Rehabilitation of Damaged Water Supply and Drainage Schemes of District Badin, Sindh

ENVIRONMENTAL AND SOCIAL SCREENING REPORT (ESSR)

Final Report
September, 2023

SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)

PLANNING & DEVELOPMENT DEPARTMENT (P&DD) COMPONENT

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DOCUMENT ISSUE AND REVISION RECORD

This document and its contents have been prepared and intended solely for the information and use of the Government of Sindh, Project Implementation Unit (PIU) concerning the **SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)**

Document Information

Project	**Sindh Flood Emergency Rehabilitation Project (SFERP)**
Proponent	**Project Implementation Unit (PIU), Government of Sindh**
Consultant	**Cameos Consultant**
Document Ref	**SFERP – ESSR/WS&DS/3**
Document Title	**ENVIRONMENTAL & SOCIAL SCREENING REPORT (ESSR) for Rehabilitation of Damaged Water Supply and Drainage Schemes of District Badin, Sindh**

Revision History:

Description	Issue	Revision	Date	Originated	Reviewed	Approved
ESSR for Rehabilitation of Damage Water Supply and Drainage Schemes of District Badin	01	01	29-09-2023	PIU	14-11-2023	-
	01	02	21-11-2023	PIU		-

Note: The template of ESSR & E&S Checklist for one District i.e., Larkana is approved by the World Bank. As per the directions of WB on dated 12th April, 2023, the document is reviewed by the E&S team of PIU and submitted to WB team for record and post review purpose.

Table of Contents

List of Tables

List of Figures

List of Annexures

1 PROJECT BACKGROUND

The Federal Government of Pakistan requested the global community and development partners for assistance to respond to the flood disaster following the Flood 2022 emergency. Subsequently, the World Bank (WB) task team visited the province and had a series of meetings with the provincial Govt. During the discussions held with the WB Mission, a two-pronged strategy was agreed i.e.

1. Restoration/Rehabilitation of Rural (Farm to Market) Roads in affected districts, talukas and UCs.
2. Restoration of water supply, drainage and sanitation schemes in affected districts, Talukas and Union Councils.
3. Provision of immediate financial assistance, cash for work is proposed to rehabilitate small community structures like rural roads, watersheds, watercourse (s) to carry irrigation water to Farm(s), Rehabilitation of village streets and restoration of village sanitation work including removal of stagnant water in villages. The exact number to be arrived at after assessment.
4. Expansion of the Emergency Rescue Service (Sindh Emergency Rescue Services-1122) to 13 districts i.e., Jamshoro, Dadu, Sajawal, Badin, Qambar Shehdadkot, Shikarpur, Jacobabad, Thatta, Ghotki, Naushehro Feroz/Matiari, Umerkot, Sanghar and Shikarpur. Establishment of Satellite Rescue Station at Motorway and National Highways (N-5 & N-55) The Provincial Government has already launched Sindh Emergency Rescue 1122 in Six Districts HQs – Karachi, Hyderabad, Mirpurkhas, Shaheed Benazirabad, Sukkur, and Larkana.

1.1 Project Components

The proposed Sindh Flood Emergency Rehabilitation Project – SFERP falls into four main components.

- Component--1 Infrastructure Rehabilitation:
- Component--2 Livelihoods Restoration
- Component--3 Institutional Strengthening for Resilience and Technical Assistance
- Component--4 Project Management and Operational Cost

1.2 The Proposed Sub-Project

The proposed project under Flood 2022 Emergency Response is a sub-component that will support the rehabilitation and reconstruction of the flood-affected water supply and drainage schemes to improve health & hygiene of local communities by providing safe drinking water with uninterrupted supply. The location map of subproject is given in **Figure 1** and the details of the subproject sites are given below;

1.3 Sub-Project Description

In District Badin, there are a total of 10 schemes, comprising 05 drainage schemes (13 Zones) and 05 water supply schemes (32 zones).

Project description	The sub-component "rehabilitation of water supply and drainage schemes" will rehabilitate the selected and prioritized water supply infrastructure that has been destroyed or damaged by the floods. The primary objective of this project is to evaluate the condition of water supply and drainage schemes, which includes assessing filtration techniques, piping, water quality, efficiency and adequacy of equipment, population coverage, and technology employed. This assessment will

	encompass a comprehensive study of network elements such as pumps, tanks, pipe materials, as well as parameters like diameters, flow rates, and the overall functionality of water supply and drainage systems constructed. The subproject schemes are located in Badin District of Sindh, Pakistan. The main aim of the said project is to rehabilitate existing sources of water supply and drainage facilities for the flood effected people in District Badin.
Environmental and Social Settings	The subproject land is owned by the Government. The proposed activities are the rehabilitation and restoration of damage water supply schemes and drainage facilities. These schemes are the properties of the Government body. There are no major environmental and social impacts of the project activities to the vicinity of the subproject areas. There are no water bodies within the sub-project sites. The subproject rehabilitation activities will not affect any flora, fauna and natural habitat of the area. There are few trees in the vicinity of the proposed subproject areas which will not be disturbed during the rehabilitation works. The environmental and social impacts will be kept at minimum by ensuring the mitigation measures and continuous monitoring. All measures will be planned, organized and implemented which are vital for health and safety of the workers. Instrumental Environmental Testing will be conducted on key parameters like air quality, water quality and noise level determination. Local flora is important to provide shelters for the birds, offer fruits and/or timber/fire wood, protect soil erosion and overall keep the environment very friendly to human living. As such cutting/chopping of flora will not be anticipated. Plantation has been proposed after the completion of the proposed subproject to enhance the aesthetic beauty of the project vicinity. No sub-projects related socioeconomic issues have been recorded during the baseline surveys of the sub-projects. Community and project beneficiaries are very much enthusiastic about the early rehabilitation and completion of the sub-projects. Settlements, including built-up areas such as homes, shops, mosques, graveyards, healthcare facilities and schools are located around sub-project schemes. Community is settled in villages which are actual project beneficiaries. No natural water spring is found in the proposed sub-project area. The site wise detailed of environmental and social setting of the proposed area are presented in the section 1.1.2.
Project Activities/ Scope of Work	**Proposed Rehabilitation of Damaged Infrastructures of Water Supply Schemes (WSS)** - Rehabilitation of Tube wells - Rehabilitation of Pumping Machinery i.e., Submersible Pumps, Centrifugal Pumps, - Rehabilitation of Solar System - Rehabilitation of Storage Tanks - Rehabilitation of Low Surface Reservoirs (LSRs) - Rehabilitation of Distribution Network i.e., Pipe network - Rehabilitation of Pumping Stations/Buildings - Rehabilitation and improvement of Electric and mechanical works transmission - Provision and installation of disinfection system i.e., hypo-chlorinator equipment **Rehabilitation of Damaged Infrastructures of Drainage Schemes** - Rehabilitation of Street drains

	- Rehabilitation of Pumping Machinery i.e., sludge Pumps, Motors - Installation of Solar System for alternative power supply - Rehabilitation of Screening Chambers - Rehabilitation of Collecting Tanks - Rehabilitation of Drainage Pumping Station Building - Rehabilitation and enhancement of existing Electric system with automation Work - Rehabilitation of Rising Main network to dispose of the drainage
Proposed Date of Commencement of Work:	The Rehabilitation of water supplies and drainage activities will be started in October, 2023 after completion of pre-requisite requirements.

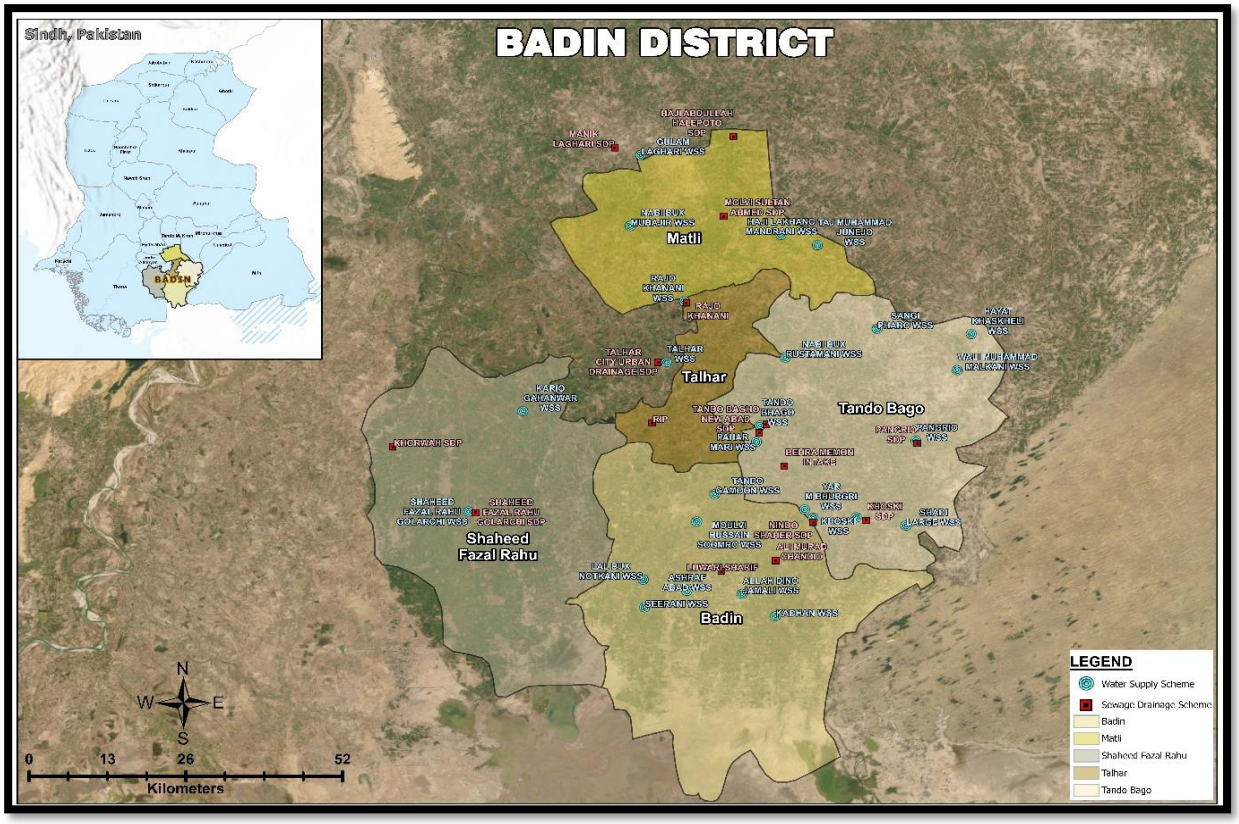


Figure 1: Study Area Map of District Badin Water Supply and Drainage Schemes

1.4 Scheme Wise E&S Setting:

No.	Schemes	Coordinates	Site Description
A	**Drainage Schemes Taluka Badin**		
1	Nindo Shaher Drainage Scheme	24°38'09.2"N 69°02'28.0"E	The proposed Scheme is situated in District Badin, with convenient access via Badin Nauakot Road at the south eastern side of Badin. The total number of household and population is 1,126 and 7880 respectively. The locality is surrounded by residential

No.	Schemes	Coordinates	Site Description
			settlements and has some commercial activities. Within the vicinity, there are educational institutions and places of worship. Notable landmarks include Civil Hospital Nindo, located at a distance of 600 meters, High School Nindo Shahar, situated 635 meters away, and Murad Shah Masjid, which is approximately 268 meters distant.
2	Luwari Sharif Drainage	24°33'31.0"N 68°54'17.5"E	The proposed scheme is positioned in the South of Badin, it can be easily accessible by Kadhan-Badin Road, and it is on the left side when moving southwards from Badin. The household and population are 870 and 6090 respectively. The area is surrounded by the human settlement with some commercial activities. There are Government Boys Secondary School at a distance of 916.78 meters, Government Dispensary at a distance of 1205.63 meters, Cricket Ground at a distance of 811.35 meters and Library Hazrat Pir Badshah at a distance of 587.98 meters.
B	**Drainage Schemes Taluka Talhar**		
3	Urban Drainage Scheme Talhar	24°53'16.7"N 68°48'36.0"E	The proposed scheme is in the North of Badin and near Phuleli Canal, it can be easily accessed through Hyderabad Badin Road. The household and population are 6,850 and 47953 respectively. The area is surrounded by human settlements with some commercial activities. It has railway station 862.83 meters apart, Govt Boys High School 457.70 meters apart, Post Office 646 meters apart and Aga Khan Health Centre 386 meters apart.
4	Rajo Khanani Drainage Scheme	24°58'53.7"N 68°51'07.7"E	The proposed scheme is located in the North of Talhar and North of Badin, accessible through Rajo Khanani Talhar Road. The household and population are 1,583 and 11078 respectively. The area is surrounded by human settlements with some commercial activities. It has Rural Health Center at a distance of 447.77 meters, GC Public School at distance of 480 meters, Government Boys High School at a distance of 387.8 meters, Mehran Rice Mills 347.65

No.	Schemes	Coordinates	Site Description
			meters apart, Government Girls Primary School 70 meters apart.
C	**Drainage Schemes Taluka Tando Bago**		
5	Pangrio Drainage Scheme	24°45'37.5"N 69°11'45.8"E	The proposed scheme is located in the North Eastern side of Badin and is accessible through Tando Bago Pangrio Road. This area is surrounded by human settlements with some commercial activities. The household and population are 1,932 and 13523 respectively. It has Government Boys High School situated at a distance of 253.36 meters, Civil Hospital 552.94 meters apart, Government Girls High School 113.04 meters apart.
6	Urban Drainage Scheme Tando Bago	24°47'25.3"N 68°58'15.4"E	The proposed scheme is located in the North Eastern side of Badin and is accessible through Tando Bago Badin Road. The area is surrounded by human settlements with commercial activities. It has the population of 3722 and 532 households. It has LRBT Eye Hospital 758.87 meters apart, Cricket ground 221.61 meters apart, Government RO Water Plant 1290.75 meters apart, Post Office 816.64 meters apart.
7	Urban Drainage Scheme New Abad	24°46'36.9"N 68°57'39.2"E	The proposed scheme is located in the North Eastern side of Badin and is accessible through Tando Bago Badin Road, it is located just below Tando Bago. The area is surrounded by human settlements with commercial activities. It has the population of 7911 and 1130 households. It has Mir Ghulam Muhammad Degree College 93.27 meters apart, technical college 249.38 meters apart, Grid Station 665.21 meters apart, Govt. Monotechnic Institute 359.88 meters apart.
8	Khoski Drainage Scheme	24°38'21.3"N 69°07'12.4"E	The proposed scheme is located in the East of Badin and is accessible through Badin Nauakot Road. The area is surrounded by human settlements with commercial activities. It has the population of 30566 and 4367 households. It has Khoski Sugar Mills 747.92 meters apart, Government Higher Secondary School 1200 meters apart, Fauji Foundation Model High School 1485.33 meters apart, Rural Health Center 1344.64 meters apart.

