Local Government Engineering Department Local Government Division Ministry of Local Government, Rural Development & Co-operatives

FINAL REPORT for

Technical Assistance Project for 'My Village-My Town'

Feasibility/ Reviewing Studies on Community Space and Recreation Facilities at Upazila Level

Submitted by VITTI STHAPATI BRINDO LTD.

SEPTEMBER

Feasibility/ Reviewing Studies on

Community Space and Recreation Facilities at Village Level under Technical Assistance Project for "My Village-My Town"

for Local Government Engineering Department (LGED).

(Package No. MVMT-S-17)

SEPTEMBER, 2022

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Executive Summary

Village is a basic population unit of Bangladesh. In the 80s, there were 68 thousand villages in Bangladesh and now it has been estimated around 87 thousand. Village is not only the power hose of economic and cultural development of the country but also a prime source of food, nutrition, available workable manpower along with the reservoir of ecology and natural resources. Thus, the improvement of villages is crucial and planned efforts are needed to bring desired changes and facilitate graduation of Bangladesh as a middle-income country by 2021, achieve SDGs goals by 2030 and rebuild Bangladesh as a developed country by 2041 as vision by the Honorable Prime Minister Sheikh Hasina.

Honorable Prime Minister Sheikh Hasina's vision towards the village is to realize these by adopting and implementing a comprehensive plan. According to this vision, all modern civic amenities will be extended to the villages and simultaneously ecology and environment will be preserved. To enrich the natural, infrastructural and human resources of the rural areas, she stressed to follow an efficient and coordinated approach to transform villages as a center of prosperity and poverty- free, climateresilient, the sustainable and dynamic economic hub of Bangladesh.

In this background, the extension of modern civic amenities in every village and making "My Village-My Town" reality has a number of challenges. To develop innovative solutions for the challenges LGED and DPHE did several in-house research and hosted a national workshop and after the workshop, a strategy and implementation plan has been developed to implement "My Village- My Town" countrywide. The strategy paper has recommended developing 30 guidelines, conduct 36 feasibility studies, and Pilot Village Investment Project to commence implementation within 2021.

The main objective of the assignment is to carry out the work for the Feasibility/ Reviewing Study on Community Spaces including Four Different Studies" under the Project "Technical assistance Project for My Village- My Town" which will be covering four major tasks regarding sustainable development and planning for setting up of different community spaces, parks at Upazila level.

This Final Report has been prepared as part of the requirements set out in the Terms of Reference under the project. The contents of the report are divided into eight chapters. Chapter one discusses the background and objectives of the study. Chapter two reviews the relevant acts, policies and documents. Chapter three provides a clear picture of the design development approach including case studies, design concept and design guidelines. Chapter four presents the Developed Design along with design typologies and its components and cost estimation. Chapter five analysis the study area and chapter six describe the site-specific design and estimated cost. Chapter seven presents sustainable management framework for operating and managing the community spaces and finally, chapter eight concludes the final report.

CHAPTER 1: INTRODUCTION

1.1. Background of the Study

Bangladesh lies in the northeastern part of South Asia and is bounded by India on the west, the north and the northeast, and Myanmar on the southeast and Bay of Bengal on the south.

Village is a basic unit of Bangladesh. In the 80s, Bangladesh has 68 thousand villages and now it has been estimated as around 87 thousand. Village is not only the power house of economic and cultural development of the country but also a prime source of food, nutrition, available workable manpower along with the reservoir of ecology and natural resources. Thus, the improvement of villages is crucial and planned efforts are needed to bring desired changes and facilitate graduation of Bangladesh as a middle-income country,



achieve SDGs goals and rebuild Bangladesh as a developed country by 2041 as set by the Honorable Prime Minister.

The agenda of village development was one of the driving forces for the War of Independence of Bangladesh. Village was the center of development philosophy of the Father of the Nation Bangabandhu Sheikh Mujibur Rahman. To realize this vision, the Father of the Nation included article 16 in the constitution of Bangladesh which states *"the State shall adopt effective measures to bring about radical transformation in the rural areas through the promotion of agriculture revolution, the provision of rural electrification, the development of cottage and other industries and the improvement of education, communications and public health, in those areas, so as progressively to remove the disparity in the standards of living between the urban and the rural areas."*

Honorable Prime Minister Sheikh Hasina's vision towards the village is to realize these by adopting and implementing a comprehensive plan. According to this vision, **all modern civic amenities will be extended to the** villages **and simultaneously ecology and environment will be preserved**. To enrich the natural, infrastructural and human resources of the rural areas, she stressed to follow an efficient and coordinated approach to transform villages as a center of prosperity and povertyfree, climate- resilient, the sustainable and dynamic economic hub of Bangladesh.

The villages of Bangladesh vary in size, shape as well as in population. There are villages that are various shapes such as circular, half-circular, square, rectangular, elliptical, straight lined, spotted,

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L-shaped, Multi spotted, zigzag etc. The population also varies from 90 to 9000 in different villages. The size of the villages also varies similarly. Moreover, 87000 villages are positioned in different geographic areas of the country such as plain land, haor, char, beel, hills, coastal land, islands etc.

In this background, the extension of modern civic amenities in every village and making "My Village-My Town" reality has a number of challenges. To develop innovative solutions for the challenges LGED and DPHE did several in-house research and hosted a national workshop on 12 September 2019. A good number of reputed researchers, academicians, representatives from ministries, agencies, development partners, and representatives from the Institution of Engineers, Planners, and Architects participated in the workshop. After the workshop, a strategy and implementation plan has been developed to implement "My Village- My Town" countrywide. The strategy paper has recommended developing 30 guidelines, conduct 36 feasibility studies, and Pilot Village Investment Project to commence implementation within 2021. A major portion of the guidelines, feasibility study, and projects will be conducted and implemented by LGED and the rest will be implemented by DPHE.

Development of guidelines, conducting feasibility studies, and preparing specialized development projects requires some extra effort, specialized skill, and understanding as well as dedicated time. Therefore, the proposed technical assistance project has been developed to give the election manifesto commitment a firm base of anchorage that will gradually work to turn the commitment a reality.

1.2. Purpose of the Study

The main objective of the assignment is to carry out the work for the *Feasibility/ Reviewing Study* on Community Spaces including Four Different Studies" under the Project "Technical assistance Project for My Village- My Town" are following:

- a. Increase availability of public spaces in rural areas and ensuring equal accessibility for the people of all ages, gender, people with differently able and social groups.
- b. Develop mechanism to increase land availability for and ensure effective management of community space and recreational facilities in rural areas.
- c. Inclusive design and planning outdoor recreational/games infrastructure to be used in Schools.
- d. Review and contextualize best practices with regard to use and design of community space and also address cultural and social aspirations and differences (climatic, social, ethnographic etc.).

The Consultants have meticulously studied the scope of services as detailed in the "Terms of Reference" enclosed with the contract agreement for carrying out consultancy services, and found it comprehensive and understandable. The Consultants understand that in order to fulfill the objectives of the project, it is expected to carry out different activities set forth in the TOR, however, the nucleus or major components of the project is provided hereunder as a reference:

Task 1: Exploring the possibilities and potentialities to increase the stock of public spaces and community spaces

- Selection of one Upazila as case study with the discussion with PMO office and exploring the possibilities and potential spaces for public spaces
- Identifying the embankment areas of rivers and canals that are suitable for turning into public spaces
- Exploring the khash lands that are suitable for developing quality public spaces
- Development of guidelines and visual illustration (3-D) for protection of water channels and establishing a blue and green network in the Upazila
 - Suggesting a mechanism for sustainable operation and maintenance

Task 2: Developing a framework on utilization/ management of community space on donated lands/ households at village level.

- Exploring current practices and behavior regarding community space use and recreation for different socio-economic groups (across gender, age, income, religion and ethnicity etc).
- Exploring ways of managing public space and pooling land from public and private sources.
- Selecting at least 3-4 case studies of land/building donation with the discussion with PMO
 office and finding an operational agreement/ mechanism for utilization of such donated
 properties as community spaces
- Develop sustainable framework of management for public/recreational spaces in donated/pooled land.

<u>**Task 3:**</u> Developing a number of models on using the durable outdoor games infrastructure in schools (using different volume ranges).

- Conduct case studies to identify the requirements of outdoor gaming infrastructure in schools and communities.
- Prepare several replicable designs of outdoor games infrastructure that present adequate variations and flexibility to fit under various physical, socio economic and climatic conditions.
- Develop a sustainable mechanism of operation and maintenance
- · Prepare a database of schools and associated land for potential development.

Task 4: Planning for setting up of different community spaces, parks at Upazila level.

- Field level investigation in selected Upazila to find the interventions of various government agencies involved in creating of public spaces/ stadium/ auditorium, library etc. and identifying the gaps of sustainability and functionality
- Review of current policies and development activities (ongoing programs and projects) with regard to provision of public facilities in relevant agencies.
- Account for current behavior, requirements, opportunities and challenges with regard to use (or potential use) of community spaces.
- Inclusive architectural/ landscape design of youth recreation center, library, auditorium park as replicable sample

1.3. Structure of the Report

The Report is divided into Eight chapters. Chapter one discusses the background and objectives of the study. Chapter two reviews the relevant acts, policies and documents. Chapter three explores the possibilities and potentialities to increase the stock of public and community spaces. Chapter four provides a Policy Development related to Public Space which includes the definition of Public Space, the process of management for Public Spaces in Union Parishad, formation of a Preservation and Management Committee etc. Chapter five provides few practical examples and few conceptual models of public spaces with durable outdoor games infrastructure including the costing. Chapter six provides some conceptual framework for setting up of mini stadiums, parks in every Upazila

Feasibility/ Reviewing Study on Community Space and Recreation Facilities at Village Level under Technical Assistance Project for "My Village-My Town" for Local Government Engineering Department (LGED). (Package No. MVMT-S-17)

across the country with some illustrations, Chapter seven illustrates the site-specific design and cost and Chapter eight concludes the final report.

The following diagram intends to convey the structure of the report and how it organizes itself to fulfill the purpose of the final report with the support of the different sections included in it:



Figure 1.1: Structure and Organization of Report

CHAPTER 2: REVIEW OF RELEVANT LITERATURE

2.1. Background

Village is the lifeline of Bangladesh. At present there are 87,000 villages in Bangladesh. For the overall development of the country, the government is working to ensure the civic amenities of the cities in the villages by conserving the environment and nature. This section identifies and reviews existing laws and policies regarding public spaces and recreational areas in villages. A study by the Center for Law and Policy Affairs found that there is not enough recreational space in the municipalities of Bangladesh. Community recreation areas are closely linked to mental health and public health. At present about 8% of non-communicable diseases (heart disease, stroke, cancer, diabetes) die in Bangladesh. Exercise is an important factor in the prevention of all these diseases, which can be ensured through the place of recreation. Here the laws are based on the four principles of public health, environmental protection, right to recreation and equality.

2.2. Review of Relevant Legal Framework

There are a variety of legal instruments that are closely associated with public and community spaces, that is connected to entertainment of the citizen and environment of the area. Among them, the Constitution of Bangladesh and Local Government (Union Parishad) Act, 2009 are important ones. In the following sections, an overview of Constitutional Amenableness and Local Government (Union Parishad) Act, 2009 are discussed and the overview of other legal instruments are given.

2.2.1. Constitutional Amenableness

The Constitution of Bangladesh is our highest legal document. Article 15 of the Constitution calls for strong improvement in the material and cultural quality of life of the people, ensuring their right to proper rest, recreation and leisure. Article 16 of the constitution calls on the state to take effective measures to eliminate inequalities in the quality of life in rural and urban areas and to improve public health in rural areas. Article 16 (1) of the Constitution identifies the improvement of public health as one of the primary duties of the state. Article 16 (1) of the Constitution identifies the state as one of the primary duties of improving public health. Article 18 (ka) deals with the protection of the environment and biodiversity for present and future citizens, and Article 19 provides for equality of opportunity. The State has been given the responsibility to ensure equality of opportunity for all citizens.

My Village-My Town project, issues related to community-based public spaces and recreational facilities are discussed in a review of following laws and policies.

- The right of entertainment
- Public Health
- Environment and Nature Conservation
- Equality

2.2.2. Local Government (Union Parishad) Act, 2009

Local Government (Union Parishad) Act, 2009 is the law that is most closely associated with village level entertainment. The law does not explicitly state the creation of recreational areas. However, indirectly, environmental protection and public health have been mentioned. But these provisions are difficult to apply.

The powers, functions, etc. of the ward meeting are stated in the law, subject to the provisions of this law and in the prescribed manner the council has the right to advise the council to determine the location or area of the public health unit and other public welfare projects. Besides, responsibility has been given to create public awareness about cleanliness, environment protection, tree plantation and prevention of environmental pollution. Development, conservation, maintenance, etc. of rural infrastructure in the provisions relating to the formation of standing committee and its functions; Environmental development, environmental conservation and tree planting; Responsibility for culture and sports has been given.

2.2.3. Other legal instruments

As discussed earlier, issues related to exercise and sports are closely associated with public meeting places. This part of the article discusses the laws and policies in this regard. In 2013, the Department of Health and the World Health Organization (WHO) conducted an important research program on the topic. This analysis shows that there is ample opportunity to play a direct or indirect role in controlling non-communicable diseases through every existing law and policy. This policy briefing paper outlines 7 principles and 11 laws related to exercise in controlling non-communicable diseases. Existing laws and policies oblige organizations to ensure that the protection of public health, sports facilities, and recreation is a preventative measure. Preservation of playgrounds, open spaces, parks and natural reservoirs in all municipal areas of the country, including metropolitan areas, divisional cities and district municipalities, due to the urgent need to preserve infrastructure for exercise, environmental protection, quality control and accessibility. According to the Real Estate Development and Management Act 2010 and the existing law of the Urban Development Authority, there is an opportunity to create such opportunities.

Title	Description
National Health Policy 2011	Strategy 33 states that non-communicable diseases will be treated, prevented and rehabilitated in a coordinated manner. Initiatives will be taken to change the lifestyle along with awareness.
National Women Development Policy 2011	In the development of the girl child, special attention has been given to the needs of the girl child such as food, nutrition, health, education, sports, culture and non-discriminatory behavior in vocational training. Besides, it has been said to ensure the necessary rights for the proper development of the physical and mental health of the girl child.

 Table 2.1: Relevant Plan and Policies regarding Public Spaces, Community and Recreation

 Facilities

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Title	Description
National Child Policy 2011	In the chapter on child entertainment and cultural activities, steps will be taken to ensure quality recreational, sports and cultural activities for the child. Emphasis has been placed on the provision of playgrounds, play equipment, area-based children's parks for each school and inclusion of playgrounds for children in town planning. In the development of the girl child, special attention has been given to the needs of the girl child such as food, nutrition, health, education, sports, culture and non- discriminatory behavior in vocational training. Besides, it has been said to ensure the necessary rights for the proper development of the physical and mental health of the girl child.
National Education Policy 2010	Strategies to promote health and physical education include achieving the required criteria for participation in primary and secondary level public examinations, hiring trained teachers in physical education, conditions of playground for registration of new educational institutions, provision of physical education equipment in schools, introduction of indigenous sports and budget allocation. Done.
National Youth Policy 2017	To promote sports as a regular part of the main curriculum to ensure the physical and mental well-being of the youth.
Multidimensional plan for non-communicable disease control	 The Department of Health has adopted a multidimensional plan for non- communicable disease control from 2016-2025. In this plan, it has been said that all the activities for physical exercise should be planned. 1. Adopt national policy on physical education. 2. Multidimensional policy aimed at increasing physical activity, where physical activity will be encouraged through travel, recreation, sports. 3. Working with urban planners to increase public space conducive to exercise. It is important to ensure safe walking and cycling facilities in urban housing. 4. Build eco-friendly infrastructure for school, university, workplace physical activity and physical activity 5. Increase publicity in the media and on social media about the benefits of exercise and physical activity. 6. Keep sidewalks suitable for pedestrian movement. 7. Create separate lanes for bicycles, open spaces like parks, lakes, ponds to encourage people to walk away from mechanical vehicles.
National Land Use Policy 2001	The main objective of the National Land Use Policy, 2001 is to ensure complete and proper use of land. Article 2 (gha) states the conservation of government khas land for future development activities. Article 3.6 mentions that lands outside the city are under the jurisdiction of Upazila Parishad. Article 13 states that for the interest of economic and social development activities of the country, it is necessary to first ensure full use of the entire land including playgrounds and then try to keep it to a minimum if additional land is required.
Non-Agricultural Khas Land Management and	According to this policy, khas land refers to only government khas lands that recorded in the name of the deputy commissioner. Other lands cannot be settled under this policy without the approval of the concerned

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Title	Description
Settlement Policy, 1995	ministry. Section 3 (ka) states that non-agricultural khas land settlement will be given to any government department or organization as per government requirement subject to payment at market rate. Although the policy does not provide for the allocation of khas land for public space, recreational and sports activities, article 3 (da) states that roads, playgrounds, etc. used by the people with khas khatian records will not be allotted to anyone.
Govt. Circular Khasjami-1 Branch	There is no provision for providing non-agricultural khas land settlement at symbolic price in favor of projects for implementation of various development projects under the Non-Agricultural Khas Land Management and Settlement Policy, 1995. Pursuant to Article 3 (1), it has been stated that at the time of taking up any development project, allocation of money equal to the market value for settlement / acquisition / purchase / transfer of any land is required. The Ministry of Land has been asked to take appropriate measures for the provision of non- agricultural khas land at symbolic price in view of the logical request of the Ministry / Department in case of nationally important projects. In order to ensure maximum utilization of land, it has been suggested to take initiative to construct integrated buildings at the same place at district and upazila level.
Agricultural Khas Land Management and Settlement Policy, 1997	This policy states about the allocation of agricultural khas land for the landless. There is no mention of allocation of agricultural land in protecting public space and recreational facilities.
The Acquisition and Requisition of Immovable property Act, 2017	The law details about how the deputy commissioner will acquire real estate on behalf of the government. Pursuant to Section 4 (1), if any immovable property appears to the Deputy Commissioner in the public use or in the public interest, he is proposed to acquire the said property will issue notice at a convenient place near the property, in prescribed form and procedure. as per section 13, the acquired immovable property shall be vested in the Government without any liability and the Deputy Commissioner shall take possession of the said property and after the acquisition of any immovable property the Deputy Commissioner shall publish a notification in the prescribed form.

Table 2.2: Relevant Acts and Rules regarding Public Spaces, Community and Rec	creation
Facilities	

Name of the Act	Description	Comments				
Zila Parishad Act 2000	The Zila Parishad Act empowers the council to make regulations on various issues. Among them are exhibitions, competitive sports and public events and control issues.	The power of this law means that the district council can cooperate in organizing sports and work for the development of existing sports				
		infrastructure.				

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Name of the Act	Description	Comments
Upzila Parishad Act 1998	Under this Act, the Upazila Parishad has been given the power to form standing committees on various issues at the Upazila level. The issues are communication and development of physical infrastructure; Agriculture and irrigation; Secondary and madrasa education; Primary and mass education; Health and family welfare; Youth and sports development; Women and child development; Social welfare; Environment and forest etc.	The power of this law means that the Upazila Parishad can cooperate in organizing sports and work for the development of existing sports infrastructure.
Local Government (Union Parishad) Act 2009	Under this Act, there are instructions to form more than one standing committee at the union level. The Education, Health and Family Planning, Culture and Sports Committee is one of them.	The power of this law is to provide budget for the citizens for walking and cycling, parks, swimming, field planning, construction of infrastructure and implementation of all these works.
National Sports Council Act 2018	Coordinating the development of sports and sports activities in the country as the responsibility of the council; Formulation and implementation of training and practice plans of sports organizations for participation in international sports competitions; Construction and maintenance of various sports facilities including stadiums, gymnasiums, swimming pools, playgrounds and training and practice centers; Arrange for proper training of athletes, coaches, referees, physios, nutritionists and sports physicians of all levels in the field of sports; Indigent athletes have been given the responsibility of providing financial assistance and assistance.	This organization can play an important role in ensuring increase in sports opportunities, exercise and facilities across the country.
Rights and Protection of Persons with Disabilities Act, 2013	Creating a movement environment for the disabled is the legal responsibility of the organization departments. The "accessibility" of this Act means the right of every person with disability to receive equal access and equal treatment in all facilities and services available to the public, including physical infrastructure, vehicles, communication, information, and information and communication technology. It is the responsibility of each organization to ensure easy access for persons with disabilities in each installation.	The provisions of this law have to be complied with to ensure easy access of persons with disabilities to the establishment of physical education.
Divisional Town and District Town's municipal	Playgrounds, open spaces, gardens and natural reservoirs in all municipal areas of the country including metropolitan, divisional	The law applies to the protection of playgrounds,

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Name of the Act	Description	Comments
areas including country's all the municipal areas' playground, open space, park and natural water reservoir Conservation Act, 2000 Public Park Act	cities and district towns may not be changed except in accordance with the provisions of this Act, playgrounds, open spaces, parks and natural reservoirs. Or such place may not be used in any other way or rented, leased or otherwise transferred for similar use.	open spaces, parks and natural reservoirs. This law is applicable for
1904	government the power to prohibit and control certain things in order to protect the environment of the park, the safety of the park and the preservation of the park.	the safety and protection of public parks.
Waqf Ordinance, 1962	This Ordinance mentions all the powers of the administrator, responsibilities of the committee, management of waqf funds, punishment for violation of law. Section 2 (10) of the Waqf Ordinance, 1962 states that immovable or movable property by a religious person may be permanently sacrificed to any religious, religious or charitable purpose recognized under Muslim law or any donation made by a non-Muslim person for that purpose. Any immovable property belonging to the said Waqf State shall be registered in the name of Waqf in accordance with section 6(ka) and in this case, it will be represented in the name of Motawalli, caretaker or administrator. Under section 7 (1), the government will appoint a waqf administrator in Bangladesh who will be the chairperson of the waqf committee, which will be responsible for supervising all waqfs in Bangladesh. Under section 48, the administrator shall maintain a register containing all the information of the waqf.	
Waqf (Property Transfer & Development) Special Provisions Act, 2013	Section 4 describes the transfer method of Waqf Property as following: a) through Sales b) through Donations c) through Mortgage d) through Exchange e) by Lease and f) through Development Partnership basis. section 11, Transfer through Donation, whatever is different in section 5, no matter what any Waqf Property; any Waqf Estate or, not operated on a profit basis; donations may be made to religious, educational or public credit institutions. section 12 (1), transfer through development partnership basis can be made. section 13 (1), in case sales or more than 5 years' period of partnership basis development or by lease for Waqf property transfer, open tendering method must be done.	
Trust Act, 1882	This Act sets out how a trust will be managed and what will be its remedy in case of violation of the law. According to section 3 of the Trust Act, 1882, a trust is formed when a person declares his / her	

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Name of the Act	Description	Comments
	trust in the immovable or movable property owned	
	by him / her and / or for the benefit of others.	

2.2.4. The Directions of Court

Fields, parks and walks play an important role in protecting public health. His Excellency the Supreme Court has been playing a very important role in protecting the ground park. Following a writ petition filed in 2003 against the management of playgrounds and parks in Dhaka, the High Court directed the management of Dhaka playgrounds and parks.

Subsequently, in the wake of another writ case in the High Court, in 2014, the district administration was directed to protect all the fields, parks and canals in the country. In 2012, it directed to take necessary steps to stop the use of motorbikes on footpaths, and also directed to ensure Zebra crossing in all High Court areas. In another case, the Appellate Division prohibited RAJUK authorities from constructing allotted plots for land and parks and directed the citizens to develop the lands and parks by preserving them. Fields and parks in the city are being occupied despite court directives and existing laws.

2.2.5. Observations and Recommendations

Based on the literature reviewed above, the following observations are made.

- ✓ In Bangladesh, there is no specific law on the construction of recreational places or public spaces in villages.
- ✓ There is no provision for encouraging the provision of recreational space in the public interest.
- ✓ No program or activities or legal framework was found to create recreational space at the union level.

As the previous section shows that there is a small scope to increase the available stock of public and community spaces at rural level, the following recommendations are made.

- To formulate separate laws and policies for the maintenance of environment and nature in the village while creating recreational space.
- > To actively consider the preservation of existing nature and animals in the village, which is important for human recreation, nature philosophy and mental space.
- Take necessary steps to encourage citizens to provide recreational space. Such as declaring all persons as socially special personalities to provide public gatherings and honoring their involvement in union level committee functions.

2.3. Review of a Relevant Master Plan

Generally, a Master Plan guides the development of an area. In this document, as an example, the proposals given by the Master Plan of a Paurashava has been examined. Monohardi Paurashava has been selected for this purpose.

2.3.1. Master Plan of Monohardi Paurashava

Master Plan of Monohardi Paurashava has been prepared following the pre-requisite of the Local Government (Paurashava) Act, 2009 guided by the LGED under Package-01 of the Upazila Towns Infrastructure Development Project (UTIDP). The Master Plan comprises of three tiers of plan in a hierarchical order which are: Structure Plan for 20 years, Urban Area Plan for 10 years and Ward Action Plan for 5 years. Urban Area Plan also comprises of three components namely; Land use plan, Traffic & Transportation Management plan and Drainage & Environmental Management Plan. This Master plan will serve as guidelines for the future infrastructure development of Monohardi Pourashava together with land use control and effective management of service facilities.

The Structure Plan sets out a long-term strategy; covering the twenty years from 2011 to 2031 for urban development and the use of land in the Paurashava Town as a whole. It extends to the entire area demarcated by the Consultant. The document sets out a series of policies to be pursued, if the broad objectives set for development of the Paurashava to be achieved. In the Structure Plan, around 148.1-acre core area, 258.7-acre fringe area, 60.0-acre new urban area and 110.4-acre peripheral area have been proposed.

The Urban Area Plan elaborates policies of the Structure Plan as far as they affect the area where urban development activity will be concentrated. The plan, therefore, is limited to the existing urban area and its immediate surroundings. It is for a period of ten years, covering the period from 2011 to 2021. In providing more detailed guidance available in the Structure Plan, it gives greater precision to the spatial dimension of the Structure Plan policies. The Urban Area Plan includes land use Plan (urban residential area 347.4-acre, circulation network 172.4-acre, education and research 33.8-acre, community facility 8.96 acre etc.), Traffic and Transportation Plan (around 60.8 km proposed road, two bus and one truck terminals), Drainage and Environmental Management Plan (around 57.2 km proposed drain) and Plan for urban Services.

The Ward Action Plan provides guidance for areas where major change or action is expected in the short-term (5 years). According to the individual Ward of the Paurashava, this plan provides further the policies and proposals of both the Structure Plan and Urban Area Plan in more detailed and guidance for the control, promotion and coordination of development.

2.3.2. Existing Land use

Existing land uses are categorized on the basis of functional activities performed in Monohardi Paurashava. From land use analysis it is found that the project area is rural in nature. Major built up part of the Paurashava area is being used for residential purpose. According to the land use survey of the study area, it has been ascertained that 347.44 acres (18.50%) of land is used as residential area. Commercial and Industrial use occupied 17.15 acres (0.91%) and acres 1.75 (0.09%) of land respectively. From the survey results, it is found that the Paurashava area is dominated by non-urban character. Mixed use occupied 2.60 acres (0.14%) of land. A large part of land which is a bulk of 1314.75 acres (69.99%) is occupied by the Agricultural land. Water bodies occupied 54.74 acres of

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land (2.91%). Only 3.33 acres (0.18%) of land are used by community services and only 12.28 acres (0.65%) of land are being used for educational facilities. Most of the areas in the Paurashava are low land which needs sufficient earth filling to provide urban services. As a result, heavy construction cost is suggested to be considered to provide different urban facilities.

Only 0.184 acres of land area of Monohardi Paurashava is used as recreational facility. Some play grounds are there as recreational facilities in this Paurashava which is situated at Ward No 04.

2.3.3. Policies and Strategies for Social Amenities and Community Facilities

Monitoring the principal aspects of community facility provision in the Paurashava: Paurashava will co-operate in supplying information needs to pursue the policy. At a later stage, according to the needs of the population, the Paurashava can extend this policy to include contributions to meeting the needs such as identifying areas where demand is higher, identifying appropriate targets for provision, identifying sites and assisting in ensuring that any obstacles to the development of a site can be overcome. Until the Paurashava is in a position to devise policies which will make a positive contribution to ensuring that the supply of community facility provision is geared to the areas and the groups of the population most is need, it is recommended that the Paurashava pursue only two further policies, such as –

Assist with the identification and development of sites for public community facilities: Where needed, the Paurashava will work with the public agency responsible for the provision of community facilities to ensure that a suitable site is chosen and developed. In some instances, the Paurashava will play the lead role in the establishment of a public community facility. As an example, establishment of wholesale or retail markets to serve local communities.

Assist with the identification and development of sites for private sector community facilities: Where a private sector sponsor is encountering difficulties in providing a community facility, the Paurashava will also work with the sponsor to ensure that a suitable site is chosen and developed.

2.3.4. Required and Proposed Land Use in Urban Area Plan

(Open Space, Community Facilities and Recreational Facilities)

Open Space

Determination of Standard: The standard recommends 3 acres per 20000 populations for playground, 1 acre per 1000 population for park and 1 acre per 1000 population for Neighborhood Park.

Recommendation / Forecast: The study team recommended three play fields. At least one park is being recommended with minimum area 30.0 acres depending on availability of open land. Park with restaurant may be created on the land situated on the riverbank. Community forest and tourism development also prescribed without considering any standard. Amount of land for those components have been considered through discussion with the stakeholders.

Land Use Proposal: Total area estimated for this zone is 44.47 acres (2.44%).

Community Facilities

Community facilities include Community center, Graveyard/ Burial ground, Electric sub-station, Water supply pump, Post office, T&T office, public library, Eidgah, Mosque/Church/Temple, Police station, Police box/outpost, Fire service station, Waste disposal site, club, etc. Existing land under community facilities is 3.33 acres.

Determination of Standard: The standard suggests 1 acre per 20000 for the community center, Graveyard/ Burial ground and Eidgah. Again, 0.5 acre per 20,000 populations prescribed for Mosque/Church/Temple, Post office and T&T, 1 acre per 20,000 populations for Fire service station and 3–5 acres per Upazila Headquarters and police station.

Recommendation / Forecast: The study team recommends a new community center on one acre of land. Areas for Mosque/Church/Temple, Post office, Fire service station and T&T remain with existing areas.

Land Use Proposal: In total, 8.14 acres land (0.49% of the planning area) has been proposed for this purpose.

Recreational Facilities

Only 0.18 acres land is under recreational facility in the Paurashava.

Determination of Standard: According to the standard for recreational facilities, 1 acre of land is to be provided for every 20,000 population for cinema / theatre, 5 to 10 acres land for stadium / sports complex and 1.75 acres land per 10,000 populations for a shishu park. The study team has estimated 22254 populations for the planning area up to the year 2031. For this population total land required for cinema/theatre stands at (22254 / 20,000), means 1.1 acres land is being needed up to the year 2031, 10 acres for stadium and 3.4 acres for shishu park.

Recommendation / Forecast: The study team recommends a stadium / sports complex on 5.00 acres of land.

Land Use Proposal: About 0.19 acres area has been proposed in Monohardi Paurashava to provide recreational facilities.

CHAPTER 3: EXPLORING THE POSSIBILITIES AND POTENTIALITIES TO INCREASE THE STOCK OF PUBLIC AND COMMUNITY SPACES

3.1. Public and community spaces and their existing stock in Bangladesh

Public and Community Spaces are such kind of facilities that are accessible by everyone irrespective of age, sex and race. So, everything outside of human private property is roughly public. A public space is referred as a government-owned area outside of private ownership, not created for any financial or commercial purpose, where people of any age, caste and economic status can easily move, use and enjoy it without hindrance. These include gardens or parks, open spaces, playgrounds as well as river banks, lakes, ponds, green forests and roads. Roads are also very important public places.

Public and community places provide a variety of services including recreation, environment protection, space to be used during disaster etc. To a limited extent, government buildings which are open to the public, such as public libraries are also public spaces, although they tend to have restricted areas and greater limits upon use.

As the tenureship of land in Bangladesh is mostly private in nature, there is a lack in the stock of Public or Community spaces in Bangladesh. So, Government has given a step forward to explore the possibility of increasing the stock. Moreover, Honorable Prime Minister Sheikh Hasina urged to use every parcel of available land as our land resource is very limited.

In the Election Manifesto Awami League promised that, "Initiatives will be taken to provide every village with facilities of modern town". Besides, provision of recreational facilities was an important issue in the election manifesto. To ensure healthy recreation for the youths, one 'Youth Recreation Centre' was promised to be established in each Upazila, where there will be opportunities of different indoor games, mini cinema, library, multimedia center, literature and culture corner, mini theatre etc. Besides, one 'Youths Sports Complex' was supposed to be established in each district (Bangladesh Awami League, 2018). So, the issue of community and public spaces were sufficiently addressed in the election manifesto which is yet to be addressed.

There are a variety of lands which could be used as public spaces and community spaces. Following are the category of such lands.

3.2. Types of Lands Available for Using as Public and Community Spaces

3.2.1. Waqf Land

If a person gives up his property permanently by sacrificing his property for religious, charitable or sacred purposes and surrenders that property, then it will be considered as waqf.

The Waqf Validity Act was enacted in 1923 to legalize waqf. In 1934, the Bengal Waqf Act was enacted and under this act, the Waqf property was supervised and managed. Later in 1972 the Waqf

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Ordinance was issued. Waqfs (amendment) Act, 2013 is the latest legal framework regarding Waqf Land under which such property is managed. The Waqf Administrator has an office under the Ministry of Religion to manage the Waqf property. The Deputy Commissioner has an important role in forming the steering committee and enlisting in the waqf.

According to the statistics, there are a total of 150,953 waqf estates in Bangladesh. Among them, 98,048 are registered, 45,608 are oral (unregistered) and 8,940 are practical. There are a total of 214585.46 acres of waqf property in Bangladesh out of which 200841.07 acres are agricultural land and 13634.39 acres are non-agricultural land. A recent survey shows that 1400 waqf properties in Bangladesh are being managed by waqf administrators. Mosques, madrasas, Eidgahs, cemeteries, orphanages, charitable clinics and religious festivals are being run from the income of the waqf organization. The waqf administration currently manages more than 1,500 mosques, 600 madrasas, 100 orphanages, five charitable clinics and welfare funds for new Muslims (Enayetullah, 2022).

According to section 11 and 12 of the Waqfs (Transfer and development of property) Act, 2013 Waqfs land could be transferred by donation or for development on a partnership basis. So, there are a potential of using this land for using as public and community spaces.

3.2.2. Khas Land

Sub-section 1 of section 76 of the State Acquisition and Tenancy Act of 1950 deals with khas land. The section states that if any land is vested to the Government and the lands are under the complete control of the Government, the Government may, in accordance with the procedure laid down by the Government, settle these lands or use them in any other way, are Khas land. So, Khas lands could be given to any authority following the appropriate procedure and hence, there is a scope to increase the bulk of Public and Community Space using this type of land.

There is an important issue in this regard. There are two types of Khas land, namely Agricultural and Non-Agricultural Khas land. According to the Agricultural Khas Land Management and Settlement Policy, 1997, those lands should be given to the landless people first. Besides, this type of land is closely linked with poverty and development, equality, food production and food security. So, this type of land should be avoided for such purpose.

According to the Non-agricultural Khas Land Management and Settlement Policy, 1995, these (Nonagricultural Khas Land) types of lands could be transferred to any government organizations to be used for government purpose. There are 2.07 million acres of Agricultural Khas Land and 1.78 million acres of Non-agricultural Khas Land in Bangladesh (Barkat, Suhrawardy, Shawaly, Hasan, & Rahman, 2020). So, Non-agricultural Khas Land should be the priority in increasing public and community space.

3.2.3. Roadside Unused Space or Vacant Land

Roads and Highways manages the land acquired mainly for building the National and Regional roads and highways. They have a provision of giving permission of using unused land under the "Land Use Policy of the Roads and Highways (RHD) Department, 2015. So, these types of lands could be used for building Public and Community Space following appropriate procedure. Similarly, there are many organizations who constructs road within their jurisdiction (like LGED, City Corporation, Paurashava, Upazila Parishad, Union Parishad). Roadside unused spaces of these organizations could be used for such purpose as well.

3.2.4. Existing Playground of Various Types of Educational Institute

Most of the educational Institutes in rural area has a playground. Both of primary and secondary schools are managed by the governing bodies. The ministry of education and local government institutions has the control over the management of these institutes. Thus, the playgrounds of these educational institutes can be used as community space for designated time with the permission of concerned authority.

3.2.5. Different Government Institutional Land

Without the authorities listed above, there are various government organizations who have ample land which are currently not in use. There is no preventing legal obligation of using that land if any government organization wish to use them. As for example, Bangladesh Railway, BIWTA, Paurashava etc. have a lot of unused land which can be used as community space. in Bangladesh, there are ample examples of this kind.

3.2.6. Existing Public Space, Park, Eidgah and Rural Marketplace

Existing public space, park, Eidgah and rural marketplaces are being used as public spaces but in most of the cases, they are underutilized. They are supposed to be community and public spaces. So, utilizing them in a more fruitful manner should be a priority. As for example, the space for Eidgah or rural market place remains busy at certain time of the day. They could be designed in such a way which may increase the rate of utilization of such spaces.

3.2.7. Riverfront, Edge of Waterbodies and Ponds

Bangladesh has a huge number of waterbodies including river, khal, marshland, haor and ponds. As they are not designed, a lion's share of them is underutilized. If designed, these spaces could be used as public and community space. Most of the waterbodies listed above are owned by different government organizations and hence they could be used with prior permission from the concerned authorities. The waterbodies which are private in nature, could be used through mutual understanding. A draft policy guideline of such arrangements is detailed out in the following chapter.

3.2.8. Existing Libraries, Theatre or Cinema Halls

There are many public and private libraries, theatre and cinema halls in Bangladesh which have space but not designed and organized well. There were some 1,235 cinema halls in Bangladesh in 1998. In two decades, that number dropped to 120. Almost 1000 theatre and cinema halls are unused. Some of them are demolished. These can create new avenue if designed properly. These can support local theater groups, as well. Local cultural groups can arrange various cultural functions like singing

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competition, drawing competition etc. Functions for senior citizens like reunion, old movie shows can also be arranged there.

3.2.9. Existing Playgrounds and Open Spaces of Community Clubs etc.

There are a lot of community clubs in Bangladesh. Among them, some of the community clubs has their own fields and playgrounds. They could be used too, to provide outdoor recreational facilities at rural level.

3.3. Findings

Though the stock of public and community space in rural area is larger than urban areas, there is serious lack in public and community space all over Bangladesh. The public and community spaces that are existing until today, are not properly designed which can bring maximum benefit to the citizens of the community. But there is a scope for upgrading the situation. If well planned and well designed, existing stock of available land can play a crucial role in promoting the situation. It will improve the environment, support the communities by providing recreational facilities, provide better services for people irrespective of age, sex and race, and importantly support the government to fulfil the promises of the government provided in the election manifesto.

Upzila/ District	Public/ Community Space Types- Land Tenureship			Public Courtyard (negise)	Public Centre (**:***)	Open Space (trestions)	Outdoor Playscape (জ্যুজ লোকুল)	Park (Strift)	Riverfront (न्मेडीव)	Waterfront (centrix)	Market Place (বালাজ্যে স্থান)
	L.		/	01	02	03	04	05	06	07	07
		1 mary about	Availability								
	a	Waqt Land	Area								
			Location		-	-					
		Khas Land	Availability			v		V.	V.	ý.	*
	b		Avea		-						
Lingzig			Location				1		_	-	-
Name/		Vested Land	Availubility								
District Name	G		Area				1		-		
Contract realized			Location								
		Donated Land	Availability								
	d		Area								
			Location								
	PD-41	Institutional	Availability								
	8	Land	Area					_		1	
	_		Location								
		Private	Availability								
	1	Land	A103			-	1	1			
			Location								

Figure 3.1: Sample Inventory of Identification of Public and Community Spaces at Upazila Level

CHAPTER-4: DEVELOPMENT OF A FRAMEWORK ON UTILIZATION/ MANAGEMENT OF COMMUNITY SPACE ON DONATED LANDS/ HOUSEHOLDS AT VILLAGE LEVEL

The government has adopted My Village My Town program to improve the living standards of the people of the village. Under this program, plans have been taken to create public meeting place, recreation, community space and open space for the people of the village. Social meeting place, recreation, exercise, and open spaces are important for both mental health and physical well-being. But due to various reasons, the number of community space for public gatherings, recreation, exercise and open space in the village is decreasing day by day. In this situation, it is the high time to think of a policy for the purpose of preserving and increasing the stock of public meeting places at village level.

4.1. Existing Policy for Utilization of public and community space and Policy Gap

Increasing the stock of public spaces and community spaces is the preliminary task of providing a sustainable environment for the inhabitants of a locality. Rather, it is important to develop a framework for its governance. A public space may be created at a land provided by both government or private owner and consequently, every public and community space require a policy guideline for its governance.

Section 51 of Local Government (Union Parishad) Act, 2009 has a provision under which a person can donate a land to Union Parishad. Government too, can transfer land to the Union Parishad within its jurisdiction in accordance with the relevant laws or regulations and such transferred property shall remain under Union Parishad's control (Section 52). But, there is no policy framework for utilization of that land to be used as public and community space.

In this backdrop, a draft policy guideline for managing such properties (to be used as public and community space) has been prepared. It is assumed that, as a local government institution, the Union Parishads will take the lead in governing such spaces. Government may impose the following guideline as a guiding principle for governing of such spaces. The guideline is given below.

4.2. A Draft Policy Related to Public Space

Content:

- 1. Introduction
- 2. Definition of Public Space
- 3. Developing Public Space in Union Parishad and Preservation Committee
- 4. Donation of land for Public Spaces of the citizens
- 5. Conservation of Environment and Biodiversity
- 6. Public Space Management Committee

- 7. Guidelines for the management and maintenance of public space
- 8. Activities in Public Spaces
- 9. Budget and finance
- 10. Effectiveness and Removal of ambiguity

1. Introduction

- i. Article 15 of the Constitution of Bangladesh calls for strong improvement in the physical and cultural quality of life of the people, ensuring their right to reasonable rest, recreation and leisure. Article 16 of the Constitution calls for the state to take effective measures to eliminate inequalities in the quality of life in rural and urban areas and for the development of public welfare in rural areas.
- ii. Every year 572,600 people in Bangladesh die due to non-communicable diseases like diabetes, heart disease, stroke, cancer, which is 67% of the total deaths in the country and about 22% of these deaths are premature deaths. People suffer for a long time from noncommunicable diseases, which harms the individual and the family physically and financially. This premature death can be prevented by having a healthy diet, exercising, controlling the use of tobacco and environmental pollution.
- iii. People in Bangladesh do not exercise enough. According to Bangladesh NCD Risk Factor Survey of 2018, 29.13% of the population is not exercising as recommended by the World Health Organization (The World Health Organization recommends 150 minutes of endless sweating per week). On the other hand, in 2016, 20.5% of the adult population in the country (25.1% women and 16.0% men) were suffering from overweight problem. About 26% of the people in our country do not get enough exercise and 13% of men and 22% of women are overweight. In 1980, overweight was a problem for 7% of adults and 3% of children on the total population of Bangladesh. In 2013, it increased to 17% for adults and 4.5% for children. In addition, 18% of married women are overweight.
- iv. Unconsciousness and a lack of adequate investment have not yet made the world a better place to expand bodybuilding opportunities. With the goal of reducing inadequate physical activity by 15% within 2030, the World Health Organization (WHO) has formulated a comprehensive plan named 'Global action plan on physical activity 2018-2030'. It is important to take integrated planned steps to create opportunities for exercise.
- v. The government has adopted 'My Village-My Town' project to improve the living standards of the people of the village. Under this project, there is a plan to create public gatherings, recreation, exercise and open space for the people of the village.
- vi. Public gatherings, recreation, exercise, and open spaces are important for mental wellbeing and physical well-being. Due to various reasons, the number of public gatherings, recreation, exercise and open space in the village is decreasing day by day. Therefore, this document has been formulated for preserving and increasing the number of public gathering places at the village level.

2. Public Spaces

i. 'Grameen Gana Parishad/ Public/ Community Space' means public recreation areas, fields, parks, open spaces, ponds, reservoirs, places for sports, exercise and physical activity and open spaces used by the people collectively.

3. Developing Public Spaces in Union parishads and Preservation Committee

- The Deputy Commissioners will form a following standing committee in each Upazila to i i create and preserve the public spaces at the village level.
 - A. Upazila Nirbahi Officer (UNO) -President Member
 - B. Upazila Education Officer -
 - C. Upazila Health Education Officer -Member
 - D. Union Land Assistant Officer -Member
 - E. Union Chairman -Member
 - F. Assistant Commissioner (Land)-**Member Secretary**
- The activities of Public Spaces in Union parishads and Preservation Committee will be as ii. follows:
 - A. Making a list of the existing public, private spaces. Storing information about the amount of such places, existing condition, type of use, etc.
 - B. To determine the needs and possibilities of creating public space in each ward in Union Parishad area.
 - C. To take overall steps to provide settlement for creation of state khas land (agriculture and non-agricultural) as public space.
 - D. If necessary, identify unused lands of other organizations and obtain and arrange permits for permanent / temporary use as public places.
 - E. Encourage Union Parishads, Zila Parishads, Upazila Parishads, villagers to provide private land for conservation of public spaces and environment.
 - F. Provide overall assistance to the Union Parishad in the purchase and development of land in relevant matters.
 - G. Ensuring environment by preserving social norms in creating an environment for women's exercise and physical labor in the union
 - H. Ensuring that the public spaces are not under the control of any particular person, group or organization.
 - I. Ensuring guidance of existing policies in development of public spaces and participation of local citizens including protection of environment.
 - J. To take steps for the preservation, reform and development of public space in the Union.
 - K. Any other responsibility assigned by the government.

4. Donation of land for Public Spaces of the citizens

- Union public meeting places, development of open spaces, members of the Conservation i. Committee will provide regular campaigns and incentives to the citizens to donate their unused non-agricultural land.
- ii. The benefactor has to donate the land to the Union Parishad.
- iii. Such land will never be used other than the purpose described in this policy.
- iv. Dignity of land donor for public space
 - A. Citizens who donate their land for recreation will be identified as Social Important Persons (SIPs).
 - B. The Social Important Person (SIP) will be in all events of Union Parishad / Upazila Parishad.

- C. The person donating the land and in his absence his successor or their representative will be a member of the donated public area management committee.
- D. If the donor wishes, he can name the public premises after him.
- E. In the absence of the land donor, one of his heirs will inherit the same status.

5. Conservation of Environment and Biodiversity

- i. Abandoned lands / shrubs inhabited by reservoirs, forests, wildlife will not be identified or allotted for public space.
- ii. No land will be allocated / used / developed in such a way that the environment is destroyed or damaged.
- iii. No public recreation areas will be destroyed or shrunk through permanent installations
- iv. No Public space will be identified in violation of Environmental Protection Act 1995, Wildlife (Conservation and Security) Act, 2012, Bangladesh Water Act, 2013 or any other law

6. Public Spaces Management Committee

- i. The Union Parishad Chairman will form a public place management committee and make each member of the union council as the president of that committee.
- ii. A committee of not more than 9 members will be formed consisting of local sports organizers, athletes, social and cultural activists, teachers, media, youth organizations, women organizers. The composition of the committee can be as follow:
 - A. Concerned Ward Member - Chairperson B. Donor of the land - Member C. Children Representative (upto 12 years) residing in the ward - Members D. Women Representative residing in the ward - Members E. Disable People Representative residing in the ward - Members F. Young People Representative residing in the ward - Members G. Civil Society Representative residing in the ward - Members H. Representative from poor community - Member I. Secretary of Union Parishad - Member Secretary
- iii. Tobacco users, smokers and drug addicted person will not be considered eligible as members of the committee.
- iv. The person giving land as public spaces will be an ex officio member of this committee.
- v. The Public Space Management Committee shall conduct the proceedings following the guidelines laid down in Policy (7)
- vi. The Union parishad will monitor the Standing Committee for Culture and Sports according to Union Parishad Act-2009 and will make recommendations on the work to be done and present them in the meeting of the council

7. Guidelines for the management and maintenance of public space

 Public recreation areas will be reserved for activities like sports, exercise, gymnastics etc. For any other type of event, the public meeting place for sports, exercise, exercise, etc. will not be closed. However, this obligation will not be applicable in case of disaster and state needs

- ii. Public recreation areas may not be rented or used for commercial purposes.
- iii. Existing forests, fruits, medicinal plants, herbs, grasses, flowers etc. that have existence in approved design of parks and playgrounds can be regularly maintained.
- iv. It is important to ensure that the recreational area of the people maintains the highest natural environment.
- v. Necessary arrangements can be made to keep the power lines, uninterrupted supply system and other electrical equipment in place of public recreation through regular maintenance.
- vi. Regular cleaning of parks and playgrounds should be conducted and arrangements should be ensured for proper disposal of solid waste.
- vii. Toilets (washing centers) can be provided in public places if required and cleanliness must be ensured
- viii. Arrangements should be made to maintain a safe environment for visitors or park and playground users
- ix. Public spaces will not be used for any purpose such as destroying the individualism of the premises or causing infrastructural damage.
- x. No permanent infrastructure will be built by occupying the playground.
- xi. The public recreation area management committee will be able to take necessary decisions as per the need. However, if it is in any way contrary to the provisions of this policy, it will be considered void.
- xii. The government / district administration will be able to provide guidelines on public place management if required.
- xiii. No person may be barred from entering these institutions due to race, religion, caste, occupation or social status.
- xiv. It must be ensured that women, people with disabilities and the elderly can easily enter and participate.
- xv. If there is any obstacle or need in conducting the existing activities, the chairman of the union will present id to the 'Developing Public Spaces in Union parishads and Preservation Committee' to resolve the issue.

7.1 Time span of the public space

- i. As the supply of public or community space is very limited, it would be better if all of the lands available for various time spans could be used. Since land can be available for different spans of time, i.e: short, mid or long term, these complexes should also incorporate temporal flexibility in design.
- ii. If a land is available for a short time (say 6- 12 months), material or design considerations would be based on this duration/ time span factor
- iii. If a land is available for a longer time (say 1-5 years), more durable material could be used for planning, design and construction.

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7.2 Opening Schedule for using the public space

- iv. There will be a specified schedule for public use. The time will be determined by the Public Area Management Committee. However, public use will be open from sunrise to 08.00 pm. Access to public space will be reserved at times other than the above.
- v. Notices regarding access to the park and playground should be posted at all entrances for the specified period of the "Management Committee" for public renovation work

7.3 Use

- vi. Appropriate use of designated space should be ensured as per approved design of public spaces.
- vii. Public spaces cannot be used for any purpose such as destroying the individuality of the premises or causing infrastructural damage
- viii. Public spaces cannot be used or facilitated in exchange for money without approval.

7.4 Cleanliness and waste management

- i. Sufficient number of cleaners should be employed to conduct regular cleaning activities and to remove solid waste properly from Public Spaces.
- ii. Garbage containers should be disposed of at the end of shift and kept in proper place by the cleaning staff.
- iii. Proper use with all facilities should be ensured by cleaning every toilet (washing center) by every hour break.

7.5 Safety

- i. There must be a certain number of security personnel / arrangements in public spaces to maintain a safe environment for users and provide them with security.
- ii. Public Management Committee will ensure appropriate clothing and tools (sticks, bamboo or flutes) for security guards at the time of their duty.

8. Activities in Public Spaces

- i. These facilities can be used for sports, exercise, walking, exercise, running, swimming, social and cultural events.
- ii. Sports, bodybuilding, walking, exercise, running, swimming or other indigenous sports will be given priority.
- iii. Local children, adolescents, youth and individuals will be given priority in the recreation areas of the people of the Union.
- iv. The public recreation area management committee will be able to make special arrangements for women's exercise. Or reserved for women at certain times.
- v. Gambling, betting and any such activities like housing are strictly prohibited

9. Budget and finance

i. Local people will be able to collect donations from organizations for the management of public recreation areas. However, the money must be spent through a bank account approved at the meeting of the Union Parishad.

ii. Money from Individuals and organizations selling drugs, tobacco, unhealthy beverages or products may not be received directly or indirectly.

10. Effectiveness and Removal of ambiguity

i. In case of any ambiguity regarding this policy, the Chairman of the Union Parishad will take written instructions from the District Administration / Upazila Executive.

This policy will be effective immediately.

4.3. Findings and Recommendation

Local Government (Union Parishad) act has given local government the power of gaining and maintaining land. The source of such land may be both public and private. It is important to understand that there is a dire need for all LGIs to provide services and facilities to its citizens. However, at present, there exists no policy framework to guide the LGIs with regard to gain, implement and monitor such land as public and community space. Given that, the said document will serve that purpose.

CHAPTER-5: DEVELOPING A NUMBER OF MODELS OF DURABLE OUTDOOR GAMES INFRASTRUCTURE IN SCHOOLS

Outdoor games are undoubtedly beneficial for health. There is numerous evidence of positive correlation between health and physical activity. Using cross-sectional studies Bize, et.al. showed that, there is a consistently positive association between self-reported physical activity and health-related quality of life (Bize, Johnson, & Plotnikoff, 2007). Mental health scores are higher and depression scores are lower with increased physical activity (Brown, Ford, Burton, Marshall, & Dobson, 2005). It is evident that physical activity enhances the feelings of well-being in various population groups (World Health Organization, 2004). Outdoor games usually take place in public and community space which help make communities livable for people of all ages. They are spaces that belong to everyone, regardless of age, gender, ethnicity, religion or income.

Outdoor games advances child's problem-solving abilities and initiates creative thinking among them. It also develops social skills in them and encourages listening habits when they interact with their friends. Gradually their communication and behavior skills develop. Haug, et.al. examined the association between physical environmental characteristics and the students' participation in daily physical activity during school breaks. They found that, the rate of daily recess physical activity together is low, when the facilities available are few for students in secondary schools (Haug, Torsheim, Sallis, & Samdal, 2008). They suggested for improvements of the situation. It is to be noted that, all over the world provision of health-promoting services such as parks and recreational facilities are found to be reduced in areas of economic and social deprivation (McNeill, Kreuter, & Subramanian, 2006). Bangladesh is not an exception. Being disadvantaged, the rural areas including schools are suffering from lack of such facilities.

In the manifesto of last election, among others commitment, the present government committed to "Create Community Space and Recreational Facilities for People of All Ages at Upazila level".

Keeping all of these in mind, the initiative of developing outdoor games infrastructure in schools has been thought. The infrastructures will provide cost effective and durable solutions which will benefit the users across age groups.

The size, capacity and facilities available at the schools or elsewhere in rural areas of Bangladesh has a wide variation. So, a single model would not be enough to fit in or replicate at those wide variations. Nevertheless, an attempt has been made in the following section which will provide a conceptual framework for building/installing durable outdoor games infrastructure in schools. In addition, this section will provide a methodology of thinking for building such type of facilities including sufficient number of illustrations. At the end of this report, Annex 3 will provide a step-by-step guide for providing/ designing community space and recreation facilities at village Level.
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Figure 5.1: Benefit of Quality Public Spaces

In a nutshell, public space and outdoor games provides the following benefits:

- IMPROVE PHYSICAL HEALTH: Community space and recreational facility help raise the physical activity levels of users, reduce their obesity rates, increase vitamin D levels and improve blood pressure, bone density and cardiorespiratory fitness.
- PROVIDE MENTAL HEALTH BENEFITS: Access to such space and natural areas has been shown to reduce stress, anger and aggression; improve coping abilities; lessen social isolation; enhance relationship skills; and improve cognitive function. For children, learning in natural environments can boost reading, math, science and social studies skills. Time spent in quality outdoor spaces can enhance creativity and problem-solving; reduce hyperactivity; and improve focus, attention and behavior.
- CREATE CLEANER AIR AND WATER: Community space, recreational facility, green spaces and trees play a vital role in overall ecosystem health by reducing storm water runoff and absorbing pollutants.
- ENHANCE COMMUNITY CONNECTIONS: Great and successful public spaces build community pride, bring people together, and increase civic engagement and the sense of belonging.
- ADD VALUE AND SAVE MONEY: Across the city, the community spaces and recreational facility provide both direct economic value and cost saving benefits to municipalities. The impact is seen

and can be measured by looking at factors like; Increased property values (which bring increased tax revenue); Recreational facility related spending by users and tourists and a sense of community cohesion (which, by building social bonds, can help prevent problems that would otherwise incur costs for law enforcement or fire protection)

5.1. Outdoor Games Infrastructure

Outdoor games are typically those which must be played outside, or they require a large area. The most important consideration in this regard is that, a large playground can be designed in such a way where a single play field can be used by different age groups of people for recreational purposes. Equipment used in most outside games may be creatively designed to accommodate a large variety of activities. Another important thing is that, these facilities can be provided at any place where there is a scope and not limited to the schools.

There are a lot of considerations for designing such a facility. There should have some guiding principles for designing them. The following section will give a detailed idea regarding the guiding principles for designing such a facility.

5.2. Guiding Principles for Designing Outdoor Recreational Facilities

Good public space (including provision of outdoor games infrastructure in schools) management goes beyond routine maintenance, such as emptying trash cans and repairing works. The first step for any county, city, town or neighborhood that's looking to improve its community space or build new ones is to take a holistic view of what a community space is and what different stakeholder can and should be doing. That means, looking strategically at existing assets, how to connect the community to those assets and how to identify potential new resources that can create opportunities for interaction. In all of these strategies, employing a focus on creativity- paired with bringing diverse user groups together. So, during designing the public or community space, following issues should be considered.

5.2.1. Sustainability of Community Space or Recreational Facilities

Sustainability should be considered first while designing a public or community space. Usually, sustainability criteria include environmental, economic and social dimension. In a nutshell, following issues should be considered.

i. Equity

Social inequality, economic inequality, gender inequality is some of the issues faced by the population through spatial segregation of the population. Economic inequalities are often seen that concentrate wealth and poverty through segregation of resources, limiting access to goods and service. A sustainable approach should tackle these inequalities and provide equal opportunities for all citizens.

ii. Adaptability and Scalability

The infrastructure for the community space and recreational facilities should be developed for the growing needs and economic background of the region. Facilities should be affordable, economical, inclusive and should be adequately designed to respect the culture, context, and environment. Infrastructure should aim to be light on earth and should utilize alternative material, technique as well as the renewable resource of energy. System should be adaptable with further scalability potential.

iii. Ecosystem

Ecosystem conservation within the capacity of land use is not only important for the ecological biodiversity but also to provide clean air, reduced temperatures, drainage, and flood control. A good balance and symbiotic relationship between built-environment and ecosystem ensures recreational locations for the citizens. Maintaining a balance ecosystem is very important for sustainability resource.

iv. Pollution

Since the industrial revolution, air, and water pollution in cities has increased exponentially. Cities contribute to 55% of total world pollution (World Bank, 2022) and are major contributors to waste generation. To curb this, new development needs to be designed to reduce greenhouse gas emissions, amount of waste generated & switch to cleaner resources. Program should encourage using local material, low energy consumption, alternative construction method, adopting technology that could reduce energy demand & emission of various harmful particulates.

v. Resilience

Resilience is the ability of the built environment and facilities to safeguard the population & survive during times of stress, shocks, and disasters. Also defined as "measurable ability of any urban or rural system, with its in habitants, to maintain continuity through all shocks & stresses, while positively adopting & transforming towards sustainability." Resilience building among the community, its infrastructure & disaster risk reduction will lead to a better life & prosperity for people. The resilience should achieve through community participation, better planning, and responsive facilities in times of disaster.

vi. Community Engagement

Community engagement involves Informing (letting the community know the basic information); Consulting (asking community members for advice); Involving (working directly with community members to provide input); Collaborating (partnering with community members in each part of the project); and Empowering (final decision-making that is created by community members). Building relationships with people about the project, in a manner that creates a welcoming atmosphere, considers barriers to participation (language, age, gender, physical abilities, location, time, transportation, childcare etc.), provides alternative

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methods for engagement (visual, audio, interactive) and provides ways to be involved in an ongoing manner.

vii. Reduced Barriers to Local Commerce

In the Neighborhood Activation process, focus groups and meetings, community stakeholders frequently raised the need for more local business opportunity, especially street vending or new form of micro-entrepreneurship. Well-managed street vending or following different design and implementation mechanism can be an important path for the development of new form of local entrepreneurs while bringing spaces to life.

In addition, these spaces need to be inclusive to all walks of people in the community. To achieve these the following criteria, need to be addressed in the design-

i. Physical Capabilities

Design should be done in such a way that it aims to allow access to those with limited capabilities. But design should not be divided between the normal users and the end-users as it will create a sense of division. The design approach should be such that people should not be reminded of their physical disabilities. And we should try to provide the same means to all users, identical whenever possible but equitable when not.

ii. Age and gender

Architecture especially the inclusive spaces should be designed in a way that it meets the needs of people of all age and gender groups. New spaces nowadays tend to have disproportionately high rates of attention for the middle-aged and the young while On the Contrary children and senior citizens are often neglected by the practice of contemporary public space design.

iii. Cultural Belief

When Architecture uses symbols and design languages, we understand that it influences and reflects culture simultaneously. Architecture should be such so that it can evoke culture and context by embedding stronger and enduring means. The current inhumane structure is making the cities more generic and does not reflect one's identity.

iv. Mental Health

An inclusive public space influences people's senses, mood as well as wellbeing. In order to create healthier and more productive environments we need to give more robust attention to the design-based circumstances and think about designing spaces keeping mental health in mind.

v. Viability & Affordability

Inclusive design should be affordable so that people of all economic backgrounds could get its benefits. Design either creates barrier or open doors, and inclusive design open doors for all. Economic weaker section people are mostly devoid of basic needs, by affordable inclusive built environments we as architects can help them get their basic needs.

vi. Tolerance of errors

The minimization of hazards and adverse consequences of accidents through design is necessary. Inclusive design is for all, not for a particular type of person so we need to provide warnings for errors and hazards which is simple and intuitive. Also, we need to design a space in such a way that it discourages unconscious actions in works which require attentiveness.

vii. Maintenance

Maintenance is as important as all the above criteria. If the design or the built environment is not low maintenance, then it will become a burden of everyone. Low maintenance has a positive economic impact on the communities. Low maintenance can maintain the quality of the architecture and can also maintain higher property values. Spaces should have a purpose to serve everybody and accommodate people of all types. In order to support every member of the community.

5.2.2. Technical aspects

i. Location

The location of a public space is one of the most important factors for designing. It should primarily locate at the intersection of several pedestrian networks to create a hub for people who can pass that place regularly. The location should already have people coming for different activities so that the public space can act as a tool to facilitate the existing life of the place. It should have multiple entrance, from middle of the square or the edge, but such way that is welcoming to people.

ii. Form of the space

The form of a public space has been widely studied with a common objective in mind- a sense of enclosure. As far as shapes are concerned, they can take any physical shape like square, rectangle, circular but a public space is large driven by the surrounding built forms and can be classified as- closed, dominated, nuclear, grouped and amorphous space.

iii. Size

The size of a public space or facilities hugely dominated by factors like—the activities, possible number of users, and the surrounding built forms. There is a general theory to maintain a ratio of 1:2 between building height and space width to create a sense of defined space. Space should be such that people can perform their activities amongst themselves, at the same time can read others' facial expression and their emotional state.

iv. Surroundings

A crucial part of a public space are its edges, which are defined by the surrounding buildings. These play a major role in attractive & keeping people within that zone. This can be achieved with various, small-scale activities rather than one, single business. A space with cafes and retail stores attracts visitors & helps in making the place livelier. The facilities should have visual connectivity with people through large openings and walls can be treated with different features to create a balance between order and complexity.

v. Activities

A public space is meant to bring people together, irrespective of their activities and interests. Henceforth, public open space should be able to cater to a crowd of people at once. This may be the reason why shopping malls/ market place are hugely popular today since people prefer to be at a place where multiple needs are served. Historical public space has also been classified based on the function that is – internal function, associated function, arterial node function, and multiple functions.

vi. Street furniture

Street furniture includes dustbins, light posts, signboards, seating and so on. They are selected based on functionality and the context of the surrounding. Seating arrangements can make or break the social aspect of a public space. The seating should be provided in both forms- fixed and loose. Fixed seating can not only be thought of as fixed benches but also staircases as they are often used for sitting and leisure activities. Therefore, a wider span of stairs can be noted. Loose furniture gives people the liberty to select their zone in the square.

vii. Landscaping

Paving materials should consider the durability, aesthetic appeal, reflection, glare of the sun, friction. They should also respond to the color & material palette of the surroundings & can be used to demarcate zones. The types of trees play a huge role in the microclimate. Often, during summer or daytime, the square gets heated up turning into a heat island. While flowering shrubs can be used to visually soften the overall hardness of the paving materials, trees can seasonally act as shade givers. Water elements can be introduced for regulating the temperature of the square as well as creating a tranquil environment.

5.2.3. Environmental and Manmade Vulnerability

Bangladesh, due to its unique geographic, socio-economic, and physical characteristics, is extremely vulnerable to the impacts of climate change. Bangladesh's water and agricultural resources (and thus economic activities) and coastal infrastructure are particularly vulnerable. Saltwater intrusion threatens Bangladeshi freshwater resources; changing temperatures, precipitation, and sea level rise could reduce agricultural productivity; and sea level rise, storm surge, and extreme events could damage or destroy coastal infrastructure.

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Here are a few key things to consider while designing the site:



Figure 5.2: Environmental and Manmade Vulnerability Considerations

5.2.4. SDG Goals, Vision 2041, and Five-Year Plans

Before designing a public or community Space, the existing situation must be analyzed against the visions and commitments of the government. The vision and commitments include but not limited to the SDG Goals, Vision 2041, and Five-Year Plans. This endeavor (building public or community Space) fits directly with Goal 3 and Goal 11 of SDG. Besides, it fits with government vision of 2041 and as well as the vision set in 8th FYP. In addition, this satisfies the government's commitment given in the election manifesto, too.



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5.3. Example of Community and Public Spaces and Play Equipment

There are over hundred million people inhibiting rural areas of Bangladesh. Most of the country is low lying flat land with numerous rivers crisscrossing the plane. Historically, people of Bengal delta have built houses with natural and sustainable materials like mud, thatch, wood and bamboo. These materials can be locally sourced as well as local knowledge and workforce are readily available. The construction process is also highly organized; it includes the manufacturers of building products and systems, the craftsmen who assemble them on the building site, the contractors who employ and coordinate the work of the craftsmen, and consultants who specialize in such aspects as construction management, quality control, and insurance. The history of this construction is marked by a number of trends. One is the increasing durability of the materials used. Early building materials were perishable, such as leaves, branches, and animal hides. Later, more durable natural materials such as clay, stone, and timber and, finally, synthetic materials such as brick, concrete, metals, and plastics were used. There are many sets of construction materials in the world. It differs time to time and place to place and that is why a perfect volume of 'construction materials' is difficult to make. In the southern part of our country, people use leaf like material a lot and in north Bengal, people use bark and mud at a great extent. In the center, bamboo is the solution for such task. The use of construction materials depends on its availability. The thing, which is abundant, can be used abundantly. So, low-cost alternative play equipment and play scape could be built using such locally available resource and materials.



Figure 5.4: Various Example of play equipment using locally resource material

Few Bamboo playscapes were designed and built by Paraa, a multidisciplinary architecture firm in Dhaka. The playscape had a central open space where children can play or organize festivals and performances. The structure can accommodate around 200 people at three different levels. Specific

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features were designed to include therapeutic exercises for children. There are play features for younger children where adults can supervise. Older children gravitate to the more adventurous zone. The semi-shaded decks offer flexible space for workshops and places to hang out. Elements have been placed in a way to allow easy maintenance or replacement of any element. It has been left 'unfinished' to allow the users of the space to personalize as necessary without any institutionalized guidance.



Figure 5.5: Bamboo Playscape at Basila by Paraa, Dhaka (source: Internet)

5.4. Outdoor Playscape Infrastructure and Play Equipment

The word "Playscape" refers to a play area that considers the larger environmental setting and enables opportunities of free, unstructured play for children. A playscape is placed in a natural setting and usually blends landscape elements such as plantation, landform etc. with man-made enticing structures.

As a part of this project, mainly two kinds of playscape infrastructure have been designed. These are-

- a. Open Playscapes
- b. Play Equipment

5.4.1 Open Playscapes

Open playscapes are designed with locally available, low-cost materials and facilitate free, unobstructed play for children of different ages. These playscapes are adaptable, as they are designed in different volume ranges to be placed in different sizes of land. In addition, they can

perform both in dry and wet seasons. They are designed to be durable yet easy-to-build. These playscapes can be placed in different types and sizes of lands as they are replicable and flexible.

i. Design Elements of Playscape

The modular open playscape is designed in many variations according to land size, shape and context. For the sake of discussion, a generic playscape is explained below:

The main structural components of the open playscape are the bamboo framework structure and the multi-level bamboo platforms. The platforms and the structural elements are joined with lashings and bamboo joinery.

The different levels of bamboo platforms are accessed through bamboo ladders. Different play equipment has been incorporated in the design of the playscape to further enhance the playing experience of children.

There is a hammock made of ropes, two tire traverses, a bamboo climbing wall and a slipper. The equipment is made using natural and low-cost materials and are easily replaceable. The multi-level platforms can accommodate a wide range of activities. The diagonally placed ladders pave the way to an interesting journey for children.

The platforms of the playscape are raised so that it can perform both in dry and wet seasons. During the wet seasons, children can dive from the different levels into the surrounding puddles. All the structural members of the bamboo frame are treated and weather-coated for sustainability.

ii. Scalability of Playscape

The entire structure is adaptable, replicable, scalable and flexible. It can be designed in a number of different ways for varying site conditions. The generic playscape structure can be designed in four different sizes: Small, Medium, Large and Extra Large for different sizes of land.





Figure 5.7: Scalability of Playscape







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Figure 5.11: Extra Large Sized Playscape

iii. Time span of using a land as public or community space

Land can be available for various spans of time, e.g.; for a short, mid or long term. As the supply of public or community space is very limited, it would be better if all of the lands available for various time spans could be used. If there is a provision of using a land for even few months, that land could be used to accommodate different kinds of playscapes and play equipment. The material or design considerations has also been based on this factor. A land may be available only for a limited period of time therefore these playscape structures has been designed with bamboo, wood etc. For example. If a land is available only for 5-7 years to be used to accommodate public playscapes, it can serve children who are 3-5 years old at the time. After 5 years, these children will outgrow this equipment and their need for these structures will diminish or change.

Playscapes can also be scaled according to the time factor. In case, a small portion of a land is available during construction, a small playscape can be constructed. If adjacent lands are acquired eventually, the playscape can be scaled to bigger sizes to accommodate more activities. The inverse scenario can also be imagined, where a large portion of land is available in the beginning, and later only a smaller part can be retained for playscapes. In this scenario, a large playscape can be reduced in size to a small sized playscape.

