PC-1
Balance Work of THQ Hospital Shujabad

| ORIGINAL APPROVED COST | PKR Million. 177.138/- |
| :---: | :---: |
| ORIGINAL APPROVED GESTATION | 43 Months |
| Till June 2025 |  |
| APPROVAL FORUM | DDSC (DDSC) |

Balance Work of THQ Hospital Shujabad
2. LOCATION OF THE PROJECT

### 2.1. DISTRICT(S)

I. MULTAN

## 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


## 4. PLAN PROVISION

| Sr \# | Description |
| ---: | :--- |
| $\mathbf{1}$ | Source of Funding:Scheme Listed in ADP CFY |
| $\mathbf{2}$ | Proposed Allocation:0.000 |
| $\mathbf{3}$ | GS No:5376 |
| $\mathbf{4}$ | Total Allocation:0.000 |
| $\mathbf{5}$ | Funds Diverted:0.000 |
| $\mathbf{6}$ | Balance Funds:0.000 |
| $\mathbf{7}$ | Comments: <br> Provision of Rs.1300 reflected at G.S. No.660 of ADP 2020-21 titled "Balance Work of Revamping <br> of All DHQ \& 15 THQ Hospitals in Punjab. |

## 5. PROJECT OBJECTIVES

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## 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 P\&SHD had decided to launch massive revamping of 40 THQ \& DHQ Hospitals in the current financial year 206-17. Program was launched to provide timely quality health care through 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, stopping overuse of some care and ending misuse of unneeded services. 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 Healthcare, Government of the Punjab is dedicated in making strenuous efforts for ensuring a better and effective Health Care system in the hospitals.

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.

The defining step in this direction was to recognize the importance of Health Care at Primary \& Secondary Levels. In order to address the dilapidated condition of hospital infrastructure, scope of work, based on the followings was chalked out:

- Addition of human resource
- Rehabilitation and improvement of infrastructure
- Supply of missing biomedical and non-biomedical equipment;
- Introduction of IT-based solutions
- Outsourcing of allied services
- Standardization of hospital protocols.


### 5.1. Brief Description / Background

The District Head Quarters (DHQ) Hospitals are located at District headquarters level and serve a population of 1 to 3 million, depending upon the category of the hospital. The DHQ hospital provides promotive, preventive and curative care, advance diagnostics, inpatient services, advance specialist and referral services. DHQs provides referral care to the patients including those referred by the Basic Health Units, Rural Health Centers, Tehsil Head Quarter hospitals along with Lady Health Workers and other primary and secondary care facilities.

Similarly, Tehsil Head Quarter Hospitals are located at each Tehsil Headquarter and serve a population of 0.5 to 1.0 million. At present, the majority of THQ hospitals have 40 to 60 beds. The THQ hospital provides promotive, preventive and curative care, diagnostics, inpatients, referral services and also specialist care. THQ hospitals are also supposed to provide basic and comprehensive Emergency Obstetric and Newborn Care. THQ hospital provides referral care to patients, including those referred by the Rural Health Centers, Basic Health Units, Lady Health Workers and other primary care facilities.

Keeping in view the importance of primary and secondary health care, the department has decided to launch massive revamping of 40 DHQ \& THQ Hospitals in the current financial year ( 25 DHQ's and 15 THQ's). In addition to this, as a part of special instructions, the department has also taken improvement of emergencies in 15 DHQ \&THQ Hospitals.

Infrastructure improvement portfolio was undertaken in all DHQ \& 15 THQ Hospitals through Infrastructure Development Authority Punjab (IDAP) with the following details:
(A) Repair/Renovation of Clinical Covered Area - Establishment / Upgradation of Missing Facilities (Emergency, ICU, CCU, Burn Unit, Dialysis Unit, Physiotherapy, Dental Unit, CT Scan, Mortuary and Yellow Room) Complete Renovation of Existing internal infrastructure (Wards, OPD Rooms, Corridors, Operation Theaters and Diagnostic blocks) with state-of-the-art clinical friendly materials
B) External Development - Façade, External Pathways, Platforms, Sewerage and Water Supply System
C) External Electrification

- Dedicated Power Lines (Dual Supply and Express Lines)
- External wiring


## (D) Establishment / Up-gradation of Missing Health Facilities:

- Emergency
- CT Scan
- Dialysis
- ICU
- CCU
- Physiotherapy
- Mortuary
- Dental Unit

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.
Civil work revamping of all DHQ \& 15 THQ Hospitals was undertaken during the FY 2016-17 through Infrastructure Development Authority Punjab (IDAP). Details of revamping in DHQ is given below:

Total area of the THQ Hospital Shujabad:
Area completed:
External Development and Electrification: Not Executed

Later on the IDAP informed that they will not be able to take the next revamping plan of DHQ/THQ Hospitals of Punjab on the grounds that it does not fall in the project role of IDAP specified in the 36th meeting of Principal Cabinet of IDAP held on 26-10-2020.

Accordingly, on the basis of RCE of IDAP and de-scope civil work received 25 subschemes of all DHQ and 15 THQ Hospitals have been approved from PDWP in its meeting held on 36-03-2021 and DDSC meeting held on 29-04-2021. Subschemes of all DHQ \& 15 THQ Hospitals were concluded.
Now it has been decided to complete the balance civil work of revamping through C\&W Department. Accordingly, the Rough Cost estimates of balance civil work
has been got prepared from the Punjab Buildings Department for preparation of instant PC-I.

### 5.2 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 three categories

### 5.4.1 External Development

### 5.4.2 Internal Development

### 5.4.3 Medical Infrastructure Development

### 5.4.4 Emergencies Development

### 5.3 External Development

### 5.3.1.1 External Platforms

In order to improve the communication between blocks, necessary interventions are taken to improve the existing metaled road network. Moreover, new internal metaled road is proposed to access the blocks of hospital.

### 5.3.1.2 Façade Improvement

In order to improve the aesthetics of hospital, façade uplift has been proposed in order to give the feel of modern architectural era.

### 5.3.1.3 Sewerage System

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 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.

### 5.3.2.1 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.

### 5.3.2.2 Seamless flooring and Lead Lining

To keep high risk areas like Operation theaters, I.C.U, C.C.U, Burn Unit 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 C.T. Scan room and X-Ray rooms radio-resistant and to keep the patients away from the harm of rays, interventions are taken in Xray rooms and C.T. Scan 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 C.T. Scan and X-Ray rooms.

### 5.3.2.3 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.

### 5.3.2.4 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.

### 5.3.2.5 Fire and theft security

The security of hospital against fire and theft is another patient beneficial initiative in the revamping program. The provision of different types of fire extinguishers and installation of different types of CCTV cameras is also proposed in this program. The fire extinguishers are planned to place at those positions in the building where the fire event is most likely to occur and CCTV cameras are designed to install at those location where monitoring is essential from security point of view. These points also include the external areas of hospital like main gates etc.

### 5.3.3 Medical Infrastructure Development

Includes establishment of new facilities which are as follows:
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.

In the revamping program, following clinical facilities are being introduced in the DHQ Hospital:

I.C.U, C.C.U, Burn Unit, Dialysis Unit, C.T. Scan, Dental Unit, Physiotherapy Unit and Prisoners ward

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 ICU

District Headquarter Hospitals (DHQ) serve catchment populations of the whole districts (1-2 million) and provide a range of specialist care in addition to basic outpatient and inpatient services. They typically have about 100 to 300 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 DHQ 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 DHQ and 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.

### 5.3.3.2 CCU

Understanding these ground realities Primary and Secondary Healthcare Department, Government of the Punjab has decided to establish coronary care units (CCU) in DHQ 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.

### 5.3.3.3 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.

District Headquarter Hospitals (DHQ) \& 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 10 bedded dialysis at DHQ hospitals \& 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 preexisting 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.

### 5.3.3.4 BURN UNIT

To improve the quality of medical care rendered to burn patients, primary and secondary Healthcare Department has decided to establish burn units in DHQ hospital as a part of its Annual Development Plan. Effective management of Burn victims is a complicated and challenging intervention in a developing country like Pakistan. Absence of clinical standards, protocols, and guidelines for care of burn patients in health facilities is an important constraint. Primary and Secondary Healthcare Revamping programme (PSHRP) is the initiative by the Chief Minister of Punjab to improve the healthcare delivery system in the province Acquisition of licenses for all DHQ and 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.

Burns are among the most common types of trauma occurring in any society. Most burns are relatively small and consequently not life threatening, but large burns, even partial thickness ones, still pose a major threat when not treated properly. Even smaller burns may cause major morbidity, because the injury is very painful and may lead to disfiguring scar formatting, primarily hypertrophic scarring. The 4 bedded Burn Units will treat children and adults with thermal burns, chemical burns, electrical burns etc.

Primary and secondary healthcare department focusing on optimal management of patient with up to $30 \%$ burns in newly developed burn units and desired to establish a proper referral system for patients who have more than $30 \%$ burns. Primary and secondary healthcare department has directed its efforts towards development of an organized system for total care of the burn patient including development of medical protocol, training \& retaining the qualified medical/nursing staff and coordination with specialized health \& Medical education department.

### 5.4.1 EMERGENCY DAPARTMENT:

All THQS and DHQs are already providing emergency services to critical ill patients. As for 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.

### 5.4.2 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:

### 5.4.3 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-

### 5.4.4 Addition of Portico and External Structures

The external structures like portico, ramp/stretcher way for entrance, podium and platform for wheel chairs are proposed in this program for facilitation of patients. Portico is a small structure constructed outsides the covered area consisting of four or two columns carrying a slab or roof over it. This portico is constructed in this program outsides the emergency department to provide a shade for the ambulance or any other vehicle carrying the patient. With presence of this portico, it will facilitate the patient to transfer it from ambulance to the department under a shade so that it provides resistance against the rain or other weathering effects.

Ramp/Stretcher way is an essential structure to constructed outsides the emergency department because almost all the patients coming towards the emergency block are on either wheel chairs of stretcher. It is impossible for a wheel chair or stretcher to cross the stairs in order to enter in the department. To cope up with this problem, ramp or stretcher way is proposed outsides the emergency department to provide a smooth passage for the stretcher or wheel chair. Platform for wheel chairs is proposed in this program in order to provide a station for wheelchairs. The presence of this wheel chairs platform will ensure in time access to the wheel chairs when required. In order to give a feel of modern architecture and to uplift the existing shabby outlook of the department, interventions regarding façade improvement are taken in this program.

### 5.4.5 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

### 5.5 Introduction of IT-based solutions

This includes implementation of IT-based solutions for improving services delivery standards to ensure better service delivery to general public/patients. In this regard, a dedicated Project Management Unit (PMU) established comprises ICT wing with the scope of revamping exercise include but not be limited to provision of IT equipment \& IT solutions.

Currently, Queue Management System (QMS) integration with Hospital Information Management System (HIMS) project was under execution by PITB for Phase-I DHQ/THQ 40 hospitals.

Number of software application has been developed, deployed and implemented in hospitals by using the IT manpower in hospitals by PMU ICT team that includes but not limited to:

- Invoice Management System
- MEPG mobile application \& web portal for outsourced services monitoring system.
- Janitorial mobile application \& web portal
- Surgery Tracking Application \& web portal
- Patient Feedback Application \& web portal
- Stock Management /Consumable Application
- Equipment Management Portal
- Hospital Management Information System for Phase-II hospitals
- Patient Referral System Portal


## - MLC portal

### 5.6 MONITORING AND QUALITY ASSURANCE (PROCESS INTERVENTIONS)

During construction phase, "Construction Supervision" will be carried out by the Procuring Agency (Director Infrastructure) who will certify construction activity.

### 5.6.1 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 THQ and DHQ 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 DHQ hospital provides promotive, preventive, curative, advance diagnostics, inpatient services, advance specialist and referral services. All DHQ hospitals are supposed to provide basic and comprehensive EmONC. DHQH provides referral care to the patients including those referred by the Basic Health Units, Rural Health Centers, Tehsil Head Quarter hospitals along with Lady Health Workers and other primary care facilities. 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 Hospitals. 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 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.

### 5.6.2 Supply of missing Biomedical and non-biomedical equipment

Procurement of Bio and non-biomedical equipment as per requirement of the hospital and available financial resources in all DHQ and 15 THQ Hospitals completed.

Impact of supply of missing Biomedical and non-biomedical equipment;
$>$ With the addition of necessary biomedical equipment like CT Scan/XRay/Ultrasound and Color Doppler, Burn Unit equipment, ICU/CCU equipment, Ventilators, Medical Gas Pipeline System and Operation Theaters etc. hospital clinical staff and administration is able to provide better healthcare to the patients' way beyond the limits prior to revamping.
$>$ Due to availability of this necessary biomedical equipment coupled with trained staff, the load on specialized healthcare hospitals has greatly reduced. The hustle and bustle of general public (especially rural) faced due to travelling towards far furlong specialized healthcare hospitals has reduced.
$>$ Lifesaving biomedical equipment for instance Emergency Equipment, Operation theaters equipment has contributed in saving many lives due to availability of the said equipment and this contribution is still going on.
$>$ Non availability of this equipment was enforcing the public for private and costly treatments, which was resulting into huge financial impact on public. The availability of these services at government rates has beneficial impact on public.
$>$ The provision of non-biomedical equipment has facilitated the public, patients and staff largely e.g. Air Conditioners, Office Furniture, Benches, Ceiling fans and generators etc.
> The provision of non-biomedical equipment e.g. waste bin sets, bed sheets, blankets etc. has contributed towards overall hospital cleanliness which has reduced the disease hotspots of hospitals.

Biomedical Equipment Resource Center (BERC) has been working under PMU to record and maintain an updated elaborate and sophisticated asset inventory of biomedical equipment in DHQ and THQ Hospitals at provincial level, respond to repair calls by mobilizing the assigned repair personnel/vendors/firms and analyze the data to identify quality, repair track and life span (end-of-life) of equipment; quality of service of vendor/firm/party and quality of service of the service provider handling the equipment; and use the information to raise alerts in relevant departments for adequate action ( procurement, condemnation, black-listing of vendor etc.)

### 5.7. Electronic Medical Record (EMR) and QMS

### 5.7.1 Queue Management System (QMS)

OPD in DHQ has enormous patient load, due to the only big public sector serving hospital in Districts and 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 DHQ is given as follows:

There are 35 counters at DHQ 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.

The same process described above for DHQ will be implemented for THQ but with lesser number of counters i.e. 25. 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.

### 5.7.2 Public Address System

Hospital Staff / Patients / Public Address System at Hospitals is a mandatory part of any hospitals facility following the international standards. The system is required to serve the multipurpose of announcing code blue (Critical Situation), making general announcement to attendants / Patients or to call patients or to transmit the fire tone under fire condition. The said system has been installed with 20 locations at hospitals with speakers and two announcement locations within the hospital. This will help in streamlining the operations of hospitals and for efficient and better service delivery and to better patient care.

### 5.7.3 CCTV System

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 being provided by an outsourced security company in relevant 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 40 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 40 public sector healthcare facilities.

### 5.7.4 EMR and Networking

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.


Ftunantsial Implications of New Management Structure

The Planning \& Development Board vide letter No.12(24)PO(COORDIIIP\&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 | Revised Project Pay Scales | Annual Increment |
| :---: | :---: | :---: |
| (PPS) | (Permissible Range) (PKR) | 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:

|  |  | Original Pay <br> package approved |  | Revised Pay <br> package |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | No. of <br> Employees | Per <br> Month <br> Salary | Salary <br> for One <br> Year | Per <br> Month <br> Salary | Salary for <br> One Year |
| Admin Officer | 1 | 80,000 | 960,000 | 105,000 | $1,260,000$ |
| Human Resource <br> 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 <br> 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 <br> 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 <br> (DEO) | 2 | 35,000 | 840,000 | 44,000 | $1,056,000$ |
| Assistant admin <br> Officer | 2 | 50,000 | $1,200,000$ | 70,000 | $1,680,000$ |


| Total | 11 | 645,000 | $8,760,000$ | 849,000 | $11,556,000$ |
| :--- | :---: | :---: | :---: | :---: | :---: |

### 5.8.1 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

### 5.8.2.1 $\quad$ HR / Legal 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 $\mathrm{MS} / \mathrm{AMS}$

## Eigibility Criteria

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

### 5.8.2.2 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
7. \& Finance/MS/P\&SHD

## Eigibility Criteria

1. Minimum qualification Masters' degree in Finance (MBA Finance)/ M.Com / CA Inter/ ACCA or equivalent from HEC recognized University or officer from treasury service / subordinate accounts service (Additional credit may be given to Chartered accountant / ACCA)
2. Minimum 1 year post degree experience of Finance, Accounts \& Budget (Additional credit may be given for Public sector experience of similar nature)

### 5.8.2.3 Audit Officer

Shall be responsible for following functions:

1. Smooth conduct and completion of all types of audit in hospital
2. Pre-audit of all Payments
3. Liaison with external audit teams
4. Preparation of replies of audit paras, working paper for Department Accounts committee, Special Departmental accounts committee \& Public Accounts committee meetings
5. Development of SOPs for finance, budget, procurement as per Government rules \& regulations
6. Any other function assigned by AMS HR\& Finance /MS/P\&SHD
Eigibility Criteria
7. Minimum qualification Masters' degree in Finance/ MBA Finance / Chartered Accountant / ACCA / M.Com or equivalent from HEC recognized University.
8. Minimum 1 year post degree experience of audit (Additional credit may be given for Public sector experience of similar nature)

### 5.8.2.4 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 / BSc Engineering / Pharm D/ Economics / Statistic / M.Com or equivalent from HEC recognized University
2. 1 year post degree experience of procurement (Additional credit may be given for public sector experience of procurement)

### 5.8.2.5 ADMIN OFFICER AND ASSISTANT ADMIN OFFICER

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

1. Security
2. Transport
3. Parking
4. Janitorial
5. Canteen
6. External housekeeping
7. Electrical works
8. Internal housekeeping
9. Laundry
10. 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 (Admin Officer)

1. Minimum qualification Masters' degree in Economics/ Public Administration/ Finance/ MBA Finance / Administration / Statistic / Computer Science/M.Com / BSc Engineering/ Pharm D or equivalent from HEC recognized University
2. Minimum 1 year post degree relevant professional experience (Additional credit may be given for hospital administration/ Public sector administration of similar nature)

## Eligibility Criteria (Assistant Admin Officer)

1. Minimum qualification Masters' degree in Social Sciences / Public Administration / MBA / ACMA / ACCA / Statistics/ Computer Science / M.Com / Pharm D or equivalent from HEC recognized University
2. Relevant professional experience will be preferred (Additional credit may be given for hospital administration/ Public sector administration of similar nature)

### 5.8.2.6 IT/STATISTICAL OFFICER

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

He shall be in liaison with PITB/HISDU for proper reflection of hospital record on PITB 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 / MCS / BSCS (Hons) / MSC Statistics/ MBA / M Com / BS Engineering or equivalent from HEC recognized University
2. 1 years post degree experience of IT / Data analysis (Additional credit may be given for similar assignment experience)

### 5.8.2.7 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 professional experience.

### 5.8.2.8 BIO-MEDICAL ENGINEER

He shall be responsible for all items of Bio-Medical and Non-Bio-Medical in the hospital.

## Eligible Criteria

1. BSc Bio-Medical Engineering / BSc Electrical Engineering / BSc Electronics or equivalent from HEC recognized University.
2. Minimum 1 year post degree relevant experience. 2 year experience is preferable.

### 5.8.2.9 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.

### 5.8.2.10 Data Entry Operators (DEO)

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

## Eligible Criteria

1. Minimum qualification BA / BSc / B.COM / BCS or equivalent from HEC recognized University. In case of BA / B.Com candidate must have six month computer course / Diploma.
2. Proficient in MS Word/ MS Excel/ MS Power point. Candidate must have typing speed of minimum 30 WPM. (additional credit may be given for additional relevant certified computer courses)
3. 1 years post degree relevant experience


Financial Implications of New Management Model

|  |  | Revised Pay <br> package |  |
| :--- | :---: | :---: | :---: |
| Name of Post | No. of <br> Employees | Per <br> Month <br> Salary | Salary for <br> One Year |
| Admin Officer | 1 | 105,000 | $1,260,000$ |
| Human Resource <br> Officer | 1 | 105,000 | $1,260,000$ |
| IT/Statistical Officer | 1 | 105,000 | $1,260,000$ |
| Finance \& Budget <br> Officer | 1 | 105,000 | $1,260,000$ |
| Procurement Officer | 1 | 105,000 | $1,260,000$ |
| Quality Assurance <br> Officer | 1 | 105,000 | $1,260,000$ |
| Logistics Officer | 1 | 105,000 | $1,260,000$ |
| Data Entry Operator <br> (DEO) | 2 | 44,000 | $1,056,000$ |
| Assistant admin Officer | 2 | 70,000 | $1,680,000$ |
| Total | $\mathbf{1 1}$ | $\mathbf{8 4 9 , 0 0 0}$ | $\mathbf{1 1 , 5 5 6 , 0 0 0}$ |

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

Government of the Punjab decided to reform primary and secondary healthcare network into a robust, proficient and vibrant delivery system. It was a landmark initiative to revamp and rehabilitate DHQ/THQ Hospitals throughout the province. Revamping of DHQ and THQ Hospitals has been a flagship program of Primary and Secondary Healthcare Department. Scope of Revamping program includes six major components like (a) Addition of human resource, (b) Rehabilitation and improvement of infrastructure, (c) Supply of missing biomedical and non-biomedical equipment; (d) Introduction of IT-based solutions, (e) Outsourcing of allied services and (f) Standardization of hospital protocols. It was realized that a dedicated Project Management Unit (PMU) to be established to undertake this ambitious revamping program, which would steer all these components towards successful service delivery meeting the quality on priority basis.

### 5.9 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 multisectorial approach. The health care facilities and ongoing services provided in the hospital will seek strength and viability from its linkage and public ownership.

### 5.10 PATIENT MANAGEMENT PROTOCOL

### 5.10.1 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.

### 5.10.2 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.

### 5.10.3 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.

### 5.10.4 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.

### 5.10.5 PROJECT MONITORING COMMITTEE

A Project Monitoring Committee is hereby constituted as under to monitor the project regarding Revamping of Hospital.

1. DC Concerned
2. DMO, Concerned
3. Executive Engineer Buildings
4. AC Concerned
5. MS DHQ Hospital
(Chairman)
(Member)
(Member)
(Member)
(Secretary/Member)

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

### 6.1 JUSTIFICATION OF PROJECT

attached

## 6. 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-I. The Population of Tehsil Shujabad District Multan is more than 0.600 million. The area of the THQ Hospital Shujabad District Multan is 412410 SFT land.

### 6.1 DESCRIPTION AND JUSTIFICATION

Government of the Punjab has taken a special initiative for Revamping of DHQs and THQs hospitals all over the Punjab. The instant PC-I is meant for completion of Balance work of Revamping of the said Hospital. For this purpose a block allocation of Rs. 1300 million has been earmarked in ADP at G.S.No 660 during 2022-23. Hence the PC-I is submitted.

Punjab has a unique burden of disease where on the one hand preventable diseases still take a heavy toll, on the other hand, diseases which were previously believed to have had been effectively curtailed, have re-emerged. This is particularly in view of the targets set under Sustainable Development Goals (SDGs) such as the end of epidemics such as aids, tuberculosis and malaria by the year 2030, and control over hepatitis, water-borne diseases and other communicable diseases while reduction to one-third of premature mortality due to non-communicable diseases through ensuring availability of effective prevention and treatment.

Primary Health sector in the province is not in a satisfactory condition at this point in time. In order to pay better attention to the primary and secondary health department, the Government of Punjab has created a new department. Government plans to launch a major program comprising several major projects and interventions in the primary health sector with a view to carry out a 360 overhaul of the health machinery. This program will be launched in 25 DHQ hospitals and 100 THQ hospitals of the province.

## JUSTIFICATION FOR REVISION OF PC-I

1. Civil work revamping of all DHQ \& 15 THQ Hospitals was undertaken during the FY 2016-17 through Infrastructure Development Authority Punjab (IDAP). Later on the IDAP informed that they will not be able to take the next revamping plan of DHQ/THQ Hospitals of Punjab on the grounds that it does not fall in the project role of IDAP specified in the 36th meeting of Principal Cabinet of IDAP held on 06-10-2020. Accordingly, on the basis of revised RCE of IDAP and de-scope civil work for 25 sub-schemes of all DHQ and 15 THQ Hospitals have been approved from

PDWP in its meeting held on 36-03-2021 and DDSC meeting held on 29-04-2021. Sub-schemes of all DHQ \& 15 THQ Hospitals were concluded.
Thereafter it was decided to complete the balance civil work of revamping through C\&W Department and a block scheme titled "Balance Work of Revamping of all DHQ/15 THQ Hospitals in Punjab" was included in ADP 2021-22. Accordingly, the Rough Cost estimates of balance civil work has been got prepared from the Punjab Buildings Department for preparation of PC-Is and were approved from the DDSC. 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 increased from Rs. 136.550 million to Rs. 138.624 million due to few changes in the scope and MRS rates (2 ${ }^{\text {nd }}$ Bi-annual 2022).
2. 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 $60^{\text {th }}$ PDWP meeting as under: -

| Name of Posts | $60^{\text {th }}$ PDWP Meeting |  |  |
| :---: | :---: | :---: | :---: |
|  | PPS Assigned | Permissible Range (PKR) \& Annual incremen | Approved Pay Package |


| HR \& Legal Officer, IT \& Statistical Officer, <br> Admin Officer, Procurement Officer, Finance <br> \& Budget Officer, Logistics Officer, Quality | PPS-6 | $75,000-105,000$ <br> $(8 \%$ annual incr.) | 75,000 |
| :--- | :--- | :--- | :--- |
| Assurance Officer, Audit Officer and <br> Biomedical Engineer |  |  |  |
| Assistant Admin Officer | PPS-5 | $50,000-75000$ <br> $(10 \%$ annual incr. $)$ | 50,000 |
| Data Entry Operator | PPS-3 | $35,000-55,000$ <br> $(10 \%$ annual incr. $)$ | 35,000 |

Now the Planning \& Development Board vide letter No.12(24)PO(COORDII)P\&D/2022 dated 14-07-2022 has informed that revised standard pay package were discussed and approved by the $83^{\text {rd }}$ 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. Due this the revenue component meant only for salaries of NMS staff has been increased.
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 all DHQ /15 THQ Hospitals and hence PCI has been proposed till 30-06-2025.
6.1.2 DHQ/THQ Hospitals covered under the Project: The location map of the DHQ and THQ hospitals that will be taken up for rehabilitation in this program are


The names of the DHQ and THQ hospitals that will be taken up for completion of balance work of in this program are given below:

1 DHQ Hospital Attock
2 DHQ Hospital Bahawalnagar
3 DHQ Hospital Bhakhar
4 DHQ Hospital Chakwal
5 DHQ Hospital Chiniot
6 DHQ Hospital Hafizabad

7 DHQ Hospital Jhang
8 DHQ Hospital Jhelum
9 DHQ Hospital Kasur
10 DHQ Hospital Khanewal
11 DHQ Hospital Khushab
12 DHQ Hospital Layyah
13 DHQ Hospital Lodhran
14 DHQ Hospital MBD
15 DHQ Hospital Mianwali
16 DHQ Hospital Muzaffargarh
17 DHQ Hospital Nankana Sahib
18 DHQ Hospital Narowal
19 DHQ Hospital Okara
20 DHQ Hospital Okara South City
21 DHQ Hospital Pakpattan
22 DHQ Hospital Rajanpur
23 DHQ Hospital Sheikhupura
24 DHQ Hospital T T Singh
25 DHQ Hospital Vehari
26 THQ Hospital Ahmedpur East District Bhahawalpur
27 THQ Hospital Arifwala District Pakpattan
28 THQ Hospital Burewala District Vehari
29 THQ Hospital Chichawatni District Sahiwal
30 THQ Hospital Chistian District Bhahawalnagar
31 THQ Hospital Daska District Sialkot
32 THQ Hospital Esa Khel District Mianwali
33 THQ Hospital Gojra District Toba Tek Singh
34 THQ Hospital Hazro District Attock
35 THQ Hospital Kamokee District Gujranwala
36 THQ Hospital Kot Addu District Muzaffargarh
37 THQ Hospital Mian Channu District Khanewal
38 THQ Hospital Noorpur Thal District Khushab
39 THQ Hospital Shujabad District Multan
40 THQ Hospital Taunsa District Dera Ghazi Khan

### 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:LO21010560
A/C To be Credited:Assan Assignment

PKR Million

| $\mathbf{S r}$ <br> $\#$ | Object Code | $\mathbf{2 0 2 1 - 2 0 2 2}$ |  | $\mathbf{2 0 2 2 - 2 0 2 3}$ |  | $\mathbf{2 0 2 3 - 2 0 2 4}$ |  | $\mathbf{2 0 2 4 - 2 0 2 5}$ |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Local | Foreign | Local | Foreign | Local | Foreign | Local | Foreign |
| $\mathbf{1}$ | A05270-To Others | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| $\mathbf{2}$ | A12403-Other <br> Buildings | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
|  | Total | $\mathbf{0 . 0 0 0}$ | $\mathbf{0 . 0 0 0}$ | $\mathbf{0 . 0 0 0}$ | $\mathbf{0 . 0 0 0}$ | $\mathbf{0 . 0 0 0}$ | $\mathbf{0 . 0 0 0}$ | $\mathbf{0 . 0 0 0}$ | $\mathbf{0 . 0 0 0}$ |

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

Grant Number:Government Buildings - (PC12042)
LO NO:LO22010099
A/C To be Credited:Account-I

| Sr <br> $\#$ | Object Code | $\mathbf{2 0 2 1 - 2 0 2 2}$ |  | $\mathbf{2 0 2 2 - 2 0 2 3}$ |  | $\mathbf{2 0 2 3 - 2 0 2 4}$ |  | $\mathbf{2 0 2 4 - 2 0 2 5}$ |  |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | A12403-Other <br> Buildings | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| $\mathbf{2}$ | A05270-To Others | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
|  | Total | $\mathbf{0 . 0 0 0}$ | $\mathbf{0 . 0 0 0}$ | $\mathbf{0 . 0 0 0}$ | $\mathbf{0 . 0 0 0}$ | $\mathbf{0 . 0 0 0}$ | $\mathbf{0 . 0 0 0}$ | $\mathbf{0 . 0 0 0}$ | $\mathbf{0 . 0 0 0}$ |

1. Building: Renovation of existing building will be required. In this regard an estimates has been prepared from the Punjab Buildings department (C\&W Department) and attached with the PC-I.
2. Human resource: Human resource is required for implementation of project - Provision of salaries of staff of New Management Structure (NMS) working in the said hospital till the vacation of stay by the honorable Lahore High Court, Lahore and completion of conversion of these posts to non-development mode.

## Abstract of Cost

| Name of THQ Hospital | Shujabad |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Scope of work | Orignal |  |  | 1st Revised |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | Capital | Revenue | Total | Capital | Revenue | Total |
| Capital component | 97.413 | 0.000 | 97.413 | 84.508 | 0.000 | 84.508 |  |  |  |  |  |  |  |  |
| Internal Development | 35.852 | 0.000 | 35.852 | 49.352 | 0.000 | 49.352 |  |  |  |  |  |  |  |  |
| External Development | 3.285 | 0.000 | 3.285 | 4.764 | 0.000 | 4.764 |  |  |  |  |  |  |  |  |
| Water filtration plant | $\mathbf{1 3 6 . 5 5 0}$ | $\mathbf{0 . 0 0 0}$ | $\mathbf{1 3 6 . 5 5 0}$ | $\mathbf{1 3 8 . 6 2 4}$ | $\mathbf{0 . 0 0 0}$ | $\mathbf{1 3 8 . 6 2 4}$ |  |  |  |  |  |  |  |  |
| Total Capital Component |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Revenue component | 0.000 | 17.520 | 17.520 | 0.000 | 38.514 | 38.514 |  |  |  |  |  |  |  |  |
| Human resource (HR) plan | $\mathbf{0 . 0 0 0}$ | $\mathbf{1 7 . 5 2 0}$ | $\mathbf{1 7 . 5 2 0}$ | $\mathbf{0 . 0 0 0}$ | $\mathbf{3 8 . 5 1 4}$ | $\mathbf{3 8 . 5 1 4}$ |  |  |  |  |  |  |  |  |
| Total Revenue component | $\mathbf{1 3 6 . 5 5 0}$ | $\mathbf{1 7 . 5 2 0}$ | $\mathbf{1 5 4 . 0 7 0}$ | $\mathbf{1 3 8 . 6 2 4}$ | $\mathbf{3 8 . 5 1 4}$ | $\mathbf{1 7 7 . 1 3 8}$ |  |  |  |  |  |  |  |  |
| Total | $\mathbf{1 3 6 . 5 5 0}$ | $\mathbf{1 7 . 5 2 0}$ | $\mathbf{1 5 4 . 0 7 0}$ | $\mathbf{1 3 8 . 6 2 4}$ | $\mathbf{3 8 . 5 1 4}$ | $\mathbf{1 7 7 . 1 3 8}$ |  |  |  |  |  |  |  |  |
| Grand Total |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Human Resource Model of THQ Hospital

|  | Original |  |  |  | 1st Revised |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NAME OF POST | No. of Emplyees | Per Month Salary | Salary for all | Salary for Two Years | No. of Emplyees | rroject <br> Pay | Month | Month | Salary for Two Years |
| ADMIN OFFICER | 1 | 80,000 | 80,000 | 1,920,000 | 1 | 6 | 105,000 | 105,000 | 3,255,000 |
| HUMAN RESOURCE/LEGAL OFFICER | 1 | 80,000 | 80,000 | 1,920,000 | 1 | 6 | 105,000 | 105,000 | 3,255,000 |
| IT/STATISTICAL OFFICER | 1 | 80,000 | 80,000 | 1,920,000 | 1 | 6 | 105,000 | 105,000 | 3,255,000 |
| FINANCE \& BUDGET OFFICER | 1 | 80,000 | 80,000 | 1,920,000 | 1 | 6 | 105,000 | 105,000 | 3,255,000 |
| PROCUREMENT OFFICER | 1 | 80,000 | 80,000 | 1,920,000 | 1 | 6 | 105,000 | 105,000 | 3,255,000 |
| DATA ENTRY OPERAOTOR (DEO) | 2 | 35,000 | 70,000 | 1,680,000 | 2 | 3 | 44,000 | 88,000 | 2,728,000 |
| QUALITY ASSURANCE OFFICER | 1 | 80,000 | 80,000 | 1,920,000 | 1 | 6 | 105,000 | 105,000 | 3,255,000 |
| LOGISTICS OFFICER | 1 | 80,000 | 80,000 | 1,920,000 | 1 | 6 | 105,000 | 105,000 | 3,255,000 |
| $\begin{aligned} & \text { ASSISTANT ADMIN } \\ & \text { OFFICER } \\ & \hline \end{aligned}$ | 2 | 50,000 | 100,000 | 2,400,000 | 2 | 5 | 70,000 | 140,000 | 4,340,000 |
| Sub Total of HR Model | 11 |  | 730,000 | 17,520,000 | 11 | 50 | 849,000 | 963,000 | 29,853,000 |
|  |  |  |  | 17.520 |  |  |  |  | 29.853 |
| Utilization of HR Component |  |  |  | 8.661 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 38.514 |



BUIILDINGS BIVISION NO. 2 MULTAN

## Revised.

AMENDEQ-ROUGH COST ESTIMATE FOR "BALANCE WORK OF REVAMPING OF ALL DHQ AND 15 THQ HOSPITALS OF PUNJAB, REVAMPING. OF TEHSIL HEĀD QUARTER HOSPITAL SHUJABAD" (GS NO. 1013, ADP-2021-22, GS NO. 658 ADP-2022-23)
138.624

Rs. $147.55 \pm(\mathrm{M})$

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## OFFICE OF THE EXECUTIVE ENGINEER, BUILDINGS DIVISION NO.2, MULTAN

AMENDED ROUGH COST ESTIMATE FOR "BALANCE WORK OF REVAMPING OF ALL DHQ AND 15 THQ HOSPITALS OF PUNJAB, REVAMPING OF TEHSIL HEAD QUARTER HOSPITAL SHUJABAD" (GS NO. 1013, ADP-2021-22, GS NO. 658 ADP-2022-23)

Reference: Joint Visit of PMU Team \& C\&W Department dated 28.06.2022, Project Management Unit Letter No. PMU/(P\&SHD)/2021/. Dated 06:08.2021, No. 285/ADM/THQ/SJB Dated 08.09.2021, SOB-I(C\&W)2-11/2021/19986 Dated 15.06.2021, PMU/(P\&SHD)/2021/1257 Dated 14.06.2021; PMU/(P\&SHD)/2021/1256 Dated 14.06.2021

## History:

- Primary \& Secondary Health Department is making extensive efforts for a state-of-the-art effective healthcare system. Improvement and rehabilitation of secondary healthcare facilities (District \& Tehsil Headquarter (THQ/DHQ) Hospitals) is an important step in this regard. P\&SHD for the sake of renovation/revamping, has bifurcated all secondary healthcare facilities in two phases i.e Phase-1 (25 DHQs and 15 THQs) and Phase-II (Remaining THQ Hospitals) Project Aanagement Unit under P\&SHD was established for smooth execution and seamless coordination of the said project.