No.	Schemes	Coordinates	Site Description
D	**Drainage Schemes Taluka Shaheed Fazal Rahu**		
9	Shaheed Fazal Rahu (Golarchi) Drainage Scheme	24°39'04.5"N 68°32'17.1"E	The proposed scheme is located in the West of Badin and is accessible through Badin Sujawal Road. The area is surrounded by human settlements with commercial activities. It has the population of 16968 persons and household are 2,424. It has Govt. Boys High School 710.51 meters apart, Civil Hospital 170.15 meters apart, Government Boys Public School 1280.34 meters apart and Post Office 151.54 meters apart.
10	Khorwah Drainage Scheme	24°45'17.0"N 68°24'53.5"E	The proposed scheme is located in the North West of Badin and is accessible through Mirpur Bathoro Khorwaah Road. The area is surrounded by human settlements with commercial activities. It has the population of 7384 and household are 1055. It has Govt. Boys High School 747.92 meters apart, Govt. Boys Primary School 1200 meters apart, Imam Bargah 1485.33 meters apart, Govt Girls Primary School 1344.64 meters apart.
E	**Drainage Schemes Taluka Matli**		
11	Manik Laghari Drainage Scheme	25°13'32.3"N 68°44'43.8"E	The proposed scheme is located in the East of Badin and is accessible through Tando Ghulam Ali Shaikh Bhirkio Road. The area is surrounded by human settlements with commercial activities. It has the population of 4486 and household are 641. It has Masjid Noorani at a distance of 655.68 meters.
12	Haji Abdullah Drainage Scheme	25°14'35.7"N 68°55'20.1"E	The proposed scheme is located in the North Eastern side of Tando Ghulam Ali and is accessible through Hyderabad Badin Road to Mirwah Sanjar Chang Road. The area is surrounded by human settlements with commercial activities. It has the population of 3177 and household are 454. It has Govt. Primary School at a distance of 377.22 meters. Pir Sakhi Minor branch is flowing adjacent to proposed project site.
13	Molvi Sultan Ahmed Drainage Scheme	25°07'04.5"N 68°54'28.6"E	The proposed scheme is located in the South East of Tando Ghulam Ali and is accessible through Matli Tando Ghulam Ali Digri Road. The area is surrounded by human settlements with commercial activities. It has the

No.	Schemes	Coordinates	Site Description
			population of 3470 and household are 496. It has Primary School Chaudary Abdullah at a distance of 219.04 meters.
F	**Water Supply Schemes Taluka Badin**		
14	Urban WSS Badin	24°39'08.2"N 68°50'30.0"E	The proposed scheme is located near Post Office Badin and Siddique Mosque. It is accessible through Shah Latif Road. It has the population of 8000 and household are 1143. There are few private clinics and educational institutes. A canal is flowing almost 180meters in the east.
15	Kadhan WSS	24°29'10.0"N 68°59'03.9"E	The proposed scheme is located near Ahmed Petroleum Fueling Station. It is accessible through Kadhan-Badin Road. It has the population of 4660 and household are 666. The area is surrounded by human settlements with commercial activities and agricultural lands.
16	Nindo Shaher WSS	24°38'31.4"N 69°02'27.1"E	The proposed scheme is located near High School Nindo Shehar. It is accessible through Badin Nauakot Road. It has the population of 3850 and household are 550. The area is surrounded by human settlements with commercial activities and agricultural lands. High school Nindo Shahr is at a distance of 50 meters westward from subproject area and Civil hospital is at a distance of 128 meters southeast.
17	Ali Murad Chandio WSS	24°34'33.2"N 68°59'06.7"E	The proposed scheme is located near GBELSS Ali Murad Chandio School. It is accessible through Luari Sharif-Nindo Link Road. It has the population of 1377 and household are 197. The area is surrounded by agricultural fields and human settlements. GBELSS ali murad school is at a distance of 70 meters westward from subproject area and a canal is flowing westward at a distance of 30 meters.
18	Seerani WSS	24°30'04.6"N 68°47'22.1"E	The proposed scheme is located near Government Hospital Seerani. It is accessible through Badin Seerani Road. It has the population of 2463 and household are 352. The area is surrounded by agricultural fields and human settlements. KPS ahmed khan colony school is at a distance of 124 meters northeast from subproject area and Govt.

No.	Schemes	Coordinates	Site Description
			Hospital is southward at a distance of 278 meters.
19	Tando Gamoon WSS	24°40'46.3"N 68°53'39.3"E	The proposed scheme is located near District Central Jail Badin. It is accessible through Tando Bago-Badin Road. It has the population of 1676 and household are 239. The area is surrounded by agricultural fields and human settlements. There is no educational and healthcare facility in the nearby surroundings.
20	Abdul Hameed Junejo WSS	24°32'42.2"N 68°47'14.3"E	The proposed scheme is located near Government Primary School Peer Fateh Shah. It is accessible through Badin Seerani Road. It has the population of 1400 and household are 200. The area is surrounded by agricultural fields and scattered human settlements. There is no educational and healthcare facility in the nearby surroundings. A canal is flowing at a distance of 120 meters westward.
21	Luari Sharif WSS	24°33'22.7"N 68°54'20.1"E	The proposed scheme is located near Government Boys Primary School Luari Sharif. It is accessible through Kadhan Badin Road. It has the population of 6662 and household are 952. The area is surrounded by agricultural fields and scattered human settlements. Govt. Boys primary school and Govt. girls' high school is at a distance of 180 and 405 meters away respectively. Whereas, Ghousia masjid 499 meters and Govt. dispensary is 1.4 km far. A canal is flowing at a distance of 195 meters southeast.
22	Ashraf Abad WSS	24°32'57.7"N 68°52'08.2"E	The proposed scheme is located on the South West of Luari Sharif. It is accessible through minor link road from Luari Sharif. It has the population of 1650 and household are 236. The area is surrounded by agricultural fields and scattered human settlements. Asraf Abad school is at a distance of 157 meters away except that no educational and healthcare facility is present. A canal is flowing at a distance of 33 meters north.
23	Lal Bux Notkani WSS	24°31'36.7"N 68°51'08.0"E	The proposed scheme is located near Lal Bux Notkani Goth along Canal. It is accessible through Canal Road. It has the population of 1594 and household are 228. The area is surrounded by agricultural fields and human settlements. There is no educational and

No.	Schemes	Coordinates	Site Description
			healthcare facility present in the area. A canal is flowing at a distance of 49 meters west.
24	Molvi Hussain Soomro WSS	24°38'10.6"N 68°52'01.2"E	The proposed scheme is located near Government Girls Elementary School. It is accessible through link road connecting Kadhan Badin Road. It has the population of 2520 and household are 360. The area is surrounded by agricultural fields and human settlements. Govt. girls' elementary school is situated at a distance of 286 meters and GBPS Molvi Husain Somroo institute is 625 meters away.
25	Allah Dino Jamali WSS	24°31'20.3"N 68°56'04.2"E	The proposed scheme is located near Mirza Sugar Mill. It is accessible through link road connecting Kadhan Badin Road. It has the population of 2000 and household are 286. The area is surrounded by agricultural fields and human settlements. No social or environmental sensitive receptor is found in the immediate vicinity of the area.
26	Yar Muhammad Bhurgri WSS	24°39'18.7"N 69°01'40.3"E	The proposed scheme is located near the intersection of Tando Bago Nindo road and Badin Nauakot Road. It is accessible through Badin Nauakot Road. It has the population of 2885 and household are 412. The area is surrounded by agricultural fields and human settlements. Govt. Girls and Boys Primary School Javed Ali Khaskheli is at a distance of 330 meters away from subproject area.
G	**Water Supply Schemes Taluka Talhar**		
27	Urban WSS Talhar	24°53'13.9"N 68°49'18.7"E	The proposed scheme is located near Nadra Office Talhar and Phuleli Canal. It is accessible through link road connecting Rajo Khanani Talhar Road. It has the population of 47953 and household are 6850. The area is surrounded by agricultural fields and human settlements. RHC Talhar is at a distance of 112 meters, Hussaini Masjid is 123 meters and community-based school is 559 meters away from subproject area. Whereas, Phuleli canal is flowing in northeast at a distance of 527 meters.
28	Rajo Khanani WSS	24°58'59.2"N 68°50'55.5"E	The proposed scheme is located near Nizamani Medical Store Rajo Khanani. It is accessible through Rajo Khanani Talhar Road. It has the

No.	Schemes	Coordinates	Site Description
			population of 11078 and household are 1583. The area is surrounded by agricultural fields and human settlements with commercial activities. Govt. Girls Primary School is at a distance of 420 meters, city school is 486 meters, and GST.C hospital is 604 meters away from subproject area. Whereas, a canal is flowing in north at a distance of 294 meters.
29	Rip WSS	24°47'32.3"N 68°48'03.3"E	The proposed scheme is located near Fuleli Canal and Mirwaah Canal Road. It is accessible through link road to RIP Village. It has the population of 3320 and household are 474. The area is surrounded by agricultural fields and human settlements with commercial activities. There are no environmental or social sensitive receptors present in the immediate vicinity of the subproject site.
H	**Water Supply Schemes Taluka Tando Bago**		
30	Pangrio WSS	24°45'48.7"N 69°11'37.3"E	The proposed scheme is located near Civil Hospital Pangrio. It is accessible through Tando Bago-Pangrio Road. It has the population of 13523 and household are 1932. The area is surrounded by agricultural fields and human settlements with commercial activities. Civil hospital is at a distance of 283 meters, Govt. boys' high school is at a distance 651 meters and Govt. girls' high school is 303 meters away from subproject site.
31	Urban WSS Tando Bago	24°47'14.8"N 68°57'42.4"E	The proposed scheme is located on Talhar Tando Bago Road and near Bilawal Park Tando Bago. It has the population of 20821 and household are 2974. The area is surrounded by agricultural fields and human settlements with commercial activities. LRBT eye hospital is at a distance of 257 meters, Govt. community based high school is at a distance 126 meters and Govt. girls' high school is 120 meters away from subproject site. A canal is flowing side by side with subproject site.
32	Khoski WSS	24°38'34.5"N 69°06'17.8"E	The proposed scheme is located near Fauji Foundation Model High School and Rural Health Center Khoski. It is accessible through Badin Nauakot Road. It has the population of 30566 and household are 4367. The area is

No.	Schemes	Coordinates	Site Description
			surrounded by human settlements with commercial activities and agricultural activities.
33	Nabi Bux Rustamani WSS	24°53'40.8"N 68°59'56.4"E	The proposed scheme is located near Sahibaan Mahal. It is accessible through Diko-Abdul Karim Khoso Road. It has the population of 2868 and household are 410. The area is surrounded by agricultural fields and human settlements with commercial activities. Govt. high school khadaro is 525 meters away from subproject site. A canal is flowing southern side at a distance of 36 meters from subproject site.
34	Hayat Khashkheli WSS	24°55'52.9"N 69°16'34.2"E	The proposed scheme is located near Government Primary School Ghulam Muhammad Arain. It is accessible through link road connecting Malkani Jhudo Road. It has the population of 2000 and household are 286. The area is surrounded by agricultural fields and sparse human settlements. Govt. primary school Ghulam Muhammad Arain is 364 meters away from subproject site.
35	Sangi Pharo WSS	24°56'23.3"N 69°08'09.1"E	The proposed scheme is located near Dadah, located on the West of Jhuddo. It is accessible through Digri Road. It has the population of 4519 and household are 646. There are no environmental or social sensitive receptors present in the immediate vicinity of the subproject site.
36	Behra Memon WSS	24°43'29.1"N 68°59'53.2"E	The proposed scheme is located near Ghulam Hussain Shah Mazar. It is accessible through Tando Bago-Nindo Road. It has the population of 2094 and household are 299. The area is surrounded by agricultural fields and sparse human settlements. A canal is flowing adjacent to subproject site.
37	Wali Muhammad Malkani WSS	24°52'29.1"N 69°15'18.8"E	The proposed scheme is located near Government Primary School Malkani. It is accessible through Pangrio-Malkani Road. It has the population of 11758 and household are 1680. The area is surrounded by human settlements with commercial activities. Civil Hospital Malkani Sharif is located at a distance of 209 meters, Basic health unit Malkani sharif is 187 meters apart, Govt. primary school Malkani Sharif and GHS Wali Muhammad

No.	Schemes	Coordinates	Site Description
			Malkani is 72 and 90 meters away respectively from subproject site.
38	Shadi Large WSS	24°37'47.6"N 69°10'43.5"E	The proposed scheme is located near Government High School Shadi Large. It is accessible through Badin-Nauakot Road. It has the population of 4233 and household are 605. The subproject site is surrounded by human settlements with commercial activities and agricultural fields. Pooja Maternity home is at a distance of 259 meters away. A canal is flowing side by side to subproject area.
39	Pahar Mari WSS	24°45'42.4"N 68°57'21.7"E	The proposed scheme is located near Haji Ahmed Zaur Primary School. It is accessible through Tando Bago-Badin Road. It has the population of 3637 and household are 520. The area is surrounded by human settlements with commercial activities and agricultural fields. GPS Pharmaree is located at a distance of 205 meters.
I	**Water Supply Schemes Taluka Shaheed Fazal Rahu**		
40	Shaheed Fazal Rahu (Golarchi) WSS	24°39'07.6"N 68°31'36.5"E	The proposed scheme is located near Sindh Shahbaz Rice Mill. It is accessible through Badin- Sujawal Road. It has the population of 26376 and household are 3768. The subproject site is surrounded by human settlements with commercial activities. GBPS Kirshan Lal Makwana is at a distance of 247 meters away, Govt. Boys High school is 616 meters, whereas Taluka Golarchi Civil Hospital is at a distance of 1.2 km away. A canal is flowing on the western side of the subproject area approximately 164 meters away.
41	Kario Gahanwar WSS	24°48'36.2"N 68°36'28.6"E	The proposed scheme is located near M/S Jehangir Petroleum Service, Kario Ghanwar. It is accessible through Kario Ghanwar-Golarchi Road. It has the population of 13038 and household are 1863. The subproject site is surrounded by human settlements with commercial activities.
42	Nabi Bux Muhajir WSS	25°06'06.1"N 68°46'04.5"E	The proposed scheme is located near Basic Health Unit Nabi Bux Kamboh. It is accessible through Nabi Bux Kamboh-Kaalro Mori Road. It has the population of 3078 and household are 440. The subproject site is surrounded by human settlements with commercial activities

No.	Schemes	Coordinates	Site Description
			and agricultural lands. BHU Nabi Bukhsh Kamboh is at a distance of 77 meters away, Darul Uloom Farooqia and Darul uloom Usmania is 173 and 284 meters away respectively.
43	Gulam Laghari WSS	25°12'48.7"N 68°47'00.2"E	The proposed scheme is located near Government Boys Primary School Gulab Laghari. It is accessible through Shaikh Bhirkio Road. It has the population of 5400 and household are 771. The subproject site is surrounded by agricultural lands, and human settlements with commercial activities. GBPS Gulab Laghari is at a distance of 537 meters away, whereas BHU is at a distance of 847 meters away.
44	Taj Muhammad Junejo WSS	25°04'16.9"N 69°02'48.7"E	The proposed scheme is located near Government Primary Masjid School Taj Muhammad Junejo which is located 275 meters away and Experimental Dispensary Taj Muhammad Junejo at 307 meters away. It is accessible through link road along Canal in the south of Dumbalo. It has the population of 1340 and household are 191. The subproject site is surrounded by agricultural lands, and scattered human settlements.
45	Haji Lakhano Mandrani WSS	25°05'15.4"N 68°59'33.9"E	The proposed scheme is located near Government Boys primary school Haji Ameer-Uddin Arain. It is accessible through link road connecting Canal Road along canal in the south of Dumbalo (1.2 km). It has the population of 1883 and household are 269. The subproject site is surrounded by agricultural lands, and scattered human settlements.

