PC-1

Revamping of THQ Hospital, Sadiqabad District Rahim Yar Khan

ORIGINAL APPROVED COST	**PKR Million. 368.473/-**
ORIGINAL APPROVED GESTATION	**72 Months** **Till June 2025**
APPROVAL FORUM	**DDSC (DDSC)**

1. NAME OF THE PROJECT

Revamping of THQ Hospital, Sadiqabad District Rahim Yar Khan

2. LOCATION OF THE PROJECT

2.1. DISTRICT(S)

I. RAHIM YAR KHAN

2.2. TEHSIL(S)

I. SADIQABAD

3. AUTHORITIES RESPONSIBLE FOR

3.1. SPONSORING AGENCY

- PRIMARY AND SECONDARY HEALTH CARE

3.2. EXECUTION AGENCY

- PRIMARY AND SECONDARY HEALTH CARE

3.3. OPERATIONS AND MAINTENANCE AGENCY

- PRIMARY AND SECONDARY HEALTH CARE

3.4. CONCERNED FEDRAL MINISTRY

- NATIONAL HEALTH SERVICES, REGULATIONS AND COORDINATION

3	**AUTHORITIES RESPONSIBLE**	
	3.1 Sponsoring	Government of the Punjab, Primary and Secondary Healthcare Department
	3.2 Execution	PMU for Revamping Program of Primary and Secondary Healthcare Department, District Health Councils and C&W Department.
	3.3 Operation & Maintenance	PMU for Revamping Program of Primary and Secondary Healthcare Department and District Health Authority
	3.4 Concerned Federal Ministry	Ministry of National Health Services, Regulation and Coordination Pakistan

4. PLAN PROVISION

Sr #	Description
1	**Source of Funding:**Scheme Listed in ADP CFY
2	**GS No:**5293
3	**Total Allocation:**0.000
4	**Comments:** Funded out of block provision reflected at G.S No.658 with an allocation of Rs. 1,800 million (Capital = Rs. 1.300 Million & Revenue = Rs. 500 Million).

5. PROJECT OBJECTIVES

attached

5. Project objectives and its relationship with Sectorial Objectives and Components

The Government of Punjab is making strenuous efforts for a better and effective Health Care system. The Defining step in this direction was to recognize the importance of Health Care at Primary & Secondary Levels. As a first step towards better health care at primary and secondary level, the department under the guidance of Government of the Punjab has decided to launch massive revamping of 40 THQ & DHQ Hospitals in the financial year 2016-17 along with revamping of emergencies of 15 selected THQs and emergencies of all Hospitals. In addition to that, Government has assigned the task of revamping of all remaining 85 THQ Hospitals of Punjab during 2017-18. The Project Management Unit, Revamping Program, Primary and Secondary Healthcare Department has started the 2nd Phase of the said revamping program in September, 2017.

5.1 Background of Primary & Secondary Healthcare Department

Effective primary and secondary healthcare is particularly important in resource-poor countries. Effective delivery of vaccinations, maternal and child care (MCH) and treatment of common pathologies (such as malaria, gastroenteritis, respiratory tract infections and other vector borne diseases) is essential for the achievement of Sustainable Development Goals (SDGs). Effective diagnostic triage, an organized system of prescription and queue management, an effective and stringent sterilization regime, quality nursing and consultant care, implementation of minimum service delivery standards (MSDS) and delivery of care for chronic pathologies lie at the center for the provision of universal health care at a cost that the community can afford as envisaged in domains established by the 1978 Alma-Ata Declaration of WHO. Primary care serves as the cornerstone for building a strong healthcare system that ensures positive health outcomes and health equity. The deficiencies in quality of care represent neither the failure of professional compassion nor necessarily a lack of resources rather, they result from gaps in knowledge, inappropriate applications of available technology and unstructured planning. Local health care systems in our setup have practically not been able to implement department's objectives. Result is continuous lack of quality improvement to lower health outcomes.

Quality health care is actually provision of health care by timely, skillful application of medical technology in a culturally sensitive manner within the available resource constraints. Eliminating poor quality involves not only giving better care but also eliminating under provision of essential clinical services (system wide microscopy for diagnosing tuberculosis, for example); stopping overuse of some care (prenatal ultrasonography or unnecessary injections, for example); and ending misuse of unneeded services (such as unnecessary hysterectomies or antibiotics for viral infections). A sadly unique feature of quality is that poor quality can obviate all the implied benefits of good access and effective treatment. At its best, poor quality is wasteful and at its worst, it causes actual harm.

Keeping in view this basic essence of primary and secondary health care, The Government of Punjab is dedicated in making strenuous efforts for ensuring a better and effective Health Care system .The Defining step in this direction was to recognize the importance of Health Care at Primary & Secondary Levels. As a first step towards better health care at primary and secondary level, a separate department was created by bifurcating the Health department into two departments Specialized Health Care & Medical Education Department and Primary & Secondary Health Care (P&SH) Department. The principle reason for bifurcation has been to improve governance and service delivery in the spheres of health care across the province. Primary and Secondary Health Care Department has been entrusted the responsibility of primary and secondary level health facilities including preventive health services and Vertical Programs. P&SH Department accordingly has its functional responsibility in respect of 26 District Headquarter Hospitals (DHQs), 129 Tehsil Headquarter Hospitals (THQs), 322 Rural Health Centers (RHCs) and 2,504 Basic Health Units (BHUs). Moreover, specialized programs like Expanded Program for Immunization (EPI), TB Control (DOTS), Hepatitis Control Programs as well as special campaigns such as Dengue Campaign, Polio Eradication Campaigns also fall in purview of the department. The establishments like Director General Health Services (DGHS), Drug Testing Labs (DTLs) and Bio-medical Engineering Workshops also assist the department in discharge of its functions efficiently. Establishment of Internal delivery Unit at Primary and Secondary Health Care Department has been aimed for institutional strengthening and capacity building of Primary and Secondary Health Care Department. Monitoring and follow up remains one of key ingredients for good governance and is at heart of all management models. Therefore, an Internal Delivery Unit, comprising well qualified and experienced persons, is being established within P&SH Department. Internal Delivery Unit shall be manned with qualified and experienced consultants. Internal Delivery Unit shall be responsible for every such task needed to strengthen the PSHD which may range from operational matters to monitoring e.g. tracking pace of all initiatives of the Department through the process such as tracking procurement of medicines by districts, procurement of vaccine by Director EPI, pace of various development schemes and performance of Drug Testing & Bio-mechanical Labs etc.

The basic mandate of Primary & Secondary Health Department is to focus on preventive health care in primary sector along with basic diagnostics and treatment facilities at secondary level. The context is to primarily lessen the load on tertiary care health establishments and to reduce treatment costs. The major challenge for Primary & Secondary Health Department is to boost the confidence of masses and raise the level of trust in the primary health care system. The reality is that most of the health care establishments at secondary level are not currently providing health care services up to the optimal level, owing to a myriad of reasons including heavy patient load, scarcity of resources, human resource constraints and dysfunctional biomedical and allied equipment.

Due to lack of structured planning and monitoring, previous efforts did not materialize into an integrated health care regime, rather these have resulted in

haphazard construction, poor repair and maintenance, lack of basic amenities, absence of waiting areas, substandard diagnostics and therapeutics, shabby outlook and suboptimal level of patient care over all. Such state of affairs has severely jolted level of trust in health care system by common man and hence the patients prefer to visit tertiary level hospitals or even private health facilities for treatment of even very common pathologies. This subsequently has a cascade effect on socioeconomics of common man who has to spend more in shape of travelling from villages to district headquarters and then bearing costs of private treatment, secondly, this has also increased disease load on our tertiary health care establishments.

Keeping in view this importance of primary and secondary health care, the department decided to launch massive revamping program for all DHQs and THQs all over the Punjab.

5.2 Project Management Unit (PMU), Primary & Secondary Healthcare Department

In order to successfully complete the program objectives in the given timeframe, it is imperative to establish a dedicated Program Management Unit (PMU) having technical and administrative expertise and autonomy, as the regular machinery of the department is too busy with the routine work and cannot successfully steer the program. The PMU is responsible for the successful implementation of the Revamping Program through completion of all related projects. After the implementation of all these projects, the Primary & Secondary Healthcare network will be improved. The PMU shall ensure that the DHQ & THQ hospitals have a well-constructed physical infrastructure with vibrant management model for efficient service delivery and improved processes to focus on patient distress in prompt manner. It adheres to Minimum Service Delivery Standards (MSDS) to address the patients' needs in the most efficient and systematic manner.

In this regard, a dedicated team of Project Management Unit (PMU) has been established to execute the project. PMU's office is located at 31-E/1, Shahrah-e-Imam Hussain, Gulberg-III, near Qaddaffi stadium, Lahore. It is headed by a Project Director with a committed team comprising of Deputy Project Director, Finance and Administration, ICT), Project Managers, Project Officers, Engineers, supporting administrative and technical staff, experienced and qualified Health consultants., Directors (Operations, Human Resource & Planning and infrastructure, Outsourcing) as well as Procurement Specialist.

5.3 Infrastructural Interventions

The construction of various new blocks of hospital complex is constructed without any proper planning and necessary connection to existing blocks. On the whole, the complete infrastructure of hospital is quite complex and scattered, access to various blocks of hospital is quite inadequate and there is no proper connection or link between different blocks of hospital. In the revamping program of

DHQ and THQ Hospitals, the placement of various facilities of hospitals are re-planned keeping in view the layout of existing blocks for facilitation of patients and some modifications/alterations were proposed in the blocks for necessary link or connection between the blocks.

Major infrastructural interventions can be divided in the following four categories

5.3.1 External Development

5.3.2 Internal Development

5.3.3 Medical Infrastructure Development

5.3.4 Emergencies Development

5.3.1 External Development

5.3.1.1 External Platforms

In order to improve the communication between blocks, necessary interventions are taken to improve the existing internal metaled road network. Moreover, new internal metaled road network is also designed and proposed to access the blocks of hospital accordingly. Despite the improvement in metaled road network, external platforms except metaled road is also designed and proposed for patients to access the blocks by simply walking among the blocks.

5.3.1.2 Façade Improvement

In order to improve the aesthetics of hospital, façade uplift with aluminum composite panels with aluminum cladding, false steel structures, façade aluminum windows and aluminum doors are designed in order to give the feel of modern architectural era.

5.3.1.3 Sewerage System

The most important entity of a hospital lies in its cleanliness. Infrastructural interventions to keep the hospital clean were taken in the form of improvement of sewerage system of the hospital. These interventions include the re designing of sewerage system, construction of new manholes, laying of new sewer lines and connection between trunk sewer and hospital sewer.

5.3.1.4 Landscaping (Horticulture)

Landscaping in hospital adds aesthetic & beauty to the built environment as well as improves in reducing the pollution. Soft & hard landscape reduces dust particles moment in air, hence contributes in a clean environment. The hours spent

in a hospital can be stressful for patients, staff and visitors. According to research easy access to a natural environment can contribute to stress management and potentially improve health outcomes: physiological studies indicate that 3-5 minutes spent in such Hospital Outdoor Landscape Design environments reduces anger, anxiety and pain and induces relaxation. Research also shows that “positive distractions” can reduce stress and their visual forms include gardens, scenic views and artwork, which play a critical role in modern hospital design: gardens, fountains, and water features provide patients, staff and visitors with restorative experiences of nature. In this regard complete lawns development, placement of benches, dust bins, playing equipment, fruit trees, flower plants, fruit trees and gazebos are proposed in all hospitals under revamping program

5.3.1.5 Water Filtration Plant

In the modern era, the access to clean water for everyone is becoming rare day by day. Especially in hospitals, the supply of water free from any harmful impurity is one of the most basic needs. To cope up with this problem water filtration system according to the existing nature of water is designed and water filtration plant is proposed accordingly. For ease of patients, drinking water supply network was designed to provide filtered water in wards and in various drinking stations within the hospital building

5.3.1.6 External Electrification

One of the major hindrances in functionality and ineffectiveness of electro medical equipment and other facilitating electrical appliances is either interrupted power supply or power supply with lesser voltage than required. This problem was solved by providing express line or dual electrical supply in all hospitals under revamping. Despite these two facilities based, on the current and proposed electrical load of hospital new transformers were proposed to step down the voltage to desired level and complete generator backup system was designed and generators along with automatic transfer switches were proposed accordingly. Moreover, to fully lighten up the hospital for proper utilization of all facilities of hospital during the low/no-light hours of the day, external pole lights to lighten up the pathways and garden lights to lighten up the lawns were designed and proposed.

5.3.1.7 Parking and Waiting area

Non-clinical facilitation of patients and attendants were specially considered in the revamping program. One such facilitation step is designing the parking and waiting areas on basis of daily influx of vehicles and patients/attendants during the

peak hours. Parking and waiting areas on several places of hospital were then proposed according to the design.

5.3.1.8 External Signage

Eexternal signage system is designed including various signage types for complete guidance of patient attendants and to search concerned facility promptly.

5.3.2 Internal development

5.3.2.1 Aesthetic improvement

In order to improve the aesthetics of hospital wards, corridors, rooms and toilet blocks, flooring and dado design of suitable material in these areas is proposed. Despite of aesthetics, the material of flooring and dado design were chosen to provide ease in cleaning process. For further improvement in aesthetics, paint on exterior and interior part of the hospital, poly-vinyl chloride paneling to conceal the dampness damaged areas and steel cladding of columns are proposed.

5.3.2.2 Ramp and Stretcher improvement

For hospitals having more than one floor, there is a huge problem of patient transfer with stretcher. This problem is solved by proposing new ramps/stretcher ways where needed. Moreover, in order to further improve the communication between various floors of hospitals improvement of stair cases with hand rail or guard rails is proposed.

5.3.2.3 Seamless flooring and Lead Lining

To keep high risk areas like Operation theaters, I.C.U, C.C.U, and Gynecology Operation Theater bacteria free is one of the basic medical practices. In the revamping program of hospitals low epoxy paint is proposed in these areas to provide seamless flooring so that the bacterial growth within the groves can be prevented. Moreover, to make the X-Ray rooms radio-resistant and to keep the patients away from the harm of rays, interventions are taken in X-ray rooms regarding provision of lead lining in walls, ceiling and floor.

Interventions were taken regarding hazardous radiation emitting areas to make them radio-resistant in order to keep patients/attendants away from harmful radiations. These interventions were in the form of provision of lead lining in ceiling, walls and roofs of X-Ray rooms.

5.3.2.4 Aluminum doors and windows

In order to make sound and heat proof the doors and windows of wards, corridors and major health facilities are proposed as aluminum doors and windows. Which despite of above benefits are also aesthetically pleasing. Corridor wire mesh windows and rolling blinds for windows are proposed in order to invite or stop the day light within the wards according to the requirement. Moreover, existing wooden doors having shabby and dirty look are proposed to be re-polished and washroom doors are proposed to be replaced with PVC doors to make them resistant against water.

5.3.2.5 Improvement of washroom blocks

The area of hospital which can be dirty at most is its washroom or toilet blocks. To improve the cleanliness of hospital the special interventions were taken regarding the renovation of toilet block of hospital. This renovation includes the re tiling of existing damaged flooring and skirting and addition of water closets etc.

5.3.2.6 Facilitation of attendants and patients

The facilitation of attendants is also one of the most basic things to be provided in the hospital. The facilitation of attendants contributes towards the facilitation of patients. In order to facilitate the attendants, pantries are designed at that location of hospital where attendants can be effectively facilitated. These pantries include stoves and washing machines. Moreover, it is also very important to educate the patients and attendants regarding the seasonal and general diseases along with its cure and prevention. Installation of LED televisions in various locations of hospitals especially in wards and waiting areas is also proposed in the design in this regard.

5.3.2.7 Furniture and Fixtures

One more step towards the facilitation of attendants or patients is placement of benches in waiting areas. The most rush positions of hospital are chosen in this regard and placement of benches is designed according to the patient number and flow. In order to improve the efficiency of consultants or doctors, interventions regarding the renovations of doctor or consultant office are designed in this regard. The doctor room furniture is designed for this purpose keeping in view the existing area of room and necessary required equipment. To carry and dispose of the medical and general waste material of hospital, waste bin sets are designed to place at various positions of the hospital. These positions are marked by keeping in view the general circulation of the public and sensitivity of the area.

5.3.2.8 Air Conditioners, Refrigerators and LEDs

According to the different standards, there is a separate requirement of temperature to control the environment of particular place with respect to the nature of facility. In this regard, air conditioners are proposed according to the required tonnage of the specific area. For better efficiency and performance delivery, cabinet air conditioners are proposed in the wards and other facilities having larger areas. The maintenance and repair services of these air conditioners are outsourced so that uninterrupted performance can be delivered. For further facilitation of patients and attendants, placement of refrigerator is proposed on each nursing counter. These refrigerators are proposed for items requiring specific temperature for storage purposes. LEDs will also be placed at various points to facilitate the patients and attendants.

5.3.2.9 Internal Signage and Paintings

As described earlier, the information regarding the positions of major health facility especially emergency and labor room etc. is very much essential for any person entering inside the covered area of hospital. For these purposes, different types of signage are proposed including corridor hanging signage, floor map boards, room numbers and room names plaques. For general information duty rooster boards, janitorial station signage, waste bin set signage, emergency exit signage.

Different kinds of paintings are designed according to the nature of area where it is desired to be fixed. These paintings are beneficial in a sense that it improves the aesthetics of hospital and moreover, such painting patterns are designed so that it give the relaxation and soothing feelings to aid in the healing of patients. Moreover, in order to create a healthy, positive, entertaining and friendly environment for interest of children, paintings on children wards is proposed.

5.3.3 Medical Infrastructure Development

To cope with the emergency condition of clinically serious patient, oxygen supply system is designed by proposing an individual oxygen supply system for each major health facility. This oxygen supply network comprises on copper pipe line, flow meter with bed head units, cylinders and setup and individual central oxygen supply system. The contract of filling of oxygen gas in cylinders is outsourced for uninterrupted oxygen gas supply to the patients.

For patient receiving, information, guidance, appointment or for any other task, separate reception counters are proposed in various blocks so that, all necessary information regarding the block is available on the counter round the clock. In this way, utilization of clinical facilities will be optimized. For indoor patient department, complete facilitation and care of patients admitted in wards is ensured

by proposal of nursing counter in each ward. This nursing counter will be placed or constructed in such a placement that each bed can be monitored by the nurse available.

The design regarding architectural planning of above mentioned facilities are designed according to the patient facilities and architectural planning standards. These designed facilities are then designed in the existing building structure according to the patient flow and sensitivity of facility.

5.3.3.1 Emergency Department:

All THQS and DHQs are already providing emergency services to critical ill patients. As far as the existing sources including human resources & equipment are not sufficient to fulfill the requirement. Primary and secondary healthcare department is going to take the initiative to improve emergencies of hospitals by providing new equipment and human resource in form of recruitment of doctors, nurses and paramedical staff along with Infrastructure of Causality Department. Ultimate goal of revamping of emergencies is to enhance the quality of medical services to critical ill patient in golden hour to decrease the mortality and morbidity rate in causality department of each hospital.

5.3.3.1.1 General Overview of Emergency Department

In any hospital, the most important and critical area is its emergency block. Specially, if hospital is situated on a highway where there is a huge flux of rapidly moving traffic which can be a major source of causalities, if patient treatment is not proper. Besides road trauma cases, cardiac cases and burn cases etc. are also more likely to be initially treated in emergency. Proper first aid to patient reduces morbidity and mortality. The emergency department of hospital is a block where in time service delivery is so much essential that delay in proper treatment can cause lot of lives to suffer from serious diseases for rest of their life. In a nutshell, the efficiency and in time service delivery of emergency block depicts the overall efficiency of the hospital.

In order to improve the emergency department and to ensure in time service delivery of the same, special initiatives are being taken in this regard. Infrastructure of emergency department depends a lot on its service delivery and efficiency. An emergency department with all necessary medical and general equipment and equipped with all essential medical facilities but without ineffective and poorly planned infrastructure will never fulfill its need. Conclusively, such infrastructural interventions are planned in this program so that the efficiency of emergency department can be optimized. Some of the following major interventions are listed below:

5.3.3.1.2 Position of Emergency Department

It is planned that new construction of building should be avoided at most because already existing blocks with no proper utilization are existing in all of the hospitals. The emergency block should be on such a location that the distance between that department and main entrance gate should be minimum with respect to other locations or positions of complex. To fulfill this purpose, that portion of this building block is selected for re planning of emergency department which is most near to the entrance gate. The far positioning of emergency department will result the lost in time for patient during its travelling which can be crucial.

5.3.3.1.3 Access towards the Emergency Department

The route leading towards the emergency department is important in this aspect that a smooth track and a widened path will be feasible for the movement of vehicle or stretcher. Initiatives are taken in this program for construction of new pathways or renovation of existing ones leading towards the emergency department. Such material of the external platform is selected so that a smooth movement should be observed over it rather than jerks bumps. Moreover, the width of the passage from entrance gate up to emergency department is designed by keeping in view the flux of the vehicles rushing towards the emergency block.

5.3.3.1.4 Medical Infrastructure Emergency:

The existing emergency department or other block of the hospital according to its access from entrance gate, is designed and re planned according to the above described emergency facilities. The changings or amendments in the existing covered area of the hospital are proposed according space availability. Due to the rush of patients and increased number of minor surgeries performed in the emergency department make it one of the dirtiest department of the hospital. Hence, in this regards it is very much essential to keep the floors of certain area of emergency department bacteria free. Seamless flooring is proposed in this regard to avoid the groves so that the cleaning process can be made easy. Low epoxy paint is designed and proposed in this regard on Minor OT, Gurney area and specialized healthcare unit.

Provision of medical gasses is essential to facilitate the patients suffering from breathing issue due to some disease and ailment. The filling process of oxygen in the cylinders is outsourced to ensure the continuous supply of the oxygen among the beds. The oxygen system comprises on copper pipe, central oxygen supply system for pressure maintenance, oxygen cylinders and flow meter with bed head units.

5.3.3.1.5 General Building Interventions:

In order to improve the over building condition of emergency blocks following major interventions are taken:

1. Provision of flooring and skirting
2. Painting on interior and exterior side of department

3. Provision of false ceiling
4. Replacement of damaged and renovation of existing wooden doors
5. Provision of aluminum doors and windows
6. Public health work regarding supply of water and gas along with improvement of sewerage system
7. Provision of LED panel lights, ceiling fans, exhaust and wall bracket fans
8. Improvement of existing wiring and distribution including replacement of damaged equipment and proposal of new equipment

5.3.3.2 Monitoring and Quality Assurance (Process Interventions)

During construction phase, “Construction Supervision” will be carried out by the Procuring Agency (Director Infrastructure) along with Punjab Buildings department (C&W D) who will certify construction activity.

5.3.3.2.1 MSDS (Minimum Service Delivery Standards)

MSDS are minimum level of services, which the patients and service users have a right to expect. MSDS include minimum package of services, standards of care (level specific) and mandatory requirements/systems for delivery of effective health care services. The World Health Assembly in Alma-Atta in 1978 expressed the need of action to protect and promote the health for all the people of the world. Essential health is to be made universally accessible to individuals and families through their full participation and at a cost that the community and country can afford. MSDS is now being deemed to be of vital importance at Secondary HealthCare level. The THQ hospital provides promotive, preventive, curative, diagnostics, in patients, referral services and also specialist care.

THQ hospitals are supposed to provide basic and comprehensive EmONC. THQ hospital provides referral care to the patients including those referred by the Rural Health Centers, Basic Health Units, Lady Health Workers and other primary care facilities. The District Head Quarters Hospital is located at District headquarters level and serves a population of 1 to 3 million, depending upon the category of the hospital. The THQ hospital provides promotive, preventive, curative, advance diagnostics, inpatient services, advance specialist and referral services. Services package and standards of care at SHC level are also not well defined. Deficient areas include: weak arrangements to deal with non-communicable diseases, mental, geriatric problems and specialized surgical care especially at THQ. There is disproportionate emphasis on maternal and child health services at SHC facilities. Services-package being provided at PHC and SHC are also deficient in terms of Health care providers’ obligations, patients’ rights and obligations.

MSDS umbrella is very vast and it requires a very extensive and planned approach towards, gap analysis, planning, development, implementation,

monitoring and evaluation. MSDS comprises of 10 thematic area, 30 standards and 162 indicators. Government of Punjab has taken an initiative to standardize all hospitals of Punjab in accordance with Punjab Health Care Commission Minimum service delivery standards. PMU team segregated MSDS indicators into various targets and sub-targets to make these targets achievable. Manuals for both clinical and non-clinical specialties are being prepared comprising of departmental organizational plan, criteria for essential human resource, essential equipment, general and specialized SOPs, departmental safety guidelines etc. Standardized Medical Protocols (SMPs) are standard steps to be taken by a health facility during medical or surgical management of a patient. Standard Operating Procedure (SOPs) are detailed description of steps required in performing a task including specifications that must be complied with and are vital to ensure the delivery of these services .It requires literature review, departmental view, facility visits, consultative visits and development of action plan for implementation of MSDS. Effective MSDS implementation requires essential documentation. Documentation is a key for record keeping, monitoring and auditing. For this purpose, registers, forms, displays have to be designed with coding for effective tracking. In addition to this it also requires analysis from field from utilization point of view.

Displays constituting of public serving messages, health related information and general facility related guidelines. In order to monitor effective implementation, compliance monitoring is required to be carried out by field experts which is followed up by further planning to ensure continuous delivery of effective, accessible, continuous and quality services to masses in uninterruptable manner.

MSDS implementation is a complex procedure. Because it requires

1. Capacity building for understanding, development and continuous implementation of MSDS.
2. Ecosystem for establishing its implementation by full cooperation, collaboration, commitment of
3. Continuous monitoring
4. Continuous audit
5. Continuous training, refresher courses with purpose of reinforcement
6. Continuous quality improvement
7. Continuous Strengths, Weaknesses, Opportunities, and Threats **(**SWOT) analysis and gap identification
8. Continuous strategy making and implementation with backup plan for secondary options.
9. Responsibility designation for clinical and non-clinical procedures and activities.
10. Effective utilization, calibration and maintenance of equipment with record maintenance and their audit
11. Establishment of plans, implementation, analysis of gaps with alternate planning regarding fire evacuation plan, hospital inflectional control plan, hospital operational and

strategic plans, disaster plan both internal (partial / complete) and external .

The PDSA cycle

1. Developing a plan to test the change (Plan),
2. Carrying out the test (Do),
3. Observing and learning from the consequences (Study), and
4. Determining what modifications should be made to the test (Act).
5. Monitoring effective load sharing of Human resource and equipment within hospitals.
6. Addition of new HR/ rationalization on requirement of MSDS indicator compliance for effective departmental organization and their planned trainings by MPDD, UHS ETC
7. Standard optimization of Standard operating procedures and methods for their effective adoption by hospital human resource.
8. We have also extended our MSDS implementation in 20 more departments such as dentistry, ICU, CCU, Dialysis, mortuary, burn unit, physiotherapy, orthopedics, medicine, nursing, paeds, ophthalmology, derma, TB, urology, patient transfer system, store and purchase, audit and accounts, procurement, planning etc. We are also in process of preparing manuals, SOPS, plans, universal forms, and universal registers with universal tracking system of record.
9. We have developed an application for continuous monitoring of MSDS compliance.

Health managers are considered essential at both the strategic and operational levels of health systems. To gain an initial understanding of the management workforce for service deliver. Every health system desires managers who are competent and have the knowledge, skills and demeanor to be effective. The performance of health services managers will depend in part on how certain standard support systems function. Even good managers will have problems if procedures for running finances, staff, etc., are not working well. Functional systems should have clear rules and regulations, good guides and forms, effective monitoring and supervision and appropriate support staff, e.g. account staff, supplies and information staff and secretarial support A health manager is supposed to be competent in planning, budgeting, financial management systems , personnel management systems, including performance management , procurement and distribution systems for drugs and other commodities , information management and monitoring systems , systems for managing assets and other logistics, infrastructure and transport. Support systems help to ensure uniformity in management practices and ensure that management and administrative systems function and get results.

5.3.3.3 Laboratory

To improve the quality of medical care of patients, primary and secondary Healthcare Department has decided to improve the Laboratory in THQ hospitals. Majority of patients are suffering problems some time life threatening phases due to delay in diagnosis and treatment according to diagnosis in case of lack of laboratory in vicinity.

5.3.3.4 X-Ray

To improve the quality of medical care of patients, primary and secondary Healthcare Department has decided to improve the Radiology unit in THQ hospitals. Majority of patients are suffering problems some time life threatening phases due to delay in diagnosis and treatment according to diagnosis in case of lack of Radiology unit in vicinity. A healthy human being enables not only nutrition of the physical body but also enhances social interaction and promotes self-esteem and feelings of self-esteem and feelings of wellbeing. The radiology equipment serves as a “window “to the patient treatment regarding the body.

5.3.3.5 CCU

Understanding these ground realities Primary and Secondary Healthcare Department, Government of the Punjab has decided to establish coronary care units (CCU) in THQ hospitals as a part of its Revamping Program. This will improve the quality of healthcare and timely provision of life saving treatment will be possible to large number of patients. A coronary care unit (CCU) is a special department of a hospital or health care facility that provide coronary care to patients. Coronary care units cater to patients with severe and life-threatening cardiac illnesses and which require constant, close monitoring and support from specialized equipment and medications in order to ensure normal bodily functions.

Coronary care units are staffed by highly trained doctors and nurses who specialize in caring for cardiac patients. They are also distinguished from normal hospital wards by a higher staff-to-patient ratio and access to advanced medical resources and equipment that are not routinely available elsewhere. Common conditions that are treated within CCUs including angina, myocardial infection, cardiac arrhythmia, cardiac shock etc. Patients may be transferred directly to coronary care unit from an emergency department or from a ward if they rapidly deteriorate, and immediately require cardiac care treatment.

5.3.3.6 Dialysis Unit

Chronic kidney disease is now a significant public health problem worldwide. Chronic kidney disease globally affects almost 10 % of general population with Incidence in prevalence of disease are still rising especially in

developing countries .The rise in chronic kidney disease is by aging of the populations and growing problems of obesity, diabetes, high blood pressure and cardiovascular diseases.

Tehsil head Quarter Hospital (THQ) serve large catchment populations of the district and provide a range of specialist care in addition to basic outpatient and inpatient services. Patient who are in need of dialysis, are referred to tertiary care hospital due to non-availability or insufficient number of dialysis machines. Patient's condition not only deteriorate but also compromise the effectiveness of life saving intervention due to approaching to other cites or to costly private setups of dialysis. Primary and Secondary Healthcare Department has decided to establish & strengthening already existing 5 bedded dialysis unit at THQ hospitals. This will improve the quality of healthcare and timely provision of life saving treatment will be possible to large number of patients.

Dialysis unit is a special department of a hospital or health care facility that provides a lifesaving support to patients with chronic renal disease along with pre-existing diseases like diabetes, hypertension, ischemic heart disease to ensure normal bodily functions. Dialysis units are staffed by highly trained doctors, dialysis technicians and dialysis nurses who have done specialized training in caring for such patients. Patients are usually admitted from out door and often from emergency and registered for their timing and schedule of dialysis because these patients are given regular appointments twice or thrice a week as per defined by nephrologist/physician.

5.3.3.7 Labor Rooms/Nurseries

To improve the quality of medical care of patients, primary and secondary Healthcare Department has decided to improve the Labor Rooms/Nursery unit in THQ hospitals.

5.3.3.8 Operation Theater

To improve the quality of medical care of patients, primary and secondary Healthcare Department has decided to improve the Operation Theater in THQ hospitals. Majority of patients are suffering problems some time life threatening phases due to delay in treatment according to diagnosis in case of lack of Operation Theater in vicinity.

5.3.3.9 Orthopedic unit

To improve the quality of medical care of patients, primary and secondary Healthcare Department has decided to improve the orthopedic unit in THQ

hospitals. Majority of patients are suffering problems some time life threatening phases due to delay in diagnosis and treatment according to diagnosis in case of lack of orthopedic unit in vicinity.

5.3.3.10 Gynecology Department

To improve the quality of medical care of patients, primary and secondary Healthcare Department has decided to improve the gynecology unit in THQ hospitals. Majority of patients are suffering problems some time life threatening phases due to delay in diagnosis and treatment according to diagnosis in case of lack of gynecology unit in vicinity.

5.3.3.11 Surgical Unit

To improve the quality of medical care of patients, primary and secondary Healthcare Department has decided to improve the surgical unit in THQ hospitals. Majority of patients are suffering problems some time life threatening phases due to delay in diagnosis and treatment according to diagnosis in case of lack of surgical unit in vicinity.

5.3.3.12 Intensive Care Unit (ICU)

Tehsil Headquarter Hospitals (THQ) serve catchment populations of the whole Tehsil (0.5-1 million) and provide a range of specialist care in addition to basic outpatient and inpatient services. They typically have about 80 to 150 beds and a broad range of specialized services including surgery, medicine, paediatrics, obstetrics, gynaecology, ENT, ophthalmology, orthopaedics, urology, neurosurgery etc. Patient who are in need of intensive care are usually referred to tertiary care hospital but due to long distance they had to travel and time consumed on road due to heavy traffic and other unavoidable circumstance ,patient's condition not only deteriorate but also compromise the effectiveness of life saving intervention. Understanding these ground realities Primary and Secondary Healthcare Department, Government of the Punjab has decided to establish intensive care units (ICU) in THQ hospitals as a part of its Annual Development Plan. This will improve the quality of healthcare and timely provision of life saving treatment will be possible to large number of patients.

Primary and Secondary Healthcare Revamping programme (PSHRP) is the initiative by the Chief Minister of Punjab to strengthen the healthcare delivery system in the province Acquisition of licenses for all THQ Hospital by developing and implementing uniform set of standard Operating procedures (SOPs) & standard medical protocol (SMP) for compliance to MSDS of PHC is planned as a part of PSHRP.

An **intensive care unit** (**ICU**) is a special department of a hospital or health care facility that provides intensive treatment medicine. Intensive care units cater to patients with severe and life-threatening illnesses and injuries, which require constant, close monitoring and support from specialized equipment and medications in order to ensure normal bodily functions. Intensive care units are staffed by highly trained doctors and nurses who specialize in caring for critically ill patients. They are also distinguished from normal hospital wards by a higher staff-to-patient ratio and access to advanced medical resources and equipment that are not routinely available elsewhere. Common conditions that are treated within ICUs include ARDS, trauma, multiple organ failure and sepsis. Patients may be transferred directly to an intensive care unit from an emergency department if required, or from a ward if they rapidly deteriorate, or immediately after surgery if the surgery is very invasive and the patient is at high risk of complications.

5.3.3.13 Mortuary Unit

To improve the quality of medical care of patients, primary and secondary Healthcare Department has decided to improve the mortuary unit in THQ hospitals. Postmortem or autopsy is a part of medico legal investigation into a death which is conducted by a judicial medical officer. Realizing the problems countered medico legal process focusing on following important areas;

1. Improving quality and motivation levels of human resource conducting medico legal Examination.
2. Improve methods to collect and preserve samples so that so that these may best be available for further forensic analysis.
3. Improving physical infrastructure at tehsil level to provide enabling environment for better conduct of medico legal cases including improvement in state of mortuaries at tehsil level.
4. Improvement in legal framework including improved forms.

5.3.3.14 Dental Unit

To improve the quality of medical care of patients, primary and secondary Healthcare Department has decided to improve the dental unit in THQ hospitals. Majority of patients are suffering problems some time life threatening phases due to delay in diagnosis and treatment according to diagnosis in case of lack of dental unit in vicinity.

5.3.3.15 Physiotherapy Unit (33 THQ Hospitals)

To improve the quality of medical care of patients, primary and secondary Healthcare Department has decided to improve the physiotherapy unit in all THQ hospitals. Majority of patients are suffering problems some time life threatening

phases due to delay in diagnosis and treatment according to diagnosis in case of lack of physiotherapy unit in vicinity.

1. Physiotherapy is a “science of healing and art of caring”. It pertains to the clinical examination, evaluation, assessment, diagnosis and treatment of musculoskeletal, Neurological, Cardio-Vascular and Respiratory systems ‘functional disorders including symptoms of pain, edema, and physiological, structural and psychosomatic ailments. It deals with methods of treatment based on movement, manual therapy, physical agents, and therapeutics modalities to relieve the pain and other complications. Hence, Physical therapy covers basic parameters of healing sciences i.e. preventive, promotive, diagnostic, rehabilitative, and curative.

2. Physiotherapy practice has a very long history and a modern clinical practice is heavily reliant on research and evidence based practice. The Primary and Secondary Healthcare Department Government of Punjab attests to this commitment by adopting and promoting the Standards of Practice for Physiotherapy.

Importance of Physiotherapy and Rehabilitation department

1. Physiotherapy provides services to individuals and populations to develop maintain and restore maximum movement and functional ability throughout the lifespan. This includes providing services in circumstances where movement and function are threatened by aging, injury, disease or environmental factors. Functional movement is central to what it means to be healthy.
2. Physiotherapy is concerned with identifying and maximizing quality of life and movement potential within the spheres of promotion, prevention, treatment/intervention, habilitation and rehabilitation. This encompasses physical, psychological, emotional, and social wellbeing. Physiotherapy involves the interaction between physical therapist, patients/clients, other health professionals, families, care givers, and communities in a process where movement potential is assessed and goals are agreed upon, using knowledge and skills unique to physical therapists.
3. The proposed project entails setting up a Physiotherapy and Rehabilitation Department. Being one of the major players in human service sector, rehabilitation Departments provide a wide range of services relating to physical impairments and disabilities of all age groups. These services range from assessment, evaluation, diagnosis, treatment and plan of care of individuals, from newborns to the very oldest, who have medical problems or other health-related conditions that limit their abilities to move and perform functional activities in their daily lives. These services will be provided by qualified Physiotherapists Consultants. Our consultants

examine each individual and develop a plan using treatment techniques to promote the ability to move, reduce pain, restore function, and prevent disability. In addition, our doctor work with individuals to prevent the loss of mobility before it occurs by developing fitness- and wellness-oriented programs for healthier and more active lifestyles. The proposed Physiotherapy and Rehabilitation Department will provide all these services under one roof.