After the detailed working and preparation of drawings and estimates etc. The physical work on Phase-I Hospitals was started in Mid-2017 through Infrastructure Development Authority Punjab (IDAP) after seeking approval from competent forums. Unfortunately, due to financial crunch and lack of fundings in Annual Development Programs, the physical work was slowed down and, in some cases, halted on site. Finally, IDAP formally refused to take up the next revamping works.

Now, the PMU P\&SHD intends to revamp its secondary healthcare facilities and a block named "Balance Works of DHQ\& THQ Hospitals Phase-l" has been allocated in ADP FY゙ 202:1-22. As per the directions of PMU, detailed survey was conducted and a Rough Cost Estimate amounting to Rs. 136.550 (M) was submitted, keeping in view the reconstruction of the dilapidated clinical building.

Later on, Building Research Station Lahore team visited the site and proposed the replacement of the roof slab of the dilapidated building instead of re-construction of the building-vide report ref No. BADV/3686-dated 09.12.2021. PMU P\&SHD again visited the site and revised scope was identified and requested to submit Revised Rough Cost Estimate. Keeping in view above, Amended Rough Cost Estimate amounting to Rs.447.551 (M) has been prepared on the basis of MRS / Plinth Area Rates of ( $2^{\text {nd }} \mathrm{Bi}$-Annual 2022) for arrangement of the Administrative Approval \& funds from the competent authority.

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## SCOPE OF WORK.

Detailed scope attached.
RATES: - Rates provided in the estimate as per fixed by the Finance Govt. of the Punjab MRS $2^{\text {nd }} \mathrm{Bi}$ Annual 2022 ( $1^{\text {st }} \mathrm{Jul} 2022$ to 30 Dec 2022).

## SPECIFICATIONS:

Standard specifications of the Punjab Building department will be followed during the execution of works to the entire satisfaction of Engineer Incharge.

LAND: . No provision of cost of land has been made in the estimate as the same is already available with the department concerned.
$1438-624$
COST: - The total cost-comes to Rs. 1477:5517 (Thittion)
TIME: . It will take 18 Months to complete the work from the actual date of commencement if full. funds are made available well in time.


Page 2 of 2

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| Sr No | Item | Admin Block | Linking Corridor, Outer Corridor, and Inner Corridor Between Admin Block and Diagnostic Block | Diagnostic Block (OT \& X-Ray) | Linking Corridor, Outer Corridor and Inner Corridor Between Diagnostic Block and Indoor Block | Indoor Block (Male, Female and Dialysis Ward) | Trauma Center | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Porcelain Floor Tile replacement | Note: No work needs to be done in already Revamped area by IDAP. <br> All floor tiles full body porcelain needs to be fixed in Admin block Portion not revamped by IDAP | In outer corridor of Diagnostic Block all floor tiles futl body porcelain needs to be fixed. In finking corfidor between Admin block and Diagnostic block all floor tites full body porcelain need to be fixed. <br> All floor tiles full body porcelain needs to be fixed in inner corridor between X-Ray and OT Block. | Alf floor tiles full body porcelain needs to be fixed on entire floor in Diagnostic (OT \& X-Ray) Block. <br> All floor tles full body porcelain needs to be fixed in entre OT block except inside OT. | All floor tiles full body porcelain needs to be fixed in Main corridor and inner corridor of Indoor Block. <br> In Outer corridor of Indoor Block all floor tiles futl body porcelain needs to be fixed. | Ail floor tiles fuil body porcelain need to be fixed in entire male. female and dialysis wards. Note: No floor tiles need to be fixed in Medicine Store. | All floor tiles need to be retained. | Tiles specifications, brand, size and Installation will be as per specified C\&W standards. |
| ${ }^{2}$ - |  | All wall/dado tiles full body porcelain in non revamped portion needs to be fixed up to height as per existing wall/dado fixed by IDAP in rèvamped area Note Wali/dado must be upto 5 ft . or as per existing corridor dado level and $6^{\prime \prime}$ inside rooms/offices. | In outer corridor of Diagnostic Block afl wall/dado tiles full body porcelain needs to be fixed up to height of 6 ft . <br> In linking corridor between Admin block and Diagnostic block all wall/dado tiles full body porcelain needs to be fixed Alt wall/dado tiles full body porcelain up to height of 6 f. needs to be fixed in inner corridor between X-Ray Block and OT Block. Note Wall/dado must be upto 5 ft . or as per existing corridor dado level and $6^{\prime \prime}$ inside rooms/offices. | All wailldado tiles full body porcelain need to be fixed in Diagnostic Block (OT \& X-Ray) Note Wall/dado must be upto 5 ft . or as per existing corridor dado levef and 6 " inside rooms/offices. | All wall/dado tiles fuil body porcelain up to height of 6 ft . needs to be fixed in main corridor and inner corridor of Indoor Block. In outer corridor of Indoor Block all wall/dado tiles need to be fixed. | All wall/dado tiles full body porcelain needs to be fixed inside Male. Femaie and Dialysis Wards with 6ft height in corridor and wards and 6" skirting inside Rooms/Offices. Note: No wall/dado tiles need to be fixed in Medicine Store. | All wall/dado tiles need to be retaned. | Tiles specifications. brand, size and Installation will be as per specified C\&W standards. |
| D | Wooden Doors flush or Solid/ Main Doors and Aluminum Doors | All doors in non revamped portion needs to be fixed matching with the doors fixed in revamped portion. | Oniy damaged doors (which are few) will be replaced by Solid flush doors. Remaining doors will only be repainted properly after scrapping the old paint. | Only damaged doors will be replaced by new wooden doors. Remaining doors in good condition will only be repainted properly after scrapping the old paint. <br> All Entrance and Exit doors of wards need to be replaced with Aluminum doors half solid and half glazed glass fixed on it. | Only damaged doors need to be replaced with new wooden doors. Most of the Doors are in good condition needs to be retained and only needs to be repainted/ repolished. <br> All wards entrance and exit doors need to be replaced with Aluminum doors half sotid and half glazed glass. | Only damaged doors need to be replaced with new wooden doors. Most of the Doors are in good condition needs to be retained and only needs to be repainted/repolished. All wards entrance and exit doors need to be replaced with Aluminum doors half solid and half glazed glass. | All Existing doors need to be retained. $\square$ | Specifications. wood/type of door, polish, door locks and handles will be às per specified C\&W standards. |

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| 4 | Verandah opening (opening to open area)/ MS Windows on Façade | All damaged MS angle iron \& jaali will be replaced with new MS angle iron \& double jaali | All damaged MS angle iron \& jaati will be replaced with new MS angle iron \& double jali. | Not Required. | All damaged MS angle iron \& jaall will be replaced with new MS angle iron \& double jaali. | All damaged MS angle iron \& jaali will be replaced with new MS angle iron \& double jaali | Not Required. | Specifications will be as per C\&W standards |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | Existing Internal Windows | All Existing MS internal windows need to be replaced with Aluminium Windows MS Windows at façade and inside rooms/offices not revamped by IDAP Aluminum windows need to be fixed matching with existing windows fixed by IDAP. | All Existing MS internal windows of outer corridor, inner corridor and linking corridor between Admin Block and OT Block needs to be replaced with Aluminium Windows. | All Existing MS interna! windows in Diagnostic Block (OT \& X-Ray) needs to be replaced with Aluminum Windows. <br> All windows other than Aluminum inside Diagnostic Block (OT \& XRay) needs to be replaced with Aluminum | All Existing MS internal windows of outer comidor and inner corridor needs to be replaced with Alumnium Windows. | All Existing MS internal windows inside male, female and Dialysis wards need to be replaced with Aluminium Windows. | All windows need to be retained. | Specifications, Alumınum and giass color will be as per specified C\&W Standards |
| 6 | Internal Electric fitings | All Electric fittings including switch boards, plates. sockets. wires, DBs \& bracket fans should be replaced and instafled at standard height from Finish Floor level and all must be identical. All old switch fittings \& DBs if requires need to be changed | Alf Electric fittings including switch boards, plates, sockets wires, DBs \& bracket fans should be reptaced and installed at standard height from Finish Floor level and all must be identical. All old switch fittings \& DBs if requires need to be changed. | All Electric fittings including switch boards. plates, sockets. wires, DBs \& bracket fans should be replaced and installed at standard height from Finish Fioor level and all must be identical All old switch fittings \& DBs if requires need to be changed. | All Electric fittings including switch boards, plates, sockets, wires, DBs \& bracket fans should be replaced and installed at standard height from Finish Floor level and all must be identical. All old switch fittings \& DBs if requires need to be changed | All Electric fittings including switch boards, plates, sockets, wires. DBs \& bracket fans should be replaced and installed at standard height from Finish Floor level and all must be identical. <br> All old switch fittings \& DBs if requires need to be changed. | Not Required. | Modet Specifications/ Brands, should be as per specified C\&W Standards. |
| 7 | Internal Lighting Fixtures | All corridors and rooms should lit with SMD's with concealed wring - | All corridors and rooms should lit with SMD's with concealed <br> wiring. $\qquad$ $\qquad$ | All corridors and rooms should lit with SMD's with concealed wiring at 8 ft distance. <br> All old switch fittings \& OBs if requires need to be changed. | All corridors and rooms should lit with SMD's. with_concealed wiring. | All corridors and rooms should lit with SMD's with concealedr wiring. | Not Required | Model Specifications/ Brands and distance shoūld be as per specified C\&W Standards. |
| 8 | Revamping of Public Toilets | All washrooms in Non Revamped area only needs to be revamped completely by fixing full body porcelain tiles on floor and full body porcelain tiles on wall up to a minimum height of 7 ft . All existing fixtures should be replaced with new fixtures along with new water supply (where damaged) and sewerage connections (where damaged) <br> Entrance doors of all washrooms need to be replaced with UPVC doors. | Not Required | All washrooms in Diagnostic <br> Block (OT \& X-Ray) needs to be revamped completely by fixing full body porcelan tiles on floor and full body porcelain tiles on wall up to a minimum height of 7 ft . All existing fixtures should be replaced with new fixtures along with new water supply (where damaged) and sewerage connections (where damaged). Entrance doors of all washrooms need to be replaced with UPVC doors. <br> Common vanities to be made. - | Not Required | All washrooms need to be revamped completely by fixing full body porcelain tiles on floor and fuil body porcelain tiles on wall up to a minimum height of 7 ft . All existing fixtures should be replaced with new fixtures along with new water supply (where damaged) and sewerage connections (where damaged). Entrance doors of all washrooms need to be replaced with UPVC doors. | All washrooms need to be revamped completely by fixing full body porcelain tiles on floor and full body porceiain tiles on wall up to a minimum height of 7 ft . All existing fixtures should be replaced with new fixtures along with new water supply (where damaged) and sewerage connections (where damaged). <br> Entrance doors of all washrooms need to be $\qquad$ replaced with UPVC doors. | Vanity, wash basin. water closets, bath room accessories, tile size and color will be as per specified C\&W standards. <br> All Washroom doors should be replaced with UPVC doors having specified C\&W Standards. |

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| 18 | External Weather Shield | External weather shield of grey and white pattern of first class quality needs to be done on the front Elevation missing portion only matching as per IDAP revamped area. | External weather shield of grey and white pattern of first class quality needs to be done on the front Elevation only | External weather shield of grey and white pattern of first class quatity needs to be done on the front Elevation only. | Externat weather shield of grey and white pattern of first class quality needs to be done on the front Elevation only | External weather shield of grey and white pattern of first class quality needs to be done on the front Elevation only | Not Required. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | Edge Protection | SS Edge Protection needs to be fixed on all corners up to height of Wall/Dado tiles. | SS Edge Protection needs to be fixed on all corners up to height of Wall/Dado tiles. | SS Edge Protection needs to be fixed on all corners up to height of 5 ft till the height of Wall/Dado tiles | SS Edge Protection needs to be fixed on all corners up to height of Wall/Dado tiles. | SS Edge Protection needs to be fixed on all comers up to height of Wall/Dado tiles | Not Required. |  |
| 20 | Cotumns SS Cladding | SS Cladding required to be done on Columns at entrance. | Not Required | SS Cladding required to be done on Columns at entrance. | Not Required | SS Cladding required to be done on Columns at entrance. | Not Required. |  |
| 21 | Plumbing Works | Damaged Water supply \& sewerage pipes causing seepage to be repaired \& rectified. | Damaged Water supply \& sewerage pipes causing seepage to be repaired \& rectified. | Damaged Water supply \& sewerage pipes causing seepage to be repaired \& rectified. | Damaged Water supply \& sewerage pipes causing seepage to be repaired \& rectified. | Damaged Water supply \& sewerage pipes causing seepage to be repaired \& rectified | Not Required. |  |
| 22 | Fire Alarm System | Required. | Required. | Required. | Required | Required. | Required |  |
| 23 | Expansion joint of Building | Treat expansion joint of building properly \& cover it with SS plate and water bearer inside as per C\&W standards. <br> Expansion joints on roof top to have double wall covered with pre cast slabs and sealing gaps between slabs properly. | Treat expansion joint of building properly \& cover it with SS plate and water bearer inside as per C\&W standards. <br> Expansion ;oints on roof top to have double wall covered with pre cast slabs and sealing gaps between-slabs properiy. | Treat expansion joint of building properly \& cover it with SS plate and water bearer inside as per $\mathrm{C} \& \mathrm{~W}$ standards. <br> Expansion joints on roof top to have double wall covered with pre cast slabs and sealing gaps between slabs properly. | Treat expansion joint of building properly \& cover it with SS plate and water bearer inside as per C\&W standards <br> Expansion joints on roof top to have double wall covered with pre cast slabs and sealing gaps between slabs properly. | Treat expansion joint of building properly \& cover it with SS plate and water bearer inside as per C\&W standards. <br> Expansion joints on roof top to have double wall covered with pre cast slabs and sealing.. gaps between slabs properly. | Not Required. |  |

V

SCOPE FOR REVAMPING OF HEALTH FACILITY THQ HOSPITALSHUJABAD MULTAN

|  | Sr No | Description | Condition | Additional Information | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Water Supply System |  | New OHR of 10,000 gallons capacity is required. <br> New Water supply lines HDP from OHR to Clinical blocks of Hospital needs to be laid and their connections with Clinical Blocks need to be done. |  |
| $\cdots$ |  | Sewerage System |  | Sewerage line of Hospital needs to be disilted ànd cleaned. Only blocked lines to be replaced with new lines of appropriate size. <br> New detention tank to be made with sludge pump fixed inside it. |  |
| \% |  | External Pathways |  | No work Required only patch work needs to be done on Roads. |  |
|  |  | Boundary Wall |  | Not Reqūired | 1 |
| $\because$ |  | Main Gate |  | Not Required | 1 |
|  |  | Sources of Electircal Supply |  | Demand Notice to be paid for Dual Supply or Express Line. | 1 |
| 7 |  | Transformer |  | Requirement of transformer will be assessed after visit of Wapda \& DN to be paid accordingly as per site requirement. |  |
| , |  | ATS Panel for Generators |  | As per site requirement. | : |
| * |  | Electrical Panel Room |  | Electrical Room needs to be made. 1 | 1 |
|  |  | External Wires |  | All external wires/cables should be replaced after detail electrical analysis \& design! Moreover these main wires should be concealed in all respects. f | , |
|  |  | Water Filtration Plant |  | Filtration plant with room is required to be made in Hospital. |  |
|  |  |  |  | 1 | 1 |
| \% |  |  |  | I | 1 |
| - |  |  |  | I | 1 |
| * |  |  |  | 1 | . |
| - |  |  |  | 1 | 1 |
|  |  |  |  | 1 | 1 |
|  |  |  |  |  | + |


2. account.

## Capital Component <br> Grail No .12042 (042) Government Building04-Economic Affairs-045 Constructioniand Transport -0457 Construction (Work)0457-02 Building and structure.

## Revenue Component

Grant No. PC-22036 (036) Development -07Health -073Hospital Seravices-0731-General Hospital Services:073101 General Hospital Services.



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

1. Accountant General, Punjab, Lahore.
2. Chief (Healt h-II), Planning \& Development Department, Lahore.
3. Director General Health Services, Punjab, 24-Cooper Road, Lahore.
4. Chief Engineer (North, Central \& South Zones), Buildings Department.
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 (Lev \& Fin), 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 (D-II)

Page 2 of

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

## NO. \& DATE EVEN:

A copy is forwarded for information and necessary acion to the.-

1. Accountant General, Punjab, Lahore.
2. Chief (Health-II), Planning \& Development Department, Lahore.
3. Director General Health Services, Punjab, 24-Cooper Road, Lahore.
4. Chief Engineer (North, Central, South Zones), Buildings Department.
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. PSO to Secretary, P\&SH Department.
10. PA to Additional Secretary (Dev \& Fin), P\&SH Department.
11. PA to Additional Secretary (Admin), P\&SH Department.

(M. ASIF RASHEED) PLANNING OFFICER (D-II)
i)

BALANCE WORK OF DHQ/THQ HOSPITALS REVAMPING OF TEHSIL HEAD QUARTER HOSPITAL SHUJABAD ROUGH COST ESTIMATE



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## TVHOBT

BMEDIMC GEREVBCHEEVLIOM

INSPECTION REPORT ON BALANCE WORK OF REVAMPING OF TEHSIL HEAD QUARTER HOSPITAL (THQ), SHUJABAD, DISTRICT MULTAN

## 1. GENERAL

A reference from Executive Engineer, Buildings Division-II, Multan was received in this Directorate vide letter No. 872/DB, dated 27.10.2021 regarding the dangerous condition of abandoned building portion of THQ Hospital, Shujabad.

## 2. SITE VISIT

In pursuance of aforementioned reference, a team from Building Research Station, Lahore headed by Mr. Muhammad Haseeb Khan, Deputy Director-l proceeded to the site on 23.11.2021 along with Mr. Muneer Ahmed, Sub Divisional Officer, Buildings Sub Division, Shujabad. Moreover Mr. Shahid Babar, Supervisor, Mechanical, Electrical, Plumbing, Generator Operations and Maintenance (MEPG), THQ Hospital, Shujabad also accompanied team during inspection.

## 3. INSPECTION

The single storey masonry structure of THQ Hospital had been constructed more than 50 years ago. Some portion of front Block of Hospital was revamped in 2017-18 and it was functional since then. However, the roof treatment of this Revamped Block was not carried out. It is further added that the Admin Block and Clinical Block were not retrofitted. The Clinical Block (back side block) had been abandoned since long due to dangerous condition of the roof slabs. However, Dialysis Unit was functional at some portion of this Block. The RCC roof slabs of Clinical Block and Admin Block were found in dilapidated condition. The concrete cover spalled out at most of the places of Wards, Corridors and Rooms at Admin Block. The Soffit plaster was loose and detached from roof. The condition of roof of this Dialysis ward was found dangerous where patients were being treated. The detached pieces of disrupted concrete might fall on the patient at any time. The steel bars were exposed and corroded heavily. Some of the bars were reduced in diameter owing to corrosion at Clinical Block.

The excessive dampness was observed in roof slab and walls due to improper drainage over the roof. The slope of roof was found uneven considerably. The cement:sand:grouting was damaged and cracks were developed between roof tiles. The spouts were choked. The plaster on parapet wall was deteriorated at many locations at Clinical Block.

Moreover, the waste building material was dumped over the roof of revamped portion which also caused dampness in structure. The wires and cables were scattered on roof of revamped portion. The roof treatment of revamped block was also found in worn out condition. In addition, the rain water down pipes were broken and missing at some places of Clinical Block. The bricks were deteriorated due to efflorescence at some lower portion of Clinical Block. The RCC shades on windows and entrance towards mosque were deteriorated and disintegrated. The floors and masonry walls were found intact as no settlement or structural crack was observed at any place of Hospital Building.

## 4. CONCLUSION

Keeping in view the existing condition of the main building of THQ Hospital, Shujabad, it is concluded that the revamped portion of Hospital is structurally stable and intact. However, the roof slabs of Clinical Block and
inspection Report On Stuclural Slability Of Baiance Work OI Revamping Of Tehsil Head Quarter Hospilal (Thq). Shujabad, Distritit Muitan Admin Block are found in dilapidated condition which need immediate measures regarding replacementrepair for further safety and durability.

## 5. RECOMMENDATIONS

In view of foregoing, following recommendations are suggested:-
i. The roof slabs of Clinical Block should be replaced.
ii. The damaged concrete cover in Admin Block should be repaired by using Ferrocement. In this process, the loose and damaged concrete should be removed. The rust on steel bars should be scrapped off thoroughly by using a hard brush. Subsequently, epoxy resin like styrene butadiene needs to be applied on the substrate. Then, expanded metal (mesh) should be nailed at regular spacing before the provision of soffit plaster.
iii. The roof treatment of Revamped Block of Hospital should be re-provided.
iv. The parapet walls of entire Hospital Building need to be re-plastered appropriately.
$v$. The broken and missing rain water down pipes should be re-installed.
vi. The Dialysis centre should be shifted from the dangerous portion of Clinical Block to any other safe place so that an untoward situation may be avoided.


Building Research Station, Lahore

AMENDED ROUGH COST ESTIMATE FOR "BALANCE WORK OF REVAMPING OF ALL DHQ/15 THQ HOSPITALS IN PUNJAB, ONE AT THQ SHUJABAD, DISTRICT MULTAN" (ADP-2022-23 GS NO. 658)


AMENDED ROUGH COST ESTIMATE FOR "BALANCE WORK OF REVAMPING OF ALL DHQ/15 THQ HOSPITALS IN PUNJAB, ONE AT THQ SHUJABAD, DISTRICT MULTAN" (ADP-2022-23 GS NO. 658)


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AMENDED ROUGH COST ESTIMATE FOR "BALANCE WORK OF REVAMPING OF ALL DHQ/15 THQ HOSPITALS IN PUNJAB, ONE AT THQ SHUJABAD, DISTRICT MULTAN" (ADP-2022-23 GS NO. 658)

|  | Description | As per RC.E.E/A.A(As per Plinth AreaMRS 2nd Bj-Annual 2021) |  |  |  |  | $\begin{gathered} \text { As per Rvised Rough Cost Estimate } \\ \text { (As per Plinth AreaMRS 2nd Bi-Anmal 2022) } \end{gathered}$ |  |  |  |  |  |  |  |  | Difference |  | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. |  | Area | Unit | Rate | Unit | Amount | Total Area |  | ${ }_{\text {B } P}$ |  | EI | $\boldsymbol{P , H , P}$ | Total | Unit | Amount | Excess | Saving |  |
| 10. | Providing And Applying Architectural Wall Coating (Sandex) I/C Preparing Surface And Applying 2 mm Thick Acraylic Chips Paste As Per Approved Texture And Colour By The Architect Or Engineer Incharge | 6929 | St | 44 | P.Sft | 304,876 |  |  |  |  |  |  |  |  | - | - | 304,876 | Deleted due to new scope provided by the Client |
| II- | P/F Glazed Commode coupted with Glazed Flushing Cistern 03-Gallons capacity (Master OP-1) Prime quality of approved color and design complete in all respect and as approved by the Engineer Incharge. | 15 | Nos. | 16880 | Each | 253,200 |  |  | . |  |  |  |  |  | - | - | 253,200 | Included in Civil Work at Sr. No. C(2) |
| 12. | Providing And Fixing Vanity Basin underneath the vanity slab, Design And Size of (MAster) Approved Quality íc cost of Botrle trap (037A) and Waste coupling(085A) Complete In All Respects And As approved by the Engineer Incharge | 15 | Nos. | 13000 | Each | 195,000 |  |  |  |  |  |  |  | . |  | - | 195,000 | Inctuded in Civil Work at Sr. No. C(2) |
| 13- | Providing And Fixing C.P basin mixer (Master 191) Approved Quality Complete In All Respects And As Approved by the engineer Incharge | 15 | Nos. | 9220 | Each | 138,300 |  |  |  |  |  |  |  |  | - | - | 138,300 | $\begin{gathered} \text { Included in Civil Work at } \\ \text { Sr. No. C(2) } \\ \hline \end{gathered}$ |
| 14- | P /F Muslim Shower Master made i/c flexible rod with C.P. double bib cock (master) best quality complete in all respects and as approved by the Engineer incharge | 28 | Nos. | 6700 | Each | 187,600 |  |  |  |  |  |  |  |  | - | - | 187,600 | Included in Civil Work at Sr. No. C(2) |
| 15. | Providing and Fixing of Exhaust fan $18^{\prime \prime}$ sweep Steel body frame G.F.C <br> Pak / Royal complete with electric connection a approved by the Engineer Incharge. | 6 | Nos. | 5700 | Each | 34,200 |  |  |  |  |  |  |  |  | - | - | 34,200 | Included in Civil Work at Sr. No. A(3) |
| 16- | Providing and Fixing of Bracker Fan 18* (As per approved manufacturers) complete with electric connection a approved by the Engineer Incharge. |  |  |  |  | - | 111 | Nos. | 5,300.00 |  | - |  | 5,300.00 | Each | 588,300 | 588,300 | - | Detuil \& Rate Analysis Atached |
| 17. | Supply:\& Installation of Phillips or Equivalent, LED Light $24^{\prime 2} \times 24^{4 \prime}$ (RC O91v LED $385 / 865 \mathrm{~W}$ ) in Fasle Ceilign of approved marufacturer itc cost of all labour \& material complete, as approved by the Engineer Incharge. | 65 | Nos. | 10560 | Each | 686,400 | 222 | Nos. | 14,820.00 | - | - | - | 14,820.00 | Each | 3,290,040 | 2,603,640 | - | Detail \& Rate Analysis Attached |
| 18. | Providing and Laying Insulation material of Extruded Polystyrene XP Sin Rigid Insulation / Foam Board on roof or walls, Density $32-38 \mathrm{Kg} / \mathrm{M}$, compressive strength $250-400 \mathrm{kpa}$, R -value 5 per inch thickness and water obsortaion ( $1 \%$ byvolume, cell structure clored cell) ic cutting and placing in position complete in alt respect. $1-1 / 2^{\prime \prime}$ thick | 20786 | sft | 8466 | \%Stt | 1,759,743 |  |  |  |  |  |  |  |  | - |  | 1,759,743 | Included in Civil Work at *- 4 <br> Sr. No. A(3) |
| 19 - | Making and fixing PVC Doors 1-1/2" thick consisting of PVC Frame and PVC Leaves icc hinges complete in all respects as approved design /color by the Engineer Incharge | 490 | Sft | 700 | P.St | 343,000 | 389 | Sf. | 1,040.00 |  | - |  | 1,040.00 | P.Sf | 404,560 | 61,560 | - | Detait \& Rate Analysis Attached |
| 20. | Providing and Fixing Stainless Steel Pipe 2" dia Hand Rail complete in all respects and as approved by the Engineer Incharge | 1264 | Rt | 460 | P.St | 581,440 |  |  |  |  |  |  |  |  | - | - | 581,440 | Included in Civil Work at Sr. No. A(3) |
| 21 - | P/F of LEAD Lining 2 mm thick lead sheet with wall for radiation protection upto roof height as aper instruction \& covering with MDF Board $3 / 4^{n}$ thick panelling $i / c$ frame of Kail Wood $1-1 / 2^{\prime \prime} \times 2^{n}$ i/c termite proofing \& fancy Deodar Wood Beading complete in all respect as approved and directed by the Engineer Incharge also, approved the Radiation Protecting agency etc. | 525 | St | 970 | P.St | 509,250 |  |  |  |  |  |  |  |  |  |  | 509,250 | Deleted due to new scope provided by the Client |
| $22-$ | P/F False ceilling (DAMPA) sheet $2^{2} \times 2^{\prime}$ imported fixed with Aluminum frame (TEE \& L) hanged with 10 No wire with RCC roof slab icc cost of Hook \& Scaffolding, carriage charges complete in all respect \& as | 18377 | St | 360 | P St | 6,615,720 | 1530 | Sft. | 360.00 |  | - |  | 360.00 | P.Sft | 550,800 | - | 6,064,920 | Detail \& Rate Analysis Attached |

amended rough cost estimate for "balance work of revamping of all dhe/15 the hospitals in punjab, one at the shujabad, district multan" (adp-2022-23 gS no. 658)

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AMENDED ROUGH COST ESTIMATE FOR "BALANCE WORK OF REVAMPING OF ALL DHQ/15 THQ HOSPITALS IN PUNJAB, ONE AT THQ SHUJABAD, DISTRICT MULTAN" (ADP-2022-23. GS NO. 658)


F-FALitional Items/Non-Schedule Items/Improved Generic Specifications

| $I-$Providing and inxing 2"X2" Stamless Stect 14 SWG Corner Guard angle <br> with bevelled corner and 0.8 mm bend at edges duly pasted with premium <br> grade self-adhesive glue strips with excellent hold/(double sided Tape) as <br> annowed and directed hv the Encinepr lacharar | 2780 | Rft. | 580 |  |  |  | 580 | P.Rft | 1,612,400 Detail \& Rate Analysis Attached |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Making And Fixing Stainless Steel Clading 20-SWG I/C Fixing With <br> 2- Screws On Columns Complete In All Respects And As Approved By The Engineer Incharge | 576 | Stt | 1060 |  |  |  | 1060 | P. Sft | 610,560 Detail \& Rate Analysis Attached |
| 3- $\begin{aligned} & \text { Making And Fixing Stainless Steel Shect 20-SWG upto height of strecher } \\ & \text { or half of door height I/C Fixing With Screws On Door Complete In All } \\ & \text { Respects And As Approved By The Engineer Incharge }\end{aligned}$ | 1332 | Sft . | 1075 |  |  |  | 1075 | P. Sft | 1,431,900 Detail \& Rate Analysis Attached |
| P/F False ceilling (DAMPA) sheet $2^{\prime} \times 2^{\prime}$ imported fixed with Aluminum frame (TEE \& L) hanged with 10 No wire with RCC roof slab $\mathrm{i} / \mathrm{c}$ cost of Hook \& Scaffolding, carriage charges complete in all respect \& as approved by the Engineer Incharge. | 1530 | Sft . | 360 |  |  |  | 360 | P.Sft | 550,800 Detail \& Rate Analysis Attached |
| P/F Of Lead Lining 1.5 mm Thick Lead Sheet With Wall For Radiation Protection Upto Roof Height As Aper Instruction \& Covering With Wall <br> 5- Panelling I/C Frame Complete In All Respect As Approved And Directed By The Engineer Incharge Also Approved The Radiation Protecting Agency Etc. | 768 | Sft | 1269 |  |  |  | 1269 | P.Sft | 974,592- Detail \& Rate Analysis Attached |
| Supply and installation premimum graded/scratch-resistant Hygienic antimicrobial Pve wall cladding of 2.5 mm thick duly thermoplastic welded <br> 6conforming to (ISO:22196) and pasted over 12mm thick gypsum board with adhesive/solvent fixed over 14-SWG G.I Channael of size $3.5^{\prime \prime} \mathrm{X}$ 2"X3.5" duly screwed on wall $\mathrm{i} / \mathrm{c}$ the cost of hardwares as approved and directed by the Enoineer In-charge | 768 | Sft | 800 |  |  |  | 800 | P.Sft | 614,400 Detail \& Rate Analysis Attached |
| Supply and installation anti microbial Hygenic Epoxy flooring (with anti bacterial agent ) conforming to (ISO:22196) of specified thickness duly welded-with-thermoplastic equipment placed over self levelling adhesive as approved and directed by the Engineer Incharge. | . 5712 n | Sft | - 550 - | - | - | - | - $550{ }^{\circ}$ | P.Sft ${ }^{-}$ | $\rightarrow 3,141,600^{-}$Detail \& Rate Analysis Attached |
| 8- $\begin{aligned} & \text { hollow profile .chowkat frame of } 60 \mathrm{~mm} \times 64 \mathrm{~mm} \text { and leaf frame } 60 \\ & \text { mmx } 106 \mathrm{~mm} \text { both duly reinforced with G.I box frame inside the void }\end{aligned}$ | 389 | Sft . | 1040 |  |  |  | 1040 | P.Sft | 404,560 Detail \& Rate Analysis Attached |
| Providing and fixing high quality LED SMD Pancl Light $2 \mathrm{ft} \times 2 \mathrm{ft}$ of 48 <br> 9- watt/4000 k wattage anf Luminous flux with Polystyrene bowl/prismatic cover made of Philips as approved and direced by the Engineer Incharge. | 222 | Nos. | 14820 |  |  |  | 14820 | Each | 3,290,040 Detail \& Rate Analysis Attached |
| 10-Supply and Installation of Philips LED Bulb 24W E27 3000K 230 V A80 <br> ICT/6 APR (Philips made) Complete in all respects as approved by the <br> Engineer Incharge | 764 | Nos. | 1150 |  |  |  | 1150 | Each |  |
| $11-$Providing and Fixing of Bracket Fan $18^{\prime \prime}$ (As per approved <br> manufacturers) complete with electric connection a approved by the <br> Engineer Incharge. | 111 | Nos. | 5300 |  |  |  | 5300 | Each | 588,300 Detail \& Rate Analysis Attached |
| $\begin{aligned} & \text { Supply and installation of Phillips or Equilent, I2-Watt SMD light } 3 \text { " dia } \\ & 12-\text { of approved nanufacturer } \mathrm{i} / \mathrm{c} \text { cost of all labour \& material complete in all } \\ & \text { respect as approved by the Engineer Incharge. } \end{aligned}$ | 444 | Nos. | 1150 | - |  |  | 1150 | Each |  |
| l3- S/E. A.C ceiling fan $56^{\prime \prime}$ sweep i/c regulaor. | 222 | Nos. | 6500 |  |  |  | 6500 | Each | 1.443 .000 d Detail \& Rate Analysis Atached |