1.5 Sub-Projects Information

1.5.1 Brief introduction to the sub-project, its geographical location, components, and benefits.

The subproject sites are situated in District Badin, Sindh, within the Government territory, specifically under the jurisdiction of the Public Health Engineering Department (PHED). The district has five Talukas; Badin Taluka, Golarchi Taluka, Talhar Taluka, Matli Taluka, and Tando Bago Taluka. The aim is to rehabilitate and restore the water supply and drainage systems that were damaged or destroyed during the floods in 2022. These efforts will prioritize the selected water supply infrastructure, ensuring its recovery. Currently, the community in District Badin has been suffering from a lack of safe drinking water and living in unhygienic conditions due to inadequate collection and treatment of storm water, which has led to the complete destruction of the drainage system.

The proposed subproject intends to address these issues by rehabilitating the water supply and drainage schemes to a resilient level. This will guarantee a continuous provision of safe drinking water to the community, while also ensuring the proper collection, treatment, and disposal of storm water in an environmentally friendly manner. The primary source of drinking water in the district is underground and surface water both. The water is extracted from underground or nearby canals using pumps and stored in Low Surface Reservoirs (LSRs) before being distributed to the community. The drinking and wastewater will undergo analysis in a recommended laboratory, and precautionary measures will be taken based on the results. surface water in the form of canals are available in some areas/schemes covered by the subproject.

Overall, the proposed project aims to create a healthier environment in the area and uplift the socioeconomic conditions of the residents by providing them with safe water, sanitation facilities and employment opportunities for the locals.

1.5.2 Details about existing conditions of the area/facility and proposed scope of rehabilitation works.

The water supply and drainage schemes were not up to mark as almost all structures have been damaged by flood, 2022. The tube wells, pumping stations, distribution network and LSRs have been badly affected. As a result of which, the people of District Badin are facing scarcity of safe drinking water. Comprehensive surveys have been conducted by the expert to monitor the sites and assessed the damages and restoration of infrastructures. Rehabilitation of damaged infrastructure will provide the capacity and efficiency for uninterrupted safe drinking water supply to the community.

Currently, community of District Badin is living in unhygienic condition as drainage system has been broken-down and blocked in flood, 2022. The sewage disposal ponds (SDPs) including pumping stations and drainage network have also been affected. The damages have been assessed through proper survey and rehabilitation work is being made part of Sub-projects PC-1 of District.

The flood damaged the Water Supply and Drainage Schemes which affected the community. The community has been deprived by drinking water facility. Due to broken lines and blockages in the drainage lines wastewater stagnate in the area after rain causes disturbance to the residents. The stagnant water provides breeding grounds to mosquitoes and flies which serve as vector of many diseases in the area. At some places, water supply lines are passing beside the storm water drains which also affect the quality of drinking water. Due to unavailability or insufficient supply of water, community have to fetch water from far flung areas and from pumping stations which creates social stress. Security and privacy of the local people has been disturbed as well. There is a need to rehabilitate the existing damaged water supply and drainage structures in order to resolve the socioeconomic issues of the sub project area. The sub-project areas are located in different areas of District Badin, the schemes and systems are operated under the Government territory. The activity involves in the subproject is restoration and rehabilitation of damaged Water Supply and Drainage Schemes of District Badin.

i. Flora of Sub-Project Area

Some of the common flora observed during survey includes jhand (*Prosopis cineraria*), babul (*Acacia nilotica*), pipal (*Ficus religiosa*), devi or (Prosopis glandulosa), neem (*Melia azadirachta*), eucalyptus or sufaida (Eucalyptus camaldulensis), banyan or bar (*Ficus bengalensis*), and Conocarpus.




Crops produced in the district that are have been observed during survey and verified during consultations are include sugarcane, rice, cotton, wheat, sunflower, all pulses, bajra, maize, jowar, barley, gram, rape & mustard and soya bean.

ii. Fauna of the Sub-Project Area

Resident birds of the area are black and grey partridges, Indian roller, common myna, babbler, white-breasted kingfisher, pond heron and cattle egret, collard and little brown dove, white-cheeked and red-vented bulbul.

1.5.3 Socio-Economic Condition of the Sub-Project Area

The total population of the district Badin is 1,805,000 persons with 37% literacy rate[1]. Majority of the population of the district is Muslim (79%). The culture life of the Muslims is greatly influenced by the Islamic way of life. After Muslims, Hindus also hold great confidence in Thakurs and Brahmans. The languages mostly spoken in District are Sindhi, Punjabi, and Urdu. Whereas, Pashto, Sraiki and Balochi are also less spoken languages. However, Urdu is understood amongst all the population of district. The economy of Badin is mainly based on Agriculture, Forestry, Fishing & Hunting (65.9%), Community, Social & Personal Services (28.4%) and other activities (11.3%). Badin has oil fields, and thus, oil production in the district accounts for approximately 50% of total crude oil production of Pakistan. Other minerals mined in the district include coal

[1] https://www.pbs.gov.pk/census-2017-district-wise/results/103

(mainly from the Tarai coal field) and limestone. Major industries in the district Badin are Sugar Mills, Rice Mills, Flour Mills, Cement Pipe, and Brick Kilns[2].

1.5.4 Explain, whether this is purely rehabilitation of existing facilities or will involve any new works

The subproject involves rehabilitation of damaged Drainage and Water Supply Schemes of the existing utilities which are being operated by the PHED. No new work is involved under sub-project scope.

1.5.5 Are consultations with stakeholders conducted?

The social and environmental specialist of Design and Supervision Consultant held series of consultation meetings with the local community and relevant stakeholders, residents of the sub-project areas in August, 2023. The field team visited the nearby communities briefed salient features of the sub-projects to get the views of the communities who could be affected and beneficiaries. Social Sensitive Receptors like religious structures (mosques, shrines and graveyards), basic/rural health units (BHU/RHU), hospitals, schools, cultural and archeological etc. were observed during the survey and consultation in the sub-project areas. The indirect impacts on the receptors have been evaluated at 200 meters' buffer zone of the proposed sub-project sites. Most of the social receptors are located in an urban settlement and far away from proposed sub-project sites hence would not be affected by project activities. The community was very blissful by the rehabilitation work carried out by the involvement of the Govt. of Sindh. They appreciated for taking up the initiative of rehabilitation and restoration of damaged water supply and drainage schemes. The team assured that all the concerns raised by them would be addressed. Mitigation measures will be proposed to minimize the impacts during rehabilitation activities. According to the community, the rehabilitation works would provide them safe and sufficient drinking water and ensure safe disposal of wastewater. The detailed concerns of community are described in the section 3 of this ESSR.

The damaged utilities are owned by the PHED of District Badin. Consultation with Line Department have also been completed. The subprojects were installed in Government owned land and no additional land will be acquired for rehabilitating the sub-projects.

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

There is no secondary impact in the sub-project areas. All the impacts are minor, temporary and site specific during the rehabilitation/restoration phase. The project falls under the category C which creates minor or low environmental impacts limited to rehabilitation/restoration phase.

1.5.7 Timeframe for starting and completion of sub-project

The subproject will be started in October, 2023 and will be completed in April, 2025.

1.5.8 Drainage and Water Supply Schemes Design and Demand details

The main rehabilitation or restoration components of water supply and drainage schemes are water tanks, drains, existing reservoirs, pump house, staff quarters, water filtration tanks and boundary walls. The capacities of these structure have been designed with respect to population sizes of proposed subproject areas. The drawings and typical cross sections of components are provided in **Annexure-2**. However, the current and future wastewater generation capacities and water supply demand are given in table-1 and table-2.

[2] https://pakistanalmanac.com/sindh-badin/#1633237638527-9dfca3b9-4b65

Table 1: Population Size and Wastewater Generation of District Badin Drainage Schemes

Description	Total Population	Per Capita Sanitation Generation	Sanitation Generation	Total Population	Per Capita Sanitation Generation	Sanitation Generation	Total Population	Per Capita Sanitation Generation	Sanitation Generation
	2023			2025 (First Operational Year)			2050 (Last Operational Year)		
	Person	GPCD	GPD	Person	GPCD	GPD	Person	GPCD	GPD
Improvement & Extension for Drainage Schemes at Various Taluka's of District Badin									
Taluka Badin Drainage Schemes									
Nindo Shaher Drainage Scheme	7880	8.8	69344	8158	8.8	71792	12588	8.8	110774
Luwari Sharif WSS	6090	8.8	53592	6305	8.8	55484	9729	8.8	85611
Taluka Talhar Drainage Scheme									
Urban Drainage Scheme Talhar	47953	8.8	421986	49646	8.8	436885	76603	8.8	674105
Rajo Khanani Drainage Scheme	11078	8.8	97486	11469	8.8	100928	17697	8.8	155730
Taluka Tando Bago Drainage Schemes									
Pangrio Drainage Scheme	13523	8.8	119002	14000	8.8	123204	21602	8.8	190101
Urban Drainage Scheme Tando Bago	3722	8.8	32754	3853	8.8	33910	5946	8.8	52322
Urban Drainage Scheme New Abad	7911	16	126576	8190	16	131045	12637	16	202200
Khoski Drainage Scheme	30566	16	489056	31645	16	506323	48828	16	781246
Taluka S.F Rahu Drainage Scheme									
Shaheed Fazal Rahu (Golarchi) Drainage Scheme	16968	8.8	149318	17567	8.8	154590	27106	8.8	238530
Khorwah Drainage Scheme	7384	8.8	64979	7645	8.8	67273	11796	8.8	103802

Description	Total Population	Per Capita Sanitation Generation	Sanitation Generation	Total Population	Per Capita Sanitation Generation	Sanitation Generation	Total Population	Per Capita Sanitation Generation	Sanitation Generation
	2023			2025 (First Operational Year)			2050 (Last Operational Year)		
	Person	GPCD	GPD	Person	GPCD	GPD	Person	GPCD	GPD
Improvement & Extension for Drainage Schemes at Various Taluka's of District Badin									
Taluka Matli Drainage Schemes									
Manik Laghari Drainage Scheme	4486	8.8	39477	4644	8.8	40871	7166	8.8	63063
Haji Abdullah Drainage Scheme	3177	8.8	27958	3289	8.8	28945	5075	8.8	44661
Molvi Sultan Ahmed Drainage Scheme	3470	8.8	30536	3593	8.8	31614	5543	8.8	48780

Table 2: Population Size and Water Supply Demand of District Badin Water Supply Schemes

Description	Total Population	Per Capita Water Demand	Water Supply Demand	Total Population	Per Capita Water Demand	Water Supply Demand	Total Population	Per Capita Water Demand	Water Supply Demand
	2023			2025 (First Operational Year)			2050 (Last Operational Year)		
	Person	UK GPCD	GPD	Person	UK GPCD	GPD	Person	UK GPCD	GPD
Improvement & Extension for Water Supply Schemes at Various Taluka's of District Badin									
Taluka Badin Water Supply Schemes									
Urban WSS Badin	8000	11	88000	8282	11	91107	12780	11	140576
Kadhan WSS	4660	11	51260	4825	11	53070	7444	11	81886
Nindo Shaher WSS	3850	11	42350	3986	11	43845	6150	11	67652
Ali Murad Chandio WSS	1377	11	15147	1426	11	15682	2200	11	24197
Seerani WSS	2463	11	27093	2550	11	28050	3935	11	43280
Tando Gamoon WSS	1676	11	18436	1735	11	19087	2677	11	29451
Abdul Hameed Junejo WSS	1200	11	13200	1242	11	13666	1917	11	21086
Luari Sharif WSS	6662	11	73282	6897	11	75869	10642	11	117065
Ashraf Abad WSS	1250	11	13750	1294	11	14235	1997	11	21965
Lal Bux Notkani WSS	1294	11	14234	1340	11	14737	2067	11	22738
Molvi Hussain Soomro WSS	2520	11	27720	2609	11	28699	4026	11	44282
Allah Dino Jamali WSS	2000	11	22000	2071	11	22777	3195	11	35144
Yar Muhammad Bhurgri WSS	2885	11	31735	2987	11	32855	4609	11	50695

Description	Total Population	Per Capita Water Demand	Water Supply Demand	Total Population	Per Capita Water Demand	Water Supply Demand	Total Population	Per Capita Water Demand	Water Supply Demand
	2023			2025 (First Operational Year)			2050 (Last Operational Year)		
	Person	UK GPCD	GPD	Person	UK GPCD	GPD	Person	UK GPCD	GPD
Improvement & Extension for Water Supply Schemes at Various Taluka's of District Badin									
Taluka Talhar Water Supply Schemes									
Urban WSS Talhar	47953	11	527483	49646	11	546106	76603	11	842632
Rajo Khanani WSS	11078	11	121858	11469	11	126160	17697	11	194663
Rip WSS	3320	11	36520	3437	11	37809	5304	11	58339
Taluka Tando Bago Water Supply Scheme									
Pangrio WSS	13523	11	148753	14000	11	154005	21602	11	237627
Urban WSS Tando Bago	20821	11	229031	21556	11	237117	33261	11	365867
Khoski WSS	30566	11	336226	31645	11	348097	48828	11	537107
Nabi Bux Rustamani WSS	2868	11	31548	2969	11	32662	4582	11	50397
Hayat Khashkheli WSS	2000	11	22000	2071	11	22777	3195	11	35144
Sangi Pharo WSS	4519	11	49709	4679	11	51464	7219	11	79408
Behra Memon WSS	2094	11	23034	2168	11	23847	3345	11	36796
Wali Muhammad Malkani WSS	11758	11	129338	12173	11	133904	18783	11	206612
Shadi Large WSS	4233	11	46563	4382	11	48207	6762	11	74382
Pahar Mari WSS	3637	11	40007	3765	11	41419	5810	11	63909

Description	Total Population	Per Capita Water Demand	Water Supply Demand	Total Population	Per Capita Water Demand	Water Supply Demand	Total Population	Per Capita Water Demand	Water Supply Demand
	2023			2025 (First Operational Year)			2050 (Last Operational Year)		
	Person	UK GPCD	GPD	Person	UK GPCD	GPD	Person	UK GPCD	GPD
Improvement & Extension for Water Supply Schemes at Various Taluka's of District Badin									
Taluka S.F Rahu Water Supply Scheme									
Shaheed Fazal Rahu (Golarchi) WSS	26376	11	290136	27307	11	300380	42135	11	463480
Kario Gahanwar WSS	13038	11	143418	13498	11	148482	20828	11	229104
Taluka Matli Water Supply Scheme									
Nabi Bux Muhajir WSS	3078	11	33858	3187	11	35053	4917	11	54087
Gulab Laghari WSS	5400	11	59400	5591	11	61497	8626	11	94889
Taj Muhammad Junejo WSS	900	11	9900	932	11	10250	1438	11	15815
Haji Lakhano Mandrani WSS	1883	11	20713	1949	11	21444	3008	11	33088

1.5.9 Scenario if there are any alternative designs options of sub-project

Here are some alternative approaches considered earlier for water supply and drainage systems but not opted for because the scope of proposed project which is to rehabilitate the existing water supply and drainage network infrastructure. On the other hand, these options require high maintenance, less cost effective and not feasible in the current scenario.

