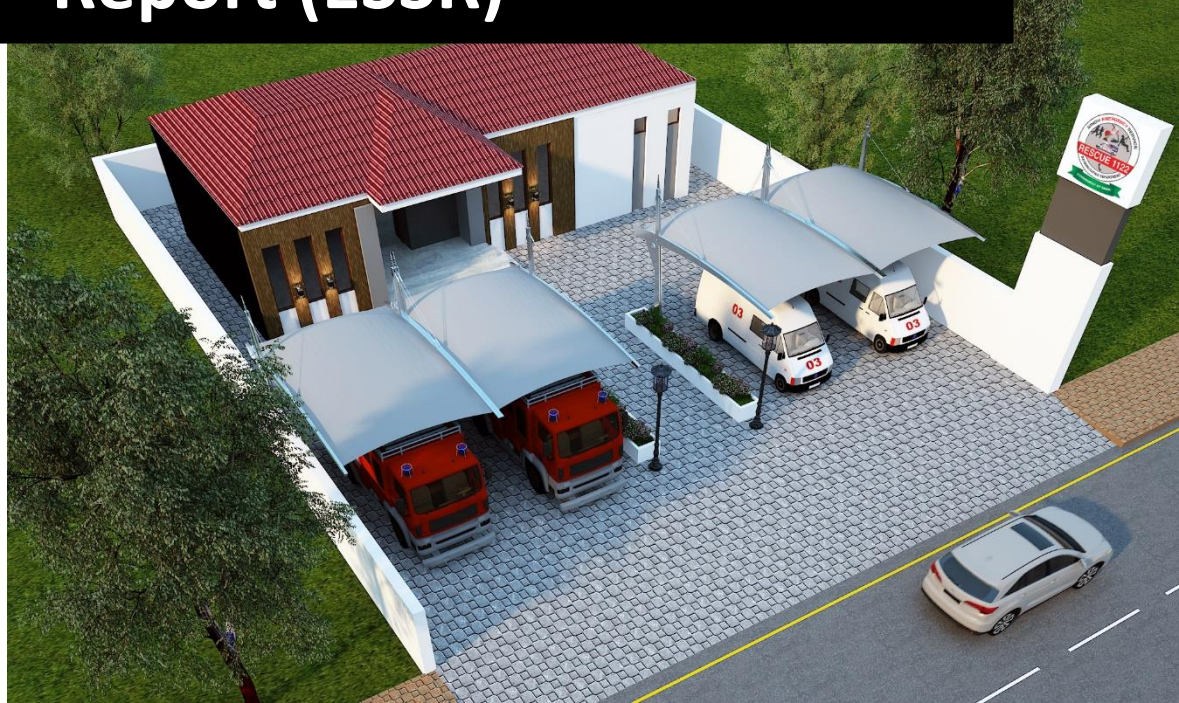




Final Report

Environmental and Social Screening Report (ESSR)

Establishment of
Satellite Station of
Rescue 1122 on
Motorway and
National Highway



May, 2023



SINDH FLOOD EMERGENCY
REHABILITATION PROJECT (SFERP)

Planning and Development
Department (P&DD Component),
Government of Sindh

Table of Contents

1.	Project Description	2
1.1.	Sub-Projects Information.....	8
1.2.	Justification of Sub-Project Design and Alternative Analysis:	9
1.3.	Environmental and Social Screening Checklist	10
1.4.	Screening for Involuntary Resettlement/Indigenous People	25
2.	Stakeholder Consultations	27
3.	Environmental Management and Monitoring Plan (EMMP)	30
4.	Environmental and Social Monitoring Budget:	36
5.	Pictorial Profile of Proposed Project Sites	38

List of Figures & Tables

Figure 1:	Layout of the proposed satellite Station	7
Figure 2:	Typical Structural view	8
Table 1:	Summary of Concerns Raised by Community	27
Table 2:	Summary of Concerns Raised by Institutional Stakeholders	28
Table 3:	Environmental and Social (E&S) Implementation cost Tentative	36

1. Project Description

Number of Project: Pakistan P179981: Sindh Flood Emergency Rehabilitation Project-P&DD Component (SFERP-P&DD)

Name of Subproject: Establishment of Satellite Station Rescue 1122

Subproject Location: Following are the location of subproject;
Motorway (M9)

Satellite No.	Address	Coordinate	Area (sq.ft)
Centre 1:	Police Chowki No. 7, M9 Motorway	25° 9'20.47"N 67°39'51.02"E	1100
Centre 2:	Police Chowki No. 12, M9 Motorway	25°18'20.74"N 68° 4'45.68"E	1100
Centre 3:	30 Bedded Hospital Near Noriabad, M9 Motorway	25° 9'55.21"N 67°46'49.21"E	1100
Centre 4:	PDMA Ware House Superhighway, M9 Motorway	25°21'47.50"N 68°11'54.14"E	1100
Centre 5:	Education city Rescue Academy (PDMA), eastern bypass	24°58'35.62"N 67°21'42.81"E	1100

National Highway (N55)

Satellite No.	Address	Coordinate	Area (Sq.ft)
Centre 1:	Liaquat University of Medical Health Sciences (LUMHS, Jamshoro)	25°28'1.16"N 68°16'17.36"E	1975
Centre 2:	Taluka Hospital Manjhand, Dist Jamshoro.	25°54'22.99"N 68°13'59.41"E	1100
Centre 3:	RHC Arazi Dist Jamshoro	26°27'37.11"N 67°46'32.46"E	1100
Centre 4:	Rani Kot Fort	26° 1'48.69"N 68° 7'19.90"E	1100
Centre 5:	Mehar Toll Plaza Indus Highway	27°14'47.65"N 67°53'56.38"E	1100

Centre 6:	PDMA Larkana	Warehouse	27°32'31.94"N 68° 4'42.41"E	1100
Center 7:	Thata	-	-	1100

National Highway (N5)

Satellite No.	Address	Coordinate	Area (Sq.ft)
Centre 1:	DHQ, Matiari	25°36'23.81"N 68°26'2.78" E	1975
Centre 2:	BHU, Milalani Shaheed Benazirabad	26° 9'7.81"N 68°15'5.73"E	1975
Centre 3:	BHU, Bago Mitlo, Khairpur	27°32'30.51"N 68°42'19.04"E	1975
Centre 4:	DHQ, Ghotki	28° 0'17.49"N 69°18'55.87"E	1975

- Subproject Objective:**
- Provide rescue services in emergency situations and better health and safety facilities to travelers and adjacent community;
 - Create employment opportunities during construction and operations phase of this sub-projects;
 - Provide sense of security and safety to the passengers and local communities of surrounding areas.

Project description The subproject sites are located at different districts of Sindh, Pakistan. The subproject will reconstruction/refurbishment of the existing infrastructure for establishment of the Satellite Station of Rescue 1122. Operations of rescue 1122 in the jurisdiction of satellite station will be monitored and supervised from this rescue station. During operational phase, the rescue stations will be operational at 24/7 to responds any emergency situation and natural disaster. The site will have 2 ambulances 2 fire tenders and 4 motor bikes at rescue station premises.

