,043.30	7,042.28	DSR 2004
	Clean utility	6.00	Glazed tiles till 900	2.25	373.30	839.93	DSR 2004
	Dirty utility	6.00	Glazed tiles till 900	2.25	373.30	839.93	DSR 2004
	Toilet	6.00	Glazed tile till 1500	2.25	373.30	839.93	DSR 2004
	Scrub/equipment park	12.00	Glazed tiles till 900	4.50	373.30	1,679.85	DSR 2004
	Change	6.00	Glazed tiles till 900	2.25	373.30	839.93	DSR 2004
	O.T.	36.00	SS/powder coated	40.50	3,500.00	141,750.00	Market Rate
	Toxemia	18.00	Marble till 900	6.75	1,043.30	7,042.28	DSR 2004
	Pantry	9.00	Glazed tiles till 900	3.38	373.30	1,259.89	DSR 2004
	Change (Female)	9.00	Glazed tiles till 900	3.38	373.30	1,259.89	DSR 2004
	Store	9.00	Glazed tiles till 900	3.38	373.30	1,259.89	DSR 2004

S.NO.	NAME OF AREA	TOTAL AREA	DADO TYPE	AREA	RATE	AMOUNT	REFERENCE
	Paediatric nursery	36.00	Marble till 900	13.50	1,043.30	14,084.55	DSR 2004
	Nurse Rest Room	18.00	Kota till 100	0.75	503.00	377.25	DSR 2004
	toilet	2.50	Glazed tile till 1500	1.56	373.30	583.28	DSR 2004
	Sub-total	326.50				353,397.61	
	Total	1,071.20				975,220.92	
H	HOSPITAL SERVICES						
	C.S.S.D.	84.00	Glazed tiles till 900	31.50	373.30	11,758.95	DSR 2004
	Laundry	108.00	Glazed tile till 1500	67.50	373.30	25,197.75	DSR 2004
	Medical gases	54.00	Kota till 100	2.25	503.00	1,131.75	DSR 2004
	General Store	99.00	Kota till 100	4.13	503.00	2,074.88	DSR 2004
	Receipt	54.00	Kota till 100	2.25	503.00	1,131.75	DSR 2004
	Medical Store	99.00	Kota till 100	4.13	503.00	2,074.88	DSR 2004
	Autopsy	54.00	SS/powder coated	60.75	3,500.00	212,625.00	Market Rate
	Kitchen	157.50	Glazed tile till 1500	98.44	373.30	36,746.72	DSR 2004
	Total	709.50				292,741.67	
I	ENGINEERING SERVICES						
	Electrical room	54.00	Cem. plaster skt.till 300	6.75	70.15	473.51	DSR 2004
	Water supply/Pump Room	54.00	Cem. plaster skt.till 300	6.75	70.15	473.51	DSR 2004
	D.G. Room	54.00	Perf.Al.Sheet with min.wool	101.25	700.00	70,875.00	Market Rate
	HVAC Room	94.50	Perf.Al.Sheet with min.wool	177.19	700.00	124,031.25	Market Rate
	AHU room(Bsmt.)-4	72.00	Perf.Al.Sheet with min.wool	135.00	700.00	94,500.00	Market Rate
	AHU room(Gr. Floor)-4	67.50	Perf.Al.Sheet with min.wool	101.25	700.00	70,875.00	Market Rate
	AHU room(First Floor)-4	66.00	Perf.Al.Sheet with min.wool	115.50	700.00	80,850.00	Market Rate
	Incinerator	36.00	Glazed tile till 1500	67.50	373.30	25,197.75	DSR 2004
	Total	498.00				467,276.03	
J	CORRIDORS						
	Corridors	3,127.70	Glazed tiles till 900	1,172.89	373.30	437,838.90	DSR 2004

S.NO.	NAME OF AREA	TOTAL AREA	DADO TYPE	AREA	RATE	AMOUNT	REFERENCE
	Elevators	80.00					
	Ramp	352.00	Glazed tiles till 900	132.00	373.30	49,275.60	DSR 2004
	Staircase	156.00	Glazed tiles till 900	58.50	373.30	21,838.05	DSR 2004
	Sub-total	3,715.70				508,952.55	
K	TOILETS						
	Toilet (male)	15.50	Glazed tile till 1500	9.69	373.30	3,616.34	DSR 2004
	Toilet (female)	15.50	Glazed tile till 1500	9.69	373.30	3,616.34	DSR 2004
	Toilet (male)	18.00	Glazed tile till 1500	11.25	373.30	4,199.63	DSR 2004
	Toilet (female)	18.00	Glazed tile till 1500	11.25	373.30	4,199.63	DSR 2004
	Toilet (male)	27.00	Glazed tile till 1500	16.88	373.30	6,299.44	DSR 2004
	Toilet (female)	27.00	Glazed tile till 1500	16.88	373.30	6,299.44	DSR 2004
	Sub-total	121.00				28,230.81	
	Total	3,836.70				537,183.37	
L	ADMIN & ANCILLARY						
	Staff room(entry-1)	18.00	Kota till 100	0.75	503.00	377.25	DSR 2004
	Staff change	54.00	Kota till 100	2.25	503.00	1,131.75	DSR 2004
	Staff room(entry-2)	18.00	Kota till 100	0.75	503.00	377.25	DSR 2004
	Medical Records	81.00	Kota till 100	3.38	503.00	1,697.63	DSR 2004
	Supervisor's Office	27.00	Kota till 100	1.13	503.00	565.88	DSR 2004
	MS	18.00	Kota till 100	0.75	503.00	377.25	DSR 2004
	Officers-4	36.00	Kota till 100	1.50	503.00	754.50	DSR 2004
	Matron	18.00	Kota till 100	0.75	503.00	377.25	DSR 2004
	Sub waiting-2	13.00	Kota till 100	0.54	503.00	272.46	DSR 2004
	Offices	143.00	Kota till 100	5.96	503.00	2,997.04	DSR 2004
	library/conference	66.00	Kota till 100	2.75	503.00	1,383.25	DSR 2004
	Snacks	9.00	Glazed tile till 900	3.38	373.30	1,259.89	DSR 2004
	Info.	9.00	Glazed tile till 900	3.38	373.30	1,259.89	DSR 2004
	Total	510.00				12,831.28	
	GRAND TOTAL	9,918.84				3,543,332.66	

109-BED HOSPITAL, NEW DELHI

DESIRABLE WALL FINISHES COST

Paint area @ Wall area x (Ceiling ht - ht. Dado)/ ht. Wall

Refer Data Sheet - 2 for Paint finish type

S.NO.	NAME OF AREA	TOTAL AREA	WALL FINISH	AREA	RATE	AMOUNT	REFERENCE
A	ENTRANCE AREA						
	Main(OPD) Entrance						
	Trolley park-2	9.00	Acrylic Emulsion	6.75	74.00	499.50	Market Rate
	General waiting	30.00	Acrylic Emulsion	22.50	74.00	1,665.00	Market Rate
	Reception	30.00	Acrylic Emulsion	22.50	74.00	1,665.00	Market Rate
	Arcade						
	shops-4	48.00	Dry distemper	70.00	19.05	1,333.50	DSR 2004
	Pharmacy	99.00	Dry distemper	144.38	19.05	2,750.34	DSR 2004
	Cafeteria	99.00	Dry distemper	111.38	19.05	2,121.69	DSR 2004
	Sub-total	315.00				10,035.04	
	Emergency Entrance						
	Trolley park-2	9.00	Acrylic Emulsion	6.75	74.00	499.50	Market Rate
	General waiting	30.00	Acrylic Emulsion	22.50	74.00	1,665.00	Market Rate
	Reception	30.00	Acrylic Emulsion	22.50	74.00	1,665.00	Market Rate
	Sub-total	69.00				3,829.50	
	Services Entrance	9.00	Dry distemper	16.50	19.05	314.33	DSR 2004
	Staff Entrance	9.00	Dry distemper	16.50	19.05	314.33	DSR 2004
	Sub-total	18.00				628.65	
	Total	402.00				14,493.19	
B	AMBULATORY CARE AREA						
	Screening Clinics						
	Exam/consultation-4	72.00	Acrylic Emulsion	81.00	74.00	5,994.00	Market Rate
	registration	48.00	Wash. oil bd. dist.	54.00	29.70	1,603.80	DSR 2004
	sub waiting	60.00	Wash. oil bd. dist.	67.50	29.70	2,004.75	DSR 2004
	GeneralClinics						
	Exam/consultation-4	72.00	Acrylic Emulsion	81.00	74.00	5,994.00	Market Rate
	sub waiting	54.00	Wash. oil bd. dist.	60.75	29.70	1,804.28	DSR 2004
	Treatment-2	27.00	Acrylic Emulsion	30.38	74.00	2,247.75	Market Rate

S.NO.	NAME OF AREA	TOTAL AREA	WALL FINISH	AREA	RATE	AMOUNT	REFERENCE
	clean utility-2	9.00	Wash. oil bd. dist.	10.13	29.70	300.71	DSR 2004
	dirty utility	9.00	Wash. oil bd. dist.	10.13	29.70	300.71	DSR 2004
	Nurse station	9.00	Acrylic Emulsion	10.13	74.00	749.25	Market Rate
	Dedicated Clinics						
	Dental-2	18.00	Acrylic Emulsion	20.25	74.00	1,498.50	Market Rate
	lab/xray	18.00	Wash. oil bd. dist.	20.25	29.70	601.43	DSR 2004
	Ent-2	36.00	Acrylic Emulsion	40.50	74.00	2,997.00	Market Rate
	audio + speech	18.00	Wash. oil bd. dist.	20.25	29.70	601.43	DSR 2004
	sub waiting	45.00	Wash. oil bd. dist.	50.63	29.70	1,503.56	DSR 2004
	Ophthalmology-2	36.00	Acrylic Emulsion	40.50	74.00	2,997.00	Market Rate
	minor surgery/treatment	42.00	Acrylic Emulsion	47.25	74.00	3,496.50	Market Rate
	sub waiting	18.00	Wash. oil bd. dist.	20.25	29.70	601.43	DSR 2004
	Treatment	13.50	Acrylic Emulsion	15.19	74.00	1,123.88	Market Rate
	clean utility	4.50	Wash. oil bd. dist.	5.06	29.70	150.36	DSR 2004
	dirty utility	9.00	Wash. oil bd. dist.	10.13	29.70	300.71	DSR 2004
	Nurse station	9.00	Acrylic Emulsion	10.13	74.00	749.25	Market Rate
	Ob./Gy./Paed. Clinics						
	Exam/consultation-4	72.00	Acrylic Emulsion	81.00	74.00	5,994.00	Market Rate
	sub waiting	36.00	Wash. oil bd. dist.	40.50	29.70	1,202.85	DSR 2004
	treatment-2	27.00	Acrylic Emulsion	30.38	74.00	2,247.75	Market Rate
	clean utility-2	9.00	Wash. oil bd. dist.	10.13	29.70	300.71	DSR 2004
	dirty utility	9.00	Wash. oil bd. dist.	10.13	29.70	300.71	DSR 2004
	Nurse station	9.00	Acrylic Emulsion	10.13	74.00	749.25	Market Rate
	ECG Room	9.00	Wash. oil bd. dist.	10.13	29.70	300.71	DSR 2004
	Sample collection	9.00	Wash. oil bd. dist.	10.13	29.70	300.71	DSR 2004
	Toilet (female)	18.00	Wash. oil bd. dist.	15.75	29.70	467.78	DSR 2004
	Toilet (male)	18.00	Wash. oil bd. dist.	15.75	29.70	467.78	DSR 2004
	Total	843.00				49,952.53	
	C DIAGNOSTIC SERVICES						
	Imaging						
	Reception	18.00	Wash. oil bd. dist.	20.25	29.70	601.43	DSR 2004
	sub waiting	63.00	Wash. oil bd. dist.	70.88	29.70	2,104.99	DSR 2004
	Patient preparation	9.00	Wash. oil bd. dist.	10.13	29.70	300.71	DSR 2004
	CT scan	27.00	Wash. oil bd. dist.	30.38	29.70	902.14	DSR 2004

S.NO.	NAME OF AREA	TOTAL AREA	WALL FINISH	AREA	RATE	AMOUNT	REFERENCE
	Control	13.50	Wash. oil bd. dist.	19.69	29.70	584.72	DSR 2004
	Special Xray	27.00	Wash. oil bd. dist.	30.38	29.70	902.14	DSR 2004
	general Xray	27.00	Wash. oil bd. dist.	30.38	29.70	902.14	DSR 2004
	ultra sound	18.00	Wash. oil bd. dist.	20.25	29.70	601.43	DSR 2004
	Record	13.50	Wash. oil bd. dist.	19.69	29.70	584.72	DSR 2004
	Report	4.50	Wash. oil bd. dist.	6.56	29.70	194.91	DSR 2004
	Report writing/computers	81.00	Wash. oil bd. dist.	118.13	29.70	3,508.31	DSR 2004
	Dark room	9.00	Wash. oil bd. dist.	13.13	29.70	389.81	DSR 2004
	Doctors room	9.00	Wash. oil bd. dist.	13.13	29.70	389.81	DSR 2004
	Sub-total	319.50				11,967.24	
	Clinical Labs						
	Sample collection	18.00	Wash. oil bd. dist.	20.25	29.70	601.43	DSR 2004
	Emergency lab	18.00	Wash. oil bd. dist.	20.25	29.70	601.43	DSR 2004
	store	18.00	Wash. oil bd. dist.	20.25	29.70	601.43	DSR 2004
	consultant	18.00	Wash. oil bd. dist.	30.75	29.70	913.28	DSR 2004
	records	18.00	Wash. oil bd. dist.	30.75	29.70	913.28	DSR 2004
	Technician's rest room	18.00	Wash. oil bd. dist.	30.75	29.70	913.28	DSR 2004
	Wash	18.00	Wash. oil bd. dist.	20.25	29.70	601.43	DSR 2004
	Media preparation	18.00	Wash. oil bd. dist.	20.25	29.70	601.43	DSR 2004
	labs	72.00	Wash. oil bd. dist.	81.00	29.70	2,405.70	DSR 2004
	Blood Bank						
	Rest	36.00	Acrylic Emulsion	40.50	74.00	2,997.00	Market Rate
	reception	4.50	Acrylic Emulsion	5.06	74.00	374.63	Market Rate
	bleed	18.00	Acrylic Emulsion	20.25	74.00	1,498.50	Market Rate
	lab	13.50	Wash. oil bd. dist.	11.81	29.70	350.83	DSR 2004
	Sub-total	288.00				13,373.61	
	Total	607.50				25,340.85	
	D INTERMEDIATE CARE AREA						
	Dirty Utility-2	13.50	Wash. oil bd. dist.	15.19	29.70	451.07	DSR 2004
	Clean Utility-2	15.00	Wash. oil bd. dist.	16.88	29.70	501.19	DSR 2004
	Linen Store-2	13.50	Wash. oil bd. dist.	15.19	29.70	451.07	DSR 2004
	General Wards-(4beds x 6)x2	333.00	Acrylic Emulsion	374.63	74.00	27,722.25	Market Rate
	Single Rm/Pvt.Ward/isolation-4	54.00	Acrylic Emulsion	60.75	74.00	4,495.50	Market Rate
	Nurse Station-2	24.00	Acrylic Emulsion	27.00	74.00	1,998.00	Market Rate

S.NO.	NAME OF AREA	TOTAL AREA	WALL FINISH	AREA	RATE	AMOUNT	REFERENCE
	Pantry-2	15.00	Wash. oil bd. dist.	16.88	29.70	501.19	DSR 2004
	Double room-4	54.00	Acrylic Emulsion	60.75	74.00	4,495.50	Market Rate
	dayroom-2	54.00	Acrylic Emulsion	60.75	74.00	4,495.50	Market Rate
	Treatment-2	39.00	Acrylic Emulsion	43.88	74.00	3,246.75	Market Rate
	patient toilet-22	114.84	Wash. oil bd. dist.	100.49	29.70	2,984.40	DSR 2004
	Doctors rest room	18.00	Wash. oil bd. dist.	26.25	29.70	779.63	DSR 2004
	Toilet	4.50	Wash. oil bd. dist.	3.94	29.70	116.94	DSR 2004
	Nurse rest room	18.00	Wash. oil bd. dist.	26.25	29.70	779.63	DSR 2004
	Toilet	4.50	Wash. oil bd. dist.	3.94	29.70	116.94	DSR 2004
	Waiting	18.00	Wash. oil bd. dist.	20.25	29.70	601.43	DSR 2004
	Total	792.84				53,736.98	
	E INTENSIVE CARE AREA						
	Dirty Utility	7.20	Wash. oil bd. dist.	9.90	29.70	294.03	DSR 2004
	Clean Utility	7.20	Wash. oil bd. dist.	9.90	29.70	294.03	DSR 2004
	Sluice Room	7.20	Wash. oil bd. dist.	9.90	29.70	294.03	DSR 2004
	Linen Store	7.20	Wash. oil bd. dist.	9.90	29.70	294.03	DSR 2004
	Patients area	194.40	Acrylic Emulsion	267.30	74.00	19,780.20	Market Rate
	Patient Monitoring	21.60	Acrylic Emulsion	29.70	74.00	2,197.80	Market Rate
	Toilet	7.20	Wash. oil bd. dist.	8.10	29.70	240.57	DSR 2004
	Change	7.20	Wash. oil bd. dist.	9.90	29.70	294.03	DSR 2004
	Equipment park-2	16.20	Wash. oil bd. dist.	22.28	29.70	661.57	DSR 2004
	Pantry	7.20	Wash. oil bd. dist.	9.90	29.70	294.03	DSR 2004
	Procedure room	39.00					
	Total	321.60				24,644.32	
	F CRITICAL CARE AREA						
	Disposal-2	13.50	Wash. oil bd. dist.	20.25	29.70	601.43	DSR 2004
	Setup (clean utility)-2	13.50	Wash. oil bd. dist.	20.25	29.70	601.43	DSR 2004
	Linen Store	9.00	Wash. oil bd. dist.	13.50	29.70	400.95	DSR 2004
	Exam/Resuscitation beds						
	resuscitation	36.00	Acrylic Emulsion	54.00	74.00	3,996.00	Market Rate
	observation	36.00	Acrylic Emulsion	54.00	74.00	3,996.00	Market Rate
	recovery	36.00	Acrylic Emulsion	54.00	74.00	3,996.00	Market Rate
	Nurse Station	18.00	Acrylic Emulsion	27.00	74.00	1,998.00	Market Rate

S.NO.	NAME OF AREA	TOTAL AREA	WALL FINISH	AREA	RATE	AMOUNT	REFERENCE
	Dirty Utility	6.00	Wash. oil bd. dist.	9.00	29.70	267.30	DSR 2004
	Clean Utility	6.00	Wash. oil bd. dist.	9.00	29.70	267.30	DSR 2004
	Toilet	6.00	Wash. oil bd. dist.	7.50	29.70	222.75	DSR 2004
	pantry	9.00	Wash. oil bd. dist.	13.50	29.70	400.95	DSR 2004
	Change	9.00	Wash. oil bd. dist.	13.50	29.70	400.95	DSR 2004
	plaster/treatment room	36.00	Acrylic Emulsion	54.00	74.00	3,996.00	Market Rate
	O.T.	36.00		-	-	-	
	scrub/equipment park-2	24.00	Wash. oil bd. dist.	36.00	29.70	1,069.20	DSR 2004
	Change-2	12.00	Wash. oil bd. dist.	18.00	29.70	534.60	DSR 2004
	Doctors rest room	18.00	Wash. oil bd. dist.	33.00	29.70	980.10	DSR 2004
	Toilet	2.50	Wash. oil bd. dist.	3.13	29.70	92.81	DSR 2004
	Total	326.50				23,821.76	
G	THERAPEUTIC SERVICES						
	Day Care						
	lounge	42.00	Acrylic Emulsion	57.75	74.00	4,273.50	Market Rate
	surgeon-2	36.00	Acrylic Emulsion	49.50	74.00	3,663.00	Market Rate
	store	9.00	Wash. oil bd. dist.	12.38	29.70	367.54	DSR 2004
	Change	9.00	Wash. oil bd. dist.	12.38	29.70	367.54	DSR 2004
	Nurse Station	18.00	Acrylic Emulsion	24.75	74.00	1,831.50	Market Rate
	Clean utility	6.00	Wash. oil bd. dist.	8.25	29.70	245.03	DSR 2004
	Dirty utility	6.00	Wash. oil bd. dist.	8.25	29.70	245.03	DSR 2004
	Toilet	6.00	Wash. oil bd. dist.	6.75	29.70	200.48	DSR 2004
	Preparation	36.00	Acrylic Emulsion	49.50	74.00	3,663.00	Market Rate
	recovery	12.00	Wash. oil bd. dist.	16.50	29.70	490.05	DSR 2004
	Procedure room-2	36.00	Acrylic Emulsion	49.50	74.00	3,663.00	Market Rate
		24.00		-	-	-	
	disposal-2	13.50	Wash. oil bd. dist.	18.56	29.70	551.31	DSR 2004
	setup-2	13.50	Wash. oil bd. dist.	18.56	29.70	551.31	DSR 2004
	store-4	24.00	Wash. oil bd. dist.	33.00	29.70	980.10	DSR 2004
	Scrub/equipment park-2	24.00	Wash. oil bd. dist.	33.00	29.70	980.10	DSR 2004
	change-2	12.00	Wash. oil bd. dist.	16.50	29.70	490.05	DSR 2004
	Sub-total	327.00				22,562.51	
	Operation Theatre Suite						
	Sterile Store	18.00	Acrylic Emulsion	13.50	74.00	999.00	Market Rate

S.NO.	NAME OF AREA	TOTAL AREA	WALL FINISH	AREA	RATE	AMOUNT	REFERENCE
	Patient transfer	14.40	Acrylic Emulsion	10.80	74.00	799.20	Market Rate
	Sterile Corridor	43.20	Acrylic Emulsion	10.80	74.00	799.20	Market Rate
	Scrub-2	10.13		-		-	
	Anaesthesia-2	10.13		-		-	
	O.T.-2	70.20		-		-	
	Disposal-2	24.30	Wash. oil bd. dist.	33.41	29.70	992.35	DSR 2004
	Setup (clean utility)-2	24.30	Wash. oil bd. dist.	33.41	29.70	992.35	DSR 2004
	PreOperation Area	34.20	Acrylic Emulsion	8.55	74.00	632.70	Market Rate
	Change-3	22.80	Wash. oil bd. dist.	31.35	29.70	931.10	DSR 2004
	Anaesthesists' Room-1	13.50	Acrylic Emulsion	18.56	74.00	1,373.63	Market Rate
	Post Operation Recovery	56.25	Acrylic Emulsion	77.34	74.00	5,723.44	Market Rate
	Nurse Station	12.15	Acrylic Emulsion	16.71	74.00	1,236.26	Market Rate
	Clean utility	6.08	Wash. oil bd. dist.	8.35	29.70	248.09	DSR 2004
	Dirty utility	6.08	Wash. oil bd. dist.	8.35	29.70	248.09	DSR 2004
	Rest Room	29.00	Wash. oil bd. dist.	49.54	29.70	1,471.39	DSR 2004
	Toilet	5.00	Wash. oil bd. dist.	5.63	29.70	167.06	DSR 2004
	Pantry	18.00	Wash. oil bd. dist.	24.75	29.70	735.08	DSR 2004
	Sub-total	417.70				17,348.92	
	Delivery Suite						
	Disposal-2	13.50	Wash. oil bd. dist.	20.25	29.70	601.43	DSR 2004
	Setup(sterile store)-2	13.50	Wash. oil bd. dist.	20.25	29.70	601.43	DSR 2004
	Delivery room	36.00		-		-	
	Patient Area						
	Pre natal	36.00	Acrylic Emulsion	54.00	74.00	3,996.00	Market Rate
	Post natal	36.00	Acrylic Emulsion	54.00	74.00	3,996.00	Market Rate
	Nurse Station	18.00	Acrylic Emulsion	13.50	74.00	999.00	Market Rate
	Clean utility	6.00	Wash. oil bd. dist.	9.00	29.70	267.30	DSR 2004
	Dirty utility	6.00	Wash. oil bd. dist.	9.00	29.70	267.30	DSR 2004
	Toilet	6.00	Wash. oil bd. dist.	9.00	29.70	267.30	DSR 2004
	Scrub/equipment park	12.00	Wash. oil bd. dist.	18.00	29.70	534.60	DSR 2004
	Change	6.00	Wash. oil bd. dist.	9.00	29.70	267.30	DSR 2004
	O.T.	36.00		-		-	
	Toxemia	18.00	Acrylic Emulsion	13.50	74.00	999.00	Market Rate
	Pantry	9.00	Wash. oil bd. dist.	13.50	29.70	400.95	DSR 2004
	Change (Female)	9.00	Wash. oil bd. dist.	13.50	29.70	400.95	DSR 2004

S.NO.	NAME OF AREA	TOTAL AREA	WALL FINISH	AREA	RATE	AMOUNT	REFERENCE
	Store	9.00	Wash. oil bd. dist.	13.50	29.70	400.95	DSR 2004
	Paediatric nursery	36.00	Acrylic Emulsion	27.00	74.00	1,998.00	Market Rate
	Nurse Rest Room	18.00	Wash. oil bd. dist.	33.00	29.70	980.10	DSR 2004
	toilet	2.50	Wash. oil bd. dist.	3.13	29.70	92.81	DSR 2004
	Sub-total	326.50				17,070.41	
	Total	1,071.20				56,981.85	
H	HOSPITAL SERVICES						
	C.S.S.D.	84.00	Wash. oil bd. dist.	126.00	29.70	3,742.20	DSR 2004
	Laundry	108.00	Wash. oil bd. dist.	135.00	29.70	4,009.50	DSR 2004
	Medical gases	54.00	Dry distemper	99.00	19.05	1,885.95	DSR 2004
	General Store	99.00	Dry distemper	181.50	19.05	3,457.58	DSR 2004
	Receipt	54.00	Dry distemper	99.00	19.05	1,885.95	DSR 2004
	Medical Store	99.00	Dry distemper	181.50	19.05	3,457.58	DSR 2004
	Autopsy	54.00					
	Kitchen	157.50	Wash. oil bd. dist.	196.88	29.70	5,847.19	DSR 2004
	Total	709.50				24,285.94	
I	ENGINEERING SERVICES						
	Electrical room	54.00	Dry Distemper	94.50	19.05	1,800.23	DSR 2004
	Water supply/Pump Room	54.00	Dry Distemper	94.50	19.05	1,800.23	DSR 2004
	D.G. Room	54.00					
	HVAC Room	94.50					
	AHU room(Bsmt.)-4	72.00					
	AHU room(Gr. Floor)-4	67.50					
	AHU room(First Floor)-4	66.00					
	Incinerator	36.00	Wash. oil bd. dist.		29.70		DSR 2004
	Total	498.00				3,600.45	
J	CORRIDORS						
	Corridors	3,127.70	Wash. oil bd. dist.	2,345.78	29.70	69,669.52	DSR 2004
	Elevators	80.00					
	Ramp	352.00	Wash. oil bd. dist.	454.67	29.70	13,503.60	DSR 2004
	Staircase	156.00	Wash. oil bd. dist.	201.50	29.70	5,984.55	DSR 2004
	Sub-total	3,715.70				89,157.67	

S.NO.	NAME OF AREA	TOTAL AREA	WALL FINISH	AREA	RATE	AMOUNT	REFERENCE
K	TOILETS						
	Toilet (male)	15.50	Wash. oil bd. dist.	19.38	29.70	575.44	DSR 2004
	Toilet (female)	15.50	Wash. oil bd. dist.	19.38	29.70	575.44	DSR 2004
	Toilet (male)	18.00	Wash. oil bd. dist.	15.75	29.70	467.78	DSR 2004
	Toilet (female)	18.00	Wash. oil bd. dist.	15.75	29.70	467.78	DSR 2004
	Toilet (male)	27.00	Wash. oil bd. dist.	30.38	29.70	902.14	DSR 2004
	Toilet (female)	27.00	Wash. oil bd. dist.	30.38	29.70	902.14	DSR 2004
	Sub-total	121.00				3,890.70	
	Total	3,836.70				93,048.37	
L	ADMIN & ANCILLARY						
	Staff room(entry-1)	18.00	Dry Distemper	33.00	19.05	628.65	DSR 2004
	Staff change	54.00	Dry Distemper	99.00	19.05	1,885.95	DSR 2004
	Staff room(entry-2)	18.00	Dry Distemper	33.00	19.05	628.65	DSR 2004
	Medical Records	81.00	Dry Distemper	148.50	19.05	2,828.93	DSR 2004
	Supervisor's Office	27.00	Dry Distemper	49.50	19.05	942.98	DSR 2004
	MS	18.00	Wash. oil bd. dist.	19.50	29.70	579.15	DSR 2004
	Officers-4	36.00	Wash. oil bd. dist.	61.50	29.70	1,826.55	DSR 2004
	Matron	18.00	Wash. oil bd. dist.	30.75	29.70	913.28	DSR 2004
	Sub waiting-2	13.00	Dry Distemper	22.21	19.05	423.07	DSR 2004
	Offices	143.00	Dry Distemper	244.29	19.05	4,653.76	DSR 2004
	library/conference	66.00	Wash. oil bd. dist.	71.50	29.70	2,123.55	DSR 2004
	Snacks	9.00	Wash. oil bd. dist.	12.38	29.70	367.54	DSR 2004
	Info.	9.00	Wash. oil bd. dist.	12.38	29.70	367.54	DSR 2004
	Total	510.00				18,169.58	
	GRAND TOTAL	9,918.84				388,075.81	

109-BED HOSPITAL, NEW DELHI

DESIRABLE CEILING FINISHES COST

Ceiling finish area @ 100% plinth area

Refer Data Sheet - 2 for ceiling finish type

S.NO.	NAME OF AREA	TOTAL AREA	CEILING TYPE	AREA	RATE	AMOUNT	REFERENCE
A	ENTRANCE AREA						
	Main(OPD) Entrance						
	Trolley park-2	9.00	Gypboard	9.00	416.70	3,750.30	DSR 2004
	General waiting	30.00	Gypboard	30.00	416.70	12,501.00	DSR 2004
	Reception	30.00	Gypboard	30.00	416.70	12,501.00	DSR 2004
	Arcade						
	shops-4	48.00	Dry distemper	48.00	19.05	914.40	DSR 2004
	Pharmacy	99.00	Dry distemper	99.00	19.05	1,885.95	DSR 2004
	Cafeteria	99.00	Dry distemper	99.00	19.05	1,885.95	DSR 2004
	Sub-total	315.00				33,438.60	
	Emergency Entrance						
	Trolley park-2	9.00	Gypboard	9.00	416.70	3,750.30	DSR 2004
	General waiting	30.00	Gypboard	30.00	416.70	12,501.00	DSR 2004
	Reception	30.00	Gypboard	30.00	416.70	12,501.00	DSR 2004
	Sub-total	69.00				28,752.30	
	Services Entrance	9.00	Dry distemper	9.00	19.05	171.45	DSR 2004
	Staff Entrance	9.00	Dry distemper	9.00	19.05	171.45	DSR 2004
	Sub-total	18.00				342.90	
	Total	402.00				62,533.80	
B	AMBULATORY CARE AREA						
	Screening Clinics						
	Exam/consultation-4	72.00	Wash. oil bd. dist.	72.00	29.70	2,138.40	DSR 2004
	registration	48.00	Dry distemper	48.00	19.05	914.40	DSR 2004
	sub waiting	60.00	Dry distemper	60.00	19.05	1,143.00	DSR 2004
	General Clinics						
	Exam/consultation-4	72.00	Wash. oil bd. dist.	72.00	29.70	2,138.40	DSR 2004
	sub waiting	54.00	Dry distemper	54.00	19.05	1,028.70	DSR 2004
	Treatment-2	27.00	Wash. oil bd. dist.	27.00	29.70	801.90	DSR 2004
	clean utility-2	9.00	Dry distemper	9.00	19.05	171.45	DSR 2004