Rainwater Harvesting: Implementing rainwater harvesting techniques can help collect and store rainwater for later use. This alternative reduces the reliance on underground sources and provides a sustainable water supply.

Grey water Recycling: Instead of disposing of grey water from sinks, showers, and washing machines, it can be treated and reused for non-potable purposes such as toilet flushing or irrigation. This approach reduces the strain on freshwater resources and promotes water conservation.

Decentralized Water Treatment Systems: Instead of relying on a centralized water treatment plant, decentralized systems can be established at the community level. These systems utilize small-scale treatment methods such as filtration, disinfection, and purification to provide safe drinking water to local residents.

Sustainable Drainage Systems (SDS): SDS employ environmentally friendly techniques to manage storm water runoff. This includes features like permeable pavements, green roofs, and rain gardens that help absorb and filter rainwater, reducing the burden on drainage systems and preventing flooding.

Water Efficiency Measures: Promoting water-efficient practices and technologies, such as low-flow fixtures, dual-flush toilets, and water-efficient appliances, can significantly reduce water consumption in households, industries, and public facilities.

Desalination: In areas where freshwater resources are scarce, desalination plants can be utilized to convert brackish water into potable water. Although this option requires substantial investment and energy, it provides an alternative water source for regions facing severe water shortages.

Water Reuse and Reclamation: Implementing advanced water treatment processes can enable the reuse of treated wastewater for various non-potable applications, such as irrigation, industrial processes, and groundwater replenishment. This approach reduces the demand for freshwater resources.

Aquifer Recharge: Managed aquifer recharge involves intentionally infiltrating excess surface water into underground aquifers, replenishing depleted groundwater resources. This technique helps to stabilize water levels and improve the sustainability of water supply systems.

Community-Based Water Systems: Engaging local communities in the planning, implementation, and maintenance of water supply and drainage systems can foster a sense of ownership and ensure sustainability. This approach empowers communities to take responsibility for their water resources.

Integrated Water Management: Adopting a holistic approach that considers the entire water cycle, including water supply, wastewater treatment, storm-water management, and water conservation, can lead to more efficient and sustainable water management practices.

It's important to assess the specific conditions, needs, and feasibility of each alternative before implementing them in a particular project or region.

2 ENVIRONMENTAL AND SOCIAL SCREENING TOOLS

2.1 Environmental and Social Management Screening

Project Area	Badin District of Sindh, Pakistan
Project Title	Sindh Flood Emergency Rehabilitation Program (SFERP), P&DD Component, Sindh
Sub-project Title	Rehabilitation of Damaged Water Supply and Drainage Schemes

Table 3: Environmental and Social Screening Checklist

S. No	SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
				NR	1	2	3	
	A. Project Siting							
1	Adjacent to or within any environmentally sensitive areas like Archeological/Cultural heritage site, Protected Forests, Wetlands, Wildlife Sanctuaries, Game Reserves etc.?	□	□	√	□	□	□	No environmental sensitive or cultural heritage site is in the vicinity of these project areas.
2	Adjacent to or within any Buffer zone of protected area	□	□	√	□	□	□	No buffer zone viz. a sanctuary, forest, national park, in its immediate surroundings. A few wild vegetation and trees were found in and outside of the proposed boundaries but will not be disturbed during the project activities.
3	Are there any potential pollution sources in water supply network?	√	□	□	□	□	□	Yes, there are few potential pollution sources in the water supply network due to no maintenance and flood affects like damages to the existing infrastructure as the structures are old and material of existing structure could not stand with flood. The construction work will solely focus on rehabilitation and improvement of the existing system.

S. No	SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
				NR	1	2	3	
4	Are there any potential sources that can damage drainage network? Or Is it affected by flood?	√	□	□	□	□	□	Natural disasters like flood and intensification in the urban population are the main factors for the destruction of existing drainage network. The scope of the proposed schemes is to rehabilitate the existing drainage network to resist with floods and cater the demands properly.
5	Is there a possibility that the project will adversely affect the local landscape?	□	√	□	□	□	□	Local landscape will not be affected by the subproject activities because it doesn't involve establishing of new infrastructure.
6	Is the project site or discharge area located in protected areas designated by the country's laws or international treaties and conventions?	□	√	□	□	□	□	The project sites or discharge areas are not located in protected areas designated by the country's laws or any international treaties and conventions.
	B. Potential Impacts at Construction Phase							
7	Will construction camp site cause land clearing and tree be cutting?	□	√	□	□	□	□	No construction camp will be constructed; existing built-in structures will be utilized as camp site. Also, it will not cause any land clearing and tree cutting activity as the subproject activities will involve upgrading existing structures.
8	Will construction works create any disturbance/ hindrance/obstruction for public movement/access?	□	√	□	□	□	□	No such issue of mobility/accessibility issues will be caused during the sub-project development. Few vehicles on specific timings will be used during construction work which will not increase traffic on road. **Mitigation Measures:** • Reduce traffic speeds on all unpaved surfaces to 15 km/ hour or less. • Contractor will strictly implement speed limits and defensive driving policies. • Traffic control will be maintained work sites. • Contractor machinery and equipment will not hamper the traffic at main road and sites.

S. No	SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
				NR	1	2	3	
								• Necessary training, information will be provided to the workers regarding traffic rules.
9	Is there any sensitive receptor (school, mosque, health unit, community very close to the scheme) that will be impacted due to construction activities?	√	□	□	□	□	□	Some social sensitive receptors might be affected indirectly due to dust, noise or construction vehicles movements but suggested mitigations will reduce it effects. **Mitigation Measures:** • GRM must be communicated to the internal staff and the general public. Community grievances will be recorded and responded to on an urgent basis. • Provision of proper safety and diversion signage, particularly at socially sensitive receptors areas; • Ensure the placement of a proper sign board that the site is restricted from the entry of irrelevant people particularly children; • Timely public notification on planned construction works should be communicated to the communities; • Setting up speed limits in close consultation with the traffic police with luminescence sign boards.
10	Will construction activities require tree cutting?	□	√	□	□	□	□	No such activity will be done and if needed then for every tree that needs to be cut down, five saplings of approved tree species will be planted, emphasizing reforestation and the replenishment of tree cover.
11	Will construction activities result in damaging existing local roads, bridges or other infrastructure?	□	√	□	□	□	□	The Sub-project activities do not involve damage to any nearby and existing road, bridge and any other infrastructure. The rehabilitation activities are limited to the demarcated boundary of existing facilities of WS & DS.
12	Will construction activities generate noise?	√	□	□	□	□	□	Yes, noise will be generated from various sources such as plumbing, drilling, generators, rehabilitation activities and vehicular movements that will be

S. No	SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
				NR	1	2	3	
								limited to the proposed boundary of the sub-project and nearby community will not be affected. **Mitigation Measures:** • The contractors would ensure keeping noise levels from construction vehicles and machinery to be within safe limits. • Construction activities will not be allowed at nighttime. • 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 machinery 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.
13	Will construction activities generate dust?	√	□	□	□	□	□	There will be construction vehicles and machines which may generate dust emissions. The machinery used in rehabilitation work will be tractors and trolleys for fetching material. **Mitigation Measures:** • Regular water sprinkling will be the responsibility of the contractor at the dust generation points during construction activities. Water will also be sprinkled at vehicular and machinery movement routes and sensitive receptor's location to avoid dust spreading to the nearby community. • Necessary PPE i.e., face mask will be provided to workers.

S. No	SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
				NR	1	2	3	
								• Contractor will ensure that dust emissions due to vehicular traffic are minimized by reducing the speed. • Well maintained and tuned vehicles will be used for the transportation and disposal of material.
14	Will construction activities cause air pollution due to stack emissions from generators, construction machines and vehicles?	□	√	□	□	□	□	The activities include rehabilitation of damaged water and drainage schemes in which air pollution at minor extent during the rehabilitation work will be caused. **Mitigation Measures:** • The emissions from generators, (if used) and vehicular/machinery movement at the site can affect the ambient air quality at sub project sites. 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.

S. No	SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
				NR	1	2	3	
15	Will construction activities cause soil pollution?	□	√	□	□	□	□	During construction work, various mitigation measures can be employed to address soil pollution. **Mitigation Measures:** • Implementing barriers and containment systems to prevent the spread of pollutants from construction sites to surrounding soil. • Ensuring proper disposal of construction waste, including hazardous materials, to prevent soil contamination. This involves following appropriate waste management procedures and regulations. • Implementing spill prevention measures and having protocols in place to quickly respond to any accidental spills of chemicals or pollutants that could contaminate the soil. • Contaminated soil management: If contaminated soil is encountered during construction, proper management procedures would be followed, including containment, removal, and disposal in accordance with local regulations. • Regular monitoring: Conducting regular soil quality monitoring throughout the construction process to detect any signs of pollution and take corrective actions promptly. • Providing training to construction personnel regarding the importance of soil protection and pollution prevention measures to ensure their active participation in maintaining a pollution-free construction site. By implementing these mitigation measures, construction activities can minimize soil pollution and contribute to environmental sustainability.

S. No	SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
				NR	1	2	3	
16	Will construction activities generate construction debris?	√	□	□	□	□	□	Yes, as the sub-project will involve civil works for the development of Water Supply and Drainage Schemes, which may generate a very small quantity of construction debris. **Mitigation Measures:** • The debris (rejected material) and WS&DS broken materials produced during construction would be disposed-off in Government approved/allocated disposal sites by engaging third party which is certified from SEPA. 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.
17	Will construction activities generate hazardous solid waste?	□	√	□	□	□	□	No hazardous waste will be generated during construction phase of the project.
18	Will construction take place near to water bodies? Or cause contamination of the surface water resources	□	√	□	□	□	□	Yes, there are a few water supply schemes that are near to surface water bodies like canals. The potential impacts of water pollution during the construction can be minimized, helping to protect water resources and aquatic ecosystems in the surrounding area. **Mitigation Measures:** • Contractor must provide the following facilities at each campsite: Latrines; lined washing areas; septic tanks, and soaking pits for toilet waste. • Soak pits will be built in absorbent soil and located 250 m away from a surface water source or groundwater well. • Diesel, oil, and lubricants should be properly stored following petroleum regulations. This will be the responsibility of the contractor.

S. No	SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
				NR	1	2	3	
								• Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; • Conduct surface water quality inspection according to the Environmental and Social Management and Monitoring Plan while adhering to SEQS 2016 and WHO standards.
19	Will construction activities take place near wastewater/ storm water drains and how quality of wastewater will be ensured?	√	□	□	□	□	□	Yes, the sub-projects are rehabilitation of water supply and drainage schemes but it will upgrade or restore the existing structures. Wastewater quality analysis will be performed complaint to SEQS 2016 so that contamination or exceedances could be monitored.
20	Will construction activities result in damaging or relocating the utilities at site like electricity, gas, telecommunication etc.?	□	√	□	□	□	□	Neither relocation nor destruction of utilities will be involved in the construction scope. However, the sub-project scope is already restoration and rehabilitation of WS&DS of the proposed subproject area.
21	Will construction activities involve excavation?	√	□	□	□	□	□	The excavation will be done for the foundation works of pump house, disposal stations/drainage works, boundary walls, collecting tanks and screening chambers. **Mitigation Measures:** • The excavation will be done carefully to avoid the damages. • Excavation area will be barricaded. • Contractor will use safety signs to warn and aware the local people during construction activities. • Contractor will be ensured availability of adequate Personal Protective Equipment (PPE) at the sub-project sites. • Risk assessment will be carried out by contractor before initiation of excavation work.

S. No	SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
				NR	1	2	3	
								• The contractor will ensure that all workers on site will be properly trained and certified to handle an excavation machine.
22	Will construction involve heavy machinery?	□	√	□	□	□	□	No, despite few machines like excavators will be used for the civil works on need basis; however, the contractor will ensure safety precautions during construction phase of the sub-projects.
23	Will construction activities/machines be the safety hazards for the workers or any anticipated OHS impacts?	√	□	□	□	□	□	Yes, Occupational Health & Safety issues are anticipated from the proposed rehabilitation work and mitigation measures have been proposed below. Risk can occur from machinery usage, vehicles, and civil work activities. General occupational hazards that may be encountered (e.g., moving machinery and motorized equipment, working at heights, repetitive motions, falling of objects, injuries etc. **Mitigation Measures:** • Ensure and strictly implement the SOPs regarding communicable diseases including daily body temperature check, PPEs, emergency response, and drills. • Unauthorized personnel will not be allowed to enter project site without permission and safety permits. • 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.

S. No	SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
				NR	1	2	3	
								• 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 During Design and Construction							
24	Will involuntary resettlement cause by project implementation? If involuntary resettlement is caused, are efforts made to minimize the impacts caused by the resettlement?	□	√	□	□	□	□	There will be no involuntary resettlement because sub-project sites are located in Government own land.
25	Will there a possibility that the project adversely affects the living conditions of inhabitants?	□	√	□	□	□	□	The proposed subproject will positively impact inhabitants and improve their social wellbeing. There is no possibility that the project will adversely affect the living conditions of inhabitants.
26	Will the construction cause any labor issues such as labor living and working conditions?	√	□	□	□	□	□	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. **Mitigation Measures:** The Workers' Grievance Redress Mechanism (GRM) will be developed and communicated among workers to lodge complains. Workers should be provided with clean drinking water for free.

S. No	SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
				NR	1	2	3	
27	Will construction activities cause community Health and Safety issues? Or any other such impacts.	□	√	□	□	□	□	No such impacts are anticipated, though following will be applicable to the project activities. **Mitigation Measures:** • GRM must be communicated to the general public. • Close consultation with local communities to identify optimal solutions where needed. Community grievances will be recorded and responded to on an urgent basis. • Contractor shall give preference to local community members in subproject areas, to the extent feasible, with respect to the employment of unskilled labor. • 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.
28	Have contents of the project and the potential impacts been adequately explained to the Local stakeholders based on appropriate procedures, including information disclosure?	√	□	□	□	□	□	Local Stakeholders have been consulted and their comments mentioned in stakeholders' consultation have been noted which will be addressed with true spirit during construction phase.