Therefore, time is an important factor in the design of outdoor playscapes.

iv. Variations for Site Context

These playscapes can perform in different sizes and shapes of lands, set in a wide array of conditions. Some of them are described below:

A playscape beside a vehicular road on a narrow land will be linear in shape and will incorporate different climbing blocks adjoined by small connective bridges. These blocks can be accompanied by a range of colorful reinforced concrete pipes of 1.5-meter diameter where children will be able to sit and play.

A playscape beside a paddy field will be larger in size and more transparent, made up principally of diagonally joined bamboos and bamboo platforms on different levels. The children will journey through an array of diagonally placed bamboo ladders taking them to different levels. The platform is designed to be raised on stilts to perform in both dry and wet seasons.

A playscape on an irregular shaped land beside residential buildings is designed with a minimalistic arrangement of nine reinforced concrete pipes in different colors, and two climbing blocks. The play area can be raised on a mound to further enhance the playing experience.

A playscape on a linear patch of land will have linearly placed reinforced concrete pipes where children will climb, sit and play, adjoined by a linear ramp block. The ramp is placed inside a bamboo framework. The linear ramp is envisioned to encourage children to explore the playscape.

A playscape beside a small school will be minimalistic in design, with a few reinforced concrete pipes adjoined by two climbing blocks for young children. A large shading tree should be incorporated in the design to provide shading for children.

A playscape beside an open public space will be comparatively larger and more transparent. The playscape will incorporate multiple bamboo platforms on different levels and linearly placed reinforced concrete pipes.



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Fig 5.13: Playscape beside a paddy field in dry season



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Fig 5.15: Playscape beside a road on a linear patch of land

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Fig 5.16: Playscape beside a road on a linear patch of land





v. Variations in Shape

The playscapes can be changed in shape according to availability of land. Three examples are illustrated below where the playscapes are in circular, rectangular and pyramid shape.

The circular playscape has three overlapping circular platforms, accessible through a flight of steps. The platforms are made of bamboo. Three tire traverse equipment are incorporated in the design.

The rectangular playscape consists of bamboo climbing blocks and adjoining bridges and platform with small interconnected, earthen tunnels.

The pyramid shaped block has two pyramid shaped bamboo huts in opposite directions adjoined by a rope bridge.







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Fig 5.22: Visualization of Outdoor Playscape

vi. Ballpoint Cost Estimation

The cost of building and installing a playscape would depend on the materials and items used.

For an example, the estimated cost for a circular bamboo playscape is given below:

	Considering Each	T		T			-	1	
(0)	Cost of materials	-					-	+	
1	Bamboo 5% wastage	1500.00	m	6	49.20	Par Meter	=	Th.	73,800.00
2	bamboo for platform	690.00	m	(Q)	49.20	Per Mater	=	TR.	33,948.00
3	Bamboo treatment	2190.00	603	0	30.00	Per Meter	=	TR.	65,700.00
4	Water resistant wood sealer matt finish for Bamboo	515,75	Sqm	8	450.00	Per Sqm	=	Tk.	232,085.25
5	PU Paint	15.00	Sqm	8	640.00	Per Sqm	=	Tk.	9,600.00
6	Labour charge for making & installation	1.00	18	8	50,000.00	is	=	Tk.	50,000.00
7	16mm dia ropa	12.00	m	0	350 00	Perim	Ħ	TR.	4,200.00
8	500 mm dia Round tyre	3.00	no	0	8,500.00	per no	-	Tk.	19,500.00
9	Galvanized not bolt of varying dia ASTM 325 rate taken from PWD 2016 et no 222	20.00	Kg	0	250.00	Per Kg	Ċ	Tk.	6,000.00
		()				Total	=	Tk.	493,833.25
					Profit	10.00%	=	Tk.	49,383.33
			P P		Overhead	3.50%		Tk.	17,284.16
						Total		Tk.	560,500.74
	Add VAT				1.08	7.50%	=	Th.	42,037.56
						Total	=	Tk.	602,538.25
10	Earth work in excavation	9.36	Cum	4	234.00	Per Cum	=	Tk.	2,190.24
11	Earth filling in foundation	9.38	Cum	8	183.00	Per Cum	=	TK.	1,712.88
12	cement concrete (1:1.5:3) with stone chips	4.68	Cum	0	7,643.00	Per Cum	=	TR	35,769.24
13	75 mm dia M.S pipe	52.00	m	0	1,281.00	per no	=	Tk.	66,612.00
						Total	-	TK.	106,284.36
_	+ +			Say.	708,823.00	.00 Per each		-	

1.111.111.11	Considering - Fach				2 J				
(a)	Cost of materials	-			÷ (-		
1	Eamboo 5% westage	1780 00	m	@	49.20	Per Metar	-	TR.	87.576.00
2	Bamboo temp & platform	585.00	1111	6	49.20	Per Meter	-	Tk	28 782 00
4	Bamboo trostmont	2365.00	- COL	6	30.00	Por Metar	- 2	Tk	70 850 00
3	16mm dia 1006	650.00	m	6	20.00	Per Metar	=	Th.	13 000 00
5	Machine made 1200 mm dia (Tongute & Groove joint) 100 mm thick RCC pipe (Double reinforcement; 1:1.5:3)	42,00	m	ø	9,500.00	Per Metar	•	TR.	399,000,00
6	Water resistant wood sealer matt finish for Bamboo	580.00	Sqm	æ	450.00	Per Sqm	=	Tk.	261,000.00
7	Labour charge for making & installation	1.00	l.s	æ	50,000.00	5	=	Tk.	50,000,00
8	Galvanized nut bolt of varying dia ASTM 325 rate taken from PWD 2018 st pp.222	20.00	Kg	6	250.00	Per Kg	=	Tk.	5,000.00
9	Painting work	150.00	Sqm	e	238.00	Per Sqm	*	Tk.	35,700,00
						Total	=	Tk.	961,008.00
_	1				Profit	10.00%	-	Th.	95,100,90
					Overhead	3.50%	=	Tk.	33,285.28
	1		1			Total		Tk.	1.079,394.08
	Add VAT				7.09	7.50%	=	TK.	60,954,56
						Total	=	Tk.	1,160,348.64
10	Earth work in excevation	8.00	Cum	0	234,00	Per Cam	-	Tk.	1,872.00
11	Earth filling in foundation	8.00	Cum	6	183.00	PerCum	=	Tk	1,464.00
12	Reinforced coment concrete (1:1.5:3) with stone chips	1.90	Cum	۵	11,500.00	Per Cum	=	TK.	11,500.00
13	Reinforcement works	1.20	Ctil	6	8,054.00	Per Qt	-	TR.	9,864,80
-					-	Total		TK.	24,500.80
_			-	Sav.	1,154,849.00	.00 Per eac	h	-	

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sepp.y	In and the East			Care wroon				T	
	Considering Each						_	-	
(a)	Cost of materials						_	_	
1	Bamboo 5% wastage	780.00	m	0	49,20	Per Meter	=	Tk.	38,376,00
2	Bamboo for platform	3350.00	rm	0	49,20	Per Meter	π	Tk.	164,820.00
3	Bamboo treatment	4130.00	m	0	30.00	Per Meter	=	Tk.	123,900.00
4	Water resistant wood sealer matt finish for Bemboo	960.00	Sqm	8	450.00	Per Sgm	12	Tk.	441,000.00
5	Labour charge for making & installation	1.00	Ls	۲	75,000,00	15	=	Tk.	75,000.00
8	16mm dia rope	8.00	m	0	350.00	Per m	=	TK	2,800.00
7	500 mm dia Round tyre	2.00	no	0	6,500.00	per no	=	Tk.	13,000.00
8	Tent	24.00	eqm	0	3,500.00	per som	=	Tk.	84,000.00
8	Galvanized nut bolt of varying dia ASTM 325 rate taken from PWO 2018 sl no.222	20.00	Kg	0	250.00	Per Kg	*	Tk.	5,000.00
1					i and	Total	ا	Tk.	947,896.00
-					Profit	10.00%	-	Tk.	94,789.60
_			5 11		Overhead	3,50%		TK.	33,176.36
						Total		Tk.	1,075,861.96
	Add VAT				1.08	7.50%		TR	80,689,65
						Total		Tk.	1,156,551,61
10	Earth work in excavation	3.00	Cum	0	234.00	Per Cum	=	Tk.	702.00
11	Earth filling in foundation	3.00	Cum	0	183.00	Per Cum	5	Tk.	549.00
12	cement concrete (1:1.5:3) with stone chips	1.60	Cum	0	7,643.00	Per Cum	*	Tk	13,757.40
_				-		Total	=	Tk.	15,008.40
			_	Say,	1,171,560.00	.00 Per each		-	

5.4.2 Play Equipment

Play equipment are made primarily with low-cost environment-friendly materials. This equipment is designed to be placed in different sizes of schools for children. Twelve different kinds of equipment have been chosen to be placed in different lands. These are described below.

i. V-Shaped Net

This equipment is made with 2nos 100x100 mm 2m& sorted Shal log vertical members &1no 2m length 100x100mm horizontal member properly joined with 16mm dia galvanized 300mm long double ended and threaded stud bolt and nut. Bottom of vertical logs will be housed in 6mm thick minimum 1200mm high cylindrical M.S casing. The casing will be embedded in an R.C.C concrete base with a fork joint made of 50x50mmx6mm M.S angel. The joint has one 450 mm long and 2nos 200mm long legs.

Joining specified welding conforming to AWS D1.4 by electric arc welding including highly oxidized electrodes with galvanized M.S surface. Mild steel should be, grade 250 with minimum fy = 250 MPa, 250 mm x250 mm or approved shape 16mm dia nylon combination rope net bolted to shal log inclined in design.16mm dia nylon combination rope (Steel + PP PET) with breaking load of LB 8666 use for rope net & proper bolt. Water resistant wood sealer matt finish for shal log.

Workshop charges, electricity and labor for fittings, fixing, curing etc. earth work in excavation with back fill, one layer brick flat soling, cum R.C.C work in 1:1.5:3 in/c. Reinforcement work etc. will be done as per design, drawing & Instruction of the architect.

Shal Log Treatment: Seasoning in a recognized mechanical timber seasoning plant up to a moisture content of 12% - 16% by weight as measured by an electric moisture meter.

This equipment costs BDT 151,118.

ii. Tire Hopscotch

Made with used standard passenger car tires of 22" dia and short wooden posts. The cost for this equipment is **BDT 25,350**.

iii. Chain Bridge

Made with 120mm dia seasoned & sorted Shal log. 8 horizontal & 4 vertical members properly joined with16mm dia galvanized 300mm length double ended and threaded stud bolt and nut. Bottom of vertical logs will be housed in 6mm thick minimum 900mm high cylindrical M.S. casing. The casing will be embedded in a RCC concrete base with a fork joint made of 50x50mmx6mm M.S. angle. The joint has one 450 mm long and 2nos 200mm long legs. Joining specified welding conforming to AWS D1.4 by electric arc welding including highly oxidized electrodes with galvanized M.S surface, Mild steel should be, grade 250 with minimum fy = 250 MPa, 16mm dia nylon combination rope (Steel + PP PET) with breaking load of LB 8666 hanging with shal log including standard hooking arrangement & proper bolt. 8 mm dia S.S chain link connecting 6 nos 800mm long horizontal shal log by suitable hook. Water resistant wood sealer, matt finish for shal log.

Workshop charges, electricity and labor for fittings, fixing, curing etc. earth work in excavation with back fill, one-layer brick flat soling, cum R.C.C work in 1:1.5:3 in/c. Reinforcement work etc. will be done as per design, drawing & Instruction of the architect. Shal Log Treatment: Seasoning in a recognized mechanical timber seasoning plant up to a moisture content of 12% - 16% by weight as measured by an electric moisture meter.

The cost for this equipment is **BDT 99,781**.



Figure 5.23: V-Shaped Net


Figure 5.24: Tire Hopscotch



Figure 5.25: Chain Bridge

iv. Log Frame

Made with 120 mm dia Seasoned & sorted 4 nos inclined average 2600mm long & 8no 2000 mm horizontal shal log with proper joining with 16mm dia galvanized 300mm long double ended and threaded stud bolt and nut. Bottom of vertical logs will be housed in 6mm thick minimum 900mm high cylindrical M.S. casing. The casing will be embedded in an RCC concrete base with a fork joint made of 50x50mmx6mm M.S. angle. The joint has one 450 mm long and 2nos 200mm long legs. Joining specified welding conforming to AWS D1.4 by electric arc welding including highly oxidized electrodes with galvanized M.S surface, Mild steel should be, grade 250 with minimum fy = 250 MPa.

Workshop charges, electricity and labor for fittings, fixing, curing etc. earth work in excavation with back fill, one layer brick flat soling, cum R.C.C work in 1:1.5:3 in/c. Reinforcement work etc. will be done as per design, drawing & Instruction of the architect.

Shal Log Treatment: Seasoning in a recognized mechanical timber seasoning plant up to a moisture content of 12% - 16% by weight as measured by an electric moisture meter.

The cost for this equipment is BDT 1,28,807.

v. Double Swing

Made with 120mm dia seasoned & sorted Shal log. 1 horizontal & 4 inclined members properly joined with 16mm dia galvanized 300mm long double ended and threaded stud bolt and nut. Bottom of vertical logs will be housed in 6mm thick minimum 900mm high cylindrical M.S. casing. The casing will be embedded in an RCC concrete base with a fork joint made of 50x50mmx6mm M.S. angle. The joint has one 450 mm long and 2nos 200mm long legs. Joining specified welding conforming to AWS D1.4 by electric arc welding including highly oxidized electrodes with galvanized M.S surface, Mild steel should be, grade 250 with minimum fy = 250 MPa.

4 nos 2000mm long 8 mm dia Stainless Steel chain link with breaking load 0.53 MT hanging with shal log by suitable frictionless hook hanging with bearing system with 2nos M.S. swing including rubber covering.

Workshop charges, electricity and labor for fittings, fixing, curing etc. earth work in excavation with back fill, one layer brick flat soling, cum R.C.C work in 1:1.5:3 in/c. Reinforcement work etc. will be done as per design, drawing & Instruction of the architect.

Shal Log Treatment: Seasoning in a recognized mechanical timber seasoning plant up to a moisture content of 12% - 16% by weight as measured by an electric moisture meter.

The cost for this equipment is **BDT 1,28,807**.

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Figure 5.26: Log Frame



Figure 5.27: Double Swing

vi. Tire Traverse

Made with 120mm dia seasoned & sorted Shal log. 1 horizontal & 2 vertical members properly joined with 16mm dia galvanized 300mm long double ended and threaded stud bolt and nut. Bottom of vertical logs will be housed in 6mm thick minimum 900mm high cylindrical M.S. casing. The casing will be embedded in a RCC concrete base with a fork joint made of 50x50mmx6mm M.S. angle. The joint has one 450 mm long and 2nos 200mm long legs. Joining specified welding conforming to AWS D1.4 by electric arc welding including highly oxidized electrodes with galvanized M.S surface. Mild steel should be, grade 250 with minimum fy = 250 MPa,

540 mm external dia tire binding with 16mm dia nylon combination rope (Steel + PP PET) with breaking load of LB 8666 hanging with shal log with suitable frictionless hook hanging with bearing system & proper bolt. Water resistant wood sealer matt finish for shal log.

The cost for this equipment is **BDT 1,07,746**.

vii. Zigzag Stilts

Made with 120mm dia Seasoned & sorted Shal log. 8 vertical members properly joined with 16mm dia galvanized 300mm length double ended and threaded stud bolt and nut. Bottom of vertical logs will be housed in 6mm thick minimum 900mm high cylindrical M.S. casing. The casing will be embedded in an RCC concrete base with a fork joint made of 50x50mmx6mm M.S. angle. The joint has one 450 mm long and 2nos 200mm long legs. Joining specified welding conforming to AWS D1.4 by electric arc welding including highly oxidized electrodes with galvanized M.S surface, Mild steel should be, grade 250 with minimum fy = 250 MPa.

The cost for this equipment is **BDT 1,25,060**.

viii. Trapeze Walk

Made with 120mm dia chemically treated & sorted Shal log. 1 horizontal & 2 vertical member proper joined with16mm dia galvanized 300mm length double ended thread stud bolt and nut. Bottom of vertical logs will be housed in 6mm thick minimum 900mm high cylindrical M.S. casing. The casing will be embedded in an RCC concrete base with a fork joint made of 50x50mmx6mm M.S. angle. The joint has one 450 mm long and 2nos 200mm long legs. Joining specified welding conforming to AWS D1.4 by electric arc welding including highly oxidized electrodes with galvanized M.S surface, Mild steel should be, grade 250 with minimum fy = 250 MPa,

5 nos 400mm long 8 mm dia Stainless Steel chain link with breaking load 0.53 MT. hanging with shal log by suitable frictionless hook hanging. Water resistant wood sealer ensuring matt finish for shal log.

The cost for this equipment is **BDT 80,703**.



Figure 5.28: Tire Traverse



Figure 5.29: Zigzag Stilts

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Figure 5.30: Trapeze Walk

ix. Jumping Pegs

Made with 90mm dia seasoned & sorted Shal log. 10 nos different height (900mm to 600m) vertical members. Bottom of vertical logs will be housed in 6mm thick minimum 600mm high cylindrical M.S casing. The casing will be embedded in an RCC concrete base with a fork joint made of 50x50mmx6mm M.S angle. The joint has one 450 mm long and 2nos 200mm long legs. Mild steel should be, grade 250 with minimum fy = 250 MPa.

The cost for this equipment is **BDT 1,13,000**.

x. Somersault

Made with seasoned and sorted 100 X 100 mm, vertical shal wood log with proper joining. The shal logs are connected with 33.4 mm dia, 3 nos MS pipe. All Pipe and log connection should have a 6 mm thick MS plate and threaded stud bolt and nut. All nut, bolts to be galvanized. Bottom of vertical logs will be housed in 6mm thick minimum 1200mm high cylindrical M.S casing. The casing will be embedded in an RCC concrete base with a fork joint made of 50x50mmx6mm M.S angle. The joint has one 450 mm long and 2nos 200mm long legs. Mild steel should be, grade 250 with minimum fy = 250 MPa.

The cost for this equipment is **BDT 69,589**.

xi. See-saw

Made with 150x150mm thick wooden log with 50mm dia S.S pipe, 6mm thick M.S plate & box, fitting with 20mm dia nut bolt with 32mm dia solid iron shaft, 2mm thick 20mm dia M.S pipe for handle. 38mm x 6mm size MS bracket, heavy duty bearing for sawing, 8mm thick rubber covering for handle and proper welding with powder coted heat paint on M.S surface. Also earth work in excavation with back fill, one layer brick flat soling, R.C.C work in 1:1.5:3 in/c. Reinforcement work etc.

The cost for this equipment is **BDT 89,261**.

xii. Climbing Block

Made with a Bamboo wall and wooden climbing clamps. The climbing wall will be embedded in the ground with a fork joint made of 50x50mmx6mm M.S. angle.

The cost for this equipment is **BDT 97,587**.



Figure 5.31: Jumping Pegs



Figure 5.32: Somersault

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Figure 5.33: See-saw





CHAPTER-6: PLANNING FOR SETTING UP OF MINI STADIUMS, PARKS IN EVERY UPAZILA ACROSS THE COUNTRY

Outdoor games and physical exercise are beneficial to health. A detailed discussion regarding this has been made in the previous chapters. Besides, in the last election manifesto present government declared to expand the facilities of urban areas into rural areas. The endeavor of setting up of mini stadiums, parks in every Upazila across the country will support fulfilling the commitment. In this chapter, few examples of public and community space would be given and after that, in the context of Bangladesh, how the left-over places could be utilized including space available for small time would be discussed and at the end, few sites which are selected for detailed design, would be described.

Proposed Conceptual Outdoor Recreational Facilities in Context of Bangladesh

From the literatures, figures and illustrations above, it is evident that there is a huge potentiality of place making (public and community space) in Bangladesh. The places may be parks, play-lots, fields, water-edges, waterbodies etc. Based on these typologies, following sections are an attempt to exemplify making of such places.

6.1 Water-edges

Different sizes of lands along the water-edge can be used for generating vibrant and inclusive community spaces. Water-edge development has the potential to protect natural waterbodies as well as increasing the stock of public spaces. Different scales of public spaces can be accommodated according to the availability of land and natural context. Water-edge places include Ghats, Pedestrian bridges, Walkways etc. Some examples are shared below:

i. Ghat

Ghats can serve the purpose of activating otherwise neglected lakes and rivers. Not only are they used for a transit, but they also act as spontaneous places of interaction and socialization. Moreover, ghats can be generators of economic activity. Since it has a heavy foot traffic throughout the day, different shops and vendor activities also grow spontaneously beside it.

Ghats can be designed as termination points or around important nodes. It is essential to consider the variety and volume of users in the design so that it can be used as a successful community space.





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ii. Socio-cultural Activity Space

Water-edges can be spaces for cultural and social events and gatherings. Where sufficient land is available, stepped seating areas with/without performance spaces can be provided to hold various events. The scale of these social spaces should be determined according to the context and user demand. In rural settings, a semi-circular ghat with plantations and sitting areas can substitute large amphitheaters. The benefit of these spaces is that they can accommodate both cultural events and leisure gatherings of users.

iii. Walkway

Walkways or trails can be designed along the edges of waterbodies to ensure better connectivity as well as creating interactive spaces. In addition, walkways can enhance shore protection, demarcate and protect the boundary of waterbody and prevent encroachment. Walkways can be situated on the ground where the edge permits, or become causeways and float on the water.

iv. Bamboo Bridge

Bamboo foot bridges are an upgrade of the locally used *shaakos*. These bridges can be designed to perform as calm and quiet community spaces apart from means of connectivity across waterbodies. Bamboo bridges are inexpensive and easy to build, which make them the ideal option to build in rural settings. These bridges can be designed incorporating small pockets of social spaces to serve adjacent neighborhoods.

V. Pocket Parks

Small pocket parks with plantation and shaded seating areas can be provided where the water-edge is sufficiently wide. These parks can be small neighborhood-scale gathering spaces. They can also enhance bio-diversity of the area by attracting different species of birds and small animals.



Figure 6.3: Socio-cultural Activity Space









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vi. Sitting Area

Different kinds of durable and modular outdoor furniture can be designed along water-edge walkways to create interactive resting areas. The design of sitting furniture can incorporate plantation to provide shading. Sittings can be placed facing each other to facilitate interaction, or they can be arranged in an extroverted fashion facing the view of the waterbody.



Figure 6.8: Outdoor Sitting Area

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6.2 Public Courtyard (Gonoprangon)

The Public Courtyard is an open community complex that contains a regulation size (5-a-side) football field in the center, and functional volumes around it. The functional spaces have been determined following the Chapter 3.11 of the Election Mandate. The central field is encircled by a walkway. The complex has 4 principal blocks around it: (i) Economic Block (ii) Service and Management Block (iii) Shelter Block and (iv) Engagement block. The economic block consists of the gallery of the mini stadium and shops underneath. The Service and Management block consists of a management office and a utility space. The shelter block consists of a waiting space and public toilets. The Engagement block is a transformative volume that consists of spaces like library, café, youth training center etc. This volume will incorporate different functions according to varying needs of the users in different regions. The complex opens up towards its surroundings through the corners.

i. Conceptual Development

The Public Courtyard has been developed in a few steps. The core concept behind this complex is developing a community center with an open space in the heart and surrounding functional blocks to contain it. The design of the complex was inspired by an age-old proverb prevalent in Bengali vernacular culture- a poem by Khona, a philosopher from west Bengal. The poem is as follows-

" দক্ষিণ দুয়ারী ঘরের রাজা,

পুব দুয়ারী তাহার প্রজা

পশ্চিম দুয়ারীর মুখে ছাই,

উত্তর দুয়ারীর খাজনা নাই"

This simple poem sums up the core principle of arranging buildings in a compound in our context. The poem dictates that south-facing orientation for buildings is the most suitable in our context, while west and north facing orientation are the most disadvantageous. The form of Gonoprangon has been carefully designed to have openings in the corners, so that it can perform climatically in any context by having partial openings towards the south.

The form has been derived in a few steps. These are as follows:

Firstly, the functional volumes are placed along the edges of the site to contain a central open space.

Secondly, the corners of the functional blocks have been cut to open up the complex towards its surroundings.

Thirdly, the central open space is transformed into a regulation sized playground with a walkway encircling it. The walkway connects the interior space to the approach road and marks the entry to the complex.

Finally, different functional blocks are incorporated within the complex and the engagement block is designed according to the site context. In addition, trees and gardens are added to encourage public activity and engagement with the complex.





Figure 6.10: Conceptual Development of Public Courtyard

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Figure 6.11: Conceptual Development of Public Courtyard



Figure 6.12: Conceptual Development of Public Courtyard

ii. Design Elements

Retaining the core concept of the Public Courtyard, it can be designed in a number of different ways according to site context, site shape etc. For the sake of discussion, a Public Courtyard with a youth training center is described below:

- **a.** Youth Training Center: The Youth Training Center is placed on one side of the central field, opposite to the approach road. The training center can be a rentable space that generates revenue to facilitate the smooth operation and maintenance of the complex.
- **b.** Management Office: The management office block sits on one side of the playground. It consists of an office space, a waiting area and a utility room.
- **c.** Waiting Area and Public Toilet: The waiting area consists of a shaded sitting area and a public toilet block.
- d. **Gallery and Marketplace:** The gallery is placed along the approach road, facing the playground. Underneath the gallery, facing the road, is a marketplace to accommodate different kinds of shops.

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Fig 6.13: Conceptual Development of Public Courtyard

iii. Variations

The complex will be transformed following certain criteria, keeping the core concept intact. These criteria are as follows:

- a. Site Context
- b. Site Shape

a. Site Context

The complex will change according to its site context. For example, when it is designed beside a paddy field, the engagement block will be single storied to maintain harmony with the horizontality of the surrounding landscape. When the complex is designed in a hilly context, the engagement block will be

comparatively perforable and transparent to facilitate views towards the surrounding landscape. When the complex is placed beside a forest, the volume can be a two storied stilted volume with a ramp. Similarly, in case it is placed beside a waterbody, the engagement block will have a large aperture in the center leading up to a ghat or a stepped landing for boats.

b. Site Shape

The complex can retain its integrity in different shapes of lands. By keeping the concept of a centrally contained space intact, the complex may change its form in different kinds of lands. For example, the design has been demonstrated in three different shapes of lands (Trapezoidal, linear, square) Figure 6.18.



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Figure 6.15: Design Variation according to Site Shape

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iv. Sustainable Features

The public courtyard complex is designed considering the three principal sustainability goals. These are:

- a. Equity
- b. Environment
- c.Economy



Figure 6.16: Consideration of Sustainability Goals

a. Equity

The complex is accessible to and serves five different groups of people: (i) Children, (ii) Youth, (iii) Elderly, (iv) Differently Abled People (v) Women. Having inclusiveness in the heart of its concept, the entire complex has been designed considering universal accessibility. The different functions are accommodated with a wide spectrum of user group in mind.

b. Economy

The complex is economically envisioned with two different aspects: 1) Use of Economic Construction Materials 2) Revenue Generation.

The complex has been designed to be constructed using locally available and cheap construction materials like brick, concrete blocks, bamboo, timber, C.I. sheets etc. In addition, the complex has a rentable space (Youth Center) which will generate revenue to ensure the management and maintenance of the entire complex.

c. Environment

The complex is environmentally sustainable with the following considerations integrated within its design:

- 1. Waste Management
- 2. Electricity Generation
- 3. Rainwater Harvesting
- 4. Productive Landscape

The complex is equipped with a Bio-gas Plant attached to the public toilet that can fulfil the need of gas of the adjacent engagement block as well as treat the organic waste of the complex.

The entire complex is powered by solar panels attached to the roof of the waiting area; thus, it is completely self-sustainable.

Moreover, the complex is designed with a rainwater harvesting system with water reservoirs under all functional blocks. In addition, the walkway is designed to be perforable and connected to the central drainage system.
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Figure 6.17: Equitable use of Public Courtyard Complex





Figure 6.19: Waste Management in Public Courtyard Complex



Figure 6.20: Power Efficiency (Solar Power) in Public Courtyard Complex





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6.3 Public Haat Complex

The Public Haat Complex is a dispersed community space that comprises of some multipurpose shaded spaces loosely attached radially from a central tree. These spaces can accommodate a number of different functions. For example: it can be used for weekly markets or haats. The spaces can also be used as waiting and interaction spaces, children's temporary schools, libraries etc. The complex is inspired from the vernacular characteristic of boats being tied radially to a central pole.

i. Conceptual Development

The idea of The Public Haat complex consists of a central force and radial axes surrounding it. The concept was derived from rural practice of tying boats radially around a central pole. The infinite feeling of the rural landscape is a core influence behind this complex. While the other community complexes aim to contain an interior courtyard space in various ways, the Public Haat Complex aims to disperse people's visions panoramically towards the horizon. The resulting space is a loosely arranged, flowing space that accommodates a variety of activities.

The structures in this complex are designed flexibly around a central interaction space under the shade of a tree. Some sitting arrangements are provided to encourage conversation among the users. The complex is intended to accommodate the activities of a rural bazar or haat. Because of its flexibility in arrangement and construction, it can be placed in various contexts and sizes of lands.

The structure is also amphibian in character. It mainly consists of bamboo platforms raised on stilts and a central raised earth mound. Therefore, it can be used both in dry seasons and during monsoon.





Figure 6.26: Boat docked under a tree (Photographer: Sujon Adhikary)

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Figure 6.27: Conceptual Development of Public Haat Complex

ii. Design Elements

The Public Haat is designed in a minimalistic arrangement, drawing inspiration from the traditional loosely arranged clusters of rural Bangladesh. The elements are described below:

- a. Interactive Shaded Sitting Area: The center of the complex is adorned with a large shading tree like Banyan, Ashwattha etc. The tree is surrounded by a radial sitting area with wooden benches. The sitting arrangement is designed in facing tiers to encourage conversation and interaction among the users. The center of the complex is on higher ground than its surroundings as an earth mound is designed in the center.
- **b.** Library (Engagement Block): The Haat complex consists of radially arranged shaded *machas* or flexible platforms that can accommodate a wide range of functions. A small library is incorporated in the complex. The library is enveloped by bamboo mat panels. Since most of these shaded platforms are flexible and can house multiple activities, this library can also be substituted to school local children or train the local youth.
- c. **Public Toilet:** One of the blocks of the Haat complex is designed as a public toilet and waiting area. The Toilet is covered on all sides by bamboo panels. In front of the toilet, there is an open waiting area.
- **d. Marketplace:** The core function of the Haat complex is the marketplace. The flexible Building blocks can be used to accommodate shops, or they can perform as a stage for the weekly haat.

iii. Climatic Performance

The Public Haat is designed sensitively considering the climatic challenges of our country. The climatic considerations are described below:

- a. Ventilation: The pavilion-like configuration of the Public Haat Complex enables it to be naturally ventilated. The structures are mostly open or perforated, with projected roofs, which lessens the solar heat gain and maintains a cool and airy environment inside.
- **b. Disaster Resiliency:** The structures are designed sustainably to withstand disasters such as cyclone, flood, storm etc. The vaulted roofs of the structure and the openness prevents wind pressure buildup around the buildings. In addition, the floors of the buildings are raised above ground and situated on stilts, which makes it ideal for flood protection. During floods, these structures can be used as shelters, since the height of the floor from the ground can be changed, making the structure adaptable.
- **c. Amphibian Character:** Since the buildings are raised on stilts, they can perform in both dry and wet seasons.



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Figure 6.29: Amphibian Character of Public Haat Complex





6.4 Encompassed Complex (Gonokendro)

The Encompassed Complex is a walled and enclosed community complex inspired from the historic Viharas or Monasteries of our country. This complex has a central monumental volume surrounded by an interactive plaza.

Different functions have been incorporated within the walls of this complex following the Chapter 3.11 of the Election Mandate. The central volume is elevated from the ground to create an open and interactive sitting/performance area underneath. In the volume above public functions like mini cinema hall/ auditorium/ multipurpose hall etc. can be designed. Complimentary functions like Youth Recreation Center, Café, Management Office, Public Toilets etc. are placed along the protective walls. The entire complex is held together with a raised plaza that can be accessed by ramps or steps. The plaza terminates in a ghat or a stepped sitting area facing a water reservoir or a natural body of water around the site. The walled complex opens up towards its surroundings through a variation of apertures.

i. Conceptual Development

The character of the ancient Buddhist viharas or monasteries is the inspiration behind this complex.

The form of the complex has been derived in 4 steps. These are as follows:

Firstly, the entire complex is protected with a thick wall with varying openings towards the outside, inspired from the protective walls of the Vihara.

Secondly, the center of the complex is adorned with a monumental volume that incorporates the central function (i.e.: multipurpose hall, auditorium, mini cinema hall etc.). inspired from the architecture of the vihara itself.

Thirdly, secondary functional spaces are inserted along the walls following the architecture of the cells of the vihara and the plaza is designed with public facilities.

Finally, the plaza is terminated on one side with a stepped sitting area or a ghat that is inspired from the traditional step-well or Kund of the subcontinent.



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The character of the ancient Buddhist viharas or monasteries is the inspiration behind this complex. Firstly, the entire complex is protected with a thick wall with varying openings towards the outside, inspired from the protective walls of the Vihara.

Figure 6.33: Conceptual Development of Encompassed Complex

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Secondly, the center of the complex is adorned with a monumental volume that incorporates the central function (i.e.: multipurpose hall, auditorium, mini cinema hall etc.). inspired from the architecture of the vihara itself.



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Thirdly, secondary functional spaces are inserted along the walls following the architecture of the cells of the vihara and the plaza is designed with public facilities.









ii. Design Elements

Preserving the core concept of the Encompassed Complex, it can be designed in a number of variations with different grouping of functions. For the sake of explanation, an Encompassed Complex with a central multipurpose hall has been illustrated and described below:

- I. Multipurpose Hall: The multipurpose hall is placed in the center in a conical bamboo structure. The building is accessed through a spiraling staircase below. The volume is omnidirectional and interactive, as the surface of the structure is divided into small operable window panels that open up towards the outside. Underneath the structure, there is a stepped circular sitting area and a performance space. The central volume is designed in a skeletal and perforable manner so that it does not disrupt the flow of public realm throughout the complex.
- **II. Gymnasium:** A small gymnasium or indoor games room is incorporated within the functional spaces along the walls. This space serves the purpose of including the youth within the user group of the complex. The structures along the wall are comparatively humble with pitched roofs that harvest rainwater.
- **III.** Library & Multimedia Center: The complex has a library and a multimedia center that will serve people of all ages but are mostly designed keeping children in mind. The library is placed on the upper floor with a balcony facing towards the plaza. The multimedia center is placed in the lower floor.
- **IV. Waiting Area:** The complex has an open waiting area for people of all ages. This space can also be used for weekly markets or *haat*s since it has adjustable furniture.
- V. **Restaurant:** The complex has a restaurant or a rentable space that will generate revenue for the maintenance and governance of the complex.
- VI. Management Office & Public Toilet: The complex has a management office and a public toilet to serve the users.
- VII. **Reservoir:** The entire complex has multiple rain water reservoirs to collect and harvest water to be used in the entire complex.

A poem by Khona, the Bengali rural philosopher is an inspiration behind the arrangement of the design elements. The poem is as follows-

"পুবে হাঁস পশ্চিমে বাঁশ

উত্তরে বেড়ে (কলা) দক্ষিনে ছেড়ে

ঘর করগে পুতা জুড়ে। "

The age-old Bengali poem gives specific directions in arranging built structures and landscape elements in a complex for the most suitable climatic performance.

iii. Variations

The complex will be transformed following certain criteria, keeping the core concept intact. These criteria are as follows-

- a. Site Context
- b. Site Shape
- c. Available Construction Materials

a. Site Context

The complex will change according to its site context. For example, when it is designed beside a paddy field, the complex will have a stepped sitting area leading towards a large rainwater tank. When it is designed beside a river, the stepped sitting will work as a landing for the boats or a ghat.

b. Site Shape

The complex can retain its integrity in different shapes of lands. By keeping the concept of a protective wall, a plaza and a central volume intact, the complex may transform into a circular, a triangular or a free-form shape.

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Figure 6.38: Design Elements of the Encompassed Complex







c. Available Construction Materials

The complex will change in form according to the available construction materials of a region. The entire complex can be constructed using a number of construction materials in different regions.

For example: in regions where earth is the prevalent vernacular material, the complex may be constructed with adobe walls and thatch or C.I. Sheet roofs. In this case, the roof overhangs will project over the walls to protect the walls from driving rain.

In places where timber and bamboo structures are commonly practiced, the structure maybe entirely built using these materials.

In other places, it may be built with conventional brick walls with or without rough plastering on its surface. The complex can also be painted according to a region's cultural context. In brick structures, the walls will be the prevalent characteristic and the roof will rest between opposing walls.







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iv. Sustainable Features

The complex is designed considering three principal sustainability goals. These are:

- a. Equity
- b. Environment
- c. Economy

a. Equity

The complex is designed considering a wide spectrum of users, including (i) Children, (ii) Youth, (iii) Elderly, (iv) Differently Abled People (v) Women. Different functions have been accommodated within the complex to serve all these different groups of people. The entire complex has been designed considering universal accessibility on the ground level. Even the landscape features are accessible through ramps. The design and maintenance of the complex relies on participation and collaboration of all interest groups of the society.

b. Economy

The complex is economically envisioned with two different aspects: 1) Use of Economic Construction Materials 2) Revenue Generation.

The complex has a café and a rentable multipurpose hall which will generate revenue for governance and maintenance through the years. The governance will be ensured by the management office. Besides, the complex is envisioned using cheap, locally available materials which make the complex easy to build and replicable all over the country. As visualized in the earlier article, the complex can be made using a wide array of materials and it will transform accordingly.




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c. Environment

The complex is environmentally sustainable with the following considerations integrated within its design:

- Waste Management
- Electricity Generation
- Rainwater Harvesting
- Productive Landscape

The complex is equipped with a Bio-gas Plant attached to the public toilet that can fulfil the need of gas of the adjacent cafeteria as well as treat the organic waste of the complex.

In addition, the entire complex is electrified using solar power from solar panels set on the roof of the structures. Thus, the entire complex is envisioned as a self-sustainable unit independent of external energy source.

Moreover, the complex is designed with a rainwater harvesting system with pitched roofs that collect the rain water and reservoirs that store it. Thus, the entire complex's demand for water can be successfully fulfilled by itself. The large water reservoir also serves as a landscape component with an adjacent ghat.

The complex is adorned with a productive landscaping along the edge of the water reservoir. The users can grow different vegetables on stilts or *Macha* to fulfil the need of nutrition of the community. Thus, the complex can pave the way to a healthier community that participates in its growth and welfare.

In conclusion, it can be said that the entire complex is envisioned to be self-sufficient and sustainable having fulfilled the different parameters of sustainability through its design.





Figure 6.48: Power Efficiency in Complex



Figure 6.49: Rain Water Harvesting System in Complex



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Figure 6.51: Sketchy view from Entry of Encompassed Complex

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6.5 Combined Complex

The Combined Complex is the combination of the Public Park Complex and the Encompassed Complex. This wide and dynamic public space is entered through the corner of the Park Complex. The engagement block of the park complex is replaced by a stepped plaza which leads to the Encompassed complex. The combination of two diverse public complexes, paves the way to a wide array of activities in a large space and can attract crowds of different categories.



Figure 6.55: Conjunction of Combined Complex



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Figure 6.57: Sectional Perspective of Combined Complex













6.6 Time as a Parameter in Design

Time can be a crucial parameter in the design of community complexes. Since land can be available for different spans of time, i.e: short, mid or long term, these complexes should also incorporate temporal flexibility in design. As the supply of public or community space is very limited, it would be better if all of the lands available for various time spans could be used. If there is a provision of using a land for even few years, that land could be used as public or community space. The material or design considerations would be based on this factor, too. If a land is available for a short time, temporary structures could be used for planning, design and construction.

6.7 Materials and Component Palette for Community Complexes

The design of Community Complexes may vary according to the availability of materials in the region. However, a certain palette of materials should be followed in design to ensure a common language in visual expression. For example, an Encompassed Complex should be either constructed with permanent materials such as: brick, concrete etc., or temporary materials such as timber, bamboo, mud etc., but never a combination of both. In addition, temporary roofing materials such as thatch should not be used in a brick/concrete structure.

It is another common feature of the community complexes to change in size following the availability of land. Despite the scalability of these complexes, it should be kept in mind that certain features should always be incorporated in design of these complexes to retain their characteristic. For example, in case of Public Courtyard Complex, there should always be a regulation-sized playground contained by surrounding structures including a spectator gallery. In case of Encompassed Complex, there should always be a central volume incorporating the auditorium or multipurpose hall, surrounded by a public plaza and fortified activity spaces.

In case of Dispersed Complex, there should always be a central shading tree, accompanied by a loosely arranged sitting arrangement, followed by radial pavilions. The number and distribution of these structures may change but the basic characteristic should be maintained.

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6.8 Ballpoint Cost Estimation

6.8.1 Cost Estimation for Public Courtyard Complex (Gonoprangon)

The cost estimation for a Public Courtyard complex (*Gonoprangon*) is given below:

Item No	Description	Amount in Taka	Remarks
1	Walkway	16,02,011.31	
2	Play Field	9,62,196.80	
3	Management Office	1,36,35,051.00	
4	Public Toilet	17,92,102.00	
5	Library	36,01,758.92	
6	Sitting Pavilion	20,21,574.15	
7	Gailery	67,48,479.31	
8	Rain Water Harvesting	3,75,000.00	
9	Water Supply System	5,55,000.00	
10	Drainage System	4,37,500.00	
11	Solar System	12,73,752.00	
12	Sewage Disposal System	4,66,520.00	
13	External Electrical Works	7,87,500.00	
	Grand Total =	3,42,58,445.49	

For detail estimation please see the annex B.

6.7.2 Cost Estimation for Public Haat Complex (*Unmukto Porishor*)

The cost estimation for a Public Haat Complex (*Unmukto Porishor*) is given below:

Item No	Description	Amount in Taka	Remarks
1	Shed-6 nos	11,39,049.00	
2	Mound	1,84,801.47	
3	Sitting-7 nos	20,475.00	
4	Tree plantation	5,000.00	
5	Electrical works	5,00,000.00	
	Grand Total =	18,49,325.47	

For detail estimation please see the annex B

6.8.3 Cost Estimation for Encompassed Complex (*Gonokendro*)

The cost estimation for Gonokendro is given below:

ltem No	Description	Amount in Taka	Remarks
1	Boundary Wall	10,20,246.59	
2	Structures (Building)	1,64,83,759.61	
3	Plaza	68,84,118.78	
4	Pond Excavation	16,17,194.20	
5	Ghat Construction	78,11,312.39	
6	Water Body	47,583.00	
7	Multipurpose Hall	77,64,330.89	
8	Landscaping	1,48,501.17	
9	Rain Water Harvesting	5,50,000.00	
10	Water Supply System	13,60,000.00	
11	Drainage Sorks	1,55,275.20	
12	Sewage Disposal System	4,66,520.00	
13	External Electrical Works	16,51,125.00	
	Grand Total =	4,59,59,966.83	

For detail estimation please see the annex B

6.8.4 Cost Estimation for Combined Complex

The cost estimation for Combined Complex is given below:

ltem No	Description	Amount in Taka	Remarks
1	Structures (Building)	1,64,83,759.61	
2	Multipurpose Hall	77,64,330.89	
3	Management Office	1,36,35,051.00	
4	Public Toilet	17,92,102.00	
5	Sitting Pavilion	20,21,574.15	
6	Gallarey	67,48,479.31	
7	Plaza	68,84,118.78	
8	Boundary Wall	10,20,246.59	
9	Walkway	16,02,011.31	
10	Play Field	9,62,196.80	
11	Pond Excavation	16,17,194.20	
12	Ghat Construction	78,11,312.39	
13	Water Body	47,583.00	
14	Rain Water Harvesting	9,25,000.00	
15	Water Supply System	19,15,000.00	
16	Drainage System	5,92,775.20	
17	Sewage Disposal System	9,33,040.00	
18	External Electrical Works	24,38,625.00	
19	Solar System	12,73,752.00	
20	Landscaping	1,48,501.17	
	Grand Total =	7,66,16,653.40	

For detail estimation please see the annex B

CHAPTER-7: SITE SPECIFIC DESIGN APPROACH

7.1 Design Placement in Selected Sites

The consultants were given few sites to demonstrate the placement and functioning of the designed public spaces. The method for accomplishment of this task was as follow:

• Reconnaissance Survey

On the outset of the task, a Reconnaissance Survey was conducted in the sites to have an idea regarding the subject sites. It helped in designing the following works.

• Public Consultation

Public consultation is to ensure that a participatory approach takes place, which in turn documents concerns of stakeholder groups and makes sure that such concerns are considered, responded to, and incorporated into the decision-making process of the development. It needs to be a two-way communication process that imparts information to stakeholders, but also obtains additional and on-the-ground information from them.

The specific objectives of the consultations are:

- ✓ Share information with stakeholders on proposed study activities and expectation of them regarding the study objectives;
- Understand stakeholders' concerns regarding various aspects of the study, including the existing condition of the community spaces, potential spaces, upgrading requirements etc.;
- ✓ Provide an opportunity to the public to influence project design in a positive manner;
- ✓ Obtain local and traditional knowledge, before decision making;
- ✓ Create a sense of ownership of the proposal in the mind of the stakeholders; and
- ✓ Develop the proposal which is truly sustainable.

Detailed Survey

After the Reconnaissance Survey, detailed survey was conducted to gather the data and information for designing the public and community spaces and play equipment.

• Design of the Site

After gathering all of the data, the design of the site was performed. The following sections will provide the details regarding the designs.

A. General description of the Study Area (Monohardi Upazila, Narsingdi)

Monohardi came into existence as a Thana in 1904 and was upgraded to Upazila in 1984. There is a general belief that the present area of the Upazila was once an attractive (meaning manohar in bangla) island. It is believed that the Upazila had derived its name as Monohardi from the above two words. The Upazila occupies an area of 193.87 sq. km. including 1.97 sq. km river area. It is located between 24004' and 24015' north latitudes and between 90038' and 90049' east longitudes. The Upazila is bounded on the north by Old Brahmaputra River, Pakundia Upazila and Katiadi Upazila of Kishoreganj Zila, east by Belabo Upazila and Katiadi Upazila, south by Shibpur Upazila and west by Kapasia Upazila of Gazipur Zila. The Upazila consists of 1 Paurashava, 9 wards, 12 mahallas, 11 unions, 124 populated mauza and 165 villages. The average population of each ward and mahallas are 1959 and 1470 respectively. On the other hand, the average size of population of each union, mauza and village are 23407, 2076 and 1560 respectively. In this Upazila there are 63385 households. Distribution of household by type shows that there are 99.57% general unit, 0.07% institutional and 0.36% other unit. The average household size (General) for the Upazila is 4.3 persons, for rural area the size is also 4.3 and for urban area the size is slightly lower i.e., 4.2. In the Upazila, 3.3% general household live in pucca house, 21.0% in semi-pucca house, 74.6% in kutcha house and the remaining 1.1% live in jhupri. (Source: Banglapedia, Bangladesh Totthobatayon, LGED)

Area	193.60 sq.km.
Population	Approx. 2,84,563
Village	172 nos.
Union	12 nos.
Municipality	01 nos.
River	4 nos.
Khas Land	462.38 acres
Hat-Bazar	23 nos
Govt. Primary School	143 nos.
Non-Govt primary School	31 nos.
High School	29 nos.
High School (Girls)	14 nos.
Madrasa	26 nos.
College	08 nos.
Technical College	03 nos
·	(Source: LGED)

Table 7.1: Monohardi Upazila at a Glance



Map 7.1: Land Use Map of Monohardi Upazila (source: Ministry of Land, GoB)

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Map 7.2: Road Network Map of Monohardi (source: LGED)

B. Methodology of the task

Survey Work

The survey work was conducted in December 2021 - January 2022. During survey, demographic data, socioeconomic data, economic data, data regarding the physical features etc. were collected.

Public Consultation

At initial stage, interview with the local stakeholder's and project officials are made to identify stakeholder's opinion about the study. As a Upazila Town, Monohardi has limited allocation of community spaces which are mainly based on the Upazila town center centric. No designated public spaces have been found in the Upazila.



Figure 7.1: Consultation with Paurashava Mayor and Union Parishad Chairmans, Monohardi

All the stakeholders attend in the consultation perceives that the project will help in providing sustained recreational opportunities to the community people at Upazila level which revitalize the physical and mental health especially for youth, children and elderly people. Sustainable green structures development is also their desire. The major proposals made by the stakeholder were:

- i) involve local communities in all stages of project planning and development;
- ii) emphasis the recreational facilities accessible for children, youth, women and elderly people;
- iii) development at government khas land though the amount of khas land at Monohardi Upazila are less compared to other Upazila and scattered by locations;
- iv) use of local sustainable cost-effective materials for construction.

C. Inventory of Public and Community Spaces at Monohardi Upazila

Before selecting a site for design, an inventory of the Public and Community Spaces of the area should be made. For the present study, such an inventory has been developed as if an idea regarding the stock of public and community spaces at Upazila level can be acquired at a glimpse. The chart for Monohardi Upazila is as follow.

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es- Land ureship			1	waqt Land		Khas Land			Vested Land			Donated Land		Institutional Land	(High School)			Institutional Lanc	(Primary School)		Private Land	17.10.000.11.557 - 0.00 - 14.1
Public/ Community Space	/	Aveilability	Area	Location	Avsilability	Area	constion	Avpliablity	Avea	ocetion	Aveilability	Area.	LOCATION	1 Availability	Area	Location	Availability	Area	Coation	Availahitey	Area	(aviation
Public Courtyard (stated)	6				4	1.66 Acre	Harordia															
Encompassed Complex (*****)	02	6																		V.	1.13 Acre	Char Kchirati
Public Haat Complex (Sage allore)	03				4	0.4 Acre	Monohordi Cow Haat								1							
Outdoor Playscape (ชิรูต centgn)	04													×	0.34 Acre	Hafizpur High School	*	0.04 Acre	Udayan Academy Monohordi	والمتعاولات والمعادلة		
Riverfront (વ્વૈહીંક)	90						40m Bridge at Brahmaputra River															
Waterfroi (semiera)	20				7	0.80 Acre	Upazila Porish Pond															

Table 7.2: Inventory of Public Spaces in Monohardi Upazila

(Package No. MVMT-S-17)

D. Existing Condition of Community Space

As a Upazila Town, Monohardi has limited allocation of community spaces which are mainly based on the upzalia town center centric. No designated public spaces have been found in the upazila level. Monohardi Pourashava master plan has been proposed some open and public spaces but no feasibility of those proposed facilities has been done yet. However, consultants have been found some options in this category during the field visit. Among them, existing Upazila Parishad pond has a great potentiality to be a public space. Besides, playgrounds of primary, secondary and colleges, road side vacant land, riverside areas are also found promising aspects in this case. Government khas land would be a good source for developing community and open spaces but those are scattered all over the upazila so a required minimum standard size of land cannot be found for these purposes.



Figure 7.2: Existing Condition of Informal Community Spaces and Playgrounds



Figure 7.3: Existing Condition of Upazila Parishad Pond



Figure 7.4: Riverside Vacant Land



Figure 7.5: Open Space beside Market Area



Figure 7.6: Existing Condition of Playground of Hafizpur High School



Figure 7.7: Existing Condition of Playground of Different Primary School



Figure 7.8: Existing Condition of Upazila Auditorium

E. Plan and Proposals

1. Outdoor Play Area in Hafizpur High School, Monohardi

In Hafizpur High School, there is a large playfield and an abundance of unused land around the corners of the field.

In another side, near the primary school building, small play equipment for primary school students can be placed to include a wide array of children. The selected play equipment for the Hafizpur High School Field are three see-saws, one tire traverse, one set of jumping pegs, a V-shaped net, a Trapeze Walk, three Double Swings, and one set of zigzag stilts.



Figure 7.9: Existing Condition of Hafizpur High School Field

The idea was to create an inclusive play area for children of different age groups. To ensure this, firstly, the playground has been secured, and the remaining unused areas in the corners are selected for placement of play equipment of different kind.

The play area is defined using a free-formed sand pool. The play equipment is placed along an axis in this sand pool. The play area is then divided into several small zones to accommodate different activities, such as: jumping zone, swing zone, balancing zone, climbing zone, hopping zone etc. The play equipment is placed accordingly maintaining standard space requirements.

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School


















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The ball-point cost estimation for	the play equipment	has been given below:
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SI no.	Item	Unit Price (BDT)	Number of Units	Total Price (BDT)
1	See-saw	89,261	3	2,67,783
2	Tire Traverse	1,07,746	1	1,07,746
3	Jumping Pegs	1,13,000	1	1,13,000
4	V-Shaped Net	95,902	1	95,902
5	Trapeze Walk	80,703	1	80,703
6	Double Swing	1,13,929	3	3,41,787
7	Zigzag Stilts	1,25,060	1	1,25,060
	·	<u>.</u>	Total	11,31,981

2. Outdoor Play Area in Saikchail Government Primary School, Monohorgonj

Another school in a different context has been selected to demonstrate outdoor Play Equipment placement. This school, Saikchail Government Primary School is located in Monohorgonj, Cumilla.

This school has a smaller playground. Beside the academic building, just around the entry gate there is an unused patch of land which is selected for placement of outdoor play equipment. The selected play equipment for the Saikchail Government Primary School Field is one set of tire hopscotch, two double swings and a clatter bridge. The play area is defined by a rectangular sand pool and an adjacent walkway leading to a shaded seating area.



Figure 7.20: Existing Condition of Saikchail Government Primary School, Monohorgonj

Like Hafizpur High School play area, this play area has also been designed by dividing the area into different activity zones such as hopping, swinging, balancing and sitting zones and placing play equipment accordingly.























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The ball-point cost estimation for the play equipment has been given below:

SI no.	Item	Unit Price (BDT)	Number of Units	Total Price (BDT)
1	Clatter Bridge	99,781	1	99,781
2	Tire Hopscotch	25,350	1	25,350
3	Double Swing	1,13,929	2	227858
			Total	352989

3. Water-edge Placemaking

The Upazila pond has been selected for designing water-edge activities. The different components of the design are described below:

- Walkway: A light weight walkway encircles the entire pond, facilitating users to experience a calm and quiet public space.
- Sitting Area: Outdoor furniture have been designed to create inclusive sitting areas around the pond.
- Ghat: On one edge of the pond, there is a ghat with a shading, that enables users to sit and converse by the pond side.
- Plantation: The edge of the pond is adorned with different species of trees like Hijal, Tamal etc.
- Public Toilet: A public toilet has been designed on one corner of the pond for the users.

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Figure 7.31: Conceptual Drawing of Pond side Placemaking (Monohardi Upazila Pond)

















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Additionally, a pedestrian bamboo bridge has been designed on one side of the Brahmaputra River near the Monohardi Thana. The multipurpose bamboo bridge is not only for ensuring connectivity but also performs as a public space with projected interaction pockets on both sides.



Figure 7.40: Pedestrian Bamboo Bridge beside Monohardi Thana

4. Public Courtyard Complex (Gonoprangon) at Harordia, Monohardi

A Public Courtyard complex has been designed in Harordia, beside Monohardi Road. The land is situated beside a vast paddy field. The shape of the site is trapezoidal. The complex has a Youth Training Center, a Co-management Office, a Shops and Gallery Block, and a Shaded Seating Area with Public Toilet.

Total land area is 1.66 Acre and estimated cost will be approximately BDT 5.46 crore.



Figure 7.41: Conceptual Drawing of Public Courtyard (Gonoprangon) at Harordia

The area of the functional spaces are as follows:

Function	Area in sqm
Waiting Area	100
Youth Training Center	430
Gallery and Shops	340
Co-management Office	260
Playfield	1520
Total Area	2710

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Figure 7.42: Plan of Gonoprangon at Harordia, Monohardi









5. Public Haat Complex at Monohardi Gorur Haat

A Public Haat complex has been designed in Monohardi Gorur Haat Area, beside Narshingdi Road. The land is situated in a peri-urban context. The complex has six bamboo structures. These incorporate functions of Public Toilet, Library and Market place. The center of the Haat Complex surrounds a Tree and is situated on an earth mound. There is an interactive central sitting area.

Total land area is 0.4 Acre and estimated cost will be approximately BDT 18.06 Lakh.



Figure 7.47: Conceptual Drawing of Public Haat Complex at Monohardi Gorur Haat Area

The area breakdown of this complex is given below:

Function	Area in sqm
Shaded Sitting Area	200
Library	145
Public Toilet	50
Marketplace	630
Total Area	2710




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Figure 7.51: View of Public Haat Complex from Street at Monohardi Gorur Haat



6. Encompassed Complex (Gonokendro) at Char Kshirati Area

An Encompassed complex has been designed in Char Kshirati Area, beside the Brahmaputra River. The land is situated beside a paddy field. The complex has a library and multimedia building, a café, a management office and a public toilet.

Total land area is 1.13 Acre and estimated cost will be approximately BDT 4.68 Crore.



Figure 7.53: Conceptual Drawing of Encompassed Complex at Kshirati Char Area

Function	Area in sqm
Gymnasium	280
Restaurant	210
Multipurpose Hall	285
Waiting Area	115
Co-Management Office	65
Library & Multimedia Center	620
Plaza Area	1660
Total Area	3235

The area breakdown of the Encompassed Complex is given below:



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Figure 7.55: Section and Elevation of Encompassed Complex at Char Kshirati





7. Combined Complex

A Combined Complex has been designed beside College Gate Road and Narsingdi Road in Monohardi. The complex is situated on a raised earth mound beside a vast paddy field. The complex is the combination of a Gonoprangon and Gonokendro. It is entered through the openings beside the Gallery and shops building. The entry opens up to a regulation-sized playground. The playground is encircled by a walkway. The walkway leads up to the entry plaza to the Gonokendro. Inside the Gonokendro, there is a Multipurpose Hall, surrounded by Library and Multipurpose Building, Gymnasium, Restaurant and a Co-management Office.

The total land area of this complex is 2.90 Acre and estimated cost will be approximately BDT 7.79 crores.



Figure 7.58: Conceptual Drawing of Combined Complex beside College Gate Road

The area breakdown for the Combined Complex is given below:

Function	Area in sqm
Gymnasium	115
Restaurant	115
Multipurpose Hall	130
Waiting Area	60
Co-Management Office	275
Sitting Area and Public Toilets	110
Library	300
Multimedia Center	300
Gallery and Shops	340
Plaza Area	1500
Waterbody	1350
Playfield	1400
Total Area	5995





Figure 7.60: Combined Complex Rendered Plan













Chapter-8: Conclusion

Village development agenda was one of the driving forces of the War of Independence of Bangladesh. Village was the center of development philosophy of the Father of the Nation Bangabandhu Sheikh Mujibur Rahman. To realizing this vision, Honorable Prime Minister Sheikh Hasina's vision towards the village is to realize these by adopting and implementing a comprehensive plan. According to this vision, all modern civic amenities will be extended to the villages and simultaneously ecology and environment will be preserved. To enrich the natural, infrastructural and human resources of the rural areas, she stressed to follow an efficient and coordinated approach to transform villages as a center of prosperity and poverty- free, climate- resilient, the sustainable and dynamic economic hub of Bangladesh.

The proposed study is a magnificent attempt identify and prepared a roadmap for implementation of community services and recreational facilities at the village level based on state-of-the-art features which are not only economical and environment friendly but also sustainable with the village environment.

Based on the consultation with the different stakeholders, consultant develop the different models and design approaches which will be fitted to develop community spaces at Upazila level with a sustainable manner. The design model includes Public Courtyard, Public Centre, Outdoor Playscapes, Riverfront and Waterfront Development along with play equipment design and ball point cost estimation. Besides, based on the study area (Monohardi Upazila) analysis, consultant also develop different community space design modules according to the space context of the study area including the estimated cost.

Operational management and maintenance are the integral parts for sustainable community space development. Operational management and maintenance guidelines are absent for the community spaces in Bangladesh. As a result, most of the cases, developed community spaces is not sustainable and lost its functionality for the community users within a short period of time. To resolve this, consultants proposed policy framework of operation and maintenance guidelines for sustainable management of the community spaces by analyzing the existing rules, regulations and laws.

Development of guidelines, conducting feasibility studies, and preparing specialized development projects requires some extra effort, specialized skill, and understanding as well as dedicated time. Therefore, the proposed design and policy framework under the technical assistance of feasibility study of community spaces will gradually work to turn the commitment a reality.