Opportunity Rationale

Due to vast media exposure over past few years, women, as well as men, have become more conscious about their health especially youngsters. In Pakistan, Rehabilitation Clinics and Fitness Centers have grown over the years. It is easy to open GP clinic as space and skill requirement is very basic. But a Rehabilitation clinic provides more professional services with qualified staff including Physiotherapy doctors and experienced support staff and therefore, requires more planning and arrangement. Quite a few Physiotherapy and Rehabilitation Departments have opened in Lahore, Islamabad, Karachi and other relatively larger cities of Pakistan, which are catering to the demand of the people, but still there is a lot of unfulfilled demand as can be judged from excessive rush at the existing Physiotherapy Departments. The patient's ratio and problems with musculoskeletal disorders and neurological disorders are same in the tehsils and districts levels of Punjab. The business is service-oriented and carries large potential for serving poor people due to its unique nature and uncontrolled spreading of joints and muscles, and neurological problems, especially in the areas where our THQ Hospitals are located. There is lot of potential in this domain, especially for those who are committed to providing quality service.

5.3.3.16 Queue Management System (QMS)

OPD in THQ has enormous patient load, due to the only big public sector serving hospital in Tehsils. At the moment the ticket system is prevailing but there is no mechanism to handle that ticket and assign number to the ticket and its being issued in manual format. This will also create dependency on the person issuing the ticket. After getting the tickets, patient will be provided with no guidance on where to go and when his term will come to meet the doctor and get the required service. This will create confusion and delayed service delivery. On the other hand it will waste lots of time on the end of doctor and patient as patient and doctor has no direct liaison with each other. Moreover, patient will again have to be dependent on some person to check that either doctor is free or any patient sitting in his facility. Here again, human intervention and dependency will come into play.

This project basically aims to remove all the human related dependency till the patient reach the doctors. Moreover, it also includes, recording basic information

for a patient and guiding him to the doctors room from registration count to triage without any dependency on hospital staff. This will improve the transparency as per the vision of good governance and serve the patient in an efficient and transparent manner. This will also help the patient in estimating that time estimate till his term which will give him relief and more belief on the fair system. On the other hand doctor will always have an idea that how many patients will be in queue and give him direct liaison with the patient sitting outside.

The need of queue management system is evident in hospital from the fact of lack of proper mechanism of patient queue management at OPD's, human resource deficiency and non-functional equipment. The Implementation of Queue Management System will provide and streamline Patient Queue Management at OPD with Ticket Generation and Display of Numbers on the counters. This will help in maintaining the queue on First IN First OUT (FIFO) basis. The system will also provide the information counter to the general public to educate them in the use of queue management system and short description of the process. After implementation of this system, the incoming patient will be guided in a manner to get the service on his turn without any dependency or interference of an external resource. All will be handled in an automated way with patient are being served at their turn.

The system manages the patients load, organizes the patient's queues in an adequate manner and gives them the ease in waiting area; and they will be examined gracefully by doctors at their turn. Basic information of the patient is also linked with its ticket, being taken at the first counter. This will help established a unique ID against each patient. This will also lead to the establishment of Electronic Medical Record. The Process flow of Queue Management System at THQ is given as follows:

There are 25 counters at THQ level including basic registration counter, triage counter, consultant office and hospital pharmacy. There is one ticketing machine with a bifurcation of male, female and old age person. The ticket will be issued to the relevant category accordingly. After receiving the ticket the said number will be blinked on male, female and old age counter. The person will move to that counter where he will be asked about his basic details which will be entered in the basic registration form software linked with QMS and that specific token / ticket number. He will also be asked about the disease and accordingly the relevant consultant / specialty area e.g. pediatrics, ophthalmology etc. after registering, he will take the printout and give the slip to patient / attendant along with its token number.

The basic fee of OPD will be received at the registration counter and accounted for in the basic registration software linked with QMS. The same token number will be displayed on the triage counter where his vitals will be taken and written on the same registration slip available with the patient. Now, keeping in view the specialty area the token number will be displayed on the relevant consultant office and he will be checked by relevant consultant. The consultant than diagnosed the medicine or either to admit it after his examination. In case of medicine he will be sent to hospital pharmacy where again the same ticket number will be displayed. There have to be an option available with the doctor to either redirect him to the hospital pharmacy or other (medical tests, referred to IPD). On displaying the same token number at pharmacy counter the patient will move to pharmacy counter along with his token number and registration slip and take prescribed medicine. Patient will be disposed from that window and process of QMS will be completed. There will be no entry in the basic registration software on the counters of triage, doctor at the moment. Detail of equipment is attached.

The process described above for THQ will be implemented. The important constraints for the systems are:

1. Same token number will be used at all the counters and patient will be getting the ticket from ticketing machine only once at the time of entry.
2. QMS will cater for missed, skipped or delayed patient at any counter.
3. There will be two LED displayed at different location in the waiting area to guide patients about the process details and to display token number along with announcement in URDU.
4. The gap between each display panel from ticketing machine to pharmacy can be customized according to requirement e.g. 5, 10, 30, 60 seconds etc.

5.3.3.17 Electronic Medical Record (EMR)

Establishment of network infrastructure, establishing a central data center, connectivity of different building through fiber, are also the major components of the revamping project in terms of ICT. This will including provision of networking point at all nursing stations and important areas where entries regarding patients' needs to be made e.g. Radiology/Pathology, Indoor, outdoor etc. This will serve as backbone to implement the Electronic Medical Record System in the Hospital which has the key feature of generating Unique Medical Record Number for each patient.

This MR number will serve as an identity for patients during their treatment, retrieval of records and for decision making.

EMR will also be able to log the patient for treatment being provided to him in different areas of hospital i.e. OPD, Pathology, Radiology, Surgery, Indoor, etc. and their integration. This will be achieved by entering the relevant information at each department against specific MR number of a patient in the Customized / Purpose build software (EMR) for these public healthcare facilities.

This entry of MR number against each patient in hospital will build a large database for patient and relevant diseases. This will help in analysis disease / epidemic prevention and better patient care through retrieval of patient history and proper diagnoses at physician end. Implementation of patient registration, Record keeping, physical queue management, E-prescription, supporting IT interventions for EMR and medicine dispensation. Detail of equipment is attached.

5.3.3.18 Video Surveillance through CCTVs

Installation of network based CCTV cameras is an important module in the ICT part of revamping project. Scope of this component is to install 60 to 80 cameras in each hospitals at important location i.e. entry, exit, OPD, waiting areas, Parking for surveillance and security purposes. This will also serve as major input to the security services by Outsourced Security Company in the hospitals. Moreover, there will be small scale central control room at each hospital to monitor the allocated locations where the cameras have been installed. This system will also have the facility to record the video for 15 days for all the cameras so that recording of specific duration can be produced on demand. This will also have the facility of central control room which has the capacity to access the camera of THQ hospitals and to view and monitor the area of specific camera within specific hospital at any given time. Therefore, it will establish a centralized surveillance and security mechanism for these 85 public sector healthcare facilities. Detail of equipment is attached.

5.3.3.19 Medicine Store

To improve the quality of medical care of patients, primary and secondary Healthcare Department has decided to improve the medicine store in THQ hospitals.

5.3.3.20 Day Care Center

On-site (or near-site) child care would lead to improve workplace satisfaction by allowing employers more frequent contact with their children,

reducing stress and anxiety over scheduling, and potentially providing financial benefit to the hospital. Therefore, P&SH Department has decided to establish the Day Care Center at every THQ Hospital. The Medical Superintendent of the concerned hospital will be the overall in-charge of the Day Care Center.

5.4 Out Sourcing of Non Clinical Services

It was planned to provide Outsourcing of following Non-clinical services through development Budget later on decided to shift to non-development Budget as per the decision of progress review meeting chaired by the Chairman P&D Board dated 01-01-2018 w.e.f. 30-06-2018:-

1. Janitorial services
2. Laundry services (On hold)
3. MEPG Services
4. CT scan
5. Security

5.4.1 Janitorial services

These services include cleaning of hospitals and its roads and ROW areas. Internal cleaning comprises of complete cleaning along with washrooms cleanliness and material for these services such as hand wash/sanitizer. The Outsourcing is hereby designed keeping in view the sizes of areas assigned to each sanitary worker along with condition and nature of service. Human resources are planned after measuring the total area of hospital, built up area excluding the areas of horticultural land and residential buildings. The workers shall work in three shifts in a day. Half of the total strength of sanitary workers shall work in morning shift due to patients load in OPD. The concerned sanitary work company is bound to provide cleaning services materials and their refilling as and when required.

The companies providing janitorial services will be required to provide quality janitorial services, complete their personnel strength on daily basis which will be ensured through biometric attendance. Also, the companies will be subject to pecuniary penalties by hospital authorities if services provided are not according to the contracts.

5.4.2 Laundry Services

Different models were being applied by the hospital administrations individually which were not properly catering the basic requirement of washing and disinfection of different items used for hospitals. This model includes the initial procurement of different daily use items such as three different colors bed sheets and pillow covers and are to be changed thrice a day. Moreover, the concerned company must provide washing and cleaning services of bed sheets, pillow covers, blankets along with covers, apparels/OT clothes.

5.4.3 MEPG Services

The service of the hospitals is suffering badly due to improper functionality of the existing electrical and mechanical equipment which arises due to lack of maintenance. This model satisfies the need of proper maintenance plan which comprises of regular visits of technicians for looking after of electrical and mechanical equipment and accessories. Outsourcing company will be responsible for immediate response and above mentioned services.

5.4.4 CT Scan Services

CT Scan Services in selected Hospitals of Punjab are also being undertaken as a component of Government's decision to revamp all Secondary Healthcare. The objective of this initiative is to provide high quality CT Scan Services to widely scattered population of low socio-economic groups at their door steps. It will ensure provision of satisfactory diagnose infections, muscle disorders, and bone fractures. The imaging technique of CT Scan can help doctor to study the blood vessels and other internal structures and assess the extent of internal injuries and internal bleeding.

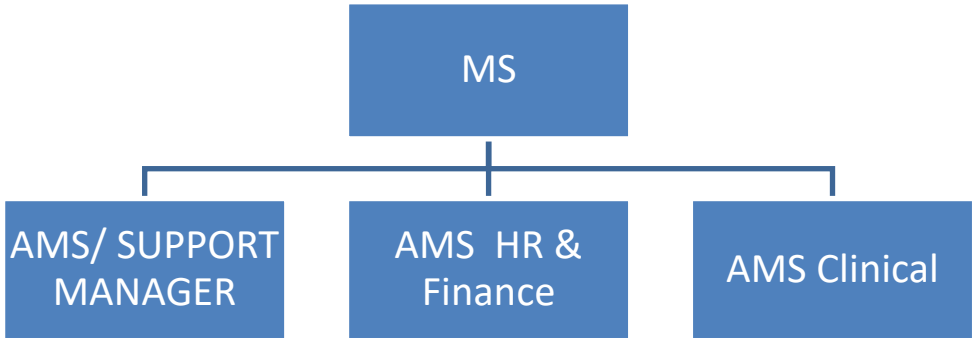
5.4.5 Security

The outsourcing model is designed due to non-provision of security arrangements and improper parking in different areas of premises of hospital. This model consists of guards who shall work in two shifts to provide security and surveillance for complete premises of hospital excluding residential areas. The devices required for this service to operate are arms, walkie talkie, Base set per unit and torch etc.

5.6 HR & Management Interventions Structure

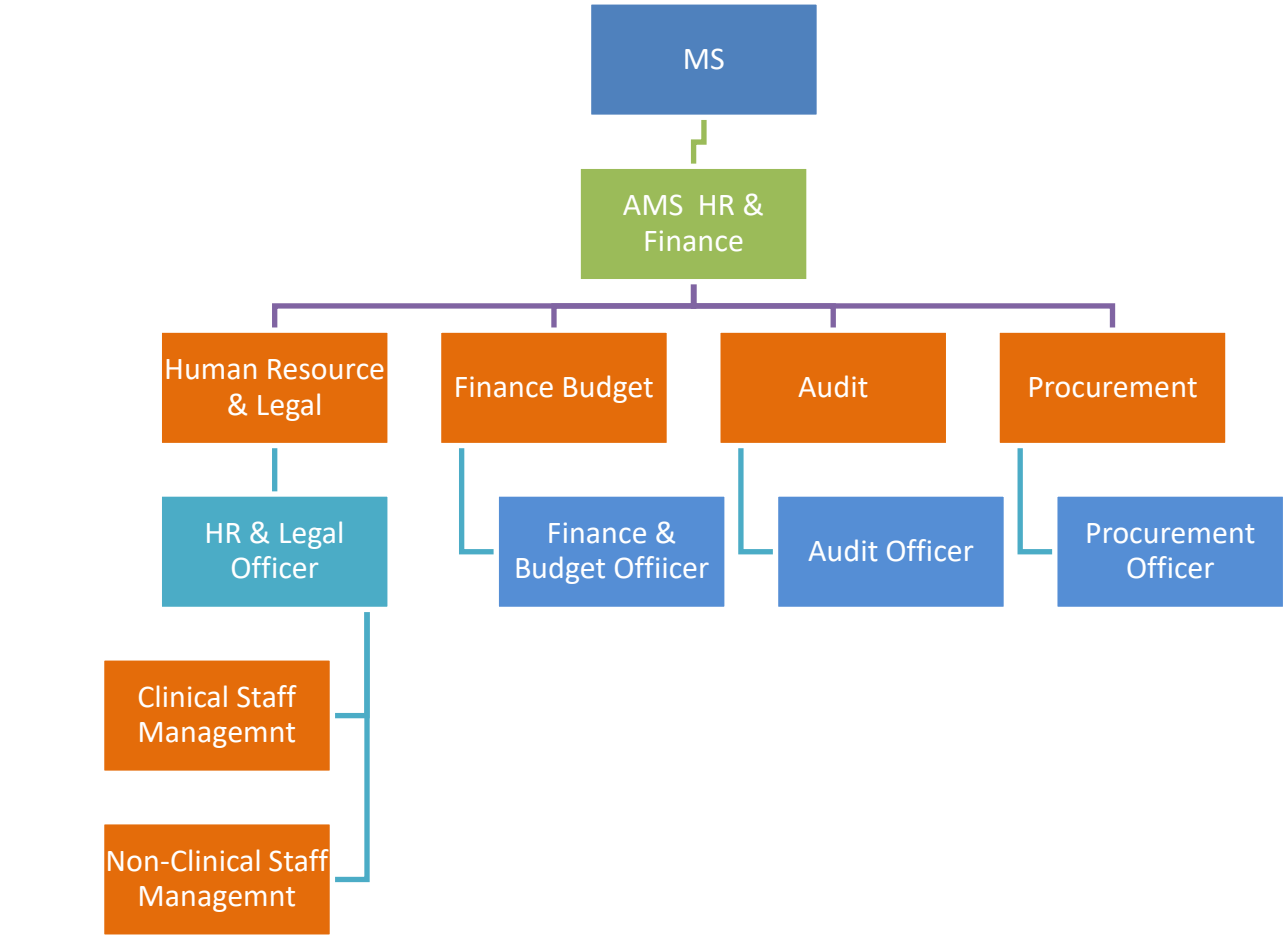
HR Interventions can be broadly classified into introduction of New Management Structure (NMS) staff.

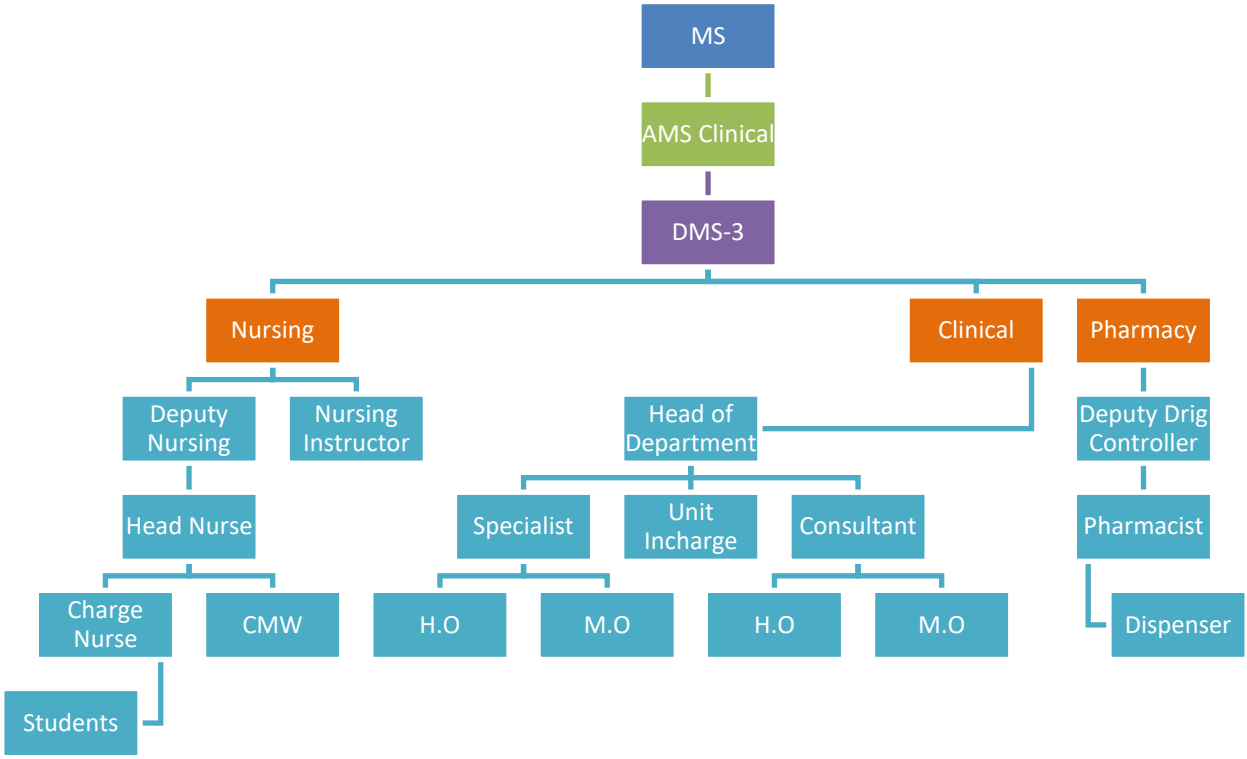
New Organogram of Hospital



MS

- AMS/ SUPPORT MANAGER
  - IT/Data Analysis
    - IT/ Statistical Officer
      - 4 Data Entry Operators
  - Admin
    - Admin Officer
      - 4 Monitors
        - Security
        - Transport
        - Parking
        - Janitorial
        - Canteen
        - External House Keeping
        - Civil Works
        - Technical works
        - Electrical Works
        - Internal House Keeping
        - Laundry
        - Stores & Supplies


MS
AMS HR & Finance
Human Resource & Legal
Finance Budget
Audit
Procurement
HR & Legal Officer
Finance & Budget Offiicer
Audit Officer
Procurement Officer
Clinical Staff Managemnt
Non-Clinical Staff Managemnt


MS
AMS Clinical
DMS-3
Nursing
Clinical
Pharmacy
Deputy Nursing
Nursing Instructor
Head of Department
Deputy Drig Controller
Head Nurse
Specialist
Unit Incharge
Consultant
Pharmacist
Charge Nurse
CMW
H.O
M.O
H.O
M.O
Dispenser
Students

5.6.1 Non Clinical HR Interventions (Human Resource (HR) Plan Management Structure)

Institution will run under the administrative control of Medical Superintendent, who will control this with the collaboration and cooperation of 3 Additional Medical Superintendents including AMS (Admin), AMS (HR & Budget) and AMS (clinical), 3 Deputy Medical Superintendents (morning, evening and night) will be reporting to AMS Clinical. Each clinical facility will be further controlled by head of concerned department and 6 administrative posts of HR & Legal Officer, IT/Static Officer, Budget & Account Officer, Admin Officer, Procurement Officer and Audit Officer will be provided as supporting hands for AMS Admin and AMS HR & Budget for smooth execution of hospital tasks.

Responsibilities / Job Descriptions, Eligibility & Financial Implications for Management Structure of Hospital

5.6.2.1 Medical Superintendent

Shall be overall responsible for all the affairs of the Hospital

5.6.2.2 AMS Admin.

Shall be responsible for following functions in addition to his own duties:

1. General administration
2. IT/Data analysis/statistics keeping (biometric machines, etc.).
3. In case of outsourced interventions like QMS/EMR he shall be responsible for enforcement of contract and in case of violation shall ensure action has been taken as envisaged in the contract.
4. He shall be responsible for entry of data on Citizen Feedback Model.
5. He shall be responsible for ensuring collection of report of actions taken on CFM reports and entry of that on CFM.
6. He shall be responsible for implementation of any IT related initiative in the hospital.
7. He shall be responsible for better record keeping of hospital
8. He shall devise and implement systems for better record keeping of hospital

9. He shall ensure generation of all types of reports/information required of hospital by District Government/P&SHD/any other authorized Public agency

New Management Structure (NMS)

In place of the clerical positions, the P&SH Department has introduced a New Management Structure (NMS), in all District and Tehsil Headquarters Hospitals. The officers recruited as a part of the NMS have a minimum of 16 years of education. Their minimum qualification is MBA / B.Sc. Engineering / M.Com / Pharm-D / M.Cs / LLB / MPA / CA Inter / ACCA / ACMA / Master Degree or equivalent in relevant field etc. Their recruitments were undertaken through a competitive process by a third party testing service.

5.6.2.3 Admin Officer

Shall be responsible for general administrative affairs of hospital along with following functions:

1. Security
2. Transport
3. Parking
4. Janitorial
5. External housekeeping
6. Electrical works
7. Internal housekeeping
8. Laundry
9. Stores & supplies

In case these functions have been outsourced, he shall be responsible for enforcement of these contracts and shall ensure that penalties are imposed in case of violation of contract. In case he fails to enforce contract and the outsourced function is not performed at par as per contract and penalties have not been imposed he shall be liable for non-action. Moreover, only reporting of violation of contract shall not suffice but he has to ensure follow up till the penalty has been imposed and action as envisaged in contract in case of violation has been taken.

Eligibility Criteria

1. Minimum qualification Masters' degree in Economics/ Public Administration/ Finance/ MBA Finance/Administration or equivalent from HEC recognized University

2. Minimum 2 years post degree experience of administration (Additional credit may be given for hospital administration/ Public sector administration of similar nature)

5.6.2.4 Human Resource Officer

Shall be responsible for following:

1. Issuance of monthly Duty rosters & special duty rosters of Eid, Muhurram etc. of all clinical & non-clinical staff in hospital
2. Issuance of Transfer/postings orders within hospital
3. Taking of joining from new incumbents and charge relieving orders of relinquishing officials
4. File maintenance of all employees of hospital
5. Record of all enquires of employees of hospital
6. Leave record of employees
7. Adjustment of officials on duty during leave of concerned employee
8. Litigation/ legal issues of hospital (shall ensure all court cases are well attended and all legal matters of hospital are well taken care of)
9. Any other HR related function assigned by MS/AMS

Eigibility Criteria

1. Minimum qualification Masters' degree in Economics/ Public Administration/ Finance/ MBA HR/Management/ Finance/Administration or equivalent from HEC recognized University
2. Minimum 1 year post degree experience of administration (Additional credit may be given for hospital administration/Public sector experience of similar nature)

5.6.2.5 IT/Statistical Officer

He shall be responsible for IT support for all IT interventions in the hospital.

He shall be in liaison with HISDU, P&SHD for proper reflection of hospital record on HISDU dashboard. In case there is any discrepancy or error he shall resolve the issue. Moreover, he shall be responsible for functionality of all IT equipment.

Eligibility Criteria

1. Minimum qualification Masters' degree in Computer Science or equivalent from HEC recognized University
2. 2 years post degree experience of IT/Data analysis(Additional credit may be given for similar assignment experience)

5.6.2.6 Finance & Budget Officer

Shall be responsible for following:

1. Handling of all financial matters of hospital
2. Petty cash handling
3. Preparation of budget
4. Budget review
5. Maintenance of accounts and record
6. Any other function assigned by AMR HR & Finance/MS/P&SHD

Eigibility Criteria

1. Minimum qualification Masters' degree in Finance/ MBA Finance or equivalent from HEC recognized University (Additional credit may be given to Charter accountant/ACCA)
2. Minimum 2 years post degree experience of Finance, Accounts & Budget (Additional credit may be given for Public sector experience of similar nature)

5.6.2.7 Procurement Officer

Shall be responsible for following functions:

1. Procurement of all kinds for hospital
2. Shall be in liaison with P&SHD for procurements being conducted
3. Any other function assigned by AMS HR & Finance /MS/P&SHD

Eigibility Criteria

1. Minimum qualification Masters' degree in Finance/ MBA Finance or equivalent from HEC recognized University
2. 2 years post degree experience of procurement (Additional credit may be given for public sector experience of procurement)

5.6.2.8 Quality Assurance Officer

He shall be responsible for quality of all things in the hospital.

Eligible Criteria

1. Masters in Total Quality Management / Masters in Public Health/ Masters in Health Administration/ Masters in Hospital Management / Masters in Biochemistry / Biotechnology / Molecular Biology / Microbiology from an HEC recognized University or equivalent.

   OR

   16 years education along with Post graduate diploma in Total Quality Management/ Post graduate diploma in Health Safety and Environmental Management System / Post graduate diploma in Healthcare and Hospital Management / Quality Assurance or equivalent.
2. Minimum 1 Year post degree relevant experience.

5.6.2.9 Logistics Officer

He shall be responsible for Supply Chain, logistics, fleet, warehousing and inventory management, clearing and forwarding in the hospital.

Eligible Criteria

1. M.Sc. Supply Chain Management/ MBA or Equivalent.
2. One year experience in Supply Chain, logistics, fleet, warehousing and inventory management, clearing and forwarding.

5.6.2.10 Data Entry Operators (DEO)

Four Data entry operators shall help IT officer in dispensation of his responsibilities.

Eligible Criteria

1. Minimum qualification BA / B.Sc / B.COM / BCS or equivalent from HEC recognized University. In case of BA/B.COM candidate must have six months computer course / Diploma.

2. Proficient in MS Word/ MS Excel/ MS Power point (additional credit may be given for additional relevant certified computer courses)
3. 1 years post degree relevant experience

5.6.2.11 Assistant Admin Officer

Shall be responsible for general administrative affairs of hospital and assist the admin officer.

Eligibility Criteria

1. Minimum qualification Masters' degree in Social Sciences/Economics/ Public Administration/ Finance/ MBA Finance/Administration or equivalent from HEC recognized University
2. Minimum 2 years post degree experience of administration (Additional credit may be given for hospital administration/ Public sector administration of similar nature).

5.7 HR for QMS and MSDS and Day Care Center.

5.7.1.1 QMS Supervisor / Information Desk Officer

Shall be responsible whole QMS networking

Eligible Criteria

1. M.Sc. (Comp. Engineering, Electronics, Electrical Engineering, IT, Telecommunication, Com. Science, Software Engineering, MCS), BCS (Comp. Engineering, Electronics, Electrical Engineering, IT, Telecommunication, Com. Science, Software Engineering, MBA, BBA, MPA, IT related 16 years Education.
2. Experience in the field of Software/Hardware/Network/DATA Quality Assurance, IT projects, IT enabled organizations, CCTV Control Room monitoring, Call Centre, Networking, Software Development will be considered as an added advantage during interview process.
3. Excellent communication Skill (Urdu, English) and IQ level
4. Age Limit of 21-28 years for Male & 21-30 years for Female
5. Typing Speed: 30WPM.

5.7.1.2 Computer Operators

Eight Computer operators shall help QMS Supervisor in dispensation of his responsibilities.

Eligible Criteria

1. Minimum qualification 14 year or Masters' degree from HEC recognized University
2. Proficient in MS Word/ MS Excel/ MS Power point (additional credit may be given for additional relevant certified computer courses)
3. 35 Word per Minute. Excellent communication in English and Urdu.

5.7.2 Consultants (MSDS) Implementation & Clinical Audit

Eligible Criteria

1. MBBS & Masters in Public Health, or equivalent qualification.
2. The consultant must have 10 years of hands on experience of third party validation, clinical audit of hospitals, Minimum Service Delivery Standards (MSDSs) implementation / hand holding; Report Writing; working knowledge of international best practices in hospital management will be preferred. Proficiency in MS Office is must. Must have strong communication skills.

5.7.2.1 Terms of Reference (TORs) for Consultants Minimum Service Delivery Standards (MSDS) Implementation & Clinical Audit

Government of the Punjab, Primary and Secondary Healthcare Department (P&SHD) is implementing multiple initiatives to improve the quality of healthcare at DHQ/THQ level across the province. One of the initiatives is Primary and Secondary Healthcare Revamping program which is being implemented by the Project Management Unit (PMU). Currently PMU is also involved in the standardization of quality of care at facility level through uniform set of Standard Operating Procedures (SOPs) & Standard Medical Protocols (SMPs) for compliance. The department intends to make all DHQs and THQ hospitals of Punjab as MSDS compliant which have been devised by Punjab Healthcare Commission.

Punjab Healthcare Commission was established under the PHC Act 2010 as an autonomous regulatory body for health sector; with the purpose of improving the quality, safety and efficiency of healthcare service delivery for all Public and Private Healthcare Establishments (including Allopaths, Homeopaths and Tibbs) in the province of Punjab. The Punjab Healthcare Commission has developed

Minimum Service Delivery Standards (MSDS) for all hospitals to improve the quality of healthcare services all over the Punjab. All Healthcare Establishments are required to implement MSDS to acquire a License to deliver healthcare services in Punjab.

This standardization effort will not only ensure availability of minimum services delivery standards (MSDS), SOPs, SMPs at all levels, but also the other essential inputs for functioning of systems and processes to ensure the smooth and safe delivery of quality healthcare services. These will also create conducive working environment for healthcare providers.

5.7.2.2 Objectives

The objective of this assignment is to implement & check all SOPs, SMPs, Minimum Service Delivery Standards (MSDS) & conduct clinical audit for 125 DHQ/THQ hospitals. Furthermore, the consultant will also monitor ongoing multiple trainings at DHQ/THQ hospitals.

5.7.2.3 Scope of Work

1. Develop policy & strategy for clinical audit of 125 hospitals.
2. Develop detailed clinical audit plan, with expected deliverables from hospitals. 360 degrees clinical audit.
3. Visit DHQ/THQ hospitals, to assess MSDS implementation and detailed report generation with short coming & highlight areas of improvement.
4. Review SOPs, SMPs & ISO Standards in hospitals to identify non-compliance.
5. Visit DHQ/THQ hospitals to implement clinical audit as per devised strategy, as well as monitoring and implementing MSDS standards.
6. Prepare detailed visit reports of clinical short comings; and suggest, and implement improvement plan.
7. Monitoring & auditing of patient referral system, detailed report on error and recommendations on rectification of errors.
8. Visit DHQ/THQ hospitals to implement clinical audit as per devised strategy, as well as monitoring and implementing MSDS standards.
9. Prepare detailed visit reports of clinical short comings; and suggest, and implement improvement plan.
10. Monitoring & auditing of patient referral system, detailed report on error and recommendations on rectification of errors.
11. Monitoring and evaluation of multiple trainings imparted at DHQ/THQ hospitals.
12. Any other relevant task assigned by Project Director/Director Quality Assurance / Project Manager.

5.7.2.4 Reporting Arrangements

- The Consultant (MSDS & Clinical Audit) will report to the Project Director/Director Quality Assurance/Senior Project Manager, P&SHD

5.7.2.5 Duration of Assignment

- The duration of assignment will initially be for THREE MONTHS / 120 DAYS which will be extendable subject to satisfactory performance.

5.7.2.6 Outputs / Key Deliverables

- Study/desk review the relevant Minimum Service Delivery Standards (MSDS) prescribed by PHC & ISO Standards, train the hospital staff/monitor/facilitate their implementation.
- Study/desk review the existing Standard Operating Procedures (SOPs), train the hospital staff/monitor/facilitate their implementation and suggest improvements where necessary.
- Study/desk review the existing SMPs, train the hospital staff/monitor/facilitate their implementation and suggest improvements where necessary.
- Conduct hospital visits of 125 DHQ/THQ hospitals (each DHQ hospital to be visited monthly & each THQ hospital every three months).
- Conduct formal hospital survey for confirming the implementation of MSDS on the relevant Scoring Matrix.
- Submit detailed report of each hospital visit on a standard format prescribed for the purpose.
- Conduct a system, process analysis with special emphasis on clinical audit and submission of detailed report accordingly.

5.7.2.7 Remunerations

- The consultant will be paid amount of Rs. **4500-6500/- per day** with no other benefits.
- All logistics will be arranged/reimbursed by PMU for field visits (accommodation, refreshments etc).

5.7.2.8 Terms of Payment

- Consultant will be paid on monthly basis throughout the contract period.

5.7.3 HR for Day Care Center

5.7.3.1 Manager Day Care Center (DCC)

Shall be responsible for general administrative affairs of DCC.

Eligibility Criteria

1. Minimum qualification Masters' degree in Economics/ Public Administration/ Finance/ MBA Finance/Administration or equivalent from HEC recognized University
2. Minimum 2 years post degree experience of administration (Additional credit may be given for hospital administration/ Public sector administration of similar nature)

5.7.3.2 Montessori Trained Teacher

Shall be responsible for basic education of children.

Eligibility Criteria

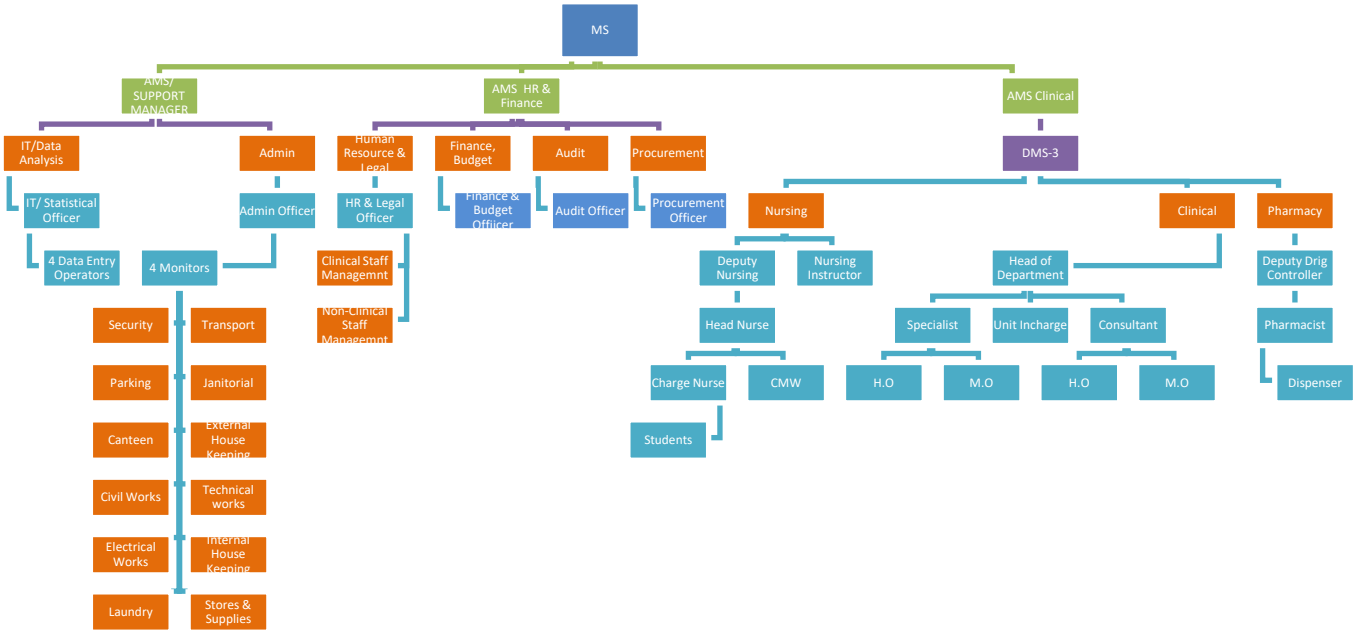
1. Minimum qualification BA/BSC or equivalent from HEC recognized University along with B.Ed.
2. Minimum 1 years post degree experience of teaching (Additional credit may be given for Public sector teaching of similar nature)

5.7.3.3 Attendant / Care Giver

Shall be responsible for special care of the children.

Eligibility Criteria

Minimum qualification Matric or equivalent alongwith diploma in relevant field



The Planning & Development Board vide letter No.12(24)PO(COORD-II)P&D/2022 dated 14-07-2022 has informed that revised standard pay package were discussed and approved by the 83rd PDWP meeting held on 28-06-2022 under the chairmanship of Chairman P&D Board for all ADP funded Project posts of Department /Organizations working in Government of the Punjab:

Project Pay Scale (PPS)	**Revised Project Pay Scales (Permissible Range) (PKR)**	**Annual Increment Up to % age**
PPS-1	28,000 --- 44,800	10
PPS-2	35,000 --56,000	10
PPS-3	43,750 -- 70,000	10
PPS-4	52,500 -- 84,000	10
PPS-5	70,000 --112000	10
PPS-6	105,000 -- 172,200	8
PPS-7	157,500 --258,300	8
PPS-8	218,750--358,750	8
PPS-9	306,250--502,250	8

PPS-10	437,500--700,000	5
PPS-11	612,500-- 980,000	5
PPS-12	875,000 --1,400,000	5

In view of the above the Pay package of NMS staff has been revised. Financial Implications of New Management Structure Model based on revised Standard Pay Package (PPS) approved by the 83rd PDWP meeting held on 28-06-2022:

Name of Post	No. of Employees	Original Pay package approved		Revised Pay package	
		Per Month Salary	Salary for One Year	Per Month Salary	Salary for One Year
Admin Officer	1	80,000	960,000	105,000	1,260,000
Human Resource Officer	1	80,000	960,000	105,000	1,260,000
IT/Statistical Officer	1	80,000	960,000	105,000	1,260,000
Finance & Budget Officer	1	80,000	960,000	105,000	1,260,000
Procurement Officer	1	80,000	960,000	105,000	1,260,000
Quality Assurance Officer	1	80,000	960,000	105,000	1,260,000
Logistics Officer	1	80,000	960,000	105,000	1,260,000
Data Entry Operator (DEO)	2	35,000	840,000	44,000	1,056,000
Assistant admin Officer	2	50,000	1,200,000	70,000	1,680,000
Total	**11**		**8,760,000**	**849,000**	**11,556,000**

5.8 Other Initiatives:

There are many other initiatives which government plans to undertake in order to improve healthcare services in the province. These include:

- Rehabilitation of Emergency Ward
- Fixture of Benches
- Addition of Bracket Fans/Water Coolers/LCDs with signage
- Supply of Laboratory/ Equipment/USG/ECG etc.
- CCU Improvement
- Installation of Water filtration plants
- Replacement of Bed sheets/Pillows/Matrasses
- Installation of Transformers/Dual Connection
- Improvement of Labor rooms/Nurseries

- Maintenance and replacement of Air-conditioners through Outsourcing
- Blood Bank improvement
- Installation of CCTV Cameras
- Installation of Basic Fire-fighting Equipment
- Up gradation of Pharmacy and medicine Store
- Improvement of Internal Roads and laying of Tough pavers
- External Development
- Rehabilitation of Hepatitis/T.B Control

The PMU is essential to deliver the project end-item within budget and time limitations, in accordance with technical specifications, and, when specified, in fulfillment of project objectives.