S. No	SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
				NR	1	2	3	
29	Will the construction activities cause the socio- cultural issues or conflicts among workers and communities?	√	□	□	□	□	□	• Contractor should take proper measures and raise awareness among the communities and workers to address and resolve issues relating to harassment, intimidation (particularly those related to issues of labor influx), and exploitation, especially against women. • Measures to prevent Gender based violence (GBV), Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH) the Contractor must include relevant clauses in the workers' code of conduct. • Workers should not be allowed to crowd in the residential communities nearby the site.
30	Are appropriate measures taken to ensure that security guards involved in the project not to violate safety of other individuals involved, or local residents?	√	□	□	□	□	□	Yes, as the security guards will be deployed at subproject sites and they are not allowed to move outside or provide entrance to anybody without permission of the site engineer.
31	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				N/A	N/A	√	
	Type of Environmental Management Tool to be Used				**Social and Environmental Screening Checklist**			

3 STAKEHOLDER CONSULTATION

Stakeholder consultation during a construction project is crucial for ensuring transparency, addressing concerns, and promoting collaborative decision-making.

Table 4: List of Stakeholders Consulted for Water Supply and Drainage Schemes of Badin

Sr. #	Schemes	Coordinates	Name of the Goth/Community	Date of Consultation
A	**Drainage Schemes Taluka Badin**			
1	Nindo Shaher Drainage Scheme	24°38'09.2"N 69°02'28.0"E	Nindo Shaher	14/8/2023
2	Luwari Sharif Drainage	24°33'31.0"N 68°54'17.5"E	Luari sharif	14/8/2023
B	**Drainage Schemes Taluka Talhar**			
3	Urban Drainage Scheme Talhar	24°53'16.7"N 68°48'36.0"E	Talhar	15/8/2023
4	Rajo Khanani Drainage Scheme	24°58'53.7"N 68°51'07.7"E	Goth Rajo Khanani	15/8/2023
C	**Drainage Schemes Taluka Tando Bago**			
5	Pangrio Drainage Scheme	24°45'37.5"N 69°11'45.8"E	Pagrio Wango Road	17/8/2023
6	Urban Drainage Scheme Tando Bago	24°47'25.3"N 68°58'15.4"E	Mir Mohalla	17/8/2023
7	Urban Drainage Scheme New Abad	24°46'36.9"N 68°57'39.2"E	Goth Newabad	17/8/2023
8	Khoski Drainage Scheme	24°38'21.3"N 69°07'12.4"E	Goth Khoski Naukot Road	17/8/2023
D	**Drainage Schemes Taluka Shaheed Fazal Rahu**			
9	Shaheed Fazal Rahu (Golarchi) Drainage Scheme	24°39'04.5"N 68°32'17.1"E	Rajput Lohar Colony Golarchi	16/8/2023
10	Khorwah Drainage Scheme	24°45'17.0"N 68°24'53.5"E	Goth Korwah	16/8/2023
E	**Drainage Schemes Taluka Matli**			
11	Manik Laghari Drainage Scheme	25°13'32.3"N 68°44'43.8"E	Goth Bhag Stop	19/8/2023
12	Haji Abdullah Drainage Scheme	25°14'35.7"N 68°55'20.1"E	Village Haji Abdullah Halepoto	19/8/2023
13	Molvi Sultan Ahmed Drainage Scheme	25°07'04.5"N 68°54'28.6"E	Village Molvi Sultan Ahmed	19/8/2023
F	**Water Supply Schemes Taluka Badin**			
14	Urban WSS Badin	24°39'08.2"N 68°50'30.0"E	Goth Haji Hashim Khaskheli	19/8/2023
15	Kadhan WSS	24°29'10.0"N 68°59'03.9"E	Kandhan Goth	14/8/2023
16	Nindo Shaher WSS	24°38'31.4"N 69°02'27.1"E	Nindo Shaher	14/8/2023
17	Ali Murad Chandio WSS	24°34'33.2"N 68°59'06.7"E	Haji Abdullah Shah Goth	13/8/2023

Sr. #	Schemes	Coordinates	Name of the Goth/Community	Date of Consultation
18	Seerani WSS	24°30'04.6"N 68°47'22.1"E	Seerani Goth	13/8/2023
19	Tando Gamoon WSS	24°40'46.3"N 68°53'39.3"E	Tando Gamoon Goth	13/8/2023
20	Abdul Hameed Junejo WSS	24°32'42.2"N 68°47'14.3"E	Junejo Goth	13/8/2023
21	Luari Sharif WSS	24°33'22.7"N 68°54'20.1"E	Luari Sharif	13/8/2023
22	Ashraf Abad WSS	24°32'57.7"N 68°52'08.2"E	Asrafabad Goth	13/8/2023
23	Lal Bux Notkani WSS	24°31'36.7"N 68°51'08.0"E	Lal Bux Notkani Gurho Goth	14/8/2023
24	Molvi Hussain Soomro WSS	24°38'10.6"N 68°52'01.2"E	Molvi Hussain Soomro Goth	14/8/2023
25	Allah Dino Jamali WSS	24°31'20.3"N 68°56'04.2"E	Allah Dino Jamali Goth	14/8/2023
26	Yar Muhammad Bhurgri WSS	24°39'18.7"N 69°01'40.3"E	Yar Muhammad Bhurgri Goth	14/8/2023
G	**Water Supply Schemes Taluka Talhar**			
27	Urban WSS Talhar	24°53'13.9"N 68°49'18.7"E	Talhar	15/8/2023
28	Rajo Khanani WSS	24°58'59.2"N 68°50'55.5"E	Goth Rajo Khanani	15/8/2023
29	Rip WSS	24°47'32.3"N 68°48'03.3"E	Goth MIyoon Malook	18/8/2023
H	**Water Supply Schemes Taluka Tando Bago**			
30	Pangrio WSS	24°45'48.7"N 69°11'37.3"E	Pangrio Tando bago Road	16/8/2023
31	Urban WSS Tando Bago	24°47'14.8"N 68°57'42.4"E	Tando Bago	16/8/2023
32	Khoski WSS	24°38'34.5"N 69°06'17.8"E	Village Khoski	16/8/2023
33	Nabi Bux Rustamani WSS	24°53'40.8"N 68°59'56.4"E	Khadaro Goth	16/8/2023
34	Hayat Khashkheli WSS	24°55'52.9"N 69°16'34.2"E	Jhuddo	14/8/2023
35	Sangi Pharo WSS	24°56'23.3"N 69°08'09.1"E	Dadah Goth	14/8/2023
36	Behra Memon WSS	24°43'29.1"N 68°59'53.2"E	Ali Muhammad Soomro Goth	18/8/2023
37	Wali Muhammad Malkani WSS	24°52'29.1"N 69°15'18.8"E	Malkani Sharif Goth	18/8/2023
38	Shadi Large WSS	24°37'47.6"N 69°10'43.5"E	Shadi Large	18/8/2023
39	Pahar Mari WSS	24°45'42.4"N 68°57'21.7"E	Muhammaed saleh Khoso	18/8/2023
I	**Water Supply Schemes Taluka Shaheed Fazal Rahu**			
40	Shaheed Fazal Rahu (Golarchi) WSS	24°39'07.6"N 68°31'36.5"E	Goth Ismail Lashari	19/8/2023
41	Kario Gahanwar WSS	24°48'36.2"N 68°36'28.6"E	Kario Ghanwar Goth	19/8/2023

Sr. #	Schemes	Coordinates	Name of the Goth/Community	Date of Consultation
42	Nabi Bux Muhajir WSS	25°06'06.1"N 68°46'04.5"E	Nabi Bux Kamboh Goth	19/8/2023
43	Gulam Laghari WSS	25°12'48.7"N 68°47'00.2"E	Gulab Laghari Goth	16/8/2023
44	Taj Muhammad Junejo WSS	25°04'16.9"N 69°02'48.7"E	Bhadhu Qambrani Goth	16/8/2023
45	Haji Lakhano Mandrani WSS	25°05'15.4"N 68°59'33.9"E	Qutab uddin Araain Goth	16/8/2023

3.1 Community Concerns

Comments /Observations	Action /Response
Discussion regarding the importance and usefulness of rehabilitation of water supplies and drainage schemes was held.	The participants were briefed that the proposed Water Supply & Drainage Schemes will provide safe drinking water and updated drainage system which will uplift the socio-economic condition of the areas.
Community members showed concerns about the overall impact of the water supply and drainage schemes on public health and sanitation.	Community was explained the positive health outcomes associated with improved access to clean water, proper sanitation facilities, and effective drainage systems. Any specific health concerns raised by the community and outline measures taken to ensure public safety will be addressed properly.
Community members were asked about the problems and issues they had faced after flood or during monsoon season.	They informed the team that there is serious load shedding issue in the area which is a major cause of destruction of current water supply and drainage system. Pumps and rising mains issues must be resolved as well as cleaning of drains must be done on usual basis. Solar panels are installed but most of them are out of order due to lack of maintenance issue.
Stakeholders/ Local Community members asked about the operations of Water Supply & Drainage Schemes.	The team responded that safe drinking water will be provided to the community without any interruption and storm water will be disposed of in safe manners.
Local Community inquired about the project execution and its completion.	The technical team replied that the project will be commenced in October, 2023 and will be completed in April, 2025. The rehabilitation work will be limited to the existing facilities of the proposed project area and it will be completed in 18 months.
The community urged to provide of semi-skilled and unskilled jobs for local labor.	Unskilled jobs will be given to local's people where possible.
In the sub-project area, women fetch water from a distance of 2-4 km. After completing their morning chores, some of them also bring their livestock to the watercourses for drinking. Some community members showed their reservation that privacy of the local communities might not be compromised.	It was explained that local labor will be hired to execute the project and all employees will be trained to take care of local norms/culture and privacy of people. No interaction of labor with women and children would be happened.

Comments /Observations	Action /Response
Community members showed reservation about the long-term maintenance and sustainability of the water supply and drainage schemes.	Community was apprised about that PHED is overseeing the project, the Department will ensure operation and maintenance plans, and any measures taken to ensure the infrastructure's long-term viability. All the Schemes under rehabilitation have operational staff hired by the GoS.
Community also raised concerns about the construction activities associated with water supply and drainage schemes can cause disruptions to daily life, including noise, dust, traffic congestion, and temporary service interruptions.	Community was assured that these disruptions will be minimized to the extent possible, provide a clear timeline of the construction activities, and communicate any alternative arrangements made to mitigate inconveniences.
Community had reservations about the proper maintenance of rehabilitated system and no availability of resources.	Community was informed that after rehabilitation works the system will be handed over to PHED who do proper maintenance and resource utilization.
Community requested to conduct a comprehensive needs assessment to understand the water supply and drainage network gaps and challenges faced by the community.	Community was intimated that the proposed subproject is going to be implemented after the detailed need assessment and damages caused by flood.

Village Haji Muhammad Hashim, Taluka Badin

Village Ghulam Nabi Shah, Taluka Tando Bago

Goth Ismail Lashari, Taluka SFR

Village Mir Ali Bukhsh, Taluka Badin

Comments /Observations	Action /Response
	
Village Saleh Khoso, Taluka Tando Bago	**Village Miyon Malook, Taluka Talhar**
	
Village Bhag Stop, Taluka Matli	**Goth Kario Gahanwar, Taluka SFR**

Figure 2 STAKEHOLDERS CONSULTATION

3.2 Institutional Consultation

The Environment and Social team of consultant conducted consultations with concerned Government Department in August, 2023. The team briefed the officers of Government Departments regarding the salient features of the proposed sub-projects. It was informed that the "Detailed Design of the Project, under PIU-SFERP-P&DD being implemented and funded by the World Bank. They were informed that the project intends to rehabilitate the damaged Water Supply and Drainage Schemes destroyed in flood 2022. The primary goal of the project is to meet the present and future requirements regarding provision of safe drinking water and drainage system. It was also briefed that the project will bring positive impacts on the lives of the local population.

According to the officials, the rehabilitation/restoration of the proposed Schemes will be beneficial for the residents of the project regions. The officials expressed their support for the planned project during the meeting and assured their full cooperation as a Line Department.

Sr. No	Department
1.	XEN PHED Department
2.	Deputy Director SEPA
3.	Representative of Municipal Administrator

Table 5: SUMMARY OF CONCERNS RAISED BY INSTITUTIONAL STAKEHOLDERS

Comments/Observations	*Actions/ Responses*
The majority of the stakeholders showed positive attitudes toward the rehabilitation of water supply and drainage schemes.	In general, the participants were in favor of the project and agreed that it is greatly needed because Water Supply and Drainage Schemes have been dilapidated in devastated floods 2022.
Detailed discussions were held regarding the environmental and social issues of the area due to proposed rehabilitation activity.	The project will not cast adverse impact on population, flora and fauna of the area. The project lies in Govt. owned land and no major social and environmental issues are anticipated during construction phase of the project. However, mitigation measures will be proposed to combat environmental degradation.
The stakeholders suggested that the establishment of the proposed project would uplift the socio-economic condition of the community in the project areas.	The team acknowledged and responded that the proposed Water Supply and Drainage Schemes will be beneficial for community residing in the area. The living standard of the community would be elevated after rehabilitation of the schemes.
The stakeholders suggested that care must be given to protect fauna and flora during the construction phase.	The plantation would be undertaken with the preference of local species; no exotic species will be promoted. No cutting of trees will be involved during the execution of the project activities. Plantation activity will be done around the boundary wall to enhance aesthetic beauty of the project area. It will be monitored to cut minimum number of trees. At few sites, trees will be cut or chopped and

Comments/Observations	*Actions/ Responses*
	1:10 trees will be planted in compensation and the Line Department would be responsible for caring the newly planted trees after construction phase.
The Stakeholder shows their concern regarding the impacts during the construction stage on waste management and land acquisition	Social and environmental teams briefed about the mitigation measures will be adopted to control dust, noise, health, and safety issues. Excess material will be removed and flattened. 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 with Revenue Department.
The stakeholders suggested to engage local people during project activities and considering the women privacy that not be affected.	The teams responded that locals will be considered during construction activities while during operation priority will be given to the locals if not available then will be sourced from other regions. There are no settlements near the proposed projects, therefore, conflicts with the community and women are not expected. It was assured that norms, ethics and traditions of community will not be disturbed.
	
	

Figure 3 INSTITUTIONAL CONSULTATION

4 ENVIRONMENTAL AND SOCIAL MANAGEMENT &MONITORING PLAN

The purpose of the ESMMP for the rehabilitation works is to ensure that all necessary identified measures should be adopted during construction and operation phase for all schemes to protect the environment and social situations and to comply with the country's environmental and social legislation and applicable World Bank standards. After the preparation of ESMF, PIU has outlined site-specific EMP for the Contractors and executing agency.