AMENDED ROUGH COST ESTIMATE FOR "BALANCE WORK OF REVAMPING OF ALL DHQ/15 THE HOSPITALS IN PUNJAB, ONE AT THQ SHUJABAD, DISTRICT MULTAN" (ADP-2022-23 GS NO. 658)

1 Dismantling end class tile roofing.


| Total: $\frac{46037 \mathrm{Sft} .}{}$ |
| :---: |
|  |
|  |

2 Dismantling Brick work in cement/Lime mortar.


| Main Building Corridor | 4 | x | 56.5 | $\chi$ | 11/8 | x | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Male/Dialisis room | 2 | $x$ | 20 | x | 11/8 | $x$ | 8 |
| " | 2 | x | 20 | x | $11 / 8$ | $\times$ | 8 |
| " | 2 | $x$ | 20 | x | 11/8 | $x$ | 8 |
| " | 2 | $x$ | 7.33 | x | 11/8 | x | 8 |
| Office | 2 | $x$ | 12.667 | x | $11 / 8$ | $x$ | 8 |
| " | 2 | $x$ | 11.5 | x | $3 / 4$ | $x$ | 8 |
| " | 2 | x | 6 | x | 3/8 | x | 8 |
| Private Room | 2 | x | 20 | x | $11 / 8$ | x | 8 |
| " | 1 | $x$ | 20 | x | $3 / 4$ | x | 8 |
| " | 1 | x | 133.25 | x | $11 / 8$ | $x$ | 8 |
| " | 2 | x | 21.25 | x | 11/8 | $x$ | 8 |
| " | 2 | $x$ | 11.5 | x | $11 / 8$ | $x$ | 8 |
| " | 2 | x | 11.5 | x | 3/4 | $x$ | 8 |
| " | 2 | $x$ | 7.33 | X | 11/8 | x | 3 |
| " | 2 | x | 6 | x | 3/8 | $x$ | 3 |
| " | 1 | x | 4 | x | $11 / 8$ | $x$ | 3 |
| " | 1 | $x$ | 7.58 | x | $11 / 8$ | $x$ | 3 |
| " | 1 | x | 135.5 | x | $11 / 8$ | $x$ | 3 |

Total:
18544 Cft.
:


4 Dismantling glazed or encaustic tiles, etc.


| Sterilizing room | 1 | x | 16.875 | x | 93/8 | x | 1/8 | = | 20 Cft . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Office | 1 | x | 16.875 | x | $97 / 8$ | x | 1/8 | = | 21 Cft . |
| O.T | 2 | x | 24.625 | X | $157 / 8$ | x | 1/8 | = | 98 Cft . |
| Scrub Up | 2 | x | 7.375 | x | $107 / 8$ | x | 1/8 | = | 20 Cft . |
| Gyne O.T | 1 | x | 15 | x | $115 / 8$ | x | 1/8 | = | 22 Cft . |
| Eye O.T | 1 | x | 15 | x | $115 / 8$ | x | 1/8 | $=$ | 22 Cft . |
| Store | 2 | x | 8.875 | x | $115 / 8$ | x | 1/8 | $=$ | 26 Cft . |
| Reception. | 1 | x | 33 | X | $123 / 4$ | x | 1/8 | = | 53 Cft . |
| Toilet | 2 | x | 7.75 | x | $83 / 4$ | x | 1/8 | = | 17 Cff . |
| Corridor | 1 | x | 67.5 | x | $71 / 4$ | X | 1/8 | = | 61 Cft . |
| Connecting Corridor |  | x | 7.25 | $\chi$ | $301 / 4$ | x | 1/8 | = | 27 Cft . |

Openings
O.T
D-1
D-2
D-3
D-4
D-5
Openings
Main Building (A)

Lav. 01
Bath roo
Bath roo
Male War
Toilet
Office
Private/Isolation room
Corridor

| $2 \times$ | 2.5 | x | $11 / 8$ | x | $1 / 8$ | $=$ | 1 Cft. |
| :---: | :---: | :---: | :---: | :---: | :---: | :--- | :--- |
| $8 \times$ | 3 | x | $11 / 8$ | x | $1 / 8$ | $=$ | 3 Cft. |
| $9 \times$ | 3.5 | x | $11 / 8$ | x | $1 / 8$ | $=$ | 4 Cft. |
| $2 \times$ | 4 | x | $11 / 8$ | x | $1 / 8$ | $=$ | 1 Cft. |
| $1 \times$ | 6.75 | x | $11 / 8$ | x | $1 / 8$ | $=$ | 1 Cft. |
| $1 \times$ | 33 | $\times$ | $11 / 8$ | x | $1 / 8$ | $=$ | 5 Cft |

2



Page 109


4 Recovery of Windows

6 Recovery of C.I Pipe 4" ia with specials and hooks
$0 \times 16$
7 Recovery of existing main Board i/c Main panel, DBS and Breakers
Total:


8 Recovery of PVC pipes or conduit wiring, etc. of all sizes including making good damaged surface
(building portion) on surface
Item No. 9
2149
32,235

9 Recovery of copper conductor cables single core all sizes
$\begin{array}{llll}\text { i } 3 / 0.029^{\prime \prime} & & \\ \text { Item No. } & 9149 \mathrm{x} & 3\end{array}$
ii 7/0.029"
Item No. 9

| Item No. 9 | $2149 \times$ | 2 |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Total: |  |

otal:
iii 7/0.036"
2700
iv 7/0.044"
8000
$V$ PVC insulated, PVC sheathed 4 core, $600 / 1000$ volt non armoured cable 25 mm (19/0.052")




| 96,705 |
| :---: |
| 107,450 |

81,000

360,000
$1.50,000$

Total

| Re-Construction/Rehablitation/Renovation Civil Works |  |  |  |  |  | 1 |  |  |  | nual 2022 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 Rehandling of earthwork Upto a lead of 50 ft . (15 m) |  |  |  |  |  | i |  |  |  |  |
| Operation Theater | 1 | $x$ | 86 | x | $341 / 4$ | $x$ | 1/3 | $=$ | 972 Cft |  |
|  | 2 | x | 8.5 | x | 3/4 | ${ }^{\prime}$ | 1/3 | = | 4 Cft |  |
|  | 1 | x | 70.5 | x | 5 | $x$. | 1/3 | = | 116 Cft |  |
|  | 1 | x | 17.5 | x | 41/2 | x | 1/3 | = | 26 Cft |  |
| Connecting Corridor | 1 | x | 8 | $x$ | 313/4 | $x$ | $1 / 3$ | $=$ | 84 Cft |  |
| Main Building | 1 | x | 161 | x | 585/8 | $x$ | 1/3 | = | 3115 Cft |  |
| Staff Portion | 1 | x | 85.875 | $x$ | 251/8 | ${ }^{\prime}$ | 1/3 | = | 712 Cft |  |
|  | 1 | x | 56 | $x$ | 171/8 | $x$ | 1/3 | = | 316 Cft |  |
| Emergency | 1 | x | 129.5 | $\times$ | 781/4 | $\begin{gathered} x_{i}^{i}, t \\ i \\ i \end{gathered}$ | $1 / 3$ | = | 3344 Cft |  |
| Main Building | 1 | x | 50.125 | x | 163/8 | $\mathrm{x}_{1}$ | 1/3 | = | 271 Cft |  |
|  | 1 | x | 33.125 | x | 601/8 | $\mathrm{x}^{\prime}$ : | 1/3 | = | 657 Cft |  |
|  | 1 | x | 100.25 | $x$ | 251/8 | $x$ | 1/3 | = | 831 Cft |  |
|  | 1 | x | 78.75 | $x$ | $171 / 8$ | $x^{\prime \prime}$ | 1/3 | = | 445 Cft |  |
| Wards (B) | 1 | x | 130.125 | $x$ | $501 / 4$ | $\mathrm{x}^{\prime}$ | 1/3 | = | 2158 Cft |  |
|  | 1 | x | 112.5 | $x$ | 9 | $x$ | 1/3 | $=$ | 334 Cft |  |
| Labs | 1 | x | 136.125 | $x$ | $411 / 2$ | $x$ | $1 / 3$ | = | 1864 Cft |  |
| Connecting corridor | 1 | x | 13.5 | $\times$ | $71 / 2$ | x | $1 / 3$ | = | 33 Cft |  |
|  |  |  |  |  | Total: | ! |  |  | 15282 Cft . |  |
|  |  |  |  |  |  | ! |  | @ | 3566.65 \%0Cft. | 54,506 |
| Providing and laying $1^{1 / 2} 2^{\text {¹ }}$ thick ( 40 mm ) damp proof course of cement concrete |  |  |  |  |  |  |  |  |  |  |
| 2 1:2: 4(using cement, sand and shingle), including bitumen coating :- <br> (a) with one coat bitumen and one coat polythene sheet 500 gauge Up raising of Existing building |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Dilapidated O.T | 2 | $x$ | 16.83 | x | $11 / 8$ | :' |  | $=$ | 38 Sft . |  |
|  | 2 | x | 21.5 | x | $11 / 8$ | ! |  | = | - $485 \mathrm{5tt}$. |  |
| " | 2 | $\lambda$ | 24.5 | $\times$ | 11/8 | i |  | = | 55 Sft . |  |
| " | 2 | $x$ | 17 | x | $11 / 8$ |  |  | = | 38 Sft . |  |
| " | 2 | x | 7.375 | x | $11 / 8$ |  |  | $=$ | 17 Sft . |  |
| " | 2 | x | 35.625 | $x$ | $11 / 8$ | 1 |  | = | 80 Sft . |  |
| " | 2 | $x$ | 7.75 | x | $11 / 8$ |  |  | = | 17 Sft . |  |
| " | 2 | x | 9.875 | x | 11/8 |  |  | = | 22 Sft . |  |
| " | 2 | $x$ | 30.33 | $x$ | $11 / 8$ |  |  | $=$ | 68 Sft . |  |
| " | 2 | $x$ | 26 | $x$ | 11/8 |  |  | $=$ | 59 Sft . |  |
| " | 4 | $x$ | 11.667 | x | $11 / 8$ |  |  | = | 53 Sft . |  |
| 4 | 1 | x | 85.25 | x | $11 / 8$ |  |  | = | 96 Sft . | ; |
| Corridor | 2 | x | 30.25 | x | $11 / 8$ |  |  | = | 68 Sft . |  |
| Main Building | 1 | x | 162.5 | x | $11 / 8$ |  |  | $=$ | 183 Sft . |  |
| " | 2 | $x$ | 48.25 | x | 11/8 |  |  | = | 109 Sft . |  |
| " | 2 | x | 12.375 | x | $11 / 8$ |  |  | = | 28 Sft . |  |
| " | 2 | x | 12.375 | $x$ | $3 / 4$ |  |  | = | 19 Sft . |  |
| " | 2 | x | 53.875 | $x$ | 11/8 |  |  | $=$ | 1215 ft . |  |
| " | 2 | x | 12.375 | x | 11/8 |  |  | = | 28 sft . |  |
| " | 2 | $x$ | 12.375 | x | $3 / 4$ |  |  | = | 19 ftt . |  |
| " | 1 | $x$ | 12.375 | x | 3/8 |  |  | = | 5 Sft . |  |
| " | 1 | x | 55 | x | $11 / 8$ |  |  | $=$ | 62 Sft . |  |
| Main Building, |  |  |  |  |  |  |  |  | 254 Sft. |  |
| Corridor | 4 | $x$ | 56.5 | $x$ | 11/8 |  |  | = |  |  |
| Male/Dialisis room | 2 | $x$ | 20 | x | 11/8 |  |  | = | 45 Sft . |  |
| " | 2 | $x$ | 20 | x | 11/8 | 1 |  | $=$ | 45 Sft . |  |
| " | 2 | $x$ | 20 | x | 11/8 |  |  | $=$ | 45 Sft . |  |
| " | 2 | $x$ | 7.33 | x | 11/8 |  |  | = | 16 Sft . |  |
| Office | 2 | $x$ | 12.667 | $x$ | 11/8 |  |  | $=$ | 29 Sft . |  |
| " | 2 | x | 11.5 | x | $3 / 4$ |  |  | = | 17 Sft . |  |
| " | 2 | $x$ | 6 | x | 3/8 |  |  | = | 5 Sft . |  |
| Private Room | 2 | x | 20 | x | 11/8 |  |  | $=$ | 45 Sft . |  |
| " | 1 | x | 20 | $x$ | 3/4 |  |  | = | 15 Sft . |  |
| " | 1 | x | 133.25 | x | $11 / 8$ |  |  | $=$ | 150 Sft . | + |
| " | 2 | x | 21.25 | x | 11/8 |  |  | $=$ | 48 Sft . |  |
| " | 2 | x | 11.5 | x | $11 / 8$ |  |  | $=$ | 26 Sft . |  |



Providing and laying $1 / 2$ " thick ( 13 mm ) vertical damp proof course with cement
3 sand plaster Ratio 1:3 and bitumen coating:-
(a) with one coat of bitumen and one coat of polythene sheet 500 gauge:
Dilapidated OT

Dilapidated O.T building
O.T

| Sterilizing room | 1 | x | 2 x | 16.875 | + | $93 / 8$ | ) x | 3 | $=$ | 158 Sft . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Office | 1 | x | 2 x | 16.875 | $+$ | $97 / 8$ | ) x | 3 | = | 161 Stt . |
| O.T | 2 | x | $2 \times 1$ | 24.625 | $+$ | $157 / 8$ | ) x . | 3 | = | 486 Sft . |
| Gyne O.T | 1 | x | $2 \times 1$ | 15 | + | $115 / 8$ | ) x | 3 | = | 160 Sft . |
| Eye O.T | 1 | x | $2 \times 1$ | 15 | $+$ | $115 / 8$ | ) x | 3 | $=$ | 160 Sft . |
| Store | 2 | x | 2 x | 8.875 | + | -115/8 | ) x | 3 | $=$ | 246 Sft . |
| Reception. | 1 | x | 2 x | 33 | + | $123 / 4$ | ) x | 3 | = | 275 Sft . |
| Toilet | 2 | x | 2 x | 7.75 | + | $83 / 4$ | ) x | 3 | $=$ | 198 Sft . |
| Corridor | 1 | x | 2 x | 67.5 | + | $71 / 4$ | ) x | 3 | $=$ | 449 Sft . |
| Connecting Corridor | 1 | x | 2 x | 7.25 | + | $301 / 4$ | ) x | 3 | = | 225 Stt . |
| Main Building (A) |  |  |  |  |  |  |  |  |  |  |
| Male Ward | 2 | x | $2 \times($ | 40.75 | + | 20 | ) x ! | 3 | $=$ | 729 Sft . |
| Office | 2 | x | 2 x | 13.375 | + | $115 / 8$ | ) x | 3 | $=$ | 300 sft . |
| Private/Isolation room | 2 | x | $2 \times($ | 11.625 | + | $73 / 8$ | ) x | 3 | $=$ | 228 Sft . |
| Corridor | 1 | x | 2 x | 133.25 | + | $71 / 4$ | ) x | 3 | = | 843 Sft . |
| Corridor | 2 | x | $2 \times 1$ | 24.25 | + | $81 / 2$ | ) ${ }^{\prime}$ | 3 | = | 393 Sft . |
| Corridor | 2 | x | $2 \times 1$ | 7.25 | + | $123 / 4$ | ) x | 3 | = | 240 Sft . |
| O.T.S | 2 | x | 2 x | 12.75 | + | $201 / 2$ | ) x | 3 | = | 399 Sft . |
| O.T.S | 2 | x | $2 \times 1$ | 12.75 | $+$ | $201 / 2$ | ) x | 3 | $=$ | 399 Sft. |
| Male Ward | I | x | 2 x | 15.5 | $+$ | 20 | ) x | 3 | = | 213 Sft . |
| Male Ward | 1 | x | 2 x | 24.5 | + | 20 | ) x | 3 | = | 267 Sft . |
| Female ward | 1 | $x$ | $2 \times 1$ | 40.75 | + | 20 | ) x | 3 | $=$ | 365 Sft . |
| Private room | 2 | x | 2 x | 11.625 | + | 73/8 | ) $\times$ | 3 | = | 228 Sft . |
| Private room | 2 | x | $2 \times 1$ | 13.375 | + | $115 / 8$ | ) $x$ | 3 | $=$ | 300 Stt . |
| Store | 1 | x | $2 \times 1$ | 12.75 | + | $63 / 8$ | ) x | 3 | $=$ | 115 Stt . |
| Front Corridor | 1 | x | $2 \times 1$ | 134.375 | + | $71 / 4$ | ) x | 3 | = | 850 Sft . |
| Main BuildingStaff Portion |  |  |  |  |  |  |  |  |  |  |
| surgen room | 1 | x | 2 x | 11.75 | + | 16 | ) x | 3 | $=$ | 167 Stt . |
| Exam | 1 | x | 2 x | 7.875 | + | 9 | ) $x$ | 3 | = | 101 Sft . |
| M.S Office | 1 | x | 2 x | 16 | + | 16 | ) x | 3 | = | 192 Sft . |
| Medicine store | 1 | x | 2 x | 19.625 | + | 16 | ) x | 3 | = | 214 Stt. |
| Clerk Room | 1 | x | $2 \times($ | 12 | + | 16 | ) x | 3 | = | 168 Sft . |
| Store | 1 | x | $2 \times 1$ | 11.75 | + | 12 | ) x | 3 | = | 143 Sft . |
| Corridor | 1 | x | $2 \times 1$ | 72.75 | + | $71 / 4$ | ) x | 3 | = | 480 Sft . |
| Gastro Counter | 1 | x | $2 \times 1$ | 11.75 | + | 16 | ) x | 3 | = | 167 Sft . |
| Dental surgen | 1 | x | $2 \times 1$ | 16.375 | + | 16 | ) x | 3 | = | 194 Sft . |
| Exam | 1 | X | 2 x | 7.875 | + | 9 | ) x | 3 | $=$ | 101 Sft . |
| Store | 1 | x | $2 \times 1$ | 16 | + | 16 | ) x | 3 | = | 192 Sft . |

Total:

|  | 10506 Sft . |  |
| :---: | :---: | :---: |
| (4) | $5681.05 \%$ Sft. | Rs.596851/- |

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Building Walls Sill

| level to roof level |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dilapidated O.T building | 2 | $x$ | 16.83 | x | 11/8 | ${ }^{1}$ | 12 | = | 454 Cft . |  |
| ${ }^{11}$. | 2 | x | 21.5 | $x$ | 11/8 | ${ }^{\text {x }}$ | 12 | $=$ | 581 Cft . |  |
| " | 2 | x | 24.5 | x | 11/8 | $\chi_{1}$ | 12 | = | 662 Cft . |  |
| " | 2 | $x$ | 17 | x | 11/8 | $\times$ | 12 | = | 459 Cft . |  |
| " | 2 | x | 7.375 | x | $11 / 8$ | x | 12 | $=$ | 199 Cft . |  |
| " | 2 | x | 35.625 | x | $11 / 8$ | $x$ | 12 | $=$ | 962 Cft . |  |
| " | 2 | $x$ | 7.75 | x | $11 / 8$ | x | 12 | $=$ | 209 Cft . |  |
| " | 2 | $x$ | 9.875 | x | $11 / 8$ | x | 12 | $=$ | 267 Cft . |  |
| " | 2 | $x$ | 30.33 | x | 11/8 | x | 12 | $=$ | 819 Cft . |  |
| " | 2 | x | 26 | $x$ | $11 / 8$ | $x$ | 12 | = | 702 Cft . |  |
| " | 4 | x | 11.667 | x | $11 / 8$ | x | 12 | = | 630 Cft . |  |
| " | 1 | x | 85.25 | $x$ | $11 / 8$ | x | 12 | = | 1151 Cft . |  |
| Corridor | 2 | x | 30.25 | x | 11/8 | x | 12 | = | 817 Cft . |  |
| Main Building | 1 | x | 162.5 | x | $11 / 8$ | $x$ | 12 | $=$ | 2194 Cft . |  |
| " | 2 | $x$ | 48.25 | x | 11/8 | x | 12 | = | 1303 Cft . |  |
| " | 2 | $x$ | 12.375 | x | 11/8 | x | 12 | = | 334 Cft . |  |
| " | 2 | x | 12.375 | x | $3 / 4$ | x | 12 | = | 223 Cft . |  |
| " | 2 | $x$ | 53.875 | x | $11 / 8$ | x | 12 | $=$ | 1455 Cft . |  |
| " | 2 | x | 12.375 | x | 11/8 | x | 12 | = | 334 Cft . |  |
| " | 2 | x | 12.375 | x | $3 / 4$ | $x$ | 12 | = | 223 Cft . |  |
| " | 1 | x | 12.375 | $x$ | $3 / 8$ | x | 12 | = | 56 Cft . |  |
| " | 1 | x | 55 | $x$ | $11 / 8$ | x | 12 | = | 743 Cft . |  |
| Main Building Corridor | 4 | x | 56.5 | $x$ | 11/8 | $x$ | 12 | = | 3051 Cft . |  |
| Male/Dialisis room | 2 | x | 20 | $x$ | $11 / 8$ | $x$ | 12 | $=$ | 540 Cfl . |  |
| " | 2 | x | 20 | x | 11/8 | x | 12 | = | 540 Cfl . |  |
| " | 2 | x | 20 | x | $11 / 8$ | x | 12 | = | 540 Clf . |  |
| " | 2 | $x$ | 7.33 | $x$ | $11 / 8$ | x | 12 | $=$ | 198 Cft |  |
| Office | 2 | x | 12.667 | $x$ | 11/8 | $x$ | 12 | $=$ | 342 Cft . |  |
| " | 2 | x | 11.5 | x | $3 / 4$ | x | 12 | $=$ | 207 Cft . |  |
| " | 2 | x | 6 | $x$ | 3/8 | $x$ | . 12 | = | 54 Clt . |  |
| Private Room | 2 | x | 20 | $x$ | $11 / 8$ | $x$ | 12 | = | 540 Cft . |  |
| " | 1 | x | 20 | x | $3 / 4$ | $x$ | 12 | = | 180 Cft . |  |
| " | 1 | x | 133.25 | x | $11 / 8$ | $x$ | 12 | $=$ | 1799 Cfi. | ! |
| " | 2 | $x$ | 21.25 | $x$ | $11 / 8$ | $x$ | 12 | = | 574 Cft . | - |
| " | 2 | x | 11.5 | x | $11 / 8$ | $x$ | 12 | = | 311 Cft . | 1 |
| " | 2 | x | 11.5 | x | $3 / 4$ | x | 12 | = | 207 Cft . | ! |
| " | 2 | $x$ | 7.33 | $x$ | $11 / 8$ | $x$ | 12 | = | 198 Cfl . |  |
| " | 2 | $x$ | 6 | - | 3/8 | $x$ | 12 | = | 54 Cfl . | , |
| " | 1 | x | 4 | 入 | $11 / 8$ | $x$ | 12 | = | 54 Cfl . |  |
| " | 1 | $x$ | 7.58 | $\lambda$ | $11 / 8$ | $x$ | 12 | = | 102 Cfl . | 1 |
| " | 1 | $x$ | 135.5 | 入 | $11 / 8$ | $x$ | 12 | = | 1829 Cfl . | ¢ |
| " | 2 | x | 9.25 | x | $3 / 4$ | $x$ | 12 | $=$ | 167 Cft . | 1 |
| " | 2 | x | 4.25 | x | $3 / 4$ | $x$ | 12 | = | 77 Cft . | , |
| " | 2 | x | 34.125 | x | 3/4 | $x$ | 12 | = | 614 Cft . | ! |
| Building Parapet |  |  |  |  |  |  |  |  |  | ! |
| O.T | 2 | x | 27.25 | $x$ | 3/4 | $x$ | $11 / 2$ | = | 61 Cft . | $\stackrel{\square}{3}$ |
| " | 2 | x | 3.75 | x | 3/4 | x | 11/2 | = | 8 Cft . | ' |
| " | 1 | x | 19.125 | x | 3/4 | x | 11/2 | $=$ | 22 Cft . | 1 |
| " | 2 | x | 9.25 | x | 3/4 | x | $11 / 2$ | = | 21 Cft . | ! |
| " | 2 | x | 4.25 | x | 3/4 | $x$ | 11/2 | = | 10 Cft . | 1 |
| " | 2 | x | 34.125 | x | 3/4 | x | : $11 / 2$ | = | 77 Cft . | 4 |
| " | 2 | x | 11.5 | x | 3/4 | $x$ | 11/2 | = | 26 Cft . | 1 |
| " | 2 | $x$ | 30.5 | x | 3/4 | x | 11/2 | = | 69 Cft . |  |
| Corridor | 2 | $x$ | 30.25 | x | 3/4 | x | 11/2 | = | 68 Cft . |  |
| Main Building | 2 | x | 77.25 | x | 3/4 | x | $11 / 2$ | = | 174 Cft . | , |
| " | 1 | $x$ | 54.625 | x | 3/4 | $x$ | $11 / 2$ | = | 61 Cft . |  |
| " | 1 | x | 47.875 | x | 3/4 | x | 11/2 | $=$ | 54 Cft . | f |
| " | 2 | x | 14.25 | x | 3/4 | $x$ | 11/2 | = | 32 Cft . | , |
| " | 1 | $x$ | 3.25 | x | 3/4 | x | '11/2 | = | 4 Cft . | ! |
| " | 1 | $x$ | 10 | x | 3/4 | X | 11/2 | $=$ | 11 Cft . |  |
| " | 2 | x | 64.375 | x | $3 / 4$ | $x$ | 11/2 | = | 145 Cft . | , |
| Staff Portion | 1 | x | 85.5 | x | 3/4 | X | 11/2 | = | 96 Cft . |  |
| " | 1 | $x$ | 25.125 | x | 3/4 | x | $11 / 2$ | $=$ | 28 Cft . |  |
| " | 1 | x | 30.375 | x | $3 / 4$ | x | 11/2 | = | 34 Cft . |  |
| " | 1 | x | 16.375 | $x$ | 3/4 | x | 11/2 | = | 18 Cft . |  |


ii Pacca brick work in ground floor cement, sand mortar Ratio 1:4
Main Building



Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than
those mentioned in 6 (a) (i)\&(ii) above not requiring form work (i.e. horizontal shuttering) complete in aII respects: Type C (nominal mix 1:2:4)

| Bed Plates |  |  |  |  |  |  |  |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| O.T | 4 | x | 2 | x | 3 | x | 1 |
| Receiption | 3 | x | 2 | x | 3 | x | 1 |
| Male Ward | 4 | x | 2 | x | 3 | x | 1 |
| Dialysis Room | 2 | x | 2 | x | 3 | x | 1 |
| Fe-male Ward | 4 | x | 2 | x | 3 | x | 1 |
| Male Ward | 2 | x | 2 | x | 3 | x | 1 |
| Corridor | 4 | x | 2 | x | 3 | x | 1 |
| Corridor | 4 | x | 2 | x | 3 | x | 1 |

$\begin{array}{lll}3 / 4 & \\ x & 11 / 8 & x \\ x & 11 & 8 \\ x & 17 / 8 & x \\ x & 1 & x / 8 \\ x & 11 / 8 & x \\ x & 17 / 8 & x \\ x & 1 \% / 8 & x \\ x & 11 / 8 & x\end{array}$
Total:


6 Fabrication of mild steel reinforcement for cement concrete including cuttirg, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars) Deformed bars (Grade-40)

| Item No. | 5 |  | 8169 | $\times$ | 6.75 | x |
| :--- | :--- | ---: | :--- | :--- | :--- | :--- |

TotaI:
7 Providing and applying 3 mm thick torch-on plain waterproofing bitumenous membrane of specified thickness (made of Roof-Grip/ Euro Bit) duly
lapped/connected by heating with Torch over ps-6 primer i/c preparation/smoothen the surface complete in all respect as approved and directed by the Engineer

| Operation Theater | $\mathbf{1}$ | x | 86 | x | $341 / 4$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2 | x | 8.5 | x | $3 / 4$ |
| Connecting Corridor | $\mathbf{1}$ | x | 70.5 | x | 5 |
| Main Building | $\mathbf{1}$ | x | 17.5 | x | $41 / 2$ |
| Staff Portion | $\mathbf{1}$ | x | 8 | x | $313 / 4$ |
|  | $\mathbf{1}$ | x | 161 | x | $585 / 8$ |
| Emergency | $\mathbf{1}$ | x | 85.875 | x | $251 / 8$ |
| Main Building | $\mathbf{1}$ | x | 56 | x | $171 / 8$ |
|  | $\mathbf{1}$ | x | 129.5 | x | $781 / 4$ |
|  | $\mathbf{1}$ | x | 50.125 | x | $163 / 8$ |
| Wards (B) | $\mathbf{1}$ | x | 33.125 | x | $601 / 8$ |
|  | $\mathbf{1}$ | x | 100.25 | x | $251 / 8$ |
| Labs | $\mathbf{1}$ | x | 78.75 | x | $171 / 8$ |
| Connecting corridor | 1 | x | 130.125 | x | $501 / 4$ |
|  | 1 | x | 112.5 | x | 9 |
| C | 1 | x | 136.125 | x | $411 / 2$ |
|  | 1 | x | 13.5 | x | $71 / 2$ |

Total:
8 Providing and Laying 1-1/2" thick Insulation material of Extruded Polystyrene XPS in Rigid Insulation / Foam Board on roof or walls, Density $32-38 \mathrm{Kg} / \mathrm{M}$, compressive strength $250-400 \mathrm{kpa}$, R-value 5 per inch thickness and water obsorption ( $1 \%$ by volume, closed ceil type structure) i/c cutting and placing in position. complete in all respect.

$$
\begin{aligned}
& =\quad 25034 \mathrm{Kgs} \\
& =\quad 10209
\end{aligned}
$$

$$
=19388 \mathrm{Kgs}
$$


 - zonoa spoms 8 himprod 8 zrotopory 8 stuop $f o$



Deduction
Khurras $70 \times 2 \times 2=20 \mathrm{Sft}$

9 Single layer of tiles 9 " $\times 41 / 2 \times 1 \times 1 / 2 "(225 \times 113 \times 40 \mathrm{~mm})$ laid over 4 " $(100 \mathrm{~mm})$ earth and $1^{\prime \prime}(25 \mathrm{~mm})$ mud plaster without Bhoosa, grouted with cement sand 1:3 on top of RCC roof slab, provided with polythene sheet 300 gauge.
$\begin{array}{lll}\text { As Per Item No. } & 8 & 46317\end{array}$

Total:
Deduction
Khurras

Khuras on roof $2^{\prime} \times 2^{\prime} \times 3^{\prime \prime}(600 \times 600 \times 75 \mathrm{~mm})$

40

11 Providing, fixing, testing and commissioning, of $\mu$-PVC (Unplasticized Polyvinyl Chloride ) Njkasi/ waste pipe make of Dadex/Popular/Betaror equivalent, plain /socket ended conforming to code EN -1329 of specified SDR (Standard Dimension Ratio) including the cost of specials and Solvents complete in all respect as approved and directed by the Engineer Incharge. Type (SDR 41/SN-4) 4" 1110 mm )

## II A

## 40 Nos.



12 Cement plaster $3 / 8^{\prime \prime}(10 \mathrm{~mm})$ thick under soffit of R.C.C. roof slabs only, unto $20^{\prime}$ height. 1:3
o. T


| Male Ward |  | $x$ | 24.5 | x | 20 |  | = | 490 Sft . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Female ward | 1 | x | 40.75 | x | 20 | ! | = | 815 Sft . |
| Private room | 2 | x | 11.625 | x | $73 / 8$ |  | = | 171 Sft . |
| Toilet | 4 | x | 6 | x | 5 5/8 | ; | = | 135 Sft . |
| Private room | 2 | $x$ | 13.375 | x | 115/8 |  | $=$ | $311 . \mathrm{Sft}$. |
| Store | 1 | x | 12.75 | x | $63 / 8$ | , | $=$ | 81 Sft . |
| Front Corridor | 1 | $x$ | 134.375 | x | $71 / 4$ |  | = | 974 Sft. |
| Main BuildingStaff |  |  |  |  |  |  |  |  |
| Portion surgen room | 1 | $x$ | 11.75 | $x$ | 16 |  | = | 188 Sft . |
| Toilet | 1 | x | 7.875 | x | $65 / 8$ |  | = | 52 sft . |
| Exam | 1 | x | 7.875 | x | 9 | , | = | 71 sft . |
| M. ${ }^{\text {Office }}$ | 1 | x | 16 | $x$ | 16 |  | $=$ | 256 Sft . |
| Medicine store | 1 | x | 19.625 | x | 16 |  | = | 314 Sff. |
| Clerk Room | 1 | $x$ | 12 | x | 16 |  | = | 192 Sft . |
| Store | 1 | x | 11.75 | x | 12 |  | = | 141 Sft . |
| Lav. | 1 | x | 11.75 | $x$ | 5 5/8 |  | $=$ | 66 Sft . |
| Bath room | 1 | $x$ | 5 | x | 5 |  | = | 25 Sft . |
| Bath room | 1 | $x$ | 3.25 | x | 5 |  | = | 16 Sft . |
| Bath room | 1 | x | 4 | x | $53 / 4$ |  | = | 23 Sft . |
| Corridor | 1 | $x$ | 72.75 | x | $71 / 4$ |  | $=$ | 527 Sft . |
| Gastro Counter | 1 | x | 11.75 | x | 16 |  | = | 188 Sft . |
| Dental surgen | 1 | x | 16.375 | x | 16 |  | $=$ | 262 Sft . |
| Exam | 1 | $x$ | 7.875 | x | 9 |  | = | 71 sft . |
| Toilet | 1 | $x$ | 7.875 | $x$ | 65/8 |  | = | 52 Stt . |
| Store | 1 | x | 16 | $x$ | 16 |  | = | 256 Sft . |
| Emergency |  |  |  |  |  |  |  |  |
| O.T | 1 | x | 20 | $x$ | 20 | - | = | 400 Sft . |
| Doctor | 1 | x | 14 | $x$ | 12 |  | = | 168 Sft . |
| Change | 1 | $x$ | 8.875 | x | 6 |  | = | 53 Sft . |
| Duct |  | $x$ | 6.75 | x | $81 / 2$ |  | = | 57 Stt |
| W.C | 1 | x | 4.75 | x | 6 |  | = | 29 Stt . |


| Total: | 15998 Sft . |  |  |
| :---: | :---: | :---: | :---: |
|  | (a) | 3762.55 \% Sft | 601,933 |

i $1 / 2^{\prime \prime}(13 \mathrm{~mm})$ thick Cement plaster $1: 4$ upto $20^{\prime}(6.00 \mathrm{~m})$ height Outside Building



$$
\cdot
$$

:
:
-
iii $1 / 2^{\prime \prime}(13 \mathrm{~mm})$ thick Cement plaster $1: 5$ upto $20^{\prime}(6.00 \mathrm{~m})$ height
Inside Building
O.T



```
.
.
.
:
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.
.
```