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Annexure-A: Sample DPP Format

বছর ভিত্তিক আর্থিক ও বাস্তব পরিকল্পনা

বাস্তবায়নকারী সংস্থা/বিভাগ/মন্ত্রণালয়ঃ স্থানীয় সরকার প্রকৌশল অধিদপ্তর

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৩২৫৮১	৩২৫৮১০৩	কম্পিউটার মেরামত	থোক	०.०२	১.০০	०.०२	0.00008	०.०२	<u> </u>	0.008%	
৩২৫৮১	৩২৫৮১০৪	অফিস সরঞ্জামাদি মেরামত	থোক	0.00	5.00	0.00	0.0000&	0.00	S00.00%	0.00&%	
		উপ-মোট মেরামত এবং সংরক্ষণ (৩২৫৮) =				0.00	9.00005	0.0¢	S00.00%	0.007%	
(ক) উপ-মোট (আবর্তক)					¢¢.38	0.500%&	¢¢.38	500.00%	১০.০৬৫%		

সংযোজনী-৪

ইকনমিক	ইকনমিক	ইকনমিক সাব-কোড বর্ণনা (বিস্তারিত)		মোট ধ	<u>ও</u> আর্থিক বাস্তবায়ন ধ		বছর -১			
কোড	সাব-কোড							জুলাই	জুন	••••••
			একক	একক দর	পরিমান	মোট ব্যয় (লক্ষ	ওজন	আর্থিক	বাং	ষব
						টাকা)	(Weight)	পরিমাণ	অঞ্চোর	প্রকল্পের
								(লক্ষ ঢাকা)	শতকরা হার	শতকরা হার
(খ) মূলধন										
		সম্পদ সংগ্ৰহ								
৪১১২২	৪১১২২০২	কম্পিউটার সরঞ্জাম	সংখ্যা	0.00	5.00	0.00	০.০০০৯১	0.00	S00.00%	o.o\$\$%
৪১১২৩	৪১১২৩১০	অফিস সরঞ্জাম	থোক	०.२०	٥.00	०.२०	०.०००७१	०.२०	<u> </u>	୦.୦৩৭%
৪১১২৩	৪১১২৩১৪	অফিস আসবাব পত্র	সংখ্যা	০.১৩	৬.০০	0.99	0.00580	0.99	<u> </u>	0.580%
		নির্মাণ কাজ								
৪১১১২	৪১১১২০১	গণকেন্দ্র নির্মাণ (বাউন্ডারী দেওয়াল নির্মাণ, অনাবাসিক ভবন, প্লাজা,	সংখ্যা	৪৫৯.০৩	১	৪৫৯.০৩	০.৮৩৭৮৪	୫৫৯.୦৩	<u> </u>	৮৩.৭৮৪%
		পুকুর খনন, ঘাট নির্মাণ, ওয়াটার বডি খনন, মাল্টিপারপাস হল নির্মাণ,								
		ল্যান্ডস্কেপ, রেইন ওয়াটার হারভেস্টিং, ডেনেজ ব্যবস্থা, পানি সরবরাহ								
		ব্যবস্থা, পয়ঃ।নঞ্চাসন ব্যবস্থা এবং বেদ্যাতক সুবিধা সম্বালত)								
(খ) ডপ-মে	াঢ (মুলখন)					860.89	०.৮৪०৫২	৪৬০.৪৯	200.00%	F8.0¢%
		মোট (ক+খ)				¢\$¢.48	০.৯৪১১৬	৫ ১৫.৬8	\$00.00%	৯৪.১২%
(গ) ফিজিক	যাল কনটিনর্জো	ন্স (২%)				৯.২১	০.০১৬৮১	৯.২১	\$00.00%	১.৬৮%
(ঘ) প্রাইস ব	কনটিনজে ন্সি	(৫%)				২৩.০২	০.০৪২০৩	২৩.০২	٥٥٥.00%	8.२०%
সৰ্বমোট (ৰ	৽+খ+গ+ঘ)					¢ 89.৮9	5.00000		S00.00%	200.00%

বছর ভিত্তিক আর্থিক ও বাস্তব পরিকল্পনা

বাস্তবায়নকারী সংস্থা/বিভাগ/মন্ত্রণালয়ঃ **স্থানীয় সরকার প্রকৌশল অধিদপ্তর**

ইকনমিক	ইকনমিক	ইকনমিক সাব-কোড বর্ণনা (বিস্তারিত)	মোট ও আর্থিক বাস্তবায়ন পরিকল্পনা			বছর -১				
কোড	সাব-কোড							জুলাই …	জুন	
			একক	একক দর	পরিমান	মোট ব্যয় (লক্ষ	ওজন	আর্থিক পরিমাণ	বাং	ষব
						টাকা)	(Weight)	(লক্ষ টাকা)	- নাগেলাব	প্রকল্লের
									অভোগ শতকরা হার	একঞ্চেন শতকরা হার
2	2	ত	8	¢	Ŀ	٩	٣	2	50	55
(ক) আবর্তব	5									
		সরবরাহ এবং সেবা								
৩২১১১	৩২১১১১৬	কুরিয়ার	থোক	٥.0১	٥.00	٥.٥১	0.00080	٥.٥১	soo.oo%	0.080%
৩২১১১	৩২১১১১৯	ডাক	থোক	٥.0১	٥.00	٥.٥১	0.00080	٥.٥১	S00.00%	0.08 0 %
৩২১১১	৩২১১১২৫	প্রচার ও বিজ্ঞাপন ব্যয়	থোক	0.30	۵.00	0.50	०.००8২৬	0.50	soo.oo%	০.৪২৬%
৩২২১১	৩২২১১০৫	টেন্টিং ফি	থোক	०.२०	٥.00	०.२०	০.০০৮৫২	०.२०	soo.oo%	০.৮৫২%
৩২২১১	৩২২১১০৭	অনুলিপি ব্যায়	থোক	०.०২	٥.00	०.०২	0.00048	०.०২	soo.oo%	0.058%
৩২৪৩১	৩২৪৩১০১	পেট্রোল, ওয়েল এন্ড লুব্রিকেন্ট	থোক	0.50	٥.00	0.50	০.০০৬৩৯	0.50	soo.oo%	০.৬৩৯%
৩২৫৫১	৩২৫৫১০১	কম্পিউটার সামগ্রী	থোক	0.05	٥.00	٥.٥১	०.०००२১	٥.٥১	soo.oo%	০.০২১%
৩২৫৫১	৩২৫৫১০২	মুদ্রণ ও বাধাই	থোক	٥.٥১	১.০০	0.05	0.00080	٥.٥১	soo.oo%	0.08 0 %
৩২৫৫১	৩২৫৫১০৪	স্ট্যাম্প ও সীল এবং স্টেশনারী	থোক	٥.٥٥	۵.00	٥.٥১	०.०००२১	٥.0১	<u> </u>	০.০২১%
৩২৫৫১	৩২৫৫১০৫	অন্যান্য মনিহারী	থোক	0.00	১.০০	0.00	০.০০১০৬	ە.00	<u> </u>	0.30৬%
৩২৫৭১	৩২৫৭১০১	পরামর্শ সেবা (বিস্তারিত ডিজাইন ড্রইং প্রণয়ন এবং বিস্তারিত	প্যাকেজ	১.২৯	٥.00	১.২৯	0.06638	১.২৯	soo.oo%	¢.¢\$8%
		সুপারভিশন)-পূর্ত কাজের ৭.০০%								
৩২৫৭১	৩২৫৭১০৪	জরিপ	থোক	0.00	۵.00	0.00	০.০২১৩০	0.00	<u> </u>	২.১৩০%
৩২৫৭২	৩২৫৭২০৬	সম্মানী / পারিতোষিক	থোক	0.50	১.০০	0.50	०.००१२७	0.50	<u> </u>	০.৪২৬%
৩২৫৭৩	৩২৫৭৩০১	ইভেন্ট ম্যানেজমেন্ট	থোক	0.50	٥.00	0.50	०.००४२७	0.50	<u> </u>	০.৪২৬%
		উপ-মোট সরবরাহ এবং সেবা (৩২০০) =				২.৫২	০.১০৭৫৩	૨.૯૨	300.00%	১০.৭৫৩%
		মেরামত এবং সংরক্ষণ								
৩২৫৮১	৩২৫৮১০৩	কম্পিউটার মেরামত	থোক	0.05	٥.00	0.05	0.00080	٥.٥১	500.00%	0.08 0 %
৩২৫৮১	৩২৫৮১০৪	অফিস সরঞ্জামাদি মেরামত	থোক	०.०२	٥.00	०.०२	0.00066	०.०২	500.00%	०.०৮৫%
		উপ-মোট মেরামত এবং সংরক্ষণ (৩২৫৮) =				0.00	০.০০১২৮	0.00	S00.00%	০.১২৮%
(ক) উপ-মে	াট (আবর্তক)					২.৫৫	0.30773	783 2.66 300.00%		১০.৮৮১%

সংযোজনী-৪

ইকনমিক	ইকনমিক	ইকনমিক সাব-কোড বর্ণনা (বিস্তারিত)		মোট ও	আর্থিক বাস্তবায়ন প		বছর -১			
কোড	সাব-কোড							জুলাই	জুন	
			একক	একক দর	পরিমান	মোট ব্যয় (লক্ষ	ওজন	আর্থিক পরিমাণ	বাং	ষব
						টাকা)	(Weight)	(লক্ষ টাকা)	অঞ্চোর	প্রকল্পের
									শতকরা হার	শতকরা হার
(খ) মূলধন										
		সম্পদ সংগ্ৰহ								
৪১১২২	৪১১২২০২	কম্পিউটার সরঞ্জাম	সংখ্যা	0.00	٥.00	0.00	০.০২১৩০	0.00	<u> </u>	২.১৩০%
৪১১২৩	৪১১২৩১০	অফিস সরঞ্জাম	থোক	0.00	٥.00	0.00	০.০০২১৩	٥.٥٤	<u> </u>	০.২১৩%
৪১১২৩	৪১১২৩১৪	অফিস আসবাব পত্র	সংখ্যা	0.50	8.00	0.65	০.০২১৭৬	٥.৫১	<u> </u>	૨.১૧৬%
		নির্মাণ কাজ								
82223	8222402	উন্মুক্ত কেন্দ্র নির্মাণ (সেড নির্মাণ-৬ টি, মাউন্টেন নির্মাণ, বসার আসন-৭ টি, বৃক্ষ রোপন ও বৈদ্যুতিক সুবিধা সম্বলিত)	সংখ্যা	১৮.৪৯	3	১৮.৪৯	০.৭৮৭৭০	১৮.৪৯	<u> </u>	ঀ৮.ঀঀ৹%
(খ) উপ-মে	াট (মুলখন)					১৯.৫৫	০.৮৩২৮৯	\$ \$.¢¢	\$00.00%	৮৩.২৯%
		মোট (ক+খ)				২২.১১	०.৯৪১৭০	২২.১১	\$00.00%	৯৪.১৭%
(গ) ফিজিক	্যাল কনটিনর্জো	ন্স (২%)				০.৩৯	0.0\$৬৬৬	০.৩৯	<u> </u>	১.৬৭%
(ঘ) প্রাইস ব	চনটিনজেন্সি	(৫%)				০.৯৮	०.०८३७८	০.৯৮	<u> </u>	8.১৬%
সর্বমোট (ক	দর্বমোট (ক+খ+গ+ঘ)					২৩.৪৮	5.00000	২৩.৪৮	S00.00%	500.00%

বছর ভিত্তিক আর্থিক ও বান্তব পরিকল্পনা

বাস্তবায়নকারী সংস্থা/বিভাগ/মন্ত্রণালয়ঃ **স্থানীয় সরকার প্রকৌশল অধিদপ্তর**

ইকনমিক	ইকনমিক	ইকনমিক সাব-কোড বর্ণনা (বিস্তারিত)	মোট ও আর্থিক বাস্তবায়ন পরিকল্পনা					বছর -১			
কোড	সাব-কোড							জুলাই	জুন	••••••	
			একক	একক দর	পরিমান	মোট ব্যয় (লক্ষ	ওজন	আর্থিক	বা	ন্তব	
						টাকা)	(Weight)	পরিমাণ		0.000	
								(লক্ষ টাকা)	অঙ্গের শতকরা হার	শ্রকল্পের শতকরা হার	
2	2	৩	8	¢	৬	٩	ત્ર	৯	১০	১১	
(ক) আবর্তব	5										
		সরবরাহ এবং সেবা									
৩২১১১	৩২১১১১৬	কুরিয়ার	থোক	0.00	٥.00	0.00	०.००००৬	0.00	<u> </u>	०.००৬%	
৩২১১১	৩২১১১১৯	ডাক	থোক	0.00	٥.00	0.00	०.००००৬	0.00	<u> </u>	०.००৬%	
৩২১১১	৩২১১১২৫	প্রচার ও বিজ্ঞাপন ব্যয়	থোক	०.२৫	٥.00	٥.২৫	০.০০০৬৩	०.२৫	<u> </u>	০.০৬৩%	
৩২২১১	৩২২১১০৫	টেন্টিং ফি	থোক	०.२०	۵.00	०.२०	0.00065	०.२०	<u> </u>	0.0৫১%	
৩২২১১	৩২২১১০৭	অনুলিপি ব্যায়	থোক	0.50	٥.00	0.50	०.०००२४	0.30	<u> </u>	০.০২৫%	
৩২৪৩১	৩২৪৩১০১	পেট্রোল, ওয়েল এন্ড লুব্রিকেন্ট	থোক	0.00	٥.00	0.00	০.০০১২৭	0.00	<u> </u>	૦.১২૧%	
৩২৫৫১	৩২৫৫১০১	কম্পিউটার সামগ্রী	থোক	0.05	٥.00	0.05	0.00005	٥.٥১	<u> </u>	0.005%	
৫১১৯৩	৩২৫৫১০২	মুদ্রণ ও বাধাই	থোক	०.०২	٥.00	०.०২	0.0000@	०.०२	<u> </u>	0.00&%	
৫১১৯৩	৩২৫৫১০৪	স্ট্যাম্প ও সীল এবং স্টেশনারী	থোক	0.05	٥.00	0.05	०.००००७	٥.٥১	S00.00%	०.००७%	
৫১১৯৩	৩২৫৫১০৫	অন্যান্য মনিহারী	থোক	0.30	٥.00	0.50	०.०००२४	0.50	S00.00%	o.o\$&%	
৩২৫৭১	৩২৫৭১০১	পরামর্শ সেবা (বিস্তারিত ডিজাইন ড্রইং প্রণয়ন এবং বিস্তারিত	প্যাকেজ	২৩.৯৭	٥.00	২৩.৯৭	০.০৬০৬৯	২৩.৯৭	<u> </u>	৬.০৬৯%	
		সুপারভিশন)-পূর্ত কাজের ৭.০০%									
৩২৫৭১	৩২৫৭১০৪	জরিপ	থোক	۵.00	٥.00	5.00	০.০০২৫৩	১.০০	S00.00%	০.২৫৩%	
৩২৫৭২	৩২৫৭২০৬	সম্মানী / পারিতোষিক	থোক	٥.২৫	٥.00	٥.২৫	০.০০০৬৩	٥.২৫	S00.00%	০.০৬৩%	
৩২৫৭৩	৩২৫৭৩০১	ইভেন্ট ম্যানেজমেন্ট	থোক	0.00	٥.00	0.00	০.০০১২৭	0.00	<u> </u>	૦.১૨૧%	
		উপ-মোট সরবরাহ এবং সেবা (৩২০০) =				২৬.৯৬	০.০৬৮২৫	২৬.৯৬	\$00.00%	৬.৮২৫%	
		মেরামত এবং সংরক্ষণ									
৩২৫৮১	৩২৫৮১০৩	কম্পিউটার মেরামত	থোক	०.०২	٥.00	०.०২	0.0000@	०.०२	<u> </u>	0.00&%	
৩২৫৮১	৩২৫৮১০৪	অফিস সরঞ্জামাদি মেরামত	থোক	٥.٥٥	٥.00	0.00	०.००००७	0.00	<u> </u>	०.००৬%	
		উপ-মোট মেরামত এবং সংরক্ষণ (৩২৫৮) =				0.0¢	0.00033	0.06	\$00.00%	o.0 3 5%	
(ক) উপ-মে	াট (আবর্তক)	•				২৭.০০ ০.০৬৮৩৬ ২৭.০০ ১০০.		\$00.00%	৬.৮৩৬%		

ইকনমিক	ইকনমিক	ইকনমিক সাব-কোড বর্ণনা (বিস্তারিত)		মোট ও আর্থিক বাস্তবায়ন পরিকল্পনা					বছর -১			
কোড	সাব-কোড							জুলাই	জুন	• • • • • • • • • • • • • • • • • • • •		
			একক	একক দর	পরিমান	মোট ব্যয় (লক্ষ	ওজন	আর্থিক	বাং	ষব		
						টাকা)	(Weight)	পরিমাণ	অঞ্চোর	প্রকল্পের		
								(লক্ষ ঢাকা)	শতকরা হার	শতকরা হার		
(খ) মূলধন												
		সম্পদ সংগ্ৰহ										
৪১১২২	৪১১২২০২	কম্পিউটার সরঞ্জাম	সংখ্যা	0.00	٥.00	0.00	০.০০১২৭	0.00	<u> </u>	૦.১২૧%		
৪১১২৩	৪১১২৩১০	অফিস সরঞ্জাম	থোক	०.२०	১.০০	०.२०	0.00065	٥.২٥	soo.oo%	0.0৫১%		
৪১১২৩	৪১১২৩১৪	অফিস আসবাব পত্র	সংখ্যা	০.১৩	હ.૦૦	0.99	০.০০১৯৪	0.99	<u> </u>	o.>>8%		
		নির্মাণ কাজ										
৪১১১২	৪১১১২০১	গণপ্রাজ্ঞাণ নির্মাণ (ওয়াকওয়ে, খেলার মাঠ, ম্যানেজমেন্ট	সংখ্যা	৩৪২.৪৫	১	৩৪২.৪৫	୦.৮৬৬৯৮	৩৪২.৪৫	<u> </u>	৮৬.৬৯৮%		
		আফিস, গণ প্রক্ষালণ কেন্দ্র, লিইব্রেরী, সিটিং প্যাভেলিয়ন,										
		গ্যালারী, ল্যান্ডস্কেপ, রেইন ওয়াটার হারভেস্টিং, ডেনেজ ব্যবস্থা,										
		পানি সরবরাহ ব্যবস্থা, পয়ঃনিষ্কাসন ব্যবস্থা নির্মাণ এবং										
		বৈদ্যুতিক সুবিধা সম্বলিত)										
(m) 1701 (m)												
(খ) ওপ-মো	৷৷ (মুলখন)					৩৪৩.৯১	୦.৮৭୦৬৯	୦୫୦.৯১	200.00%	F1.01%		
		মোট (ক+খ)				৩৭০.৯২	০.৯৩৯০৫	৩৭০.৯২	200.00%	৯৩.৯১%		
(গ) ফিজিক	্যাল কনটিনজে	ন্স (২%)				৬.৮৮	০.০১৭৪১	৬.৮৮	S00.00%	১.৭৪%		
(ঘ) প্রাইস ব	স্নটিনজে ন্সি	(৫%)				১৭.২০	0.08 0 ¢0	১৭.২০	<u> </u>	8.9৫%		
সর্বমোট (ক	সর্বমোট (ক+খ+গ+ঘ)					৩৯৪.৯৯	5.00000	৩৯৪.৯৯	300.00%	soo.oo%		

বছর ভিত্তিক আর্থিক ও বাস্তব পরিকল্পনা

বাস্তবায়নকারী সংস্থা/বিভাগ/মন্ত্রণালয়ঃ **স্থানীয় সরকার প্রকৌশল অধিদপ্তর**

ইকনমিক	ইকনমিক	ইকনমিক সাব-কোড বর্ণনা (বিস্তারিত)		মোট ও		বছর -১				
কোড	সাব-কোড							জুলাই	জুন	• • • • • • • • • • • • • • • • • • • •
			একক	একক দর	পরিমান	মোট ব্যয় (লক্ষ	ওজন	আর্থিক	বা	ন্তব
						টাকা)	(Weight)	পরিমাণ	অঞ্চোর	পকলের
								(লক্ষ টাকা)	শতকরা হার	শতকরা হার
2	২	৩	8	¢	৬	٩	৮	\$	১০	১১
(ক) আবর্তব	व									
		সরবরাহ এবং সেবা								
৩২১১১	৩২১১১১৬	কুরিয়ার	থোক	0.00	5.00	0.00	०.००००५	0.00	<u> </u>	०.००৬%
৩২১১১	৩২১১১১৯	ডাক	থোক	0.00	5.00	0.00	०.००००५	0.00	<u> </u>	०.००৬%
৩২১১১	৩২১১১২৫	প্রচার ও বিজ্ঞাপন ব্যয়	থোক	0.00	১.০০	0.00	0.000&&	0.00	<u> </u> \$00.00%	0.066%
৩২২১১	৩২২১১০৫	টেন্টিং ফি	থোক	0.80	۵.00	0.80	0.00088	0.80	<u> </u> \$00.00%	0.088%
৩২২১১	৩২২১১০৭	অনুলিপি ব্যায়	থোক	०.२०	5.00	०.२०	०.०००২২	०.२०	<u> </u> \$00.00%	o.o২২%
৩২৪৩১	৩২৪৩১০১	পেট্রোল, ওয়েল এন্ড লুব্রিকেন্ট	থোক	5.00	۵.00	٥.00	0.00333	5.00	<u> </u> \$00.00%	0.555%
৩২৫৫১	৩২৫৫১০১	কম্পিউটার সামগ্রী	থোক	0.05	۵.00	٥.٥٥	٥.0000	0.05	<u> </u> \$00.00%	0.005%
৩২৫৫১	৩২৫৫১০২	মুদ্রণ ও বাধাই	থোক	২০.০২	۵.00	২০.০২	o.o২২২o	২০.০২	<u> </u> \$00.00%	২.২২০%
৩২৫৫১	৩২৫৫১০৪	স্ট্যাম্প ও সীল এবং স্টেশনারী	থোক	०.०২	১.০০	०.०२	०.००००२	०.०२	<u> </u> \$00.00%	०.००২%
৩২৫৫১	৩২৫৫১০৫	অন্যান্য মনিহারী	থোক	०.२०	১.০০	०.२०	०.०००২২	०.२०	<u> </u> \$00.00%	o.o২২%
৩২৫৭১	৩২৫৭১০১	পরামর্শ সেবা (বিস্তারিত ডিজাইন ড়ইং প্রণয়ন এবং বিস্তারিত	প্যাকেজ	৫৩.৫৮	۵.00	৫৩.৫৮	০.০৫৯৪২	৫৩.৫৮	<u> </u> \$00.00%	৫.৯৪২%
		সুপারভিশন)-পূর্ত কাজের ৭.০০%								
৩২৫৭১	৩২৫৭১০৪	জরিপ	থোক	٤.00	১.০০	২.০০	o.oo২২২	٩.00	<u> </u> \$00.00%	০.২২২%
৩২৫৭২	৩২৫৭২০৬	সম্মানী / পারিতোষিক	থোক	0.00	১.০০	0.00	0.000&&	0.00	<u> </u> \$00.00%	0.066%
৩২৫৭৩	৩২৫৭৩০১	ইভেন্ট ম্যানেজমেন্ট	থোক	۵.00	১.০০	5.00	0.00333	5.00	S00.00%	0.555%
		উপ-মোট সরবরাহ এবং সেবা (৩২০০) =				৭৯.৫৩	০.০৮৮১৯	୧୬.৫৩	S00.00%	৮.৮১৯%
		মেরামত এবং সংরক্ষণ								
৩২৫৮১	৩২৫৮১০৩	কম্পিউটার মেরামত	থোক	0.08	5.00	0.08	0.00008	0.08	500.00%	0.008%
৩২৫৮১	৩২৫৮১০৪	অফিস সরঞ্জামাদি মেরামত	থোক	0.00	۵.00	0.00	०.००००৬	0.00	500.00%	0.00%%
		উপ-মোট মেরামত এবং সংরক্ষণ (৩২৫৮) =				0.0\$	0.00050	0.0\$	\$00.00%	0.050%
(ক) উপ-মে	াট (আবর্তক)					৭৯.৬২	০.০৮৮২৯	৮৮২৯ ৭৯.৬২ ১০০.০০%		৮.৮২৯%

ইকনমিক	ইকনমিক	ইকনমিক সাব-কোড বর্ণনা (বিস্তারিত)		মোট ও আর্থিক বাস্তবায়ন পরিকল্পনা					বছর -১			
কোড	সাব-কোড							জুলাই	জুন	••••••		
			একক	একক দর	পরিমান	মোট ব্যয় (লক্ষ	ওজন	আর্থিক	বাং	ষব		
						টাকা)	(Weight)	পরিমাণ (লক্ষ টাকা)	অঞ্চোর	প্রকল্পের		
								(-14 014)	শতকরা হার	শতকরা হার		
(খ) মূলধন												
		সম্পদ সংগ্ৰহ										
৪১১২২	৪১১২২০২	কম্পিউটার সরঞ্জাম	সংখ্যা	5.00	5.00	5.00	0.00555	১.০০	soo.oo%	0.333%		
৪১১২৩	৪১১২৩১০	অফিস সরঞ্জাম	থোক	0.80	5.00	0.80	0.00088	0.80	soo.oo%	0.088%		
৪১১২৩	৪১১২৩১৪	অফিস আসবাব পত্র	সংখ্যা	0.50	১২.০০	১.৫৩	०.००১৭०	১.৫৩	soo.oo%	०.১৭०%		
		নির্মাণ কাজ										
82225	৪১১১২০১	কম্বাইন্ড কমপ্লেক্স নির্মাণ (অনাবাসিক ভবন, মাল্টিপারপাস	সংখ্যা	૧৬৫. ৪৬	১	૧৬৫. ৪৬	০.৮৪৮৮১	৭৬৫.৪৬	S00.00%	৮৪.৮৮১%		
		হল নির্মাণ, ম্যানেজমেন্ট আফিস, প্রক্ষালণ কেন্দ্র, সিটিং										
		প্যাভেলিয়ন, গ্যালারী, প্লাজা, বাউন্ডারী দেওয়াল, ওয়াকওয়ে, খেলার										
		মাঠ, পুকুর খনন, ঘাট নির্মান, ওয়াটার বডি খনন, রেইন ওয়াটার										
		হারভেস্টিং, ড্রেনেজ ব্যবস্থা, পানি সরবরাহ ব্যবস্থা, ল্যান্ডস্কেপ										
		,পয়ঃনিষ্কাসন ব্যবস্থা, ল্যান্ডস্কেপ এবং বৈদ্যুতিক সুবিধা সম্বলিত)										
(খ) উ প -মে	টি (মূলধন)					৭৬৮.৩৯	০.৮৫২০৬	৭৬৮.৩৯	\$00.00%	৮৫.২১%		
		মোট (ক+খ)				৮ 8৮. ০১	0.\$80%	৮8৮.০১	500.00%	\$8.08%		
(গ) ফিজিক	যাল কনটিনর্জো	ন্সি (২%)				১৫.৩৭	०.०১৭०৪	১৫.৩৭	\$00.00%	১.৭০%		
(ঘ) প্রাইস ব	কনটিনজেন্সি	(৫%)				৩৮.৪২	০.০৪২৬০	৩৮.৪২	S00.00%	8.২৬%		
সর্বমোট (ব	৽+খ+গ+ঘ)					৯০১.৮০	5.00000	৯০১.৮০	\$00.00%	\$00.00%		

Feasibility/ Reviewing Study on Community Space and Recreation Facilities at Village Level under Technical Assistance Project for "My Village-My Town" for Local Government Engineering Department (LGED). (Package No. MVMT-S-17)

Annexure-B: Detail Cost Estimation

Feasibility/Reviewing Study on Community Space and Recreation Facilities at Village Level under Technical Assistance Project for "My Village-My Town" for Local Government Engineering Department (LGED)

ABSTRACT OF COST SUMMARY

For

GONO PRANGON

Item No	Description	Amount in Taka	Remarks
1	Walkway	16,02,011.31	
2	Play Field	9,62,196.80	
3	Management Office	1,36,35,051.00	
4	Public Toilet	17,92,102.00	
5	Library	36,01,758.92	
6	Sitting Pavilian	20,21,574.15	
7	Gallary	67,48,479.31	
8	Rain Water Harvesting	3,75,000.00	
9	Water Supply System	5,55,000.00	
10	Drainage System	4 37 500 00	
10		4,01,000.00	
11	Solar System	12,73,752.00	
12	Sewage Disposal System	4,66,520.00	
13	External Electrical Works	7,87,500.00	
	Grand Total =	3,42,58,445.49	

Feasibility/Reviewing Study on Community Space and Recreation Facilities at Village Level under Technical Assistance Project for "My Village-My Town" for Local Government Engineering Department (LGED)

COST ESTIMATION FOR GONO PRANGON

Items # 01

Walkway- 1.68 meter wide

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
1	3.01.2	BC(150mm): Earth work in box cutting on road crest up to 150mm depth, maintaining proper grade, camber and alignment, super elevation on curves, removing soil to a safe distance, watering, if necessary, spreading the excavated earth on road flanks and slopes uniformly including leveling, dressing, manual compacting, etc. all complete as per direction of the E-I-C.	sqm	320.88	33.85	10,861.79
		1 x 191 x 1.68 = 320.88	sqm			
2	3.07.04	KS(RW): Manufacturing, Supplying and Fixing of cement concrete kerb stone with top and bottom thickness 120mm and 150mm respectively, width 380mm and height 550mm as per approved drawing for side of footpath/median/road island etc. using steel shutter, with 6mm downgraded Stone Chips of LAA value \leq 35%, sand (FM>=2.2) and minimum cement conforming to BDS EN 197-1 : 2003 CEM-II/A-M 42.5N content relates to mix ratio 1:2:4 satisfying specified minimum required average strength, fcr = 28.5 MPa and satisfying a compressive strength fc = 20 MPa at 28 days on standard cylinders, including grading, washings stone chips, mixing in standard mixture machine, casting in forms, making shutter water-tight properly, compacting by vibrator machine and curing for at least 28 days, including preparation kerb foundation, true to level, maintaining alignment and height, including carrying and placing kerb stone, filling interstices of kerb stone tightly with cement mortar (1:4), raking out joints, cleaning and soaking kerb stone at least for 24 hours before use, curing for requisite period, etc. all complete as per drawing and direction of the E-I- C.	meter	382.00	1,177.11	4,49,656.02
	.	2 x 191 = 382.00	meter			
3	5.03.05	Providing single layer polythene sheet (0.18mm thick) weighing one kilogram per 6.5 square meter in floor or any where in ground floor underneath the cement concrete, etc. all complete as per specifications and direction of the E-I-C.	sqm	320.88	47.00	15,081.36
		1 x 191 x 1.68 = 320.88	sqm			

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description		Quantity	Rate in Tk.	Amount in Tk.
4	4.06.04	PCC-17 : Plain cement concrete work in foundation with minimum compressive strength of 17MPa at 28 days (suggested mix proportion 1:2:4 & maximum w/c ratio 0.45) on standard cylinder as per standard practice of Code AASHTO/ ASTM/ and cement conforming to BDS EN 197-1 : 2003 CEM- II/A-L/M/V/W 42.5N, sand of minimum FM 1.8 and 20mm down well graded 1st class/ picked brick chips (LAA value not exceeding 40) conforming to ASTM C 33 including breaking bricks into chips, shuttering, mixing by concrete mixer machine, casting, laying compacting and curing for the requisite period etc. all complete as per direction of the E-I-C. Additional quantity of cement to be added if required to attain the strength at the contractor's own cost.	cum	26.36	10,063.81	2,65,261.90
		1 x 191 x 1.38 x 0.1 = 26.36	cum			
4	5.04.22	Klinker paving brick works in floor or pavement with machine made pressed bricks of approved quality with cement sand (F.M. 1.2) mortar (1:4) on minimum 12 mm thick cement sand (F.M. 1.2) mortar (1:4) including raking out joints, cutting the bricks to required size, soaking the same for 24 hours before use wherever necessary including high class flush pointing in cement mortar (1:2), cleaning, curing at least for 7 days etc. including washing and screening of sand, cost of water, electricity and other charges complete and accepted by the Engineer-in-charge. (Cement: CEM-II/B-M) (PWD 04.22)	cum			
	5.04.22.1	100 mm thick flat brick pavement with 200 mm x 100 mm x 50 mm size klinker facing bricks. (PWD 04.22.1)		275.04	3,131.00	8,61,150.24
		1 x 191 x 1.44 = 275.04	sqm			
		Total = 275.04	sqm			10.00.011.01
ltems ‡	¥ 02				I Otal	16,02,011.31
Play fie	eld					
1	4.06.01	Sand filling on the prepared foundation bed with sand of specified FM in layers not more than 150mm thick including necessary carriage, leveling, watering and ramming to achieve minimum dry density (MDD) of 95% STD compaction with optimum moisture content (OMC) by ramming each layer up to finished level as per direction of E-I-C.				
	4.06.01.01	Sand of Minimum FM 0.8	cum	306.23	1,074.50	3,29,044.56
		1 x 37.2 x 27.44 x 0.300 = 306.23	cum			
2	2 5.26.04 Alluvial loamy silty soil supplying cost by any means of approved local best quality including cost of labour for loading, unloading at both ends with properly stacking at site with cost of tools and plants etc. all complete and accepted by the Engineer			76.56	913.00	69,897.09
		1 x 37.2 x 27.44 x 0.075 = 76.5576	cum			

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
3	5.26.06	Spreading the alluvial loamy silty soil from the stacks at site on the lawn surface including cost labour for carring, spreading, leveling, dressing the same etc. all complete as per direction of the E-I-C.	cum	76.56	194.00	14,852.17
		1 x 37.2 x 27.44 x 0.075 = 76.5576	cum			
4	5.26.03	lawn area Preparation with leveling and dressing to proper slope and grade by spading the earth up to 150 mm thickness including cost tools and plants etc. all complete and accepted by the Engineer	sqm	1,020.77	8.00	8,166.14
		1 x 37.2 x 27.44 = 1,020.77	sqm			
5	5.26.08	Lawn grass supplying by truck or any other means of approved best quality and size including sorting the grass to proper size and quality with washing the grass, dibbling the grass @ 10 mm to 50 mm distance in both ways, water spreading the lawn area till the grass grown at least for two months after plantation, weeding the undesirable grass, mowing the lawn grass by lawn mower up to two months after plantation, applying urea fertilizer on the lawn surface @ 1 kg per 9.29 sqm including cost of tools and plants etc. all complete as per direction of the E-I-C.	sqm	1,020.77	67.00	68,391.46
		1 x 37.2 x 27.44 = 1,020.77	sqm			
6	MR	Drainge work (Installation of PVC pipe)	LS	1.00	1,00,000.00	1,00,000.00
7	7 5.02.06 Earth filling inside plinth in 150mm layers with earth available within 90m of the building site, watering, leveling and consolidating each layer up to finished level, etc. all complete as per direction of the E-I-C Dry density after compaction shall not be less than 90% of MDD (STD).			714.54	520.40	3,71,845.37
		1 x 37.2 x 27.44 x 0.7 = 714.54	cum			
					Total	9,62,196.80

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description			Unit	Quantity	Rate in Tk.	Amount in Tk.			
	Plinth area basis rate as per PWD schedule of rates 2022										
Items # 03 : Management Office											
Structures (Building)											
Building	Building type :Non Residential										
Building	g Category : S	pecial	and the state of t								
Type of	structure : S	ingle storied Ma	isonry structure								
Founda	Foundation :Single storied building with Masonary foundation										
Plinth A	rea : 24	13 sqm bor than apostal	laree								
Sile	. 01		Idled								
1	1 SOIL INVESTIGATION										
(i)		Soil Investigatio	on : LS or Actual cost	2	BH	38,821.00	/BH	77,642.00			
		(BH Nos. as pri	mary, say)								
						"A"	=	77,642.00			
2		CONSTRUCTIO	ON OF BUILDING								
A		FOUNDATION	CUSI	242	Cam	0 4 4 0 0 0	leam	22 03 020 00			
(1)		From PLAR Tal	ble - 1. Plinth area 243.00 som @	243	Sym	9,440.00	/sqiii	22,95,920.00			
		75% (For mase	onry foundation) of Tk. 7532.00 per								
		sqm, So Tk 56	49.00 per sqm								
						"B1"	=	22.93.920.00			
В		SUPER STRUCTURE COST									
1		(i)	Ground floor- (from PLAR Table-	243	Sam	32 567 00	/sam	79 13 781 00			
		(1)	2). 243.00sqm @ 70% cost of	210	oqiii	02,007.00	/oqiii	10,10,101.00			
			21555.00, So, Rate per sqm Tk								
			Tk.15089.00 per sqm								
			•			"B2"	=	79,13,781.00			
С	ADDITIONAL SUPER STRUCTURE COST										
(i)	17.1.1	Supply and	application of non-toxic two	243	Sqm	781.00	/sqm	1,89,783.00			
		coating (minim	um 1.5 mm thickness) for water								
		proofing of ro	of/ roof garden/ swimmimg pool								
		which consists	s of powder and liquid acrylic								
		emulsion; unde	er a protective cover of plaster/								
		cement concre	ete/ tiles etc. as per standard								
		charge (Rate	is excluding the cost of protective								
		cover)									
		,									
						"B3"	=	1 89 783 00			
				Sub Tot:	al "B"=	(B1+B2+B3)		1 03 97 484 00			
OTHER BUILDING COST								1,00,07,101.00			
					040	0 405 00	E 16 27E 00				
3	3 (I) Internal Sanitary & Water Supply (From additional cost			151	Sqm	243	2,125.00	5, 10,375.00			
4	(i)	Internal Electrif	ication (From additional cost chart, ite	·m-	Sqm	243	2,140.00	5,20,020.00			
		1 /. 270.00 SYIII	w 11. 2170.00 per squit								
5 External water supply Index of the service of th	ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.				
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(i) Construction of underground reservoir (From additional cost chart, item-94-a): Image: Construction of underground reservoir (From WASA, Municipality or Public Health Engineering sources, WASAMUnicipal charge as per requirement. Image: Construction of upper lines as per requirement. (ii) Laying of distribution pipe lines as per requirement. Ls 1 5,00,000.00 (iii) Laying of distribution pipe lines as per requirement. Ls 1 5,00,000.00 (iv) Supplying and installation of Sewage Treatment Plant (SIP) and Water Treatment Plant (WTP) as per requirement. Ls 1 5,00,000.00 6 External Electrification Image: Construction constructicon construction construction construction constru	5	External wate	r supply								
(ii) Sinking of deep tube well/arranging water from WASA, Municipal charge as per requirement. Actual costs (iii) Laying of distribution pipe lines as per requirement. (iv) Laying of distribution pipe lines as per requirement. (iv) Construction of pump house as per requirement. (ivi) Supplying and installation of pumps as per requirement. (vii) Installation of Rain water harvesting system as per requirement. (viii) Installation of Rain water harvesting system as per requirement. (viii) Installation of Rain water harvesting system as per requirement. (viii) Installation of Rain water harvesting system as per requirement. (viii) Sub-station Equipment/Transformer (iii) Sub-station Equipment/Transformer (iii) Pump & Motor set in/ri installation (viii) Overhead Transmission-Not required (viii) Overhead Transmission-Not required (viii) Overhead Transmission-Not required (viii) Overhead Transmission-Not required (viii) Installation of Rain water harvesting system (viii) Installation of Rain water harvesting system (viii) Overhead Transmission-Not required (viii)		(i)	Construction of underground reservoir (From additional cost chart, item-9-i-a) :								
(ii) Laying of distribution pipe lines as per requirement. Laying of distribution pipe lines as per requirement. LS 1 5,00,000.00 (iv) Supplying and installation of pump house as per requirement. LS 1 5,00,000.00 5,00,000.00 (vii) Installation of Rain water harvesting system as per requirement. LS 1 5,00,000.00 5,00,000.00 6 External Electrification Image: Comparison of Rain Water Plant (XTP) as per requirement. Image: Comparison of Rain Water Plant (XTP) as per requirement. Image: Comparison of Rain Water Plant (XTP) as per requirement. (iii) Sub-station Equipment/Transformer Image: Comparison of Rain Water Plant (STP) and Water Transmission-Not required Image: Comparison of Rain Water Plant (STP) and W		(ii)	Sinking of deep tube well/arranging water from WASA, Municipality or Public Health Engineering sources, WASA/Municipal charge as per requirement. Actual cost								
(iv) Laying of distribution pipe lines as per requirement. LS 1 5,00,000.00 (vi) Supplying and installation of pumps as per requirement. LS 1 5,00,000.00 (vii) Installation of Sawage Treatment Plant (STP) and Water Treatment Plant (WTP) as per requirement. LS 1 5,00,000.00 (viii) Installation of Rain water harvesting system as per requirement. LS 1 10,00,000.00 (viii) Installation Equipment/Transformer L 1 10,00,000.00 (ii) Sub-station Equipment/Transformer LS 1 10,00,000.00 (iv) BJ DESA/DESCO/REB Charge LS 1 10,00,000.00 (vii) Compound Light. Wring system 3 conce LS 1 10,00,000.00 (viii) Overhead Transmission-Not required LS 1 10,00,000.00 (viii) Overhead Transmission-Not required LS 1 10,00,000.00 (viii) Overhead Transmission-Not required LS 1 10,00,000.00 (viii) Installation of Rain water harvesting system as per requirement. Actual cost		(iii)	Laying of distribution pipe lines as per requirement.								
(v) Construction of pump house as per requirement. LS 1 5,00,000.00 5,00,000.00 (vi) Installation of pumps as per requirement. Image: Construction of pumps as per requirement. Image: Construction of pumps as per requirement. Image: Construction of pumps as per requirement. (vii) Installation of Sain water harvesting system as per requirement. Actual cost Image: Construction of pumps as per requirement. Image: Construction of pumps as per requirement. (viii) Installation of Sain water harvesting system as per requirement. Actual cost Image: Construction of pumps as per requirement. Image: Construction of pumps as per requirement. (viii) Sub-station Equipment/Transformer Image: Construction of pumps as per requirement. Image: Construction of pumps as per requirement. (viii) Pump & Motor set in/c installation Image: Construction of Pumps as per requirement. Image: Construction of Pumps as per requirement. (viii) Duelses / DESA / DESCO / REB Charge LS 1 10,00,000.00 10,00,000.00 (viii) Duelse pystem Image: Construction of Rain water harvesting system as per requirement. Image: Construction of Rain water harvesting system as per requirement. Image: Construction of Rain water harvesting system as per requirement. Image: Construction of Component Image: Construction of Compound drain		(iv)	Laying of distribution pipe lines as per requirement.								
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(vii) Installation of Sewage Treatment Plant (STP) and Water Treatment Plant (WTP) as per requirement. (viii) Installation of Rain water harvesting system as per requirement. Actual cost 6 External Electrification (i) Sub-station building-Not required (ii) Sub-station building-Not required (iii) Pump & Motor set in/c installation (iv) H.T./L.T. Line (v) PDB /DESA /DESCO /REB Charge (viii) Earthing System (viii) Diverhead Transmission-Not required (viii) Overhead Transmission-Not required (xi) Solar PV system (viii) Installation of Rain water harvesting system as per requirement. Actual cost (viii) Installation of Rain water harvesting system as per requirement. Actual cost (xi) Solar PV system 7 Electro-mechanical Component (i) Lift. Not required (ii) Ground Floor. (From additional cost chart item-8-i) sqm 9 Construction of Compound drain meter 10 Approach Road As per requirement. (From additional cost chart item-13-i/ii) sqm 50 3,163.00 1,58,150.00		(vi)	Supplying and installation of pumps as per requirement.	-							
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(vii) Earthing System (viii) Overhead Transmission-Not required (ix) Underground cable laying (x) Compound light. Wiring system & other safety system (xi) Solar PV system (viii) Installation of Rain water harvesting system as per requirement. Actual cost (ix) Solar PV system (i) Lift. Not required (ii) Air Condition Not required 8 Gas Connection (i) Ground Floor. (From additional cost chart item-8-i) sqm 9 Construction of Compound drain meter 10 Approach Road As per requirement. (From additional cost chart item-13-i/ii) sqm 50 3,163.00 1,58,150.00 12 Site improvement- Considered separately 11,84,680.00 1,84,680.00 <t< td=""><td></td><td>(vi)</td><td>Standby Power & Source</td><td></td><td></td><td></td><td></td></t<>		(vi)	Standby Power & Source								
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9 Construction of Compound drain meter 50 5,614.00 2,80,700.00 10 Culvert- Not required		(i)	Ground Floor. (From additional cost chart item-8-i)	sqm	0	350.00	-				
10 Culvert- Not required Image: Second	9	Construction	of Compound drain	meter	50	5,614.00	2,80,700.00				
11 Approach Road As per requirement. (From additional cost chart item-13-i/ii) sqm 50 3,163.00 1,58,150.00 12 Site improvement- Considered separately	10	Culvert- Not r	equired								
12 Site improvement- Considered separately Image: Constraint of the separately <td>11</td> <td>Approach Roa</td> <td>d As per requirement. (From additional cost chart item-13-i/ii)</td> <td>sqm</td> <td>50</td> <td>3,163.00</td> <td>1,58,150.00</td>	11	Approach Roa	d As per requirement. (From additional cost chart item-13-i/ii)	sqm	50	3,163.00	1,58,150.00				
13 Arboriculture /Landscape cum 243 760.00 1,84,680.00 Total "C" 31,59,925.00 Sub-Total "P" 1,36,35,051.00	12	Site improvem	ent- Considered separately								
Total "C" 31,59,925.00 Sub-Total "P" 1,36,35,051.00	13	Arboriculture /I	Landscape	cum	243	760.00	1,84,680.00				
Sub-Total "P" 1,36,35,051.00		I		I		Total "C"	31,59,925.00				
						Sub-Total "P"	1,36,35,051.00				

ltem No	Ref. to LGED Dhaka Division SoR. 2022		Description		Unit	Quantity	Rate in Tk.	Amount in Tk.
			Plinth area basis rate as per PV	VD schedule	e of rate	s 2018		
ltems ‡	ŧ 04 : Public To	oilet-2 nos						
Building	g type :No	on Residential						
Building	g Category : S	pecial						
Type of	f structure : S	ingle storied Ma	isonry structure					
Founda	ition :Si	ngle storied buil	ding with Masonary foundation					
Plinth A	vrea : 13	3.50 sqm x2= 27	7.00 sqm					
Site	: 01	her than coasta	larea					
1		SOIL INVESTI	GATION					
(i)		Soil Investigation	on : LS or Actual cost	1	BH	38,821.00	/BH	38,821.00
		(BH Nos. as pri	imary, say)					
						"A"	=	38,821.00
2		CONSTRUCTI	ON OF BUILDING					
A (1)		FOUNDATION	COST	07	0	0 4 4 0 0 0	10 0000	0 54 000 00
(1)		Foundation cos	ble - 1 Plinth area 27.00 som ϖ	21	Sqm	9,440.00	/sqm	2,54,000.00
		60% (For mas	onry foundation) of Tk. 7532.00 per					
		sqm, So Tk 45	20.00 per sqm					
						"B1"	=	2 54 880 00
в		SUPER STRU	CTURE COST			ы		2,04,000.00
			Ground floor (from DLAD Table	27	Cam	32 567 00	leam	8 70 200 00
1.		(1)	2). 27.00sam @ 80% cost of	21	Sym	52,507.00	/sqiii	0,79,309.00
			21555.00, So, Rate per sqm Tk					
			Tk.17244.00 per sqm					
						"B2"	=	8,79,309.00
С		ADDITIONAL	SUPER STRUCTURE COST					
(i)	17.1.1	Supply and	application of non-toxic two	27	Sqm	781.00	/sqm	21,087.00
		omponents acr	ylic polymer modified cementitious					
		proofing of ro	of/ roof garden/ swimming pool					
		which consists	s of powder and liquid acrylic					
		emulsion; und	er a protective cover of plaster/					
		cement concre	ete/ tiles etc. as per standard					
		specification a	ind accepted by the Engineer-in-					
		cover)	is excluding the cost of protoctive					
		,						
						"B3"	=	21,087.00
				Sub Tota	al, "B"=	(B1+B2+B3)		11,55,276.00
		OTHER BUILD	ING COST			,		
3	(i)	Internal Sanitar	y & Water Supply (From additional co	ost	Sam	27	2,125.00	57,375.00
		chart, item-6): 2	27.00 sqm @ Tk. 2125.00 per sqm				,	,
4	(i)	Internal Electrif	ication (From additional cost chart_ite	m-	Sam	27	2 140 00	57 780 00
	\'7	7):27.00 sqm @) Tk. 2140.00 per sqm		~ 1		_,	01,100.00

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
5	External wate	r supply				
	(i)	Construction of underground reservoir (From additional cost chart, item-9-i-a) :	0	0	106.00	-
	(ii)	Sinking of deep tube well/arranging water from WASA, Municipality or Public Health Engineering sources, WASA/Municipal charge as per requirement. Actual cost				
	(iii)	Laying of distribution pipe lines as per requirement.				
	(iv)	Laying of distribution pipe lines as per requirement.				
	(v)	Construction of pump house as per requirement.	LS	1	50,000.00	50,000.00
	(vi)	Supplying and installation of pumps as per requirement.				
	(vii)	Installation of Sewage Treatment Plant (STP) and Water Treatment Plant (WTP) as per requirement.				
	(viii)	Installation of Rain water harvesting system as per requirement. Actual cost				
6	External Elect	rification				
	(i)	Sub-station building-Not required				
	(ii)	Sub-station Equipment/Transformer				
	(iii)	Pump & Motor set in/c installation				
	(iv)	H.T./L.T. Line				
	(v)	PDB /DESA /DESCO /REB Charge	LS	1	1,00,000.00	1,00,000.00
	(vi)	Standby Power & Source				
	(vii)	Earthing System				
	(viii)	Overhead Transmission-Not required				
	(ix)	Underground cable laying				
	(x)	Compound light. Wiring system & other safety system				
	(xi)	Solar PV system				
	(viii)	Installation of Rain water harvesting system as per requirement. Actual cost				
	(ix)	Solar PV system				
7	Electro-mecha	anical Component				
	(i)	Lift. Not required				
	(ii)	Air Condition Not required				
8	Gas Connecti	on				
	(i)	Ground Floor. (From additional cost chart item-8-i)	sqm	0	455.00	-
9	Construction	of Compound drain	meter	50	5,614.00	2,80,700.00
10	Culvert- Not r	equired				
11	Approach Roa Ramp	d As per requirement. (From additional cost chart item-13-i/ii)	sqm	10	3,163.00	31,630.00
12	Site improvem	ent- Considered separately				
13	Arboriculture /I	Landscape	cum	27	760.00	20,520.00
14	Fire fighting		LS		-	-
			1		Total "C"	5,98,005.00
					Sub-Total "P"	17,92,102.00

ltem No	Ref. to LGED Dhaka Division SoR. 2022				Desc	cription					Unit	Quantity	Rate in Tk.	Amount in Tk.
Items #	‡ 05													
Library	/ building													
A	Foundation co	ost												
1	5.02.01.2	Earthwork in layout, by exca as shown in the mark pillars, fi chalk powder excavated mate in all types of soil, leveling, re- all complete for lead not excent tools and equip of the E-I-C.	exca avatin ne dr. xing filling erials soils soils ammi r an i eding ment	vation g eart awing bambo bambo g bask at a s excep ing, dr nitial e 20m, t at wo	n of h to prov coo s afe c ot roc essir excav incl rk sit	founda the line viding of pikes a carryir distance cky, gra- ng and vation of uding te, etc.	atio es, cen and ng e de pro dep arr cor	n trencl grades ter lines markir and dis esignate elly, slus eparing th of 2n anging mplete a	cum	97.20	168.00	16,329.60		
		20	x	1.8	x	1.8	х	1.5	=	97.20	cum			
			1.1		1		1^	Total	=	97.20	cum			
2	5.03.05	Providing sin weighing one where in groun complete as pe	i gle kilogr id floc er spe	layer am pe or unde cificati	poly er 6.8 ernea ions	/thene 5 squa ath the and dir	sł re ce ect	neet (0 meter i ment co ion of th	.18ı n flo oncr ne E	mm thick) oor or any ete, etc. all -I-C.	sqm	1.80	47.00	84.60
		20	х	1.8	х	1.8			=	1.80	sqm			
								Total	=	1.80	sqm			
3	4.06.04	PCC-17: Plain minimum corr (suggested ministandard cylinot ASTM/ and cer II/A-L/M/V/W 42 well graded 1 exceeding 40) bricks into ch machine, cast requisite period Additional quar the strength at	a cen apress c prop der as ment 2.5N, st cla confe nips, ing, d etc. ntity c the co	nent (sive s portion s per s confor sand (ass/ p orming shutte laying all co of cem ontrac	conci strens 1:2:- stand ming of mi icker g to <i>p</i> ering cor mple ent t tor's	rete w gth of 4 & ma lard pra g to BD inimum d brick ASTM , mixin mpactir ete as p to be a own co	ork 1 ixin acti SI SI C ng ng Der dde ost.	in fou 7MPa num w/o ce of C EN 197- M 1.8 ar hips (L 33 inclu by co and cu directio ed if rec	anda at ode 1: nd 2 AA nore uring n o guire	ation with 28 days tio 0.45) on AASHTO/ 2003 CEM- 0mm down value not g breaking ete mixer g for the f the E-I-C. ed to attain	cum	30.74	10,063.81	3,09,311.20
		20	X	1.5	X	1.5	X	0.075	=	3.38	cum			
		1	X	48	X	1.6	Х	0.075	=	27.36	cum			
								TOTAL	-	30.74	cum			

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Descriptio	n				Unit	Quantity	Rate in Tk.	Amount in Tk.
4	5.05.01	RCC: 1:2:4, 17MPa, Brick Chips (concrete works with minimum cem ratio (tentative 1:2:4) and maximun having minimum required average s satisfied a specified compressive si days on standard cylinders as per AASHTO/ ASTM and Portland Com to BDS EN 197-1 :2003 CEM-II 42.5 and 20mm down well graded picke and maximum water absorption no respectively) conforming to ASTM C Appendix-3 LGED Schedule of Rate recognized envelop in/c breaking ch proper sieves, centering, shutterins shuttering fully leak proof & shutterins shuttering fully leak proof & shuttering shuttering allowable slump of 50r 75mm to 100mm (when plasticize compacting by mechanical vibrator r least for 28 days, removing centering specified time period, i/c cost of ad materials and cylinders required. reinforcement and its fabrication, v binding etc. Additional quantity of c Water reducing chemical admixture ASTM C 494 to reduce mixing w workability and to maintain low v (Doses of admixture to be fixed approved laboratory instruction by quantity of cement to be added if real and approval of the Engineer in char and approval of the Engineer in char	(BC): (BC): ent c n wat strengt stand posit N sar ed bri ot exc C 33 c es or a nips a ing it ng wit oden itably e aggi standa mm (i er uso machi g-shu ddition Exc weldin cemer of co vater ty the the the co so ra a so ra so	Reinfc ontent er cem th, fcr = lard pra e Ceme d of mi ick chip ceeding or Aggr any othe n posi th plain plank brace regates ard mea without e), pou ne and ttering nal testi cluding g, coup t and mplying require cemen ne mix Engine a plate a	after after after actic	d cement tes to mix ratio 0.45 I Mpa and Mpa at 28 e of Code conforming um FM 1.8 LAA value and 15% te Grading ternational ng through BWG steel nels and vacing of n standard ng boxes, sticizer) & , casting, ng at				
		-								
4.1	5.05.01.01	In individual and continuous footing slab at plinth level	olumn,	raft	and floor	cum	7.81	8,673.00	67,757.81	
		20 x 1.25 x 1.25	x	0.25	=	7.81	cum			
10	5 05 01 02	In nodactal, column, conital lift well a	nd w	Total	=	7.81	cum	0.46	0 000 00	10 500 40
4.2	5.05.01.02	in pedestai, column, capital liit Wall a	anu w	all			cum	2.10	9,032.00	19,009.12
		20 x 0.3 x 0.3	x	1.2	=	2.16	cum			
				Total	=	2.16	cum			

ltem No	Ref. to LGED Dhaka Division SoR. 2022				Des	cription					Unit	Quantity	Rate in Tk.	Amount in Tk.
	5.05.11	FORM WORK strutting, propp both in and out the designed sl minimum 16 B\ 5 mm, flat bars	(Si bing t of hape NG, etc.	eel) :C etc. (T plane, t and si angles) and re	ente he f o m ze t of r	ering ar formworl ake the by using minimum val of for	nd ki cc ne ns rm	shutter must be oncrete ecessar size 40 r for: (PV	ing, surf surf M M M VD	including jid enough ace true to S sheets of x 40 mm x 07.12)				
	5.05.11.01	In individual ar slab at plinth le	nd c vel	ontinuo	us f	footing o	of	column,	rat	ft and floor	Sqm	25.00	582.00	14,550.00
		20	х	5.0	х	0	х	0.25	=	25.00	Sqm			
								Total	=	25.00	Sqm			
	5.05.11.04	In pedestal, col	umr	i, capita	l lift	wall and	v b	vall			Sqm	28.80	522.00	15,033.60
		20	x	1.2	x	0	х	1.2	=	28.80	Sam			
								Total	=	28.80	Sqm			
5	5.06.01.02	Grade 400 (F produced and minimum yield yield strength s and the ratio of strength (fy) sl after fracture (<i>A</i> force (Agt) is 14	RB ma stre shall f tes hall A5.6	400/ 4 rked as ingth, fy not ex ted ultir be at l 5) & mi and 2.5	00V s pe cee nate east nim % re	V): Ribl er BDS (eH) = 4 d fy by e strengt t 1.25 a um total espective	be IS IO(mo th, ind l e ely	d or E SO 693) MPa, ore thar fu (Re) I minim longatio	Defo 5-2: but to the to t um n a	rmed bar 2006 with the tested e 125 MPa tested yield elongation t maximum	kg	1,957.10	100.00	1,95,710.31
		2.50%							=	1957.10	kg			
6	5.02.11	Earth filling ins within 90m of consolidating e as per directio shall not be les	side f th ach n o s tha	plinth i e build layer u f the E an 90%	n 18 ling p to -I-C	50mm la site, v o finishe Dry d MDD (S1	ye wa d I en	ers with tering, level, et isity afte).	earl lev c. a er c	th available eling and Il complete compaction	cum	97.20	207.00	20,120.40
7	5.04.01	Brick works wit mortar (1:6) in fully with morta the bricks at le for 7 days etc. and other charg accepted by th (PWD 04.1)	h fir four ar, ra ast all ges ne E	st class dation a acking o for 24 h complet and Enginee	bri and out nour te in r-in-	cks with plinth, fi the joint s before cluding -charge.	illir s, cc ((ement s ng the jo cleanin se and ost of w Cement	anc bints g a curi ater : C	I (F.M. 1.2) /interstices nd soaking ing at least -, electricity EM-II/B-M)	cum	10.94	7,529.00	82,329.62
	Up to GL	1	x	97.200	x	0.25	х	0.45	=	10.94	cum			
								Total	=	10.94	cum			
													Sub Total	7,40,736.26

ltem No	Ref. to LGED Dhaka Division SoR. 2022			[De	scription					Unit	Quantity	Rate in Tk.	Amount in Tk.
В	Superstructur	e									•			
1	PWD 2022- 10.2	Supply, fabrica columns, bear conforming to , 345 MPa, inclu red/grey-oxide specification ar	itio ns, AS dir pr	n and in rafters, TM A572 ing the co imer eto direction	nst b 2, v st c. of	allation or racings with a mi of testing all comp Engineer	of etc inir j 0 ole -in-	built-up c. from num yie f plates te as -charge	se sto eld , ap per	ections i.e. eel plates strength of oplicaton of drawing,	KG	11,369.94	137.00	15,57,681.78
	Post	20	х	3.04	х	0.45	х	0.01	=	2147.76				
	Central Post	20	х	10.67	х	0.45	х	0.01	=	7538.36				
	Roofing Truss	22	x	13	x	0.15	х	0.005	=					
								Total	=	11369.94	KG			
2	MR	Supply and ir conforming to strength of 310 all complete a Engineer-in-cha	ISTA IAS M S I arg	allation STM A65 Pa, inclu per draw e.	of i3" dir /ing	GI purli grade 44 ng the cost g, specifi	n 5, st ca	& girt with a i of testin tion an	of mini Ig o d d	any size imum yield f materials, lirection of	KG	1,865.16	137.00	2,55,526.92
	Roofing Truss	44	х	9	х	0.1	х	0.006	=	1865.16				
3	MR	PUPAINT									sqm	448.26	238.00	1,06,685.88
	Post	20	х	3.04	х	0.75	х	2	=	91.20				
	Central Post	20	х	10.67	Х	0.45	х	2	=	192.06				
	Roofing TRUSS	22	х	13	х	0.15	х	2	=	85.80				
	Roofing TRUSS	44	х	9	x	0.1	х	2	=	79.20				
								Total	=	448.26	sqm			
4	10.21	Supply and i galvanized iror 63-65 kg per b fixed on M.S. screws, limpet accepted by the	nst un se w e E	allation heet (Ba dle (2'-6" ctions w vashers ngineer-i	of ngl wi ith an in-o	0.457 adesh m idth, 70 - 'J' hook d putty charge.	mi ad - 7 oi ete	m thick le) havi 2 foot le r woode c. all c	k d ng ong en com	corrugated min weight) fitted and purlin with plete and	sqm	455.12	578.00	2,63,056.47
		9	х	7.6	х	5.23			=	357.73	sqm			
		2	Х	11.35	х	4.29			=	97.38	sqm			
								Total	=	455.12	sqm			
5	22.4	Supplying, fittin door including closure, specia device, top hing drawing and dir	g a all l q ge a rec	and fixing accesso uality 2 r and hanc tion of th	g 1 nos lle e E	0 mm thi s, 1 set f c. clampir etc. com ingineer-	ick floo ng ple in-	clear te or mour devices te in all charge.	emp nted s, 1 res	pered glass I auto door set locking pect as per	sqm	7.20	15,816.00	1,13,875.20
		2	Х	1.5	X	2.4		Tatal	=	7.20	sqm			
								rotal	=	1.20	sqm			

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
6	4.31	38 mm thick artificial patent stone (1:1.5:3) flooring with cement, best quality coarse sand (50% quantity of Sylhet sand or coarse sand of equivalent F.M. 2.2 and 50% best quality local sand of FM 1.2) and 12 mm down well graded stone chips, laying the concrete in alternate panels, compacting and finishing the top with neat cement and curing at least for 7 days in all floors including cost of water, electricity and other charges etc. all complete and accepted by the Engineer-in charge.(Cement: CEM-II/A-M) In ground floor	sqm -	311.60	741.00	2,30,895.60
		1 x 41 x 7.6 = 311.60	sqm			
		Total = 311.60	sqm			
7	4.16	125 mm brick works with first class bricks with cement sand (F.M. 1.2) mortar (1:4) and making bond with connected walls including necessary scaffolding, raking out joints, cleaning and soaking the bricks for at least 24 hours before use and washing of sand, curing at least for 7 days in all floors including cost of water, electricity and other charges etc. all complete and accepted by the Engineer-in-charge. (Cement: CEM-II/A M) In ground floor	sqm -	42.48	1,185.00	50,334.06
		4 x 3.7 x 2.87 = 42.48	sqm			
8	15.1.1	Providing minimum 12 mm thick cement sand (F.M. 1.2) plaster (1:4) with fresh cement to both inner and outer surface of wall, finishing the corner and edges including washing of sand, cleaning the surface, curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) ground floor.	sqm	42.48	299.00	12,700.32
٩	16 1 1	Exterior standard acrylic emulsion paint of approved best	sam	12.18	274.00	11 638 //2
σ	16.1.1	Exterior standard acrylic emulsion paint of approved best quality and color having water resisting properties and resistance properties against fungi, fading & flaking delivered from authorized local agent of the manufacturer (Berger weather coat smooth/ Elite smooth exterior/ Asian apex weather coat or equivalent brand) in a sealed container; applying to exterior surface with surface preparation including cleaning, drying, making free from dirt, grease, wax, removing all chalked and scaled materials, fungus, mending good the surface defects using sand paper and necessary scaffolding; applying 1 coat of exterior sealer of specified brand on prepared surface; then applying 1 coat of exterior putty of specified brand for levelling, spot filling, crack filling and cutting by sand paper/zero water paper; finally applying 2 coats of exterior emulsion paint by spreading with brush/roller/spray machine & necessary scaffolding etc. upto desired finishing, elapsing specified time for drying or recoating; all complete in all floors and accepted by the Engineer-in-charge.	sqm	42.48	274.00	11,638.42
		4 x 3.7 x 2.87 = 42.48	sqm			

Item NoRef. to LGED Dhaka Division SoR. 2022DescriptionUnitQuantity	Rate in Tk.	Amount in Tk.
10 Electrical Works		
PLAR Internal Electrification (From additional cost chart, item- 7): 311.6 sqm @ Tk. 830.00 per sqm	830.00	2,58,628.00
	Sub Total	28,61,022.66
	Total	36,01,758.92
Items # 06		
Sitting pavilion		
1 5.02.01.2 Earthwork in excavation of foundation trenches, including layout, by excavating earth to the lines, grades and elevation as shown in the drawing providing center lines, local bench mark pillars, fixing bamboo spikes and marking layout with chalk powder filling baskets, carrying and disposing of all excavated materials at a safe distance designated by the E-I-C in all types of soils except rocky, gravelly, slushy or organic soil, leveling, ramming, dressing and preparing the base, etc. all complete for an initial excavation depth of 2m and an initial lead not exceeding 20m, including arranging all necessary tools and equipment at work site, etc. complete as per direction of the E-I-C. 42.1	8 168.00	7,086.08
2 x 1.275 x 0.375 x 0.75 = 0.72 cum		
1 x 29.5 x 0.375 x 0.75 = 8.30 cum		
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		
2 X 9.5 X 0.3/5 X 0.75 = 5.34 Cum		
2 χ 7 χ 0.375 χ 0.75 $=$ 3.34 cum Pillar 4 χ 0.9 χ 0.875 χ 0.75 $=$ 2.36 cum		
sitting 3 x 10 x 0.75 x 0.75 = 16.88 cum		
Total = 42.18 cum		
2 4.06.02 Single layer brick flat soling with 1st class or picked kiln burnt bricks in foundation, filling the interstices tightly with sand of minimum FM 0.50, watering, leveling, dressing, etc. all complete as per instruction of the E-I-C. 169.7	4 478.76	81,264.12
2 x 1.275 x 0.375 = 0.96 sqm		
1 x 29.5 x 0.375 = 11.06 sqm		
1 x 20.65 x 0.3 = 6.20 sqm		
2 x 9.5 x 0.3/5 = 7.13 sqm		
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		
Pillar 4 X 0.9 X 0.8/5 = 3.15 sqm Other 2 14 0 14 0.0 140 140		
Situing Situing <t< td=""><td></td><td></td></t<>		

ltem No	Ref. to LGED Dhaka Division SoR. 2022			[Des	scription				Unit	Quantity	Rate in Tk.	Amount in Tk.	
3	4.06.04	PCC-17: Plain minimum com (suggested mix standard cylind ASTM/ and cer II/A-L/M/V/W 42 well graded 1s exceeding 40) bricks into ch machine, casti requisite period Additional quar the strength at t	pre pre er ne 2.5 st co ips ng entity	ement c essive s oportion as per s nt confor N, sand c class/ pi nforming s, shutte , laying tc. all con y of cemu	ion tre 1:2 tan mir of n icko to erin co mpl ent or's	crete w ngth of 2:4 & ma dard pra- ng to BD ninimum ed brick ASTM g, mixir ompactin lete as p to be a s own co	ork 1 xin acti S I S I C C ng ng oer dde ost.	in fou 7MPa num w/c ce of C EN 197- <i>I</i> 1.8 an hips (L 33 inclu by co and cu directio ed if rec	unda at rat ode 1 : d 2 AA udine n cre urine n o juire	ation with 28 days iio 0.45) on AASHTO/ 2003 CEM- 0mm down value not g breaking ete mixer g for the f the E-I-C. ed to attain	cum	12.73	10,063.81	1,28,116.39
		2	x	1.275	x	0.375	х	0.075	=	cum				
		1	х	29.5	х	0.375	х	0.075	=	0.83	cum			
		1	х	20.65	х	0.3	х	0.075	=	0.46	cum			
		2	х	9.5	х	0.375	х	0.075	=	0.53	cum			
		2	Х	7	х	0.375	х	0.075	=	0.39	cum			
		1	Х	29.5	х	4	х	0.075	=	8.85	cum			
	Pillar	4	Х	0.9	х	0.875	Х	0.075	=	0.24	cum			
	sitting	3	Х	10	Х	0.6	Х	0.075	=	1.35	cum			
		.						Total	=	12.73	cum			4 00 000 40
4	3.04.01	mortar (1:6) in f fully with morta the bricks at lea for 7 days etc. and other charg accepted by th (PWD 04.1)	r, asi all jes	racking of racking of for 24 h complet and Enginee	out out e ii r-in	l plinth, f the joint rs before ncluding	illir illir ts, co	ing the jo cleaning se and st of wa	ints g ai curi ater	((F.M. 1.2) /interstices nd soaking ing at least , electricity EM-II/B-M)	cum	14.43	7,523.00	1,00,000.10
		2	х	1.275	х	0.375	х	0.15	=	0.14	cum			
		2	Х	1.275	х	0.25	Х	0.45	=	0.29	cum			
		1	Х	29.500	х	0.375	Х	0.15	=	1.66	cum			
		1	х	29.500	х	0.25	Х	0.45	=	3.32	cum			
		1	х	20.650	х	0.25	х	0.45	=	2.32	cum			
		2	Х	9.500	Х	0.375	Х	0.15	=	1.07	cum			
		2	х	9.500	х	0.25	х	0.45	=	2.14	cum			
		2	х	7.000	x	0.375	х	0.15	=	0.79	cum			
		2	х	7.000	x	0.25	х	0.45	=	1.58	cum			
	Pillar	12	x	0.25	x	0.25	х	1.5	=	1.13	cum			
								Total	=	14.43	cum			

ltem No	Ref. to LGED Dhaka Division SoR. 2022			[Des	scription					Unit	Quantity	Rate in Tk.	Amount in Tk.
5	5.04.04	Brick work with first class brick Portland Comp quality sand (n joints, true to interstices tight soaking bricks sand, necessar complete as pe	K sio ve ly at y s r d	iln 1st cla n cemen inte cemen imum FN ertical an with mor least for scaffoldin irection c	ass it n ent /1 id tar, g, f th	bricks/a nortar (1 (CEM 1 2) with u horizonta , racking 4 hours curing fo ne E-I-C	auto :4) II/A al ot be r re	omatic r in exte M, 42. orm wi lines, i lines, i it joints fore us equisite	mac rior 5N) dth n/c , cle e, v per	walls with and best and depth filling the eaning and washing of riod, etc. all	cum			
		Ground Floor								cum	30.26	9.197.00	2.78.344.33	
		2	x	1,275	x	0.25	x	1.25	=	cum		-,	_,,	
		1	x	29.500	x	0.25	x	1.25	=	9.22	cum			
		1	x	20.650	x	0.25	x	0.225	=	1.16	cum			
		1	x	9.500	х	0.25	х	2.85	=	6.77	cum			
		2	х	7.000	х	0.25	х	2.85	=	9.98	cum			
		12	х	0.250	x	0.25	х	3.125	=	2.34	cum			
								Total	=	30.26	cum			
		with specified s earth in 150mm other means to complete as pe beyond 200m).	soi Ia be rd	I in/c sup yers with supplied irection c	oply ca d at of th	ying, car arted ear t the con ne E-I-C.	th o tra (C	ng, fillin carried l ctor's or arried f	g b by t wn rom	by throwing ruck or any cost etc. all n a distance				
	5.02.14.1	Outside munici	bal	area.							cum	312.73	760.00	2,37,673.47
		0.5	х	2.850	X	7.3	Х	38.5	=	400.50	cum			
		1	х	20.700	х	4	х	1.06	=	-87.77	cum			
								Total	=	312.73	cum			
7	5.12.05	Minimum 12 m having with fre wall, finishing sand, cleaning water, electrici complete in all Engineer-in-cha 15.4]	Ninimum 12 mm thick cement sand (F.M. 1.2) plaster (1:6) having with fresh cement to both inner and outer surface of wall, finishing the edges and corners including washing of sand, cleaning the surface, curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-II/BM) ground floor.[PWD 15.4]										291.00	48,686.85
		2	Х	1.275			х	1.25	=	3.19	sqm			
		2	х	29.500			х	1.25	=	73.75	sqm			
		1	х	20.650			х	0.225	=	4.65	sqm			
		1	х	9.500			х	2.85	=	27.08	sqm			
		2	х	7.000			Х	2.85	=	39.90	sqm			
		12	х	0.250			х	3.125	=	9.38	sqm			
		12	Х	0.250			Х	3.125	=	9.38	sqm			
								Total	=	167.31	sqm			

ltem No	Ref. to LGED Dhaka Division SoR. 2022			De	es	scription				Unit	Quantity	Rate in Tk.	Amount in Tk.	
8	16.1.1	Exterior standa quality and co resistance prop- from authorized weather coat s weather coat c applying to exte cleaning, drying all chalked and surface defects applying 1 coa prepared surfac specified brand by sand paper/ exterior emulsic machine & nec- elapsing specifie all floors and ac	rd olor ert smor ertc, n ut ze; for ze ce	acrylic e r having ies agains local age pooth/ Elit equivalen or surface naking fre caled mat sing sand of exteric then app r levelling, ro water paint by sary scaff time for c pted by th	en vete For pl sfordre	nulsion pa water resis fungi, fadi t of the r smooth brand) in vith surface from dirt, g rials, fungu paper and sealer of ying 1 coa spot filling, aper; finall preading v Iding etc. ying or rec Engineer-i	int stin mai e p gre us, a f s at cra ly a t upt coa	of aj g pro- & flal nufact repara ase, v meno- cessal pecific of ext applyir n brus o des ting; a charge	ppro pper king ture As atior wax ding ry s ed erio ng 2 sh/re all c e.	oved best rties and delivered r (Berger ian apex container; n including good the caffolding; brand on r putty of and cutting 2 coats of boller/spray I finishing, omplete in	sqm	166.14	274.00	45,522.36
		1	х	1.275		х	(1.25	=	1.59	sqm			
		1	х	29.500		x	(1.25	=	36.88	sqm			
		1	х	20.650		x	(0	.225	=	4.65	sqm			
		1	х	9.500		x		2.85	=	27.08	sqm			
		1	X	7.000		X		2.85	=	19.95	sqm			
		2	X	29.500	-	X		1.20	-	2.75	sqm			
		2	^	0.900	-	~	Γ I	r.25 Fotal	-	166 14	sam			
9	5.02.08.1	Sand filling in f	ou	ndation tr	eı	nches and	ins	side pl	inth	with sand	cum	17.70	1.088.00	19.257.60
		(minimum FM (and consolidati complete as pe compaction sha).5 ng er II r	0) in 150 each lay direction not be less)m iye c s t	nm layers er up to f of the E-l- han 95% c	in/c finis -C. of N	c leve shed Dry IDD (S	ling leve der STD	, watering el etc. all nsity after)				
		1	х	29.5	Х	4 x	(0.15	=	17.70	cum			
10	5.13.02	38mm thick arti Composite cem sand (minimum chips (LAA val screening, mixi compacting and requisite period,	smm trick artificial patent stone floor (1:2:4) with Portland omposite cement (CEM II/AM, 42.5N), best quality coarse and (minimum FM1.8) and 10mm down graded picked brick hips (LAA value not exceeding 38) in/c breaking chips, creening, mixing, laying the concrete in alternate panels, pmpacting and finishing the top with neat cement, curing for equisite period, etc. all complete as per direction of the E-I-C										594.00	70,092.00
		1	х	29.500		x	(4	=	118.00	sqm			
							1	Total	=	118.00	sqm			

ltem No	Ref. to LGED Dhaka Division SoR. 2022			[Descrip	otion					Unit	Quantity	Rate in Tk.	Amount in Tk.
11	6.05.02	Supply of MS w etc. with minir including fabric forging drilling, fitting, fixing, lo etc. all complet the Engineer-In	ply of MS work in plates, angles, channels, flat bars, Tu with minimum yield strength, fy (ReH) = 300 MF iding fabricating, machining, cutting, bending, weldin ng drilling, riveting, embedding anchor bars, staging a g, fixing, local handling etc including energy consumpt all complete as per design, specification and direction Engineer-In-charge $\frac{6 + x + 23.200 + x + 0.15 + x + 0.004 + 655.65}{6 + x + 6.350 + x + 0.15 + x + 0.004 + 0.226}$							bars, Tees 300 MPa, , welding, taging and onsumption direction of	kg	3,566.52	138.46	4,93,820.98
		6	x 23.2)0	x 0.	.15	Х	0.004	=	655.63	kg			
		6	x 6.35	0	х				=	2286.00	kg			
		12	x 1.50	0					н	536.58	kg			
		6	x 0.25	0	x 0.3	375	х	0.02	=	88.31	kg			
								Total	=	3566.52	kg			
12	MR	Painting M.S se	ction								kg	3,566.52	15.00	53,497.87
13	10.21	Supply and in galvanized iron 63-65 kg per b fixed on M.S. screws, limpet accepted by the	nstallatio sheet (undle (2 sections washe Engine	n Bai -6" wi s s	of 0.4 nglade 'width ith 'J' and p n-char	457 r sh ma , 70 – hook outty e ge.	mr ad - 7 or etc	m thick le) havii 72 foot l r woode c. all c	c c ng l long en l com	orrugated min weight g fitted and purlin with plete and	sqm	84.68	578.00	48,945.04
		1	x 23.)	x 3.	.65			=	84.68	sqm			
	/					(= -		Total	=	84.68	sqm			
	5.05.01	RCC:12:4, 17/ concrete works ratio (tentative having minimur satisfied a spec days on standa AASHTO/ ASTI to BDS EN 197- and 20mm dov and maximum respectively) cc Appendix-3 LGI recognized env proper sieves, shuttering fully i sheet fitted ov Standard size reinforcement in mixer machine maintaining allo 75mm to 100n compacting by i	VIPa, B with m 1:2:4) a n require cified co rd cylin M and F 1 :2003 vn well water a onformin ED Sche elop in/c center leak pro ver 38m bo m positio with hop owable s nm (wh mechan	ick nin nd a piler orti CE gracos to dul br n, r per, ner, cal	chip: num cr maxim averag ressive s as p and Cc SM-II 42 ded pi prption) ASTN e of R: eaking fed b plastic vibrato	s (BC ement hum w e stre er sta ompos 2.5N s cked not e V C 3. ates o chips tering v woodd suitab the ac y stan 50mm cizer u or mac	(2): crain (2): cra	Keinfo content ter cem gth, fcr th fc = dard pra- e Ceme nd of mi- rick chip ceeding or Aggr any othe and scre- in posi th plain plank brace gregates ard mea without ine and	rce relation = 2 17 action inim s (38 ega er Ir eeni tion 16 asuu pla uring cur	d cement ttes to mix ratio 0.45 4 Mpa and Mpa at 28 ce of Code conforming num FM 1.8 LAA value and 15% te Grading ng through l, making BWG steel anels and placing of th standard ring boxes, isticizer) & g, casting, ing at				

ltem No	Ref. to LGED Dhaka Division SoR. 2022				Des	scription					Unit	Quantity	Rate in Tk.	Amount in Tk.
		least for 28 day specified time materials and reinforcement a binding etc. Ad Water reducing ASTM C 494 workability and (Doses of adn approved laboi quantity of cem at the contractor and approval of Note : Using Co	schor 20 days, removing centering-struttering after approved acified time period, i/c cost of additional testing charges of terials and cylinders required Excluding the cost of norcement and its fabrication, welding, coupling, placing, ding etc. Additional quantity of cement and Plasticizer i.e. atter reducing chemical admixture of complying type A under TM C 494 to reduce mixing water required for normal rkability and to maintain low water-cement (W/C) ratio oses of admixture to be fixed by the mix design from proved laboratory instruction by the Engineer) Additional antity of cement to be added if required to attain the strength the contractor's own cost) etc. all complete as per direction d approval of the Engineer in charge. te : Using Concrete Mixer.							er approved charges of e cost of ng, placing, isticizer i.e. rpe A under for normal W/C) ratio esign from Additional the strength er direction				
14.1	5.05.01.01	In individual ar slab at plinth le	ndividual and continuous footing of column, raft and floor o at plinth level						ra	ft and floor	cum	5.98	8,673.00	51,875.38
		6	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$							3.28	cum			
		3	Х	10	Х	0.6	Х	0.15	=	2.70	cum			
	/ /							Total	=	5.98	cum			
14.2	5.05.01.03.01	In pedestal, col	um	ın, capita	ıl lif	t wall an	d v	vall			cum	8.09	9,032.00	73,091.46
		6	Х	0.375	х	0.3	х	1.25	=	0.84	cum			
		6	Х	0.25	х	0.25	х	3.13	=	1.17	cum			
		3	Х	10	х	0.15	х	0.9	=	4.05	cum			
		3	Х	10	х	0.45	х	0.15	=	2.03	cum			
								Total	=	8.09	cum			
	5.05.11	FORM WORK strutting, propp both in and out the designed sh minimum 16 BV 5 mm, flat bars	(ing of nap WC	Steel) :C g etc. (T f plane, t be and si G, angles c.) and re	ent he o n ze of emo	tering an formwor hake the by using minimur oval of fo	nd rk i e cc g ne g ne s rm	shutter must be oncrete ecessar ize 40 r for: (PV	ing e riq sur y M mm VD	, including gid enough face true to S sheets of x 40 mm x 07.12)				
	5.05.11.01	In individual ar slab at plinth le	nd vel	continuo	us	footing	of	column	ra	ft and floor	sqm	20.04	582.00	11,663.28
		6	Х	5	Х	0	Х	0.35	=	10.50	sqm			
		3	Х	21.2	Х	0	Х	0.15	=	9.54	sqm			
								Total	=	20.04	sqm			
	5.05.11.04	Pedestal, colun floor	edestal, column, column capital, lift wall and wall up to grou por							p to ground	sqm	93.12	522.00	48,608.64
		6	х	1.35	Х	0	Х	1.25	=	10.13	sqm			
		6	х	1.00	х	0	Х	3.13	=	18.78	sqm			
		3	х	20.30	х	0	Х	0.9	=	54.81	sqm			
		3	х	20.90	х	0	X	0.15	=	9.41	sqm			
								Total	=	93.12	sqm			

ltem No	Ref. to LGED Dhaka Division SoR. 2022			[Desc	ription					Unit	Quantity	Rate in Tk.	Amount in Tk.
15	5.06.01.02	Grade 400 (F produced and minimum yield yield strength s and the ratio of strength (fy) sh after fracture (A force (Agt) is 14	B 40 marke streng hall n testeo all be (5.65) % and	00/ 4 ed as gth, fy not exc d ultim e at le & min d 2.5%	00W per (Re ceed nate east nimu % res	 r): Ribb r): BDS eH) = 4 l fy by a strengt strengt 1.25 a um total spective 	bec IS 00 mc h, nd ely	d or D 3O 6933 MPa, ore than fu (Re) minimu ongatio	efo 5-2: but the to t um n a	rmed bar 2006 with the tested e 125 MPa tested yield elongation t maximum	kg	1,785.68	100.00	1,78,567.88
		2.00%							=	1785.68	kg			
16	5.02.11	Earth filling ins within 90m of consolidating e as per direction shall not be less	the the ach la of the than	linth ir build ayer u he E- 90%	n 150 ling p to I-C of M	0mm la site, v finisheo Dry d DD (ST	yei wat d le en: D)	rs with o tering, evel, eto sity afte	eart leve c. a er c	th available eling and Il complete compaction	cum	42.18	207.00	8,731.07
17	25.26.3	Leveling and grade by spadiu tools and plar Engineer-in-cha	eveling and dressing of lawn area to proper slope and ade by spading the same up to 150 mm including supplying ols and plants etc. all complete and accepted by the ingineer-in-charge.							slope and g supplying ed by the	sqm	193.28	8.00	1,546.26
		1	x 38	3.500	х	7.3			=	281.05	sqm			
		1	x 20).700	х	4	Χ	1.06	=	-87.77	sqm			
								Total	=	193.28	cum			
18	25.26.04	Supply of best including loadin site including s accepted by the	and a g, unl upply Engii	approv loading of too neer-i	ed c g at ols a n-ch	puality a both er nd plar arge.	allu nds nts	avial lo s, prope etc. all	am <u>y</u> rly cor	y silty soil stacking at mplete and	cum	21.08	913.00	19,244.90
		1	x 38	3.500	х	7.3	Х	0.075	=	21.07875	cum			
		1	x 20).700	х	4	Х	0.075	=	-6.21	sqm			
								Total	=	14.87	cum			
19	25.26.06	Labour charge the stacks at s same including complete and a	for sp te on supp ccepte	the la the la ly all ed by	ng th awn nece the I	ne alluvi surface essary Enginee	ial e, l toc er-i	loamy eveling, bls and n-charg	silt dro pla e.	t y soil from essing the nts etc. all	cum	14.87	194.00	2,884.54
		1	x 38	3.500	х	7.3	Х	0.075	=	21.07875	cum			
		1	x 20).700	х	4	х	0.075	=	-6.21	sqm			
								Total	=	14.87	cum			
20	24.3	Creating turf or good quality tur till the grass gr and accepted b	f not I own i y the I	side s less th includi Engine	ilope nan 2 ing a eer-i	es and f 225 mm all leads in-charg	top n so s a ge.	of eml quare c ind lifts	ban hun etc	kment with k, watering c. complete	sqm	193.28	23.00	4,445.49
			x 38	3.500	X	7.3		4.00	=	281.05	sqm			
		1	x 20	0.700	X	4	Х	1.06 Total	=	-81.11	sqm			
								iulai	-	199.20	ဗျ။		Total	20.21.574.15
													10101	