5.9 Patient Management Protocol

5.9.1 Emergency:

1. Initial reception and computerization of data, issuance of medical record number and preparation of record file.
2. Patients seen by C.M.O. initial assessment (brief history and physical examination) is entered on the emergency slip/file initial treatment is started.
3. C.M.O calls the medical officer / house officer of the relevant department who takes on of the following action:-
    i. Discharges the patient from emergency department after the patient is stabilized (himself or after consultation).
    ii. Returns the patient in emergency department and inform the consultant or call such patient is either discharged after some time i.e. 2 hours of admitted later on
    iii. Patient is straight way admitted by the medical officer himself or in consultation with the consultant
4. A separate record is maintained by each department. Each patient discusses at the morning meeting and any pitfalls are any pitfalls are corrected.
5. The patient who is admitted is again entered into the computer in the ward, complete history and physical examination is carried out and relevant lab & radiological investigations are ordered. (If not already done in the emergency department).

6. The definitive management is either started by the medical officer himself or in consultation with the consultant. (Telephone or physically). The patient is prepared for surgery if required.
7. At the evening round of the ward, the patients admitted throughout the day (Through OPD or emergency) are seen by the specialist. Appropriate changes in the management are carried out.
8. During the night, medical officer & house officer will be on duty and they will remain in contact with consultant.
9. In the morning round all the new admissions and old patients are thoroughly discussed management / treatment changed, surgery ordered or discharge ordered.
10. The discharge certificate is either prepared by the house officer or medical officer. If prepared by the house officer, it is countersigned by the medical officer

Appropriate changes are made in the computer record after discharge. The file is sent to the central record.

5.9.2 O.P.D:

1. After the initial registration and issuance of computerized number patient is sent to the relevant medical officer with the OPD slip/file.
2. The medical officer / house officer of the relevant department performs the initial assessment. The medical officer himself advises the treatment / investigation or refers the patients to the specialist or admits the patient.
3. After admission. The same routine is followed which has been mentioned in the case of admission through emergency.

5.9.3 Death or End of Life Management.

1. The decision regarding resuscitation is made at the initial stages by the medical officer / house officer or specialist in consultation with the patient himself and / attendants.
2. The DNR (Do not resuscitate) patients are only seen by the medical officer/ hose officer at the time of death.
3. For the patients to be resuscitated, a special code (blue code) is declared when patient go onto cardiac or the terminal events.
4. The policy for very sick / terminal and dying patients is formulated at the hospital administration level and appropriate modifications are decided in the relevant department for each patient.

5. Every death is discussed weekly at the mortality committee at the department and at the hospital level cleared by the Medical Superintendent.

5.9.4 Inventory Control System

The stock keeping and issuance of such items shall also be controlled and monitored through closer supervision and checks and balance system built in the software. The stock and expense of durable and consumable items will be kept in the system and also as hard copies. The main stores computers will be linked with the sub stores computers through networking. The areas like emergency. Outpatient department, Indoor registration desks, Laboratory and Radiology Department, ICUs, etc., will have linkages with the main and sub stores to know about:-

1. Stock in hand of various items
2. New receipt of these items
3. The items which have been issued to other departments
4. The Items which are not available
5. The expenditure incurred on the purchase.

The budget and details of account shall be linked with the financial control system.

5.9.5 Project Monitoring Committee

A Project Monitoring Committee is proposed hereby as under to monitor the project regarding Revamping of THQ Hospital:

1.	Deputy Commissioner	(Chairman)
2.	District Monitoring Officer	(Member)
3.	Executive Engineer Buildings	(Member)
4.	Assistant Commissioner Concerned	(Member)
5.	MS THQ Hospital	(Secretary/Member)

The committee will monitor the progress of the project and will hold regular weekly meeting to review the progress.

5.10 Relationship with Sectoral Objectives

The Government of the Punjab, Primary & Secondary Healthcare Department is in the process of undertaking number of initiatives to improve health care delivery system in the province. The Government of the Punjab is firmly committed to provide health care services at the doorstep of the community through integrated approach. A number of projects to improve emergency health care service particularly targeting on the promptness and quality have been

initiated. Although major focus is on disease prevention and health promotion strategies by providing specialist health care services to victims of various diseases in the patients is one of the top most priority. The instant project will be a major wing to health department with line departments.

Mainly the linkage with social welfare and human empowerment, labour and manpower, Education Department, Special Education, Home of the project will be in a vibrant environment in the holistic manner. The scope of the project itself aims to establish horizontal linkage with all the stakeholders through multi-sectorial approach. The health care facilities and ongoing services provided in the hospital will seek strength and viability from its linkage and public ownership.

6. DESCRIPTION AND JUSTIFICATION OF PROJECT

6.1 JUSTIFICATION OF PROJECT

attached

1. Description, Justification and Technical Parameters

The scheme has been estimated on face of the factual basic requirements and if needed, alterations and has been quoted in this PC-1. The Population of Tehsil Sadiqabad District Rahim Yar Khan is more than 0.527 million. The area of the THQ Hospital Sadiqabad District Rahim Yar Khan is 516,231 SFT land.

6.1 Description and Justification

The Project Management Unit, Revamping Program, Primary and Secondary Healthcare Department planned to start the 2nd Phase of the said revamping program. The instant PC-I is also meant for provision of requisite biomedical and non-biomedical equipment, Electricity, Furniture & Fixture, Signage, HR and outsourcing of services for THQ Sadiqabad District Rahim Yar Khan.

Revamping of THQ Sadiqabad District Rahim Yar Khan constitutes of value addition in all major domains of the hospital including improvement of Civil infrastructure, addition of water filtration plant facility, value addition in Emergency ward and making the health facility more equipped with modern bio-medical equipment. State of the art furniture and fixtures complemented by interior and exterior decors are also part of this revamping project backed by the thought of dedicated express line of electricity to ensure smooth operations of hospitals will bring the modern health facilities in healthy and comfortable environment at the door step of masses. Introduction of new model of outsourcing of laundry services to ensure provision of neat and clean bed sheets, pillow covers, blankets etc. round the clock is also a part of this project. Fool proof security and adequate cleanliness measures of whole health facility are also proposed in this PC-I.

Civil work component will be carried out through C&W Department instead of District Health Authority for this hospital. Value addition in Emergency block is proposed in four domains i.e. Triage, Minor O.T, Specialized care room and emergency ward. Addition of Water Filtration Plant facility where it is not available as unclean or polluted water is devastating for human health. A key consideration was made while selecting furniture and its compatibility with hospital grade cleaners, detergents and disinfectants. Signage is an effective interface between the user and intended facility. Effective signage promotes the healthcare facility in a patient friendly manner. Access is an important part of quality of care. A crucial aspect for patient satisfaction is their comfort levels with the facility itself i.e. a person's ease in navigating a facility, and the timeliness in receiving care. Clear and proper signage at strategic points helps patients in reaching their destination without losing much of their valuable time and saves lot of their efforts in unnecessary enquiring from persons. In this regard, the Equipment of Emergency, Bio-Medical, Non-Bio-Medical, Electricity, Signage, Janitorial, Security, Laundry, Maintenance of Generator and Horticulture have been added as per actual requirement of the Hospital. The Equipment of MSDS, IT, Furniture Fixture, Day

Care Center, HR, Medical Gases, Cafeteria are fixed in all hospitals as per yardstick established by P& SH Department. Prior to initiation of this exercise standardization of required facilities was done by committee of experts in P & SH Department and on the basis of it, gaps were identified which would be covered under this PC-I.

Justification for 3rd Revision of PC-I

1. Originally the Civil work component of the scheme was planned to be executed by the Health Council of the concerned District Health Authority based on cost estimates prepared by the Infrastructure Wing of PMU and approved by the DDSC. Accordingly, funds of Rs.3, Rs.5 and Rs.10 million were provided during FY 2017-18 for the execution of work as per parameters provided to these THQ Hospitals. However, no reasonable revamping civil work was carried out and hence did not fulfil the requirement and the objectives of the Revamping Program. Now P&SHD has decided to carry out further revamping of Civil work through Communication and Works Department Punjab to accomplish the uniformity of THQ Hospitals with already revamped hospitals of Phase-I. Hence the Rough Cost Estimates of the Punjab Buildings Department has been included in the civil work cost of this scheme.

2. Primary & Secondary Healthcare Department (P&SHD) made a decision to shift all the clerical posts in DHQ / THQ hospitals of Punjab to District Health Authorities as per notification dated 24th October, 2017. This administrative decision was taken due to a multiplicity of reasons which were adversely affecting healthcare service delivery in the hospitals. Primarily, these clerical posts were not specialized in any particular field, and therefore, the HR hired against these posts were generalized to the extent that they were not able to perform functions of Hospitals and Health Specific tasks that any medical administration should ideally perform. Additionally, public complaints against the clerical staff on issues such as behavior, performance created an environment of malfeasance in all hospitals. In place of the clerical positions, the Department introduced a New Management Structure (NMS), in all District and Tehsil Headquarters Hospitals. The officers/officials recruited as a part of the NMS have a minimum of 16 years of education. Introduction of New Management Structures (NMS) across all secondary hospitals in the Punjab, has allowed for the overall efficiency of District and Tehsil Headquarters Hospitals. In each Tehsil Headquarter Hospital HR under MNS has been provided for smooth running of the health services. Pay Package for NMS Staff was never been revised since 2017-18, therefore it was decided to approach the P&D Department for revision of Pay package. The PDWP approved revised pay page in its meeting held on 08-02-2022 based on PPS approved in 60th PDWP meeting as under: -

Name of Posts	60th PDWP Meeting		
	PPS Assigned	Permissible Range (PKR) & Annual increment	Approved Pay Package
HR & Legal Officer, IT & Statistical Officer, Admin Officer, Procurement Officer, Finance & Budget Officer, Logistics Officer, Quality Assurance Officer, Audit Officer and Biomedical Engineer	PPS-6	75,000-105,000 (8% annual incr.)	75,000
Assistant Admin Officer	PPS-5	50,000-75000 (10% annual incr.)	50,000
Data Entry Operator	PPS-3	35,000-55,000 (10% annual incr.)	35,000

Now the Planning & Development Board vide letter No.12(24)PO(COORD-II)P&D/2022 dated 14-07-2022 has informed that revised standard pay package were discussed and approved by the 83rd PDWP meeting held on 28-06-2022 under the chairmanship of Chairman P&D Board for all ADP funded Project posts of Department /Organizations working in Government of the Punjab. Therefore, the revised Pay Package has been incorporated in the revised PC-I.

3. As the gestation period of the PC-I till 30.06.2023, therefore, the cost of NMS has been revised for smooth running of the Tehsil Headquarter Hospitals and hence PC-I has been proposed till 30- 06-2025.

4. Infrastructure team has conducted the Joint visits with the team of C&W Department. During the field visits, few alterations were recommended by the technical teams which have been incorporated in the Revised Rough Cost Estimates of the subject scheme and have been attached with the PC-I along with comparative statement. Therefore, Civil works component cost has been decreased from Rs. 154.238 million to Rs. 14.179 million due to few changes in the scope and MRS rates (2nd Bi-annual 2022).

85 THQ Hospitals covered under the Program:

The location map of the 85 THQ hospitals that will be taken up for rehabilitation in this program is given below:

PROJECT MANAGEMENT UNIT
PRIMARY & SECONDARY HEALTHCARE DEPARTMENT

LOCATION OF DHQ AND THQ HOSPITALS IN PUNJAB

6.2 SECTORAL SPECIFIC INFORMATION

Social Sectors, Health Department

7. CAPITAL COST ESTIMATES

Financial Components: Revenue
Cost Center:OTHERS- (OTHERS)
Fund Center (Controlling):N/A

Grant Number: Development - (PC22036)
LO NO:LO17011170
A/C To be Credited: Assan Assignment

PKR Million

Sr #	Object Code	2019-2020		2020-2021		2021-2022		2022-2023		2023-2024		2024-2025	
		Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign
1	**A05270**-To Others	0.000	0.000	0.000	0.000	0.000	0.000	119.124	0.000	100.000	0.000	100.000	0.000
Total		**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**119.124**	**0.000**	**100.000**	**0.000**	**100.000**	**0.000**

Financial Components: Capital
Cost Center:OTHERS- (OTHERS)
Fund Center (Controlling):LE4203

Grant Number: Government Buildings - (PC12042)
LO NO:LO21010609
A/C To be Credited: Account-I

PKR Million

Sr #	Object Code	2019-2020		2020-2021		2021-2022		2022-2023		2023-2024		2024-2025	
		Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign
1	**A12403**-Other Buildings	0.000	0.000	0.000	0.000	0.000	0.000	49.349	0.000	0.000	0.000	0.000	0.000
Total		**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**49.349**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**

Abstract of Cost

Revamping of THQ Hospital Sadiqabad

Scope of work	Original			1st Revised			2nd Revised			Amended Cost			3rd Revised		
	Cost in million														
	Capital	Revenue	Total	Capital	Revenue	Total	Capital	Revenue	Total	Capital	Revenue	Total	Capital	Revenue	Total
Capital component															
Internal development	0.000	25.530	25.530	0.000	25.530	25.530	27.824	10.000	37.824	31.682	10.000	41.682	31.682	10.000	41.682
External development	0.000	3.475	3.475	0.000	3.475	3.475	11.122	0.000	11.122	14.209	0.000	14.209	14.209	0.000	14.209
Water filtration plant	0.000	5.600	5.600	0.000	5.600	5.600	3.060	0.000	3.060	3.458	0.000	3.458	3.458	0.000	3.458
Total Capital Component	**0.000**	**34.605**	**34.605**	**0.000**	**34.605**	**34.605**	**42.007**	**10.000**	**52.007**	**49.349**	**10.000**	**59.349**	**49.349**	**10.000**	**59.349**
Revenue component															
Emergency	0.000	23.043	23.043	0.000	23.043	23.043	0.000	32.158	32.158	0.000	32.158	32.158	0.000	53.075	53.075
MSDS	0.000	8.647	8.647	0.000	8.647	8.647	0.000	9.654	9.654	0.000	9.654	9.654	0.000	13.438	13.438
Med. Machinery and Equipment	0.000	49.608	49.608	0.000	49.608	49.608	0.000	67.541	67.541	0.000	67.541	67.541	0.000	104.090	104.090
Electricity	0.000	17.180	17.180	0.000	17.180	17.180	0.000	17.180	17.180	0.000	17.180	17.180	0.000	30.380	30.380
IT & QMS & Surveillance	0.000	14.515	14.515	0.000	14.515	14.515	0.000	16.715	16.715	0.000	16.715	16.715	0.000	20.120	20.120
Furniture and Fixtures	0.000	13.504	13.504	0.000	13.504	13.504	0.000	13.504	13.504	0.000	13.504	13.504	0.000	18.788	18.788
Interior and Exterior decorations/ Signage	0.000	4.337	4.337	0.000	4.337	4.337	0.000	5.980	5.980	0.000	5.980	5.980	0.000	5.980	5.980
Day Care Center	0.000	1.600	1.600	0.000	1.600	1.600	0.000	1.600	1.600	0.000	1.600	1.600	0.000	1.600	1.600
Human resource (HR) plan	0.000	17.220	17.220	0.000	17.220	17.220	0.000	42.350	42.350	0.000	42.350	42.350	0.000	59.433	59.433
LC Deficit during procurement (currency fluctuation)								2.172	2.172		2.172	2.172		2.172	2.172
Total Revenue component	**0.000**	**149.654**	**149.654**	**0.000**	**149.654**	**149.654**	**0.000**	**208.854**	**208.854**	**0.000**	**208.854**	**208.854**	**0.000**	**309.076**	**309.076**
Outsourcing component															
Janitorial Services	0.000	14.802	14.802	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Security and Parking services	0.000	7.232	7.232	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Laundry Services	0.000	4.200	4.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Maintenance (Generator)	0.000	2.320	2.320	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEP	0.000	4.686	4.686	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Medical Gases	0.000	1.304	1.304	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Cafeteria	0.000	6.743	6.743	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Horticulture services	0.000	4.687	4.687	0.000	0.048	0.048	0.000	0.048	0.048	0.000	0.048	0.048	0.000	0.048	0.048
Total outsourcing cost	**0.000**	**45.975**	**45.975**	**0.000**	**0.048**	**0.048**	**0.000**	**0.048**	**0.048**	**0.000**	**0.048**	**0.048**	**0.000**	**0.048**	**0.048**
Total	**0.000**	**230.234**	**230.234**	**0.000**	**184.307**	**184.307**	**42.007**	**218.902**	**260.909**	**49.349**	**218.902**	**268.251**	**49.349**	**319.124**	**368.473**
Contingency (1%) only on Civil	0.000	0.346	0.346	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Third Party Monitoring (TPM) (1%)	0.000	2.302	2.302	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Third Party Validation (TPV) (1%)	0.000	2.302	2.302	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Grand Total	**0.000**	**235.185**	**235.185**	**0.000**	**184.307**	**184.307**	**42.007**	**218.902**	**260.909**	**49.349**	**218.902**	**268.251**	**49.349**	**319.124**	**368.473**

Emergency Equipment

				Original			1st Revised			2nd Revised			3rd Revised		
Sr. No.	Area	ITEM DESCRIPTION	Yard Stick	Required Quantity (T=4+S=0+E=8)	Actual Unit Price	Actual Total Cost(Rs)	Required Quantity (T=4+S=0+E=8)	Actual Unit Price	Actual Total Cost(Rs)	Required Quantity (T=4+S=0+E=8)	Actual Unit Price	Actual Total Cost(Rs)	Required Quantity (T=4+S=0+E=8)	Actual Unit Price	Actual Total Cost(Rs)
1	Reception Area	Table	0	0	99,750	-	0	99,750	-	0	99,750	-	0	99,750	-
2		Chairs	0	0	26,775	-	0	26,775	-	0	26,775	-	0	30,000	-
3		Computer Data Entry With Printer	1	1	141,750	141,750	1	141,750	141,750	1	141,750	141,750	1	195,000	195,000
4	3	Table (2.5 X 4)*(N)	0	0	101,850	-	0	101,850	-	0	101,850	-	0	101,850	-
5	4	Chairs *(N)	0	0	26,775	-	0	26,775	-	0	26,775	-	0	30,000	-
6	Triage area	B.p apparatus wall type*(N)	3	4	15,750	63,000	4	15,750	63,000	4	30,000	120,000	4	30,000	120,000
7		Gurney WITH FOOT STEP)*(N)	3	4	420,000	1,680,000	4	420,000	1,680,000	4	460,000	1,840,000	4	800,000	3,200,000
8		Mercury B.P apparatus*(N)	2	3	33,600	100,800	3	33,600	100,800	3	36,000	108,000	3	36,000	108,000
9		Laryngoscope paeds &adult each*(N)	2	3	10,500	31,500	3	10,500	31,500	3	12,000	36,000	3	20,000	60,000
10		Diagnostic set*(N)	1	2	45,150	90,300	2	45,150	90,300	2	50,000	100,000	2	85,000	170,000
11		ECG Machine (with trolley) *(N)	1	2	169,785	339,570	2	169,785	339,570	2	180,000	360,000	2	300,000	600,000
12		Central oxygen with accessories FOR each	0	0	420,000	-	0	420,000	-	0	-	-	0	-	-
13		NEBULIZER HD*(N)	2	3	125,265	375,795	3	125,265	375,795	3	215,000	645,000	3	300,000	900,000
14		SUCKER MACHINE*(N)	1	2	259,350	518,700	2	259,350	518,700	2	275,000	550,000	2	300,000	600,000
15		Resuscitation Trolley (fully equipped))*(N)	1	2	244,733	489,466	2	244,733	489,466	2	400,000	800,000	2	600,000	1,200,000
16		INSTRUMENT CABINET*N	1	2	69,300	138,600	2	69,300	138,600	2	69,300	138,600	2	69,300	138,600
17		MEDICINE TROLLY*N	1	2	60,900	121,800	2	60,900	121,800	2	60,900	121,800	2	60,900	121,800
18	Minor O.T	O.T table WITH foot step	2	2	1,417,500	2,835,000	2	1,417,500	2,835,000	2	2,000,000	4,000,000	2	2,500,000	5,000,000
19		Anesthesia Machine	1	1	2,509,554	2,509,554	1	2,509,554	2,509,554	1	3,000,000	3,000,000	1	7,000,000	7,000,000
20		Sucker machine	2	2	259,350	518,700	2	259,350	518,700	2	275,000	550,000	2	300,000	600,000
21		Portable O.T Lights	1	1	304,220	304,220	1	304,220	304,220	1	500,000	500,000	1	900,000	900,000
22		Ceiling o.t light	1	1	414,750	414,750	1	414,750	414,750	1	800,000	800,000	1	950,000	950,000
23		Hot air oven	1	1	110,000	110,000	1	110,000	110,000	1	385,000	385,000	1	450,000	450,000
24		Autoclave	1	1	441,000	441,000	1	441,000	441,000	1	550,000	550,000	1	850,000	850,000
25		Instrument trolley*N	1	1	54,000	54,000	1	54,000	54,000	1	54,000	54,000	1	55,000	55,000
26		Defibrillator*N	1	1	310,000	310,000	1	310,000	310,000	1	650,000	650,000	1	800,000	800,000
27		Instrument cabinet	1	1	69,300	69,300	1	69,300	69,300	1	69,300	69,300	1	69,300	69,300
28	Constant / specialized care room	GURNEYS*N	0	0	420,000	-	0	420,000	-	0	460,000	-	0	850,000	-
29		Sucker machine *(N)	0	0	259,350	-	0	259,350	-	0	275,000	-	0	300,000	-
30		Nebulizer HD*(N)	0	0	125,265	-	0	125,265	-	0	215,000	-	0	300,000	-
31		Center Oxygen supply*N	0	0	420,000	-	0	420,000	-	0	-	-	0	-	-
32		Resuscitation Trolley (fully equipped))*(N)	0	0	237,618	-	0	237,618	-	0	400,000	-	0	600,000	-
33		Defibrillator*N	0	0	302,605	-	0	302,605	-	0	650,000	-	0	800,000	-
34		Pulse- oximeter*(N)	0	0	104,000	-	0	104,000	-	0	160,000	-	0	225,000	-
35		Bedside-monitor*(N)	0	0	301,665	-	0	301,665	-	0	550,000	-	0	1,200,000	-
36		ECG MACHINE)*(N)	0	0	169,785	-	0	169,785	-	0	169,785	-	0	300,000	-
37		BP APPARATUS*N	0	0	15,750	-	0	15,750	-	0	16,000	-	0	16,000	-
38		FOOT STEP)*(N)	0	0	3,150	-	0	3,150	-	0	4,000	-	0	5,500	-
39		ATTANDANT BENCH)*(N)	0	0	5,250	-	0	5,250	-	0	8,000	-	0	10,000	-
40	7	(MOTRIZED BEDS) with accessories (with foot steps*(N)	7	8	210,000	1,680,000	8	210,000	1,680,000	8	400,000	3,200,000	8	600,000	4,800,000
41	8	ECG machine(with trolley) *(N)	1	2	169,785	339,570	2	169,785	339,570	2	169,785	339,570	2	300,000	600,000
42	Emergency ward	Pulse- oximeter *(N)	6	7	104,000	728,000	7	104,000	728,000	7	160,000	1,120,000	7	225,000	1,575,000
43		Bedside-monitor*(N)	3	4	301,665	1,206,660	4	301,665	1,206,660	4	550,000	2,200,000	4	1,200,000	4,800,000
44		B.P apparatus wall type *(N)	6	7	26,250	183,750	7	26,250	183,750	7	30,000	210,000	7	30,000	210,000
45		Nebulizer HD *(N)	2	3	125,265	375,795	3	125,265	375,795	3	215,000	645,000	3	300,000	900,000

Emergency Equipment

				Original			1st Revised			2nd Revised			3rd Revised		
Sr. No	Area ward	ITEM DESCRIPTION	Yard Price	Required Quantity	Actual Unit Price	Actual Total Cost (Rs.)	Required Quantity	Actual Unit Price	Actual Total Cost (Rs.)	Required Quantity	Actual Unit Price	Actual Total Cost (Rs.)	Required Quantity	Actual Unit Price	Actual Total Cost (Rs.)
46		Resuscitation Trolley (fully equipped))*(N)	1	2	237,618	475,236	2	237,618	475,236	2	400,000	800,000	2	600,000	1,200,000
47		Defibrillator*N	1	2	299,153	598,307	2	299,153	598,307	2	650,000	1,300,000	2	800,000	1,600,000
48		Sucker machine *(N)	2	3	259,350	778,050	3	259,350	778,050	3	275,000	825,000	3	300,000	900,000
49		Wheal chairs *(N)	0	0	31,500	-	0	31,500	-	0	35,000	-	0	35,000	-
50		Stretcher *(N)	0	0	69,300	-	0	69,300	-	0	69,300	-	0	69,300	-
51		ambo bag paeds with Mask*N	5	5	15,750	78,750	5	15,750	78,750	5	19,000	95,000	5	19,000	95,000
52	**Generalized**	ambo bag adult with Mask* N	5	5	15,750	78,750	5	15,750	78,750	5	19,000	95,000	5	19,500	97,500
53		patient stool * N	2	2	4,085	8,169	2	4,085	8,169	2	4,500	9,000	2	5,000	10,000
54		Portable x-rays (300 M.A)	1	1	3,450,350	3,450,350	1	3,450,350	3,450,350	1	4,300,000	4,300,000	1	9,800,000	9,800,000
55		Portable ultra-sound	1	1	1,403,325	1,403,325	1	1,403,325	1,403,325	1	1,500,000	1,500,000	1	2,400,000	2,400,000
		Total				**23,042,517**			**23,042,517**			**32,158,020**			**53,075,200**
						23.043			23.043			32.158			53.075

MSDS

		Original			1st Revised			2nd Revised			3rd Revised		
Sr. No.	ITEM DESCRIPTION	Quantity Required	Actual Unit Price	Actual Total Cost(Rs)	Quantity Required	Actual Unit Price	Actual Total Cost(Rs)	Quantity Required	Actual Unit Price	Actual Total Cost(Rs)	Quantity Required	Actual Unit Price	Actual Total Cost(Rs)
1	Histology slide boxes	3	3,100	9,299	3	3,100	9,299	3	4,500	13,500	3	4,500	13,500
2	Labeling Device connected with Computer	3	60,000	180,000	3	60,000	180,000	3	80,000	240,000	3	80,000	240,000
3	Safe Transportation Boxes	2	15,750	31,500	2	15,750	31,500	2	18,000	36,000	2	18,000	36,000
4	Portable Safety Exhaust Hood	1	160,000	160,000	1	160,000	160,000	1	250,000	250,000	1	450,000	450,000
5	Centrifuge Machine	0	149,336	-	0	149,336	-	0	250,000	-	0	325,000	-
6	Hot plates	2	26,250	52,500	2	26,250	52,500	2	45,000	90,000	2	55,000	110,000
7	Water bath	1	157,500	157,500	1	157,500	157,500	1	157,500	157,500	1	300,000	300,000
8	Complaint boxes	10	3,150	31,500	10	3,150	31,500	10	3,150	31,500	10	3,150	31,500
9	Spine boards with Neck holders	4	31,080	124,320	4	31,080	124,320	4	31,080	124,320	4	31,080	124,320
10	Sensitometer	1	137,325	137,325	1	137,325	137,325	1	137,325	137,325	1	137,325	137,325
11	Densitometer personal	2	191,391	382,782	2	191,391	382,782	2	191,391	382,782	2	191,391	382,782
12	Box of Films	2	26,250	52,500	2	26,250	52,500	2	30,000	60,000	2	30,000	60,000
13	Aluminium Step Wedge	1	26,250	26,250	1	26,250	26,250	1	26,250	26,250	1	26,250	26,250
14	Non-Mercury thermometer	10	305	3,045	10	305	3,045	10	350	3,500	10	750	7,500
15	Brass or copper mesh screen	2	5,250	10,500	2	5,250	10,500	2	5,250	10,500	2	5,250	10,500
16	Wheel Chairs	0	31,500	-	0	31,500	-	0	35,000	-	0	35,000	-
17	Statures	0	67,830	-	0	67,830	-	0	75,000	-	0	75,000	-
18	Blood Warmer	3	246,750	740,250	3	246,750	740,250	3	275,000	825,000	3	275,000	825,000
19	Sequence Compression Device	2	210,000	420,000	2	210,000	420,000	2	230,000	460,000	2	600,000	1,200,000
20	Blood Bank Refrigerators with	0	682,500	-	0	682,500	-	0	700,000	-	0	1,469,900	-
21	Data Coder	1	84,000	84,000	1	84,000	84,000	1	100,000	100,000	1	-	-
22	Plasma Separator 1	0	4,200,000	-	0	4,200,000	-	0	4,500,000	-	0	4,500,000	-
23	Blood Storage Cabinet	1	682,500	682,500	1	682,500	682,500	1	700,000	700,000	1	1,469,900	1,469,900
24	Resuscitation Trolley	0	244,733	-	0	244,733	-	0	400,000	-	0	491,350	-
25	Ultra sound machine gyne	0	1,403,325	-	0	1,403,325	-	0	1,700,000	-	0	2,150,000	-
26	Delivery Table	0	47,250	-	0	47,250	-	0	47,250	-	0	48,500	-
27	Height and weight scale	4	8,400	33,600	4	8,400	33,600	4	10,000	40,000	4	31,500	126,000
28	Suction Electronic	0	259,350	-	0	259,350	-	0	275,000	-	0	275,000	-
29	Fetal Heart Rate Detector	1	144,375	144,375	1	144,375	144,375	1	175,000	175,000	1	275,000	275,000
30	Ambo bag	0	17,325	-	0	17,325	-	0	19,000	-	0	19,000	-
31	Neonatal size face mask	4	578	2,310	4	578	2,310	4	1,200	4,800	4	1,500	6,000
32	Exchange transfusion trays	2	10,000	20,000	2	10,000	20,000	2	10,000	20,000	2	12,000	24,000
33	Shoe racks SS	4	39,900	159,600	4	39,900	159,600	4	39,900	159,600	4	39,900	159,600
34	Sterilizer	0	2,940,000	-	0	2,940,000	-	0	3,500,000	-	0	7,800,000	-
35	Washer disinfector	0	-	-	0	-	-	0	-	-	0	-	-
36	Packing table	0	-	-	0	-	-	0	-	-	0	-	-
37	Digital Sealer Printer	1	420,000	420,000	1	420,000	420,000	1	480,000	480,000	1	520,000	520,000
38	Backup Auto Clave	0	441,000	-	0	441,000	-	0	550,000	-	0	789,625	-
39	Racks for Manual	10	21,000	210,000	10	21,000	210,000	10	37,500	375,000	10	56,160	561,600
40	Locked Racks for MSDS Data	2	21,000	42,000	2	21,000	42,000	2	37,500	75,000	2	56,160	112,320
41	Eye Wash Station with shower	3	300,000	900,000	3	300,000	900,000	3	350,000	1,050,000	3	350,000	1,050,000
42	Air Curtain	4	50,190	200,760	4	50,190	200,760	4	60,000	240,000	4	60,000	240,000
43	Fire Sand Buckets with stand	5	15,000	75,000	5	15,000	75,000	5	20,000	100,000	5	20,000	100,000
44	Smoke Detectors	10	7,350	73,500	10	7,350	73,500	10	8,500	85,000	10	8,500	85,000
45	Heat Detector	5	8,400	42,000	5	8,400	42,000	5	10,000	50,000	5	10,000	50,000
46	Gas Detector	5	6,300	31,500	5	6,300	31,500	5	7,500	37,500	5	7,500	37,500
47	Fire Blankets	10	2,783	27,825	10	2,783	27,825	10	3,200	32,000	10	3,200	32,000
48	Fire Alarms	10	5,250	52,500	10	5,250	52,500	10	6,500	65,000	10	6,500	65,000

MSDS

		Original			1st Revised			2nd Revised			3rd Revised		
Sr. No.	**ITEM DESCRIPTION**	**Quantity Required**	**Actual Unit Price**	**Actual Total Cost(Rs)**	**Quantity Required**	**Actual Unit Price**	**Actual Total Cost(Rs)**	**Quantity Required**	**Actual Unit Price**	**Actual Total Cost(Rs)**	**Quantity Required**	**Actual Unit Price**	**Actual Total Cost(Rs)**
49	Identification Bands	100	3	315	100	3	315	100	3	300	100	3	300
50	Wet Flooring Signages	0	431	-	0	431	-	0	550	-	0	750	-
51	Key Box	6	8,190	49,140	6	8,190	49,140	6	10,000	60,000	6	10,000	60,000
52	Dehumidifier	0	58,800	-	0	58,800	-	0	70,000	-	0	100,000	-
53	Tourniquet	4	840	3,360	4	840	3,360	4	850	3,400	4	1,500	6,000
54	LAB SAFETY BOX	2	3,150	6,300	2	3,150	6,300	2	4,000	8,000	2	4,000	8,000
55	densitometer	0	210,000	-	0	210,000	-	0	210,000	-	0	210,000	-
56	vending machine	0	630,000	-	0	630,000	-	0	630,000	-	0	630,000	-
57	Automatic shoe cover machine	2	296,100	592,200	2	296,100	592,200	2	332,500	665,000	2	332,500	665,000
58	Vein Finder	2	630,000	1,260,000	2	630,000	1,260,000	2	630,000	1,260,000	2	630,000	1,260,000
59	Blood Sample Vials (BOXES)	3	13	38	3	13	38	3	15	45	3	15	45
60	Bassinets	5	21,000	105,000	5	21,000	105,000	5	22,000	110,000	5	22,000	110,000
61	Chemical Spill Cleanup kit	2	100,000	200,000	2	100,000	200,000	2	100,000	200,000	2	100,000	200,000
62	Digital Tempurature Humidity Guage	4	15,000	60,000	4	15,000	60,000	4	15,000	60,000	4	15,000	60,000
63	Bio Cleaning and Disinfection System	1	650,000	650,000	1	650,000	650,000	1	650,000	650,000	1	2,200,000	2,200,000
	Total			**8,647,094**			**8,647,094**			**9,653,822**			**13,437,942**
				8.647			8.647			9.654			13.438