Main BuildingStaff
Portion
Openings
D-4
D-5
Openings


13 Providing and fitting all types of glazed aluminium windows of anodised/powder coated partly fixed and partly sliding using delux sections of approved manufacturer section thickness is 1.2 mm .having frame size of $100 \times 30 \mathrm{~mm}\left(4^{\prime \prime} \times 1-1 / 4^{\prime \prime}\right)$ and leaf frame sections of $50 \times 20 \mathrm{~mm}\left(2^{\prime \prime} x^{3} / 4^{\prime \prime}\right)$, all of 1.6 mm or thickness including 5 mm thick imported tinted glass with sections are of dull aluminium rubber gasket using approved standard latches, hardware shade etc., as approved by the Engineer incharge.

| W-1 | 8 | x | 3 | $x$ | 1 | $x$ | 5 | = | 120 sft . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W-5 | 12 | x | 6 | x | 1 | ${ }^{\text {x }}$ | 4 | $=$ | 288 Sft. |
| W-6 | 1 | x | 7.375 | x | 1 | x | 6 | $=$ | 44 Sft . |
| W-7 | 2 | $x$ | 16 | x | 1 | x | 6 | = | 192 Sft . |

Main Building (A)

| W-3 | 39 | x | 4 | $x$ | 1 | $x^{i}$ | 5 | = | 780 Sft . |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Main BuildingStaff Portion |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| W-2 | $10 \times$ |  | 3.667 | x | 1 | x . | 5 | = | 183 Sft . |  |
|  |  |  |  |  |  | ; |  | = | 1607 Sft . |  |
|  |  |  |  |  |  | , |  | @ | 1353.75 P.Sft | 2,175,476 |

14 Providing and fixing Aluminum Fly screen comprising of Fiber / Aluminum wire guaze (Malasian) fixed in aluminum frame of approved manufacturer / powder coated of size $1-1 / 2^{\prime \prime} \times 1 / 2^{\prime \prime}$ and 1.6 mm thick with rubber gasket $\mathrm{i} / \mathrm{c}$ cost of Hardwares as approved and directed by the engineer incharge. complete in all respect.
As Qty item No. 131607 / 2


15 Providing and fixing M.S. grill fabricated with MS Square polished
Vertical/horizontal Bars of $3 / 8^{\prime \prime}$ Squar Bars size @ $4^{\prime \prime} \mathrm{c} / \mathrm{c}$ ' passed through'punched
holes in MS Patti of $1-1 / 4^{\prime \prime} \times 1 / 8^{\prime \prime}$ i/c the cost of $1-1 / 4^{\prime \prime} \times 1 / 8^{\prime \prime}$ MS patti for Frame of
windows and painting 3 coat complete in all respect as approved and directed by As Qty item No. 131607


16 Providing and fixing aluminium glazed partition of anodized / powder coated using section of M/s. Al-Cop/ Pakistan Cable having 2 mm thick Frame size D48-A , i/c 12 mm tinted TEMPERED glass with sand blasting and edge polishing $\mathrm{i} / \mathrm{c}$ the cost of tear resistance film,rubber gasket and hardware etc. complete in all respect as approved and directed by the Engineer Incharge.
Emergency $1 \times 1 \times 7.25 \times 12$

|  | $=$ | 87 Sft |
| ---: | :--- | ---: |
| Total:- | $=$ | 87 Sft |
|  | $@$ | $1244.20 \mathrm{P} . \mathrm{Sft}$ |

17 Providing and fixing 2" wide MS/ GI Chowkat singel/double rebate made of 16 SWG MS sheet pressed/welded / supported with M.S. flat $1-1 / 4^{\prime \prime} \times 1 / 8^{\prime \prime} \mathrm{i} / \mathrm{C} 6^{\prime \prime}$ long M.S. Flat 1 " $x 1 / 8$ "hold fasts ( $6-\mathrm{Nos}$ ) welded/ screwed, punching of lock hole covered with MS Box,coating with antirust paint including filling with cement sand mortar (1:8) and 15 inch wide.
embedding hold fast in cement concrete (1:2:4), complete in all respect as Main Building (A)

| D-2 | 6 | x | 3 | $x$ | 7 |
| :--- | :--- | :--- | :---: | :--- | :--- |
| D-3 | $8 \times$ | 3.5 | $x$ | $=$ | 126 Sft. |


| D-4 | $13 \times$ | 4 | $x$. | 81/2 | $=$ | 442 Sft . |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D-5 | $4 \times$ | 6.75 | x | 81/2 | = | 230 Sft . | 1 |
| Main BuildingStaff |  |  |  |  |  |  |  |
| Portion |  |  |  |  |  |  |  |
| D-2 | $5 \times$ | 3 | ${ }^{\text {l }}$ | 7 | = | 105 Sft . | \% |
| D-3 | $4 \times$ | 3.5 | $\times$ | 7 | = | 98 Sft . |  |
| D-4 | 4 | 4 | $\times$ | 81/2 | = | 136 Sft . | * |
| D-5 | $1 \times$ | 6.75 | $\times$ | 81/2 | = | 57 Sft . |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  | @ | 731.75 P.Sft. | 1,017,133 |

18 Providing and fixing 2" wide $\mathrm{MS} / \mathrm{Gl}$ Chowkat singel/double rebate made of 16 SWG MS sheet pressed/welded / supported with M.S. flat 1-1/4"x1/8" i/c 6 "long M.S. Flat 1 "x $1 / 8$ "hold fasts ( $6-$ Nos) welded/screwed, punching of lock hole covered with MS Box,coating withantirust paint including filling with cement sand mortar (1:8) and
embedding hold fast in cement concrete (1:2:4), complete in all respect as $1011^{\prime}$ wide. O.T

| D-2 | 8 | $x$ | 3 | $x$ | 7 | $=$ | 168 Sft. |
| :--- | :--- | :--- | :---: | :--- | :--- | :--- | :--- |
| D-3 | 9 | x | 3.5 | x | 7 | $=$ | 221 Sft |
| D-4 | 2 | x | 4 | x | $81 / 2$ | $=$ | 68 Sft |
| D-5 | 1 | x | 6.75 | x | $81 / 2$ | $=$ | 57 Sft. |

Total:


19 P/F 1-1/2" thick solid flush door comprising of 2.5 mm thick Deodar/Ash/Oak ply with grooves, compressed over 2.5 mm thick commercial ply over 1 " thick packing wood in style and rails under proper pressure $i / c$ the cost of nails, tower bolt , handles, glue, sawing charges and lacquar polishing to show the grains of ply properly, sand papering and $3 / 8^{\prime \prime}$ thick matching wooden lipping as approved and directed by the Engineer Incharge.

| directed by the Engine <br> O.T |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D-2 | 8 | x | 2.833 | $x$ | 6.917 | = | 157 Sft . |  |
| D-3 |  | x | 3.333 | ${ }_{1}$ | 6.917 | = | 207 Sft . |  |
| D-4 | 2 | x | 3.833 | $\times$ | 8.417 | = | 65 Sft . |  |
| D-5 |  | x | 6.583 | $\times$ | 8.417 | = | 55 Sft . |  |
| Main Building (A) |  |  |  | ! |  |  |  |  |
| D-2 | 6 | x | 2.833 | x | 6.917 | $=$ | 118 Sft . | : |
| D-3 | 8 | x | 3.333 | x | 6.917 | = | 184 Sft . |  |
| D-4 | 13 |  | 3.833 | x | 8.417 | = | 419 Sft . |  |
| D-5 |  | x | 6.583 | $\times$ | 8.417 | = | 222 Sft . |  |
| Main BuildingStaff |  |  |  |  |  |  |  |  |
| Portion * |  |  |  |  |  |  |  |  |
| D-2 | 5 | x | 2.833 | x | 6.917 | = | 98 Sft . |  |
| D-3 | 4 | x | 3.333 | x | 6.917 | = | 92 sft . |  |
| D-4 | 4 | x | 3.833 | $x$ | 8.417 | = | 129 Sft . |  |
| D-5 |  | x | 6.583 | $x$ | 8.417 | = | 55 sft . |  |
| Emergency |  |  |  |  |  |  |  |  |
| D-6 | 10 | x | 4.833 | $x$ | 8.417 | = | 407 Sft . |  |
|  |  |  |  |  |  |  | 2208 Sft. |  |
|  |  |  |  |  |  | @ | 685.75 P.Sft. | 2,514,136 |

20 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 02 Coats

| respect 02 Coats <br> Outside Building |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| O.T | 2 | 27.25 | $x$ | 161/8 | = | 879 Sft |
| * | 2 | 4.5 | $x$ | 161/8 | $=$ | 145 Sft |
| " | 1 | 19.125 | $x$ | 161/8 | = | 308 Sft |
| " | 2 | 9.25 | $\times$ | 161/8 | = | 298 Sft |
| " | 2 | 5 | $x$ | 161/8 | = | 161 Sft |
| " | 2 | 35.625 | $x$ | 161/8 | $=$ | 1149 Stt |
| " | 2 | 11.5 | $x$ | 161/8 | = | 371 Sft |
| " | 2 | 30.5 | $x$ | 161/8 | = | 984 Sft |
| Corridor | 2 | 30.25 | $x$ | 161/8 | = | 976 Sft |



## 21 Providing and applying wall putty of 2 mm thicknessover plastered surface (new <br> sufface) to prepare the surface even and smooth complete in all respect. <br> Inside Building Walls

| о.T |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sterilizing room | 1 | $x$ | $2 \times 1$ | 16.875 | + | 93/8 | ) | 8 | = | 420 Sft . |
| Office | 1 | x | $2 \times($ | 16.875 | + | 97/8 | ) ${ }^{\prime}$ | 8 | = | 428 Sft . |
| O.T | 2 | x | $2 \times 1$ | 24.625 | + | $157 / 8$ | ) | 8 | = | 1296 Stt . |
| Gyne 0.T | 1 | x | $2 \times($ | 15 | + | $115 / 8$ | ) | 8 | = | 426 Sft . |
| Eye 0.T | 1 | x | $2 \times 1$ | 15 | + | 115/8 | ) ${ }^{\text {d }}$ | 8 | = | 426 Sft . |
| Store | 2 | x | $2 \times 1$ | 8.875 | + | 115/8 | ) ${ }^{\text {' }}$ | 8 | = | 656 Sft . |
| Reception. | 1 | x | $2 \times 1$ | 33 | + | $123 / 4$ | ) | 8 | = | 732 Sft . |
| Toilet | 2 | x | $2 \times 1$ | 7.75 | + | 83/4 | ) ${ }^{\text {d }}$ | 8 | = | 528 Sft . |
| Corridor | 1 | x | $2 \times 1$ | 67.5 | + | $71 / 4$ | ) ${ }^{\text {d }}$ | 8 | $=$ | 1196 Sft . |
| Connecting Corridor | 1 | x | $2 \times 1$ | 7.25 | + | $301 / 4$ | ) ${ }^{\text {d }}$ | 8 | = | 600 St . |
| Main Building (A) |  |  |  |  |  |  |  |  |  |  |
| Male Ward | 2 | $x$ | $2 \times 1$ | 40.75 | + | 20 | ) | 8 | = | 1944 Stt . |
| Office | 2 | x | $2 \times 1$ | 13.375 | + | $115 / 8$ | ) | 8 | $=$ | 800 Sft . |
| Private/Isolation room | 2 | x | $2 \times($ | 11.625 | + | 73/8 | ) $x^{\text {c }}$ | 8 | = | 608 Sft . |
| Corridor | 1 | x | $2 \times 1$ | 133.25 | + | $71 / 4$ | ) $\times$ | 8 | = | 2248 Sft . |
| Corridor | 2 | x | 2 x ( | 24.25 | + | $81 / 2$ | ) ${ }^{\text {a }}$ | 8 | = | 1048 Sft . |
| Corridor | 2 | x | $2 \times 1$ | 7.25 | + | $123 / 4$ | ) ${ }^{\text {c }}$ | 8 | = | 640 Sft . |
| O.T.S | 2 | x | $2 \times 1$ | 12.75 | + | $201 / 2$ | ) ${ }^{\text {c }}$ | 8 | = | 1064 Stt . |
| O.T.S | 2 | x | $2 \times 1$ | 12.75 | + | $201 / 2$ | ) ${ }^{\text {a }}$ | 8 | $=$ | 1064 Stt : |



## Deductions

| O.T |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D-1 | 2 | $x$ | 2.5 | x | 3 | = | 15 Sft . |
| D-2 | 8 | $x$ | 3 | x | 3 | = | 72 Sft . |
| D-3 | 9 | x | 3.5 | x | 3 | = | 95 Sft . |
| D-4 | 2 | $x$ | 4 | x | 41/2 | = | 36 Sft . |
| D-5 | 1 | $x$ | 6.75 | X | 41/2 | = | 30 Sft . |
| Openings | 1 | x | 33 | x | 41/2 | $=$ | 149 Sft . |
| Main Building (A) |  |  |  |  |  |  |  |
| O.T.S | 2 | x | 20.5 | x | 8 | $=$ | 328 Sft . |
| O.T.S | 2 | x | 20.5 | x | 8 | = | 328 Sft. |
| Openings |  |  |  |  |  |  |  |
| D-0 | 12 | $x$ | 2 | x | 3 | = | 72 Sft . |
| D-1 | 9 | x | 2.5 | x | 3 | = | 68 Sft . |
| D-2 | 6 | $x$ | 3 | x | 3 | = | 54 Sft . |
| D-3 | 8 | $x$ | 3.5 | x | 3 | $=$ | 84 Stt. |
| D-4 | 13 | $x$ | 4 | x | 41/2 | = | 234 Sft . |
| D-5 | 4 | $x$ | 6.75 | X | 41/2 | = | 122 Sft . |
| Openings | 2 | x | 7.25 | x | 41/2 | = | 65 Sft . |
| Openings | 2 | x | 20.5 | X | 41/2 | = | 185 Sft . |
| W-3 | 39 | x | 4 | x | 5 | = | 780 sft . |

Main BuildingStaff
Portion
Openings


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\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Scrub Up & 2 & x & 7.375 & x & \(107 / 8\) & & \(=\) & 160 Sft . \\
\hline Gyne O.T & 1 & \(x\) & 15 & \(x\) & 115/8 & & = & 174 Sft . \\
\hline Eye 0.T & 1 & \(x\) & 15 & x & 115/8 & & = & 174 Sft . \\
\hline Store & 2 & x & 8.875 & \(x\) & 115/8 & ; & = & 206 Sff . \\
\hline Reception. & 1 & x & 33 & x & \(123 / 4\) & & = & 421 sft . \\
\hline Toilet & 2 & x & 7.75 & x & \(83 / 4\) & & = & 136 Sft . \\
\hline Corridor & 1 & \(x\) & 67.5 & x & \(71 / 4\) & & = & 489 Sft . \\
\hline Connecting Corridor & 1 & x & 7.25 & \(x\) & \(301 / 4\) & & = & 219 Stt. \\
\hline Main Building (A) & & & & & & & & \\
\hline Lav. 01 & 2 & \(x\) & 12.75 & x & 73/8 & & = & 188 Stt . \\
\hline Bath room & 4 & \(x\) & 4 & x & \(51 / 4\) & & = & 84 Sft . \\
\hline Bath room & 2 & x & 3.75 & x & \(51 / 4\) & & = & 39 sft . \\
\hline Male Ward & 2 & \(x\) & 40.75 & \(x\) & 20 & ; & = & 1630 Stt . \\
\hline Toilet & 4 & \(x\) & 6 & x & \(55 / 8\) & & = & 135 Stt . \\
\hline Office & 2 & \(x\) & 13.375 & x & \(115 / 8\) & & = & 311 Stf . \\
\hline Private/lsolation room & 2 & \(x\) & 11.625 & \(x\) & 73/8 & , & = & 171 Sft . \\
\hline Corridor & 1 & \(x\) & 133.25 & x & \(71 / 4\) & , & \(=\) & 966 Sft . \\
\hline Corridor & 2 & \(x\) & 24.25 & x & \(81 / 2\) & ! & = & 412 Stt . \\
\hline Corridor & 2 & \(x\) & 7.25 & x & \(123 / 4\) & & = & 185 Stt . \\
\hline O.T.S & 2 & \(x\) & 12.75 & x & \(20 \mathrm{l} / 2\) & & = & 523 Sft . \\
\hline O.T.S & 2 & x & 12.75 & x & \(201 / 2\) & & = & 523 Sft . \\
\hline Lav. 02 & 2 & x & 12.75 & \(x\) & 5 & & \(=\) & 128 Sft . \\
\hline Bath room & 4 & x & 4 & x & \(51 / 4\) & & = & 84 Sft . \\
\hline Bath room & 2 & \(x\) & 3.75 & x & \(51 / 4\) & & = & 39 St . \\
\hline Male Ward & 1 & \(x\) & 15.5 & x & 20 & & \(=\) & 310 Sft . \\
\hline Male Ward & 1 & \(x\) & 24.5 & \(x\) & 20 & & = & 490 Sft . \\
\hline Female ward & 1 & \(x\) & 40.75 & x & 20 & & \(=\) & 815 Sft . \\
\hline Private room & 2 & \(x\) & 11.625 & x & \(73 / 8\) & & = & 171 Stt . \\
\hline Toilet & 4 & & 6 & x & \(55 / 8\) & & \(=\) & 135 Sft . \\
\hline Private room & 2 & & 13.375 & x & 115/8 & & = & 311 Stt . \\
\hline Store & 1 & \(x\) & 12.75 & x & \(63 / 8\) & & F & 81 Sft . \\
\hline Front Corridor & 1 & & 134.375 & x & \(71 / 4\) & & = & 974 Stt . \\
\hline
\end{tabular}

Main BuildingStaff
Portion
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline surgen room & & & 1 & x & 11.75 & x & 16 & & & = & 188 Sft . \\
\hline Toilet & & & 1 & x & 7.875 & x & \(65 / 8\) & & & = & 52 Sft . \\
\hline Exam & & & 1 & x & 7.875 & x & 9 & & & = & 71 Sft . \\
\hline M.S Office & & & 1 & x & 16 & x & 16 & ! & & = & 256 Sft . \\
\hline Medicine store & & & 1 & x & 19.625 & x & 16 & & & \(=\) & 314 Sft . \\
\hline Clerk Room & & & 1 & x & 12 & x & 16 & & & = & 192 Sft . \\
\hline Store & & & 1 & x & 11.75 & x & 12 & & & = & 141 Sft . \\
\hline Lav. & & & 1 & x & 11.75 & x & \(55 / 8\) & & & = & 66 Sft . \\
\hline Bath room & & & 1 & x & 5 & x & 5 & ; & & \(=\) & 25 Sft . \\
\hline Bath room & & & 1 & x & 3.25 & x & 5 & & & = & 16 Sft . \\
\hline Bath room & & & 1 & x & 4 & x & \(53 / 4\) & & & = & 23 Sft . \\
\hline Corridor & & & 1 & x & 72.75 & x & \(71 / 4\) & & & = & 527 Sft . \\
\hline Gastro Counter & & & 1 & x & 11.75 & x & 16 & & & = & 188 Stt . \\
\hline Dental surgen & & & 1 & x & 16.375 & x & 16 & & & = & 262 Sft . \\
\hline Exam & & & 1 & x & 7.875 & x & 9 & & & = & 71 Sft . \\
\hline Toilet & & & 1 & x & 7.875 & x & \(65 / 8\) & & & = & 52 Sft . \\
\hline Store & & & 1 & x & 16 & x & 16 & & & = & 256 Sft . \\
\hline Inside Building & & & & & & & & & & & \\
\hline O.T & & & & & & & & & & & \\
\hline Sterilizing room & I & x & 2 & x & 16.875 & + & \(93 / 8\) & ) x & 8 & = & 420 Sft . \\
\hline Office & 1 & x & 2 & x & 16.875 & + & \(97 / 8\) & ) x & 8 & = & 428 Sft . \\
\hline O.T & 2 & x & 2 & \(x\) & 24.625 & + & \(157 / 8\) & ) x & 8 & \(=\) & 1296 Sft . \\
\hline Gyne O.T & 1 & X & 2 & \(x\) & 15 & + & \(115 / 8\) & ) x & 8 & = & 426 Sft . \\
\hline Eye O.T & 1 & . & 2 & x( & 15 & + & \(115 / 8\) & ) x & 8 & \(=\) & 426 Sft . \\
\hline Store & 2 & x & 2 & x( & 8.875 & + & \(115 / 8\) & ) x & 8 & = & 656 Sft . \\
\hline Reception. & 1 & X & 2 & x & 33 & + & \(123 / 4\) & ) x & 8 & \(=\) & 732 Sft . \\
\hline Toilet & 2 & x & 2 & x( & 7.75 & + & \(83 / 4\) & ) x & 8 & = & 528 Sft . \\
\hline Corridor & 1 & x & 2 & x & 67.5 & + & \(71 / 4\) & ) x & 8 & = & 1196 Sft . \\
\hline Connecting Corridor & 1 & x & 2 & x( & 7.25 & + & \(301 / 4\) & ) x & 8 & = & 600 Sft . \\
\hline Main Building (A) & & & & & & & & & & & \\
\hline Male Ward & 2 & x & 2 & \(x(\) & 40.75 & + & 20 & ) x & 8 & = & 1944 Sft. \\
\hline Office & 2 & x & 2 & x & 13.375 & \(+\) & \(115 / 8\) & ) x & 8 & \(=\) & 800 Sft . \\
\hline
\end{tabular}
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Ceiling
Emergency
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline 04 Beded ward & 2 & \(x\) & 20.75 & x & 19 & & \(=\) & 789 Stt . \\
\hline Toilet & 4 & x & 4.75 & x & 5 & & \(=\) & 95 Sft . \\
\hline Nurse & 1 & x & 10 & x & 10 & & = & 100 Sft . \\
\hline Entrance back & 1 & x & 20.75 & \(x\) & 10 & & \(=\) & 208 Sft. \\
\hline Doctor/cross/clinical room & 3 & x & 10 & x & 19 & & = & 570 Sft . \\
\hline X-ray room & 1 & x & 13 & x & 19 & & = & 247 St . \\
\hline Dark room & 1 & x & 7 & x & 81/4 & & = & 58 Sft . \\
\hline Lav. & 1 & x & 7 & x & 5 5/8 & & = & 39 Sft . \\
\hline Bath room & 2 & x & 3.375 & x & 4 & & \(=\) & 27 Sft . \\
\hline Corridor & 1 & x & 131.25 & x & \(81 / 4\) & & = & 1083 Sft . \\
\hline W.C & 2 & x & 5 & x & \(33 / 8\) & & = & 34 Stt . \\
\hline W.C & 2 & x & 6.375 & x & \(33 / 8\) & & = & 43 Sft . \\
\hline DMS Office & 1 & x & 17.75 & x & 10 & & = & 178 Sft . \\
\hline Store & 1 & x & 5 & x & 8 & & = & 40 Sft . \\
\hline Dispensary & 1 & X & 13 & x & 19 & & = & 247 Sft. \\
\hline Waiting hall & 2 & x & 15 & x & 19 & & = & 570 Sft . \\
\hline Waiting hall & 1 & x & 33 & x & \(201 / 2\) & & = & 677 Sft . \\
\hline Nurse & 1 & x & 10 & x & 12 & & = & 120 St . \\
\hline Change & 1 & x & 6 & x & 12 & & \(=\) & 72 Sft . \\
\hline Lobby & 1 & x & 16.75 & x & \(151 / 4\) & & = & 255 Stt . \\
\hline Corridor & 1 & X & 82.125 & x & \(81 / 4\) & & \(=\) & 678 Sft . \\
\hline Trolley space/autoclave & 2 & x & 6.75 & \(x\) & 10 & & \(=\) & 135 Sft . \\
\hline Plaster & 1 & x & 14 & x & \(135 / 8\) & & = & 191 Sft . \\
\hline Splint & 1 & x & 14 & x & 6 & & = & 84 Stt . \\
\hline Telephone/Reception & 2 & \(x\) & 10 & x & 83/4 & & = & 175 Sft . \\
\hline Entrance front & 1 & x & 44.5 & x & \(211 / 8\) & & = & 940 Sft . \\
\hline Treatment room & 1 & \(x\) & 18 & x & 20 & ! & = & 360 Sft . \\
\hline Doctor & 1 & x & 12 & x & 20 & & = & 240 Sft . \\
\hline Nurse & 1 & x & 10 & x & \(101 / 4\) & & \(=\) & 103 Sft . \\
\hline Store & 1 & x & 10 & x & 93/8 & ; & = & 94 Sft . \\
\hline W.C & 1 & x & 4.625 & x & \(41 / 2\) & & = & 21 Sft . \\
\hline
\end{tabular}

Inside Building Walls
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{11}{|l|}{Emergency} \\
\hline 04 Beded ward & 2 & x & \(2 \times(\) & 20.75 & + & 19 & ) x & 8 & \(=\) & 1272 Sft. \\
\hline Toilet & 4 & x & \(2 \times(\) & 4.75 & + & 5 & ) \({ }^{\text {c }}\) & 8 & \(=\) & 624 Sft . \\
\hline Nurse & 1 & x & \(2 \times 1\) & 10 & + & 10 & ) \(\mathrm{x}^{\prime \prime}\) & 8 & = & 320 Sft . \\
\hline Entrance back & 1 & x & \(2 \times 1\) & 20.75 & + & 10 & ) x & 8 & = & 492 Sft . \\
\hline Doctor/cross/clinical room & 3 & x & \(2 \times 1\) & 10 & + & 19 & ) x & 8 & = & 1392 Stt . \\
\hline X-ray room & 1 & x & \(2 \times 1\) & 13 & + & 19 & ) x & 8 & \(=\) & 512 Sft . \\
\hline Dark room & 1 & x & \(2 \times 1\) & 7 & + & \(81 / 4\) & ) x & 8 & = & 244 Sft . \\
\hline Lav. & 1 & x & \(2 \times 1\) & 7 & + & \(55 / 8\) & ) x & 8 & = & 202 Sft . \\
\hline Bath room & 2 & x & \(2 \times 1\) & 3.375 & + & 4 & ) x & 8 & \(=\) & 236 Sft , \\
\hline Corridor & 1 & x & \(2 \times(\) & 131.25 & + & \(81 / 4\) & ) x & 8 & = & 2232 Sft . \\
\hline W.C & 2 & x & \(2 \times(\) & 5 & + & \(33 / 8\) & ) x & 8 & = & 268 Sft . \\
\hline W.C & 2 & x & \(2 \times(\) & 6.375 & + & \(33 / 8\) & ) x & 8 & = & 312 Sft . \\
\hline DMS Office & 1 & X & \(2 \times 1\) & 17.75 & \(+\) & 10 & ) x & 8 & \(=\) & 444 Sft . \\
\hline Store & 1 & x & 2 x & 5 & \(+\) & 8 & ) x & 8 & = & 208 Sft . \\
\hline Dispensary & 1 & x & 2 x & 13 & \(+\) & 19 & ) x & 8 & \(=\) & 512 Sft . \\
\hline Waiting hall & 2 & x & \(2 \times 1\) & 15 & + & 19 & ) x & 8 & \(=\) & 1088 Stt. \\
\hline Waiting hall & 1 & x & 2 x & 33 & + & \(201 / 2\) & ) x & 8 & = & 856 Sft . \\
\hline Nurse & 1 & x & 2 x & 10 & + & 12 & ) x & 8 & \(=\) & 352 Sft . \\
\hline Change & 1 & \(x\) & 2 x & 6 & + & 12 & ) x & 8 & \(=\) & 288 Sft . \\
\hline Lobby & 1 & X & \(2 \times(\) & 16.75 & + & \(151 / 4\) & ) x & 8 & = & 512 Sft . \\
\hline Corridor & I & x & \(2 \times 1\) & 82.125 & + & \(81 / 4\) & ) & 8 & = & 1446 Sft . \\
\hline Trolley space/autoclave & 2 & x & 2 x & 6.75 & + & 10 & ) x & 8 & \(=\) & 536 Sft . \\
\hline Plaster & 1 & x & \(2 \times 1\) & 14 & + & \(135 / 8\) & ) x & 8 & = & 442 sft . \\
\hline Splint & 1 & x & \(2 \times 1\) & 14 & + & 6 & ) x & 8 & \(=\) & 320 Sft . \\
\hline Telephone/Reception & 2 & x & \(2 \times 1\) & 10 & + & 83/4 & ) x & 8 & \(=\) & 600 Sft . \\
\hline Entrance front & 1 & x & \(2 \times 1\) & 44.5 & + & 21 1/8 & ) x & 8 & = & 1050 Sft . \\
\hline Treatment room & 1 & x & \(2 \times 1\) & 18 & + & 20 & ) x & 8 & = & 608 Sft . \\
\hline Doctor & 1 & x & \(2 \times(\) & 12 & + & 20 & ) x & 8 & = & 512 Sft . \\
\hline Nurse & 1 & X & \(2 \times 1\) & 10 & + & \(101 / 4\) & ) x & 8 & = & 324 Sft. \\
\hline Store & 1 & x & 2 x & 10 & \(+\) & 93/8 & ) x & 8 & = & 310 Stt . \\
\hline W.C & 1 & x & \(2 \times 1\) & 4.625 & + & \(41 / 2\) & ) x & 8 & \(=\) & 146 Sft . \\
\hline
\end{tabular}
•
```




28 Cement concrete plain including placing, compacting, finishing and curing
complete (including screening and washing of stone aggregate) Ratio 1:2:4
O.T
Sterilizing room
Office
O.T
Scrub Up
Gyne O.T
Eye O.T
Store
Reception.
Toilet
Corridor
Connecting Corridor

| 1 | x | 16.875 | x | $93 / 8$ | x | 0.083 | $=$ | 13 Cft. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :--- |
| 1 | x | 16.875 | x | $97 / 8$ | x | 0.083 | $=$ | 14 Cft |
| 2 | x | 24.625 | x | $157 / 8$ | x | 0.083 | $=$ | 65 Cft |
| 2 | x | 7.375 | x | $107 / 8$ | x | 0.083 | $=$ | 13 Cf. |
| 1 | x | 15 | x | $115 / 8$ | x | 0.083 | $=$ | 14 Cft |
| 1 | x | 15 | x | $115 / 8$ | x | 0.083 | $=$ | 14 Cft |
| 2 | x | 8.875 | x | $115 / 8$ | x | 0.083 | $=$ | 17 Cft |
| 1 | x | 33 | x | $123 / 4$ | x | 0.083 | $=$ | 35 Cft |
| 2 | x | 7.75 | x | $83 / 4$ | x | 0.083 | $=$ | 11 Cft |
| 1 | x | 67.5 | x | $71 / 4$ | x | 0.083 | $=$ | 41 Cft. |
| 1 | x | 7.25 | x | $301 / 4$ | x | 0.083 | $=$ | 18 Cf. |

Openings
O.T
D-1
D-2
D-3
D-4
D-5

Openings
$\quad$ Main Building (A)
Lav. 01
Bath room
Bath room
Male Ward
Toilet
Office
Private/Isolation room
Corridor

Corridor
Corridor
Corrido
O.T.S

Lav. 02
Bath room
Bath room
Male Ward
Male Ward
Female ward
Private room
Toilet
Private room
Store
Front Corridor

| 2 | x | 2.5 | x | 11/8 | x | 0.083 | = | 0.47 Cft |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | $x$ | 3 | x | 11/8 | x | 0.083 | = | 2 Cft |
| 9 | x | 3.5 | $x$ | 11/8 | x | 0.083 | $=$ | 3 Cft |
| 2 | $x$ | 4 | $x$ | $11 / 8$ | $x$ | 0.083 | = | 1 Cft |
| 1 | X | 6.75 | $x$ | 11/8 | x | 0.083 | = | 1 Cft |
| 1 | x | 33 | x | $11 / 8$ | X | 0.083 | = | 3 Cft . |
| 2 | x | 12.75 | X | $73 / 8$ | x | 0.083 | = | 16 Cft |
| 4 | x | 4 | x | $51 / 4$ | X | 0.083 | $=$ | 7 Cft . |
| 2 | x | 3.75 | X | $51 / 4$ | X | 0.083 | = | 3 Cft . |
| 2 | x | 40.75 | x | 20 | X | 0.083 | = | 135 Cft . |
| 4 | x | 6 | x | 5 5/8 | X | 0.083 | = | 11 Cft . |
| 2 | x | 13.375 | x | $115 / 8$ | $x$ | 0.083 | = | 26 Cft . |
| 2 | x | 11.625 | x | 73/8 | x | 0.083 | = | 14 Cft . |
| 1 | X | 133.25 | $x$ | $71 / 4$ | X | 0.083 | = | 80 Cft . |
| 2 | x | 24.25 | X | $81 / 2$ | X | 0.083 | $=$ | 34 Cft |
| 2 | x | 7.25 | X | 123/4 | X | 0.083 | = | 15 Cft . |
| 2 | x | 12.75 | x | $201 / 2$ | X | 0.083 | = | 43 Cft . |
| 2 | x | 12.75 | X | $201 / 2$ | X | 0.083 | = | 43 Cft . |
| 2 | x | 12.75 | x | 5 | $x$ | 0.083 | = | 11 Cft . |
| 4 | x | 4 | x | $51 / 4$ | x | 0.083 | = | 7 Cft . |
| 2 | x | 3.75 | x | $51 / 4$ | X | 0.083 | = | 3 Cft . |
| 1 | x | 15.5 | X | 20 | x | 0.083 | = | 26 Cft . |
| 1 | x | 24.5 | x | 20 | x | 0.083 | = | 41 Cft . |
| 1 | $x$ | 40.75 | X | 20 | x | 0.083 | = | 68 Cft . |
| 2 | x | 11.625 | x | 73/8 | x | 0.083 | = | 14 Cft . |
| 4 | x | 6 | X | $55 / 8$ | x | 0.083 | = | 11 Cft . |
| 2 | x | 13.375 | $x$ | $115 / 8$ | x | 0.083 | = | 26 Cft . |
| 1 | x | 12.75 | X | $63 / 8$ | x | 0.083 | = | 7 Cft |
| 1 | x | 134.375 | x | $71 / 4$ | x | 0.083 | = | 81 Cfl |

## Openings

\[\)|  D-0  |
| :--- |
|  D-1  |
|  D-2  |
|  D-3  |
|  D-4  |
|  D-5  |

\]

Openings
Openings
Main BuildingStaff
Portion

| surgen room | 1 | x | 11.75 | x | 16 | x | 0.083 | $=$ | 16 Cft . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Toilet | 1 | x | 7.875 | X | $65 / 8$ | X | 0.083 | = | 4 Cft . |
| Exam | 1 | X | 7.875 | x | 9 | X | 0.083 | $=$ | 6 Cft . |
| M.S Office | 1 | x | 16 | X | 16 | X | 0.083 | = | 21 Cft . |
| Medicine store | 1 | x | 19.625 | x | 16 | x | 0.083 | $=$ | 26 Cfl . |
| Clerk Room | 1 | x | 12 | x | 16 | X | 0.083 | = | 16 Cft . |
| Store | 1 | x | 11.75 | x | 12 | X | 0.083 | $=$ | 12 Cft . |
| Lav. | 1 | x | 11.75 | x | 5 5/8 | x | 0.083 | = | 5 Cft . |
| Bath room | 1 | x | 5 | X | 5 | x | 0.083 | = | 2 Cft . |
| Bath room | 1 | x | 3.25 | x | 5 | x | 0.083 | = | 1 Cft . |
| Bath room | 1 | x | 4 | x | 53/4 | x | 0.083 | $=$ | 2 Cft . |
| Corridor | 1 | x | 72.75 | X | $71 / 4$ | x | 0.083 | = | 44 Cft . |