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
ltems #	# 07 # 07	L				
Structi	ures (Gallery)					
1	5.02.01.2	Earthwork in excavation of foundation trenches, including layout, by excavating earth to the lines, grades and elevation as shown in the drawing providing center lines, local bench mark pillars, fixing bamboo spikes and marking layout with chalk powder filling baskets, carrying and disposing of all excavated materials at a safe distance designated by the E-I-C in all types of soils except rocky, gravelly, slushy or organic soil, leveling, ramming, dressing and preparing the base, etc. all complete for an initial excavation depth of 2m and an initial lead not exceeding 20m, including arranging all necessary tools and equipment at work site, etc. complete as per direction of the E-I-C.	cum	101.25	168.00	17,010.00
		30 x 1.5 x 1.5 x 1.5 = 101.25	cum			
2	5.02.11	Earth filling inside plinth in 150mm layers with earth available within 90m of the building site, watering, leveling and consolidating each layer up to finished level, etc. all complete as per direction of the E-I-C Dry density after compaction shall not be less than 90% of MDD (STD).	cum	101.25	207.00	20,958.75
		30 x 1.5 x 1.5 x 1.5 = 101.25	cum			
3	4.06.02	Single layer brick flat soling with 1st class or picked kiln burnt bricks in foundation, filling the interstices tightly with sand of minimum FM 0.50, watering, leveling, dressing, etc. all complete as per instruction of the E-I-C.	sqm	67.50	478.76	32,316.30
4	5.05.01	30 x 1.5 x 1.5 = 67.50 RCC:1:2:4, 17MPa, Brick Chips (BC): Reinforced cement concrete works with minimum cement content relates to mix ratio (tentative 1:2:4) and maximum water cement ratio 0.45 having minimum required average strength, fcr = 24 Mpa and satisfied a specified compressive strength fc = 17 Mpa at 28 days on standard cylinders as per standard practice of Code AASHTO/ ASTM and Portland Composite Cement conforming to BDS EN 197-1 : 2003 CEM-II 42.5N sand of minimum FM 1.8 and 20mm down well graded picked brick chips (LAA value and maximum water absorption not exceeding 38 and 15% respectively) conforming to ASTM C 33 or Aggregate Grading Appendix-3 LGED Schedule of Rates or any other International recognized envelop in/c breaking chips and screening through proper sieves, centering, shuttering in position, making shuttering fully leak proof & shuttering with plain 16 BWG steel sheet fitted over 38mm thick wooden plank panels and Standard size Bamboo Props suitably braced, placing of reinforcement in position, mixing the aggregates with standard mixer machine with hoper, fed by standard measuring boxes, maintaining allowable slump of 50mm (without plasticizer) & 75mm to 100mm (when plasticizer use), pouring, casting,	sqm			

ltem No	Ref. to LGED Dhaka Division SoR. 2022				De	scription					Unit	Quantity	Rate in Tk.	Amount in Tk.
		compacting by for 28 days, r specified time p materials and reinforcement a binding etc. Ad Water reducing ASTM C 494 workability and (Doses of adn approved labor quantity of cem at the contracto and approval of Note : Using Co	me per cy anc diti ch to I to nixt rato ent or's	chanica noving c iod, i/c dinders l its fab ional qu emical a reduce to maint ture to ory instr to be a own co e Engine rete Mix	i vil cos re rica ant ant ain be uct dde st) eer er.	brator m tering-sh st of add quired. ation, we ity of ce nixture c ixing wa fixed b ion by ed if requ etc. all in charg	ach nutt litio Ex eldi eme of co ater ater oy f the uire con le.	ine and ering a nal test cluding ng, cou nt and omplying require -cemen the mix Engine d to atta nplete a	cui fter ing plin Pla g ty ed f t (\ eer) ain t s p	ring at least approved charges of e cost of g, placing, sticizer i.e. pe A under for normal <i>N/</i> C) ratio esign from Additional he strength er direction				
4.1	5.05.01.01	In individual an slab at plinth lev	n individual and continuous footing of column, raft and floor lab at plinth level						rat	cum	27.00	8,673.00	2,34,171.00	
		30	30 x 1.5 x 1.5 x 0.4 = 27.00							cum				
	5.05.01.03	In Tie Beam an	ld I	Lintel :										
4.2	5.05.01.03	Below Plinth Le	vel	and in (Gro	ound Floo	or				cum	51.30	8,817.00	4,52,312.10
		3	х	36.5	х	0.375	Х	0.3	=	12.32	cum			
		20	х	6	Х	0.375	Х	0.3	=	13.50	cum			
		3	X	35.5	X	0.375	X	0.3	=	11.98	cum			
		20	X	б	X	0.375	X	U.3 Total	=	13.50 51.30	cum			
4.3	5.05.01.02	column,Wall						Total	- 	01.00	cum	9.72	9,032.00	87,791.04
		30	Х	0.3	Х	0.3	Х	3.6	=	9.72	cum	== 0.4	0.047.00	0.00.547.55
4.5	5.05.01.03	Floor			T			0.475		10.01	cum	/5.94	8,817.00	6,69,547.55
	root	1	Х	36.5	X	2.6	Х	0.175	=	16.61	cum			
	W/S	1	х	36.5	X	5.80	X	0.175	=	37.43	cum			
	Step	5	X	30.5	X	0.75	X	0.15	=	20.53	cum			
	Step	1	X	30.5	X	0.25	X	0.15	=	1.37	cum			
	5.05.11	FORM WORK strutting, propp both in and out the designed sh minimum 16 BV 5 mm, flat bars	FORM WORK (Steel) :Centering and shuttering, including strutting, propping etc. (The formwork must be rigid enough both in and out of plane, to make the concrete surface true to the designed shape and size by using necessary MS sheets of minimum 16 BWG, angles of minimum size 40 mm x 40 mm x 5 mm, flat bars etc.) and removal of form for: (PWD 07.12)							cum				
	5.05.11.01	n individual and continuous footing of column, raft and flo slab at plinth level							rat	ft and floor	Sqm	72.00	582.00	41,904.00
		30	30 x 6.0 x 0 x 0.4 = 72.00							72.00	Sqm			
	5.05.11.05	In Tie Beam an	n Tie Beam and Lintel :											
		Below Plinth Le	low Plinth Level and in Ground Floor								sqm	444.60	543.00	2,41,417.80
		3	x	36.5	х	0	Х	0.975	=	106.76	sqm			
		20	х	6	х	0	Х	0.975	=	117.00	sqm			

ltem No	Ref. to LGED Dhaka Division SoR. 2022			l	Des	scription					Unit	Quantity	Rate in Tk.	Amount in Tk.
		3	х	35.5	x	0	х	0.975	=	103.84	sqm			
		20	х	6	х	0	х	0.975	=	117.00	sqm			
								Total	=	444.60	sqm			
	5.05.11.04	Pedestal, colun floor	۱n,	column	cap	oital, lift w	/al	l and wa	all u	p to ground	sqm	129.60	522.00	67,651.20
		30	х	1.2	x	0	Х	3.6	=	129.60	sqm			
	5.05.11.07	Floor and roof s	slat	o up to g	rou	nd floor (ĺΡ	WD 07.1	12.7	')	sam	551.28	597.00	3,29,111.77
	roof	1	x	36.85	x	0	x	2.95	=	108.71	sam			
	W/S	1	х	36.85	х	0	х	6.21	=	228.84	sqm			
	Step	5	х	36.85	х	0	х	1.05	=	193.46	sqm			
	Step	1	х	36.85	х	0	х	0.55	=	20.27	sqm			
								Total	=	551.28	sqm			
5	5.06.01.02	Grade 400 (F produced and minimum yield yield strength s and the ratio of strength (fy) sl after fracture (<i>I</i> force (Agt) is 14	RB mastr str ha te hall A5.	400/ 4 arked as rength, fy II not ex sted ultir be at I 65) & mi and 2.50	00 p (F cee nat eas nin % r	W): Ribl ber BDS ReH) = 4 ed fy by te strengt st 1.25 a num total respective	be 100 100 100 100 100 100 100	d or E SO 693 D MPa, ore thar fu (Re) d minim longatic	Defo 5-2: but to the to t um	rmed bar :2006 with the tested e 125 MPa tested yield elongation t maximum	kg	32,176.81	100.00	32,17,680.66
									=	32176.81	kq			
6	5.04.01	Brick works wit mortar (1:6) in ' fully with morta the bricks at le for 7 days etc. and other char (Cement: CEM-	h f fou ast all ge	irst class ndation a racking o for 24 h complet s and ao 3-M) (PV	br br but bout iou ice i cce /D	icks with d plinth, fi the joint rs before ncluding pted by 04.1)	i C illin is, co th	ement s ng the jo cleanin ise and ost of w e Engir	and bints g a cur ater neer	d (F.M. 1.2) s/interstices nd soaking ing at least r, electricity r-in-charge.	cum	41.37	7,529.00	3,11,441.79
	Up to GL	8	Х	3.350	х	0.375	Х	0.375	=	3.77	cum			
		8	х	3.350	x	0.25	х	0.25	=	1.68	cum			
	GL to Roof	8	х	3.350	х	0.25	х	3	=	20.10	cum			
	Incliend wall	2	х	8.300	x	0.375	х	0.375	=	2.33	cum			
		2	х	8.300	X	0.25	Х	0.25	=	1.04	cum			
		2	Х	8.300	X	0.25	Х	3	=	12.45	cum			
7	5.02.08.1	Sand filling in (minimum FM and consolidat complete as p compaction sha	fou 0.5 ing er all r	indation 50) in 15 J each I directio not be les	tre i0m aye n c ss t	nches an nm layers er up to of the E than 95%	nd s i 	inside p in/c leve inished C. Dry f MDD (= olintl eling lev de STI	41.37 h with sand g, watering rel etc. all ensity after D)	cum	26.95	1,088.00	29,326.22
		1	х	43.3	x	8.3	х	0.075	=	26.95	cum			
								Total	=	26.95	cum			
8	4.06.02	Single layer b burnt bricks in t of minimum F complete as pe	ric iou M r in	k flat so ndation, 0.50, wa istruction	fillin fillin ate	ng with 7 ng the int ring, leve the E-I-C	1s ter eli C.	t class stices ti ng, dre	or ghtl ssin	picked kiln ly with sand ng, etc. all	sqm	359.39	478.76	1,72,061.56
			X	43.3	×	0.3			1 -	209.39	sqm			

ltem No	Ref. to LGED Dhaka Division SoR. 2022			Des	scription					Unit	Quantity	Rate in Tk.	Amount in Tk.
9	4.06.04	PCC-17: Plain minimum comp (suggested mix standard cylinde ASTM/ and cem II/A-L/M/V/W 42. well graded 1s exceeding 40) o bricks into chi machine, castir requisite period Additional quant the strength at th	cement proportion er as per leent confo 5N, sand t class/ p conforminin ps, shutt ng, laying etc. all co ity of cen ne contract	con stre stan rmir of n picko g to erin g to erin g to compl nent	crete wo ngth of 2:4 & max dard prac- ng to BDS ninimum I ed brick ASTM C g, mixing pmpacting lete as pe to be ad s own cos	ork 1 cti FN cti FN cl S FN cl S FN cl S FN cl S FN cl S FN cl S FN cl S FN cl S FN cl S FN cl	in fou 7MPa num w/c ce of C EN 197- <i>I</i> 1.8 an hips (L 33 inclu by co and cu directio ed if rec	inda at rat ode 1 : d 2 AA dine nore urine nore	ation with 28 days io 0.45) on AASHTO/ 2003 CEM- 0mm down value not g breaking ete mixer g for the f the E-I-C. ed to attain	cum	26.95	10,063.81	2,71,262.45
		1	x 43.3	х	8.3	х	0.075	=	26.95	cum			
							Total	=	26.95	cum			
10	5.13.02	38mm thick arti Composite cem sand (minimum chips (LAA val screening, mixii compacting and requisite period,	Binm thick artificial patent stone floor (1:2:4) with Portland omposite cement (CEM II/AM, 42.5N), best quality coarse and (minimum FM1.8) and 10mm down graded picked brick hips (LAA value not exceeding 38) in/c breaking chips, creening, mixing, laying the concrete in alternate panels, ompacting and finishing the top with neat cement, curing for quisite period, etc. all complete as per direction of the E-I-C.						h Portland lity coarse icked brick ing chips, te panels, , curing for the E-I-C.	sqm	718.78	594.00	4,26,955.32
		1	x 43.3	x	8.3			=	359.39	sqm			
		1	x 43.3	x	8.3	_		=	359.39	sqm			
							Total	=	718.78	sqm			
11	5.12.05	Minimum 12 mr having with fres wall, finishing tl sand, cleaning t water, electricit complete in all Engineer-in-char 15.4]	m thick co the cement the edges the surfac y, scaffo respect a rge. (Cem	eme t to an e, c Idino s po nent	nt sand both inne d corners uring at l g and o er drawin : CEM-II/I	(F er ea th g BN	.M. 1.2 and ou includin ast for 7 er chai and ac M) grou) pla ter g v da rges cep nd	aster (1:6) surface of vashing of iys, cost of s etc. all ted by the floor.[PWD	sqm	160.80	291.00	46,792.80
	GL to Roof	8	x 3.350	х	2	х	3	=	160.80	cum			
							Total	=	160.80	sqm			
12		Electrical Work	s	1									
	PLAR	Internal Electrific 7): 94.90 sqm @	ternal Electrification (From additional cost chart, item- : 94.90 sqm @ Tk. 830.00 per sqm						em-	sqm	94.90	830.00	78,767.00
												Total	67,48,479.31
ltems ‡	ŧ 08		actina										
	Kain water Ha	rvesting	esting									0 00 000 00	0.00.000.00
1	PLAR-Annex- A 9	Submersible pur	mersible pump with tube well							LS	1.00	3,00,000.00	3,00,000.00
	MR	Pipe line								Ls	1.00	75,000.00	75,000.00
												Total	3,75,000.00

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
ltems #	# 09 Water supply	system				
1	PLAR-Annex- A 9	Underground Water Reservoir :	gal	5,000.00	106.00	5,30,000.00
2	MR	Laying pipe for water received	Ls	1.00	25,000.00	25,000.00
					Total	5,55,000
Items #	⊧ 10 Drainage syst	em				
1	MR	Drainage system	sqm	1,750.00	250.00	4,37,500.00
			1		Total	4,37,500
ltems ‡	i 11 Solar System					
1		OFF- GRID SOLAR PANEL SYSTEM : S upplying, installation, testing & commissioning of following capacity solar system (off grid) for 2 Hrs backup with required quantities of mono / poly crystalline silicon solar PV modules, Solar suited Deep Cycle Lead Acid battery (12V), with required size maximum power point tracking (MPPT)/PWM charge-controller & inverter as per relevant international standards & certification such as IEC / CE / UL as per following specification to produce AC- 220V, 50Hz pure sine wave for suitable use of all standard AC appliances with battery racks /cabinet, solar PV mounting structure, combiner box, fuse box, meter etc. system includes compatible solar cables, equipotential bonded and earthed with the building earth electrode which is conventional and / or chemical electrode system and all accessories as required to complete the installation with one year free operation & maintenance of the system which shall have the following features:S OLAR PV MODULES/PANEL:I . Parameters for PV Panel should be at Standard Test Condition of solar irradiance of 1000 W/m2, Cell Temperature of 25 degree Celsius and AM of 1.5g.I I. II. Solar PV module / panel shall be inconformity with the requirement of BDS IEC 61215, IEC 61730 (latest edition) along with VDE/NEMA/JIS/BS standards. Certificate issued by the internationally recognized	KWp	7.2	1,76,910.00	12,73,752.00

lterr No	Ref. to LGED Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
		authority such as CE / TUV /DNV or equivalent certifying body shall have to be submitted by the bidder for the above mentioned international standard. Manufacturing facility should be ISO9001, ISO14001 quality management system certified.I II. III. Solar panels shall be installed pointing to the right direction to capture most of the solar energy to transform it into electricity with the facility to be adjusted from the horizontal to 12 degree in summer and to 35 degree in winter to get the maximum efficiency and must face the true south in our country. For fixed panel mounting system, the panels must be tilted (22.5 \pm 1) degree with horizontal and must face the true south in BANGLADESH.I V. The average efficiency of PV module should be minimum 17%.V. The complete PV module shall be diode protected at junction box to protect reverse current.				
		V I. Operating temperature range should be - 40 to 85 Degree Celsius. V II. Power de-rating allowed should be not more than (-0.41%)/Degree CelsiusV III. Panels should be constructed with anti-reflective glass, anti Potential Induced Degradation(PID), IEC 617011 X. Modules fitted with anodized aluminum frames or, if without frame, two-glass modules.X . Resistance to a maximum pressure load of 5400 Pa and vacuum of 2400 Pa (according to BDS IEC 61215)X I. Each module will be provided with a clearly visible identifier bearing the name, the model of the module and a visual identification or a serial number which allows the traceability of the date of manufacture in accordance with standard NF EN 50380 XII. Each combiner box of PV module shall be diode protected to ensure any back flow current to the PV array and may have fuse of adequate ratings in DC positive line of the PV array and wire terminals. The main combiner box shall have lightning surge protective device of as per nominal voltage of the combiner box both in positive and negative line in order to ensure the bypass diode always function even in thunder storm. The fuse, if exists, shall also have disconnection switch .The box shall be completely water proof according to IP 68. X III. Product warranty against manufacturing defects : minimum 12				
		years and their replacement during this period. XIV. Performance warranty: linear degradation, minimum 98% at 1 year, then linear with minimum 90% at 10 years, and 80% at 25 yearsS olar panel from Sunpro/Vikram/Saronic/Suntech /ULICA/Canadian Solar/JA Solar/Trina Solar/Longi or equivalent. CHARGE CONTROLLER:M PPT / PWM (Pulse Wave Modulator) solar charge controller shall be protected from: I)Overcharge protection (adjustable) II)Over discharge protection (for DC load and less than 200 Wp system)				

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
		III)Battery reverse current protection IV)Overloading protection V)Temperature compensated chargingV I)Short circuit protection V II)Reverse polarity connection protectionV III)Lightning induced surge current protectionP ower consumption should be less than 20 mw. T he controller should be microprocessor controlled with wide input range, cooling fan temperature compensation (-3 to 7mV /cell / Celsius), more than one-step charging to provide quick and safe charging for battery, 7 modes timer control (on / off DC load) selectable, automatic etc. as required.I X .Power conversion efficiency: 90% INVERTER: The Inverter is specially designed for DC to AC power which provides pure sine wave. Supplier is allowed to use Off Grid Inverter for designing the system keeping in mind that, utility grid cannot be used for battery charging, they may use battery bank for reference input. T he inverter(s) shall comply with the following requirements: I. Adopt power frequency transformed, pure sine wave output, adapt to different load. II. Excellent protection design against output short circuit, working reliably.I II. High inverting efficiency, energy saving and environmental protection. IV. LCD +LED display show the working status clearly.V . Design, manufacturing, performance, testing, safety, quality and environmental management shall be in accordance to the BDS				
		IEC 62109/BS/VDE or equivalent international standards.V I. Should conform to ISO 9001, 14001 & 45001 standard. V II. The Inverter manufacturer shall have at least 05 (five) years of experience, nominal input voltage: 24/48V DC, output : 220V AC, output waveform : pure / modified sine wave, self consumption : less than 1 (one) watt, Efficiency : 97% or higher at operating load range from 10% to 100% rated load, Energy source : Priority to solar then battery. VIII. The Inverter shall be protected from lightning induced current by surge protective device of adequate rating both in DC and AC side in parallel at the entry and exit terminal of the inverter. The inverter shall also be protected for overload and over current protection from both DC and AC side. I X. Frequency ranges: 50-60 Hz, Relative humidity: 0- 95%, non- condensing, Operating temperature range: 0- 55°C, Cooling method: Natural Convention, Topology -Transformerless , Noise - <30dB , Protection – IP65.X. Brand: Solar Inverter from SAJ/Solis/Huawei or equivalent BATTERY: Solar suited Deep Cycle Lead Acid battery(12V)C ompliance : ISO9001 & ROHS (Restriction of Hazardous Substances) certified company. ENERGY METER:S upplying and installation of energy meters with following features: I.Single phase / three phase (as per requirement) II. Energy meter to be provided to record the				

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
		amount of solar e nergy provided from the solar system. G ENERAL GUIDELINE/CRITERIA:1 . The bidder shall examine the site before the design of solar system & its componentsI I. The bidder shall have facilities and proper tools and machineries for installing, testing & commissioning of solar panel. I II. Adequate space & height shall be provided in the rows of panels for easy air flow to avoid excessive heat generation in the panel and to provide access for rain water drainage and damage to protect from dirty water. Minimum air gap between two panels shall be 25 mm. IV.All frames of the PV module, combiner box, inverter etc. shall be equipotential bonded and earthed with the building earth electrode which is conventional and /or chemical electrode system with soil conductivity enhancing material that the earth resistance must be less than 1 Ohm as per related standard and code of practice. V. The solar panel mounting shall be of galvanized iron or equivalent to ensure rust protection of the installation. All nut bolts shall be of stainless steel (SS) or galvanized mild steel (MS) materials. VI. After successful completion, testing & commissioning of the whole system the contractor shall have to train nominated person(s) of the user for a period of at least 2 days.V II. After completion of whole system and before handing over the system to the concerned authority, the contractor must have to provide minimum 30 days' satisfactory operation for performance evaluation. VIII. Technical specification with catalogue of PV module, inverter must be submitted with technical offer.I X. Only approved cable shall be used for wiring.X . Sufficient AC and DC circuit breakers shall be used to ensure proper safety of the system.[PWD-12.1]				
					Total	12,73,752.00

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
ltems #	12					
Sewag	e disposal sys	em				
1	7.75	Construction of non electric Eco STP of different sizes (as per detail drawing attached in annexure) with 250 mm walls of brick work in cement mortar (1:4) having a brick flat soling and 125 mm thick reinforced cement concrete flooring (1:2:4) with 125 mm thick walls (1:4) in partition and flush pointing (1:2) or inside wall surface and 12 mm thick cement plaster (1:4) with N.C.F. on floor and slab surface including supplying, fitting and fixing of upvc pipes & Tees and providing 450 mm dia water sealed heavy type C.I. manhole cover with locking/unlocking arrangement and 100 mm thick R.C.C (1:2:4) top slab, including centering, shuttering, fabricating, casting and curing etc. complete up to required depth including necessary earth work in excavation and shoring, bailing out water and side filling, dressing, inside cleaning, cow dung or old septic tank liquied for charging/start up including the cost of all materials, operations and incidental charges. etc. all complete as per type plan approved and accepted by the Engineer-in-charge (Rate is including cost of reinforcement and its fabrication, binding and placing).				
1.1	7.75.2	300 users (PWD BW 26.75.2)	each	1.00	4,66,520.00	4,66,520.00
		1 = 1.00	each		.	4 00 500 00
					lotal	4,66,520.00
Items # Extern	al Electrical					
1	MR	External electrical and lighting works	sqm	2,250.00	350.00	7,87,500.00
		1 x 2250 x = 2250.00	sqm			
					Total	7,87,500.00

Feasibility/Reviewing Study on Community Space and Recreation Facilities at Village Level under Technical Assistance Project for "My Village-My Town" for Local Government Engineering Department (LGED)

ABSTRACT OF COST SUMMARY

For

UNMUKTO KENDRO

Item No	Description	Amount in Taka	Remarks
1	Shed-6 nos	11,39,049.00	
2	Mountain	1,84,801.47	
3	Sitting-7 nos	20,475.00	
4	Tree plantation	5,000.00	
5	Electrical works	5,00,000.00	
	Grand Total =	18,49,325.47	

Feasibility/Reviewing Study on Community Space and Recreation Facilities at Village Level under Technical Assistance Project for "My Village-My Town" for Local Government Engineering Department (LGED)

COST ESTIMATION FOR UNMUKTO KENDRO

Items # 01

Shed-6 Nos

ltem No	Ref. to LGED Dhaka Division SoR. 2019			D	escr	iption				Unit	Quantity	Rate in Tk.	Amount in Tk.
1	3.11.17	BP(Ø75mm minimum 7 vertically in complete in and direction (Total length towards pay): Supp 5mm c the grou all res n of the n embe ment)	lying of s lia (at all und upto r pect as p Engineer dded and	straiq equi per a -in-c l abo	ght & stro ctions) a red depth approved harge. Th ove groun	ong ba nd driv by any drawin ne rate nd shall	mbo ing g, s s foi be	o posts of the same ans, all pecificatior single pin considered	f m I	396.00	90.00	35,640.00
	Shed	72	х	4				=	288.00	m			
	Ramp	72	х	1.5				=	108.00	m			
							Tota	ıl =	396.00	m			
2	Basic rate, SL 293 in/c, Labour, VAT, TAX, Profit	50mm dia b charges	orak b	ambo as	tie b	eam and	roofing	i tie	in/c labou	r m	6,283.20	55.00	3,45,576.00
	Beam	36	х	3.35	x			=	120.60	meter			
	Beam	12	x	18	x			=	216.00	meter			
	Roof	36	x	5				=	180.00	m			
	Floor	1440	х	3.35				=	4824.00	m			
	Ramp	228	х	1.5				=	342.00	m			
	Ramp	546	х	1.1				=	600.60	m			
							Tota	ıl =	6283.20	m			
3	Basic rate, SL 294 in/c, Labour, VAT, TAX, Profit	75mm dia b	orak ba	mbo as tie	e bea	am for floo	or in/c la	ibou	r charges	m	336.60	55.00	18,513.00
	Short Beam	36	x	3.35	Х			=	120.60	meter			
	Long Beam	18	x	12				=	216.00	m	528.00	65.00	34,320.00
						I	Tota	ıl =	336.60	m			
4	MR	Bambo mats hard ware e of Engineer	s roofin tc com in Char	g work wi plete in al ge	th ne I res	ecessary l pect as p	bambo er desi	split gn ai	s and rope nd direction	, sqm n	528.00	1,250.00	6,60,000.00
		6	х	88	х			=	528.00	sqm			
							Tota	ıl =	528.00	sqm			
5	MR	Supplying h	ard war	е						Each	6.00	7,500.00	45,000.00
	I	1								1	1	Total	11,39,049.00

ltem No	Ref. to LGED Dhaka Division SoR. 2019		De	escription					Unit	Quantity	Rate in Tk.	Amount in Tk.
Items # Mounta	‡ 02 ain											
1	5.02.14	Site developme sand,sandy silt hazardous subs means including all; including loc the designated a and dressing in direction and acc	ent/Improveme (free from ar stances) carrie cost of cutting cal carrying, p area, maintaini layers up to fin cepted by the	ent by car ny organic, ed by head g or by drei lacing the ing slopes, nished leve engineer in	ted e foreid d or ti dging earth/s breaki l etc. a charg	arth o gn, en ruck o of san sand, s ing lum all com ge.	or ivir or a d, s sar nps	dredged conmental any other sandy silt, ndy silt in s, levelling ete as per				
1.1	5.02.14.1	By other method	l/means than o	dredgeing.	[PWD	02.16.	.1		cum	166.18	760.00	1,26,293.00
		1	x 144.5	x 1.15			=	166.18	cum			
		ļ		1 1	T	otal	=	166.18	cum			
2	5.02.15	Mechanical com preapproved sp including levellir chain dozer, gra 95% with optimu finished level all complete and submission of th	paction of ea ecific engined ng, watering a ider, roller etc. um moisture c accepted by e method state	rth beyond ering purpe and consol . to achieve content (mo the enginee ement. [PW	plinth ose in lidation e minir dified er-in-c /D 02.	area, 150 n each num d procto harge 17]	re mi h la ry or to sul	quired for m layers ayer with density of est) up to bjected to	cum	166.18	222.00	36,890.85
		1 1	x 144.5	x 1.15			=	166.18	cum			
					Т	otal	=	166.18	cum			
3	2.05.1	Leveling and dre maintenance wo maintaining prop all complete as p	essing the emb ork by earth c per slope and per direction o	bankment c utting and camber in f the E-I-C.	rown, filling Icludin	road f as neo g com	lan ces ipa	nks, etc. in ssary with action etc.	cum	262.00	15.51	4,063.62
		1	x 262	x 1	<u> </u> Т	otal	=	262.00 262.00	cum cum			
4	5.26.08	Supply of lawn g means, sorting dibbling the grass the grass grown the undesirable to two months at surface @ 1 kg etc. all complete 25.8]	grass of appro the grass to ss 6 mm to 50 at least for tw grass, mowing fter plantation, per 9.29 sqm e and accepte	ved quality proper siz mm apart, vo months g the lawn , applying u including s ed by the E	by tru ze, wa after p grass urea fe upply ingine	ick or l ashing ion of l lantati by law ertilizer of tool er-in-c	by th law ion vn i or s a hai	any other ne grass, vn area till , weeding mower up n the lawn and plants rge.[PWD	sqm	262.00	67.00	17,554.00
		1	x 262		х	1	=	262.00	sqm			
											Total	1,84,801.47

Item No	Ref. to LGED Dhaka Division SoR. 2019			D	escrij	otion					Unit	Quantity	Rate in Tk.	Amount in Tk.
Sittina	-7 Nos													
1	3.11.17	BP(Ø75mm) minimum 75 vertically in th complete in and direction (Total length towards payr	: Supp form of he gro all res of the embe ment)	Diving of s dia (at all und upto n spect as p e Engineer edded and	straig sec equiro er aj -in-ch abov	ht & str tions) a ed depth oproved narge. Th ve grour	ron Ind di di he nd	g baml driving y any m rawing, rate is shall b	poo g t lear sp for e c	posts of he same ns, all ecification single pin. onsidered	m	63.00	90.00	5,670.00
	Post	42	x	1.5					=	63.00	m			
					_ 1 _ 1			Total	=	63.00	m			
2	Basic rate, SL 293 in/c, Labour, VAT, TAX, Profit	50mm dia bo charges	orak b	ambo as i	tie be	eam and	Iro	oofing t	ie i	n/c labour	m	231.00	55.00	12,705.00
	cross Tio	21	v	0.5					_	10 50	motor			
	Seat	70	^ 	3 15	×				=	220.50	meter			
	0001	10	^	0.10				Total	=	231.00	m			
3	MR	Supplying ha	ird wai	re							Each	7.00	300.00	2,100.00
													Total	20,475.00
Items ‡	# 04													
Tree p	lantation													
1	MR	Supplying an height, free f & carrying th minimum 10 100mm x 10 cum cow du properly; plan bamboo splii ground up including sup the E-I-C.	id plan rom ar days 00mm ing ar nting tl t/stick, to 0.5 oplying	ting Banya ny disease ne to the of planta x1000mn nd 0.15 kg ne plants, i sharpene 0m depth g of tools of	an Tre s, col work tion I n size tighte d at c , wa etc. a	ee of mi llected fr site; pre by earth e for pla one dby j one end tering fr ill compl	nir pa wc nta w ute an or lete	num 2.(n appro iration (ork in e ation, ap ith exc e rope v nd plac minimu e as pe	Om ved of p exca oply ava vith ing um er d	I nurseries bit prior to avation of ring 0.015 ted earth 2.0m long it into the 07 days irection of	each	1.00	5,000.00	5,000.00
		1							=	1.00	each			
								Total	=	1.00	each			E 000 00
Items	¥ 05												Iotal	5,000.00
Extern	al Electrical													
1	MR	External elec	trical a	and lighting	g wor	ks					LS	1.00	5,00,000.00	5,00,000.00
						ļ	_					•	Total	5,00,000.00

Feasibility/Reviewing Study on Community Space and Recreation Facilities at Village Level under Technical Assistance Project for "My Village-My Town" for Local Government Engineering Department (LGED)

ABSTRACT OF COST SUMMARY

For

GONO KENDRO

Item No	Description	Amount in Taka	Remarks
1	Boundary Wall	10,20,246.59	
2	Structures (Building)	1,64,83,759.61	
3	Plaza	68,84,118.78	
4	Pond Excavation	16,17,194.20	
5	Ghat Construction	78,11,312.39	
6	Water Body	47,583.00	
7	Multipurpose Hall	77,64,330.89	
8	Landscaping	1,48,501.17	
9	Rain Water Harvesting	5,50,000.00	
10	Water Supply System	13,60,000.00	
11	Drainage Sorks	1,55,275.20	
12	Sewage Disposal System	4,66,520.00	
13	External Electrical Works	16,51,125.00	
		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	Grand Tota	= 4,59,59,966.83	

Feasibility/Reviewing Study on Community Space and Recreation Facilities at Village Level under Technical Assistance Project for "My Village-My Town" for Local Government Engineering Department (LGED)

COST ESTIMATION FOR GONO KENDRO

Items # 01

Boundary wall

	Ref. to LGED					
Item	Dhaka Division SoR	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
NO	2022					
1	5.02.01.2	Earthwork in excavation of foundation trenches, including layout, by excavating earth to the lines, grades and elevation as shown in the drawing providing center lines, local bench mark pillars, fixing bamboo spikes and marking layout with chalk powder filling baskets, carrying and disposing of all excavated materials at a safe distance designated by the E-I-C in all types of soils except rocky, gravelly, slushy or organic soil, leveling, ramming, dressing and preparing the base, etc. all complete for an initial excavation depth of 2m and an initial lead not exceeding 20m, including arranging all necessary tools and equipment at work site, etc. complete as per direction of the E-I-C.	cum	38.00	168.00	6,384.00
		1 x 38 x 1 x 1 = 38.00	cum			
2	4.06.02	Single layer brick flat soling with 1st class or picked kiln burnt bricks in foundation, filling the interstices tightly with sand of minimum FM 0.50, watering, leveling, dressing, etc. all complete as per instruction of the E-I-C.	sqm	38.00	478.76	18,192.88
		1 x 38 x 1 = 38.00	sqm			
3	5.05.01	RCC:1:2:4, 17MPa, Brick Chips (BC): Reinforced cement concrete works with minimum cement content relates to mix ratio (tentative 1:2:4) and maximum water cement ratio 0.45 having minimum required average strength, fcr = 24 Mpa and satisfied a specified compressive strength fc = 17 Mpa at 28 days on standard cylinders as per standard practice of Code AASHTO/ ASTM and Portland Composite Cement conforming to BDS EN 197- 1 :2003 CEM-II 42.5N sand of minimum FM 1.8 and 20mm down well graded picked brick chips (LAA value and maximum water absorption not exceeding 38 and 15% respectively) conforming to ASTM C 33 or Aggregate Grading Appendix-3 LGED Schedule of Rates or any other International recognized envelop in/c breaking chips and screening through proper sieves, centering, shuttering in position, making shuttering fully leak proof & shuttering with plain 16 BWG steel sheet fitted over 38mm thick wooden plank panels and Standard size Bamboo Props suitably braced, placing of reinforcement in position, mixing the aggregates with standard mixer machine with hoper, fed by standard measuring boxes, maintaining allowable slump of 50mm (without plasticizer) & 75mm to 100mm (when plasticizer use), pouring, casting, compacting by mechanical vibrator machine and curing at least for 28 days, removing centering-shuttering after				

ltem No	Ref. to LGED Dhaka Division SoR. 2022			D	esc	ription					Unit	Quantity	Rate in Tk.	Amount in Tk.
		approved speci charges of mate reinforcement a binding etc. Add reducing chemic 494 to reduce n maintain low wa fixed by the mix Engineer) Additi attain the streng per direction and Note : Using Con	fiec rial and itio cal nixii des ona th a f ap nor	d time per ls and cylir its fabric nal quantity admixture ng water re -cement (V sign from a al quantity at the contr oproval of th ete Mixer.	rioc nde cation of of wppi of of cact he	I, i/c cc rs requir on, weld c cement complyin ired for) ratio (I roved lat cement t or's own Engineer	ost red ding an ng f nor Dos to t to t r in	of addit Excludii g, coupl d Plastic type A ur mal worl ses of ac atory inst be added sst) etc. a charge.	al testing the cost of placing, r i.e. Water r ASTM C ility and to cture to be tion by the required to complete as					
3.1	5.05.01.01	In individual and plinth level	со	ontinuous fo	oti	ng of col	um	ın, raft ar	oor slab at	cum	11.40	8,673.00	98,872.20	
		1	x	38	х	1	х	0.3	=	11.40	cum			
3.2	5.05.11	FORM WORK (S propping etc. (T of plane, to mak and size by usi angles of minimu removal of form	Ste he e ti ing um for:	el) :Centeri formwork r he concrete necessary size 40 mr : (PWD 07.	ing nus / N n x 12)	and shu st be rigi urface tr IS sheet 40 mm s	ttei ue ts o x 5	ring, inclu enough be to the de of minime mm, flat						
	5.05.11.01	In individual and plinth level	со	ntinuous fo	oti	ng of col	um	ın, raft ar	oor slab at	sqm	22.80	582.00	13,269.60	
		2	x	38	х			0.3	=	22.80	sqm			
4	5.06.01.02	Grade 400 (RB and marked as strength, fy (Ref- exceed fy by n ultimate strength least 1.25 and minimum total el respectively.	4(pe 1) = nor n, f m on	00/ 400W): er BDS IS(= 400 MPa, e than the tu (Re) to t ninimum el gation at m	Ri D (bu test long axi	bbed or 6935-2:2 t the test 25 MPa ted yield gation a mum for	De 1000 ar st st fte	eformed 6 with m yield strend the ra rength (f r fracture (Agt) is 1	produced num yield th shall not of tested shall be at A5.65) & and 2.5%	kg	1,342.35	100.00	1,34,235.00	
		1.50%							=	1342.35	kg			
5	5.04.01	Brick works with mortar (1:6) in f fully with mortar bricks at least fo etc. all complet charges and ac II/B-M) (PWD 04	h fi fou ; ra r 24 re i cep 1)	irst class t ndation an acking out 4 hours bef including c bted by the	the ore cosi	ks with blinth, fill joints, c use and use and t of wat ngineer-i	ce ling clea d cu ær, n-c	ment san the join aning an uring at le electrici harge. (((F.M. 1.2) interstices baking the for 7 days and other nent: CEM-	cum	64.17	7,529.00	4,83,122.94	
	Up to GL	1	x	38.000	Х	0.375	Х	0.8	=	11.40	cum			
	SS	1	x	48.000	Х	0.375	Х	5.25	=	94.50	cum			
	Ded													
			X	20.6	X	0.375	X	4.06	=	-31.36	cum			
		3 6	X	1.07	X	0.3/5	X	4.06	=	-4.89	cum			
		U .	^	0.0	×	0.070	^	Total	=	- <u>3.40</u> 64,17	cum			
	1						1							

ltem No	Ref. to LGED Dhaka Division SoR.			D	es	cription					Unit	Quantity	Rate in Tk.	Amount in Tk.
6	5.02.11	Earth filling in within 90m of th each layer up to the E-I-C Dry of MDD (STD).	sio ne o f de	de plinth in building site inished leve nsity after co	15 e, w l, e om	50mm lay vatering, etc. all co paction s	yer lev mp sha	rs with e reling and blete as p Ill not be	arth 1 co ber o less	available nsolidating direction of than 90%	cum	7.60	207.00	1,573.20
		0.2	х	38	x	1	х	1	=	7.60	cum			
7	5.05.01.03	In Tie Beam an	d	Lintel :		1								
7.1	5.05.01.03	Below Plinth Le	ve	I and in Gro	uno	d Floor					cum	2.63	8,817.00	23,144.63
		1	х	21	Х	0.5	x	0.25	=	2.63	cum			
	5.05.11	FORM WORK (propping etc. (1 of plane, to mal and size by us angles of minim removal of form	St he sin fo	eel) :Center e formwork the concret g necessar n size 40 mi r: (PWD 07.	ing mu es y N m x .12	and shu st be rigi surface tr AS sheet 40 mm	itte id e rue ts x 5	ring, inclu enough b to the de of minim 5 mm, flat	udin ooth esig um : bar	g strutting, in and out ned shape 16 BWG, s etc.) and				
	5.05.11.05	In Tie Beam an	d	Lintel :							sqm	10.50	543.00	5,701.50
		2	х	21	x			0.25	=	10.50	sqm			
ŏ	5.12.05	with fresh ceme the edges and surface, curing scaffolding and drawing and ac II/BM) ground fl	n ent c c e c e c e	thick certen to both inn- prners inclu at least for her charges epted by the r. [PWD 15.	er a din 7 a et e E 4]	and (F.M and oute g washii days, c c. all com ngineer-i	rs ng ost nple in-e	.2) plaste urface of of sand, t of wate ete in all charge. (1:0) naving II, finishing eaning the electricity, pect as per nent: CEM-	sqm	410.72	291.00	1, 19,5 18. 18	
		2	х	48.000	x	5.25			=	504.00	sqm			
		1	х	48.000	Х	0.375			=	18.00	sqm			
	Ded	1	х	20.6	Х	4.06			=	-83.64	sqm			
	Ded	3	Х	1.07	X	4.06			=	-13.03	sqm			
	Ded	6	Х	0.6	X	4.06		Tatal	=	-14.62	sqm			
9	5.16.03.2	Interior premiun best quality and manufacturer in ceiling with sur free from dirt, materials, fungi paper and nei sealer of spec necessary inter crack filling an applying 2 cc brush/roller/spra finishing, elaps complete in all [PWD 16.2.2]	I c fac gr ifie ior bat sing file	acrylic emuls olour deliver a sealed co ce preparati rease, wax, mending g ssary scaff ed brand o putty of sp cutting by s s of interi & necess g specified loors and a	sion red nta on joo old eci san ior ary tin acc	h painting from auti iner; app including emoving d the su ing; app prepared fied bran d paper/ emulsio c scaffol me for d epted by	g (stopy) g cliping cl	I total silky finisi vrized loc ng to int leaning c l chalked ce defec ng neces urface; t or levellin ro water paint s ig etc. in ving or i he Engin	410.72 f approved gent of the r wall and ag, making nd scaled sing sand y interior applying spot filling, ber; finally ading by o desired bating; all -in-charge	sqm sqm	410.72	283.00	1,16,232.46	
		2	Х	48.000	X	5.25	1	1	=	504.00	sqm			

ltem No	Ref. to LGED Dhaka Division SoR. 2022			D	esc	ription					Unit	Quantity	Rate in Tk.	Amount in Tk.
		1	X	48.000	х	0.375			=	18.00	sqm			
	Ded	1	x	20.6	х	4.06			=	-83.64	sqm			
	Ded	3	x	1.07	х	4.06			=	-13.03	sqm			
	Ded	6	x	0.6	Х	4.06			=	-14.62	sqm			
								Total	=	410.72	sqm			
												Sub Total	Tk	10,20,246.59
Items ‡	# 02 ures (Building)												
4		/										075 70	400.00	40.000.00
1	5.02.01.2	Earthwork in by excavating p bamboo spike baskets, carry distance desig gravelly, slush preparing the of 2m and an necessary too direction of the	ear rovi es ing gnat bas initia e E-	th to the line ding center and markin and disposir ed by the E- or organic s e, etc. all co al lead not e ind equipme I-C.	line g l ng c l-C oil, mp xce nt a	adation ti grades a s, local l ayout w of all exca in all typ leveling, lete for a eding 20 at work s	ren Ind ber ith ava ra n i m, site	cnes, inc elevatior inch mark chalk p ted mate s of soils amming, of nitial exca including , etc. con	n as pill owo rial exc dre: ava a ar nple	ing layout, s shown in lars, fixing der filling s at a safe cept rocky, ssing and ition depth ranging all ete as per	cum	275.72	168.00	46,320.96
		4	x	68.93	x	1	х	1	=	275.72	cum			
2	4.06.02	Single layer I bricks in four minimum FM (per instruction	bric ndat 0.50 of t	k flat soling tion, filling f watering, lo he E-I-C.	jw he eve	ith 1st c interstic ling, dres	es es	ss or pick tightly v ng, etc. al	ked vith I co	kiln burnt sand of omplete as	sqm	275.72	478.76	1,32,003.71
	= = = = = (4	X	68.93	X	1			=	275.72	sqm			
3	5.05.01	RCC:1:2:4, 17 works with mi 1:2:4) and max having minim satisfied a spe on standard c ASTM and Po 1 : 2003 CEM well graded p absorption not ASTM C 33 o Rates or any chips and scre position, maki 16 BWG steel and Standard reinforcement mixer machin maintaining al to 100mm (wh mechanical vit	rMP nim ximi um ecifie yline rtlar I-II / picket t ex r Age eeni I sh I sh I siz in e v lowa hen brat	a, Brick Chij um cement um water cei required av ed compress ders as per ad Compositi 2.5N sand of ed brick chij ceeding 38 ggregate Gra er Internation ng through p shuttering fu eet fitted ov ze Bamboo position, mi vith hoper, able slump of plasticizer u or machine a	os (con era sive sta C of r band and lly con xin fed 5 se) and	BC): Rei tent rela- nt ratio 0. ge strengt ndard pri- ement co- ninimum (LAA val 1 15% re ng Apper recogniz ber sieve leak proo 38mm th ops suit g the ag by star 0mm (wit , pouring curing a	info tes 45 gth fo actor FN e solice abl gda tho g, c	A contract of the second secon	Mpa and at 28 days AASHTO/ DS EN 197- Omm down num water forming to chedule of c breaking nuttering in with plain nk panels blacing of standard ng boxes, r) & 75mm pacting by					

ltem No	Ref. to LGED Dhaka Division SoR. 2022			D	esc	ription					Unit	Quantity	Rate in Tk.	Amount in Tk.
		least for 28 da specified time materials and reinforcement binding etc. Add reducing chemi 494 to reduce n maintain low w fixed by the mix Engineer) Addii attain the streng per direction an Note : Using Co	ays pe c and ditic cal mix ate c de tion d a onc	, removing riod, i/c cc cylinders ri d its fabrid onal quantit admixture ring water ri r-cement (V esign from a hal quantity at the conti approval of t rete Mixer.	cer equ catio y of equ W/C appr of c ract	ntering-s of addit ired. E on, weld complyir ired for) ratio (I roved lal cement f or's own Enginee	shut iona xclu ding an ng t nor Dos pora to b n co r in	ttering a al testin, uding t g, coupl d Plastic ype A u mal wor ses of ac atory ins be addec st) etc. a charge.	approved harges of cost of placing, r i.e. Water r ASTM C illity and to kture to be tion by the required to omplete as					
3.1	5.05.01.01	In individual and plinth level	d c	ontinuous fo	ootii	ng of col	um	n, raft ar	oor slab at	cum	82.72	8,673.00	7,17,395.87	
		4	х	68.93	x	1	х	0.3	=	82.72	cum			
	5.05.11.01	steel shuttering								sqm	165.43	582.00	96,281.42	
		8	х	68.93	Х			0.3	=	165.43	sqm			
4	5.05.01.03	In Tie Beam an	d L	Lintel :										
4.1		Below Plinth Le	vel	and in Gro	und	Floor					cum	17.39	8,817.00	1,53,292.36
		4	x	36	x	0.375	х	0.2	=	10.80	cum			
		4	х	32.93	x	0.25	x	0.2	=	6.59	cum			
								Total	=	17.39	cum			
	5.05.11.05	steel shuttering									sam	220.58	543.00	1.19.772.77
		8	х	36	x			0.4	=	115.20	sam			, -,
		8	х	32.93	x			0.4	=	105.38	sqm			
5	5.06.01.02	Grade 400 (RE and marked as strength, fy (Re exceed fy by r ultimate strengt least 1.25 and minimum total e respectively.	3 4 s p H) mo th, d r elor	00/ 400W): ber BDS IS = 400 MPa, re than the fu (Re) to minimum e ngation at m	: Ri O (, bu e 12 test lonç naxi	bbed or 5935-2:2 t the tesi 25 MPa ed yield gation <i>a</i> mum for	De coord ted an str fter ce	eformed 5 with n yield strond the ra rength (f r fractur (Agt) is f	produced num yield th shall not of tested shall be at A5.65) & and 2.5%	kg	2,730.10	100.00	2,73,009.83	
									=	2730.10	kg			
6	5.04.01	Brick works wi mortar (1:6) in f with mortar, rac at least for 24 h all complete ind and accepted I (PWD 04.1)	th our hou cluc by	first class ndation and ng out the jo urs before u ding cost of the Engine	bric plir pints se a f wa er-i	ks with hth, filling a, cleanin and curin ater, eleo n-chargo	cei ng th ng a ctric e. (ment sa e joints/i and soal at least f city and Cement	(F.M. 1.2) rstices fully the bricks 7 days etc. er charges EM-II/B-M)	cum	428.37	7,529.00	32,25,198.86	
	Up to GL	4	х	36.000	x	0.375	х	0.8	=	43.20	cum			
	SS	4	х	32.930	x	0.375	х	5.65	=	279.08	cum			
	Up to GL	4	х	32.930	х	0.25	Х	0.8	=	26.34	cum			

ltem No	Ref. to LGED Dhaka Division SoR. 2022			De	esc	ription					Unit	Quantity	Rate in Tk.	Amount in Tk.
	SS	4	х	32.930	Х	0.25	Х	3.88	=	127.77	cum			
	Ded													
		48	х	0.6	х	0.375	Х	2.54	=	-27.43	cum			
		32	х	0.6	х	0.25	Х	2.54	=	-12.19	cum			
		16	х	1	Х	0.25	Х	2.1	=	-8.40	cum			
			Total = 428.37											
7	5.02.11	Earth filling ins within 90m of th each layer up to the E-I-C Dry d of MDD (STD).	sic e o fi lei	le plinth in building site, nished level, nsity after co	15 w e mp	0mm lay atering, l tc. all con paction s	eve mpl hal	s with e eling and lete as p I not be	arth I co ber o less	available nsolidating direction of than 90%	cum	55.14	207.00	11,414.81
		0.8	х	68.93	х	1	Х	1	=	cum				
8	5.02.08.1	Sand filling in (minimum FM 0 consolidating ea direction of the E than 95% of MD	fc).5 ich E-I	oundation tre 0) in 150mr 1 layer up to -C. Dry dens (STD)	n I fini	hes and ayers in, shed lev after cor	in /c I el e mp	side plin leveling, etc. all co action sh	nth wa omp nall	with sand tering and lete as per not be less	cum	674.10	1,088.00	7,33,420.80
		2	х	177	х	1	Х	1.05	=	371.70	cum			
		2	х	144	х	1	х	1.05	=	302.40	cum			
								Total	=	674.10	cum			
9	4.06.02	Single layer br bricks in found minimum FM 0.5 per instruction o	Igle layer brick flat soling with 1st class or picked kiln burnt cks in foundation, filling the interstices tightly with sand of nimum FM 0.50, watering, leveling, dressing, etc. all complete as r instruction of the E-I-C.										478.76	3,07,363.92
		2	х	177	Х	1			=	354.00	sqm			
		2	х	144	Х	1			=	288.00	sqm			
								Total	=	642.00	sqm			
10	4.06.04	PCC-17: Plain c compressive st proportion 1:2:4 per standard p conforming to E sand of minimun picked brick chi ASTM C 33 incl by concrete mix for the requisite C. Additional qua strength at the c	re ara 30 mip: uc pinan an	ment concre ngth of 171 maximum w ctice of Co IS EN 197- FM 1.8 and s (LAA value ling breaking machine, ca eriod etc. all tity of cemer ntractor's own	te VIP /c de 1 : 20 ast cont to n c	work in a at 28 ratio 0.45 AASHT 2003 C Dmm dov not exce- ricks into ing, layin omplete a o be add ost.	fou 6 d 6) c (O/ EN edi g (as ed	ndation lays (su on standa ASTM/ /I-II/A-L/I well gra ng 40) nips, shu compacti per direc if require	with agge ard an M/V/ ded con tter ing ctior ed to	n minimum ested mix cylinder as d cement W 42.5N, 1st class/ forming to ing, mixing and curing n of the E-l- o attain the	cum	48.15	10,063.81	4,84,572.45
		2	х	177	Х	1	Х	0.075	=	26.55	cum			
		2	х	144	Х	1	Х	0.075	=	21.60	cum			
								Total	=	48.15	cum			

