## **GENERAL INFORMATION معلومات عمومی**

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| **FCDO – Driving Action for Wellbeing to Avert Mortality (DAWAM) Project**  **تلاش برای رفا و کاهش مرگ و میر** | |
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| **ADMINISTRATION OF SURVEY**  **مدیریت سروی** | |
| Name of province: | Herat |
| Name of district: | Gulran |
| Name of health center | Qarabagh District Hospital |
| Health Center Type: please select one (H3, CHC, BHC, DH) | District Hospital (DH) |
| Building ownership (Private or Governmental) | Governmental |
| Number of clinic personnel | 49 |
| Number of patients visited in clinic (daily basis) | 750 |
| Number of hospitalized patients (the max capacity) | 25 |
| Name of surveyor(s) | Mokhtar Rezaee, Mustafa Mosleh Rezaee, Atiqullah Kushki, |
| Date of survey | 30-JUL-2024 |

## **WORK DESCRIPTION تشریح کار**

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| **SCOPE OF INTERVENTION**  **عرصه حمایت** | | Water and Sanitation components require major maintenance. | |
| **PERIMETER PROTECTION** | | The provision and improvement of Water, Sanitation, and Hygiene (WASH) facilities play a pivotal role in safeguarding human health and overall well-being. These initiatives serve multifaceted purposes, ranging from the prevention of waterborne and diarrheal diseases to the control of vector-borne illnesses.  Additionally, they contribute to the enhancement of health and nutrition outcomes, mitigate the risk of epidemics, and foster dignity and safety among communities. Economically, investing in WASH facilities yields significant benefits, while also ensuring environmental protection and alignment with international sustainability and health standards.  To enhance the capacity of healthcare workers to uphold hygiene standards, ActionAid is committed to revitalizing and enhancing existing Water, Sanitation, and Hygiene (WASH) facilities in targeted healthcare facilities (HCFs). | |
| **CLINIC MAP نقشه کلینیک** | | | |
| GPS of DH: Please collect the GPS related clinic building جی پی اس نقاط کلیدی: لطفا جی پی کلنیک مربوطه را بگیرید: | | | |
| GPS | 34.938408 **N** | | 61.775621 **E** |

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| **Please draw a freehand sketch of the DH facility point out, main building – sanitation facilities, water source, waste disposal site)** |
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## **PROJECT FEASIBILITYامکان پذیری پروژه**