S.NO.	NAME OF AREA	TOTAL AREA	CEILING TYPE	AREA	RATE	AMOUNT	REFERENCE
	dirty utility	9.00	Dry distemper	9.00	19.05	171.45	DSR 2004
	Nurse station	9.00	Wash. oil bd. dist.	9.00	29.70	267.30	DSR 2004
	Dedicated Clinics						
	Dental-2	18.00	Wash. oil bd. dist.	18.00	29.70	534.60	DSR 2004
	lab/xray	18.00	Dry distemper	18.00	19.05	342.90	DSR 2004
	Ent-2	36.00	Wash. oil bd. dist.	36.00	29.70	1,069.20	DSR 2004
	audio + speech	18.00	Dry distemper	18.00	19.05	342.90	DSR 2004
	sub waiting	45.00	Dry distemper	45.00	19.05	857.25	DSR 2004
	Ophthalmology-2	36.00	Wash. oil bd. dist.	36.00	29.70	1,069.20	DSR 2004
	minor surgery/treatment	42.00	Wash. oil bd. dist.	42.00	29.70	1,247.40	DSR 2004
	sub waiting	18.00	Dry distemper	18.00	19.05	342.90	DSR 2004
	Treatment	13.50	Wash. oil bd. dist.	13.50	29.70	400.95	DSR 2004
	clean utility	4.50	Dry distemper	4.50	19.05	85.73	DSR 2004
	dirty utility	9.00	Dry distemper	9.00	19.05	171.45	DSR 2004
	Nurse station	9.00	Wash. oil bd. dist.	9.00	29.70	267.30	DSR 2004
	Ob./Gy./Paed. Clinics						
	Exam/consultation-4	72.00	Wash. oil bd. dist.	72.00	29.70	2,138.40	DSR 2004
	sub waiting	36.00	Dry distemper	36.00	19.05	685.80	DSR 2004
	treatment-2	27.00	Wash. oil bd. dist.	27.00	29.70	801.90	DSR 2004
	clean utility-2	9.00	Dry distemper	9.00	19.05	171.45	DSR 2004
	dirty utility	9.00	Dry distemper	9.00	19.05	171.45	DSR 2004
	Nurse station	9.00	Wash. oil bd. dist.	9.00	29.70	267.30	DSR 2004
	ECG Room	9.00	Dry distemper	9.00	19.05	171.45	DSR 2004
	Sample collection	9.00	Dry distemper	9.00	19.05	171.45	DSR 2004
	Toilet (female)	18.00	Dry distemper	18.00	19.05	342.90	DSR 2004
	Toilet (male)	18.00	Dry distemper	18.00	19.05	342.90	DSR 2004
	Total	843.00				20,771.78	
	C DIAGNOSTIC SERVICES						
	Imaging						
	Reception	18.00	Dry distemper	18.00	19.05	342.90	DSR 2004
	sub waiting	63.00	Dry distemper	63.00	19.05	1,200.15	DSR 2004
	Patient preparation	9.00	Dry distemper	9.00	19.05	171.45	DSR 2004
	CT scan	27.00	Dry distemper	27.00	19.05	514.35	DSR 2004
	Control	13.50	Dry distemper	13.50	19.05	257.18	DSR 2004

S.NO.	NAME OF AREA	TOTAL AREA	CEILING TYPE	AREA	RATE	AMOUNT	REFERENCE
	Special Xray	27.00	Dry distemper	27.00	19.05	514.35	DSR 2004
	general Xray	27.00	Dry distemper	27.00	19.05	514.35	DSR 2004
	ultra sound	18.00	Dry distemper	18.00	19.05	342.90	DSR 2004
	Record	13.50	Dry distemper	13.50	19.05	257.18	DSR 2004
	Report	4.50	Dry distemper	4.50	19.05	85.73	DSR 2004
	Report writing/computers	81.00	Dry distemper	81.00	19.05	1,543.05	DSR 2004
	Dark room	9.00	Dry distemper	9.00	19.05	171.45	DSR 2004
	Doctors room	9.00	Dry distemper	9.00	19.05	171.45	DSR 2004
	Sub-total	319.50				6,086.48	
	Clinical Labs						
	Sample collection	18.00	Dry distemper	18.00	19.05	342.90	DSR 2004
	Emergency lab	18.00	Dry distemper	18.00	19.05	342.90	DSR 2004
	store	18.00	Dry distemper	18.00	19.05	342.90	DSR 2004
	consultant	18.00	Dry distemper	18.00	19.05	342.90	DSR 2004
	records	18.00	Dry distemper	18.00	19.05	342.90	DSR 2004
	Technician's rest room	18.00	Dry distemper	18.00	19.05	342.90	DSR 2004
	Wash	18.00	Dry distemper	18.00	19.05	342.90	DSR 2004
	Media preparation	18.00	Dry distemper	18.00	19.05	342.90	DSR 2004
	labs	72.00	Dry distemper	72.00	19.05	1,371.60	DSR 2004
	Blood Bank						
	Rest	36.00	Wash. oil bd. dist.	36.00	29.70	1,069.20	DSR 2004
	reception	4.50	Wash. oil bd. dist.	4.50	29.70	133.65	DSR 2004
	bleed	18.00	Wash. oil bd. dist.	18.00	29.70	534.60	DSR 2004
	lab	13.50	Dry distemper	13.50	19.05	257.18	DSR 2004
	Sub-total	288.00				6,109.43	
	Total	607.50				12,195.90	
	D INTERMEDIATE CARE AREA						
	Dirty Utility-2	13.50	Dry distemper	13.50	19.05	257.18	DSR 2004
	Clean Utility-2	15.00	Dry distemper	15.00	19.05	285.75	DSR 2004
	Linen Store-2	13.50	Dry distemper	13.50	19.05	257.18	DSR 2004
	General Wards-(4beds x 6)x2	333.00	Wash. oil bd. dist.	333.00	29.70	9,890.10	DSR 2004
	Single Rm/Pvt.Ward/isolation-4	54.00	Wash. oil bd. dist.	54.00	29.70	1,603.80	DSR 2004
	Nurse Station-2	24.00	Wash. oil bd. dist.	24.00	29.70	712.80	DSR 2004
	Pantry-2	15.00	Dry distemper	15.00	19.05	285.75	DSR 2004

S.NO.	NAME OF AREA	TOTAL AREA	CEILING TYPE	AREA	RATE	AMOUNT	REFERENCE
	Double room-4 dayroom-2	54.00	Wash. oil bd. dist.	54.00	29.70	1,603.80	DSR 2004
	Treatment-2 patient toilet-22	39.00	Wash. oil bd. dist.	39.00	29.70	1,158.30	DSR 2004
	Doctors rest room	114.84	Dry distemper	114.84	19.05	2,187.70	DSR 2004
	Toilet	18.00	Dry distemper	18.00	19.05	342.90	DSR 2004
	Nurse rest room	4.50	Dry distemper	4.50	19.05	85.73	DSR 2004
	Toilet	18.00	Dry distemper	18.00	19.05	342.90	DSR 2004
	Waiting	4.50	Dry distemper	4.50	19.05	85.73	DSR 2004
	Total	792.84		18.00	29.70	534.60	DSR 2004
						21,238.00	
	E INTENSIVE CARE AREA						
	Dirty Utility	7.20	Dry distemper	7.20	19.05	137.16	DSR 2004
	Clean Utility	7.20	Dry distemper	7.20	19.05	137.16	DSR 2004
	Sluice Room	7.20	Dry distemper	7.20	19.05	137.16	DSR 2004
	Linen Store	7.20	Dry distemper	7.20	19.05	137.16	DSR 2004
	Patients area	194.40	Wash. oil bd. dist.	194.40	29.70	5,773.68	DSR 2004
	Patient Monitoring	21.60	Wash. oil bd. dist.	21.60	29.70	641.52	DSR 2004
	Toilet	7.20	Dry distemper	7.20	19.05	137.16	DSR 2004
	Change	7.20	Dry distemper	7.20	19.05	137.16	DSR 2004
	Equipment park-2	16.20	Dry distemper	16.20	19.05	308.61	DSR 2004
	Pantry	7.20	Dry distemper	7.20	19.05	137.16	DSR 2004
	Procedure room	39.00	Al.clad.false ceil.	39.00	1,100.00	42,900.00	DSR 2004
	Total	321.60				50,583.93	
	F CRITICAL CARE AREA						
	Disposal-2	13.50	Dry distemper	13.50	19.05	257.18	DSR 2004
	Setup (clean utility)-2	13.50	Dry distemper	13.50	19.05	257.18	DSR 2004
	Linen Store	9.00	Dry distemper	9.00	19.05	171.45	DSR 2004
	Exam/Resuscitation beds						
	resuscitation	36.00	Wash. oil bd. dist.	36.00	29.70	1,069.20	DSR 2004
	observation	36.00	Wash. oil bd. dist.	36.00	29.70	1,069.20	DSR 2004
	recovery	36.00	Wash. oil bd. dist.	36.00	29.70	1,069.20	DSR 2004
	Nurse Station	18.00	Wash. oil bd. dist.	18.00	29.70	534.60	DSR 2004
	Dirty Utility	6.00	Dry distemper	6.00	19.05	114.30	DSR 2004

S.NO.	NAME OF AREA	TOTAL AREA	CEILING TYPE	AREA	RATE	AMOUNT	REFERENCE
	Clean Utility	6.00	Dry distemper	6.00	19.05	114.30	DSR 2004
	Toilet	6.00	Dry distemper	6.00	19.05	114.30	DSR 2004
	pantry	9.00	Dry distemper	9.00	19.05	171.45	DSR 2004
	Change	9.00	Dry distemper	9.00	19.05	171.45	DSR 2004
	plaster/treatment room	36.00	Wash. oil bd. dist.	36.00	29.70	1,069.20	DSR 2004
	O.T.	36.00	Al.clad.false ceil.	36.00	1,100.00	39,600.00	DSR 2004
	scrub/equipment park-2	24.00	Dry distemper	24.00	19.05	457.20	DSR 2004
	Change-2	12.00	Dry distemper	12.00	19.05	228.60	DSR 2004
	Doctors rest room	18.00	Dry distemper	18.00	19.05	342.90	DSR 2004
	Toilet	2.50	Dry distemper	2.50	19.05	47.63	DSR 2004
	Total	326.50				46,859.33	
G	THERAPEUTIC SERVICES						
	Day Care						
	lounge	42.00	Wash. oil bd. dist.	42.00	29.70	1,247.40	DSR 2004
	surgeon-2	36.00	Wash. oil bd. dist.	36.00	29.70	1,069.20	DSR 2004
	store	9.00	Dry distemper	9.00	19.05	171.45	DSR 2004
	Change	9.00	Dry distemper	9.00	19.05	171.45	DSR 2004
	Nurse Station	18.00	Wash. oil bd. dist.	18.00	29.70	534.60	DSR 2004
	Clean utility	6.00	Dry distemper	6.00	19.05	114.30	DSR 2004
	Dirty utility	6.00	Dry distemper	6.00	19.05	114.30	DSR 2004
	Toilet	6.00	Dry distemper	6.00	19.05	114.30	DSR 2004
	Preparation	36.00	Wash. oil bd. dist.	36.00	29.70	1,069.20	DSR 2004
	change-2	12.00	Dry distemper	12.00	19.05	228.60	DSR 2004
	recovery	36.00	Wash. oil bd. dist.	36.00	29.70	1,069.20	DSR 2004
	Procedure room-2	24.00	Al.clad.false ceil.	24.00	1,100.00	26,400.00	DSR 2004
	disposal-2	13.50	Dry distemper	13.50	19.05	257.18	DSR 2004
	setup-2	13.50	Dry distemper	13.50	19.05	257.18	DSR 2004
	store-4	24.00	Dry distemper	24.00	19.05	457.20	DSR 2004
	Scrub/equipment park-2	24.00	Dry distemper	24.00	19.05	457.20	DSR 2004
	change-2	12.00	Dry distemper	12.00	19.05	228.60	DSR 2004
	Sub-total	327.00				33,961.35	
	Operation Theatre Suite						
	Sterile Store	18.00	Gypboard	18.00	416.70	7,500.60	DSR 2004
	Patient transfer	14.40	Gypboard	14.40	416.70	6,000.48	DSR 2004

S.NO.	NAME OF AREA	TOTAL AREA	CEILING TYPE	AREA	RATE	AMOUNT	REFERENCE
	Sterile Corridor	43.20	Al.clad.false ceil.	43.20	1,100.00	47,520.00	DSR 2004
	Scrub-2	10.13	Al.clad.false ceil.	10.13	1,100.00	11,137.50	DSR 2004
	Anaesthesia-2	10.13	Al.clad.false ceil.	10.13	1,100.00	11,137.50	DSR 2004
	O.T.-2	70.20	Al.clad.false ceil.	70.20	1,100.00	77,220.00	DSR 2004
	Disposal-2	24.30	Dry distemper	24.30	19.05	462.92	DSR 2004
	Setup (clean utility)-2	24.30	Dry distemper	24.30	19.05	462.92	DSR 2004
	PreOperation Area	34.20	Gypboard	34.20	416.70	14,251.14	DSR 2004
	Change-3	22.80	Dry distemper	22.80	19.05	434.34	DSR 2004
	Anaesthesists' Room-1	13.50	Wash. oil bd. dist.	13.50	29.70	400.95	DSR 2004
	Post Operation Recovery	56.25	Wash. oil bd. dist.	56.25	29.70	1,670.63	DSR 2004
	Nurse Station	12.15	Wash. oil bd. dist.	12.15	29.70	360.86	DSR 2004
	Clean utility	6.08	Dry distemper	6.08	19.05	115.73	DSR 2004
	Dirty utility	6.08	Dry distemper	6.08	19.05	115.73	DSR 2004
	Rest Room	29.00	Dry distemper	29.00	19.05	552.45	DSR 2004
	Toilet	5.00	Dry distemper	5.00	19.05	95.25	DSR 2004
	Pantry	18.00	Dry distemper	18.00	19.05	342.90	DSR 2004
	Sub-total	417.70				179,781.88	
	Delivery Suite						
	Disposal-2	13.50	Dry distemper	13.50	19.05	257.18	DSR 2004
	Setup(sterile store)-2	13.50	Dry distemper	13.50	19.05	257.18	DSR 2004
	Delivery room	36.00	Al.clad.false ceil.	36.00	1,100.00	39,600.00	DSR 2004
	Patient Area						
	Pre natal	36.00	Wash. oil bd. dist.	36.00	29.70	1,069.20	DSR 2004
	Post natal	36.00	Wash. oil bd. dist.	36.00	29.70	1,069.20	DSR 2004
	Nurse Station	18.00	Gypboard	18.00	416.70	7,500.60	DSR 2004
	Clean utility	6.00	Dry distemper	6.00	19.05	114.30	DSR 2004
	Dirty utility	6.00	Dry distemper	6.00	19.05	114.30	DSR 2004
	Toilet	6.00	Dry distemper	6.00	19.05	114.30	DSR 2004
	Scrub/equipment park	12.00	Dry distemper	12.00	19.05	228.60	DSR 2004
	Change	6.00	Dry distemper	6.00	19.05	114.30	DSR 2004
	O.T.	36.00	Al.clad.false ceil.	36.00	1,100.00	39,600.00	DSR 2004
	Toxemia	18.00	Gypboard	18.00	416.70	7,500.60	DSR 2004
	Pantry	9.00	Dry distemper	9.00	19.05	171.45	DSR 2004
	Change (Female)	9.00	Dry distemper	9.00	19.05	171.45	DSR 2004
	Store	9.00	Dry distemper	9.00	19.05	171.45	DSR 2004

S.NO.	NAME OF AREA	TOTAL AREA	CEILING TYPE	AREA	RATE	AMOUNT	REFERENCE
	Paediatric nursery	36.00	Gypboard	36.00	416.70	15,001.20	DSR 2004
	Nurse Rest Room	18.00	Dry distemper	18.00	19.05	342.90	DSR 2004
	toilet	2.50	Dry distemper	2.50	19.05	47.63	DSR 2004
	Sub-total	326.50				113,445.83	
	Total	1,071.20				327,189.05	
H	HOSPITAL SERVICES						
	C.S.S.D.	84.00	Dry distemper	84.00	19.05	1,600.20	DSR 2004
	Laundry	108.00	Dry distemper	108.00	19.05	2,057.40	DSR 2004
	Medical gases	54.00	Dry distemper	54.00	19.05	1,028.70	DSR 2004
	General Store	99.00	Dry distemper	99.00	19.05	1,885.95	DSR 2004
	Receipt	54.00	Dry distemper	54.00	19.05	1,028.70	DSR 2004
	Medical Store	99.00	Dry distemper	99.00	19.05	1,885.95	DSR 2004
	Autopsy	54.00	Al.clad.false cell.	54.00	1,100.00	59,400.00	DSR 2004
	Kitchen	157.50	Dry distemper	157.50	19.05	3,000.38	DSR 2004
	Total	709.50				71,887.28	
I	ENGINEERING SERVICES						
	Electrical room	54.00	Dry Distemper	54.00	19.05	1,028.70	DSR 2004
	Water supply/Pump Room	54.00	Dry Distemper	54.00	19.05	1,028.70	DSR 2004
	D.G. Room	54.00	Perf.Al.Sheet with min.wool	54.00	700.00	37,800.00	DSR 2004
	HVAC Room	94.50	Perf.Al.Sheet with min.wool	94.50	700.00	66,150.00	DSR 2004
	AHU room(Bsmt.)-4	72.00	Perf.Al.Sheet with min.wool	72.00	700.00	50,400.00	DSR 2004
	AHU room(Gr. Floor)-4	67.50	Perf.Al.Sheet with min.wool	67.50	700.00	47,250.00	DSR 2004
	AHU room(First Floor)-4	66.00	Perf.Al.Sheet with min.wool	66.00	700.00	46,200.00	DSR 2004
	Incinerator	36.00	Dry distemper	36.00	19.05	685.80	DSR 2004
	Total	498.00				250,543.20	

S.NO.	NAME OF AREA	TOTAL AREA	CEILING TYPE	AREA	RATE	AMOUNT	REFERENCE
J	CORRIDORS						
	Corridors	3,127.70	Gypboard	3,127.70	416.70	1,303,312.59	DSR 2004
	Elevators	80.00					DSR 2004
	Ramp	352.00	Dry distemper	352.00	19.05	6,705.60	DSR 2004
	Staircase	156.00	Dry distemper	156.00	19.05	2,971.80	DSR 2004
	Sub-total	3,715.70				1,312,989.99	
K	TOILETS						
	Toilet (male)	15.50	Dry distemper	15.50	19.05	295.28	DSR 2004
	Toilet (female)	15.50	Dry distemper	15.50	19.05	295.28	DSR 2004
	Toilet (male)	18.00	Dry distemper	18.00	19.05	342.90	DSR 2004
	Toilet (female)	18.00	Dry distemper	18.00	19.05	342.90	DSR 2004
	Toilet (male)	27.00	Dry distemper	27.00	19.05	514.35	DSR 2004
	Toilet (female)	27.00	Dry distemper	27.00	19.05	514.35	DSR 2004
	Sub-total	121.00				2,305.05	
	Total	3,836.70				1,315,295.04	
L	ADMIN & ANCILLARY						
	Staff room(entry-1)	18.00	Dry Distemper	18.00	19.05	342.90	DSR 2004
	Staff change	54.00	Dry Distemper	54.00	19.05	1,028.70	DSR 2004
	Staff room(entry-2)	18.00	Dry Distemper	18.00	19.05	342.90	DSR 2004
	Medical Records	81.00	Dry Distemper	81.00	19.05	1,543.05	DSR 2004
	Supervisor's Office	27.00	Dry Distemper	27.00	19.05	514.35	DSR 2004
	MS	18.00	Gypboard	18.00	416.70	7,500.60	DSR 2004
	Officers-4	36.00	Dry Distemper	36.00	19.05	685.80	DSR 2004
	Matron	18.00	Dry Distemper	18.00	19.05	342.90	DSR 2004
	Sub waiting-2	13.00	Dry Distemper	13.00	19.05	247.65	DSR 2004
	Offices	143.00	Dry Distemper	143.00	19.05	2,724.15	DSR 2004
	library/conference	66.00	Gypboard	66.00	416.70	27,502.20	DSR 2004
	Snacks	9.00	Dry distemper	9.00	19.05	171.45	DSR 2004
	Info.	9.00	Dry distemper	9.00	19.05	171.45	DSR 2004
	Total	510.00				43,118.10	
	GRAND TOTAL	9,918.84				2,222,215.40	

109-BED HOSPITAL, NEW DELHI

DESIRABLE EXTERNAL FINISH COST

External Finish Area @ 150% of plan area (2902 sqm.) = 4353 sqm.

Area wise Cost loading @ plinth area proportions

S.NO.	NAME OF AREA	TOTAL AREA	EXTERNAL FINISH AREA	RATE	AMOUNT	REFERENCE
A	ENTRANCE AREA					
	Main(OPD) Entrance	315.00	138.24	23.10	3,193.38	Refer Data Sheet - 2
	Emergency Entrance	69.00	30.28	23.10	699.50	Refer Data Sheet - 2
	Services & Staff Entrance	18.00	7.90	23.10	182.48	Refer Data Sheet - 2
	Total	402.00	176.42		4,075.36	
B	AMBULATORY CARE AREA					
		843.00	369.96	23.10	8,546.09	Refer Data Sheet - 2
C	DIAGNOSTIC SERVICES					
	Imaging	319.50	140.22	23.10	3,239.00	Refer Data Sheet - 2
	Clinical Labs & Blood bank	288.00	126.39	23.10	2,919.66	Refer Data Sheet - 2
	Total	607.50	266.61		6,158.66	
D	INTERMEDIATE CARE AREA					
		792.84	347.95	23.10	8,037.58	Refer Data Sheet - 2
E	INTENSIVE CARE AREA					
		321.60	141.14	23.10	3,260.29	Refer Data Sheet - 2
F	CRITICAL CARE AREA					
		326.50	143.29	23.10	3,309.96	Refer Data Sheet - 2
C	THERAPEUTIC SERVICES					
	Day Care	327.00	143.51	23.10	3,315.03	Refer Data Sheet - 2
	Operation Theatre Suite	417.70	183.31	23.10	4,234.52	Refer Data Sheet - 2
	Delivery Suite	326.50	143.29	23.10	3,309.96	Refer Data Sheet - 2
	Total	1,071.20	470.11		10,859.51	
H	HOSPITAL SERVICES					
		709.50	311.37	23.10	7,192.70	Refer Data Sheet - 2
I	ENGINEERING SERVICES					
		498.00	218.55	23.10	5,048.58	Refer Data Sheet - 2

S.NO.	NAME OF AREA	TOTAL AREA	EXTERNAL FINISH AREA	RATE	AMOUNT	REFERENCE
J	CORRIDORS	3,715.70	1,630.68	23.10	37,668.68	Refer Data Sheet - 2
K	TOILETS	121.00	53.10	23.10	1,226.66	Refer Data Sheet - 2
	Total	3,836.70	1,683.78		38,895.34	
L	ADMIN & ANCILLARY	510.00	223.82	23.10	5,170.23	Refer Data Sheet - 2
	GRAND TOTAL	9,918.84	4,353.00		100,554.30	

109-BED HOSPITAL, NEW DELHI

DESIRABLE SERVICES SCHEDULE

AC Load (Tons) @ 15sqm/ton (general areas, chambers etc.); 10 sqm/ton (procedure rooms etc.); 7.5 sqm/ton (OTs etc)

Rate = Rs. 50,000/- per ton

Mechanical Ventilation @ nos. as per area requirement

Rate = Rs. 30,000/- per point

Ceiling Fans @ 1nos./9sqm. only wherever required

Rate = Rs. 10,000/- per point

Light Pts. @ 150 lux (general lighting); 300 lux (consultancy/examination/observation rooms etc.); 500 lux (treatment/procedure rooms etc.)

Area X lux level = lumens; No. of Light pts = lumens/2250 (1 Ft. Tubelight =2250 lumens)

Rate = Rs. 10,000/- per point

15 Amp (6-pin) @ nos. as per area requirement

Rate = Rs. 10,000/- per point

30 Amp @ nos. as per area requirement

Rate = Rs. 10,000/- per point

UPS @ nos. as per area requirement

Rate = Rs. 7,500/- per point

Telecom @ nos. as per area requirement

Rate = Rs. 5,500/- per point

Fire Detectors @ 1 nos./ 18 sqm. all over

Rate = Rs. 6,000/- per point

Sprinkler @ 1 nos./ 9 sqm. all over

Rate = Rs. 6,500/- per point

PA system @ 1nos./36 sqm. only wherever required

Rate = Rs. 5,500/- per point

Nurse call @ per bed, per patients toilet, per room as required

Rate = Rs. 12,000/- per point

Cable TV @ per room wherever required

Rate = Rs. 16,000/- per point

CCTV @ corridors, nursery, entrance

Rate = Rs. 20,000/- per point

Medical Gases @ per bed , per area as required

Rate = Rs. 12,500/- per point

S.NO.	NAME OF SPACE	TOTAL AREA	A.C. Factor (sqm/ton)	AC Load (Tons)	Mech. Vent.	Ceiling Fans	Lux Lvl.	Light Pts.	15 Amp (6-pin)	30 Amp	UPS	Data	Telecom	Fire Det. (below false ceiling)	Fire Det. (above false ceiling)	Sprinkler	PA system	Nurse call	Cable TV	CCTV	Medical Gases
A	ENTRANCE AREA																				
	Main(OPD) Entrance																				
	Trolley park-2	9.00	-	-	-		150	1							2	2	1				
	General waiting	30.00	-	-	-	3	150	2	1		1	1	1	2	2	3	1		1	1	
	Reception	30.00	-	-	-	3	150	2	2		2	2	2	2	2	3	1		1	1	
	Arcade		-	-	-																
	shops-4	48.00	-	-	-	5	300	6	8		4	4	4	4	4	5	4		4	4	
	Pharmacy	99.00	-	-	-	11	300	13	2		1	1	1	6		11	1			2	
	Cafeteria	99.00	-	-	-	11	300	13	2		1	1	1	6		11	1			2	
	Sub-total	315.00	-	-	-	34		37	15	-	9	9	9	22	6	35	8	-	8	10	-
	Emergency Entrance		-	-	-																
	Trolley park-2	9.00	-	-	-		150	1						2	2	1					
	General waiting	30.00	-	-	-	3	150	2	1		1	1	1	2	2	3	1		1	1	
	Reception	30.00	-	-	-	3	150	2	2		2	2	2	2	2	3	1			1	
	Sub-total	69.00	-	-	-	7		5	3	-	3	3	3	6	6	8	2	-	2	2	-
	Services Entrance	9.00	-	-	-	1	150	1	1					1	1	1	1			1	
	Staff Entrance	9.00	-	-	-	1	150	1	1					1	1	1	1			1	
	Sub-total	18.00	-	-	-	2		1	2	-	-	-	-	2	-	2	2	-	-	2	-
	Total	402.00	-	-	-	43		43	20	-	12	12	12	30	12	45	12	-	10	14	-
B	AMBULATORY CARE AREA																				
	Screening Clinics		-	-	-																
	Exam/consultation-4	72.00	-	-	-	8	300	10	8		4	4	4	4	4	8			4		
	registration	48.00	-	-	-	5	150	3	2		1	1	1	3		5				1	
	sub waiting	60.00	-	-	-	7	150	4	1		1	1	1	3		7			1	1	
	GeneralClinics		-	-	-																
	Exam/consultation-4	72.00	-	-	-	8	300	10	8		4	4	4	4	4	8			4		
	sub waiting	54.00	-	-	-	6	150	4	1		1	1	1	3		6			1	1	
	Treatment-2	27.00	-	-	-	3	500	6	8		4	2		2		3		2		2	2
	clean utility-2	9.00	-	-	-	1	150	1	2							1					
	dirty utility	9.00	-	-	-	1	150	1								1					
	Nurse station	9.00	-	-	-	1	300	1	2		1	1	1	1		1					

S.NO.	NAME OF SPACE	TOTAL AREA	A.C. Factor (sqm/ton)	AC Load (Tons)	Mech. Vent.	Ceiling Fans	Lux Lvl.	Light Fts.	15 Amp (6-pin)	30 Amp	UPS	Data	Telecom	Fire Det. (below false ceiling)	Fire Det. (above false ceiling)	Sprinkler	PA system	Nurse call	Cable TV	CCTV	Medical Gases
	Dedicated Clinics																				
	Dental-2	18.00	-	-	-	2	500	4	4		2	2	2		2			2			2
	lab/xray	18.00	-	-	-	2	500	4	2		1	1	1		1						
	Ent-2	36.00	-	-	-	4	500	8	4		2	2	2		2			2			2
	audio + speech	18.00	-	-	-	2	300	2	2		1	1	1		1						
	sub waiting	45.00	-	-	-	5	150	3	1		1	1	1		3						1
	Ophthalmology-2	36.00	-	-	-	4	500	8	4		2	2	2		2			2			
	minor surgery/treatment	42.00	10.0	4.20	-		500	9	3		3	1			2			1			4
	sub waiting	18.00	-	-	-	2	150	1	1		1	1	1		1						1
	Treatment	13.50	-	-	-	2	500	3	4		2	1			1			1			1
	clean utility	4.50	-	-	-	1	150	0	1		-				-						
	dirty utility	9.00	-	-	1		150	1	-		-				-						
	Nurse station	9.00	-	-	-	1	300	1	2		1	1	1		1						
	Ob./Gy./Paed. Clinics																				
	Exam/consultation-4	72.00	-	-	-	8	300	10	8		4	4	4		4						4
	sub waiting	36.00	-	-	-	4	150	2	1		1	1	1		2						1
	treatment-2	27.00	-	-	-	3	500	6	7		4	2			2						2
	clean utility-2	9.00	-	-	-	1	150	1	2		-				-						
	dirty utility	9.00	-	-	1		150	1	-		-				-						
	Nurse station	9.00	-	-	-	1	300	1	2		1	1	1		1						
	ECG Room	9.00	-	-	-	1	300	1	3		2	1	1		1						1
	Sample collection	9.00	-	-	-	1	300	1	2		1	1	1		1						
	Toilet (female)	18.00	-	-	1		150	1	1		-				-						2
	Toilet (male)	18.00	-	-	1		150	1	1		-				-						2
	Total	843.00		4.20	5	82		109	86	44	37	31	47	94	-	24	5	6	14	14	14
C	DIAGNOSTIC SERVICES																				
	Imaging																				
	Reception	18.00	-	-	-	2	150	1	1		1	1	1		1						2
	sub waiting	63.00	-	-	-	7	150	4	1		1	1	1		4						7
	Patient preparation	9.00	-	-	-	1	300	1	1		-				1						1
	CT scan	27.00	15.0	1.80	-		300	4	3		3	1			2						3

S.NO.	NAME OF SPACE	TOTAL AREA	A.C. Factor (sqm/ton)	AC Load (Tons)	Mech. Vent.	Ceiling Fans	Lux Lvl.	Light Pts.	15 Amp (6-pin)	30 Amp	UPS	Data	Telecom	Fire Det. (below false ceiling)	Fire Det. (above false ceiling)	Sprinkler	PA system	Nurse call	Cable TV	CCTV	Medical Gases
	Control	13.50	15.0	0.90	-		300	2	2	2	2	1	1	1	1	2					
	Special Xray	27.00	15.0	1.80	-		300	4	3	1	3	1	1	2		3		1			1
	general Xray	27.00	15.0	1.80	-		300	4	3	1	3	1	1	2		3		1			
	ultra sound	18.00	15.0	1.20	-		300	2	2	2	2	1	1	1		2		1			
	Record	13.50	-	-	-	2	300	2	1	1	1	1	1	1		2					
	Report	4.50	-	-	-	1	300	1	1	1	1	1	1	1		1					
	Report writing/computers	81.00	15.0	5.40	-		300	11	8	4	4	4	4	5		9					
	Dark room	9.00	15.0	0.60	-		300	1	2	1	1	1	1	1		1					
	Doctors room	9.00	-	-	-	1	150	1	2	1	1	1	1	1		1			1		
	Sub-total	319.50		13.50	-	13		37	28	3	21	15	14	23	-	36	-	5	3	2	9
	Clinical Labs																				
	Sample collection	18.00	-	-	-	2	300	2	2	1	1	1	1	1		2					
	Emergency lab	18.00	15.0	1.20	-		300	2	2	1	1	1	1	1		2					
	store	18.00	-	-	-	2	150	1	1	-	-	-	-	1		2					
	consultant	18.00	-	-	-	2	150	1	2	1	1	1	1	1		2					
	records	18.00	-	-	-	2	300	2	2	1	1	1	1	1		2					
	Technician's rest room	18.00	-	-	-	2	150	1	1	1	1	1	1	1		2			1		
	Wash	18.00	-	-	-	2	150	1	1	-	-	-	-	1		2					
	Media preparation	18.00	-	-	-	2	300	2	2	-	-	-	-	1		2					
	labs	72.00	15.0	4.80	-		300	10	16	8	8	8	2	4		8					
	Blood Bank																				
	Rest	36.00	15.0	2.40	-		150	2	1	-	-	-	-	2		4			1		
	reception	4.50	15.0	0.30	-		150	0	1	1	1	1	1	1		1				1	
	bleed	18.00	15.0	1.20	-		300	2	2	1	1	1	1	1		2				1	
	lab	13.50	15.0	0.90	-		300	2	2	1	1	1	1	1		2					
	Sub-total	288.00		10.80	-	14		31	35	-	16	15	9	17	-	32	-	1	2	1	-
	Total	607.50		24.30	-	27		68	63	3	37	30	23	40	-	68	-	6	5	3	9
	D INTERMEDIATE CARE AREA																				
	Dirty Utility-2	13.50	-	-	2		150	1	-	-	-	-	-	-		-					
	Clean Utility-2	15.00	-	-	-	2	150	1	2	-	-	-	-	-		2					
	Linen Store-2	13.50	-	-	-	2	150	1	2	-	-	-	-	2		2					