Environmental and Social Settings The subproject land is owned by the government. There is no major environmental and social impact of the project to the vicinity of subproject area. There are no any settlements, water bodies, road etc. within the sub-project site. The subproject does not affect the flora and fauna and natural habitat of the areas and there is no plantation where development is proposed. However, site wise environmental and social setting of the sites are as follows;

M9 Motorway

- **Center 1:** Located at police check post no. 07 on the left track of Karachi- Hyderabad M-9 Motorway. The land is vacant with no vegetation and no settlements. Residential colony/village/goth is at a distance of 250m on south of the proposed site. There are few commercial activities in 1km surrounding i.e. industries, hotels, mosques, petrol pumps, etc.
- **Center: 2:** Located at police check no. 12 on the left track of Karachi-Hyderabad M-9 Motorway. The land is vacant with no vegetation, no settlements and commercial activities within surrounding of 500m from the site. However, few commercial activities are found at a distance of 600m on southwest.
- **Center: 3** is proposed in boundary wall of 30 bedded Hospital Noriabad on right track of Hyderabad- Karachi M9 Motorway. The construction site is vacant land with no vegetation. The proposed station is 130m away from the M-9 Motorway on northwest, no any settlements, and water course are present within 320m surrounding. There is a village about distance of 320m on southeast. Maltex Export warehouse present at west from the proposed station in a distance of 480m.
- **Center: 4** is located inside the premises of PDMA Humanitarian Response Center Jamshoro, on left track of M-9 Motorway from KHI-HYD. Proposed site is vacant with no vegetation and any human settlements and commercial activities. Water course is present at a distance of 2km from the proposed site. Few commercial activities like petrol pumps, shops and hotels are found at a distance of 3.1km on northeast from the proposed site. Crusher Plant, commercial shops and mosques are located at a distance of 4km on southwest from the site.
- **Center: 5** is located within premises of education city Rescue 1122 Academy (PDMA) Darsano Chano towards Hyderabad. The site is vacant with no vegetation and own by the government. No settlement or commercial activities is present within the 450m of the construction site whereas, SIUT Healthcare Kathor and Dm Jhokio Cricket Stadium are present in a range of 500m.

Indus Highway, N55

- **Center: 1** is located near PAK-Turk International School, LUMHS Campus on the right track of national highway N55 from Jamshoro to Sehwan. The propose construction area is vacant land, owned by the government. There are settlements at distance of 50m on the
-

northeast. Settlements will not be disturbed during the project activities, as the proposed development is limited to plinth works and erection of pre-fabricated structure that will not create major environmental and social impact.

- **Center: 2** is located inside the boundary wall of Taluka Hospital Manjhand, Dist Jamshoro on the right track of National Highway N-55 Jamshoro to Sehwan. The proposed site can be accessed from the Manjhand city road via RBOD Bridge. RBOD canal is at distance of 350m on southwest from the proposed site, human settlements are present on the northeast direction. The proposed construction is pre-fabricated type which will create minor to low environmental and social impacts.
 - **Center: 3** is located within the premises of RHC Arazi on the right track of N-55 at Sehwan to Dadu road. The proposed site is owned by Govt. and has no population in nearby vicinity whereas, some commercial properties i.e. Ayan work shop, hospitals, and Roshni School Arazi and settlements are present at a distance of 500m on northeast. Agriculture lands are situated in immediate surrounding of the proposed site. No mature tree cutting will be proposed except trimming as per requirements of station.
 - **Center: 4** is located at Ranikot Fort Bus Stop on the left track of Indus Highway N-55 towards Manjhand. The proposed site is surrounded by the commercial activities i.e. general store, petrol pump, and hotels within 300m. Human Settlement is at distance of 330m opposite to the proposed site on northeast. The archaeological site i.e. Ranikot Fort (The Great Wall of Sindh), Karchat, Sindh is located at 27km on southwest of the proposed site. The proposed construction (pre-fabricated) has no impact to the cultural heritage and immediate surroundings.
 - **Center: 5** is located at Mehar Toll towards Larkana on the right track of N55. The site is vacant and owned by the government with no settlements and vegetation, surrounded by the agricultural lands. Few commercial and religious places are present at a distance of 500m on the southeast.
 - **Center: 6** is located at inside the boundary wall of PDMA warehouse Larkana on the left track of Indus Highway, N55 towards Shikarpur. The proposed site is vacant with no vegetation, few settlements, agricultural land, and commercial activities at 300m.
 - **Center: 7** is located at inside the premises of healthcare unit at district Thatta. The land is vacant and owned by the government.
-

National Highway N5

- **Center: 1** is located inside the boundary wall of DHQ Matiari, on the left track of N-5 Sakrand. The proposed site is owned by Govt. and barren with no vegetation, surrounded by settlements and commercial area. The environmental and social impacts is not envisaged due to limited scope of plinth work with erection of pre-fabricated structures.
- **Center: 2** is located within the boundary wall of Basic Health Unit (BHU) Jalalani, Sakrand, district Shaheed Benazirabad, on the right track Qazi Ahmad to Sakrand. The proposed site is barren with no vegetation, no tree cutting is involved. Proposed site is surrounded by residential and commercial area Mehar Colony in the east.
- **Center: 3** is located at inside the boundary wall of BHU Bago Mitlo, District Khairpur on the left via Ahmedpur road. The proposed site is vacant with no vegetation and settlements. Cadet College Khairpur is at a distance of 1.2km on northeast from the site. The site is surrounded by the agricultural land.
- **Center: 4** is located inside the boundary wall of DHQ, Ghotki on the left track of N-5 from Sukkur to Dharki. The land is owned by the DHQ which is vacant with few trees on the fence, branches of these trees will be trimmed as per requirement to get the space for erection of pre-fabricated structure.

Allied Facilities/work Scope

The construction of allied facilities includes office area, area for rescuers, meeting rooms, stores, living area, waiting area, female area, open drive way, septic tank and parking area in the close boundary of satellite station. Layout of the said facility and typical structural view are presented in **figure 1 & Figure 2** respectively.

Proposed Date of Commencement of Work:

The construction activities will be started after completion of pre-requisite requirements, expected May, 2023