ltem No	Ref. to LGED Dhaka Division SoR. 2022			D	esc	ription					Unit	Quantity	Rate in Tk.	Amount in Tk.	
11	5.13.02	38mm thick ar Composite cem (minimum FM1. value not excee laying the conc the top with no complete as per	tifi er 3) ed ref ea	cial patent t (CEM II/A) and 10mm of ing 38) in/c te in alterna t cement, of rection of th	sto M, 4 dow bro te µ surii e E	one floo 42.5N), l yn graded eaking c panels, c ng for r -I-C.	r (bes d p hip con equ	1:2:4) v st quality icked bri os, scree npacting uisite pe	vith co ck o enin ano erioo	Portland parse sand chips (LAA g, mixing, d finishing d, etc. all	sqm	642.00	594.00	3,81,348.00	
		2	х	177	х	1			sqm						
		2	Х	144	х	1		sqm							
								Total	=	642.00	sqm				
12	5.12.05	Minimum 12 mn with fresh ceme the edges and surface, curing scaffolding and drawing and ac II/BM) ground flo	n t nt cc a otl ce	nick cement to both inne prners includ t least for ner charges pted by the .[PWD 15.4]	r a er a ding 7 (etc En	nd (F.M. nd outer y washin days, cc . all com ngineer-ir	su g (ost ple n-cl	2) plaste irface of of sand, of wate te in all i harge. ((sqm	2,321.03	291.00	6,75,418.92			
	SS	4	х	36.000			х	5.65	=	813.60	sqm				
	SS	4	х	36.000			х	4.45	=	640.80	sqm				
	SS	8	х	32.930			х	3.88	=	1022.15	sqm				
	Ded														
		48	х	0.6			х	2.54	=	-73.15	sqm				
		32	х	0.6			х	2.54	=	-48.77	sqm				
		16	Х	1			х	2.1	=	-33.60	sqm				
10	5 40 00 0				ĻI		, .	Total	=	2321.03	sqm	0.004.00	000.00	0 50 050 70	
		best quality and manufacturer in ceiling with surf free from dirt, materials, fungu paper and nec sealer of speci necessary interi crack filling and applying 2 co brush/roller/spra finishing, elaps complete in all [PWD 16.2.2]	ac gr is, efice or l at y in f	sealed cor sealed cor e preparatic ease, wax, mending g ssary scaffo d brand or putty of spe cutting by sis s of interior & necessa g specified oors and a	ed f itair n i rei cod ildir n p ccifi and or ary tim cce	from autilities from autilities from autilities from autilities application of the surner and the surner scaffold the for distributed by the surner and the	hor lyin all fac yin su fac su fac n th	ized loca ized loca g to inte eaning d chalked e defect g neces rface; tl or levellir o water paint sp g etc. u ng or r e Engin	, equi	2,02,000		0,00,000.10			
	SS	4	4 x 36.000 x 5.65 = 813.6												
	SS	4	х	36.000			Х	4.45	=	640.80	sqm				
	SS Ded	8	x	32.930			X	3.88	=	1022.15	sqm				
		48	Х	0.6			Х	2.54	=	-73.15	sqm				
		32	Х	0.6	$\left \right $		Х	2.54	=	-48.77	sqm				
		īb	Х	1	\square		Х	2.1	=	-33.60	sqm				
								i otal	=	2321.03	sqm				
Item Drake No Devise Set Unit Quantity Rate in Tk Amount in Tk. 14 5.07.05.2 Supplying, fitting and fixing M.S. flat bar clamp of 150 mm x38 mm x 6 mm size having biturceted ends to doer and window frames with necessary route. all complete and accepted by the Engineerin-charge [PWD 12.2] Set (b) Set (c) 131.00 12.576.00 15 5.07.01 Supplying and making door and window frames with web sesoned wood of required kisses for wood are finished for all floors etc. all complete as per direction of the E-I-C. cum 1.25 1.35.599.00 1.89.115.23 16 5.07.01.1 Malagenit/Shishu wood cum cum <td< th=""><th></th><th>Ref. to LGED</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></td<>		Ref. to LGED													
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No Discont Soft 2022 Supplying, fitting and fixing MS. fait bar clamp of 150 mm x 38 mm sk fb necessary rowel pug, screws etc. including cutting grooves in chowkat if necessary etc. all complete and accepted by the Engineerin- charge. [PWD 11.2.] Soft and making door and window frames with necessary etc. all complete and accepted by the Engineerin- charge. [PWD 11.2.] Last and memory and dress of the painting two costs of coal ter to the surface in contact with wall, fitted and fixed in position and memoring good any damage (All sizes of wood are finished) for all floors etc. all complete as per direction of the E+C. Last 0.1 are surface in contact with wall, fitted and fixed in position and memoring good any damage (All sizes of wood are finished) for all floors etc. all complete as per direction of the E+C. Last 0.1 are surface in contact with wall, fitted action (100 mm XMM) lock rail (125mm/XBmm) and batter minimum 280mm wite paink) having to rail style of scele thandle, hinge calles, buffer blocks and finished with sand papering for all floors etc. all complete as per stype incickel plate handle, hinge calles, buffer blocks and finished with sand papering from all style of sceles, buffer blocks and finished with sand papering from all stores etc. all complete as per stype incickel plate handle, hinge calles, buffer blocks and finished with sand papering from all stores etc. all complete as per stype incickel plate handle, hinge calles, buffer blocks and finished with sand papering from all stores etc. all complete as per stype incickel plate handle, hinge calles, buffer blocks and supplying fitting hand table handle, hinge calles, buffer blocks and finished with finate in grooves in the cost of screws, nale wooden have functioner broozed and wooden lower (150mm/20mm) speed (275mm Cer mori all the screws, has wooden haved house houser (150mm/20mm) speaed (275mm Cer mori all the screws	Item	Dhaka			D	Description					Unit	Quantity	Rate in Tk.	Amount in Tk.	
14 5.07.02 Supplying: fitting and fixing M.S. flat bar clamp of 150 mm x 38 mm x 6 mm size having biturated ends to door and window frames with necessary etc. all complete and accepted by the Engineerin- charge. [PWD 11.2] each 96.00 131.00 12.576.00 15 5.07.01 Supplying and making door and window frames with sessoned wood of required size inc. paring two costs of coal tor to the surface in contact with well, fitted and fixed in position and meeting good any damage (All sizes of wood are finished) for all floors etc. all complete as per direction of the E+C. um 1.25 1.35,509.00 1.69,115.23 16 5.07.01.11 Mehaponil/Shishu wood um 1.25 um 1.25 1.35,509.00 1.69,115.23 16 5.07.01.11 Mehaponil/Shishu wood to um 1.25 cum 1.25 1.25 cum 1.25 1.25 cum 1.25 1.25 1.25 cum 1.25 cum 1.25 1.25 1.25 1.25 cum 1.25 1.25 cum 1.25 1.25 1.25 cum 1.25 1.25 cum 1.25 1.25 1.25 1.25 cum 1.25 1.25	No	Division SoR.					1						j		
No. Construct Construct <thcons< td=""><td>1/</td><td>2022</td><td>Supplying fitting</td><td>a an</td><td>d fivina M</td><td>\$</td><td>flat har c</td><td>lan</td><td>on of 150</td><td>) mi</td><td>m v 38 mm</td><td>each</td><td>96.00</td><td>131.00</td><td>12 576 00</td></thcons<>	1/	2022	Supplying fitting	a an	d fivina M	\$	flat har c	lan	on of 150) mi	m v 38 mm	each	96.00	131.00	12 576 00
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image: space of the space			plank) having t	top r	ail style c	of s	ections ((10	0mmx38	mm	n) lock rail				
provided with best quality 4 nos. 100mm iron hinges, 2 nos. best quality 12mm dia 300mm and 225mm long iron tower and socket bolts, 2 nos. heavy type nicklet plated handle, hinge cleasts, buffer blocks and finished with sand papering for all floors etc. all complete as per direction of the E+C. (Single leaf door. All sizes of wood are finished). sqm 30.24 8.296.00 2.50.871.04 5.08.01.4 Gamari (SS Fittings) (PWD 12.12.1) sqm sqm 30.24 8.296.00 2.50.871.04 17 5.08.10.4 Gamari (SS Fittings) (PWD 12.12.1) sqm sqm 2 50.810 18 5.08.01.4 Gamari (SS Fittings) (PWD 12.12.1) sqm sqm 2 50.810 17 5.08.10 Manufacturing and supplying fitting fixing well matured natural seasoned wooden fixed lower shutters (min 250mm wide plank) having frame (62mmx125mm) and inner horizontal wooden louver (150mmx20mm) spaced @75mm cl: fixed with frame in grooves in/c cost of screws, nails, wooden bit, preparing the sufface by sand papering for all floors etc complete in all respect as per drawing and direction of the E-I-C (All sizes of wood are finished). sqm 121.92 11,567.00 14,10,248.64 18 6.05.02 Supply of MS work in plates, angles, channels, flat bars, Tees etc. uru thing, bending, welding, forging drilling, including fibricating, machining, cutting, bending, welding, forging and fitting, fixing, local handling etc. including encluding rapering consumptice etc. all complete as per design, specificat			(125mmx38mm	i) and	d bottom r	ail	(225mmx	(38	mm), clo	sec	joints and				
guality 12mm dia 300mm and 225mm long iron tower and socket bolts, 2 nos. heavy type nickel plated handle, hinge cleats, buffer blocks and finished with sand papering for all floors etc. all complete as per direction of the E-I-C. (Single leaf door. All sizes of wood are finished). sqm 30.24 8.296.00 2,50.871.04 5.08.01.4 Gamari (SS Fittings) [PWD 12.12.1] sqm 30.24 8.296.00 2,50.871.04 17 5.08.10 Manufacturing and supplying fitting fixing well matured natural seasoned wooden fixed lower shutters (min 250mm wide plank) having frame (82mmx125mm) and inner horizontal wooden lower (150mmx20mm) spaced @75mm c/c fixed with frame in grooves in/c cost of screws, nails, wooden bin preparing the surface by sand papering for all floors etc complete in all respect as per drawing and direction of the E-I-C (All sizes of wood are finished). sqm 14,10,248.64 5.08.10.1 Gamari [PWD 12.10.1] sqm sqm 14,10,248.64 32 x 0.6 x 2.54 73.15 sqm 18 6.05.02 Supply of MS work in plates, angles, channels, flat bars, Tees etc. with minimum yield strength, fy (ReH) = 300 MPa, including fabricating, machining, welding, anchorb bars, staging and fitting, fixing, local handling etc including energy consumption etc. all complete as per disign, specification and direction of the Engineer- in-charge sqm 3653.98 138.46 5,05,929.74 18 0.05.02 x 36			provided with b	, est (quality 4 r	ios	100mm	irc	on hinges	s, 2	2 nos. best				
bolts, 2 nos. heavy type nickel plated handle, hinge cleats, buffer blocks and finished with sand papering for all floors etc. all complete as per direction of the E-I-C. (Single leaf door. All sizes of wood are finished). sqm 30.24 8,296.00 2,50,871.04 5.08.01.4 Gamari (SS Fittings) [PWD 12.1.2.1] sqm 30.24 8,296.00 2,50,871.04 17 5.08.01 Manufacturing and supplying fitting fixing well matured natural seasoned wooden fixed louver shutters (min 250mm wide plank) having frame (62mmx125mm) and inner horizontal wooden louver (150mmx200m) space(037bm of: Kied with frame in grooves in/c cost of screws, nails, wooden bit, preparing the surface by sand papering for all floors etc complete in all respect as per drawing and direction of the E-I-C (All sizes of wood are finished). sqm 11.567.00 14,10,248.64 18 6.05.02 Supply of MS work in plates, angles, channels, flat bars, Tees etc. with minimum yield strength, fy (ReH) = 300 Smm sqm 3653.98 138.46 5,05,929.74 18 6.05.02 Supply of MS work in plates, angles, channels, flat bars, Tees etc. with minimum yield strength, fy (ReH) = 300 NPA, including fabricating, machining, cutting, bending, welding, forging drilling, riveting, embedding anchor bars, staging and fitting, fixing, local handling etc including energy consumption etc. all complete as per design, specification and direction of the Engineer- in-charge sqm 13.653.98 138.46 5,05,929.74 C channel			quality 12mm d	lia 3	00mm and	1 22	25mm lo	ng	iron tow	er a	and socket				
blocks and finished with sand papering for all floors etc. all complete as per direction of the E-I-C. (Single leaf door. All sizes of wood are finished). sqm 30.24 8,296.00 2,50,871.04 5.08.01.4 Gamari (SS Fittings) [PWD 12.1.2.1] sqm 30.24 8,296.00 2,50,871.04 17 5.08.10 Manufacturing and supplying fitting fixing well matured natural seasoned wooden fixes (min 250mm wide plank)) having frame (62mmx125mm) and inner horizontal wooden louver (150mmx20mm) spaced (075mm c/c fixed with frame in grooves in/c cost of screws, nails, wooden bit, preparing the surface by sand papering for all floors etc. complete in all respect as per drawing and direction of the E-I-C (All sizes of wood are finished). sqm 121.92 11,567.00 14,10,248.64 6.05.02 Supply of MS work in plates, angles, channels, flat bars, Teres etc. with minimum yield strength, fy (ReH) = 300 MPa, including fabricating, mechting, welding, forging drilling, riveting, embedding anchor bars, staging and fitting, fixing, local handling etc including energy consumption etc. all complete as per design, specification and direction of the Engineer-ln-c-harge cum 3,653.98 138.46 5,05.929.74 18 6.05.02 Supply of MS work in plates, angles, channels, flat bars, Teres etc. all complete as per design, specification and direction of the Engineer-ln-charge cum 3,653.98 138.46 5,05.929.74 18 6.05.02 Supply of MS work in plates, angles, channels, flat bars, Teres etc			bolts, 2 nos. he	eavy	type nick	el p	plated ha	nd	le, hinge	cle	eats, buffer				
5.08.01.4 Gamari (SS Fittings) [PWD 12.1.2.1] sqm 30.24 8,296.00 2,50,871.04 17 5.08.10 Manufacturing and supplying fitting fixing well matured natural seasoned wooden fixed louver shutters (min 250mm wide plank) having frame (62mmx215mm) and inner horizontal wooden louver (150mmx20mm) spaced @75mm c/c fixed with frame in grooves in/c cost of screws, nails, wooden bit, reparing the surface by sand papering for all floors etc complete in all respect as per drawing and direction of the E-I-C (All sizes of wood are finished). sqm 121.92 11,567.00 14,10,248.64 5.08.10.1 Gamari [PWD 12.10.1] sqm sqm sqm sqm 14,10,248.64 18 6.05.02 Supply of MS work in plates, angles, channels, flat bars, Tees etc. with minimum yield strength, fy (ReH) = 300 MPa, including fabricating, machining, cutting, bending, welding, forging and filling, riveling, embedding anchor bars, staging and filting, fixing, local handling etc including energy consumption etc. all complete as per design, specification and direction of the E-IC (M is 200 MPa, including fabricating, machining, cutting, bending, welding, forging and filting, riving, local handling etc including energy consumption etc. all complete as per design, specification and direction of the Engineer-in-charge sqm 3.653.98 138.46 5.05,929.74 18 6.05.02 Supply of MS work in plates, angles, channels, flat bars, Tees etc. unit, incharge and plates angles, channels, flat bars, Tees etc. unit, fixing, local handling etc including encincluding and tincerio			blocks and fin	ishe	d with sa	nd	paperin	g	tor all th	oor	rs etc. all				
5.08.01.4 Gamari (SS Fittings) [PWD 12.1.2.1] sqm 30.24 8,296.00 2,50,871.04 16 x 0.9 x 2.1 = 30.24 sqm 17 5.08.10 Manufacturing and supplying fitting fixing well matured natural seasoned wooden fixed louver shutters (min 250mm wide plank) having frame (62mmx125mm) and inner horizontal wooden louver (150mmx20mm) spaced @75mm c/c fixed with rame in grooves in/c cost of screws, nails, wooden bit, preparing the surface by sand papering for all floors etc complete in all respect as per drawing and direction of the E-I-C (All sizes of wood are finished). sqm 121.92 11,667.00 14,10,248.64 5.08.10.1 Gamari [PWD 12.10.1] sqm sqm 121.92 11,667.00 14,10,248.64 32 x 0.6 x 2.54 = 73.15 sqm 18 6.05.02 Supply of MS work in plates, angles, channels, flat bars, Tees etc. with minimum yield strength, fy (ReH) = 300 MPa, including fabricating, machining, cutting, bending, welding, forging drilling, riveting, embedding and charbor bars, staging and fitting, fixing, local handling etc including energy consumption etc. all complete as per design, specification and direction of the Engineer-in-charge cm 3,653.98 138.46 5,05,929.74 18 6.05.02 Supply of MS work in plates, angles, channels, flat bars, Tees etc. complete as per			Complete as per	r aire vr All	ection of th		:-I-U. d ara fini	ch	od)						
5.08.01.4 Gamari (SS Fittings) [PWD 12.1.2.1] sqm 30.24 8,296.00 2,50,871.04 11 16 x 0.9 x 2.1 = 30.24 sqm 30.24 8,296.00 2,50,871.04 17 5.08.10 Manufacturing and supplying fitting fixing well matured natural seasoned wooden fixed louver shutters (min 250mm wide plank) having frame (62mmx125mm) and inner horizontal wooden louver (150mmx20mm) spaced @75mm cf fixed with frame in grooves in/c cost of screws, nalls, wooden bit, preparing the surface by sand papering for all floors etc complete in all respect as per drawing and direction of the E-I-C (All sizes of wood are finished). sqm 11,567.00 14,10,248.64 5.08.10.1 Gamari [PWD 12.10.1] sqm sqm sqm 11,567.00 14,10,248.64 48 x 0.6 x 2.54 = 73.15 sqm 11,567.00 14,10,248.64 32 x 0.6 x 2.54 = 73.15 sqm 11,567.00 14,10,248.64 6.05.02 Supply of MS work in plates, angles, channels, flat bars, Tees etc. with minimum yield strength, fy (ReH) = 300 MPa, including fabricating, machining, cutting, bending, welding, foriging dilling, riveting, entiedding anchor bars, staging and fitting, fixing, local handling etc including energy consumption etc. all complete as per				/i. Ali	51265 01 1	100		5110	eu).						
5.06.01.4 Carminary (SS Printings) (PWD 12.1.2.1) sqm 30.24 6,296.00 2,30,671.04 10 16 x 2.1 = 30.24 sqm sqm 30.24 6,296.00 2,30,671.04 17 5.08.10 Manufacturing and supplying fitting fixing well matured natural seasoned wooden fixed louver shutters (min 250mm wide plank) having frame (62mmx125mm) and inner horizontal wooden louver (150mmx20mm) spaced @75mm c/c fixed with frame in grooves in/c cost of screws, nails, wooden bit, preparing the surface by sand papering for all floors etc complete in all respect as per drawing and direction of the E-I-C (All sizes of wood are finished). sqm 121.92 11,567.00 14,10,248.64 5.08.10.1 Gamari [PWD 12.10.1] sqm 121.92 11,567.00 14,10,248.64 48 x 0.6 x 2.54 48.77 sqm 3653.98 138.46 5,05,929.74 18 6.05.02 Supply of MS work in plates, angles, channels, fat bars, Tese set. cum 3,653.98 138.46 5,05,929.74 with minimum yield strength, fy (ReH) = 300 MPa, including fabricating, machining, cutting, bending, welding, forging drilling, riveting, embedding anchor bars, staging and fitting, fixing, local handling etc including energy consumption etc. all complete as per design, specification and direction of the Engineer-lin-charge k<		F 00 04 4	O a mari (00 Fitt			4 (11						20.04	0.000.00	0 50 074 04
10 x 0.5 x 2.1 - 0.2.24sqiii175.08.10Manufacturing and supplying fitting fixing well matured natural seasoned wooden fixed louver shutters (min 250mm wide plank) having frame (62mmx125mm) and inner horizontal wooden louver (150mmx20mm) spaced @75mm c/c fixed with frame in grooves in/c cost of screws, nails, wooden bit, preparing the surface by sand papering for all floors etc complete in all respect as per drawing and direction of the E-I-C (All sizes of wood are finished).sqm121.9211,567.0014,10,248.645.08.10.1Gamari [PWD 12.10.1]sqm121.9211,567.0014,10,248.6448x0.6x2.5448.77sqm32x0.6x2.5448.77sqm186.05.02Supply of MS work in plates, angles, channels, flat bars, Tees etc. with minimum yield strength, fy (ReH) = 300 MPa, including fabricating, machining, cutting, bending, welding, forging drilling, riveling, embedding anchor bars, staging and fitting, forging drilling, specification and direction of the Engineer-<		5.00.01.4	16 Gaman (55 Fill	ings,		. 1.4	<u>2.]</u>	v	21	-	20.24	sqm	30.24	0,290.00	2,50,071.04
17 3.06.10 Wahulacung and supplying inting intinting intinting inting intinting inting inting intintin	17	E 00 10	10 Manufaaturing	^ 	0.9	E1	ling fivin	^		-	JU.24	Sqiii			
braving frame (62mmx125mm) and inner horizontal wooden louver (150mmx20mm) spaced @75mm c/c fixed with frame in grooves in/c cost of screws, nails, wooden bit, preparing the surface by sand papering for all floors etc complete in all respect as per drawing and direction of the E-I-C (All sizes of wood are finished). sqm 121.92 11,567.00 14,10,248.64 5.08.10.1 Gamari [PWD 12.10.1] sqm 121.92 11,567.00 14,10,248.64 4 48 x 0.6 x 2.54 = 73.15 sqm 32 x 0.6 x 2.54 = 48.77 sqm 5.05.02 Supply of MS work in plates, angles, channels, flat bars, Tees etc. with minimum yield strength, fy (ReH) = 300 MPa, including fabricating, machining, cutting, bending, welding, forging drilling, riveting, embedding anchor bars, staging and fitting, fixing, local handling etc including energy consumption etc. all complete as per design, specification and direction of the Engineer- In-charge x 360 x 0.004 z 26.74 kg	17	5.06.10	seasoned woo	anu den	fixed louv	iii er	ung iixin shutters	yv (m	in 250m	m w	vide nlank)				
(150mmx20mm) spaced @75mm c/c fixed with frame in grooves in/c cost of screws, nails, wooden bit, preparing the surface by sand papering for all floors etc complete in all respect as per drawing and direction of the E-I-C (All sizes of wood are finished). sqm 121.92 11,567.00 14,10,248.64 5.08.10.1 Gamari [PWD 12.10.1] sqm 121.92 11,567.00 14,10,248.64 4 48 x 0.6 x 2.54 = 73.15 sqm 32 x 0.6 x 2.54 = 48.77 sqm - 18 6.05.02 Supply of MS work in plates, angles, channels, flat bars, Tees etc. with minimum yield strength, fy (ReH) = 300 MPa, including fabricating, machining, cutting, bending, welding, forging drilling, riveting, embedding anchor bars, staging and fitting, fixing, local handling etc including energy consumption etc. all complete as per design, specification and direction of the Engineer- In-charge x 360 x 0.075 x 0.004 = 266.74 kg			having frame (6	52mr	nx125mm) ar	nd inner	hoi	rizontal v	voo	den louver				
in/c cost of screws, nails, wooden bit, preparing the surface by sand papering for all floors etc complete in all respect as per drawing and direction of the E-I-C (All sizes of wood are finished). sqm 121.92 11,567.00 14,10,248.64 5.08.10.1 Gamari [PWD 12.10.1] sqm 121.92 11,567.00 14,10,248.64 48 x 0.6 x 2.54 = 73.15 sqm - 32 x 0.6 x 2.54 = 48.77 sqm - 18 6.05.02 Supply of MS work in plates, angles, channels, flat bars, Tees etc. with minimum yield strength, fy (ReH) = 300 MPa, including fabricating, machining, cutting, bending, welding, forging drilling, riveting, embedding anchor bars, staging and fitting, fixing, local handling etc including energy consumption etc. all complete as per design, specification and direction of the Engineer-In-charge cum 3,653.98 138.46 5,05,929.74 C channel 2 x 360 x 0.06 = 254.40 kg cum 3,653.98 138.46 5,05,929.74 18 6.05.02 Supply of MS work in plates, angles, channels, flat bars, Tees etc. with minimum yield strength, fy (ReH) = 300 MPa, including fabricating, machining, cutting, bending, welding, forging and fitting, fixing, local handling etc including energy consumption etc.			(150mmx20mm	ı) sp	aced @75	5mr	n c/c fixe	əd	with fran	ne i	in grooves				
sand papering for all floors etc complete in all respect as per drawing and direction of the E-I-C (All sizes of wood are finished).5.08.10.1Gamari [PWD 12.10.1]sqm121.9211,567.0014,10,248.6448x0.6x2.54448.77sqm32x0.6x2.54448.77sqm111121.9211,567.0014,10,248.6448x0.6x2.54448.77sqm1032x0.6x2.545sqm1186.05.02Supply of MS work in plates, angles, channels, flat bars, Tees etc. with minimum yield strength, fy (ReH) = 300 MPa, including fabricating, machining, cutting, bending, welding, forging drilling, riveting, embedding anchor bars, staging and fitting, fixing, local handling etc including energy consumption etc. all complete as per design, specification and direction of the Engineer- In-charges3.653.98138.465.05,929.74C Channel2x360x0.075x0.006z2543.40kgPurline20x8.23x0.04x0.004z206.74kgPurline32x20x0.04x0.004803.84kgPurline32x20x0.04x100.00kgPurline32x20x0.04 <td></td> <td></td> <td>in/c cost of sci</td> <td>rews</td> <td>, nails, w</td> <td>000</td> <td>len bit, p</td> <td>ore</td> <td>paring th</td> <td>ne s</td> <td>surface by</td> <td></td> <td></td> <td></td> <td></td>			in/c cost of sci	rews	, nails, w	000	len bit, p	ore	paring th	ne s	surface by				
drawing and direction of the E-I-C (All sizes of wood are finished).5.08.10.1Gamari [PWD 12.10.1]sqm121.9211,567.0014,10,248.6448x0.6x2.54=73.15sqm132x0.6x2.54=48.77sqm1111Total=121.92sqm1186.05.02Supply of MS work in plates, angles, channels, flat bars, Tees etc. with minimum yield strength, fy (ReH) = 300 MPa, including fabricating, machining, cutting, bending, welding, forging drilling, riveting, embedding anchor bars, staging and fitting, fixing, local handling etc including energy consumption etc. all complete as per design, specification and direction of the Engineer- In-charge360x0.075x0.006=2543.40kg1Purline20x8.23x0.04x0.004=206.74kgPurline32x20x0.04x0.004=803.84kg1Purline32x20x0.04x0.004=803.84kgCleat1111113653.98kg1			sand papering	for	all floors	etc	comple	te	in all re	spe	ect as per				
Image: Signer condition of the sector of			drawing and dir	ectio	on of the E	-I-C	C (All size	es c	of wood a	ire f	finished).				
Solution Gamari [PWD 12.10.1] sqm 121.92 11,567.00 14,10,248.64 48 x 0.6 x 2.54 = 73.15 sqm 121.92 11,567.00 14,10,248.64 32 x 0.6 x 2.54 = 73.15 sqm 1															
Stor. 10.1 Gaman (PWD 12, 10.1) Sqm 121.92 11,567.00 14,10,248.64 48 x 0.6 x 2.54 = 73.15 sqm 121.92 11,567.00 14,10,248.64 32 x 0.6 x 2.54 = 73.15 sqm 1 <td></td> <td>E 00 40 4</td> <td></td> <td>0 40</td> <td>11</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.000</td> <td>404.00</td> <td>14 567 00</td> <td>14 40 040 04</td>		E 00 40 4		0 40	11							0.000	404.00	14 567 00	14 40 040 04
ToNC.ONPPP		5.00.10.1	18 Anali (2001	2.10 Y	0.0			v	2 5/	=	73 15	sam	121.92	11,007.00	14, 10,240.04
Image: Second			32	x	0.6	+		^ X	2.54	=	48 77	som			
18 6.05.02 Supply of MS work in plates, angles, channels, flat bars, Tees etc. with minimum yield strength, fy (ReH) = 300 MPa, including fabricating, machining, cutting, bending, welding, forging drilling, riveting, embedding anchor bars, staging and fitting, fixing, local handling etc including energy consumption etc. all complete as per design, specification and direction of the Engineer-In-charge C channel 2 x 360 x 0.075 x 0.006 = 2543.40 kg Purline 20 x 8.23 x 0.004 z 206.74 kg Purline 32 x 20 x 0.004 z 206.74 kg Cleat 1						+			Total	=	121.92	sam			
with minimum yield strength, fy (ReH) = 300 MPa, including fabricating, machining, cutting, bending, welding, forging drilling, riveting, embedding anchor bars, staging and fitting, fixing, local handling etc including energy consumption etc. all complete as per design, specification and direction of the Engineer-In-charge C channel 2 x 360 x 0.075 x 0.006 = 2543.40 kg Purline 20 x 360 x 0.004 x 0.004 s kg Purline 32 x 20 x 0.004 s 803.84 kg Cleat Image Image Image Image Image Image	18	6.05.02	Supply of MS w	vork	in plates.	and	gles, cha	nn	els, flat b	ars	, Tees etc.	cum	3,653.98	138.46	5,05,929.74
Image: static			with minimum	yield	d strength	ı, f	y (ReH)	=	300 MI	Pa,	including				
Image: Second system forging drilling, riveting, embedding anchor bars, staging and fitting, fixing, local handling etc including energy consumption etc. all complete as per design, specification and direction of the Engineer-In-charge Image: Second system Image: Second system<			fabricating, mad	chinir	ng, cutting	, be	ending, w	eld	ling,						
Itxing, local handling etc including energy consumption etc. all complete as per design, specification and direction of the Engineer- In-chargeEngineer- In-chargeC channel2x360x0.075x0.006=2543.40kgPurline20x8.23x0.04x0.004=206.74kgPurline32x20x0.04x0.004=803.84kgCleatImageImageImageImageImageImageImageImageImageImageImageImageImageImageImage32x20x0.04x0.004ImageImageImageImageImageImageImageImageImageImage32x20x0.04x0.004ImageImageImageImageImageImageImageImageImageImageImageImage32x20x0.04x0.004Image <t< td=""><td></td><td></td><td>forging drilling,</td><td>riveti</td><td>ing, embeo</td><td>ddir</td><td>ng ancho</td><td>r b</td><td>ars, stag</td><td>ing</td><td>and fitting,</td><td></td><td></td><td></td><td></td></t<>			forging drilling,	riveti	ing, embeo	ddir	ng ancho	r b	ars, stag	ing	and fitting,				
C channel 2 x 360 x 0.075 x 0.006 = 2543.40 kg Purline 20 x 8.23 x 0.04 x 0.004 = 206.74 kg Purline 32 x 20 x 0.04 x 0.004 = 803.84 kg Cleat Image: Cleat			Tixing, local ha	indlir r da	ig etc inc	iud	ing ener	gy ہے:	consum	iptic	on etc. all				
C channel 2 x 360 x 0.075 x 0.006 = 2543.40 kg Purline 20 x 8.23 x 0.04 x 0.004 = 206.74 kg Purline 32 x 20 x 0.04 x 0.004 = 803.84 kg Cleat Image: Cleat			In-charge	ues	sign, spec	IIICa		ul		1 (1)	e ⊏ngineer-				
C channel 2 x 360 x 0.075 x 0.006 = 2543.40 kg Purline 20 x 8.23 x 0.04 x 0.04 = 206.74 kg Purline 32 x 20 x 0.04 x 0.004 = 803.84 kg Cleat Image: Cleat			in ondigo												
Purline 20 x 8.23 x 0.04 x 0.004 = 206.74 kg Purline 32 x 20 x 0.04 x 0.004 = 803.84 kg Cleat Image: Cleat		C channel	2	x	360	Х	0.075	х	0.006	=	2543.40	kg			
Purline 32 x 20 x 0.04 x 0.004 = 803.84 kg		Purline	20	x	8.23	Х	0.04	х	0.004	=	206.74	kg			
Cleat = 100.00 kg Total = 3653.98 kg		Purline	32	x	20	х	0.04	х	0.004	=	803.84	kg			
Total = 3653.98 kg		Cleat								=	100.00	kg			
				\Box					Total	=	3653.98	kg			

ltem	Ref. to LGED Dhaka		Description									Quantity	Data in Tk	Amount in Th
No	Division SoR. 2022			De	esc	npuon					Unit	Quantity	Rate In TK.	Amount in TK.
19	PWD SoR 2022, SL no	Supply and inst iron sheet (Ba	all ng	ation of 0.45 ladesh mad	67 i e)	mm thick having n	cc nin	orrugated weight	l g 63-	alvanized 65 kg per	sqm	642.00	578.00	3,71,076.00
	10.21	bundle (2'-6" v	/ic	lth, 70 – 72	rft	long) fit	teo	and fi	xed	I on M.S.				
		sections with '	J'	hook or w	00	den purl	lin	with sc	rew	/s, limpet				
		wasners and pu	m	etc. all com	ipie	ete and a	CC	eptea by	the	e Engineer-				
		in charge.												
		2	х	177.000			Х	1	=	354.00	sqm			
		2	х	144.000			Х	1	=	288.00	sqm			
								Total	=	642.00	sqm			
20	5.16.10.01	Standard Frenc	n j	oolishing to V	Vo	oden boa	rd	surface	by t	three coats	sqm	564.96	432.00	2,44,064.79
		over a coat of	F	priming inclu	din	g putty,	cl	eaning,	finis	shing and				
		polishing with	sa	ind paper e	tc.	all com	ple	ete in a	II fl	loors and				
		accepted by the	E	ngineer-in-cr	ar	ge. [PVVL)	0.9.1]						
		40	х	0.9			х	2.1	=	75.60	sqm			
		120	х	0.6			Х	2.54	=	182.88	sqm			
		80	х	0.6			Х	2.54	=	121.92	sqm			
		2	Х	360			Х	0.158	=	113.76	sqm			
		20	20 x 8.23 x 0.088 = 14.4											
		32	32 x 20 x 0.088 = 56.3											
			Total = 564.										- /	
21	(i)	Internal Sanitary	18	Water Supp	ly L	(From ad	dit	ional cos	st		Sqm	642	2,125.00	13,64,250.00
		chart, item-6): 6	42		к.	000.00 p	er	sqm						
22	(i)	Internal Electrific	ca	tion (From ac	ldit	ional cos	t c	hart, iten	n-		Sqm	642	2,140.00	13,73,880.00
		7):642.00 sqm (D	Tk. 1300.00	per	sqm								
23	External wate	er supply												
	(i)	Construction of	ur	nderground r	ese	ervoir (Fr	om	addition	nal	cost chart,	0	0	106.00	-
		item-9-i-a) :				, , , , , , , , , , , , , , , , , , ,								
	(ii)	Sinking of deep	tu	be well/arrar	ngiı	ng water	fro	m WAS/	A, №	lunicipality				
		or Public Health		ngineering s	50U	rces, WA	۹S	A/Munici	pal	charge as				
		per requirement	. /	Actual COSt										
	(iii)	Laying of distrib	uti	on pipe lines	as	per requ	ire	ement.						
	(iv)	Laying of distrib	uti	on pipe lines	as	per requ	iire	ement.						
	(V)	Construction of	ρι	imp house as	s p	er require	m	ent.			LS	1	1,00,000.00	1,00,000.00
	(VI)	Supplying and in	าร	tallation of pu	Im	os as per	re	quireme	nt.	T				
	(VII)	Plant (WTP) as	эм ре	age Treatme	ent it.	Plant (SI	IP,	and wa	ter	Ireatment				
	(viii)	Installation of F	lai	n water harv	/es	ting syst	en	n as per	ree	quirement.				
		Actual cost	ctual cost											
24	External Elec	trification	ication											
	(i)	Sub-station build	p-station building-Not required											
	(ii)	Sub-station Equ	-station Equipment/ I ransformer											
	(III)	Pump & Motor s	et	in/c installati	on									
	(IV)		<u>د</u>		ore	0					10	4	5 00 000 00	5 00 000 00
	(V) (vi)	Standby Power	dby Power & Source								LO		5,00,000.00	5,00,000.00
	(vi) (vii)	Farthing System	by Power & Source											
	(vii) (viii)	Overhead Trans	' m	ission-Not re	an	ired								
	(ix)	Underground ca	bl	e layina	٩u									
	(x)	Compound light	. V	Viring system	۱&	other sat	fet	y system						

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
	(xi) (viii)	Solar PV system Installation of Rain water harvesting system as per requirement. Actual cost				
	(ix)	Solar PV system				
25	Electro-mech	anical Component				
	(i)	Lift. Not required				
	(ii)	Air Condition Not required				
26	Gas Connect	ion				
	(i)	Ground Floor. (From additional cost chart item-8-i)	sqm	0	455.00	-
27	Construction Cost on meter	of Compound drain basis (From additional cost chart item-15-i/ii/iii)	meter	50	3,196.00	1,59,800.00
28	Culvert- Not	required				
28.1	Approach Roa	d As per requirement. (From additional cost chart item-13-i/ii) Ramp	sqm	50	2,886.00	1,44,300.00
29	Site improven	ent- Considered separately	cum	2321.03	760.00	17,63,982.80
30	Arboriculture	Landscape	LS	1	1,00,000.00	1,00,000.00
					Total "C"	1,64,83,759.61
Plaza A	# 03 Masonry guid	le wall				
1	5.02.01.2	Earthwork in excavation of foundation trenches, including layout, by excavating earth to the lines, grades and elevation as shown in the drawing providing center lines, local bench mark pillars, fixing bamboo spikes and marking layout with chalk powder filling baskets, carrying and disposing of all excavated materials at a safe distance designated by the E-I-C in all types of soils except rocky, gravelly, slushy or organic soil, leveling, ramming, dressing and preparing the base, etc. all complete for an initial excavation depth of 2m and an initial lead not exceeding 20m, including arranging all necessary tools and equipment at work site, etc. complete as per direction of the E-I-C.	cum	7.09	168.00	1,190.70
		1 x 42 x 0.375 x 0.45 = 7.09	cum			
2	5.03.05	Providing single layer polythene sheet (0.18mm thick) weighing one kilogram per 6.5 square meter in floor or any where in ground floor underneath the cement concrete, etc. all complete as per specifications and direction of the E-I-C. 1 x 42 x 0.375 = 15.75	sqm sqm	15.75	47.00	740.25

ltem No	Ref. to LGED Dhaka Division SoR.		De	escription				Unit	Quantity	Rate in Tk.	Amount in Tk.
3	4.06.04	PCC-17: Plain c compressive str proportion 1:2:4 per standard pr conforming to B sand of minimum picked brick chi ASTM C 33 inclu by concrete mixe for the requisite C. Additional qua strength at the co	ement concre rength of 171 & maximum w ractice of Co DS EN 197- n FM 1.8 and ps (LAA value uding breaking er machine, ca period etc. all antity of cemer pontractor's own	te work in fc MPa at 28 //c ratio 0.45) de AASHTC 1 : 2003 CE 20mm down e not excee g bricks into asting, laying complete as int to be adde n cost.	pundation days (st o n stand- D/ ASTM/ EM-II/A-L/I n well gra ding 40) chips, shu o compact s per direc d if require	with ugge ard (and M/V/ ded conf itteri ing a ction ed to	minimum sted mix cylinder as d cement W 42.5N, 1st class/ forming to ng, mixing and curing of the E-l- to attain the	cum	0.79	10,063.81	7,925.25
		1	< 42	x 0.25	x 0.075	=	0.79	cum			
4	5.04.01	Brick works with mortar (1:6) in f fully with mortar, bricks at least for etc. all complet charges and acc II/B-M) (PWD 04	n first class b oundation and , racking out t 24 hours before including c cepted by the .1)	ricks with c d plinth, fillin the joints, clo ore use and ost of wate Engineer-in-	ement sa ng the joir eaning an curing at le r, electric -charge. ((F.M. 1.2) interstices paking the for 7 days and other nent: CEM-	cum	16.54	7,529.00	1,24,510.84	
	FF	1 >	< 42	x 0.25	x 0.375	=	3.94	cum			
	SF	1 >	42	x 0.25	x 1.2	=	12.60	cum			
					Total	=	16.54	cum			
5	5.02.11	Earth filling ins within 90m of the each layer up to the E-I-C Dry di of MDD (STD).	ide plinth in building site, finished level ensity after co	150mm laye watering, le , etc. all com mpaction sh	ers with e veling and plete as p all not be	arth d coi ber c less	available nsolidating lirection of than 90%	cum	1.42	207.00	293.42
		0.2	< 42	x 0.375	x 0.45	=	1.42	cum			
										Sub Total	1,34,660.46
В	Main Plaza w	orks									
1	5.02.08.1	Sand filling in (minimum FM 0 consolidating eac direction of the E than 95% of MDI	foundation tre 50) in 150mr ch layer up to -I-C. Dry dens D (STD)	enches and n layers in/c finished leve sity after com	inside plin leveling, letc. all co paction sh	nth wat omp nall r	with sand tering and lete as per not be less	cum	165.60	1,088.00	1,80,172.80
	E 00.05	1 >	< <u>1104</u>	x 1	x 0.15	=	165.60	cum	4 404 00	47.00	F4 000 00
2	5.03.05	Providing single one kilogram per floor underneath specifications an	e layer polyth r 6.5 square n i the cement d direction of f	nene sheet (neter in floor concrete, et the E-I-C.	0.18mm t or any wl tc. all cor	nick here nple) weighing in ground te as per	sqm	1,104.00	47.00	51,888.00
		1 >	< 1104	x 1		=	1104.00	sqm			

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
3	4.06.04	PCC-17: Plain cement concrete work in foundation with minimu compressive strength of 17MPa at 28 days (suggested m proportion 1:2:4 & maximum w/c ratio 0.45) on standard cylinder per standard practice of Code AASHTO/ ASTM/ and ceme conforming to BDS EN 197-1 : 2003 CEM-II/A-L/M/V/W 42.5 sand of minimum FM 1.8 and 20mm down well graded 1st clas picked brick chips (LAA value not exceeding 40) conforming ASTM C 33 including breaking bricks into chips, shuttering, mixi by concrete mixer machine, casting, laying compacting and curi for the requisite period etc. all complete as per direction of the C. Additional quantity of cement to be added if required to attain to strength at the contractor's own cost.	m cum x as tt l, s/ o ng ng i-i-i- ne	110.40	10,063.81	11,11,044.62
4	5.04.22	1 x 1104 x 1 x 0.1 = 110.4 Klinker paving brick works in floor or pavement with machine mapressed bricks of approved quality with cement sand (F.M. 1. mortar (1:4) on minimum 12 mm thick cement sand (F.M. 1. mortar (1:4) including raking out joints, cutting the bricks to requir size, soaking the same for 24 hours before use wherever necessary including high class flush pointing in cement mort (1:2), cleaning, curing at least for 7 days etc. including washing a screening of sand, cost of water, electricity and other charg complete and accepted by the Engineer-in-charge. (Cement: CE II/B-M) (PWD 04.22)) cum de 2) 2) ed r ar nd s M-			
	5.04.22.1	100 mm thick flat brick pavement with 200 mm x 100 mm x 50 mr size klinker facing bricks. (PWD 04.22.1)	n sqm	1,104.00	3,131.00	34,56,624.00
		1 x 1104 x 1 x 1 = 1104.0	0 sqm			
		Total = 1104.0	0 sqm			
				Sub Total	Tk	47,99,729.42
C	Central Maso	nry steps		- [
	5.02.01.2	Earthwork in excavation of foundation trenches, including layor by excavating earth to the lines, grades and elevation as shown the drawing providing center lines, local bench mark pillars, fixi bamboo spikes and marking layout with chalk powder fillir baskets, carrying and disposing of all excavated materials at a si- distance designated by the E-I-C in all types of soils except roci gravelly, slushy or organic soil, leveling, ramming, dressing a preparing the base, etc. all complete for an initial excavation dep of 2m and an initial lead not exceeding 20m, including arranging necessary tools and equipment at work site, etc. complete as p direction of the E-I-C.	in cum ig g fe y, d th all er	27.10	168.00	4,552.00
1	1	ן ו אן סוס אן א גער אן א א גער אן או א גער אן או א גער אן או א גער אן א גער או א גער אן א גער א גער א גער אין א	l cum			

ltem No	Ref. to LGED Dhaka Division SoR.			D	escript	ion					Unit	Quantity	Rate in Tk.	Amount in Tk.
2	5.02.08.1	Sand filling ir (minimum FM consolidating e direction of the than 95% of MI	n foi 0.50 each E-I- DD (undation tro) in 150m layer up to C. Dry den STD)	enches m laye finishe sity afte	and ers in/c ed leve er com	insid : leve l etc. ipacti	e plin eling, all co on sha	th v wat mpl all r	with sand ering and lete as pen not be less	cum	11.61	1,088.00	12,634.13
		1	х	51.61	x	3	x 0	075	=	11.61	cum			
							Т	otal	=	11.61	cum			
3	4.06.02	Single layer b bricks in foun minimum FM 0 per instruction	datio .50, of th	t flat solin on, filling f watering, lo e E-I-C.	g with the inte eveling	1st cli erstice , dress	ass c s tig sing,	or pick htly v etc. al	ked vith II co	kiln burnt sand of omplete as	sqm	154.83	478.76	74,126.41
		1	Х	51.61	х	3			=	154.83	sqm			
							<u> </u>	otal	=	154.83	sqm		40.000.04	((0.000, (0
4	4.06.04	PCC-17: Plain compressive s proportion 1:2: per standard conforming to sand of minimu picked brick c ASTM C 33 ind by concrete mi for the requisit C. Additional q strength at the	CC-17 : Plain cement concrete work in foundation with minimu ompressive strength of 17MPa at 28 days (suggested mi roportion 1:2:4 & maximum w/c ratio 0.45) on standard cylinder er standard practice of Code AASHTO/ ASTM/ and cemen onforming to BDS EN 197-1 : 2003 CEM-II/A-L/M/V/W 42.51 and of minimum FM 1.8 and 20mm down well graded 1st class icked brick chips (LAA value not exceeding 40) conforming .STM C 33 including breaking bricks into chips, shuttering, mixil y concrete mixer machine, casting, laying compacting and curil or the requisite period etc. all complete as per direction of the E . Additional quantity of cement to be added if required to attain the trength at the contractor's own cost.									11.61	10,063.81	1,16,863.48
		1	х	51.61	х	3	x 0	.075	=	11.61	cum			
							Т	otal	=	11.61	cum			
5	5.04.01	Brick works w mortar (1:6) in with mortar, rai at least for 24 h complete includ accepted by the 04.1	Total = 11.6 Brick works with first class bricks with cement sand (F.M. 1 mortar (1:6) in foundation and plinth, filling the joints/interstices t with mortar, racking out the joints, cleaning and soaking the bri at least for 24 hours before use and curing at least for 7 days et complete including cost of water, electricity and other charges a accepted by the Engineer-in-charge. (Cement: CEM-II/B-M) (PW 04.1								cum I	50.32	7,529.00	3,78,857.40
		1	x	51.61	x 0.	325	x	3	=	50.32	cum			
6	5.04.22	Klinker paving brick works in floor or pavement with machine or pressed bricks of approved quality with cement sand (F.M. mortar (1:4) on minimum 12 mm thick cement sand (F.M. mortar (1:4) including raking out joints, cutting the bricks to requise, soaking the same for 24 hours before use wher necessary including high class flush pointing in cement m 1:2), cleaning, curing at least for 7 days etc. including washing screening of sand, cost of water, electricity and other char complete and accepted by the Engineer-in-charge. (Cement: I/B-M) (PWD 04.22)								50.32 hine made (F.M. 1.2) (F.M. 1.2) o requirec wherever nt mortar ashing and r charges nent: CEM	- cum			

ltem No	Ref. to LGED Dhaka Division SoR. 2022			Desc	cription	00				Unit	Quantity	Rate in Tk.	Amount in Tk.
	5.04.22.1	100 mm thick fla size klinker facin	t brick pave g bricks. (P	ment WD (with 200)4.22.1)) m	m x 100	mm	ı x 50 mm	sqm	193.54	3,131.00	6,05,965.91
		1 1	x 51.61	X	3			=	154.83	sqm			
		1 1	x 51.61	x	0.75			=	38.71	sqm			
							Total	=	193.54	sqm			
											Sub Total	Tk	11,92,999.33
D	Entry Mason	ry step-2 nos											
1	5.02.01.2	Earthwork in ex by excavating ea the drawing prov bamboo spikes baskets, carrying distance designa gravelly, slushy preparing the ba of 2m and an ini necessary tools direction of the E	ccavation of arth to the I viding cente and mark g and dispo ated by the or organic se, etc. all tial lead not and equipr -I-C.	of four ines, er line ing l sing c E-I-C soil, comp exce nent	ndation t grades a es, local ayout w of all exc: i in all ty leveling, lete for a seding 20 at work s	rer and be rith ava pes an)m site	nches, ind l elevatio nch mark chalk p ated mate s of soils amming, initial exc including e, etc. co	clud n a: c pil bow eria dre cava g ai mpl	ling layout, s shown in llars, fixing der filling ls at a safe cept rocky, essing and ation depth rranging all lete as per	cum	3.04	168.00	511.43
		2 2	x 5.66	x	0.375	Х	0.15	=	0.64	cum			
		4 2	x 1.5	X	0.375	х	0.15	=	0.34	cum			
		4	x 2.3	Х	1.5	Х	0.15	=	2.07	cum			
0	E 00 00 4	Canal filling in	f	4	امیر میا	1 :	l otal	=	3.04	cum	4 50	4 000 00	4 656 07
2	5.02.06.1	(minimum FM 0 consolidating ea direction of the E than 95% of MD	.50) in 150 ch layer up E-I-C. Dry de D (STD)	to finitensity	ayers in, ished lev after co	/c /el mp	leveling, etc. all co action sh	wa omp nall	tering and lete as per not be less	cum	1.52	1,000.00	1,000.07
		2	x 5.66	Х	0.375	Х	0.075	=	0.32	cum			
		4	x 1.5	X	0.375	Х	0.075	=	0.17	cum			
		4	x 2.3	Х	1.5	Х	0.075	=	1.04	cum			
2	4.06.00	Single laver be	ok flat as	inc ··	with 1 at a			= kod	1.52 kiln hurnt	cum	00 70	170 70	17 0/6 70
3	4.00.02	bricks in found minimum FM 0.5 per instruction of	cks in foundation, filling the interstices tightly with san nimum FM 0.50, watering, leveling, dressing, etc. all comple r instruction of the E-I-C.							sqm	31.28	478.76	17,845.78
		2	x 5.66	Х	0.375			=	4.25	sqm			
		4	x 1.5	Х	0.375			=	2.25	sqm			
		4 2	x 2.3	Х	1.5			=	13.80	sqm			
		2	2 x 5.66 x 1.5 =							sqm			
							Total	=	37.28	sqm			

ltem No	Ref. to LGED Dhaka Division SoR. 2022		D	esc	ription					Unit	Quantity	Rate in Tk.	Amount in Tk.
4	4.06.04	PCC-17: Plain cc compressive str proportion 1:2:4 & per standard pr conforming to B sand of minimun picked brick chip ASTM C 33 inclu by concrete mixe for the requisite C. Additional qua strength at the cc	ement concre ength of 17 & maximum v actice of Cd DS EN 197- n FM 1.8 and os (LAA valu iding breakin er machine, c period etc. al initity of ceme ontractor's ow	ete v MPa v/c r ode 1 : 20 ie n g br astii l co nt to n co	work in a at 28 atio 0.44 AASHT 2003 C mm dow ot exce icks into ng, layir mplete b be add ost.	fou 5) c O/ EM vn edi o ch ig c as j ed	ndation ays (su nstanda ASTM/ 1-II/A-L/N well grac ng 40) o ips, shu compacti per direc if require	with gge and an (/V/ ded cont tteri ng tior ed to	a minimum sted mix cylinder as d cement W 42.5N, 1st class/ forming to ng, mixing and curing of the E-l- o attain the	cum	2.29	10,063.81	23,005.87
		2 ×	(10.16	Х	1.5	Х	0.075	=	2.29	cum			
	F 0 1 0 1		C				Total	=	2.29	cum		7 500 00	F0 000 =0
5	5.04.01	Brick Works Witt mortar (1:6) in fo with mortar, rack at least for 24 hc all complete incli and accepted by (PWD 04.1)	Tick works with first class bricks with cement sand (F.M. 1.2) lortar (1:6) in foundation and plinth, filling the joints/interstices fully rith mortar, racking out the joints, cleaning and soaking the bricks t least for 24 hours before use and curing at least for 7 days etc II complete including cost of water, electricity and other charges nd accepted by the Engineer-in-charge. (Cement: CEM-II/B-M) PWD 04.1)									7,529.00	58,206.70
		4 x	2.28	x	1.5	x	0.15	=	2.05	cum			
		4 x	2.03	х	1.5	х	0.15	=	1.83	cum			
		4 x	(1.78	х	1.5	х	0.15	=	1.60	cum			
		4 ×	(1.75	х	1.5	х	0.15	=	1.58	cum			
		4 x	0.5	Х	1.5	х	0.15	=	0.45	cum			
		4 x	0.25	х	1.5	х	0.15	=	0.23	cum			
	5.04.00						Total	=	7.73	cum			
D	5.04.22	numker paving br pressed bricks of mortar (1:4) on mortar (1:4) inclu size, soaking th necessary incluo (1:2), cleaning, cl screening of san complete and ac II/B-M) (PWD 04.	linker paving brick works in floor or pavement with machine machines and ressed bricks of approved quality with cement sand (F.M. 1.2) iortar (1:4) on minimum 12 mm thick cement sand (F.M. 1.2) iortar (1:4) including raking out joints, cutting the bricks to require ize, soaking the same for 24 hours before use whereve ecessary including high class flush pointing in cement mortat (1:2), cleaning, curing at least for 7 days etc. including washing an creening of sand, cost of water, electricity and other charge complete and accepted by the Engineer-in-charge. (Cement: CE //B-M) (PWD 04.22)										
	5.04.22.1	100 mm thick flat size klinker facing	brick pavem g bricks. (PW	ent D 0	with 200 4.22.1)	m	m x 100 i	nm	x 50 mm	sqm	35.88	3,131.00	1,12,340.28
		2 ×	10.16	X	1.5			=	30.48	sqm			
		24 🗴	1.5	X	0.15		Tatal	=	5.40	sqm			
			Total =									Sub Total	2,13,566,13

ltem No	Ref. to LGED Dhaka Division SoR. 2022			D)escrij	ption					Unit	Quantity	Rate in Tk.	Amount in Tk.
E		onry step												
1	5.02.01.2	Earthwork in by excavatin the drawing bamboo spi baskets, carn distance des gravelly, slue preparing the of 2m and ar necessary to direction of th	n exca g earth providi kes ai rying a ignated shy or base n initial pols an he E-I-0	vation of n to the line ng center nd markin nd disposit d by the E organic s , etc. all co lead not e d equipme C.	found es, gr lines, ig lay ng of -I-C ir coil, le comple exceed ent at	lation t rades a , local yout w all exc n all ty eveling te for a ding 20 work s	ren and ber ith ava pes an i)m, site	ches, inc elevation ach mark chalk p ated mate s of soils amming, nitial exc including , etc. con	clud n a: pil oow eria exc dre ava g ai mpl	ling layout, s shown in llars, fixing der filling ls at a safe cept rocky, essing and ation depth rranging all ete as per	cum	12.01	168.00	2,017.58
		1	х	15.25	х	4.5	х	0.175	=	12.01	cum			
							-	Total	=	12.01	cum			
2	5.02.08.1	Sand filling (minimum Fl consolidating direction of tl than 95% of	in fou M 0.50 g each he E-I-0 MDD (indation tr i) in 150m layer up to C. Dry den STD)	renche im lay o finish isity a	es and yers in hed lev fter co	l in /c l rel e mpa	side plin leveling, etc. all co action sh	with sand tering and lete as per not be less	cum	5.15	1,088.00	5,599.80	
		1	x	15.25	x	4.5	х	0.075	=	5.15	cum			
								Total	=	5.15	cum			
3	4.06.02	Single layer bricks in for minimum FM per instructio	r brick undation 1 0.50, on of the	flat solin on, filling watering, l e E-I-C.	i g with the ir levelin	h 1st o nterstio ng, dre:	clas ces ssir	s or pick tightly n ng, etc. a	ked with II c	kiln burnt sand of omplete as	sqm	68.63	478.76	32,854.91
		1	х	15.25	Х	4.5			=	68.63	sqm			
								Total	=	68.63	sqm			
4	4.06.04	PCC-17: Pla compressive proportion 1: per standard conforming is sand of mini picked brick ASTM C 33 by concrete for the requi C. Additional strength at th	CC-17: Plain cement concrete work in foundation with minimum ompressive strength of 17MPa at 28 days (suggested mix roportion 1:2:4 & maximum w/c ratio 0.45) on standard cylinder a er standard practice of Code AASHTO/ ASTM/ and cemer onforming to BDS EN 197-1 : 2003 CEM-II/A-L/M/V/W 42.5N and of minimum FM 1.8 and 20mm down well graded 1st clas icked brick chips (LAA value not exceeding 40) conforming to STM C 33 including breaking bricks into chips, shuttering, mixir y concrete mixer machine, casting, laying compacting and curr for the requisite period etc. all complete as per direction of the E 2. Additional quantity of cement to be added if required to attain th trength at the contractor's own cost.1 x 15.25 x 4.5 x 0.075=5.15								cum	5.15	10,063.81	51,797.17
		1	Х	15.25	X	4.5	Х	0.075	=	5.15	cum			
								Total	=	5.15	cum			

ltem No	Ref. to LGED Dhaka Division SoR.			D	esc	ription					Unit	Quantity	Rate in Tk.	Amount in Tk.
	2022													
5	5.04.01	Brick works w mortar (1:6) ir fully with mort bricks at least etc. all compl charges and a II/B-M) (PWD 04.1	vith ar, r for 2 lete acce	first class undation an acking out 24 hours be including of pted by the	bric nd p the fore cost e Er	ks with linth, fill joints, o use and of wat gineer-i	cer ling clea d cu er, n-c	nent san the join aning an iring at le electrici harge. (i	nd i ts / d so east ty a Cen	(F.M. 1.2) interstices baking the for 7 days and other nent: CEM-	cum	13.83	7,529.00	1,04,104.42
		1	Х	33.5	Х	0.25	х	1.075	=	9.00	cum			
		1	Х	15.24	Х	0.25	Х	0.15	П	0.57	cum			
		1	х	14.64	х	0.25	х	0.15	=	0.55	cum			
		1	х	14.04	х	0.25	х	0.15	=	0.53	cum			
		1	х	13.44	Х	0.25	х	0.15	=	0.50	cum			
		1	х	12.84	Х	0.25	х	0.15	=	0.48	cum			
		1	х	12.24	х	0.25	Х	0.15	=	0.46	cum			
		2	х	4.6	х	0.25	Х	0.15	=	0.35	cum			
		2	х	4.3	х	0.25	Х	0.15	=	0.32	cum			
		2	х	4	х	0.25	Х	0.15	=	0.30	cum			
		2	х	3.7	х	0.25	Х	0.15	=	0.28	cum			
		2	Х	3.4	X	0.25	Х	0.15	=	0.26	cum			
		2	х	3.1	Х	0.25	Х	0.15	=	0.23	cum			
6	5.04.22	Klinker paving	bric	k works in	floor	ornave	13.83 hine made	cum						
		pressed bricks of approved quality with cement sand (F.M. 1.2 mortar (1:4) on minimum 12 mm thick cement sand (F.M. 1.2 mortar (1:4) including raking out joints, cutting the bricks to require size, soaking the same for 24 hours before use wherever necessary including high class flush pointing in cement morta (1:2), cleaning, curing at least for 7 days etc. including washing an screening of sand, cost of water, electricity and other charges complete and accepted by the Engineer-in-charge. (Cement: CEI II/B-M) (PWD 04.22)												
	5.04.22.1	100 mm thick t size klinker fac	flat k cing	vrick pavem bricks. (PW	ent /D 0	with 200 4.22.1)	x 50 mm	sqm	110.76	3,131.00	3,46,789.56			
		1	Х	15.25	X	4.5			=	68.63	sqm			
		1	Х	12.2	X	1.5			=	18.30	sqm			
		1	х	24.5	Х	0.15			=	3.68	sqm			
		1	х	23.9	Х	0.15			=	3.59	sqm			
		1	х	23.3	х	0.15			=	3.50	sqm			
		1	х	22.7	Х	0.15			=	3.41	sqm			
		1	х	22.1	x	0.15			=	3.32	sqm			
		1	х	21.5	x	0.15			=	3.23	sqm			
		1	x	20.9	x	0.15			=	3.14	sqm			
					+			Total	=	110.76	sqm			
	L	1									ı	1	Sub Total	5,43,163.44
												Total	Tk	68,84,118.78

Item No	Ref. to LGED Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
Pond e	excavation					
1	6.01.20.01	Earthwork in excavation of canals/Khals, ponds, drains etc. by excavating earth to lines, grades and elevation in all types of soils except rocky, gravelly, slushy or organic soil as shown in the drawings, filling buskets, carrying and disposing all excavated materials at a safe distance including levelling, dressing etc all complete all for an initial excavation depth upto 2m and lead not exceeding 20m including arranging for and supplying all necessary tools and equipments etc., all complete as per direction of the Engineer-in-Charge.	cum	2,636.00	170.41	4,49,200.76
		1 x 1318 x 1 x 2 = 2636.00	cum			
2	6.01.19	Earthwork in excavation of canals/Khals, ponds, drains etc. by excavating earth to the lines, grades and elevation as shown in the drawings, filling baskets, carrying & disposing of all excavated materials at a safe distance designated by the Engineer-in-Charge in all types of soil except rocky, gravelly, slushy or organic soil, levelling, dressing etc all complete for an initial excavation depth of each meter or part thereof beyond the initial 2m depth and an initial lead not exceeding 20m including arranging for & supplying all necessary tools & equipment at work site etc., all complete as per direction of the Engineer-in-Charge	cum	1,318.00	108.88	1,43,503.84
		1 x 1318 x 1 x 1 = 1318.00	cum			
3	6.01.02	Earthwork in excavation of canals/Khals, ponds, drains etc. by excavating earth to the lines, grades and elevation as shown in the drawings, filling baskets, carrying & disposing of all excavated materials at a safe distance designated by the Engineer-in-Charge in all types of soil except rocky, gravelly, slushy or organic soil, levelling, dressing etc all complete for an initial excavation depth of each meter or part thereof beyond the initial 2m depth and an initial lead not exceeding 20m including arranging for & supplying all necessary tools & equipment at work site etc., all complete as per direction of the Engineer-in-Charge	cum	856.70	142.03	1,21,677.10
		1 x 1318 x 1 x 0.65 = 856.70	cum			
4	Present rates	Slope protection works	cum	722.25	1,250.00	9,02,812.50
		1 x 107 x 6.75 = 722.25	sqm			
				Total	Tk	16,17,194.20

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
Items #	# 05					
Gnat c	RCC quide w	all				
1	5.02.01.2	Earthwork in excavation of foundation trenches, including layout, by excavating earth to the lines, grades and elevation as shown in the drawing providing center lines, local bench mark pillars, fixing bamboo spikes and marking layout with chalk powder filling baskets, carrying and disposing of all excavated materials at a safe distance designated by the E-I-C in all types of soils except rocky, gravelly, slushy or organic soil, leveling, ramming, dressing and preparing the base, etc. all complete for an initial excavation depth of 2m and an initial lead not exceeding 20m, including arranging all necessary tools and equipment at work site, etc. complete as per direction of the E-I-C.	cum	211.41	168.00	35,516.25
		1 x 56.375 x 3.000 x 1.250 = 211.41	cum			
2	5.03.05	Providing single layer polythene sheet (0.18mm thick) weighing one kilogram per 6.5 square meter in floor or any where in ground floor underneath the cement concrete, etc. all complete as per specifications and direction of the E-I-C.	sqm	160.67	47.00	7,551.43
		1 x 56.375 x 2.850 = 160.67	sqm			
3	4.06.04	PCC-17 : Plain cement concrete work in foundation with minimum compressive strength of 17MPa at 28 days (suggested mix proportion 1:2:4 & maximum w/c ratio 0.45) on standard cylinder as per standard practice of Code AASHTO/ ASTM/ and cement conforming to BDS EN 197-1 : 2003 CEM-II/A-L/M/V/W 42.5N, sand of minimum FM 1.8 and 20mm down well graded 1st class/ picked brick chips (LAA value not exceeding 40) conforming to ASTM C 33 including breaking bricks into chips, shuttering, mixing by concrete mixer machine, casting, laying compacting and curing for the requisite period etc. all complete as per direction of the E-I-C. Additional quantity of cement to be added if required to attain the strength at the contractor's own cost.	cum	12.05	10,063.81	1,21,270.48
		1 x 56.375 x 2.850 x 0.075 = 12.05	cum			

	Ref. to LGED					
Item	Dhaka	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
INO	2022					
4	2022 5.05.03	RCC WORKS: 1:1.5:3(measured on gross concrete section) (fc =25MPa, minimum fcr = 33.5 MPa in nominal mix 1 : 1.5 : 3), with stone chips (100% sand of F.M. 2.2) Reinforced cement concrete works with minimum cement content relates to mix ratio 1:1.5:3 having maximum water cement ratio = 0.40 and minimum fcr = 33.5 MPa, satisfying a specified compressive strength fc = 25 MPa at 28 days on standard cylinders as per standard practice of Code ACI/BNBC/ASTM, Cement conforming to BDS EN-197-1-CEM-I, 52.5N (52.5 MPa) / ASTM-C 150 Type – I, best quality Sylhet sand or coarse sand of equivalent F.M. 2.2 and 20 mm down well graded stone chips conforming to ASTM C-33 (Aggregate grading as per table shown in technical specification), conducting necessary tests, making and placing shutter in position and maintaining true to plumb, making shutter water-tight properly, placing reinforcement in position; mixing with standard mixer machine with hopper, fed by standard measuring boxes, casting in forms, compacting by vibrator machine and curing at least for 28 days, removing centering-shuttering after specified time approved; including cost of water, electricity, other charges etc. all complete, approved and accepted by the Engineer-incharge. (Rate is excluding laboratory test fees, the cost of reinforcement and its fabrication, placing,binding etc. and the cost of shuttering & centering) (PWD 07.3)				
4.1	5.05.03.01	Individual & combined footing, pile cap, raft/mat, floor slab and foundation beam up to plinth level (PWD 07.3.1)	cum	25.37	13,842.00	3,51,154.24
		1 x 56.375 x 1.500 x 0.300 = 25.37	cum			
4.2	5.05.03.02	Pedestals, column, column capital, lift wall and RCC wall up to ground floor (PWD 07.3.2)	cum	60.25	14,201.00	8,55,621.34
		1 x 56.375 x 2.850 x 0.375 = 60.25	cum			
4.3		FORM WORK (Steel) :Centering and shuttering, including strutting, propping etc. (The formwork must be rigid enough both in and out of plane, to make the concrete surface true to the designed shape and size by using necessary MS sheets of minimum 16 BWG, angles of minimum size 40 mm x 40 mm x 5 mm, flat bars etc.) and removal of form for: (PWD 07.12)				
	5.05.11.01	Individual and combined footing (PWD 07.12.1)	sqm	17.36	582.00	10,104.98
		1 x 57.875 x 0.300 = 17.36	sqm			
	5.05.11.04	Pedestal, column, column capital, lift wall and wall up to ground floor (PWD 07.12.4)	sqm	363.62	522.00	1,89,808.99
		2 x 56.375 x 3.225 = 363.62	sqm			

ltem No	Ref. to LGED Dhaka Division SoR. 2022		Descri	ption				Unit	Quantity	Rate in Tk.	Amount in Tk.
5	5.06.01.02	Grade 400 (RB 40 and marked as pestrength, fy (ReH) = exceed fy by mor ultimate strength, f least 1.25 and m minimum total elon respectively.	00/ 400W): Ribl er BDS ISO 69 = 400 MPa, but t re than the 125 fu (Re) to teste ninimum elonga gation at maxim	bed or D 035-2:200 the tested 5 MPa and d yield st ation afte num force	eformed t 6 with mi yield stre nd the ra trength (fy r fracture (Agt) is 1-	par inim ngt tio /) s /) s (/ 4%	produced num yield h shall not of tested hall be at A5.65) & and 2.5%	kg	10,081.70	100.00	10,08,169.98
		1.50%				=	10081.70	kg			
6	5.04.03	Brick work with foundation and plin 42.5N) and best interstices tightly soaking bricks at le curing for requisite direction of the E-I-	1st class brid th with Portland quality sand with mortar, ra east for 24 hour period, etc. all c C.	cks in ce Composi (minimun aking out rs before complete a	ement mo ite cemen n FM1.2) joints, c use, was as per	ortar t (C lear hing	r (1:4) in CEM II/AM, illing the ning and g of sand,	cum	12.68	8,419.00	1,06,789.75
		1 x	56.375 x	0.250 x	0.900	=	12.68	cum			
_					Total	=	12.68	cum	0.47.40		
	0.02.10	within 90m of the b each layer up to fir the E-I-C Dry den of MDD (STD).	building site, wat hished level, etc sity after compa	ering, lev . all comp action sha	eling and plete as pe Il not be le	cor er d ess	nsolidating lirection of than 90%	cum	047.40	700.00	0,00,000.00
		1 x	36.575 x	9.900 x	1.200	=	434.51	cum			
		1 x	33.528 x	8.380 x	0.450	=	126.43	cum			
		1 x	30.480 x	9.150 x	0.450	=	125.50	cum			
		1 X	27.432 X	7.620 X	0.450	=	94.06	cum			
8	5 12 0/	Minimum 12mm th	24.300 X	0.100 X	to dado a	- and	00.92	cum	50.74	373.00	18 925 09
	0.12.01	upto 150mm belo including washing edges and corner complete as per minimum FM. 1.2 to	ow ground leve of sand and a s and curing for direction of th o be used)	added De or the re ne Engin	eat ceme enso-01, quisite pe eer-in-Cha	ent finis erio arge	finishing shing the d etc. all e. (Sand			010.00	10,020.00
_		1 x	56.375	Х	0.900	=	50.74	sqm			
<u>В</u>	5 03 05	Providing single l	aver polythese	sheet (18mm th	lick)) weighing	sam	120.02	17 00	20 21/ 25
	0.00.00	one kilogram per 6 floor underneath ti specifications and o	b.5 square meter he cement con- direction of the E	r in floor of crete, etc E-I-C.	b rany white	in ground te as per	sym	432.23	47.00	20,314.85	
		1 x	24.380 x	6.100		=	148.72	sqm			
		1 x	39.620 x	1.525		=	60.42	sqm			
		1 X	45./30 X	1.525		=	69.74 72.04	sqm			
		1 X	53.320 x	1.525		=	81.31	sqm			
		· · /^			1		UU	~ ~ ' ' '			

ltom	Ref. to LGED							
No	Division SoR.	Description			Unit	Quantity	Rate in Tk.	Amount in Tk.
	2022							
2	4.06.04	PCC-17: Plain cement concrete work in fou	Indation with mi	nimum	cum	32.42	10,063.81	3,26,241.61
		compressive strength of 1/MPa at 28 d	lays (suggester	d mix				
		proportion 1:2:4 & maximum w/c ratio 0.45) c		ider as				
		conforming to BDS EN 197-1 · 2003 CEM		42.5N				
		sand of minimum FM 1.8 and 20mm down	well graded 1st	class/				
		picked brick chips (LAA value not exceedi	ing 40) conform	ning to				
		ASTM C 33 including breaking bricks into ch	nips, shuttering,	mixing				
		by concrete mixer machine, casting, laying o	compacting and	curing				
		or the requisite period etc. all complete as p	per direction of	the E-I-				
		J. Additional quantity of cement to be added	if required to at	ain the				
		strength at the contractor's own cost.						
		1 x 24.380 x 6.100	0.075 =	1.15	cum			
		1 X 39.620 X 1.525	0.075 =	4.53	cum			
		1 X 45.730 X 1.525	0.075 =	5.23	cum			
		1 x 47.240 x 1.525	0.075 =	5.40	cum			
		1 x 53.320 x 1.525	0.075 =	6.10	cum			
3	5.05.01	RCC:1:2:4, 17MPa, Brick Chips (BC): Reinfo	brced cement co	ncrete				
		1.2.4) and maximum water cement ratio 0.45		nauve				
		naving minimum required average strength	n. f'cr = 24 Ma	a and				
		satisfied a specified compressive strength for	c = 17 Mpa at 2	8 days				
		on standard cylinders as per standard pract	ice of Code AA	SHTO/				
		ASTM and Portland Composite Cement confe	orming to BDS I	EN 197-				
		1 :2003 CEM-II 42.5N sand of minimum FM	1 1.8 and 20mm	1 down				
		well graded picked brick chips (LAA value	and maximum	water				
		ASTM C 33 or Aggregate Grading Appendix	x-3 I GED Sche	hille of				
		Rates or any other International recognized	envelop in/c br	eaking				
		chips and screening through proper sieves, o	centering, shutte	ering in				
		position, making shuttering fully leak proof &	& shuttering wit	h plain				
		16 BWG steel sheet fitted over 38mm thick	wooden plank	panels				
		and Standard size Bamboo Props suitabl	y braced, plac	ing of				
		einforcement in position, mixing the aggre	egates with sta	andard				
		maintaining allowable slump of 50mm (witho	ut plasticizer) &	75mm				
		o 100mm (when plasticizer use), pouring, c	asting, compac	ting by				
		mechanical vibrator machine and curing a	at least for 28	days,				
		emoving centering-shuttering after approved	specified time					

ltem No	Ref. to LGED Dhaka Division SoR. 2022			Desc	ription					Unit	Quantity	Rate in Tk.	Amount in Tk.
		period, i/c cost cylinders requir fabrication, well quantity of cem admixture of cor water required cement (W/C) r design from ap Additional quant strength at the direction and ap Note : Using Cor	of addition ed. Excludii ding, coupl ent and Pla nplying type for normal ratio (Doses oproved lab tity of ceme contractor's proval of the ncrete Mixed	al te ng th ng, j sticiz A un worka of a orator of a ovr Engi	sting cl e cost placing, ter i.e. 1 der AST ability an dmixture ry instru- be adde n cost) ineer in o	narç of i bir Wat M (nd e tc uctio ed il etc.	ges of n reinforce nding et ter reduc C 494 to to maint o be fixe on by th f required . all com rge.	nate mei c cing red ain d b he d to	erials and nt and its Additional g chemical uce mixing low water- by the mix Engineer) o attain the tet as per				
3.1	5.05.01.01	In individual and plinth level	l continuous	footir	ng of col	lum	n, raft ar	nd fl	loor slab at	cum	54.03	8,673.00	4,68,592.16
		1	x 24.38	0 x	6.100	х	0.125	=	18.59	cum			
		1	x 39.62	0 x	1.525	х	0.125	=	7.55	cum			
		1	x 45.73	0 x	1.525	х	0.125	=	8.72	cum			
		1	x 47.24	0 x	1.525	х	0.125	=	9.01	cum			
		1	x 53.32	0 x	1.525	Х	0.125	=	10.16	cum			
3.2	5.05.11	FORM WORK (3 propping etc. (T of plane, to mak and size by us angles of minimu removal of form	Steel) :Cent he formworl at the concr ing necessa um size 40 n for: (PWD 0	ering a mus ete su ary M nm x 7.12)	and shu at be rigi urface tr S sheet 40 mm	itter de ue ts c x 5	ring, inclu nough be to the de of minime mm, flat	udin oth esig um bar	ig strutting, in and out ned shape 16 BWG, rs etc.) and	sqm	55.62	582.00	32,372.30
	5.05.11.01	Individual and co	ombined foo	ting (I	PWD 07	.12	.1)						
		1	x 60.96	0 x	0.125		-	=	7.62	sqm			
		1	x 82.29	0 x	0.125			=	10.29	sqm			
		1	x 94.5′	0 x	0.125			=	11.81	sqm			
		1	x 97.53	0 x	0.125			=	12.19	sqm			
		1	x 109.69	0 x	0.125			=	13.71	sqm			
4	5.06.01.02	Grade 400 (RB and marked as strength, fy (Rel- exceed fy by n ultimate strength least 1.25 and minimum total el respectively.	400/ 400W per BDS d) = 400 MP nore than t h, fu (Re) to minimum longation at): Ril SO 6 a, but ne 12 o test elong maxii	bbed or (935-2:2 t the tesi 25 MPa ed yield gation a mum for	De 2006 ted an I stu after ce	eformed 6 with m yield strend the ra rength (f r fracture (Agt) is 1	bar hinir atio y) s e (14%	produced mum yield th shall not of tested shall be at A5.65) & and 2.5%	kg	6,361.90	100.00	6,36,189.64
		1.50%						=	6361.90	kg			

ltem No	Ref. to LGED Dhaka Division SoR. 2022		De	escription				Unit	Quantity	Rate in Tk.	Amount in Tk.
5	5.04.22.2	Klinker paving bi pressed bricks of mortar (1:4) on mortar (1:4) inclu size, soaking t necessary includ (1:2), cleaning, c screening of sa complete and ac II/B-M) (PWD 04 50 mm thick bric facing bricks. (PM	rick works in fl of approved c minimum 12 iding raking ou he same for ding high clas uring at least ind, cost of w ecepted by the .22) k pavement w ND 04.22.3)	oor or pave juality with mm thick ut joints, cut 24 hours ss flush po for 7 days e vater, electu e Engineer-i ith 200 mm	ement with r cement sa cement sa ting the brid before u inting in cr itc. including ricity and c n-charge. (x 50 mm x	mac nd nd cks se eme g wa othe Cen	hine made (F.M. 1.2) (F.M. 1.2) to required wherever ent mortar ashing and r charges nent: CEM- mm klinker	sqm	432.23	2,823.00	12,20,187.41
		1	x 24.380	x 6.100	x	=	148.72	sqm			
		1 3	x 39.620	x 1.525	x	=	60.42	sqm			
		1 2	K 45.730	x 1.525	х	=	69.74	sqm			
		1 2	k 47.240	x 1.525	x	=	72.04	sqm			
		1	x 53.320	x 1.525	x	=	81.31	sqm			
С	Sitting const	ruction								1	
1	5.03.05	Providing single one kilogram pe floor underneath specifications an	e layer polyti r 6.5 square n n the cement d direction of	nene sheet neter in floo concrete, o the E-I-C.	(0.18mm ti or or any wh etc. all con	sqm	81.15	47.00	3,813.87		
		1 2	x 30.480	x 0.375	x	=	11.43	sqm			
		1 2	x 39.620	x 0.375	x	=	14.86	sqm			
		1 3	45.730 x	x 0.375	x	=	17.15	sqm			
		1 3	k 47.240	x 0.375	х	=	17.72	sqm			
		1 ;	K 53.320	x 0.375	x	=	20.00	sqm			
3	4.06.04	PCC-17: Plain c compressive str proportion 1:2:4 per standard pr conforming to B sand of minimur picked brick chi ASTM C 33 inclu by concrete mixe for the requisite C. Additional qua strength at the co	ement concre rength of 171 & maximum w ractice of Co DS EN 197- n FM 1.8 and ps (LAA valu uding breaking er machine, ca period etc. all antity of cemer pontractor's own	te work in MPa at 28 /c ratio 0.45 de AASHT 1 : 2003 C 20mm dov e not exce g bricks into asting, layin complete a ht to be add n cost.	foundation days (su on standa O/ ASTM/ EM-II/A-L/N vn well grav eding 40) o o chips, shu og compacti as per direc ed if require	a minimum ested mix cylinder as d cement W 42.5N, 1st class/ forming to ing, mixing and curing of the E-l- b attain the	cum	6.09	10,063.81	61,248.03	
		1	x 30.480	x 0.375	x 0.075	=	0.86	cum			
		1 3	x 39.620	x 0.375	x 0.075	=	1.11	cum			
		1 3	45.730 k	x 0.375	x 0.075	=	1.29	cum			
		1 3	k 47.240	x 0.375	x 0.075	=	1.33	cum			
		1 2	x 53.320	x 0.375	x 0.075	=	1.50	cum			

ltem No	Ref. to LGED Dhaka Division SoR. 2022			Des	cription					Unit	Quantity	Rate in Tk.	Amount in Tk.
4	5.04.03	Brick work wit foundation and p 42.5N) and be interstices tighty soaking bricks a curing for requisi direction of the E	h 1st cla plinth with I st quality y with mo it least for ite period, -I-C.	ss b Portlan sand rtar, 24 ho etc. al	ricks in nd Comp I (minim raking c purs befo I complet	cei ium out ire i ie a	ment mo te cemer FM1.2 joints, o use, was s per	orta it (C), f clea shin	rr (1:4) in CEM II/AM, filling the aning and ig of sand,	cum	40.57	8,419.00	3,41,585.14
		1 >	x 30.4	80 x	0.750	x	0.250	=	5.72	cum			
		1 >	x 39.6	20 x	0.750	х	0.250	=	7.43	cum			
		1 >	x 45.7	30 x	0.750	х	0.250	=	8.57	cum			
		1 >	K 47.2	40 x	0.750	х	0.250	=	8.86	cum			
5	E 0E 01		< 53.3 Do Driek (20 X	0.750	X	0.250	10.00	cum				
5	5.05.01	RCC. 1.2.4, 17Mi works with minin 1.2:4) and maxim having minimum satisfied a specif on standard cylir ASTM and Portla 1 :2003 CEM-II - well graded pick absorption not e: ASTM C 33 or A Rates or any oth chips and screer position, making 16 BWG steel sl and Standard s reinforcement in mixer machine maintaining allow to 100mm (wher mechanical vibra least for 28 day specified time p materials and reinforcement a binding etc. Addi reducing chemic 494 to reduce m maintain low wa' fixed by the mix of Engineer) Additio attain the strengt per direction and Note : Using Cor	ys, removi period, i/c cylinders itional quan itional quan	nips of the construction o	ntering-s of additi- ired. E on, weld complyin- ired for complyin- ired for complyin- ired for complyin- ired for complyin- ired for complyin- ired for complyin- ired for complyin- complyin- ired for complyin- comply	https://www.absolution.com/actionality.com/act	tering a al testing d Plastic ype A u mal worl es of ac atory inside the active of the source of the	ter atic 24 pa 4 pa 4 pa 4 pa 4 pa 4 pa 4 pa 4 pa	Approved approved approved harges of cost of placing, r i.e. Water required to complete as				

ltem No	Ref. to LGED Dhaka Division SoR. 2022		De	escription				Unit	Quantity	Rate in Tk.	Amount in Tk.
5.1	5.05.01.03	In Stair case slat	and step					cum	7.54	8,817.00	66,513.68
		20 >	0.900	x 1.524 >	0.150	=	4.11	cum			
		60 >	0.250	x 1.524 >	0.150	=	3.43	cum			
	5.05.11	FORM WORK (S	Steel) :Centeri	ng and shutte	ering, inclu	ıdin	g strutting,	sqm	13.72	551.00	7,557.52
		propping etc. (Th	ne formwork n	nust be rigid	enough b	oth	in and out				
		of plane, to make	e the concrete	e surface true	to the de	sig	ned shape				
		and size by usi angles of minimu removal of form f	ng necessary im size 40 mn for: (PWD 07.1	n x 40 mm x 8 12)	of minim 5 mm, flat	um bar	s etc.) and				
	5.05.11.10	Stair case slab a	nd steps up to	ground floor	(PWD 07	.12.	10)				
		60 >	1.524	x 0.150		=	13.72	sqm			
6	5.06.01.02	Grade 400 (RB	400/ 400W):	Ribbed or D	eformed	bar	produced	kg	9,666.91	100.00	9,66,690.51
		and marked as	per BDS ISC	0 6935-2:200)6 with m	ninin	num yield				
		strength, ty (Ref) = 400 MPa, Iore than the	125 MPa a	a yield stre	engi atio	of tested				
		ultimate strength	, fu (Re) to t	ested yield s	trength (f	y) s	shall be at				
		least 1.25 and	minimum el	ongation afte	er fractur	e (/	A5.65) &				
		minimum total el	ongation at m	aximum force	e (Agt) is 1	4%	and 2.5%				
		respectively.									
		2.00%				=	9666.91	kg			
7	5.04.22.2	Klinker paving br	ick works in fl	oor or pavem	nent with r	nac	hine made	sqm	125.49	2,823.00	3,54,262.50
		pressed bricks of	of approved of	uality with c	ement sa	nd	(F.M. 1.2)				
		mortar (1:4) on	minimum 12 Iding raking ol	mm thick ce	ement sai	nd ((F.M. 1.2)				
		size, soaking t	he same for	24 hours	before u	se	wherever				
		necessary includ	ding high cla	ss flush poir	iting in ce	eme	ent mortar				
		(1:2), cleaning, c	uring at least	for 7 days etc	. includin	g wa	ashing and				
		screening of sa	nd, cost of w cented by the	vater, electric Engineer-in	charge (othe Cen	r charges				
		II/B-M) (PWD 04	.22)		charge. (oon					
		50 mm thick bric	k pavement w	ith 200 mm x	50 mm x	50 ı	mm klinker				
		facing bricks. (P\	VD 04.22.3)								
		60 >	1.524	x 0.150		=	13.72	sqm			
		10 >	3.200	x 0.450		=	14.40	sqm			
		1 >	30.480	x 0.450		=	13.72	sqm			
		1	39.620	x 0.450		=	17.83	sqm			
		1 >	45.730	x 0.450		=	20.58	sqm			
			47.240	x 0.450		=	21.26	sqm			
		1	53.320	x 0.450		=	23.99	sqm		Out Total	70 44 040 00
										SUD I OTAL	78,11,312.39