S.NO.	NAME OF SPACE	TOTAL AREA	A.C.Factor (sqm/ton)	AC Load (Tons)	Mech. Vent.	Ceiling Fans	Lux Lvl.	Light Pts.	15 Amp (6-pin)	30 Amp	UPS	Data	Telecom	Fire Det. (below false ceiling)	Fire Det. (above false ceiling)	Sprinkler	PA system	Nurse call	Cable TV	CCTV	Medical Gases
	General Wards-(4beds x 6)x2	333.00	-	-	-	37	150	22	12	-	-	-	-	24	-	37	-	48	-	-	-
	Single Rm/Pvt. Ward/isolation-4	54.00	15.0	3.60	-	-	150	4	4	-	4	4	4	4	-	6	-	4	4	-	8
	Nurse Station-2	24.00	-	-	-	3	300	3	4	-	2	2	2	2	-	3	-	-	-	-	-
	Pantry-2	15.00	-	-	-	2	150	1	2	-	-	-	-	2	-	2	-	-	-	-	-
	Double room-4	54.00	-	-	-	6	150	4	4	-	4	4	4	4	-	6	-	8	-	-	8
	dayroom-2	54.00	-	-	-	6	150	4	2	-	2	2	2	2	-	6	-	-	2	-	-
	Treatment-2	39.00	-	-	-	4	150	3	2	-	2	2	-	2	-	4	-	2	-	-	2
	patient toilet-22	114.84	-	-	22	-	150	8	22	-	-	-	-	-	-	13	-	22	-	-	-
	Doctors rest room	18.00	-	-	-	2	150	1	1	-	1	1	1	1	-	2	-	-	1	-	-
	Toilet	4.50	-	-	1	-	150	0	1	-	-	-	-	-	-	1	-	-	-	-	-
	Nurse rest room	18.00	-	-	-	2	150	1	1	-	1	1	1	1	-	2	-	-	1	-	-
	Toilet	4.50	-	-	1	-	150	0	1	-	-	-	-	-	-	1	-	-	-	-	-
	Waiting	18.00	-	-	-	2	150	1	1	-	1	1	1	1	-	2	-	-	1	-	-
	Total	792.84		3.60	26	67		54	61	-	17	17	15	45	-	88	-	84	9	-	18
E	INTENSIVE CARE AREA																				
	Dirty Utility	7.20	-	-	1	-	150	0	-	-	-	-	-	-	-	1	-	-	-	-	-
	Clean Utility	7.20	-	-	-	1	150	0	1	-	-	-	-	-	-	1	-	-	-	-	-
	Sluice Room	7.20	-	-	-	1	150	0	1	-	-	-	-	-	-	1	-	-	-	-	-
	Linen Store	7.20	-	-	-	1	150	0	1	-	-	-	-	1	-	1	-	-	-	-	-
	Patients area	194.40	10.0	19.44	-	-	150	13	24	-	12	1	-	11	-	22	-	12	-	-	24
	Patient Monitoring	21.60	10.0	2.16	-	-	300	3	4	-	2	1	1	1	-	2	-	-	-	-	-
	Toilet	7.20	-	-	1	-	150	0	1	-	-	-	-	-	-	1	-	1	-	-	-
	Change	7.20	-	-	-	1	150	0	-	-	-	-	-	1	-	1	-	-	-	-	-
	Equipment park-2	16.20	-	-	-	2	150	1	2	-	2	2	-	2	-	2	-	-	-	-	-
	Pantry	7.20	-	-	-	1	150	0	1	-	-	-	-	1	-	1	-	-	-	-	-
	Procedure room	39.00	7.5	5.20	-	-	500	9	3	-	3	1	-	2	-	4	-	1	-	-	4
	Total	321.60		26.80	2	6		29	38	-	19	5	1	19	2	36	-	14	-	-	28
F	CRITICAL CARE AREA																				
	Disposal-2	13.50	-	-	2	-	150	1	-	-	-	-	-	-	-	-	-	-	-	-	-
	Setup (clean utility)-2	13.50	-	-	-	2	150	1	2	-	-	-	-	-	-	2	-	-	-	-	-

S.NO.	NAME OF SPACE	TOTAL AREA	A.C. Factor (sqm/ton)	AC Load (Tons)	Mech. Vent.	Ceiling Fans	Lux Lvl.	Light Pts.	15 Amp (6-pin)	30 Amp	UPS	Data	Telecom	Fire Det. (below false ceiling)	Fire Det. (above false ceiling)	Sprinkler	PA system	Nurse call	Cable TV	CCTV	Medical Gases
	Linen Store	9.00	-	-	-	1	150	1	1	-	-	-	-	1	-	-	-	-	-	-	-
	Exam/Resuscitation beds																				
	resuscitation	36.00	10.0	3.60	-		500	8	3	3	3	1		2		4		1			2
	observation	36.00	10.0	3.60	-		300	5	3	3	3	1		2		4		1			2
	recovery	36.00	10.0	3.60	-		300	5	3	3	3	1	1	2		4		1			2
	Nurse Station	18.00	-	-	-	2	300	2	2	1	1	1	1	1		2					
	Dirty Utility	6.00	-	-	1		150	0	-	-	-	-	-	-		1					
	Clean Utility	6.00	-	-	-	1	150	0	1	-	-	-	-	-		1					
	Toilet	6.00	-	-	1		150	0	1	-	-	-	-	-		1					
	pantry	9.00	-	-	-	1	150	1	1	-	-	-	-	1		1					
	Change	9.00	-	-	-	1	150	1	-	-	-	-	-	1		1					
	plaster/treatment room	36.00	15.0	2.40	-		500	8	3	3	3	1		2		4		1			1
	O.T.	36.00	7.5	4.80	-		500	8	3	3	3	1		2	2	4					4
	scrub/equipment park-2	24.00	15.0	1.60	-		150	2	4	2	2	2		2		3					
	Change-2	12.00	-	-	-	1	150	1	-	-	-	-	-	2		1					
	Doctors rest room	18.00	-	-	-	2	150	1	1	1	1	1	1	1		2					
	Toilet	2.50	-	-	1		150	0	1	-	-	-	-	-		0					
	Total	326.50		19.60	5	11		45	29	-	19	9	3	19	2	36	-	5	1	-	11
G	THERAPEUTIC SERVICES																				
	Day Care																				
	lounge	42.00	15.0	2.80	-		150	3	1	1	1	1	1	2		5			1	1	
	surgeon-2	36.00	15.0	2.40	-		300	5	4	2	2	2	2	2		4					
	store	9.00	-	-	-	1	150	1	1	-	-	-	-	1		1					
	Change	9.00	-	-	-	1	150	1	-	-	-	-	-	1		1					
	Nurse Station	18.00	-	-	-	2	300	2	2	1	1	1	1	1		2					
	Clean utility	6.00	-	-	-	1	150	0	1	-	-	-	-	-		1					
	Dirty utility	6.00	-	-	1		150	0	-	-	-	-	-	-		1					
	Toilet	6.00	-	-	1		150	0	1	-	-	-	-	-		1					
	Preparation	36.00	15.0	2.40	-		300	5	1	-	-	-	-	2		4		1			1
	change-2	12.00	15.0	0.80	-		150	1	-	-	-	-	-	2		1					
	recovery	36.00	15.0	2.40	-		300	5	3	3	3	1	1	2		4		1			1

S.NO.	NAME OF SPACE	TOTAL AREA	A.C. Factor (sqm/ton)	AC Load (Tons)	Mech. Vent.	Ceiling Fans	Lux Lvl.	Light Pts.	15 Amp (6-pin)	30 Amp	UPS	Data	Telecom	Fire Det. (below false ceiling)	Fire Det. (above false ceiling)	Sprinkler	PA system	Nurse call	Cable TV	CCTV	Medical Gases
	Procedure room-2	24.00	7.5	3.20	-		500	5	3	3	2	2	2	2	2	3		2			8
	disposal-2	13.50	-	-	2		150	1	-	-	-	-	-	-	-	2					
	setup-2	13.50	15.0	0.90	-		300	2	2	-	-	-	-	-	-	2					
	store-4	24.00	-	-	-	3	300	3	4	-	-	-	-	1	-	3					
	Scrub/equipment park-2	24.00	15.0	1.60	-		150	2	4	2	2	2	2	2	2	3					
	change-2	12.00	-	-	-	1	150	1	-	-	-	-	-	2	2	1					
	Sub-total	327.00		16.50	4	10		36	27	12	9	5	5	20	2	36	-	4	1	1	10
	Operation Theatre Suite																				
	Sterile Store	18.00	10.0	1.80	-		300	2	1	-	-	-	-	1	1	2					
	Patient transfer	14.40	10.0	1.44	-		500	3	-	-	-	-	-	1	1	2					
	Sterile Corridor	43.20	10.0	4.32	-		500	10	-	-	-	-	-	2	2	5					
	Scrub-2	10.13	10.0	1.01	-		300	1	-	-	-	-	-	2	2	1					8
	Anaesthesia-2	10.13	10.0	1.01	-		500	2	3	3	2	2	2	2	2	1					8
	O.T.-2	70.20	7.5	9.36	-		500	16	6	6	2	2	4	4	4	8					
	Disposal-2	24.30	-	-	2		150	2	-	-	-	-	-	-	-	3					
	Setup (clean utility)-2	24.30	10.0	2.43	-		300	3	2	-	-	-	-	-	-	3					
	PreOperation Area	34.20	10.0	3.42	-		500	8	3	3	1	1	2	2	2	4		1			2
	Change-3	22.80	-	-	-	3	300	3	-	-	-	-	-	3	3	3					
	Anaesthetists' Room-1	13.50	10.0	1.35	-		500	3	2	2	1	1	1	1	1	2					
	Post Operation Recovery	56.25	10.0	5.63	-		300	8	4	4	1	1	3	3	3	6		1			6
	Nurse Station	12.15	15.0	0.81	-		300	2	2	1	1	1	1	1	1	1					
	Clean utility	6.08	-	-	-	1	150	0	1	-	-	-	-	-	-	1					
	Dirty utility	6.08	-	-	1		150	0	-	-	-	-	-	-	-	1					
	Rest Room	29.00	15.0	1.93	-		150	2	1	1	1	1	1	2	2	3			1		
	Toilet	5.00	-	-	1		150	0	1	-	-	-	-	-	-	1					
	Pantry	18.00	-	-	-	2	150	1	1	-	-	-	-	1	1	2					
	Sub-total	417.70		34.51	4	5		66	26	19	9	3	3	25	14	46	-	2	1	-	24
	Delivery Suite																				
	Disposal-2	13.50	-	-	2		150	1	-	-	-	-	-	-	-	2					
	Setup(sterile store)-2	13.50	15.0	0.90	-		300	2	2	-	-	-	-	-	-	2					
	Delivery room	36.00	10.0	3.60	-		500	8	3	3	1	1	2	2	2	4					8
	Patient Area																				

S.NO.	NAME OF SPACE	TOTAL AREA	A.C. Factor (sqm/ton)	AC Load (Tons)	Mech. Vent.	Ceiling Fans	Lux Lvl.	Light Pts.	15 Amp (6-pin)	30 Amp	UPS	Data	Telecom	Fire Det. (below false ceiling)	Fire Det. (above false ceiling)	Sprinkler	PA system	Nurse call	Cable TV	CCTV	Medical Gases
	Pre natal	36.00	15.0	2.40	-		300	5	3	3	3	1	1	2	2	4			5		10
	Post natal	36.00	15.0	2.40	-		300	5	3	3	3	1	1	2	2	4			4		8
	Nurse Station	18.00	15.0	1.20	-		300	2	1	1	1	1	1	1	1	2					
	Clean utility	6.00	-	-	-	1	150	0	1	-	-			-	-	1					
	Dirty utility	6.00	-	-	1		150	0	-	-	-			-	-	1			1		
	Toilet	6.00	-	-	1		150	0	1	-	-			-	-	1					
	Scrub/equipment park	12.00	15.0	0.80	-		150	1	2	1	1	1	1	1	1	1					
	Change	6.00	-	-	-	1	150	0	-	-	-			1	1	1					
	O.T.	36.00	7.5	4.80	-		500	8	3	3	3	1	1	2	2	4			2		4
	Toxemia	18.00	15.0	1.20	-		300	2	2	1	1	1	1	1	1	2			2		4
	Pantry	9.00	-	-	-	1	150	1	1	-	-			1	1	1					
	Change (Female)	9.00	-	-	-	1	150	1	-	-	-			1	1	1					
	Store	9.00	-	-	-	1	150	1	1	-	-			1	1	1					
	Paediatric nursery	36.00	10.0	3.60	-		500	8	3	3	3	1	1	2	2	4			6	1	12
	Nurse Rest Room	18.00	15.0	1.20	-		300	2	2	1	1	1	1	1	1	2				1	
	toilet	2.50	-	-	1		150	0	1	-	-			-	-	0					
	Sub-total	326.50		22.10	5	4		48	29	19	19	9	3	18	8	36	-	18	1	1	46
	Total	1,071.20		73.11	13	20		151	83	51	51	27	11	63	24	119	-	24	3	2	80
H	HOSPITAL SERVICES																				
	C.S.S.D.	84.00	-	-	-	9	150	6	5	-	-	1	1	5	-	9	2				
	Laundry	108.00	-	-	1		300	14	6			1	1	6		12	2				
	Medical gases	54.00	-	-	1		300	7	3	1	1	1	1	3		6	1				
	General Store	99.00	-	-	-	11	150	7	6	1	1	1	1	6		11	2			1	
	Receipt	54.00	-	-	-	6	150	4	3	1	1	1	1	3		6	1			1	
	Medical Store	99.00	-	-	-	11	150	7	6	1	1	1	1	6		11	2			1	
	Autopsy	54.00	7.5	7.20	-		500	12	5	5	2	1	1	3	3	6					
	Kitchen	157.50	-	-	1		300	21	9	-	-	1	1	-	-	18	4				
	Total	709.50		7.20	3	37		77	41	9	9	6	8	32	3	79	14			3	
I	ENGINEERING SERVICES																				
	Electrical room	54.00	-	-	-	6	300	7	3	1	1	1	1	3	-	6	1				

S.NO.	NAME OF SPACE	TOTAL AREA	A.C. Factor (sqm/ton)	AC Load (Tons)	Mech. Vent.	Ceiling Fans	Lux Lvl.	Light Pts.	15 Amp (6-pin)	30 Amp	UPS	Data	Telecom	Fire Det. (below false ceiling)	Fire Det. (above false ceiling)	Sprinkler	PA system	Nurse call	Cable TV	CCTV	Medical Gases
	Water supply/Pump Room	54.00	-	-	-	6	300	7	3	1	1	1	1	3		6	1				
	D.G. Room	54.00	-	-	1		300	7	3	1	1	1	1	3		6	1				
	HVAC Room	94.50	-	-	1		300	13	5	1	1	1	1	5		11	2				
	AHU room(Bsmt.)-4	72.00	-	-	-	8	300	10	4	1	1	1	1	4		8					
	AHU room(Gr. Floor)-4	67.50	-	-	-	8	300	9	4	1	1	1	1	4		8					
	AHU room(First Floor)-4	66.00	-	-	-	7	300	9	4	1	1	1	1	4		7					
	Incinerator	36.00	-	-	1		300	5	2	1	1	1	1	2		4	1				
	Total	498.00	-	-	3	35		66	28	8	8	8	8	28	-	55	6	-	-	-	-
	J CORRIDORS																				
	Corridors	3,127.70	-	-	-		150	209	43	43	43	43	43	174	174	348	87			30	
	Elevators	80.00	-	-	-		150	5	-	-	-	-	20	4		-	1				
	Ramp	352.00	-	-	-		150	23	-	-	-	-	-	20		39	8				
	Staircase	156.00	-	-	4		150	10	-	-	-	-	-	-		17	8				
	Sub-total	3,715.70	-	-	4	-		248	43	43	43	43	63	198	174	404	104	-	-	30	-
	K TOILETS																				
	Toilet (male)	15.50	-	-	1		150	1	1	-	-	-	-	1		2	1				
	Toilet (female)	15.50	-	-	1		150	1	1	-	-	-	-	1		2	1				
	Toilet (male)	18.00	-	-	1		150	1	1	-	-	-	-	1		2	1				
	Toilet (female)	18.00	-	-	1		150	1	1	-	-	-	-	1		2	1				
	Toilet (male)	27.00	-	-	1		150	2	1	-	-	-	-	1		3	1				
	Toilet (female)	27.00	-	-	1		150	2	1	-	-	-	-	1		3	1				
	Sub-total	121.00	-	-	6	-		8	6	-	-	-	-	6	-	13	6	-	-	-	-
	Total	3,836.70	-	-	10	-		256	49	43	43	43	63	204	174	417	110	-	-	30	-
	L ADMIN & ANCILLARY																				
	Staff room(entry-1)	18.00	-	-	-	2	150	1	1	1	1	1	1	1		2	1		1		
	Staff change	54.00	-	-	-	6	150	4	-	-	-	-	-	3		6					
	Staff room(entry-2)	18.00	-	-	-	2	150	1	1	1	1	1	1	1		2	1		1		
	Medical Records	81.00	-	-	-	9	300	11	2	2	2	2	1	5		9	1		1		
	Supervisor's Office	27.00	-	-	-	3	150	2	1	1	1	1	1	2		3	1				
	MS	18.00	15.0	1.20	-		150	1	1	1	1	1	1	1	1	2	1		1		

S.NO.	NAME OF SPACE	TOTAL AREA	A.C. Factor (sqm/ton)	AC Load (Tons)	Mech. Vent.	Ceiling Fans	Lux Lvl.	Light Pts.	15 Amp (6-pin)	30 Amp	UPS	Data	Telecom	Fire Det. (below false ceiling)	Fire Det. (above false ceiling)	Sprinkler	PA system	Nurse call	Cable TV	CCTV	Medical Gases
	Officers-4	36.00	-	-	-	4	150	2	4	4	4	4	4	2		4	1				
	Maitron	18.00	-	-	-	2	150	1	1	1	1	1	1	1		2	1				
	Sub waiting-2	13.00	-	-	-	1	150	1	2	2	2	2	2	1		1	1				
	Offices	143.00	-	-	-	16	150	10	4	4	4	4	4	8		16	4			1	
	library/conference	66.00	15.0	4.40	-		300	9	2	2	2	2	1	4	4	7	2		1		
	Snacks	9.00	-	-	-	1	150	1	1	1	0	0	1	1		1					
	Info.	9.00	-	-	-	1	150	1	1	1	1	1	1	1		1	1		1		
	Total	510.00		5.60	-	47		44	20	-	19	19	18	31	5	57	15	-	5	2	-
	GRAND TOTAL	9,918.84		164.41	67	374		941	518	3	277	213	193	558	222	1,093	157	157	38	60	160

109-BED HOSPITAL, NEW DELHI

SERVICES COST SUMMARY - BASED ON MARKET RATES

(Refer Cost Sheets 14,18,19,20,21,22 for details)

S.NO.	NAME OF SPACE	TOTAL AREA	HVAC	ELECTRICAL (INCL.DG&UPS)	LOW VOLTAGE	FIRE DET. & FIGHT.	SANITARY & PLB.	MEDICAL GASES	ELEVATORS	CONTINGENCY (@3%)	TOTAL
Medical gases system @ Rs. 12,500.00/- per point											
Elevators (L-S Rs. 8,000,000.00/-); Area wise Cost loading @ plinth area proportions											
A	ENTRANCE AREA										
	Main(OPD) Entrance	315.00	-	1,775,998.68	565,132.96	402,576.85	-	-	254,061.97	89,933.11	3,087,703.58
	Emergency Entrance	69.00	-	336,977.77	147,377.65	125,617.57	-	-	55,651.67	19,968.74	685,593.40
	Services & Staff Entrance	18.00	-	93,300.65	51,000.00	25,404.39	-	-	14,517.83	5,526.69	189,749.56
	Total	402.00	-	2,206,277.11	763,510.62	553,598.81	-	-	324,231.46	115,428.54	3,963,046.54
B	AMBULATORY CARE AREA	843.00	520,150.70	6,005,968.12	1,233,447.03	912,006.40	586,777.06	175,000.00	679,918.22	303,398.03	10,416,665.56
C	DIAGNOSTIC SERVICES										
	Imaging	319.50	1,003,147.79	1,911,001.27	461,797.60	379,279.05	-	-	257,691.42	123,762.51	4,249,179.65
	Clinical Labs & Blood bank	288.00	817,379.68	1,797,214.79	337,344.23	316,470.27	182,360.82	-	232,285.23	110,491.65	3,793,546.66
	Total	607.50	1,820,527.47	3,708,216.06	799,141.83	695,749.31	182,360.82	112,500.00	489,976.65	234,254.16	8,042,726.31
D	INTERMEDIATE CARE AREA	792.84	1,456,421.97	3,719,573.39	1,500,625.36	859,793.23	2,604,515.19	225,000.00	639,461.87	330,161.73	11,335,552.75
E	INTENSIVE CARE AREA	321.60	2,095,464.27	1,723,669.69	242,933.40	367,279.05	351,760.68	350,000.00	259,385.17	161,714.77	5,552,207.02
F	CRITICAL CARE AREA	326.50	1,709,066.60	1,947,591.26	220,588.92	367,279.05	453,838.96	137,500.00	263,337.25	152,976.06	5,252,178.09
G	THERAPEUTIC SERVICES										
	Day Care	327.00	1,404,406.90	1,590,492.79	244,770.27	373,279.05	308,330.64	125,000.00	263,740.52	129,300.60	4,439,320.77
	Operation Theatre Suite	417.70	2,741,937.29	2,171,512.82	184,588.92	542,301.01	597,990.69	300,000.00	336,894.23	206,256.75	7,081,481.71
	Delivery Suite	326.50	1,857,681.09	1,872,950.73	396,588.92	397,279.05	453,838.96	575,000.00	263,337.25	174,500.28	5,991,176.27
	Total	1,071.20	6,004,025.28	5,634,956.35	825,948.11	1,312,859.10	1,360,160.28	1,000,000.00	863,972.00	510,057.63	17,511,978.76
H	HOSPITAL SERVICES	709.50	653,903.74	3,063,547.70	281,936.66	739,473.47	-	-	572,244.34	159,333.18	5,470,439.08
I	ENGINEERING SERVICES	498.00	133,753.04	2,578,019.16	204,673.75	536,620.77	-	-	401,659.87	115,641.80	3,970,368.38
J	CORRIDORS	3,715.70	178,337.38	6,248,184.68	2,256,559.85	4,939,687.10	-	-	2,996,882.70	498,589.55	17,118,241.27
K	TOILETS	121.00	267,506.08	261,241.83	33,000.00	123,128.55	1,756,449.54	-	97,592.06	76,167.54	2,615,085.60
	Total	3,836.70	445,843.46	6,509,426.51	2,289,559.85	5,062,815.65	1,756,449.54	-	3,094,474.76	574,757.09	19,733,326.87
L	ADMIN & ANCILLARY	510.00	445,843.46	2,432,754.65	602,134.47	598,025.16	-	-	411,338.42	134,702.89	4,624,799.06
	GRAND TOTAL	9,918.84	15,285,000.00	39,530,000.00	8,964,500.00	12,005,500.00	7,295,862.53	2,000,000.00	8,000,000.00	2,792,425.88	95,873,288.41

109-BED HOSPITAL, NEW DELHI

DESIRABLE SERVICES COST PER SQM.

(Refer Cost Sheets 14,18,19,20,21,22 for details)

S.NO.	NAME OF SPACE	TOTAL AREA	HVAC	ELECTRICAL	LOW CURRENT	FIRE DET. & FIGHT.	SANITARY & PLB.	MEDICAL GASES	ELEVATORS	CONTINGENCY (@3%)	TOTAL
A	ENTRANCE AREA										
	Main(OPD) Entrance	315.00	-	5,638.09	1,794.07	1,278.02	-	-	806.55	285.50	9,802.23
	Emergency Entrance	69.00	-	4,883.74	2,135.91	1,820.54	-	-	806.55	289.40	9,936.14
	Services & Staff Entrance	18.00	-	5,183.37	2,833.33	1,411.36	-	-	806.55	307.04	10,541.64
	Total	402.00	-	5,488.25	1,899.28	1,377.11	-	-	806.55	287.14	9,858.32
B	AMBULATORY CARE AREA	843.00	617.02	7,124.52	1,463.16	1,081.86	696.06	207.59	806.55	359.90	12,356.66
C	DIAGNOSTIC SERVICES										
	Imaging	319.50	3,139.74	5,981.22	1,445.38	1,187.10	-	352.11	806.55	387.36	13,299.47
	Clinical Labs & Blood bank	288.00	2,838.12	6,240.33	1,171.33	1,098.86	633.20	-	806.55	383.65	13,172.04
	Total	607.50	2,996.75	6,104.06	1,315.46	1,145.27	300.18	185.19	806.55	385.60	13,239.06
D	INTERMEDIATE CARE AREA	792.84	1,836.97	4,691.46	1,892.72	1,084.45	3,285.05	283.79	806.55	416.43	14,297.40
E	INTENSIVE CARE AREA	321.60	6,515.75	5,359.67	755.39	1,142.04	1,093.78	1,088.31	806.55	502.84	17,264.33
F	CRITICAL CARE AREA	326.50	5,234.51	5,965.06	675.62	1,124.90	1,390.01	421.13	806.55	468.53	16,086.30
G	THERAPEUTIC SERVICES										
	Day Care	327.00	4,294.82	4,863.89	748.53	1,141.53	942.91	382.26	806.55	395.41	13,575.90
	Operation Theatre Suite	417.70	6,564.37	5,198.74	441.92	1,298.30	1,431.63	718.22	806.55	493.79	16,953.51
	Delivery Suite	326.50	5,689.68	5,736.45	1,214.67	1,216.78	1,390.01	1,761.10	806.55	534.46	18,349.70
	Total	1,071.20	5,604.95	5,260.41	771.05	1,225.60	1,269.75	933.53	806.55	476.16	16,348.00
H	HOSPITAL SERVICES	709.50	921.64	4,317.90	397.37	1,042.25	-	-	806.55	224.57	7,710.27
I	ENGINEERING SERVICES	498.00	268.58	5,176.75	410.99	1,077.55	-	-	806.55	232.21	7,972.63
J	CORRIDORS	3,715.70	48.00	1,681.56	607.30	1,329.41	-	-	806.55	134.18	4,607.00
K	TOILETS	121.00	2,210.79	2,159.02	272.73	1,017.59	14,516.11	-	806.55	629.48	21,612.28
	Total	3,836.70	116.20	1,696.62	596.75	1,319.58	457.80	-	806.55	149.81	5,143.31
L	ADMIN & ANCILLARY	510.00	874.20	4,770.11	1,180.66	1,172.60	-	-	806.55	264.12	9,068.23
	GRAND TOTAL	9,918.84	1,541.01	3,985.35	903.79	1,210.37	735.56	201.64	806.55	281.53	9,665.78

109-BED HOSPITAL, NEW DELHI

DESIRABLE SERVICES COST PER BED

(Refer Cost Sheets 14,18,19,20,21,22 for details)

S.NO.	NAME OF SPACE	HVAC	ELECTRICAL	LOW CURRENT	FIRE DET. & FIGHT.	SANITARY & PLB.	MEDICAL GASES	ELEVATORS	CONTINGENCY (@3%)	TOTAL
A	ENTRANCE AREA									
	Main(OPD) Entrance	-	16,293.57	5,184.71	3,693.37	-	-	2,330.84	825.07	28,327.56
	Emergency Entrance	-	3,091.54	1,352.09	1,152.45	-	-	510.57	183.20	6,289.85
	Services & Staff Entrance	-	855.97	467.89	233.07	-	-	133.19	50.70	1,740.82
	Total	-	20,241.07	7,004.68	5,078.89	-	-	2,974.60	1,058.98	36,358.23
B	AMBULATORY CARE AREA	4,772.02	55,100.62	11,316.03	8,367.03	5,383.28	1,605.50	6,237.78	2,783.47	95,565.74
C	DIAGNOSTIC SERVICES									
	Imaging	9,203.19	17,532.12	4,236.68	3,479.62	-	-	2,364.14	1,135.44	38,983.30
	Clinical Labs & Blood bank	7,498.90	16,488.21	3,094.90	2,903.40	1,673.04	-	2,131.06	1,013.68	34,803.18
	Total	16,702.09	34,020.33	7,331.58	6,383.02	1,673.04	1,032.11	4,495.20	2,149.12	73,786.48
D	INTERMEDIATE CARE AREA	13,361.67	34,124.53	13,767.21	7,888.01	23,894.63	2,064.22	5,866.62	3,029.01	103,995.90
E	INTENSIVE CARE AREA	19,224.44	15,813.48	2,228.75	3,369.53	3,227.16	3,211.01	2,379.68	1,483.62	50,937.68
F	CRITICAL CARE AREA	15,679.51	17,867.81	2,023.75	3,369.53	4,163.66	1,261.47	2,415.94	1,403.45	48,185.12
G	THERAPEUTIC SERVICES									
	Day Care	12,884.47	14,591.68	2,245.60	3,424.58	2,828.72	1,146.79	2,419.64	1,186.24	40,727.71
	Operation Theatre Suite	25,155.39	19,922.14	1,693.48	4,975.24	5,486.15	2,752.29	3,090.77	1,892.26	64,967.72
	Delivery Suite	17,042.95	17,183.03	3,638.43	3,644.76	4,163.66	5,275.23	2,415.94	1,600.92	54,964.92
	Total	55,082.80	51,696.85	7,577.51	12,044.58	12,478.53	9,174.31	7,926.35	4,679.43	160,660.36
H	HOSPITAL SERVICES	5,999.12	28,105.94	2,586.57	6,784.16	-	-	5,249.95	1,461.77	50,187.51
I	ENGINEERING SERVICES	1,227.09	23,651.55	1,877.74	4,923.13	-	-	3,684.95	1,060.93	36,425.40
J	CORRIDORS	1,636.12	57,322.80	20,702.38	45,318.23	-	-	27,494.34	4,574.22	157,048.09
K	TOILETS	2,454.18	2,396.71	302.75	1,129.62	16,114.22	-	895.34	698.78	23,991.61
	Total	4,090.31	59,719.51	21,005.14	46,447.85	16,114.22	-	28,389.68	5,273.00	181,039.70
L	ADMIN & ANCILLARY	4,090.31	22,318.85	5,524.17	5,486.47	-	-	3,773.75	1,235.81	42,429.35
	GRAND TOTAL	140,229.36	362,660.55	82,243.12	110,142.20	66,934.52	18,348.62	73,394.50	25,618.59	879,571.45