Figure 3: Layout of the proposed satellite Station

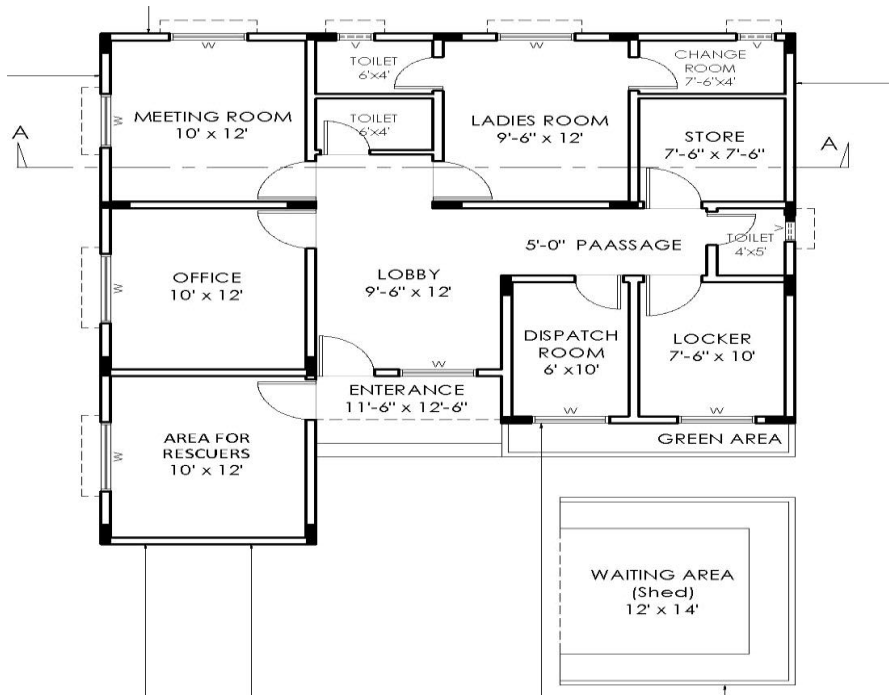


Figure 4: Typical Structural view



1.1.Sub-Projects Information

1. Give a brief introduction to the sub-project, its geographical location, components, objectives and benefits

The subproject is owned by the Government of Sindh under the umbrella of Sindh Flood Emergency Rehabilitation Project (P&DD-Component), the project sites are located at Karachi-Hyderabad Motorway (M9), National Highway (N55), and National Highway (N5), the project site is totally vacant land. The purpose of the construction RCC type up to plinth level and above plinth level prefabricated structure will be erected.

The overall objectives of the project are;

- Provide services in case of any emergency situation and better health facilities to the community
- Create employment opportunities during construction and operations phase of this sub-projects
- Provide services and sense of safety and security to the local communities and the nearby surrounding areas.

2. Details about existing conditions of the facilities and proposed restoration or rehabilitation works with scope

The subproject area is located vacant land own by the government. The subproject will construct RCC infrastructure at the project land to create rescue 1122 station. Operations of rescue 1122 in in the jurisdiction of the satellite station will be monitored and supervised from the specific rescue station.

3. Explain, whether this is purely restoration/rehabilitation of existing facilities or will involve any new works

The subproject involves installing prefabricated rooms and infrastructure in the subproject vicinity. Construction will start for the main building, while demarcation of the station boundary will be continued. After the completion of demarcation work, the construction of plinth work will be initiated which includes office area, area for rescuers, meeting rooms, stores, living area, waiting area, open driveway and parking Area.

4. Is this sub-project doing the consultation with their stakeholders?

The stakeholder's consultation has been carried out with different GoS departments like health department, Local district administration, Sindh, Environmental protection Agency. NGOs and the nearby local community were also consulted about the surrounding environment. Residents showed positive attitude towards the development of Rescue 1122 and availability of 24/7 rescue operations. Locals and travelers will be facilitated in case of any emergency in the jurisdiction of satellite station. The detailed stakeholder consultation is provided in the section.

5. Will this sub-project involve any ancillary impact/ activity away from the work site?

There is no secondary impact in the project area. All the impacts are minor and temporary during the construction phase and the project falls under the category C which create moderate or minor adverse environmental impact with limited to construction phase.

6. Timeframe for starting and completion of sub-project

The subproject will be started in May-2023 and will be ended in July-2023

1.2. Justification of Sub-Project Design and Alternative Analysis:**1. Importance of the proposed sub-project and its activities, and why it should be taken up:**

The subproject has a very positive impact to the project area. This will provide basic emergency response for any incidents, accidents and natural disasters like flood, earthquake, cyclones, etc.

2. Scenario if there are any alternative designs options of sub-project to avoid or minimize social/resettlement and environment impacts

There are no alternative design options, as the subproject is already on government land which is allocated for the subproject. The subproject land is totally vacant and will be established on the existing boundaries of specified location and there is no social, environmental and resettlement issue in that area or land.

1.3. Environmental and Social Screening Checklist

Project Area	Motorway M-9, National Highways N-55 & N-5 of Sindh, Pakistan
Project Title	Sindh Flood Emergency Rehabilitation Program (SFERP), P&DD Component, Sindh
Sub-project Title	Establishment of Satellite Rescue 1122 Stations

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
A. Project Siting Is the project area							
1. Densely populated?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The proposed satellite stations are located in a sparsely populated area of Sindh Districts. Mitigation Measures: <ul style="list-style-type: none"> As per the World Bank’s Environmental Health and Safety Guidelines, the construction contractor will develop civil work construction and management plans for each civil works activity prior to the start of the work to avoid any disturbance to the local residents. The plans will be specifically targeted towards waste management, Emergency preparedness, and an overall environmental management plan.
2. Heavy with development activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No development activity is going on in the surrounding areas.
3. Adjacent to or within any environmentally sensitive areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No sensitive area is around of the proposed satellite stations.
4. Cultural heritage site	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No cultural or heritage site is in the vicinity of this project areas. However, a Chance Finds Mechanism will be proposed and construction contractor will be ensured during construction activities. The contractor will also ensure training of the workers in case a chance find is encountered. This training will be part of the overall training delivered by the contractor.

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
5. Protected area	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No, the proposed satellite stations will be developed on the existing land which is own by government.
6. Wetlands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No wetland or damage to flora and fauna is envisaged
7. Mangrove	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No mangroves are present in the vicinity of the proposed areas.
8. Estuarine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No estuarine area is present around the project areas.
9. Buffer zone of protected area	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No buffer zone viz. a river lake, open space, endangered species, in its immediate surroundings. A few wild vegetation and trees were found at outside of the proposed boundaries which will not be disturbed during the project activities.
10. Special area for protecting biodiversity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The area is in use of regular inhabitants and no special area for the protection of biodiversity exists.
11. Forest	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No forested area or a forestation is around in the project surroundings.
12. Bay	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No bay is around in the sub-project vicinity.
B. Potential Environmental Impacts (Construction Phase)							
1. Will construction camp site cause land clearing and tree cutting?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No construction camp will be constructed and will not cause any land clearing and tree cutting for it.
2. Will construction camp site interfere with the community?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No construction camp will be established, hence no interference to the community is anticipated. The sites are located in developed area, labor will be housed to the nearest in rented rooms or go back to their home every day.
3. Will construction camp site cause soil pollution?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No construction camp will be established; therefore, no soil pollution will be occurred.
4. Will construction camp generate domestic solid waste?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No construction camp will be established; therefore, no domestic solid waste will be envisaged except food waste and it will disposed by considering the existing practices of waste management in the area.
5. Will construction camp generate hazardous solid waste?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There will be no construction camp, therefore no major hazardous waste will be created, despite few paint buckets used oil etc. These waste will be

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
							dispose according to SEPA rules and Regulation.
6. Will construction camp generate sanitary wastewater?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There will be no construction camp, therefore, no sanitary wastewater will be created at site. Wastewater will be expected at the labors' resident in some areas at rented house most of the labor go back to their homes every day.
7. Will fire be a potential safety hazard at construction camp?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No construction camp will be established; therefore, no fire risk is anticipated.
8. Will construction camp activities cause air pollution?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No construction camp will be established; therefore, no air pollution from camp will be created.
9. Will construction camp activities cause noise?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No construction camp will be established; therefore, no noise pollution from camp will be created.
10. Will construction activities require tree cutting?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The development is site-specific and within the existing boundary wall of the facility. No any trees are exist in the sites despite two location at the boundary wall of RHC Arazi and DHQ Ghotki and it will be trimmed as per requirements.
11. Will construction activities result in damaging existing local roads, bridges or other infrastructure?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The Sub-project activities do not involve damage to any nearby and existing road, bridge and any other infrastructure.
12. Will construction activities involve use of explosives and chemicals?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No explosives and chemical will be used during the project activities.
13. Will construction activities disturb natural habitats?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No natural habitats will be disturbed as the project is for the establishment of rescue 1122 in closed vicinity of the existing area.
14. Will construction activities resulting impairment of historical/cultural monuments/areas and loss/damage to these sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The sub project sites are located in the existing buildup area, where no historical/cultural monument is present. Therefore, it will not cause any harm or damaged to such historical sites.
15. Will construction activities generate noise?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, noise will be generated from various sources such as construction machinery, generators, construction activities and vehicular movement that will be limited to the proposed boundary of the project. Mitigation Measures:

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
							<ul style="list-style-type: none"> - The contractors would ensure keeping noise levels from construction vehicles and machinery to be within safe limits. - Vehicular traffic and machinery will not be allowed to operate at night time. - Noisy machines and vehicles will not be allowed to be used at the sub project sites (noise level will not be more than 85 dBA at 7.5 m distance), properly tuned machines and vehicles will be allowed only. - Workers will use noise protection equipment when working in a noisy area. - Notifying and coordinating with locals adjacent to project area prior to construction to inform them of the possibility of temporary noise disruption, and how to report noise complaints in accordance with the proposed GRM. - The contractor will adhere to the requirements of the mitigation plan contained in the contract documents with true spirit and regular monitored as per SEQs.
16. Will construction activities generate dust?	✓	<input type="checkbox"/>	<input type="checkbox"/>	✓	<input type="checkbox"/>	<input type="checkbox"/>	<p>There will be construction vehicles and machines which may generate dust emissions.</p> <p>Mitigation Measures:</p> <ul style="list-style-type: none"> - Regular water sprinkling will be the responsibility of the contractor at the dust generation points, during construction activities. Water will be also sprinkled at vehicular and machinery movement routes to avoid dust

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
							<p>spreading to the nearby community. In addition, the provision of dust masks and ensuring their use by the workers will also be the responsibility of the contractor.</p> <ul style="list-style-type: none"> - All vehicles, machinery, equipment and generators used during construction activities should be kept in good working condition and be properly tuned and maintained to minimize exhaust emissions. - Stockpiled materials will be covered to avoid dust/particulate emission.
17. Will construction activities cause air pollution due to stack emissions from generators, construction machines and vehicles?	✓	<input type="checkbox"/>	<input type="checkbox"/>	✓	<input type="checkbox"/>	<input type="checkbox"/>	<p>The civil work activities may cause air pollution during the construction works.</p> <p>Mitigation Measures:</p> <ul style="list-style-type: none"> • The stack emissions from generators, (if used) and vehicular/machinery movement at the site can affect the ambient air quality at sub project site. It will be the responsibility of the contractor to use well maintained generators and vehicles/machines to keep ambient air quality within the desired level. The contractor will be obliged to provide fitness certificate/maintenance records of the generators, vehicles and machines before deploying them at the construction sites.
18. Will construction activities generate asphalt emissions?	<input type="checkbox"/>	✓	✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No asphalt activity is involved in the sub-project.
19. Will construction activities cause soil pollution?	✓	<input type="checkbox"/>	<input type="checkbox"/>	✓	<input type="checkbox"/>	<input type="checkbox"/>	<p>Yes, the project construction may cause soil pollution.</p> <p>Mitigation Measures:</p> <ul style="list-style-type: none"> • Storage of fuel, paint, and oil containers, oil filters, oily parts and oily rags on impervious floor under shade or storing of fuel and lubricants on a sand flooring of at least 6 inch thick, done on brick edge flooring lined with polyethylene sheet.

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
							<ul style="list-style-type: none"> • Placement of fuel containers under containment and proper decantation arrangement to avoid its spillage and leakage on floor. • Presence of spill kit to remove spills from the floor Avoidance of washing the contaminated floors rather dry cleaning the spills from the floor with saw dust and rags. • Location of fuel storage and refilling areas at least 500 m from all cross-drainage structures and important water bodies.
20. Will construction activities generate construction debris?	✓	<input type="checkbox"/>	<input type="checkbox"/>	✓	<input type="checkbox"/>	<input type="checkbox"/>	<p>Yes, as the sub-project will involve civil works for the development of rescue stations of the existing infrastructure, which may generate a very small quantity of construction debris.</p> <p>Mitigation Measures:</p> <ul style="list-style-type: none"> • The debris (rejected material) produced during construction would be disposed-off in government approved/allocated disposal sites. Leftover material would not be dumped into storm water drains or watercourses, because such practices can clog these man-made and natural drainage systems and cause many other problems for the residents/Local Commuters.
21. Will construction activities generate hazardous solid waste?	✓	<input type="checkbox"/>	<input type="checkbox"/>	✓	<input type="checkbox"/>	<input type="checkbox"/>	<p>Yes, during the construction activities different types of hazardous solid waste including empty containers of paint, lubricants, grease, fuel, etc. oil filters, and construction waste will be generated, though in very small quantity.</p> <p>Mitigation Measures:</p> <ul style="list-style-type: none"> - The hazardous waste will be properly collected and temporarily stored at the impervious surface under shade. This waste will be handed over to the authorized waste collectors (SEPA Approved) so that it could be disposed of

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
							<p>properly. The construction contractor will implement the mitigation measures provided in this screening report. Following mitigations will be implemented in true spirit:</p> <ul style="list-style-type: none"> - Non-toxic and biodegradable products will be used whenever possible. - Hazardous materials will be transported and stored in appropriate containers with clearly visible labels. Hazardous materials will be stored at least 100 feet from any down gradient drainage or within secondary containment capable of containing its entire volume. - Equipment and work areas will be regularly inspected for signs of leaks and spills. Spill containment and cleanup kits will be available wherever hazardous materials are being used or stored. Any incidental spills or leaks will be contained and cleaned up as soon as it is safe to do so. Any contaminated soil will be collected and disposed of in an appropriate landfill. - Equipment refueling and maintenance will be limited to designated areas at least 30 meters (100 feet) from any down gradient drainage.
22. Will construction take place near to water bodies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No surface water body is present around the proposed sub project sites.
23. Will construction activities cause contamination of the surface water resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	It will not cause contamination of the surface water resources as it is the development of a rescue station with the limited scope of the sub-project within their respective enclosed boundary wall.
24. Will construction activities take place near wastewater/storm water drains?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No, wastewater/drain is present in the closed proximity of the few sub-project sites. However, Most of the stations proposed in the existing building, for discharge of sanitary waste existing drain will utilize
25. Will construction activities result in damaging the utilities at site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No, the sub-project development will not cause any damage to the utilities at the site or utilities of the area.