```
Openings
D-2
D-3
D-4
D-5
```

Openings

$\qquad$
11734 Sft.
341.90 P.Sft

34 Providing and laying superb quality Ceramic tile floors of Master brand of specified size,Glossy/Matt/Texture of approved Color and Shade as per approved design with adhesive bond, over $3 / 4^{\prime \prime}$ 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.
size 12 "x36"

| O.T |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Scrub Up | 2 | x | 7.375 | x | $107 / 8$ | $=$ | 160 Sft . |
| Toilet | 2 | x | 7.75 | x | $83 / 4$ | $=$ | 136 Sft . |
| Main Building (A) |  |  |  |  |  |  |  |
| Lav. 01 | 2 | x | 12.75 | x | $73 / 8$ | $=$ | 188 Sft . |
| Bath room | 4 | x | 4 | x | $51 / 4$ | = | 84 Stt . |
| Bath room | 2 | x | 3.75 | x | $51 / 4$ | = | 39 Sft . |
| Toilet | 4 | x | 6 | x | 5 5/8 | $=$ | 135 Stt . |
| Lav. 02 | 2 | x | 12.75 | x | 5 | = | 128 Sft . |
| Bath room | 4 | x | 4 | x | $51 / 4$ | $=$ | 84 Sft . |
| Bath room | 2 | x | 3.75 | x | $51 / 4$ | = | 39 Sft . |
| Toilet | 4 | x | 6 | $x$ | $55 / 8$ | $=$ | 135 Sft . |
| Main BuildingStaff |  |  |  |  |  |  |  |
| Portion |  |  |  |  |  |  |  |
| Toilet | 1 | x | 7.875 | x | $65 / 8$ | $=$ | 52 Sft . |
| Lav. | 1 | x | 11.75 | x | 55/8 | = | 66 Sft . |
| Bath room | 1 | x | 5 | x | 5 | = | 25 Sft . |
| Bath room | 1 | x | 3.25 | x | 5 | $=$ | 16 Sft . |
| Bath room | 1 | x | 4 | x | $53 / 4$ | $=$ | 23 Sft . |
| Toilet | 1 | x | 7.875 | x | 65/8 | = | 52 Sft . |


| Total:- | $=$ | 1362 Sft. |  |
| :--- | :--- | :--- | :--- | :--- |
|  | $@$ | $241.35 \mathrm{P.Sft}$ | 328,719 |
|  |  |  |  |

35 Providing and laying superb quality Ceramic tiles dado of Master brand of sjecified size,Glossy/Matt/Texture skirting/dado of approved Color and Shade with adhesive bond over $1 / 2^{\prime \prime}$ 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 direced by the Engineer Incharge.

| size 12"x36" |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| O.T |  |  |  |  |  |  |  |  |  |  |
| Scrub Up | 2 | $x$ | $2 \times 1$ | 7.375 | $+$ | $107 / 8$ | ) x | 7 | = | 511 Sft . |
| Toilet | 2 | x | $2 \times 1$ | 7.75 | + | 83/4 | ) x | 7 | $=$ | 462 Stt . |
| Main Building (A) |  |  |  |  |  |  |  |  |  |  |
| Lav. 01 | 2 | x | $2 \times 1$ | 12.75 | $+$ | 73/8 | ) x | 7 | $=$ | 564 Sft . |
| Bath room | 4 | x | $2 \times 1$ | 4 | + | $51 / 4$ | ) x | 7 | $=$ | 518 Stt . |
| Bath room | 2 | X | $2 \times 1$ | 3.75 | $+$ | $51 / 4$ | ) x | 7 | $=$ | 252 Stt . |
| Toilet | 4 | x | $2 \times 1$ | 6 | + | 5 5/8 | ) x | 7 | $=$ | 651 Stt . |
| Lav. 02 | 2 | x | $2 \times 1$ | 12.75 | + | 5 | ) x | 7 | = | 497 Stt . |
| Bath room | 4 | x | $2 \times 1$ | 4 | + | $51 / 4$ | ) x | 7 |  | 518 Stt . |
| Bath room | 2 | x | 2 x | 3.75 | + | $51 / 4$ | ) x | 7 | = | 252 Sft . |
| Toilet | 4 | x | $2 \times 1$ | 6 | + | 5 5/8 | ) x | 7 | $=$ | 651 Stt . |
| Main BuildingStaff Portion |  |  |  |  |  |  |  |  |  |  |
| Toilet | 1 | x | $2 \times 1$ | 7.875 | + | $65 / 8$ | ) x | 7 | $=$ | 203 Sft . |
| Lav. | 1 | x | $2 \times 1$ | 11.75 | + | 55/8 | ) x | 7 | $=$ | 243 Sft . |
| Bath room | 1 | x | $2 \times 1$ | 5 | + | 5 | ) x | 7 | $=$ | 140 Sft . |
| Bath room | 1 | x | 2 x | 3.25 | + | 5 | ) x | 7 | $=$ | 116 Stt . |
| Bath room | 1 | x | $2 \times 1$ | 4 | + | $53 / 4$ | ) x | 7 | = | 137 Stt . |
| Toilet | 1 | x | $2 \times 1$ | 7.875 | + | 65/8 | ) x | 7 | = | 203 Stt . |

## Deductions

Total:
5918 Sft.


37 Providing and laying Prepolished Granite of specified thickness and shade of full width of approved quality laid with adhesive bond over $3 / 4$ "thick (1:2) cement sand mortor bed, complete in all respect as approved and directed by the Engineer Incharge. I/2" Thick Riser.


38 Providing and fixing $3^{\prime \prime}(75 \mathrm{~mm})$ thick R.C.C. manhole cover, $22^{\prime \prime}(550 \mathrm{~mm})$ dia, with
tee shaped C.I. frame of $20^{\prime \prime}(500 \mathrm{~mm})$ clear i/d (frame weighing $37.324 \mathrm{Kg}_{\mathrm{j}}$ or one
maund) as per Standard Drawing STD/PD No. 5, of 1977, complete in all respects


39 Providing and fixing Copper winged Exhaust fan wfth louver and shutter made of Pak/rounas/G.F.C. jec the cost of nelessary cablgand hardware for
connection/rom ceiling robe complete asapproved and directed byengineer
Incharge. Steel body 18" sweep


40 Providing and fixing 4" deep cable tray with straight flange fabricated with perforated G.I. Sheet of specified guage,size and depth duly wall supported/ceiling hung,supported on painted brackets of MS angle iron of 1 -
$1 / 2 " x 1-1 / 2^{\prime \prime} \times 3 / 16^{\prime \prime}$ and MS patti of $1-1 / 2^{" x} \times 3 / 16^{\prime \prime}$ size @ $5 \mathrm{ft} / \mathrm{C}$, hangers $\mathrm{i} / \mathrm{c}$ the cost of hardwares as approved and directed by the Engineer Incharge.

## 16SWG 10"x4"

## o.T

| Reception. |  | 73 | $=$ | 73 Rft |
| :---: | :---: | :---: | :---: | :---: |
| Corridor |  | 67.5 | = | 68 Rft . |
| Connecting Corridor |  | 40 | = | 40 Rft . |
| Main Building (A) |  |  |  |  |
| Male Ward |  | 60.75 | = | 122 Rft . |
| Corridor |  | 133.25 | $=$ | 133 Rft . |
| Corridor | 2 | 30 | $=$ | 60 Rft . |
| Corridor | 2 | $123 / 4$ | = | 26 Rft . |
| Male Ward | 1 | 60 | = | 60 Rft . |
| Male Ward | 1 | 65 | = | 65 Rft . |
| Female ward | 1 | 65 | - | 65 Rft . |
| Front Corridor | 1 | 34.375 | $=$ | 134 Rft . |
| Main BuildingStaff |  |  |  |  |
| Portion |  |  |  |  |
| Corridor | 1 | 90 | = | 90 Rft . |


| Total:- | $=$ | 936 Rft. |  |
| :--- | :--- | :--- | :--- |
|  | $@$ | $1010.10 \mathrm{P} . \mathrm{Rft}$ | 945,454 |

41 Providing and fixing $1 / 8^{\prime \prime}(3 \mathrm{~mm})$ thick $3^{\prime \prime}(75 \mathrm{~mm})$ wide aluminium strip on horizontal and vertical expansion joints in walls, columns, ceilings and floors etc., including cost of clips/screws etc. complete in all respects:- a) On interior surface (without mastic strip)
OPD Block

| Wings | $2 \times$ | 40 | $=$ | 80 Rft. |
| :--- | :--- | :--- | :--- | :--- |
| Connecting Corridor <br> Labor room and O.T Block | $2 \times$ | 40 | $=$ | 80 Rft. |
| Front Corridor | $2 \times$ | 40 | $=$ | 80 Rft. |
| Emergency and General Wards <br> Corridor | $2 \times$ | 40 | $=$ | 80 Rft. |


| Total:- | $=$ | 320 Rft . |  |
| :---: | :---: | :---: | :---: |
|  | (a) | 148.40 P.Rft | 47,488 |
|  | $61247682-6+121823$ |  |  |



Say Rs. $=63,438 ; 600=$ $63085112-631306002$

# AMENDED ROUGH COST ESTIMATE FOR "BALANCE WORK OF <br> REVAMPING OF ALL DHQ/ 15 THQ HOSPITALS IN PUNJAB, ONE AT <br> THQ SHUJABAD, DISTRICT MULTAN" (ADP-2022-23 GS NO. 658) <br> PIPELINE WITH FITTINGS 

2nd Bi-Annual 2022
1- Providing, laying, cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE-100) working presure pipe, Beta/ Dadex/ Popular/ ILL or equivalent, in trenches, as approved \& directed by the engineer incharge, complete in all respects.
e) $\mathrm{PN}-16$ (SDR-11)

| i) 90 mm |  | 500 | Rft |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | @ | 349.8 | P.Rft | Rs: | 174,900 |
| ii) 110 mm | = | 250 | Rft | ; |  |
|  | @ | 525.05 | P.Rft | Rs; | 131,263 |
| iii) 125 mm | $=$ | 100 | Rft |  |  |
|  | (a) | 678.7 | P.Rft | Rs: | 67,870 |
| iv) 160 mm | $=$ | 50 | Rft |  |  |
|  | @ | 1,104.00 | P.Rft | Rs: | 55,200 |

2- Providing and fixing heavy duty Globe valve of specified diameter and material for pressure rating PN-16 made of Crane (USA), Hatersly (UK) or Scon (Pakistan) $\mathrm{i} / \mathrm{c}$ the cost of all accessories flanges,nut/bolt and gaskit where required complete in all respect as approved and directed by the Engineer Incharge.
(b) Flange Ended Ductile Iron Valve

| (viii) $3^{\prime \prime}$ dia | 1 | $=$ | 1 | No |  |  |
| :--- | :--- | :--- | :---: | :--- | :--- | :--- | :--- |
|  |  | @ | $30,686.40$ | Each | Rs: | 30,686 |
| (ix) 4 " dia | 1 | $=$ | 1 | No |  |  |
| (xi) $6^{\prime \prime}$ dia |  | @ | $34,886.40$ | Each | Rs: | 34,886 |
|  | 1 | $=$ | 1 | No |  |  |
|  |  | @ | $60,206.40$ | Each | Rs: | 60,206 |

3- Providing and fixing heavy duty Check valve of sjecified diameter and material for pressure rating PN-16 made of Crane (USA), Hatersly (UK) or Scon (Pakistan) i/c the cost of all accessories flanges,nut/bolt and gaskit where required complete in all respect as approved and directed by the Engineer Incharge
(b) Flange Ended Ductile Iron Valve

| (viii) $3^{\prime \prime}$ dia | 1 | $=$ | 1 | No |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | @ | 21,758.40 | Each | Rs: | 21,758 |
| (ix) $4^{\prime \prime}$ dia | 1 | $=$ | 1 | No |  |  |
|  |  | @ | 30,158.40 | Each | Rs: | 30,158 |
| (xi) $6^{\prime \prime}$ dia | 1 | $=$ | 1 | No |  |  |
|  |  | @ | 47,730.00 | Each | Rs: | 47,730 |

4- Providing and fixing heavy duty Check valve of specified diameter and material for pressure rating PN-16 made of Crane (USA), Hatersly (UK) or Scon (Pakistan) $\mathrm{i} / \mathrm{c}$ the cost of all accessories flanges,nut/bolt and gaskit where required complete in all respect as approved and directed by the Engineer Incharge
(b) Flange Ended Ductile Iron Valve
(viii) $3^{\prime \prime}$ dia
(ix) $4^{\prime \prime}$ dia
(xi) $6^{\prime \prime}$ dia

$$
\begin{aligned}
& = \\
& @ \\
& = \\
& @ \\
& = \\
& @
\end{aligned}
$$

| 1 | No |  |  |
| :---: | :--- | :---: | :---: |
| $21,758.40$ | Each | Rs: | 21,758 |
| 1 | No |  |  |
| $30,158.40$ | Each | Rs: | 30,158 |
| 1 | No |  |  |
| $47,730.00$ | Each | Rs: | 47,730 |
|  |  | $\vdots$ |  |
|  |  | Page | 163 |

5. Excavation of trenches in all kinds of soil, except cutting rock, for watersupply pipelines upto $5 \mathrm{ft} .(1.5 \mathrm{~m})$ depth from ground level, including leveling the beds of trenches to correct grade and cutting pits for joints, etc. complete in

| 1 | x | 500 | x | 2 | x | 3 | $=3000$ | Cft |
| :---: | :---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | x | 250 | x | 2 | x | 3 | $=1500$ | Cft |
| 1 | x | 100 | x | 2 | x | 3 | $=600$ | Cft |
| 1 | x | 50 | x | 2 | x | 3 | $=300$ | Cft |
|  |  |  |  | Total | $=\mathbf{5 4 0 0}$ | $\mathbf{C f t}$ |  |  |
|  |  |  |  |  |  |  |  |  |

6- Rehandling of earth work lead upto a single throw of kassi.


Total Rs:
809,354
Add 3\% Contingency
24,281

Total Rs:
833,635

SAY Rs: 833,600
M.Unut
SUB ENGINEER
Sub Divisional Officer
Buildings Sub Division Shujabad
Exesutive Enginger,
Buildings Division No. 2 MULTAN..


2 Excavation of well in dry upto $20^{\prime}(6$ metre) below ground level, and disposal of soil within one chain ( 30 metre) a) in ordinary soil or sand :- i) from $0^{\prime}$ to $5^{\prime}(0$ to 1.5 metre) depth
O.H.R $3.14 \times 20.5 \times 20.5 \times \quad 5=\quad 6598 \mathrm{Cft}$
ii) from $5.1^{\prime}$ to $10^{\prime}$ ( 1.5 to 3.0 metre) depth


3 Cement concrete brick or stone ballast $1^{1 / 2} 2^{\prime \prime}$ to $2^{\prime \prime}(40 \mathrm{~mm}$ to 50 mm ) gauge, in foundation and plinth:- (b) Ratio 1:4:8
Base
$\frac{(3.14 \times 20.5 \times 20.5)}{4}$

| x | 0.75 |
| :--- | :--- |
| @ | 24893 |

61,486
4 Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and other structural members other than those mentioned in 5 (a) (i) above not requiring form work (i.e. horizental shuttering) complete in all respects:(3) Type C (nominal mix 1:2:4)

|  | $3.14 \times 20.5 \times 20.5 \times$ | 1 | $4=$ | 330 Cft |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| Raft beam | $3.14 \times$ | $11 \times$ | 1.5 | $\times$ | $1.5=$ | 78 Cft |
| Core Wall | $3.14 \times$ | $11 \times$ | 0.5 | $\times$ | $8.5=$ | 147 Cft |
|  |  |  |  |  | Total: | 555 Cft |

5 Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-

| Coloumns | $4 \times$ | 1.5 | $x$ | 1.5 x | $45=$ | 405 | Cft |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Braces | $16 \times$ | 6.83 | x | $1.5 \times$ | 1.5 = | 246 | Cft |  |
| Top beam | $4 \times$ | 6.83 | $x$ | 1 x | $1.667=$ | 46 | Cft | 1 |
| Landing | $5 \times$ | 2.25 | x | $2.25 \times$ | $0.33=$ | 8 | Cft |  |
| Intermidiate slab | $1 \times$ | 10 | x | 10 x | $0.417=$ | 42 | Cft |  |
| Tanki bottom slab. | $3.14 \times$ | 41 | $x$ | 0.625 x | -- = | 80 | Cft |  |
| Tanki bottom slab. $12.75 \times 12.75 / 4$ | 3.14 x | 41 | $x$ | 0.5 x | -- $=$ | 64 | Cft |  |
| Hodi | $2 \times$ | 2 | x | $1.5 \times$ | $0.208=$ | 1 | Cft |  |
| Hodi | $1 \times$ | 2 | $x$ | 2 x | $0.208=$ | 1 | Cft |  |
| Hodi | $1 \times$ | 1.5 | x | $1.5 \times$ | $0.208=$ | 0 | Cft |  |
|  |  |  |  |  | Total: | 893 | Cft |  |
|  |  |  |  | @ | 559.2 |  |  | 499,366 |

5A Carriage of subsequent stone aggregate and bajri (sakhi sarwar query)


7 Mosaic dado or skirting with one part of cement and marble powder in the ratio of $3: 1$ and two parts of marble chips, laid over $1 / 2^{1 /}(13 \mathrm{~mm})$ thick cement plaster $1: 3$, including rubbing and polishing, complete with finishing: (a) using grey cement: ii) $1 / 2^{\prime \prime}(13 \mathrm{~mm})$ thick

|  | 4 | 8 | $x$ | 0.5 | $x$ | -- | $=$ | 16 | 6 Sft |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| bottom beam. | 3.14 | 10 | $x$ | 10 | $x$ | 0.25 | $=$ | 79 | Sft |
| Walls | 3.14 | 10 | $x$ | ''9 | $x$ | -- | = | 283 | Sft |
|  |  |  |  |  |  | Total: |  | 378 | Sft |
|  |  |  |  |  | (a) | 21437 |  |  |  |

8 Fabrication of heavy steel work, with angle, tees, flat iron round iron and sheet iron for making trusses, girders, tanks, etc., including cutting, drilling, revitting, handling, assembling and fixing, including erection in position


1 under floors:- ii) with new earth excavated from outside, lead upto
Miles


12 Supplying and filling sand under floor; or plugging in wells. Under Foundation ( $4 \times 0.5$ )

13 Providing, laying, watering and ramming brick ballast $1^{1 / 2^{\prime \prime}}$ to $2^{\prime \prime}(40$ mm to 50 mm ) gauge mixed with $25 \%$ sand, for floor foundation, complete in all respects.

Appron.

14 Providing and laying topping of cement concrete $1: 2: 4$, including surface finishing and dividing in panels:- (c) $11 / 2^{\prime \prime}(40 \mathrm{~mm})$ thick

15 Providing and fixing marble strip of any shade for dividing the mosaic flooring into panels a) Size $1^{1 / 2^{\prime \prime}} \mathrm{x}$ $3 / 8^{\prime \prime}(40 \times 10 \mathrm{~mm})$

Take $60 \%$ of item above. $284 \times$
16 Providing/fixing stair railing consisting of M.S. Box section size 1$1 / 2^{\prime \prime} \times 3^{\prime \prime}$ of 16 SWG welded with M.S. flat 1 " $\times 1 / 8^{\prime \prime}$ continuously and welded over M.S. square bars $5 / 8^{\prime \prime} \times 5 / 8^{\prime \prime}$ punched in M.S. flat $23 / 4^{\prime}$ high @ $51 / 2^{\prime \prime}$ $\mathrm{c} / \mathrm{c}$ fixed in steps on stair $\mathrm{I} / \mathrm{C}$ painting 3 coats complete.

17 Extra labour for laying concrete plain or reinforced (a) above $20^{\prime}(6 \mathrm{~m})$ upto $40^{\prime}(12 \mathrm{~m})$ height

| Coloumns | $4 \times$ |  |
| ---: | ---: | ---: |
| Braces | $8 \times$ |  |
| Top beam | $4 \times$ |  |
| Landing | $3 \times$ |  |
| Tanki bottom slab. | $12.75 \times 12.75 / 4$ | $3.14 \times$ |
| Top slab | $12 \times 12 / 4$ | $3.14 \times$ |
|  | Core Wall | $3.14 \times$ |

18 Pacca brick work in ground floor:- i) cement, sand mortar:- Ratio 1:4

$$
\text { Core Wall } 3.14 \times
$$

$3.14 \times$

| 1.5 | x | 1.5 | x |
| ---: | :--- | ---: | :--- |
| 6.83 | x | 1 | x |
| 6.83 | x | 1 | x |
| 2.25 | x | 2.25 | x |
| 41 | x | 0.58 | x |
| 36 | x | 0.417 | x |
| 11 | x | 0.5 | x |

        cement, sand mortar:- Ratio 1:6
    | O.H.R | $4 \times$ |
| ---: | :--- |
| Deduction |  |
| Cw | $2 \times$ |
| D.Opening | $1 \times$ |
| Lintles | $2 \times$ |
| D/L | $1 \times$ |

Cement plaster 1:5 upto $20^{\prime}(6.00$ mm ) height:- b) $1 / 2^{\prime \prime}(13 \mathrm{~mm})$ thick

| Toe Wall | $1 \times$ |
| ---: | :--- |
| Drain | $2 \times$ |
| Hodi | $8 \times$ |


| 71 | x |
| ---: | :--- |
| 3 | x |
| 2.5 x |  |


| 1.5 | $x$ |
| ---: | :--- |
| 1.25 | $x$ |
| 1.5 | $x$ |


| 20 | $=$ | 180 Cft |
| ---: | :--- | ---: |
| 1 | $=$ | 55 Cft |
| 1.667 | $=$ | 46 Cft |
| 0.33 | $=$ | 5 Cft |
| -- | $=$ | 75 Cft |
| $\cdots$ | 47 Cft |  |
| 8.5 | $=$ | 147 Cft |
| Total: |  | 555 Cft |
| 4076.15 | $\% \mathrm{Cft}$ |  |

22,623

| $9=$ | 109 | Cft |  |
| :---: | :---: | :---: | :---: |
| 9 = | 135 | Cft |  |
| Total: = | 244 | Cft |  |
| 32585.8 | \% Cft |  | 79,509 |
| $9=$ | 209 | Cft |  |
| $1.5=$ | 7 | Cft |  |
| 7 = | 21 | Cft |  |
| $0.5=$ | 3 | Cft |  |
| $0.5=$ | 2 | Cft |  |
| Total: = | 33 | Cft |  |
| Balance | 176 | Cft |  |
| 30913 | \% Cft |  | 54,407 |
| -- = | 107 | Sft |  |
| -- = | 8 | Sft |  |
| -- = | 30 | Sft |  |

21 Cement plaster 1:4 upto $20^{\prime}$ ( 6.00 $\mathrm{mm})$ height:- b) ${ }^{1 / 2^{\prime \prime}}(13 \mathrm{~mm})$ thick


32 Distempering:- a) new surface:- iii) three coats
$22 \mathrm{P} / \mathrm{F}$ Iron door comprising of specified leaves made of $1-1 / 4^{\prime \prime} \times 1-$ $1 / 4^{\prime \prime} \times 3 / 16^{\prime \prime}$ MS angle iron for leaf frame, diagonal and horizontal
braces duly welded with MS. sheet 18-SWG $i / \mathrm{c}$ the cost of
sliding bolt, tower bolt and painting 3 -coats but excluding the cost of Chowkat complete in all respect as approved and directed by the Engineer incharge Double Leaf
$24 \mathrm{P} / \mathrm{F} 3 / 4^{\prime \prime}$ dia heavy duty sliding bolt of specified material $i / c$ the cost of hardware complete in all respect as approved and directed by the Engineer Incharge. ii) iron sliding bolt, $12^{\prime \prime}(300 \mathrm{~mm})$ long

25 Painting new surface:- c) Preparing surface and painting of doors and windows any type (including edges):(Three coats)
$1 \times$
$4 \times$
$7 \times \quad-\quad=$
396.75

28 Sft
P-Sft
-

AMENDED ROUGH COST ESTIMATE FOR "BALANCE WORK OF REVAMPING OF ALL DHQ/ 15 THQ HOSPITALS IN PUNJAB, ONE AT THQ SHUJABAD, DISTRICT MULTAN" (ADP-2022-23 GS NO. 658)

DETAILED ESTIMATE FOR INSTALLATION OF 1/2-CUSEC VERTICAL TURBINE PUMP I/C BORING, PUMP CHAMBER AND POWER WIRING ETC



## MACHINERY 1/2-CUSEC DISCHARGE VERTICAL TURBINE PUMP

Providing and installation of Vertical Turbine Pump (KSB) 1/2-Cusec ALTA 260.60 /04-Stages disçharge against the total head of 160 latest manufacture assembly steel carbonishafts. Column pipes upto 100 coupled with 20 -
 (KSB Standard) Mounting clamps size 4" 1-No. Set, Butterfly, Reflex Valve 4" dia and Mechanical installation without civil \& electrical work complete in all respects as réquired at site of work and as approved by the Enigneer Incharge (Working condition)

2nd Bi-Annual 2022

## Unit of Rate $=\mathbf{P} . J o b$

I-

Certified that Input Rates of Material and Labour for the item at Serial No. NIL are as per Input Rates displayed on website of Finance Department for 2nd Bi-annual 2022



## QUOTATION <br> Vertical Line Shaft Turbine Pump <br> ALTA



$\square$

1. Direct Rotary/ Reverse Rotary drilling of bore for tube well in all type of soil except shingle gravel and rock (a) from ground level to $250^{\prime}$ below ground level $15^{\prime \prime}$ to $18^{\prime \prime}$ dia

|  | $=$ | 250 |
| :---: | :---: | :---: |
| (h:23 Itm. 5-a-i (p-130) | (a) | 775.15 |

2- Exceeding 250' depth below ground level $15^{\prime \prime}$ to $18^{\prime \prime}$
Ch.23 $\quad=\quad 150 \quad \mathrm{Rft}$

3- Providing strong substantly built box of deodar wood $4^{\prime} \times 2-1 / 2^{\prime} \times 9^{\prime \prime}$ with compartment Rock and locking arrangement, for preserving samples of strats from bore hole
$=\quad 1 \quad$ Job
(h:23 Itm. 7 (p-130)

$$
\begin{array}{lll}
\text { (a) } & 34428.2 & \text { P.Job }
\end{array}
$$

4- Fumishing sample of water from bore hole

|  | $=$ | 3 | Sets |
| :---: | :---: | :---: | :--- |
| Ch:23 Itm. $8(P-130)$ | $(\omega)$ | 183.95 | P.Set |

5- Providing \& Installing brass strainer in tube well bore hole $8^{\prime \prime}$ dia $3 / 16^{\prime \prime}$ thick $8^{\prime \prime}$ dia 3/16" thick

| $=$ | 100 | Rft |
| :---: | :---: | :---: |
|  |  |  |

6- Providing \& Installing M.S.Bail plug in tube well bore hole 8 " dia 2 ft long

|  | $=$ | 1 | No. |
| :--- | :--- | :---: | :--- |
| Ch:23 ltm. 10-g (P-131) | a) | 4906.15 | P.Rft |

Rs: $\quad 4,906$

7- Providing \& Installing M.S. Blind pipe socket welded joint M.S. reducer in tube well Bore hole $\mathrm{i} / \mathrm{c}$ jointing welding with strainer complete
i) $8^{\prime \prime}$ dia $3 / 16^{\prime \prime}$ thick
$=\quad 180 \quad \mathrm{Rft}$

Ch:23 Itm. 14-q (P-132)

| (a) | 2886 | $\mathrm{P} . \mathrm{Rft}$ |
| :--- | :--- | :--- |
| $=$ | 120 | Rft |

Ch:23 Itm. 14-j (P-132) (a). 4729.95 P.Rft
Rs: $\quad 567,594$

8- Shrouding with Graded Pea Gravel $3 / 8^{\prime \prime}$ to $1 / 8^{\prime \prime}$ ( 10 to 3 mm ) around tube well in bore hole

Rs: $\quad 34,428$

Ch:23 11m. 9-g (P-131)
(a) 9729.1 P.Rft

Rs:
972,910
(a) 4906.15 P.Rft

Rs: $\quad 4,906$
$22 / 7 \times 1.5 \times 1.5 \times 1 / 4 \times 400$
9. Providing and fixing Well Cap $12^{\prime \prime}$ dia comprising of $1 / 8^{\prime \prime}$ thick Iron Sheet and MS Flat $2^{\prime \prime} \times 1 / 8^{\prime \prime}$ complete in all respects and as approved by the Engineer Incharge

| $=$ | 1 | No |
| :---: | :---: | :---: |
| (a) | 1200 | Each |

Rs:
1,200
10. $\mathrm{P} / \mathrm{F}$ Welding $1 / 2^{\text {" }}$ dia MS Long Bar longitudnally along with strainerf for keeping the strainer in correct vertical position as required at site of work and as approved by the Engineer Incharge

$$
2 \times 80 \quad=\quad 160 \quad \mathrm{Rft}
$$

$$
\text { (N.S) (a) } 80 \quad \text { P.Rft }
$$

11- Providing and fixing of Clamps of MS Flat 3 " $x 3 / 8$ " and 3 long on top of casing pipe to avoid sinking $\mathrm{i} / \mathrm{c}$ cost of nut and bolt of required size complete as desired by the Engineer Incharge

|  | $=$ | 1 | Jobi: |
| :---: | :---: | :---: | :---: |
| (N.S) | @ | 3500 | P.Job |

Rs: $\quad 3,500$

12- Testing and developing of tube well of size $6^{\prime \prime} i / d$ and above contineousely upto 1.5 -cusec discharge 24 -hours

|  |  | $!$ |
| :---: | :---: | :---: |
| $=$ | 24 | Hour ! |
| (a) | 2828.55 | P.Hour |


| Rs: | 67,885 |
| ---: | :--- |
| Total Rs: | $=2,569,991$ |
| SAY Rs: | $=$$2,570,000$ |

SUB ENGINEER


1. Excavation in foundation of bridges and other structure i/c dag belling dressing etc: complete.

Room L/W

## SW

Toe walls L/W
$\begin{array}{rlrl}2 \times 16-1 / 8 \times 3 \times 2 & = & & 196 \mathrm{Cft} \\ 2 \times 10-1 / 8 \times 3 \times 2 & = & & 122 \mathrm{Cft} \\ 2 \times 23-1 / 2 \times 2 \times 1-1 / 2 & = & 141 \mathrm{Cft} \\ 2 \times 19-1 / 2 \times 2 \times 1-1 / 2 & = & 117 \mathrm{Cft} \\ \text { Total } & =576 \mathrm{Cft} @\end{array}$
Total $=576 \mathrm{Cft} @ 10712.6 \% \mathrm{Cft} 6,170 \%$
2. Cement concrte brick or stone ballast $1-1 / 2^{\prime \prime}$ to $2^{\prime \prime}$ gauge in foundaiton and plinth (Ratio 1:6:12).

Room L/W

| $2 \times 16-1 / 8 \times 3 \times 3 / 4$ | $=73.00 \mathrm{Cft}$ |
| ---: | :--- |
| $2 \times 10-1 / 8 \times 3 \times 3 / 4$ | $=46.00 \mathrm{Ct}$ |
| Total | $=119.00 \mathrm{Cf} @$ |

Total $=119.00 \mathrm{Cft} @ 21217.4 \% \mathrm{Cft} 25,249$ /-
3. Dry rammed brick or stone ballast $1-1 / 2^{\prime \prime}$ to $2^{\prime \prime}$ gauge in foundation and plinth

| Toe wall L/W | $2 \times 23-1 / 2 \times 2 \times 1 / 2$ | $=$ | 47 Cft |  |
| :--- | ---: | :--- | :--- | :--- |
| $\mathrm{S} / \mathrm{W}$ | $2 \times 19-1 / 2 \times 2 \times 1 / 2$ | $=39 \mathrm{Ct}$ |  |  |
|  | Total | $=86.00 \mathrm{Cft} @ \quad 9035.4 \% \mathrm{Cft}$ | $7,770 \quad /-$ |  |

4. Pacca brick work in $1: 6 \mathrm{c} / \mathrm{s}$ mortar in $F$ \& $P$

@
28698 \% Cft 124,262 /-
5. P/L DPC of cement concrte 1:2:4 1-1/2" thick i/c bitumen coating 01 coat and of polythene sheet 500 gauge.
i) D.P.C. No. 1

LMall $2 \times 14.25 \times 1.125=32 \mathrm{Stt}$
S/Wall
$2 \times 12 \times 1.125=\quad 27 \mathrm{Sft}$
ii) D.P.C. No. 2

L/Wall
S/Wall

D/duct

| $2 \times 14.25 \times 1.125$ | $=$ | 32 Sft |
| ---: | :--- | ---: |
| $2 \times 12 \times 1.125$ | $=$ | 27 Stt |
| Total | $=118 \mathrm{St}$ |  |
| $1 \times 4 \times 1-1 / 8$ | $=5 \mathrm{Sft}$ |  |

6. P/L vertical DPC with $\mathrm{c} / \mathrm{s}$ plaster and bitumen coating with one coat of bitumen (1:3,1/2" thick) \& one caot polythene sheet.

$$
1 \times 2(12+12) \times 1-1 / 2=72.00 \mathrm{Stt} @ 5681.05 \% \mathrm{Cft} 4,090 \quad /
$$

Filling watering ramming earth under floors with
7. surplus earth excavated from foundation etc. $2 / 3$ Qty as/item No. 1

Above $2 / 3 \times 576=384.00 \mathrm{Cft} @ 5107.850 \% \mathrm{Cft} 1,961 \mathrm{~K}$
Filling watering ramming earth under floors with
8. new earth excavated from out side sources lead up to 8 miles $\mathrm{i} / \mathrm{c}$ transportation charges of earth 1 mileRoom
$1 \times 12 \times 12 \times 2=228.00 \mathrm{cft}$
Under apros: $\quad 2 \times 20-3 / 4 \times 3-1 / 4 \times 1 / 2=67.00 \mathrm{Cft}$ $2 \times 14-1 / 4 \times 3-1 / 4 \times 1 / 2=46.00 \mathrm{Cft}$
OMs pros:
$2 \times 26-1 / 4 \times 2 \times 1-1 / 4=131.00 \mathrm{Cft}$ $2 \times 22-1 / 4 \times 2 \times 1-1 / 4=111.00 \mathrm{Cft}$

Total $=583.00 \mathrm{Cft} @$
9. Pacca brick work in ground floor and cement sand
a) Ratio (1:6)

Room L/W
Parapit

D/deductions

| Ops | O | $1 \times 4 \times 1-1 / 8 \times 8-1 / 2=$ | 38.00 Cft |
| :--- | :--- | ---: | :--- |
|  | W | $3 \times 3-1 / 2 \times 1-1 / 8 \times 4=$ | 47.00 Cft |
|  | Lintels | $2 \times 4 \times 3 / 8 \times 5=$ | 15.00 Cft |
|  | D | $1 \times 5 \times 1-1 / 8 \times 1 / 2=$ | 2.00 Cft |
|  | W | $3 \times 4-1 / 2 \times 1-1 / 8 \times 1 / 2=$ | 8.00 Cft |
|  | A | $2 \times 5 \times 3 / 8 \times 1 / 2=$ | 2.00 Cft |
|  |  | Total | $=112.00 \mathrm{Cft}$ |

$$
\begin{aligned}
2 \times 14-1 / 4 \times 1-1 / 8 \times 12 & =385.00 \mathrm{Cft} \\
2 \times 12 \times 1-1 / 8 \times 12 & =324.00 \mathrm{Cft} \\
2 \times 14-1 / 4 \times 3 / 4 \times 1-7 / 8 & =40.00 \mathrm{Cft} \\
2 \times 12-3 / 4 \times 1-7 / 8 & =36.00 \mathrm{Cft} \\
\text { Total } & =785.00 \mathrm{Cft}
\end{aligned}
$$

24434-500\%Cft 12,496-/-


$$
\text { Net }(785-112)=673.00 \mathrm{Cft} @ \quad 30913 \% \mathrm{Cft} 208,044 \quad \text { - }
$$

10. Pacca brick work in ground floor and cement sand mortar (G.F)
a) Ratio (1:4)

Girder Pill

| $2 \times 2-1 / 4 \times 3 / 4 \times 2$ | $=$ |
| ---: | :--- |
|  | 7 Cft |
| $2 \times 2 \times 1-1 / 8 \times 3 / 8 \times 5$ | $=$ |
| 8 Cft |  |
| $2 \times 1 \times 1-1 / 8 \times 1 / 4 \times 4-1 / 4$ | $=$ |
| Total | $=$ |
|  | 17 Cft |
| $\mathrm{Cft} @$ |  |

11. RCC 1:2:4 work in roof slabs beams cols lintels girdus, and other structural members laid in situ or precast laid in position complete in all respect

12. Fabrication of mild steel reinforcement for cement concrete $\mathrm{i} / \mathrm{c}$ cutting bending laying in position making joints and fastenings for binding wire and labour charges for bending of steel reinforcement (also includes removal of rust from bar. (Deformed bars)
Qty as / item No:12 above $\quad 104 \times 6.75 \times 0.454$
$104 \times 6.75 \times 0.454=319 \mathrm{Kg}$
Total $=319 \mathrm{Kg} @ 31451.40 \% \mathrm{Kg} \quad 100,330 /-$
13. Bitumen coating to plastered or cement concrete surface:-i) 10 lbs. per $100 \mathrm{Sft}(4.54 \mathrm{Kg}$ per Sq.m)

Bearing of slab $L / W$

| $2 \times 13-1 / 2 \times 3 / 4$ | $=$ |
| ---: | :--- |
| $2 \times 12 \times 3 / 4$ | $=18 \mathrm{Sft}$ |
| Total | $=38 \mathrm{Stt} @ \quad 1223.15 \% \mathrm{Stt} \quad 465 \quad /-$ |

14. P/F Iron door comprising of specified leaves
 made of $1-1 / 4^{\prime \prime} \times 11 / 4^{\prime \prime} \times 3 / 16^{\prime \prime} \mathrm{MS}$ angle iron for leaf frame, diagonal and horizontal braces duly welded with MS. sheet 18-SWG i/c the cost of sliding bolt, tower bolt and painting 3 -coats including cost of Chowkat(M.S. angle iron $11 / 2^{\prime \prime} \times$ $11 / 2^{\prime \prime} \times 1 / 4^{\prime \prime}(40 \times 40 \times 6 \mathrm{~mm})$ welded with M.S. flat 2 " $\times$ $1 / 4^{\prime \prime}(50 \mathrm{~mm} \times 6 \mathrm{~mm})$ complete in all respect as approved and directed by the Engineer incharge.(ii) Double Leaf

$$
1 \times 4 \times 7=28 \mathrm{Sft} @ 1396.75 \mathrm{P} . \mathrm{Sft} 39,109 /-
$$

15. P/F class rooh almirah consisting of 1 " thaick solid

16. P/F MS box section of 16SWG, having frames of 2 "x $1-1 / 2^{\prime \prime}$, leave frame of T-type box section of $2^{\prime \prime} \times 1^{\prime \prime} \times 1^{\prime \prime}$, with $1 / 2^{\prime \prime} \times 1 / 2^{\prime \prime}$ box section using, Ushaped rubber for fixing 5 mm thick glass panes $\mathrm{i} / \mathrm{c}$ the cost of fixing of 24 SWG wire guaze on inner side by means of $1 / 2^{\prime \prime} \times 1 / 8^{\prime \prime} \mathrm{MS}$ flat patti, MS grill fitted with in the window frame and screws including hinges, brass handles and painting 3coats.
Complete in all respect

$$
\text { W: } \quad 3 \times 3-1 / 2 \times 4=42 \mathrm{Sft} @ 1342.75 \mathrm{P} \mathrm{Sft} 56,396 \quad /-
$$

17. Preparing surface to doors and windows any type $\mathrm{i} / \mathrm{c}$ the edges 3 coat new surface
Al $2 \times 2 \times 4 \times 5=80 \mathrm{Sft} @ \underset{2770.70}{\%} \% \mathrm{Sft} 2,217 \quad 1-$
18. Cement concrete plain $i / c$ placing compacting,
finishing \& curing etc complete Ratio (1:2:4) i/c screening and washing stone aggregate.

19. $1 / 2^{\prime \prime}$ thick cement plaster $1: 4$ upto 20 ht

Motor Found
Parapit
Girder Pillars
Al: Side
inside
$1 \times 2(2-1 / 2+2-1 / 2) \times 2=20 \mathrm{Sft}$
$2 \times 14-1 / 4 \times 3-1 / 2=100 \mathrm{Sft}$ $2 \times 12-3 / 4 \times 3-1 / 2=89 \mathrm{Stt}$ $2 \times 2(2-1 / 4+3 / 4) \times 2=24 \mathrm{Sft}$ $2 \times 2 \times 2-1 / 4 \times 5=45 \mathrm{Sft}$ $2 \times 1 \times 2-1 / 4 \times 4-1 / 4=19 \mathrm{Sft}$ $1 \times 2(12+12) \times 11-1 / 2=552 \mathrm{Sft}$

Total $=$
$20^{\prime}$ heigh
20. Cement Pointing struck Joints, on walls, upto 20 height a) ratio $1: 2 \mathrm{i} / \mathrm{c}$ Red Oxide Pigment