DESIRABLE H.V.A.C. SYSTEM COST

S.NO.	PARTICULARS	QUANTITY	UNIT	RATE	TOTAL AMOUNT (High side)	REFERENCE		
	HVAC System (High Side)							
1	2 nos. 80 TR screw type chillers with microprocessor panel	160	TR	20,000.00	3,200,000.00	Market rate		
2	3 nos. primary chilled water pumps including standby	3	nos.	75,000.00	225,000.00	Market rate		
3	4 nos. secondary chilled water pumps including standby	4	nos.	75,000.00	300,000.00	Market rate		
4	3 nos condensor water pumps including standby	3	nos.	75,000.00	225,000.00	Market rate		
5	2 nos. 100 TR FRP cooling towers including standby	200	TR	1,250.00	250,000.00	Market rate		
6	Pressurised expansion tank			L.S	300,000.00	Lumpsum		
7	Control panel including control wiring & earthing			L.S	500,000.00	Lumpsum		
	GRAND TOTAL (1)				5,000,000.00			
S.NO.	NAME OF SPACE	TOTAL AREA	AC Load (Tons)	Amount	Mech. Vent. Pts.	Amount	TOTAL AMOUNT (Low side)	REFERENCE
A	ENTRANCE AREA							
	Main(OPD) Entrance	315.00	-	-	-	-	-	Refer Data Sheet - 13
	Emergency Entrance	69.00	-	-	-	-	-	Refer Data Sheet - 13
	Services & Staff Entrance	18.00	-	-	-	-	-	Refer Data Sheet - 13
	Total	402.00						
B	AMBULATORY CARE AREA							
		843.00	4.0	200,000.00	5	150,000.00	350,000.00	Refer Data Sheet - 13
C	DIAGNOSTIC SERVICES							
	Imaging	319.50	13.5	675,000.00	-	-	675,000.00	Refer Data Sheet - 13
	Clinical Labs & Blood bank	288.00	11.0	550,000.00	-	-	550,000.00	Refer Data Sheet - 13
	Total	607.50	24.5	1,225,000.00			1,225,000.00	
D	INTERMEDIATE CARE AREA							
		792.84	4.0	200,000.00	26	780,000.00	980,000.00	Refer Data Sheet - 13
E	INTENSIVE CARE AREA							
		321.60	27.0	1,350,000.00	2	60,000.00	1,410,000.00	Refer Data Sheet - 13
F	CRITICAL CARE AREA							
		326.50	20.0	1,000,000.00	5	150,000.00	1,150,000.00	Refer Data Sheet - 13
G	THERAPEUTIC SERVICES							

S.NO.	NAME OF SPACE	TOTAL AREA	AC Load (Tons)	Amount	Mech. Vent. Pts.	Amount	TOTAL AMOUNT (Low side)	REFERENCE
	Day Care	327.00	16.5	825,000.00	4	120,000.00	945,000.00	Refer Data Sheet - 13
	Operation Theatre Suite	417.70	34.5	1,725,000.00	4	120,000.00	1,845,000.00	Refer Data Sheet - 13
	Delivery Suite	326.50	22.0	1,100,000.00	5	150,000.00	1,250,000.00	Refer Data Sheet - 13
	Total	1,071.20	73.0	3,650,000.00	13	390,000.00	4,040,000.00	
H	HOSPITAL SERVICES	709.50	7.0	350,000.00	3	90,000.00	440,000.00	Refer Data Sheet - 13
I	ENGINEERING SERVICES	498.00	-	-	3	90,000.00	90,000.00	Refer Data Sheet - 13
J	CORRIDORS	3,715.70	-	-	4	120,000.00	120,000.00	Refer Data Sheet - 13
K	TOILETS	121.00	-	-	6	180,000.00	180,000.00	Refer Data Sheet - 13
	Total	3,836.70	-	-	10	300,000.00	300,000.00	
L	ADMIN & ANCILLARY	510.00	6.0	300,000.00		-	300,000.00	Refer Data Sheet - 13
	GRAND TOTAL (2)	9,918.84	165.5	8,275,000.00	67	2,010,000.00	10,285,000.00	
	TOTAL H.V.A.C. SYSTEM COST (1+2)						15,285,000.00	

109-BED HOSPITAL, NEW DELHI

DESIRABLE ELECTRICAL SYSTEM COST

S.NO.	PARTICULARS	QUANTITY	UNIT	RATE	TOTAL AMOUNT (High side)	REFERENCE					
1	Electrical Cost (Sub Stn. Equip./High Side)										
1.1	11 kV HT Vacuum Circuit Breaker	2	nos.	600,000.00	1,200,000.00	Market rate					
1.2	1600 kVA Oil type outdoor Transformer	2	nos.	800,000.00	1,600,000.00	Market rate					
1.3	HT voltage stabilizer (2400 kVA)	1	nos.	1,600,000.00	1,600,000.00	Market rate					
1.4	HT/Trans. cabling and earthing			L.S	500,000.00	Lumpsum					
					4,900,000.00						
2	DG Sets system										
2.1	500 kVA DG sets	4	nos.	2,000,000.00	1,000,000.00	Market rate					
2.2	AMF Panels	4	nos.	250,000.00	1,000,000.00	Market rate					
2.3	Cooling Towers including pumps & piping			L.S	750,000.00	Lumpsum					
2.4	Exhaust piping, silencers, chimney insulation			L.S	750,000.00	Lumpsum					
2.5	Catalytic Converter			L.S	500,000.00	Lumpsum					
					3,000,000.00						
3	UPS Equipment										
3.1	40 kVA 3-phase, isolation transformer, 30 min. backup	1	nos.	1,000,000.00	1,000,000.00	Market rate					
3.2	80 kVA 3-phase, hot standby mode, 30 min. backup	1	nos.	1,500,000.00	1,500,000.00	Market rate					
					2,500,000.00						
	GRAND TOTAL (1)				10,400,000.00						
S.NO.	NAME OF SPACE	Ceiling Fans	Light Pts.	Amount	15 Amp (6-pin) Amount	30 Amp Amount	Amount	UPS	Amount	TOTAL AMOUNT (Low side)	REFERENCE
A	ENTRANCE AREA										
	Main(OPD) Entrance	34	37	340,000.00	370,000.00	150,000.00		9	90,000	950,000.00	Refer Cost Sheet - 14
	Emergency Entrance	7	5	70,000.00	50,000.00	30,000.00		3	30,000	180,000.00	Refer Cost Sheet - 14
	Services & Staff Entrance	2	1	20,000.00	10,000.00	20,000.00		-	-	50,000.00	Refer Cost Sheet - 14
	Total	43	43	430,000.00	430,000.00	200,000.00		12	120,000	1,180,000.00	
B	AMBULATORY CARE AREA										
		82	109	820,000.00	1,090,000.00	860,000.00		44	440,000	3,210,000.00	Refer Cost Sheet - 14
C	DIAGNOSTIC SERVICES										
	Imaging	13	37	130,000.00	370,000.00	280,000.00		21	210,000	1,020,000.00	Refer Cost Sheet - 14
	Clinical Labs & Blood bank	14	31	140,000.00	310,000.00	350,000.00		16	160,000	960,000.00	Refer Cost Sheet - 14
	Total	27	68	270,000.00	680,000.00	630,000.00		37	370,000	1,980,000.00	
D	INTERMEDIATE CARE AREA										
		67	54	670,000.00	540,000.00	610,000.00		17	170,000	1,990,000.00	Refer Cost Sheet - 14
E	INTENSIVE CARE AREA										
		6	29	60,000.00	290,000.00	380,000.00		19	190,000	920,000.00	Refer Cost Sheet - 14

S.NO.	NAME OF SPACE	Ceiling Fans	Amount	Light Pts.	Amount	15 Amp (6-pin)	30 Amp	Amount	UPS	Amount	TOTAL AMOUNT (Low side)	REFERENCE
F	CRITICAL CARE AREA	11	110,000.00	45	450,000.00	29	290,000.00	-	19	190,000	1,040,000.00	Refer Cost Sheet - 14
G	THERAPEUTIC SERVICES											
	Day Care	10	100,000.00	36	360,000.00	27	270,000.00	-	12	120,000	850,000.00	Refer Cost Sheet - 14
	Operation Theatre Suite	5	50,000.00	66	660,000.00	26	260,000.00	-	19	190,000	1,160,000.00	Refer Cost Sheet - 14
	Delivery Suite	4	40,000.00	48	480,000.00	29	290,000.00	-	19	190,000	1,000,000.00	Refer Cost Sheet - 14
	Total	19	190,000.00	150	1,500,000.00	82	820,000.00	-	50	500,000	3,010,000.00	
H	HOSPITAL SERVICES	37	370,000.00	77	770,000.00	41	410,000.00	-	9	90,000	1,640,000.00	Refer Cost Sheet - 14
I	ENGINEERING SERVICES	35	350,000.00	67	670,000.00	28	280,000.00	-	8	80,000	1,380,000.00	Refer Cost Sheet - 14
J	CORRIDORS	-	-	248	2,480,000.00	43	430,000.00	-	43	430,000	3,340,000.00	Refer Cost Sheet - 14
K	TOILETS	-	-	8	80,000.00	6	60,000.00	-	-	-	140,000.00	Refer Cost Sheet - 14
	Total	-	-	256	2,560,000.00	49	490,000.00	-	43	430,000	3,480,000.00	
L	ADMIN & ANCILLARY	47	470,000.00	44	440,000.00	20	200,000.00	-	19	190,000	1,300,000.00	Refer Cost Sheet - 14
	GRAND TOTAL (2)	374	3,740,000.00	942	9,420,000.00	517	5,170,000.00	3	277	2,770,000	21,130,000.00	
	TOTAL ELECTRICAL SYSTEM COST (1+2)										31,530,000.00	

109-BED HOSPITAL, NEW DELHI

LOW VOLTAGE SYSTEMS COST

S.NO.		PARTICULARS										QTY.	UNIT	RATE	TOTAL AMOUNT (Equipment)	REFERENCE
S.NO.	NAME OF SPACE	TOTAL AREA	Data	Amount	Telecom	Amount	PA system	Amount	Nurse call	Amount	Cable TV	Amount	CCV	Amount	TOTAL AMOUNT (wiring etc.)	REFERENCE
1 LAN Equipment																
1.1	Server													L.S	500,000.00	Lumpsum
1.2	Computer Terminals													L.S	750,000.00	Lumpsum
															1,250,000.00	
2 Telecom Equipment																
2.1	EPABX System													L.S	500,000.00	Lumpsum
															500,000.00	
	GRAND TOTAL (1)														1,750,000.00	
A ENTRANCE AREA																
	Main(OPD) Entrance	315.00	9	67,500	9	49,500	8	44,000	-	-	8	128,000	10	200,000	489,000	Refer cost Sheet - 14
	Emergency Entrance	69.00	3	22,500	3	16,500	2	11,000	-	-	2	32,000	2	40,000	122,000	Refer cost Sheet - 14
	Services & Staff Entrance	18.00	-	-	-	-	2	11,000	-	-	#	-	2	40,000	51,000	Refer cost Sheet - 14
	Total	402.00	12	90,000	12	66,000	12	66,000	-	-	10	160,000	14	280,000	662,000	
B AMBULATORY CARE AREA																
		843.00	37	277,500	31	170,500	-	-	24	288,000	5	80,000	6	120,000	936,000	Refer cost Sheet - 14
C DIAGNOSTIC SERVICES																
	Imaging	319.50	15	112,500	14	77,000	-	-	-	-	3	48,000	2	40,000	337,500	Refer cost Sheet - 14
	Clinical Labs & Blood bank	288.00	15	112,500	9	49,500	-	-	5	60,000	2	32,000	1	20,000	226,000	Refer cost Sheet - 14
	Total	607.50	30	225,000	23	126,500	-	-	6	72,000	5	80,000	3	60,000	563,500	
D INTERMEDIATE CARE AREA																
		792.84	17	127,500	15	82,500	-	-	84	1,008,000	9	144,000	-	-	1,362,000	Refer cost Sheet - 14
E INTENSIVE CARE AREA																
		321.60	5	37,500	1	5,500	-	-	14	168,000	-	-	-	-	2,11,000	Refer cost Sheet - 14
F CRITICAL CARE AREA																
		326.50	9	67,500	3	16,500	-	-	5	60,000	1	16,000	-	-	160,000	Refer cost Sheet - 14
G THERAPEUTIC SERVICES																
	Day Care	327.00	9	67,500	5	27,500	-	-	4	48,000	1	16,000	1	20,000	179,000	Refer cost Sheet - 14
	Operation Theatre Suite	417.70	9	67,500	3	16,500	-	-	2	24,000	1	16,000	-	-	124,000	Refer cost Sheet - 14
	Delivery Suite	326.50	9	67,500	3	16,500	-	-	18	216,000	1	16,000	1	20,000	336,000	Refer cost Sheet - 14
	Total	1,071.20	27	202,500	11	60,500	-	-	24	288,000	3	48,000	2	40,000	639,000	

S.NO.	NAME OF SPACE	TOTAL AREA	Data	Amount	Telecom	Amount	PA system	Amount	Nurse call	Amount	Cable TV	Amount	CCTV	Amount	TOTAL AMOUNT (wiring etc.)	REFERENCE
H	HOSPITAL SERVICES	709.50	6	45,000	8	44,000	14	77,000	-	-	-	-	3	60,000	226,000	Refer cost Sheet - 14
I	ENGINEERING SERVICES	498.00	8	60,000	8	44,000	6	33,000	-	-	-	-	-	-	1,37,000	Refer cost Sheet - 14
J	CORRIDORS	3,715.70	43	322,500	63	346,500	104	572,000	-	-	-	-	30	600,000	1,841,000	Refer cost Sheet - 14
K	TOILETS	121.00	-	-	-	-	6	33,000	-	-	-	-	-	-	33,000	Refer cost Sheet - 14
	Total	3,836.70	43	322,500	63	346,500	110	605,000	-	-	-	-	30	600,000	1,874,000	
L	ADMIN & ANCILLARY	510.00	19	142,500	18	99,000	15	82,500	-	-	5	80,000	2	40,000	444,000	Refer cost Sheet - 14
	GRAND TOTAL (2)	9,918.84	213	1,597,500	193	1,061,500	157	863,500	157	1,884,000	38	608,000	60	1,200,000	7,214,500	
	TOTAL LOW VOLTAGE SYSTEMS COST (1+2)														8,964,500.00	

109-BED HOSPITAL, NEW DELHI

FIRE DETECTION & FIGHTING SYSTEMS COST

S.NO.	PARTICULARS		QUANTITY	UNIT	RATE	TOTAL AMOUNT	REFERENCE			
1	Fire Fighting System									
1.1	Fire pumps incl hydrant system, FHCs, wet risers				L.S	3,500,000.00	Lumpsum			
	GRAND TOTAL (1)					3,500,000.00				
S.NO.	NAME OF SPACE	TOTAL AREA	Fire Det. (below false ceiling)	Amount	Fire Det. (above false ceiling)	Amount	Sprinkler	Amount	TOTAL AMOUNT	REFERENCE
A	ENTRANCE AREA									
	Main(OPD) Entrance	315.00	22	132,000	6	36,000	35	122,500	290,500	Refer cost Sheet - 14
	Emergency Entrance	69.00	6	36,000	6	36,000	8	28,000	100,000	Refer cost Sheet - 14
	Services & Staff Entrance	18.00	2	12,000	-	-	2	7,000	19,000	Refer cost Sheet - 14
	Total	402.00	30	180,000	12	72,000	45	157,500	409,500	
B	AMBULATORY CARE AREA									
		843.00	47	282,000	-	-	94	329,000	611,000	Refer cost Sheet - 14
C	DIAGNOSTIC SERVICES									
	Imaging	319.50	23	138,000	-	-	-	-	-	
	Clinical Labs & Blood bank	288.00	17	102,000	-	-	36	126,000	264,000	Refer cost Sheet - 14
	Total	607.50	40	240,000	-	-	68	238,000	478,000	Refer cost Sheet - 14
D	INTERMEDIATE CARE AREA									
		792.84	45	270,000	-	-	88	308,000	578,000	Refer cost Sheet - 14
E	INTENSIVE CARE AREA									
		321.60	19	114,000	2	12,000	36	126,000	252,000	Refer cost Sheet - 14
F	CRITICAL CARE AREA									
		326.50	19	114,000	2	12,000	36	126,000	252,000	Refer cost Sheet - 14
G	THERAPEUTIC SERVICES									
	Day Care	327.00	20	120,000	2	12,000	36	126,000	258,000	Refer cost Sheet - 14
	Operation Theatre Suite	417.70	25	150,000	14	84,000	46	161,000	395,000	Refer cost Sheet - 14
	Delivery Suite	326.50	18	108,000	8	48,000	36	126,000	282,000	Refer cost Sheet - 14
	Total	1,071.20	63	378,000	24	144,000	118	413,000	935,000	

S.NO.	NAME OF SPACE	TOTAL AREA	Fire Det. (below false ceiling)	Amount	Fire Det. (above false ceiling)	Amount	Sprinkler	Amount	TOTAL AMOUNT	REFERENCE
H	HOSPITAL SERVICES	709.50	32	192,000	3	18,000	79	276,500	486,500	Refer cost Sheet - 14
I	ENGINEERING SERVICES	498.00	28	168,000	-	-	55	192,500	360,500	Refer cost Sheet - 14
J	CORRIDORS	3,715.70	198	1,188,000	174	1,044,000	404	1,414,000	3,646,000	Refer cost Sheet - 14
K	TOILETS	121.00	6	36,000	-	-	13	45,500	81,500	Refer cost Sheet - 14
	Total	3,836.70	204	1,224,000	174	1,044,000	417	1,459,500	3,727,500	
L	ADMIN & ANCILLARY	510.00	31	186,000	5	30,000	57	199,500	415,500	Refer cost Sheet - 14
	GRAND TOTAL (2)	9,918.84	558	3,348,000	222	1,332,000	1,093	3,825,500	8,505,500	
	TOTAL FIRE DETECTION & FIGHTING SYSTEM COST (1+2)								12,005,500.00	

109 BED HOSPITAL, NEW DELHI

SANITARY & PLUMBING COSTS (INTERNAL WORKS)

S.NO.	PARTICULARS	QUANTITY	UNIT	RATE	AMOUNT	REFERENCE
	Sanitary & Plumbing System					
1	Water supply Pumps	12	nos.	75,000.00	900,000.00	Market rate
2	Control panel for Pumps including wiring & earthing		L.S		200,000.00	Lumpsum
3	On-line Water Softener	1	nos.	500,000.00	500,000.00	Market rate
4	RO Plant		L.S.		500,000.00	Lumpsum
5	Hot Water Generators	4	nos.	500,000.00	2,000,000.00	Market rate
6	Hot Water Pumps	5	nos.	75,000.00	375,000.00	Market rate
	GRAND TOTAL (1)				4,475,000.00	
S.NO.	NAME OF SPACE	AREA	RATE	AMOUNT	REFERENCE	
A	ENTRANCE AREA					
	Main(OPD) Entrance					
	Emergency Entrance					
	Services Entrance					
	Total	-		-		
B	AMBULATORY CARE AREA					
	Wash / Utilities / Pantry-1	27.00		3,917.10	105,761.62	Refer Cost Sheet - 22
	Public Toilet (female)-2	18.00		3,160.85	56,895.29	Refer Cost Sheet - 22
	Public Toilet (male)-2	18.00		3,567.43	64,213.79	Refer Cost Sheet - 22
	Total	63.00			226,870.70	
C	DIAGNOSTIC SERVICES					
	Imaging					
	Clinical Labs					
	Wash / Utilities / Pantry-2	18.00		3,917.10	70,507.74	Refer Cost Sheet - 22
	Total	18.00			70,507.74	
D	INTERMEDIATE CARE AREA					
	Wash / Utilities / Pantry-3	13.50		3,917.10	52,880.81	Refer Cost Sheet - 22
	Wash / Utilities / Pantry-4	15.00		3,917.10	58,756.45	Refer Cost Sheet - 22
	Patient toilet-1	114.84		7,138.19	819,750.03	Refer Cost Sheet - 22

S.NO.	NAME OF SPACE	AREA	RATE	AMOUNT	REFERENCE
	Staff Toilet-2	9.00	8,402.11	75,618.97	Refer Cost Sheet - 22
	Total	152.34		1,007,006.27	
E	INTENSIVE CARE AREA				
	Wash / Utilities / Pantry-5	21.60	3,917.10	84,609.29	Refer Cost Sheet - 22
	Patient toilet-2	7.20	7,138.19	51,394.99	Refer Cost Sheet - 22
	Total	28.80		136,004.28	
F	CRITICAL CARE AREA				
	Wash / Utilities / Pantry-1	9.00	3,917.10	35,253.87	Refer Cost Sheet - 22
	Wash / Utilities / Pantry-3	13.50	3,917.10	52,880.81	Refer Cost Sheet - 22
	Wash / Utilities / Pantry-6	6.00	3,917.10	23,502.58	Refer Cost Sheet - 22
	Patient toilet-3	6.00	7,138.19	42,829.16	Refer Cost Sheet - 22
	Staff Toilet-3	2.50	8,402.11	21,005.27	Refer Cost Sheet - 22
	Total	37.00		175,471.69	
G	THERAPEUTIC SERVICES				
	Day Care				
	Wash / Utilities / Pantry-3	13.50	3,917.10	52,880.81	Refer Cost Sheet - 22
	Wash / Utilities / Pantry-6	6.00	3,917.10	23,502.58	Refer Cost Sheet - 22
	Patient toilet-3	6.00	7,138.19	42,829.16	Refer Cost Sheet - 22
	Sub-total	25.50		119,212.54	
	Operation Theatre Suite				
	Wash / Utilities / Pantry-2	18.00	3,917.10	70,507.74	Refer Cost Sheet - 22
	Wash / Utilities / Pantry-6	6.00	3,917.10	23,502.58	Refer Cost Sheet - 22
	Wash / Utilities / Pantry-7	24.30	3,917.10	95,185.45	Refer Cost Sheet - 22
	Staff Toilet-4	5.00	8,402.11	42,010.54	Refer Cost Sheet - 22
	Sub-total	53.30		231,206.32	
	Delivery Suite				
	Wash / Utilities / Pantry-1	9.00	3,917.10	35,253.87	Refer Cost Sheet - 22
	Wash / Utilities / Pantry-3	13.50	3,917.10	52,880.81	Refer Cost Sheet - 22
	Wash / Utilities / Pantry-6	6.00	3,917.10	23,502.58	Refer Cost Sheet - 22
	Patient toilet-3	6.00	7,138.19	42,829.16	Refer Cost Sheet - 22
	Staff Toilet-3	2.50	8,402.11	21,005.27	Refer Cost Sheet - 22
	Sub-total	37.00		175,471.69	
	Total	115.80		525,890.55	

S.NO.	NAME OF SPACE	AREA	RATE	AMOUNT	REFERENCE
H	HOSPITAL SERVICES	-		-	
I	ENGINEERING SERVICES	-		-	
J	CORRIDORS	-		-	
K	TOILETS				
	Public Toilet (female)-1	15.50	3,160.85	48,993.17	Refer Cost Sheet - 22
	Public Toilet (female)-2	18.00	3,160.85	56,895.29	Refer Cost Sheet - 22
	Public Toilet (male)-1	15.50	3,567.43	55,295.21	Refer Cost Sheet - 22
	Public Toilet (male)-2	18.00	3,567.43	64,213.79	Refer Cost Sheet - 22
	Staff Toilet-1	36.00	8,402.11	302,475.90	Refer Cost Sheet - 22
	Staff Toilet-5	18.00	8,402.11	151,237.95	Refer Cost Sheet - 22
	Total	121.00		679,111.30	
L	ADMIN & ANCILLARY	-		-	
	GRAND TOTAL (2)	535.94		2,820,862.53	
	TOTAL SANITARY & PLUMBING SYSTEM COST (1+2)			7,295,862.53	

109 BED HOSPITAL, NEW DELHI

SANITARY & PLUMBING COSTS PER TOILET TYPE

S.No.	Toilet Type	Nos.	Area/type	Cost /sqm./type (Ref. Cost Sheet - 23)	Total cost
T 1	Wash / Utilities / Pantry				
	Wash / Utilities / Pantry-1	5	9.00	3,917.10	176,269.36
	Wash / Utilities / Pantry-2	2	18.00	3,917.10	141,015.49
	Wash / Utilities / Pantry-3	8	6.75	3,917.10	211,523.23
	Wash / Utilities / Pantry-4	2	7.50	3,917.10	58,756.45
	Wash / Utilities / Pantry-5	3	7.20	3,917.10	84,609.29
	Wash / Utilities / Pantry-6	4	6.00	3,917.10	94,010.33
	Wash / Utilities / Pantry-7	2	12.15	3,917.10	95,185.45
					861,369.61
T 2	Consultant / Executive	-			-
T 3	Staff (male/female)				
	Staff Toilet-1	2	18.00	8,402.11	302,475.90
	Staff Toilet-2	2	4.50	8,402.11	75,618.97
	Staff Toilet-3	2	2.50	8,402.11	42,010.54
	Staff Toilet-4	1	5.00	8,402.11	42,010.54
	Staff Toilet-5	2	9.00	8,402.11	151,237.95
					613,353.91
T 4	Patients				
	Patient toilet-1	22	5.22	7,138.19	819,750.03
	Patient toilet-2	1	7.20	7,138.19	51,394.99
	Patient toilet-3	3	6.00	7,138.19	128,487.47
					999,632.49
T 5	Public (female)				
	Public Toilet (female)-1	1	15.50	3,160.85	48,993.17
	Public Toilet (female)-2	2	18.00	3,160.85	113,790.58
					162,783.74
T 6	Public (male)				
	Public Toilet (male)-1	1	15.50	3,567.43	55,295.21
	Public Toilet (male)-2	2	18.00	3,567.43	128,427.58
					183,722.79
	GRAND TOTAL				2,820,862.53

COST OF TOILETS PER TOILET TYPE

S.No.	TOILET TYPE	COST			TOTAL COST	AREA	TOTAL COST/SQM.	COST/SQM.		
		Civil works	Electrical	Plumbing				Civil works	Electrical	Plumbing
T 1	Wash / Utilities / Pantry	64295.46	10,600.00	26,440.40	101,335.86	6.75	15,012.72	9525.25	1570.37	3917.10
T 2	Consultant / Executive	31,424.41	13,500.00	33,429.61	78,354.02	2.25	34,824.01	13966.40	6000.00	14857.61
T 3	Staff (G/L)	49,540.25	13,500.00	36,465.15	99,505.40	4.34	22,927.51	11414.80	3110.60	8402.11
T 4	Patient Rooms	54,732.16	15,000.00	38,403.48	108,135.64	5.38	20,099.56	10173.26	2788.10	7138.19
T 5	Public (L)	252,731.63	42,800.00	82,972.30	378,503.92	26.25	14,419.20	9627.87	1630.48	3160.85
T 6	Public (G)	289,128.80	49,100.00	113729.76	451,958.56	31.88	14,176.87	9069.28	1540.15	3567.43

INSTRUMENTS, EQUIPMENT & FURNITURE SCHEDULE

REFER COST SHEET 26 FOR DETAILS

S.NO.	EQUIPMENT & FURNITURE	RATE	QUANTITY																										
			ENTRANCE AREA	Main(OPD) Entrance	Emergency Entrance	Services & Staff Entrance	SUB TOTAL	AMBULATORY CARE AREA	DIAGNOSTIC SERVICES	Imaging	Clinical Labs	SUB TOTAL	INTERMEDIATE CARE AREA	INTENSIVE CARE AREA	CRITICAL CARE AREA	THERAPEUTIC SERVICES	Day Care	Operation Theatre suite	Delivery suite	SUB TOTAL	HOSPITAL SERVICES	ENGINEERING SERVICES	CORRIDORS	TOILETS	SUB TOTAL	ADMIN & ANCILLARY	GRAND TOTAL		
1	air motor	14,000.00																											2
2	air rotator with compressor	20,000.00																											2
3	air viva	4,000.00																											2
4	albuminometer (esbach's)	7,500.00																											21
5	Anaesthesia Equipments	100,000.00																											7
6	Aprons, lead-rubber/rubber	1,000.00																											16
7	Audiometer	20,000.00																											4
8	baby tray	1,000.00																											4
9	back rests	750.00																											104
10	basin	1,500.00																											54
11	basin, stainless steel	3,000.00																											36
12	beaker	30.00																											114
13	bed pans	250.00																											129
14	bed pans, stainless steel	400.00																											8
15	bed, fowler's	10,500.00																											105
16	Bedsheet	150.00																											180
17	bedside locker	2,000.00																											112
18	bedsteads	5,000.00																											104
19	biopsy kit	4,000.00																											6
20	bladder set	50,000.00																											4
21	blankets	600.00																											129
22	blood sedimentation rate stand-6/12 tubes	2,000.00																											21

S.NO.	EQUIPMENT & FURNITURE	RATE	ENTRANCE AREA	Main(OPD) Entrance	Emergency Entrance	Services & Staff Entrance	SUB TOTAL	AMBULATORY CARE AREA	DIAGNOSTIC SERVICES	Imaging	Clinical Labs	SUB TOTAL	INTERMEDIATE CARE AREA	INTENSIVE CARE AREA	CRITICAL CARE AREA	THERAPEUTIC SERVICES	Day Care	Operation Theatre suite	Delivery suite	SUB TOTAL	HOSPITAL SERVICES	ENGINEERING SERVICES	CORRIDORS	TOILETS	SUB TOTAL	ADMIN & ANCILLARY	GRAND TOTAL
23	Bottle blood, transfusion, with screw neck and floated window complete	500.00									6	6															6
24	bottles, wide mouth	200.00						6			6	6															16
25	bowl	250.00						14					4	2	4		4	4	10	18	6						48
26	bowl for placenta, stainless steel	400.00																	4	4	4						8
27	Bowls, stainless steel	400.00						16		2		2	4	2	4		6	12	10	28	6						62
28	bowls, wash	200.00						8		1		1	2	1	2		3	6	5	14	18						46
29	brooms, mops etc.	50.00						3					2	2	3		3	3	3	9							26
30	brush, nail	500.00													1		2	2	2	6	5						13
31	bucket	150.00						3		1		1	2	2	3		3	3	5	11							22
32	bucket with lid	300.00						9		6		8	6	2	4		5	8	7	20							56
33	buckets stainless steel	500.00						8		1		5	6	13	13		7	15	16	38	6						146
34	burettes	1,000.00									84	84															84
35	burr hole set	50,000.00																			4						4
36	C.T. scan unit	#####																									1
37	cabinet, instruments	4,000.00						1		5		6	11	2	3	5	7	3	8	18							40
38	cabinet, steel, instruments	12,000.00						5		1		1	1	2	1	4	5	8	8	21	6						40
39	can, douche	500.00																	4	4	4						4
40	cannula transfusion, hamilton baileys recording fitting crandbend, with two lateral holes, goldplated, small, for children (A&H 6492)	5,000.00																									
41	cannula blood transfusion with stilette	150.00									6	6															6
42	cannula transfusion, hamilton baileys luer	200.00									6	6															6
43	cans	250.00																									4
44	cans, 100 litre	500.00																									12
45	cassette with intensifying screens	2,000.00								60		60															60