Medical Equipment

				Original				1st Revised				2nd Revised				3rd Revised			
Sr. No.	Area	Name of Equipment	Yard Stick	Available Quantity	Required Quantity	Cost per Unit	Total Cost	Available Quantity	Required Quantity	Cost per Unit	Total Cost	Available Quantity	Required Quantity	Cost per Unit	Total Cost	Available Quantity	Required Quantity	Cost per Unit	Total Cost
1		Semi Auto Clinical Chemistry Analyzer	1	3	0	449,295	-	3	0	449,295	-	3	0	550,000	-	3	0	550,000	-
2		Hematology Analyzer	1	0	1	427,350	427,350	0	1	427,350	427,350	0	1	550,000	550,000	0	1	750,000	750,000
3		Electrolyte Analyzer	1	0	1	427,350	427,350	0	1	427,350	427,350	0	1	550,000	550,000	0	1	550,000	550,000
4		Blood Gas Analyzer	0	0	0	2,744,858	-	0	0	2,744,858	-	0	0	3,200,000	-	0	0	1,400,000	-
5		Clinical Microscope	1	4	0	132,825	-	4	0	132,825	-	4	0	180,000	-	4	0	250,000	-
6	**Laboratory**	Water Bath	1	1	0	60,000	-	1	0	60,000	-	1	0	157,500	-	1	0	325,000	-
7		Hot air Oven	1	0	1	210,000	210,000	0	1	210,000	210,000	0	1	385,000	385,000	0	1	450,000	450,000
8		Distilled water plant	1	0	1	52,500	52,500	0	1	52,500	52,500	0	1	75,000	75,000	0	1	125,000	125,000
9		Auto pipettes	10	4	6	31,500	189,000	4	6	31,500	189,000	4	6	40,500	243,000	4	6	45,000	270,000
10		glass wares	0	0	0	105,000	-	0	0	105,000	-	0	0	105,000	-	0	0	105,000	-
11		Centrifuge Machine	2	2	0	149,336	-	2	0	149,336	-	2	0	250,000	-	2	0	400,000	-
12		Static X-ray Machine	1	1	0	4,200,000	-	1	0	4,200,000	-	1	0	6,000,000	-	1	0	12,000,000	-
13		Mobile X-Ray Machine	0	1	0	3,850,524	-	1	0	3,850,524	-	1	0	4,300,000	-	1	0	9,800,000	-
14		Computerized Radiography System	0	0	0	4,018,245	-	0	0	4,018,245	-	0	0	4,500,000	-	0	0	4,500,000	-
15		Dental X-Ray	0	0	0	282,975	-	0	0	282,975	-	0	0	350,000	-	0	0	525,000	-
16	**X-Rays**	Lead apron and PPE	2	3	0	52,500	-	3	0	52,500	-	3	0	60,000	-	3	0	85,000	-
17		Density meter personal (Add)	0	0	0	210,000	-	0	0	210,000	-	0	0	210,000	-	0	0	250,000	-
18		Lead glass /shield	0	1	0	105,000	-	1	0	105,000	-	1	0	105,000	-	1	0	150,000	-
19		Lead Walls	0	0	0	525,000	-	0	0	525,000	-	0	0	525,000	-	0	0	525,000	-
20	**Ultrasound**	Portable/Mobile Ultrasound	0	0	0	1,371,331	-	0	0	1,371,331	-	0	0	1,500,000	-	0	0	2,400,000	-
21		Color Doppler RADIOLOGY	1	0	1	3,698,310	3,698,310	0	1	3,698,310	3,698,310	0	1	4,500,000	4,500,000	0	1	5,500,000	5,500,000
22		ICU MONITOR	2	0	2	301,665	603,330	0	2	301,665	603,330	0	2	900,000	1,800,000	0	2	1,250,000	2,500,000
23		Temporary pace maker	0	0	0	315,000	-	0	0	315,000	-	0	0	315,000	-	0	0	550,000	-
24		Defibrillator	1	0	1	299,153	299,153	0	1	299,153	299,153	0	1	650,000	650,000	0	1	800,000	800,000
25	**CCU**	ECG Machine Three Channel	2	0	2	169,785	339,570	0	2	169,785	339,570	0	2	169,785	339,570	0	2	300,000	600,000
26		ETT Machine	0	0	0	2,021,838	-	0	0	2,021,838	-	0	0	2,200,000	-	0	0	3,000,000	-
27		Color doplor CARDIOLOGY	0	0	0	4,681,790	-	0	0	4,681,790	-	0	0	4,800,000	-	0	0	6,000,000	-
28		Suction Pump	2	0	2	259,350	518,700	0	2	259,350	518,700	0	2	275,000	550,000	0	2	300,000	600,000
29		Blood Cabinet	1	1	0	690,539	-	1	0	690,539	-	1	0	700,000	-	1	0	1,500,000	-
30	**Blood Bank**	Centrifuge Machine	2	1	1	149,336	149,336	1	1	149,336	149,336	1	1	250,000	250,000	1	1	400,000	400,000
31		Slide viewer	1	1	0	42,000	-	1	0	42,000	-	1	0	55,000	-	1	0	55,000	-
32		Clinical Microscope	1	1	0	132,825	-	1	0	132,825	-	1	0	180,000	-	1	0	250,000	-
33	**Dialysis Unit (10 beds)**	Computerized Hemo Dialysis Machine	5	0	5	1,050,000	5,250,000	0	5	1,050,000	5,250,000	0	5	1,600,000	8,000,000	0	5	3,200,000	16,000,000
34		Baby Cot	10	6	4	14,669	58,674	6	4	14,669	58,674	6	4	16,000	64,000	6	4	16,000	64,000
35		Phototherapy Unit	2	3	0	130,200	-	3	0	130,200	-	3	0	655,000	-	3	0	850,000	-
36		Infant Warmer	2	2	0	335,638	-	2	0	335,638	-	2	0	985,000	-	2	0	1,050,000	-
37	**Nursery**	Pulse Oximeter	6	1	5	104,500	522,500	1	5	104,500	522,500	1	5	160,000	800,000	1	5	225,000	1,125,000
38		Infant Incubator	2	3	0	858,932	-	3	0	858,932	-	3	0	900,000	-	3	0	1,750,000	-
39		Suction Pump	1	0	1	259,350	259,350	0	1	259,350	259,350	0	1	275,000	275,000	0	1	300,000	300,000
40		Hospital Grade Nebulizer Heavy Duty	2	5	0	125,265	-	5	0	125,265	-	5	0	215,000	-	5	0	300,000	-
41		Anesthesia Machine with Ventilator	1	2	0	2,509,554	-	2	0	2,509,554	-	2	0	3,000,000	-	2	0	7,000,000	-
42		BED SIDE PATIENT MONITOR	2	2	0	441,000	-	2	0	441,000	-	2	0	550,000	-	2	0	1,200,000	-
43		Defibrillator	2	1	1	308,713	308,713	1	1	308,713	308,713	1	1	650,000	650,000	1	1	800,000	800,000
44		Electrosurgical Unit	1	2	0	507,530	-	2	0	507,530	-	2	0	700,000	-	2	0	900,000	-
45		Operation Table	1	5	0	1,426,215	-	5	0	1,426,215	-	5	0	2,000,000	-	5	0	2,500,000	-
46	**O.T (04)**	Ceiling Operating Light	1	4	0	413,013	-	4	0	413,013	-	4	0	800,000	-	4	0	950,000	-
47		STEAM STERILIZER	1	5	0	3,465,000	-	5	0	3,465,000	-	5	0	4,000,000	-	5	0	7,800,000	-
48		Suction Pump	2	0	2	259,350	518,700	0	2	259,350	518,700	0	2	275,000	550,000	0	2	300,000	600,000
49		Resuscitation trolley With Crash Cart	2	2	0	244,733	-	2	0	244,733	-	2	0	400,000	-	2	0	600,000	-
50		mayo table	4	0	4	21,000	84,000	0	4	21,000	84,000	0	4	23,000	92,000	0	4	23,000	92,000
51		MOBILE OPERATING LIGHT	1	1	0	304,220	-	1	0	304,220	-	1	0	400,000	-	1	0	900,000	-
52		Operation Table	0	0	0	1,426,215	-	0	0	1,426,215	-	0	0	2,000,000	-	0	0	5,000,000	-
53		ORTHOPEDIC DRILL	0	0	0	1,108,740	-	0	0	1,108,740	-	0	0	1,500,000	-	0	0	4,000,000	-
54	**Orthopedic**	Plaster Cutting Pneumatic	1	0	1	276,250	276,250	0	1	276,250	276,250	0	1	450,000	450,000	0	1	1,500,000	1,500,000
55		Pneumatic Tourniquets	0	0	0	262,500	-	0	0	262,500	-	0	0	262,500	-	0	0	300,000	-
56		Orthopedic Instruments	0	0	0	432,623	-	0	0	432,623	-	0	0	550,000	-	0	0	550,000	-

Medical Equipment

				Original				1st Revised				2nd Revised				3rd Revised			
Sr. No.	Area	Name of Equipment	Yard Stick	Available Quantity	Required Quantity	Cost per Unit	Total Cost	Available Quantity	Required Quantity	Cost per Unit	Total Cost	Available Quantity	Required Quantity	Cost per Unit	Total Cost	Available Quantity	Required Quantity	Cost per Unit	Total Cost
57	Gynea (20 beds)	Portable/Mobile Ultrasound	1	2	0	1,418,958	-	2	0	1,418,958	-	2	0	1,500,000	-	2	0	2,400,000	-
58		Autoclave	1	0	1	441,000	441,000	0	1	441,000	441,000	0	1	550,000	550,000	0	1	850,000	850,000
59		Delivery Set	10	2	8	31,500	252,000	2	8	31,500	252,000	2	8	40,000	320,000	2	8	65,000	520,000
60		Delivery Table	2	4	0	47,250	-	4	0	47,250	-	4	0	47,250	-	4	0	55,000	-
61		BED SIDE PATIENT MONITOR	2	0	2	294,000	588,000	0	2	294,000	588,000	0	2	550,000	1,100,000	0	2	1,200,000	2,400,000
62		D & C Set	2	1	1	34,650	34,650	1	1	34,650	34,650	1	1	40,000	40,000	1	1	60,000	60,000
63		Vaccume Extractor	1	1	0	259,350	-	1	0	259,350	-	1	0	300,000	-	1	0	350,000	-
64		CTG Machine	1	1	0	628,049	-	1	0	628,049	-	1	0	725,000	-	1	0	900,000	-
65		ECG Machine Three Channel	1	0	1	169,785	169,785	0	1	169,785	169,785	0	1	180,000	180,000	0	1	300,000	300,000
66		Portable O.T Light	2	1	1	304,220	304,220	1	1	304,220	304,220	1	1	400,000	400,000	1	1	900,000	900,000
67		Baby Cot	2	0	2	14,669	29,337	0	2	14,669	29,337	0	2	16,000	32,000	0	2	16,000	32,000
68		Delivery trolly	2	2	0	47,250	-	2	0	47,250	-	2	0	47,250	-	2	0	47,250	-
69		Desktop Fetal Heart Rate Detector	1	1	0	144,375	-	1	0	144,375	-	1	0	175,000	-	1	0	200,000	-
70	Surgical Emergency (10 beds)	Steam Sterilizer	0	0	0	3,355,849	-	0	0	3,355,849	-	0	0	4,000,000	-	0	0	7,800,000	-
71		Operation Table	0	0	0	1,426,215	-	0	0	1,426,215	-	0	0	2,000,000	-	0	0	2,500,000	-
72		MOBILE OPERATING LIGHT	0	0	0	285,466	-	0	0	285,466	-	0	0	400,000	-	0	0	900,000	-
73		Suction Pump	0	0	0	259,350	-	0	0	259,350	-	0	0	275,000	-	0	0	300,000	-
74		Laryngoscope	0	1	0	9,744	-	1	0	9,744	-	1	0	12,000	-	1	0	20,000	-
75		Set of Surgical Instruments	0	4	0	141,750	-	4	0	141,750	-	4	0	160,000	-	4	0	220,000	-
76	Others	Stretcher	10	0	10	68,250	682,500	0	10	68,250	682,500	0	10	69,300	693,000	0	10	69,300	693,000
77		wheel chair	10	0	10	31,500	315,000	0	10	31,500	315,000	0	10	35,000	350,000	0	10	35,000	350,000
78		foot support	6	0	6	4,200	25,200	0	6	4,200	25,200	0	6	4,500	27,000	0	6	5,148	30,888
79		Resuscitation trolly With Crash Cart	5	0	5	237,618	1,188,091	0	5	237,618	1,188,091	0	5	400,000	2,000,000	0	5	600,000	3,000,000
80		BP Appratus	15	12	3	15,750	47,250	12	3	15,750	47,250	12	3	16,000	48,000	12	3	16,000	48,000
81		Ventilator	0	0	0	2,195,080	-	0	0	2,195,080	-	0	0	3,500,000	-	0	0	5,500,000	-
82		CPAP	1	0	1	1,098,510	1,098,510	0	1	1,098,510	1,098,510	0	1	2,100,000	2,100,000	0	1	2,800,000	2,800,000
83		X-RAY PROCESSOR	1	0	1	858,440	858,440	0	1	858,440	858,440	0	1	925,000	925,000	0	1	1,200,000	1,200,000
84		Hand wash Scrub Double Bay	2	0	2	94,500	189,000	0	2	94,500	189,000	0	2	100,000	200,000	0	2	140,000	280,000
85		Image Inensifier	0	0	0	4,667,460	-	0	0	4,667,460	-	0	0	4,667,460	-	0	0	12,000,000	-
86		Central Medical Gass Pipe Line System	7	0	7	850,000	5,950,000	0	7	850,000	5,950,000	0	7	-	-	0	7	-	-
87	ICU	Motorized Patient bed with bed side,Mattress,IV stand, Attendant Bench	4	0	4	210,000	840,000	0	4	210,000	840,000	0	4	400,000	1,600,000	0	4	600,000	2,400,000
88		Sphygmomanometer wall mtd	4	0	4	15,750	63,000	0	4	15,750	63,000	0	4	30,000	120,000	0	4	35,000	140,000
89		Resuscitation trolly With Crash Cart	2	0	2	244,733	489,466	0	2	244,733	489,466	0	2	400,000	800,000	0	2	600,000	1,200,000
90		Defibrilator	1	0	1	299,153	299,153	0	1	299,153	299,153	0	1	650,000	650,000	0	1	800,000	800,000
91		Defibrillator with Monitor	0	0	0	330,750	-	0	0	330,750	-	0	0	650,000	-	0	0	800,000	-
92		ECG Machine Three Channel	0	0	0	169,785	-	0	0	169,785	-	0	0	180,000	-	0	0	300,000	-
93		Syringe pump	1	0	1	108,780	108,780	0	1	108,780	108,780	0	1	125,000	125,000	0	1	200,000	200,000
94		Suction Pump	0	0	0	259,350	-	0	0	259,350	-	0	0	275,000	-	0	0	300,000	-
95		ICU Monitor	0	0	0	298,200	-	0	0	298,200	-	0	0	900,000	-	0	0	1,250,000	-
96		Instrument Trolley	1	0	1	55,000	55,000	0	1	55,000	55,000	0	1	55,000	55,000	0	1	55,000	55,000
97		Ward instruments	0	0	0	-	-	0	0	-	-	0	0	-	-	0	0	-	-
98		Ventilator intensive care	2	0	2	1,600,000	3,200,000	0	2	1,600,000	3,200,000	0	2	3,500,000	7,000,000	0	2	5,500,000	11,000,000
99		CPAP with humidifier	0	0	0	1,098,510	-	0	0	1,098,510	-	0	0	2,100,000	-	0	0	2,800,000	-
100		DELIVERY TROLLY STAINLESS STEEL	1	0	1	23,835	23,835	0	1	23,835	23,835	0	1	47,250	47,250	0	1	47,250	47,250
101		Ambu-Bag, adult	4	0	4	17,325	69,300	0	4	17,325	69,300	0	4	19,000	76,000	0	4	19,000	76,000
102		Ambu-Bag, paeds	4	0	4	17,325	69,300	0	4	17,325	69,300	0	4	19,000	76,000	0	4	19,000	76,000
103	MORTUERY	TWO BODY REFRIGERATOR WITH CASTERS 220v 50Hz Along with Atopsy Table & Lifter Trolley	1	0	1	2,470,546	2,470,546	0	1	2,470,546	2,470,546	0	1	3,000,000	3,000,000	0	1	3,500,000	3,500,000
104	Dental Unit	Dental Unit	2	0	2	2,190,000	4,380,000	0	2	2,190,000	4,380,000	0	2	2,820,000	5,640,000	0	2	2,820,000	5,640,000
105		Autoclave	1	0	1	441,000	441,000	0	1	441,000	441,000	0	1	550,000	550,000	0	1	850,000	850,000
106		Dental X-RAY Machine	1	0	1	282,975	282,975	0	1	282,975	282,975	0	1	350,000	350,000	0	1	525,000	525,000
107		Digital Intra Oral Camera	0	0	0	94,500	-	0	0	94,500	-	0	0	150,000	-	0	0	600,000	-
108		DENTAL CAUTERY	0	0	0	84,000	-	0	0	84,000	-	0	0	160,000	-	0	0	900,000	-
109		Ultrasonic scaling	1	0	1	120,750	120,750	0	1	120,750	120,750	0	1	175,000	175,000	0	1	300,000	300,000
110		Curing lights	1	0	1	52,500	52,500	0	1	52,500	52,500	0	1	95,000	95,000	0	1	150,000	150,000
111		Endo motor system	1	0	1	199,601	199,601	0	1	199,601	199,601	0	1	265,000	265,000	0	1	500,000	500,000

Medical Equipment

				Original				1st Revised				2nd Revised				3rd Revised			
Sr. No.	Area	Name of Equipment	Yard Stick	Available Quantity	Required Quantity	Cost per Unit	Total Cost	Available Quantity	Required Quantity	Cost per Unit	Total Cost	Available Quantity	Required Quantity	Cost per Unit	Total Cost	Available Quantity	Required Quantity	Cost per Unit	Total Cost
112		Dental cabinet	0	0	0	42,000	-	0	0	42,000	-	0	0	70,000	-	0	0	160,000	-
113		Dental examination/surgical instrument sets	4	0	4	157,500	630,000	0	4	157,500	630,000	0	4	175,000	700,000	0	4	175,000	700,000
114	Physiotherapy unit	Shortwave diathermy	1	0	1	844,562	844,562	0	1	844,562	844,562	0	1	1,500,000	1,500,000	0	1	2,750,000	2,750,000
115		Infrared Radiation	1	0	1	142,916	142,916	0	1	142,916	142,916	0	1	315,222	315,222	0	1	526,500	526,500
116		TENS(Transcutaneous Electrical Nerve Stimulation)	1	0	1	132,577	132,577	0	1	132,577	132,577	0	1	275,000	275,000	0	1	585,000	585,000
117		Treatment couch	4	0	4	10,080	40,320	0	4	10,080	40,320	0	4	75,000	300,000	0	4	760,500	3,042,000
118		A. Electrical Heating Pads	3	0	3	6,300	18,900	0	3	6,300	18,900	0	3	20,000	60,000	0	3	117,000	351,000
119		B. Hot pack unite	1	0	1	131,782	131,782	0	1	131,782	131,782	0	1	253,485	253,485	0	1	1,053,000	1,053,000
120		C. Paraffin bath	1	0	1	154,082	154,082	0	1	154,082	154,082	0	1	308,071	308,071	0	1	819,000	819,000
121		Therapeutic ULTRASOUND unit	1	0	1	141,748	141,748	0	1	141,748	141,748	0	1	275,000	275,000	0	1	819,000	819,000
122		Treadmill	1	0	1	335,111	335,111	0	1	335,111	335,111	0	1	950,000	950,000	0	1	1,404,000	1,404,000
123		Mats	1	0	1	75,817	75,817	0	1	75,817	75,817	0	1	150,000	150,000	0	1	292,500	292,500
124		Quadriceps Bench	1	0	1	189,164	189,164	0	1	189,164	189,164	0	1	425,000	425,000	0	1	750,000	750,000
125		Ergometer Cycling	1	0	1	66,087	66,087	0	1	66,087	66,087	0	1	175,000	175,000	0	1	409,500	409,500
126		Mirror	1	0	1	24,640	24,640	0	1	24,640	24,640	0	1	45,000	45,000	0	1	400,000	400,000
127		Floor Mounted Parallel Bars	1	0	1	87,821	87,821	0	1	87,821	87,821	0	1	150,000	150,000	0	1	590,000	590,000
128		Pully System	1	0	1	41,826	41,826	0	1	41,826	41,826	0	1	128,594	128,594	0	1	409,500	409,500
129		Trollies	4	0	4	2,520	10,080	0	4	2,520	10,080	0	4	35,000	140,000	0	4	50,000	200,000
130		Stool(Steel)	4	0	4	2,520	10,080	0	4	2,520	10,080	0	4	7,000	28,000	0	4	10,000	40,000
131	**Beds**	Fowler beds with Mattress	100	0	100	70,000	7,000,000	0	100	70,000	7,000,000	0	100	110,000	11,000,000	0	100	150,000	15,000,000
		Total					**49,608,488**				**49,608,488**				**67,541,191**				**104,090,138**
							49.608				**49.608**				**67.541**				**104.090**

Electricity

		Original			1st Revised			2nd Revised			3rd Revised		
Sr. No.	Item Name	Quantity	Per Unit Cost	Total Cost	Quantity	Per Unit Cost	Total Cost	Quantity	Per Unit Cost	Total Cost	Quantity	Per Unit Cost	Total Cost
1	Transformers (200 KVA)	1	600,000	600,000	1	600,000	600,000	1	600,000	600,000	3	1,600,000	4,800,000
2	Transformers (100 KVA)	1	450,000	450,000	1	450,000	450,000	1	450,000	450,000	1	450,000	450,000
3	Generator (200 KVA)	1	4,000,000	4,000,000	1	4,000,000	4,000,000	1	4,000,000	4,000,000	2	6,500,000	13,000,000
4	Generator (100 KVA)	0	2,300,000	-	0	2,300,000	-	0	2,300,000	-	0	2,300,000	-
5	2 Ton air conditioners (split)	55	55,500	3,052,500	55	55,500	3,052,500	55	55,500	3,052,500	55	55,500	3,052,500
6	2 Ton air conditioners (Cabinet)	33	78,000	2,574,000	33	78,000	2,574,000	33	78,000	2,574,000	33	78,000	2,574,000
7	4 Ton air conditioners (Cabinet)	8	120,000	960,000	8	120,000	960,000	8	120,000	960,000	8	120,000	960,000
8	Ceiling Fans 56"	20	3,090	61,800	20	3,090	61,800	20	3,090	61,800	20	3,090	61,800
10	Bracket Fans 18"	114	3,280	373,920	114	3,280	373,920	114	3,280	373,920	114	3,280	373,920
9	Exhaust Fans	36	3,000	108,000	36	3,000	108,000	36	3,000	108,000	36	3,000	108,000
11	Dual Connection of Electricity / Express Line	1	5,000,000	5,000,000	1	5,000,000	5,000,000	1	5,000,000	5,000,000	1	5,000,000	5,000,000
	Total			**17,180,220**			**17,180,220**			**17,180,220**			**30,380,220**
				17.180			**17.180**			**17.180**			**30.380**

IT & QMS & Surveillance

		Original			1st Revised			2nd Revised			3rd Revised		
Sr. No.	**Item Name**	**Quantity**	**Per Unit Cost**	**Total Cost**	**Quantity**	**Per Unit Cost**	**Total Cost**	**Quantity**	**Per Unit Cost**	**Total Cost**	**Quantity**	**Per Unit Cost**	**Total Cost**
1	Desktop, UPS, LED	30	75,000	2,250,000	30	75,000	2,250,000	30	130,000	3,900,000	30	216,000	6,480,000
2	MS Windows License	30	20,000	600,000	30	20,000	600,000	30	20,000	600,000	30	20,000	600,000
3	Scanner Flatbed with ADF	3	90,000	270,000	3	90,000	270,000	3	150,000	450,000	3	150,000	450,000
4	Heavy duty Printer	7	40,000	280,000	7	40,000	280,000	7	50,000	350,000	7	110,000	770,000
5	Multimedia Projector with Screen	1	100,000	100,000	1	100,000	100,000	1	100,000	100,000	1	100,000	100,000
6	Tabs	4	50,000	200,000	4	50,000	200,000	4	50,000	200,000	4	50,000	200,000
7	Laptop	1	100,000	100,000	1	100,000	100,000	1	100,000	100,000	1	100,000	100,000
8	MS Windows License	1	20,000	20,000	1	20,000	20,000	1	20,000	20,000	1	20,000	20,000
9	QMS System	1	3,700,000	3,700,000	1	3,700,000	3,700,000	1	4,000,000	4,000,000	1	4,000,000	4,000,000
10	Networking	1	995,000	995,000	1	995,000	995,000	1	995,000	995,000	1	1,200,000	1,200,000
11	Monitoring & Surveillance (CCTV)	1	5,000,000	5,000,000	1	5,000,000	5,000,000	1	5,000,000	5,000,000	1	5,000,000	5,000,000
12	Public Address System	1	1,000,000	1,000,000	1	1,000,000	1,000,000	1	1,000,000	1,000,000	1	1,200,000	1,200,000
	Total			**14,515,000**			**14,515,000**			**16,715,000**			**20,120,000**
				14.515			**14.515**			**16.715**			**20.120**

Furniture and Fixtures

		Original			1st Revised			2nd Revised			3rd Revised		
Sr. No.	Item Name	Quantity	Unit Price	Total	Quantity	Unit Price	Total	Quantity	Unit Price	Total	Quantity	Unit Price	Total
1	Benches (internal)	60	30,000	1,800,000	60	30,000	1,800,000	60	30,000	1,800,000	60	40000	2,400,000
2	Benches (external)	10	10,000	100,000	10	10,000	100,000	10	10,000	100,000	10	40000	400,000
3	Electric Water Cooler	8	45,000	360,000	8	45,000	360,000	8	45,000	360,000	8	60000	480,000
4	Doctors rooms Furniture	30	70,000	2,100,000	30	70,000	2,100,000	30	70,000	2,100,000	30	125000	3,750,000
5	Examination couches	10	35,000	350,000	10	35,000	350,000	10	35,000	350,000	10	35000	350,000
6	Fire Blanket	5	2,500	12,500	5	2,500	12,500	5	2,500	12,500	5	3000	15,000
7	Fire Extinguisher (Water Based)	30	8,000	240,000	30	8,000	240,000	30	8,000	240,000	30	2500	75,000
8	Acrylic Board	150	2,200	330,000	150	2,200	330,000	150	2,200	330,000	150	2000	300,000
9	Rostrum	2	18,000	36,000	2	18,000	36,000	2	18,000	36,000	2	20000	40,000
10	Blinds for windows	6000	150	900,000	6000	150	900,000	6000	150	900,000	6000	200	1,200,000
11	Paintings	100	6,000	600,000	100	6,000	600,000	100	6,000	600,000	100	5000	500,000
12	Waste Bin Sets (3 bin)	40	6,000	240,000	40	6,000	240,000	40	6,000	240,000	40	9000	360,000
13	Printing			1,000,000			1,000,000			1,000,000			1,000,000
	Machinery and Equipment's												
14	Refrigerator(Domestic) front glass double door	2	160,000	320,000	2	160,000	320,000	2	160,000	320,000	2	150000	300,000
15	Refrigerator glass single door	5	80,000	400,000	5	80,000	400,000	5	80,000	400,000	5	90000	450,000
16	Refrigerator 16 cft	5	36,000	180,000	5	36,000	180,000	5	36,000	180,000	5	50000	250,000
17	Air Curtain On Door	5	50,000	250,000	5	50,000	250,000	5	50,000	250,000	5	75000	375,000
18	Washing machines for pantries	3	13,000	39,000	3	13,000	39,000	3	13,000	39,000	3	11000	33,000
19	Gas Burner for pantries	10	4,800	48,000	10	4,800	48,000	10	4,800	48,000	10	80000	800,000
20	Fire Extinguishers DCP	30	4,800	144,000	30	4,800	144,000	30	4,800	144,000	30	6500	195,000
21	LED TV	15	55,000	825,000	15	55,000	825,000	15	55,000	825,000	15	140000	2,100,000
22	Industrial Exhaust	5	50,000	250,000	5	50,000	250,000	5	50,000	250,000	5	60000	300,000
23	Acrylic Display Board	4	20,000	80,000	4	20,000	80,000	4	20,000	80,000	4	20000	80,000
	Laundry & Washing												
24	Bed Sheets and pillow covers	300	1,250	375,000	300	1,250	375,000	300	1,250	375,000	300	2500	750,000
25	Pillows	150	400	60,000	150	400	60,000	150	400	60,000	150	500	75,000
26	Blankets with covers	100	5,000	500,000	100	5,000	500,000	100	5,000	500,000	100	4000	400,000
	Medicine Store												
27	Medicine (Iron Racks) 8x6x2 (Required)	20	50,000	1,000,000	20	50,000	1,000,000	20	50,000	1,000,000	20	60000	1,200,000
28	Moveable Iron Stairs (Required)	2	15,000	30,000	2	15,000	30,000	2	15,000	30,000	2	20000	40,000
29	Lifters (Required)	2	37,000	74,000	2	37,000	74,000	2	37,000	74,000	2	35000	70,000
30	Pallets 3x4 (Plastic) (Required)	20	12,000	240,000	20	12,000	240,000	20	12,000	240,000	20	10000	200,000
31	Dehumidifier (Required)	1	100,000	100,000	1	100,000	100,000	1	100,000	100,000	1	125000	125,000
32	Insect Killer (Required)	25	8,000	200,000	25	8,000	200,000	25	8,000	200,000	25	6500	162,500
33	Thermometer (Required)	20	16,000	320,000	20	16,000	320,000	20	16,000	320,000	20	600	12,000
	Total			**13,503,500**			**13,503,500**			**13,503,500**			**18,787,500**
				13.504			**13.504**			**13.504**			**18.788**

Signage and plaques

			Original			1st Revised			2nd Revised			3rd Revised		
Sr No	**Type**	**Kinds of Sign Boards**	**Quantity**	**Rates**	**Cost**	**Quantity**	**Rates**	**Cost**	**Quantity**	**Rates**	**Cost**	**Quantity**	**Rates**	**Cost**
		External Sign Boards												
1	A1	External Platform/Road Signage (Circular)	10	10,119	101,190	10	10,119	101,190	10	13,951	139,510	10	13,951	139,510
2	A2	External Platform/Road Signage (Triangular)	10	9,257	92,570	10	9,257	92,570	10	12,762	127,624	10	12,762	127,624
3	B1	Main Directional Board	2	112,496	224,992	2	112,496	224,992	2	155,107	310,215	2	155,107	310,215
4	C1	Directional Board (Single Sheet)	12	14,454	173,448	12	14,454	173,448	12	19,929	239,148	12	19,929	239,148
5	C2	Directional Board (Two Sheets)	1	22,495	22,495	1	22,495	22,495	1	31,016	31,016	1	31,016	31,016
6	C3	Directional Board (Three Sheets)	2	30,158	60,316	2	30,158	60,316	2	41,581	83,163	2	41,581	83,163
7	C4	Directional Board (Four Sheets)	2	37,243	74,486	2	37,243	74,486	2	51,351	102,701	2	51,351	102,701
8	C5	Directional Board (Five Sheets)	1	45,228	45,228	1	45,228	45,228	1	62,360	62,360	1	62,360	62,360
9	C6	Directional Board (Six Sheets)	1	52,808	52,808	1	52,808	52,808	1	72,810	72,810	1	72,810	72,810
10	C7	Additional Panel (For Fixation on existing Foundation & Posts)	3	7,944	23,832	3	7,944	23,832	3	10,952	32,857	3	10,952	32,857
11	D1	Departmental Signage on Building	7	47,206	330,442	7	47,206	330,442	7	65,087	455,612	7	65,087	455,612
12	E1	External Map Boards	4	41,187	164,748	4	41,187	164,748	4	56,788	227,153	4	56,788	227,153
		Internal Signage	0		-	0		-	0	-	-	0	-	-
1	F1	Internal Hanging Signage (Main Entrance)	7	90,873	636,111	7	90,873	636,111	7	125,294	877,061	7	125,294	877,061
2	F2	Internal Hanging Signage (Main Entrance 2)	7	69,188	484,316	7	69,188	484,316	7	95,396	667,772	7	95,396	667,772
3	F3	Internal Hanging Signage (Corridor)	6	51,241	307,446	6	51,241	307,446	6	70,651	423,906	6	70,651	423,906
4	F4	Internal Hanging Signage (Corridor 2)	5	51,835	259,175	5	51,835	259,175	5	71,470	357,350	5	71,470	357,350
5	G1	Internal Department Signage on wall	10	13,107	131,070	10	13,107	131,070	10	18,071	180,712	10	18,071	180,712
6	H1	Specialist Name Plaques fixed on wall	20	3,767	75,340	20	3,767	75,340	20	5,194	103,880	20	5,194	103,880
7	J1	Room Name Plaques and Numbers fixed on wall	120	866	103,920	120	866	103,920	120	1,194	143,304	120	1,194	143,304
8	K1	Internal Wall Signage	120	1,423	170,760	120	1,423	170,760	120	1,961	235,368	120	1,961	235,368
9	L1	Room Numbers Fixed on Wall	80	3,611	288,880	80	3,611	288,880	80	4,978	398,272	80	4,978	398,272
10	M1	Advance Fire Exit Sign	15	1,837	27,555	15	1,837	27,555	15	2,534	38,010	15	2,534	38,010
11	M2	Fire Exit Sign Mounted Above the Door	15	1,271	19,065	15	1,271	19,065	15	1,753	26,292	15	1,753	26,292
12	N1	Fire Safety/Equipment Signage	25	2,434	60,850	25	2,434	60,850	25	3,357	83,930	25	3,357	83,930
13	P1	Floor Map Board	8	21,088	168,704	8	21,088	168,704	8	29,075	232,602	8	29,075	232,602
14	Q1	Caution Signage	30	2,173	65,190	30	2,173	65,190	30	2,996	89,880	30	2,996	89,880
15	Q2	Caution Signage	10	653	6,530	10	653	6,530	10	902	9,016	10	902	9,016
16	Q3	Caution Signage	15	1,143	17,145	15	1,143	17,145	15	1,576	23,646	15	1,576	23,646
17	Q4	Caution Signage	25	888	22,200	25	888	22,200	25	1,225	30,625	25	1,225	30,625
		Total			**4,210,812**			**4,210,812**			**5,805,793**			**5,805,793**
		Designing and Site Supervision			126,324			126,324			174,174			174,174
		Grand Total			**4,337,136**			**4,337,136**			**5,979,967**			**5,979,967**
					4.337			4.337			5.980			5.980

DAY CARE CENTER

Yard Stick as per Women Dvelopment Department

		Original			1st Revised			2nd Revised			3rd Revised		
Sr. No.	ITEMS	Yard Stick (DCC of 25 Kids)	Unit Cost	Total	Yard Stick (DCC of 25 Kids)	Unit Cost	Total	Yard Stick (DCC of 25 Kids)	Unit Cost	Total	Yard Stick (DCC of 25 Kids)	Unit Cost	Total
1	Cylinder Block	1	3,000	3,000	1	3,000	3,000	1	3,000	3,000	1	3,000	3,000
2	Geometrical Cabinet (36 pcs)	1	4,000	4,000	1	4,000	4,000	1	4,000	4,000	1	4,000	4,000
3	Geometrical Solids (10 pcs)	1	2,200	2,200	1	2,200	2,200	1	2,200	2,200	1	2,200	2,200
4	Base for Geometrical Solids (14 pcs)	1	2,000	2,000	1	2,000	2,000	1	2,000	2,000	1	2,000	2,000
5	Constructive Triangles (4 box)	1	400	400	1	400	400	1	400	400	1	400	400
6	Metal Insets (10 - shape)	1	1,000	1,000	1	1,000	1,000	1	1,000	1,000	1	1,000	1,000
7	Stand for metal insets	1	2,000	2,000	1	2,000	2,000	1	2,000	2,000	1	2,000	2,000
8	Paper Board for metal insets (10 Boards)	1	5,000	5,000	1	5,000	5,000	1	5,000	5,000	1	5,000	5,000
9	Sandpaper Alphabets (English)	3	2,000	6,000	3	2,000	6,000	3	2,000	6,000	3	2,000	6,000
10	Sandpaper Alphabets (Urdu)	3	3,500	10,500	3	3,500	10,500	3	3,500	10,500	3	3,500	10,500
11	Sandpaper Number	3	2,000	6,000	3	2,000	6,000	3	2,000	6,000	3	2,000	6,000
12	Hammer Case	2	1,000	2,000	2	1,000	2,000	2	1,000	2,000	2	1,000	2,000
13	Soft Reading Book	15	200	3,000	15	200	3,000	15	200	3,000	15	200	3,000
14	Shape Sorting Case	2	500	1,000	2	500	1,000	2	500	1,000	2	500	1,000
15	Transport Set (Model)	2	700	1,400	2	700	1,400	2	700	1,400	2	700	1,400
16	Model Puzzles (S)	7	300	2,100	7	300	2,100	7	300	2,100	7	300	2,100
17	Model Puzzles (B)	7	500	3,500	7	500	3,500	7	500	3,500	7	500	3,500
18	Storybook	20	100	2,000	20	100	2,000	20	100	2,000	20	100	2,000
19	Information Book (Large)	20	350	7,000	20	350	7,000	20	350	7,000	20	350	7,000
20	Basket (L)	10	1,000	10,000	10	1,000	10,000	10	1,000	10,000	10	1,000	10,000
21	Basket (S)	10	600	6,000	10	600	6,000	10	600	6,000	10	600	6,000
22	Color table Box	2	1,000	2,000	2	1,000	2,000	2	1,000	2,000	2	1,000	2,000
23	ABC Block	4	500	2,000	4	500	2,000	4	500	2,000	4	500	2,000
24	Number Block	4	500	2,000	4	500	2,000	4	500	2,000	4	500	2,000
25	Color Pensils (Large)	5	450	2,250	5	450	2,250	5	450	2,250	5	450	2,250
26	Color Crayons (Large)	5	300	1,500	5	300	1,500	5	300	1,500	5	300	1,500
27	Marker Color (Board and Permanent)	15	395	5,925	15	395	5,925	15	395	5,925	15	395	5,925
28	Fruits Basket (Model Set)	2	1,000	2,000	2	1,000	2,000	2	1,000	2,000	2	1,000	2,000
29	Vegetables Basket (Model Set)	2	1,000	2,000	2	1,000	2,000	2	1,000	2,000	2	1,000	2,000
30	Animal Sets	2	600	1,200	2	600	1,200	2	600	1,200	2	600	1,200
31	Insects sets	2	400	800	2	400	800	2	400	800	2	400	800
32	Shape Sorting House	2	1,500	3,000	2	1,500	3,000	2	1,500	3,000	2	1,500	3,000
33	Flash card (Small)	10	120	1,200	10	120	1,200	10	120	1,200	10	120	1,200
34	Flash card (Big)	10	325	3,250	10	325	3,250	10	325	3,250	10	325	3,250
35	Sand Play	2	1,000	4,000	2	1,000	4,000	2	1,000	4,000	2	1,000	4,000
36	Gym Play	2	2,000	3,000	2	2,000	3,000	2	2,000	3,000	2	2,000	3,000
37	Straight Mats	20	1,500	40,000	20	1,500	40,000	20	1,500	40,000	20	1,500	40,000
38	Folding Mats	20	2,000	6,000	20	2,000	6,000	20	2,000	6,000	20	2,000	6,000
39	Diaper Changing Mats	3	300	1,500	3	300	1,500	3	300	1,500	3	300	1,500
40	Cube Cushion	2	500	1,000	2	500	1,000	2	500	1,000	2	500	1,000
41	Square Cushion	2	500	600	2	500	600	2	500	600	2	500	600
42	Baby Mirror	3	300	2,400	3	300	2,400	3	300	2,400	3	300	2,400
43	Pink Tower With Stand	1	800	500	1	800	500	1	800	500	1	800	500
44	Dressing Frames	10	500	8,000	10	500	8,000	10	500	8,000	10	500	8,000
45	Monkey Stuffed	2	800	2,400	2	800	2,400	2	800	2,400	2	800	2,400
46	Lion Stuffed	2	1,200	3,400	2	1,200	3,400	2	1,200	3,400	2	1,200	3,400
47	Cater Pillar Stuffed	2	1,700	3,000	2	1,700	3,000	2	1,700	3,000	2	1,700	3,000
48	Stuffed toys (Animal shaped i.e. Moneky, lion, caterpillar etc)	6	1,500	9,000	6	1,500	9,000	6	1,500	9,000	6	1,500	9,000
49	Long Roads with Stands	1	1,500	1,500	1	1,500	1,500	1	1,500	1,500	1	1,500	1,500
50	Number Rods	1	500	500	1	500	500	1	500	500	1	500	500
51	Stand Number Rods	1	800	800	1	800	800	1	800	800	1	800	800