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
26. Will construction activities require utilities relocation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No utilities relocation is required.
27. Will construction activities involve excavation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The excavation will be done for the foundation works, but it will be done carefully to avoid damages.</p> <p>Mitigation Measures:</p> <ul style="list-style-type: none"> - The excavation will be done carefully to avoid the damages. - Excavation area will be hardly barricaded. - Contractor will be used safety signs to warn and aware the local people for the hazards of excavation. - Contractor will be ensured availability of adequate personal protective equipment at the sub-project sites. - Risk assessment will be carried out by contractor before initiation of excavation work. - The contractor will ensure that all workers on site will be properly trained and certified to handle an excavation machine.
28. Will construction involve heavy machinery?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>No, despite few machine like excavators will be used for the civil works on need basis; however, the contractor will ensure that all operators of heavy or dangerous machinery are properly trained/certified, and also insured and HSE procedures are followed.</p> <p>Mitigation Measures:</p> <ul style="list-style-type: none"> - The contractor will ensure that all operators of heavy machinery are properly trained/certified, and also insured

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
							<p>and HSE procedures like OHSAS 18001 are followed.</p> <ul style="list-style-type: none"> - Operators should be aware of their swing radius, especially when working in tighter spaces, to avoid hitting other workers, bystanders, or other vehicles or equipment in the vicinity. - Labors should be kept out of areas where heavy equipment is operating.
29. Will construction activities increase road traffic at site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Construction activities will be carried out within the enclosed boundary wall of sub-project site, which will not cause traffic congestion.
30. Will construction activities cause traffic congestion/diversion?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The work will be carried out within the boundary of the project, therefore, no traffic congestion/jam will appear at the road.
31. Will construction activities cause mobility and accessibility issue for the residents?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No such issue of mobility/accessibility will be caused during the sub-project development.
32. Will construction activities/machines be the safety hazards for the workers?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Yes, the proposed sub-project will involve civil works and infrastructure developmental activities which can pose safety risks for workers. Risk can occur from machinery usage, vehicles, and civil work activities.</p> <p>General occupational hazards that may be encountered (e.g., moving machinery and motorized equipment, working at heights, repetitive motions, falling objects, exposure to heat, loud noises, and hazardous materials and protective clothing).</p> <p>However, the construction industry recognizes the "fatal four" accident types, which result in the majority of all work-related injuries and fatalities. These common hazards include:</p> <ul style="list-style-type: none"> a) Falling b) Being struck by an object c) Electrocutions

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
							<p>d) Getting caught in or between equipment</p> <p>Mitigation Measures:</p> <ul style="list-style-type: none"> - The risk of fires will be evaluated for sub-project site based on the activities that would occur, environmental conditions, and presence of ignitable or combustible materials in the area. - If the activities pose a risk of igniting a fire, appropriate fire prevention and response equipment will be available at each active site such as shovels, axes, fire extinguishers, and dedicated water tanks. - All workers will be trained on proper fire prevention and response procedures prior to working on the site. - Any smoking on site will be restricted to barren areas away from ignitable or combustible material. Smoking waste will be fully extinguished and disposed of appropriately. - The construction contractors will supply all labors with personal protective equipment (PPE), and ensure labors use the proper PPE during all work activities. <ul style="list-style-type: none"> • At a minimum, PPE for labor will include: <ul style="list-style-type: none"> a) Safety headgear b) Steel toed boots c) Safety glasses or impact-resistant eye protection d) Ear protective devices e) Harnesses for workers operating at heights f) Respirators g) Gloves h) High visibility clothing or vests

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
							i) Other specialized protective equipment for the drilling, welding, etc. <ul style="list-style-type: none"> - All PPEs will be properly fitted for each worker, including body size and gender, and workers will be trained in the proper use of PPEs, prior to working on the project site. - Suitable transport will be provided to take injured or ill person(s) to the nearest approachable hospital. - First Aid Box will be provided at every construction site and under the charge of a responsible person who will always be readily available during working hours. - The contractor will be responsible for providing safe drinking water and for implementing appropriate sanitation conditions. - The construction activities, particularly the excavation, will not be carried out during rainy season to avoid any accident. - The excavated areas will be properly cordoned off, and warning and safety signs will be posted at accident prone areas to warn the passersby the potential danger at the construction site. - The construction contractors will install temporary signs and fences around all unsafe areas to prevent members of the public from entering the areas. If installing fences is not feasible, the area will be clearly identified as unsafe with signs and flagging.
33. Will construction activities be the safety hazards for the occupational?	√	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	√	<input type="checkbox"/>	Yes, occupational health and safety issues are anticipated from the proposed activities.

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
							<p>Mitigation Measures:</p> <ul style="list-style-type: none"> • The laborers with any transmittable diseases will not be allowed on the construction site. • Ensure and strictly implement the SOPs regarding communicable diseases like COVID- 19, including daily body temperature check, PPEs, emergency response, and drills. • Workers should be provided with good hygienic food. • Trained Skilled and unskilled workers will be allowed to work at the construction sites. • Assess the hazards associated with the required works and prepare and follow the safety procedures required for the specific works such as electrical works and works at height. • Provision of first aid facilities for workers at site for meeting the emergency needs of workers, and providing basic medical training to specified work staff and basic medical service and supplies to workers. • Observe and maintain standards of Health and Safety towards all employees in line with WB EHS Guidelines along with Sindh Occupational Health and Safety Law. • Ensure that hazards associated with manual lifting are controlled by proper lifting techniques, work rotation system will reduce the chances of being exposed to work- related stress associated with construction activities.

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
							<ul style="list-style-type: none"> • Unauthorized personnel will not be allowed to access the proposed project site without permission and safety permits. • Workers should be facilitated by providing appropriate work specific PPE's. • The contractor will install Physical barrier, to restrict and prevent the entry of persons to any area exposed to a hazard due to his construction / rehabilitation activity. • Contractor will install safety signs and markings to demarcate the construction zone. • Contractor will ensure provision of controlled access points for the prevention of an unauthorized access to the site. • The Contractor will maintain a record of the persons who enter or exit from the sub-project site.
C. Potential Social Impacts							
1. Will the construction cause any labor issues such as labor living and working conditions?	✓	<input type="checkbox"/>	<input type="checkbox"/>	✓	<input type="checkbox"/>	<input type="checkbox"/>	<p>Labor condition or rights related issues will be complied such as working hours, leaves, benefits, wages, and other related facilities like provision of foods, clean water, transportation etc. However, no labor camps are anticipated as it involves small scale activities which doesn't involve any living conditions, labor will be housed in rented house and go back to their home.</p> <p>Mitigation Measures:</p> <ul style="list-style-type: none"> - The worker's Grievance redress mechanism will be developed communicated among workers to lodge complains. - Workers should be provided with clean drinking water for free.

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
2. Will construction activities cause community Health and Safety issues? Or any other such impacts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>No such impacts are anticipated, though following will be applicable to the project activities.</p> <ul style="list-style-type: none"> • GRM Mechanism must be communicated to the internal staff and the general public. • Close consultation with local communities to identify optimal solutions where needed. • Contractor shall give preference to local community members in the Project Area of Influence, to the extent feasible, with respect to the employment of unskilled labor. • Community grievances will be recorded and responded to on an urgent basis. • No Hazardous and non-hazardous waste will be dumped outside any community. • There should be sufficient signage to warn of dangers and hazards on a construction or worksite. Signs should be clear and accompanied by ropes, cones, and other equipment to cordon off dangerous areas. • Conduct worksite inspections daily to identify any potential dangers or hazards. Dangers and hazards should be cordoned off immediately.
3. Will the construction activities cause the socio- cultural issues and damage to any cultural heritage?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>No, the construction activities will not cause such impacts because construction activities will be carried out within the enclosed boundary wall of sub-project sites.</p>
D. Potential Environmental Impacts (Operational Phase)							