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
Items #	<i># 06</i>					
Water	Body Constru	ction				
A	Masonrv qui	de wall				
1	5.02.01.2	Earthwork in excavation of foundation trenches including layout	cum	1.77	168.00	297.68
		by excavating earth to the lines, grades and elevation as shown in the drawing providing center lines, local bench mark pillars, fixing bamboo spikes and marking layout with chalk powder filling baskets, carrying and disposing of all excavated materials at a safe distance designated by the E-I-C in all types of soils except rocky, gravelly, slushy or organic soil, leveling, ramming, dressing and preparing the base, etc. all complete for an initial excavation depth of 2m and an initial lead not exceeding 20m, including arranging all necessary tools and equipment at work site, etc. complete as per direction of the E-I-C.				
		2 x 525 x 0375 x 045 = 177	cum			
2	6.01.20.01	Earthwork in excavation of canals/khals, ponds, drains, etc. by excavating earth to the lines, grades and elevation as shown in the drawing, filling baskets, carrying and disposing of all excavated materials at a safe distance designated by the E-I-C in all types of rocky, gravelly, slushy or organic soil, leveling, dressing, etc. all complete for an initial excavation depth upto 2m and an initial lead not exceeding 20m, including arranging for and supplying all necessary tools and equipment at work site, etc. complete as per direction of the E-I-C.	cum	60.00	170.41	10,224.60
		2 x 30 x 1 x 1 = 60.00	cum			
3	5.04.03	Brick work with 1st class bricks in cement mortar (1:4) in foundation and plinth with Portland Composite cement (CEM II/AM, 42.5N) and best quality sand (minimum FM1.2), filling the interstices tightly with mortar, raking out joints, cleaning and soaking bricks at least for 24 hours before use, washing of sand, curing for requisite period, etc. all complete as per direction of the E-I-C.	cum	2.63	8,419.00	22,099.88
	FF	2 x 5.25 x 0.25 x 1 = 2.63	cum			
		Total = 2.63	cum			
4	5.02.13	Earth filling inside plinth in 150mm layers with earth available within 90m of the building site, watering, leveling and consolidating each layer up to finished level, etc. all complete as per direction of the E-I-C. Dry density after compaction shall not be less than 90% of MDD (STD).	cum	0.35	709.00	251.25
		0.4 x 5.25 x 0.375 x 0.45 = 0.35	cum			
5	5.03.01	Single layer brick flat soling with 1st class or picked kiln burnt bricks in foundation, filling the interstices tightly with sand of minimum FM 0.50, watering, leveling, dressing, etc. all complete as per instruction of the E-I-C.	sqm	3.94	518.00	2,039.63
		2 x 3.23 x 0.375 = 3.94	sqm			

ltem No	Ref. to LGED Dhaka Division SoR. 2022			Des	scription				Unit	Quantity	Rate in Tk.	Amount in Tk.
6	4.06.04	PCC-17: Plain of compressive st proportion 1:2:4 per standard p conforming to I sand of minimu picked brick ch ASTM C 33 incl by concrete mix for the requisite C. Additional qu strength at the c	cement rength & max ractice 3DS E m FM ips (L/ uding I er mac period antity c	concrete of 17M imum w/c of Cod N 197-1 1.8 and 2 AA value preaking chine, cas etc. all of f cement tor's own	e work in fo Pa at 28 c ratio 0.45) e AASHTO : 2003 CE 20mm down not exceed bricks into c sting, laying complete as to be added cost.	minimum sted mix cylinder as d cement W 42.5N, 1st class/ forming to ng, mixing and curing of the E-l- o attain the	cum	0.30	10,063.81	2,971.97		
7	5.12.04	2 Minimum 12mm upto 150mm k including washi edges and con complete as p minimum FM. 1.	x thick below ng of ners a er dire 2 to be	5.25 cement ground sand an nd curing ection of used)	0.375 x blaster (1:4) evel with d added g for the Engir	0.075 to dado a neat cemu enso-01, equisite pe neer-in-Cha	= and ent fini erio arg	0.30 plinth wall finishing shing the d etc. all e. (Sand	cum sqm	26.00	373.00	9,698.00
		1	x	26	X	(1	=	26.00	sqm			
	1			I	1 1	-11					Sub Total	47,583.00
Items i Multip A	# 07 urpose Hall Foundation o	cost										
1	5.02.01.2	Earthwork in a	voovot	ion of for	undation tro	nohoo ino	lud	ing lovout			400.00	
·	0.02.01.2	by excavating e the drawing pro	arth to	the lines	orades and			cum	198.00	108 001	33 264 00	
		bamboo spikes baskets, carryin distance design gravelly, slushy preparing the ba of 2m and an in necessary tools direction of the B	and g and g ated by or or ase, et itial lea and e E-I-C.	center lin marking disposing / the E-I/ ganic soil c. all com d not exc quipment	, grade and les, local be layout with of all excav C in all type , leveling, r plete for an seeding 20m at work site	d elevatior ench mark n chalk p rated mate es of soils ramming, o initial exc n, including e, etc. cor	n as pil owe rial exc dre ava g ar nple	s shown in lars, fixing der filling s at a safe cept rocky, ssing and ation depth ranging all ete as per	cum	198.00	168.00	33,264.00
		bamboo spikes baskets, carryin distance design gravelly, slushy preparing the ba of 2m and an in necessary tools direction of the P	and g and o ated by or org ase, etc itial lea and e E-I-C.	center lin marking disposing y the E-I-i ganic soil c. all com d not exc quipment	es, local be layout with of all excav C in all type , leveling, r plete for an eeeding 20m at work site	d elevatior ench mark n chalk p rated mate es of soils amming, (initial exc. n, including e, etc. cor	n as pil oww rial exc dre ava g ar mple	s shown in lars, fixing der filling s at a safe cept rocky, ssing and ation depth ranging all ete as per	cum	198.00	108.00	33,264.00
		bamboo spikes baskets, carryin distance design gravelly, slushy preparing the ba of 2m and an in necessary tools direction of the B	and g and g ated by or org ase, etc itial lea and e E-I-C.	center lin marking disposing y the E-I ganic soil c. all com d not exc quipment	<pre>s, local be layout with of all excav C in all type l, leveling, r plete for an seeding 20m at work site</pre>	d elevatior ench mark n chalk p rated mate es of soils ramming, o initial exc n, including e, etc. cor	n as pil owe rial exc dre ava g ar nple	s shown in lars, fixing der filling s at a safe cept rocky, ssing and attion depth ranging all ete as per 192.00 6.00	cum cum cum	198.00		33,264.00
2	5.03.05	bamboo spikes baskets, carryin distance design gravelly, slushy preparing the ba of 2m and an in necessary tools direction of the f 12 1 Providing sing	and g and g ated by or org ase, etc itial lea and e E-I-C.	center lin marking disposing y the E-I-i ganic soil c. all com d not exc quipment 4 > 1.5 >	<pre>s, local be layout with of all excav C in all type l, leveling, r plete for an eeding 20m at work site</pre>	d elevatior ench mark n chalk p rated mate es of soils amming, (initial exc n, including e, etc. cor	i as pil oww rial exc dre ava g ar npl = =	Ing layout, s shown in lars, fixing der filling s at a safe cept rocky, ssing and ation depth ranging all ete as per <u>192.00</u> 6.00 <u>198.00</u>	cum cum cum cum	198.00	47.00	4 700 00
2	5.03.05	bamboo spikes baskets, carryin distance design gravelly, slushy preparing the ba of 2m and an in necessary tools direction of the B 12 1 Providing sing one kilogram pe floor underneat specifications an	and a g and a dated by or orgase, etc dated by or orgase, etc dated by dated by and e dated by a	center lin marking disposing y the E-I-i ganic soil c. all com d not exc quipment 4 y 1.5 y r polythe quare me cement c ction of th	c) solution of all excav of all excav C in all type I, leveling, r plete for an exeeding 20m at work site c 2 x	d elevatior ench mark n chalk p rated mate es of soils amming, (initial exc. n, including e, etc. cor	as pil owe rial exc dre ava g ar mple = = = iick ere ple	192.00 192.00 6.00 198.00) weighing in ground te as per	cum cum cum cum sqm	198.00 	47.00	33,264.00
2	5.03.05	bamboo spikes baskets, carryin distance design gravelly, slushy preparing the ba of 2m and an in necessary tools direction of the B 12 1 Providing sing one kilogram pe floor underneat specifications an 12	and g and a dated by or orquese, etc dated by or orquese, etc dated by or orquese, etc dated by and etc date dated by an and etc dated by an	center lin marking disposing y the E-I ganic soil c. all com d not exc quipment 4 y 1.5 y r polythe quare me cement c ction of th 4 y	es, local be layout with of all excav C in all type , leveling, r plete for an eeding 20m at work sit	d elevatior ench mark n chalk p rated mate es of soils ramming, o initial exc. n, including e, etc. cor	avagar = = = = = = = = = = = = =	192.00 192.00 6.00 198.00 196.00 196.00	cum cum cum cum sqm	198.00	47.00	33,264.00
2	5.03.05	bamboo spikes baskets, carryin distance design gravelly, slushy preparing the ba of 2m and an in necessary tools direction of the f 12 1 Providing sing one kilogram pe floor underneat specifications an 12 1	and g and a g and a d ated by or orgase, etc this lear and e e-I-C.	center lin marking disposing y the E-I-i ganic soil c. all com d not exc quipment 1.5 > r polythe quare me cement c ction of th 4 > 2 > >	es, local be layout with of all excav C in all type , leveling, r plete for an eeding 20m at work sit (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2)	d elevatior ench mark n chalk p rated mate es of soils ramming, o initial exc n, including e, etc. cor	ava pillowe rial exc dre ava gar nple = = = iick ere ple	192.00 192.00 192.00 192.00 198.00) weighing in ground te as per 96.00 4.00	cum cum cum cum sqm sqm	198.00	47.00	33,264.00

ltem No	Ref. to LGED Dhaka Division SoR. 2022			C	Descri	ption					Unit	Quantity	Rate in Tk.	Amount in Tk.
3	4.06.04	PCC-17: Plain compressive s proportion 1:2:4 per standard p conforming to sand of minimu picked brick ch ASTM C 33 inc by concrete min for the requisite C. Additional qu strength at the o	ceme trengt & ma practic BDS im FN hips (I luding ker ma e peric iantity contra	nt concr h of 17 aximum æ of C EN 197 1 1.8 an _AA valu breakin achine, co od etc. a of ceme ctor's ov	ete w 7MPa w/c ra ode / -1 : 2 d 20n ue no ng bric casting ill com ent to vn cos	ork in at 28 tio 0.4 AASHT 2003 (anm doo t exce cks into g, layin aplete be ado st.	fou 8 c 5) c FO/ CEN wn eedi o ch ng c as ded	Indation days (su on standa ASTM/ <i>A</i> -II/A-L/N well grad ing 40) o nips, shu compacti per direc if require	with gge ard an //V ded con tter ng ttor ed t	h minimum ested mix cylinder as ad cement /W 42.5N, d 1st class/ forming to ing, mixing and curing n of the E-I- to attain the	cum	7.50	10,063.81	75,478.58
		12	х	4	x	2	х	0.075	=	7.20	cum			
		1	Х	2	Х	2	Х	0.075	=	0.30	cum			
4	E 0E 04	DCC :4:0:4 471	4D- 1			O), D.		Total	=	7.50	cum			
4	5.05.01	RCC: 1.2.4, 17/1 works with min 1:2:4) and maxi having minimus satisfied a spec on standard cyl of Code AAS conforming to E FM 1.8 and 20r and maximum respectively) cr Appendix-3 LG recognized env proper sieves, fully leak proof over 38mm thic Props suitably the aggregates standard meas (without plastic pouring, casting curing at	imum imum imum imum inders inders HTO/ BDS E where the second inders ind	anck Ciri cement water ce uired av compres as per s ASTM N 197-1 own well r absor- ning to chedule in/c bre- ring, shu uttering oden pla d, placin standar boxes, r & 75mn apacting	pps (b) conterment verage sive s standa and :2003 grade ption ASTM of R aaking g of r mk pai g of r mix nainta n to 1 by m	C). Re ent rela ratio 0 e stren strengt ard prat e Portla C CM- ed pick not e f C CM- ed pick not e chipss g in pr oblain 1 nels an einforc er ma aining a 100mm echan	and ates).45 ngth h fr action and -II 4 ced and -II 4 ced action a a cosit cosit cosit allo n (vi ical	h, fcr = c = 17 M ce Compo 2.5N sar brick chi eeding 3 or Aggre iny other nd scree ion, mak BWG ste Standard hent in po ne with I wable sl when pla	24 pa site of c ps sate site of c site of c si c c site of c site of c site of c site of c site	Mpa and at 28 days e Cement of minimum (LAA value and 15% e Grading ternational ng through sheet fitted ze Bamboo ion, mixing per, fed by p of 50mm cizer use), achine and				

ltem No	Ref. to LGED Dhaka Division SoR. 2022			D	esci	ription					Unit	Quantity	Rate in Tk.	Amount in Tk.
		least for 28 da specified time materials and reinforcement binding etc. Add reducing chemi 494 to reduce ri maintain low wa fixed by the mix Engineer) Addit attain the streng per direction an Note : Using Cc	ays pe an diti ica miz ate diol gth dia on o	s, removing eriod, i/c co cylinders re d its fabric onal quantity il admixture king water re er-cement (V esign from a nal quantity a the contr approval of ti crete Mixer.	cer st c equi catic of c equi V/C) of c cacto he E	tering-s of addit red. E cement complyir red for ratio (I oved Ial ement f or's own Enginee	shu ion xcl ding an ng nor bor to to to to to to to to	ttering a al testing uding tt g, coupl d Plastic type A u mal work ses of ac atory insis- be added ist) etc. a charge.	r approved charges of cost of j, placing, er i.e. Water er ASTM C obility and to ixture to be ction by the required to complete as					
4.1	5.05.01.01	In individual and plinth level	d c	continuous fo	otin	ig of col	um	n, raft ar	floor slab at	cum	75.00	8,673.00	6,50,475.00	
		12	х	4	Х	2	Х	0.75	=	72.00	cum			
		1	Х	2	Х	2	Х	0.75	=	3.00	cum			
	/							Total	75.00	cum				
4.2	5.05.01.02	In pedestal, colu	um	n, capital lift	wa	l and w	all				cum	2.72	9,032.00	24,528.65
		24	х	0.375	х	0.3	Х	0.975	=	2.63	cum			
		1	Х	0.3	х	0.3	Х	0.925	=	0.08	cum			
								Total	=	2.72	cum			
4.3	5.05.01.01	In foundation be	a	m							cum	12.15	8,673.00	1,05,376.95
		2	х	54	Х	0.3	х	0.375	=	12.15	cum			
	5.05.11	FORM WORK (propping etc. (1 of plane, to mal and size by us angles of minim removal of form	(St The ke sin iur	eel) :Centeri e formwork r the concrete g necessary n size 40 mr or: (PWD 07.	ng a nus e su / M n x / 12)	and shu t be rigi Irface tr S sheet 40 mm :	ttei ue ts (x 5	ing, incluent nough b to the de of minim mm, flat	udir oth esig um ba	ng strutting, n in and out gned shape n 16 BWG, rrs etc.) and				
	5.05.11.01	Footing									sqm	114.00	582.00	66,348.00
		12	х	12	x			0.75	=	108.00	sqm			
		1	х	8	x			0.75	=	6.00	sqm			
								Total	=	114.00	sqm			
	5.05.11.04	Column								•	sqm	32.70	522.00	17,069.40
		24	х	1.35	x			0.975	=	31.59	sqm			
		1	х	1.2	x			0.925	=	1.11	sqm			
			•		<u>. </u> [Total	=	32.70	sqm			
	5.05.11.03	Foundation Bea	Im					1			sqm	113.40	493.00	55,906.20
		2	х	54	x			1.05	=	113.40	sqm			
5	5.06.01.02	Grade 400 (RE and marked as strength, fy (Re exceed fy by r ultimate strengt least 1.25 and minimum total e respectively.	34 81 H) mo th, 12	400/ 400W): ber BDS IS = 400 MPa, ore than the fu (Re) to t minimum el ngation at m	Rit O 6 but 12 teste long	bbed or 935-2:2 the tesi 5 MPa ed yield ation a num for	De 1000 ted ar st st fte	eformed 6 with m yield stre nd the ra rength (f r fractum (Agt) is 1	ban hini eng atio y) e 14%	r produced mum yield gth shall not o of tested shall be at (A5.65) & % and 2.5%	kg	17,636.15	100.00	17,63,615.34
		2.50%			Π				=	17636.15	kg			

ltem No	Ref. to LGED Dhaka Division SoR. 2022			D	esc	ription					Unit	Quantity	Rate in Tk.	Amount in Tk.		
6	5.02.11	Earth filling i within 90m of f each layer up the E-I-C Dry of MDD (STD).	nsio he to fi de	de plinth in building site inished leve nsity after co	15 e, w I, e omp	Omm lay atering, l tc. all co paction s	/er lev mp ha	s with e eling and lete as p Il not be	arth I co ier o less	n available nsolidating direction of s than 90%	cum	192.00	207.00	39,744.00		
		12	x	4	x	2	Х	2	=	192.00	cum					
		1					1			1			Sub Total	28,36,506.12		
В	Superstructu	ire														
1	DNCC-2019- 32.76.9	Loha wooden	oos	t				1			cum	29.20	1,12,664.00	32,89,274.77		
	Post	12	х	0.2	Х	0.2	х	16	=	7.68	cum					
	Central Post	1	х	0.07	Х	1	х	5.85	=	0.41	cum					
		12	х	0.15	Х	0.2	Х	5	=	1.80	cum					
	Tie	4	х	12	х	0.2	х	0.2	=	1.92	cum					
	Beam	20	х	8	Х	0.2	х	0.3	=	9.60	cum					
	Floor	1	х	150	Х	1	х	0.025	=	3.75	cum					
	Roofing	20	х	8	х	0.1	Х	0.15	=	2.40	cum					
	Beam	2	х	15	х	0.1	х	0.15	=	0.45	cum					
	Planks	24	Х	1.2	Х	0.625	Х	0.05	=	0.90	cum					
	Railing	0.25	Х	15	Х	1.25	Х	0.025	=	0.12	cum					
	Baten	3	Х	15												
			Total = 29.20 cum													
2	MR	Metal section,	etal section, plates, anchor bolt etc each 12.00 5,000.00													
			= 12.00 each													
3	MR	Metal section,	plat	tes, anchor l	oolt	etc for c	ent	tral post			each	12.00	7,500.00	90,000.00		
									=	12.00	each					
4	MR	Hardware									LS	1.00	35,000.00	35,000.00		
									=	1.00	LS					
5	MR	Painting wood	in/c	treatment						1	LS	1.00	1,50,000.00	1,50,000.00		
							1		=	1.00	LS					
6	MR	Bamboo mats	roo	fing and wal	l in/	c paintin	a			1.00	sam	387 50	1 500 00	5 81 250 00		
		1		150		1	9		_	150.00		001.00	1,000.00	0,01,200.00		
		12	X	150	X	ו ר			-	100.00	sqm					
		27	×	1 75	×	2			-	9/ 50	sqm					
		21	^	1.75	^	2		Total	=	387.50	sam					
7	5,16,10,1	Standard Fren	ch r	oolishina to	Wo	oden bo	ard	surface	bv f	three coats	sam	775.00	432.00	3 34 800 00		
		over a coat of polishing with accepted by th	of p sa e E	priming inclu and paper of angineer-in-c	udir etc. har	ig putty, all cor ge.[PW	cl npl D 1	eaning, ete in a 6.9.1]	finis II f	shing and loors and	• •			0,01,000,00		
		2	x	150	x	1			=	300.00	sqm					
		26	x	5.5	x	2	T		=	286.00	sqm					
		54	x	1.75	x	2			=	189.00	sqm					
8	MR	Water proofing	wo	orks							sqm	387.50	1,000.00	3,87,500.00		
		1	х	150	х	1			=	150.00	sqm					
		13	х	5.5	х	2			=	143.00	sqm					
		27	х	1.75	Х	2			=	94.50	sqm					
								Total	=	387.50	sqm		0 • - • •	40.07.00 /		
													SUD I Otal	49,27,824.7		
1													rotal	11,04,330.89		

	Ref. to LGED												
Item	Dhaka				Description					Unit	Quantity	Rate in Tk.	Amount in Tk.
INO	2022												
Items #	± 08												
Landso	caping (Plante	er with tree p	olantatio	n)									
1	5.02.01.2	Earthwork	in excav	vation of	foundation tre	enche	es, inclu	Jdi	ng layout,	cum	6.08	168.00	1,020.60
		by excavating	ng earth	to the lir	ies, grades an	id ele	evation	as aill	shown in				
		bamboo sp	ikes and	d marki	ng lavout wit	h ch	alk po	wc	er filling				
		baskets, car	rrying an	d dispos	ing of all exca	vated	l materi	ials	at a safe				
		distance de	signated	by the I	E-I-C in all type	es of	soils e	хс	ept rocky,				
		gravelly, slu	ushy or a	organic	soil, leveling,	ramr	ning, dı	res	sing and				
		preparing th	le base, i In initial l	etc. all c ead not	complete for an	n initi n inc	al exca	va arr	anging all				
		necessary t	ools and	equipm	ent at work si	te, et	c. com	ple	te as per				
		direction of	the E-I-C			,		r -					
		2	x	18	x 0.375	x C	.45 =	=	6.08	cum			
2	5.02.08.1	Sand filling	g in four	ndation	trenches and	insid	e plinth	۱v	vith sand	cum	1.01	1,088.00	1,101.60
		(minimum F	M 0.50)	in 150r	nm layers in/c	: leve	eling, w	/at	ering and				
		consolidatin	g each la	ayer up t	o finished leve	l etc.	all com	וpl וו ה	ete as per				
		than 95% of	MDD (S	TD)	risity after com	ipaci	OTISTIA	11 [1	ot be less				
			χ-	,									
		2	х	18	x 0.375	x 0	.075 =	=	1.01	cum			
						Т	otal =	=	1.01	cum			
3	5.03.05	Providing s	single lay	yer poly	thene sheet (0.18	mm thio	ck)	weighing	sqm	13.50	47.00	634.50
		floor under	n per 6.5 heath the	square	meter in tioor	ora tra	ny wne	re Iot	in ground				
		specification	ns and di	rection c	of the E-I-C.	ic. u	i comp	101					
									10.50				
		2	X	18	x 0.375		etal -	=	13.50	sqm			
4	4 06 02	Single lave	r brick f	flat soli	na with 1st cl	1	otai -	- -	kiln hurnt	sqm	13 50	478 76	6 463 26
4	4.00.02	bricks in fo	oundation	n, filling	the interstice	es tic	htly wi	ith	sand of	Sym	15.50	470.70	0,403.20
		minimum FM	M 0.50, w	/atering,	leveling, dress	sing,	etc. all	со	mplete as				
		per instruction	on of the	E-I-C.									
		2	x	18	x 0.375		:	=	13.50	sqm			
						T	otal =	=	13.50	sqm			
5	4.06.04	PCC-17: Pla	ain ceme	ent conc	rete work in fo	punda	ation wi	ith	minimum	cum	1.01	10,063.81	10,189.61
		compressive	e streng	th of 1	7MPa at 28	day	s (sugo	ges	sted mix				
		proportion i per standar	.2.4 & m rd practi	ce of C	ode AASHT)/ AS	STM/ a	u d Ind	cement				
		conforming	to BDS	EN 197	7-1 : 2003 CE	EM-II	/A-L/M/	V۸	V 42.5N,				
		sand of min	imum FN	VI 1.8 ar	nd 20mm down	n we	ll grade	bd	1st class/				
		picked brick	c chips (LAA va	lue not excee	ding obing	40) co	onto Srir	orming to				
		by concrete	mixer m	achine	castina. lavino	cinhe I con	npacting	ann Cala	nd curina				
		for the requ	isite peri	od etc. a	all complete as	s per	directio	on	of the E-I-				
		C. Additiona	l quantity	y of cem	ent to be adde	d if r	equired	to	attain the				
		strength at t	ne contra	actor's o	wn cost.								
		2	х	18	x 0.375	x 0	.075 =	=[1.01	cum			
						T	otal =	=	1.01	cum			

	Ref. to LGED												
Item	Dhaka			Descrip	otion					Unit	Quantity	Rate in Tk.	Amount in Tk.
NO	DIVISION SOR.										,		
6	5.04.01	Brick works wit mortar (1:6) in fe	th first class oundation ar	bricks d plinth	with n, filling	ceme the j	ent sar oints/ii	nd (nter	(F.M. 1.2) stices fully	cum	5.40	7,529.00	40,656.60
		at least for 24 h	ours before	use an	d curin	ig and ig at l	least f	or 7	davs etc.				
		all complete inc	cluding cost	of wate	er, elec	tricity	and	othe	er charges				
		and accepted b (PWD 04.1)	by the Engir	neer-in-	charge	. (Ce	ement:	CE	EM-II/B-M)				
		2	x 18	x	0.25	x	0.6	=	5.40	cum			
						1	Total	=	5.40	cum			
7	MR	Tree plantation	ц							each	2.00	500.00	1,000.00
		2						=	2.00	each			
						1	Total	=	2.00	each			
8	5.26.03	Leveling and d spading the sa plants etc. all co	Iressing of la me up to 1 omplete and	awn are 50 mm accepte	ea to pi includ ed by th	roper ling s ne En	slope supplyi gineer	and ng -in-	d grade by tools and charge.	sqm	100.00	8.00	800.00
		1	x 100			x	1	=	100.00	sqm			
9	5.26.04	Supply of best including loadin including supply by the Engineer	and appro- g, unloading / of tools and -in-charge.	ved qua at both I plants	ality al n ends, s etc. al	lluvia prop Il con	I loar perly sinplete	ny tack anc	silty soil king at site accepted	cum	67.50	913.00	61,627.50
		1	x 100	х	1	x 0).675	=	67.5	cum			
10	5.26.05	Supply well dec means includin same at site inc and accepted by	composed c g loading, u cluding supp y the Engine	ow dur unloadir ly of to er-in-ch	ng carri ng at ols and narge	ied by both d plar	y truck ends, nts etc	s oi sta . al	r any other acking the I complete	cum	7.50	1,703.00	12,772.50
		1	x 100	x	1	x 0	0.075	=	7.5	cum			
11	5.26.09	Labour charge loamy silty soil safe distance in and accepted by	ell deco ed earth oly of to er-in-ch	omposi h, remo pols and harge.	ed co oving d plai	ow dun the ex nts etc	vith alluvial ss earth to I complete	cum	15.00	175.00	2,625.00		
	Loam soil	1	x 100	x	1	x 0	0.075	=	7.5	cum			
	Cow dung	1	x 100	х	1	x 0	075	=	7.5	cum			
		Total						=	15	cum			
12	5.26.06	Labour charge stacks at site of including supply	tor spreadin on the lawn y all necess	g the al surface ary too	lluvial I e, level Is and	oamy ling, o plan	y silty dressii ts etc.	ng all	the same complete	cum	15.00	194.00	2,910.00
		and accepted by	y the Engine	er-in-ch	narge.								
	Loam soil	1	x 100	x	1	x 0	0.075	=	7.5	cum			
	Cow dung	1	x 100	x	1	x 0).075	=	7.5	cum			
		Total						=	15	cum			

11	Ref. to LGED					
Item No	Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
13	5.26.08	Supply of lawn grass of approved quality by truck or by any other means, sorting the grass to proper size, washing the grass, dibbling the grass 6 mm to 50 mm apart, irrigation of lawn area till the grass grown at least for two months after plantation, weeding the undesirable grass, mowing the lawn grass by lawn mower up to two months after plantation, applying urea fertilizer on the lawn surface @ 1 kg per 9.29 sqm including supply of tools and plants etc. all complete and accepted by the Engineer-in-charge.[PWD 25.8]	sqm	100.00	67.00	6,700.00
		1 x 100 x 1 = 100.00	sqm			
Itoms	# 00				Sub Total	1,48,501.17
noms i	Rain water H	arvesting				
	PLAR- Annex-A 9	Submersible pump with tube well	LS	1.00	3,00,000.00	3,00,000.00
	MR	Pipe line	Ls	1.00	2,50,000.00	2,50,000.00
	I				Sub Total	5,50,000.00
Items	# 10 Water supply	system				
	PLAR- Annex-A 9	Underground Water Reservoir :	gal	10,000.00	106.00	10,60,000.00
	MR	Laying pipe for water received	Ls	1.00	3,00,000.00	3,00,000.00
					Sub Total	13,60,000
Items i	# 11 					
Draina	ge works	Cumpling and loving of UDVC piece of different diameter and well				
Ţ	0.10.01	thickness for at least 3.25 bar (32.00 m head) working pressure in accordance with ISO-4422 and ISO-4065, including placing in position, connecting and leak proof O-ring jointing using best quality elastomeric sealing gaskets, etc. completed including costs of all materials, labors, etc and costs of testing for complete leak proofness and repair and/or replacement of leaking joints , if any but excluding costs of earthworks in trench cutting & filling as per design drawings, specifications and as per Direction of Engineer-in- Charge.				
1.1	6.10.01.03	For PVC Pipe: 200mm Dia, Wall Thickness 4.0mm	m	60.00	1,063.42	63,805.20
^	7.70	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	m			
2	1.70	Construction of masonry inspection pit with 250 mm thick brick work in cement mortar (1:4) including necessary earth work side filling and one layer brick flat soling, 75 mm thick (1:3:6) base concrete for making invert channel and 12 mm thick (1:2) cement plaster with neat finishing up to a depth of 700 mm etc. all complete and as per direction of the E-I-C (minimum sand F.M. 1.2)				
2.1	7.70.3	Clear 600x600 mm and depth 750 to 900 mm average 825 mm for single 300 mm dia R.C.C pipes and 375 mm and 400 mm PVC pipe	each	10.00	8,259.00	82,590.00
	1		each			

ltem No	Ref. to LGED Dhaka Division SoR. 2022			De	escription					Unit	Quantity	Rate in Tk.	Amount in Tk.
3	7.72	Construction ar thick RCC sla reinforcement (locking/ unlock side filling, shu 5.12.01) with no as per direction	nd pl ib) i (of it ing a utteri eat fi of th	acing of R. n (1:2:4) em no-5.0 arrangemei ng, curing, nishing on ne E-I-C	C.C inspe (of item 1 6.01.01) e nt including , cement 1 edges and	ro- xcli g r pla:	on pit co 5.05.01.0 uding M. necessary ster (1:4) p etc. all	H co () (of () (of	(100 mm with 1% over with rth work, f item no- uplete and				
3.1	7.72.3	1100 x 1100 x 7	75 m	m R.C.C pi	t cover					each	2.00	2,440.00	4,880.00
		2						=	2.00	each			
4	MR	Gratings etc								each	2.00	2,000.00	4,000.00
		2						=	2.00	each			
Itoms	4 19											Total	1,55,275.20
Sewag	e disposal sv:	stem											
		detail drawing work in cement thick reinforced walls (1:4) in pa and 12 mm thic surface includir and providing 4 cover with locki (1:2:4) top slab and curing etc. earth work in e filling, dressing, for charging/sta and incidental c and accepted b reinforcement a	attac c mor cen artitic k ce ng su 150 r ng/u , inc com excav insi art up chargoy th and it	thed in anr tar (1:4) ha nent concre on and flush ment plaste upplying, fit mm dia wa nlocking ar luding cent plete up to vation and de cleaning o including jes. etc. all e Engineer s fabricatio	nexure) with aving a brid et flooring n pointing (er (1:4) with ting and fix ter sealed rangement ering, shut o required co shoring, b g, cow dung the cost o complete a -in-charge n, binding a	th 2 ck f (1:2) h N tari deplailin g or f al as p (Ra anc	250 mm flat soling 2:4) with) on insid I.C.F. on of upvc avy type ad 100 mm ng, fabric th includi ng out wa r old sept I materia ber type p ate is inc I placing)	walls and 125 e wa floor pipe C.I. m th catin ng r ater ater ls, c blan ludir	s of brick d 125 mm mm thick all surface and slab es & Tees manhole ick R.C.C g, casting necessary and side nk liquied operations approved ng cost of				
1.1	7.75.02	300 users (PWI	D BV	V 26.75.2)						each	1.00	4,66,520.00	4,66,520.00
Items Extern	# 13 al Electrical												
1	MR	External electric	cal a	nd lighting	works					sqm	4,717.50	350.00	16,51,125.00
		1	x	2250	x			=	2250.00	sqm			
		1				-!						Total	16,51,125.00

Feasibility/Reviewing Study on Community Space and Recreation Facilities at Village Level under Technical Assistance Project for "My Village-My Town" for Local Government Engineering Department (LGED)

ABSTRACT OF COST SUMMARY

For

COMBINED COMPLEX

Item No	Description	Amount in Taka	Remarks
1	Structures (Building)	1,64,83,759.61	
2	Multipurpose Hall	77,64,330.89	
3	Management Office	1,36,35,051.00	
4	Public Toilet	17,92,102.00	
5	Sitting Pavilion	20,21,574.15	
6	Gallarey	67,48,479.31	
7	Plaza	68,84,118.78	
8	Boundary Wall	10,20,246.59	
9	Walkway	16,02,011.31	
10	Play Field	9,62,196.80	
11	Pond Excavation	16,17,194.20	
12	Ghat Construction	78,11,312.39	
13	Water Body	47,583.00	
14	Rain Water Harvesting	9,25,000.00	
15	Water Supply System	19,15,000.00	
16	Drainage System	5,92,775.20	
17	Sewage Disposal System	9,33,040.00	
18	External Electrical Works	24,38,625.00	
19	Solar System	12,73,752.00	
20	Landscaping	1,48,501.17	
	Grand Total =	7,66,16,653.40	

Feasibility/Reviewing Study on Community Space and Recreation Facilities at Village Level under Technical Assistance Project for "My Village-My Town" for Local Government Engineering Department (LGED)

COST ESTIMATION FOR COMBINED COMPLEX

Items # 01

Structures (Building)

	Ref. to LGED					
Item No	Dhaka Division SoR 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
1	5.02.01.2	Earthwork in excavation of foundation trenches, including layout, by excavating earth to the lines, grades and elevation as shown in the drawing providing center lines, local bench mark pillars, fixing bamboo spikes and marking layout with chalk powder filling baskets, carrying and disposing of all excavated materials at a safe distance designated by the E-I-C in all types of soils except rocky, gravelly, slushy or organic soil, leveling, ramming, dressing and preparing the base, etc. all complete for an initial excavation depth of 2m and an initial lead not exceeding 20m, including arranging all necessary tools and equipment at work site, etc. complete as per direction of the E-I-C.	cum	275.72	168.00	46,320.96
		4 x 68.93 x 1 x 1 = 275.72	cum			
2	4.06.02	Single layer brick flat soling with 1st class or picked kiln burnt bricks in foundation, filling the interstices tightly with sand of minimum FM 0.50, watering, leveling, dressing, etc. all complete as per instruction of the E-I-C.	sqm	275.72	478.76	1,32,003.71
		4 x 68.93 x 1 = 275.72	sqm			
3	5.05.01	RCC:1:2:4, 17MPa, Brick Chips (BC): Reinforced cement concrete works with minimum cement content relates to mix ratio (tentative 1:2:4) and maximum water cement ratio 0.45 having minimum required average strength, fcr = 24 Mpa and satisfied a specified compressive strength fc = 17 Mpa at 28 days on standard cylinders as per standard practice of Code AASHTO/ ASTM and Portland Composite Cement conforming to BDS EN 197- 1 : 2003 CEM-II 42.5N sand of minimum FM 1.8 and 20mm down well graded picked brick chips (LAA value and maximum water absorption not exceeding 38 and 15% respectively) conforming to ASTM C 33 or Aggregate Grading Appendix-3 LGED Schedule of Rates or any other International recognized envelop in/c breaking chips and screening through proper sieves, centering, shuttering in position, making shuttering fully leak proof & shuttering with plain 16 BWG steel sheet fitted over 38mm thick wooden plank panels and Standard size Bamboo Props suitably braced, placing of reinforcement in position, mixing the aggregates with standard mixer machine with hoper, fed by standard measuring boxes, maintaining allowable slump of 50mm (without plasticizer) & 75mm to 100mm (when plasticizer use), pouring, casting, compacting by mechanical vibrator machine and curing at				

ltem No	Ref. to LGED Dhaka Division SoR. 2022			De	eso	cription					Unit	Quantity	Rate in Tk.	Amount in Tk.
		least for 28 di specified time materials and reinforcement binding etc. Ad reducing chem 494 to reduce maintain low w fixed by the mit Engineer) Addi attain the stren per direction ar Note : Using Co	ay: ar dit ica mi ation ation gth on	s, removing eriod, i/c co- cylinders re- nd its fabric ional quantity al admixture xing water re- er-cement (V lesign from a nal quantity n at the contr approval of th crete Mixer.	ce st ati of of of pp of aci	ntering-s of additi iired. E: on, welc f cement complyin uired for i corved lab cement t tor's own Engineer	hut ona xcli ding an ig t nor Dos ora o t co	tering at al testing uding th g, coupl d Plastic ype A u mal worl ses of ac atory ins be added st) etc. a charge.	fter g c ne ing, izer nde kab Imix truc I if r III co	approved harges of cost of placing, r i.e. Water r ASTM C ility and to ture to be tion by the required to complete as				
3.1	5.05.01.01	In individual an plinth level	d	continuous fo	oti	ing of col	um	n, raft ar	nd fl	oor slab at	cum	82.72	8,673.00	7,17,395.87
		4	x	68.93	х	1	х	0.3	82.72	cum				
	5.05.11.01	steel shuttering								sqm	165.43	582.00	96,281.42	
		8	х	68.93	х			0.3	165.43	sqm				
4	5.05.01.03	In Tie Beam ar	۱d	Lintel :										
4.1		Below Plinth Le	eve	and in Grou	inc	Floor					cum	17.39	8,817.00	1,53,292.36
		4	x	36	х	0.375	х	0.2	=	10.80	cum			
		4	x	32.93	х	0.25	х	0.2	=	6.59	cum			
								Total	=	17.39	cum			
	5.05.11.05	steel shuttering				1	-		1		sqm	220.58	543.00	1,19,772.77
		8	x	36	х			0.4	=	115.20	sqm			
		8	x	32.93	х			0.4	=	105.38	sqm			
5	5.06.01.02	Grade 400 (RB 400/ 400W): Ribbed or Deformed bar produced and marked as per BDS ISO 6935-2:2006 with minimum yield strength, fy (ReH) = 400 MPa, but the tested yield strength shall no exceed fy by more than the 125 MPa and the ratio of tested ultimate strength, fu (Re) to tested yield strength (fy) shall be at least 1.25 and minimum elongation after fracture (A5.65) & minimum total elongation at maximum force (Agt) is 14% and 2.5% respectively.										2,730.10	100.00	2,73,009.83
6	E 04 04	Driek worke		first slore !		ko		mont -		2100.10	ry our	100 07	7 500 00	20.05 400.00
0	5.04.01	mortar (1:6) in with mortar, rad at least for 24 all complete in and accepted (PWD 04.1)	fou cki ho clu by	Inst class to indation and ng out the jo urs before us iding cost of the Engine	pli int se wa	cks with nth, filling s, cleanir and curir ater, elec in-charge	ce g th ng ng ctric e. (e joints/i and soal at least f city and Cement:	(F.M. 1.2) rstices fully the bricks days etc. er charges EM-II/B-M)	cum	428.37	7,529.00	32,23,198.80	
	Up to GL	4	x	36.000	x	0.375	x	0.8	=	43.20	cum			
	SS	4	x	32.930	x	0.375	x	5.65	=	279.08	cum			
	Up to GL	4	x	32.930	x	0.25	x	0.8	=	26.34	cum			
	SS	4	x	32.930	x	0.25	x	3.88	=	127.77	cum			

ltem No	Ref. to LGED Dhaka Division SoR. 2022			D	esc	ription					Unit	Quantity	Rate in Tk.	Amount in Tk.
	Ded													
		48	Х	0.6	х	0.375	Х	2.54	=	-27.43	cum			
		32	Х	0.6	х	0.25	Х	2.54	=	-12.19	cum			
		16	X	1	х	0.25	Х	2.1	=	-8.40	cum			
								Total	=	428.37	cum			
7	5.02.11	Earth filling within 90m of each layer up the E-I-C Dry of MDD (STD)	insion the to f de	de plinth in building site inished level nsity after co	15 , wa l, et omp	0mm lay atering, l tc. all co paction s	/er: leve mp hal	s with e eling and lete as p Il not be	arth d co ber (less	a available insolidating direction of s than 90%	cum	55.14	207.00	11,414.81
		0.8	х	68.93	х	1	Х	1	=	55.14	cum			
8	5.02.08.1	Sand filling in (minimum FM consolidating of direction of the than 95% of M	in fo 0.5 eacl e E- 1DD	bundation tro 50) in 150m h layer up to I-C. Dry den (STD)	enc m I fini sity	hes and ayers in shed lev after co	l ir /c mp	iside plin leveling, etc. all co action sh	with sand tering and plete as per not be less	cum	674.10	1,088.00	7,33,420.80	
		2	Х	177	х	1	Х	1.05	=	371.70	cum			
		2	Х	144	х	1	Х	1.05	=	302.40	cum			
								Total	=	674.10	cum			
9	4.06.02	Single layer bricks in four minimum FM (per instruction	bric ndat 0.50 of t	k flat soling tion, filling f , watering, le he E-I-C.	g w the eve	vith 1st o interstic ling, dres	clas ces ssii	ss or pic tightly ng, etc. a	ked with all c	l kiln burnt n sand of omplete as	sqm	642.00	478.76	3,07,363.92
		2	х	177	х	1			=	354.00	sqm			
		2	х	144	х	1			=	288.00	sqm			
								Total	=	642.00	sqm			
10	4.06.04	PCC-17 : Plain cement concrete work in foundation with minimum compressive strength of 17MPa at 28 days (suggested mix proportion 1:2:4 & maximum w/c ratio 0.45) on standard cylinder a per standard practice of Code AASHTO/ ASTM/ and cemen conforming to BDS EN 197-1 : 2003 CEM-II/A-L/M/V/W 42.5N sand of minimum FM 1.8 and 20mm down well graded 1st class picked brick chips (LAA value not exceeding 40) conforming to ASTM C 33 including breaking bricks into chips, shuttering, mixin by concrete mixer machine, casting, laying compacting and curin for the requisite period etc. all complete as per direction of the E. C. Additional quantity of cement to be added if required to attain th strength at the contractor's own cost.										48.15	10,063.81	4,84,572.45
		2	X	177	X	1	X	0.075	=	26.55	cum			
		2	X	144	X	1	X	0.075	=	21.60	cum			
								rotal	=	40.15	cum			

ltem No	Ref. to LGED Dhaka Division SoR. 2022			D	esc	cription					Unit	Quantity	Rate in Tk.	Amount in Tk.
11	5.13.02	38mm thick Composite ce (minimum FM value not exc laying the cor the top with complete as p	artif mer 1.8) ceec ncre ncre nea er d	icial patent t (CEM II/A and 10mm of ling 38) in/c te in alterna t cement, c irection of th	st M, dov br te curi e E	one floo 42.5N), l vn graded reaking c panels, c ng for r -I-C.	r bes d p ship cor equ	(1:2:4) v st quality icked bri os, scree npacting uisite pe	vith ck enin an erioc	Portland arse sand chips (LAA g, mixing, d finishing d, etc. all	sqm	642.00	594.00	3,81,348.00
		2	X	177	х	1			=	354.00	sqm			
		2	x	144	х	1			=	288.00	sqm			
								Total	=	642.00	sqm			
12	5.12.05	Minimum 12 r with fresh cen the edges an surface, curir scaffolding an drawing and a II/BM) ground	nm nent Ig a d ot acce floo	thick cemeni to both inne orners inclue at least for her charges apted by the r.[PWD 15.4	ding 7 etc []	and (F.M. and outer g washin days, cc c. all com ngineer-ir	1. g pst ple	2) plaste Irface of of sand, of wate te in all r harge. ((:6) having II, finishing eaning the electricity, pect as per nent: CEM-	sqm	2,321.03	291.00	6,75,418.92	
	SS	4	x	36.000			Х	5.65	813.60	sqm				
	SS	4	x	36.000			Х	4.45	640.80	sqm				
	SS	8	Х	32.930			х	3.88	=	1022.15	sqm			
	Ded													
		48	Х	0.6			Х	2.54	П	-73.15	sqm			
		32	х	0.6			Х	2.54	=	-48.77	sqm			
		16	Х	1			Х	2.1	=	-33.60	sqm			
								Total	=	2321.03	sqm			
13	5.10.03.2	best quality ar manufacturer ceiling with su free from dirf materials, fun paper and n sealer of spe necessary inte crack filling a applying 2 of brush/roller/sp finishing, elar complete in a [PWD 16.2.2]	in a in a urfac t, g gus eceifie ecifie ecifie oray ossin all f	a yaic entrus olour deliver a sealed cor ce preparatio rease, wax, , mending g ssary scaffo ed brand or putty of spe cutting by s s of interin & necessa g specified loors and a	ed ntai on re oldi n p ecif and or ary tin cce	from authors from authors; applincluding moving d the sur ng; appliorepared ied brand d paper/z emulsion scaffolc ne for d opted by	lyir lyir all fac yin su fac yin su fac yin th	iny fills ized loca og to inte eaning d chalked e defect g neces urface; tl or levellir o water paint sp g etc. u ng or r e Engin	al a erio ryin ar s u sar ng, s pap prea upto ecco eer	gent of the r wall and g, making nd scaled sing sand y interior applying spot filling, ber; finally ading by o desired bating; all -in-charge	sqm	2,321.03	203.00	0,50,650.70
	SS	4	x	36.000			х	5.65	=	813.60	sqm			
	SS	4	x	36.000	\uparrow		х	4.45	=	640.80	sqm			
	SS	8	x	32.930	1		х	3.88	=	1022.15	sqm			
	Ded													
		48	x	0.6	T		х	2.54	=	-73.15	sqm			
		32	x	0.6	ſ		х	2.54	=	-48.77	sqm			
		16 x 1 x 2.1 = -33.								-33.60	sqm			
								Total	=	2321.03	sqm			

Itom	Ref. to LGED													
No	Division			D	eso	cription					Unit	Quantity	Rate in Tk.	Amount in Tk.
	SoR. 2022													
14	5.07.08.2	Supplying, fitt x 6 mm size with necessau chowkat if n Engineerin- cl	ing har ry r ece har	and fixing M ving bifurcate owel plug, sc essary etc. a ge. [PWD 11.	.S. ed rev all .2.2	flat bar c ends to c vs etc. inc complete 2]	lan doo clu e a	np of 150 or and w ding cutti and acce	ind ing pte	m x 38 mm ow frames grooves in ed by the	each	96.00	131.00	12,576.00
15	5.07.01	Supplying an wood of requ surface in cor good any dan all complete a	d n lire ntac nag ls p	haking door d size in/c p et with wall, fit e (All sizes c er direction o	an bain tted of w of th	d window hting two l and fixe vood are ne E-I-C.	v 1 cc d ir fini	frames weats of contract of contract of contract of contract of the second seco	/ith bal ban an an	seasoned tar to the d mending floors etc.	cum	1.25	1,35,509.00	1,69,115.23
	5.07.01.1.1	Mehagoni/Shi	shu	n wood										
16	5.08.01	16 Supplying, fit seasoned so plank) having (125mmx38m provided with quality 12mm bolts, 2 nos. blocks and 1 complete as p wood are finis Gamari (SS F 16	iting lid (to (m) be dia hea inis ber shea	5.2 and fixing wooden do p rail style o and bottom r st quality 4 r a 300mm and avy type nick shed with sa direction of tr d). [gs) [PWD 12 0.9	x 38 oor of s and and and and and tel p and	0.15 3mm thic sections ((225mmx) 25mm loi plated ha paperin E-I-C. (Sir 2.1]	x (n (10 (38 irc ng ng ng ng x	0.1 well mainimum 0mmx38 mm), clo on hinges iron tow- le, hinge for all fl le leaf do	cum	30.24	8,296.00	2,50,871.04		
		16)	0.9			Х	2.1	=	30.24	sqm			
17	5.08.10	Manufacturing seasoned we having frame (150mmx20m in/c cost of s sand paperin drawing and c	g a bod (62 im) scre g f dire	nd supplying len fixed louv 2mmx125mm spaced @7! ews, nails, w or all floors ction of the E	i fit ver) a 5mi ooc etc -I-C	ting fixing shutters nd inner m c/c fixe den bit, p c comple C (All size	g v (m hoi ed ore te es c	well mat in 250mr rizontal v with fran paring th in all re of wood a	n v voo ne i spe ire f	den natural vide plank) den louver in grooves surface by ect as per finished).				
	5.08.10.1	Gamari [PWD	12	.10.1]							sqm	121.92	11,567.00	14,10,248.64
		48)	0.6			х	2.54	=	73.15	sqm			
		32)	0.6			х	2.54	=	48.77	sqm			
18	6.05.02	Supply of MS work in plates, angles, channels, flat bars, Tees e with minimum yield strength, fy (ReH) = 300 MPa, includin fabricating, machining, cutting, bending, welding, forging drillin riveting, embedding anchor bars, staging and fitting, fixing, loc handling etc including energy consumption etc. all complete as p design, specification and direction of the Engineer-In-charge										3,653.98	138.46	5,05,929.74
	C channel	2)	360	x	0.075	x	0.006	=	2543.40	ka			
	Purline	20	,	(8.23	x	0.04	x	0.004	=	206.74	kg			
	Purline	32)	< 20	x	0.04	х	0.004	=	803.84	kg			
	Cleat				Γ				=	100.00	kg			
								Total	=	3653.98	kg			

ltem No	Ref. to LGED Dhaka Division SoB 2022			De	escription					Unit	Quantity	Rate in Tk.	Amount in Tk.
19	PWD SoR	Supply and ins	tall	ation of 0.45	57 mm thic	k c	orrugated		alvanized	sam	642.00	578.00	3 71 076 00
	2022. SL no	iron sheet (Ba	ana	ladesh mad	e) having	mir	n weight	. g. 63-	65 ka per	oqiii	012.00	010.00	0,11,010.00
	10.21	bundle (2'-6"	wid	th, 70 – 72	rft long)	fitte	d and fi	xed	on M.S.				
		sections with	'J'	hook or w	ooden pi	urlin	with so	rew	rs, limpet				
		washers and p	utty	etc. all com	plete and	acc	epted by	the	e Engineer-				
		in-charge.											
		2	х	177.000		Х	1	=	354.00	sqm			
		2	х	144.000		х	1	=	288.00	sqm			
							Total	=	642.00	sqm			
20	5.16.10.01	Standard Fren	ch p	olishing to V	Vooden bo	bard	surface	by t	hree coats	sqm	564.96	432.00	2,44,064.79
		over a coat o	of p	riming inclu	ding putty	/, cl	leaning,	finis	shing and				
		polishing with	sa	nd paper e	tc. all co	mpl	ete in a	ll fl	oors and				
		accepted by th	еĿ	ngineer-in-ch	narge. [PV	/D 1	6.9.1]						
		40	x	0.9		x	2.1	=	75.60	sam			
		120	x	0.6		x	2.54	=	182.88	sam			
		80	x	0.6		x	2.54	=	121.92	sam			
		2	x	360		x	0.158	=	113.76	sam			
		20	x	8.23		x	0.088	=	14.48	sam			
		32	x	20		x	0.088	=	56.32	sam			
						-	Total	=	564.96	sam			
21	(i)	Internal Sanita	rv &	Water Supp	l I Iv (From a	addit	tional cos	st i		Sam	642	2,125,00	13.64.250.00
	(1)	chart, item-6):	642	.00 sqm @ T	rk. 2125.0	0 pe	er sqm			0 q	0.1	_,	
22	(i)	Internal Electrit 7):642.00 sqm	ficat @	ion (From ac Tk. 2140.00	dditional co per sqm	ost o	chart, iter	n-		Sqm	642	2,140.00	13,73,880.00
23	External wat	er supply											
	(i)	Construction o	fur	deraround r	eservoir (l	Fron	n additio	nali	cost chart	0	0	106.00	
	(1)	item-9-i-a) :	i ui							Ŭ	0	100.00	
	(ii)	Sinking of deep	o tu	be well/arrar	nging wate	er fro	om WAS	4, N	lunicipality				
		or Public Heal	th E	ingineering s	sources, V	VAS	A/Munici	pal	charge as				
		per requiremen	nt. A	ctual cost									
	(iii)	Laying of distri	buti	on pipe lines	as per re	quir	ement.						
	(iv)	Laying of distri	buti	on pipe lines	as per re	quire	ement.						
	(v)	Construction of	f pu	mp house as	s per requi	irem	ient.			LS	1	1,00,000.00	1,00,000.00
	(vi)	Supplying and	inst	allation of pu	imps as p	er re	equireme	nt.					
	(vii)	Installation of S	Sew	age Treatme	ent Plant (STP) and Wa	ater	Treatment				
		Plant (WTP) as	s pe	r requiremer	nt.								
	(viii)	Installation of	Rai	n water harv	vesting sy	ster	n as per	rec	quirement.	-			
		Actual cost							-				
24	External Ele	ctrification											
	(i)	Sub-station but	ildin	a-Not requir	od								
	(i)	Sub-station Eq		nent/Transfo	rmor					-			
	(ii)	Pump & Motor	e ot	in/c installati						-			
	(iv)	HT/IT line	351	nije motanati						-			
	(v)	PDB /DESA /D	FS	CO /REB Ch	arge					15	1	5 00 000 00	5 00 000 00
	(vi)	Standby Power	 r & :	Source	~.90						•	0,000,000.00	0,00,000.00
	(vii)	Farthing Syste	m							-			
	(viii)	Overhead Tran	ISM	ission-Not re	auired					-			
	(ix)	Underground o	ahl	e laving						1			
	(x)	Compound link	nt. V	/irina svstem	1 & other s	afet	v svstem			-			
	(xi)	Solar PV syste	m	5 - 5 - 5			, .,			-			
			•							1			

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
	(viii)	Installation of Rain water harvesting system as per requirement.				
	(ix)	Solar PV system				
25	Electro-mecl	nanical Component				
_	(i)	Lift. Not required				
	(ii)	Air Condition Not required				
26	Gas Connect	tion				
	(i)	Ground Floor. (From additional cost chart item-8-i)	sqm	0	455.00	-
27	Construction Cost on mete	n of Compound drain r basis (From additional cost chart item-15-i/ii/iii)	meter	50	3,196.00	1,59,800.00
28	Culvert- Not	required				
28.1	Approach Ro	ad As per requirement. (From additional cost chart item-13-i/ii) Ramp	sqm	50	2,886.00	1,44,300.00
29	Site improven	nent- Considered separately	cum	2321.03	760.00	17,63,982.80
30	Arboriculture	/Landscape	LS	1	1,00,000.00	1,00,000.00
					Total "C"	1,64,83,759.61

ltems # 02

Multipurpose Hall

A Foundation cost

1	5.02.01.2 Earthwork in excavation of foundation trenches, including layou by excavating earth to the lines, grades and elevation as shown i the drawing providing center lines, local bench mark pillars, fixin bamboo spikes and marking layout with chalk powder filling baskets, carrying and disposing of all excavated materials at a saf distance designated by the E-I-C in all types of soils except rock gravelly, slushy or organic soil, leveling, ramming, dressing and										cum	198.00	168.00	33,264.00
		of 2m and an initial lead not exceeding 20m, including arranging all necessary tools and equipment at work site, etc. complete as per direction of the E-I-C.												
		12	X	4	X	2	Х	2	=	192.00	cum			
		1	Х	1.5	Х	2	Х	2	=	6.00	cum			
								Total	=	198.00	cum			
2	5.03.05	Providing single layer polythene sheet (0.18mm thick) weighing one kilogram per 6.5 square meter in floor or any where in ground floor underneath the cement concrete, etc. all complete as per specifications and direction of the E-I-C.									sqm	100.00	47.00	4,700.00
		12	х	4	X	2			=	96.00	sqm			
		1	х	2	х	2			=	4.00	sqm			
								Total	=	100.00	sqm			
Item No 3	Ref. to LGED Dhaka Division SoR. 2022 4.06.04	PCC-17: Plain compressive proportion 1:2 per standard conforming to sand of minin picked brick ASTM C 33 ir by concrete n for the requis C. Additional of strength at the	n cemer strengt 2:4 & ma l practic o BDS num FN chips (I ncluding nixer ma site peric quantity e contra	Int concr h of 1 aximum ce of C EN 197 1 1.8 an LAA val breakin achine, od etc. a of ceme ctor's ou	The second secon	ption ork in at 28 tio 0.4: AASHT 2003 C 1mm dow t exce sks intc g, layir nplete a be add st.	four 3 da 5) or CO/ CEM wn v edir o chi ng c as p led i	adation ays (su astanda ASTM/ -II/A-L/N vell grad g 40) o ps, shu ompacti er direc f require	with gge ird an I/V led con ter ng tior d t	h minimum ested mix cylinder as id cement /W 42.5N, d 1st class/ forming to ring, mixing and curing n of the E-I- to attain the	Unit	Quantity 7.50	Rate in Tk. 10,063.81	Amount in Tk. 75,478.58
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		12	x	4	x	2	x	0.075	=	7.20	cum			
		1	x	2	x	2	x	0.075	=	0.30	cum			
							-	Total	=	7.50	cum			
4	5.05.01	RCC:1:2:4, 17 works with m 1:2:4) and ma having minim satisfied a spion standard of ASTM and Po 1 :2003 CEM well graded p absorption no ASTM C 33 of Rates or any chips and scriposition, mak 16 BWG stee and Standard reinforcement mixer machir maintaining a to 100mm (w mechanical v removing cen	7MPa, E inimum aximum um req ecified o cylinders ortland C I-II 42.51 picked t ot excee or Aggre other Ir eening f ing shu al sheet d size I t in pos ne with illowable then pla- vibrator itering-s	Brick Ch cement water ce juired a compress is as per Composi N sand brick ch doing 38 egate G nternatic through ttering f fitted or Bamboo sition, n hoper, e slump sticizer machin huttering	ips (B c conte ement verage ssive s stanc of the Cer of mir ips (L and rading prope ully le ver 38 op Prop fed t of 50r use), e anc g after	C): Re ent rela ratio 0 e strer strengtl lard pr ment co minum AA va 15% re Apper cogniz r sieve ak pro amm th tos suit the a poy star nm (wi pouring appro	 infoi ites .45 .45 .45 .45 .45 .45 .45 .45 .45 .45	rced cer to mix r = 17 M ce of Co rming to 1.8 and and ma ctively) 3 LGEI envelop entering shutter wooden braced gates v d meas t plastic asting, c t least specifie	24 24 24 24 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	I mt concrete o (tentative · Mpa and at 28 days ∂ AASHTO/ DS EN 197- 0mm down num water nforming to Schedule of /c breaking huttering in g with plain ank panels placing of n standard ng boxes, er) & 75mm npacting by · 28 days, time period,				

ltem No	Ref. to LGED Dhaka Division SoR. 2022		[Descri	ption				Unit	Quantity	Rate in Tk.	Amount in Tk.	
		i/c cost of addii required. Excluc welding, couplir cement and Pla complying type required for norr (W/C) ratio (Dos approved labora of cement to be contractor's own approval of the E Note : Using Con	tional testing ding the cost ng, placing, sticizer i.e. V A under AS mal workabil ses of admixt tory instructione e added if r n cost) etc. Engineer in c ncrete Mixer.	charg of re bindir Vater STM (ity and ure to on by equire all c harge.	ges of inforcer ng etc. reducin C 494 d to ma be fixe the Eng d to at omplete	ma me to to aint d b gine ttair e a							
4.1	5.05.01.01	In individual and plinth level	continuous	footing	g of colu	umi	n, raft an	cum	75.00	8,673.00	6,50,475.00		
		12	x 4	x	2	х	0.75	=	72.00	cum			
		1	x 2	х	2	х	0.75	Π	3.00	cum			
							Total	=	75.00	cum			
4.2	5.05.01.02	In pedestal, colu	mn, capital li	ft wall	and wa	all				cum	2.72	9,032.00	24,528.65
		24	x 0.375	х	0.3	х	0.975	=	2.63	cum			
		1	x 0.3	х	0.3	х	0.925	Π	0.08	cum			
							Total	=	2.72	cum			
4.3	5.05.01.01	In foundation be	am							cum	12.15	8,673.00	1,05,376.95
		2	x 54	x	0.3	х	0.375	=	12.15	cum			
	5.05.11	FORM WORK (S propping etc. (T of plane, to mak and size by usi angles of minimu removal of form	Steel) :Cente he formwork e the concre ing necessa um size 40 m for: (PWD 07	ring a must te sur ry MS im x 4 7.12)	nd shut be rigic face tru sheets 0 mm x	tteri ue t s o c 5 i	ing, inclu nough bo to the de f minimu mm, flat	idin oth sig um bai	ng strutting, in and out ned shape 16 BWG, rs etc.) and				
	5.05.11.01	Footing								sam	114.00	582.00	66.348.00
		12	x 12	x			0 75	=	108.00	sam			,
		1	x 8	- Y		$\left \right $	0.75	=	6.00	som			
		· · ·					Total	=	114 00	som			
	5.05.11.04	Column								sam	32 70	522.00	17 069 40
	0.00.11.01	20.0.11	v 125				0 075	-	31 50	eam	52.10	522.00	,000.10
		<u> </u>	v 10				0.010	-	1 11	sqiii			
			^ I.Z	^			U.920	-	1.11	sqiii			
	5 05 11 02	Foundation Poor	m				ruldi	-	JZ.10	sam	112 /0	103 00	55 006 20
	5.05.11.05	Foundation Bear								Sqiii	113.40	493.00	55,900.20
		2	x 54	х			1.05	=	113.40	sqm			
5	5.06.01.02	and marked as per BDS ISO 6935-2:2006 with minimum yield strength, fy (ReH) = 400 MPa, but the tested yield strength shall not exceed fy by more than the 125 MPa and the ratio of tested ultimate strength, fu (Re) to tested yield strength (fy) shall be at least 1.25 and minimum elongation after fracture (A5.65) & minimum total elongation at maximum force (Agt) is 14% and 2.5% respectively.								kg	17,636.15	100.00	17,63,615.34
		2.50%						=	1/636.15	кд			

6 5.02.11 Earth Filling inside plant in 150mm layers with earth available our with sound in the building site, watering consolidating gene haver, letc. all complete as per direction of the E-VC. Dry density after compaction shall not be less than 90% of MDD (STD). 207.00 39.744.00 7 12 X 4 X 2 x 2 1000000000000000000000000000000000000	ltem No	Ref. to LGED Dhaka Division SoR. 2022				Desc	ription					Unit	Quantity	Rate in Tk.	Amount in Tk.
Image:	6	5.02.11	Earth filling within 90m c each layer u the E-I-C D of MDD (STI	inside of the bu p to fini ry dens D).	plinth in uilding sit shed lev sity after o	n 15 ie, wa el, et comp	0mm lay atering, l tc. all co paction s	/ers eve mp hal	s with e eling and lete as p l not be	available nsolidating direction of than 90%	cum	192.00	207.00	39,744.00	
B Superstructure Sub Total 22.86,506.12 B Superstructure cum 29.20 1,12,664.00 32.89,274.77 27.69 70 1 x 0.07 x 1 x 5.5 = 1.60 cum			12	х	4	Х	2	Х	2	=	192.00	cum			
1 DNC2019- 32/69 Loba wooden post cum 29.20 1,12,664.00 32,89,274.77 22/69 Post 12 x 0.07 x 1 x 5.85 a 0.41 cum cu	В	Superstruct	Jre											Sub Total	28,36,506.12
32.76.9 1 x 0.2 x 16 = 7.66 cum	1	DNCC-2019-	Loha wooden post										29.20	1,12,664.00	32,89,274.77
Post 12 x 0.02 x 102 x 55 = 112 cum 100 </td <td></td> <td>32.76.9</td> <td>10</td> <td>' </td> <td>0.0</td> <td></td> <td>0.0</td> <td></td> <td>16</td> <td>-</td> <td>7.69</td> <td></td> <td></td> <td></td> <td></td>		32.76.9	10	' 	0.0		0.0		16	-	7.69				
central rosi 1 x 0.07 x 1 x 0.07 x 1 x 0.07 x 0.0 x 0.07 x 0.07 x 0.07 x 0.07 x 0.07 x 0.07 x x 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0		POSI Control Post	12	X	0.2	X	0.2	X	5.85	=	7.08	cum			
Image: The state is a state in the state		Central Post	12	X	0.07	×	0.2	X	5.05	-	1.80	cum			
Inc.		Tie	12		12	-^	0.2	^ v	0.2	-	1.00	cum			
Locarity Locarity S A O A O A O A O A O A O A O A O A O A O A O A O D O Cont A Cont A Cont		Beam	20	×	8	×	0.2	^ Y	0.2	=	9.60	cum			
Robing 20 x 8 x 0.1 x 0.15 a 2.40 cum a Beam 2 x 15 x 0.1 x 0.15 a 0.45 cum a <t< td=""><td></td><td>Floor</td><td>1</td><td>x</td><td>150</td><td>x</td><td>1</td><td>x</td><td>0.025</td><td>=</td><td>3.75</td><td>cum</td><td></td><td></td><td></td></t<>		Floor	1	x	150	x	1	x	0.025	=	3.75	cum			
Beam 2 x 15 x 0.1 x 0.15 = 0.45 cum		Roofing	20	x	8	x	0.1	x	0.15	=	2.40	cum			
Planks 24 x 1.2 x 0.65 x 0.05 z 0.07 z 0.17 cum cum <thcm< th=""> cum <thcum< th=""></thcum<></thcm<>		Beam	2	x	15	x	0.1	х	0.15	=	0.45	cum			
Railing 0.25 x 15 x 0.25 x 0.05 x 0.075 z 0.17 cum Baten 3 x 15 x 0.05 x 0.075 z 0.17 cum		Planks	24	x	1.2	x	0.625	х	0.05	=	0.90	cum			
Baten 3 x 15 x 0.075 x 0.075 x 0.17 cum 2 MR Metal section, plates, anchor bolt etc Total = 29.20 cum 12.00 60,000.00 60,000.00 3 MR Metal section, plates, anchor bolt etc for central post each 12.00 each 90,000.00 3 MR Hardware Image: section plates, anchor bolt etc for central post each 12.00 90,000.00 4 MR Painting wood in/c treatment Image: section plates anchor bolt etc for central post each 1.00 1,50,000.00 35,000.00 4 MR Painting wood in/c treatment Image: section plates Image: section plates Image: section plates Seq 1.00 LS 5 MR Bamboo mats roofing and wall in/c painting seq sqm 387.50 1,50.00.0 5,81,250.00 1 1 150 X 1 = 143.00 sqm 1 Seq 1,50.00 3,34,800.00		Railing	0.25	x	15	x	1.25	Х	0.025	=	0.12	cum			
Image: Constraint of the section plates, anchor bolt etc Total = 29.20 cum each 12.00 5,000.00 60,000.00 3 MR Metal section, plates, anchor bolt etc for central post each 12.00 5,000.00 90,000.00 3 MR Metal section, plates, anchor bolt etc for central post each 12.00 7,500.00 90,000.00 3 MR Hardware		Baten	3	x	15	x	0.05	х	0.075	=	0.17	cum			
2 MR Metal section, plates, anchor bolt etc each 12.00 5,000.00 60,000.00 3 MR Metal section, plates, anchor bolt etc for central post each 12.00 each 12.00 90,000.00 3 MR Hardware I			Total = 29.20												
3 MR Metal section, plates, anchor bolt etc for central post each 12.00 each 12.00 90,000.00 3 MR Hardware I	2	MR	Metal section	Vetal section, plates, anchor bolt etc										5,000.00	60,000.00
3 MR Metal section, plates, anchor bolt etc for central post each 12.00 7,500.00 90,000.00 3 MR Hardware I															
3 MR Hardware LS 1.00 35,000.00 35,000.00 4 MR Painting wood in/c treatment LS 1.00 LS 1.00 4 MR Painting wood in/c treatment LS 1.00 1,50,000.00 1,50,000.00 5 MR Bamboo mats roofing and wall in/c painting sqm 387.50 1,500.00 5,81,250.00 1 x 150 x 1 = 143.00 sqm 1 1 1 1,50,000.00 5,81,250.00 1 x 150 x 1 = 143.00 sqm 1 1 1 1 1,50,000.00 5,81,250.00 1 x 150 x 1 = 143.00 sqm 1 1 1 1 1,50,000 5,81,250.00 1 x 155 X 2 = 143.00 sqm 1 1 1 1,30,00 3,34,800.00 1,00 3,34,800.00 1,33,4,800.00 1,432.00 3,34,800.00 1,432.00 3,34,800.00 1,150,150,150	3	MR	Metal section	n, plates	s, anchor	bolt	etc for c	ent	ral post			each	12.00	7,500.00	90,000.00
3 MR Hardware LS 1.00 35,000.00 35,000.00 35,000.00 4 MR Painting wood in/c treatment I I I I IS IS 1.00 LS IS IS IS 5 MR Bamboo mats roofing and wall in/c painting Is <		MD	11							=	12.00	each	1.00	25 000 00	25 000 00
4 MR Painting wood in/c treatment LS 1.00 LS 1.00 1,50,000.00 5 MR Bamboo mats roofing and wall in/c painting sqm 387.50 1,500.00 5,81,250.00 6 1 x 150 x 1 = 143.00 sqm 387.50 1,500.00 5,81,250.00 1 x 5.5 x 2 = 143.00 sqm	3	IVIR	Hardware					1		-	1.00	LS	1.00	35,000.00	35,000.00
4 Initial relations Image: second second relations Image: second second relations Image: second second relations Image: second second relations Image: second relations <td>1</td> <td>MR</td> <td>Painting woo</td> <td>d in/c t</td> <td>reatment</td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>1.00</td> <td></td> <td>1.00</td> <td>1 50 000 00</td> <td>1 50 000 00</td>	1	MR	Painting woo	d in/c t	reatment					-	1.00		1.00	1 50 000 00	1 50 000 00
5 MR Bamboo mats roofing and wall in/c painting sqm 387.50 1,500.00 5,81,250.00 1 1 x 150 x 1 = 143.00 sqm 387.50 1,500.00 5,81,250.00 1 13 x 5.5 x 2 = 143.00 sqm 1 <	4	IVIIX	r annung woo		caunent			1		=	1.00	19	1.00	1,50,000.00	1,30,000.00
Image: Series of the formation of	5	MR	Bamboo mat	ts roofin	ia and wa	all in/	c paintin	a		<u> </u>	1.00	sam	387.50	1,500,00	5.81.250.00
13 x 5.5 x 2 = 143.00 sqm 27 x 1.75 x 2 = 94.50 sqm 6 27 x 1.75 x 2 = 94.50 sqm 6 5.16.10.1 Standard French polishing to Wooden board surface by three coats over a coat of priming including putty, cleaning, finishing and polishing with sand paper etc. all complete in all floors and accepted by the Engineer-in-charge. [PWD 16.9.1] 775.00 432.00 3,34,800.00 2 2 150 x 1 = 300.00 sqm 775.00 432.00 3,34,800.00 2 2 150 x 1 = 300.00 sqm 432.00 3,34,800.00 2 2 150 x 1 = 300.00 sqm 2 3,34,800.00 2 2 150 x 1 = 300.00 sqm 2 3,34,800.00 2 2 16.9.1 1 = 300.00 sqm 2 2 2 2 2 2 2 </td <td></td> <td></td> <td>1</td> <td>x</td> <td>150</td> <td>x</td> <td>1</td> <td>9</td> <td></td> <td>=</td> <td>150.00</td> <td>sam</td> <td></td> <td>.,</td> <td>0,0.,200.00</td>			1	x	150	x	1	9		=	150.00	sam		.,	0,0.,200.00
27 x 1.75 x 2 = 94.50 sqm sqm 6 5.16.10.1 Standard French polishing to Wooden board surface by three coats over a coat of priming including putty, cleaning, finishing and polishing with sand paper etc. all complete in all floors and accepted by the Engineer-in-charge. [PWD 16.9.1] sqm 775.00 432.00 3,34,800.00 0 2 x 150 x 1 = 300.00 sqm 334,800.00 1 2 x 150 x 1 = 300.00 sqm 432.00 3,34,800.00 1 2 x 150 x 1 = 300.00 sqm 1			13	x	5.5	x	2			=	143.00	sqm			
Image: Constraint of the second se			27	x	1.75	x	2			=	94.50	sqm			
6 5.16.10.1 Standard French polishing to Wooden board surface by three coats over a coat of priming including putty, cleaning, finishing and polishing with sand paper etc. all complete in all floors and accepted by the Engineer-in-charge. [PWD 16.9.1] x 1 = 300.00 sqm 432.00 3,34,800.00 2 x 150 x 1 = 300.00 sqm 20									Total	=	387.50	sqm			
over a coat of priming including putty, cleaning, finishing and polishing with sand paper etc. all complete in all floors and accepted by the Engineer-in-charge. [PWD 16.9.1] 2 x150x1=300.00sqm 2 x5.5x2=286.00sqm 2 x1.75x2=189.00sqm 1 54 x1.75x2=189.00sqm 7 MRWater proofing worksTotal=150.00sqm 1 x150x1=150.00sqm 1 x1.55x2=143.00sqm 1 x1.75x2=94.50sqm 2 Total=387.50sqm 1 Total=387.50sqm 2 2 387.50 sqm 2 2 387.50 sqm 1 2 2 387.50 sqm 2 2 387.50 sqm 3 $49.27.824.77$ $49.27.824.77$ Total 387.50 Sub Total49.27.824.77TotalTotalTotalTotalTotal	6	5.16.10.1	Standard Fre	ench po	lishing to	Wo	oden boa	ard	surface	by t	three coats	sqm	775.00	432.00	3,34,800.00
2 x 150 x 1 = 300.00 sqm 2 2 x 150 x 1 = 300.00 sqm 26 x 5.5 x 2 = 286.00 sqm			over a coat	tor pri thi sani	ming inc d naner	iuain etc	ig putty, all con	CI nnli	eaning, ete in a	tinis II fi	sning and				
2 x 150 x 1 = 300.00 sqm			accepted by	the Eng	gineer-in-	char	ge. [PWI	D 1	6.9.1]						
2 x 100 x 1 2000 sqm 1000 sqm 26 x 5.5 x 2 = 286.00 sqm 1000 1000 54 x 1.75 x 2 = 189.00 sqm 1000 1000 1000 7 MR Water proofing works Total = 775.00 sqm 1000.00 3,87,500.00 1 1 x 150 x 1 = 150.00 sqm 1000.00 3,87,500.00 1 1 x 150 x 1 = 143.00 sqm 1000.00 3,87,500.00 13 x 5.5 x 2 = 143.00 sqm 1000.00 <t< td=""><td></td><td></td><td>2</td><td>v</td><td>150</td><td></td><td>1</td><td></td><td>-</td><td>-</td><td>300.00</td><td>cam</td><td></td><td></td><td></td></t<>			2	v	150		1		-	-	300.00	cam			
1 1			26	x	5.5	×	2			-	286.00	sam			
MR Water proofing works Total = 775.00 sqm 387.50 1,000.00 3,87,500.00 1 x 150 x 1 = 150.00 sqm 387.50 1,000.00 3,87,500.00 1 x 150 x 1 = 150.00 sqm 0 1 x 5.5 x 2 = 143.00 sqm 0 0 27 x 1.75 x 2 = 94.50 sqm 0 0 1 - - Total = 387.50 sqm 0 0 1 - - - - - 94.50 sqm 0 0 1 - - - Total = 387.50 sqm 0 0 1 - - - Total = 387.50 sqm 0 0 49,27,824.77 1 - - - - - Total 387.50 sqm 0 <td></td> <td></td> <td>54</td> <td>x</td> <td>1.75</td> <td>x</td> <td>2</td> <td></td> <td></td> <td>=</td> <td>189.00</td> <td>sam</td> <td></td> <td></td> <td></td>			54	x	1.75	x	2			=	189.00	sam			
7 MR Water proofing works sqm 387.50 1,000.00 3,87,500.00 1 x 150 x 1 = 150.00 sqm 13 x 5.5 x 2 = 143.00 sqm 27 x 1.75 x 2 = 94.50 sqm Total = 387.50 sqm									Total	=	775.00	sqm			
1 x 150 x 1 = 150.00 sqm sqm 13 x 5.5 x 2 = 143.00 sqm sqm 27 x 1.75 x 2 = 94.50 sqm sqm Total = 387.50 sqm Sub Total Total = 387.50 sqm	7	MR	Water proofi	ng work	(S							sqm	387.50	1,000.00	3,87,500.00
13 x 5.5 x 2 = 143.00 sqm			1	х	150	х	1			=	150.00	sqm			
27 x 1.75 x 2 = 94.50 sqm sqm <td></td> <td></td> <td>13</td> <td>x</td> <td>5.5</td> <td>Х</td> <td>2</td> <td></td> <td></td> <td>=</td> <td>143.00</td> <td>sqm</td> <td></td> <td></td> <td></td>			13	x	5.5	Х	2			=	143.00	sqm			
I otal = 387.50 sqm 49,27,824.77 Total 77,64,330.89			27	X	1.75	X	2		T-1-1	=	94.50	sqm			
Total 77,64,330.89									iotai	=	307.50	sqm		Sub Total	49 27 824 77
														Total	77,64,330.89