S.NO.	EQUIPMENT & FURNITURE	RATE	ENTRANCE AREA	Main(OPD) Entrance	Emergency Entrance	Services & Staff Entrance	SUB TOTAL	AMBULATORY CARE AREA	DIAGNOSTIC SERVICES	Imaging	Clinical Labs	SUB TOTAL	INTERMEDIATE CARE AREA	INTENSIVE CARE AREA	CRITICAL CARE AREA	THERAPEUTIC SERVICES	Day Care	Operation Theatre suite	Delivery suite	SUB TOTAL	HOSPITAL SERVICES	ENGINEERING SERVICES	CORRIDORS	TOILETS	SUB TOTAL	ADMIN & ANCILLARY	GRAND TOTAL
46	catheter rubber and metal	250.00																	8	8							8
47	catheter, rubber all sizes	100.00																2	2	5	9	4					14
48	catheterization sets	2,000.00																	4	4	4						8
49	centrifuge AC/DC 200 W with 8 buckets	10,000.00									5	5															5
50	centrifuge tubes (glass)	500.00						1			43	43															44
51	chair, dental	180,000.00						2																			2
52	Chair, metal office type	1,000.00		8	2		10	30		14	15	29	6	2	3		5	8	3	16	28	3				49	181
53	chair, revolving	2,500.00		8	2		10	5		12	15	27		2			3	4		7						12	63
54	chair, wheel	3,000.00		2	2		4	9					4	4	6		6	2	6	14							41
55	Chairs - plastic moulded	1,200.00		52	22		74	226		63		63	108	12	11		20	6	17	43	4					42	583
56	chairs, easy	3,000.00								1	2	3	22	12	12		6	7	12	25						10	84
57	chamber pots	500.00											20	12	11		4	6	11	21							64
58	chart holder	150.00											62	12	12		7	10	18	35						4	125
59	chemical mixing plunger	10,000.00								2	2	2															2
60	chest instruments set	50,000.00																									4
61	colorimeter	5,000.00									5	5															5
62	cooking range with oven	10,000.00		1			1														2						3
63	cover, glass, haemocytometer	10,000.00									5	5															5
64	cradles, baby	2,500.00																	12	12							12
65	craniotomy set	10,000.00																	4	4							8
66	curtains	150.00											60	12	11		4	6	11	21							104
67	dark room adaption goggles	500.00								2		2															2
68	dark room safe light	500.00								1		1															1
69	dark room timer	100.00								1		1															1
70	delivery tray	3,000.00																									4
71	dental unit, complete	50,000.00						2																			2
72	dental x- ray unit & developing facilities	150,000.00						1																			1

S.NO.	EQUIPMENT & FURNITURE	RATE	ENTRANCE AREA	Main(OPD) Entrance	Emergency Entrance	Services & Staff Entrance	SUB TOTAL	AMBULATORY CARE AREA	DIAGNOSTIC SERVICES	Imaging	Clinical Labs	SUB TOTAL	INTERMEDIATE CARE AREA	INTENSIVE CARE AREA	CRITICAL CARE AREA	THERAPEUTIC SERVICES	Day Care	Operation Theatre suite	Delivery suite	SUB TOTAL	HOSPITAL SERVICES	ENGINEERING SERVICES	CORRIDORS	TOILETS	SUB TOTAL	ADMIN & ANCILLARY	GRAND TOTAL
73	Desk:Nurses station counter	5,000.00						3					2	1	1		1	1	1	3							10
74	Desk:Reception/registration	20,000.00		2	1		3	2		3	3	6															11
75	Diagnostic 60 M.A. X- ray machine (portable type)	200,000.00								1		1															1
76	diagnostic x- ray unit 200/300 M.A., with automatic device	750,000.00								2		2															2
77	diathermy machine	20,000.00											1	1			2	2	1	5							6
78	doctors cots	1,000.00								1	2	3	2		1		1	1	1	2							8
79	Doctors towel	100.00						25		3	3	6	4	1	3		5	8	6	19							58
80	draw sheets	150.00											4	2	2												8
81	dressing drum	2,000.00						8					4	1	3		5	4	6	15							31
82	dressing drum, all sizes, SS	5,000.00											4		1		2	2	1	5							14
83	dressing sets :A) suture needles B) artery forceps C) scalpel blades	2,000.00																									
84	Dusters etc.	20.00		11	1		12	26		12	19	31	64	14	15		10	13	17	40	12	2				32	248
85	ECG Machines	25,000.00								1		1	1	2	3		1	1	1	3							10
86	emergency light	1,000.00		6			6	30		7	6	13	24	13	14		10	16	18	44	11	8				15	178
87	endoscopy set	1,200,000.00																			4						4
88	enema can sets	500.00											20	12	11		4	6	11	21							64
89	ENT speculum	1,000.00						2					2	2	3		5	1	3	9							18
90	episiotomy tray	5,000.00																			4						4
91	excavators	2,000.00						2																			2
92	extraction forcep assorted	2,000.00						2																			2
93	facilities to keep dead body cool	50,000.00																			1						1
94	feeding cups	100.00																		4	4						4
95	feeding cups with spout	100.00											60	12	11		4	6	17	27							110
96	file cabinets	4,000.00		1	1		2	26		10	12	22	2	2	1		4	6	1	11	20	8				57	151

S.NO.	EQUIPMENT & FURNITURE	RATE	ENTRANCE AREA	Main(OPD) Entrance	Emergency Entrance	Services & Staff Entrance	SUB TOTAL	AMBULATORY CARE AREA	DIAGNOSTIC SERVICES	Imaging	Clinical Labs	SUB TOTAL	INTERMEDIATE CARE AREA	INTENSIVE CARE AREA	CRITICAL CARE AREA	THERAPEUTIC SERVICES	Day Care	Operation Theatre suite	Delivery suite	SUB TOTAL	HOSPITAL SERVICES	ENGINEERING SERVICES	CORRIDORS	TOILETS	SUB TOTAL	ADMIN & ANCILLARY	GRAND TOTAL
97	filling instrument set	10,000.00					2																				2
98	film clips	100.00								24		24															24
99	film hanger and wall brackets	600.00								6		6															6
100	flit pumps	50.00					5				1	1	2	1	3		3	3	3	9							21
101	Floor scrubbers	50.00		2	2	2	6	3					2	2	3		3	3	3	9							25
102	fly swatters	10.00											60	12	11		4	6	11	21							104
103	foetoscope	5,000.00																	2	2							2
104	folding screen	2,000.00					6	6		4	1	5	62	13	13		9	13	16	38							137
105	foot steps	750.00					6	6		3	1	4	62	13	13		9	12	16	37							135
106	Forceps :allis	500.00																									4
107	Forceps :artery	500.00																	8	8							12
108	Forceps :dissecting	500.00																	8	8							12
109	forceps tray	500.00																									4
110	forceps:cheatle's	1,000.00											2	1	2		5	3	10	18							27
111	forceps:obstetric, ferguson	1,000.00																	8	8							12
112	forceps:obstetric, wringles	700.00																	8	8							12
113	forceps:ovum	1,000.00																	8	8							12
114	forceps:sponge holders	200.00																	8	8							12
115	ryer (deep fat)	1,500.00																									2
116	funnel	50.00						6				6															16
117	gall bladder set	50,000.00																									4
118	gas burners (domestic)	2,000.00											2	1	1			1	1	2	12						19
119	gastroctomy set	50,000.00																									4
120	general instruments set	50,000.00													1		2	2	5	9	4						14
121	gloves	50.00					20	20		8	20	28	4	2	4		10	14	10	34	12						104
122	gloves box	500.00					10	10		4	10	14	2	1	2		5	7	5	17	10						56
123	gloves, lead rubber	1,000.00								4		4															4

S.NO.	EQUIPMENT & FURNITURE	RATE	ENTRANCE AREA	Main(OPD) Entrance	Emergency Entrance	Services & Staff Entrance	SUB TOTAL	AMBULATORY CARE AREA	DIAGNOSTIC SERVICES	Imaging	Clinical Labs	SUB TOTAL	INTERMEDIATE CARE AREA	INTENSIVE CARE AREA	CRITICAL CARE AREA	THERAPEUTIC SERVICES	Day Care	Operation Theatre suite	Delivery suite	SUB TOTAL	HOSPITAL SERVICES	ENGINEERING SERVICES	CORRIDORS	TOILETS	SUB TOTAL	ADMIN & ANCILLARY	GRAND TOTAL	
124	haemocytometer with WBC/RBC pipettes	10,000.00									5	5																5
125	haemoglobinometer, sahli complete	10,000.00									5	5																5
126	hand towel	50.00						33			6	15	21	68	16	18	12	16	21	49							205	
127	handle for B.P. blade	100.00																									4	
128	handle (surg. Blades), bard parker type	100.00																									8	
129	handpiece straight&contra angle	5,000.00						2																			2	
130	hanger for X- ray film	800.00																									6	
131	holder, case, sheet	50.00																									16	
132	holter monitoring machine	5,000.00						1																			15	
133	hot air oven	5,000.00																									5	
134	Hot plates	3,000.00						2																			45	
135	hot water bottles	150.00						6																			34	
136	Hurricane Lantern, wick lamp	250.00																									14	
137	I. V. sets (pref. single use type)	200.00						6																			24	
138	ice bags	50.00						6																			48	
139	icebox	500.00						6																			34	
140	incubator	35,000.00																									5	
141	irrigation sets:A)syringe B)catheter	2,000.00																									4	
142	Janitors - equipment	300.00						2																			28	
143	jar with cover	500.00																									16	
144	jug, stainless steel	200.00																									20	
145	jugs for water	100.00						15																			262	
146	jugs, enamel	100.00																									14	
147	kettles	250.00																									10	
148	kidney set	50,000.00																									4	
149	kidney tray, stainless steel	250.00																									10	
150	Kidney trays	100.00						25																			81	

S.NO.	EQUIPMENT & FURNITURE	RATE	ENTRANCE AREA	Main(OPD) Entrance	Emergency Entrance	Services & Staff Entrance	SUB TOTAL	AMBULATORY CARE AREA	DIAGNOSTIC SERVICES	Imaging	Clinical Labs	SUB TOTAL	INTERMEDIATE CARE AREA	INTENSIVE CARE AREA	CRITICAL CARE AREA	THERAPEUTIC SERVICES	Day Care	Operation Theatre suite	Delivery suite	SUB TOTAL	HOSPITAL SERVICES	ENGINEERING SERVICES	CORRIDORS	TOILETS	SUB TOTAL	ADMIN & ANCILLARY	GRAND TOTAL	
151	kitchen knife	100.00																										14
152	Knee hammer	100.00																										17
153	laboratory electric ovens	15,000.00									5	5																5
154	laparoscope, single puncture	1,000,000.00																										6
155	Laryngoscope & Auroscope	2,000.00						2																				22
156	lead numbers for marking	50.00								48		48																48
157	lead sheets	50.00						1		4		4																5
158	leparatomy set	50,000.00																										4
159	mackintoshes	500.00																										10
160	magnifying glass	100.00								4	9	13																15
161	mattress covers	500.00						25		2	4	6	68	15	16													173
162	mattresses	5,000.00								1	2	3	62	12	12													113
163	medicine cups	20.00											64	14	13													118
164	medicine glass	20.00											4	2	2													16
165	minor surgery instrument	20,000.00						8					2	1	2													22
166	monitors (cardiac)	200,000.00						1					2	2	4													25
167	monocular microscope	10,000.00									21	21																21
168	mortuary sheets	150.00																										6
169	mouth gag	100.00																										10
170	mugs	20.00											64	14	13													128
171	needle hypodermic:re-usable all sz	5.00																										4
172	needle hypodermic:single use all sz	2.00						6		1	84	85	2	1	2													114
173	Needle, blood transfusion, (fateman) blunt pointed, all sizes	20.00																										6
174	needle:lumber puncture set	20,000.00																										8
175	nessler's tube	200.00																										9
176	Notice board	1,000.00						4	2	2	8	26	7	2	2													110

S.NO.	EQUIPMENT & FURNITURE	RATE	ENTRANCE AREA	Main(OPD) Entrance	Emergency Entrance	Services & Staff Entrance	SUB TOTAL	AMBULATORY CARE AREA	DIAGNOSTIC SERVICES	Imaging	Clinical Labs	SUB TOTAL	INTERMEDIATE CARE AREA	INTENSIVE CARE AREA	CRITICAL CARE AREA	THERAPEUTIC SERVICES	Day Care	Operation Theatre suite	Delivery suite	SUB TOTAL	HOSPITAL SERVICES	ENGINEERING SERVICES	CORRIDORS	TOILETS	SUB TOTAL	ADMIN & ANCHLARY	GRAND TOTAL
177	office equipment	3,000.00		7	1		8	24		5	13	18	2	2	1		3	2	1	6	13	4				25	103
178	Ophthalmoscope	5,000.00						2									5	1	7	13							22
179	offit blood grouping, complete	10,000.00									8	8															8
180	oxygen cylinders with trolley, flowmeters	12,000.00						3					2	3	4		5	6	10	21							33
181	oxygen masks	500.00						1					2	3	4		5	6	10	21							35
182	patient coats or jackets	250.00								6		6	64	14	13		10	30	11	51							148
183	patient pyjama	150.00								6		6	64	14	13		* 10	30	11	51							148
184	pelvic meter	500.00																4	4								4
185	Percussion hammer	100.00						16			1	1	2	2	3		5	2	3	10							34
186	perio - surgical instrument	5,000.00						2																			2
187	petri dishes	50.00									42	42															42
188	photo therapy	75,000.00											2	2	3		3	1	3	7							14
189	pillow cases	75.00						25		4	4	8	68	15	16		9	14	17	40							172
190	pillows	250.00						25		4	4	8	64	13	14		9	14	17	40							164
191	pint measures	200.00																4	4	4							8
192	pipette for haemoglobinometers and blood pipette for biochemical work	5,000.00																									
193	pipette, serological	5,000.00									12	12															12
194	pipettes, dilution for haemocytometers	5,000.00									12	12															12
195	plastic filling instrument	5,000.00						2																			2
196	plates for serving	150.00					8						60	12	11		4	6	11	21	100					212	
197	platform scales	1,000.00						1			1	1								2							4
198	post mortem table	25,000.00																									1
199	potatoe peeler	20.00																									6
200	probe, uterine	20,000.00																	2	2							2
201	proctoscopes	500.00																									4

S.NO.	EQUIPMENT & FURNITURE	RATE	ENTRANCE AREA	Main(OPD) Entrance	Emergency Entrance	Services & Staff Entrance	SUB TOTAL	AMBULATORY CARE AREA	DIAGNOSTIC SERVICES	Imaging	Clinical Labs	SUB TOTAL	INTERMEDIATE CARE AREA	INTENSIVE CARE AREA	CRITICAL CARE AREA	THERAPEUTIC SERVICES	Day Care	Operation Theatre suite	Delivery suite	SUB TOTAL	HOSPITAL SERVICES	ENGINEERING SERVICES	CORRIDORS	TOILETS	SUB TOTAL	ADMIN & ANCILLARY	GRAND TOTAL
202	prosthetic laboratory and denture processing instruments	50,000.00						1																			1
203	rack, storage	2,000.00		15	2		17	32		12	15	27	12	6	10		9	10	10	29	24	3				71	236
204	rack, test tube	12,000.00						1			8	8	2	2	3		3	2	3	8	6					1	24
205	rack, utensils	3,000.00		2			2						2	1	1		1	1	1	2	6					1	15
206	Refrigerator	8,000.00		4			4	7		7	7	7	4	2	4		3	4	5	12	2					1	43
207	resuscitation tray:new born babies	20,000.00																			4						4
208	room heaters	1,000.00		8	1		9	21		4	11	15	22	12	12		6	8	14	28							119
209	saw, plaster	3,000.00													2		2	2	1	5							7
210	scalars assorted	2,000.00						2																			2
211	scalars set sub - gingival	2,000.00						2																			2
212	scalars ultrasonic	3,000.00						2																			2
213	scissors:Bandage, lister's	500.00																	8	8	4						12
214	scissors:curved and Straight	500.00																	8	8	4						12
215	scissors:dissecting	500.00																			4						4
216	scissors:Episiotomy	500.00																	8	8	4						12
217	scissors:general type	250.00											2	1	2		5	3	6	14	4						23
218	scissors:mayo's	500.00																			4						4
219	scissors:stitch cutting	250.00													1		2	2	9	13	4						18
220	Screen stands	4,000.00						27		4	2	6	4	3	3		6	7	6	19							62
221	screws clamp	200.00																			4						4
222	set blood taking, complete	500.00									6	6									4						10
223	set of instruments for post mortem	200,000.00																			4						4
224	set plasma giving, complete	500.00									6	6									4						10
225	set, blood & saline giving (UK pattern)	500.00									6	6									4						10
226	Shadowless ceiling lamp	75,000.00													1		2	2	5	9	1						11
227	Shadowless portable type lamp	10,000.00													1		2	2	5	9	1						11

S.NO.	EQUIPMENT & FURNITURE	RATE	ENTRANCE AREA	Main(OPD) Entrance	Emergency Entrance	Services & Staff Entrance	SUB TOTAL	AMBULATORY CARE AREA	DIAGNOSTIC SERVICES	Imaging	Clinical Labs	SUB TOTAL	INTERMEDIATE CARE AREA	INTENSIVE CARE AREA	CRITICAL CARE AREA	THERAPEUTIC SERVICES	Day Care	Operation Theatre suite	Delivery suite	SUB TOTAL	HOSPITAL SERVICES	ENGINEERING SERVICES	CORRIDORS	TOILETS	SUB TOTAL	ADMIN & ANCILLARY	GRAND TOTAL
228	Sink with instrument work area	5,000.00					7				2	5	7	2	1	2		3	6	5	14	7					40
229	sinks with liquid soap dispensers	2,000.00					1				6	6															7
230	slides and slide boxes	100.00					10				94	94										4					108
231	slippers	100.00								6	6	6	60	12	15		20	39	33	33	92	8					193
232	sound uterine	5,000.00																4	4	4	4	4					8
233	spectroscope, adjustable slit	20,000.00									5	5										4					5
234	speculum	1,000.00					1																				5
235	Speculum, sims	1,000.00																			8	8					8
236	Sphygmanometer	1,000.00					19				1	1	2	2	3		5	1	3	9	36					36	
237	spirit lamp	100.00									5	5	2	2	3		3	1	3	7	19					19	
238	splints, arm	200.00											2	2	3		3	1	3	7	14					14	
239	splints, thomas	550.00											2	2	3		3	1	3	7	14					14	
240	sponge, nylon	50.00																				4					4
241	spoons, stainless steel	20.00											60	12	11		4	6	11	21	216					12	
242	stand:basin	750.00																1	4	5	5					5	
243	stand:I.V.	750.00								1		1	62	13	13		9	13	22	44	140					140	
244	stand:test tube	750.00																	4	4	4					4	
245	stand:towel	750.00											60	12	11		6	7	16	29	113					113	
246	stand:transfusion, metal, complete	1,200.00									1	1									1						1
247	Step stool	750.00								3	1	4	64	15	16		11	10	25	46	192					12	
248	sterilizer steam	750.00									5	5							4	4	9					9	
249	sterilizer steam, portable type	5,000.00									4	4						1	1	1	4					9	
250	sterilizer, hot air	3,000.00																				4					4
251	sterilizer, instruments	10,000.00											2	2	3		3	1	3	7	18					18	
252	sterilizer, steam(autoclave)	4,000.00																	1	1	4					5	
253	sterilizer:bowls and utensils	2,000.00													1		2	2	5	9	14					14	
254	sterilizer:Pressure, hot&cold water	150,000.00													1		2	2	5	9	14					14	

S.NO.	EQUIPMENT & FURNITURE	RATE	ENTRANCE AREA	Main(OPD) Entrance	Emergency Entrance	Services & Staff Entrance	SUB TOTAL	AMBULATORY CARE AREA	DIAGNOSTIC SERVICES	Imaging	Clinical Labs	SUB TOTAL	INTERMEDIATE CARE ARE	INTENSIVE CARE AREA	CRITICAL CARE AREA	THERAPEUTIC SERVICES	Day Care	Operation Theatre suite	Delivery suite	SUB TOTAL	HOSPITAL SERVICES	ENGINEERING SERVICES	CORRIDORS	TOILETS	SUB TOTAL	ADMIN & ANCLARY	GRAND TOTAL	
255	sterilizers	10,000.00					2																					2
256	Stethoscope	200.00					22				1	1	2	2	4		7	4	10	21								52
257	stitch removal set:forceps, scissors	2,000.00													1		2	2	5	9	4							14
258	Stool revolving	1,000.00					30			3	1	4	4	3	5		8	7	8	23								69
259	stool, revolving, stainless steel	2,000.00																3		3								3
260	stop clock, three way	200.00																				4						4
261	stop watch	100.00									7	7																7
262	stove	250.00									5	5																5
263	strainers	100.00																				6						6
264	stress test equipment	50,000.00					1																					1
265	Stretcher and stretcher carrier	8,000.00					19		1	1	2	2	2	2	3		6	5	3	14	1							43
266	suction apparatus	5,000.00					2						2	2	4		5	3	8	16	4							30
267	suitable strips(substitute for var. tests)	100.00									21	21									4							25
268	suture tray	2,000.00													1		2	2	5	9	5							15
269	syringe:transfusion, all glass	200.00									6	6									4							10
270	syringe hypodermic:re-usable all sz	100.00																	4	4	4							8
271	syr hypodermic:single use all sz	50.00						6	2	12	14	2	1	2	2		3	6	17	26	4							55
272	syringes, all glass, all sizes	1,000.00									12	12			1		2	2	5	9	4							26
273	table cloth	200.00						29	10	10	20	8	3	4	4		3	5	3	11	6							81
274	table ware	2,000.00					4														12							16
275	table with marble top	5,000.00					4				9	9									2					2		17
276	Table, conference	50,000.00																								1		1
277	Table, doctors	4,000.00						19			1	1					2	1	1	4	1							25
278	Table, metal, office/ counter	4,000.00					9	12	12	11	23	4	1	2	2		3	5	2	10	16	4						105
279	table, operation, hydraulic, major	60,000.00															2	2	1	5								5
280	table, operation, hydraulic, minor	10,000.00													1													1
281	table:examination/stretcher with mattress	4,000.00						23	1	2	3	4	3	5	5		8	10	4	22								60

S.NO.	EQUIPMENT & FURNITURE	RATE	ENTRANCE AREA	Main(OPD) Entrance	Emergency Entrance	Services & Staff Entrance	SUB TOTAL	AMBULATORY CARE AREA	DIAGNOSTIC SERVICES	Imaging	Clinical Labs	SUB TOTAL	INTERMEDIATE CARE AREA	INTENSIVE CARE AREA	CRITICAL CARE AREA	THERAPEUTIC SERVICES	Day Care	Operation Theatre suite	Delivery suite	SUB TOTAL	HOSPITAL SERVICES	ENGINEERING SERVICES	CORRIDORS	TOILETS	SUB TOTAL	ADMIN & ANCILLARY	GRAND TOTAL
282	Table:instruments	5,000.00						6		1		1	2	1	2		3	6	5	14							26
283	table:Obstetric, labour	10,000.00																	4	4							4
284	tank thermometer	500.00								2		2															2
285	Tape measure, steel	50.00													1		4	2	5	11							12
286	test tubes pyrex type (glass)	150.00									84	84															84
287	thermometers, clinical	150.00						19		1	1	2	2	2	4		8	8	4	20							49
288	thermometers, rectal	200.00								1	1	2	2	4			8	8	10	26							35
289	Torch	100.00						20		1	1	2	2	3			6	6	8	20							49
290	torch (flashlights)	500.00													1		4	2	1	7							8
291	Toung depressor	100.00						20		1	1	2	2	4			8	8	8	24							54
292	towel clip	200.00																			16						16
293	towels	100.00								6	6	6	4	2	2		8	24		32	12				2		60
294	trace dilators	500.00																			4						4
295	tracheostomy sets	5,000.00																			4						4
296	tray complete set for edentulous and dentulous jaws (perforated)	5,000.00						2																			2
297	tray with cover	100.00											2	2	3		5	1	3	9							16
298	tray, food (stainless steel)	750.00										60	12	11			4	6	17	27	100				6		216
299	trays	200.00						6			6	6							14	14	4						30
300	trocar cannula	2,000.00																			4						4
301	trolley, closed and ordinary	1,500.00								2	2	2					1	4		5	4						11
302	trolley, general medical stores	1,000.00										2	1	1													4
303	trolley, hot food	2,000.00											2	1	1										2		20
304	trolley, linen/ house keeping	2,000.00								2	2	2	2	1	1		1	4		5	12						23
305	trolley, patients	4,000.00						4	9	5	1	6	2	1	2		3	6	5	14							38
306	Trolley,dressing/instrument/ med.	5,000.00						10				4	3	6			9	8	19	36							59
307	trolleys	2,000.00						2			2	2									20						24

S.NO.	EQUIPMENT & FURNITURE	RATE	ENTRANCE AREA	Main(OPD) Entrance	Emergency Entrance	Services & Staff Entrance	SUB TOTAL	AMBULATORY CARE AREA	DIAGNOSTIC SERVICES	Imaging	Clinical Labs	SUB TOTAL	INTERMEDIATE CARE AREA	INTENSIVE CARE AREA	CRITICAL CARE AREA	THERAPEUTIC SERVICES	Day Care	Operation Theatre suite	Delivery suite	SUB TOTAL	HOSPITAL SERVICES	ENGINEERING SERVICES	CORRIDORS	TOILETS	SUB TOTAL	ADMIN & ANCILLARY	GRAND TOTAL	
308	trough, staining	500.00									9	9																9
309	tubes:foetus	500.00																	8	8	4						12	
310	tubes:ryles	500.00														2	4	4	10	18	4						24	
311	tubes:stomach	500.00																			4						4	
312	tubes:tracheostomy	500.00																			4						4	
313	tubs, baby bath	5,000.00																6	6	6	4						10	
314	tumblers	20.00						5			1	1	2	1	3	3	3	3	3	9	12						33	
315	tumblers (stainless steel)	50.00										60	12	11		4	6	17	27								110	
316	ultrasound trolley:multi probe	1,500,000.00								1		1															1	
317	ultra sound machine:multiple probe	750,000.00								1		1															1	
318	ultra sound scanner, multi pupose	1,000,000.00								1		1															1	
319	urinals	500.00													2	4	4	6	14								16	
320	urine collection jar	500.00						12			18	18															30	
321	vaccum extractor	2,000.00																2	2								2	
322	venesection sets	50,000.00																			4						4	
323	volumetrics flasks	2,000.00						12			33	33															45	
324	wall clock	100.00						2	1	2	5	17	7	3		6	5	5	16	8	2						104	
325	Wash hand basin with liquid soap dispenser and towel rail	3,000.00								1		19	6	2	4	5	11	8	24	11							97	
326	washing machine for floor cleaning	35,000.00								2		3															3	
327	Washing machines	25,000.00									1	1	2	1	3	3	3	3	9	12							33	
328	waste paper baskets	100.00						5	2	2	9	37	14	15		9	14	16	39	9	2						242	
329	Waste receptacles	500.00									1	2	6	4	6	6	13	9	28	6							67	
330	water bath, serological	1,000.00									5	5															5	
331	Water cooler with 3/4 spouts	8,000.00								2	1	3	4	2	4	3	4	4	11								30	
332	weighing machine, baby	500.00																2	2								2	
333	weighing scales	500.00						16		1	1	2	2	2	3	4	5	3	12	7							44	

S.NO.	EQUIPMENT & FURNITURE	RATE	ENTRANCE AREA	Main(OPD) Entrance	Emergency Entrance	Services & Staff Entrance	SUB TOTAL	AMBULATORY CARE AREA	DIAGNOSTIC SERVICES	Imaging	Clinical Labs	SUB TOTAL	INTERMEDIATE CARE AREA	INTENSIVE CARE AREA	CRITICAL CARE AREA	THERAPEUTIC SERVICES	Day Care	Operation Theatre suite	Delivery suite	SUB TOTAL	HOSPITAL SERVICES	ENGINEERING SERVICES	CORRIDORS	TOILETS	SUB TOTAL	ADMIN & ANCILLARY	GRAND TOTAL	
334	wire gauze	50.00									5	5																5
335	wiring set for jaw fractures	500.00						2																				2
336	wrapper	200.00																										4
337	x- ray film corner	2,000.00						1		2		2																3
338	x- ray film processing tank	10,000.00								2		2																2
339	x- ray protection screen	6,000.00						1		2		2																3
340	x- ray view box	1,000.00						29		11	2	13	24	13	14		10	16	21	47							4	144

109-BED HOSPITAL, NEW DELHI

INSTRUMENTS, EQUIPMENT & FURNITURE COST SUMMARY

S.NO.	NAME OF AREA	AMOUNT	CONTINGENCY (@10%)	TOTAL	REFERENCE
A	ENTRANCE AREA				
	Main(OPD) Entrance	425,320.00	42,532.00	467,852.00	Refer Cost Sheet - 27
	Emergency Entrance	133,420.00	13,342.00	146,762.00	Refer Cost Sheet - 27
	Services & Staff Entrance	3,200.00	320.00	3,520.00	Refer Cost Sheet - 27
	Total	561,940.00	56,194.00	618,134.00	
B	AMBULATORY CARE AREA				
		3,578,567.00	357,856.70	3,936,423.70	Refer Cost Sheet - 27
C	DIAGNOSTIC SERVICES				
	Imaging	15,690,372.00	1,569,037.20	17,259,409.20	Refer Cost Sheet - 27
	Clinical Labs & Blood bank	2,353,618.00	235,361.80	2,588,979.80	Refer Cost Sheet - 27
	Total	18,043,990.00	1,804,399.00	19,848,389.00	
D	INTERMEDIATE CARE AREA				
		3,480,764.00	348,076.40	3,828,840.40	Refer Cost Sheet - 27
E	INTENSIVE CARE AREA				
		1,524,637.00	152,463.70	1,677,100.70	Refer Cost Sheet - 27
F	CRITICAL CARE AREA				
		2,622,954.00	262,295.40	2,885,249.40	Refer Cost Sheet - 27
C	THERAPEUTIC SERVICES				
	Day Care	3,121,761.00	312,176.10	3,433,937.10	Refer Cost Sheet - 27
	Operation Theatre Suite	3,061,822.00	306,182.20	3,368,004.20	Refer Cost Sheet - 27
	Delivery Suite	7,692,875.00	769,287.50	8,462,162.50	Refer Cost Sheet - 27
	Total	13,876,458.00	1,387,645.80	15,264,103.80	
H	HOSPITAL SERVICES				
		13,942,658.00	1,394,265.80	15,336,923.80	Refer Cost Sheet - 27
I	ENGINEERING SERVICES				
		96,340.00	9,634.00	105,974.00	Refer Cost Sheet - 27
J	CORRIDORS				
		-	-	-	Refer Cost Sheet - 27
K	TOILETS				
		-	-	-	Refer Cost Sheet - 27
	Total	-	-	-	
L	ADMIN & ANCILLARY				
		849,670.00	84,967.00	934,637.00	Refer Cost Sheet - 27
	GRAND TOTAL	58,577,978.00	5,857,797.80	64,435,775.80	

109-BED HOSPITAL, NEW DELHI

COST PER SQM. & COST PER BED - INSTRUMENTS, EQUIPMENT & FURNITURE

S.NO.	NAME OF AREA	AREA (Sq.m.)	AMOUNT (incl. Contingency)	COST / SQM	COST / BED	REFERENCE
A	ENTRANCE AREA					
	Main(OPD) Entrance	315.00	467,852.00	1,485.24	4,292.22	Refer Cost Sheet - 24
	Emergency Entrance	69.00	146,762.00	2,126.99	1,346.44	Refer Cost Sheet - 24
	Services & Staff Entrance	18.00	3,520.00	195.56	32.29	Refer Cost Sheet - 24
	Total	402.00	618,134.00	1,537.65	5,670.95	
B	AMBULATORY CARE AREA	843.00	3,936,423.70	4,669.54	36,113.98	Refer Cost Sheet - 24
C	DIAGNOSTIC SERVICES					
	Imaging	319.50	17,249,409.20	53,988.76	158,251.46	Refer Cost Sheet - 24
	Clinical Labs & Blood bank	288.00	2,488,979.80	8,642.29	22,834.68	Refer Cost Sheet - 24
	Total	607.50	19,848,389.00	32,672.25	182,095.31	
D	INTERMEDIATE CARE AREA	792.84	3,828,840.40	4,829.27	35,126.98	Refer Cost Sheet - 24
E	INTENSIVE CARE AREA	321.60	1,677,100.70	5,214.87	15,386.24	Refer Cost Sheet - 24
F	CRITICAL CARE AREA	326.50	2,885,249.40	8,836.90	26,470.18	Refer Cost Sheet - 24
C	THERAPEUTIC SERVICES					
	Day Care	327.00	3,433,937.10	10,501.34	31,504.01	Refer Cost Sheet - 24
	Operation Theatre Suite	417.70	3,368,004.20	8,063.21	30,899.12	Refer Cost Sheet - 24
	Delivery Suite	326.50	8,462,162.50	25,917.80	77,634.52	Refer Cost Sheet - 24
	Total	1,071.20	15,264,103.80	14,249.54	140,037.65	
H	HOSPITAL SERVICES	709.50	15,336,923.80	21,616.52	140,705.72	Refer Cost Sheet - 24
I	ENGINEERING SERVICES	498.00	105,974.00	212.80	972.24	Refer Cost Sheet - 24
J	CORRIDORS	3,715.70	-	-	-	Refer Cost Sheet - 24
K	TOILETS	121.00	-	-	-	Refer Cost Sheet - 24
	Total	3,836.70	-	-	-	
L	ADMIN & ANCILLARY	510.00	934,637.00	1,832.62	8,574.65	Refer Cost Sheet - 24
	GRAND TOTAL	9,918.84	64,435,775.80	6,496.30	591,153.91	