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| **PARAMETERS INSPECTION AND FINDINGS**  **بررسی پارامترها**  **و یافته ها** | **BACKGROUND INFORMATION:** The district hospital of Qarabagh was constructed 51 years ago by the government and partially improved by UNICEF organization. This DH has a total of 49 employees, 28 males and 21 females. The male staff consists of a medical doctor, nurses, cleaners and cook.The district hospital consists of several buildings build by the government and NGOs. In addition to the buildings, it has 5 portable Connexus donated by the UNCIEF NGO. This district hospital is located at the center of the Gulran district which serves the entire population living in Gulran center and neighboring villages. This DH can cover daily treatment of at least 750 patient, 250 male and 500 female patients and outpatients on a daily basis.The main challenge facing this district hospital is the insufficiency of clean water and proper sanitation services, which leads to the spread of diseases.Currently, the required water is provided from a bore well inside the DH building which is partially connected to the network system.Therefore, the ActionAid office technical team conducted a technical survey. During the observations and technical survey, the WASH requirements of this clinic include the following components.  * Existing water reservoirs are not Adequate and sufficient to provide the required demand for all sections and facilities. * Standard hand washing station is not existing in the DH. * Hand wash sinks and water drain pipes are not existing in the Tuberculosis building. * The sewage drains in the two-story (A) building is not functioning and need to be cleaned.  **Water source**For both clinical use and drinking purposes, the water supply at the Qarabagh DH is provided by a handpump bore well located in the clinic area. The water quality and quantity from this bore well are adequate and will provide enough pure water for clinical use.**Water Storage and Distribution** *Water reservoir*The Qarabagh DH has metallic water tank with various capacities which are not providing enough water demand for the WASH purposes. The total volume of the tanks is not sufficient to meet the clinic's demand. To address the clinic's water needs, a larger water storage unit with a capacity of at least 18000 liters is necessary to provide enough water for all clinical purposes.*Hand washing*The Qarabagh DH does not have standard and functioning handwashing stations. To prevent the spread of diseases and provide a healthy environment for patients and outpatients, it is necessary to build standard handwashing stations.*Bathroom*Bathrooms are essential for the clinic personal and patients’ users, adequate sanitation and hygiene are crucial in a healthcare setting to prevent the spread of infections and maintain a clean environment. Additionally, bathrooms provide necessary comfort and privacy for patients. The clinic staff also require bathroom facilities to maintain their own hygiene and efficiency. Moreover, regulatory standards mandate the availability of such facilities to ensure legal operation and uphold the clinic’s reputation. Finally, access to bathrooms is a fundamental component of public health infrastructure, essential for proper waste management and disease prevention. Given these factors, it is imperative to construct two standard bathrooms for the Qarabagh DH to ensure a safe, hygienic, and functional healthcare environment.*Latrines*The existing toilets at Qarabagh DH both for male and female are sufficient and standard.  * The toilets are constructed with standard material and modern amenities. * The interior surfaces of the toilets, including the walls and floors, are washable and easy to clean. * All toilets have access to the water. * The toilets have access to the lighting system. * Doors and windows do not need repairment. * Waste bins are reachable in the toilets and corridors. * All Toilets have proper and protected septic tanks and protected pits. * All toilets are equipped with facilities to accommodate persons with disabilities (PWDs).  *Septic Tank* The district hospital (DH) has a standard septic tank which is completely protected and secured. The Tuberculosis building need a dug well to collect the waste water from the building.**Waste Management**The following process and system for solid waste collection and disposal are in place at the Qarabagh district hospital.*Waste collection and separation* Although all types of solid waste are separately stored and collected, the available bins are of high quality and sufficient to handle the daily volume of disposed wastes. *Incineration* Incineration system is available in the Qarabagh DH, the metallic incinerator positioned over a pit to allow ash to be directly emptied into it. *Sharp pits* Sharps waste is disposed of in a standard way. The existing sharp pit is covered with an RCC slab and securely sealed. *Organic waste pit* Organic wastes are disposing of in a special and secured pit. A specific pit having RCC cover available for this purpose. |
| **Technical solution in compliance with MoPH/WHO standards**  **راه حل تخنیکی مطابق استندرد های وزارت صحت عامه وسازمان صحی جهانی** | **Water source***Quantity aspect* From the quantity point of view the existing water source has good water yield. By considering a proper water reservoir and water supply network to the DH, the problems of the clinic in the area of ​​water shortage will be solved. *Quality aspect* ActionAid is committed to ensuring that the water from the tap meets the highest standards of quality. As part of this effort, water quality testing will be conducted during the repairment process to ensure compliance with the WHO water quality standards. The results of the water analysis will be documented and included in the table below.   |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **PARAMETERS** | **TURBIDITY (NTU)** | **COLOR** | **ODOR** | **WATER TEMPERATURE** | **TTC (CFU/100ML)** | **PH** | **TDS** | **ARSENIC** | | **WHO** Guideline | <5 NTU | Not  Detected | Not Offensive | 25 to 30C° | 0/100ml | 6.5 to 8.5 | 1000 ppm | 10µg/l | | **Laboratory Results** |  |  |  |  |  |  |  |  |  **Water Storage and Distribution***Water Tank (water availability)*  |  |  | | --- | --- | | **WHO suggested minimum water quantities in Health care facilities** | | | **USAGE** | **GUIDELINE QUANTITY** | | Outpatients | 5 liters/consultation | | In patients | 40–60 liters/patient/day | | Operating theatre / maternity | 100 liters/intervention | | Dry or supplementary feeding center | 0.5–5 liters/consultation | | Wet supplementary feeding center | 15 liters/consultation | | Inpatient therapeutic feeding center | 30 liters/patient/day | | Cholera treatment center | 60 liters/patient/day | | Severe acute respiratory diseases isolation center | 100 liters/patient/day | | Viral hemorrhagic fever isolation center | 300–400 liters/patient/day |  |  |  |  |  | | --- | --- | --- | --- | | **TOTAL DAILY WATER DEMAND FOR QARABAGH DISTRICT HOSPITAL** | | | | | **TYPE