DAY CARE CENTER

Yard Stick as per Women Dvelopment Department

		Original			1st Revised			2nd Revised			3rd Revised		
Sr. No.	ITEMS	Yard Stick (DCC of 25 Kids)	Unit Cost	Total	Yard Stick (DCC of 25 Kids)	Unit Cost	Total	Yard Stick (DCC of 25 Kids)	Unit Cost	Total	Yard Stick (DCC of 25 Kids)	Unit Cost	Total
52	Soft toys	2	700	1,400	2	700	1,400	2	700	1,400	2	700	1,400
53	Infants Manual Weight Machine	1	1,000	1,000	1	1,000	1,000	1	1,000	1,000	1	1,000	1,000
54	Toddlers Manual Weight Machine	1	1,000	1,000	1	1,000	1,000	1	1,000	1,000	1	1,000	1,000
55	Tri Cycles	4	3,500	14,000	4	3,500	14,000	4	3,500	14,000	4	3,500	14,000
56	Wooden Cots	10	10,000	100,000	10	10,000	100,000	10	10,000	100,000	10	10,000	100,000
57	Mattresses for Cots	10	1,200	12,000	10	1,200	12,000	10	1,200	12,000	10	1,200	12,000
58	Pillows	10	300	3,000	10	300	3,000	10	300	3,000	10	300	3,000
59	Bed Sheets and pillow covers	20	400	8,000	20	400	8,000	20	400	8,000	20	400	8,000
60	Nets	10	600	6,000	10	600	6,000	10	600	6,000	10	600	6,000
61	High Chairs for feeding	15	3,000	45,000	15	3,000	45,000	15	3,000	45,000	15	3,000	45,000
62	Rockers Cum Bouncer	8	2,500	20,000	8	2,500	20,000	8	2,500	20,000	8	2,500	20,000
63	Cot Mobile	10	1,500	15,000	10	1,500	15,000	10	1,500	15,000	10	1,500	15,000
64	Plastic Chairs (Round edges Animal Shapes)	7	600	4,200	7	600	4,200	7	600	4,200	7	600	4,200
65	Multi-Purpose Table	2	3,000	6,000	2	3,000	6,000	2	3,000	6,000	2	3,000	6,000
66	Writing Board	1	500	500	1	500	500	1	500	500	1	500	500
67	Electric Sterilizer	2	5,000	10,000	2	5,000	10,000	2	5,000	10,000	2	5,000	10,000
68	Electric Warmer	2	5,000	10,000	2	5,000	10,000	2	5,000	10,000	2	5,000	10,000
69	Table sets	2	4,000	8,000	2	4,000	8,000	2	4,000	8,000	2	4,000	8,000
70	Rocker	6	3,200	19,200	6	3,200	19,200	6	3,200	19,200	6	3,200	19,200
71	Activity Gym (Infants)	5	2,000	10,000	5	2,000	10,000	5	2,000	10,000	5	2,000	10,000
72	Play Gym	5	2,700	13,500	5	2,700	13,500	5	2,700	13,500	5	2,700	13,500
73	Activity Gym (Toddlers)	5	2,000	10,000	5	2,000	10,000	5	2,000	10,000	5	2,000	10,000
74	Toiler Training Seat	10	3,000	30,000	10	3,000	30,000	10	3,000	30,000	10	3,000	30,000
75	Infant Toys	30	4,000	120,000	30	4,000	120,000	30	4,000	120,000	30	4,000	120,000
76	Bath Toys	15	1,000	15,000	15	1,000	15,000	15	1,000	15,000	15	1,000	15,000
77	Fun Links Teether	15	300	4,500	15	300	4,500	15	300	4,500	15	300	4,500
78	Fun Pal Teether	15	500	7,500	15	500	7,500	15	500	7,500	15	500	7,500
79	Fun Rattle	15	400	6,000	15	400	6,000	15	400	6,000	15	400	6,000
80	Mother feeding Chair	1	3,000	3,000	1	3,000	3,000	1	3,000	3,000	1	3,000	3,000
81	Soft Books (duplication)	20	500	10,000	20	500	10,000	20	500	10,000	20	500	10,000
82	Bottle Brushes	3	300	900	3	300	900	3	300	900	3	300	900
List of others Items i.e. Kitchen, Office, Electric items				-			-			-			-
1	Water Dispenser	1	14,000	14,000	1	14,000	14,000	1	14,000	14,000	1	14,000	14,000
2	Microwave Oven	1	12,400	12,400	1	12,400	12,400	1	12,400	12,400	1	12,400	12,400
3	Fridge	1	34,000	34,000	1	34,000	34,000	1	34,000	34,000	1	34,000	34,000
4	Kitchen Accessories / Cutleries etc.	24	200	4,800	24	200	4,800	24	200	4,800	24	200	4,800
5	Sofa Set	1	40,000	40,000	1	40,000	40,000	1	40,000	40,000	1	40,000	40,000
6	Office Table	1	5,000	5,000	1	5,000	5,000	1	5,000	5,000	1	5,000	5,000
7	Office Chairs	5	10,000	50,000	5	10,000	50,000	5	10,000	50,000	5	10,000	50,000
8	Air Conditioner	2	42,000	84,000	2	42,000	84,000	2	42,000	84,000	2	42,000	84,000
9	LCD	1	27,000	27,000	1	27,000	27,000	1	27,000	27,000	1	27,000	27,000
10	DVD player	1	5,000	5,000	1	5,000	5,000	1	5,000	5,000	1	5,000	5,000
11	CCTV Cameras	1	100,000	100,000	1	100,000	100,000	1	100,000	100,000	1	100,000	100,000
12	Fire Alarms	3	5,000	15,000	3	5,000	15,000	3	5,000	15,000	3	5,000	15,000
13	UPS	1	10,000	10,000	1	10,000	10,000	1	10,000	10,000	1	10,000	10,000
14	Vacuum Cleaner	1	7,000	7,000	1	7,000	7,000	1	7,000	7,000	1	7,000	7,000
15	Fire Extinguishers (Large)	2	5,000	10,000	2	5,000	10,000	2	5,000	10,000	2	5,000	10,000
16	Electric Insect Killer	2	7,800	15,600	2	7,800	15,600	2	7,800	15,600	2	7,800	15,600
17	Electric Hand Dryer	1	4,000	4,000	1	4,000	4,000	1	4,000	4,000	1	4,000	4,000
18	Electric Heater	2	5,000	10,000	2	5,000	10,000	2	5,000	10,000	2	5,000	10,000
19	Ceiling/bracket Fans	4	8,000	32,000	4	8,000	32,000	4	8,000	32,000	4	8,000	32,000
20	Curtains	2	45,000	90,000	2	45,000	90,000	2	45,000	90,000	2	45,000	90,000
21	Carpets	1	100,000	100,000	1	100,000	100,000	1	100,000	100,000	1	100,000	100,000
22	Other miscellaneous items	1	218,675	218,675	1	218,675	218,675	1	218,675	218,675	1	218,675	218,675
	TOTAL			**1,600,000**			**1,600,000**			**1,600,000**			**1,600,000**
				1.600			1.600			1.600			1.600

Human Resource Model of THQ Hospital

		Original				1st Revised				2nd Revised				3rd Revised				
Sr. No.	**NAME OF POST**	**No. of Employees**	**Per Month Salary**	**Per Month Salary for Person**	**Salary for One Year**	**No. of Employees**	**Per Month Salary**	**Per Month Salary for Person**	**Salary for One Year**	**No. of Employees**	**Per Month Salary**	**Per Month Salary for Person**	**Salary for Two Years**	**No. of Emplyees**	**Project Pay Scale**	**Per Month Salary**	**Per Month Salary for all Person**	**Salary for Two Years**
1	ADMIN OFFICER	1	60,000	60,000	720,000	1	60,000	60,000	720,000	1	80,000	80,000	1,920,000	1	6	105,000	105,000	3,255,000
2	HUMAN RESOURCE & LEGAL OFFICER	1	60,000	60,000	720,000	1	60,000	60,000	720,000	1	80,000	80,000	1,920,000	1	6	105,000	105,000	3,255,000
3	IT/STATISTICAL OFFICER	1	60,000	60,000	720,000	1	60,000	60,000	720,000	1	80,000	80,000	1,920,000	1	6	105,000	105,000	3,255,000
4	FINANCE, BUDGET & AUDIT OFFICER	1	60,000	60,000	720,000	1	60,000	60,000	720,000	1	80,000	80,000	1,920,000	1	6	105,000	105,000	3,255,000
5	PROCUREMENT OFFICER	1	60,000	60,000	720,000	1	60,000	60,000	720,000	1	80,000	80,000	1,920,000	1	6	105,000	105,000	3,255,000
6	QUALITY ASSURANCE OFFICER	1	60,000	60,000	720,000	1	60,000	60,000	720,000	1	80,000	80,000	1,920,000	1	6	105,000	105,000	3,255,000
7	LOGISTICS OFFICER	1	60,000	60,000	720,000	1	60,000	60,000	720,000	1	80,000	80,000	1,920,000	1	6	105,000	105,000	3,255,000
8	DATA ENTRY OPERAOTOR (DEO)	2	25,000	50,000	600,000	2	25,000	50,000	600,000	2	35,000	70,000	1,680,000	2	3	44,000	88,000	2,728,000
9	ASSISTANT ADMIN OFFICER	2	40,000	80,000	960,000	2	40,000	80,000	960,000	2	50,000	100,000	2,400,000	2	5	70,000	140,000	4,340,000
10	**HR FOR QMS and MSDS and Day Care Center**																	
11	QMS Supervisor / Information Desk Officer	2	25,000	50,000	600,000	2	25,000	50,000	600,000	2	25,000	50,000	600,000	2		25,000	50,000	600,000
12	Computer Operator	8	20,000	160,000	1,920,000	8	20,000	160,000	1,920,000	8	20,000	160,000	1,920,000	8		20,000	160,000	1,920,000
13	Consultants (MSDS) Implementation & Clinical Audit	1	100,000	100,000	1,200,000	1	100,000	100,000	1,200,000	1	100,000	100,000	1,200,000	1		100,000	100,000	1,200,000
14	Training on MSDS Compliance for Staff of THQ Hospital	1000	4,000	4,000,000	4,000,000	1000	4,000	4,000,000	4,000,000	1000	4,000	4,000,000	4,000,000	1000		4,000	4,000,000	4,000,000
15	Rent for Vehicle				500,000				500,000				500,000				0	500,000
16	Manager Day Care Center	1	45,000	45,000	540,000	1	45,000	45,000	540,000	1	45,000	45,000	540,000	1		45,000	45,000	540,000
17	Montessori Trained Teacher	1	35,000	35,000	420,000	1	35,000	35,000	420,000	1	35,000	35,000	420,000	1		35,000	35,000	420,000
18	Attendant / Care Giver	4	25,000	100,000	1,200,000	4	25,000	100,000	1,200,000	4	25,000	100,000	1,200,000	4		25,000	100,000	1,200,000
19	Office Boy	1	20,000	20,000	240,000	1	20,000	20,000	240,000	1	20,000	20,000	240,000	1		20,000	20,000	240,000
	Sub Total of HR Model			**4,860,000**	**17,220,000**			**4,860,000**	**17,220,000**			**5,040,000**	**28,140,000**				**5,273,000**	40,473,000
					17.220				**17.220**				**28.140**					**40.473**
	Utilization of HR Component								**14.210**				**18.96**					
	Total of HR Component												**42.35**					**59.433**

Janitorial Services

	Original			From 1st Revised to onward
Assumptions				In the light of decision made during the Progress Review Meeting of Revamping of DHQ/THQ Hospitals held on 01-01-2018 under the Chairmanship of Chairman, P&D Board; it was inter alia decided as under: **"It would be made sure by the P&SH Department that the outsourcing would be shifted to the non-development side from 1st July 2018 next FY".** In view of above, Outsourcing cost has been excluded from this PC-I.
Covered area excluding residential area	45,022	sft		
Covered area assigned to one sweeper	7,500	sft		
Number of sweepers required for covered area	6	Persons		
Road and ROW area	89,747	sft		
Road and ROW assigned to one sweeper	15,000	sft		
Number of sweepers required for road and ROW area	6	Persons		
Number of washroom blocks	11	blocks		
Number of washroom block assigned to one sweeper	3	Persons		
Number of sweepers required for total washroom blocks	4	Persons		
Total sweeper in morning shift	16	Persons		
Total number of sweepers in evening shift	8	Persons		
Total number of sweepers in night shift	8	Persons		
Total number of sweepers in all shifts	31	Persons		
Number of sewer men required	3	Persons		
Number of supervisors	3	Persons		
Salary component				
Type of worker	**No of workers**	**Salary per month**	**Salary for One Year**	
Sweepers / Janitors	31	22,000	8,273,549	
Sewer men	3	22,000	792,000	
Supervisors	3	26,000	936,000	
Cost of Supply per Month		400,000	4,800,000	
Sub Total (Salary component)			**14,801,549**	
			14.802	

Security and Parking

	Original				From 1st Revised to onward
Assumptions					In the light of decision made during the Progress Review Meeting of Revamping of DHQ/THQ Hospitals held on 01-01-2018 under the Chairmanship of Chairman, P&D Board; it was inter alia decided as under: **"It would be made sure by the P&SH Department that the outsourcing would be shifted to the non-development side from 1st July 2018 next FY".** In view of above, Outsourcing cost has been excluded from this PC-I.
Covered area excluding residences	45,022				
Covered Area per guard	15,000				
Number of guards	**3**				
Open area excluding parking area	89,747				
Area covered per guard per shift for open area excluding parking	15,000				
Number of guards for total area excluding parking area	**6**				
Number of gates	3				
Number of guards at gates	**6**				
Total No of Guard	**15**				
Total number of all guards for second shift	**7**				
Lady Searcher	**4**				
Number of parking areas	1				
Number of guards for parking lot per shift (Morning+ Evening)	**2**				
Total no. of Supervisors	**2**				
Type of worker	**No of workers**	**Salary per month**	**Salary per Month for all Person**	**Salary for One year**	
Supervisors	2	24,675	49,350	592,200	
Ex-Army	8	21,525	172,200	2,066,400	
Civilian	12	21,000	252,000	3,024,000	
Lady Searcher	4	21,525	86,100	1,033,200	
Parking	2	21,525	43,050	516,600	
Sub total				**7,232,400**	
Equipment cost					
Lump sum Provision (Walk Through Gate=1, Metal Detector=5, Walkies Talkies=10, Base Set=1)				500,000	
Sub total				**500,000**	
Subtracting Parking Fees				500,000	
Total Security and Parking Services				**7,232,400**	
				7.232	

Laundry Services

	Original			From 1st Revised to onward
Number of beds	100			
Type of Item	**No of Beds**	**Per bed cost per year**	**Total Cost**	
No of Bed	100	30,000	3,000,000	
Transport Charges			1,200,000	
Total for laundry items			**4,200,000**	
Total			**4.200**	

In the light of decision made during the Progress Review Meeting of Revamping of DHQ/THQ Hospitals held on 01-01-2018 under the Chairmanship of Chairman, P&D Board; it was inter alia decided as under:

"It would be made sure by the P&SH Department that the outsourcing would be shifted to the non-development side from 1st July 2018 next FY".

In view of above, Outsourcing cost has been excluded from this PC-I.

Maintenance of Generator

	Original			From 1st Revised to onward
Item Name	**Quantity**	**Cost per year**	**Total Cost**	
Periodical Maintenance Cost				
Number of Generators (200 KVA)	1	500,000	500,000	In the light of decision made during the Progress Review Meeting of Revamping of DHQ/THQ Hospitals held on 01-01-2018 under the Chairmanship of Chairman, P&D Board; it was inter alia decided as under: **"It would be made sure by the P&SH Department that the outsourcing would be shifted to the non-development side from 1st July 2018 next FY".** In view of above, Outsourcing cost has been excluded from this PC-I.
Number of Generators (100 KVA)	-	300,000	-	
Number of Generators (50 KVA)	-	175,000	-	
Repairs Cost	1	500,000	500,000	
HR Cost				
Supervisor	1	40,000	240,000	
Generator Operator	3	30,000	1,080,000	
Technical Staff/Mechanic	-	30,000	-	
Total			**2,320,000**	
			2.320	

MEP

	Original				From 1st Revised to onward
Type of worker / Component	**No of workers**	**Salary per month**	**Salary per Month for all persons**	**Salary for One Year**	In the light of decision made during the Progress Review Meeting of Revamping of DHQ/THQ Hospitals held on 01-01-2018 under the Chairmanship of Chairman, P&D Board; it was inter alia decided as under: **"It would be made sure by the P&SH Department that the outsourcing would be shifted to the non-development side from 1st July 2018 next FY".** In view of above, Outsourcing cost has been excluded from this PC-I.
Supervisors	1	56,420	56,420	677,040	
Plumber	1	32,550	32,550	390,600	
AC/ Technician	1	34,720	34,720	416,640	
Electrician	2	31,465	62,930	755,160	
Car painter	1	30,380	30,380	364,560	
Total (Salary component)			**217,000**	**2,604,000**	
	No.	**Per Unit Cost per Year**	**Cost per Year for all Items**	**Cost for One Year**	
A/C	200	6,665	1,333,000	1,333,000	
Fridge	10	4,000	40,000	40,000	
UPS	15	8,000	120,000	120,000	
Water Cooler	20	4,000	80,000	80,000	
Exhaust	10	3,000	30,000	30,000	
Geyser	20	4,000	80,000	80,000	
Water Pump	8	3,000	24,000	24,000	
Carpentry Work		-	180,000	180,000	
Electrical Work		-	120,000	120,000	
Plumbing Work		-	75,000	75,000	
Sub Total				**2,082,000**	
General Total				**4,686,000**	
				4.686	

Medical Gases

		Original				From 1st Revised to onward
Scope of Work		Monthly Consumption per THQ Hospital	Annual Consumption per THQ Hospital	Rate per Cylinder	Total Annual Cost per THQs	
Oxygen	Medical Oxygen Gas in 240 CFTCylinder (MM)	12	144	1850	266,400	In the light of decision made during the Progress Review Meeting of Revamping of DHQ/THQ Hospitals held on 01-01-2018 under the Chairmanship of Chairman, P&D Board; it was inter alia decided as under: **"It would be made sure by the P&SH Department that the outsourcing would be shifted to the non-development side from 1st July 2018 next FY".** In view of above, Outsourcing cost has been excluded from this PC-I.
	Medical Oxygen Gas in 48 CFTCylinder (MF)	30	360	1,000	360,000	
	Medical Oxygen Gas in 24 CFTCylinder (ME)	40	480	800	384,000	
Nitrous Oxide	Nitrous Oxide in 1,620 Liter (XE)	2	24	5,000	120,000	
	Nitrous Oxide in 16,200 Liter (XM)	1	12	12,500	150,000	
Nitrogen Gas	Nitrogen Gas	1	12	2,000	24,000	
Total					**1,304,400**	
					1.304	

Cafeteria

Pre-Fabrication Cateen (Procurement)

		Original				From 1st Revised to onward
Sr. No.	**Description of work**	**Unit**	**Qty**	**Rate (Rs)**	**Amount (Rs)**	In the light of decision made during the Progress Review Meeting of Revamping of DHQ/THQ Hospitals held on 01-01-2018 under the Chairmanship of Chairman, P&D Board; it was inter alia decided as under: **"It would be made sure by the P&SH Department that the outsourcing would be shifted to the non-development side from 1st July 2018 next FY".** In view of above, Outsourcing cost has been excluded from this PC-I.
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m) for ordinary soil	Cft	2545	6.13	15,602	
2	Spraying anti-termite liquid mixed with water in the ratio of 1:40.	Sft	4305	2.21	9,514	
3	Supplying and filling sand of approved quality from outside sources under floors etc complete in all respects.	Cft	2268	15.62	35,426	
4	Providing, laying, watering and ramming brick ballast 1½" to 2"(40 mm to 50 mm) gauge mixed with 25% sand, for floor and foundation, complete in all respects.	Cft	998	39.15	39,069	
5	Providing and laying damp proof course (1½" thick (40 mm)) of cement concrete 1:2:4, with one coat bitumen and one coat polythene sheet 500gauge	Sft	318	43.34	13,789	
6	Brick work with cement, sand mortar ratio 1:5	Cft	1792	180.25	323,071	
7	Cement concrete plain Ratio 1: 4: 8 including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate)	Cft	427	170.72	72,893	
8	Cement concrete plain Ratio 1: 2 : 4 including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate)	Cft	1043	190.48	198,746	
9	Placing Granite tiles (24"x24"x0.5") using white cement over a bed of ¾" (20 mm) thick cement mortar 1:6.	Sft	2160	200.00	432,000	
10	Providing and laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope . complete in all respect.	Sft	720	118.00	84,960	
	Total Amount of Platform Construction				**1,225,070**	
Pre-Fabrication of Canteen Structure						
11	Providing and fixing aluminium frame window with double glazzed glass 6mm+6mm thick complete in all respect as approved by engineer	Sft	48	1100.00	52,800	
12	Providing and fixing aluminium frame door with single glazzed glass 6mm thick complete in all respect as approved by engineer	Sft	56	700.00	39,200	
13	Fixing of frameless Glass wall of approved quality and design as approved by engineer	Sft	550	1500.00	825,000	
14	Providing Granite skirting or dado 4/8"(13 mm) thick including rounding of corner and straight ening of top edge and finishing to smooth surface afterplastering	Sft	491	212.00	104,177	
15	Placing & erection of pre-painted Box section tube Columns of M.S sheet 4mm thick of size 4" x4" complete in all respect.	Kg	693	150.00	103,950	
16	Placing & erection of pre-painted Box section tube Rafters of M.S sheet 4mm thick of size 3" x3" with all fittings, complete in all respect.	Kg	1040	150.00	155,925	
17	Placing & erection of pre-painted Box section tube Purlins of M.S sheet 1.6 mm thick (16 Gauge) of size 2" x2", with all fittings, complete in all respect.	Rft	676	120.00	81,144	
18	Placing & erection of pre-painted, Galvanized Sandwitched board of 0.5 mm thick M.S sheet with 50mm PU insulation with all fittings, complete in all respect.	Sft	2640	400.00	1,055,800	
19	Placing & fixing glass wool complete in all respect.	Sft	3024	50.00	151,200	
20	Placing & fixing Gypsum False Ceiling, complete in all respect.	Sft	3024	70.00	211,680	
21	Providing & Fixing corrugated galvanized iron sheets 22 gauge with EPDM screw fittings, complete in all respect.	Sft	3629	145.00	526,176	
	Total Cost of Pre-Fabrication of Canteen Structure				**3,307,052**	
	Total Amount (Rs)				**4,532,121**	
22	Electrification				998,735	
23	Plumbing and Sanitory				410,000	
24	Kitching Fixtures				802,000	
	Grand Total Amount (Rs)				**6,742,856**	

6.743

LANDSCAPE DEVELOPMENT WORKS
COST ESTIMATE

		Original				From 1st Revised to onward
Sr. No.	Description	Unit	Quantity	Unit Rate Rs.	Amount Rs.	In the light of decision made during the Progress Review Meeting of Revamping of DHQ/THQ Hospitals held on 01-01-2018 under the Chairmanship of Chairman, P&D Board; it was inter alia decided as under: **"It would be made sure by the P&SH Department that the outsourcing would be shifted to the non-development side from 1st July 2018 next FY".** In view of above, Outsourcing cost has been excluded from this PC-I whereas Rs. 0.048 million has been charged in this scheme against Design Consultancy from development side before the above said decision, hence it is reflected in this PC-I.
1	**SOFT LANDSCAPE**					
1.1	**TOP SOIL**					
	Providing, spreading and leveling of topsoil (sweet soil including manure and fertilizers) as required complete in all respects as per Drawings, Specifications and as approved by the Engineer.	Cft	13,960	22	307,127	
1.2	**STONE / PEBBLES**					
	Supply and laying a layer of pebbles/stone at specified locations with Landscape base as in Landscape Design approved by the Engineer.	Truck	1	34,375	34,375	
1.3	**GRASSING**					
a	**GRASSING (EXISTING NON MAINTANE LAWNS)**					
	Providing and dibbing of Fine Dacca grass where required, including mud filling/leveling and contour shape preparation confirming to the criteria outlined in the Specifications, complete in all respects as per Drawings , Specifications and as approved by the Engineer.	Sft	19,146	7	134,019	
b	**GRASSING (NEW LAWNS)**					
	Providing and dibbing of Fine Dacca grass , including mud filling/leveling and contour shape preparation confirming to the criteria outlined in the Specifications, complete in all respects as per Drawings, Specifications and as approved by the Engineer.	Sft	23,932	11.25	269,235	
1.4	**TREE / SHRUBS (SPREADING)**					
	Providing and planting tree / shrub as listed and as arrangement and type shown in the Drawings, in pits of size 305mm x 305mm x 305mm. Dug in improved soil 610mm. deep filled by adding 10% cow dung manure and confirming to the criteria outlined in the Specifications, complete in all respects and to the satisfaction of Engineer .					
a	Trees 18" pot 6'-7' - Terminally, Cassia Fistula, Bauhinia Variegated, Alstonia Choirs, Ficus Yellow, Ficus Black, Jacaranda, Pilken, Mangifera etc.	No's	98	1,500	147,000	
b	Trees 12" pot 3'-4' - Polyalthia Long folia, Terminally, Cassia Fistula, Bauhinia Variegated, Latonia Choirs, Delonix Regia, Ficus Yellow, Focus Black, fichus Starlight, Melaluca, Mimuspps, Pine, Ficus Amestal, Pilken, Palms etc.	No's	23	270	6,210	
c	Plantation of Fruit Plants in the vacant area 12" pot 3'- 4' - Am rood, Jaman, Berri, Mango, Citrus. Including site preparation, plantation, watering and maintenance for six months.	No's	40	600	24,000	
1.5	Shrubs and Ornamental Plants 10" pot Pittosporum Variegated, Murray Small, Ixora Coccinea, Juniper Varigated, Hibiscus Varigated, Carronda Dwarf Spp, Jasmine Sambac(Mottya), Leucophyllum Frutescens(Silvery), Rose, Nerium, Lantana, Canna, Asparagrass, Conocarpus, Acalypha, Callistemon Dwarf, Cestrum, Thabernaemontara Variegated etc.	No's	8,703	69	600,507	
a	Shrubs and Ornamental Plants 12" pot Pittosporum Varigated, Ixora Cochineal, Juniper Variegated, Carronade Dwarf, Jasmine Thai, Plumier Robar, Cassia Malacca, Largest mea, Euphorbia, Jestropha Thai etc	No's	1,368	195	266,760	
1.6	**GROUND COVERS**					
	Providing and planting ground covers as listed and as arrangement and type shown in the Drawings, in pits of size 150mm x 150mm x 150mm. Dug in improved soil 610mm deep filled by adding 10% cow dung manure and confirming to the criteria outlined in the Specifications, complete in all respects and to the satisfaction of Engineer .					
	Ground Cover Plastic Bag Plants Alternant Hera, Dianella, Iresine (Red), Hemercollis(Daylily), Duranta etc	No's	9,294	12	111,528	
1.7	**PALMS**					
	Providing and planting palms as per Drawings, specifications and to the satisfaction of Engineer .					
a	Palm 18" pot - Queen Palm, Wodyetia Bifurcate, Washingtonian Palm, Biskarkia etc.	No's	11	3,675	40,425	
b	Palm 18" pot - Phoenix Palm, Cyrus Palm	No's	15	1,800	27,000	
1.8	**CREEPERS**					
	Providing and planting Creepers as listed and as arrangement and type shown in the Drawings, in pits of size 305mm x 305mm x 305mm. Dug in improved soil 610mm. deep filled by adding 10% cow dung manure and confirming to the criteria outlined in the Specifications, complete in all respects and to the satisfaction of Engineer .					
	Creepers 12" Pot - Bougainvillea, Bonsai, Qusqualus, Bombay Creeper etc.	No's	46	195	8,970	
2	**HARD LANDSCAPE**					
2.1	**WALK WAYS**					
a	Excavation of walkways and edging including brick ballast under 12"X14" curb stones fixing with1:2:4 PCC, supply of 7000PSI tuff tiles 60mmas per approved design fixing on 4" brick ballast compacted and grouting with sand.	Sft	1915	150	287,250	
2.2	**BENCHES**					
	Concrete Bench 5' wide complete in all respects and to the satisfaction of Engineer as per approved design.	No's	9	14,698	132,282	
2.3	**DUSTBINS**					
	Complete in all respects and to the satisfaction of Engineer as per approved design.	No's	6	27,700	166,200	
2.4	**PLAYING EQUIPMENTS**					

LANDSCAPE DEVELOPMENT WORKS
COST ESTIMATE

		Original				From 1st Revised to onward
	Complete in all respects and to the satisfaction of Engineer as per approved design.	No's	1	544,939	544,939	
2.5	**PLANTERS**					
	Concrete planters 2' X 2-1/2' complete in all respects and to the satisfaction of Engineer as per approved design.	No's	8	3,850	30,800	
2.6	**WATER POINTS (Injector Pump 1HP)**	No's	1	45,000	45,000	
3	**SOFT LANDSCAPE MAINTENANCE** (Including maintenance and up keeping of site for 6 months) after development as per specifications and to the satisfaction of Engineer.	Sft	47,864	9.00	430,776	
4	**CONSTRUCTION OF PLANTERS**					
4.1	**Large Size** with keystones fixed with cement with top concrete slab as per design and to the satisfaction of Engineer.	No's	186	550	102,300	
4.2	**Medium Size** with keystones fixed with cement with top concrete slab as per design and to the satisfaction of Engineer.	No's	24	550	13,200	
4.3	**Small Size** with keystones fixed with cement with top concrete slab as per design and to the satisfaction of Engineer.	No's	45	550	24,750	
5	**GAZEEBO** Construction of Gazebo 12' X 12' with top fiberglass 3 layer canopy as per approved design and to the satisfaction of Engineer.	No's	1	200,000	200,000	
	Total Amount of - Landscaping				**3,954,654**	
	PRA(16%)				632,745	
	Design Consultancy				100,000	
	Grand Total				**4,687,398**	
					4.687	

(1A)

PHONE NO.062-9250334

From,

The Superintending Engineer,
Buildings Circle, Bahawalpur

To,

The Chief Executive Officer (CEO),
Rahim Yar Khan.

No. 4528 ***/DB,*** ***Dated:*** 29/12/ ***2021.***

Subject: - ***ROUGH COST ESTIMATES OF ADP SCHEMES "BALANCE WORK OF REVAMPING OF ALL DHQ /15 THQ HOSPITALS IN PUNJAB ONE AT TEHSIL HEADQUARTER HOSPITAL SADIQABAD DISTRICT RAHIM YAR KHAN (ADP SCHEMES NO.1013/ 2021-22).***

The Scheme was approved for amounting to **Rs.42.007 (M)** by the Secretary Primary & Secondary Healthcare Department vide letter No.PO(D-II)1-237/2021, dated 09.11.2021. The work could not be allotted due to increase in Market Rates. Now, the new MRS 1st Bi-Annul 2022 has been notified by the Finance Department and there is considerable increase in rates.

Hence, this amended rough cost estimate amounting to **Rs.49.349 (M)** for the scheme cited as subject has been reframed on the basis of fresh MRS for 1st Bi-Annual 2022 is being submitted herewith dully vetting for arranging amended administrative approval, there is no change in original approved scope of work, please

Superintending Engineer,
Buildings Circle, Bahawalpur

DA/ Estimates

Endstt. ***/DB,*** ***Dated*** ***/2021.***

Copy is forwarded for information to the Executive Engineer, Buildings Division, Rahim Yar Khan with reference to his office letter No.854/DB, dt: 27.12.2021.

Superintending Engineer,
Buildings Circle, Bahawalpur.

D:\LETTER WORK\Estimate letter\SE Rough Cost Estimate\Se to THQ Hospital sadiqabad ryk 1013.doc

(1)

PUNJAB BUILDINGS DEPARTMENT

BAHAWALPUR

DIVISION:- BUILDINGS DIVISION, RAHIM YAR KHAN

SUB DIVISION:- BUILDINGS SUB DIVISION NO.1 RAHIMYARKHAN

NAME OF WORK:- AMENDED ROUGH COST ESTIMATE FOR "PROGRAM FOR REVAMPING OF ALL THQ HOSPITALS IN PUNJAB ONE AT TEHSIL HEADQUARTER HOSPITAL SADIQABAD DISTRICT RAHIM YAR KHAN." ADP NO.1013/2021-22.

ESTIMATED COST: Rs.49.349 (M)

AMENDED ROUGH COST ESTIMATE FOR "PROGRAM FOR REVAMPING OF ALL THQ HOSPITALS IN PUNJAB ONE A TEHSIL HEADQUARTER HOSPITAL SADIQABAD DISTRICT RAHIM YAR KHAN." ADP NO.1013/2021-22.

HISTORY:-

The Project Manager Civil Project Management Unit P & SHC Department has requested to prepare rough cost estimate vide No. PMU/(P&SHC)/2021/1140 dated 07-04-2021 for the above mentioned work. Accordingly the rough cost estimate "Revamping of Main Building in THQ hospital Sadiq Abad was technically vetted by the Superintending Engineer Circle Bahawalpur amounting to **Rs.42.007(M)**. The administrative approval amounting to **Rs.42.007 (M)** was issued by the Secretary P&SHC Department. The tenders were called on 23.12.2021 but no contractor participated due to inflation in the market rates of the materials. Now the new MRS 1st Bi-Annual 2022 has been notified by the Finance Department and there is huge increase in the rates so the amended approval on new rates is required.

Keeping in view, the amended rough cost estimate with new plinth area rates 1st Bi-Annual 2022, amounting to **Rs.49.349 (M)** has been prepared and submitted for arranging amended administrative approval.

SCOPE OF WORK:-

The following provisions have been made in the estimate:-

	A) Revamping of Main Building	1-Job
	B) External Development Work	1-Job

SPECIFICATIONS:-

Latest approved specifications will be followed during execution of the scheme and work will be got carried out to the entire satisfaction of the Engineer Incharge.

RATES:-

The amended rough cost estimate has been prepared on the basis of MRS/Plinth Area Rates for the 1st Bi-Annual for the year 2022.

LAND:-

No provision for acquisition of land has been made in the estimate, as the same is available with Client Department.

COST:-

Total Cost of this scheme works out to **Rs.49.349/-**

TIME LIMIT:-

It will take about **12-Months** to complete the work from the actual date of commencement. Provided adequate funds are required.

CARRYING OUT OF WORK:-

The work will be carried out at site through the approved Govt. contractor after calling competitive tenders as per usual practice of the Department.

Sub Divisional Officer,
Buildings Sub Division No.02,
Rahim Yar Khan.

Executive Engineer
Buildings Division,
Rahim Yar Khan.

No. PMU/(P&SHD)/2021/1489
PROJECT MANAGEMENT UNIT
P&S HEALTHCARE DEPARTMENT
(31-E/1, Shahrah-e-Hazrat Imam Hussain
Gulberg-III, Lahore, Ph: 042-99231208)
Dated: December 21, 2021

To

Executive Engineer,
Buildings Division,
Rahim Yar Khan.

Bldgs : Divn
Rahim Yar Khan
Diary No. 1661
Dated. 27.12.21

H.D. B.A.C
H.C. E.E.

SUBJECT: **EXECUTION/COMPLETION OF VARIOUS PRIMARY AND SECONDARY HEALTHCARE DEPARTMENT PROJECT FOR THE FINANCIAL YEAR OF 2021-2022 OF RAHIM YAR KHAN DISTRICT.**

It is stated that Primary and Secondary Healthcare Department (P&SHD) is determined to enhance the service delivery of its primary and secondary healthcare facilities. For this purpose, P&SHD has chalked out the most deserving Healthcare facilities across the Punjab. Execution/Revamping of Primary & Secondary Healthcare facilities is a top priority among development programmes of Government of Punjab.

Several Healthcare facilities of District Rahim Yar Khan lying under following schemes of ADP were approved in DDSC in this financial year.

- ADP No. 1013 "Balance Work of Revamping of all DHQ/ 15 THQ Hospitals in Punjab"'
- ADP No. 995 "Strengthening of Basic Health Units (BHU's) of Punjab Phase-II".
- ADP No. 792 "Programme for Revamping of all THQ Hospitals in Punjab".

Despite Execution/Completion of all sub schemes of above projects, only following schemes are selected for execution/completion in this financial year. In order to complete this partial funding of these following schemes have already been done and remaining funds are likely to be released before 15th January 2022.

So in view of above, it is stated to please take further necessary action (Tendering/Execution or Revision of Estimates as per 1st Bi-Annual MRS of 2022) for in time completion of these sub schemes. However, in case the estimates of these below mentioned facilities are need to be revised as per New MRS rates (1st Jan 2022 to 31st July 2022) then it must be noted that only rates may be revised on the similar scope which is already approved as per P&D Guidelines.

P.T.O

(4)

Sr. #	Name of Health Facility	District	Approved Cost as per 2nd Rb. Annual 2021
1	Revamping of THQ Hospital Khanpur	Rahim Yar Khan	154.238 (M)
2	Revamping of THQ Hospital Sadiqabad	Rahim Yar Khan	42.007 (M)

Project Manager Civil
PMU P&SHD

A copy is forwarded for information to the:

1. Project Director, PMU, Primary and Secondary Healthcare Department Punjab.
2. Deputy Project Director, PMU, Primary and Secondary Healthcare Department Punjab.
3. Chief Engineer Buildings South, Lahore.
4. Director Infrastructure, PMU, Primary and Secondary Healthcare Department Punjab.
5. Chief Executive Officer Health Rahim Yar Khan.
6. Office copy I&C wing.

No _____ dated _____

A copy of above letter is forwarded to the SDOs Buildings Sub Division No. of Rahim Yar Khan. It is requested that signed & August pur for information and necessary action please.