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
1. Leakages in the drains	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project is established for the establishment of rescue 1122 operations within the existing facility and No leakages and damage to the drains is involved in the sub- project as there is no any drains passes at the site.
2. Damaging of drains	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project development is on the existing specified facility, therefore, no damage to the drains is involved in the project.
3. Clogging and overflowing of wastewater from the drains	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project development is in the premises of respective BHU/DHQ/PPHI facility; The drainage system of the facility is adequate and sufficient to future course therefore, no overflowing of any gutter will be involved. However, Soak pits is proposed on few site where drainage and sewer channel are not present.
4. Chances of contamination water supply	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project development is on the existing specified facility; therefore, no contamination of water supply coming in the area of project.
5. Flooding at roads	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project development is on the existing specified facility; therefore, no flooding will be caused on the roads.
6. Type of lightings in the infrastructure	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	During the establishment of the sub-project all lighting and other electrical services will be replaced or changed within the project boundary.
7. Inadequate protection of intake works or wells, leading to pollution of water supply?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No such activity will be undertaken for sure, to avoid pollution of water supply to the community.
NR: Not Relevant 1. No or Minor Impact 2. Moderate, Short Term, Reversible Impact 3. Severe, Long Term, Irreversible Impact							
Category			A		B		C
Environmental Management Required			NO		N/A		v
Type of Environmental Management Tool to be Used	Environmental and Social Monitoring checklist						
Type of Environmental and Social Report	Environmental and Social Screening Report (ESSR)						

1.4. Screening for Involuntary Resettlement/Indigenous People

Involuntary Resettlement Impact screening questionnaire.				
Probable IR Impacts	Yes	No	Not Known	Remarks
Involuntary Acquisition of Land and Resettlement Impacts				
1. Will there be land acquisition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No land acquisition will be required, the proposed sub-project land belongs to the government.
2. Is the site for land acquisition and ownership status and current usage of land to be acquired known?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The land acquisition is not acquired. The proposed sub-project land belongs to the government.
3. Will easement be utilized within an existing Right of Way (ROW)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The construction on the existing specified facility for development of rescue 1122 satellite stations.
4. Will there be loss of shelter and residential land due to land acquisition or due to clearance of existing right of way?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No shelter or residential land will be lost.
5. Will there be loss of agricultural and other productive assets due to land acquisition or due to clearance of existing right of way?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No agriculture or other productive assets exists.
6. Will there be losses of crops, trees, and fixed assets due to land acquisition or due to clearance of existing right of way?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No loss of trees, crops, trees and fixed assets are anticipated.
7. Will there be loss of businesses or enterprises due to land acquisition or due to clearance of existing right of way?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No loss of business enterprise is anticipated.
8. Will there be loss of income sources and means of livelihoods due to land acquisition or due to clearance of existing right of way?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No clearance of the existing ROW will be required.
9. Will people lose access to natural resources, communal facilities and services due to involuntary restriction of land use or on access to legally designate parks/protected areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No, reconstruction/refurbishment of the existing structures will be carried out in the facility of the project area.
10. Will access to land and resources owned by communally or by the state be restricted?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The access will not be restricted.
11. The site is in use by informal settlers for residential or any livelihood purposes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	All the sites are located inside of the boundary wall and vacant. No any informal settlers is exist in the sites
Information on PAPs:				

Any estimate of the likely number of persons that will be affected by the Project? If yes, [NO]	
Approximately how many? <u>Not applicable</u>	
Are any of them poor, female-heads of households, or vulnerable to poverty risks?	[NO]

2. Stakeholder Consultations

2.1. Community Concerns

Table 1: Summary of Concerns Raised by Community

Comments /Observations	PIU Action /Response
One of the resident appreciated that the proposed satellite station will help to respond emergencies on roads as well as nearby communities.	The team briefed that the proposed satellite station will provide the rescue services in case of any incidents/emergency and also provide health safety to adjacent community and travelers.
Participants inquired about the rescue 24/7 operations.	The team responded that the satellite station will provide the rescue services 24/7.
Participants inquired about the expected time for the project execution and its completion. Whether Construction activities would lead to air and noise pollution?	The technical team responded that the expected starting time for construction activities is May/June, 2023. The construction phase will be limited to the boundary wall of proposed project and it will be completed within 03 months. The nature of construction is pre-fabricated, therefore the impact of air and noise is temporary and short-term. For dust and noise generation contractor will do sprinkling on project site to reduce dust and adopt the mechanism for control of noise if any. Appropriate mitigation measures will be ensured in true letter and spirit.
The community demanded the provision of semi-skilled and unskilled jobs for local labor.	Unskilled and skilled labor will be engaged locally where available, however in case of unavailability of specific skill external skilled personals will be deployed. Local semi-skilled labor will be attached with highly skilled deployed personnel.
One of the community group inquired about the community benefits of establishing Rescue 1122.	E&S team responded that there is no any rescuer service in the surrounding. By establishing Rescue 1122 service on main highways and motorways, will better respond to any emergency and accidents on roads as well as in nearby communities.
The participants inquired about the operations and management of rescue 1122, like hiring procedure of drivers, staff, and station facilities.	The technical staff of PIU responded that the Rescue 1122 will be operated according to the international standards with all the required facilities. Hiring of staff will be done through merit base system by advertising the positions in different newspapers. It was explicitly explained that local female staff will be encouraged to apply. Moreover, the community members were enlightened that there will be a separate facility for female staff in the proposed satellite stations.

2.2. Institutional Consultation

A series of consultation meetings with relevant government departments i.e. Public Health Engineering, Works and Services Rescue staff, district administration, Project technical staff, municipal staff and NGOs in Karachi, Jamshoro, Dadu, Larkana, Ghotki, Khairpur, Sakrand, Matiari, Hyderabad were held in April 2023. The team briefed the officers of government agencies regarding the salient features of the proposed interventions. The participants were informed that the Detailed Design of the Project, under PIU-SFERP is being implemented by the Rehabilitation Department and funded by the World Bank. They were informed that the project intends to improve the rescue services, health and safety of the community and travelers. The primary goal of the project is to meet the present and future emergency rescue requirements. It was also briefed that the project will bring positive impacts on the lives of the local population through improved emergency management and response.

According to the Govt. officials, the establishment of the proposed satellite rescue stations will benefit the road travelers in particular and local communities in general, especially in disaster relief situations. Especially the officials of health, NHA and district administration appreciated the idea of establishing such satellite rescue stations on main highways and motorway to deal the emergencies amicably. The officials extended their support for the execution of proposed project.

Table 2: Summary of Concerns Raised by Institutional Stakeholders

<i>Comments/Observations</i>	<i>Actions Responses</i>
<p>The majority of the stakeholders showed positive attitudes towards the establishment of the rescue 1122.</p> <p>It was also expressed that such service is desperately needed because there are no any rescue services available in the proposed project areas.</p>	<p>It was found that, the participants are in favour of the project and their response was welcoming.</p> <p>The participants were briefed that the proposed intervention is designed on the bases of emerging need of rescue service in the area.</p>
<p>Detailed discussions were held regarding the environmental and social issues of the area due to proposed construction activities.</p>	<p>As the proposed project areas is situated in vacant land with few wild vegetation and grass. Few scattered settlements which is far away from the proposed areas. The construction activity involves plinth work with prefabricated structures. The environmental impact is minimal and short-term and limited to the construction phase only. During operational phase proper mitigation protocols will be adopted at rescue stations.</p>
<p>The stakeholders expressed that the establishment of the proposed project would lead to improvement in overall health and safety of community and road travelers in the project areas.</p>	<p>The team acknowledged and responded that the proposed satellite station of rescue 1122 will be helpful for travelers and locals in any case of emergency. Moreover, it will help in employment generation locally.</p>
<p>The stakeholders suggested that care must be given to protect fauna and flora during the construction phase.</p>	<p>New plantation local species would be carried out after completion of the projects. No any trees cutting will be during the execution of the project activities. Plantation activity will be done around the boundary wall for beautification.</p>
<p>The Stakeholder suggested that Emergency Preparedness and Response training should be given</p>	<p>The duration of this training will be 01 days and will be free of cost. The training will guide the labor and staff in emergency preparedness and response to the emergency at project site. SOPs</p>

during construction phase and specially focused during operation of rescue 1122.

will be followed strictly by the workers and rescuers during operation phase and it will be monitored through respective department.