| o/s room $4 \times 14-1 / 4 \times 15-1 / 2=$ | 884 Sft | @ | 3573.2 \%Sft | 31,587 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Single layer of tile $9^{\prime \prime} \times 4-1 / 2^{\prime \prime}$ laid over $4^{\prime \prime}$ earth and | ! |  |  |  |  |
| 1" mud plaster without bhoosa grouted with | , |  |  | 1 |  |
| cement sand 1:3 on top of RCC roof slab provided | , |  |  | + |  |
| with 34LBS per \% Sft bitumen coating sand |  |  |  |  |  |
| blinded. Supplying and laying polythene sheet | 1 |  |  |  |  |
| over D.P.C. under floors and on roofs, etc. | \% |  |  |  |  |
| 500 gauge (.005" thick) |  |  |  |  |  |
| $1 \times 12 \times 12=$ | 144 Sft | @ | 12070.9 \% Sft | 17,382 | $1-$ |

22. Mosaic dado or skirting with one part of cement and marble powder in the ratio of $3: 1$ and two parts of marble chips, laid over $1 / 2^{\prime \prime}(13 \mathrm{~mm})$ thick cement plaster 1:3, including rubbing and polishing, complete with finishing: (a) using grey cement ii) $1 / 2^{\prime \prime}(13 \mathrm{~mm})$ thick

In side $1 \times 2(12+12) \times 1 / 2=\quad 24 \mathrm{Sft} @ 21437.00 \% \mathrm{Sft} . \quad 5,145 \mathrm{l}$
23. Supply/filling sand under floors or plugging in walls

| Room | $1 \times 12 \times 12 \times 1 / 3=$ | 48 Cft |  | 2,740 |
| :---: | :---: | :---: | :---: | :---: |
| Plinth |  |  | 2824.60 \% Cft |  |
|  | $1 \times 2(18-3 / 4+14-1 / 4) \times 2-1 / 4 \times 1 / 3=$ | 49 Cft |  |  |
|  | Total: $=$ | 97 Cft @ |  |  |
| Khurra on roof $2^{\prime} \times 2^{\prime} \times 66^{\prime \prime}$ |  |  |  |  |
|  |  | 1 No @ | 865.75 Each | 866 |

25. Providing and laying conglomerate flooring (two coat work) with top layer of $1 / 2^{\prime \prime}(13 \mathrm{~mm})$ thick wearing surface, consisting of one part of cement and 2 parts of stone chips passing $3 / 16 "(6 \mathrm{~mm})$ sieve, over bottom layer of cement concrete 1:3:6, including surface finishing and dividing in panels:-
i) 1-1/2" thick

| L.Wall | $2 \times 20.25 \times 3$ | $=$ | 122 Sft |
| ---: | :--- | ---: | :--- |
| S.Wall | $2 \times 14.25 \times 3$ | $=$ | 86 Sft |
|  | Total | $=208 \mathrm{Sft} @ \quad 7703.45 \% \mathrm{Stt} .16,023 \%$ |  |

ii) 2" thick

Room Floor

Deduct:

| $1 \times 12 \times 12$ | $=$ | 144 Sft |
| ---: | :--- | ---: | :--- |
| $1 \times 4 \times 1-1 / 8$ | $=$ | 5 Stt |
| Total | $=$ | 149 Stt |
| $4-1 / 2 \times 4-1 / 2$ | $=$ | 20 Sft |
| NET: | $=129 \mathrm{Sft} @ 9745.85 \% \mathrm{Sft}$ | $12,572 \quad /-$ |

26. Providing, fixing, testing and commissioning of $\mu$ PVC (Unplasticized polyvinyl Chloride) Nikasi/waste pipemake of dadex /Popular/Beta/BBJ plain/socket ended conforming to code EN-1401 of specified SDR (Standard Dimension Ratio) including the cost of specials and Solvents complete in all respect as approved and directed by the Engineer Incharge. Type (SDR $32.5 / \mathrm{SN}-84^{\prime \prime}(110 \mathrm{~mm})$
27. Distempering new surface three coats
28. S /E of Ceiling Rose (149/30)
29. S /E of Holder (Bakelite) large size (149/39)



30. Supply and erection of tube light, including rod, choke, starter with frame, flexible wire, including connection from ceiling rose, etc., compléte. single rod ( 40 watts) with one choke and one starter.
31. S/E of M.S sheet board. 9" $\times 4$ " (146/14)
ii) 7 " $\times 4$ "
32. S/E switches 5 Amp (Piano) (149/31 (ii))
33. S/E of 3-pin 5 Amp wall socket (149/34)
34. S/E of PVC pipe for wiring recessed. $3 / 4^{\prime \prime}$ dia (143/3(ii) $1 \times 4 \times 12 \quad 48 \times 0.3048(20 \mathrm{~mm})$
35. S/E of PVC Insulated Copper Conductor Cable in prelaid PVC Pipe (144/10-a)
i) $310.029^{\prime \prime}$
ii) $7 / 10.029^{\prime \prime}$
36. $\mathrm{S} / \mathrm{E}$ of $03-\mathrm{Pin}$ Plug \& Switch combined 10-15Amps (149/36)
37. Fabrication of heavy steel work, with angle, tees, flat iron round iron and sheet iron for making trusses, girders, tanks, etc., including cutting, drilling, revitting, handling, assembling and fixing, but excluding erection in position. (P/Hoisting girders $4^{\prime \prime} \times 8^{\prime \prime}$ weighing $18 \mathrm{lbs} /$ Rft. (14 Rft x $18 \times 0.454$ ) (155/10) $=$
38. S/E of A.C. ceiling fan 56 " sweep $=$
$=$
$=$
39. Erection of A.C Ceiling Fan (154/83)
40. Earthing of Iron /Aluminum Clad Main Switches
$=\quad 120 \mathrm{Rft}$
@ $\quad$ 26.10 PRft
3,132 /-
$=\quad 60 \mathrm{R}$
@
41.15 PRft

2,469 /$=1$ No. @ 151.10 Each 151 /.
$\square$ $=$

1- Earthing of Iron Clad/Aluminum Switches with Gl Wire No. 8-SWG in Gl Pipe ( $1 / 2 \mathrm{dia}$ ) recessed or on surface or wall and floor complete with 1.5 -meter long GI Pipe ( $2^{\prime \prime}$ dia) with reducing socket 4 to 5 meter long below ground level 02 -meter away from building plinth

Motor \& S. Board
$=$
$(a)$

- $\mathrm{S} / \mathrm{E}$ of Iron /Aluminum Clad 500 -Volts Main Switches with Kit Kat fuses on L-Iron Board with $03-\mathrm{mm}$ ( $1 / 8^{\prime \prime}$ thick) MS Sheet covering $\mathrm{i} / \mathrm{c}$ bonding to earth with necessary flexible pipe and thimbles etc (Tripple Pole with Neutral Link) 100-Amps wood board

| $=$ | 1 | No. |
| :---: | :---: | :---: |

3- S /E of Single Core PVC Insulated PVC Copper Conductor Cable 250-440-Volts grade cables (BSS-2004) in preload PVC Pipe /MS Conduit GI Pipe /Wooden Strip Bateen /Wooden Crossing \& Coping trenches etc (Rate for Cables
i) $7 / 0.064^{\prime \prime} \quad 2 \times 4(5+10+80+25)$

4- $\quad \mathrm{S} / \mathrm{E}$ of PVC Pipe for recessed wiring (Main \& Sub Main) purpose $\mathrm{i} / \mathrm{c}$ bends specials etc in floor walls \& trenches 02" dia
i) $02^{\prime \prime}$ dia $1(10+80+15)$
$=$
$(a)$
5- $\mathrm{S} / \mathrm{E}$ of House Service Pipe Henley (G.I Pipe Water Quality) or pole type $50-\mathrm{mm}\left(02^{\prime \prime}\right.$ dia) erected to install insulated overhead line $\mathrm{i} / \mathrm{c}$ shackle insulator for holding insulated wire \& straining devices for bearer wire \& other accessories etc complete 151/54

$$
1 \times 10
$$

$=$
(a)

6- Supply and erection of G.I Wire No. 16-SWG for support of earthing wire pole to pole etc or rubber wire
151/60
$1(10+80+25)=115-R f t$
7. Providing and tixing switch Board $4 \times 3^{(a)}$ size consisting of S Sheet $1 / 8^{\prime \prime}$ thick with Angle Iron $1-1 / 2^{\prime \prime} \times 1-1 / 2^{\prime \prime} \times 3 / 16^{\prime \prime}$ frame with $04-$ No. Legs (Holdfasts) to be fixed at suitable place $\mathrm{i} / \mathrm{c}$ cost of volt meter, amp meter and phase indicator bulbts " 0 " Watts brass holder and wiring $\mathrm{i} / \mathrm{c}$ painting 03-coats complete in all respects as required at site of work and as approved by the Fnigneer Incharge
Sub Divistional Officer
Sub Divistional Officer
Buildings Sub Division
Shtujabad

# G.I PIPE LINE WITH FITTING (TURBINE TO O.H RESERVIOR) 

2nd Bi-Annual 2022
1 Providing, laying cutting, jointing, testing and disinfecting G.I pipeline in trenches, with socket joints, using G.l pipes of B.S.S 1387-1967 complete in all respect with special and valves. (Medium Quality)
A) 4" dia

Turbine to OHR $1(78+30+50+50)$

| $=$ | 208 Rft |  |
| :---: | :---: | :---: |
|  |  |  |
| $=$ | 208 Rft |  |
|  | @ 1565.25 P.Rft | 325,572 |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| $=$ | 1 No. |  |
|  | @ 18404.75 Each | 18,405 |

3 Providing and fixing, air valve $21 / 2(65 \mathrm{~mm})$ dia of B.S.S. quality and weight (complete with jointing material).
A) 2" dia (Double)

4 Providing and Fixing Reflex / Non Retunr Valve with FInged including Cost of jointing material at site of work complete in all respects as apporved by the Engineer Incharge. (4" dia) N.S

1 No.
@ 16000 Each
16,000
5 Excavation of trenches in all kind of soil except cutting rock for $w /$ s pipe lines up to $5^{\prime \prime}$ depth from $G$. level i/c trimming, dressing sides leveling the bed of trenches to correct grade and cutting pits for joints etc complete

$$
1 \times 100 \times 1 \times 2-1 / 2
$$

250 Cft
6 Bitumen coating to plastered or cement concrete surface:10 lbs . per 100 Sft . ( 4.54 Kg per Sq.m)

$$
1 \times(100) \times 22 / 7 \times 1 / 3
$$

Supply and Laying one layer of polythene sheet 300 gauge
7 Supply and Laying one layer of polythene sheet 300 gauge
Take same qty. item No. 6

8 Rehandling of earth work lead up to a single throw of kassi, phaorah or showel

Take same qty. item No. 5

## 1 No.

@ 11461.15 Each
Providing and Fixing sluice valve of B.S.S quality and weight, Class "B" for cast iron pipe line, and Asbestos cement pipe line (including cost of jointing material):-

## A) $4^{\prime \prime}$ dia

@ 18404.75 Each
@ 11
$=\quad 1$ No.
$\quad @$

| ! $=$ | 105 Sft |  |  | 1,284 |
| :---: | :---: | :---: | :---: | :---: |
| !! | @ | 1223.15 | \%Sft |  |
| = | 105 Sft |  |  | 630 |
| $=$ | 250 Cft |  |  |  |
| , | @ | 2547.60 | \%0cft | 637 |
| , |  |  | Total Rs: | 375,901 |
| , |  |  | Say Rs: | 375,900 |

SUB ENGINEER
Sub Divisfonal Officer
Buildings Sub Division
Sh\&jabad

# 1 <br> DETAIL OF TURBINE FOUNDATION 

## 2nd Bi-Annual 2022

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 ).
b) in ordinary soil.

$$
4-1 / 2 \times 4-1 / 2 \times 1
$$

2 Dry rammed brick or stone ballast, $1 \frac{1}{2}$ to $2^{\prime \prime}$ gauge.

$$
4-1 / 2 \times 4-1 / 2 \times 1 / 2
$$

10 Cft
@ $9035.40 \% \mathrm{Cft}$
3 RCC in Slab of rafts / strip foundation base slab etc or other structure not requiring from work i.e. horiznotal shuttering (Type "C" (Ratio 1:2:4)
$4-1 / 2 \times 4-1 / 2 \times 1=20.25 \mathrm{Cft}$
@ 460.05 P.Cft
4 Fabrication of Mild Steel Reinforcement for Cement Concrete i/c cutting bending laying in position (Deformed Bars Grade 40)

| $2 \times 2 \times 8 \times 4.67$ | $=$ | 149 Rft |
| :--- | :--- | ---: |
| $149 \times 0.375 \times .4536$ | $=$ | 25 Kg |

$149 \times 0.375 \times .4536 \quad=\quad 25 \mathrm{Kg}$
@ $31451.40 \% \mathrm{Kg} \quad 7,863$
20 Cft
@ 10712.6 \%0Cft
$4-1 / 2 \times 4-1 / 2 \times 1 / 2=$
(Deformed Bars Grade 40)

149x0.375.453

Total Rs:
18,297


Say Rs: $\quad 18,300$
 Multan

.

Providing and Installation of Non Clogging Centrifugal Pump KSB (Size 2-1/2"x3") capable of $0.5-\mathrm{Cusec}$ Discharge coupled with A.C Electric Motor 7.5-BHP 03-Phase 1450-RPM, Base Plate, Switch Starter i/c foundation complete in all respects and as approved by the Engineer Incharge

## Unit of Rate $=$ P.Job <br> 2nd Bi-Annual 2022

I- Providing and Installation of Non Clogging Centrifugal Pump KSB (Size 2-1/2"x3") capable of 0.5-Cuse Discharge coupled with A.C Electric Motor 7.5 -BHP 03-Phase 1450-RPM, Base Plate, Switch Starter i/c foundation complete in all respects and as approved by the Engineer Incharge
Quotation from KSB Office at Multan attached

Sub Divisona ofticer
Buildings Sub Division Shujabad
Executive Engineer,
Buildings Division No. 2 MULTAN.


Superintedray Engin eer
Buidinglivedermian


## Ks®.

## Executive Engineer, Buildings Division 02

 Multan
## Quotation

1

## n, ONCL Fíging CENTRIFUGAL PUMP

| Your Relerente No. | Tclephonic |
| :--- | :---: |
| Dalo | 23.08 .22 |
| IIom Numbor | 01 |



We thank you for your above enquirydorder and are pleased to submit our offerforden copsimation subject to our general conditions for Sales and Supply of equipment contained in form 07 FT-04 aftached.

## TECHMICAL PART

| Pump Data | Sewatoc | 65-250 |
| :---: | :---: | :---: |
| Liquid handled | Sowage |  |
| Flow rate | 0.50 CUSEC |  |
| Pump tolal head | 40 Fl |  |
| Speod Spocific Gravity | 1450 | rpm |
|  |  |  |
| Vscosily / PH Value |  |  |
| Purnp Input |  |  |
| Motor Erqine Rating | $7.5 H^{P}$ | HP |
| NPSH Required |  |  |
| Impelier diameter / Type |  |  |
| Suction Flange I.D. | 3 | inch |
| Delivery Flange 1. ${ }^{\text {d }}$ | 2.5 | inch |
| Flange Standard | BS Table 100 |  |
| Shatl Soal | Gland Pa |  |
| Couping Type | H95 |  |

Electric Motor

| Drlver | Mated Speed | 1450 RPM |  |
| :--- | :--- | :--- | :--- |
| Make/Type | Siemens | Rated |  |
| Protection | IP55 | Rated Outpul | 7.5 HP |
| Insulation Clas5 | F | Voltage | 400 |
| Ambieni Temp. | $40 c$ | Phase | 3 |
| Enclosure | , | CyclelSec | 50 Hz |


| Matorlal Part | GG-25 <br> Matarial | Part | Matorial |
| :---: | :---: | :---: | :---: |
| Pump Casing | GG-25 | Snatil | C-45N |
| tmpalar | GG-25 | Suction Covar | GG-25 |
| Discliarge Cover | G6-25 | Seal Ring | GG-25 |
| S.P Sleeve | f.4138 | Spider | Cost fron |
| S.B Gtand | Cast fron | Throat bush | Cest fron |
| Mechanical Seal |  | Type |  |

COMMERCIAL PART

for KSE Pumps Company Limited


Working out the price of above mentioned engineered product should be aitnowledgeif. . 3 KSB's prerogative. This Quotation will have no bearing on previousiy quoted prices anywhere or on' prices to be quoted in future $b$ any prospective client. After expiry of quotation's validily $K S B$ reserve the right to change price as a resulthof markat forces/nanufacturing variables.
Procuring agency is requested to comply with all PPRA rutes as it is its ros,ronsibility.
$\square$

## PIPELINE WITH FITTINGS

## 2nd Bi-Annual 2022

1- Providing and installing M.S. blind pipe socketed/welded joint, M.S. reducer (where necessary), in tubewell bore hole, including jointing/welding with strainer, etc. complete: -
$2^{\prime \prime}$ dia
$3^{\prime \prime}$ dia

| $=$ | 10 | Rft |  |  |
| :--- | :---: | :--- | :---: | :---: |
| @ | $\vdots 84$ | P.Rft | Rs: | 23,360 |
| $=$ | $\vdots 0$ | Rft |  |  |
| @ | 778.4 | P.Rft | Rs: | 31,136 |

2- Providing and fixing of Sluice valve of $B . S S$ quality class ' B ' for pipe line.
3"dia $2=2$ No
(a) 17750.3 Each Rs: 35,501

3- Providing and fixing C.I Specials of B.S.S classs 'B' (bend, tee, cross, collar ,redicer, etc. $3^{\prime \prime}$ to $6^{\prime \prime}$ dia.
Bend 4" dia

|  | 4 | x | 16 | $=$ | 64 | Kg |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Bend 5" dia |  |  |  |  |  |  |
|  | 2 | x | 18 | $=$ | 36 | Kg |
|  |  |  |  | Total | 100 | Kg |

(123.05 P.Kg $\quad$ Rs: 12,305
4. 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 leveling the beds of trenches to correct grade and cutting pits for joints, etc. complete in


5- Bitumen coating to plastered or c.concrete surface including polythen sheet. 10 lbs

| 1 | x | 20 | x | 22/7 | $x$ | 3/7 | $={ }^{\prime} 27$ | Sft |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | x | 25 | x | 22/7 | x | 1/3 | = 26 | Sft |
|  |  |  |  | Total |  |  | $=53$ | Sft |
|  |  |  |  |  |  | @ | 1223.15 | $\% \mathrm{Sft}$ |

Rs: . 648

6- Rehandling of earth work lead upto a single throw of kassi.
1 x 980
$\begin{array}{rlrl} & =980 \quad \mathrm{Cft} \\ \text { Total } & & =980 & \mathrm{Cft} \\ @ & & 25<7.60 & \% 0 \mathrm{Cft}\end{array}$
Rs: $\quad 2,497$
7. Providing and fixing of C.I foot valve $3^{\prime}$ dia complete in respect as approved by



Buildings Division N $\varnothing .2$ MULTAN.

## 2nd Bi-Annual 2022

l- Supply and erection of PVC pipe for wiring on recessed including inspection boxes, pull boxes, hooks, cutting jharrie and repairing surface, etc., complete with all specials.

| 40 mm i.d | 1 | x | $\begin{aligned} & 30 \\ & @ \end{aligned}$ | $\begin{aligned} & 30 \\ & 148.10 \end{aligned}$ | Rft P.Rft |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 20 mm i.d | 1 | x | 50 <br> @ | $\begin{gathered} 50 \\ 83.70 \end{gathered}$ | Rft P.Rft |

4,443

4,185

2- Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/ wooden strip batten/wooden césing and capping $250 / 440$ volts, PVC insulated /G.I. wire / trenches (rate for cables only):

| 3/0.029" | 1 | x | $\begin{gathered} 200 \\ @ \end{gathered}$ | $\begin{gathered} 200 \\ 26.10 \end{gathered}$ | Rft P.Rft | Rs: | 5,220 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $7 / 0.036^{\prime \prime}$ | 1 | x | 150 | 150 | Rft |  |  |
|  |  |  | @ | . 54.25 | P.Rft | Rs: | 8,138 |
| 7/0.044" | 1 | x | 240 | 240 | Rft |  |  |
|  |  |  | @ | ; 75.6 | P.Rft | Rs: | 18,144 |
| 7/0.064" | 1 | x | 500 | 500 | Rft |  |  |
|  |  |  | @ | 176.15 | P.Rft | Rs: | 88,075 |

3- $\quad \mathrm{S} / \mathrm{E}$ of Iron /Aluminum Clad 500 -Volts Main Switches with Kit Kat fuses on L-Iron Board with $03-\mathrm{mm}\left(1 / 8^{\prime \prime}\right.$ thick) MS Sheet covering $\mathrm{i} / \mathrm{c}$ bonding to earth with necessary flexible pipe and thimbles etc (Tripple Pole with Neutral Link) 100 -Amps

| $=$ | 2 | No. |
| :---: | :---: | :--- |
| (a) | 6523.25 | Each |

Rs
13,047

4- Supply and erection of house service pipe $50 \mathrm{~mm}\left(2^{\prime \prime}\right)$ dia G.I. pi pe Henl ey or pol e $t$ ype $f$ or bare copper wi re overhead I i ne, including shackle insulatot, straining devices and otheraccessor i es et c.

| $1 \times 10$ | $=$ | 10 | Rft |  | Rs: |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | (a) | 628.95 | P.Rft | Rs:290 |  |

5- Supply and erection of Stay for House Service Pipe erected with straining screws and 7/14" Stay Wire complete

I 20

| $=$ | 20 | Rft |
| :---: | :---: | :--- |
| $(a)$ | 63.25 | $\mathrm{P} . \mathrm{Rft}$ |

1,265

6- Earthing of metlic cases with G.l wire 8 SWG in 15 mm diaía.I pipeline. recessed in wall, including hooks, jharries and making good surface


12- S/E of 3-pin switch and plug combind recessed type $10 / 15 \mathrm{Amp}$ :

| $=$ | 2 | No. |  |
| :---: | :---: | :---: | :--- |
|  | (a) | 135.4 | Each |

Rs:
271

13- S/E of 03 pin 10/15 Amp: wall socket.open type 2 (e)

## Sub Divis Buildings \&ub Division Shujabad


6. P/L. vertical DPC with $\mathrm{c} / \mathrm{s}$ plaster and bitumen coating with one coat of bitumen ( $1: 3,1 / 2^{\prime \prime}$ thick) \& one cast polythene sheet.

$$
1 \times 2(12+12) \times 1-1 / 2=72.00 \mathrm{Sft} @ 5681.05 \% \mathrm{Cft} \quad 4090 \%
$$

Filling watering ramming earth under floors with
7. surplus earth excavated from foundation etc. $2 / 3$

Qty as/item No. 1
Above $2 / 3 \times 576=384.00 \mathrm{Cft} @ 5107.850 \% \mathrm{Cft} 1961 /-$
Filling watering ramming earth under floors with
8. new earth excavated from out side sources lead up to \& miles ic transportation charges of earth Anile Room
$1 \times 12 \times 12 \times 2=228.00 \mathrm{Cft}$
Under apros: $2 \times 20-3 / 4 \times 3-1 / 4 \times 1 / 2=67.00 \mathrm{Cft}$ $2 \times 14-1 / 4 \times 3-1 / 4 \times 1 / 2=46.00 \mathrm{Cft}$
Ohs pros:
$2 \times 26-1 / 4 \times 2 \times 1-1 / 4=131.00 \mathrm{Cft}$ $2 \times 22-1 / 4 \times 2 \times 1-1 / 4=111.00 \mathrm{Cft}$ Total $=583.00 \mathrm{Cft} @$
9. Pacca brick work in ground floor and cement sand
a) Ratio (1:6)

Room L/W

$$
\begin{aligned}
2 \times 14-1 / 4 \times 1-1 / 8 \times 12 & =385.00 \mathrm{Cft} \\
2 \times 12 \times 1-1 / 8 \times 12 & =324.00 \mathrm{Cft} \\
2 \times 14-1 / 4 \times 3 / 4 \times 1-7 / 8 & =40.00 \mathrm{Cft} \\
2 \times 12-3 / 4 \times 1-7 / 8 & =36.00 \mathrm{Cft} \\
\text { Total } & =785.00 \mathrm{Cft}
\end{aligned}
$$

Parapit

D/deductions

| Ops | O | $1 \times 4 \times 1-1 / 8 \times 8-1 / 2=$ | 38.00 Cft |
| :--- | :--- | ---: | :--- |
|  | W | $3 \times 3-1 / 2 \times 1-1 / 8 \times 4=$ | 47.00 Cft |
| Lintels | A | $2 \times 4 \times 3 / 8 \times 5=$ | 15.00 Cft |
|  | D | $1 \times 5 \times 1-1 / 8 \times 1 / 2=$ | 2.00 Cft |
|  | W | $3 \times 4-1 / 2 \times 1-1 / 8 \times 1 / 2=$ | 8.00 Cft |
|  | A | $2 \times 5 \times 3 / 8 \times 1 / 2=$ | 2.00 Cft |
|  |  | Total | $=112.00 \mathrm{Cft}$ |

Net $(785-112)=673.00 \mathrm{Cft} @ \quad 30913 \% \mathrm{Cft} 208044 /$ -
10. Pacca brick work in ground floor and cement sand mortar (G.F)
a) Ratio (1:4)

Girder Pill

| $2 \times 2-1 / 4 \times 3 / 4 \times 2$ | $=$ |
| ---: | :--- |
| $2 \times 2 \times 1-1 / 8 \times 3 / 8 \times 5$ | $=$ |
| $2 \times \mathrm{Ct}$ |  |
| $2 \times 1 \times 1 / 8 \times 1 / 4 \times 4-1 / 4$ | $=$ |
| Total | $=17 \mathrm{Cft}$ |
|  | $17 \mathrm{Cft} @ 32585.8 \% \mathrm{Cft}$ |

11. RCC $1: 2: 4$ work in roof slabs beams cols lintels girdus, and other structural members laid in situ or precast laid in position complete in all respect


[^1]$$
104 \times 0.88=92 \mathrm{Cft}
$$
$$
\text { Total }=\quad 92 \mathrm{Cft} @ \quad 9742.55 \% . \mathrm{Cft} \quad 8963 /-
$$
12. Fabrication of mild steel reinforcement for cement concrete $\mathrm{i} / \mathrm{c}$ cutting bending laying in position making joints and fastenings for binding wire and labour charges for bending of steel reinforcement (also includes removal of rust from bar. (Deformed bars)
Qty as / item No:12 above $\quad 104 \times 6.75 \times 0.454$


Total $=319 \mathrm{Kg} @ 31451.40 \% \mathrm{Kg} 100330 \%$
13. Bitumen coating to plastered or cement concrete surface:-i) 10 lbs .per $100 \mathrm{Sft}(4.54 \mathrm{Kg}$ per Sq.m)

Bearing of slab $L / W$

| $2 \times 13-1 / 2 \times 3 / 4$ | $=20 \mathrm{Sft}$ |
| ---: | :--- |
| $2 \times 12 \times 3 / 4$ | $=18 \mathrm{Sft}$ |
| Total | $=38 \mathrm{Sft} @ 1223.15 \% \mathrm{Stt} \quad 465 \%$ |

14. P/F Iron door comprising of specified leaves made of $1-1 / 4^{\prime \prime} \times 11 / 4^{\prime \prime} \times 3 / 16^{\prime \prime}$ MS angle iron for leaf frame, diagonal and horizontal braces duly welded with MS. sheet 18-SWG i/c the cost of sliding bolt, tower bolt and painting 3 -coats including cost of Chowkat(M.S. angle iron $11 / 2^{\prime \prime} \times$ $11 / 2^{\prime \prime} \times 1 / 4^{\prime \prime}(40 \times 40 \times 6 \mathrm{~mm})$ welded with M.S. flat 2 " $\times$ $1 / 4 "(50 \mathrm{~mm} \times 6 \mathrm{~mm})$ complete in all respect as approved and directed by the Engineer
$1 \times 4 \times 7=28 \mathrm{Sft} @ 1396.75 \mathrm{P} . \mathrm{Sft} 39109 /-$
45.-P/F class pom almiraty consisting of 1 " thick solid flush with deodar yood lipping $1 / 4^{\prime \prime}$ thick all around (sterling made) fixed in deodar wood frame $3^{\prime \prime} \times 1$ " i/c ful hinges C.P. fitting with RCC ( $1: 1$ $\left.1 / 2^{\prime \prime} / 3\right)$ shelves $\left(-1 / 2^{\prime \prime} /(40 \mathrm{~mm})\right.$ thick $\mathrm{i} / \mathrm{c}, 3$ coats of parnting
$2 \times 4 \times 5=40 \mathrm{Sft} @$ 819.3PSt $32772 / 2$
15. P/F MS box section of 16SWG, having frames of $2 " x 1-1 / 2^{\prime \prime}$, leave frame of T-type box section of $2^{\prime \prime} \times 1^{\prime \prime} \times 1^{1 "}$, with $1 / 2^{\prime \prime} \times 1 / 2^{\prime \prime}$ box section using, Ushaped rubber for fixing 5 mm thick glass panes i/c the cost of fixing of 24 SWG wire guaze on inner side by means of $1 / 2^{\prime \prime} \times 1 / 8^{\prime \prime}$ MS flat patti, MS grill fitted with in the window frame and screws including hinges, brass handles and painting 3coats. Complete in all respect
W: $3 \times 3-1 / 2 \times 4=42 \mathrm{Sft} @ 1342.75 \mathrm{P} \mathrm{Sft} 56396 /-$
16. Preparing surface to doors and windows any type i/c the edges 3 coat new surface

Al $\quad 2 \times 2 \times 4 \times 5=$
18. Cement concrete plain $i / c$ placing compacting, finishing \& curing etc complete Ratio (1:2:4) i/c screening and washing stone aggregate.
Motor Found
$1 \times 3-1 / 2 \times 3-1 / 2 \times 2=\quad 25 \mathrm{Cft}$
Beam
19. $1 / 2^{\prime \prime}$ thick cement plaster $1: 4$ upto $20^{\prime}$ ht Motor Found $1 \times 2(2-1 / 2+2-1 / 2) \times 2$ Parapit

$$
=\quad 20 \mathrm{sft}
$$

$$
100 \mathrm{sft}
$$

$$
89 \mathrm{stt}
$$

Girder Pillars

$$
2 \times 2(2-1 / 4+3 / 4) \times 2=24 \mathrm{Sft}
$$

Al: Side

$$
2 \times 2 \times 2-1 / 4 \times 5 \quad=\quad 45 \mathrm{Sft}
$$

$$
2 \times 1 \times 2-1 / 4 \times 4-1 / 4 \quad=\quad 19 \mathrm{St}
$$

inside

$$
1 \times 2(12+12) \times 11-1 / 2=552 \mathrm{sft}
$$

Total $=849 \mathrm{Sft} @ 3285.45 \% \mathrm{Sft} 27893 /-$
20. Cement Pointing struck Joints, on walls, upto $20^{\prime}$ height a) ratio $1: 2 \mathrm{i} / \mathrm{c}$ Red Oxide Pigment

Page 214
o/s room $4 \times 14-1 / 4 \times 15-1 / 2=884 \mathrm{Sft} @ 3573.2 \% \mathrm{Sft}$
21. Single layer of tile $9^{\prime \prime} \times 4-1 / 2^{\prime \prime}$ laid over $4^{\prime \prime}$ earth and 1" mud plaster without bhoosa grouted with cement sand 1:3 on top of RCC roof slab provided with 34LBS per \% Sft bitumen coating sand blinded. Supplying and laying polythene sheet over D.P.C. under floors and on roofs, etc.
500 gauge (. $005^{\prime \prime}$ thick)

$$
1 \times 12 \times 12=144 \mathrm{Sft} @ 12070.9 \% \mathrm{Sft} \quad 17382 /-
$$

22. Mosaic dado or skirting with one part of cement and marble powder in the ratio of $3: 1$ and two parts of marble chips, laid over $1 / 2$ " $(13 \mathrm{~mm})$ thick cement plaster $1: 3$, including rubbing and polishing, complete with finishing: (a) using grey cement ii) $1 / 2=1(13 \mathrm{~mm})$ thick
In side
$1 \times 2(12+12) \times 1 / 2=$
$24 \mathrm{Sft} @ 21437.00 \% \mathrm{Sft}$
23. Supply/filling sand under floors or plugging in walls

| Room | $1 \times 12 \times 12 \times 1 / 3=$ | 48 Cft |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Plinth |  |  |  |  |
|  | $1 \times 2(18-3 / 4+14-1 / 4) \times 2-1 / 4 \times 1 / 3=$ | 49 Cft |  |  |
|  | Total: $=$ | 97 Cft @ | 2824.60 \% Cft | 2740 /- |
| Khurra on roof 2'x2'x6" |  |  |  |  |
|  | = | 1 No @ | 865.75 Each | 866 /- |

25. Providing and laying conglomerate flooring (two coat work) with top layer of $1 / 2$ " $(13 \mathrm{~mm})$ thick wearing surface, consisting of one part of cement and 2 parts of stone chips passing $3 / 16^{\prime \prime}(6 \mathrm{~mm})$ sieve, over bottom layer of cement concrete 1:3:6, including surface finishing and dividing in panels:-
i) 1-1/2" thick
L.Wall

ii) 2" thick

Room Floor

| $1 \times 12 \times 12$ |  |  | 144 Sft |
| ---: | :--- | ---: | :--- |
| $1 \times 4 \times 1-1 / 8$ | $=$ | 5 Sft |  |
| Total | $=$ | 149 Sft |  |

Deduct:

| $4-1 / 2 \times 4-1 / 2$ | $=20 \mathrm{Sft}$ |
| ---: | :--- |
| NET: | $=129 \mathrm{Sft} @ \quad 9745.85 \% \mathrm{Sft} 12572 \%$ |

26. Providing, fixing, testing and commissioning of $\mu$ PVC (Unplasticized polyvinyl Chloride) Nikasi/waste pipemake of dadex /Popular/Beta/BBJ plain/socket ended conforming to code EN-1401 of specified SDR (Standard Dimension Ratio) including the cost of specials and Solvents complete in all respect as approved and directed by the Engineer Incharge. Type (SDR 32.5/SN-8 4"(110 mm)
27. Distempering new surface three coats
28. S /E of Ceiling Rose (149/30)
29. S /E of Hoider (Bakelite) large size (149/39)

30. Supply and erection of tube light, including rod, choke, starter with frame, flexible wire, including connection from ceiling rose, etc., complete. single rod ( 40 watts) with one choke and one starter.
31. S/E of M.S sheet board. 9 " $\times 4$ " $(146 / 14)$
ii) 7 " $\times 4$ "
32. S/E switches 5 Amp (Piano) (149/31(ii))
33. S/E of 3-pin 5 Amp wall socket (149/34)
34. S/E of PVC pipe for wiring recessed. $3 / 4^{\prime \prime}$ dia (143/3(ii) $1 \times 4 \times 12$
$48 \times 0.3048(20 \mathrm{~mm})=$
35. S/E of PVC Insulated Copper Conductor Cable in prelaid PVC Pipe (144/10-a)
i) $3 / 0.029^{\prime \prime}$
ii) $7 / 0.029^{\prime \prime}=$
36. S/E of 03-Pin Plug \& Switch combined 10-15Amps (149/36)
37. Fabrication of heavy steel work, with angle, tees, flat iron round iron and sheet iron for making trusses, girders, tanks, etc., including cutting, drilling, revitting, handling, assembling and fixing, but excluding erection in position. (P/Hoisting girders $4^{\prime \prime} \times 8^{\prime \prime}$ weighing $18 \mathrm{lbs} / \mathrm{Rft}$. ( $14 \mathrm{Rft} \times 18 \times 0.454$ ) ( $155 / 10$ )
38. S/E of A.C. ceiling fan 56 " sweep


39. Excavation of well in dry upto $20^{\circ}$ below $G$.level $\&$ disposal of soil within one chain.Ordinary Soil

40. Cement concrte brick work stone ballast $1-1 / 2^{\prime \prime}$ to $2^{\prime \prime}$ gauge in foundaiton and plinth (Ratio 1:6:12).
$1 \times 22 / 7 \times(19)^{2} \times 1 / 4 \times 1 / 2=142 \mathrm{Cft} @ 21217.40 \% \mathrm{Cft} \mid 30,129 \%$
41. RCC $1: 2: 4$ work in slab of raft /strip foundation base slab of columrs and retaining walls and other structural members laid in position not reçuiring from work etc complete
Base Raft $1 \times 22 / 7 \times(19)^{2} \times 1 / 4 \times 1 / 2=284 \mathrm{Cf}$
Core Wall $1 \times 22 / 7 \times(15-1 / 8)^{2} \times 3 / 8 \times 8=143 \mathrm{Cf}$ Total: $=427 \mathrm{Cft} @ 460.05$ P.Cft $196,441 /-$
42. Fabrication of mild steel reinforcement for cement concrete i/c cutting bending laying in position making joints and fastenings for binding wire and labour charges for bending of steel reinforcement (also includes removal of rust from bar. (Deformed bars) 6.75 lbs /Cft of Quantity as Item No. 3

43. Pacca brick work in $1: 4 \mathrm{c} / \mathrm{s}$ mortar in other then buidling

| I/S Core Wall | $1 \times 3.143 \times 14.4 \times 0.38$ | $\times$ | 8 | $=136 \mathrm{Cft}$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| O/S Core Wall | 1 | $\times 3.143 \times 16.3 \times 0.75$ | $\times$ | 8 | $=306 \mathrm{Cft}$ |
| Above | 1 | $\times 3.143 \times 15.1 \times 1.13 \times 2$ | $\times 107 \mathrm{Ct}$ |  |  |

ii) From $10^{\circ}$ to $20^{\circ}$ height
$1 \times 3.143 \times 15.1 \times 1.13 \times 7.5=401 \mathrm{Cft}$
401 Cft @ 32845.35 \% Cft
131,710
6. Extra brick work in sterning of well or any other circular masonary

$$
\text { Same Quantity as Item No. } 5 \text { (i) \& (ii) }
$$

$$
1 \times 1(549+401)=
$$

7. $P / F$ Terrace Railing of $2^{\prime \prime}$ i/d conduit pipe 16 -SWG welded with $5 / 8^{\prime \prime} \times 5 / 8^{\prime \prime}$ Sq Bars 2.75 ft height fixed at $5^{\prime \prime} \mathrm{c} / \mathrm{c}$ in RCC Slab with suitable arrangement complete in all respects as per design and drawing

$$
1 \times 3.143 \times 15.1
$$

8. Cement Concrete Plain (Ratio $1: 2: 4$ ) $\mathrm{i} / \mathrm{c}$ placing compacting finishing and curing etc complete $\mathrm{i} / \mathrm{c}$ screening and washing of stone aggregates

For Railing $1 \times 3.14 \times 15.1 \times 1.13 \times 0.5=$

9. $1 / 2^{\prime \prime}$ thick cement sand plaster $1: 4$ on walls upto $20^{\prime}$ height