Table 6: Environmental and Social Management and Monitoring Plan (ESMMP)

Sr. No.	Activity	Potential Impacts	Mitigation Measures	Monitoring & Reporting Frequency	Responsibility
1.	**Land Use**	**Construction Phase** Civil Works **Operation Phase** None	- The work will be carried out in the land of PHED which comprised of rehabilitation work only. - No need to clear land or cutting of trees is envisaged.	NA	None
2.	**Dust Emission**	**Construction Phase** Movement of construction vehicles. **Operation Phase** 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	**Construction phase** Contractor
3.	**Noise Emission**	**Construction Phase** Construction Equipment, Generator, Vehicle Movement **Operation Phase** None	- Proper design, maintenance and repair of construction machinery and equipment will be ensured.	Twice a month during Construction Phase	**Construction phase** Contractor

Sr. No.	Activity	Potential Impacts	Mitigation Measures	Monitoring & Reporting Frequency	Responsibility
4.	**Water Management**	**Construction Phase** Construction activities Water sprinkling for dust minimization **Operation Phase** Supply of water and maintaining its quality will be managed by the PHED	- Contractor will 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 disinfection. - Excess use of water will be avoided and monitored in routine basis. - Water Tankers/water bowsers and bore water will be proposed for the utilization of water during project activities. - Clean and safe drinking water will be provided to the workers during working hours.	- Daily during Construction Phase - Water quality analysis at the beginning and end of construction phase	**Construction phase** Contractor **Operational phase** PHED
5.	**Ecological Impact**	**Construction Phase** Construction activities Clearance of top Soil No habitat loss No tree cutting at site **Operation Phase** None	- As the subproject develops, plantation must be done in and around the subproject vicinity as a CSR.	None	None

Sr. No.	Activity	Potential Impacts	Mitigation Measures	Monitoring & Reporting Frequency	Responsibility
6.	**Solid Waste Management**	**Construction Phase** In construction phase, cement bags, woods remain, debris will be generated. **Operation Phase** Food Waste and Recyclables Material like; paper, plastic etc.	- Waste reduction methodologies will be implemented. - On spot segregation will be ensured. - 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. - 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 of properly at designated disposal area. - Food waste and recyclables viz. paper, plastic, glass etc. will be stored in designated waste bins/containers.	Daily during Construction Phase	**Construction phase** Contractor **Operational phase** PHED

Sr. No.	Activity	Potential Impacts	Mitigation Measures	Monitoring & Reporting Frequency	Responsibility
			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. - Waste disposal will not be allowed in agriculture lands.		
7.	**Soil and Land Contamination**	**Construction Phase** No any chemical or hazardous substance is used in the construction phase therefore there is no chance of soil or land contamination **Operation Phase** 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. - Reinstate and protect cleared areas as soon as possible. - Cover unused area of disturbed or exposed surfaces immediately with mulch/grass turnings/tree plantations. - Locate stockpiles away from drainage lines. - Remove debris from drainage paths and sediment control structures. - Keep the final or finished surface of	Weekly during Construction Phase	**Construction phase** Contractor **Operational phase** PHED

Sr. No.	Activity	Potential Impacts	Mitigation Measures	Monitoring & Reporting Frequency	Responsibility
			all the raised lands free from any kind of depression that causes water logging. - Reinstate the natural landscape of the ancillary construction sites after completion of works.		
8.	**Waste Water**	**Construction Phase** Water used in the construction material during preparing bed and lean activity, construction of pump house, septic tanks, LSRs and other works **Operation Phase** Sanitary waste water from the office	- 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.	- Visual inspection on daily basis during Construction Phase - Wastewater quality analysis at the beginning and end of construction phase	**Construction phase** Contractor
9.	**Safety Hazards**	**Construction Phase** Project related vehicular traffic Driving Injuries related with civil works and electrical works Heat Waves Cold Waves Communicable Diseases **Operation Phase** Injuries during Operational phase	- Ensure the World Bank EHS guideline will be followed. - Personal Protective Equipment will be provided during construction. - First Aid kits will be provided at sites. - 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	Daily during Construction and operation phase	**Construction phase** Contractor **Operational phase** PHED

Sr. No.	Activity	Potential Impacts	Mitigation Measures	Monitoring & Reporting Frequency	Responsibility
			or late evening hours. - Monitoring weather forecasts for outdoor work to provide advance warning of extreme weather and scheduling work accordingly. - Adjustment of work and rest periods according to temperature stress management procedures such as providing easy access to adequate hydration such as drinking water or electrolyte drinks depending on the temperature and workloads. - Providing temporary shelters to protect against the elements during working activities or for use as rest areas. - Implementation of health and hygiene practices to mitigate the communicable diseases.		
10.	**Socio-Economic Environment**	**Construction Phase** Traffic and vehicle movement Noise generated form subproject activities Labor requirement form the nearby area Occupational health & safety issue of working labor	- 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	**Construction Phase** GRM for labor and community	**Construction phase** Contractor **Operational phase** PHED

Sr. No.	Activity	Potential Impacts	Mitigation Measures	Monitoring & Reporting Frequency	Responsibility
			unit including an adequate supply of sterilized dressing material and appliances.		
		Operation Phase Employment opportunities Awareness to local people to emergency situation Gender Issues, Gender inclusion GBS and VAC related impacts	- Community liaison will be maintained during the construction stage and GRM will be developed and ensure the accessibility to the local community and labor.		

5 PICTORIAL PROFILE OF PROJECT SITES

5.1 Abdul Hameed Junejo Water Supply Scheme, Taluka Badin

5.2 Kario Gahanwar Water Supply Scheme, Taluka SF Rahu, District Badin

5.3 Haji Lakhano Mandarani Water Supply Scheme, Taluka Matli

5.4 Urban Drainage Scheme, Taluka Talhar District Badin

5.5 Urban Drainage Scheme, Taluka Tando Bago, District Badin

5.6 Water Supply Scheme Rehmanabad Bandhi Town Taluka Daur District Badin

6 ENVIRONMENTAL AND SOCIAL IMPLEMENTATION BUDGET

There are total 45 schemes in District Badin in which 13 are Drainage Schemes and 32 are water supply schemes. Environmental Quality Analysis for Air Quality Monitoring, Testing of Water and Wastewater Quality and Noise Level Determination will be conducted at each sub-project site, starting and at completion of the sub-projects. The detail of cost has been given in table below. It is worthy to mention here that sub-projects are in Government owned land and there will be no social issue during the rehabilitation work.

Table 7: Environmental Compliance Cost

Item No.	Item	Rational	Frequency	Average Rate (Rs.)/unit*	Site-wise Quantity	No of units/sites	Total Quantity	Estimated Amount (Rs.)
A. Environmental Analysis at Start of Civil Works								
1	Wastewater	1 Sample from Each Drainage Scheme	Once at the Start of Construction	17,000	1	13	13	221,000
2	Drinking Water	One Sample from each water supply scheme		15,000	1	32	32	480,000
3	Ambient Air	1 Sample from each subproject scheme		15,000	1	45	45	675,000
4	Ambient Noise	1 Sample from each subproject scheme		1,000	1	45	45	45,000
							Sub Total – A	**1,200,000**
B. Environmental Analysis Cost at Completion Phase (18 months)								
1	Drinking Water	One from camp area at each water supply scheme site	Once at the End of Construction	15,000	1	32	32	480,000
2	Wastewater	1 Sample from Each Drainage Scheme		17,000	1	13	13	221,000
3	Generators/Stack Emission (If available)	One Sample from construction site		10,000	1	45	45	450,000
4	Ambient Air	One from the camp area		15,000	1	45	45	675,000
5	Ambient Noise	One from the camp area		1,000	1	45	45	45,000
6	Mobilization Charges	At each water supply and drainage scheme		10,000	1	45	45	450,000
							Sub Total – B	**2,321,000**
C. EHS Management								
1	Personal Protective Equipment		Bi annual	6,000	1	45	45	270,000
2	Waste Disposal from Construction Sites						Lump sum	100,000

Item No.	Item	Rational	Frequency	Average Rate (Rs.)/unit*	Site-wise Quantity	No of units/sites	Total Quantity	Estimated Amount (Rs.)
3	Project dissemination materials such as banners, flayers, notice board etc.			10000	1	45	45	450,000
							Sub Total - C	**820,000**
D. EHS Administrative Cost								
1	Training/Capacity Building (Environment, Social, Gender, & OHS)		50 persons	20,000	1	45	45	900,000
2	Social Expert (for social compliance & GRM implementation) Salary			120,000	18	1	18	2,160,000
3	GRM running & General Community support needs (if any)						Lump sum	500,000
4	Environmental & OHS Officer Salaries (120 thousand for each person)			120,000	18	1	18	2,160,000
							Sub Total - D	**5,720,000**
							TOTAL OF (A TO D)	**10,061,000**

*** Schemes wise testing will be performed at start of civil works**

7 OPERATION AND MAINTENANCE (O&M)

Operation and maintenance (O&M) of Water Supply (WS) and Drainage Systems is a critical task that ensures the continued provision of safe and reliable water and drainage services to communities. O&M activities can be divided into two main categories: preventive maintenance and corrective maintenance.

Preventive maintenance is carried out on a regular basis to prevent problems from occurring. This includes activities such as cleaning and inspecting pipes, valves, and other equipment; lubricating the moving machines etc. Corrective maintenance is carried out to address problems that have already occurred. This includes activities such as repairing broken pipes, replacing damaged equipment, and clearing blockages in drainage systems. In addition, the PHED should also ensure timely procurement of disinfectant chemicals for disinfection of the water and keep a sufficient stock of such chemicals so that there is no interruption in making the water safe for human consumption.

O&M of WS and Drainage Systems is a complex and challenging task. It requires a skilled workforce, a well-maintained inventory of spare parts, and a comprehensive set of procedures and documentation. However, the benefits of effective O&M are significant. By preventing problems from occurring and addressing problems quickly, O&M can help to ensure the continued provision of safe and reliable water services to communities. After completion of rehabilitation work, the project will be handed over to the PHED who will operate and maintain the project. PHED department has technical staff for operation and maintenance of proposed rehabilitation schemes. Moreover, GoS yearly allocates substantial budget for operation and maintenance of these schemes. After rehabilitation these schemes will be operationalized under PHED through its O&M section which is adequately staffed with required skills and expertise. Training of these staff would be required to operate new machinery installed during rehabilitation.

7.1 Key aspects of O&M for WSS and Drainage systems:

7.1.1 Operation:

i. Regular monitoring of water sources, such as reservoirs, wells, or treatment plants, to ensure a consistent water supply.
ii. Operation of pumps, valves, and control systems to regulate the flow of water through the distribution network.
iii. Monitoring and maintaining water pressure levels within acceptable limits.
iv. Disinfecting the water all the times prior to supplying to the consumers.
v. Managing water quality, including regular testing and treatment to ensure compliance with health and safety standards.
vi. Coordinating with the local community and consumers to address their water supply needs and concerns.

7.1.2 Maintenance

i. Routine inspection of pipelines, valves, and fittings to identify and repair leaks, cracks, or any other damages.

ii. Clearing blockages in pipelines, channels, and drains to maintain an unobstructed flow of water.
iii. Cleaning and desilting of reservoirs, tanks, and drainage channels to prevent sedimentation and maintain capacity. After every cleanup operation, the tanks, reservoirs and / or pipelines must be disinfected prior to putting them back to use.
iv. Repair and maintenance of water treatment plants, pumping stations, and other infrastructure components.
v. Regular calibration and maintenance of measuring instruments and control systems.
vi. Periodic maintenance of equipment such as pumps, motors, and generators.

7.1.3 Emergency Response

i. Developing contingency plans and emergency response protocols to address unexpected events such as equipment failures, natural disasters, or water contamination incidents.
ii. Establishing a communication system to notify the public and relevant authorities in case of emergencies.
iii. Rapid response and repair of damages during emergencies to restore the system's functionality as quickly as possible.

7.1.4 Water Conservation

i. Implementing water conservation measures, such as promoting public awareness campaigns, encouraging responsible water usage, and identifying and repairing water wastage points.
ii. Monitoring and managing water losses and leakages in the distribution network.
iii. Regular assessment and optimization of the system to reduce energy consumption and improve overall efficiency.

7.1.5 Data Management

i. Maintaining comprehensive records of system performance, maintenance activities, and water quality data.
ii. Utilizing data analysis and predictive modeling to optimize the operation and maintenance activities.
iii. Incorporating modern technologies, such as remote sensing, real-time monitoring systems, and data analytics, to improve decision-making and efficiency.

7.1.6 Documentation and Handover

i. Compile project documentation (operation and maintenance manuals, as-built drawings, warranties).
ii. Hand over documentation to the PHED for future reference.

7.1.7 Facilities Management

i. Establish a comprehensive facilities management plan.
ii. Outline responsibilities, protocols, and schedules for maintenance, inspections, repairs, and upgrades.

7.1.8 Staffing and Training

i. Increase adequate staffing.
ii. Provide necessary training for personnel deputed for O&M.
iii. Increase maintenance technicians, engineers, custodial staff, security personnel, and administrative support.

7.1.9 Preventive Maintenance

i. Implement a preventive maintenance program.
ii. Conduct regular inspections, cleaning, lubrication, adjustments, and equipment testing.

7.1.10 Repairs and Corrective Maintenance

i. Respond promptly to issues and conduct repairs.
ii. Establish an inventory of spare parts.
iii. Maintain relationships with reliable contractors or suppliers.

7.1.11 Safety and Compliance

i. Enforce safety protocols.
ii. Conduct regular inspections and provide safety training.
iii. Ensure compliance with relevant codes and regulations.

7.1.12 Energy Efficiency and Sustainability

i. Promote energy efficiency and sustainable practices.
ii. Implement energy management systems.
iii. Optimize equipment performance.
iv. Utilize renewable energy sources and green building practices.

7.1.13 Asset Management

i. Track and monitor equipment and systems.
ii. Maintain an asset inventory.
iii. Conduct periodic assessments and plan for replacements or upgrades.

7.1.14 Stakeholder Communication

i. Establish clear communication channels.
ii. Receive and address maintenance requests.
iii. Maintain effective communication with stakeholders.

7.1.15 Continuous Improvement

i. Regularly evaluate and seek feedback.
ii. Analyze maintenance records.
iii. Conduct user surveys.
iv. Involve the maintenance team in identifying areas for improvement.

7.1.16 Cleaning and maintenance of solar system

i. Regularly clean solar panels to remove dust, debris, and dirt.
ii. Inspect for any damage or wear and tear on the panels.
iii. Check the wiring and connections for any loose or damaged parts.
iv. Monitor the performance of the solar system to ensure it is generating the expected amount of energy.
v. Conduct preventive maintenance such as tightening bolts and screws, and replacing faulty components.
vi. Schedule professional inspections and maintenance by qualified solar technicians.
vii. Keep records of cleaning and maintenance activities for future reference.
viii. Follow manufacturer's guidelines and recommendations for cleaning and maintenance.
ix. Consider scheduling cleaning during periods of low sunlight or in cooler temperatures for safety reasons.
x. Ensure the safety of personnel when performing maintenance tasks on the solar system.