S.NO.	EQUIPMENT & FURNITURE	RATE	ENTRANCE AREA	Main(OPD) Entrance	Emergency Entrance	Services & Staff Entrance	SUB TOTAL	AMBULATORY CARE	DIAGNOSTIC	Imaging	Clinical Labs	SUB TOTAL	INTERMEDIATE CARE	INTENSIVE CARE
37	cabinet, instruments	4,000.00		-	-	-	-	4,000.00		20,000.00	24,000.00	44,000.00	8,000.00	12,000.00
38	cabinet, steel, instruments	12,000.00		-	-	-	-	60,000.00		-	12,000.00	12,000.00	24,000.00	12,000.00
39	can, douche	500.00		-	-	-	-	-		-	-	-	-	-
40	cannula transfusion, hamilton baileys	5,000.00		-	-	-	-	-		-	30,000.00	30,000.00	-	-
41	cannula blood transfusion with siliette	150.00		-	-	-	-	-		-	900.00	900.00	-	-
42	cannula transfusion, hamilton baileys luer	200.00		-	-	-	-	-		-	1,200.00	1,200.00	-	-
43	cans	250.00		-	-	-	-	-		-	-	-	-	-
44	cans, 100 litre	500.00		-	-	-	-	-		-	-	-	-	-
45	cassette with intensifying screens	2,000.00		-	-	-	-	-		120,000.00	-	120,000.00	-	-
46	catheter rubber and metal	250.00		-	-	-	-	-		-	-	-	-	-
47	catheter, rubber all sizes	100.00		-	-	-	-	-		-	-	-	-	-
48	catheterization sets	2,000.00		-	-	-	-	-		-	-	-	-	-
49	centrifuge AC/DC 200 W with 8 buckets	10,000.00		-	-	-	-	-		-	50,000.00	50,000.00	-	-
50	centrifuge tubes (glass)	500.00		-	-	-	-	500.00		-	21,500.00	21,500.00	-	-
51	chair, dental	180,000.00		-	-	-	-	360,000.00		-	-	-	-	-
52	Chair, metal office type	1,000.00		8,000.00	2,000.00	-	10,000.00	30,000.00		14,000.00	15,000.00	29,000.00	6,000.00	2,000.00
53	chair, revolving	2,500.00		20,000.00	5,000.00	-	25,000.00	12,500.00		30,000.00	37,500.00	67,500.00	-	5,000.00
54	chair, wheel	3,000.00		6,000.00	6,000.00	-	12,000.00	27,000.00		-	-	-	12,000.00	12,000.00
55	Chairs - plastic moulded	1,200.00		62,400.00	26,400.00	-	88,800.00	271,200.00		75,600.00	6,000.00	75,600.00	129,600.00	14,400.00
56	chairs, easy	3,000.00		-	-	-	-	-		3,000.00	-	9,000.00	66,000.00	36,000.00
57	chamber pots	500.00		-	-	-	-	-		-	-	-	10,000.00	6,000.00
58	chart holder	150.00		-	-	-	-	-		-	-	-	9,300.00	1,800.00
59	chemical mixing plunger	10,000.00		-	-	-	-	-		20,000.00	-	20,000.00	-	-
60	chest instruments set	50,000.00		-	-	-	-	-		-	-	-	-	-
61	colorimeter	5,000.00		-	-	-	-	-		-	25,000.00	25,000.00	-	-
62	cooking range with oven	10,000.00		10,000.00	-	-	10,000.00	-		-	-	-	-	-
63	cover, glass, haemocytometer	10,000.00		-	-	-	-	-		-	50,000.00	50,000.00	-	-
64	cradles, baby	2,500.00		-	-	-	-	-		-	-	-	-	-
65	craniotomy set	10,000.00		-	-	-	-	-		-	-	-	-	-
66	curtains	150.00		-	-	-	-	-		-	-	-	9,000.00	1,800.00
67	dark room adapiton goggles	500.00		-	-	-	-	-		1,000.00	-	1,000.00	-	-
68	dark room safe light	500.00		-	-	-	-	-		500.00	-	500.00	-	-
69	dark room timer	100.00		-	-	-	-	-		100.00	-	100.00	-	-
70	delivery tray	3,000.00		-	-	-	-	-		-	-	-	-	-
71	dental unit, complete	50,000.00		-	-	-	-	100,000.00		-	-	-	-	-
72	dental x-ray unit & developing facilities	150,000.00		-	-	-	-	150,000.00		-	-	-	-	-
73	Desk:Nurses station counter	5,000.00		-	-	-	-	15,000.00		-	-	-	10,000.00	5,000.00
74	Desk:Reception/registration	20,000.00		40,000.00	20,000.00	-	60,000.00	40,000.00		60,000.00	60,000.00	120,000.00	-	-
75	Diagnostic 60 M.A. X-ray machine	200,000.00		-	-	-	-	-		200,000.00	-	200,000.00	-	-
76	diagnostic x-ray unit 200/300 M.A., with	750,000.00		-	-	-	-	-		1,500,000.00	-	1,500,000.00	-	-

S.NO.	EQUIPMENT & FURNITURE	RATE	ENTRANCE AREA	Main(OPD) Entrance	Emergency Entrance	Services & Staff Entrance	SUB TOTAL	AMBULATORY CARE	DIAGNOSTIC	Imaging	Clinical Labs	SUB TOTAL	INTERMEDIATE CARE	INTENSIVE CARE
77	diathermy machine	20,000.00		-	-	-	-	-	-	-	-	-	-	-
78	doctors coats	1,000.00		-	-	-	-	-	-	1,000.00	2,000.00	3,000.00	2,000.00	-
79	Doctors towel	100.00		-	-	-	-	-	-	300.00	300.00	600.00	400.00	100.00
80	draw sheets	150.00		-	-	-	-	-	-	-	-	-	600.00	300.00
81	dressing drum	2,000.00		-	-	-	-	-	-	-	-	-	8,000.00	2,000.00
82	dressing drum, all sizes, SS	5,000.00		-	-	-	-	-	-	-	-	-	-	-
83	dressing sets :A) suture needles B) artery	2,000.00		-	-	-	-	-	-	-	-	-	-	-
84	Dusters etc.	20.00		220.00	20.00	-	240.00	520.00	-	240.00	380.00	620.00	8,000.00	2,000.00
85	ECG Machines	25,000.00		-	-	-	-	-	-	25,000.00	-	25,000.00	25,000.00	50,000.00
86	emergency light	1,000.00		6,000.00	-	-	6,000.00	30,000.00	-	7,000.00	6,000.00	13,000.00	24,000.00	13,000.00
87	endoscopy set	1,200,000.00		-	-	-	-	-	-	-	-	-	-	-
88	enema can sets	500.00		-	-	-	-	-	-	-	-	-	10,000.00	6,000.00
89	ENT speculum	1,000.00		-	-	-	-	2,000.00	-	-	-	-	2,000.00	2,000.00
90	episiotomy tray	5,000.00		-	-	-	-	-	-	-	-	-	-	-
91	excavators	2,000.00		-	-	-	-	4,000.00	-	-	-	-	-	-
92	extraction forcep assorted	2,000.00		-	-	-	-	4,000.00	-	-	-	-	-	-
93	facilities to keep dead body cool	50,000.00		-	-	-	-	-	-	-	-	-	-	-
94	feeding cups	100.00		-	-	-	-	-	-	-	-	-	-	-
95	feeding cups with spout	100.00		-	-	-	-	-	-	-	-	-	-	-
96	file cabinets	4,000.00		4,000.00	4,000.00	-	3,000.00	104,000.00	-	40,000.00	48,000.00	88,000.00	6,000.00	1,200.00
97	filling instrument set	10,000.00		-	-	-	-	20,000.00	-	-	-	-	-	-
98	film clips	100.00		-	-	-	-	-	-	2,400.00	-	2,400.00	-	-
99	film hanger and wall brackets	600.00		-	-	-	-	-	-	3,600.00	-	3,600.00	-	-
100	flit pumps	50.00		-	-	-	-	250.00	-	-	50.00	50.00	100.00	50.00
101	Floor scrubbers	50.00		100.00	100.00	100.00	300.00	150.00	-	-	-	-	100.00	100.00
102	fly swatters	10.00		-	-	-	-	-	-	-	-	-	600.00	120.00
103	foetoscope	5,000.00		-	-	-	-	-	-	-	-	-	-	-
104	folding screen	2,000.00		-	-	-	-	12,000.00	-	8,000.00	2,000.00	10,000.00	124,000.00	26,000.00
105	foot steps	750.00		-	-	-	-	4,500.00	-	2,250.00	750.00	3,000.00	46,500.00	9,750.00
106	Forceps :allis	500.00		-	-	-	-	-	-	-	-	-	-	-
107	Forceps :artery	500.00		-	-	-	-	-	-	-	-	-	-	-
108	Forceps :dissecting	500.00		-	-	-	-	-	-	-	-	-	-	-
109	forceps tray	500.00		-	-	-	-	-	-	-	-	-	-	-
110	forceps:cheatele's	1,000.00		-	-	-	-	-	-	-	-	-	2,000.00	1,000.00
111	forceps:obstetric, furguson	1,000.00		-	-	-	-	-	-	-	-	-	-	-
112	forceps:obstetric, wringles	700.00		-	-	-	-	-	-	-	-	-	-	-
113	forceps:ovum	1,000.00		-	-	-	-	-	-	-	-	-	-	-
114	forceps:sponge holders	200.00		-	-	-	-	-	-	-	-	-	-	-
115	Fryer (deep fat)	1,500.00		-	-	-	-	300.00	-	-	300.00	300.00	-	-
116	funnel	50.00		-	-	-	-	-	-	-	-	300.00	-	-
												300.00		

S.NO.	EQUIPMENT & FURNITURE	RATE	ENTRANCE AREA	Main(OPD) Entrance	Emergency Entrance	Services & Staff Entrance	SUB TOTAL	AMBULATORY CARE	DIAGNOSTIC	Imaging	Clinical Labs	SUB TOTAL	INTERMEDIATE CARE	INTENSIVE CARE
117	gall bladder set	50,000.00		-	-	-	-	-	-	-	-	-	4,000.00	2,000.00
118	gas burners (domestic)	2,000.00		-	-	-	-	-	-	-	-	-	-	-
119	gastroctomy set	50,000.00		-	-	-	-	-	-	-	-	-	-	-
120	general instruments set	50,000.00		-	-	-	-	-	-	-	-	-	-	-
121	gloves	50.00		-	-	-	-	-	-	-	-	-	-	-
122	gloves box	500.00		-	-	-	-	-	-	-	-	-	-	-
123	gloves, lead rubber	1,000.00		-	-	-	-	-	-	-	-	-	-	-
124	haemocytometer with WBC/RBC pipettes	10,000.00		-	-	-	-	-	-	-	-	-	-	-
125	haemoglobinometer, sahli complete	10,000.00		-	-	-	-	-	-	-	-	-	-	-
126	hand towel	50.00		-	-	-	-	-	-	-	-	-	-	-
127	handle for B.P. blade	100.00		-	-	-	-	-	-	-	-	-	-	-
128	handle (surg. Blades), bard parker type	100.00		-	-	-	-	-	-	-	-	-	-	-
129	handpiece straight&contra angle	5,000.00		-	-	-	-	-	-	-	-	-	-	-
130	hanger for X- ray film	800.00		-	-	-	-	-	-	-	-	-	-	-
131	holder, case, sheet	50.00		-	-	-	-	-	-	-	-	-	-	-
132	holter monitoring machine	5,000.00		-	-	-	-	-	-	-	-	-	-	-
133	hot air oven	5,000.00		-	-	-	-	-	-	-	-	-	-	-
134	Hot plates	3,000.00		-	-	-	-	-	-	-	-	-	-	-
135	hot water bottles	150.00		-	-	-	-	-	-	-	-	-	-	-
136	Hurricane Lantern, wick lamp	250.00		-	-	-	-	-	-	-	-	-	-	-
137	I.V. sets (pref. single use type)	200.00		-	-	-	-	-	-	-	-	-	-	-
138	ice bags	50.00		-	-	-	-	-	-	-	-	-	-	-
139	icebox	500.00		-	-	-	-	-	-	-	-	-	-	-
140	incubator	35,000.00		-	-	-	-	-	-	-	-	-	-	-
141	irrigation sets:A)syringe B)catheter	2,000.00		-	-	-	-	-	-	-	-	-	-	-
142	Janitors - equipment	300.00		600.00	300.00	600.00	1,500.00	900.00	900.00	-	1,200.00	1,200.00	600.00	600.00
143	jar with cover	500.00		-	-	-	-	-	-	-	-	-	-	-
144	jug, stainless steel	200.00		-	-	-	-	-	-	-	-	-	-	-
145	jugs for water	100.00		1,500.00	200.00	-	1,700.00	2,900.00	2,900.00	700.00	1,700.00	2,400.00	6,600.00	1,400.00
146	jugs, enamel	100.00		-	-	-	-	-	-	-	-	-	-	-
147	kettles	250.00		-	-	-	-	-	-	-	-	-	-	-
148	kidney set	50,000.00		-	-	-	-	-	-	-	-	-	-	-
149	kidney tray, stainless steel	250.00		-	-	-	-	-	-	-	-	-	-	-
150	Kidney trays	100.00		-	-	-	-	-	-	-	-	-	-	-
151	kidney knife	100.00		-	-	-	-	-	-	-	-	-	-	-
152	Knee hammer	100.00		-	-	-	-	-	-	-	-	-	-	-
153	laboratory electric ovens	15,000.00		-	-	-	-	-	-	-	-	-	-	-
154	laparoscope, single puncture	1,000,000.00		-	-	-	-	-	-	-	-	-	-	-
155	Laryngoscope & Auroscope	2,000.00		-	-	-	-	-	-	-	-	-	-	-
156	lead numbers for marking	50.00		-	-	-	-	-	-	2,400.00	-	2,400.00	-	-

S.NO.	EQUIPMENT & FURNITURE	RATE	ENTRANCE AREA	Main(OPD) Entrance	Emergency Entrance	Services & Staff Entrance	SUB TOTAL	AMBULATORY CARE	DIAGNOSTIC	Imaging	Clinical Labs	SUB TOTAL	INTERMEDIATE CARE	INTENSIVE CARE
157	lead sheets	50.00						50.00		200.00		200.00		
158	leparatomy set	50,000.00												
159	mackintoshes	500.00												
160	magnifying glass	100.00								400.00	900.00	1,300.00		
161	mattress covers	500.00						12,500.00		1,000.00	2,000.00	3,000.00	34,000.00	7,500.00
162	mattresses	5,000.00								5,000.00	10,000.00	15,000.00	310,000.00	60,000.00
163	medicine cups	20.00											1,280.00	280.00
164	medicine glass	20.00											80.00	40.00
165	minor surgery instrument	20,000.00						160,000.00					40,000.00	20,000.00
166	monitors (cardiac)	200,000.00						200,000.00					400,000.00	400,000.00
167	monocular microscope	10,000.00									210,000.00	210,000.00		
168	moruary sheets	150.00												
169	mouth gag	100.00												
170	mugs	20.00											1,280.00	280.00
171	needle hypodermic:re-usable all sz	5.00												
172	needle hypodermic:single use all sz	2.00						12.00		2.00	168.00	170.00	4.00	2.00
173	Needle, blood transfusion, (fateman) blunt	20.00									120.00	120.00		
174	needle:lumber puncture set	20,000.00												
175	nessler's tube	200.00									1,800.00	1,800.00		
176	Notice board	1,000.00		4,000.00	2,000.00	2,000.00	8,000.00	29,000.00		10,000.00	16,000.00	26,000.00	7,000.00	2,000.00
177	office equipment	3,000.00		21,000.00	3,000.00		24,000.00	72,000.00		15,000.00	39,000.00	54,000.00	6,000.00	6,000.00
178	Ophthalmoscope	5,000.00						10,000.00					10,000.00	10,000.00
179	otft blood grouping, complete	10,000.00												
180	oxygen cylinders with trolley, flowmeters	12,000.00						36,000.00					24,000.00	36,000.00
181	oxygen masks	500.00						500.00					1,000.00	1,500.00
182	patient coats or jackets	250.00								1,500.00		1,500.00	16,000.00	3,500.00
183	patient pyjama	150.00								900.00		900.00	9,600.00	2,100.00
184	pelvic meter	500.00												
185	Percussion hammer	100.00						1,600.00			100.00	100.00	200.00	200.00
186	perio - surgical instrument	5,000.00						10,000.00						
187	petri dishes	50.00									2,100.00	2,100.00		
188	photo therapy	75,000.00											150,000.00	150,000.00
189	pillow cases	75.00						1,875.00		300.00	300.00	600.00	5,100.00	1,125.00
190	pillows	250.00						6,250.00		1,000.00	1,000.00	2,000.00	16,000.00	3,250.00
191	pint measures	200.00												
192	pipette for haemoglobinometers and blood	5,000.00									60,000.00	60,000.00		
193	pipette, serological	5,000.00									60,000.00	60,000.00		
194	pipettes, dilution for haemocytometers	5,000.00									60,000.00	60,000.00		
195	plastic filling instrument	5,000.00						10,000.00						
196	plates for serving	150.00		1,200.00			1,200.00						9,000.00	1,800.00

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197	platform scales	1,000.00		-	-	-	-	1,000.00			1,000.00	1,000.00	-	-
198	post mortem table	25,000.00		-	-	-	-	-			-	-	-	-
199	potatoe peeler	20.00		-	-	-	-	-			-	-	-	-
200	probe, uterine	20,000.00		-	-	-	-	-			-	-	-	-
201	proctoscopes	500.00		-	-	-	-	-			-	-	-	-
202	prosthetic laboratory and denture processing	50,000.00		-	-	-	-	50,000.00			-	-	-	-
203	rack, storage	2,000.00		30,000.00	4,000.00	-	34,000.00	64,000.00		24,000.00	30,000.00	54,000.00	24,000.00	12,000.00
204	rack, test tube	12,000.00		-	-	-	-	12,000.00			-	-	24,000.00	24,000.00
205	rack, utensils	3,000.00		6,000.00	-	-	6,000.00	-			-	-	6,000.00	3,000.00
206	Refrigerator	8,000.00		32,000.00	-	-	32,000.00	56,000.00			56,000.00	56,000.00	32,000.00	16,000.00
207	resuscitation tray:new born babies	20,000.00		-	-	-	-	-			-	-	-	-
208	room heaters	1,000.00		8,000.00	1,000.00	-	9,000.00	21,000.00		4,000.00	11,000.00	15,000.00	22,000.00	12,000.00
209	saw, plaster	3,000.00		-	-	-	-	-			-	-	-	-
210	scalers assorted	2,000.00		-	-	-	-	4,000.00			-	-	-	-
211	scalers set sub - gingival	2,000.00		-	-	-	-	4,000.00			-	-	-	-
212	scalers ultrasonic	3,000.00		-	-	-	-	6,000.00			-	-	-	-
213	scissors:Bandage, lister's	500.00		-	-	-	-	-			-	-	-	-
214	scissors:curved and Straight	500.00		-	-	-	-	-			-	-	-	-
215	scissors:dissecting	500.00		-	-	-	-	-			-	-	-	-
216	scissors:Episiotomy	500.00		-	-	-	-	-			-	-	-	-
217	scissors:general type	250.00		-	-	-	-	-			-	-	500.00	250.00
218	scissors:mayo's	500.00		-	-	-	-	-			-	-	-	-
219	scissors:stitch cutting	250.00		-	-	-	-	-			-	-	-	-
220	Screen stands	4,000.00		-	-	-	-	108,000.00		16,000.00	8,000.00	24,000.00	16,000.00	12,000.00
221	screws clamp	200.00		-	-	-	-	-			-	-	-	-
222	set blood taking, complete	500.00		-	-	-	-	-			3,000.00	3,000.00	-	-
223	set of instruments for post mortem	200,000.00		-	-	-	-	-			-	-	-	-
224	set plasma giving, complete	500.00		-	-	-	-	-			3,000.00	3,000.00	-	-
225	set, blood & saline giving (UK pattern)	500.00		-	-	-	-	-			3,000.00	3,000.00	-	-
226	Shadowless ceiling lamp	75,000.00		-	-	-	-	-			-	-	-	-
227	Shadowless portable type lamp	10,000.00		-	-	-	-	-		10,000.00	25,000.00	35,000.00	10,000.00	5,000.00
228	Sink with instrument work area	5,000.00		-	-	-	-	2,000.00			12,000.00	12,000.00	-	-
229	sinks with liquid soap dispensers	2,000.00		-	-	-	-	1,000.00			9,400.00	9,400.00	-	-
230	slides and slide boxes	100.00		-	-	-	-	-		600.00	-	600.00	6,000.00	1,200.00
231	slippers	100.00		-	-	-	-	-			-	-	-	-
232	sound uterine	5,000.00		-	-	-	-	-			-	-	-	-
233	spectroscope, adjustable slit	20,000.00		-	-	-	-	-			100,000.00	100,000.00	-	-
234	speculum	1,000.00		-	-	-	-	1,000.00			-	-	-	-
235	Speculum, sims	1,000.00		-	-	-	-	-			-	-	-	-
236	Sphygmomanometer	1,000.00		-	-	-	-	19,000.00			1,000.00	1,000.00	2,000.00	2,000.00

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237	spirit lamp	100.00									500.00	500.00	200.00	200.00
238	splints, arm	200.00											400.00	400.00
239	splints, thomas	550.00											1,100.00	1,100.00
240	sponge, nylon	50.00												
241	spoons, stainless steel	20.00												
242	stand:basin	750.00												
243	stand:I. V.	750.00						5,250.00		750.00		750.00	46,500.00	9,750.00
244	stand:test tube	750.00												
245	stand:towel	750.00						750.00					45,000.00	9,000.00
246	stand:transfusion, metal, complete	1,200.00									1,200.00	1,200.00		
247	Step stool	750.00						22,500.00		2,250.00	750.00	3,000.00	48,000.00	11,250.00
248	sterilizer steam	750.00									3,750.00	3,750.00		
249	sterilizer steam, portable type	5,000.00									20,000.00	20,000.00		
250	sterilizer, hot air	3,000.00												
251	sterilizer, instruments	10,000.00												
252	sterilizer, steam(autoclave)	4,000.00											20,000.00	20,000.00
253	sterilizer:bowls and utensils	2,000.00												
254	sterilizer:Pressure, hot&cold water	150,000.00												
255	sterilizers	10,000.00						20,000.00						
256	Stethoscope	200.00						4,400.00			200.00	200.00	400.00	400.00
257	stitch removal set:forceps, scissors	2,000.00												
258	Stool revolving	1,000.00						30,000.00		3,000.00	1,000.00	4,000.00	4,000.00	3,000.00
259	stool, revolving, stainless steel	2,000.00												
260	stop clock, three way	200.00												
261	stop watch	100.00									700.00	700.00		
262	stove	250.00									1,250.00	1,250.00		
263	strainers	100.00												
264	stress test equipment	50,000.00						50,000.00						
265	Stretcher and stretcher carrier	8,000.00						152,000.00		8,000.00	8,000.00	16,000.00	16,000.00	16,000.00
266	suction apparatus	5,000.00						10,000.00						
267	suitable strips(substitute for var. tests)	100.00									2,100.00	2,100.00		
268	suture tray	2,000.00												
269	syringe:transfusion, all glass	200.00									1,200.00	1,200.00		
270	syringe hypodermic:re-usable all sz	100.00												
271	syr hypodermic:single use all sz	50.00						300.00		100.00	600.00	700.00	100.00	50.00
272	syringes, all glass, all sizes	1,000.00									12,000.00	12,000.00		
273	table cloth	200.00						5,800.00		2,000.00	2,000.00	4,000.00	1,600.00	600.00
274	table ware	2,000.00					8,000.00							
275	table with marble top	5,000.00					20,000.00				45,000.00	45,000.00		
276	Table, conference	50,000.00												

S.NO.	EQUIPMENT & FURNITURE	RATE	ENTRANCE AREA	Main(OPD) Entrance	Emergency Entrance	Services & Staff Entrance	SUB TOTAL	AMBULATORY CARE	DIAGNOSTIC	Imaging	Clinical Labs	SUB TOTAL	INTERMEDIATE CARE	INTENSIVE CARE
277	Table, doctors	4,000.00		-	-	-	-	76,000.00		-	4,000.00	4,000.00	-	-
278	Table, metal, office/ counter	4,000.00		28,000.00	8,000.00	-	36,000.00	48,000.00		48,000.00	44,000.00	92,000.00	16,000.00	4,000.00
279	table, operation, hydraulic, major	60,000.00		-	-	-	-	-		-	-	-	-	-
280	table, operation, hydraulic, minor	10,000.00		-	-	-	-	-		-	-	-	-	-
281	table:examination/stretchers with mattress	4,000.00		-	-	-	-	92,000.00		4,000.00	8,000.00	12,000.00	16,000.00	12,000.00
282	Table:instruments	5,000.00		-	-	-	-	30,000.00		5,000.00	-	5,000.00	10,000.00	5,000.00
283	table:Obstetric, labour	10,000.00		-	-	-	-	-		-	-	-	-	-
284	tank thermometer	500.00		-	-	-	-	-		1,000.00	-	1,000.00	-	-
285	Tape measure, steel	50.00		-	-	-	-	-		-	-	-	-	-
286	test tubes pyrex type (glass)	150.00		-	-	-	-	-		-	12,600.00	12,600.00	-	-
287	thermometers, clinical	150.00		-	-	-	-	2,850.00		150.00	150.00	300.00	300.00	300.00
288	thermometers, rectal	200.00		-	-	-	-	-		200.00	-	200.00	400.00	400.00
289	Torch	100.00		-	-	-	-	2,000.00		100.00	100.00	200.00	200.00	200.00
290	torch (flashlights)	500.00		-	-	-	-	-		-	-	-	-	-
291	Toungge depressor	100.00		-	-	-	-	2,000.00		100.00	100.00	200.00	200.00	200.00
292	towel clip	200.00		-	-	-	-	-		-	-	-	-	-
293	towels	100.00		-	-	-	-	-		600.00	-	600.00	400.00	200.00
294	trace dilators	500.00		-	-	-	-	-		-	-	-	-	-
295	tracheostomy sets	5,000.00		-	-	-	-	-		-	-	-	-	-
296	tray complete set for edentulous and	5,000.00		-	-	-	-	10,000.00		-	-	-	-	-
297	tray with cover	100.00		-	-	-	-	-		-	-	-	-	-
298	tray, food (stainless steel)	750.00		-	-	-	-	-		-	-	-	200.00	200.00
299	trays	200.00		-	-	-	-	1,200.00		-	1,200.00	1,200.00	45,000.00	9,000.00
300	trocar cannula	2,000.00		-	-	-	-	-		-	-	-	-	-
301	trolley, closed and ordinary	1,500.00		-	-	-	-	-		3,000.00	-	3,000.00	-	-
302	trolley, general medical stores	1,000.00		-	-	-	-	-		-	-	-	2,000.00	1,000.00
303	trolley, hot food	2,000.00		-	-	-	-	-		-	-	-	4,000.00	2,000.00
304	trolley, linen/ house keeping	2,000.00		-	-	-	-	-		4,000.00	-	4,000.00	4,000.00	2,000.00
305	trolley, patients	4,000.00		8,000.00	8,000.00	-	16,000.00	36,000.00		20,000.00	4,000.00	24,000.00	8,000.00	4,000.00
306	Trolley,dressing/instrument/ med.	5,000.00		-	-	-	-	50,000.00		-	-	-	20,000.00	15,000.00
307	trolleys	2,000.00		-	-	-	-	4,000.00		-	4,000.00	4,000.00	-	-
308	trough, staining	500.00		-	-	-	-	-		-	4,500.00	4,500.00	-	-
309	tubes:foetus	500.00		-	-	-	-	-		-	-	-	-	-
310	tubes:ryles	500.00		-	-	-	-	-		-	-	-	-	-
311	tubes:stomach	500.00		-	-	-	-	-		-	-	-	-	-
312	tubes:tracheostomy	500.00		-	-	-	-	-		-	-	-	-	-
313	tubs, baby bath	5,000.00		-	-	-	-	-		-	-	-	-	-
314	tumblers	20.00		-	-	-	-	100.00		-	20.00	20.00	40.00	20.00
315	tumblers (stainless steel)	50.00		-	-	-	-	-		-	-	-	3,000.00	600.00
316	ultrasound trolley:multi probe	1,500,000.00		-	-	-	-	-		1,500,000.00	-	1,500,000.00	-	-

S.NO.	EQUIPMENT & FURNITURE	RATE	ENTRANCE AREA	Main(OPD) Entrance	Emergency Entrance	Services & Staff Entrance	SUB TOTAL	AMBULATORY CARE	DIAGNOSTIC	Imaging	Clinical Labs	SUB TOTAL	INTERMEDIATE CARE	INTENSIVE CARE
317	ultra sound machine:multiple probe	750,000.00		-	-	-	-	-	750,000.00	-	-	750,000.00	-	-
318	ultra sound scanner, multi purpose	1,000,000.00		-	-	-	-	-	1,000,000.00	-	-	1,000,000.00	-	-
319	urinals	500.00		-	-	-	-	-	-	-	-	-	-	-
320	urine collection jar	500.00		-	-	-	-	6,000.00	-	-	9,000.00	9,000.00	-	-
321	vaccum extractor	2,000.00		-	-	-	-	-	-	-	-	-	-	-
322	venesection sets	50,000.00		-	-	-	-	-	-	-	-	-	-	-
323	volumetrics flasks	2,000.00		-	-	-	-	24,000.00	-	-	66,000.00	66,000.00	-	-
324	wall clock	100.00		200.00	100.00	200.00	500.00	2,800.00	800.00	800.00	900.00	1,700.00	700.00	-
325	Wash hand basin with liquid soap dispenser	3,000.00		3,000.00	-	-	3,000.00	84,000.00	21,000.00	21,000.00	36,000.00	57,000.00	18,000.00	6,000.00
326	washing machine for floor cleaning	35,000.00		70,000.00	35,000.00	-	105,000.00	-	-	-	-	-	-	-
327	Washing machines	25,000.00		-	-	-	-	125,000.00	-	-	25,000.00	25,000.00	50,000.00	25,000.00
328	waste paper baskets	100.00		500.00	200.00	200.00	900.00	3,700.00	1,200.00	1,200.00	1,400.00	2,600.00	7,100.00	1,400.00
329	Waste receptacles	500.00		-	-	-	-	7,000.00	500.00	500.00	500.00	1,000.00	3,000.00	2,000.00
330	water bath, serological	1,000.00		-	-	-	-	-	-	-	5,000.00	5,000.00	-	-
331	Water cooler with 3/4 spouts	8,000.00		16,000.00	8,000.00	-	24,000.00	40,000.00	-	-	8,000.00	8,000.00	32,000.00	16,000.00
332	weighing machine, baby	500.00		-	-	-	-	-	-	-	-	-	-	-
333	weighing scales	500.00		-	-	-	-	8,000.00	500.00	500.00	500.00	1,000.00	1,000.00	1,000.00
334	wire gauze	50.00		-	-	-	-	-	-	-	250.00	250.00	-	-
335	wiring set for jaw fractures	500.00		-	-	-	-	-	-	-	-	-	-	-
336	wrapper	200.00		-	-	-	-	-	-	-	-	-	-	-
337	x- ray film corner	2,000.00		-	-	-	-	2,000.00	-	4,000.00	-	4,000.00	-	-
338	x- ray film processing tank	10,000.00		-	-	-	-	-	-	20,000.00	-	20,000.00	-	-
339	x- ray protection screen	6,000.00		-	-	-	-	6,000.00	12,000.00	12,000.00	-	12,000.00	-	-
340	x- ray view box	1,000.00		-	-	-	-	29,000.00	11,000.00	11,000.00	2,000.00	13,000.00	24,000.00	13,000.00
	TOTAL		425,320.00	133,420.00	3,200.00	561,940.00	3,578,567.00	15,690,372.00	2,353,618.00	18,043,990.00	3,480,764.00	1,524,637.00		