OF USERS** | **NUMBER OF USERS** | **CONSUMPTION NORM**  (Liter /Day) | **TOTAL DAILY DEMAND**  (Liter) | | Outpatients | 750 | 5 | 3750 | | Patients | 25 | 100 | 2500 | | Clinic staff | 49 | 110 | 5390 | | Daily water demand | | | 11,640 Liters | | 36 hours water demand | | | 17,460 Liters | | Minimum volume of water required for 36 hrs. + Safety volume | | | **18,000** Liters |  To ensure an uninterrupted water supply for at least 36 hours, it is imperative to have adequate water storage capacity. Based on our calculations, there is enough water during the day to supply the system and avoid any shortages. It is recommended to connect the existing water source to the water supply network and provide an elevated RCC reservoir of at least 18000 liters to meet the necessary demand.The reservoir should perfectly smooth inner surface allows for easy cleaning. The reservoir should be supplied with a top screwed lid and include all necessary accessories and fittings and should be connected to the water supply network inside the building’s facilities, hand washing stations and toilets.**Solar Power System:**The existing solar panels are functioning and provide enough power for the clinic power needs.Mainly, the clinic power is provided from public power source and is stable during the day.**Water distribution within the Qarabagh District hospital (DH)**To optimize the distribution system and accommodate the addition of new facilities, it is imperative to add proper reservoirs and extend it to the DH building, toilets and handwashing sinks. This will ensure efficient water distribution throughout the facilities. To achieve this, we will utilize high quality PPR pipes for distribution network.To guarantee the longevity and reliability of the system, the pipes will be buried at a depth of at least 80 cm from the ground level. This strategic placement not only protects the pipes from external damage but also helps maintain consistent water flow, particularly during colder seasons when the risk of freezing is heightened.These PPR pipes will seamlessly integrate with the existing distribution network, facilitating an uninterrupted water supply to the newly established amenities. By preventing leakages and minimizing water wastage, this comprehensive approach enhances the functionality of the system and promotes sustainability and responsible resource management.**Hand Washing Sinks/Station**The installation of handwashing sinks and construction of hand washing stations within the district hospital area is paramount for effective infection control, adherence to hygiene standards, and the enhancement of overall health outcomes. By ensuring that healthcare workers, patients, and visitors have easy access to handwashing facilities, the spread of infections can be significantly reduced, thereby supporting compliance with protocols and minimizing health risks. This initiative ultimately results in lower infection rates, heightened staff productivity, improved patient care, and an overall safer environment within the healthcare setting.Moreover, the presence of handwashing sinks and stations fosters hygiene awareness, contributing to broader public health initiatives and promoting a culture of cleanliness and wellness. To address this critical need, ActionAid has outlined plans to construct standard handwashing sink consist of 4 wash taps in 3 key location of the DH, and installation of hand wash sinks in the Tuberculosis building rooms.Additionally, the three existing handwashing sinks will be connected to the main water supply network and sewerage system. mirrors including soap shelves will also be supplied and fixed to the walls.**Soak away pit**ActionAid plans to build a standard soak away pit with the following criteria:  * The dug well should be excavated to a depth of 4 meters having a diameter of 1m. * Well rings will be installed throughout the well. * The well should be protected with a RCC cover. * A ventilation 2inch pipe should be connected to the well.  **Toilets and Latrines**At the Qarabagh District hospital (DH), there are currently standard toilets connected to the water supply network which present some significant issues. These issues include the absence of hand-washing facilities outside the toilets and waste bins. to address these problems, ActionAid has devised a comprehensive plan to upgrade the existing toilets.The existing toilets at the clinic area are sufficient for the patients and outpatients.Additionally, the toilets for People with Disabilities (PWDs) are equipped with railings on the toilet ramp to enhance accessibility and safety. This will improve sanitation, hygiene, and accessibility at the Qarabagh DH, providing a more hygienic and inclusive environment for all users.In terms of infrastructure, the water supply for these toilets will be connected to an elevated water reservoir, ensuring consistent access to the clean water. Furthermore, the sewer pipes are connected to a septic tank to transfer and manage waste effectively.The following actions are planned for upgrading the existing toilets.The toilets water demand should be connected to the water supply network.Trash bins should be mounted in each toilet.**Waste management**According to WHO requirements, the perimeter of healthcare facilities must be protected not only against clinical hazardous waste but also from domestic waste generated within these facilities. To achieve optimal hygienic conditions, ActionAid plans to construct a standard solid waste management system at the Qarabagh sub-health center (DH). The planned construction includes the following:*Incinerator Construction*The incinerator will be constructed with reinforced cement concrete (RCC), and its pit will be built with brick masonry, adhering to the specified drawings.*Waste Disposal Pits*A specific pit for organic and hazardous waste will be built according to the drawings and specifications.*Incineration Area Security*The incineration structure will be secured by erecting a galvanized fence, pipes, and a gate to prevent unauthorized access. These measures will ensure a safe, secure, and hygienic environment for waste management. |
| Note: | An allocation of 3% of the total cost has been designated for miscellaneous and unexpected expenses. Contractors may claim overspend only when changes in the definable features of work are recommended and approved by the ActionAid superintendent and the AAA budget holder. |

### **Period of workمدت زمان کار**

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| **STARTING DATEتاریخ شروع** |  |
| **FINISHING DATEتاریخ ختم** |  |

### **Summary of Bill of Quantities**

## Signatoriesامضا کننده گان

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| ActionAid  اکشن اید | | | DopH and DH agents  نماینده ریاست صحت عامه ومرکزصحی | | |
| Name and position  نام و وظیفه | Date  تاریخ | Signature  امضا | Name and position  نام و وظیفه | Date  تاریخ | Signature  امضا |
| Project Coordinator  کوردیناتور پروژه |  |  |  |  |  |
| WASH Specialist  متخصص واش |  |  |  |  |  |
| Program Manager  مدیر پروگرام |  |  |  |  |  |