	Ref. to LGED					
Item	Dhaka	Description	Linit	Quantity	Data in Th	Amount in Th
No	Division	Description	Unit	Quantity	Rate in TK.	Amount in TK.
Í	SoR. 2022					

Plinth area basis rate as per PWD schedule of rates 2022

Items # 03 : Management Office

Structures (Building)

Building type	:Non Residential
Building Category	: Special
Type of structure	: Single storied Masonry structure
Foundation	:Single storied building with Masonary foundation
Plinth Area	: 243 sqm

Site : Other than coastal area

1 SOIL INVESTIGATION

(i)		Soil Investiga (BH Nos. as p	tion : LS or Actual cost primary, say)	2	BH	38,821.00	/BH	77,642.00
						"A"	=	77,642.00
2 A		CONSTRUC [®] FOUNDATIO	FION OF BUILDING N COST					
(i)		Foundation co From PLAR T (For masonry Tk 5649.00 p	ost : For single storied portion Table - 1, Plinth area 243.00 sqm @ 75% foundation) of Tk. 7532.00 per sqm, So er sqm	243	Sqm	9,440.00	/sqm	22,93,920.00
						"B1"	=	22,93,920.00
В		SUPER STR	JCTURE COST					
I.		(i)	Ground floor- (from PLAR Table-2). 243.00sqm @ 70% cost of 21555.00, So, Rate per sqm Tk Tk.15089.00 per sqm	243	Sqm	32,567.00	/sqm	79,13,781.00
				L L		"B2"	=	79,13,781.00
С		ADDITIONAL	SUPER STRUCTURE COST					
(i)	17.1.1	Supply and a acrylic poly (minimum 1.5 roof garden/ and liquid acr plaster/ cema specification (Rate is exclu	application of non-toxic two omponents mer modified cementitious coating is mm thickness) for water proofing of roof/ swimming pool which consists of powder rylic emulsion; under a protective cover of ent concrete/ tiles etc. as per standard and accepted by the Engineer-in-charge. iding the cost of protective cover)	243	Sqm	781.00	/sqm	1,89,783.00
						"B3"	=	1,89,783.00
				Sub Tota	al, "B"=	(B1+B2+B3)		1,03,97,484.00
		OTHER BUIL	DING COST		_			
3	(i)	Internal Sanit chart, item-6)	ary & Water Supply (From additional cost : 243.00 sqm @ Tk. 2125.00 per sqm		Sqm	243	2,125.00	5,16,375.00
4	(i)	Internal Elect 7): 243.00 sq	rification (From additional cost chart, item- m @ Tk. 2140.00 per sqm		Sqm	243	2,140.00	5,20,020.00

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
5	External wat	er supply				
	(i)	Construction of underground reservoir (From additional cost chart, item-9-i-a) :				
	(ii)	Sinking of deep tube well/arranging water from WASA, Municipality or Public Health Engineering sources, WASA/Municipal charge as per requirement. Actual cost				
	(iii)	Laying of distribution pipe lines as per requirement.				
	(iv)	Laying of distribution pipe lines as per requirement.				
	(v)	Construction of pump house as per requirement.	LS	1	5,00,000.00	5,00,000.00
	(vi)	Supplying and installation of pumps as per requirement.				
	(vii)	Installation of Sewage Treatment Plant (STP) and Water Treatment Plant (WTP) as per requirement.				
	(viii)	Installation of Rain water harvesting system as per requirement. Actual cost				
6	External Electronic	ctrification				
	(i)	Sub-station building-Not required				
	(ii)	Sub-station Equipment/Transformer				
	(iii)	Pump & Motor set in/c installation				
	(iv)	H.T./L.T. Line				
	(v)	PDB /DESA /DESCO /REB Charge	LS	1	10,00,000.00	10,00,000.00
	(vi)	Standby Power & Source				
	(vii)	Earthing System				
	(viii)	Overhead Transmission-Not required				
	(ix)	Underground cable laying				
	(x)	Compound light. Wiring system & other safety system				
	(xi)	Solar PV system				
	(viii)	Installation of Rain water harvesting system as per requirement. Actual cost				
	(ix)	Solar PV system				
7	Electro-mec	nanical Component				
	(i)	Lift. Not required				
	(ii)	Air Condition Not required				
8	Gas Connec	tion				
	(i)	Ground Floor. (From additional cost chart item-8-i)	sqm	0	350.00	-
9	Construction	n of Compound drain	meter	50	5,614.00	2,80,700.00
10	Culvert- Not	required				
11	Approach Ro	ad As per requirement. (From additional cost chart item-13-i/ii) Ramp	sqm	50	3,163.00	1,58,150.00
12	Site improver	nent- Considered separately				. ,
13	Arboriculture	/Landscape	cum	243	760.00	1,84.680.00
	1	· .			Total "C"	31,59.925.00
					Sub-Total "P"	1,36,35,051.00

ltem No	Ref. to LGED Dhaka Division SoR. 2022		Description		Unit	Quantity	Rate in Tk.	Amount in Tk.
			Plinth area basis rate as per PWI) schedule	of rates	2018		
Items ‡	# 04 : Public 1	oilet-2 nos						
Building	g type :N	Ion Residential						
Building	g Category ::	Special Single storied N	Accord ctructure					
Founda	tion ·	Single storied h	ulding with Masonany foundation					
		12 50 arm v0- (
Site	: (Other than coas	tal area					
1		SOIL INVESTI	GATION					
(i)		Soil Investigati (BH Nos. as pr	on : LS or Actual cost imary, say)	1	BH	38,821.00	/BH	38,821.00
						"A"	=	38,821.00
2		CONSTRUCT	on of Building					
A		FOUNDATION	ICOST					
(i)		Foundation cos	st : For single storied portion	27	Sqm	9,440.00	/sqm	2,54,880.00
		From PLAR Ta	ble - 1, Plinth area 27.00 sqm @ 60%					
		Tk 4520.00 pe	r sam					
в		SUPER STRU	CTURE COST			"B1"	=	2,54,880.00
<u> </u>		(i)	Ground floor- (from PLAR Table-2).	27	Sam	32.567.00	/sam	8.79.309.00
			27.00sqm @ 80% cost of 21555.00, So, Rate per sqm Tk Tk.17244.00 per sqm		·			
						"B2"	=	8,79,309.00
С		ADDITIONAL	SUPER STRUCTURE COST					
(i)	17.1.1	Supply and a	oplication of non-toxic two omponents	27	Sqm	781.00	/sqm	21,087.00
		acrylic polym (minimum 1.5 roof garden/ sv and liquid acry plaster/ cemer specification a	ner modified cementitious coating mm thickness) for water proofing of roof/ wimmimg pool which consists of powder lic emulsion; under a protective cover of nt concrete/ tiles etc. as per standard nd accepted by the Engineer-in-charge.					
		(Rate is exclud	ling the cost of protective cover)					
						100		04 007 00
				Sub Tot	al "D"-	D3	-	21,007.00
				300 101	аі, D –	(01+02+03)		11,33,270.00
	(1)				Com	7	0 405 00	E7 07E 00
3	(1)	chart, item-6): 2	ry & vvater Supply (From additional cost 27.00 sqm @ Tk. 2125.00 per sqm		Sqm	21	2,125.00	57,375.00
4	(i)	Internal Electrit 7):27.00 sqm (fication (From additional cost chart, item- ② Tk. 2140.00 per sqm		Sqm	27	2,140.00	57,780.00

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
5	External wat	er supply				
	(i)	Construction of underground reservoir (From additional cost chart, item-9-i-a) :	0	0	106.00	-
	(ii)	Sinking of deep tube well/arranging water from WASA, Municipality or Public Health Engineering sources, WASA/Municipal charge as per requirement. Actual cost				
	(iii)	Laying of distribution pipe lines as per requirement.				
	(iv)	Laying of distribution pipe lines as per requirement.				
	(v)	Construction of pump house as per requirement.	LS	1	50,000.00	50,000.00
	(vi)	Supplying and installation of pumps as per requirement.				
	(vii)	Installation of Sewage Treatment Plant (STP) and Water Treatment Plant (WTP) as per requirement.				
	(viii)	Installation of Rain water harvesting system as per requirement. Actual cost				
6	External Elec	ctrification				
	(i)	Sub-station building-Not required				
	(ii)	Sub-station Equipment/Transformer				
	(iii)	Pump & Motor set in/c installation				
	(iv)	H.T./L.T. Line				
	(v)	PDB /DESA /DESCO /REB Charge	LS	1	1,00,000.00	1,00,000.00
	(vi)	Standby Power & Source				
	(vii)	Earthing System				
	(viii)	Overhead Transmission-Not required				
	(ix)	Underground cable laying				
	(x)	Compound light. Wiring system & other safety system				
	(xi)	Solar PV system				
	(viii)	Installation of Rain water harvesting system as per requirement.				
		Actual cost				
	(ix)	Solar PV system				
7	Electro-mec	hanical Component				
	(i)	Lift. Not required				
	(ii)	Air Condition Not required				
8	Gas Connec	tion				
	(i)	Ground Elean (From additional cost chart itom 8 i)	cam	0	455.00	
	(1)		sqiii	0	455.00	-
9	Construction	n of Compound drain	meter	50	5,614.00	2,80,700.00
10	Culvert- Not	required				
11	Approach Ro	ad As per requirement. (From additional cost chart item-13-i/ii) Ramp	sqm	10	3,163.00	31,630.00
12	Site improver	nent- Considered separately				
13	Arboriculture	/Landscape	cum	27	760.00	20,520.00
14	Fire fighting		LS		-	-
<u> </u>					Total "C"	5,98.005.00
					Sub-Total "P"	17.92 102 00
					545 I VIUI 1	,02,102.00

ltem No	Ref. to LGED Dhaka Division			C)esc	ription			Unit	Quantity	Rate in Tk.	Amount in Tk.		
Items #	# 05													
Sitting	pavilion													
1	5.02.01.2	Earthwork in excavation of foundation trenches, including layout, by excavating earth to the lines, grades and elevation as shown in the drawing providing center lines, local bench mark pillars, fixing bamboo spikes and marking layout with chalk powder filling baskets, carrying and disposing of all excavated materials at a safe distance designated by the E-I-C in all types of soils except rocky, gravelly, slushy or organic soil, leveling, ramming, dressing and preparing the base, etc. all complete for an initial excavation depth of 2m and an initial lead not exceeding 20m, including arranging all necessary tools and equipment at work site, etc. complete as per direction of the E-I-C.										42.18	168.00	7,086.08
		2	x	1.275	x	0.375	x	0.75	=	0.72	cum			
		1	x	29.5	x	0.375	x	0.75	=	8.30	cum			
		1	X	20.65	Х	0.3	х	0.75	=	4.65	cum			
		2	x	9.5	Х	0.375	х	0.75	=	5.34	cum			
	Dillor	2	X	7	X	0.375	X	0.75	=	3.94	cum			
	sitting	4	×	10	x	0.075	X	0.75	-	2.30	cum			
	Sitting	5		10	^	0.75	^	Total	=	42.18	cum			
2	4.06.02	Single layer brick flat soling with 1st class or picked kiln burnt bricks in foundation, filling the interstices tightly with sand of minimum FM 0.50, watering, leveling, dressing, etc. all complete as per instruction of the E-I-C.									sqm	169.74	478.76	81,264.12
		2	х	1.275	х	0.375			=	0.96	sqm			
		1	X	29.5	Х	0.375			=	11.06	sqm			
		1	x	20.65	Х	0.3			=	6.20	sqm			
		2	x	9.5	Х	0.375			=	7.13	sqm			
		2	X	7	Х	0.375			=	5.25	sqm			
	Floor	1	x	29.5	Х	4			=	118.00	sqm			
	Pillar	4	X	0.9	Х	0.875			=	3.15	sqm			
	Sitting	3	X	10	Х	0.6			=	18.00	sqm			
3	4.06.04	PCC-17: Plain cement concrete work in foundation with minimum compressive strength of 17MPa at 28 days (suggested mix proportion 1:2:4 & maximum w/c ratio 0.45) on standard cylinder as per standard practice of Code AASHTO/ ASTM/ and cement conforming to BDS EN 197-1 : 2003 CEM-II/A-L/M/V/W 42.5N, sand of minimum FM 1.8 and 20mm down well graded 1st class/ picked brick chips (LAA value not exceeding 40) conforming to ASTM C 33 including breaking bricks into chips, shuttering, mixing by concrete mixer machine, casting, laying compacting and curing for the requisite period etc. all complete as per direction of the E-I-C. Additional quantity of cement to be added if required to attain the strength at the contractor's own cost. 2 x 1.275 x 0.375 x 0.075 = 0.07									cum	12.73	10,063.81	1,28,116.39
		1	x	29.5	x	0.375	x	0.075	=	0.83	cum			

ltem No	Ref. to LGED Dhaka Division SoR 2022	Description									Unit	Quantity	Rate in Tk.	Amount in Tk.
	0014 2022	1	x	20.65	x	0.3	х	0.075	=	0.46	cum			
		2	x	9.5	x	0.375	х	0.075	=	0.53	cum			
		2	x	7	x	0.375	х	0.075	=	0.39	cum			
		1	x	29.5	x	4	x	0.075	=	8.85	cum			
	Pillar	4	x	0.9	x	0.875	x	0.075	=	0.24	cum			
	sitting	3	x	10	x	0.6	x	0.075	=	1.35	cum			
		•	^		n	0.0	n	Total	=	12 73	cum			
4	5 04 01	Brick works w	/ith	first class l	hric	ks with	Cel	ment sa	l nd	(FM 12)	cum	14 43	7 529 00	1 08 608 18
		mortar (1:6) in with mortar, ra at least for 24 all complete ir and accepted (PWD 04.1)	fou ickir hou iclue by	ndation and ng out the jo rs before us ding cost of the Engine	plir pints se a wa er-i	nth, filling s, cleanir and curir ater, elec n-charge	g th ng a ng a ctric e. (
		2	Х	1.275	х	0.375	х	0.15	=	0.14	cum			
		2	x	1.275	x	0.25	x	0.45	=	0.29	cum			
		1	х	29.500	x	0.375	х	0.15	=	1.66	cum			
		1	х	29.500	х	0.25	х	0.45	=	3.32	cum			
		1	х	20.650	x	0.25	х	0.45	=	2.32	cum			
		2	x	9.500	x	0.375	х	0.15	=	1.07	cum			
		2	х	9.500	х	0.25	х	0.45	=	2.14	cum			
		2	x	7.000	x	0.375	х	0.15	=	0.79	cum			
		2	х	7.000	х	0.25	х	0.45	=	1.58	cum			
	Pillar	12	х	0.25	х	0.25	х	1.5	=	1.13	cum			
								Total	=	14.43	cum			
5	5.04.04	Brick work with class bricks in Composite ce (minimum FM vertical and h mortar, racking soaking bricks necessary sca as per direction	h Ki mer 1.2) orizo ou ou at ffold n of	In 1st class ment mortar nt (CEM II/. with unifo ontal lines, t joints, clea least for 24 ding, curing the E-I-C	bri r (1 AM rm in/c nin/ ho for	cks/auto :4) in ex ; 42.5N) width a ; filling tl g and urs befo requisite	ma teri nd he re e pe	tic mach or walls nd best depth j interstice use, was eriod, etc	ine wit qu oint es f shin c. al	made first th Portland ality sand s, true to tightly with ng of sand, Il complete	cum			
		Ground Floor									cum	30.26	9,197.00	2,78,344.33
		2	x	1.275	x	0.25	х	1.25	=	0.80	cum			
L		1	x	29.500	x	0.25	x	1.25	=	9.22	cum			
		1	x	20.650	x	0.25	x	0.225	=	1.16	cum			
		1	x	9.500	x	0.25	x	2.85	=	6.77	cum			
		2	x	7.000	x	0.25	x	2.85	=	9.98	cum			
		12	x	0.250	x	0.25	x	3.125	=	2.34	cum			
							T	Total	=	30.26	cum			

ltem No	Ref. to LGED Dhaka Division SoR. 2022			D	es	cription					Unit	Quantity	Rate in Tk.	Amount in Tk.
6	5.0214	Site improvem	ent/	earth filling i	in f	oundation	n tr	enches	and	l plinth with	cum			
		specified soil	in/c	supplying,	ca	rrying, fill	ing	y by thro	wir	ng earth in				
		150mm layers	s wi	th carted e	art	h carried	b	y truck	or	any other				
		means to be s	upp	lied at the c	ont	ractor's c)Wr	n cost et	с. а	Il complete				
		as per directi	on c	of the E-I-C	, (Carried	roi	m a disi	and	ce beyond				
		200111).												
	5.02.14.1	Outside munic	ipal	area.							cum	312.73	760.00	2,37,673.47
		0.5	X	2 850	x	73	x	38.5	=	400 50	cum			
		1	x	20,700	x	4	x	1.06	=	-87.77	cum			
		•	Ĥ	20.100			~	Total	=	312.73	cum			
7	5.12.05	Minimum 12 n	nm t	hick cement	t sa	and (F.M.	1	2) plaste		1:6) having	sam	167.31	291.00	48,686,85
	0.12.000	with fresh cen	nent	to both inne	er a	and outer	้รเ	urface of	wa	II, finishing	• • • •		_00	,
		the edges an	d co	orners inclue	din	g washin	g	of sand,	cle	eaning the				
		surface, curin	g a	t least for	7	days, co	ost	of wate	er,	electricity,				
		scaffolding an	d otł	ner charges	et	c. all com	ple	ete in all	res	pect as per				
		drawing and a	acce	pted by the	E	ngineer-ir	1-C	harge. (Cer	nent: CEM-				
		II/BM) ground	tloor	r.[PWD 15.4]									
				4.075	—	1		4.05	_					
		2	X	1.275			Х	1.25	=	sqm				
		2	X	29.500			Х	1.25	=	73.75	sqm			
		1	х	20.650			Х	0.225	=	4.65	sqm			
		1	х	9.500			х	2.85	=	27.08	sqm			
		2	х	7.000			х	2.85	=	39.90	sqm			
		12	х	0.250			х	3.125	=	9.38	sqm			
		12	x	0.250			х	3.125	=	9.38	sqm			
								Total	=	167.31	sqm			
8	16.1.1	Exterior stand	ard	acrvlic emu	Ilsi	on paint	of	approve	d b	est quality	sam	166.14	274.00	45.522.36
		and color ha	aving	g water re	sis	ting pro	pei	rties and	d r	resistance				,
		properties aga	inst	fungi, fadin	g٤	k flaking o	del	ivered fr	om	authorized				
		local agent of	the	manufacture	er (Berger w	ea	ther coa	t sn	nooth/ Elite				
		smooth exterio	or/ A	sian apex w	/ea	ther coat	or	equivale	ent	brand) in a				
		sealed conta	iner;	applying	to	exterior	S	urface	with	1 Surface				
			rom	ang cleanir oving all ch	iy, alk	arying,		aking in Jod mat	ee orio	lioni airi,				
		mending good	the	oving all ch surface defi	ain ort		an	d naner a	and	necessary				
		scaffolding: ar	nlvi	ng 1 coat of	es.	terior sea	ale	r of spec	cifie	d brand on				
		prepared surfa	ace;	then applyir	ng	1 coat of	ex	terior pu	tty o	of specified				
		brand for leve	elling	g, spot filling	g,	crack filli	ng	and cu	tting	g by sand				
		paper/zero w	ater	paper; fin	ally	y applyir	ıg	2 coats	5 0	f exterior				
		emulsion pair	nt by	/ spreading	W	ith brush	/rc	oller/spra	y n	nachine &				
		necessary sca	ffolc	ling etc. upt	o d	lesired fin	ist	ning, elap	osin	g specified				
		time for drying) or i	recoating; a	II C	omplete	in a	all floors	an	d accepted				
		by the Engine	31-111	-charge.										
					_		1							
		1	X	1.275			Х	1.25	=	1.59	sqm			
		1	X	29.500			Х	1.25	=	36.88	sqm			
		1	X	20.650			Х	0.225	=	4.65	sqm			
		1	X	9.500			Х	2.85	=	27.08	sqm			
		1	X	/.000			Х	2.85	=	19.95	sqm			
		2	Х	29.500			Х	1.25	=	/3./5	sqm			

	Ref. to LGED													
Item	Dhaka			Г	000	rintion					Lloit	Quantity	Pata in Tk	Amount in Tk
No	Division			L	630	Inpuon					Unit	Quantity		Amount in TK.
	SoR. 2022													
		2	х	0.900			Х	1.25	=	2.25	sqm			
								Total	=	166.14	sqm			
9	5.02.08.1	Sand filling	in fo	undation tr	enc	ches and	in	side plir	nth	with sand	cum	17.70	1,088.00	19,257.60
		(minimum FN	M 0.50	0) in 150m	m	layers in/	/c I	eveling,	wa	tering and				
		consolidating	each	layer up to	fin	ished lev	el e	etc. all co	mp	lete as per				
		direction of th	ne E-I-	-C. Dry den	sity	after cor	mpa	action sh	all	not be less				
		than 95% of I	MDD	(STD)										
					_									
		1	х	29.5	Х	4	Х	0.15	=	17.70	cum			
10	5.13.02	38mm thick	artifi	cial patent	st	one floo	r ((1:2:4) v	vith	Portland	sqm	118.00	594.00	70,092.00
		Composite c	emen	t (CEM II/A	М,	42.5N),	bes	st quality	CO	arse sand				
		(minimum FM	/11.8) a	and 10mm	dov	vn gradeo	d pi	icked brid	ck					
		chips (LAA v	alue n	not exceedi	ng	38) in/c b	rea	aking chi	ps,	screening,				
		mixing, layin	g the	concrete	n a	alternate	pa	nels, coi	mpa	acting and				
		finishing the t	top wi	th neat cen	nen	t, curing f	or		_					
		requisite peri	od, et	c. all compl	ete	as per d	irec	ction of th	ne E	-I-C				
					-	1		4						
		1	X	29.500			Х	4	=	118.00	sqm			
								Total	=	118.00	sqm			
11	6.05.02	Supply of MS	S work	c in plates,	ang	gles, cha	nne	els, flat b	ars	, Tees etc.	kg	3,566.52	138.46	4,93,820.98
		with minimu	m yie	eld strength	1, f	y (ReH)	=	300 MI	Pa,	including				
		fabricating, m	nachin	ing, cutting	, be	ending, w	eld	ing,						
		forging drilling	g, rive	eting, embe	ddi	ng ancho	r b	ars, stag	ing	and fitting,				
		fixing, local	handl	ing etc inc	lud	ing ener	gy	consum	ptic	on etc. all				
		complete as	per de	esign, spec	fica	ation and	dire	ection of						
		the Engineer-	-in-cn	arge										
					-	0.45		0.004		055.00				
		6	X	23.200	X	0.15	Х	0.004	=	655.63	кд			
		6	X	6.350	X				=	2286.00	кд			
		12	X	1.500	_	0.077		0.00	=	536.58	кд			
		6	X	0.250	X	0.375	Х	0.02	=	88.31	кg			
								Total	=	3566.52	kg			
12	MR	Painting M.S	sectio	on							kg	3,566.52	15.00	53,497.87
13	10.21	Supply and i	install	ation of 0.4	157	mm thic	ck (corrugate	ed g	galvanized	sqm	84.68	578.00	48,945.04
		iron sheet (E	Bangla	adesh mad	e)	having n	nin	weight	63-	65 kg per				
		bundle (2'-6"	widt	h, 70 – 72	fc	ot long	titte	ed and f	ixeo	d on M.S.				
		sections with	'J' ho	ok or wood	en	purlin wit	th s	screws, li	mp	et washers				
		and putty etc	. all co	omplete and	d ad	ccepted b	by t	ne Engin	eer	-in-charge.				
		1		<u> </u>	~	3 65			_	01 60				
		1	X	23.Z	X	3.00		Total	-	04.00	sqm			
								Total	-	04.00	Sqiii			

	Ref. to LGED													
Item	Dhaka			D	esc	ription					Unit	Quantity	Rate in Tk.	Amount in Tk.
NO	Division													
14	5.05.01	RCC:1:2:4. 1	17MPa	a. Brick Chi	ps (BC): Re	einfo	orced cer	ner	nt concrete				
		works with n	ninimu	um cement	con	tent rela	ates	s to mix r	atic	(tentative				
		1:2:4) and m	aximu	ım water ce	mer	nt ratio 0	.45	5		·				
		having minir	mum	required av	/era	ge strer	ngtl	h, f'cr =	24	Mpa and				
		satisfied a sp	pecifie	ed compres	sive	strengt	h f	c = 17 M	pa	at 28 days				
		on standard	cylind	lers as per	sta	ndard pi	ract	tice of Co	bde	AASHTO/				
			ortian		ie C	ement c			BL	JS EN 197-				
		well araded	nicke	d brick chi	ns i	II AA va	riv Ilue	and ma	vim	nım water				
		absorption n	ot exc	ceeding 38	and	15% re	esp	ectively)	con	forming to				
		ASTM C 33	or Ag	gregate Gr	adir	ig Appe	ndiz	x-3 LGÉE) S	chedule of				
		Rates or any	y othe	r Internatio	nal	recogniz	zed	l envelop	in/	c breaking				
		chips and sc	reenir	ng through	prop	per sieve	es,	centering	, sł	nuttering in				
		position, ma	king s	shuttering fu	Illy I	leak pro	01 Jok	& shutter	ing	with plain				
		and Standar	rd siz	e Ramboo	Pri	nns suit	lick tahl	lv bracer	pie 1 r	allik pariels				
		reinforcemer	nt in	position, m	ixin	g the a	qqr	regates v	vith	standard				
		mixer mach	ine w	ith hoper,	fed	by stai	nda	ard meas	urir	ng boxes,				
		maintaining a	allowa	able slump of	of 50	Omm (wi	itho	out plastic	ize	r) & 75mm				
		to 100mm (v	when	plasticizer ι	use)	, pouring	g, c	casting, c	om	pacting by				
		mechanical	vibrato	or machine	and	curing a	at							
		least for 28	days	, removing	cei	ntering-s	shu	ttering af	ter	approved				
		specified tin	ne pe	riod, i/c co	ost	of addit	ion	al testing	j cl	harges of				
		materials a	ind c	cylinders r d ito fobri	equ	ired E	XCI	uding th	ie na	cost of				
		hinding etc.	n an Additi	u its iauri onal quantit	v ∩f	cement	uiii an	y, coupi nd Plastic	ny, zer	ie Water				
		reducina che	emica	l admixture	of	complyir	na t	tvpe A ur	nde	r ASTM C				
		494 to reduc	ce mix	king water r	equ	ired for	nor	rmal work	ab	ility and to				
		maintain low	v wate	r-cement (\	N/C) ratio (l	Dos	ses of ad	mix	cture to be				
		fixed by the	mix de	esign from a	appr	oved la	bor	atory inst	ruc	tion by the				
		Engineer) Ad	dditior	at the cont	0† (root	cement i	to t	be added	t ti מ	required to				
		ner direction	and a	at the cont	he l	ors own Enginee	r in	charge		ompiete as				
		Note : Using	Conc	rete Mixer.		Linginioo		onargo.						
		5												
1/1	5 05 01 01	In individual	and o	ontinuous f	ootii		lum	n raft an	d fl	oor slab at	cum	5.08	8 673 00	51 875 38
17.1	5.05.01.01	plinth level			000	ig of col	um	in, rait an	un	וויסט אמט מנ	cum	0.00	0,070.00	51,075.50
		6	x	1.25	x	1.25	x	0.35	=	3.28	cum			
		3	х	10	х	0.6	x	0.15	=	2.70	cum			
								Total	=	5.98	cum			
14.2	5.05.01.03.0	In pedestal, o	colum	n, capital lif	t wa	ll and w	all				cum	8.09	9,032.00	73,091.46
	1			0.075				4.05		0.01				
		б	X	0.375	X	0.3	X	1.25	=	0.84	cum			
		3	A Y	10	× Y	0.25	× ×	0.13	-	4.05	cum			
		3	x	10	^ X	0.45	x	0.15	=	2.03	cum			
						2	\uparrow	Total	=	8.09	cum			
										-				

ltem No	Ref. to LGED Dhaka Division SoR. 2022				D	esc	ription						Unit	Quantity	Rate in Tk.	Amount in Tk.
14.3	5.05.11	FORM WORk propping etc. of plane, to m and size by angles of mini removal of for	(S) (Th ake usir mu m f	teel ne fo ng i m s or: (I) :Center ormwork i e concret necessary ize 40 mi (PWD 07.	ing mus e si y M m x 12)	and sh st be riç urface IS she 40 mm	iut gic tru ets n x	teri lei le t so	ing, inclu nough b to the de f minim mm, flat	ıdir oth sig um baı	ng strutting, in and out gned shape 16 BWG, rs etc.) and				
	5.05.11.01	In individual a plinth level	nd	con	tinuous fo	ootii	ng of co	olu	ımı	n, raft ar	ıd f	loor slab at	sqm	20.04	582.00	11,663.28
		6	Х	(5	х	0		х	0.35	=	10.50	sqm			
		3	X	(21.2	х	0		х	0.15	=	9.54	sqm			
										Total	=	20.04	sqm			
	5.05.11.04	Pedestal, colu floor	umr	1, C	olumn ca	pita	ıl, lift w	val	la	nd wall	up	to ground	sqm	93.12	522.00	48,608.64
		6	Х	(1.35	Х	0		х	1.25	=	10.13	sqm			
		6	X	(1.00	х	0		х	3.13	=	18.78	sqm			
		3	X	(20.30	Х	0		х	0.9	=	54.81	sqm			
		3	×	(20.90	Х	0		х	0.15	=	9.41	sqm			
										lotal	=	93.12	sqm			
15	5.06.01.02	Grade 400 (F and marked strength, fy (F exceed fy by ultimate stren least 1.25 a minimum tota respectively.	RB as teH m gth nd l elo	400 per) = 4 ore , fu mir onga	D/ 400W): BDS IS 400 MPa, than the (Re) to nimum e ation at m	: Ri O (bu e 12 test long naxi	bbed c 6935-2: t the te 25 MP 25 MP 25 MP 25 MP 25 MP 25 MP 25 MP 25 MP 26 MP	or :20 ste a Id af orc	De 006 an str ter xe (formed with m yield stre d the ra ength (f fracture (Agt) is 1	bar hinir eng atio y) : e (4%	r produced mum yield th shall not o f tested shall be at (A5.65) & 6 and 2.5%	kg	1,785.68	100.00	1,78,567.88
		2.00%									=	1785.68	kg			
16	5.02.11	Earth filling within 90m of each layer up the E-I-C Dr of MDD (STD	insi the to y de).	ide bu finis ensi	plinth in ilding site shed leve ty after co	15 , wa I, et omp	0mm la atering tc. all c baction	ay , le :on sh	ers eve npl nall	with ea ling and ete as p not be l	er (er (ess	n available onsolidating direction of s than 90%	cum	42.18	207.00	8,731.07
17	25.26.3	Leveling and spading the s plants etc. all	dr san con	ess neι nple	ing of lav up to 150 ete and ac	vn a) m ccep	area to im incli oted by	pr ud th	rop ing ie E	er slope supplyi Engineer	an ing [.] -in-	d grade by tools and -charge.	sqm	193.28	8.00	1,546.26
		1	Х	(38.500	Х	7.3				=	281.05	sqm			
		1	X	(20.700	х	4		Х	1.06	=	-87.77	sqm			
										Total	=	193.28	cum			
18	25.26.04	Supply of be including load including supply by the Engine	st ing oly er-i	and , un of to n-cl	approve loading a pols and p harge.	ed o at bo plar	quality oth end nts etc.	al Is, al	pr I co	vial loar operly s omplete	ny tacl and	silty soil king at site d accepted	cum	21.08	913.00	19,244.90
		1	X	(38.500	x	7.3		Х	0.075	=	21.079	cum			
		1	x	(20.700	x	4		х	0.075	=	-6.21	sqm			
										Total	=	14.87	cum			

ltem No	Ref. to LGED Dhaka Division			D	esci	ription					Unit	Quantity	Rate in Tk.	Amount in Tk.
19	SoR. 2022 25.26.06	Labour charge stacks at site including supp	foi on oly a	spreading the lawn su all necessar	the urfao y to	alluvial ce, leve ols and	loa eline	my silty g, dressi ants etc	/ so ng . al	bil from the the same I complete	cum	14.87	194.00	2,884.54
		and accepted I	by tl	ne Engineer	-in-c	charge.								
		1	х	38.500	х	7.3	Х	0.075	=	21.079	cum			
		1	x	20.700	х	4	Х	0.075	=	-6.21	sqm			
								Total	=	14.87	cum			
20	24.3	Creating turf o quality turf not grass grown in by the Enginee	n th t les cluc er-in	e side slope ss than 225 ling all leads -charge.	es a mn s an	nd top o n squar d lifts et	ofe c c. (embankn hunk, w complete	neni atei an	t with good ring till the d accepted	sqm	193.28	23.00	4,445.49
		1	х	38.500	х	7.3			=	281.05	sqm			
		1	х	20.700	х	4	Х	1.06	=	-87.77	sqm			
								Total	=	193.28	sqm			00.04.574.45
													lotal	20,21,574.15
Items a Structu 1	# 06 ures (Gallery) 5.02.01.2	Earthwork in by excavating the drawing pr bamboo spike baskets, carryi distance desig gravelly, slush preparing the b of 2m and an i necessary tool direction of the	ear ovic es a nate y o pase nitia ls a E-I	avation of f th to the line ding center l and marking and disposir ed by the E- r organic so e, etc. all co il lead not e: nd equipme -C.	ioun es, g ig o ig o il-C oil, mpl xcee nt a	dation t grades a s, local ayout w f all exc in all ty leveling ete for a eding 20 t work s	ren and ber ith ava pes , ra an i)m, site	inches, in elevatio nch marl chalk p ated mate ated mate s of soils amming, initial exo includin o, etc. co	cluc n a c pi cow eria cava g a mpl	ling layout, s shown in llars, fixing der filling ls at a safe cept rocky, essing and ation depth rranging all lete as per	cum	101.25	168.00	17,010.00
		30	х	1.5	х	1.5	Х	1.5	=	101.25	cum			
2	5.02.11	Earth filling i within 90m of t each layer up the E-I-C Dry of MDD (STD).	nsic the to fi der	le plinth in building site nished level nsity after co	150 , wa , etc omp)mm lay atering, l c. all co action s	/er: leve mp hal	s with e eling and lete as p Il not be	arth I co ber o less	a available nsolidating direction of s than 90%	cum	101.25	207.00	20,958.75
		30	x	1.5	x	1.5	Х	1.5	=	101.25	cum			
3	4.06.02	Single layer b bricks in foun minimum FM 0 per instruction	oricl dat 0.50 of t	t flat soling ion, filling t watering, le ne E-I-C.	j wi he evel	th 1st (interstic ing, dres	cla ces ssii	ss or pic tightly ng, etc. a	kec with all c	kiln burnt sand of omplete as	sqm	67.50	478.76	32,316.30
		30	X	0.1	×	1.D			1=	07.50	sqm			

	Ref. to LGED													
Item	Dhaka			D	esc	ription					Unit	Quantity	Rate in Tk.	Amount in Tk.
No	Division					F								
1	5 05 01	RCC-1-2-4 17	MPa	Brick Chir	ne (info	orced cer	nor	nt concrete				
т 	0.00.01	works with mir	nimun	n cement i	con	tent rela	tes	s to mix r	atio	tentative				
		1:2:4) and max	kimun	n water cer	ner	nt ratio 0	.45	;						
		having minimu	um re	equired av	era	ge strer	ngth	h, f'cr =	24	Mpa and				
		satisfied a spe	cified	compress	sive	strength	n f'	c = 17 M	ра	at 28 days				
		on standard cy	linde	ers as per	sta	ndard pr	act	tice of Co	bde	AASHTO/				
		ASTM and Por	tland	Composite	эC	ement co	onf	forming to	B	DS EN 197-				
		1:2003 CEM	-11 42. iokod	.5N sand (ot n		//+/ 		120					
		absorption not	exce	edina 38	and	15% re	sne	ectivelv)	cor	norming to				
		ASTM C 33 or	r Agg	regate Gra	adir	ig Apper	ndix	x-3 LGED) S	chedule of				
		Rates or any o	other	Internation	nal	recogniz	ed	envelop	in/	c breaking				
		chips and scre	ening	g through p	orop	per sieve	s,	centering	, sl	huttering in				
		position, makir	ng sh	uttering fu	lly I	leak pro	of	& shutter	ing	with plain				
		16 BWG Steel	snee	Bamboo	er : Dr	somm tn	ICK abl	wooden	bia • •	ank panels				
		reinforcement	in no	osition, mi	xin	ops suit the ac	aui aar	regates v	ן , ו vith	standard				
		mixer machine	e witl	h hoper, t	fed	by star	nda	ard meas	uri	ng boxes,				
		maintaining all	owab	le slump o	f 50) Dmm (wi	tho	out plastic	ize	er) & 75mm				
		to 100mm (wh	en pl	asticizer u	se)	, pouring	g, c	casting, c	om	pacting by				
		mechanical vib	orator	machine a	and	curing a	t							
		least for 28 d	ays,	removing	cei	ntering-s	hut	ttering af	ter	approved				
		specified time	peri	od, i/c co	st	of additi	ona	al testing	g c	harges of				
		materials and	d cy	linders re	equ	ired. E	xcl	uding th	ne	cost of				
		hinding etc. Ac	and Idition	Its tabric		on, weid	ung an	g, coupii d Plastici	ing. izoi	, placing, r i o Water				
		reducina chem	nical a	admixture	of of	complyin	an Ia t	tvpe A ur	nde	er ASTM C				
		494 to reduce	mixir	ng water re	equ	ired for	nor	mal work	kab	ility and to				
		maintain low w	vater-	cement (V	v/c) ratio ([Dos	ses of ad	mi	xture to be				
		fixed by the mi	x des	sign from a	ppr	oved lab	oor	atory inst	ruc	tion by the				
		Engineer) Add	itiona	I quantity	of	cement t	o t	be added	if I	required to				
		attain the stren	igin a nd an	it the contr proval of t	act	ors own Engineer	CO cin	st) etc. a	II C	omplete as				
		Note : Usina C	oncre	ete Mixer.		LIGINEE		charge.						
4.4	E 0E 04 04	المرامة بالمراجع	I	alianana fi	.				a /	lease also st		07.00	0 070 00	0.04.474.00
4.1	5.05.01.01	in individual an		nunuous fo	otii	ig of col	um	in, ratt an	d fl	ioor siad at	cum	27.00	8,673.00	2,34,171.00
		30	Y	15	v	15	Y	04	=	27.00	cum			
	5.05.01.03	In Tie Beam a	nd Li	ntel :	^	1.0	^	0.4	_	21.00	Cum			
4.2	5.05.01.03	Below Plinth Le	evel a	and in Grou	und	Floor					cum	51.30	8.817.00	4,52,312.10
		3	x	36.5	x	0.375	х	0.3	=	12.32	cum		- ,	,. ,
		20	x	6	x	0.375	x	0.3	=	13.50	cum			
		3	x	35.5	x	0.375	х	0.3	=	11.98	cum			
		20	x	6	х	0.375	х	0.3	=	13.50	cum			
								Total	=	51.30	cum			
4.3	5.05.01.02	column,Wall			.						cum	9.72	9,032.00	87,791.04
		30	x	0.3	x	0.3	х	3.6	=	9.72	cum			

ltem No	Ref. to LGED Dhaka Division SoR. 2022			C	esc	ription					Unit	Quantity	Rate in Tk.	Amount in Tk.
4.4	5.05.01.03	Floor									cum	75.94	8,817.00	6,69,547.55
	roof	1	х	36.5	х	2.6	Х	0.175	=	16.61	cum			
	W/S	1	х	36.5	Х	5.86	Х	0.175	=	37.43	cum			
	Step	5	Х	36.5	Х	0.75	Х	0.15	=	20.53	cum			
	Step	1	X	36.5	X	0.25	Х	0.15	=	1.37	cum			
								Total	=	75.94	cum			
4.5	5.05.11	FORM WORI propping etc. of plane, to n and size by angles of min removal of for	K (Ste (The nake usine iimun rm fo	eel) :Center e formwork the concrei g necessar n size 40 m r: (PWD 07	ing mus te su y M m x .12)	and shu it be rigi urface tr S sheet 40 mm	ttei de ue tso x 5	ring, inclu nough b to the de of minim mm, flat	udin oth esig um bar	g strutting, in and out ned shape 16 BWG, rs etc.) and				
	5.05.11.01	In individual a plinth level	and c	ontinuous f	ootir	ng of col	um	n, raft ar	nd fl	oor slab at	Sqm	72.00	582.00	41,904.00
4.0	E 0E 44 0E	30	x	6.0	X	0	Х	0.4	=	/2.00	Sqm			
4.6	5.05.11.05	In Lie Beam	and	Lintel :	اء میں	Floor					0.000	111 60	E 4 2 0 0	0 / 1 / 1 7 00
		Below Plintn I	Leve			F1001		0.075	-	106 76	sqm	444.00	543.00	2,41,417.00
		3 20	X	30.5 6	X	0	X	0.975	-	100.70	sqm			
		20	X	35.5	X	0	X X	0.975	=	103.84	sam			
		20	x	6	x	0	X	0.975	=	117.00	sam			
						-		Total	=	444.60	sqm			
	5.05.11.04	Pedestal, col floor	umn,	, column ca	pita	l, lift wa	ill a	and wall	up	to ground	sqm	129.60	522.00	67,651.20
		30	х	1.2	х	0	Х	3.6	=	129.60	sqm			
	5.05.11.07	Floor and roo	of slat	o up to grou	nd f	loor (PW	/D	07.12.7)			sqm	551.28	597.00	3,29,111.77
	roof	1	х	36.85	х	0	Х	2.95	=	108.71	sqm			
	W/S	1	х	36.85	х	0	Х	6.21	=	228.84	sqm			
	Step	5	х	36.85	х	0	Х	1.05	=	193.46	sqm			
	Step	1	х	36.85	х	0	Х	0.55	=	20.27	sqm			
								Total	=	551.28	sqm			
5	5.06.01.02	Grade 400 (l and marked strength, fy (F exceed fy by ultimate strer least 1.25 a minimum tota respectively.	RB 4 as p ReH) y mo ngth, and r al elor	too/ 400W) ber BDS IS = 400 MPa ore than the fu (Re) to minimum e ngation at n	: Ril O 6 , but test long naxii	bbed or 935-2:2 the test 25 MPa ed yield yation a mum for	De 000 ted ar st fte ce	eformed 6 with m yield stree nd the ra rength (f r fracture (Agt) is 1	bar ninir atio y) s e (14%	produced num yield th shall not of tested shall be at A5.65) & o and 2.5%	kg	32,176.81	100.00	32,17,680.66
									=	32176.81	kg			
6	5.04.01	Brick works mortar (1:6) in with mortar, r at least for 24 all complete and accepted (PWD 04.1)	with rackir 4 hou inclue d by	first class ndation and ag out the ju urs before u ding cost o the Engine	bric l plir bints se a f wa eer-i	ks with hth, filling cleanin and curin hter, elec n-charge	ce g th ng ctrid e. (ment sai le joints/ii and soak at least f city and o (Cement:	nd ntei king or 7 othe	(F.M. 1.2) rstices fully the bricks 7 days etc. er charges EM-II/B-M)	cum	41.37	7,529.00	3,11,441.79
	Up to GL	8	X	3.350	X	0.375	X	0.375	=	3.77	cum			

ltem No	Ref. to LGED Dhaka Division SoB 2022			D	esc	cription					Unit	Quantity	Rate in Tk.	Amount in Tk.
		8	x	3.350	x	0.25	х	0.25	=	1.68	cum			
	GL to Roof	8	x	3.350	x	0.25	x	3	=	20.10	cum			
	Incliend wall	2	x	8 300	x	0.375	x	0.375	=	2 33	cum			
		2	v	8 300	v	0.25	Y	0.25	=	1.00	cum			
		2	^ v	8 300	^ v	0.25	^ v	3	_	12 /5	cum			
		2	^	0.300	^	0.25	*	J	-	12.40	cum			
7	F 00 00 4	Court filling in						TOLA	-	41.37	cum	00.05	4 000 00	00 200 00
7	5.02.06.1	(minimum FM consolidating ea direction of the than 95% of ME	0.5 acl E- DD	50) in 150mi n layer up to I-C. Dry dens (STD)	m I fini sity	ayers in/ ished lev after cor	n /c el (mp	leveling, etc. all co action sh	wa mp all	tering and lete as per not be less	cum	20.95	1,000.00	29,320.22
		1	х	43.3	х	8.3	Х	0.075	=	26.95	cum			
			t					Total	=	26.95	cum			
8	4.06.02	Single layer b	ric	k flat soling	j w	ith 1st c	la	ss or pic	ked	l kiln burnt	sqm	359.39	478.76	1,72,061.56
		bricks in found minimum FM 0. per instruction of	dat .50 of t	ion, filling t , watering, le he E-I-C.	he eve	interstic ling, dres	es ssii	tightly ng, etc. a	with II co	n sand of omplete as				
		1	х	43.3	х	8.3			=	359.39	sqm			
9	4.06.04	PCC-17: Plain compressive s proportion 1:2:4 per standard p conforming to sand of minimu picked brick cf ASTM C 33 inc by concrete min for the requisite C. Additional qu strength at the o	ce tre 4 & pra BE un piluo xei piar coi	ment concre ingth of 17 maximum w ictice of Cc DS EN 197- FM 1.8 and s (LAA valu ding breaking machine, c eriod etc. al htty of cemen htractor's ow	ete MP v/c ode 1 : 1 20 e r g b ast l cc nt t n c	work in f a at 28 ratio 0.45 AASHT 2003 C Dmm dov not excer ricks into ing, layin pmplete a o be add ost.	fou fou fou fou fou fou fou fou	Astronomic and a constant and a constant a c	with gge ard an //V/ ded cont tteri ng etior	n minimum ested mix cylinder as d cement W 42.5N, 1st class/ forming to ing, mixing and curing n of the E-I- to attain the	cum	26.95	10,063.81	2,71,262.45
		1	Х	43.3	х	8.3	Х	0.075	=	26.95	cum			
	- 10							Total	=	26.95	cum			
10	5.13.02	38mm thick a Composite cen (minimum FM1 value not exce laying the cond the top with n complete as pe	rtif ner .8) eec cre iea r d	icial patent int (CEM II/A and 10mm of ling 38) in/c te in alterna it cement, of irection of th	st M, dov br te curi e E	one floo 42.5N), vn grade reaking c panels, o ng for r -I-C.	r be d p cor cor eq	(1:2:4) v st quality bicked bri bs, scree mpacting uisite pe	vith co ick enin an eriod	Portland arse sand chips (LAA g, mixing, d finishing d, etc. all	sqm	718.78	594.00	4,26,955.32
		1	х	43.3	X	8.3			=	359.39	sqm			
		1	x	43.3	x	8.3	-		=	359.39	sam			
			$\left \right $					Total	=	718.78	sqm			

ltem No	Ref. to LGED Dhaka Division SoB 2022				De	escrip	otion					Unit	Quantity	Rate in Tk.	Amount in Tk.
11	5.12.05	Minimum 12 with fresh ce the edges a surface, cur scaffolding a drawing and II/BM) groun	mm and c ring a and of and of acco d floc	thick cen t to both corners in at least ther chargepted by or.[PWD 1	nent inne icluc for ges the [5.4]	t sand er and ding 7 da etc. a Eng	d (F.M. d outer washir ays, co all com ineer-ii	. 1.: r su ng c ost nple n-cl	2) plaste Irface of of sand, of wate te in all r harge. (0	r (1 wal cle r, e esp Cerr	:6) having I, finishing aning the electricity, pect as per nent: CEM-	sqm	160.80	291.00	46,792.80
	GL to Roof	8	х	3.350)	x	2	х	3	=	160.80	cum			
									Total	=	160.80	sqm			
12		Electrical V	Vorks	S		a ee .		. 1	L				04.00	000.00	70 707 00
	PLAR	7): 94.90 sq	m @	ation (Froi Tk. 830.0	m ao DO p	aaitio er sa	inal cos Im	St C	nart, iten	1-		sqm	94.90	830.00	78,767.00
		, ,												Total	67,48,479.31
<i>Items</i> ‡ Plaza A	‡ 7 Masonry gui	de wall													
1	5.02.01.2	Earthwork i by excavatin the drawing bamboo spi baskets, carn distance des gravelly, slu preparing the of 2m and ar necessary to direction of th	n exo ng ear provi ikes rying signal shy o e bas n initi pols a he E-	cavation rth to the iding cen and mar and disp ted by the or organi se, etc. al al lead no and equip I-C.	of fr line ter I rking osin e E- c sc l con ot ex omer	ound es, gra lines, g lay ng of a l-C ir pil, le mplet xceec nt at	ation tr ades a local l rout w all exca n all type veling, te for a ding 20 work s	rend ben ith ava pes , ra an ii)m, site,	ches, inc elevation nch mark chalk p tted mate s of soils imming, nitial exc including , etc. cor	ludi n as pill owo rial: exc dre: ava arm nple	ing layout, s shown in lars, fixing der filling s at a safe sept rocky, ssing and tion depth ranging all ete as per	cum	7.09	168.00	1,190.70
		1	x	42		x (0.375	x	0.45	=	7.09	cum			
2	5.03.05	Providing s one kilogram floor undern specification	ingle n per leath s and	6.5 squa the cem didirectior	olyth ire n ient n of t	hene neter conc the E	sheet in floc crete, o -I-C.	etc.	.18mm th r any wh . all com	ick) ere ple) weighing in ground te as per	sqm	15.75	47.00	740.25
		1	x	42		x (0.375			=	15.75	sqm			
3	4.06.04	PCC-17: Pla compressive proportion 1: per standari conforming sand of mini picked brick ASTM C 33 by concrete for the requi C. Additional strength at th	in ce stre 2:4 8 d pra to BI imum c chip inclu mixe site p I quan ne co	ement cor ength of & maximu actice of DS EN 1 h FM 1.8 bs (LAA h ding brea r machine beriod etc ntity of ce ntractor's	ncre 17I m w Co 97- and value king e, ca c. all emer own	te wo MPa //c rai de A 1 : 2 l 20m e noi g bric astinç I com nt to t n cos	ork in at 28 tio 0.45 AASHT 2003 C am dov t exce- ks into g, layin aplete a be add st.	four 3 d 5) o O/ EN edir o ch ng c as p led	ndation v lays (sup on standa ASTM/ /I-II/A-L/IV well grac ng 40) c nips, shut compactin per direc if require	vith gge rd c anc I/V/ led onf terin g a tion d to	minimum sted mix cylinder as d cement W 42.5N, 1st class/ forming to ng, mixing and curing of the E-I- b attain the	cum	0.79	10,063.81	7,925.25
		1	x	42		x	0.25	X	0.075	=	0.79	cum			

ltem No	Ref. to LGED Dhaka Division SoR 2022			D	escri	iption					Unit	Quantity	Rate in Tk.	Amount in Tk.
4	5.04.01	Brick works w mortar (1:6) in with mortar, ra at least for 24 all complete in and accepted (PWD 04.1)	ith firsi founda cking o hours l cluding by the	class tion and tion and ut the jc pefore u cost of Engine	brick: plint pints, se ar se ar wat	s with h, filling cleanir nd curir er, elec -charge	ceme the ng an ng at tricit	ent sar joints/ir d soak least fo y and o ement:	nd ing or Oth C	(F.M. 1.2) rrstices fully g the bricks 7 days etc. ier charges EM-II/B-M)	cum	16.54	7,529.00	1,24,510.84
	FF	1	х	42	x	0.25	x	0.375	=	3.94	cum			
	SF	1	х	42	х	0.25	х	1.2	=	12.60	cum			
								Total	=	16.54	cum			
5	5.02.11	Earth filling in within 90m of t each layer up the E-I-C Dry of MDD (STD).	nside p he buil o finish density	olinth in ding site ned leve after co	150i , wat l, etc ompa	mm lay tering, l action s	eveli eveli mplei hall r	with ea ng and te as po not be lo	erth er ess	h available onsolidating direction of s than 90%	cum	1.42	207.00	293.42
		0.2	x	42	x	0.375	х	0.45	=	1.42	cum			
	-												Sub Total	1,34,660.46
В	Main Plaza v	vorks												
1	5.02.08.1	Sand filling ir (minimum FM consolidating e direction of the than 95% of M	i founc 0.50) i ach lay E-I-C. DD (ST	lation tra rer up to Dry den D)	ench m lag finis sity a	es and yers in/ hed lev after cor	insi /c lev el eto mpac	de plin veling, c. all co tion sh	th wa mp all	with sand atering and plete as per not be less	cum	165.60	1,088.00	1,80,172.80
		1	x	1104	х	1	х	0.15	=	165.60	cum			
2	5.03.05	Providing sing one kilogram p floor undernea specifications a	gle lay er 6.5 th the ind dire	er polyt square r cement ection of	hene mete con the E	r in floo crete, o E-I-C.	(0.1 or or etc. a	8mm th any wh all com	nick ere nple	k) weighing e in ground ete as per	sqm	1,104.00	47.00	51,888.00
		1	х	1104	х	1			=	1104.00	sqm			
3	4.06.04	PCC-17: Plain compressive as proportion 1:2: per standard conforming to sand of minim picked brick c ASTM C 33 ind by concrete mi for the requisit C. Additional q strength at the	cemer strength 4 & ma practice BDS E um FM hips (L cluding xer ma e perio uantity contrac	t concret of 17 ximum v e of Cc N 197- 1.8 and AA valu breaking chine, c d etc. al of ceme ctor's ow	110.40	10,063.81	11,11,044.62							
			X	1104	X	I	X	U.1	=	110.40	cum			

ltem No	Ref. to LGED Dhaka Division SoR, 2022			De	escrip	ption					Unit	Quantity	Rate in Tk.	Amount in Tk.
4	5.04.22	Klinker paving b pressed bricks mortar (1:4) on mortar (1:4) incl size, soaking necessary inclu (1:2), cleaning, screening of sa complete and a II/B-M) (PWD 04	rick work of appro- minimur uding rak the samu iding high curing at l and, cost ccepted b 1.22)	s in flo ved q n 12 ing ou e for n clas east f of w by the	oor o juality nm it joir 24 ss flu for 7 vater, Eng	or pave y with thick on ts, cuth hours ush po days e , electr jineer-ir	me cer ting be intii tc. ricit	nt with ment sa nent sa the bri efore u ng in c includin y and o harge. (mac ind nd cks se eme g wa othe Cer	hine made (F.M. 1.2) (F.M. 1.2) to required wherever ent mortar ashing and r charges nent: CEM-				
	5.04.22.1	100 mm thick fla size klinker facir	at brick pa ng bricks.	veme (PWE	ent w D 04.	ith 200 .22.1)	mn	n x 100	mm	x 50 mm	sqm	1,104.00	3,131.00	34,56,624.00
		1	x 110	4	х	1	х	1	=	1104.00	sqm			
								Total	=	1104.00	sqm			
												Sub Total	Tk	47,99,729.42
С	Central Mase	onry steps												
		by excavating e the drawing pro bamboo spikes baskets, carryin distance design gravelly, slushy preparing the b of 2m and an in necessary tools direction of the l	arth to the viding ce and ma g and dis ated by the or organ ase, etc. a itial lead n and equ E-I-C.	e line: nter li arking posing ne E-I nic so all cor not ex ipmer	s, gra ines, g lay g of a l-C ir il, le mple cceec nt at	ades al local k rout wi all exca n all typ eveling, te for a ding 20 work s	nd pen ith avai pes rai in ir m, site,	elevatic ch mar chalk ted mat of soils mming, nitial ex includin etc. cc	n as k pil pow erial cava dre cava g ar mpl	s shown in lars, fixing der filling ls at a safe cept rocky, ssing and ation depth ranging all ete as per				,,
-		1	x 51.6	51	x	3.5	x	0.15	=	27.10	cum		(000 00	10.004.40
2	5.02.08.1	Sand tilling in (minimum FM (consolidating ea direction of the I than 95% of MD	toundatio 0.50) in 1 ach layer (E-I-C. Dry DD (STD)	on tre 50mn up to f dens	n lay finish sity a	es and /ers in/ ned leve fter con	in: c le el e mpa	side pli eveling, itc. all co action sl	nth wa omp nall	with sand tering and lete as per not be less	cum	11.61	1,088.00	12,634.13
		1	x 51.6	61	х	3	х	0.075	=	11.61	cum			
	4.00.00	0						Total	=	11.61	cum	454.00	470 70	74.400.44
3	4.06.02	Single layer bi bricks in found minimum FM 0.4 per instruction o	Tick flat s lation, fill 50, wateri f the E-I-0	ing th ng, le C.	y with ne ir velin	h 1st c nterstice ng, dres	las es ssin	s or pic tightly g, etc. a	ked with all co	kiln burnt sand of omplete as	sqm	154.83	478.76	74,126.41
		1	x 51.6	61	х	3			=	154.83	sqm			
								Total	=	154.83	sqm			

ltem No	Ref. to LGED Dhaka Division SoR. 2022				D	esci	ription						Unit	Quantity	Rate in Tk.	Amount in Tk.
4	4.06.04	PCC-17: Plair compressive proportion 1:2 per standard conforming to sand of minin picked brick ASTM C 33 ir by concrete n for the requisi C. Additional of strength at the	n ce stre 2:4 8 pra b Bl num chip nclu nixe nixe qual qual	emer engtl & ma actic DS I D FM os (L ding er ma oerio ntity ntra	nt concre h of 17 eximum v ee of Cc EN 197- I 1.8 anc "AA valu breaking achine, c bd etc. al of ceme ctor's ow	v/c r y/c r y/	vork in atio 0.4 AASH 2003 0 mm do ot exce icks int ng, layi mplete be ado ost.	fc 8 45) TC wr ee to ing as de	Jund day on)/ A EM-I 1 we ding chip g coi g coi g coi g coi g coi g coi g coi g coi g coi	lation ys (su standa STM/ I/A-L/N ell grac g 40) o rs, shut mpaction require	with gge and 1/V/ ded cont tteri ng tion	n minimum ested mix cylinder as d cement /W 42.5N, 1st class/ forming to ing, mixing and curing n of the E-l- o attain the	cum	11.61	10,063.81	1,16,863.48
		1	х		51.61	х	3	1	x (0.075	=	11.61	cum			
										Total	Π	11.61	cum			
		mortar (1:6) ir with mortar, ra at least for 24 all complete i and accepted (PWD 04.1)	n fou acki 1 ho inclu 1 by	unda ing c urs l uding v the	ation and but the jo before us g cost of Engine	plin pints se a wa er-ir	th, fillin , cleani nd curi ter, ele 1-charg	ing ing ing cti je.	the j j an j at ricity (Ce	joints/ii d soak least fi / and d ement:	nter ing or 7 othe CI	rstices fully the bricks days etc. er charges EM-II/B-M)		00.02	7,020.00	0,10,001.10
		1	Х		51.61	x	0.325	2	x	3	=	50.32	cum			
						\square			-	Total	Ш	50.32	cum			
6	5.04.22	Klinker paving pressed brick mortar (1:4) in size, soaking necessary ind (1:2), cleaning screening of complete and II/B-M) (PWD	g bri s o on includ g th clud g, cu sar l acc 04.2	ick w of ap minif ding ne s ling uring nd, c cepte 22)	vorks in f proved of mum 12 raking o same for high cla pat least cost of v ed by the	loor qual mr ut jc r 2 ² iss for wate e Er	or pav ity with n thick ints, cu 1 hour flush p 7 days r, elec ngineer	en 1 C 1 C 1 Utti s oir etc tric -in	nent eme ng ti befo nting c. in city -cha	t with n ent sar he bric ore us ore us cluding and o arge. ((nac nd nd ks eme g wa the Cer	chine made (F.M. 1.2) (F.M. 1.2) to required wherever ent mortar ashing and er charges ment: CEM-				
	5.04.22.1	100 mm thick size klinker fa	flat cing	bricl bric	k pavem cks. (PW	ent D 04	with 20 4.22.1)	0 r	nm	x 100 ı	nm	1 x 50 mm	sqm	193.54	3,131.00	6,05,965.91
		1	x		51.61	x	3	\downarrow	\perp		=	154.83	sqm			
	<u> </u>	1	X		51.61	X	0.75	\downarrow	<u> </u>	T . 1 . 1	=	38.71	sqm			
								\perp		IOTAI	=	193.54	sqm	Sub Total	Tk	11,92 999 33

ltem No	Ref. to LGED Dhaka Division			D	esc	ription					Unit	Quantity	Rate in Tk.	Amount in Tk.
D	Entry Masor	nry step-2 nos	5											
1	5.02.01.2	Earthwork in by excavating the drawing bamboo spil baskets, carr distance des gravelly, slus preparing the of 2m and ar necessary to direction of th	thwork in excavation or foundation trenches, including layout excavating earth to the lines, grades and elevation as shown ir drawing providing center lines, local bench mark pillars, fixing nboo spikes and marking layout with chalk powder filling kets, carrying and disposing of all excavated materials at a safe ance designated by the E-I-C in all types of soils except rocky velly, slushy or organic soil, leveling, ramming, dressing and paring the base, etc. all complete for an initial excavation deptr m and an initial lead not exceeding 20m, including arranging al essary tools and equipment at work site, etc. complete as per cition of the E-I-C.								cum	3.04	168.00	511.43
		2	2 x 5.66 x 0.375 x 0.15 = 0.64							cum				
		4	x	1.5	X	0.375	X	0.15	=	0.34	cum			
		4	X	2.3	Х	1.5	Х	0.15 Total	=	2.07	cum			
2	5.02.08.1	Sand filling (minimum FN	and filling in foundation trenches and inside plinth with sand							cum	1.52	1,088.00	1,656.07	
		consolidating direction of th than 95% of	infinitiant PM 0.50) in Toomin layers into revening, watering and nsolidating each layer up to finished level etc. all complete as per rection of the E-I-C. Dry density after compaction shall not be less an 95% of MDD (STD)											
		2	x	5.66	Х	0.375	х	0.075	=	0.32	cum			
		4	X	1.5	X	0.375	X	0.075	=	0.17	cum			
		4	X	2.3	X	1.5	X	U.U/5 Total	=	1.04	cum			
3	4.06.02	Single layer bricks in fou minimum FM per instructio	brick undation 0.50, v n of the	flat solin n, filling vatering, l e E-I-C.	g w the eve	vith 1st (interstic ling, dre	cla: ces ssi	ss or pic tightly ng, etc. a	vitl witl	d kiln burnt h sand of complete as	sqm	37.28	478.76	17,845.78
		2	х	5.66	Х	0.375			=	4.25	sqm			
		4	x	1.5	х	0.375			=	2.25	sqm			
		4	X	2.3	Х	1.5			=	13.80	sqm			
		2	X	00.0	X	1.5		Total	+=	37.28	sqm			
4	4.06.04	PCC-17: Pla compressive proportion 1:: per standard conforming t sand of minii picked brick ASTM C 33 i by concrete for the requis C. Additional strength at th	2 x 10.16 x 1.5 x 0.075 = 2.29							cum	2.29	10,063.81	23,005.87	
		_				1.0	_^	Total	=	2.29	cum			

ltem No	Ref. to LGED Dhaka Division			[Desc	ription					Unit	Quantity	Rate in Tk.	Amount in Tk.
5	5.04.01	Brick works mortar (1:6) in with mortar, r at least for 24 all complete and accepted (PWD 04.1)	with n fou ackin 4 hou inclu d by	first class indation and ng out the j urs before u ding cost o the Engine	bricl d plir oints use a f wa eer-ii	ks with ath, fillin and curi ater, ele n-charg	ce g th ng ctric e.	ment san ne joints/ii and soak at least f city and o (Cement:	nd nter ting or 7 othe CE	(F.M. 1.2) rstices fully the bricks 7 days etc. er charges EM-II/B-M)	cum	7.73	7,529.00	58,206.70
		4	x	2.28	x	1.5	Х	0.15	=	2.05	cum			
		4	x	2.03	x	1.5	Х	0.15	=	1.83	cum			
		4	x	1.78	x	1.5	х	0.15	=	1.60	cum			
		4	x	1.75	x	1.5	х	0.15	=	1.58	cum			
		4	x	0.5	х	1.5	х	0.15	=	0.45	cum			
		4	x	0.25	х	1.5	х	0.15	=	0.23	cum			
								Total	=	7.73	cum			
6	5.04.22	Klinker paving pressed brick mortar (1:4) in size, soaking necessary in (1:2), cleaning screening of complete and II/B-M) (PWD	g brid on r ncluc g th cludi g, cu san l acc 04.2	ck works in f approved minimum 12 ding raking of e same fo ing high cla rring at leas d, cost of expted by th 22)	floor quai 2 mr out jo or 2 ass t for wate ie Er	or pave lity with n thick pints, cu bints, cu 4 hours flush pe 7 days er, elect ngineer-	emo ce ittin s t oint etc. trici	ent with r ement sa ment sa g the bric before us ing in ca including ity and c charge. (1	nac nd nd cks se eme g wa othe Cer	chine made (F.M. 1.2) (F.M. 1.2) to required wherever ent mortar ashing and er charges ment: CEM-				
	5.04.22.1	100 mm thick size klinker fa	flat	brick paven bricks. (PV	nent VD 0	with 200 4.22.1)	0 m	m x 100	mm	n x 50 mm	sqm	35.88	3,131.00	1,12,340.28
		2	x	10.16	х	1.5			=	30.48	sqm			
		24	x	1.5	x	0.15			=	5.40	sqm			
								Total	=	35.88	sqm			
													Sub Total	2,13,566.13
E	External Mas	sonry step												
1	5.02.01.2	1 x 15.25 x 4.5 x 0.175 = 12.01								ling layout, s shown in llars, fixing ider filling ls at a safe cept rocky, essing and ation depth rranging all lete as per 12.01	cum	12.01	168.00	2,017.58
			- 1					Total	=	12.01	cum			

ltem No	Ref. to LGED Dhaka Division			D	esc	ription					Unit	Quantity	Rate in Tk.	Amount in Tk.
2	5.02.08.1	Sand filling in (minimum FM consolidating e direction of the than 95% of MI	fou 0.50 ach E-I- DD (undation tro)) in 150m layer up to C. Dry den STD)	enc m la fini sity	hes and ayers in, shed lev after cor	l in /c l el e mp	side plin eveling, etc. all co action sh	ith wa omp all	with sand tering and lete as per not be less	cum	5.15	1,088.00	5,599.80
		1	х	15.25	х	4.5	х	0.075	=	5.15	cum			
								Total	=	5.15	cum			
3	4.06.02	Single layer b bricks in found minimum FM 0. per instruction of	rick datio 50, of th	a flat solin on, filling t watering, le e E-I-C.	g w he evel	rith 1st c interstic ling, dres	es es ssir	is or picl tightly ng, etc. a	ked with II c	kiln burnt sand of omplete as	sqm	68.63	478.76	32,854.91
		1	1 x 15.25 x 4.5 = 68.63 Total = 68.63							sqm				
			C-17 : Plain cement concrete work in foundation with minimum						sqm					
4	4.06.04	PCC-17: Plain compressive s proportion 1:2:4 per standard p conforming to sand of minimu picked brick ch ASTM C 33 inc by concrete mit for the requisite C. Additional qu strength at the o	cerr tren I & I prac BDS Inn I hips Iludi ker pe iant conf	nent concre ngth of 17 maximum v tice of Cc S EN 197- FM 1.8 and (LAA valu ng breaking machine, c triod etc. al ity of ceme tractor's ow	ete MP v/c i ode 1 : 1 20 ie r asti l co nt to	work in a at 28 ratio 0.45 AASHT 2003 C Dmm dov not exce- ricks into ng, layin mplete a b be add ost.	fou fou fou fou fou fou fou fou	ndation lays (su n standa ASTM/ 1-II/A-L/M well grac ng 40) c nips, shut compacti per direc if require	with gge and an I/V/ ded con tter ng tior ed to	a minimum ested mix cylinder as d cement W 42.5N, 1st class/ forming to ng, mixing and curing of the E-l- to attain the	cum	5.15	10,063.81	51,797.17
		1	^	10.20	^	4.0		Total	-	5.15	cum			
5	5.04.01	Brick works wi mortar (1:6) in i with mortar, rad at least for 24 I all complete in and accepted (PWD 04.1)	th f oun king nour clud by f	irst class I dation and g out the jo rs before us ing cost of the Engine	oric plir ints se a wa er-i	ks with hth, filling s, cleanir and curir ater, elec n-charge	cei g th ng a ctric e. (ment sar e joints/ii and soak at least fi city and o Cement:	nter nter ing or 7 othe Cl	(F.M. 1.2) stices fully the bricks days etc. er charges EM-II/B-M)	cum	13.83	7,529.00	1,04,104.42
		1	х	33.5	х	0.25	Х	1.075	=	9.00	cum			
		1	x	15.24	х	0.25	х	0.15	=	0.57	cum			
		1	x	14.64	x	0.25	х	0.15	=	0.55	cum			
		1	x	14.04	X	0.25	X	0.15	=	0.53	cum			
		1	X	13.44	X	0.25	X	0.15	=	0.50	cum			
		1	X	12.04	×	0.20	X	0.15	=	0.40	cum			
		2	x	4.6	^ x	0.25	^ X	0.15	=	0.35	cum			
		2	x	4.3	X	0.25	x	0.15	=	0.32	cum			
		2	x	4	x	0.25	x	0.15	=	0.30	cum			
		2	x	3.7	x	0.25	х	0.15	=	0.28	cum			
		2	х	3.4	х	0.25	х	0.15	=	0.26	cum			
		2	x	3.1	x	0.25	Х	0.15	=	0.23	cum			
								Total	=	13.83	cum			

ltem No	Ref. to LGED Dhaka Division			C)esc	ription					Unit	Quantity	Rate in Tk.	Amount in Tk.
6	5.04.22	Klinker paving pressed bricks mortar (1:4) or mortar (1:4) in size, soaking necessary inc (1:2), cleaning screening of complete and II/B-M) (PWD (bricl s of n m cludi the ludin , curi sand acce 04.22	k works in approved inimum 12 ng raking o same fo g high cla ing at least , cost of pted by th 2)	floor qua 2 mi put jo or 2 ass t for wate e Ei	r or pave lity with m thick oints, cut 4 hours flush pc 7 days e er, elect ngineer-i	eme ce cer tting binti etc. ricit n-c	ent with r ment sa g the bric efore us ing in ca including ty and c tharge. (f	nac nd nd cks se eme g wa othe Cen	hine made (F.M. 1.2) (F.M. 1.2) to required wherever ent mortar ashing and r charges nent: CEM-				
	5.04.22.1	100 mm thick f size klinker fac	mm thick flat brick pavement with 200 mm x 100 mm x 50 mr klinker facing bricks. (PWD 04.22.1)								sqm	110.76	3,131.00	3,46,789.56
		1	x	15.25	х	4.5			=	68.63	sqm			
		1	x	12.2	Х	1.5			=	18.30	sqm			
		1	x	24.5	х	0.15			=	3.68	sqm			
		1	x	23.9	Х	0.15			=	3.59	sqm			
		1	x	23.3	Х	0.15			=	3.50	sqm			
		1	x	22.7	Х	0.15			=	3.41	sqm			
		1	1 x 22.1 x 0.15 = 3.32								sqm			
		1	1 x 21.5 x 0.15 = 3.2								sqm			
		1	Х	20.9	х	0.15			=	3.14	sqm			
								Total	=	110.76	sqm			
													Sub Total	5,43,163.44
												Total	Tk	68,84,118.78

ltems # 08

Boundary wall

1	5.02.01.2	Earthwork in excavation of foundation trenches, including layout,	cum	38.00	168.00	6,384.00
		by excavating earth to the lines, grades and elevation as shown in				
		the drawing providing center lines, local bench mark pillars, fixing				
		bamboo spikes and marking layout with chalk powder filling				
		baskets, carrying and disposing of all excavated materials at a safe				
		distance designated by the E-I-C in all types of soils except rocky,				
		gravelly, slushy or organic soil, leveling, ramming, dressing and				
		preparing the base, etc. all complete for an initial excavation depth				
		of 2m and an initial lead not exceeding 20m, including arranging all				
		necessary tools and equipment at work site, etc. complete as per				
		direction of the E-I-C.				
		1 x 38 x 1 x 1 = 38.00	cum			
2	4.06.02	Single laver brick flat soling with 1st class or picked kiln burnt	sam	38.00	478.76	18,192,88
-		bricks in foundation, filling the interstices tightly with sand of	•9			
		minimum FM 0.50, watering, leveling, dressing, etc. all complete as				
		per instruction of the E-I-C.				
		1 x 38 x 1 = 38.00	sqm			