109-BED HOSPITAL, NEW DELHI														
INSTRUMENTS, EQUIPMENT & FURNITURE COST														
(Refer Data Sheet - 24 for details)														
S.NO.	EQUIPMENT & FURNITURE	RATE	CRITICAL CARE AREA	THERAPEUTIC SERVICE	Day Care	Operation Theatre suite	Delivery suite	SUB TOTAL	HOSPITAL SERVICES	ENGINEERING SERVICE	CORRIDORS	TOILETS	SUB TOTAL	ADMIN & ANCILLARY
1	air motor	14,000.00	-	-	-	-	-	-	-	-	-	-	-	-
2	air rotator with compressor	20,000.00	-	-	-	-	-	-	-	-	-	-	-	-
3	air viva	4,000.00	-	-	-	-	-	-	-	-	-	-	-	-
4	albuminometer (esbach's)	7,500.00	-	-	-	-	-	-	-	-	-	-	-	-
5	Anaesthesia Equipments	100,000.00	-	-	-	300,000.00	300,000.00	600,000.00	-	-	-	-	-	-
6	Aprons, lead-rubber/rubber	1,000.00	-	-	-	-	12,000.00	12,000.00	-	-	-	-	-	-
7	Audiometer	20,000.00	-	-	-	-	-	-	4,000.00	-	-	-	-	-
8	baby tray	1,000.00	-	-	-	-	-	-	-	-	-	-	-	-
9	back rests	750.00	8,250.00	-	3,000.00	4,500.00	8,250.00	15,750.00	-	-	-	-	-	-
10	basin	1,500.00	6,000.00	-	4,500.00	6,000.00	6,000.00	16,500.00	6,000.00	-	-	-	1,500.00	-
11	basin, stainless steel	3,000.00	6,000.00	-	9,000.00	27,000.00	15,000.00	51,000.00	3,000.00	-	-	-	-	-
12	beaker	30.00	-	-	-	-	-	-	-	-	-	-	-	-
13	bed pans	250.00	2,750.00	-	1,000.00	1,500.00	2,750.00	5,250.00	1,000.00	-	-	-	-	-
14	bed pans, stainless steel	400.00	-	-	-	-	1,600.00	1,600.00	1,600.00	-	-	-	-	-
15	bed, fowler's	10,500.00	115,500.00	-	42,000.00	73,500.00	115,500.00	231,000.00	-	-	-	-	-	-
16	Bedsheet	150.00	2,400.00	-	1,050.00	2,550.00	3,450.00	7,050.00	-	-	-	-	-	-
17	bedside locker	2,000.00	24,000.00	-	8,000.00	14,000.00	24,000.00	46,000.00	-	-	-	-	-	-
18	bedsteads	5,000.00	55,000.00	-	20,000.00	30,000.00	55,000.00	105,000.00	-	-	-	-	-	-
19	biopsy kit	4,000.00	-	-	-	-	-	-	16,000.00	-	-	-	-	-
20	bladder set	50,000.00	-	-	-	-	-	-	200,000.00	-	-	-	-	-
21	blankets	600.00	8,400.00	-	2,400.00	5,400.00	10,800.00	18,600.00	-	-	-	-	-	-
22	blood sedimentation rate stand-6/12 tubes	2,000.00	-	-	-	-	-	-	-	-	-	-	-	-
23	Bottle blood, transfusion, with screw neck	500.00	-	-	-	-	-	-	-	-	-	-	-	-
24	bottles, wide mouth	200.00	-	-	-	-	-	-	-	-	-	-	-	-
25	bowl	250.00	1,000.00	-	1,000.00	1,000.00	2,500.00	4,500.00	800.00	-	-	-	-	-
26	bowl for placenta, stainless steel	400.00	-	-	-	-	1,600.00	1,600.00	1,600.00	-	-	-	-	-
27	Bowls, stainless steel	400.00	1,600.00	-	2,400.00	4,800.00	4,000.00	11,200.00	2,400.00	-	-	-	-	-
28	bowls, wash	200.00	400.00	-	600.00	1,200.00	1,000.00	2,800.00	3,600.00	-	-	-	-	-
29	brooms, mops etc.	50.00	150.00	-	150.00	150.00	150.00	450.00	-	-	-	-	50.00	-
30	brush, nail	500.00	500.00	-	1,000.00	1,000.00	1,000.00	3,000.00	2,500.00	-	-	-	-	-
31	bucket	150.00	450.00	-	450.00	450.00	750.00	1,650.00	-	-	-	-	-	-
32	bucket with lid	300.00	1,200.00	-	1,500.00	2,400.00	2,100.00	6,000.00	-	-	-	-	-	300.00
33	buckets stainless steel	500.00	6,500.00	-	3,500.00	7,500.00	8,000.00	19,000.00	3,000.00	-	-	-	-	-
34	burettes	1,000.00	-	-	-	-	-	-	200,000.00	-	-	-	-	-
35	burr hole set	50,000.00	-	-	-	-	-	-	-	-	-	-	-	-
36	C.T. scan unit	10,000,000.00	-	-	-	-	-	-	-	-	-	-	-	-

S.NO.	EQUIPMENT & FURNITURE	RATE	CRITICAL CARE AREA	THERAPEUTIC SERVICE	Day Care	Operation Theatre suite	Delivery suite	SUB TOTAL	HOSPITAL SERVICES	ENGINEERING SERVICE	CORRIDORS	TOILETS	SUB TOTAL	ADMIN & ANCILLARY
37	cabinet, instruments	4,000.00	20,000.00		28,000.00	12,000.00	32,000.00	72,000.00						
38	cabinet, steel, instruments	12,000.00	48,000.00		60,000.00	96,000.00	96,000.00	252,000.00	72,000.00					
39	can, douche	500.00					2,000.00	2,000.00						
40	cannula, transfusion, hamilton baileys	5,000.00												
41	cannula blood transfusion with siflette	150.00												
42	cannula transfusion, hamilton baileys luer	200.00												
43	cans	250.00							1,000.00					
44	cans, 100 litre	500.00							6,000.00					
45	cassette with intensifying screens	2,000.00												
46	catheter rubber and metal	250.00					2,000.00	2,000.00						
47	catheter, rubber all sizes	100.00	100.00		200.00	200.00	500.00	900.00	400.00					
48	catheterization sets	2,000.00					8,000.00	8,000.00						
49	centrifuge AC/DC 200 W with 8 buckets	10,000.00												
50	centrifuge tubes (glass)	500.00												
51	chair, dental	180,000.00												
52	Chair, metal office type	1,000.00	3,000.00		5,000.00	8,000.00	3,000.00	16,000.00	28,000.00	8,000.00			49,000.00	
53	chair, revolving	2,500.00			7,500.00	10,000.00		17,500.00						
54	chair, wheel	3,000.00	18,000.00		18,000.00	6,000.00	18,000.00	42,000.00						
55	Chairs - plastic moulded	1,200.00	13,200.00		24,000.00	7,200.00	20,400.00	51,600.00	4,800.00					
56	chairs, easy	3,000.00	36,000.00		18,000.00	21,000.00	36,000.00	75,000.00						
57	chamber pots	500.00	5,500.00		2,000.00	3,000.00	5,500.00	10,500.00						
58	chart holder	150.00	1,800.00		1,050.00	1,500.00	2,700.00	5,250.00						
59	chemical mixing plunger	10,000.00												
60	chest instruments set	50,000.00							200,000.00					
61	colorimeter	5,000.00												
62	cooking range with oven	10,000.00							20,000.00					
63	cover, glass, haemocytometer	10,000.00												
64	cradles, baby	2,500.00												
65	craniotomy set	10,000.00							40,000.00					
66	curtains	150.00	1,650.00		600.00	900.00	1,650.00	3,150.00						
67	dark room adaption goggles	500.00												
68	dark room safe light	500.00												
69	dark room timer	100.00												
70	delivery tray	3,000.00							12,000.00					
71	dental unit, complete	50,000.00												
72	dental x-ray unit & developing facilities	150,000.00												
73	Desk:Nurses station counter	5,000.00	5,000.00		5,000.00	5,000.00	5,000.00	15,000.00						
74	Desk:Reception/registration	20,000.00												
75	Diagnostic 60 M.A. X-ray machine	200,000.00												
76	diagnostic x-ray unit 200/300 M.A., with	750,000.00												

S.NO.	EQUIPMENT & FURNITURE	RATE	CRITICAL CARE AREA	THERAPEUTIC SERVICE	Day Care	Operation Theatre suite	Delivery suite	SUB TOTAL	HOSPITAL SERVICES	ENGINEERING SERVICE	CORRIDORS	TOILETS	SUB TOTAL	ADMIN & ANCILLARY
77	diathermy machine	20,000.00	20,000.00		40,000.00	40,000.00	20,000.00	100,000.00	-	-	-	-	-	-
78	doctors cots	1,000.00	1,000.00		-	1,000.00	1,000.00	2,000.00	-	-	-	-	-	-
79	Doctors towel	100.00	300.00		500.00	800.00	600.00	1,900.00	-	-	-	-	-	-
80	draw sheets	150.00	300.00		-	-	-	-	-	-	-	-	-	-
81	dressing drum	2,000.00	6,000.00		10,000.00	8,000.00	12,000.00	30,000.00	-	-	-	-	-	-
82	dressing drum, all sizes, SS	5,000.00	5,000.00		10,000.00	10,000.00	5,000.00	25,000.00	40,000.00	-	-	-	-	-
83	dressing sets :A) suture needles B) artery	2,000.00	6,000.00		6,000.00	6,000.00	4,000.00	16,000.00	8,000.00	-	-	-	-	-
84	Dusters etc.	20.00	300.00		200.00	260.00	340.00	800.00	240.00	40.00	-	-	-	640.00
85	ECG Machines	25,000.00	75,000.00		25,000.00	25,000.00	25,000.00	75,000.00	-	-	-	-	-	-
86	emergency light	1,000.00	14,000.00		10,000.00	16,000.00	18,000.00	44,000.00	11,000.00	8,000.00	-	-	-	15,000.00
87	endoscopy set	1,200,000.00	-		-	-	-	-	4,800,000.00	-	-	-	-	-
88	enema can sets	500.00	5,500.00		2,000.00	3,000.00	5,500.00	10,500.00	-	-	-	-	-	-
89	ENT speculum	1,000.00	3,000.00		5,000.00	1,000.00	3,000.00	9,000.00	-	-	-	-	-	-
90	episiotomy tray	5,000.00	-		-	-	-	-	20,000.00	-	-	-	-	-
91	excavators	2,000.00	-		-	-	-	-	-	-	-	-	-	-
92	extraction forcep assorted	2,000.00	-		-	-	-	-	-	-	-	-	-	-
93	facilities to keep dead body cool	50,000.00	-		-	-	-	-	50,000.00	-	-	-	-	-
94	feeding cups	100.00	-		-	-	-	-	-	-	-	-	-	-
95	feeding cups with spout	100.00	1,100.00		400.00	600.00	400.00	400.00	-	-	-	-	-	-
96	file cabinets	4,000.00	4,000.00		16,000.00	24,000.00	4,000.00	44,000.00	80,000.00	32,000.00	-	-	-	228,000.00
97	filling instrument set	10,000.00	-		-	-	-	-	-	-	-	-	-	-
98	film clips	100.00	-		-	-	-	-	-	-	-	-	-	-
99	film hanger and wall brackets	600.00	-		-	-	-	-	-	-	-	-	-	-
100	flit pumps	50.00	150.00		150.00	150.00	150.00	450.00	-	-	-	-	-	-
101	Floor scrubbers	50.00	150.00		150.00	150.00	150.00	450.00	-	-	-	-	-	-
102	fly swatters	10.00	110.00		40.00	60.00	110.00	210.00	-	-	-	-	-	-
103	foetoscope	5,000.00	-		-	-	10,000.00	10,000.00	-	-	-	-	-	-
104	folding screen	2,000.00	26,000.00		18,000.00	26,000.00	32,000.00	76,000.00	-	-	-	-	-	-
105	foot steps	750.00	9,750.00		6,750.00	9,000.00	12,000.00	27,750.00	-	-	-	-	-	-
106	Forceps :allis	500.00	-		-	-	-	-	2,000.00	-	-	-	-	-
107	Forceps :artery	500.00	-		-	-	4,000.00	4,000.00	2,000.00	-	-	-	-	-
108	Forceps :dissecting	500.00	-		-	-	4,000.00	4,000.00	2,000.00	-	-	-	-	-
109	forceps tray	500.00	-		-	-	-	-	2,000.00	-	-	-	-	-
110	forceps:cheatle's	1,000.00	2,000.00		5,000.00	3,000.00	10,000.00	18,000.00	4,000.00	-	-	-	-	-
111	forceps:obstetric, furguson	1,000.00	-		-	-	8,000.00	8,000.00	4,000.00	-	-	-	-	-
112	forceps:obstetric, wringles	700.00	-		-	-	5,600.00	5,600.00	2,800.00	-	-	-	-	-
113	forceps:ovum	1,000.00	-		-	-	8,000.00	8,000.00	4,000.00	-	-	-	-	-
114	forceps:sponge holders	200.00	-		-	-	1,600.00	1,600.00	800.00	-	-	-	-	-
115	Fryer (deep fat)	1,500.00	-		-	-	-	-	3,000.00	-	-	-	-	-
116	funnel	50.00	-		-	-	-	-	200.00	-	-	-	-	-

S.NO.	EQUIPMENT & FURNITURE	RATE	CRITICAL CARE AREA	THERAPEUTIC SERVICE	Day Care	Operation Theatre suite	Delivery suite	SUB TOTAL	HOSPITAL SERVICES	ENGINEERING SERVICE	CORRIDORS	TOILETS	SUB TOTAL	ADMIN & ANCILLARY
157	Lead sheets	50.00	-	-	-	-	-	-	-	-	-	-	-	-
158	leparatomy set	50,000.00	-	-	-	-	-	-	200,000.00	-	-	-	-	-
159	mackintoshes	500.00	-	-	-	-	5,000.00	5,000.00	-	-	-	-	-	-
160	magnifying glass	100.00	-	-	200.00	-	-	200.00	-	-	-	-	-	-
161	mattress covers	500.00	8,000.00	-	4,500.00	8,500.00	8,500.00	21,500.00	-	-	-	-	-	-
162	mattresses	5,000.00	60,000.00	-	20,000.00	40,000.00	60,000.00	120,000.00	-	-	-	-	-	-
163	medicine cups	20.00	260.00	-	120.00	160.00	260.00	540.00	-	-	-	-	-	-
164	medicine glass	20.00	40.00	-	-	40.00	40.00	80.00	-	-	-	-	-	-
165	minor surgery instrument	20,000.00	40,000.00	-	40,000.00	40,000.00	20,000.00	100,000.00	80,000.00	-	-	-	-	-
166	monitors (cardiac)	200,000.00	800,000.00	-	1,000,000.00	600,000.00	1,600,000.00	3,200,000.00	-	-	-	-	-	-
167	monocular microscope	10,000.00	-	-	-	-	-	-	-	-	-	-	-	-
168	mortuary sheets	150.00	-	-	-	-	-	-	900.00	-	-	-	-	-
169	mouth gag	100.00	100.00	-	200.00	200.00	500.00	900.00	-	-	-	-	-	-
170	mugs	20.00	260.00	-	80.00	160.00	260.00	500.00	-	-	-	-	-	240.00
171	needle hypodermic:re-usable all sz	5.00	-	-	6.00	12.00	10.00	28.00	-	-	-	-	-	-
172	needle hypodermic:single use all sz	2.00	4.00	-	-	-	-	-	8.00	-	-	-	-	-
173	Needle, blood transfusion, (fatemam) blunt	20.00	-	-	-	-	-	-	-	-	-	-	-	-
174	needle:lumber puncture set	20,000.00	-	-	-	-	80,000.00	80,000.00	-	-	-	-	-	-
175	nessler's tube	200.00	-	-	-	-	-	-	-	-	-	-	-	-
176	Notice board	1,000.00	2,000.00	-	4,000.00	2,000.00	3,000.00	9,000.00	6,000.00	2,000.00	-	-	19,000.00	-
177	office equipment	3,000.00	3,000.00	-	9,000.00	6,000.00	3,000.00	18,000.00	39,000.00	12,000.00	-	-	75,000.00	-
178	Ophthalmoscope	5,000.00	15,000.00	-	25,000.00	5,000.00	35,000.00	65,000.00	-	-	-	-	-	-
179	offit blood grouping, complete	10,000.00	-	-	-	-	-	-	-	-	-	-	-	-
180	oxygen cylinders with trolley, flowmeters	12,000.00	48,000.00	-	60,000.00	72,000.00	120,000.00	252,000.00	-	-	-	-	-	-
181	oxygen masks	500.00	2,000.00	-	2,500.00	3,000.00	5,000.00	10,500.00	2,000.00	-	-	-	-	-
182	patient coats or jackets	250.00	3,250.00	-	2,500.00	7,500.00	2,750.00	12,750.00	-	-	-	-	-	-
183	patient pyjama	150.00	1,950.00	-	1,500.00	4,500.00	1,650.00	7,650.00	-	-	-	-	-	-
184	pelvic meter	500.00	-	-	-	-	2,000.00	2,000.00	-	-	-	-	-	-
185	Percussion hammer	100.00	300.00	-	500.00	200.00	300.00	1,000.00	-	-	-	-	-	-
186	perio - surgical instrument	5,000.00	-	-	-	-	-	-	-	-	-	-	-	-
187	petri dishes	50.00	-	-	-	-	-	-	-	-	-	-	-	-
188	photo therapy	75,000.00	225,000.00	-	225,000.00	75,000.00	225,000.00	525,000.00	-	-	-	-	-	-
189	pillow cases	75.00	1,200.00	-	675.00	1,050.00	1,275.00	3,000.00	-	-	-	-	-	-
190	pillows	250.00	3,500.00	-	2,250.00	3,500.00	4,250.00	10,000.00	800.00	-	-	-	-	-
191	pint measures	200.00	-	-	-	-	800.00	800.00	-	-	-	-	-	-
192	pipette for haemoglobinometers and blood	5,000.00	-	-	-	-	-	-	-	-	-	-	-	-
193	pipette, serological	5,000.00	-	-	-	-	-	-	-	-	-	-	-	-
194	pipettes, dilution for haemocytometers	5,000.00	-	-	-	-	-	-	-	-	-	-	-	-
195	plastic filling instrument	5,000.00	-	-	-	-	-	-	-	-	-	-	-	-
196	plates for serving	150.00	1,650.00	-	600.00	900.00	1,650.00	3,150.00	15,000.00	-	-	-	-	-

S.NO.	EQUIPMENT & FURNITURE	RATE	CRITICAL CARE AREA	THERAPEUTIC SERVICE	Day Care	Operation Theatre suite	Delivery suite	SUB TOTAL	HOSPITAL SERVICES	ENGINEERING SERVICE	CORRIDORS	TOILETS	SUB TOTAL	ADMIN & ANCLARY
197	platform scales	1,000.00	-	-	-	-	-	-	2,000.00	-	-	-	-	-
198	post mortem table	25,000.00	-	-	-	-	-	-	25,000.00	-	-	-	-	-
199	potatoe peeler	20.00	-	-	-	-	-	-	120.00	-	-	-	-	-
200	probe, uterine	20,000.00	-	-	-	-	40,000.00	40,000.00	-	-	-	-	-	-
201	proctoscopes	500.00	-	-	-	-	-	-	2,000.00	-	-	-	-	-
202	prosthetic laboratory and denture processing	50,000.00	-	-	-	-	-	-	-	-	-	-	-	-
203	rack, storage	2,000.00	20,000.00	-	18,000.00	20,000.00	20,000.00	58,000.00	48,000.00	16,000.00	-	-	142,000.00	-
204	rack, test tube	12,000.00	36,000.00	-	36,000.00	24,000.00	36,000.00	96,000.00	-	-	-	-	-	-
205	rack, utensils	3,000.00	3,000.00	-	-	3,000.00	3,000.00	6,000.00	18,000.00	-	-	-	3,000.00	-
206	Refrigerator	8,000.00	32,000.00	-	24,000.00	32,000.00	40,000.00	96,000.00	16,000.00	-	-	-	8,000.00	-
207	resuscitation tray:new born babies	20,000.00	-	-	-	-	-	-	80,000.00	-	-	-	-	-
208	room heaters	1,000.00	12,000.00	-	6,000.00	8,000.00	14,000.00	28,000.00	-	-	-	-	-	-
209	saw, plaster	3,000.00	6,000.00	-	6,000.00	6,000.00	3,000.00	15,000.00	-	-	-	-	-	-
210	scalars assorted	2,000.00	-	-	-	-	-	-	-	-	-	-	-	-
211	scalars set sub - gingival	2,000.00	-	-	-	-	-	-	-	-	-	-	-	-
212	scalars ultrasonic	3,000.00	-	-	-	-	-	-	-	-	-	-	-	-
213	scissors:Bandage, lister's	500.00	-	-	-	-	4,000.00	4,000.00	2,000.00	-	-	-	-	-
214	scissors:curved and Straight	500.00	-	-	-	-	4,000.00	4,000.00	2,000.00	-	-	-	-	-
215	scissors:dissecting	500.00	-	-	-	-	-	-	2,000.00	-	-	-	-	-
216	scissors:Episiotomy	500.00	-	-	-	-	4,000.00	4,000.00	2,000.00	-	-	-	-	-
217	scissors:general type	250.00	500.00	-	1,250.00	750.00	1,500.00	3,500.00	1,000.00	-	-	-	-	-
218	scissors:mayo's	500.00	-	-	-	-	-	-	2,000.00	-	-	-	-	-
219	scissors:stitch cutting	250.00	250.00	-	500.00	500.00	2,250.00	3,250.00	1,000.00	-	-	-	-	-
220	Screen stands	4,000.00	12,000.00	-	24,000.00	28,000.00	24,000.00	76,000.00	-	-	-	-	-	-
221	screws clamp	200.00	-	-	-	-	-	-	800.00	-	-	-	-	-
222	set blood taking, complete	500.00	-	-	-	-	-	-	2,000.00	-	-	-	-	-
223	set of instruments for post mortem	200,000.00	-	-	-	-	-	-	800,000.00	-	-	-	-	-
224	set plasma giving, complete	500.00	-	-	-	-	-	-	2,000.00	-	-	-	-	-
225	set, blood & saline giving (UK pattern)	500.00	-	-	-	-	-	-	2,000.00	-	-	-	-	-
226	Shadowless ceiling lamp	75,000.00	75,000.00	-	150,000.00	150,000.00	375,000.00	675,000.00	75,000.00	-	-	-	-	-
227	Shadowless portable type lamp	10,000.00	10,000.00	-	20,000.00	20,000.00	50,000.00	90,000.00	10,000.00	-	-	-	-	-
228	Sink with instrument work area	5,000.00	10,000.00	-	15,000.00	30,000.00	25,000.00	70,000.00	35,000.00	-	-	-	-	-
229	sinks with liquid soap dispensers	2,000.00	-	-	-	-	-	-	-	-	-	-	-	-
230	slides and slide boxes	100.00	-	-	-	-	-	-	400.00	-	-	-	-	-
231	slippers	100.00	1,500.00	-	2,000.00	3,900.00	3,300.00	9,200.00	800.00	-	-	-	-	-
232	sound uterine	5,000.00	-	-	-	-	20,000.00	20,000.00	20,000.00	-	-	-	-	-
233	spectroscope, adjustable slit	20,000.00	-	-	-	-	-	-	-	-	-	-	-	-
234	speculum	1,000.00	-	-	-	-	-	-	4,000.00	-	-	-	-	-
235	Speculum, sims	1,000.00	-	-	-	-	8,000.00	8,000.00	-	-	-	-	-	-
236	Sphygmomanometer	1,000.00	3,000.00	-	5,000.00	1,000.00	3,000.00	9,000.00	-	-	-	-	-	-

EQUIPMENT & FURNITURE										
1	spirit lamp	300.00	300.00	100.00	300.00	700.00	-	-	-	-
2	splints, arm	600.00	600.00	200.00	600.00	1,400.00	-	-	-	-
3	splints, thomas	1,650.00	1,650.00	550.00	1,650.00	3,850.00	-	-	-	-
4	sponge, nylon	50.00	-	-	-	-	-	-	-	-
5	spoons, stainless steel	20.00	80.00	120.00	220.00	420.00	-	-	-	240.00
6	stand:basin	-	-	-	-	-	-	-	-	-
7	stand:I.V.	-	-	-	-	-	-	-	-	-
8	stand:test tube	-	-	-	-	-	-	-	-	-
9	stand:towel	-	-	5,250.00	12,000.00	21,750.00	-	-	-	-
10	stand:transfusion, metal, complete	1,750.00	-	-	-	-	-	-	-	-
11	Step stool	750.00	8,250.00	7,500.00	18,750.00	34,500.00	1,000.00	-	-	1,000.00
12	sterilizer steam	750.00	-	-	-	-	3,000.00	-	-	-
13	sterilizer steam, portable type	5,000.00	-	5,000.00	-	5,000.00	-	-	-	-
14	sterilizer, hot air	3,000.00	-	-	-	-	12,000.00	-	-	-
15	sterilizer, instruments	10,000.00	30,000.00	10,000.00	30,000.00	70,000.00	40,000.00	-	-	-
16	sterilizer, steam(autoclave)	4,000.00	-	-	-	4,000.00	16,000.00	-	-	-
17	sterilizer:bowls and utensils	2,000.00	2,000.00	4,000.00	10,000.00	18,000.00	8,000.00	-	-	-
18	sterilizer:Pressure, hot&cold water	150,000.00	300,000.00	300,000.00	750,000.00	1,350,000.00	600,000.00	-	-	-
19	sterilizers	10,000.00	-	-	-	-	-	-	-	-
20	Stethoscope	200.00	-	800.00	2,000.00	4,200.00	-	-	-	-
21	stitch removal ser:forceps, scissors	2,000.00	-	4,000.00	10,000.00	18,000.00	8,000.00	-	-	-
22	Stool revolving	1,000.00	-	6,000.00	8,000.00	23,000.00	-	-	-	-
23	stool, revolving, stainless steel	2,000.00	-	-	-	6,000.00	-	-	-	-
24	stop clock, three way	200.00	-	-	-	-	800.00	-	-	-
25	stop watch	100.00	-	-	-	-	-	-	-	-
26	stove	250.00	-	-	-	-	-	-	-	-
27	strainers	100.00	-	-	-	-	600.00	-	-	-
28	stress test equipment	50,000.00	-	-	-	-	-	-	-	-
29	Stretcher and stretcher carrier	8,000.00	-	-	-	-	-	-	-	-
30	suction apparatus	5,000.00	-	-	24,000.00	112,000.00	8,000.00	-	-	-
31	suitable strips(substitute for var. tests)	100.00	-	-	40,000.00	80,000.00	20,000.00	-	-	-
32	suture tray	2,000.00	-	-	10,000.00	18,000.00	10,000.00	-	-	-
33	syringe:transfusion, all glass	200.00	-	-	-	-	800.00	-	-	-
34	syringe hypodermic:re-usable all sz	-	-	-	400.00	400.00	-	-	-	-
35	syn hypodermic:single use all sz	-	-	-	850.00	1,300.00	200.00	-	-	-
36	syringes, all glass, all sizes	1,000.00	-	-	5,000.00	9,000.00	-	-	-	-
37	table cloth	200.00	-	1,000.00	600.00	2,200.00	-	-	-	-
38	table ware	1,000.00	-	-	-	-	-	-	-	-
39	table with marble top	1,000.00	-	-	-	-	-	-	-	-
40	Table, conference	50,000.00	-	-	-	-	-	-	-	50,000.00

S.NO.	EQUIPMENT & FURNITURE	RATE	CRITICAL CARE AREA	THERAPEUTIC SERVICE	Day Care	Operation Theatre suite	Delivery suite	SUB TOTAL	HOSPITAL SERVICES	ENGINEERING SERVICE	CORRIDORS	TOILETS	SUB TOTAL	ADMIN & ANCILLARY
277	Table, doctors	4,000.00	-	-	8,000.00	4,000.00	4,000.00	16,000.00	4,000.00	-	-	-	-	-
278	Table, metal, office/ counter	4,000.00	8,000.00	-	12,000.00	20,000.00	8,000.00	40,000.00	64,000.00	16,000.00	-	-	-	96,000.00
279	Table, operation, hydraulic, major	60,000.00	-	-	120,000.00	120,000.00	60,000.00	300,000.00	-	-	-	-	-	-
280	Table, operation, hydraulic, minor	10,000.00	10,000.00	-	-	-	-	-	-	-	-	-	-	-
281	Table:examination/stretchers with mattress	4,000.00	20,000.00	-	32,000.00	40,000.00	16,000.00	88,000.00	-	-	-	-	-	-
282	Table:instruments	5,000.00	10,000.00	-	15,000.00	30,000.00	25,000.00	70,000.00	-	-	-	-	-	-
283	Table:Obstetric, labour	10,000.00	-	-	-	-	40,000.00	40,000.00	-	-	-	-	-	-
284	tank thermometer	500.00	-	-	-	-	-	-	-	-	-	-	-	-
285	Tape measure, steel	50.00	50.00	-	200.00	100.00	250.00	550.00	-	-	-	-	-	-
286	test tubes pyrex type (glass)	150.00	-	-	-	-	-	-	-	-	-	-	-	-
287	thermometers, clinical	150.00	600.00	-	1,200.00	1,200.00	600.00	3,000.00	-	-	-	-	-	-
288	thermometers, rectal	200.00	800.00	-	1,600.00	1,600.00	2,000.00	5,200.00	-	-	-	-	-	-
289	Torch	100.00	300.00	-	600.00	600.00	800.00	2,000.00	-	-	-	-	-	-
290	torch (flashlights)	500.00	500.00	-	2,000.00	1,000.00	500.00	3,500.00	-	-	-	-	-	-
291	Tounge depressor	100.00	400.00	-	800.00	800.00	800.00	2,400.00	-	-	-	-	-	-
292	towel clip	200.00	-	-	-	-	-	-	3,200.00	-	-	-	-	-
293	towels	100.00	200.00	-	800.00	2,400.00	-	3,200.00	1,200.00	-	-	-	-	200.00
294	trace dilators	500.00	-	-	-	-	-	-	2,000.00	-	-	-	-	-
295	tracheostomy sets	5,000.00	-	-	-	-	-	-	20,000.00	-	-	-	-	-
296	tray complete set for edentulous and	5,000.00	-	-	-	-	-	-	-	-	-	-	-	-
297	tray with cover	100.00	300.00	-	500.00	100.00	300.00	900.00	-	-	-	-	-	-
298	tray, food (stainless steel)	750.00	8,250.00	-	3,000.00	4,500.00	12,750.00	20,250.00	75,000.00	-	-	-	-	4,500.00
299	trays	200.00	-	-	-	-	2,800.00	2,800.00	800.00	-	-	-	-	-
300	trocar cannula	2,000.00	-	-	-	-	-	-	8,000.00	-	-	-	-	-
301	trolley, closed and ordinary	1,500.00	-	-	1,500.00	6,000.00	-	7,500.00	6,000.00	-	-	-	-	-
302	trolley, general medical stores	1,000.00	1,000.00	-	-	-	-	-	-	-	-	-	-	-
303	trolley, hot food	2,000.00	2,000.00	-	-	2,000.00	2,000.00	4,000.00	24,000.00	-	-	-	-	4,000.00
304	trolley, linen/ house keeping	2,000.00	2,000.00	-	2,000.00	8,000.00	-	10,000.00	24,000.00	-	-	-	-	-
305	trolley, patients	4,000.00	8,000.00	-	12,000.00	24,000.00	20,000.00	56,000.00	-	-	-	-	-	-
306	Trolley:dressing/instrument/ med.	5,000.00	30,000.00	-	45,000.00	40,000.00	95,000.00	180,000.00	-	-	-	-	-	-
307	trolleys	2,000.00	-	-	-	-	-	-	40,000.00	-	-	-	-	-
308	trough, staining	500.00	-	-	-	-	-	-	-	-	-	-	-	-
309	tubes:foetus	500.00	-	-	-	-	4,000.00	4,000.00	2,000.00	-	-	-	-	-
310	tubes:ryles	500.00	1,000.00	-	2,000.00	2,000.00	5,000.00	9,000.00	2,000.00	-	-	-	-	-
311	tubes:stomach	500.00	-	-	-	-	-	-	2,000.00	-	-	-	-	-
312	tubes:tracheostomy	500.00	-	-	-	-	-	-	2,000.00	-	-	-	-	-
313	tubs, baby bath	5,000.00	-	-	-	-	-	-	20,000.00	-	-	-	-	-
314	tumbler	20.00	60.00	-	60.00	60.00	60.00	180.00	240.00	-	-	-	-	-
315	tumblers (stainless steel)	50.00	550.00	-	200.00	300.00	850.00	1,350.00	-	-	-	-	-	-
316	ultrasound trolley:multi probe	1,500,000.00	-	-	-	-	-	-	-	-	-	-	-	-