Executive Engineer
Building Division
Rahim Yar Khan

Primary & Secondary
Healthcare Department

GOVERNMENT OF THE PUNJAB
Dated Lahore the 07-11-2021

ORDER

No.PO(D-II)1-237/2021: Consequent upon the decision of Departmental Development Sub Committee (DDSC), in its meeting held on 29.09.2021, the Governor of the Punjab is pleased to accord 2nd revised Administrative Approval of 10 sub-schemes under block scheme titled "Programme for Revamping of all THQ Hospitals in Punjab" at cost mentioned against each sub-scheme, with revised gestation period upto 30.06.2023:

Rs. in Millions

Sr. No.	Sub-Scheme Title	2nd Revised Cost		
		Capital Component	Revenue Component	Total
1	Revamping of THQ Hospital, Kahuta District Rawalpindi	37.709	199.102	236.811
2	Revamping of THQ Hospital, Gujar Khan District Rawalpindi	37.256	174.999	212.255
3	Revamping of THQ Hospital, Taxila District Rawalpindi	41.278	203.228	244.506
4	Revamping of THQ Hospital, Mian Meer Lahore Cantt. District Lahore	44.697	192.796	237.493
5	Revamping of THQ Hospital, Govt. Civil Hospital Multan	67.143	200.403	267.546
6	Revamping of THQ Hospital, Khanpur District Rahim Yar Khan	154.238	208.777	363.015
7	Revamping of THQ Hospital, Liaquatpur District Rahim Yar Khan	44.187	192.016	236.203
8	Revamping of THQ Hospital, Sadiqabad District Rahim Yar Khan	42.007	218.902	260.909
9	Revamping of THQ Hospital Sarai Alamgir District Gujrat	14.875	195.653	210.528
10	Revamping of Civil Hospital Fort Munro District D G Khan	48.097	218.014	266.111

2. The expenditure involved will be debitable under the following heads of account.

Capital Component — *Grant No.12042 (042) Government Building04-Economic Affairs-045 Construction and Transport -0457 Construction (Work)0457-02 Building and structure.*

Revenue Component — *Grant No. PC-22036 (036) Development -07Health -073 – Hospital Seravices-0731-General Hospital Services - 073101 General Hospital Services.*

(IMRAN SIKANDAR BALOCH)
SECRETARY P&SH DEPARTMENT

(6)

NO. & DATE EVEN:

A copy is forwarded for information and necessary action to the:-

1. Accountant General, Punjab, Lahore.
2. Chief (Health-II), Planning & Development Department, Lahore.
3. Director General Health Services, Punjab, 24-Ghazi Road, Lahore.
4. Chief Engineer (North, Central & South Zone), Building, Lahore.
5. Project Director, Project Management Unit, P&SH Department.
6. Section Officer (Health-I), Finance Department
7. Budget Officer-I & III, Finance Department.
8. All Planning Officer, P&SHC Department
9. PS to Secretary, P&SH Department
10. PA to Special Secretary, P&SH Department.
11. PA to Additional Secretary (D&F), P&SH Department
12. PA to Additional Secretary (Admin), P&SH Department
13. PA to Deputy Secretary (D), P&SH Department

(M. ASIF RASHEED)
PLANNING OFFICER (H-I)

Document for Scope of THQs Revamping

A. External Development

Road Networking (Asphalt)

Rehabilitation and Repair of Existing Road Network

Construction of new asphalt road where required

External Plat forms/Pathways

Provision, Alteration and Rehabilitation of plat forms / external pathways other than asphalt road (e.g. P.C.C, Tough Paver etc.) in order to have easiest access to all the facilities of complex should be designed

Boundary Wall

Existing boundary wall of complex should be examined and addition of missing wall (Clinical Side), and strengthening solutions of existing wall and dismantling/reconstruction (if required) should be assessed

Sewerage System

The functionality of the existing sewerage system of clinical blocks of hospitals needs to be examined and provisions for its optimal functions keeping in view the present and future hospital requirements are required. Provisions for replacement of blocked/undersized existing sewerage line along with rehabilitation of manholes may also be incorporated therein.

Water Supply System

Repair of existing external water supply line of clinical blocks of hospital

Provision for new water supply lines where required.

Water Filtration plant with supply system

Provision for new water filtration plant vis-à-vis the hospital requirements may be incorporated. All important points including OPD, wards, waiting areas, emergency and other blocks must be provided with drinking water stations, for which the distribution system needs to be planned and made a part of the estimates.

Repair / Rehabilitation of existing water filtration plant along with provision of drinking water distribution system as mentioned above.

External Electrification

Provisions of main power supply cable.(4 – Core), main power panels / distribution boxes (from transformer to main meter and main meter to distribution boxes) should

be incorporated keeping in view the current distributive and future electric load of the complex

Provisions of external pole lights should be made within the clinical blocks of hospital

Provision of complete earthing and lighting protection system for clinical blocks including all electrical equipment.

External Waiting Area and Parking Facility

External waiting area should be provided according to the space requirement.

Parking facility should be provided according to the space requirement.

B. Internal Development

Tile work

Suitable tile work for flooring and skirting/dado (5') by keeping in view the existing and adjacent tile work condition should be proposed in complete hospital. (Provisions of 2' x 2' full body porcelain tile for flooring and 2' x 1' for dado are suggested to match with the tile work of already revamped 40 DHQ/THQ Hospitals).

The tile work where found in good condition should only be incorporated for minor repair rather than complete replacement.

Ramps and Stairs

Coarse Grained / Rough Textured / Anti-skid flooring should be proposed on the ramp/stretcher way along with guard and handrails for stable movement of stretcher on ramp and patient/attendants on stairs should be proposed.

Paint and dampness works

Paint work type on interior and exterior side of clinical blocks of hospital should be assessed by keeping in view the existing paint condition of hospital

Assessments regarding elimination of dampness origin or source and regarding concealment of existing dampness should be made and appropriate solutions should be incorporated

Flooring Ceiling and Wall requirements of high cleanliness requiring areas like Operation Theaters (OTs), Gynecology OT, Labor room and ICU cum CCU should be incorporated with Anti-Bacterial Material (Provision of Antistatic, Antimicrobial Vinyl flooring and Wall panels with monolithic false ceiling of gypsum or non-porous aluminum are suggested)

Provision of lead lining in X-Ray Rooms should be made.

HEADQUARTER HOSPITAL JADIDABAD DISTRICT RAHIM RAY MANAS "JOB NO.-707/2015-22"

GENERAL ABSTRACT/ESTIMATE

Sl. No.	Description of items	Unit	Rates				Amount	Remarks
			E.P.	E.I.	P.H.	Sub Div.	Total	
A	CLINICAL BUILDING Internal Development TO Work Room, Shift Point & Operation work bed lining, Ceiling, Internal Electrical Fittings, Internal electrification and Electronic work etc. complete							Based on MES Rate Analysis 2nd Revised 2021-22
1	Excavation of Main Building							
2	Excavation of Toilet Block (for 3Units)							
3	Re-Construction of Boundary Wall							
4	Provision of Water Filtration Plant with Supply System							
5	Provision of Tube Well							
6	Cost of Elect. Cross Bore Drilling							
7	External Water Supply System							
8	External Sewage System							
9	Provision of Electrification & Street Light							
	Add 8% Miscellaneous Charges							
	Total (Rs) =							
	Add 18% GST							
	G. Total (Rs) =							
	SAY (Rs) =							
	Add (Rs) =							
	Say (Rs) =							

Executive Engineer
Building Sub Division No.-2

Superintending Engineer
Building Circle

Chief Engineer
Building Division

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Name of work:-

AMENDED ROUGH COST ESTIMATE FOR "PROGRAM FOR REVAMPING OF ALL THQ HOSPITALS IN PUNJAB ONE AT TEHSIL HEADQUARTER HOSPITAL SADIQABAD DISTRICT RAHIM YAR KHAN." ADP NO.1013/2021-22.

i) Administrative approval.

a Amount. **Rs.42.007 (M)**

b Number and date. **S.E No.3543/2020-21 dated 29.11.2021.**

ii) Amount of amended estimate **Rs.49.349 (M)**

Sr. No.	Description of itmes	As per Approved Rough Cost Estimate				As per Amended Rough Cost Estimate				Difference (B-A)	Remarks
		Plinth Area/ Quantity	Rates	Unit	Total (A)	Plinth Area/ Quantity	Rates	Unit	Total (B)		
1	2	3	4	5	6	7	8	9	10	11	12
1	**Revamping of Main Building** (Internal Development, Tile Work, Ramp, Stair Paint & Dampness work lead lining, façade improvement, internel fixtures, internel electrification and miscellaneous repair work of building)	1	23,738,249	Job	23,738,249	1	27,483,000	Job	27,483,000	3744751	**Based on MRS Rates 1st Bi Annual 2022.**
2	Revamping of Toilet Block (for 35-Nos)	1	2,510,977	Job	2,510,977	1	3,675,000	Job	3,675,000	1164023	--do--
3	Re-Construction of Boundary Wall (150-Rft)	1	464,218	Job	464,218	1	524,000	Job	524,000	59782	--do--
4	Provision of Water Filtration Plant with Supply System	1	2,887,145	Job	2,887,145	1	3,458,000	Job	3,458,000	570855	--do--
5	Provision of Tuff Paver	1	512,398	Job	5,123,918	1	6,283,000	Job	6,283,000	1159082	--do--
6	Supply and Erection of 10 ft high Cantiliver type Car Parking Shed consisting of 3 mm thick fiber glass sheet roof fixed / riveted with moulded curved frame comprising of 1-1/2"x1-1/2" 16-SWG MS box placed @ 2 ft C/C both sides and 1-1/2"x3" M.S box 16-SWG at front and back side welded on cantiliever arch type MS pipe 3" dia arms welded with 3/8" thick and 8 " dia Main Post duly welded with 1/2" thick 1.5'x1.5' base plate and 4 no stiffeners of 1/2" thick MS sheet embeded in PCC 2'x2'x3' with 18" long nut bolts 1"dia i/c cost of foundation,cutting straightening assembling, bending as per drawing, welding / grinding of joints and painting three coats complete in all respect as approved by the Engineer Incharge. 8(12x18)	1	1,441,152	Job	1,441,152	1728	544	Job	939,514	-501638	--do--
7	External Water Supply System	1	575,536	Job	575,536	1	1,275,200	Job	1,275,200	699664	--do--
8	External Sewerage System	1	1,047,346	Job	1,047,346	1	1,112,500	Job	1,112,500	65154	--do--

Sr. No.	Description of itmes	As per Approved Rough Cost Estimate				As per Amended Rough Cost Estimate				Difference (B-A)	Remarks
		Plinth Area/ Quantity	Rates	Unit	Total (A)	Plinth Area/ Quantity	Rates	Unit	Total (B)		
9	Provision of Electrification of Street Light	1	1,840,300	Job	1,840,300	1	1,805,000	Job	1,805,000	-35300	--do--
	Total (Rs) =				39,628,841				46,555,214	6926373	
	Add 1% Harticulture Charges				396,288				465,552	69,264	
	Add 5% PRA				1,981,442				2,327,761	346319	
	Total (Rs) =				42,006,571				49,348,526	7341955	
	SAY (Rs). =				42,007,000				49,349,000	7,342,000	
	OR (Rs.) =				Rs.42.007 (M)				Rs.49.349 (M)	Rs.7.342 (M)	Excess

17.48% Excess

Sub Engineer

Sub Divisional Officer,
Buildings Sub Division No.2
Rahimyarkhan

Executive Engineer,
Buildings Division,
Rahimyarkhan

Superintending Engineer
Buildings Circle Bahawalpur

(17)

ESTIMATE FOR REVAMPING OF MAIN BUILDING

1st Bi Annual 2022

1	Removing door with chowkat.						=	16	Nos
							@	362.35	Each	Rs5,798
2	Fixing door, including chowkats.						=	16	Nos
							@	603.90	Each	Rs9,662
3	Dismantling glazed or encaustic tiles, etc.								
		1	x	125	x	12.0	=	1500	Sft
		2	x	135	x	12.0	=	3240	Sft
		4	x	19	x	36.0	=	2736	Sft
						Total	=	7476	Sft
							@	1932.50	%Sft	Rs144,474
4	Dismantling cement concrete 1:2:4 Plain.								
		1	x	125	x	12.0 x 0.125	=	188	Cft
		2	x	135	x	12.0 x 0.125	=	405	Cft
		4	x	19	x	36.0 x 0.125	=	342	Cft
						Total	=	935	Cft
							@	9060.50	%Cft	Rs84,716
5	Dismantling mud concrete.								
		1	x	125	x	12.0 x 0.33	=	495	Cft
		2	x	135	x	12.0 x 0.33	=	1069	Cft
		4	x	19	x	36.0 x 0.33	=	903	Cft
						Total	=	2467	Cft
							@	1647.50	%Cft	Rs40,644
6	Providing, laying, watering and ramming brick ballast 1½" to 2"(40 mm to 50 mm) gauge mixed with 25% sand, for floor foundation, complete in all respects.								
		1	x	125	x	12.0 x 0.33	=	495	Cft
		2	x	135	x	12.0 x 0.33	=	1069	Cft
		4	x	19	x	36.0 x 0.33	=	903	Cft
		1	x	125	x	12.0 x 0.33	=	495	Cft
		1	x	178	x	12.0 x 0.33	=	705	Cft
		1	x	210	x	12.0 x 0.33	=	832	Cft
		2	x	110	x	12.0 x 0.33	=	871	Cft
		4	x	22	x	36.0 x 0.33	=	1045	Cft
						Total	=	6415	Cft
							@	5161.30	%Cft	Rs331,097
7	Cement concrete plain including placing,compacting,finishing and curing complete(including screening and washing of stone aggregate):Ratio 1: 2: 4								
		1	x	125	x	12.0 x 0.125	=	188	Cft
		2	x	135	x	12.0 x 0.125	=	405	Cft
		4	x	19	x	36.0 x 0.125	=	342	Cft
		2	x	110	x	12.0 x 0.125	=	330	Cft
		4	x	22	x	36.0 x 0.125	=	396	Cft
						Total	=	1661	Cft
							@	28918.55	%Cft	Rs480,337
8	Providing and laying Full body Glazed tiles (600mmx 600 mm) superb quality Porcelain glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive / bond over 3/4" thick(1:3)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respect as approved and directed by the Engineer Incharge.								
		2	x	125	x	12.0	=	3000	Sft
		2	x	135	x	12.0	=	3240	Sft
		3	x	19	x	36.0	=	2052	Sft
		2	x	78	x	12.0	=	1872	Sft
		3	x	49	x	12.0	=	1764	Sft
		2	x	89	x	36.0	=	6408	Sft
						Total	=	18336	Sft
							@	302.25	%Sft	Rs5,542,056

9 Providing and laying Full body Glazed tiles (600mmx 600 mm) superb quality Porcelain glazed tiles of Master brand, skirting / dado of specified size,Color and Shade with adhesive / bond over 1/2" thick(1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge.

1	x	189	x	5.0	=	945	Sft
2	x	180	x	5.0	=	1800	Sft
4	x	55	x	5.0	=	1100	Sft
4	x	78	x	5.0	=	1560	Sft
4	x	68	x	5.0	=	1360	Sft
1	x	39	x	5.0	=	195	Sft
6	x	49	x	5.0	=	1470	Sft
2	x	89	x	5.0	=	890	Sft
				Total	=	**9320**	Sft
					@	**302.25**	**P.Sft**

Rs2,816,970

10 Providing and laying Half body Tile Non-Skid Chequred Tiles (300mm x 300mm) superb quality Porcelain glazed tiles of Master brand, skirting / dado of specified size,Color and Shade with adhesive / bond over 1/2" thick(1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge.

1	x	24	x	12.0	=	288	Sft
1	x	32	x	14.0	=	448	Sft
1	x	26	x	10.0	=	260	Sft
				Total	=	**996**	Sft
					@	**190.50**	**P.Sft**

Rs189,738

11 Providing and laying Antistatic Antibacterial Vinyl flooring with fixing on floor i/c carraige of material from market to site of work complete in all respect as approved by the Engineer Incharge.

2	x	19.25	x	18.75	=	722	Sft
2	x	9	x	12	=	216	Sft
1	x	19	x	18	=	342	Sft
2	x	15.25	x	14	=	427	Sft
1	x	14	x	18	=	252	Sft
				Total:-	=	**1959**	Sft
					@	**320.00**	**P.Sft**

Rs626,840

12 Cement plaster 1:4 upto 20' (6.00 m) height:-½" (13 mm) thick After Removing.

1	x	45	x	4	=	180	Sft
1	x	85	x	2.5	=	213	Sft
6	x	12	x	4	=	288	Sft
4	x	20	x	3	=	240	Sft
1	x	35	x	2	=	70	Sft
4	x	39.25	x	2.75	=	432	Sft
2	x	48	x	1.25	=	120	Sft
2	x	65.75	x	2.5	=	329	Sft
2	x	75	x	4	=	600	Sft
1	x	28	x	2.5	=	70	Sft
1	x	16.5	x	3.5	=	58	Sft
				Total:-	=	**2599**	Sft
					@	**2934.70**	**%Sft**

Rs76,266

13 Providing and applying weather shield paint of approved quality on external surface of building including preparation of surface, application of primer complete in all respect:old surface after scraping.

2	x	185	x	16	=	5920	Sft
2	x	225	x	16	=	7200	Sft
3	x	95	x	16	=	4560	Sft
2	x	198	x	16	=	6336	Sft
3	x	160	x	16	=	7680	Sft
2	x	78	x	16	=	2496	Sft
1	x	133	x	16	=	2128	Sft
				Total:-	=	**36320**	Sft
					@	**1929.05**	**%Sft**

Rs700,631

14 Dismantling brick or flagged flooring without concrete foundation.

1	x	185	x	70	=	12950	Sft
1	x	85	x	2.5	=	213	Sft
1	x	12	x	4	=	48	Sft

			Total:-	= **13211** Sft	
				@ **700.15** **%Sft**	**Rs92,493**

15 Providing and fixing false ceiling (6 mm thick) comprises of Gypsum board laminated sheet of size 2'x2'/2'x3'/3'x3'of specified design and thickness i/c cost of fixtures i.e galvanized angle 1"x1"at wall sides, galvanized tee 1¼"x1" and 1½"x1" both at 4'c/c(made of Taiwan CK Mor equivalent), hanging with G.I / Copper wire 16 SWG, G.I hook, Rawal Plug etc: complete in all respects as approved and directed by the Engineer Incharge.

1	x	24	x	19	=	456 Sft
2	x	19	x	17	=	646 Sft
2	x	22	x	19	=	836 Sft
				Total:-	= **1938**	Sft
					@ **73.00**	**P.Sft** **Rs141,474**

16 Providing and fixing all types of partly fixed and partly openable glazed anodised bronze colour aluminium doors, using delux section of M/s Al-Cop or Pakistan Cables, having chowkat frame of size 40 x 100 mm (1½" x 4") and leaf frame of 60x40mm (2½"x1½") wide sections including the cost of ¼" (5 mm) thick imported tinted glass with aluminium triangular gola and rubber gasket to support the glass and leaf edging, using approved standard fittings, locks, 3" (75 mm) wide long handles etc., and hardware any required as approved by the engineer in-charge.

12	x	3.5	x	7	=	294 Sft
7	x	4	x	7	=	196 Sft
5	x	3	x	7	=	105 Sft
				Total:-	= **595**	Sft
					@ **716.50**	**P.Sft** **Rs426,318**

17 Providing and fixing 2'-9" high stair railing comprising of non magnetic (304) Stain less steel 2" dia pipe railing of 18 SWG welded with vertical posts of 2" dia stainless steel round/ Squar pipe @ 2-ft c/c fixed on alternate steps with 3" long steel screws and brass rawal plugs , 3-Nos diagonal stainless steel pipes of 1/2" dia passes through goties fixed on vertical post, i/c stainles steel welding, fixing & polishing complete in all respects as approved and directed by the Engineer Incharge.

2	x	26	=	52	Rft
2	x	22	=	44	Rft
2	x	12	=	24	Rft
		Total:-	=	**120**	Rft
			@	**1775.10**	**P.Rft** **Rs213,012**

18 Providing and fixing False Ceiling (DAMPA) Sheet 2'x2' imported fixed with aluminum frame (TEE&L) hanged with 10 No wire with RCC Roof Slab including cost of hook complete in all respect as approved by the Engineer Icharge.

4	x	22	x	14.0	=	1232 Sft
3	x	24	x	18.0	=	1296 Sft
4	x	28	x	19.0	=	2128 Sft
4	x	18	x	14.0	=	1008 Sft
2	x	14	x	12.0	=	336 Sft
1	x	13	x	11.0	=	143 Sft
				Total:-	= **6143**	Sft
					@ **160.00**	**P.Sft** **Rs982,880**

19 Providing and fixing 1½" (40mm) thick solid flushdoor comprising of 2.5mm thick Ash Ply with Groves with router compressed over 2.5mm thick commercial ply over 1" thick packing wood in style and Rails under proper pressure i/c cost of nails,tower bolt,handle,glue, sawing charges and laquer polishing to show the grain of Ash Ply properly,sand papering and 3/8" thick ash wood lipping as approved and Directed by the Engineer Incharge.

6	x	3.5	x	7	=	147 Sft
8	x	4	x	7	=	224 Sft
6	x	2.5	x	7	=	105 Sft
2	x	4	x	8	=	64 Sft
				Total:-	= **540**	Sft
					@ **575.00**	**P.Sft** **Rs310,500**

20 Providing and fitting all types of glazed aluminium windows of anodised bronze colour partly fixed and partly sliding using delux sections of approved manufacturer having frame size of 100 x 20 mm (4"x¾") and leaf frame sections of 50 x 20 mm (2"x¾"), all of 1.6mm thickness including 5 mm thick imported tinted glass with rubber gasket using approved standard latches, hardware etc.,i/c Aluminum Fly screen comprising of Fiber / Aluminum wire guaze (Malasian) fixed in aluminum frame of approved manufacturer brownze Colour / powder coated of size 1-1/2"x1/2"and 1.6 mm thick with rubber gasket i/c cost of Hardwares as approved by the Engineer in-charge.

	18	x	5	x	6	=	540	Sft
	8	x	4	x	6	=	192	Sft
	10	x	4	x	3	=	120	Sft
					Total:-	=	**852**	Sft
						@ **1294.85**	**P.Sft**	**Rs1,103,212**

21 Providing and fixing M.S. flat ½"x1/8" (13mm x 3mm) grill including ¾" x 1/8" (20 mmx3 mm) M.S. flat frame, in windows of approved design, including painting three coats, complete in all respects.

	18	x	5	x	6	=	540	Sft
	8	x	4	x	6	=	192	Sft
	10	x	4	x	3	=	120	Sft
					Total:-	=	**852**	Sft
						@ **411.00**	**P.Sft**	**Rs350,172**

22 Providing and fixing PVC panelling etc complete in all respect.

	2	(12	+	14	) 12	=	624	Sft
	2	(16	+	18	) 12	=	816	Sft
	2	(21	+	14	) 12	=	840	Sft
	2	(10	+	12	) 12	=	528	Sft
					Total:-	=	**2808**	Sft
						@ **140.00**	**P.Sft**	**Rs393,120**

23 Providing and fixing lead lining 2mm thick lead sheet with wall for radiation protection upto roof height as per instruction and covering with MDF board 3/4" thick paneling including frame of kail wood 1-1/2" x 2" including termite proofing and fency deodar wood beading complete in all respect as approved by the Engineer Incharge. Also Approved by the Radiation Protecting Agency.

X-Ray Room	1	x	15.75	x	18.875	=	297	Sft
	2	x	15.75	x	12	=	378	Sft
	2	x	18.88	x	16	=	604	Sft
Dark Room	1	x	9.25	x	9.125	=	84	Sft
	2	x	9.25	x	12	=	222	Sft
	2	x	9.25	x	9	=	167	Sft
Store	2	x	18	x	16	=	576	Sft
	2	x	12	x	13	=	312	Sft
					Total:-	=	**2640**	Sft
						@ **950.00**	**P.Sft**	**Rs2,508,178**

24 Providing and fixing auotomatic hydraulic operated door closer imported heavy duty complete in all respect as approved and directed by the Engineer Incharge.

	1	x	14			=	14	No.
					Total:-	=	**14**	No..
						@ **2641.55**	**Each**	**Rs36,982**

25 P/F fancy LED light 2' x 2' including LED light and driver 36-W philips / ALPHA / ULTRA SLIM or equilvent including in false ceiling and electric connection complete in all respects as approved by the Engineer Incharge.

	2	x	44			=	88	No.
					Total:-	=	**88**	No.
						@ **9500.00**	**Each**	**Rs836,000**

26 Supply and erection of copper conductor cables for service connection, in prelaid pipe/G.I. wire/trenches, etc. (rate for cable only):- a)PVC insulated, PVC sheathed twin core, 250/440 volts. 7/1.63 mm (7/0.064")

	2	x	320			=	640	Rft
					Total:-	=	**640**	Rft
						@ **141.05**	**P.Rft**	**Rs90,272**

27 Supply and erection of copper conductor cables for service connection, in prelaid pipe/G.I. wire/trenches, etc. (rate for cable only):- PVC insulated, PVC sheathed 4 core 660/1100 volt grade cable, armoured with G.I. wire 16 SWG. 19/2.11 mm (19/0.083")

	2	x	194			=	388	Rft
					Total:-	=	**388**	Rft
						@ **2627.35**	**P.Rft**	**Rs1,019,412**

28 Provision of Electric Installation as per pinth area rates complete in all respect.

						=	19550	Sft
					Total:-	=	**19550**	Sft
						@ **146.00**	**P.Rft**	**Rs2,854,300**

29 Provision of plumbing Installation as per pinth area rates complete in all respect.

						=	19550	Sft
					Total:-	=	**19550**	Sft

			@	110.00 P.Rft	Rs2,150,500

30 Provision of Gas Installation as per pinth area rates complete in all respect.

=	19550	Sft	
Total:- =	**19550**	Sft	
@	**47.00**	**P.Rft**	**Rs918,850**

31 Single layer of tiles 9"x4½"x1½" (225x113x40 mm) laid over 4"(100 mm) earth and 1" (25 mm) mud plaster without Bhoosa, grouted with cement sand 1:3 on top of RCC roof slab, provided with 34 lbs. per %Sft. or 1.72 Kg/Sq.m bitumen coating sand blinded.

1	x	185	x	70	=	12950 Sft
2	x	85	x	2.5	=	425 Sft
2	x	12	x	4	=	96 Sft
2	x	12	x	5	=	120 Sft
2	x	12	x	4	=	96 Sft
				Total:-	=	**13687** Sft
					@	**9577.85 %Sft** **Rs1,310,920**
					Total: =	**Rs26,787,823**

Recovery of old materials

Tiles (9"x4.5"x1.5")	13211	x	0.4	x	3.5	=	18495 Nos
						@	**4500.00 %0Nos** **Rs83,226**
Tiles bats	13211	x	0.6	x	0.125	=	991 Cft
						@	**2200.00 %Cft** **Rs21,797**
						D/d Total: =	**Rs105,023**
						Net Total: =	**Rs26,682,800**
						Add 03% Contingency =	**Rs800,483.99**
						Net Total: =	**Rs27,483,284**
						SAY: =	**Rs27,483,000**

Sub Engineer

Sub Divisional Officer,
Buildings Sub Division No. 2
Rahim Yar Khan

Executive Engineer
Buildings Division
Rahim Yar Khan

DETAILED ESTIMATE FOR REVAMPING OF TOILET BLOCK

1st Bi Annual 2022

1 Dismantling glazed or encaustic tiles, etc.

BATH	1	x	5	x	6.0	=	30	Sft
	1	x	22	x	6.0	=	132	Sft
					Total	=	**162**	**Sft**
						@	**1932.50**	**%Sft**

Rs3,130.7

2 Dismantling cement concrete 1:2:4 Plain.

Bath	1	x	5	x	6.00	x 0.125	=	4	Cft
						Total	=	**4**	**Cft**
							@	**9060.50**	**%Cft**

Rs362.4

3 Dismantling mud concrete.

Bath	1	x	5	x	6.00	x 0.33	=	10	Cft
						Total	=	**10**	**Cft**
							@	**1647.35**	**%Cft**

Rs164.7

4 Providing, laying, watering and ramming brick ballast 1½" to 2"(40 mm to 50 mm) gauge mixed with 25% sand, for floor foundation, complete in all respects.

Bath	1	x	5	x	6.00	x 0.33	=	10	Cft
						Total	=	**10**	**Cft**
							@	**5161.30**	**%Cft**

Rs516.1

5 Cement concrete plain including placing,compacting,finishing and curing complete(including screening and washing of stone aggregate):Ratio 1: 2: 4

BATH	1	x	5	x	6.00	x 0.17	=	5	Cft
						Total	=	**5**	**Cft**
							@	**28918.55**	**%Cft**

Rs1,445.9

6 Providing and laying superb quality Ceramic tile (12"x18") floors of Master brand of specified size, Glossy / Mat t/ Texture of approved Color and Shade as per approved design with adhesive bond, over 3/4" thick(1;2)cement sand plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects and as approved and directed by the Engineer Incharge.

BATH	1	x	5	x	6.00	=	30	Sft
					Total	=	**30**	**Sft**
						@	**202.70**	**P.Sft**

Rs6,081.0

7 Providing and laying superb quality Ceramic tiles dado (12"x18") of Master brand of specified size, Glossy / Matt/ Texture skirting / dado of approved Color and Shade with adhesive bond over 1/2" thick(1:2)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects as approved and directed by the Engineer Incharge.

BATH	1	x	22	x	5.00	=	110	Sft
					Total	=	**110**	**Sft**
						@	**209.65**	**P.Sft**

Rs23,061.5

8 Cement plaster 1:4 upto 20' (6.00 m) height:-½" (13 mm) thick After Removing.

1	x	15	x	2	=	30	Sft
1	x	13	x	2.5	=	33	Sft
1	x	22	x	3	=	66	Sft
				Total:-	=	**129**	**Sft**
					@	**2934.70**	**%Sft**

Rs3,771.1

9 Providing and fitting glazed earthen ware wash hand basin 56x40 cm (22"x16") including bracket set, waste pipe and waste coupling, etc. coloured, with pedestal

=	1	Nos	
@	**3567.90**	**Each**	**Rs3,568**

10 Providing and fitting plastic made low down flushing cistern 13.63 litre (3 gallons) capacity, including bracket set, copper connection, etc. complete. Coloured or White

=	2	Nos.	
@	**2379.65**	**Each**	**Rs4,759**

11 Providing and fixing chromium plated tee stop cock (½") dia

=	6	No.	
@	**646.20**	**Each**	**Rs3,877**

12 P/F C.P bib-cock.

1/2" dia.

=	3	Nos.	
@	**466.20**	**Each**	**Rs1,399**

13 Providing and fitting glazed earthen ware water closet, squatter type (Orisa pattern), combined with foot rest.coloured

=	2	Nos

@ 2174.70 Each Rs4,349

14 Providing and fitting "P" trap:- 10 cm (4") glazed.

= 4 Nos
@ 218.35 Each Rs873

15 Providing and fitting glazed earthen ware water closet European type, excluding seat and cover:-coloured

= 1 Nos
@ 7020.75 Each Rs7,021

16 Providing and fitting, chromium plated or brass oxidised, swan neck cock 15 mm (½") dia.single way.

= 2 Nos.
@ 466.20 Each Rs932

17 Providing laying cutting jointing testing and disinfecting G.I. pipe line in trenches with socket joints using G.I. pipes of B.S.S 1387-1967 complete in all respects with specials and valves Medium quality.
ii) 1/2" dia

= 250 Rft
@ 146.55 P.Rft Rs36,638

Total: = Rs101,950

For 35-Nos Toilets = Rs3,568,247

Add 03% Contingency = Rs107,047

Total Rs3,675,294

SAY: = Rs3,675,000

Sub Engineer

Sub Divisional Officer,
Buildings Sub Division no 2
Rahim Yar Khan

Executive Engineer
Buildings Division
Rahim Yar Khan

RE-COSTRUCTION OF BOUNDARY WALL AT T.H.Q HOSPITAL SADIQ ABAD DISTRICT RAHIM YAR KHAN

Sr.No.	Description	Amount (Rs.)
1	RE-COSTRUCTION OF BOUNDARY WALL (150 Rft)	522,759
2	DISMANTLING OF BOUNDARY WALL	47,259
	TOTAL (Rs.)	**570,018**
3	RECOVERY OF OLD MATERIALS	61,088
	NET TOTAL (Rs.)	**508,931**
	Add 03% Contingeny	15,268
	TOTAL (Rs.)	524,199
	G. TOTAL (Rs.)	**524,000**

SUB ENGINEER

SUB DIVISIONAL OFFICER
BUILDINGS SUB DIVISION NO.1
RAHIM YAR KHAN

EXECUTIVE ENGINEER
BUILDINGS DIVISION
RAHIM YAR KHAN

ROUGH COST ESTIMATE FOR

RE-COSTRUCTION OF BOUNDARY WALL AT T.H.Q HOSPITAL SADIQ ABAD DISTRICT RAHIM YAR KHAN

ABSTRACT OF COST

1st Bi Annual 2022

S.N.	Description	No		Length		Bredth		Height		Quantity	Unit	Rate (Rs.)		Amount (Rs.)
1	Dismantling brick work in lime or cement mortar.													
		1	x	50.00	x	1.13	x	4.00	=	225	Cft			
		1	x	50.00	x	0.75	x	6.00	=	225	Cft			
								Total	=	450	Cft	3500.65	%Cft	15753
2	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m) b) in ordinary soil. By Manual in ordinary soil.													
		1	x	8.00	x	2.00	x	1.50	=	24.00	Cft			
									=	24.00	Cft	8727.65	%oCft	209
3	Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.													
		1	x	8.00	x	2.00	x	0.50	=	8	Cft			
									=	8	Cft	4474.80	%Cft	358
4	Pacca brick work in foundation and plinth in Ratio 1:6													
		1	x	8.00	x	1.875	x	0.25	=	4	Cft			
		1	x	8.00	x	1.50	x	0.25	=	3	Cft			
		1	x	8.00	x	1.125	x	4.00	=	36	Cft			
									=	43	Cft	22942.20	%Cft	9808
5	Providing and laying damp proof course of cement concrete 1:2: 4 (using cement, sand and shingle), including bitumen coating :-with two coats of bitumen													
		1	x	8.00	x	1.125	x		=	9	Sft			
									=	9	Sft	6902.25	%Sft	621
6	Pacca brick work other than building upto 10ft. (3 m) height Cement sand Marter Ratio 1:6													
		1	x	8.00	x	0.75	x	8.00	=	48	Cft			
		1	x	0.75	x	0.375	x	8.00	=	2	Cft			
									=	50	Cft	23829.35	%Cft	11974
7	Cement plaster 1:5 upto 20' (6.00 mm) height:-½" (13 mm) thick													
		1	x	5.75	x		x	8.00	=	46	Sft			
									=	46	Sft	2488.80	%Sft	1145
8	Outer Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-ratio 1:2 including red oxide.													
		1	x	8.75	x		x	8.00	=	70	Sft			
		2	x	8.00	x		x	2.00	=	32	Sft			
									=	102	Sft	3388.40	%Sft	3456
9	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):Ratio 1:2:4													
		1	x	8.00	x	0.75	x	0.170	=	1.02	Cft			
		1	x	0.75	x	0.375	x	0.170	=	0.05	Cft			
									=	1.07	Cft	28918.55	%Cft	309
												TOTAL		27881

$$\frac{27881}{8} = 3485 \ / \ \text{P.Rft}$$

Sub Engineer

Sub Divisional Officer,
Buildings Sub Division No. 2
Rahim Yar Khan

Executive Engineer
Buildings Division
Rahim Yar Khan

ROUGH COST ESTIMATE FOR

DISMANTLING OF BOUNDARY WALL AT T.H.Q HOSPITAL SADIQ ABAD DISTRICT RAHIM YAR KHAN

S.N.	Description	No		Length		Bredth		Height		Quantity	Unit	Rate (Rs.)		Amount (Rs.)
1	**Dismantling brick work in lime or cement mortar.**													
		1	x	150.00	x	1.13	x	4.00	=	675	Cft			
		1	x	150.00	x	0.75	x	6.00	=	675	Cft			
								Total	=	**1350**	**Cft**	3500.65	%Cft	**47259**
												Total	=	**47259**

Sub Divisional Officer,
Buildings Sub Division No.1,
Rahim Yar Khan

Executive Engineer
Buildings Division
Rahim Yar Khan

RECOVERY OF OLD MATERIALS

S.N.	Description	No		Length		Bredth		Height		Quantity	Unit	Rate (Rs.)	Amount (Rs.)
1	**Bricks**												
		1350	x	0.60	x	13.50			=	10935	Nos		
								Total	=	**10935**	Nos	4500.00 %0Nos	**49208**
	Bricks Bats												
		1350	x	0.40					=	540	Cft		
								Total	=	**540.**	Cft	2200.00 %Cft	**11880**
												Total =	**61088**

Sub Divisional Officer,
Buildings Sub Division No.1,
Rahim Yar Khan

Executive Engineer
Buildings Division
Rahim Yar Khan

DETAILED ESTIMATE FOR PROVISION OF WATER SUPPLY

1st Bi Annual 2022

S.N.	Description	No		Length		Bredth		Height		Quantity	Unit	Rate (Rs.)		Amount (Rs.)
1	Excavation of trenches in all kinds of soil, except cutting rock, for watersupply pipelines upto 5 ft. (1.5 m) depth from ground level, including trimming, dressing sides, leveling the beds of trenches to correct grade and cutting pits for joints, etc. complete in all respects.													
		1	x	2030.00	x	1.00	x	2.00	=	4060	Cft			
								Total	=	4060	Cft	6204.00	%0Cft	25188
2	Providing, laying, testing and commissioning of POLYPROPYLENE RANDOM COPOLYMER (PPRC) water supply pipe made of (Dadex/Popular/Beta/BBJ) with specified pressure rating PN (PRESSURENOMINAL) and conforming to DIN8077-8078 code i/c cost of solvent, specials, making jharries complete in all respect as approved and directed by Engineer Incharge. (Internal / External Diameters mentioned). PN-20 pipe													
	25mm	1	x	1300.00					=	1300	Rft			
								Total	=	1300	Rft	53.55	P.Rft	69615
	32mm	1	x	600.00					=	600	Rft			
								Total	=	600	Rft	85.80	P.Rft	51480
3	Providing, laying, testing and commissioning of POLYTHILENE RANDOM COPOLYMER (PPRC) water supply pipe made of (Dadex/Popular/Beta/BBJ) with specified pressure rating PN (PRESSURENOMINAL) and conforming to DIN8077-8078 code i/c cost of solvent, specials, making jharries complete in all respect as approved and directed by Engineer Incharge. (Internal / External Diameters mentioned). PN-20 pipe													
	50mm	1	x	740.00					=	740	Rft			
								Total	=	740	Rft	740.00	P.Rft	547600
	90mm	1	x	1290.00					=	1290	Rft			
								Total	=	1290	Rft	217.95	P.Rft	281156
3	Providing and fixing chromium plated bib cock:-													
		1	x	22.00					=	22	Nos			
								Total	=	22	Nos	466.20	Each	10256
4	Providing and fixing chromium plated tee stop cock 15mm (½").													
		1	x	42.00					=	42	Nos			
								Total	=	42	Nos	641.35	Each	26937
5	Providing and fixing gun metal peet/gate valve (screwed):-30 mm (1¼") dia													
		1	x	22.00					=	22	Nos			
								Total	=	22	Nos	4431.30	Each	97489
6	Providing and fixing, chromium plated mixing valve, for wash hand basin, sink or													
		1	x	32.00					=	32	Nos			
								Total	=	32	Nos	1977.75	Each	63288
7	Providing and fitting glazed earthen ware wash hand basin 56x40 cm (22"x16") including bracket set, waste pipe and waste coupling, etc. i) white, with pedestal													
		1	x	12.00					=	12	Nos			
								Total	=	12	Nos	3567.90	Each	42815
8	Service connection													
		1	x	10.00					=	10	Nos			
								Total	=	10	Nos	2227.50	Each	22275
													TOTAL	1238098
												Add 03% Contingency		37143
													SAY	1275200

Sub Engineer

Sub Divisional Officer
Buildings Sub Division No.2
Rahim Yar Khan

Executive Engineer
Buildings Division
Rahim Yar Khan

PROVISION OF SEWERAGE SYSTEM

1st Bi Annual 2022

S.N.	Description	No		Length		Bredth		Height		Quantity	Unit	Rate (Rs.)		Amount (Rs.)
1	Earthwork excavation in open cutting for sewers and manholes as shown in drawings including shuttering and timbering, dressing to correct section and dimensions according to templates and levels, and removing surface water, in all types of soil except shingle, gravel and rock:- i) 0 ft. to 7.0 ft. (0 to 2.10 m) depth													
		1	x	250.00	x	2.00	x	4.00	=	2000	Cft			
		1	x	600.00	x	2.00	x	4.00	=	4800	Cft			
								Total	=	6800	Cft	7272.55	%0Cft	49453
2	Providing and laying R.C.C. pipe sewers, moulded with cement concrete 1:1½:3 conforming to ASTM Specification C-76-79, Class II. Wall B, including carriage of pipe from factory to site of work, lowering in trenches to correct alignment and grade, jointing with rubber ring, cutting pipes where necessary, testing, etc., complete.310 mm (12") i/d													
		1	x	250.00					=	250	Rft			
									=	250	Rft	637.05	P.Rft	159263
3	Providing and laying R.C.C. pipe, moulded with cement concrete 1:1½:3, with spigot socket or collar joint, etc. including cost of reinforcement, conforming to B.S. 5911: Part I: 1981, Class "L" including carriage of pipe from factory to site of work, lowering in trenches to correct alignment and grade, jointing, cutting pipes where necessary, finishing and testing, etc., complete.9" i/d													
		1	x	600.00					=	600	Rft			
									=	600	Rft	436.70	P.Rft	262020
4	Rehandling of earthwork:Lead upto a single throw of Kassi, phaorah or shovel													
		6800	x	0.67					=	4533	Cft			
								Total	=	4533	Cft	2059.20	%0Cft	9335
5	Construction of manhole													
		1	x	20.00					=	20	Nos			
								Total	=	20	Nos	30000.00	Each	600000
												TOTAL		1080071
												Add 03% Contingency		32402
												SAY		1112500

Sub Engineer

Sub Divisional Officer
Buildings Sub Divison No.1
Rahim Yar Khan

Executive Engineer
Buildings Divison
Rahim Yar Khan

DETAILED ESTIMATE FOR TUFF PAVEMENT

1st Bi Annual 2022

1 Pacca brick work other than building upto 10ft. (3 m) height Cement sand Marter Ratio 1:6

4	x	60.00	x	1.13	x	1.00	=	270	Cft
4	x	95.00	x	1.125	x	1.00	=	428	Cft
4	x	78.00	x	1.13	x	1.00	=	351	Cft
4	x	69.00	x	1.125	x	1.00	=	311	Cft
						Total	=	1359	Cft
							@	23829.65 %Cft	Rs323,844.9

2 Providing, laying, watering and ramming brick ballast 1½" to 2" (40 mm to 50 mm) gauge mixed with 25% sand, for floor foundation, complete in all respects.