	Ref. to LGED					
Item No	Dhaka Division	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
	SoR. 2022					
No 3	Division SoR. 2022 5.05.01	RCC:1:2:4, 17MPa, Brick Chips (BC): Reinforced cement concrete works with minimum cement content relates to mix ratio (tentative 1:2:4) and maximum water cement ratio 0.45 having minimum required average strength, fcr = 24 Mpa and satisfied a specified compressive strength fc = 17 Mpa at 28 days on standard cylinders as per standard practice of Code AASHTO/ ASTM and Portland Composite Cement conforming to BDS EN 197- 1 :2003 CEM-II 42:5N sand of minimum FM 1.8 and 20mm down well graded picked brick chips (LAA value and maximum water absorption not exceeding 38 and 15% respectively) conforming to ASTM C 33 or Aggregate Grading Appendix-3 LGED Schedule of Rates or any other International recognized envelop in/c breaking chips and screening through proper sieves, centering, shuttering in position, making shuttering fully leak proof & shuttering with plain 16 BWG steel sheet fitted over 38mm thick wooden plank panels and Standard size Bamboo Props suitably braced, placing of reinforcement in position, mixing the aggregates with standard mixer machine with hoper, fed by standard measuring boxes, maintaining allowable slump of 50mm (without plasticizer) & 75mm to 100mm (when plasticizer use), pouring, casting, compacting by mechanical vibrator machine and curing at				
		binding etc. Additional quantity of cement and Plasticizer i.e. Water reducing chemical admixture of complying type A under ASTM C 494 to reduce mixing water required for normal workability and to maintain low water-cement (W/C) ratio (Doses of admixture to be fixed by the mix design from approved laboratory instruction by the Engineer) Additional quantity of cement to be added if required to attain the strength at the contractor's own cost) etc. all complete as per direction and approval of the Engineer in charge. Note : Using Concrete Mixer.		44.40	0.070.000	00.070.00
3.1	5.05.01.01	In individual and continuous tooting of column, raft and floor slab at plinth level	cum	11.40	8,673.00	98,872.20
32	5 05 11	FORM WORK (Steel) Centering and shuttering including strutting	cuili			
5.2	5.05.11	propping etc. (The formwork must be rigid enough both in and out of plane, to make the concrete surface true to the designed shape and size by using necessary MS sheets of minimum 16 BWG, angles of minimum size 40 mm x 40 mm x 5 mm, flat bars etc.) and removal of form for: (PWD 07.12)				
	5.05.11.01	In individual and continuous footing of column, raft and floor slab at plinth level	sqm	22.80	582.00	13,269.60
		2 x 38 x 0.3 = 22.80	sqm			

ltem No	Ref. to LGED Dhaka Division SoB 2022			D	esc	cription					Unit	Quantity	Rate in Tk.	Amount in Tk.
4	5.06.01.02	Grade 400 (F	RB 4	00/ 400W):	Ri	bbed or	De	formed	bar	produced	ka	1.342.35	100.00	1.34.235.00
•		and marked	as p	per BDS IS	0 0	6935-2:2	006	with m	ninin	num yield		.,		.,,
		strength, fy (R	leH)	= 400 MPa,	bu	t the test	ed	yield stre	engt	th shall not				
		exceed fy by	mo	re than the	1	25 MPa	an	d the ra	atio	of tested				
		ultimate stren	gth,	fu (Re) to	test	ted yield	str	ength (f	y)s	shall be at				
		least 1.25 ai	nd r	minimum el	ong	gation a	fter	fracture	e (/	A5.65) &				
		respectively	eiui	iyalion al m	axi		ле (Ayı) is i	4 /0	anu 2.570				
		roopoourory.												
		1.50%							=	1342.35	ka			
5	5.04.01	Brick works v	with	first class I	oric	ks with	cer	nent sar	nd ((F.M. 1.2)	cum	64.17	7.529.00	4.83.122.94
-		mortar (1:6) in	fou	ndation and	pliı	nth, filling	, th	e joints/ii	nter	stices fully		• • • • •	.,	.,,.
		with mortar, ra	ackir	ng out the jo	ints	s, cleanir	ng a	and soak	king	the bricks				
		at least for 24	hou	irs before u	se	and curir	ng a	at least f	or 7	' days etc.				
		all complete in	nclu	ding cost of	Wa	ater, elec	tric	ity and o	othe	er charges				
			by	the Engine	er-i	n-cnarge). (Cement:	CE	=IVI-II/B-IVI)				
	Up to GL	1	1 x 38.000 x 0.375 x 0.8 = 11.40								cum			
	SS	1	x	48.000	x	0.375	x	5.25	=	94.50	cum			
	Ded													
		1	х	20.6	х	0.375	х	4.06	=	-31.36	cum			
		3	х	1.07	х	0.375	х	4.06	=	-4.89	cum			
		6	х	0.6	х	0.375	х	4.06	=	-5.48	cum			
								Total	=	64.17	cum			
6	5.02.11	each layer up the E-I-C Dry of MDD (STD)	the to fi der).	te plinth in building site nished level nsity after co	15 , w l, e omp	Umm lay atering, l tc. all cor paction s	ers eve npl hall	with ea eling and ete as p not be l	arth coi er c ess	available nsolidating direction of than 90%	cum	7.60	207.00	1,573.20
		0.2	х	38	х	1	х	1	=	7.60	cum			
7	5.05.01.03	In Tie Beam a	and	Lintel :			1							
7.1	5.05.01.03	Below Plinth L	.evel	and in Grou	und	Floor					cum	2.63	8,817.00	23,144.63
		1	x	21	x	0.5	x	0.25	=	2.63	cum			
	5.05.11	FORM WORK	(Ste	eel) :Centeri	ing	and shu	tteri	ing, inclu	Idin	g strutting,				
		propping etc.	(The	e formwork r	nus	st be rigio	d e	nough be	oth	in and out				
		of plane, to m	ake	the concret	e s	urface tru	ue t	to the de	sigi	ned shape				
		and size by i	usinę	g necessary	/ N	IS sheet	s o	f minim	um	16 BWG,				
		removal of for	m fo	r: (PWD 07.	12)	40 mm)	()	mm, nat	Dan	s etc.) and				
	5.05.11.05	In Tie Beam a	and I	Lintel :							sqm	10.50	543.00	5,701.50
		2	x	21	x			0.25	=	10.50	sqm			
8	5.12.05	Minimum 12 n	nm t	hick cemen	t sa	and (F.M.	. 1.:	2) plaste	er (1	:6) having	sqm	410.72	291.00	1,19,518.18
		with fresh cen	ith fresh cement to both inner and outer surface of wall, finishi											
		the edges an	e edges and corners including washing of sand, cleaning t											
		surface, curin	urface, curing at least for 7 days, cost of water, electric											
		scattolding an	attolding and other charges etc. all complete in all respect as awing and accepted by the Engineer-in-charge (Cement: C											
		II/BM) around	SM) ground floor. [PWD 15.4]											
		, 3	M) ground noor. [P VD 15.4]											
		2	X	48.000	Х	5.25			=	504.00	sqm			
		1	x	48.000	х	0.375			=	18.00	sqm			

ltem No	Ref. to LGED Dhaka Division SoR. 2022			D	esc	ription					Unit	Quantity	Rate in Tk.	Amount in Tk.
	Ded	1	х	20.6	х	4.06			=	-83.64	sqm			
	Ded	3	x	1.07	х	4.06			=	-13.03	sqm			
	Ded	6	х	0.6	х	4.06			=	-14.62	sqm			
								Total	=	410.72	sqm			
9	5.16.03.2	Interior premii best quality a manufacturer ceiling with si free from dir materials, fun paper and n sealer of spa necessary int crack filling a applying 2 brush/roller/sp finishing, ela complete in a [PWD 16.2.2]	um a nd co in a urfac t, gr gus, ecces ecific erior coat coat oray psin(all fl	crylic emuls blour deliver sealed con e preparatine ease, wax, mending g ssary scaffd d brand o putty of spiro cutting by s s of interi & necess g specified oors and a	sion red ntai on i re ooc oldii n p ecifi anc or ary tin icce	painting from auth ner; appl including moving a d the sur- ng; apply repared ied branc d paper/z emulsior scaffold ne for d epted by	(sinor lyir all fac yin su fac yin su fac n su fac n th	Iky finish ized loca og to inte eaning d chalked e defect g neces for levellir o water paint sp g etc. u ng or r e Engin	i) of al ag ryin ryin ar ar sar ben g, s pap prea upto eco eer	f approved gent of the r wall and g, making nd scaled sing sand y interior applying spot filling, ber; finally ading by desired ating; all in-charge	sqm	410.72	283.00	1,16,232.46
		2	Х	48.000	х	5.25			=	504.00	sqm			
		1	Х	48.000	x	0.375			=	18.00	sqm			
	Ded	1	х	20.6	x	4.06			=	-83.64	sqm			
	Ded	3	х	1.07	x	4.06			=	-13.03	sqm			
	Ded	6	х	0.6	x	4.06			=	-14.62	sqm			
								Total	=	410.72	sqm			
												Sub Total	Tk	10,20,246.59

Item	Ref. to LGED Dhaka	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
No	Division SoR. 2022		0	Quantity		

Items # 09

Walkway- 1.68 meter wide

1	3.01.2	BC(150mm): Earth work in box cutting on road crest up to 150m depth, maintaining proper grade, camber and alignment, superelevation on curves, removing soil to a safe distance, watering, necessary, spreading the excavated earth on road flanks an slopes uniformly including leveling, dressing, manual compactinetc. all complete as per direction of the E-I-C.	n sqm f ,	320.88	33.85	10,861.79
		1 x 191 x 1.68 = 320.88	sqm			
2	3.07.04	KS(RW): Manufacturing, Supplying and Fixing of cement concre kerb stone with top and bottom thickness 120mm and 150m respectively, width 380mm and height 550mm as per approve drawing for side of footpath/median/road island etc. using ste shutter, with 6mm downgraded Stone Chips of LAA value ≤359 sand (FM>=2.2) and minimum cement conforming to BDS EN 19 1 : 2003 CEM-II/A-M 42.5N content relates to mix ratio 1:2: satisfying specified minimum required average strength, fcr = 28 MPa and satisfying a compressive strength fc = 20 MPa at 28 da on standard cylinders, including grading, washings stone chip mixing in standard mixture machine, casting in forms, makin shutter water-tight properly, compacting by vibrator machine ar curing for at least 28 days, including preparation kerb foundatio true to level, maintaining alignment and height, including carryir and placing kerb stone, filling interstices of kerb stone tightly wi cement mortar (1:4), raking out joints, cleaning and soaking ke stone at least for 24 hours before use, curing for requisite perio etc. all complete as per drawing and direction of the E-I-C.	e meter	382.00	1,177.11	4,49,656.02
		2 x 191 = 382.00	meter			
3	5.03.05	Providing single layer polythene sheet (0.18mm thick) weighin one kilogram per 6.5 square meter in floor or any where in groun floor underneath the cement concrete, etc. all complete as per specifications and direction of the E-I-C.	g sqm d	320.88	47.00	15,081.36
		1 x 191 x 1.68 = 320.88	sqm			

ltem No	Ref. to LGED Dhaka Division	Description			Unit	Quantity	Rate in Tk.	Amount in Tk.
4	4.06.04	PCC-17 : Plain cement concrete work in compressive strength of 17MPa at 2 proportion 1:2:4 & maximum w/c ratio 0.4 per standard practice of Code AASH conforming to BDS EN 197-1 : 2003 sand of minimum FM 1.8 and 20mm do picked brick chips (LAA value not exc ASTM C 33 including breaking bricks in by concrete mixer machine, casting, lay for the requisite period etc. all complete C. Additional quantity of cement to be ad strength at the contractor's own cost.	a foundation with r 28 days (suggest 45) on standard cy TO/ ASTM/ and CEM-II/A-L/M/V/W own well graded 1 eeding 40) confor to chips, shuttering ing compacting an as per direction c ded if required to a	ninimum red mix linder as cement / 42.5N, st class/ rming to g, mixing id curing of the E-I- attain the	cum	26.36	10,063.81	2,65,261.90
		1 x 191 x 1.38	x 0.1 =	26.36	cum			
	E 04 00		Total =	26.36	cum			
4	5.04.22	Klinker paving brick works in floor or pav pressed bricks of approved quality with mortar (1:4) on minimum 12 mm thick mortar (1:4) including raking out joints, cr size, soaking the same for 24 hour necessary including high class flush p (1:2), cleaning, curing at least for 7 days screening of sand, cost of water, elec complete and accepted by the Engineer II/B-M) (PWD 04.22)	rement with machin in cement sand (F a cement sand (F utting the bricks to rs before use w bointing in cement etc. including was ctricity and other -in-charge. (Ceme	ne made M. 1.2) M. 1.2) required herever t mortar hing and charges nt: CEM-				
	5.04.22.1	100 mm thick flat brick pavement with 20 size klinker facing bricks. (PWD 04.22.1)	0 mm x 100 mm x	50 mm	sqm	275.04	3,131.00	8,61,150.24
		1 x 191 x 1.44	=	275.04	sqm			
			Total =	275.04	sqm			
							Total	16,02,011.31
Items # Play fie	# 10 eld	Cond filling on the property foundation	had with good of a	ana sifind				
1	4.00.01	FM in layers not more than 150mm carriage, leveling, watering and rammin density (MDD) of 95% STD compactic content (OMC) by ramming each layer direction of E-I-C.	thick including ne g to achieve minir on with optimum r up to finished leve	num dry num dry noisture al as per				
	4.06.01.01	Sand of Minimum FM 0.8			cum	306.23	1,074.50	3,29,044.56
		1 x 37.2 x 27.44	x 0.300 =	306.23	cum			
2	5.26.04	Alluvial loamy silty soil supplying cost b local best quality including cost of labou both ends with properly stacking at site v etc. all complete and accepted by the En	y any means of a ur for loading, unlo vith cost of tools ar gineer	pproved bading at nd plants	cum	76.56	913.00	69,897.09
		1 x 37.2 x 27.44	x 0.075 = 70	6.5576	cum			

ltem No	Ref. to LGED Dhaka Division	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
3	5.26.06	Spreading the alluvial loamy silty soil from the stacks at site on the lawn surface including cost labour for carring, spreading, leveling, dressing the same etc. all complete as per direction of the E-I-C.	cum	76.56	194.00	14,852.17
		1 x 37.2 x 27.44 x 0.075 = 76.5576	cum			
4	5.26.03	lawn area Preparation with leveling and dressing to proper slope and grade by spading the earth up to 150 mm thickness including cost tools and plants etc. all complete and accepted by the Engineer	sqm	1,020.77	8.00	8,166.14
		1 x 37.2 x 27.44 = 1,020.77	sqm			
5	5.26.08	Lawn grass supplying by truck or any other means of approved best quality and size including sorting the grass to proper size and quality with washing the grass, dibbling the grass @ 10 mm to 50 mm distance in both ways, water spreading the lawn area till the grass grown at least for two months after plantation, weeding the undesirable grass, mowing the lawn grass by lawn mower up to two months after plantation, applying urea fertilizer on the lawn surface @ 1 kg per 9.29 sqm including cost of tools and plants etc. all complete as per direction of the E-I-C.	sqm	1,020.77	67.00	68,391.46
		1 x 37.2 x 27.44 = 1,020.77	sqm			
6	MR	Drainge work (Installation of PVC pipe)	LS	1.00	1,00,000.00	1,00,000.00
7	5.02.06	Earth filling inside plinth in 150mm layers with earth available within 90m of the building site, watering, leveling and consolidating each layer up to finished level, etc. all complete as per direction of the E-I-C Dry density after compaction shall not be less than 90% of MDD (STD).	cum	714.54	520.40	3,71,845.37
		1 x 37.2 x 27.44 x 0.7 = 714.54	cum			
					Total	9,62,196.80
<i>Items</i> ‡ Pond e	# 11 excavation					
1	6.01.20.01	Earthwork in excavation of canals/Khals, ponds, drains etc. by excavating earth to lines, grades and elevation in all types of soils except rocky, gravelly, slushy or organic soil as shown in the drawings, filling buskets, carrying and disposing all excavated materials at a safe distance including levelling, dressing etc all complete all for an initial excavation depth upto 2m and lead not exceeding 20m including arranging for and supplying all necessary tools and equipments etc., all complete as per direction of the Engineer-in-Charge.	cum	2,636.00	170.41	4,49,200.76
1	1		CUIII	I I	1	

	Ref to I GED					
Item	Dhaka			A		
No	Division	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
	SoR. 2022					
2	6.01.19	Earthwork in excavation of canals/Khals, ponds, drains etc. by	cum	1,318.00	108.88	1,43,503.84
		excavating earth to the lines, grades and elevation as shown in the				
		drawings, filling baskets, carrying & disposing of all excavated				
		materials at a safe distance designated by the Engineer-in-Charge				
		in all types of soil except rocky, gravelly, slushy or organic soil,				
		levelling, dressing etc all complete for an initial excavation depth of				
		each meter or part thereof beyond the initial 2m depth and an initial				
		lead not exceeding 20m including arranging for & supplying all				
		direction of the Engineer in Charge				
		direction of the Engineer-in-Charge				
		1 x 1318 x 1 x 1 = 1318.00	cum			
3	6.01.02	Earthwork in excavation of canals/Khals, ponds, drains etc. by	cum	856.70	142.03	1,21,677.10
		excavating earth to the lines, grades and elevation as shown in the				
		drawings, filling baskets, carrying & disposing of all excavated				
		materials at a safe distance designated by the Engineer-in-Charge				
		in all types of soil except rocky, gravelly, slushy or organic soil,				
		levelling, dressing etc all complete for an initial excavation depth of				
		lead not exceeding 20m including arranging for & supplying all				
		necessary tools & equipment at work site etc. all complete as per				
		direction of the Engineer-in-Charge				
		1 v 1210 v 1 v 0.65 - 956 70	0.100			
1	Present	Slope protection works	cum	722.25	1 250 00	9 02 812 50
	rates		oum	122.20	1,200.00	0,02,012.00
		1 x 107 x 6.75 = 722.25	sam			
				Total	Tk	16,17,194.20
Items ‡	# 12					
Ghat c	onstruction					
Α	RCC guide v	all				
1	5.02.01.2	Earthwork in excavation of foundation trenches, including layout,	cum	211.41	168.00	35,516.25
		by excavating earth to the lines, grades and elevation as shown in				
		the drawing providing center lines, local bench mark pillars, fixing				
		bamboo spikes and marking layout with chalk powder filling				
		baskets, carrying and disposing of all excavated materials at a safe				
		arayelly slushy or organic soil leveling ramming dressing and				
		preparing the base etc. all complete for an initial excavation denth				
		of 2m and an initial lead not exceeding 20m, including arranging all				
		necessary tools and equipment at work site, etc. complete as per				
		direction of the E-I-C.				
		1 x 56.375 x 3.000 x 1.250 = 211.41	cum			
2	5.03.05	Providing single layer polythene sheet (0.18mm thick) weighing	sam	160.67	47.00	7,551.43
		one kilogram per 6.5 square meter in floor or any where in ground				,
		floor underneath the cement concrete, etc. all complete as per				
		specifications and direction of the E-I-C.				
		1 x 56 375 x 2 850 = 160 67	sam			

ltem No	Ref. to LGED Dhaka Division	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
3	4.06.04	PCC-17 : Plain cement concrete work in foundation with minimum compressive strength of 17MPa at 28 days (suggested mix proportion 1:2:4 & maximum w/c ratio 0.45) on standard cylinder as per standard practice of Code AASHTO/ ASTM/ and cement conforming to BDS EN 197-1 : 2003 CEM-II/A-L/M/V/W 42.5N, sand of minimum FM 1.8 and 20mm down well graded 1st class/ picked brick chips (LAA value not exceeding 40) conforming to ASTM C 33 including breaking bricks into chips, shuttering, mixing by concrete mixer machine, casting, laying compacting and curing for the requisite period etc. all complete as per direction of the E-I-C. Additional quantity of cement to be added if required to attain the strength at the contractor's own cost.	cum	12.05	10,063.81	1,21,270.48
3	5.05.03	1 x 56.375 x 2.850 x 0.075 = 12.05 RCC WORKS: 1:1.5:3(measured on gross concrete section) (fc =25MPa, minimum fcr = 33.5 MPa in nominal mix 1 : 1.5 : 3), with stone chips (100% sand of F.M. 2.2) Reinforced cement concrete works with minimum cement content relates to mix ratio 1:1.5:3 having maximum water cement ratio = 0.40 and minimum fcr = 33.5 MPa, satisfying a specified compressive strength fc = 25 MPa at 28 days on standard cylinders as per standard practice of Code ACI/BNBC/ASTM, Cement conforming to BDS EN-197-1-CEM-I, 52.5N (52.5 MPa) / ASTM-C 150 Type – I, best quality Sylhet sand or coarse sand of equivalent F.M. 2.2 and 20 mm down well graded stone chips conforming to ASTM C-33 (Aggregate grading as per table shown in technical specification), conducting necessary tests, making and placing shutter in position and maintaining true to plumb, making shutter water-tight properly, placing reinforcement in position; mixing with standard mixer machine with hopper, fed by standard measuring boxes, casting in forms, compacting by vibrator machine and curing at least for 28 days, removing centering-shuttering after specified time approved; including cost of water, electricity, other charges etc. all complete, approved and accepted by the Engineer-incharge. (Rate is excluding laboratory test fees, the cost of reinforcement and its fabrication, placing,binding etc. and the cost of shuttering & centering) (PWD 07.3)	cum			
	5.05.03.01	Individual & combined footing, pile cap, raft/mat, floor slab and foundation beam up to plinth level (PWD 07.3.1)	cum	25.37	13,842.00	3,51,154.24
	5.05.03.02	Pedestals, column, column capital, lift wall and RCC wall up to	cum	60.25	14,201.00	8,55,621.34
		ground floor (PWD 07.3.2)				
		1 x 56.375 x 2.850 x 0.375 = 60.25	cum			

ltem No	Ref. to LGED Dhaka Division SoR. 2022		Dese	cription	Unit	Quantity	Rate in Tk.	Amount in Tk.			
		FORM WORK (S propping etc. (T of plane, to mak and size by usi angles of minimu removal of form	Steel) :Centering he formwork mu: e the concrete s ing necessary N um size 40 mm x for: (PWD 07.12)	and shutter st be rigid e surface true //S sheets o (40 mm x 5							
	5.05.11.01	Individual and co	ombined footing ((PWD 07.12	sqm	17.36	582.00	10,104.98			
		1	x 57.875 x	0.300		= 17.3	6	sqm			
	5.05.11.04	Pedestal, colum floor (PWD 07.12	n, column capita 2.4)	al, lift wall a	and wall u	up to grou	und	sqm	363.62	522.00	1,89,808.99
		2	x 56.375 x	3.225		= 363.0	62	sqm			
4	5.06.01.02	Grade 400 (RB and marked as strength, fy (Ref- exceed fy by n ultimate strength least 1.25 and minimum total el respectively.	400/ 400W): R per BDS ISO I) = 400 MPa, butore than the 1 h, fu (Re) to tes minimum elon longation at max	ibbed or De 6935-2:2000 it the tested 25 MPa ar ted yield st gation after imum force	eformed b 6 with mi yield stre nd the rai rength (fy r fracture (Agt) is 14	par produc inimum yi ngth shall tio of test) shall be (A5.65) 4% and 2.	ced eld not ted at & 5%	kg	10,081.70	100.00	10,08,169.98
		1.50%				= 10081	.70	kg			
5	5.04.03	Brick work with foundation and p 42.5N) and be interstices tight soaking bricks a curing for requis E-I-C.	th 1st class bi blinth with Portlar est quality sanc y with mortar, at least for 24 hc ite period, etc. a	ricks in ce nd Composi d (minimum raking out ours before all complete	ment mo te cement n FM1.2) joints, c use, wasl as per di	in AM, he nd nd, the	cum	12.68	8,419.00	1,06,789.75	
		1	x 56.375 x	0.250 x	0.900	= 12.6	8	cum			
					Total	= 12.6	8	cum			
6	5.02.13	Earth filling ins within 90m of the each layer up to the E-I-C Dry d of MDD (STD).	side plinth in 15 e building site, w finished level, e ensity after com	0mm layers vatering, leve tc. all comp paction shal	s with ea eling and lete as pe Il not be le	ble ting n of 0%	cum	847.43	709.00	6,00,830.65	
		1	x 36.575 x	9.900 x	1.200	= 434.	51	cum			
		1	x 33.528 x	8.380 x	0.450	= 126.4	43	cum			
		1	x 30.480 x	9.150 x	0.450	= 125.	50	cum			
		1	x 27.432 x	7.620 x	0.450	= 94.0	6	cum			
		1	x 24.380 x	6.100 x	0.450	= 66.9	2	cum			
1	5.12.04	upto 150mm b including washi edges and corr complete as p minimum FM. 1.:	tnick cement p elow ground le ng of sand and hers and curing er direction of 2 to be used)	laster (1:4) evel with n added De for the rea the Engine	to dado a eat ceme enso-01, quisite pe eer-in-Cha	wall ng the all nd	sqm	50.74	373.00	18,925.09	
		1	× JU.J/J	×	0.300	- 00.7	7	SYIII			

Ref. to LGED Item Dhaka No Division SoR 2022			Desc	ription		Unit	Quantity	Rate in Tk.	Amount in Tk.		
B Platform											
1 5.03.05	Providing single one kilogram per floor underneath specifications an	e la r 6. n th	ayer polythen 5 square meter ne cement con lirection of the	e sheet (er in floor ncrete, ef E-I-C.	(0. o tc.	sqm	432.23	47.00	20,314.85		
	1	x	24.380 x	6.100		sqm					
	1 >	x	39.620 x	1.525		=	60.42	sqm			
	1 2	x	45.730 x	1.525		=	69.74	sqm			
	1	x	47.240 x	1.525		=	72.04	sqm			
	1	x	53.320 x	1.525		=	81.31	sqm			
2 4.00.04	compressive strength of 17MPa at 28 days (suggested mix proportion 1:2:4 & maximum w/c ratio 0.45) on standard cylinder as per standard practice of Code AASHTO/ ASTM/ and cement conforming to BDS EN 197-1 : 2003 CEM-II/A-L/M/V/W 42.5N, sand of minimum FM 1.8 and 20mm down well graded 1st class/ picked brick chips (LAA value not exceeding 40) conforming to ASTM C 33 including breaking bricks into chips, shuttering, mixing by concrete mixer machine, casting, laying compacting and curing for the requisite period etc. all complete as per direction of the E-I- C. Additional quantity of cement to be added if required to attain the strength at the contractor's own cost.								32.42	10,063.61	3,20,241.01
	1	x	24.380 x	6.100		0.075 =	11.15	cum			
	1 2	x	39.620 x	1.525		0.075 =	4.53	cum			
	1 >	x	45.730 x	1.525		0.075 =	5.23	cum			
	1 >	x	47.240 x	1.525		0.075 =	5.40	cum			
	1 2	x	53.320 x	1.525		0.075 =	6.10	cum			
3 5.05.01	RCC:1:2:4, 17MPa, Brick Chips (BC): Reinforced cement concrete works with minimum cement content relates to mix ratio (tentative 1:2:4) and maximum water cement ratio 0.45 having minimum required average strength, fcr = 24 Mpa and satisfied a specified compressive strength fc = 17 Mpa at 28 days on standard cylinders as per standard practice of Code AASHTO/ ASTM and Portland Composite Cement conforming to BDS EN 197- 1 :2003 CEM-II 42.5N sand of minimum FM 1.8 and 20mm down well graded picked brick chips (LAA value and maximum water absorption not exceeding 38 and 15% respectively) conforming to ASTM C 33 or Aggregate Grading Appendix-3 LGED Schedule of Rates or any other International recognized envelop in/c breaking chips and screening through proper sieves, centering, shuttering in position, making shuttering fully leak proof & shuttering with plain 16 BWG steel sheet fitted over 38mm thick wooden plank panels and Standard size Bamboo Props suitably braced, placing of reinforcement in position, mixing the aggregates with standard mixer machine with hoper, fed by standard measuring boxes, maintaining allowable slump of 50mm (without plasticizer) & 75mm to 100mm										

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description										Quantity	Rate in Tk.	Amount in Tk.
		(when plasticizer use), pouring, casting, compacting by mechanical vibrator machine and curing atleast for 28 days, removing centering-shuttering after approved specified time period, i/c cost of additional testing charges of materials and cylinders required. Excluding the cost of reinforcement and its fabrication, welding, coupling, placing, binding etc. Additional quantity of cement and Plasticizer i.e. Water reducing chemical admixture of complying type A under ASTM C 494 to reduce mixing water required for normal workability and to maintain low water-cement (W/C) ratio (Doses of admixture to be fixed by the mix design from approved laboratory instruction by the Engineer) Additional quantity of cement to be added if required to attain the strength at the contractor's own cost) etc. all complete as per direction and approval of the Engineer in charge. Note : Using Concrete Mixer.												
3.1	5.05.01.01	In individual and plinth level	d Co	ontinuous foo	otin	g of colun	nn,	, raft and	d fl	oor slab at	cum	54.03	8,673.00	4,68,592.16
		1	х	24.380	х	6.100 x	(0.125	=	18.59	cum			
		1	х	39.620	х	1.525 x	(0.125	=	7.55	cum			
		1	х	45.730	х	1.525 x	(0.125	=	8.72	cum			
		1	х	47.240	х	1.525 x	(0.125	=	9.01	cum			
		1	Х	53.320	х	1.525 x	(0.125	=	10.16	cum			
4	5.05.11	FORM WORK (Steel) :Centering and shuttering, including strutting, propping etc. (The formwork must be rigid enough both in and out of plane, to make the concrete surface true to the designed shape and size by using necessary MS sheets of minimum 16 BWG, angles of minimum size 40 mm x 40 mm x 5 mm, flat bars etc.) and removal of form for: (PWD 07.12)										55.62	582.00	32,372.30
4.1	5.05.11.01	Individual and c	om	bined footing	3 (F	WD 07.12	2.1)						
		1	x	60.960	x	0.125			=	7.62	sqm			
		1	х	82.290	x	0.125	+		=	10.29	sqm			
		1	x	94.510	x	0.125			=	11.81	sqm			
		1	х	97.530	х	0.125			=	12.19	sqm		_	
		1	х	109.690	х	0.125			=	13.71	sqm			
5	5.06.01.02	Grade 400 (RB 400/ 400W): Ribbed or Deformed bar produced and marked as per BDS ISO 6935-2:2006 with minimum yield strength, fy (ReH) = 400 MPa, but the tested yield strength shall not exceed fy by more than the 125 MPa and the ratio of tested ultimate strength, fu (Re) to tested yield strength (fy) shall be at least 1.25 and minimum elongation after fracture (A5.65) & minimum total elongation at maximum force (Agt) is 14% and 2.5% respectively.										6,361.90	100.00	6,36,189.64
		1.50%							=	6361.90	кд			
ltem No	Ref. to LGED Dhaka Division	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.								
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6	5.04.22.2	Klinker paving brick works in floor or pavement with machine made pressed bricks of approved quality with cement sand (F.M. 1.2 mortar (1:4) on minimum 12 mm thick cement sand (F.M. 1.2) mortar (1:4) including raking out joints, cutting the bricks to require size, soaking the same for 24 hours before use wherever necessary including high class flush pointing in cement mortar (1:2), cleaning, curing at least for 7 days etc. including washing an screening of sand, cost of water, electricity and other charges complete and accepted by the Engineer-in-charge. (Cement: CEN II/B-M) (PWD 04.22) 50 mm thick brick pavement with 200 mm x 50 mm x 50 mm klinke facing bricks. (PWD 04.22.3)	sqm - -	432.23	2,823.00	12,20,187.41								
		1 x 24.380 x 6.100 x = 148.72	sqm											
		1 x 39.620 x 1.525 x = 60.42	sqm											
		1 x 45.730 x 1.525 x = 69.74	sqm											
		1 x 47.240 x 1.525 x = 72.04	sqm											
		1 x 53.320 x 1.525 x = 81.31	sqm											
C	Sitting const	truction												
1	5.03.05	Providing single layer polythene sheet (0.18mm thick) weighing one kilogram per 6.5 square meter in floor or any where in ground floor underneath the cement concrete, etc. all complete as per specifications and direction of the E-I-C.	sqm I	81.15	47.00	3,813.87								
		1 x 30.480 x 0.375 x = 11.43	sqm											
		1 x 39.620 x 0.375 x = 14.86	sqm											
		1 x 45.730 x 0.375 x = 17.15	sqm											
		1 x 47.240 x 0.375 x = 17.72	sqm											
		1 x 53.320 x 0.375 x = 20.00	sqm											
2	4.06.04	PCC-17 : Plain cement concrete work in foundation with minimun compressive strength of 17MPa at 28 days (suggested mix proportion 1:2:4 & maximum w/c ratio 0.45) on standard cylinder a per standard practice of Code AASHTO/ ASTM/ and cement conforming to BDS EN 197-1 : 2003 CEM-II/A-L/M/V/W 42.5N sand of minimum FM 1.8 and 20mm down well graded 1st class picked brick chips (LAA value not exceeding 40) conforming to ASTM C 33 including breaking bricks into chips, shuttering, mixing for the requisite period etc. all complete as per direction of the E-C. Additional quantity of cement to be added if required to attain the strength at the contractor's own cost.	cum	6.09	10,063.81	61,248.03								
		1 x 30.480 x 0.375 x 0.075 = 0.86	cum											
		1 x 39.620 x 0.375 x 0.075 = 1.11	cum											
		1 x 45.730 x 0.375 x 0.075 = 1.29	cum											
		1 x 47.240 x 0.375 x 0.075 = 1.33	cum											
		1 x 53.320 x 0.375 x 0.075 = 1.50	cum											

	Ref. to LGED										
ltem No	Dhaka Division		Desc	cription	Unit	Quantity	Rate in Tk.	Amount in Tk.			
	SoR. 2022										
3	5.04.03	Brick work wit foundation and p 42.5N) and be interstices tighth soaking bricks a curing for requis E-I-C.	th 1st class built with Portlar st quality sand y with mortar, at least for 24 ho it period, etc. a	ricks in ad Compo (minimu raking ours befor Il comple	cement m psite cemer um FM1.2 ut joints, re use, was te as per c	orta nt (), clea shir ire	ar (1:4) in (CEM II/AM, filling the eaning and ng of sand, action of the	cum	40.57	8,419.00	3,41,585.14
		1 >	x 30.480 x	0.750	x 0.250	=	5.72	cum			
		1	x 39.620 x	0.750	x 0.250	=	7.43	cum			
		1	x 45.730 x	0.750	x 0.250	=	8.57	cum			
		1 >	x 47.240 x	0.750	x 0.250	=	8.86	cum			
		1	x 53.320 x	0.750	x 0.250	=	= 10.00	cum			
4	5.05.01	RCC:1:2:4, 17MI works with minin 1:2:4) and maxin having minimum satisfied a specil on standard cylin ASTM and Portla 1 :2003 CEM-II well graded pick absorption not e ASTM C 33 or A Rates or any oth chips and screer position, making 16 BWG steel si and Standard s reinforcement in mixer machine maintaining allov to 100mm (wher mechanical vibra least for 28 day specified time p materials and reinforcement a binding etc. Addi reducing chemic 494 to reduce m maintain low wa fixed by the mix Engineer) Additio attain the strengt per direction and Note : Using Cor	Pa, Brick Chips f num cement cor num water cement i required avera fied compressive nders as per sta and Composite C 42.5N sand of n ked brick chips xceeding 38 and Aggregate Gradin rer International ning through prop shuttering fully heet fitted over is ize Bamboo Pr position, mixin with hoper, fed vable slump of 5 n plasticizer use) ator machine and ys, removing ce beriod, i/c cost cylinders requ and its fabricati itional quantity of ixal admixture of nixing water requ ter-cement (W/C design from app onal quantity of th at the contract d approval of the ncrete Mixer.	(BC): Reinitent relation ratio 0. age strength age strength age strength age strength age strength age strength age and age and age age by stan age age age by stan age age by st	nforced cei tes to mix i 45 gth, fcr = 1 fc = 17 M actice of Ci onforming to FM 1.8 and ue and ma spectively) dix-3 LGEI ed envelop s, centering of & shutter ck wooden ably brace gregates in dard meas hout plastic , casting, co thing, coupl and Plastic g type A u normal wor boses of ac oratory ins o be addec cost) etc. a in charge.	terror for the second s	ent concrete io (tentative 4 Mpa and a at 28 days e AASHTO/ 3DS EN 197- 20mm down mum water informing to Schedule of i/c breaking shuttering in g with plain lank panels placing of h standard ring boxes, er) & 75mm npacting by r approved charges of cost of g, placing, er i.e. Water er ASTM C bility and to ixture to be ction by the required to complete as				

ltem No	Ref. to LGED Dhaka Division SoR. 2022		Desc	cription	Unit	Quantity	Rate in Tk.	Amount in Tk.		
4.1	5.05.01.03	In Stair case slat	and step				cum	7.54	8,817.00	66,513.68
		20 >	(0.900 x	1.524 >	(0.150 =	4.11	cum			
		60 >	(0.250 x	1.524 >	< 0.150 =	= 3.43	cum			
4.2	5.05.11	FORM WORK (S	Steel) :Centering	and shutte	ering, includ	ing strutting,	sqm	13.72	551.00	7,557.52
		propping etc. (Th of plane, to make and size by usi	the formwork must the concrete s ng necessary N	st be rigid surface true //S sheets	enough bot to the desi of minimur	n in and out gned shape n 16 BWG,				
		removal of form f	or: (PWD 07.12)		o min, nat o					
	5.05.11.10	Stair case slab a	nd steps up to g	round floor	(PWD 07.1	2.10)				
		60 >	(1.524 x	0.150	=	13.72	sqm			
5	5.06.01.02	Grade 400 (RB	400/ 400W): R	ibbed or D	eformed ba	ar produced	kg	9,666.91	100.00	9,66,690.51
	ĺ	and marked as	per BDS ISO	6935-2:200 ut the testor)6 with min	imum yield				
		exceed fy by m	ore than the 1	25 MPa a	and the rati	o of tested				
	ĺ	ultimate strength	, fu (Re) to tes	ted yield s	trength (fy)	shall be at				
	ĺ	least 1.25 and	minimum elon	gation after	er fracture	(A5.65) &				
	ĺ	respectively.	ongation at max	imum iorce	e (Agi) is 14					
	ĺ									
		2.00%			:	9666.91	kg			
6	5.04.22.2	Klinker paving br	ick works in floo	r or pavem	nent with ma	chine made	sqm	125.49	2,823.00	3,54,262.50
	ĺ	pressed bricks of	of approved qua	ality with c	ement sand	I (F.M. 1.2)				
	ĺ	mortar (1:4) on mortar (1:4) inclu	minimum 12 m iding raking out i	im unick ce ioints, cuttir	ng the brick	(F.IVI. 1.2) s to required				
	ĺ	size, soaking th	he same for 2	24 hours	before use	wherever				
		necessary includ	ding high class	flush poin	in cen	nent mortar				
		(1:2), cleaning, c	uring at least for	7 days etc	: including v sity and oth	vashing and				
		complete and ac	cepted by the E	ingineer-in-	-charge. (Ce	ement: CEM	-			
		II/B-M) (PWD 04.	.22)							
	ĺ	50 mm thick brick	k pavement with	200 mm x	50 mm x 50	mm klinker				
			12 0 1.22.07							
		60 >	(1.524 x	0.150	:	13.72	sqm			
		10 >	(3.200 x	0.450	:	= 14.40	sqm			
		1 >	(30.480 x	0.450		sqm				
		1 >	39.620 x	0.450	:	sqm				
	ļ	1 >	45.730 x	0.450	=	sqm				
	ļ	1 >	47.240 x	0.450	=	sqm				
	<u> </u>	1	53.320 x	0.450		= 23.99	sqm		C.L.T.A.L	70 44 040 00
									Sub i otal	78,11,312.39

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
Items #	# 13		-	11		
Water	Body Constru	uction				
Α	Masonry gui	de wall				
1	5.02.01.2	Earthwork in excavation of foundation trenches, including layout, by excavating earth to the lines, grades and elevation as shown in the drawing providing center lines, local bench mark pillars, fixing bamboo spikes and marking layout with chalk powder filling baskets, carrying and disposing of all excavated materials at a safe distance designated by the E-I-C in all types of soils except rocky, gravelly, slushy or organic soil, leveling, ramming, dressing and preparing the base, etc. all complete for an initial excavation depth of 2m and an initial lead not exceeding 20m, including arranging all necessary tools and equipment at work site, etc. complete as per direction of the E-I-C.	cum	1.77	168.00	297.68
2	6.01.20.01	Earthwork in excavation of canals/khals, ponds, drains, etc. by excavating earth to the lines, grades and elevation as shown in the drawing, filling baskets, carrying and disposing of all excavated materials at a safe distance designated by the E-I-C in all types of rocky, gravelly, slushy or organic soil, leveling, dressing, etc. all complete for an initial excavation depth upto 2m and an initial lead not exceeding 20m, including arranging for and supplying all necessary tools and equipment at work site, etc. complete as per direction of the E-I-C.	cum	60.00	170.41	10,224.60
		2 x 30 x 1 x 1 = 60.00	cum			
3	5.04.03	Brick work with 1st class bricks in cement mortar (1:4) in foundation and plinth with Portland Composite cement (CEM II/AM, 42.5N) and best quality sand (minimum FM1.2), filling the interstices tightly with mortar, raking out joints, cleaning and soaking bricks at least for 24 hours before use, washing of sand, curing for requisite period, etc. all complete as per direction of the E-I-C.	cum	2.63	8,419.00	22,099.88
	FF	2 x 5.25 x 0.25 x 1 = 2.63	cum			
<u> </u>		Total = 2.63	cum			
4	5.02.13	Earth filling inside plinth in 150mm layers with earth available within 90m of the building site, watering, leveling and consolidating each layer up to finished level, etc. all complete as per direction of the E-I-C. Dry density after compaction shall not be less than 90% of MDD (STD).	cum	0.35	709.00	251.25
		0.4 x 5.25 x 0.375 x 0.45 = 0.35	cum			
5	5.03.01	Single layer brick flat soling with 1st class or picked kiln burnt bricks in foundation, filling the interstices tightly with sand of minimum FM 0.50, watering, leveling, dressing, etc. all complete as per instruction of the E-I-C.	sqm	3.94	518.00	2,039.63
		2 x 5.25 x 0.375 = 3.94	sqm			

	Ref. to LGED					
Item	Dhaka	Description	1.1	Owentite	Dete in Th	A second in Th
No	Division	Description	Unit	Quantity	Rate In TK.	Amount in TK.
	SoR. 2022					
6	4.06.04	PCC-17: Plain cement concrete work in foundation with minimum	cum	0.30	10,063.81	2,971.97
		compressive strength of 17MPa at 28 days (suggested mix				
		proportion 1:2:4 & maximum w/c ratio 0.45) on standard cylinder as				
		per standard practice of Code AASHTO/ ASTM/ and cement				
		conforming to BDS EN 197-1 : 2003 CEM-II/A-L/M/V/W 42.5N,				
		sand of minimum FM 1.8 and 20mm down well graded 1st class/				
		ACTM C 22 including brooking bricks into ships, shuttering, mixing				
		by concrete mixer machine, casting laving compacting and curing				
		for the requisite period etc. all complete as per direction of the E-I-				
		C. Additional quantity of cement to be added if required to attain the				
		strength at the contractor's own cost.				
		2 x 5.25 x 0.375 x 0.075 = 0.30	cum			
7	5.12.04	Minimum 12mm thick cement plaster (1:4) to dado and plinth wall	sqm	26.00	373.00	9,698.00
		upto 150mm below ground level with neat cement finishing				
		including washing of sand and added Denso-UI, finishing the				
		complete as per direction of the Engineer-in-Charge (Sand				
		minimum FM 1.2 to be used)				
		1 x 26 x 1 = 26.00	sqm			
			1		Sub Total	47,583.00
Items i	# 14					
	Rain water H	arvesting				
	PLAR-	Submersible pump with tube well	IS	1.00	6.00.000.00	6.00.000.00
	Annex-A 9				-,,	-,,
	MR	Pine line	ls	1 00	3 25 000 00	3 25 000 00
			20	1.00	Sub Total	9 25 000 00
Home	# 15					3,23,000.00
ICEIIIS						
	water supply	system	1			
	PLAR-	Underground Water Reservoir :	gal	15,000.00	106.00	15,90,000.00
	Annex-A 9					
	MR	Laying pipe for water received	Ls	1.00	3,25,000.00	3,25,000.00
					Sub Total	19,15,000
Items	# 16					
Draina	ge works					
1	6.10.01	Supplying and laving of uPVC pipes of different diameter and wall				
		thickness for at least 3.25 bar (32.00 m head) working pressure in				
		accordance with ISO-4422 and ISO-4065, including placing in				
		position, connecting and leak proof O-ring jointing using best				
		quality elastomeric sealing gaskets, etc. completed including costs				
		of all materials, labors, etc and costs of testing for complete leak				
		proofness and repair and/or replacement of leaking joints , if any				
		but excluding costs of earthworks in trench cutting & filling as per				
		design drawings, specifications and as per Direction of Engineer-In-				
		unaiye.				
1.1	6 10 01 03	For PVC Pipe: 200mm Dia, Wall Thickness 4.0mm	m	60.00	1.063.42	63.805.20
	0.10.01.00				,	,

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
2	7.70	Construction of masonry inspection pit with 250 mm thick brick work in cement mortar (1:4) including necessary earth work side filling and one layer brick flat soling, 75 mm thick (1:3:6) base concrete for making invert channel and 12 mm thick (1:2) cemen plaster with neat finishing up to a depth of 700 mm etc. all complete and as per direction of the E-I-C (minimum sand F.M. 1.2)	t 9			
2.1	7.70.3	Clear 600x600 mm and depth 750 to 900 mm average 825 mm fo single 300 mm dia R.C.C pipes and 375 mm and 400 mm PVC pip	each e	10.00	8,259.00	82,590.00
		2 = 2.00	each			
3	7.72	Construction and placing of R.C.C inspection pit cover (100 mn thick RCC slab) in (1:2:4) (of item no-5.05.01.01) with 1% reinforcement (of item no-5.06.01.01) excluding M.H cover with locking/ unlocking arrangement including necessary earth work side filling, shuttering, curing, cement plaster (1:4) (of item no 5.12.01) with neat finishing on edges and top etc. all complete and as per direction of the E-I-C)- 1			
3.1	7.72.3	1100 x 1100 x 75 mm R.C.C pit cover	each	2.00	2,440.00	4,880.00
		2 = 2.00	each			
4	MR	Gratings etc	each	2.00	2,000.00	4,000.00
		2 = 2.00	each			
5	MR	Drainage system (Gonoprangon)	sqm	1,750.00	250.00	4,37,500.00
				1	Total	5,92,775.20
<i>ltems</i> ‡ Sewag	‡ 17 e disposal sy	stem				
1	7.75	Construction of non electric Eco STP of different sizes (as per				

1	7.75	Construction of non electric Eco STP of different sizes (as per detail drawing attached in annexure) with 250 mm walls of brick work in cement mortar (1:4) having a brick flat soling and 125 mm thick reinforced cement concrete flooring (1:2:4) with 125 mm thick walls (1:4) in partition and flush pointing (1:2) on inside wall surface and 12 mm thick cement plaster (1:4) with N.C.F. on floor and slab surface including supplying, fitting and fixing of upvc pipes & Tees and providing 450 mm dia water sealed heavy type C.I. manhole cover with locking/unlocking arrangement and 100 mm thick R.C.C (1:2:4) top slab, including centering, shuttering, fabricating, casting and curing etc. complete up to required depth including necessary earth work in excavation and shoring, bailing out water and side filling, dressing, inside cleaning, cow dung or old septic tank liquied for charging/start up including the cost of all materials, operations and incidental charges. etc. all complete as per type plan approved and accepted by the Engineer-in-charge (Rate is including cost of reinforcement and its fabrication, binding and placing).				
1.1	7.75.02	300 users (PWD BW 26.75.2)	each	2.00	4,66,520.00	9,33,040.00 9.33.040.00
					. 0101	0,00,040.00

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
ltems	# 18			II		
Extern	al Electrical		T			
1	MR	External electrical and lighting works (Complex- 01)	sqm	4,717.50	350.00	16,51,125.00
		1 x 4717.5 x = 4717.50	sqm			
2	MR	External electrical and lighting works (Complex- 02)	sqm	2,250.00	350.00	7,87,500.00
		1 x 2250 x = 2250.00	sqm			
					Total	24,38,625.00
ltoms	# 10					
nems	Solar System					
1		OFF- GRID SOLAR PANEL SYSTEM : S upplying, installation, testing & commissioning of following capacity solar system (off grid) for 2 Hrs backup with required quantities of mono / poly crystalline silicon solar PV modules, Solar suited Deep Cycle Lead Acid battery (12V), with required size maximum power point tracking (MPPT)/PWM charge-controller & inverter as per relevant international standards & certification such as IEC / CE / UL as per following specification to produce AC- 220V, 50Hz pure sine wave for suitable use of all standard AC appliances with battery racks /cabinet, solar PV mounting structure, combiner box, fuse box, meter etc. system includes compatible solar cables, equipotential bonded and earthed with the building earth electrode which is conventional and / or chemical electrode system and all accessories as required to complete the installation with one year free operation & maintenance of the system which shall have the following features:S OLAR PV MODULES/PANEL:I . Parameters for PV Panel should be at Standard Test Condition of solar irradiance of 1000 W/m2, Cell Temperature of 25 degree Celsius and AM of 1.5g.I I. II. Solar PV module / panel shall be inconformity with the requirement of BDS IEC 61215, IEC 61730 (latest edition) along with VDE/NEMA/JIS/BS standards. Certificate issued by the internationally recognized authority such as CE / TUV /DNV or equivalent certifying body shall have	КШр	7.2	1,76,910.00	12,73,752.00
		to be submitted by the bidder for the above mentioned international standard. Manufacturing facility should be ISO9001, ISO14001 quality management system certified.I II. III. Solar panels shall be installed pointing to the right direction to capture most of the solar energy to transform it into electricity with the facility to be adjusted from the horizontal to 12 degree in summer and to 35 degree in winter to get the maximum efficiency and must face the true south in our country. For fixed panel mounting system, the panels must be tilted (22.5 \pm 1) degree with horizontal and must face the true south in BANGLADESH.I V. The average efficiency of PV module should be minimum 17%.V . The complete PV module shall be diode protected at junction box to protect reverse current.				

	Ref. to LGED					
Item	Dhaka	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
INO	SoR 2022					
		V I. Operating temperature range should be -				
		40 to 85 Degree Celsius. V II. Power de-rating allowed should be				
		not more than (-0.41%)/Degree CelsiusV III. Panels should be				
		constructed with anti-reflective glass, anti Potential Induced				
		Degradation(PID), IEC 617011 X. Modules fitted with anodized				
		aluminum frames or, if without frame, two-class modules.X				
		Resistance to a maximum pressure load of 5400 Pa and vacuum of				
		2400 Pa (according to BDS IEC 61215)X I. Each module will be				
		provided with a clearly visible identifier bearing the name, the				
		model of the module and a visual identification or a serial number				
		which allows the traceability of the date of manufacture in				
		accordance with standard NF EN 50380 XII. Each combiner box of				
		PV module shall be diode protected to ensure any back flow				
		current to the PV array and may have fuse of adequate ratings in				
		DC positive line of the PV array and wire terminals. The main				
		combiner box shall have lightning surge protective device of as per				
		nominal voltage of the combiner box both in positive and negative				
		line in order to ensure the bypass diode always function even in				
		thunder storm. The fuse, if exists, shall also have disconnection				
		switch .The box shall be completely water proof according to IP 68.				
		X III. Product warranty against manufacturing defects : minimum 12				
		years and their replacement during this period. XIV. Performance				
		warranty: linear degradation, minimum 98% at 1 year, then linear				
		with minimum 90% at 10 years, and 80% at				
		25 yearsS olar panel from Sunpro/Vikram/Saronic/Suntech				
		/ULICA/Canadian Solar/JA Solar/Trina Solar/Longi or equivalent.				
		CHARGE CONTROLLER:M PPT / PWM (Pulse Wave Modulator)				
		solar charge controller shall be protected from: I)Overcharge				
		protection (adjustable) II)Over discharge protection (for DC load				
		and less than 200 Wp system) III)Battery reverse current protection				
		IV)Overloading protection V)Temperature compensated chargingV				
		I)Short circuit protection V II)Reverse polarity connection				
		protectionV III)Lightning induced surge current protectionP ower				
		consumption should be less than 20 mw. The controller should be				
		microprocessor controlled with wide input range, cooling fan				
		temperature compensation (-3 to /mv /cell / Celsius), more than				
		une-step charging to provide quick and sate charging for battery, /				
		required LY Dower conversion officiancy: 000/ INIVEDTED: The				
		Inverter is specially designed for DC to AC power which provides				
		nure sine wave. Supplier is allowed to use Off Crid Inverter for				
		designing the system keeping in mind that utility and cappot be				
		used for battery charging they may use battery bank for reference				
		input. The inverter(s) shall comply with the following requirements:				
		I. Adopt power frequency transformed, pure sine wave output				
		adapt to different load.				

	Ref. to LGED					
Item	Dhaka	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
INO	SoR. 2022			-		
	SoR. 2022	II. Excellent protection design against output short circuit, working reliably.I II. High inverting efficiency, energy saving and environmental protection. IV. LCD +LED display show the working status clearly.V . Design, manufacturing, performance, testing, safety, quality and environmental management shall be in accordance to the BDS IEC 62109/BS/VDE or equivalent international standards.V I. Should conform to ISO 9001, 14001 & 45001 standard. V II. The Inverter manufacturer shall have at least 05 (five) years of experience, nominal input voltage: 24/48V DC, output : 220V AC, output waveform : pure / modified sine wave, self consumption : less than 1 (one) watt, Efficiency : 97% or higher at operating load range from 10% to 100% rated load, Energy source : Priority to solar then battery. VIII. The Inverter shall also be protected from lightning induced current by surge protective device of adequate rating both in DC and AC side in parallel at the entry and exit terminal of the inverter. The inverter shall also be protected for overload and over current protection from both DC and AC side. I X. Frequency ranges: 50-60 Hz, Relative humidity: 0- 95%, non-condensing, Operating temperature range: 0- 55°C, Cooling method: Natural Convention, Topology -Transformerless , Noise - <30dB , Protection – IP65.X .				
		Brand: Solar Inverter from SAJ/Solis/Huawei or equivalentB ATTERY: Solar suited Deep Cycle Lead Acid battery(12V)C ompliance : ISO9001 & ROHS (Restriction of Hazardous Substances) certified company. ENERGY METER:S upplying and installation of energy meters with following features: I.Single phase / three phase (as per requirement) II. Energy meter to be provided to record the amount of solar e nergy provided from the solar system. G ENERAL GUIDELINE/CRITERIA:I. The bidder shall examine the site before the design of solar system & its componentsI I. The bidder shall have facilities and proper tools and machineries for installing, testing & commissioning of solar panel. I II. Adequate space & height shall be provided in the rows of panels for easy air flow to avoid excessive heat generation in the panel and to provide access for rain water drainage and damage to protect from dirty water. Minimum air gap between two panels shall be 25 mm. IV.All frames of the PV module, combiner box, inverter etc. shall be equipotential bonded and earthed with the building earth electrode which is conventional and /or chemical electrode system with soil conductivity enhancing material that the earth resistance must be less than 1 Ohm as per related standard and code of practice. V. The solar panel mounting shall be of galvanized iron or equivalent to ensure rust protection of the installation.				

	Ref. to LGED					
Item	Dhaka	Description	Unit	Quantity	Rate in Tk.	Amount in Tk.
INU	SoR. 2022					
		All nut bolts shall be of stainless steel (SS) or galvanized mild steel				
		(MS) materials. VI. After successful completion, testing &				
		commissioning of the whole system the contractor shall have to				
		days V II. After completion of whole system and before handing				
		over the system to the concerned authority, the contractor must				
		have to provide minimum 30 days' satisfactory operation for				
		performance evaluation. VIII. Technical specification with catalogue				
		of PV module, inverter must be submitted with technical offer.I X.				
		DC circuit breakers shall be used to ensure proper safety of the				
		system.[PWD-12.1]				
					Total	10 70 750 00
					Iotai	12,73,752.00
ltems ‡	‡ 20					
Lands	caping (Plante	er with tree plantation)				
1	5.02.01.2	Earthwork in excavation of foundation trenches, including layout,	cum	6.08	168.00	1,020.60
		by excavating earth to the lines, grades and elevation as shown in				
		the drawing providing center lines, local bench mark pillars, fixing				
		baskets carrying and disposing of all excavated materials at a safe				
		distance designated by the E-I-C in all types of soils except rocky,				
		gravelly, slushy or organic soil, leveling, ramming, dressing and				
		preparing the base, etc. all complete for an initial excavation depth				
		of 2m and an initial lead not exceeding 20m, including arranging all				
		direction of the E-I-C.				
		2 x 18 x 0.375 x 0.45 = 6.08	cum			
2	5.02.08.1	Sand filling in foundation trenches and inside plinth with sand	cum	1.01	1,088.00	1,101.60
		(minimum FM 0.50) in 150mm layers in/c leveling, watering and				
		direction of the E-I-C. Dry density after compaction shall not be less				
		than 95% of MDD (STD)				
		2 x 18 x 0.375 x 0.075 = 1.01	cum			
		Total = 1.01	cum			
3	5.03.05	Providing single layer polythene sheet (0.18mm thick) weighing	sqm	13.50	47.00	634.50
		one kilogram per 6.5 square meter in floor or any where in ground	.			
		floor underneath the cement concrete, etc. all complete as per				
		specifications and direction of the E-I-C.				
		2 x 18 x 0.375 = 13.50	sqm			
	4.00.00	Total = 13.50	sqm	40 50	470 70	0.400.00
4	4.06.02	single layer brick that soling with 1st class or picked kiln burnt	sqm	13.50	4/8./6	6,463.26
		minimum FM 0.50, watering, leveling, dressing, etc. all complete as				
		per instruction of the E-I-C.				
		2 x 18 x 0.375 = 13.50	sam			
		Total = 13.50	sqm			

ltem No	Ref. to LGED Dhaka Division		De	escri	ption				Unit	Quantity	Rate in Tk.	Amount in Tk.
5	4.06.04	PCC-17 : Plain cement concrete work in foundation with minimum compressive strength of 17MPa at 28 days (suggested mix proportion 1:2:4 & maximum w/c ratio 0.45) on standard cylinder as per standard practice of Code AASHTO/ ASTM/ and cement conforming to BDS EN 197-1 : 2003 CEM-II/A-L/M/V/W 42.5N, sand of minimum FM 1.8 and 20mm down well graded 1st class/ picked brick chips (LAA value not exceeding 40) conforming to ASTM C 33 including breaking bricks into chips, shuttering, mixing by concrete mixer machine, casting, laying compacting and curing for the requisite period etc. all complete as per direction of the E-I-C. Additional quantity of cement to be added if required to attain the strength at the contractor's own cost.							cum	1.01	10,063.81	10,189.61
		2 x	18	x (0.375 x	0.075	=	1.01	cum			
			•	· ·		Total	=	1.01	cum			
6	5.04.01	Brick works with first class bricks with cement sand (F.M. 1.2) mortar (1:6) in foundation and plinth, filling the joints/interstices fully with mortar, racking out the joints, cleaning and soaking the bricks at least for 24 hours before use and curing at least for 7 days etc. all complete including cost of water, electricity and other charges and accepted by the Engineer-in-charge. (Cement: CEM-II/B-M) (PWD 04.1)							cum	5.40	7,529.00	40,656.60
		2 x	18	х	0.25 x	0.6	=	5.40	cum			
						Total	=	5.40	cum			
7	MR	Tree plantation					1-	2.00	each	2.00	500.00	1,000.00
		2				Total	-	2.00	each			
8	5.26.03	Leveling and dro spading the sam plants etc. all con	essing of law ne up to 150 nplete and ac	n are mm cepte	ea to prop i includin ed by the	per slope g supply Enginee	e an /ing /r-in·	d grade by tools and -charge.	sqm	100.00	8.00	800.00
		1 x	100		Х	1	=	100.00	sqm			
9	5.26.04	Supply of best and approved quality alluvial loamy silty soil including loading, unloading at both ends, properly stacking at site including supply of tools and plants etc. all complete and accepted by the Engineer-in-charge.							cum	67.50	913.00	61,627.50
		1 x 100 x 1 x 0.675 = 67.5							cum			
10	5.26.05	Supply well decc means including same at site inclu and accepted by	inposed cov loading, unluding supply the Engineer	v dui loadii of to in-ch	ng carried ng at bo ols and p narge	th ends th ends blants et	ks o , st c. a	or any other acking the II complete	cum	7.50	1,703.00	12,772.50
1		I X	100	×	I X	0.073	1 -	r.5	cum			

ltem No	Ref. to LGED Dhaka Division SoR. 2022	Description								Unit	Quantity	Rate in Tk.	Amount in Tk.
11	5.26.09	Labour charge for mixing well decomposed cow dung with alluvial loamy silty soil and excavated earth, removing the excess earth to safe distance including supply of tools and plants etc. all complete and accepted by the Engineer-in-charge.								cum	15.00	175.00	2,625.00
	Loam soil	1	x 100	х	1	х	0.075	=	7.5	cum			
	Cow dung	1	x 100	х	1	х	0.075	=	7.5	cum			
		Total	Total = 15										
12	5.26.06	Labour charge tor spreading the alluvial loamy silty soil from the stacks at site on the lawn surface, leveling, dressing the same including supply all necessary tools and plants etc. all complete and accepted by the Engineer-in-charge.								cum	15.00	194.00	2,910.00
	Loam soil	1	x 100	x	1	х	0.075	=	7.5	cum			
	Cow dung	1	x 100	x	1	х	0.075	=	7.5	cum			
		Total = 15								cum			
13	5.26.08	Supply of lawn grass of approved quality by truck or by any other means, sorting the grass to proper size, washing the grass, dibbling the grass 6 mm to 50 mm apart, irrigation of lawn area till the grass grown at least for two months after plantation, weeding the undesirable grass, mowing the lawn grass by lawn mower up to two months after plantation, applying urea fertilizer on the lawn surface @ 1 kg per 9.29 sqm including supply of tools and plants etc. all complete and accepted by the Engineer-in-charge.[PWD 25.8]								sqm	100.00	67.00	6,700.00
		1	x 100			х	1	=	100.00	sqm			
						Sub Total	1,48,501.17						