S.NO.	EQUIPMENT & FURNITURE	RATE	CRITICAL CARE AREA	THERAPEUTIC SERVICE	Day Care	Operation Theatre suite	Delivery suite	SUB TOTAL	HOSPITAL SERVICES	ENGINEERING SERVICE	CORRIDORS	TOILETS	SUB TOTAL	ADMIN & ANCILLARY
317	ultra sound machine:multiple probe	750,000.00	-	-	-	-	-	-	-	-	-	-	-	-
318	ultra sound scanner, multi pupose	1,000,000.00	-	-	-	-	-	-	-	-	-	-	-	-
319	urnals	500.00	1,000.00	-	2,000.00	2,000.00	3,000.00	7,000.00	-	-	-	-	-	-
320	urine collection jar	500.00	-	-	-	-	-	-	-	-	-	-	-	-
321	vaccum extractor	2,000.00	-	-	-	-	-	-	-	-	-	-	-	-
322	venesection sets	50,000.00	-	-	-	-	-	4,000.00	200,000.00	-	-	-	-	-
323	volumetrics flasks	2,000.00	-	-	-	-	-	-	-	-	-	-	-	-
324	wall clock	100.00	300.00	-	600.00	500.00	500.00	1,600.00	800.00	200.00	-	-	1,800.00	-
325	Wash hand basin with liquid soap dispenser	3,000.00	12,000.00	-	15,000.00	33,000.00	24,000.00	72,000.00	33,000.00	-	-	-	6,000.00	-
326	washing machine for floor cleaning	35,000.00	-	-	-	-	-	-	-	-	-	-	-	-
327	Washing machines	25,000.00	75,000.00	-	75,000.00	75,000.00	75,000.00	225,000.00	300,000.00	-	-	-	-	-
328	waste paper baskets	100.00	1,500.00	-	900.00	1,400.00	1,600.00	3,900.00	900.00	200.00	-	-	2,000.00	-
329	Waste receptacles	500.00	3,000.00	-	3,000.00	6,500.00	4,500.00	14,000.00	3,000.00	-	-	-	500.00	-
330	water bath, serological	1,000.00	-	-	-	-	-	-	-	-	-	-	-	-
331	Water cooler with 3/4 spouts	8,000.00	32,000.00	-	24,000.00	32,000.00	32,000.00	88,000.00	-	-	-	-	-	-
332	weighing machine, baby	500.00	-	-	-	-	1,000.00	1,000.00	-	-	-	-	-	-
333	weighing scales	500.00	1,500.00	-	2,000.00	2,500.00	1,500.00	6,000.00	3,500.00	-	-	-	-	-
334	wire gauze	50.00	-	-	-	-	-	-	-	-	-	-	-	-
335	wiring set for jaw fractures	500.00	-	-	-	-	-	-	-	-	-	-	-	-
336	wrapper	200.00	-	-	-	-	-	-	800.00	-	-	-	-	-
337	x- ray film corner	2,000.00	-	-	-	-	-	-	-	-	-	-	-	-
338	x- ray film processing tank	10,000.00	-	-	-	-	-	-	-	-	-	-	-	-
339	x- ray protection screen	6,000.00	-	-	-	-	-	-	-	-	-	-	-	-
340	x- ray view box	1,000.00	14,000.00	-	10,000.00	16,000.00	21,000.00	47,000.00	-	-	-	-	4,000.00	-
	TOTAL		2,622,954.00	-	3,121,761.00	3,061,822.00	7,692,875.00	13,876,458.00	13,942,658.00	96,340.00	-	-	849,670.00	-

SERVICES COST - BASED ON MARKET RATES

S.NO.	NAME OF SPACE	AC High side	AC Low side	Electrical High side	Electrical Low side	DG Set System	UPS Equipment	UPS wiring etc.
A	ENTRANCE AREA							
	Main(OPD) Entrance	-	-	229,521	860,000	515,251	81,227	90,000
	Emergency Entrance	-	-	40,033	150,000	89,869	27,076	30,000
	Services & Staff Entrance	-	-	13,344	50,000	29,956	-	-
	Total	-	-	282,897.60	1,060,000.00	635,076.25	108,303.25	120,000.00
B	AMBULATORY CARE AREA	170,150.70	350,000.00	739,270	2,770,000	1,659,586	397,112	440,000
C	DIAGNOSTIC SERVICES							
	Imaging	328,147.79	675,000.00	216,176	810,000	485,294	189,531	210,000
	Clinical Labs & Blood bank	267,379.68	550,000.00	213,508	800,000	479,303	144,404	160,000
	Total	595,527.47	1,225,000.00	429,684.10	1,610,000.00	964,596.95	333,935.02	370,000.00
D	INTERMEDIATE CARE AREA	476,421.97	980,000.00	485,730	1,820,000	1,090,414	153,430	170,000
E	INTENSIVE CARE AREA	685,464.27	1,410,000.00	194,826	730,000	437,364	171,480	190,000
F	CRITICAL CARE AREA	559,066.60	1,150,000.00	226,852	850,000	509,259	171,480	190,000
G	THERAPEUTIC SERVICES							
	Day Care	459,406.90	945,000.00	194,826	730,000	437,364	108,303	120,000
	Operation Theatre Suite	896,937.29	1,845,000.00	258,878	970,000	581,155	171,480	190,000
	Delivery Suite	607,681.09	1,250,000.00	216,176	810,000	485,294	171,480	190,000
	Total	1,964,025.28	4,040,000.00	669,880.17	2,510,000.00	1,503,812.64	451,263.54	500,000.00
H	HOSPITAL SERVICES	213,903.74	440,000.00	413,671	1,550,000	928,649	81,227	90,000
I	ENGINEERING SERVICES	43,753.04	90,000.00	346,950	1,300,000	778,867	72,202	80,000
J	CORRIDORS	58,337.38	120,000.00	776,634	2,910,000	1,743,464	388,087	430,000
K	TOILETS	87,506.08	180,000.00	37,364	140,000	83,878	-	-
	Total	145,843.46	300,000.00	813,997.82	3,050,000.00	1,827,342.05	388,086.64	430,000.00
L	ADMIN & ANCILLARY	145,843.46	300,000.00	296,242	1,110,000	665,033	171,480	190,000
	GRAND TOTAL	5,000,000.00	10,285,000.00	4,900,000.00	18,360,000.00	11,000,000.00	2,500,000.00	2,770,000.00

109-BED HOSPITAL, NEW DELHI

SERVICES COST - BASED ON MARKET RATES

S.NO.	NAME OF SPACE	Computers, Server etc.	LAN wiring etc.	EPABX	Telephone wiring etc.	PA system	Nurse Call System	Cable TV System	CCTV System
A	ENTRANCE AREA								
	Main(OPD) Entrance	52,817	67,500	23,316	49,500	44,000	-	128,000	200,000
	Emergency Entrance	17,606	22,500	7,772	16,500	11,000	-	32,000	40,000
	Services & Staff Entrance	-	-	-	-	11,000	-	-	40,000
	Total	70,422.54	90,000.00	31,088.08	66,000.00	66,000.00	-	160,000.00	280,000.00
B	AMBULATORY CARE AREA								
		217,136	277,500	80,311	170,500	-	288,000	80,000	120,000
C	DIAGNOSTIC SERVICES								
	Imaging	88,028	112,500	36,269	77,000	-	60,000	48,000	40,000
	Clinical Labs & Blood bank	88,028	112,500	23,316	49,500	-	12,000	32,000	20,000
	Total	176,056.34	225,000.00	59,585.49	126,500.00	-	72,000.00	80,000.00	60,000.00
D	INTERMEDIATE CARE AREA								
		99,765	127,500	38,860	82,500	-	1,008,000	144,000	-
E	INTENSIVE CARE AREA								
		29,343	37,500	2,591	5,500	-	168,000	-	-
F	CRITICAL CARE AREA								
		52,817	67,500	7,772	16,500	-	60,000	16,000	-
G	THERAPEUTIC SERVICES								
	Day Care	52,817	67,500	12,953	27,500	-	48,000	16,000	20,000
	Operation Theatre Suite	52,817	67,500	7,772	16,500	-	24,000	16,000	-
	Delivery Suite	52,817	67,500	7,772	16,500	-	216,000	16,000	20,000
	Total	158,450.70	202,500.00	28,497.41	60,500.00	-	288,000.00	48,000.00	40,000.00
H	HOSPITAL SERVICES								
		35,211	45,000	20,725	44,000	77,000	-	-	60,000
I	ENGINEERING SERVICES								
		46,948	60,000	20,725	44,000	33,000	-	-	-
J	CORRIDORS								
		252,347	322,500	163,212	346,500	572,000	-	-	600,000
K	TOILETS								
		252,347.42	322,500.00	163,212.44	346,500.00	605,000.00	-	-	600,000.00
L	ADMIN & ANCILLARY								
		111,502	142,500	46,632	99,000	82,500	-	80,000	40,000
	GRAND TOTAL	1,250,000.00	1,597,500.00	500,000.00	1,061,500.00	863,500.00	1,884,000.00	608,000.00	1,200,000.00

109-BED HOSPITAL, NEW DELHI

SERVICES COST - BASED ON MARKET RATES

S.NO.	NAME OF SPACE	Fire Det. System	Hydrants, Pumps	Sprinkler System	San./Plumbing High side	San./Plumbing piping etc.	Medical Gases System	Elevators
A	ENTRANCE AREA							
	Main(OPD) Entrance	168,000	112,077	122,500	-	-	-	2,54,061.97
	Emergency Entrance	72,000	25,618	28,000	-	-	-	55,651.67
	Services & Staff Entrance	12,000	6,404	7,000	-	-	-	14,517.83
	Total	252,000.00	144,098.81	157,500.00	-	-	-	324,231.46
B	AMBULATORY CARE AREA							
		282,000	301,006	329,000	359,906.36	226,870.70	175,000	679,918.22
C	DIAGNOSTIC SERVICES							
	Imaging	138,000	115,279	126,000	-	-	112,500	257,691.42
	Clinical Labs & Blood bank	102,000	102,470	112,000	111,853.0771	70,507.74	-	232,285.23
	Total	240,000.00	217,749.31	238,000.00	111,853.08	70,507.74	112,500.00	489,976.65
D	INTERMEDIATE CARE AREA							
		270,000	281,793	308,000	1,597,508.92	1,007,006.27	225,000	639,461.87
E	INTENSIVE CARE AREA							
		126,000	115,279	126,000	215,756.40	136,004.28	350,000	259,385.17
F	CRITICAL CARE AREA							
		126,000	115,279	126,000	278,367.27	175,471.69	137,500	263,337.25
G	THERAPEUTIC SERVICES							
	Day Care	132,000	115,279	126,000	189,118.0911	119,212.54	125,000	263,740.52
	Operation Theatre Suite	234,000	147,301	161,000	366784.37	231,206.32	300,000	336,894.23
	Delivery Suite	156,000	115,279	126,000	278367.2696	175,471.69	575,000	263,337.25
	Total	522,000.00	377,859.10	413,000.00	834,269.73	525,890.55	1,000,000.00	863,972.00
H	HOSPITAL SERVICES							
		210,000	252,973	276,500	-	-	-	572,244.34
I	ENGINEERING SERVICES							
		168,000	176,121	192,500	-	-	-	401,659.87
J	CORRIDORS							
		2,232,000	1,293,687	1,414,000	-	-	-	2,996,882.70
K	TOILETS							
		36,000	41,629	45,500	1077338.241	679,111.30	-	97,592.06
	Total	2,268,000.00	1,335,315.65	1,459,500.00	1,077,338.24	679,111.30	-	3,094,474.76
L	ADMIN & ANCILLARY							
		216,000	182,525	199,500	-	-	-	411,338.42
	GRAND TOTAL	4,680,000.00	3,500,000.00	3,825,500.00	4,475,000.00	2,820,862.53	2,000,000.00	8,000,000.00

109-BED HOSPITAL, NEW DELHI

TOTAL PROJECT COST - PROPOSED COST MODEL(REFER COST SHEETS 3, 4, 24, 27)

S.NO.	PARTICULARS	AMOUNT (Rs.) (109 BED MODEL)	AMOUNT (Rs.) (100 BED MODEL)	COST/Sqm. @ 9918.84 sqm	COST/BED @ 109 beds	% OF SUBHEAD D COST	% OF TOTAL COST
1	COST OF STRUCTURE (incl. infill panels) (BASED ON CPWD PLINTH AREA RATES)	77,016,490.90	70,657,331.10	7,764.67	706,573.31		29.93
2	COST OF FINISHES (BASED ON DSR-2002/MARKET RATES)						
2.1	DOORS & WINDOWS	2,953,334.61	2,709,481.29	297.75	27,094.81	17.22	1.15
2.2	FLOORING	7,944,991.57	7,288,983.10	801.00	72,889.83	46.32	3.09
2.3	CEILING FINISHES	2,222,215.40	2,038,729.72	224.04	20,387.30	12.96	0.86
2.4	WALL FINISHES	3,931,408.47	3,606,796.76	396.36	36,067.97	22.92	1.53
2.5	EXTERNAL WALL PAINT	100,554.30	10.14	10.14	922.52	0.59	0.04
	TOTAL	17,152,504.35	15,643,990.87	1,729.29	157,362.43	100.00	6.67
3	COST OF SERVICES (BASED ON ELEMENTAL COST DATA)						
3.1	HVAC WORKS						
3.1.1	HVAC Cost (High Side)	5,000,000.00	5,000,000.00	504.09	45,871.56		
3.1.2	HVAC Cost (Low Side)	10,285,000.00	9,435,779.82	1,036.92	94,357.80		
	SUB TOTAL	15,285,000.00	14,435,779.82	1,541.01	140,229.36	16.42	5.94
3.2	ELECTRICAL WORKS						
3.2.1	Electrical Cost (Sub Stn. Equip./High Side)	4,900,000.00	4,900,000.00	494.01	44,954.13		
3.2.2	Electrical Cost (Low Side incl. LT Panel)	18,360,000.00	16,844,036.70	1,851.02	168,440.37		
3.2.3	DG Sets system	11,000,000.00	11,000,000.00	1,109.00	100,917.43		
3.2.4	UPS	5,270,000.00	5,270,000.00	531.31	48,348.62		
	SUB TOTAL	39,530,000.00	38,014,036.70	3,985.35	362,660.55	42.47	15.36
3.3	LAN	2,847,500.00	2,847,500.00	287.08	26,123.85	3.06	1.11
3.4	TELECOM SYSTEM	1,561,500.00	1,561,500.00	157.43	14,325.69	1.68	0.61
3.5	PUBLIC ADDRESS SYSTEM	863,500.00	792,201.83	87.06	7,922.02	0.93	0.34

S.NO.	PARTICULARS	AMOUNT (Rs.) (109 BED MODEL)	AMOUNT (Rs.) (100 BED MODEL)	COST/Sqm. @ 9918.84 sqm	COST/BED @ 109 beds	% OF SUBHEAD ID COST	% OF TOTAL COST
3.6	NURSE CALL SYSTEM	1,884,000.00	1,728,440.37	189.94	17,284.40	2.02	0.73
3.7	CABLE TV SYSTEM	608,000.00	557,798.17	61.30	5,577.98	0.65	0.24
3.8	CCTV / SECURITY SYSTEM	1,200,000.00	1,200,000.00	120.98	11,009.17	1.29	0.47
3.9	FIRE DETECTION SYSTEM	4,680,000.00	4,293,577.98	471.83	42,935.78	5.03	1.82
3.10	FIRE FIGHTING SYSTEM	7,325,500.00	6,720,642.20	738.54	67,206.42	7.87	2.85
3.11	SANITARY & PLUMBING SYSTEM	7,295,862.53	6,693,451.87	735.56	66,934.52	7.84	2.84
3.12	MEDICAL GASES SYSTEM	2,000,000.00	1,834,862.39	201.64	18,348.62	2.15	0.78
3.13	ELEVATORS (4nos.20 Passenger Lifts)	8,000,000.00	8,000,000.00	806.55	73,394.50	8.59	3.11
	TOTAL	93,080,862.53	88,679,791.32	9,384.25	853,952.87	100.00	36.18
4	Adding 3% for Contingencies (on Serial Nos.1, 2 & 3)	2,792,465.13	5,249,433.40	566.35	51,536.66		2.18
5	COST OF EQUIPMENT & FURNITURE (BASED ON ELEMENTAL COST DATA)	58,577,978.00	58,577,978.00	5,905.73	537,412.64		22.77
6	Adding 10% for Customisation of Equipment & Contingencies (on Serial No.5)	5,857,797.80	5,857,797.80	590.57	53,741.26		2.28
	TOTAL COST (incl. contingencies)	257,303,129.31	244,666,322.48	25,940.85	2,360,579.17		100.00

PROJECT COST PER SQM. - PROPOSED COST MODEL

Cost of Structure (Refer Summary Sheet - 1) : Area wise Cost loading @ plinth area proportions

S. NO.	FUNCTIONAL AREA	AREA (Sqm.)	COST PER SQM.				TOTAL
			Structure	Finishes (ref. Data Sheet - 5)	Services (ref. Data Sheet - 15)	Equipment (ref. Data Sheet - 26)	
A	ENTRANCE AREA						
	Main(OPD) Entrance	315.00	245.21	1,548.63	9,802.23	1,485.24	13,081.33
	Emergency Entrance	69.00	53.71	4,114.72	9,936.14	2,126.99	16,231.56
	Services & Staff Entrance	18.00	14.01	789.53	10,541.64	195.56	11,540.74
	Total	402.00	312.94	1,955.09	9,858.32	1,537.65	13,664.00
B	AMBULATORY CARE AREA	843.00	656.24	1,816.13	12,415.62	4,669.54	19,557.54
C	DIAGNOSTIC SERVICES						
	Imaging	319.50	248.72	864.66	13,299.47	54,020.06	68,432.91
	Clinical Labs & Blood bank	288.00	224.20	1,519.30	13,225.67	8,989.51	23,958.68
	Total	607.50	472.91	1,175.01	13,264.48	32,672.25	47,584.65
D	INTERMEDIATE CARE AREA	792.84	617.19	2,128.65	14,575.66	4,829.27	22,150.78
E	INTENSIVE CARE AREA	321.60	250.35	2,853.90	17,356.97	5,214.87	25,676.10
F	CRITICAL CARE AREA	326.50	254.17	2,431.02	16,204.05	8,836.90	27,726.14
G	THERAPEUTIC SERVICES						
	Day Care	327.00	254.56	2,242.60	13,655.77	10,501.34	26,654.26
	Operation Theatre Suite	417.70	325.16	3,132.07	17,074.78	8,063.21	28,595.23
	Delivery Suite	326.50	254.17	3,061.01	18,467.44	25,917.80	47,700.42
	Total	1,071.20	833.89	2,838.89	16,455.56	14,249.54	34,377.87
H	MEDICAL SERVICES	709.50	552.32	1,348.04	7,710.27	21,616.52	31,227.16
I	ENGINEERING SERVICES	498.00	387.67	1,980.18	7,972.63	212.80	10,553.27
J	CORRIDORS	3,715.70	2,892.52	1,231.17	4,607.00	-	8,730.70
K	TOILETS	121.00	94.19	1,005.40	22,841.87	-	23,941.47
	Total	3,836.70	2,986.72	1,224.05	5,182.09	-	9,392.86
L	ADMIN & ANCILLARY	510.00	397.01	862.04	9,068.23	1,832.62	12,159.91
	GRAND TOTAL	9,918.84	7,721.42	1,668.49	9,728.08	6,496.30	25,614.30

109-BED HOSPITAL, NEW DELHI

PROJECT COST PER BED - PROPOSED COST MODEL

Cost of Structure (Refer Summary Sheet - 1) : Area wise Cost loading @ plinth area proportions

S. NO.	FUNCTIONAL AREA	AREA (Sq.m.)	COST PER BED				TOTAL
			Structure	Finishes (ref. Data Sheet - 6)	Services (ref. Data Sheet - 16)	Equipment (ref. Data Sheet - 26)	
A	ENTRANCE AREA						
	Main(OPD) Entrance	315.00	22,314.19	4,475.41	28,327.56	4,292.22	59,409.37
	Emergency Entrance	69.00	4,887.87	2,604.73	6,289.85	1,346.44	15,128.89
	Services & Staff Entrance	18.00	1,275.10	130.38	1,740.82	32.29	3,178.59
	Total	402.00	28,477.15	7,210.52	36,358.23	5,670.95	77,716.86
B	AMBULATORY CARE AREA	843.00	59,717.02	14,045.88	96,021.73	36,113.98	205,898.61
C	DIAGNOSTIC SERVICES						
	Imaging	319.50	22,632.96	2,534.49	38,983.30	158,343.20	222,493.95
	Clinical Labs & Blood bank	288.00	20,401.54	4,014.29	34,944.90	23,752.11	83,112.84
	Total	607.50	43,034.51	6,548.78	73,928.20	182,095.31	305,606.79
D	INTERMEDIATE CARE AREA	792.84	56,163.75	15,483.26	106,019.90	35,126.98	212,793.89
E	INTENSIVE CARE AREA	321.60	22,781.72	8,420.32	51,211.04	15,386.24	97,799.33
F	CRITICAL CARE AREA	326.50	23,128.83	7,281.92	48,537.81	26,470.18	105,418.74
G	THERAPEUTIC SERVICES						
	Day Care	327.00	23,164.25	6,727.79	40,967.32	31,504.01	102,363.38
	Operation Theatre Suite	417.70	29,589.32	12,002.45	65,432.43	30,899.12	137,923.32
	Delivery Suite	326.50	23,128.83	9,168.99	55,317.61	77,634.52	165,249.95
	Total	1,071.20	75,882.41	27,899.23	161,717.36	140,037.65	405,536.65
H	MEDICAL SERVICES	709.50	50,260.05	8,774.63	50,187.51	140,705.72	249,927.92
I	ENGINEERING SERVICES	498.00	35,277.67	9,047.04	36,425.40	972.24	81,722.34
J	CORRIDORS	3,715.70	263,215.33	41,969.48	157,048.09	-	462,232.89
K	TOILETS	121.00	8,571.48	1,116.09	25,356.57	-	35,044.14
	Total	3,836.70	271,786.81	43,085.57	182,404.66	-	497,277.03
L	ADMIN & ANCILLARY	510.00	36,127.73	4,033.39	42,429.35	8,574.65	91,165.13
	GRAND TOTAL	9,918.84	702,637.65	151,830.55	885,241.18	591,153.91	2,330,863.28

CHAPTER 8 - CONCLUSIONS & RECOMMENDATIONS

- 8.1 The Corrections applied by way of The Proposed Cost Model over the PAR Model
- 8.2 Key Findings of the Study
- 8.3 General findings of the study
- 8.4 Recommendations of the Study
 - 8.4.1 Recommendations for Project Planning

CHAPTER 8 - CONCLUSIONS & RECOMMENDATIONS

The study has been able to identify the problems with the PAR method and suggests the procedures to be used to apply this cost model, in order to capture the total cost picture of a project at the inception stage.

The PAR cost model is a parametric cost model used to calculate the preliminary estimate for a project on which the technical sanction is granted to the project. Based on this technical sanction the administrative approval and expenditure sanction is granted to a project. The preliminary estimate is prepared on the preliminary drawings of the project.

At the preliminary drawing stage the project scope is not fully defined many a times. The municipal/local body approvals have yet to be taken. The clearances from the fire authorities, aviation authorities, pollution control board and other statutory bodies has not been taken.

There are many changes that invariably happen in a project as a corollary to these statutory requirements, for example:

1. The codes based on which the architectural designs, structural designs, and services designs are done may themselves change e.g. the National Building Code is under going a major redefinition, thus requiring the drawings to change. The durability conditions in the IS 456 structural design codes have also changed, thus requiring changes in the structural specifications.
2. The local building bylaws keep changing the local land use, zonal regulations etc., which may lead to major changes to the architectural drawings which trigger changes to all systems drawings for the services.
3. The Central Ground Water Commission has regulated the rules for extraction of ground water. The supply of utilities is a major issue to be resolved between the preliminary stages of project planning and the

actual completion of the project. Rain Water Harvesting has become a mandatory requirement in many places in india. This needs to be adjusted for.

The PAR method of calculation the preliminary estimate for a general building has been prepared by the estimators of the CPWD. These engineers are fully conversant with the procedures of calculation of the estimates including the computations of the areas etc. However, many of these engineers lack the understanding of the functional requirements of the building, the finishes required in the different areas of the hospital and the reasons for the same.

An attempt has been made in this study to rectify some of the systemic errors.

8.1 THE CORRECTIONS APPLIED BY WAY OF THE PROPOSED COST MODEL OVER THE PAR MODEL ARE AS FOLLOWS:

1. The finishes for each of the functional areas have been proposed as per the specific functional requirements of each space in a hospital.
2. The services required for each space has been derived from the functional requirement of each of these spaces, and not on a percentage of civil works basis. This step in itself levels the field for all cost centres by taking away the primacy given to civil works for historic reasons.
3. The cost of equipment and furniture has been taken into account at the inception stage itself.
4. The cost of HVAC services has been included in the Cost Model.
5. The cost of Electrical sub-station Equipment has been included in the Cost Model.
6. The cost of Medical Gases System, which is the soul of a hospital, has been included in the Cost Model.
7. The costs of modern Communication, Information and Surveillance systems have been included in the Cost Model.

8.2 THE KEY FINDINGS OF THE STUDY ARE AS FOLLOWS:

1. A balance has to be maintained between the three primary cost centres in a 100-bed Multi-Speciality Hospital project. These are:
 - The Building Cost, i.e. **Structure & Finishes Cost (approx. 37.5%)**
 - The **Services Cost (approx. 37.5%)**
 - The **Equipment & Furniture Cost (approx. 25% of the total project cost)**
2. At no stage should the sum total of the services costs and the equipments costs be allowed to be less than 60% of the total project cost in order to preserve the basic minimum services and equipment requirements.
3. The use of information technology has brought about this paradigm shift. This may necessitate the need to see the two heads i.e. Services and Equipment, as one in order to get a better cost picture vis-à-vis the building costs.
4. Since the area requirement for equipments and Hospital services (and not Engineering services) is undergoing a major reduction, it is leading to a reduction in the cost of structure.
5. At the same time, there has been a sea change in the public perception of minimum acceptable finishes standards. This has led to an enhancement in the finishes cost to the extent of approximately 7% as compared to the PAR finishes cost.
6. Therefore, the basic requirement of the hospital planning as published by Bureau of Indian Standards is in a need to be updated. It has to be made relevant to the present times. The physical planning standards and quality management systems, as relevant to hospitals, has to be integrated into the present document.

7. The cost of finishes in the civil works is 6% of the totals cost of the project. Almost 50% of this is the cost of flooring. The area of flooring is very high in the circulation areas of a Multi-Speciality Hospital.
8. The cost per bed & sqm. for lifts is lower than the cost for Circulation areas.
9. Even if the lifts are to be operated on stand-by generators also, they are cost effective due to the enormous savings made in the cost of land, cost of structures, cost of finishes and the cost of lighting fixtures. The area thus saved may be added to the intermediate care area where it would be counted as a functional area instead of a circulation area; thus becoming a prime revenue generation area, thereby far offsetting the initial costs incurred in the procurement and installation of lifts and the later recurring costs.
10. It is observed that the cost per sqm. for the labs & blood bank is same as the cost per sqm. for toilets. This should not be the case since the cost for labs should be more due to equal services but higher specifications of the finishes required.
11. It is possible that the cost of horizontal run of the pipes for the laboratory sinks etc. would add up to this cost. This does not get reflected in a proper manner in the present proposed cost model since a per toilet basis costing has been attempted in the model. The above aberration may be offset if the cost per sqm. as developed (from earlier case study conducted in the last semester) and adopted for the cost per Toilet basis, is also applied to the laboratory areas and similar such areas in the hospital.
12. The cost per bed is the maximum in the diagnostic services area. The cost per sqm is also the maximum in the diagnostic services area. The cost per bed and the cost per sqm. are the least in the engineering services areas and the entrances areas. They are insignificantly different for the two areas to be seen as unequal. This again is a validation of the proposed cost model.

13. The cost of finishes is the maximum in the OT areas, followed by Delivery suite, and then the ICUs. This also is a validation of the application of finishes to the proposed cost model especially when seen as a variation from the CPWD PAR specifications.

8.3 THE GENERAL FINDINGS OF THE STUDY ARE:

1. It is important for the promoters of 100 bed Multi-Speciality Hospitals to know their total budgets available for the total project before undertaking the project. The total (present day) costs of the complete project should be assembled by the project manager at the very initial stages of the project. This information should be with the financial controller of the project.

Most of the times and more often than not the resources available would be less than the demand for the resources from the various cost centres of the hospital.

2. The technical team should come up with the total funds requirements of the project at the initial stage itself to identify the total cost of the project under the heads of:

- Cost of consultants
- Cost of land
- Site development & External development works
- Cost of building
- Cost of engineering services
- Cost of equipment & furniture
- Preliminary expenses
- Pre-operative expenses
- Margin money for working capital
- Provision for contingencies

3. There should be no hidden cost left in the projects that would make the project starved of funds after the project has taken off. Cost models should be developed covering the total project scope and the different units of the project at all the stages of the development of the project, to aid in informed and guided decision making.
4. It has been well established by this study that a hospital is a functional building. It needs a lot of services for the medical and Para-medical staff to perform at the optimum levels of their skills and expertise. This is where the role of equipment and furniture is highlighted, as these are the tools that improve the efficiency and effectiveness of the workers.
5. The hospital building and the quality of engineering services in the building are the basic infrastructure for the functioning of the medical equipment in the hospital. Without proper function medical equipment, the hospital cannot perform its intended functions.
6. The outcome of this study has been to establish the bare minimum performance specifications for each of the above-mentioned cost centres and to budget for them.

8.4 RECOMMENDATIONS OF THE STUDY

8.4.1 Recommendations for Project Planning

The problems with most projects are that they do not follow a holistic planning process and thus are not commissioned on schedule.

The requirements of funds as per the technical requirements of the project are not budgeted for; rather in actual practise, it happens the other way round. The budgetary allocation for the project determines the amount of work that is to happen in that financial year and under what cost head.

Thus the problem is systemic and the solution to the problem lies in estimating the total cost of the project at the inception stage and then deciding on the implementation period of the project.

The recommendations for the project planning stages are as follows:

1. It is recommended that at the inception stage of the project a cost model incorporating all the cost centres should be prepared. An elemental cost model for all the cost centres of the proposed project be prepared and followed to bring the project to its successful completion and commissioning.
2. These cost models may be used by the regulatory agencies to guide the prospective promoters on the amount of funds that should be available with them before they can think of undertaking such assignments.
3. It is important to have all the required resources committed to the project and only then allowing the project take off. The project must complete within its stipulated time, cost, and quality standards as envisaged in the project documentation.
4. The project commissioning may be taken up in a phased manner and the costing for the same may be incorporated as per the availability of the funds. As the project starts generating revenues, it may open the other areas that may not have been commissioned in the initial stages.

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