The Stakeholder shows their concern regarding the impacts during the construction stage on waste management and land acquisition

Social and environmental team briefed about the mitigation measures that will be adopted to control dust, noise, health and safety issues. There are no issues regarding land acquisition, the land is vacant and owned by the government. If the issues occur, then these matters will be dealt by Revenue Department in accordance with Project Resettlement Policy Framework.

The contractor shall dispose of the hazardous waste through EPA-certified contractors.

The stakeholders suggested to engaged local people during project activities and consider the women privacy during construction phase and operations.

The teams responded that locals will be given preference during construction activities while during operations priority will be given to the locals. There are no settlements near the proposed establishment therefore conflicts with community and women is not anticipated.

3. Environmental Management and Monitoring Plan (EMMP)

Sr. No.	Activity	Potential Impact	Mitigation Measures	Monitoring & Reporting Frequency	Responsibility
1.	Land Use	<p>Construction/renovation Phase Civil Works</p> <p>Operation Phase None</p>	<ul style="list-style-type: none"> - Land uptake will be kept to minimum required. - No need to clear land or cutting of trees is envisaged. - Tree trimming should be done carefully without damages the mature plant. - Native Plants should be planted during the construction phase. 	NA	None
2.	Air Emission	<p>Construction Phase Construction Equipments, Vehicle Movement, vehicular exhaust</p> <p>Operation Phase Minor impacts during operation phase due to ambulance movement.</p>	<ul style="list-style-type: none"> - Vehicles shall be used in good working condition having emissions within the permissible limits as per Sindh Environmental Quality Standards (SEQs). - Conduct monitoring of vehicle emissions during operational phase to check the vehicle emissions compliance. - 	<p>weekly during Construction Phase and quarterly during operation phase</p> <p>Monthly maintenance check of ambulances</p>	<p>Construction phase Contractor</p> <p>Operation phase Rescue 1122</p>
3.	Dust Emission	<p>Construction Phase Movement of construction vehicles.</p> <p>Operation Phase None</p>	<ul style="list-style-type: none"> - Water will be sprinkled daily or when as required to avoid the dust emission near proposed project vicinity. - For dust control cordon off the construction area through dust control net. 	Daily during Construction Phase	<p>Construction phase Contractor</p>
4.	Noise Emission	<p>Construction Phase Construction Equipment, Generator, Vehicle Movement</p>	<ul style="list-style-type: none"> - Proper design, maintenance and repair of construction machinery and equipment will be ensured. - Use of proper silencers, mufflers and personal protective equipment's (PPEs); 	Twice a month during Construction Phase	<p>Construction phase Contractor</p>

		<p>Operation Phase None</p>	<ul style="list-style-type: none"> - During night time construction activities and traffic flow will be avoided 		
5.	<p>Water Management</p>	<p>Construction Phase Construction activities Water sprinkling for dust minimization,</p> <p>Operation Phase Office domestic use</p>	<ul style="list-style-type: none"> - Contractor should handle and manage waste generated from the construction activities without contamination to natural environment/water bodies and it will reduce risk to general public who stay close to sites. - Water contamination during construction will be avoided through proper waste disposal arrangement. - Proper drainage system and waste disposal system will be implemented during construction and operational phase. - Excess use of water will be avoided and monitored in routine basis and log. - Water Tankers/water bowsers and bore water will be proposed for the utilization of water during project activities. - Clean and safe drinking water shall be provided to the construction workers for drinking purposes. - Water log shall be maintained while extracting water from boreholes for domestic purposes during operational activities. 	<p>Daily during Construction Phase and monthly during operation phase</p>	<p>Construction phase Contractor</p> <p>Operational phase Rescue 1122</p>
6.	<p>Ecological Impact</p>	<p>Construction Phase Construction activities Clearance of top Soil No habitat loss No tree cutting at site</p> <p>Operation Phase None</p>	<ul style="list-style-type: none"> - Top soil will be removed for preparing the earth works and ground floor. - No ecological impact during construction and operational phase is envisaged. - As the subproject develops, plantation is grown in and around the subproject vicinity as a CSR. 	<p>None</p>	<p>None</p>

<p>7.</p>	<p>Solid Waste</p>	<p>Construction Phase Construction activities includes scrapped materials during tiles fixing works, damaged floor tiles, rejected components and materials, packing and shipping materials (pallets, crates, Styrofoam, plastics etc.).</p> <p>Operation Phase Food Waste and Recyclables Material like; paper, plastic etc.</p>	<ul style="list-style-type: none"> - Waste inventory of hazardous and non-hazardous waste generated will be prepared and periodically updated. - Scrap metal waste generated from designing and construction activities will be collected and stored separately in a waste yard and sold to local recyclers for reuse purposes. - Solid waste generated during construction and operation activities will be segregated disposed of appropriately. - Waste will be disposed off properly at designated disposal area with approval of concerned municipal department. - Food waste and recyclables viz. paper, plastic, glass etc. will be stored in designated waste bins/containers. The recyclables will be periodically sold to local recyclers while food waste will be disposed through proper waste handling mechanism. - Separate bins with symbols shall be placed at construction area. - Secondary containment shall be ensured to avoid the leakages and seepages. 	<p>Daily during Construction Phase and monthly during operation phase</p>	<p>Construction phase Contractor</p> <p>Operational phase Rescue 1122</p>
<p>8.</p>	<p>Waste Management</p>	<p>Construction Phase Construction activities Water sprinkling for dust minimization Overflows leaks Odor</p> <p>Operation Phase Office domestic waste like paper, cardboard</p>	<ul style="list-style-type: none"> - Covered bins shall be ensured. - Separate Bins for recyclable material and other type of solid waste shall be ensured. - Ensure the disposal of waste properly from the site on daily basis to avoid odor and maintained the site esthetics. - Food waste will be disposed of separately. 	<p>Daily during Construction Phase and monthly during operation phase</p>	<p>Construction phase Contractor</p> <p>Operational phase Rescue 1122</p>