```
x 3.14 x 16.25 x 4.00 = 204 Sft
\times3.143 < 14.00 }\times18.00=792 Sf
```

10. $\mathrm{P} / \mathrm{L}$ Topping of Cement Concrete (Ratio 1:2:4) i/c surface finishing and dividing into panels ( $3^{\prime \prime}$ thick)

$$
1 \times 3.143 \times 14 \times 14.00 \times 0.25=
$$

154
@
11943.70 \% Cft
$18,393 /$
11. Rehandling of earth work lead upto one kassi

Same quantity as Item No. 1 (i), (ii), (iii) \& (iv)
Above
$1 \times(1418+1418+1418+567)$
@ 2547.60 12,282 /-
12. $P / L$ Watering, Ramming Dry Brick Ballast $1-1 / 2^{\prime \prime}$ to $02^{\prime \prime}$ gauge mixed with $25 \%$ sand for floors foundation complete in all respects
$1 \times 3.143 \times 203 \times 400 \times 0.33=$
13. Extra for making and finishing benching floor work in Manhole Chamber with $1 / 8^{\prime \prime}$ thick cement finish
Bottom $1 \times 3.143 \times 14 \times 14.00 \times 0.25=154 \mathrm{Sft} @ 42976.75 \% \mathrm{Sft} /-$
14. Applying floating coat of cement $1 / 32^{\prime \prime}$ thick

I/S Wall $1 \times 3.143 \times 14 \times 18.00 \quad 192 \mathrm{Stt} @ 1876.70 \% \mathrm{Stt}$
15. Brick on edge flooring laid in (Ratio 1:6) cement sand mortar under a bed of $3 / 4^{"}$ thick cement sand mortar
@ $\quad 8095.8 \%$ Sft
20,644 /
16. P /F 1-1/4"x $\times 1-1 / 4^{\prime \prime} \times 3 / 16^{\prime \prime}$ L-Iron Steps in Manhole Chamber i/c carriage and setting the same in work to correct lines and levels
I/S $1 \times 18 \quad=18$ Nos.@ $@ 104.95$ Each $1 /$



## SCREENING CHAMBER 8'X4' \& 10' DEEP (DISPOSAL SYSTEM)

2nd Bi-Annual 2022

1. Excavation in open cutting for sewer and manhole as shown in the drawing without shutterina. etc: complete.

| $0^{\prime}-7{ }^{\prime}$ depth | $1 \times 11.75 \times 7.75 \times 7$ | = | 637 Cft | @ | 11770.45 \%ócfi | 7,498 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | : |  |
| 7.1'-15' depth | $1 \times 11.75 \times 7.75 \times 2.75$ | = | 250 Cft | @ | 16932.3 \%ocft | 4,233 |

2. Cement concrte brick work stone ballast $1-1 / 2^{\prime \prime}$ to $2^{\prime \prime}$ gauge in foundaiton and plinth (Ratio 1:6:12).
$1 \times 11.75 \times 7.75 \times 0.75=68 \mathrm{Cft} @ \quad 21217.40 \% \mathrm{Cft} 14.428 \%$
3. Pacca brick work in $1: 4 \mathrm{c} / \mathrm{s}$ mortar in other then buidling

$$
1 \times 2 \times 16.3 \times 1.13 \times 10 \times 366 \mathrm{Cft}
$$

4. RCC 1:2:4 work in slab of raft/strip foundation base slab of columns and retaining walls and other structural members laid in position etc complete

Base Raft

| $1 \times 10.25 \times 6.25 \times .42$ | $=$ | 27 Cft |
| :---: | :--- | :--- |
| Total: | $=$ | 27 Cft |

@
$460.05 \mathrm{P} . \mathrm{Sft}$
$12,421 /-$

4A Carriage of subsequent stone aggregate and bajri (sakhi sarwar query)

| Item No. 4 | $27 \times 0.88$ | $=$ | 24 Cft |
| :---: | :---: | :---: | :---: |
|  | Total: | $=\quad 24 \mathrm{Cft} @ \quad 9742.55$ | $\%$ |

5. Fabrication of mild steel reinforcement for cement concrete $i / c$ cutting bending laying in position making joints and fastenings for binding wire and labour charges for bending of steel reinforcement (also includes removal of rust from bar. (Deformed bars)
$6.75 \mathrm{lbs} / \mathrm{Cft}$ of Quantity as Item No. 4
Above $1 \times 1 \times 27 \times 6.75 \times 0.454=83 \mathrm{Kg} @ 31451.40 \% \mathrm{Kg} \quad 26,105 \quad /$
6. $1 / 2^{\prime \prime}$ thick cement sand plaster $1: 4$ on walls upto 20 height

| $1 \times 2.00 \times 16.50 \times 3.00$ | $=$ | 99 Sft |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $1 \times 2.000 \times 12.00 \times 10.00$ | $=$ | 240 Sft |

Total 339 Sft @ $3285.45 \%$ Sft $11,138 \quad /$
7. $P / L$ Topping of Cement Concrete (Ratio $1: 2: 4$ ) i/c surface finishing and dividing into panels (3" thick)

8. Extra for making and finishing benching floor work in Manhole Chamber with $1 / 8^{\prime \prime}$ thick cement finish

9. Applying floating coat of cement $1 / 32^{\prime \prime}$ thick
I/S Wall $1 \times 2 \times 240 \mathrm{Sft} @ 12 \times 10.00 \quad 1876.70 \% \mathrm{Sft} 4.504 /-$
10. Rehandling of earth work lead upto one kassi
Above $1 \times(637+50) \quad=\quad 887 \mathrm{Cft} @ \quad 2547.60 \% \mathrm{Cft} 2,260 /-$
11. $P / F 1-1 / 4^{\prime \prime} \times 1-1 / 4^{\prime \prime} \times 3 / 16^{\prime \prime}$ L-Iron Steps in Manhole Chamber $\mathrm{i} / \mathrm{c}$ carriage and setting the same in work to correct lines and levels

| $1 / S$ | $1 \times 8$ |
| :--- | :--- | :--- |

12. P/F 6 " thick RCC manhole cover with T.shaped C.I frame 24 " dia complete in all respect.

$$
1 \times 2
$$

$\square$ 2055.65 Each

4,111 /-
13. $P / L$ Watering, Ramming Dry Brick Ballast $1-1 / 2^{\prime \prime}$ to $02^{\prime \prime}$ gauge'mixed with $25 \%$ sand for floors foundation complete in all respects

| 1 | X | 2 | x | 16.3 | $x$ | 3.00 | $x$ | 0.333 | $=$ | 32 Cft |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | X | 2 | X | 6.25 | $x$ | 3.00 | X | 0.333 | = | 12 Cft |
|  |  |  |  |  |  |  |  | Total | = | 44 Cft |

14. Brick on edge flooring laid in (Ratio $1: 6$ ) cement sand mortar uñder a bed of $3 / 4^{\prime \prime}$ thick cement sand mortar

15. Providing and fixing in position M.S screen, grating consisting of frame of M.S LIron $2^{\prime \prime} \times 2^{\prime \prime} \times 3 / 8^{\prime \prime}, 3 / 4^{\prime \prime}$ MS bar $2^{\prime \prime}$ c/c complete in all respect as approved by the engineer incharge.
$1 \times 1 \times 4 \times 12.00$
$=\quad 48 \mathrm{Sft}$
@
1500 \%Sft $72,000 /$

Total 293,019 /-


## DETAIL OF PUMP FOUNDATION

## 2nd Bi-Annual 2022

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 ).
b) in ordinary soil.

$$
4-1 / 2 \times 4-1 / 2 \times 1
$$

2 Dry rammed brick or stone ballast, $11 / 2$ to $2^{\prime \prime}$ gauge.
$4-1 / 2 \times 4-1 / 2 \times 1 / 2 \quad=10 \mathrm{Cft}$
@ $9035.40 \% \mathrm{Cft}$
3 RCC in Slab of rafts /strip foundation base slab etc or other structure not requiring from work i.e. horiznotal shuttering (Type "C" (Ratio 1:2:4)
$4-1 / 2 \times 4-1 / 2 \times 1 \quad=20.25 \mathrm{Cft}$
@ 460.05 P.Cft
4 Fabrication of Mild Steel Reinforcement for Cement Concrete $\mathrm{i} / \mathrm{c}$ cutting bending laying in position (Deformed Bars Grade 40)
$2 \times 2 \times 8 \times 4.67$
$149 \times 0.375 \times .4536$



2 Dry rammed brick or stone ballast, $11 / 2^{\prime \prime}$ to $2^{\prime \prime}(40 \mathrm{~mm}$ to 50 mm$)$ gauge.
Force Main line $\begin{array}{llllllll} & \mathrm{I} & 60 & \mathrm{x} & 3 & \mathrm{x} & 0.5\end{array}$

|  | $=$ |
| ---: | :--- |
| Total | $=$ |
| $@$ | 90 Cft |
| @ | $4488.00 \% \mathrm{Cft}$ |

3 Providing, laying, cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE-100) working presure pipe, Beta/Dadex/ Popular/ IIL or equivalent, in trenches, as approved \& directed by th engineer incharge, complete in all respects. $\mathrm{PN}-16$ (SDR-11) 315 mm
i 315 mm
Force Main line $\quad 1 \quad \times \quad 60$


4 Constructing of Manhole/ Sump 2'-6" $\times 4^{\prime}-0^{\prime \prime}$ (Internal Size) including PCC 1:6:12, $6^{\prime \prime}$ thick, brick work in 1:6' mortar and $9^{\prime \prime}$ thick, plastered inside in $1: 4$ cement sand and $4^{\prime \prime}$ thick RCC slab $6^{\prime \prime} \mathrm{c} / \mathrm{c} 3 / 8^{\prime \prime}$ steel bars G-40 including Manhole cover , complete in all respect as approved by the Engineer Incharge. .

4 feet deep


6 Providing and fixing cast iron special of B.S.S. Class ' B ' (such as bend, tee cross collar, reducer, tail piece, flanged spigot, cap, flanged socket, taper, angle branch, plug etc.) for cast iron pipe line, complete C.I. flanged specials, with flanged and flanged joints:-C.I. flanged specials, with flanged and flanged joints:-
SUB ENGINEER

Provision/Installation of Electrical Equipment.

| S.\# | Description | Qty: | Unit | Rate | Amount |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A | L.T. (LV)SUB-STATION EQUIPMENT: |  |  |  |  |
|  |  |  |  |  |  |
| 1 | Construction of ELECTRICAL ROOM | 1 |  | As per requirement |  |
| , | P/F floor mounted Electric Panel board of required depth and size, fabricarted with 14SWG M.S sheet (Indoor/Outdoor Type),derusting, zinc Phosphated, finish with electro static powder coating in approved colour $\mathrm{i} / \mathrm{c}$ the cost of Lock, Indication lights, thimbles, Copper Comb, Wiring, Netural \& Earth Bar, glands,Current Transformers of specified capacity ,Door Earthing, Brass glands,bus bars,controles complete in all respects as approved and directed |  |  |  |  |
|  | MDB |  |  |  |  |
|  | (i) LT Switchboards |  |  |  |  |
|  | (a) 2.50 FI deep |  |  |  |  |
|  | (i) $1200 \mathrm{~A}\left(3.0 \times 6^{\prime} \times 2.5^{\prime}\right)$ | 45 | Cft | 4,377.05 | 196,967 |
|  | Incoming From 630KVA Transformer |  |  |  |  |
|  | 1 Supplying, Installation and commissioning of MCCB (Moulded Case Circuit Breaker) of specified rating made of LEGRAND FRANCE/ GE U.S.A / SCHNEIDER GERMANY / TERASAKI JAPAN/SIEMEN/ABB SWITZERLAND (with fixed Thermal-Magnetic Trip ) in prelaid DBs and Panels $\mathrm{i} / \mathrm{c}$ the cost of screws, necessary wire complete in all respect as approved and directed by the Engineer Incharge. |  |  |  |  |
|  | (a) Tripple Pole $1200 \mathrm{~A}(50 \mathrm{KA}) 1 * 1=1$ | 1 | Each | 234,034.30 | 234,034 |
|  | (b) Tripple Pole $\left.500 \mathrm{~A}(36 \mathrm{KA})\right\|^{*} \mathrm{l}=1$ | 1 | Each | 62,434.30 | 62,434 |
|  | (c) Tripple Pole 300A(36 KA) $1^{*} 1=1$ | 1 | Each | 62,434.30 | 62,434 |
| 3 | P/F floor mounted Electric Panel board of required depth and size, fabricarted with 14SWGM.S sheet (Indoor/Outdoor Type),derusting, zinc Phosphated, finish with electro static powder coating in approved colour $\mathrm{i} / \mathrm{c}$ the cost of Lock, Indication lights,thimbles, Copper Comb, Wiring, Netural \& Earth Bar, glands, Current Transformers of specified capacity ,Door Earthing, Brass glands,bus bars,controles complete in all respects as approved and directed by the Engineer Incharge (Breakers will be Paid Separately). |  |  |  |  |
|  | MDB-1(For PDBs) |  |  |  |  |
|  | Incoming From Transformers |  |  |  |  |
|  | (i) LT Switchboards |  |  |  |  |
|  | (b) 12 " deep |  |  |  |  |
|  | (i) $300 \mathrm{~A}\left(3.0 \times 6 \times 2.5^{\prime}\right)$ | 45 | Cft | 3,438.40 | 154,728 |
|  | Incoming breakers for MDB-1 |  |  |  |  |
|  | Supplying , installation and commissioning of MCCB (Moulded Case Circuit Breaker) of specified rating made of LEGRAND FRANCE/ GE U.S.A / SCHNEIDER GERMANY / TERASAKI JAPAN/SIEMEN/ABB SWITZERLAND (with fixed Thermal-Magnetic Trip ) in prelaid DBs and Panels $\mathrm{i} / \mathrm{c}$ the cost of screws, necessary wire complete in all respect as approved and directed by the Engineer Incharge. |  |  |  |  |
|  | (a) Tripple Pole 300A( 36 KA ) $1^{*} 2=2$ | 2 | Each | 62,434.30 | 124,869 |
|  | Outgoing breakers for M ${ }^{\text {d }}$ DB-1 |  |  |  |  |
|  | (a) Tripple Pole 150A( 36 KA ) 1*2=2 | 2 | Each | 18,094.30 | 36,189 |
|  | (b) Tripple Pole 150A( 36 KA ) $1^{*} 2=2$ | 2 | Each | 18,094.30 | 36,189 |
|  | (c) Tripple Pole 200A(36 KA) $1 * 2=2$ | 2 | Each | 39,814.30 | 79,629 |
| 4 | P/F floor mounted ATS (Auto Transfer Switch) panel board, fabricarted with 14 S WG M.S sheet (Indoor Type) duly painted with 100 microns powder coated paint in approved colour, front access , extendable, insulation class of 600 volts IP-44, incomimg \& outgoing connections from bottom with flexible copper cable suitable for 415 VAC , 3 -phase 4 wire, 50 HZ TPN\&E system having rated service, short circuit breaking capacity at 400VAC conformimg to IEC-947-2 to accomodate given no of circuit components, instruments \& accessories, assembled \& wired with Electrolitic Copper bus bars at 50 deg and cables duly cleaned down to bare shining metal phosphate, manual change Over $\mathrm{i} / \mathrm{c}$ the cost of Lock, Indication lights,thimbles, Copper Comb, Wiring, Netural \& Earth Bar,CTs,Contactors,Relays, Door Earthing, Brass glands complete in all respects as approved and directed by the Engineer Incharge. (Breakers wil be oaid additionally). |  |  |  |  |
|  | ATS (for 200 KVA Generator Transformer) |  |  |  |  |
|  | Incoming from Generator and ATS for dual supply |  |  |  |  |
|  | (b) 2.00 Ft deep | 1 | Each | 1,833,923.45 | 1,833,923 |
|  | (ii) 200 KVA |  |  |  |  |
|  | Incoming Breakers For ATS (for 100 KVA Generator and Transformer) |  |  |  |  |
|  | 1 Supplying, Installation and commissioning of MCCB (Moulded Case Circuit Breaker) of specified rating made of LEGRAND FRANCE/GE U.S.A / SCHNEIDER GERMANY / TERASAKI JAPAN/SIEMEN/ABB SWITZERLAND (with fixed Thermal-Magnetic Trip ) in prelaid DBs and Pancls $\mathrm{i} / \mathrm{c}$ the cost of screws, necessary wire complete in all respect as approved and directed by the Engineer Incharge. |  |  |  |  |
|  | (a) Tripple Pole 300A( 36 KA ) ( ${ }^{*}$ ] $=1$ ) | 1 | Each | 62,434.30 | 62,434 |
|  | Outgoing Breakers For ATS (for 100 KVA Generator and Transformer) |  |  |  |  |
|  | Supplying , Installation and commissioning of MCCB (Moulded Case Circuit Breaker) of specified rating made of LEGRAND FRANCE/GE U.S.A / SCHNEIDER GERMANY / TERASAKI JAPAN/SIEMEN/ABB SWITZERLAND (with fixed Thermal-Magnetic Trip) in prelaid DBs and Panels $i / c$ the cost of screws, necessary wire complete in all respect as approved and directed by the Engineer Incharge. |  |  |  |  |
|  | (a) Tripple Pole 63A(36 KA) (3* $3=9$ ) | 9 | Each | 17,434.30 | 156,909 |



|  |  |  |  |  |  | $1$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S.\# |  | Description 1 | Qty: | Unit | Rate | A mount |
| C | EMBEDED FITTINGS |  |  |  |  | 1 |
|  | ] | Supply and erection of PVC pipe for wiring recessed in walls, including inspection boxes, pull boxes, hooks, cutting jharries, and repairing surface, etc., complete with all specials. iii) $25 \mathrm{~mm} \mathrm{i} / \mathrm{d}$ | 28,648 | rft | 96.85 | $2: 774,559$ |
|  | 2 | Supply and erection of PVC pipe for wiring recessed in walls, including inspection boxes, jull boxes, hooks, cutting jharries, and repairing surface, etc., complete with all specials. iv) 32 mm i/d | 13,369 | rft | 123.00 | $1.644,387$ |
|  | 3 | Supply and erection of PVC pipe for wiring recessed in walls, including inspection boxes, pull boxes, hooks, cutting jharries, and repairing surface, etc., complete with all specials. vi) $5 \mathrm{C} \mathrm{mm} \mathrm{i} / \mathrm{d}$ | 7,639 | rft | 186.05 | 1,421,236 |
| D | SWITCHES \& BOARDS |  |  |  |  | 4 |
|  |  |  |  |  |  | 1 |
|  | 1 | P/F PVC concealed Switch kit Box $\mathrm{i} / \mathrm{c}$ the cost of screws complete as approved and directed by the Engineer Incharge <br> (i) Small | 764 | Each | 137.40 | 104,974 |
|  | 2 | P/F PVC concealed Switch kit Box i/c the cost of screws complete as approved and directed by the Engineer Incharge <br> (ii) Large | 191 | Each | 161.40 | ${ }^{30,827}$ |
|  | 3 | P/F PVC double layer Switch kit Face plate with specified switch holes i/c the cost of switches / sockets / dimmer made of Hi-Life / Bush / Schenider, screws complete as approved and directed by the Engineer Incharge <br> (a) One way Gange Switch <br> Small (iv) 04 Gange | 382 | Each | 913.80 | 1349,072 |
| - | 4 | P/F PVC double layer Switch kit Face plate with specified switch holes i/c the cost of switches / sockets / dimmer made of Hi-Life / Bush / Schenider, screws complete as approved and directed by the Engineer Incharge <br> (a) One way Gange Switch <br> Small_(viii) Three Pin Power Plug 15-32 Amp | 191 | Each | 757.80 | 144,740 |
|  | 5 | P/F PVC double layer Switch kit Face plate with specified switch holes $\mathrm{i} / \mathrm{c}$ the cost of switches / sockets / dimmer made of Hi-Life / Bush / Schenider, screws complete as approved and directed by the Engineer Incharge <br> (a) One way Gange Switch <br> Large, (iii) 06 Gange | 191 | Each | 1,165.80 | 222,668 |
|  | 6 | P/F PVC double layer Switch Kit Face plate with specified switch holes i/c the cost of switches/ sockets / dimmer made of Hi-Life / Bush / Schenider, screws complete as approved and cirected by the Engineer Incharge <br> (a) One way Gange Switch <br> Small. (iv) Three pin_Light Plug_10/13 Amp | 191 | Each | 535.80 | $\left.\right\|^{102,338}$ |
| E |  | haust Fan |  |  |  | 1 |
|  |  |  |  |  |  | 1 |
|  | 1 | Providing and fixing Copper winded Exhaust fan with louver and shutter made of Pak/Younas/G.F.C. $\mathrm{i} / \mathrm{c}$ the cost of necessary cable and hardware for connection from ceiling rose complete as approved and directed by Engineer Incharge. Steel body $18^{\prime \prime}$ sweep | 20 | Each | 4,454.75 | 89,095 |
|  |  |  |  |  | TOTAL | - $20,191,870$ |
|  |  |  |  | Add 3\% | ntingency | -605,756 |
|  |  |  |  |  | TOTAL | ${ }_{2}^{20,797,626}$ |




1

DETAILED ESTIMATE FOR THE CONSTRUCTION OF GATE AND GATE PILLAR AND PROVISION OF STEEL GATE ( 16 'X6') SIZE WITH WICKET GATE

2nd Bi-Annual 2022

1. Excavation in foundation of bridges and other structure i/c dag belling dressing etc: complete.(By Excavator)

$$
3 \times 4-3 / 4 \times 4-3 / 4 \times 4=270.75 \mathrm{Cft}
$$

@ $8062.8 \% \mathrm{oCft} 2,183 /-$
2. P/L Cement concrte brick work stone ballast 1$1 / 2$ " to 2" gauge (Ratio 1:6:12).

$$
3 \times 4-3 / 4 \times 4-3 / 4 \times 1 / 2=34.00 \mathrm{Cft}
$$

@ $21217.40 \% \mathrm{Cft} \quad 7,214 \%$
3. P/L Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining wall, etc and other structural members other than thosa mentioned in $5(a)$ above not requiring from work (i.e. horizontal Shuttering) complete in all respect:-
(1) Type C (Nominal Mix 1:2:4)

$$
\begin{aligned}
3 \times 3-3 / 4 \times 3-3 / 4 \times 1 & =42.00 \mathrm{Cft} \\
3 \times 1.5 \times 1.5 \times 14.5 & =97.88 \mathrm{Cft} \\
\text { Total } & =139.88 \mathrm{Cft}
\end{aligned}
$$

@ 460.05 P.Cft
64,352

3A Carriage of subsequent stone aggregate and bajri (sakhi sarwar query)
(1) Type C (Nominal Mix 1:2:4)

Item No. $3 \quad 139.88 \times 0.88=123.09 \mathrm{Cft}$
Total $=123.09 \mathrm{Cft}$
4. Fabrication of mild steel reinforcement for cement concrete $\mathrm{i} / \mathrm{c}$ cutting bending laying in position making joints and fastenings for binding wire and labour charges for bending of steel reinforcement (also includes removal of rust from bar. (Deformed bars) G-40
$139.88 \times 6.75 \times .454$
5. P/Brick work other than building upto $10^{\prime}$ height cement sand mortar ratio 1:4
$3 \times 3 \times 3 \times 14-1 / 2=391.50 \mathrm{Cft}$ $3 \times 3.5 \times 3.5 \times 0.5=18.38 \mathrm{Cft}$ D/d RCC $3 \times 1.5 \times 1.5 \times 14.5 \quad(-) \quad 98 \mathrm{Cft}$ Balance $=\quad 312 \mathrm{Cft}$
6. Providing and laying fair face Gutka cladding laid in(1:2) cement / red posso mortar having $1 / 4^{\prime \prime}$ thick groove finishi/c cost of 8 SWG wirein shape of 8 placed horizontally and vertically at $36^{\prime \prime}$ and $18^{\prime \prime} \mathrm{c} / \mathrm{c}$ respectively $\mathrm{i} / \mathrm{c}$ cutting charges as per approved drawing including carriage charges complete in all respect as approved and directed by the Engineer Incharge.2-1/4"x21/4"x9" Size.

$$
3 \times 4 \times 3 \times 14-1 / 2=522.00 \mathrm{Sft}
$$

@ $\quad 222$ P.Sft 115,884
7. $1 / 2^{\prime \prime}$ thick Cement Sand Plaster (1:4) upto $20^{\prime}$

Height
Top Cap $3 \times 3.5 \times 3.5=36.75 \mathrm{Sft}$ $3 \times 4 \times 3.5 \times 0.75=31.50 \mathrm{Sft}$

Total: $=68.25 \mathrm{Sft} @ 3285.45 \% \mathrm{Sft} 2,242$
8. Rehandling of Earth with single throw of kassi

Top Cap
$270.75 \times 2 / 3=180.50 \mathrm{Cft}$
Total: $=180.50 \mathrm{Cft}$ @ $2547.6 \% \mathrm{Cft} 460$
9. Making and Fixing steel grated door with $1 / 16^{\prime \prime}$ thick sheeting i/c angle iron frame 2 " $\times 2$ " $\times 3 / 8^{\prime \prime}$ and $3 / 4^{\prime \prime}$ square bars $4^{\prime \prime}(100 \mathrm{~mm})$ center to center with locking arrangement

$$
\begin{aligned}
1 \times 16 \times 7 & =112.00 \mathrm{Sft} \\
1 \times 4 \times 7 & =28.00 \mathrm{Sft} \\
\text { Total } & =140.00 \mathrm{Sft}
\end{aligned}
$$

(@) 1935.20 P.Sft 270,928
10. Preparing and surface and painting door and
windows any type on new surface 3-coats

$$
\begin{array}{rlr}
2 \times 16 \times 7 & =224.00 \mathrm{Sft} \\
2 \times 4 \times 7 & =56.00 \mathrm{Sft} \\
\text { Total } & =280.00 \mathrm{Sft}
\end{array}
$$

@ $\quad 2770.70 \% \mathrm{Sft} \quad 7,758$
11. Cement concrete plain i/c placing, compacting,
finishing and curing complete (including screening and washing of stone aggregate):

Ratio 1:2:4


AMENDED ROUGH COST ESTIMATE FOR "BALANCE WORK OF REVAMPING OF ALL DHQ/15 THQ HOSPITALS IN PUNJAB, ONE AT THQ SHUJABAD, DISTRICT MULTAN" (ADP-2022-23 GS

NO. 658)
PATHWAY
2nd Bi-Annual 2022
Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling
around structure with excavated earth, watering and rammiing lead upto one chain ( 30 m ) and lift upto 5 ft .
( 1.5 m ) (In ordinary soil)


6,428

2 Dry rammed brick or stone ballast $11 / 2^{\prime \prime}$ to $2^{\prime \prime}$ guage

| 2.000 | x | 100.00 | x | 1.50 | x | $0.75=$ |  | 225 | Cft |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Total | = | 225 |  | ft |  |
|  |  |  |  |  |  |  |  | 35.4 |  | cft | 20,330 |

3 Pacca Brick Work in Cement Sand Mortor in other than Building (1:6)

解 concrete plain including placing, compacting, finishing and curing comp
4 and washing of stone aggregate): -
(f) Ratio 1:2:4
$2 \mathrm{x} \quad 99.3 \mathrm{x}$
$0.750 \times \quad 0.083$


3,051
5 1/2" thick cement plastr 1:4 upto $20^{\prime}$ height.
$2 \mathrm{x} \quad 99.30$
$x$

| 4.00 | $=$ | 794 Sft |
| :--- | :--- | :--- |
| Total | $=$ | 794 Sft |
|  | $3285.45 \% . \mathrm{Stt}$ |  |

26,086

6 P/L Cement concrete plan 1:2:4i/c finishing
$2 x \quad 99.30 \quad x \quad 1.125 x$

| 0.125 | $=$ | 28 Cft |
| :--- | :--- | :--- |
| Total | $=$ | 28 Cft |
|  |  |  |

10,701

7 Earthowrk in ordinary soil for embankments lead upto 03 mile, including ploughing and mixing with blade grade or disc harrow or other suitable equipment, and compaction by mechanical means at optimum moisture content and dressing to designed section, complete in all respects $90 \%$ maximum modified AASHO dry density.
$16.00 \times 99.3 \times 2.500=3,972 \mathrm{cft}$
(a) 16810.70 \%cft 66,772

8 Cement concrete brick or stone ballast $11 / 2$ "to 2 " ( 40 mm to 50 mm ) gauge, in foundation and plinth:-
e) Ratio 1: 6: 18

$$
\begin{array}{ll}
16.00 \times \quad 99.3 \times \quad \begin{array}{l}
0.250 \\
\text { Total }=
\end{array} \quad: \quad \begin{array}{l}
397 \mathrm{cft} \\
397 \mathrm{cft}
\end{array}
\end{array}
$$

Carriage of subsequent stone aggregate and bajri (sakhi sarwar query)
$28.00 \times 0.880$

|  | $=$ | 25 Cft |
| :--- | :--- | :---: |
|  | $=$ | 349 Cft |
|  | $=$ | 374 Cft |
| Total | $=$ | $9742.55 \% \mathrm{Cft}$ |

10 Providing and laying Tuff pavers, having 7000 PSI , crushing strength of approved manufacturer, over $2^{\prime \prime}$ to $3^{\prime \prime}$ sand cushion $\mathrm{i} / \mathrm{c}$ grouting with sand in joints $\mathrm{i} / \mathrm{c}$ finishing to require slope complete in all respect . ( $50 \%$ Grey / 50\% Coloured) b) $60-\mathrm{mm}$ thick
16.00 x


Sub Engineer



Revamping of Existing Clinical Building<br>Additional Items/Non-Schedule Items/lmproved Generic Specifications

1 Providing and fixing 2"X2" Stainless Steel 14 SWG Corner Guard angle with bevelled corner and 0.8 mm bend at edges duly pasted with premium grade selfadhesive glue strips with excellent hold/(double sided Tape) as approved and directed by the Engineer Incharge.

| O.T |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D-1 | 2 | x |  | x | 5 |  | = | 40 Rft . |  |
| D-2 | 8 | x |  | x | 5 |  | = | 160 Rft . |  |
| D-3 | 9 | x |  | x | 5 |  | $=$ | 180 Rft . |  |
| D-4 | 2 | x | 4 | x | 5 |  | = | 40 Rft . |  |
| D-5 | 1 | x | 4 | x | 5 |  | = | 20 Rft . |  |
| Openings | 1 | x | 4 | x | 5 |  | = | 20 Rft . |  |
| Main Building (A) |  |  |  |  |  |  |  |  |  |
| O.T.S | 2 | x | 4 | $x$ | 5 |  | = | 40 Rft . |  |
| O.T.S | 2 | x | 4 | x | 5 |  | $=$ | 40 Rft . |  |
| Openings |  |  |  |  |  |  |  |  |  |
| D-0 | 12 | $x$ | 4 | x | 5 |  | = | 240 Rft . |  |
| D-1 | 9 | x | 4 | x | 5 |  | = | 180 Rft . |  |
| D. 2 | 6 | x | 4 | x | 5 |  | = | 120 Rft . |  |
| D-3 | 8 | x | 4 | x | 5 |  | = | 160 Rft . |  |
| D-4 | 13 | x | 4 | x | 5 |  | = | 260 Rft . |  |
| D-5 | 4 | x | 4 | x | 5 |  | = | 80 Rft . |  |
| Openings | 2 | x | 4 | x | 5 |  | $=$ | 40 Rft . |  |
| Openings | 2 | x | 4 | x | 5 |  | $=$ | 40 Rft . |  |
|  | 39 | x | 4 | x | 5 |  | = | 780 Rft . |  |
| Main BuildingStaff |  |  |  |  |  |  |  |  |  |
| Portion |  |  |  |  |  |  |  |  |  |
| Openings |  |  |  |  |  |  |  |  |  |
| D-0 | 2 | $x$ | 4 | $x$ | 5 |  | = | 40 Rft . |  |
| D-2 | 5 | x | 4 | x | 5 |  | $=$ | 100 Rft . |  |
| D-3 | 4 | x | 4 | $x$ | 5 |  | = | 80 Rft . |  |
| D-4 | 4 | x | 4 | x | 5 |  | = | 80 Rft . |  |
| D-5 | 1 | $x$ | 4 | x | 5 |  | = | 20 Rft . |  |
| Openings | 1 | x | 4 | x | 5 |  | = | 20 Rft . |  |
|  |  |  |  |  |  | Total:- | = | 2780 Rft. |  |
|  |  |  |  |  |  |  | @ | 580.00 P.Rft | 1,612,400 |

2 Making And Fixing Stainless Steel Clading 20-SWG I/C Fixing With Screws On Columns Complete In All Respects And As Approved By The Engineer Incharge
Column $12 \cdot x+2 \times(2+2) \times 676$ Sft.

| Total:- | $=$ | 576 Sft |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | $@$ | $1060.00 \mathrm{P} . \mathrm{Sft}$ |  |  |
|  |  |  |  |  |

3 Making And Fixing Stainless Steel Sheet 20-SWG upto height of strecher or half of door height I/C Fixing With Screws On Door Complete In All Respects And As
Approved By The Engineer Incharge


## Emergency

O.T
$1 \mathrm{x} \quad 20 \quad \mathrm{x} \quad 20$
400 Sft .

| Total:- | $=$ | 1530 Sft. |  |
| :--- | :--- | :--- | :--- |
|  | $@$ | 360.00 P.Sft | 550,800 |

5 P/F Of Lead Lining 1.5mm Thick Lead Sheet With Wall For Radiation Protection Upto Roof Height As Aper Instruction \& Covering With Wall Panelling I/C Frame
Complete in All Respect As Approved And Directed By The Engineer Incharge Also
Approved The Radiation Protecting Agency Etc.
Labor room and O.T Block
X-Ray room $11 \times 2 \times(13+19) \times 12=768 \mathrm{Stt}$

| Total:- | $=$ | 768 Sft |  |
| :--- | :--- | :--- | :--- | :--- |
|  | $@$ | $1269.00 \mathrm{P.Sft}$ | 974,592 |

6 Supply and installation premimum graded/scratch-resistant Hygienic anti-microbial
Pve wall cladding of 2.5 mm thick duly thermoplastic welded conforming to
(ISO:22196) and pasted over 12 mm thick gypsum board with adhesive/solvent fixed
over 14-SWG G.I Channael of size 3.5 " X 2 " X 3.5 " duly screwed on wall $\mathrm{i} / \mathrm{c}$ the cost
of hardwares as annrnved and directed th the Ennine.er In-charce
Labor room and O.T Block
X-Ray room $1 \times 2 \times 13$
$) \times 12=768 \mathrm{St}$

| Total:• | $=$ | 768 Sft |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | $@$ | $800,00 \mathrm{P.Sft}$ | 614,400 |  |
|  |  |  |  |  |

7 Supply and installation anti microbial Hygenic Epoxy flooring (with anti bacteriai agent ) conforming to (ISO:22196) of specified thickness duly welded with thermoplastic equipment placed over self levelling adhesive as approved and directed by the Engineer Incharge.
O.T

| $0 . T$ |  |  |  | 2 | $x$ | 24.625 | x | 157/8 |  | = | 782 Sft . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gyne O.T |  |  |  |  | x | 15 | $x$ | 115/8 |  | $=$ | 174 Sft . |
| Eye O.T |  |  |  |  | x | 15 | x | $115 / 8$ |  | $=$ | 174 Sft . |
| Emergency |  |  |  |  |  |  |  |  |  |  |  |
| O.T |  |  |  |  | x | 20 | x | 20 |  | $=$ | 400 Sft . |
| O.T |  |  |  |  |  |  |  |  |  |  |  |
| O.T | 2 | x | 2 |  | x | 24.625 | + | $157 / 8$ | ) $\times 12$ | = | 1944 Sft |
| Gyne O.T | 1 | x | 2 |  | x | 15 | + | $115 / 8$ | ) $\times 12$ | = | 639 St |
| Eye O.T | 1 | x | 2 |  | $x$ | 15 | + | $115 / 8$ | ) $\times 12$ | = | 639 Stt |
| Emergency |  |  |  |  |  |  |  |  |  |  |  |
| O.T | 1 | x | 2 |  | $x$ | 20 | + | 20 | ) $\times 12$ | $=$ | 960 Sft |


| Total: | $=$ | 5712 Sft |  |
| :--- | :--- | :--- | :--- |
|  | $@$ | $550.00 \mathrm{P.Sft}$ | $3,141,600$ |
|  |  |  |  |

8 Providing and fixing Openable door comprising of 3 mm thick UPVC hollow profile ,chowkat frame of $60 \mathrm{~mm} \times 64 \mathrm{~mm}$ and leaf frame 60 mmx 106 mm both duly reinforced with G.I box frame inside the void with 20 mm wide panel with grooves on both sides $i / c$ the cost of hardwares, hinges, four bolt and cutting changes on approved \& directed by the Engineer Incharge

| O.T |
| :---: |
| D-1 |
| Main Building (A) |
| D-0 |
| D-1 |
| noutin |
| D-0 |



9 Providing and fixing high quality LED SMD Panel Light $2 \mathrm{f} \times 2 \mathrm{ft}$ of 48 watt $/ 4000 \mathrm{k}$ wattage anf Luminous flux with Polystyrene bow//prismatic cover made of Philips as approved and direced by the Engineer Incharge.
$222 x$

10 Supply and Installation of Philips LED Bulb 24W E27 3000K 230 V A80 1CT/6 APR
(Philips made) Complete in all respects as approved by the Engineer Incharge
$764 \times 1$


11 Providing and Fixing of Bracket Fan 18" (As per approved manufacturers) complete with electric connection a approved by the Engineer Incharge.
$111 \times 1$

12 Supply and installation of Phillips or Equilent, 12-Watt SMD light 3" dia of approved manufacturer i/c cost of all labour \& material complete in all respect as approved by the Engineer Incharge.

$$
1 \times \quad 444
$$

|  | $=$ | 444 Nos. |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| Total:- | $=$ | 444 Nos. |  |
|  | $@$ | 1150.00 Each | 510,600 |

13 S/E A.C ceiling fan $56^{\prime \prime}$ sweep i/C regulaor.

$$
1 x
$$

222

O2mes



AMENDED ROUGH COST ESTIMATE FOR "BALANCE WORK OF REVAMPING OF ALL DHO/15 THQ HOSPITALS IN PUNJAB, ONE AT THQ SHUJABAD, DISTRICT MULTAN" (ADP-2022-23 GS NO. 658)

## WATER FILTERATION PLANT

| 1 |  | Supplying, installing and testing of water purification plant 2000 LPH capacity conforming to standard specifications and quality of the purification plant before installation / execution. consisting of the following components complete, complete in all respect. |  |  |
| :---: | :---: | :---: | :---: | :---: |
| No. |  | Item | Brand/Make | Justification |
|  | Pre Filtration System |  | Penta pure |  |
| 1 | 1.1 | Raw Water Feed Pump 1. HP | Origen/Europe | To provide 80 psi pressure as required for pre filtration. |
| 1.2 |  | Sand Filter ( 5.4 ft hight \& 1.6 ft diameter FRP ,Fiber Reinforced Polyester) <br> S22-D Media | Brand: Euro Tech wave cyber /Pentair, USA NSF Approved | Due brackish water stainless steel vessel is not suitable. FRP material is resistant to brackish water. |
|  | 1.3 | Carbon Filter (Activated carbon ${ }^{(3)}$ Filter ( 5.4 ft hight \& 1.6 ft diameter FRP, Fiber Reinforced Polyester) | Brand: Euro Tech wave cyber/Pentair. USA NSF Approved | Due brackish water stainless steel vessel is not suitable. FRP material is resistant to brackish water |
|  | 1.4 | Jumbo filter 20(1 Micron) 2-Nos | Branded | Refine the filterec water up to 01 micron |
|  | 1.5 | Antiścalant system | Origen /Europe | To prevent the chocking of R.O. membranes. |
|  | Fully Automatic Reverse Osmosis system ( with following item- specifications) |  |  |  |
| 2 | 2.1 | Penta pure R O Water treatment Capacity | 2000 LPH | 1 |
|  | 2.2 | High Pressure R.O. Pump 2.5 hp power | Origen Europe/USA | For 100 PSI Pressure to membranes |
|  | 2.3 | R.O. Membranes (BWW88"x40") | Tory FilmTec/Hydroanautios USA | To remove the seltsa TDS Control. |
|  | 2.4 | High Pressure Membrane Vessels ${ }^{(6)}$ | wave cyber ppwt Euro Tech USA | S.S. Vessel is not suitable due brackish water. |
|  | 2.5 | Digital controlled system | Origen Europe /Korea | For smooth operation Automatic of plant. Back Wash system to clean the |
| 3 | Gages Flow Meter TDS Meter Etc. |  | Italy/Taiwan /USA | checking of R.O. membranes Pressure and flow \&TDS : |
| 4 | Storage Tank 500 Gallon, Food grade Q-NO-3 |  | Branded | PE Master tuff Smooth and continued supply of water ! |
| 5 | Piping, Fitting \& etc. |  | Food grade UPVC | As per required \| |
| 6 | S S. Skid |  | Local | As per required |
|  |  |  | 1 to 8, complete se (inc.uding 16\% G.S.T) 1 Set. | 1 |
|  | 1 to 8, complete se |  | 1 Set | 2,000,000 |
|  |  |  | Contractor Profit $=20 \%$ | 400,000 |
|  |  |  | Total: | 2,400,000 |
|  |  |  | Say: | 2,400,000 |



Penta Pure

To
Executive Engineer,
Buildings Division No.2,
Multan

Details of Bottle water Plant ( 2000 LPH )

| Numbers | Details | Qty | Price |
| :---: | :---: | :---: | :---: |
| 1 | Feed Water Pump (Brand New) Hualien/enp Pumps | 1 | 1 |
| 2 | Media Filter (FRP) EURO TECH 150 psi | 1 | 1 |
| 3 | Carbon Filter ( FRP) EURO TECH 150 psi | 1 |  |
| 4 | Cartridge Filter housing Taiwan | 4 | 1 |
| 5 | RO Membrane + Casing | $2+1$ | 1 |
| 6 | RO Pump (Brand New) Hualien/cup Pumps Taiwan | 1 | , |
| 7 | Water tank 500 GLN Master tuff | 1 | 1 |
| 8 | UV sterilizer With American Lamp / Quartz | 2 | 1 |
| 9 | Chemical Dozing Pump (Brand New) Italy | 1 |  |
| 10 | Plant skid (MS) Complete UPVC fittings within plant | 1 | 1 |
| 11 | Complete Media (Sand / Carbon) | $1+1$ |  |
| 12 | Complete Panel with Electric Panel / TDS meter / Pressure gages / flow meters / LP-HP switches / Solenoid valve etc. |  | , |

## TOTAL COST OF RO PLANT

## TOTAL COST OF RO PLANT Ex-Lahore

1-Complete unit with Branded product
Mentioned as above with local sand / gravels, carbon Media
Rs: 2000000/=
85-Tample Road, Lahore, Www.pentapure.com.tw


## 1-Transportation at actual will be Paid by Customer.

2-Prices are without all taxes and Ex -Lahore.

## 01-ONLINE DOSING PUMP

One dosing pump is provided for the system for anti-scalant or biocides.

## 02-PRESSURE GUAGES

Stainless steel liquid filled low and high pressure gauges, low pressure in 2.5 " diameter and high
Quantity: 3
Made : Germany

## 03-ONLINE FLOWMETER

Two online, panel mounted flow-meters are provided. One flow meter for permeate and other for rejected water.

## 04-HIGH PRESSURE CONCENTRATE VALVE

Heavy-duty high pressure regulator SS material is corrosion zesistant, pre-adjusted at factory. This high pressure valve can be adjusted to maintain the desire high pressure out of the pressure, pump and into the R.O membranes.

## 05-ONLINE TDS METER

This instrument is a combined control instrument of a Reverse Osmosis monitor and online. It can perform the operation test status control and online monitoring of water quality.

## STANDARD DELIVERY TIME

Within 15 to 20 days after confirm written order.

BUYER'S RESPONSIBILITY<br>1-Availability of raw water<br>2-Easy approach of site<br>3-Site clearance<br>4-Rigging arrangement if require<br>MOD OF PAYMENT<br>100-Percent Advance

5-Main electric supply 3 ph
6-Plumbing materials
7- Drainage and all civil works
8- Residence \& food for technicians at site

Tasleem khan

03214464787
85-Tample Road, Lahore, Www.pentapure.com.tw

AMENDED ROUGH COST ESTIMATE FOR "BALANCE WORK OF REVAMPING OF ALL DHQ/15 THQ HOSPITALS IN PUNJAB, ONE AT THQ SHUJABAD, DISTRICT MULTAN" (ADP-2022-23 GS NO. 658)

CARRIAGE OF SUBSIQUENT STONE AGGREGATE ANL BAJRI (SAKHI SARIVAR QUERRY)

| CARRIAGE OF SUBSIQUENT STONE AGGREGATE ANL; BAJRI (SAKHI SARWAR QUERRY) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | ! |  | 2ND BI-ANNUAL 2022 |
| Carriage |  |  |  | $\vdots$ |  |  |
| 1st Km |  |  |  |  | $=299.80$ |  |
| 2nd Km |  |  |  | !' | $=145.45$ |  |
| 3 rd Km |  |  |  |  | $=117.00$ |  |
| 4th Km |  |  |  |  | $=85.40$ |  |
| 5th Km |  |  |  |  | $=80.25$ |  |
| 6th Km |  |  |  |  | $=79.10$ |  |
| 7th Km |  |  |  |  | $=74.30$ |  |
| 8th Km |  |  |  |  | $=73.60$ |  |
| 9 th Km |  |  |  |  | $=69.60$ |  |
| 10th Km |  |  |  |  | $=65.75$ |  |
| 11th Km to 161 Km | 151 | x | 57.3 |  | $=8652.30$ |  |
|  |  |  |  | Total | $=9742.55$ |  |



AMENDED ROUGH COST ESTIMATE FOR "BALANCE WORK OF REVAMPING OF ALL DHQ/15 THQ HOSPITALS IN PUNJAB, ONE AT THQ SHUJABAD, DISTRICT MULTAN" (ADP-2022-23 GS NO. 658)

LEAD CHART FOR SUB BASE, BASE \& BA'JRI

| Quarry Sakhi Sarwar |  | Quarry Kirana Hill |  |  |  |
| :---: | :---: | :--- | :--- | :--- | :--- |
| 114.00 |  | Km | 104.00 |  |  | Km.


| Nag Shah |  | Kabir wala |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 40.00 | Km |  | 35.00 | Km |


| Start of work |  | NLC Chowk |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Total lead | 161.00 | Km |  | 15.00 |
| Km |  |  |  |  |


| Say | 161.00 | Km | Bahawalpur Chowk |  |
| :---: | :---: | :---: | :---: | :---: | :---: |


| Nag Shah |  |  |
| :---: | :---: | :---: |
|  | 40.00 | Km |
| Start of work |  |  |
| Site + Av: |  |  |
| Total lead | 315.00 | Km |
| Say | 315.00 | Km |

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## RATE ANALYSIS FOR

 0.8 mm bend at edges duly pasted with premium grade self-adhesive glue strips with excellent hold/(double sided Tape) as approved and directed by the Engineer Incharge.


RATE ANALYSIS FOR
Supply and installation anti microbial Hygenic Epoxy flooring (with anti bacterial agent ) conforming to (ISO:22196) of specified thickness duly welded with thermoplastic equipment placed over self levelling adhesive as approved and directed by the Engineer Incharge.
(10×10=100-Sft) Take For Analysis Propose
2nd Bi-Annual 2022

## A. MATERIAL

1 Anti-static epoxy self leveling floor / dado PVC MFRP conductive epoxy flooring (imported) to aviodfriction with all chemical polish etc

| 1 $\times 10 \times 10$ | = | 100 Sft |
| :---: | :---: | :---: |
| Add $5 \%$ wastage / over lapping | = | 5 Sft |
| Total |  | 105 Sft | 400 /-P.Sft Rs: 42000/-

2 Fixing Charges
Total 105 Sft
@ $40 /$-P.Sft Rs: 42CO/-

Total Rs: 46200/-
Add 20\% Contractor's Profit and OHC 9240/-
Total Rs: $\overline{55440 /-~}$