2	x	60	x	90.00	x	0.33	=	3564	Cft
2	x	85	x	60.00	x	0.33	=	3366	Cft
2	x	78	x	70.00	x	0.33	=	3604	Cft
2	x	69	x	58.50	x	0.33	=	2664	Cft
						Total	=	**13198**	**Cft**
							@	**5161.30**	**%Cft** Rs681,188.4

3 Providing and laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope . complete in all respect.60-mm thick

2	x	60	x	90.00			=	10800	Sft
2	x	85	x	60.00			=	10200	Sft
2	x	78	x	70.00			=	10920	Sft
2	x	69	x	58.50			=	8073	Sft
						Total	=	**39993**	Sft
							@	127.40	P.Sft Rs5,095,108.2
								Total: =	**Rs6,100,142**

Add 03% Contingency **Rs183,004**

Total **Rs6,283,146**

Total: = **Rs6,283,000**

Sub Engineer

Sub Divisional Officer,
Buildings Sub Division no 2
Rahim Yar Khan

Executive Engineer
Buildings Division
Rahim Yar Khan

Provision of Electrification of Street Light

1 Excavation of trenches in all kinds of soil, except cutting rock, for watersupply pipelines upto 5 ft. (1.5 m) depth from ground level, including trimming, dressing sides, leveling the beds of trenches to correct grade and cutting pits for joints, etc. complete in all respects.

	2	x	270	x	1	x	1.50	=	810	Cft
	2	x	340	x	1	x	1.50	=	1020	Cft
							Total	=	**1830**	**Cft**
								@	**5755.20**	**%0Cft**

Rs. 10532/-

2 Supply and erection of PVC pipe for wiring on surface including clamps inspection boxes, pull boxes, bends, tees, repairing surface, etc., complete with all specials:-

32 mm	2	x	270	=	540	Rft
	2	x	340	=	680	Rft
			Total	=	**1220**	**Rft**
				@	**57.85**	**P.Rft**

Rs. 70577/-

3 Supply and erection of single core PVC insulated, PVC sheathed copper conductor, 250/440 volts grade cable (BSS-2004), in prelaid PVC pipes/M.S. conduit/G.I. pipe/wooden strip batten/wooden casing and capping/trenches, etc. (rate for cable only):- (7/0.036")

32 mm	2	x	2	x	270	=	1080	Rft
	2	x	2	x	340	=	1360	Rft
					Total	=	**2440**	**Rft**
						@	**25.60**	**P.Rft**

Rs. 62464/-

4 Providing and fixing Sub Panel Board of required size almirah with necessary fitting complete with circuit breaker copper bus bar Amp Meter, Volt Meter complete in all respect detail as below:

INCOMING

1. 100-125 Amp TP MCCB (Terasaki) 1 No
2. 15-20 Amp SP MCB (Terasaki) 3 Nos
3. 6 Amp SP MCB (Terasaki) 8 Nos
4. Ampare meter 0-500 Amp. (imported) 3 No
5. Volt meter 0-200 Amp. (imported) 3 No
6. Phase Indication Light 3 No
7. Copper Cable Thimble Selves and other wiring material 1 Set
8. Current Transformer 500 Amp 3 No
9. MS Sheet Box Almirah Cubical Powder coated paint 14 SWG i/c Bus bars & bnecessary fitting and locking arrangement size 18"x30" 1 No

complete in all respect as approved by the Engineer Incharge.

Payment will be made subject to certification of Main Importer / Agent of Terasaki Circuit Breaker

	1	=	2	No.	
		Total	=	**2**	**No.**
			@	**55000.00**	**Each**

Rs. 110000/-

5 Providing and fixing street light poles of 4" dia 12' long, 3" dia 6'-2" long, 2" dia 6'-2" long, 1-1/4" dia 6'-2" long G.I. Pipe with CC 1:2:4 foundation 12"x12"x12" i/c base plate 2-nos 1/2" thick 12"x12" i/c PVC pipe, i/c PVC pipe & necessary cable i/c welding, molding and painting with silver paint. i/c Philips LED street light (model BRP 130 & 100-W) complete in all respect.

	=	22	No.	
Total	=	**22**	**No.**	
	@	**64673.00**	**Each**	**Rs. 1422806/-**

6 Supply and erection of copper conductor cables for service connection, in prelaid pipe/G.I. wire/trenches, etc. (rate for cable only):- PVC insulated, PVC sheathed 4 core, 660/1100 volt non armoured cable:- 7/1.63 mm (7/0.064")

280	=	280	Rft	
Total	=	**280**	**Rft**	
	@	**272.40**	**P.Rft**	**Rs. 76272/-**

Total	**Rs. 1752651/-**
Add 03% Contingency	**Rs. 52580/-**
Total	**Rs. 1805231/-**
Say	**Rs. 1805000/-**

Sub Engineer

Sub Divisional Officer
Buildings Sub Division No.2
Rahim yar Khan

Executive Engineer
Buildings Division
Rahim yar Khan

AMENDED ROUGH COST ESTIMATE FOR INSTALLATION OF WATER FILTRATION PLANT (REVERSE OSMOSIS) IN THQ HOSPITALS AT TEHSIL HEADQUARTER HOSPITAL SADIQABAD DISTRICT RAHIM YAR KHAN.

ABSTRACT OF COST

Sr. No.	Description of Items	Plinth Area / Quantity		Rates				Total (Rs.)	Unit	Amount (Rs.)	Remarks
				B.P.	P.H	E.I	S.G				
1	Construction of Filter Plant Room(14'X12') With 7' Verandah	364	Sft	2585	110	145		2840	P. Sft	1,033,760	**Plinth Area Rates for 1st Bi-Annual 2022**
2	Providing and laying Full body Glazed tiles (600mmx 600 mm) superb quality Porcelain glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive / bond over 3/4" thick(1:3)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respect as approved and directed by the Engineer Incharge. (302.25-154.99+55.95=203)	266	Sft					203	P.Sft	54,054	- - do - -
3	Providing and laying Full body Glazed tiles (600mmx 600 mm) superb quality Porcelain glazed tiles of Master brand, skirting / dado of specified size,Color and Shade with adhesive / bond over 1/2" thick(1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge. (302.25-154.56=148)	437	Sft					148	P.Sft	64,541	- - do - -
								TOTAL A		**1,152,354**	
1	Supplying ,installing,testing and commissioning Reverse Osmosis (RO) Plant for Tubidity, TDS (upto 5000 ppm) and Bacteriological Removal, of 1000 litter/Hour capacity including Carriage loading unloading charges, inclusive of all Taxes and Transportation charges to the site of work, conforming to standard specifications of water filteration plants approved by HUD & PHED Govt: of Punjab. The Detailed of Specification along with following equipment and accessories properly mounted in the Frame/Skid. are given as below.	1	Job					1853500	P. Job	1,853,500	Detail attached
2	Providing and hoisting vertical / horizontal type storage tank of required capacity made of rotationally molded from (HDPE), double ply polyethelene of approved manufacturer i/c cost of making connection for inlet / outlet pipe,float valve i/c all cost of specials & labour complete in all respect as approved and directed by the Engineer Incharge.	1000	Gln					92.90	P.Gln	92,900	

3	Provision of boring lowering etc complete.	1	Job						P.Job	91,000	Detail attached
								TOTAL B		**2,037,400**	
								TOTAL A+B		**3,189,754**	
a)	**Add 10 % for External Development work on Rs.**	**1,033,760**	/-							**103,376**	
									TOTAL:-	**3,293,130**	
									ADD 5% PRA	**164,657**	
									ADD 03% PRA	**98,794**	
									TOTAL:-	**3,457,787**	
									SAY (RS):-	**3,458,000**	
									OR (RS):-	**3.458 (M)**	

Sub Engineer

Sub Divisional Officer
Buildings Sub Division No.1
Rahim Yar Khan

Executive Engineer
Buildings Division
Rahim Yar Khan

Sub Head No.05

WATER FILTERATION PLANT (REVERSE OSMOSIS)

Treated Water Capacity 1000 litter/Hour	
Type "RO" Plants for TDS and Bacteriological Removal	
Supplying ,installing,testing and commissioning Reverse Osmosis (RO) Plant for Tubidity, TDS (upto 5000 ppm) and Bacteriological Removal, of 1000 litter/Hour capacity including Carriage loading unloading charges, inclusive of all Taxes and Transportation charges to the site of work, conforming to standard specifications of water filteration plants approved by HUD & PHED Govt: of Punjab. The Detailed of Specification along with following equipment and accessories properly mounted in the Frame/Skid. are given as below.	
Filtration units	1 Unit
Filter Vessel	1 Unit
Material	FRP
Size	4" x 40" (1-No.)
Thickness	5-7 mm
Type of Membrane (No of bores)	Multiple bore
Maximum Flow Rate	1000 litter/Hour
Membrane Material	PES
· Make	Applied membranes/Equivalent/USA/ATS ASPRIN
· Origin	USA / ITALY /TAIWAN
Membrane Working Pressure	40-150 PSI Max
Membrane Life	5 Years
Pore Size of Membrane	0.01 micron
Bacterial Removal Efficiency of the Ultra filtration	99.99%
Viruses Removal Efficiency of the Ultra filtration	99.99%
Cleaning Process of Ultra filtration Plant	
Cleaning frequency	Continuous
Cleaning duration	Continuous
Working Temperature	77 °F to 140 °F
Max	140 oF
Working Pressure	60 PSI
High Pressure Pump Coupled with Motor	
Raw Water Feed Pump	
Pump Manufacturer	ITT/KSB/Grundfoss/Seimens, Aqua Treatment system USA/Haulin CNP
Pump Type	horizontal / Multi stage
Impeller material	Stainless Steel/ Technopolymer/Equivalent
Housing material	AISI 304/AISI 316/Equivalent
Discharge	2 m^3/hr
Head	122 ft
Pump efficiency	50%
Motor	Built in with pump
Manufacturer	ITT/KSB/Grundfoss/Seimens, Aqua Treatment system USA/Haulin CNP
Power rating, kw	0.75 KW to 0.90 KW
Voltage rating	1x220V/50hz/2900RPM
Starting current	DOL 3 to 8 Times of Normal Current
Normal current	5.03
NEMA Insulation Class	F
Temperature class	Amb.+80 °C
Prefiltration:	
Manufacturer	Pentair /wave cyber / USA Or equivalent
Filter Vessel	Pressure Vessel
· Material	FRP
· Size	13" x 54"
· Thickness	5 mm
Filter media, Material	S 22-D Media
Pore size	0.15 of grain size
Size of Media	0.45 to 1mm
Particle removal range	Below 10 micron
Cleaning Process	Manual
Working Temperature	1 to 50 °C

Working Pressure	2 bar
Jumbo filter 20" (5 Micron Cartridge)	2 No.
Activated Carbon Filter:	
Manufacturer	Pentair Water USA Or equivalent
Filter Vessel	Pressure Vessel
· Material	FRP
· Size	13" x 54"
· Thickness	5 mm
Base Material	Coconut Shell
Surface Area	800 m^2 /gm
Bulk Density	5 gm / cm^3
Backwash	Manual
Ash Contents	5%
Jumbo filter 20 '' (1 Micron Cartridge)	2 No.
Antiscalant system	To prevent the chocking of R.O. membranes.
Hardness Removal:	
Manufactures Type Designation	Aqua Treatment System, USA
Manufacturer	Aqua Treatment System/Pentair Or equivalent
Ion-exchanger Media	Sulphmated polyester bea
Regeneration Media	NACL
Frequency of Regeneration	Depends on feed water
Feed Water Requirement (at Prefiltration)	1000 litter/Hour
Reverse Osmosis:	
Manufactures Type Designation.	USA/ ITALY
Permeate Recovery	60.00%
Design Temperature	25 C
Salt Rejection Efficiency	90% to 98%
Life of R.O Membrane	5 Years
Membrane Dia	8" x 40" (1-No.).
Blending Requirement	Depends on site requirement)
Dia of UPVC Pipe / Strainer in the Injection well	Feed 2 Waste Product
Overall Size of RO Plant and the whole Plant	As per drawing / Manual
Temperature Control, for High Ambient and Container Temperature.	Max 105 °F
Pump coupled with motor, (provide data as given	ITT/Goulds/Equivalent / Grounfos / Stairs
Under other relevant item)	Multistage centrifugal / pump with as per design
CIP System	Auto backwash system to clean the R.Omembranes before switch off the R.O. with permeates water to avoid the purging of salts on membranes
Feed Water Tank:	2 Nos.
Manufactures Type Designation/Origin	Pakistan
Manufacturer	Polycon Supertuff / Mastertuff other
Tank Capacity (Dimensions)	1000 litter/Hour
Material Class	Food Grade
Tank Material	HDPE /UPVC
Thickness of Material	Medium 3 to 4 mm
Working Temperature	-20 ◦C to 60 ◦C
Working Pressure	Atmospheric
Ancillary Items:	
Gages Flow Meter, TDS Meter Etc.	Italy/Taiwan /USA (checking of R.O. membranes Pressure and flow &TDS)
Ultra violet lamp. (Water Sterilization / Disinfection Unit)	Italy/Taiwan /USA (The UV Sterilizer operates using a low pressure mercury vapor to produce the UV There are five major groups of micro organisms that are destroyed with Ultra Violet Sterilizer; viruses, bacteria, fungi, algae and protozoa.)
Arsenic removal	Italy/Australia/USA. (Remove of iron & manganese arsenic.
Manufacturer	Pentair Water USA Or equivalent
Filter Vessel	Pressure Vessel
· Material	FRP
· Size	16" x 65"
· Thickness	5 mm
Base Material	Coconut Shell
Surface Area	800 m^2 /gm
Bulk Density	5 gm / cm^3
Backwash	Manual

Ash Contents		5%
Digital Control Panel		Assembled Box
(Provide Make, Type and rating of the following)		
· Cable Size		4 -6mm
· Voltmeter		on board
· Ammeter		on board
· Indication Lamp		on board
· Push Button		on board
· M C B		on board
· Bus Bar		on board
· Contaction		on board
Monitoring System		m2m CS WTP
(The type of hardware for the following)		Digital control valve
·Backwash of Prefiltration		On board
·Backwash of Ultrafiltration		On board
·Inlet (feed water) Flow – Liter/hour		1000 litter/Hour
Pressure gauge		
(EU/China)		
·Manufacturer		WIKA / Equivalent
.Pressure Range		125 PSI
.Gauge Dia		4"
Pipe work		
·Manufactures Type Designation/Origin		Pakistan/ Taiwan/UAE
· Manufacturer		New Tech / Dadex/ Beta or approved manufacture
· Pipe Material		PP R / UPVC
· Pipe dia		40mm (Min)
		2 – 6 bar
· Working Temperature		0-60 °C
SKID		M.S. Powder coated
P/F brass stop cock/bib cock 1/2" dia.		5 No.
Additional RO System		1352900
With holding Tax (Supply & Fixing) =7.5%		
General Sale Tax =17%		229993
Contractor Profit=20%		270580
Total Rs:		1853473
Say:		**1,853,500**
1	x	**1853500**

Sub Engineer

Sub Divisional Officer
Buildings Sub Division No.1
Rahim Yar Khan

Executive Engineer
Buildings Division
Rahim Yar Khan

ROUGH COST ESTIMATE FOR REVAMPING OF MAIN BUILDING

1 Removing door with chowkat.

= 16 Nos

@ ~~295.15~~ 331.65 Each Rs4,722

2 Fixing door, including chowkats.

= 16 Nos

@ ~~501.95~~ 552.75 Each Rs8,031

3 Dismantling glazed or encaustic tiles, etc.

1	x	125	x	12.0	=	1500 Sft
2	x	135	x	12.0	=	3240 Sft
4	x	19	x	36.0	=	2736 Sft
				Total	=	7476 Sft

@ ~~1606.20~~ 1768.80 %Sft Rs120,080

4 Dismantling cement concrete 1:2:4 Plain.

1	x	125	x	12.0	x	0.125	=	188 Cft
2	x	135	x	12.0	x	0.125	=	405 Cft
4	x	19	x	36.0	x	0.125	=	342 Cft
						Total	=	935 Cft

@ ~~7817.55~~ 8421.60 %Cft Rs73,094

5 Dismantling mud concrete.

1	x	125	x	12.0	x	0.33	=	495 Cft
2	x	135	x	12.0	x	0.33	=	1069 Cft
4	x	19	x	36.0	x	0.33	=	903 Cft
						Total	=	2467 Cft

@ ~~1421.40~~ 1531.20 %Cft Rs35,066

6 Providing, laying, watering and ramming brick ballast 1½" to 2" (40 mm to 50 mm) gauge mixed with 25% sand, for floor foundation, complete in all respects.

1	x	125	x	12.0	x	0.33	=	495 Cft
2	x	135	x	12.0	x	0.33	=	1069 Cft
4	x	19	x	36.0	x	0.33	=	903 Cft
1	x	125	x	12.0	x	0.33	=	495 Cft
1	x	178	x	12.0	x	0.33	=	705 Cft
1	x	210	x	12.0	x	0.33	=	832 Cft
2	x	110	x	12.0	x	0.33	=	871 Cft
4	x	22	x	36.0	x	0.33	=	1045 Cft
						Total	=	6415 Cft

@ ~~4585.25~~ 4805.70 %Cft ~~Rs294,144~~

7 Cement concrete plain including placing,compacting,finishing and curing complete (including screening and washing of stone aggregate):Ratio 1: 2: 4

1	x	125	x	12.0	x	0.125	=	188 Cft
2	x	135	x	12.0	x	0.125	=	405 Cft
4	x	19	x	36.0	x	0.125	=	342 Cft
2	x	110	x	12.0	x	0.125	=	330 Cft
4	x	22	x	36.0	x	0.125	=	396 Cft
						Total	=	1661 Cft

@ ~~22837.60~~ 25119.60 %Cft ~~Rs379,333~~

8 Providing and laying of Porceline full body tiles 600-mmx600-mm DWV Class SB Master or Equvilant quality , Flooring (Diagnal shape / design) of approved Color and Shade laid over 3/4"thick cement plaster 1:2 i/c white cement, pigment and sealer for finishing the joints i/c cutting grinding where necessary complete in all respects and as approved by the Engineer Incharge

2	x	125	x	12.0	= 3000 Sft
2	x	135	x	12.0	= 3240 Sft

3	x	19	x	36.0	=	2052	Sft
2	x	78	x	12.0	=	1872	Sft
3	x	49	x	12.0	=	1764	Sft
2	x	89	x	36.0	=	6408	Sft
					Total =	18336	Sft
					@ ~~266.00~~	%Sft	~~Rs4,877,376~~

Providing and laying of Porceline full body tiles 600-mmx600-mm DWV Class SB Master or Equvilant quality, skirting/dado of approved Color and Shade laid over 1/2"thick cement plaster 1:2 i/c white cement, pigment and sealer for finishing the joints i/c cutting grinding where necessary complete in all respects and as approved by the Engineer Incharge

1	x	189	x	~~6.0~~ 6	=	1134	Sft
2	x	180	x	~~6.0~~ 6	=	2160	Sft
4	x	55	x	~~6.0~~ 6	=	1320	Sft
4	x	78	x	~~6.0~~ 6	=	1872	Sft
4	x	68	x	~~6.0~~ 6	=	1632	Sft
1	x	39	x	~~6.0~~ 6	=	234	Sft
6	x	49	x	~~6.0~~ 6	=	1764	Sft
2	x	89	x	~~6.0~~ 6	=	1068	Sft
					Total =	11184	Sft
					@ ~~266.00~~	P.Sft	~~Rs2,974,944~~

Providing and laying of Non Skid Ceramic Tile made approved manufacture size 12" x 12" tile laid in white cement over bed of 3/4" thick cement plaster 1:2 i/c white cement, pigment and sealer for finishing the joints i/c cutting grinding where necessary complete in all respects and as approved by the Engineer Incharge.

1	x	24	x	12.0	=	288	Sft
1	x	32	x	14.0	=	448	Sft
1	x	26	x	10.0	=	260	Sft
					Total =	996	Sft
					@ ~~252.00~~	P.Sft	~~Rs250,992~~

Providing and laying Antistatic Antibacterial Vinyl flooring with fixing on floor i/c carraige of material from market to site of work complete in all respect as approved by the Engineer Incharge.

2	x	19.25	x	18.75	=	722	Sft
2	x	9	x	12	=	216	Sft
1	x	19	x	18	=	342	Sft
2	x	15.25	x	14	=	427	Sft
1	x	14	x	18	=	252	Sft
					Total:- =	1959	Sft
					@ ~~611.00~~	P.Sft	~~Rs1,196,873~~

Cement plaster 1:4 upto 20' (6.00 m) height:-½" (13 mm) thick After Removing.

1	x	45	x	4	=	180	Sft
1	x	85	x	2.5	=	213	Sft
6	x	12	x	4	=	288	Sft
4	x	20	x	3	=	240	Sft
1	x	35	x	2	=	70	Sft
4	x	39.25	x	2.75	=	432	Sft
2	x	48	x	1.25	=	120	Sft
2	x	65.75	x	2.5	=	329	Sft
2	x	75	x	4	=	600	Sft
1	x	28	x	2.5	=	70	Sft
1	x	16.5	x	3.5	=	58	Sft
					Total:- =	2599	Sft
					@ ~~2403.25~~	%Sft	~~Rs62,454~~

2310-75+319

Providing and applying weather shield paint of approved quality on external surface of building including preparation of surface, application of primer complete in all respect:old surface after scraping.

	18	x	5	x	6	=	540	Sft	
	8	x	4	x	6	=	192	Sft	
	10	x	4	x	3	=	120	Sft	
					Total:-	=	852	Sft	
						@	~~686.45~~ 498.50	P.Sft	Rs499,655

13 Providing and fixing MS Grill to windows using 1/2" x 1/2" squre bars @ 4" c/c vertically in 2-parts with 2-Nos horizental locking for sliding of windows etc complete in all respect.

	18	x	5	x	6	=	540	Sft	
	8	x	4	x	6	=	192	Sft	
	10	x	4	x	3	=	120	Sft	
					Total:-	=	852	Sft	
						@	~~462.00~~ 360	P.Sft	~~Rs394,476~~

13 Providing and fixing PVC panelling etc complete in all respect.

	2	(	12	+	14)	12	=	624	Sft
	2	(	16	+	18)	12	=	816	Sft
	2	(	21	+	14)	12	=	840	Sft
	2	(	10	+	12)	12	=	528	Sft
						Total:-	=	2808	Sft
							@	~~140.00~~ 110	P.Sft ~~Rs393,120~~

13 Providing and fixing lead lining 2mm thick lead sheet with wall for radiation protection upto roof height as per instruction and covering with MDF board 3/4" thick paneling including frame of kail wood 1-1/2" x 2" including termite proofing and fency deodar wood beading complete in all respect as approved by the Engineer Incharge. Also Approved by the Radiation Protecting Agency.

X-Ray Room	1	x	15.75	x	18.875	=	297	Sft	
	2	x	15.75	x	12	=	378	Sft	
	2	x	18.88	x	16	=	604	Sft	
Dark Room	1	x	9.25	x	9.125	=	84	Sft	
	2	x	9.25	x	12	=	222	Sft	
	2	x	9.25	x	9	=	167	Sft	
Store	2	x	18	x	16	=	576	Sft	
	2	x	12	x	13	=	312	Sft	
					Total:-	=	2640	Sft	2568000
						@	~~970.00~~ 950	P.Sft	~~Rs2,560,982~~

12 P/F Hydraulic Door Closer best quality made including cost of nail and screws etc complete in all respects as approved by the Engineer Incharge.

	1	x	14			=	14	No.	
					Total:-	=	14	No.	
						@	~~2500.00~~ 35000	Each	Rs35,000

12 P/F fancy LED light 2' x 2' including LED light and driver 36W philips / ALPHA / ULTRA SLIM or equilvent including in false ceiling and electric connection complete in all respects as approved by the Engineer Incharge.

	2	x	44			=	88	No.	
					Total:-	=	88	No.	
						@	10920.00	Each	~~Rs960,960~~ 9500

12 Supply and erection of copper conductor cables for service connection, in prelaid pipe/G.I. wire/trenches, etc. (rate for cable only):- a)PVC insulated, PVC sheathed twin core, 250/440 volts. 7/1.63 mm (7/0.064")

	2	x	320			=	640	Rft	
					Total:-	=	640	Rft	
						@	~~139.55~~	P.Rft	Rs89,312

12 Supply and erection of copper conductor cables for service connection, in prelaid pipe/G.I. wire/trenches, etc. (rate for cable only):- PVC insulated, PVC sheathed 4 core 660/1100 volt grade cable, armoured with G.I. wire 16 SWG. 19/2.11 mm (19/0.083")

	2	x	195			=	390	Rft	
					Total:-	=	390	Rft	
						@	1425.45	P.Rft	Rs555,926

12 Provision of Electric Installation as per pinth area rates complete in all respect.

- Weather sheds.

2	x	185	x	16	=	5920	Sft
2	x	225	x	16	=	7200	Sft
3	x	95	x	16	=	4560	Sft
2	x	198	x	16	=	6336	Sft
3	x	160	x	16	=	7680	Sft
2	x	78	x	16	=	2496	Sft
1	x	133	x	16	=	2128	Sft
				Total:-	=	36320	Sft
					@ ~~3116.00~~ 1039+57+20	%Sft	Rs1,131,731

12 Dismantling brick or flagged flooring without concrete foundation. 1608.20

1	x	185	x	70	=	12950	Sft
1	x	85	x	2.5	=	213	Sft
1	x	12	x	4	=	48	Sft
				Total:-	=	13211	Sft
					@ ~~604.10~~ 650.25	%Sft	~~Rs79,805~~

12 P/F Gypsum board false ceiling

1	x	24	x	19	=	456	Sft
2	x	19	x	17	=	646	Sft
2	x	22	x	19	=	836	Sft
				Total:-	=	1938	Sft
					@ ~~95.00~~ 85	P.Sft	Rs184,110

12 Provision of Aluminium doors complete (T)

12	x	3.5	x	7	=	294	Sft
7	x	4	x	7	=	196	Sft
5	x	3	x	7	=	105	Sft
				Total:-	=	595	Sft
					@ ~~568.55~~ 586.45	P.Sft	Rs338,287

12 Providing and fixing Stain less steel pipe stair railing comprising of 1-No. 2" dia steel pipe 18 SWG Top rail, 2" dia steel pipe for vertical posts @ 2-ft c/c 2'-9" high, 3-Nos horizantal steel pipes 1/2" dia fixed on steps with 3" long steel screws and brass rawal plugs 3" long, i/c fixing carrage & polishing complete in all respects as approved by the Engineer Incharge.

2	x	26			=	52	Rft
2	x	22			=	44	Rft
2	x	12			=	24	Rft
					Total:-	= 120	Rft
					@ ~~2300.00~~ 1600	P.Rft	Rs276,000

12 Providing and fixing False Ceiling (~~DAMPA~~) Sheet 2'x2' imported fixed with aluminum frame (TEE&L) hanged with 10 No wire with RCC Roof Slab including cost of hook complete in all respect as approved by the Engineer Icharge.

4	x	22	x	14.0	=	1232	Sft
3	x	24	x	18.0	=	1296	Sft
4	x	28	x	19.0	=	2128	Sft
4	x	18	x	14.0	=	1008	Sft
2	x	14	x	12.0	=	336	Sft
1	x	13	x	11.0	=	143	Sft
					Total:-	= 6143	Sft
					@ ~~300.00~~ 85	P.Sft	Rs2,395,770

12 P/f solid flush doors 1 1/2" thick complete N.S

6	x	3.5	x	7	=	147	Sft
8	x	4	x	7	=	224	Sft
6	x	2.5	x	7	=	105	Sft
2	x	4	x	8	=	64	Sft
					Total:-	= 540	Sft
					@ ~~403.80~~ 575	P.Sft	Rs218,052

13 Providing and fixing aluminum windows etc complete.

	=	19550	Sft	
Total:-	=	19550	Sft	
	@	110.00	P.Rft	Rs2,150,500

12 Provision of plumbing Installation as per pinth area rates complete in all respect.

	=	19550	Sft	
Total:-	=	19550	Sft	
	@	78.00	P.Rft	Rs1,524,900

12 Provision of Gas Installation as per pinth area rates complete in all respect.

	=	19550	Sft	
Total:-	=	19550	Sft	
	@	39.00	P.Rft	Rs762,450

14 Single layer of tiles 9"x4½"x1½" (225x113x40 mm) laid over 4"(100 mm) earth and 1" (25 mm) mud plaster without Bhoosa, grouted with cement sand 1:3 on top of RCC roof slab, provided with 34 lbs. per %Sft. or 1.72 Kg/Sq.m bitumen coating sand blinded.

1	x	185	x	70	=	12950	Sft
2	x	85	x	2.5	=	425	Sft
2	x	12	x	4	=	96	Sft
2	x	12	x	5	=	120	Sft
2	x	12	x	4	=	96	Sft
				Total:-	=	13687	Sft
					@	~~7363.48~~	%Sft
					Total:	=	~~Rs25,835,973~~

Recovery of old materials

Tiles (9"x4.5"x1.5")	13211	x	0.4	x	3.5	=	18495	Nos
						@	4000.00	%0Nos
Tiles bats	13211	x	0.6	x	0.125	=	991	Cft
						@	2000.00	%Cft
						D/d Total:	=	Rs93,795
						Net Total:	=	~~Rs25,742,178~~
						Add 3 % Contingency	=	Rs772,265
						G Total:	=	Rs26,514,444

Sub Engineer

Sub Divisional Officer,
Buildings Sub Division,no 2
Rahim Yar Khan

ROUGH COST ESTIMATE FOR REVAMPING OF TOILET BLOCK

Dismantling glazed or encaustic tiles, etc.

BATH	1	x	5	x	6.0		=	30	Sft
	1	x	22	x	6.0		=	132	Sft
						Total	=	162	Sft
							@	~~1606.20~~ 1768.80	%Sft

Rs~~2,602.0~~

Dismantling cement concrete 1:2:4 Plain.

Bath	1	x	5	x	6.00	x 0.125	=	4	Cft
						Total	=	4	Cft
							@	~~7817.55~~ 8421.60	%Cft

Rs312.7

Dismantling mud concrete.

Bath	1	x	5	x	6.00	x 0.33	=	10	Cft
						Total	=	10	Cft
							@	~~1421.40~~ 1531.20	%Cft

Rs142.1

Providing, laying, watering and ramming brick ballast 1½" to 2" (40 mm to 50 mm) gauge mixed with 25% sand, for floor foundation, complete in all respects.

Bath	1	x	5	x	6.00	x 0.33	=	10	Cft
						Total	=	10	Cft
							@	~~4585.25~~ 4825.70	%Cft

Rs458.5

Cement concrete plain including placing,compacting,finishing and curing complete (including screening and washing of stone aggregate):Ratio 1: 2: 4

BATH	1	x	5	x	6.00	x 0.17	=	5	Cft
						Total	=	5	Cft
							@	~~22887.60~~ 25118.60	%Cft

Rs1,141.9

Laying floor of approved coloured glazed tiles ~~12x12~~ 12x18 (6 mm) thick, laid in white cement and pigment on a bed of ¾ (20 mm) thick cement mortar 1:2.

BATH	1	x	5	x	6.00		=	30	Sft
						Total	=	30	Sft
							@	~~16996.70~~ 19396.70	%Sft

Rs~~5,099.0~~

Coloured glazed tile dado (~~6"x6"~~ 12x18) (6mm) thick in pigment over 1:2 cement, sand mortar 3/4" (20mm) thick, including finishing.

BATH	1	x	22	x	6.50		=	143	Sft
						Total	=	143	Sft
							@	18426.10	%Sft

Rs26,349.3

Cement plaster 1:4 upto 20' (6.00 m) height:-½" (13 mm) thick After Removing.

	1	x	15	x	2		=	30	Sft
	1	x	13	x	2.5		=	33	Sft
	1	x	22	x	3		=	66	Sft
						Total:-	=	129	Sft
							@	~~2403.25~~ 2629.15	%Sft

Rs3,088.2

P/F glazed earthen ware W.H.B (22"x16") including bracket set, waste pipe and waste coupling etc.coloured with pedistal.

							=	1	Nos
							@	~~2883.90~~ 2764.85	Each

Rs2,884

P/F plastic made low down flushing sistern3-gallon capacity, i/c bracket set, copper connention etc. Complete

							=	2	Nos.
							@	~~1496.70~~ 1576.15	Each

Rs2,993

Providing and fixing chromium plated tee stop cock (½") dia

							=	6	No.
							@	~~459.30~~ 467.80	Each

Rs2,756

P/F C.P bib-cock.

1/2" dia.							=	3	Nos.