9.	Soil and Land Contamination	<p>Construction Phase</p> <p>None of any chemical or hazardous substance is used in the construction phase therefore there is no chance of soil or land contamination</p> <p>Operation Phase</p> <p>Domestic use</p>	<ul style="list-style-type: none"> - Debris, Waste generated from construction material will be properly covered and stored and disposed-off periodically during the construction phase. No leftover construction waste will be left on the site. Maintenance of machinery will only be carried out at designated places to avoid any fuel spill if require. 	<p>Weekly during Construction Phase and monthly during operation phase</p>	<p>Construction phase</p> <p>Contractor</p> <p>Operational phase</p> <p>Rescue 1122</p>
10.	Waste Water	<p>Construction Phase</p> <p>Water used in the construction material during tile fixing, preparing bed and lean activity, construction camps and other works</p> <p>Operation Phase</p> <p>Sanitary waste water from the office during domestic use</p>	<ul style="list-style-type: none"> - Conduct daily inspections at the site to ensure removal of construction debris. - Store construction material containing fine particles in an enclosure so that sediment laden water does not drain into nearby water drains. - Sanitary waste will be drained to the drainage system properly. - Existing drainage system should be used for discharge of domestic waste by passing through septic tank despite to discharge in open environment. For the area where drainage sytem isn't exist state of the art mechanism shall be adopted for disposal of sanitary waste like soak pit via passing through septic tank. - Rain harvesting system shall be considered during establishment of recue 1122, conserve water should be used for vehicle and floor washing. 	<p>Daily during Construction Phase</p>	<p>Construction phase</p> <p>Contractor</p>
11.	Safety Hazards	<p>Construction Phase</p> <p>Project related vehicular traffic Driving Injuries related with civil works and electrical works</p>	<ul style="list-style-type: none"> - Ensure the World Bank EHS guideline will be followed. - Personal Protective equipment will be provided during construction and operation phase to the workers. - First Aid kits will be provided at sites. - Road Sign board to reduce safety hazards associated with subproject related routine 	<p>Daily during Construction and operation phase</p>	<p>Construction phase</p> <p>Contractor</p> <p>Operational phase</p>

		<p>Heat Waves</p> <p>COVID-19 issues</p> <p>Operation Phase</p> <p>Injuries during Operational phase</p>	<p>traffic.</p> <ul style="list-style-type: none"> - Subproject drivers will be trained of defensive driving. - Strict code of conduct will be followed. - Make safety precautions and display on the notice board of entry gate in both national and local language. - During heat wave, working hours will be revised to make sure that labor work force work only in early hours or late evening hours. - Use face mask and hand sanitizer as a precautionary measure to mitigate the COVID-19 and communicable diseases. - During operation hazardous material will be expected i.e. medical waste, compressed gasses, disinfectant, chemicals and other material for fir safety and in emergency situation. Hazardous material protocol will be developed and ensured in true sprit prior to handover to the respective department. - Medical waste and other hazardous waste will be stored separately in a close container and disposed off by engaging SEPA third party certified contractors. 		<p>Rescue 1122</p>
12.	Socio Economic Environment	<p>Construction Phase</p> <p>Traffic and vehicle movement</p> <p>Noise generated form subproject activities</p> <p>Labor requirement form the nearby area</p> <p>Occupational health & safety issue of working labor</p> <p>Operation Phase</p>	<ul style="list-style-type: none"> - Plan temporary traffic arrangements during construction within the construction area. Review the plan periodically with respect to site conditions. - Give special consideration to local traffic management. - Take adequate precautions to prevent danger from electrical equipment (switches and wiring). - Provide a readily available first aid unit including an adequate supply of sterilized dressing material and appliances. - Ensure workers exposed to loud noise wear Ear plugs/ear muffs. 	<p>Construction Phase</p> <p>GRM log for labour and community</p>	<p>Construction phase</p> <p>Contractor</p> <p>Operational phase</p> <p>Rescue 1122</p>

		Traffic Management Employment opportunities Awareness to local people to emergency situation Gender Issues, Gender inclusion GBS and VAC related impacts	- GRM mechanism shall be develop and ensure the accessibility to the local community and labor.		
--	--	--	---	--	--

4. Environmental and Social Monitoring Budget:

The Contractor shall consider air, noise water as an environmental concern in initial, planning and during execution of the works. The Contractor shall use plant and equipment conforming to international standards and directives on noise, vibrations and emissions shall include the details of measures for abating noise and air emission at source in the mitigation and the monitoring plan to be submitted to the PIU-SFERP on monthly. Bidder shall consider the following items define in table for E&S Implementation during project executive phase. The cost of E&S implementation will be mandatory for bidder shall be bid along with BOQ.

Table: 3 Environmental and Social (E&S) Implementation cost Tentative;

Name of item	Total Quantity	Unit Rate	Total Amount in PKR
A. Baseline Environmental Monitoring Before the start of Civil Works	16	50,000	800,000
Drinking water (At the Proposed Satellite Station)	16	20,000	320,000
Ambient Air and Noise (At the Proposed Satellite Station and Surrounding)	16	30,000	480,000
B. Safety Equipments (Banners, Barriers, PPEs, Fire Extinguishers)			
Masks Box	32	300	9600
Safety Shoes	80	1,500	120,000
Safety Gloves	80	100	8000
First Aid Box	16	600	9600
Ear Plugs	80	100	8000
Safety Helmets	80	500	40,000
Safety Jackets with reflectors	80	300	24,000
Provision of Dust Bins	16	500	
SUB TOTAL (01)			
C. Environmental Analysis Cost During Construction Phase (By engaging Sindh EPA Certified Laboratory) – 03 months			
Ambient Air and Noise Quality Analysis for 24 hours (CO, SO ₂ , NO, NO ₂ , SPM, PM _{2.5} , and PM ₁₀ ,); once in a month. At proposed satellite stations and its surrounding.	16	30000	480,000
Drinking Water Quality Testing ; once in a month. From the camp site	16	20000	320,000
Machinery/Stack Emission/Generators (if any)	16	7000	112,000
Mobilization Charges; once in a month	48	15,000	720,000
SUB TOTAL (02)			
OTHERS & E&S Management			

<p>Internal Training/Capacity buildings for sub-project construction staff comprises:</p> <ul style="list-style-type: none"> - Project overview - E&S Checklist implementation, communication, documentation, logistics and reporting requirement - GBV/SH - Code of Conduct - Grievances Redress Mechanism (GRM) running <ul style="list-style-type: none"> - Soft and Hard landscaping – Plantation Plan - Community Consultations - Tree Plantations 	16	50,000	800,000
Project dissemination materials such as banners, flayers etc.	16	15,000	240,000
Remuneration of Contractor's Environmental, Social Safeguards and Occupational Health and Safety Implementation Staff	5	120,000	600,000
SUB TOTAL (03)			4,291,200

5. Pictorial Profile of Proposed Project Sites

Proposed Satellite Station at Check Post 07



Consultations with locals at Check Post 7



Proposed Site at Check Post 7

Proposed Satellite Station at Check Post 12



Proposed Project Site at Check Post 12



Consultation with locals at Check Post 12



Project Surrounding at Check Post 12

Proposed Satellite Station at PDMA Warehouse Jamshoro



Proposed Project Site



PDMA Warehouse Jamshoro



Education City PDMA Academy

Proposed Satellite Station st 30 Bedded Hospital Nooriabad



Proposed Project Site



Discussion with locals



Project Surrounding

Pictorial View of Proposed site at N 55 & N5



Surrounding view at LMUHS, N55



Surrounding view at Taluka Hospital Manjhand, N55



RHC, Arazi, N55



Mehar Toll, N55



PDMA Warehouse Larkana



DHQ, Ghotki



BHU, Khairpur





Jalalani Goth Sakrand, N5



DHU, Matiari