```
Rate P.Sft = 50040/100 = 554/-
```

Say Rs: 550/- P.Sft

1 Certified that input rates of material and labour for the items are as per input rates displayed on web site of Finance Department 2nd Bi-Annual 2C22


## ANALYSIS OF RATE FOR THE ITEM

Providing and fixing high quality LED SMD Panel Light $2 \mathrm{ft} \times 2 \mathrm{ft}$ of 48 watt/4000 k wattage anf Luminous flux with Polystyrene bowl/prismatic cover made of Philips as approved and direced by the Engineer Incharge.

Detail of Cost=1-No.
Unit = Each
2nd Bi-annual 2022

| A | Material |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Phillips, LED Panel Light 24"x24" 48 wat//4000 k | 1 | No | Each | 11000 | 11000 |
|  |  |  |  |  | Total "A" | 11000 |

B Labour

| 1 | Labour for fixing / installation. | 1 | No | Each | 1350 | 1350 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Total "B" | 1350 |
|  |  | Total Cost $=$ " ${ }^{\text {P }}+$ " $\mathrm{B} "=$ |  |  |  | 12350 |
|  | Add 20\% Contractor's Profit \& Overhead charges on Rs. | 12350 |  |  |  | 2470 |
|  |  |  |  |  | Grand Total: $=$ | 14820 |
| Unit Rate P Sft |  | 14820 / |  | 1 | 14820 Each |  |
|  |  | 14800 |  | Each |  |  |

1 Certified that input rates of material and labour for the item at serial No. Nil are as per input rates displayed on web site of Finance Department for 2nd BI-Annual 2022

2 Certified that rates for items at serial No. except all above are not available on the web site of Finance Department for 2nd BI-Annual 2022 and based on prevailing Market Rates.



Superintenothy Engineer $\{$ Buiding Cirole Muitan

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.
:
:

P/F False coiling (DAMPA) sheet 2'x2' imported fixed with Aluminum frame (TEE \& L) hanged with 10 No wire with RCC roof slab i/c cost of Hook \& Scaffolding, carriage charges complete in all respect \& as approved by the Engineer Incharge.

1st July 2022 to 31st Dec 2022
Unit Rate P.Sft

\(\begin{array}{cc}\text { Sub Divisional Officer } \\ \text { Building } & \text { Ex ib Division } \\ \text { Shujabad } & \text { Elective Engineer } \\ \text { Building Division No.02 } \\ \text { Multan }\end{array}\) Superimendingoligineer
Building Circe Mutton
\(\{\)


Supply and Installation of Philips LED Bulb 24 W E27 3000 K 230V AB0 1CT/6 APR (Philips made) Complete in all respects as approved by the Engineer Incharge

2nd Biannual :022
a) Material
\(l\) Supply and Installation of Philips LED Bulb 24 W E 273000 K 230 V A80 ICT/6 APR (Philips made)
b) LABOUR:
\(l\) For fixing

Say \(1150 /-\)




Making And Fixing Stainless Steei Sheet \(2 \overline{0}-\overline{s w g}\) upto height of strecher or half of door height \(\mathrm{I} / \mathrm{C}\) Fixing With Screws On Door Complete In All Respects And As Approved By The Engineer Incharge



\section*{RATE ANALYSIS FOR}

Making And Fixing Stainless Steel Clading 20-Sw \(\overline{\mathrm{I}}\) / \(\overline{\mathrm{C}}\) Fixing With Screws On Columns Complete In All Respects And As Approved By The Engineer Incharge


\section*{8. ANNUAL OPERATING COST (POST COMPLETION)}

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

Grant Number:Government Buildings - (PC12042)
LO NO:LO22010099
A/C To be Credited:Account-I
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Sr \# & Object Code & \multicolumn{2}{|r|}{2023-2024} & \multicolumn{2}{|c|}{2024-2025} & \multicolumn{2}{|r|}{2025-2026} & \multicolumn{2}{|r|}{2026-2027} & \multicolumn{2}{|l|}{2027-2028} \\
\hline & & Local & Foreign & Local & Foreign & Local & Foreign & Local & Foreign & Local & Foreign \\
\hline 1 & A05270-To Others & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 \\
\hline 2 & A12403-Other Buildings & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 \\
\hline & Total & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 \\
\hline
\end{tabular}

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

Grant Number:Government Buildings - (PC12042)
LO NO:LO22010099
A/C To be Credited:Account-I
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Sr \# & Object Code & \multicolumn{2}{|r|}{2023-2024} & \multicolumn{2}{|l|}{2024-2025} & \multicolumn{2}{|c|}{2025-2026} & \multicolumn{2}{|c|}{2026-2027} & \multicolumn{2}{|c|}{2027-2028} \\
\hline & & Local & Foreign & Local & Foreign & Local & Foreign & Local & Foreign & Local & Foreign \\
\hline 1 & A05270-To Others & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 \\
\hline 2 & A12403-Other Buildings & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 \\
\hline & Total & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 & 0.000 \\
\hline
\end{tabular}

\section*{9. DEMAND AND SUPPLY ANALYSIS}

No modern health facilities and scientific diagnostics are presently available in this Hospital. This initiative of revamping Hospital covers all departments and components of healthcare including Medical, Surgical, psychiatric, Cardiac, ENT, Ophthalmic and Pediatrician components. Moreover, women health components i.e. Gymea 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

\subsection*{10.1 FINANCIAL PLAN EQUITY INFORMATION}
10.2 FINANCIAL PLAN DEBT INFORMATION
undefined
10.3 FINANCIAL PLAN GRANT INFORMATION
attached

\section*{9. FINANCIAL PLAN AND MODE OF FINANCING}

The project will be executed / financed through Annual Development Program under the Primary and Secondary Healthcare Department, the Government of Punjab.

Revenue Side:
(Rs.in Million)
\begin{tabular}{|c|c|c|}
\hline & FY 2021-22 & FY 2022-23 \\
\hline Funds Released & 6.240 & 9.098 \\
\hline Utilization & 5.088 & 2.162 \\
\hline
\end{tabular}

\section*{Capital Side:}
\begin{tabular}{|c|c|c|}
\hline & FY 2021-22 & FY 2022-23 \\
\hline Funds Released & 0.000 & 5.000 \\
\hline Utilization & 0.000 & 0.000 \\
\hline
\end{tabular}

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

\subsection*{10.4 WEIGHT COST OF CAPITAL INFORMATION}
undefined

\section*{11. PROJECT BENEFITS AND ANALYSIS}

\subsection*{11.1 PROJECT BENEFIT ANALYSIS INFORMATION}

\section*{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.

\subsection*{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.

\section*{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 gazetted and non-gazetted posts will be available for employment directly or indirectly.

\subsection*{11.2 ENVIRONMENTAL IMPACT ANALYSIS}

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.

\subsection*{11.3 PACT ANALYSIS}
undefined

\subsection*{11.4 ECONOMIC ANALYSIS}

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.

\subsection*{11.5 FINANCIAL ANALYSIS}

\section*{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.

\subsection*{11.1.1 FINANCIAL IMPACT:}

In the beginning, the 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.

\subsection*{11.2 REVENUE GENERATION}

Revenue will be generated from:

Laboratory fees
Diagnostic facility fees
X-Ray fee
Dental fee
ECG fee
Private room charges
Parking fee

Medico Legal Fee
Medical Certificate of New Government Employees

\section*{12. IMPLEMENTATION SCHEDULE}

\subsection*{12.1 IMPLEMENTATION SCHEDULE/GANTT CHART}

Starting date: 01-07-2021
Expected Completion date: 30-06-2025

\subsection*{12.2 RESULT BASED MONITORING (RBM) INDICATORS}
undefined

\subsection*{12.3 IMPLEMENTATION PLAN}
undefined

\subsection*{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.

\subsection*{12.5 RISK MITIGATION PLAN}
attached
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multicolumn{8}{|c|}{Balance Work of Revamping of all DHQ / 15 THQ Hospitals in Punjab} \\
\hline \multicolumn{4}{|c|}{RISK DATA} & \multicolumn{3}{|c|}{Pre-Mitigation / Current} & MITIGATION \\
\hline Risk Item No & Risk Description/Event & Cause & Effect / Consequences & Likelihood (1 to 3) & \begin{tabular}{l}
Impact \\
(1 to 3 )
\end{tabular} & Risk Score (1 to 9) & Mitigation / Actions \\
\hline 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 & \begin{tabular}{l}
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
\end{tabular} & 3 & 3 & 9 & Hospital administration is requested to finalize the scope during joint field visits o C\&W and PMU \\
\hline 2 & Various unexpected structural issues are being encountered & Unforeseen structural issues are expected to face during execution in hospital buildings approaching end of life & \begin{tabular}{l}
1. Stoppage of work \\
2. Performance of the Contractor has affected \\
3. Delays in the project
\end{tabular} & 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 \\
\hline 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 \\
\hline 4 & Financial Issues & Funds for these schemes should be provided as per the targets & \begin{tabular}{l}
1) Delay in tendering \\
2) Effect on quality as the Consultant supervision will not take place \\
3) Inconvenience to the patients
\end{tabular} & 3 & 3 & 9 & Approval of PCIs and early release of funds is requested \\
\hline 5 & Nationwide spread of pandemic i.e. COVID-19 in 2 nd and 3rd quarter of this year & Work delays during nationwide lockdown. & \begin{tabular}{l}
1) Delays in completion of works \\
2) Claim requests received by Contractor and Consultant
\end{tabular} & 3 & 3 & 9 & Contractor will be asked to depute fully vaccinated labor \\
\hline
\end{tabular}

\subsection*{12.6 PROCUREMENT PLAN}
undefined

\section*{13. MANAGEMENT STRUCTURE AND MANPOWER REQUIREMENTS}

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

\section*{14. ADDITIONAL PROJECTS / DECISIONS REQUIRED}

NA

\section*{15. CERTIFICATE}

Focal Person Name:Mr. KHIZAR HAYAT
Email:

Designation:Project Director, PMU P\&SHD Tel. No.:

\section*{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 "Balance work of Revamping of \(\qquad\) (Hst 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:


DIRECTOR PLANNING \& HR, PMU, PRIMARY \& SECONDARY HEALTHCARE DEPARTMENT, LAHORE
(042-99231206)
(Oct-2022)

(HAMZA NASEEM) PROJECT MANAGER CIVIL, PM, PRIMARY \& SECONDARY HEALTHCARE DEPARTMENT, LAHORE (042-99231206)
(Oct-2022)

Checked By:

(Dr. AYESHA PARVEZ)
DEPPUTY PROJECT DIRECTOR (PMU), PRIMARY \& SECONDARY HEALTHCARE DEPARTMENT, LAHORE
(042-99231206)
(Oct-2022)
(KHAZAR 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)```


[^0]:    attached

[^1]:    Item No. 11