@ ~~339.30~~ Each Rs1,018

347.80

13 Providing and fitting glazed earthen ware water closet,squatter type (Orisa pattern), combined wi th foot rest.coloured

= 2 Nos

@ ~~1479.55~~ Each Rs2,959

1553.30

14 P, trap glazed 4"

= 4 Nos

@ ~~151.70~~ Each Rs607

379.5

15 Providing and fitting glazed earthen ware water closet European type, excluding seat and cover:-coloured

= 1 Nos

@ ~~2737.85~~ Each Rs2,738

1880.65

16 Providing and fitting, chromium plated or brass oxidised, swan neck cock 15 mm (½") dia.single way.

= 1 Nos.

@ ~~384.30~~ Each Rs381

17 Providing laying cutting jointing testing and disinfecting ~~G.I.~~ PPR-C pipe line in trenches with socket joints using G.I. pipes of B.S.S 1387-1967 complete in all respects with specials and valves Medium quality.

ii) ~~1/2" dia~~ 25 mm

= 250 Rft

@ ~~402.55~~ P.Rft Rs25,638

Total:	=	~~Rs81,107~~
Add 3 % Contingency	=	Rs2,435
G.Total:	=	Rs83,602

= 71742/-

Sub Engineer

Sub Divisional Officer,
Buildings Sub Division no 2
Rahim Yar Khan

RE-COSTRUCTION OF BOUNDARY WALL AT T.H.Q HOSPITAL SADIQ ABAD DISTRICT RAHIM YAR KHAN

Sr.No.	Description	Amount (Rs.)	
1	RE-COSTRUCTION OF BOUNDARY WALL 150 Rft	461311	~~453,710~~
2	DISMANTLING OF BOUNDARY WALL	43926	~~40,775~~
	TOTAL (Rs.)	505237	~~494,486~~
3	RECOVERY OF OLD MATERIALS		54,540
	NET TOTAL (Rs.)	450697	~~439,946~~
	Add 3 % Contingency	13524	~~13,198~~
	G. TOTAL (Rs.)	464218	~~453,144~~

ROUGH COST ESTIMATE FOR

RE-COSTRUCTION OF BOUNDARY WALL AT T.H.Q HOSPITAL SADIQ ABAD DISTRICT RAHIM YAR KHAN

ABSTRACT OF COST

S.N.	Description	No		Length		Bredth		Height		Quantity	Unit	Rate (Rs.)	Amount (Rs.)
1	Dismantling brick work in lime or cement mortar.												
		1	x	50.00	x	1.13	x	4.00	=	225	Cft		
		1	x	50.00	x	0.75	x	6.00	=	225	Cft		
								Total	=	450	Cft	~~3020.40~~ %Cft	~~13592~~ 3153.80
2	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m) b) in ordinary soil.												
		1	x	8.00	x	2.00	x	1.50	=	24.00	Cft		
									=	24.00	Cft	~~7492.30~~ %oCft	~~180~~ 807.84
3	Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.												
		1	x	8.00	x	2.00	x	0.50	=	8	Cft		
									=	8	Cft	~~4051.10~~ %Cft	324
4	Pacca brick work in foundation and plinth in Ratio 1:6												42.57
		1	x	8.00	x	2.25	x	0.25	=	5	Cft		
		1	x	8.00	x	1.50	x	0.25	=	3	Cft		
		1	x	8.00	x	1.125	x	3.50	=	32	Cft		
									=	39	Cft	~~21172.25~~ %Cft	~~8257~~ 2057.30
5	Providing and laying damp proof course of cement concrete 1:2: 4 (using cement, sand and shingle), including bitumen coating :-with two coats of bitumen												
		1	x	8.00	x	1.125	x		=	9	Sft		
									=	9	Sft	~~5256.95~~ %Sft	~~473~~ 56.11.00
6	Pacca brick work other than building upto 10ft. (3 m) height Cement sand Marter Ratio 1:6												
		1	x	8.00	x	0.75	x	8.00	=	48	Cft		
		1	x	0.75	x	0.375	x	8.00	=	2	Cft		
									=	50	Cft	~~21913.50~~ %Cft	11012
7	Cement plaster 1:5 upto 20' (6.00 mm) height:-½" (13 mm) thick												2187.85
		1	x	5.75	x		x	8.00	=	46	Sft		
									=	46	Sft	~~2030.60~~ %Sft	934
8	Outer Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-ratio 1:2 including red oxide.												2224.80
		1	x	8.75	x		x	8.00	=	70	Sft		
		2	x	8.00	x		x	2.00	=	32	Sft		
									=	102	Sft	~~2719.80~~ %Sft	~~2774~~
9	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):Ratio 1: 2: 4												2377.54 7733
		1	x	8.00	x	0.75	x	0.170	=	1.02	Cft		
		1	x	0.75	x	0.375	x	0.170	=	0.05	Cft		
									=	1.07	Cft	~~22837.60~~ %Cft	~~241~~
												TOTAL	~~24198~~ 24603

$$\frac{24603}{8} = \frac{3075}{3025} \text{ P.Rft}$$

ROUGH COST ESTIMATE FOR

DISMANTLING OF BOUNDARY WALL AT T.H.Q HOSPITAL SADIQ ABAD DISTRICT RAHIM YAR KHAN

S.N.	Description	No		Length		Bredth		Height		Quantity	Unit	Rate (Rs.)	Amount (Rs.)
1	Dismantling brick work in lime or cement mortar.												
		1	x	150.00	x	1.13	x	4.00	=	675	Cft		
		1	x	150.00	x	0.75	x	6.00	=	675	Cft		
								Total	=	1350	Cft	3020.40 %Cft	40775
												Total =	40775

43926/-

RECOVERY OF OLD MATERIALS

S.N.	Description	No		Length		Bredth		Height		Quantity	Unit	Rate (Rs.)		Amount (Rs.)
1	**Bricks**													
		1350	x	0.60	x	13.50			=	10935	Nos			
								Total	=	10935	Nos	4000.00	%0Nos	**43740**
	Bricks Bats													
		1350	x	0.40					=	540	Cft			
								Total	=	540	Cft	2000.00	%Cft	**10800**
												Total	=	**54540**

ROUGH COST ESTIMATE FOR INSTALLATION OF WATER FILTRATION PLANT (REVERSE OSMOSIS) IN DISTRICT COURTS COMPLEX RAHIM YAR KHAN

ABSTRACT OF COST

Sr. No.	Description of Items	Plinth Area / Quantity		Rates B.P.	Rates P.H	Rates E.I	Rates S.G	Total (Rs.)	Unit	Amount (Rs.)	Remarks
1	Construction of Filter Plant Room(14'X12') With 7' Verandah	364	Sft	2147	78	110		2335	P. Sft	849,940	Plinth Area Rates 2nd 2021.
2	Providing and laying Full Body Porcelain Polish Tile (Light Colour) 16"x16"x⅜" size (Stile, Master or equivalent) laid in white cement and matching pigment over ¾" thick cement mortar 1:2 i/c filling joints with white cement and matching pigment complete in all respect. (Dado / Skirting) 1X 16.25x5	~~437~~ 81	Sft					~~266~~ 219	P.Sft	~~116,242~~ 17739	Analysis attached
3	Providing and laying Full Body Porcelain Polish Tile (Light Colour) 16"x16"x⅜" size (Stile, Master or equivalent) laid in white cement and matching pigment over ¾" thick cement mortar 1:2 i/c filling joints with white cement and matching pigment complete in all respect. (for Floor) 1 x 16.25x7	~~266~~ 114	Sft					219 ~~266~~	P.Sft	24966 ~~70,756~~ 89265	Analysis attached
								TOTAL A		~~1,036,938~~	
1	Supplying ,installing,testing and commissioning Reverse Osmosis (RO) Plant for Tubidity, TDS (upto 5000 ppm) and Bacteriological Removal, of 1000 litter/Hour capacity including Carriage loading unloading charges, inclusive of all Taxes and Transportation charges to the site of work, conforming to standard specifications of water filteration plants approved by HUD & PHED Govt: of Punjab. The Detailed of Specification along with following equipment and accessories properly mounted in the Frame/Skid. are given as below.	1	Job					1853500	P. JOB	1,853,500	Detail attached
2	Provision of supper tuff water tank 1000 Gln I/c boring and pump	1	Job						P.Job	141,000	Detail attached
								TOTAL B		1,994,500	
1	~~Operational and Maintenance charges 5 year~~									~~1,892,425~~	
								~~TOTAL C~~		~~1,892,425~~	

								TOTAL A+B+C	~~4,923,863~~
								TOTAL:-	~~4,923,863~~ 288714
								~~ADD 5% PRA~~	246,193 ~~24614~~
								TOTAL:-	~~5,170,056~~
								SAY (RS):-	~~5,~~170,000 ~~2913597~~

2887145

Sub Engineer

Sub Divisional Officer
Buildings Sub Division No.1
Rahim Yar Khan

Executive Engineer
Buildings Division
Rahim Yar Khan

Sub Head No.05

WATER FILTERATION PLANT (REVERSE OSMOSIS)

Treated Water Capacity 1000 litter/Hour	
Type "RO" Plants for TDS and Bacteriological Removal	
Supplying ,installing,testing and commissioning Reverse Osmosis (RO) Plant for Tubidity, TDS (upto 5000 ppm) and Bacteriological Removal, of 1000 litter/Hour capacity including Carriage loading unloading charges, inclusive of all Taxes and Transportation charges to the site of work, conforming to standard specifications of water filteration plants approved by HUD & PHED Govt: of Punjab. The Detailed of Specification along with following equipment and accessories properly mounted in the Frame/Skid. are given as below.	
Filtration units	1 Unit
Filter Vessel	1 Unit
Material	FRP
Size	4" x 40" (1-No.)
Thickness	5-7 mm
Type of Membrane (No of bores)	Multiple bore
Maximum Flow Rate	1000 litter/Hour
Membrane Material	PES
· Make	Applied membranes/Equivalent/USA/ATS ASPRIN
· Origin	USA / ITALY /TAIWAN
Membrane Working Pressure	40-150 PSI Max
Membrane Life	5 Years
Pore Size of Membrane	0.01 micron
Bacterial Removal Efficiency of the Ultra filtration	99.99%
Viruses Removal Efficiency of the Ultra filtration	99.99%
Cleaning Process of Ultra filtration Plant	
Cleaning frequency	Continuous
Cleaning duration	Continuous
Working Temperature	77 °F to 140 °F
Max	140 oF
Working Pressure	60 PSI
High Pressure Pump Coupled with Motor	
Raw Water Feed Pump	
Pump Manufacturer	ITT/KSB/Grundfoss/Seimens, Aqua Treatment system USA/Haulin CNP
Pump Type	horizontal / Multi stage
Impeller material	Stainless Steel/ Technopolymer/Equivalent
Housing material	AISI 304/AISI 316/Equivalent
Discharge	2 m^3/hr
Head	122 ft
Pump efficiency	50%
Motor	Built in with pump
Manufacturer	ITT/KSB/Grundfoss/Seimens, Aqua Treatment system USA/Haulin CNP
Power rating, kw	0.75 KW to 0.90 KW
Voltage rating	1x220V/50hz/2900RPM
Starting current	DOL 3 to 8 Times of Normal Current
Normal current	5.03
NEMA Insulation Class	F
Temperature class	Amb.+80 °C
Prefiltration:	
Manufacturer	Pentair /wave cyber / USA Or equivalent
Filter Vessel	Pressure Vessel
· Material	FRP
· Size	13" x 54"
· Thickness	5 mm
Filter media, Material	S 22-D Media
Pore size	0.15 of grain size
Size of Media	0.45 to 1mm
Particle removal range	Below 10 micron
Cleaning Process	Manual
Working Temperature	1 to 50 °C

Working Pressure		2 bar
Jumbo filter 20" (5 Micron Cartridge)		2 No.
Activated Carbon Filter:		
Manufacturer		Pentair Water USA Or equivalent
Filter Vessel		Pressure Vessel
· Material		FRP
· Size		13" x 54"
· Thickness		5 mm
Base Material		Coconut Shell
Surface Area		800 m^2 /gm
Bulk Density		5 gm / cm^3
Backwash		Manual
Ash Contents		5%
Jumbo filter 20 " (1 Micron Cartridge)		2 No.
Antiscalant system		To prevent the chocking of R.O. membranes.
Hardness Removal:		
Manufactures Type Designation		Aqua Treatment System, USA
Manufacturer		Aqua Treatment System/Pentair Or equivalent
Ion-exchanger Media		Sulphmated polyester bea
Regeneration Media		NACL
Frequency of Regeneration		Depends on feed water
Feed Water Requirement (at Prefiltration)		1000 litter/Hour
Reverse Osmosis:		
Manufactures Type Designation.		USA/ ITALY
Permeate Recovery		60.00%
Design Temperature		25 C
Salt Rejection Efficiency		90% to 98%
Life of R.O Membrane		5 Years
Membrane Dia		8" x 40" (1-No.).
Blending Requirement		Depends on site requirement)
Dia of UPVC Pipe / Strainer in the Injection well		Feed 2 Waste Product
Overall Size of RO Plant and the whole Plant		As per drawing / Manual
Temperature Control, for High Ambient and Container Temperature.		Max 105 °F
Pump coupled with motor, (provide data as given		ITT/Goulds/Equivalent / Grounfos / Stairs
Under other relevant item)		Multistage centrifugal / pump with as per design
CIP System		Auto backwash system to clean the R.Omembranes before switch off the R.O. with permeates water to avoid the purging of salts on membranes
Feed Water Tank:		2 Nos.
Manufactures Type Designation/Origin		Pakistan
Manufacturer		Polycon Supertuff / Mastertuff other
Tank Capacity (Dimensions)		1000 litter/Hour
Material Class		Food Grade
Tank Material		HDPE /UPVC
Thickness of Material		Medium 3 to 4 mm
Working Temperature		-20 ◦C to 60 ◦C
Working Pressure		Atmospheric
Ancillary Items:		
Gages Flow Meter, TDS Meter Etc.		Italy/Taiwan /USA (checking of R.O. membranes Pressure and flow &TDS)
Ultra violet lamp. (Water Sterilization / Disinfection Unit)		Italy/Taiwan /USA (The UV Sterilizer operates using a low pressure mercury vapor to produce the UV There are five major groups of micro organisms that are destroyed with Ultra Violet Sterilizer; viruses, bacteria, fungi, algae and protozoa.)
Arsenic removal		Italy/Australia/USA. (Remove of iron & manganese arsenic.
Manufacturer		Pentair Water USA Or equivalent
Filter Vessel		Pressure Vessel
· Material		FRP
· Size		16" x 65"
· Thickness		5 mm
Base Material		Coconut Shell
Surface Area		800 m^2 /gm
Bulk Density		5 gm / cm^3
Backwash		Manual

Ash Contents		5%
Digital Control Panel		Assembled Box
(Provide Make, Type and rating of the following)		
. Cable Size		4 -6mm
. Voltmeter		on board
. Ammeter		on board
. Indication Lamp		on board
. Push Button		on board
. M C B		on board
. Bus Bar		on board
. Contaction		on board
Monitoring System		m2m CS WTP
(The type of hardware for the following)		Digital control valve
·Backwash of Prefiltration		On board
·Backwash of Ultrafiltration		On board
·Inlet (feed water) Flow – Liter/hour		1000 litter/Hour
Pressure gauge		
(EU/China)		WIKA / Equivalent
·Manufacturer		125 PSI
.Pressure Range		4"
.Gauge Dia		
Pipe work		Pakistan/ Taiwan/UAE
·Manufactures Type Designation/Origin		New Tech / Dadex/ Bata or approved manufacture
· Manufacturer		PP R / UPVC
· Pipe Material		40mm (Min)
· Pipe dia		2 – 6 bar
		0-60 °C
· Working Temperature		M.S. Powder coated
SKID		5 No.
P/F brass stop cock/bib cock 1/2" dia.		1352900
Additional RO System		
With holding Tax (Supply & Fixing) =7.5%		229993
General Sale Tax =17%		270580
Contractor Profit=20%		1853473
Total Rs:		1,853,500
Say:		1853500
1	X	

Sub Engineer

Sub Divisional Officer
Building Division No.2
Rahim Yar Khan

ROUGH COST ESTIMATE FOR TUFF PAVEMENT

Pacca brick work other than building upto 10ft. (3 m) height Cement sand

4	x	50.00	x	1.13	x	1.00	= 225	Cft
4	x	95.00	x	1.125	x	1.00	= 428	Cft
4	x	78.00	x	1.13	x	1.00	= 351	Cft
4	x	69.00	x	1.125	x	1.00	= 311	Cft
						Total	= 1314	Cft
							@ ~~21013.50~~ 2367.40 %Cft	Rs287,943.4

Providing, laying, watering and ramming brick ballast 1½" to 2" (40 mm to 50 mm) gauge mixed with 25% sand, for floor foundation, complete in all respects.

2	x	50	x	70.00	x	0.33	= 2310	Cft
2	x	85	x	40.00	x	0.33	= 2244	Cft
2	x	78	x	70.00	x	0.33	= 3604	Cft
2	x	69	x	40.00	x	0.33	= 1822	Cft
						Total	= 9980	Cft
							4885.70 @ ~~4585.23~~ %Cft	Rs457,608.0

Providing and laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope . complete in all respect.60-mm thick

2	x	65	x	70.00			= 9100	Sft
2	x	85	x	60.00			= 10200	Sft
2	x	78	x	70.00			= 10920	Sft
2	x	69	x	60.00			= 8280	Sft
						Total	= 38500	Sft
							112.55 @ ~~111.00~~ P.Sft	Rs4,273,500.0
							Total: =	~~Rs5,019,051~~ 5123918/—

Sub Engineer

Sub Divisional Officer,
Buildings Sub Division,no 2
Rahim Yar Khan

SEWERAGE SYSTEM

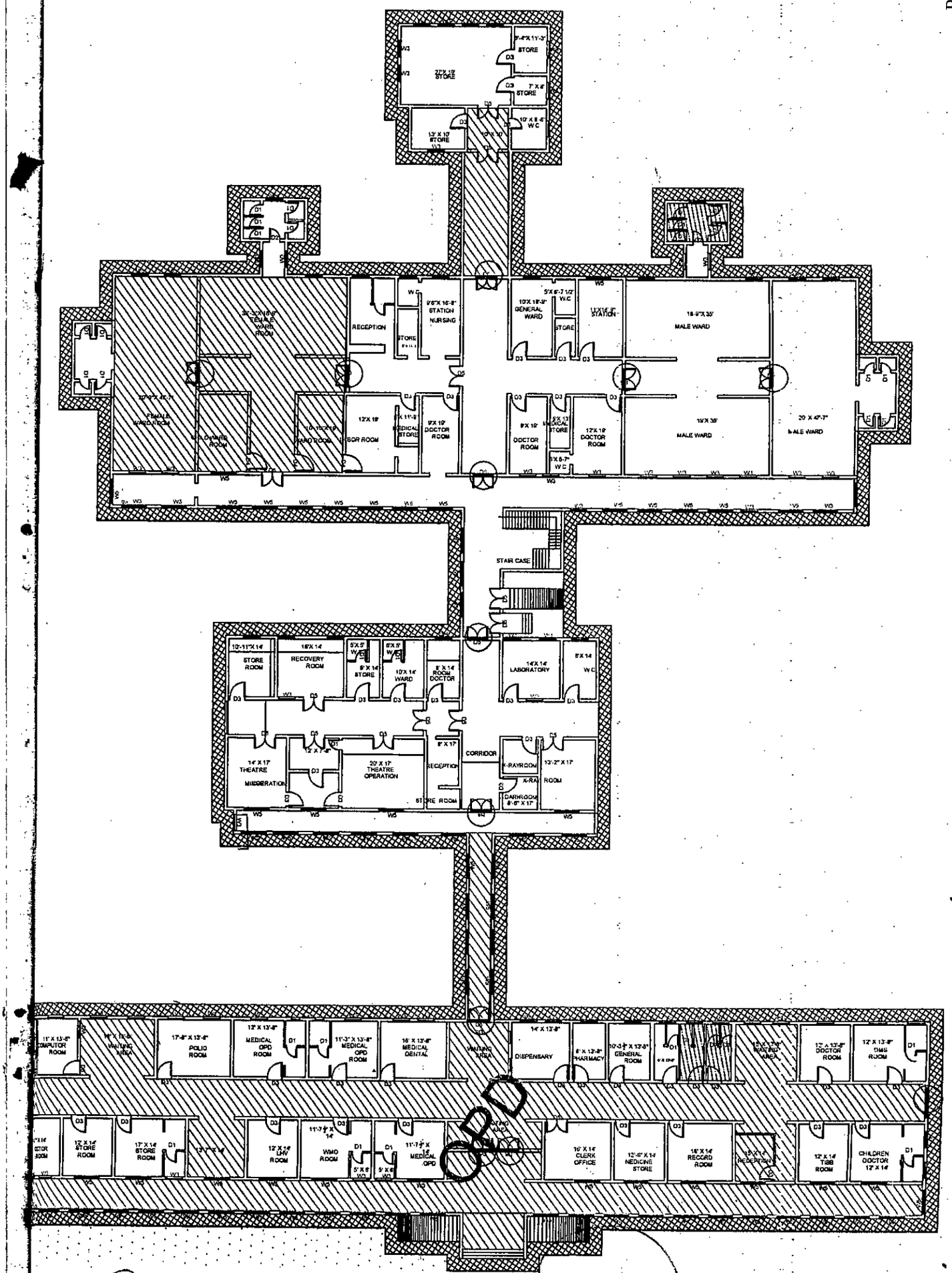
S.N.	Description	No		Length		Bredth		Height		Quantity	Unit	Rate (Rs.)	Amount (Rs.)
1	**Earthwork excavation in open cutting for sewers and manholes as shown in drawings including shuttering and timbering, dressing to correct section and dimensions according to templates and levels, and removing surface water, in all types of soil except shingle, gravel and rock:- i) 0 ft. to 7.0 ft. (0 to 2.10 m) depth**												
		1	x	250.00	x	2.00	x	4.00	=	2000	Cft		
		1	x	600.00	x	2.00	x	4.00	=	4800	Cft	6683.50	45446
								Total	=	6800	Cft	~~5852.95~~ %0Cft	~~39800~~
2	**Providing and laying R.C.C. pipe sewers, moulded with cement concrete 1:1½:3 conforming to ASTM Specification C-76-79, Class II. Wall B, including carriage of pipe from factory to site of work, lowering in trenches to correct alignment and grade, jointing with rubber ring, cutting pipes where necessary, testing, etc., complete.310 mm (12") i/d**												
		1	x	250.00					=	250	Rft	54665	136663
									=	250	Rft	~~459.55~~ P.Rft	~~114888~~
3	**Providing and laying R.C.C. pipe, moulded with cement concrete 1:1½:3, with spigot socket or collar joint, etc. including cost of reinforcement, conforming to B.S. 5911: Part I: 1981, Class "L" including carriage of pipe from factory to site of work, lowering in trenches to correct alignment and grade, jointing, cutting pipes where necessary, finishing and testing, etc., complete.9" i/d**												
		1	x	600.00					=	600	Rft	42760	256569
									=	600	Rft	~~390.10~~ P.Rft	~~234060~~
4	**Rehandling of earthwork:Lead upto a single throw of Kassi, phaorah or shovel**												
		6800	x	0.67					=	4533	Cft	1914	8677
								Total	=	4533	Cft	~~1776.70~~ %0Cft	~~8054~~
5	**Construction of manhole**												
		1	x	20.00					=	20	Nos		
								Total	=	20	Nos	30000.00 Each	600000
												TOTAL	~~996802~~ 1473346

WATER SUPPLY

S.N.	Description	No		Length		Breadth		Height		Quantity	Unit	Rate (Rs.)		Amount (Rs.)
1	**Excavation of trenches in all kinds of soil, except cutting rock, for watersupply pipelines upto 5 ft. (1.5 m) depth from ground level, including trimming, dressing sides, leveling the beds of trenches to correct grade and cutting pits for joints, etc. complete in all respects.**													14848 ~~13778~~
		1	x	1290.00	x	1.00	x	2.00	=	2580	Cft.			
								Total	=	2580	Cft.	~~5340.20~~ %0Cft		575520
2	**Providing, laying, testing and commissioning POLYPROPYLENE RANDOM COPOLYMER (PPRC)(Dadex / Beta / BBJ) water supply pipe (PN20) i/c solvent and specials but excluding threaded specials complete**													
	25mm	1	x	1300.00					=	1300	Rft			
								Total	=	1300	Rft	48	P.Rft	62322
	32mm	1	x	1100.00					=	1100	Rft			
	poly ethemer.							Total	=	1100	Rft	76	P.Rft	83196
	~~50mm~~	~~1~~	~~x~~	~~740.00~~					=	740	Rft			
								Total	=	740	Rft	185	P.Rft	136567
	~~63mm~~ 90mm	1	x	~~550.00~~ 1290					=	~~550~~	Rft			281156
								Total	=	~~550~~ 1290	Rft	~~286~~ 217/98	P.Rft	~~157434~~
3	**Providing and fixing chromium plated bib cock:-**													
		1	x	22.00					=	22	Nos			7652
								Total	=	22	Nos	~~339.30~~ Each		~~7465~~
4	**Providing and fixing chromium plated bib cock:-Providing and fixing chromium plated tee stop cock 15mm (½").**											347.80		
		1	x	42.00					=	42	Nos			19648
								Total	=	42	Nos	~~159.30~~ Each		~~19291~~
5	**Providing and fixing gun metal peet/gate valve (screwed):-30 mm (1¼") dia**											467.80		
		1	x	22.00					=	22	Nos	924.70		10223
								Total	=	22	Nos	~~451.95~~ Each		~~9943~~
6	**Providing and fixing, chromium plated mixing valve, for wash hand basin, sink or shower.**													
		1	x	32.00					=	32	Nos			50490
								Total	=	32	Nos	~~1565.65~~ Each		~~50101~~
7	**Providing and fitting glazed earthen ware wash hand basin 56x40 cm (22"x16") including bracket set, waste pipe and waste coupling, etc. i) white, with pedestal**											1576.75		
		1	x	12.00					=	12	Nos	2961.95		35527
								Total	=	12	Nos	2627.90 Each		~~32375~~
												TOTAL		~~572472~~

(2) Service connection with water proof tape 10 Nos @ 2227/50 — 22275

Total = 575536



Sub Divisional Officer
Bulungu Sub Division
Bulungu

8. Annual Operating and Maintenance Cost after Completion of the Project

The Annual operating and maintenance cost after completion of the project will be borne by the concerned District Health Authority (DHA) as well as Primary and secondary healthcare Department, Lahore.

8. ANNUAL OPERATING COST (POST COMPLETION)

Financial Components: Capital
Cost Center:OTHERS- (OTHERS)
Fund Center (Controlling):LE4203
Grant Number: Government Buildings - (PC12042)
LO NO:LO21010609
A/C To be Credited: Account-I

PKR Million

Sr #	Object Code	2023-2024		2024-2025		2025-2026		2026-2027		2027-2028	
		Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign
1	**A05270**-To Others	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	**A12403**-Other Buildings	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total		**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**

Financial Components: Capital
Cost Center:OTHERS- (OTHERS)
Fund Center (Controlling):LE4203
Grant Number: Government Buildings - (PC12042)
LO NO:LO21010609
A/C To be Credited: Account-I

PKR Million

Sr #	Object Code	2023-2024		2024-2025		2025-2026		2026-2027		2027-2028	
		Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign
1	**A05270**-To Others	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	**A12403**-Other Buildings	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total		**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**

9. DEMAND AND SUPPLY ANALYSIS

Semi modern health facilities and scientific diagnostics are presently available in this Hospital. This initiative of revamping Hospital will cover all departments and components of healthcare including Medical, Surgical, psychiatric, Cardiac, ENT, Ophthalmic and Pediatrician components. Moreover, women health components i.e. Gynecology and obstetric will also be emphasized upon. In emergency, calamities and natural disasters, valuable lives will be saved through revamping of Emergency Units.

10. FINANCIAL PLAN AND MODE OF FINANCING

10.1 FINANCIAL PLAN EQUITY INFORMATION

10.2 FINANCIAL PLAN DEBT INFORMATION

undefined

10.3 FINANCIAL PLAN GRANT INFORMATION

attached

10. Financial Plan and Mode of Financing

The project will be executed / financed through Annual Development Program under the sector Primary and Secondary Healthcare Department, the Government of Punjab. Year wise financial utilization is as under:

Revenue Side

(Rs.in Million)

Year	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Funds Released	65.000	33.869	3.315	3.365	5.572	8.147	119.268
Utilization	30.081	26.206	3.310	3.185	5.405	1.395	69.582

Capital Side:

Year	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Funds Released	0	0	0	0	41.548	7.801	49.349
Utilization	0	0	0	0	41.548	0.000	41.548

Balance funds may be provided for completion of the project in subsequent years through ADP

10.4 WEIGHT COST OF CAPITAL INFORMATION

undefined

11. PROJECT BENEFITS AND ANALYSIS

11.1 PROJECT BENEFIT ANALYSIS INFORMATION

Social Benefits with Indicators

Social economic burden will be decreased due to availability of better medical services in the district. Time and money of community will be saved which were expended in other cities like Lahore Islamabad etc. on treatment of patients and for boarding and logging of attendants. The social status of community will rise.

11.3.1 Social Impact:

A number of patients lose their lives or suffer serious disabilities for want of timely access to the health facilities. The project will ensure that no one is left to reach the health facilities. The most important beneficiaries will be mothers having complicated delivery conditions. The number of patients transferred to the health facilities for treatment and lifesaving will serve as indicators for performance evaluation. In long term the project will help in improving socio-economic indicators of IMR and MMR.

Employment Generation (Director and Indirect)

Revamping of this Hospital will lead to generation of employment for highly skilled /professional staff and unskilled staff leading to reduction of unemployment. Huge employments opportunity will be created from the establishment of the project. The Medical doctors and paramedics who are trained in this discipline or intended to specialize in this field can make maximum use of training. A large number of gazette and non-gazette posts will be available for employment directly or indirectly.

11.2 ENVIRONMENTAL IMPACT ANALYSIS

Environmental Impact

It will have no hazardous effect on the environment. On the other hand, addition of horticulture and landscaping will provide healthy environment to the general public. All the more, the program is environment friendly having no adverse environmental effects. Simultaneously, this shall further improve environment by creating sense of responsibility among employed and beneficiaries of the service.

11.3 PACT ANALYSIS

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11.4 ECONOMIC ANALYSIS

Impact of Delays on Project Cost and Viability

Delay in the implementation of the project will lead to increase in cost and increase financial burden on the Government and general population of Punjab. Since the project is one of the major needs and a long awaited desire of the community, therefore, Government of the Punjab contemplated plan for early execution of Revamping of Emergency Units. The delay will not only deprive the patients of the state of the art facility but also distort the public image of the Government.

11.5 FINANCIAL ANALYSIS

Financial Benefits & Analysis

Tremendous public benefits will be accrued from revamping of Emergency Units:

The Targets of Sustainable Development Goals (SDGs) will be achieved
The Human Development Index of Pakistan (HDI) will improve
Infant Mortality Rate will decrease
Mother Mortality rate will be decreased
The international commitments of Pakistan will be accomplished
Health standard of public will
Better Health Facilities to mother and
Prompt and scientific facility for operation
Rehabilitation of disables and injured
Blindness in this area will be decreased and controlled
Better social and mental health to addict
Provision of better health facilities at doorsteps
Awareness and control for communicable
Survival of heart failure
Social indicators of Pakistan will improve

This will decrease load of patients on teaching hospitals and specialized institutions by promoting physical and mental health. By adopting preventive and Hygienic principles, the number of patients and diseases will decrease. Resultantly budget load of Government for treatment will decrease and saving will be utilized for development programs.

11.1.1 Financial Impact:

In the beginning, It is extremely difficult to put a money value on each life saved by taking/shifting a critically ill patient to the appropriate health facility for treatment. However, the exact amount spent shall be calculated against each patient shifted by analyzing data collected during operations.

11.2 Revenue Generation

Revenue will be generated from:

Indoor fee
Laboratory fees
Diagnostic facility fees
Dental fee
ECG fee
Private room charges
Ambulance charges
From other fees prescribed by Government

12. IMPLEMENTATION SCHEDULE

12.1 IMPLEMENTATION SCHEDULE/GANTT CHART

Implementation Schedule

Original Gestation period (From September, 2017 to June, 2019)
Extension in Gestation period for one year with no change in cost & Scope till June 2020.
1st Revised gestation period till June, 2021
2nd Revised gestation period till June, 2023.
3rd Revised gestation period till June, 2025

12.2 RESULT BASED MONITORING (RBM) INDICATORS

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12.3 IMPLEMENTATION PLAN

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12.4 M&E PLAN

The operation team will monitor the progress of the project and will hold regular weekly meeting to review the progress under the supervision of Project Director.

12.5 RISK MITIGATION PLAN

attached

RISK REGISTER

Programme for Revamping of all THQ Hospitals in Punjab

RISK DATA				Pre-Mitigation / Current Qualitative Assessment			MITIGATION
Risk Item No	Risk Description/Event	Cause	Effect / Consequences	Likelihood (1 to 3)	Impact (1 to 3)	Risk Score (1 to 9)	Mitigation / Actions
1	Due date for the completion of some hospital sites may be extended due to increase in scope from the Client	Direct instructions from the Medical Superintendents / Hospital Administration to revamp the remaining areas	Significant scope increase requested by the Hospital administration will result in: 1. Project delays 2. Contractor claims 3. Increase in project cost along with variations	3	3	9	Hospital administration is requested to finalize the scope during joint field visits of C&W and PMU
2	Various unexpected structural issues are being encountered	Unforeseen structural issues are expected to face during execution in hospital buildings approaching end of life	1. Stoppage of work 2. Performance of the Contractor has affected 3. Delays in the project	3	3	9	Various items which are unforeseen and expected to be used during execution may be taken in estimates so that those can be executed to address these issues
3	Change in management of the Client	Management change	Re-briefing is to be carried out	2	2	4	Acceleration of understanding for smooth and expeditious transition, without affecting the project
4	Financial Issues	Funds for these schemes should be provided as per the targets	1) Delay in tendering 2) Effect on quality as the Consultant supervision will not take place 3) Inconvenience to the patients	3	3	9	Approval of PCIs and early release of funds is requested
5	Nationwide spread of pandemic i.e. COVID-19 in 2nd and 3rd quarter of this year	Work delays during nationwide lockdown.	1) Delays in completion of works 2) Claim requests received by Contractor and Consultant	3	3	9	Contractor will be asked to depute fully vaccinated labor

12.6 PROCUREMENT PLAN

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13. MANAGEMENT STRUCTURE AND MANPOWER REQUIREMENTS

The Organogram of New Management Structure is available in PC-I

14. ADDITIONAL PROJECTS / DECISIONS REQUIRED

NA

15. CERTIFICATE

Focal Person Name: Mr. Adeel Aslam **Designation:**Project Director, PMU P&SHD
Email: **Tel. No.:**
Fax No:
Address:31/E1, Shahrah-e-imam Hussain? Road? Block E 1 Gulberg III, Lahore, Punjab

15. It is certified that the project titled **"Revamping of THQ Hospital Sadiqabad. (3rd Revised)"** has been prepared on the basis of instruction provided by the Planning Commission for the preparation of PC-I for Social Sector projects.

Prepared By:

(HISSAN ANEES)
DIRECTOR PLANNING & HR, PMU,
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(042-99231206)
(Oct-2022)

(RIZWAN SHOUKAT)
PROCUREMENT SPECIALIST, (PMU),
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(Oct-2022)

(HAMZA NASEEM)
PROJECT MANAGER CIVIL, PMU,
PRIMARY & SECONDARY HEALTHCARE DEPARTMENT, LAHORE
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(Oct-2022)

Checked By:

(Dr. AYESHA PARVEZ)
DEPPUTY PROJECT DIRECTOR (PMU),
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(Oct-2022)

(KHIZAR HAYAT)
PROJECT DIRECTOR (PMU),
PRIMARY & SECONDARY HEALTHCARE
DEPARTMENT, LAHORE
(042-99231206)
(Oct-2022)

Approved By:

(DR. IRSHAD AHMAD)
SECRETARY,
GOVERNMENT OF THE PUNJAB
PRIMARY & SECONDARY HEALTHCARE DEPARTMENT, LAHORE
(042-99204567)
(Oct-2022)

17. RELATION WITH OTHER PROJECTS

20. MARGINALISATION OF PC-1

SR.NO.	CRITERIA	YES/NO	COMMENTS
Description & Objectives			
1	does the pc-i specify link/alignment with punjab growth strategy, punjab spatial strategy (if relevant) & sustainable development goals?	NO	
2	do project objectives/justification include focus on marginalised groups (women, pwds, minorities, transgender, poor etc.)?	NO	
Use of Gender Disaggregated Data			
1	has gender disaggregated data been used to determine need for the project? if yes, identity the source. if not, what additions/observations have been made to strengthen the pc-i?	NO	
2	was gender disaggregated data used to identify potetialimpact of the project on selected beneficiaries?	NO	
Social Impact			
1a	have marginalised groups been included as beneficiaries of the project?	NO	
1b	if yes, does the pc-1 specify a specific quota/percentage for the marginalised (women, peds, etc.)?	NO	
2	does the pc-1 include specific provisions for capacity building / training of women (if applicable)?	NO	
Results Based Monitoring			
1a	does the pc-i include a results based monitoring framework (rbmf)/logical framework?	NO	
1b	if yes, does the framework include measurable targets relating to impact on marginalised groups?	NO	
2	were sdg indicators used for determining targets included in the pc-i?	NO	
3	was gender disaggregated data used to establish baseline and develop quantifiable targets/key indicators?	NO	
4	if yes, identify the source/refresh institute(s)?	NO	
Inculsion/Participation			
1	was female representation ensured in planning and adp formulization?	NO	
2a	was stakeholder consultation held during adp formulization and/or pc-idevelopment?	NO	
2b	if yes, did the consultation include experts and representatives of marginalised groups and csos?	NO	

3	was participation of representatives of marginalised groups ensured in pc-1 rist assessment planning?	NO	
Monitoring & Evaluation			
1	does the project provide a role to communities in project monitoring and/or implementation (if relevant)?	NO	
2a	does the project include formation of a steering committee and/or project implementation committiees?	NO	
2b	if yes, is there a provision to ensure representation of women in these committees?	NO	