7.1.17 Regular maintenance and monitoring of Hypo-chlorinator

i. Routine inspections: Conduct regular inspections of the hypo-chlorinator system to identify any visible signs of damage, leaks, or malfunctions. Inspect all components, including injection systems, pipes, valves, and storage tanks.
ii. Calibration of equipment: Calibrate the hypo-chlorinator equipment periodically to ensure accurate dosing or injection of chlorine. Follow the manufacturer's guidelines for calibration procedures and frequency.
iii. Replacement of parts: Replace worn-out or damaged parts of the hypo-chlorinator system as needed. This may include valves, seals, gaskets, tubing, or other components. Use genuine manufacturer-approved parts for replacements.
iv. Monitoring chlorine levels: Regularly monitor chlorine levels in the water supply to ensure that the desired disinfection levels are being maintained. This can be done through manual sampling and testing or by using automated monitoring systems. Adjust the hypo-chlorinator settings if necessary to achieve the desired chlorine concentration.
v. System optimization: Continuously assess the performance of the hypo-chlorinator system and optimize its operation for efficiency and effectiveness. This may involve adjusting dosing rates, ensuring proper mixing of chlorine, optimizing contact time, and considering factors such as water temperature and flow rate.
vi. Documentation: Maintain detailed records of maintenance activities, inspections, calibrations, and chlorine monitoring results. This documentation serves as a reference for future maintenance, helps track system performance, and aids in regulatory compliance.
vii. Training and awareness: Regularly train and update the personnel responsible for operating and maintaining the hypo-chlorinator system. Ensure they are aware of proper maintenance procedures, safety protocols, emergency response measures, and any updates or changes in regulations.

7.1.18 PHED Responsibility

i. PHED solely responsible for operation and maintenance.
ii. Customize O&M plans for long-term success.

Overall, O&M of WSS and Drainage System requires a combination of technical expertise, regular monitoring, preventive maintenance, and prompt response to ensure the uninterrupted supply of clean water and effective wastewater management. The Public Health Engineering Division (PHED) would typically be responsible for the operation and maintenance of public infrastructure projects related to Water Supply and Drainage System. They would be the primary entity overseeing the operation and maintenance activities to ensure the functionality and sustainability of the constructed assets. By considering these aspects and implementing effective O&M practices, the project can function optimally and provide long-term benefits to its users and stakeholders.

7.2 Key benefits of effective O&M of WSS and Drainage Systems

i. **Improved water quality:** O&M activities can help to prevent the contamination of water supplies, which can lead to waterborne diseases.

ii. **Increased water availability**: O&M activities can help to reduce leakages and improve the efficiency of water distribution systems, which can lead to increased water availability for communities.

iii. **Reduced flooding:** O&M activities can help to prevent flooding by clearing blockages in drainage systems and improving the capacity of storm water management systems.

iv. **Improved public health:** O&M activities can help to prevent the spread of waterborne diseases by improving the quality of water supplies and reducing the risk of flooding.

v. **Increased property values:** Communities with well-maintained WSS and drainage systems typically have higher property values.

The cost of O&M can be significant, but the benefits far outweigh the costs. By investing in effective O&M, communities can ensure the continued provision of safe and reliable water services to their residents.

ANNEXURE 1:

Environmental & Social Screening Checklist of All Schemes of District Badin

Annexure 1: Environmental & Social Screening Checklist of All Schemes of District Badin

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP) ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT		
Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes	
Sector:	Public Health Engineering Department (PHED)	
Subproject Location:	Badin, Sindh	
Schemes Location:	Nindo Shaher Drainage Scheme (Taluka Badin)	Coordinates: 24°38'09.2"N 69°02'28.0"E
Date	14/8/2023	

Screening Question	***Yes***	***No***	***Remarks***
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	The site is devoid of vegetation. No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?	✓		The risk of contaminating drinking water sources would be short-term only during the construction phase of rehabilitation works of existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Screening Question	*Yes*	*No*	*Remarks*
Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Screening Question	*Yes*	*No*	*Remarks*
Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No such category is present in the subproject area.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities or in a close periphery.
Has **stakeholder engagement** taken place in the proposed subproject areas?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Were **vulnerable** groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Community requested to conduct a comprehensive needs assessment to understand the water supply demands and challenges in the area.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Luwari Sharif Drainage (Taluka Badin) Coordinates: 24°33'31.0"N 68°54'17.5"E
Date	14/8/2023

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Minor impacts only during construction
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Minor impacts only during construction
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.

Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities which exist in a demarcated area.

Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		The community asked about the operations and how they will be benefited by the subproject.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, women of the subproject area were taken onboard also.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Urban Drainage Scheme Talhar (Taluka Talhar) Coordinates: 24°53'16.7"N 68°48'36.0"E
Date	15/8/2023

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.

Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject	✓		Minor impacts only during construction.

intervention activities, particularly during the construction phase?			
Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Will community Health and Safety be impacted due to construction?
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, females were happy that sufficient supply of water will be available to the subproject area.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Rajo Khanani Drainage Scheme Coordinates: 24°58'53.7"N 68°51'07.7"E (Taluka Talhar)
Date	15/8/2023

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies
Will the proposed subproject interventions pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Minor impacts only during construction
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Minor impacts only during construction
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.

Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?		✓	Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities which exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.

Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Community requested to conduct a comprehensive needs assessment for the supply of drinking water as the population has increased but water supply and drainage networks are not available.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, women of the subproject area were taken onboard also.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Pangrio Drainage Scheme (Taluka Tando Bago) Coordinates: 24°45'37.5"N 69°11'45.8"E
Date	17/8/2023

Screening Question	***Yes***	***No***	***Remarks***
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.

Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject	✓		Minor impacts only during construction.

intervention activities, particularly during the construction phase?			
Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Community members asked about the operations of the drainage Scheme and the benefits from it.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, there is no attention to the literacy rate and education system of children.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes	
Sector:	Public Health Engineering Department (PHED)	
Subproject Location:	Badin, Sindh	
Schemes Location:	Urban Drainage Scheme Tando Bago	Coordinates: 24°47'25.3"N 68°58'15.4"E
Date	17/8/2023	

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion.

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities or in a close periphery.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Community requested to resolve the specific health and hygiene challenges in the community due to stagnant water.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to the unavailability of a drainage network especially during monsoon and after it.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Urban Drainage Scheme New Abad (Taluka Tando Bago) Coordinates: 24°46'36.9"N 68°57'39.2"E
Date	17/8/2023

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies
Will the proposed subproject interventions pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		negligible impacts only during construction
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts only during construction
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.

Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities which exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.

Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		The community pointed out that drainage networks are not available and if available are in bad condition or blocked.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, women of the subproject area were taken onboard also. Mostly concerns were related to damaged or unavailable drainage lines.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Sub project:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Khoski Drainage Scheme (Taluka Tando Bago) Coordinates: 24°38'21.3"N 69°07'12.4"E
Date	17/8/2023

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies
Will the proposed subproject interventions pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		negligible impacts only during construction
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts only during construction
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.

Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities which exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.

Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		The community pointed out that drainage networks are not available and if available are in bad condition or blocked.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, women of the subproject area were taken onboard also.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Shaheed Fazal Rahu (Golarchi) Drainage Scheme (Taluka Shaheed Fazal Rahu) Coordinates: 24°39'04.5"N 68°32'17.1"E
Date	16/8/2023

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies
Will the proposed subproject interventions pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		negligible impacts only during construction
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts only during construction
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.

Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities which exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject	✓		Minor impacts only during construction.

intervention activities, particularly during the construction phase?			
Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		The community pointed out that drainage networks are not available and if available are in bad condition or blocked.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, women shared that stagnant water or wastewater causes skin irritations and other diseases.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes	
Sector:	Public Health Engineering Department (PHED)	
Subproject Location:	Badin, Sindh	
Schemes Location:	Khorwah Drainage Scheme (Taluka Shaheed Fazal Rahu)	Coordinates: 24°45'17.0"N 68°24'53.5"E
Date	16/8/2023	

Screening Question	***Yes***	***No***	***Remarks***
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion.

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction. Proper mitigations must be implemented so that social receptors would not get disturbed.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities or in a close periphery.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Community requested to provide water supply lines and drainage network where it is not available.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to the unavailability of a drainage network especially during monsoon and after it.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes	
Sector:	Public Health Engineering Department (PHED)	
Subproject Location:	Badin, Sindh	
Schemes Location:	Manik Laghari Drainage Scheme (Taluka Matli)	**Coordinates:** 25°13'32.3"N 68°44'43.8"E
Date	19/8/2023	

Screening Question	***Yes***	***No***	***Remarks***
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.

Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities which exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.

Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Community members expressed concern about the overall impact of the water supply and drainage system on public health and sanitation.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, their main concern was how they will be benefited by the schemes.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Haji Abdullah Drainage Scheme **Coordinates:** 25°14'35.7"N 68°55'20.1"E (Taluka Matli)
Date	19/8/2023

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.

Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion.
Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction. Proper mitigations must be implemented so that social receptors would not get disturbed.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities in a close periphery.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		The community also raised concerns about the construction activities associated with water supply and drainage schemes can cause disruptions to daily life, including noise, dust, traffic congestion, and temporary service interruptions.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes. They were concerned about health and hygiene issues due to unavailability or improper supply of water as well as stagnant wastewater.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Molvi Sultan Ahmed Drainage Scheme (Taluka Matli) **Coordinates:** 25°07'04.5"N 68°54'28.6"E
Date	19/8/2023

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.

Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion.
Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject	✓		Minor impacts only during construction. Proper mitigations must be implemented so

intervention activities, particularly during the construction phase?			that social receptors would not get disturbed.
Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities in a close periphery.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		The community was happy as the associated subproject works will improve access to clean water, proper sanitation facilities, and effective drainage systems in the area.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes. They were concerned about health and hygiene issues due to unavailability or improper supply of water.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes		
Sector:	Public Health Engineering Department (PHED)		
Subproject Location:	Badin, Sindh		
Schemes Location:	Urban WSS Badin (Taluka Badin)	**Coordinates:**	24°39'08.2"N 68°50'30.0"E
Date	19/8/2023		

Screening Question	***Yes***	***No***	***Remarks***
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion.

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings. A canal is flowing almost 180 meters in the east.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction. Proper mitigations must be implemented so that social receptors would not get disturbed.
Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities or in a close periphery.

Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Community requested to conduct a comprehensive needs assessment to understand the specific education gaps and challenges in the community.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes. Females were concerned about their mobility for daily purposes during construction.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes		
Sector:	Public Health Engineering Department (PHED)		
Subproject Location:	Badin, Sindh		
Schemes Location:	Kadhan WSS (Taluka Badin)	**Coordinates:**	24°29'10.0"N 68°59'03.9"E
Date	14/8/2023		

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies
Will the proposed subproject interventions pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		negligible impacts only during construction
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts only during construction
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities which exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.

Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Community members showed concerns about the overall impact of the water supply and drainage schemes on public health and sanitation.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, women shared that stagnant water or wastewater causes skin irritations and other diseases.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes		
Sector:	Public Health Engineering Department (PHED)		
Subproject Location:	Badin, Sindh		
Schemes Location:	Nindo Shaher WSS (Taluka Badin)	**Coordinates:**	24°38'31.4"N 69°02'27.1"E
Date	14/8/2023		

Screening Question	***Yes***	***No***	***Remarks***
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies
Will the proposed subproject interventions pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		negligible impacts only during construction
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts only during construction
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities which exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.

Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		The community pointed out that drainage networks are not available and if available are in bad condition or blocked.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, women shared that stagnant water or wastewater causes skin irritations and other diseases. There is also unavailability of educational facilities like higher school and colleges for girls.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes		
Sector:	Public Health Engineering Department (PHED)		
Subproject Location:	Badin, Sindh		
Schemes Location:	Ali Murad Chandio WSS (Taluka Badin)	**Coordinates:**	24°34'33.2"N 68°59'06.7"E
Date	13/8/2023		

Screening Question	***Yes***	***No***	***Remarks***
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings. A canal is flowing westward at a distance of 30 meters.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.

Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		The community urged to provide semi-skilled and unskilled jobs for local labor first.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members showed their reservations about their privacy during construction.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes	
Sector:	Public Health Engineering Department (PHED)	
Subproject Location:	Badin, Sindh	
Schemes Location:	Seerani WSS (Taluka Badin)	**Coordinates:** 24°30'04.6"N 68°47'22.1"E
Date	13/8/2023	

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.

Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Yes, residents investigated how disruptions to daily life, including noise, dust, traffic congestion, and temporary service interruptions will be mitigated.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, engaging local people during project activities and considering the women's privacy not be affected.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes		
Sector:	Public Health Engineering Department (PHED)		
Subproject Location:	Badin, Sindh		
Schemes Location:	Tando Gamoon WSS (Taluka Badin)	**Coordinates:**	24°40'46.3"N 68°53'39.3"E
Date	13/8/2023		

Screening Question	***Yes***	***No***	***Remarks***
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.

Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		The Stakeholder shows their concern regarding the impacts during the construction stage on waste management and land acquisition.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, there is no attention to the literacy rate and education system of children.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes		
Sector:	Public Health Engineering Department (PHED)		
Subproject Location:	Badin, Sindh		
Schemes Location:	Abdul Hameed Junejo WSS (Taluka Badin)	**Coordinates:**	24°32'42.2"N 68°47'14.3"E
Date	13/8/2023		

Screening Question	***Yes***	***No***	***Remarks***
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies
Will the proposed subproject interventions pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		negligible impacts only during construction
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts only during construction
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.

Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings. A canal is flowing at a distance of 120 meters westward.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities which exist in a demarcated area.
Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.

Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Community members showed concerns about the overall impact of the water supply and drainage schemes on public health and sanitation.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, women shared that stagnant water or wastewater causes skin irritations and other diseases.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes		
Sector:	Public Health Engineering Department (PHED)		
Subproject Location:	Badin, Sindh		
Schemes Location:	Luari Sharif WSS (Taluka Badin)	**Coordinates:**	24°33'22.7"N 68°54'20.1"E
Date	13/8/2023		

Screening Question	***Yes***	***No***	***Remarks***
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings. A canal is flowing at a distance of 195 meters southeast.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.

Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Yes, community was concerned about how the maintenance and sustainability of drainage schemes will be ensured.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to unavailability of drainage network.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Ashraf Abad WSS (Taluka Badin) **Coordinates:** 24°32'57.7"N 68°52'08.2"E
Date	13/8/2023

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.

Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings. A canal is flowing at a distance of 33 meters north.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.

Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Yes, Will the drainage scheme require long-term maintenance? How sustainability will be ensured?
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to unavailability of drainage network.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes		
Sector:	Public Health Engineering Department (PHED)		
Subproject Location:	Badin, Sindh		
Schemes Location:	Lal Bux Notkani WSS (Taluka Badin)	**Coordinates:**	24°31'36.7"N 68°51'08.0"E
Date	14/8/2023		

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies
Will the proposed subproject interventions pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		negligible impacts only during construction
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts only during construction
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings. A canal is flowing at a distance of 49 meters west.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities which exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Community members showed concerns about the overall impact of the water supply and drainage schemes on public health and sanitation.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, women shared that stagnant water or wastewater causes skin irritations and other diseases.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes	
Sector:	Public Health Engineering Department (PHED)	
Subproject Location:	Badin, Sindh	
Schemes Location:	Molvi Hussain Soomro WSS (Taluka Badin)	**Coordinates:** 24°38'10.6"N 68°52'01.2"E
Date	14/8/2023	

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	The site is devoid of vegetation. No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Will the drainage scheme require long-term maintenance? How sustainability will be ensured?
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to unavailability of drainage network.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Allah Dino Jamali WSS (Taluka Badin) **Coordinates:** 24°31'20.3"N 68°56'04.2"E
Date	14/8/2023

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion.

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?	✓		Yes, a canal is flowing at a distance of 40-60 meters away from proposed water supply scheme.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction. Proper mitigations must be implemented so that social receptors would not get disturbed.
Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities or in a close periphery.

Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Community requested to resolve issues related to water supply lines and stagnant wastewater after rains
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes. Females were concerned about their mobility for daily purposes during construction.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Yar Muhammad Bhurgri WSS (Taluka Badin) **Coordinates:** 24°39'18.7"N 69°01'40.3"E
Date	14/8/2023

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	The site is devoid of vegetation. No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?	✓		Yes, a canal "Aamir Jee Branch" is flowing adjacent to sub-project site approximately 103 meters away from sub-project site.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Will the drainage scheme require long-term maintenance?
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage network.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes	
Sector:	Public Health Engineering Department (PHED)	
Subproject Location:	Badin, Sindh	
Schemes Location:	Urban WSS Talhar (Taluka Talhar)	**Coordinates:** 24°53'13.9"N 68°49'18.7"E
Date	15/8/2023	

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings. Phuleli canal is flowing in northeast at a distance of 527 meters.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Stakeholders showed a positive attitude and said that it would uplift the socio-economic condition of the community as the drainage system was very old and ineffective.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage networks especially during and after monsoon season.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes		
Sector:	Public Health Engineering Department (PHED)		
Subproject Location:	Badin, Sindh		
Schemes Location:	Rajo Khanani WSS (Taluka Talhar)	**Coordinates:**	24°58'59.2"N 68°50'55.5"E
Date	15/8/2023		

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings. A canal is flowing in north at a distance of 294 meters.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Stakeholders showed a positive attitude and said that it would uplift the socio-economic condition of the community as the drainage system was very old and ineffective.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage networks especially during and after monsoon season.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes	
Sector:	Public Health Engineering Department (PHED)	
Subproject Location:	Badin, Sindh	
Schemes Location:	Rip WSS (Taluka Talhar)	**Coordinates:** 24°47'32.3"N 68°48'03.3"E
Date	18/8/2023	

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Stakeholders showed a positive attitude and said that it would uplift the socio-economic condition of the community as the drainage system was very old and ineffective.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage networks especially during and after monsoon season.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes	
Sector:	Public Health Engineering Department (PHED)	
Subproject Location:	Badin, Sindh	
Schemes Location:	Pangrio WSS (Taluka Tando Bago)	**Coordinates:** 24°45'48.7"N 69°11'37.3"E
Date	16/8/2023	

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Stakeholders showed a positive attitude and said that it would uplift the socio-economic condition of the community as the drainage system was very old and ineffective.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage networks especially during and after monsoon season.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes		
Sector:	Public Health Engineering Department (PHED)		
Subproject Location:	Badin, Sindh		
Schemes Location:	Urban WSS Tando Bago (Taluka Tando Bago)	**Coordinates:**	24°47'14.8"N 68°57'42.4"E
Date	16/8/2023		

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings. A canal is flowing in side by side to subproject site.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Stakeholders showed a positive attitude and said that it would uplift the socio-economic condition of the community as the drainage system was very old and ineffective.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage networks especially during and after monsoon season.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes		
Sector:	Public Health Engineering Department (PHED)		
Subproject Location:	Badin, Sindh		
Schemes Location:	Khoski WSS (Taluka Tando Bago)	**Coordinates:**	24°38'34.5"N 69°06'17.8"E
Date	16/8/2023		

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Stakeholders showed a positive attitude and said that it would uplift the socio-economic condition of the community as the drainage system was very old and ineffective.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage networks especially during and after monsoon season.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Nabi Bux Rustamani WSS (Taluka Tando Bago) **Coordinates:** 24°53'40.8"N 68°59'56.4"E
Date	16/8/2023

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings. A canal is flowing southern side at a distance of 36 meters from subproject site.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Stakeholders showed a positive attitude and said that it would uplift the socio-economic condition of the community as the drainage system was very old and ineffective.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage networks especially during and after monsoon season.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Hayat Khashkheli WSS (Taluka Tando Bago) **Coordinates:** 24°55'52.9"N 69°16'34.2"E
Date	14/8/2023

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Stakeholders showed a positive attitude and said that it would uplift the socio-economic condition of the community as the drainage system was very old and ineffective.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage networks especially during and after monsoon season.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Sangi Pharo WSS (Taluka Tando Bago) **Coordinates:** 24°56'23.3"N 69°08'09.1"E
Date	14/8/2023

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Stakeholders showed a positive attitude and said that it would uplift the socio-economic condition of the community as the drainage system was very old and ineffective.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage networks especially during and after monsoon season.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Behra Memon WSS (Taluka Tando Bago) **Coordinates:** 24°43'29.1"N 68°59'53.2"E
Date	18/8/2023

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings. A canal is flowing side by side to subproject site.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Stakeholders showed a positive attitude and said that it would uplift the socio-economic condition of the community as the drainage system was very old and ineffective.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage networks especially during and after monsoon season.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Wali Muhammad Malkani WSS (Taluka Tando Bago) **Coordinates:** 24°52'29.1"N 69°15'18.8"E
Date	18/8/2023

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Stakeholders showed a positive attitude and said that it would uplift the socio-economic condition of the community as the drainage system was very old and ineffective.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage networks especially during and after monsoon season.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Shadi Large WSS (Taluka Tando Bago) **Coordinates:** 24°37'47.6"N 69°10'43.5"E
Date	18/8/2023

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings. A canal is flowing side by side to subproject site.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Stakeholders showed a positive attitude and said that it would uplift the socio-economic condition of the community as the drainage system was very old and ineffective.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage networks especially during and after monsoon season.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes		
Sector:	Public Health Engineering Department (PHED)		
Subproject Location:	Badin, Sindh		
Schemes Location:	Pahar Mari WSS (Taluka Tando Bago)	**Coordinates:**	24°45'42.4"N 68°57'21.7"E
Date	18/8/2023		

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Stakeholders showed a positive attitude and said that it would uplift the socio-economic condition of the community as the drainage system was very old and ineffective.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage networks especially during and after monsoon season.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Shaheed Fazal Rahu (Golarchi) WSS (Taluka Shaheed Fazal Rahu) **Coordinates:** 24°39'07.6"N 68°31'36.5"E
Date	19/8/2023

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings. A canal is flowing on the western side of the subproject area approximately 164 meters away.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Stakeholders showed a positive attitude and said that it would uplift the socio-economic condition of the community as the drainage system was very old and ineffective.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage networks especially during and after monsoon season.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Kario Gahanwar WSS (Taluka Shaheed Fazal Rahu) **Coordinates:** 24°48'36.2"N 68°36'28.6"E
Date	19/8/2023

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Stakeholders showed a positive attitude and said that it would uplift the socio-economic condition of the community as the drainage system was very old and ineffective.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage networks especially during and after monsoon season.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes		
Sector:	Public Health Engineering Department (PHED)		
Subproject Location:	Badin, Sindh		
Schemes Location:	Nabi Bux Muhajir WSS (Taluka Shaheed Fazal Rahu)	**Coordinates:**	25°06'06.1"N 68°46'04.5"E
Date	19/8/2023		

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Stakeholders showed a positive attitude and said that it would uplift the socio-economic condition of the community as the drainage system was very old and ineffective.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage networks especially during and after monsoon season.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Gulam Laghari WSS (Taluka Shaheed Fazal Rahu) **Coordinates:** 25°12'48.7"N 68°47'00.2"E
Date	16/8/2023

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Stakeholders showed a positive attitude and said that it would uplift the socio-economic condition of the community as the drainage system was very old and ineffective.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage networks especially during and after monsoon season.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Taj Muhammad Junejo WSS (Taluka Shaheed Fazal Rahu) **Coordinates:** 25°04'16.9"N 69°02'48.7"E
Date	16/8/2023

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Stakeholders showed a positive attitude and said that it would uplift the socio-economic condition of the community as the drainage system was very old and ineffective.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage networks especially during and after monsoon season.

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject:	Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector:	Public Health Engineering Department (PHED)
Subproject Location:	Badin, Sindh
Schemes Location:	Haji Lakhano Mandrani WSS (Taluka Shaheed Fazal Rahu) **Coordinates:** 25°05'15.4"N 68°59'33.9"E
Date	16/8/2023

Screening Question	*Yes*	*No*	*Remarks*
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of **clearance of vegetation** that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of **contaminating drinking water sources** due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Is there any potential **pollution source** in water supply network?		✓	No, as such no pollution sources have been identified but due to flood existing infrastructure has been affected causes pollution in drinking water supply.
Is there any potential source that can **damage drainage network**? Or Is it **affected by flood**?	✓		Yes, flood and improper maintenance are the potential sources of destruction of drainage network
Will the proposed subproject interventions **deplete groundwater** because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in **ambient air pollution**, including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in **ambient noise levels** and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the **SEQS**?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased **soil erosion?**		✓	Rehabilitation works do not involve any activity that will increase soil erosion

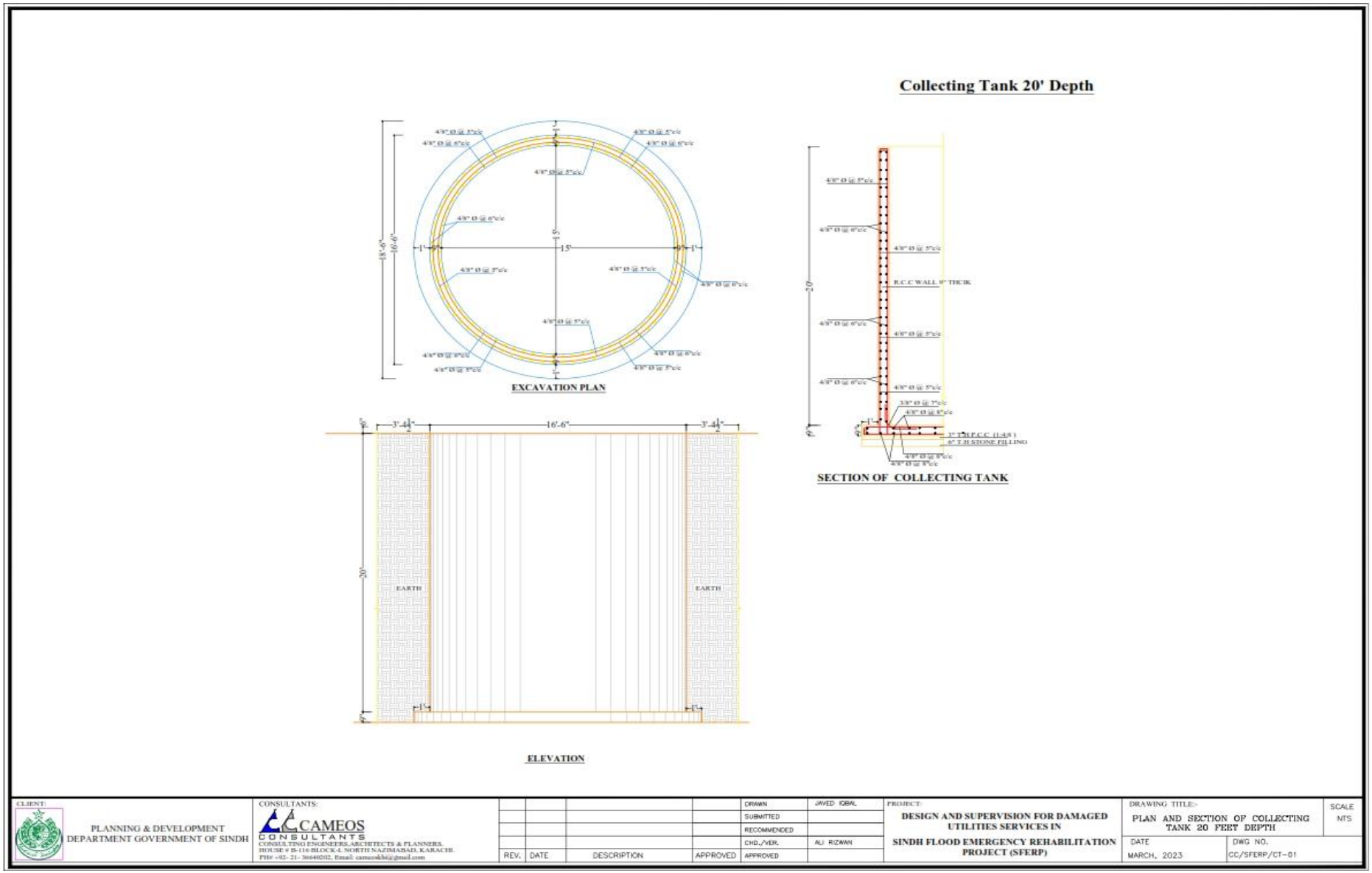
Will the proposed subproject interventions result in the generation of **hazardous and/or non-hazardous waste**?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for **subproject workers and communities** (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with **high natural hazard risk**? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on **habitats, ecosystems**, and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the **conversion of natural habitats**?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located **on or near sensitive environmental areas**, including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings. A canal is flowing in the south of Dumbalo goth (1.2 km).
Are the proposed subproject interventions activities likely to pose risks to any **endangered species?**		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve **land acquisition**?		✓	Subproject land is owned by GoS.
Are there any **forced labor or child labor** risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is **labor influx** (**outside labor force**) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will **local labor** be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any **temporary or permanent displacement** as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any **traffic-related issues** as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.

Are the proposed subproject activities likely to have **impacts on important religious/cultural heritage sites**?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past **security-related issues** at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has **stakeholder engagement** taken place in the proposed subproject areas?	✓		Stakeholders showed a positive attitude and said that it would uplift the socio-economic condition of the community as the drainage system was very old and ineffective.
Were **vulnerable groups** involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage networks especially during and after monsoon season.

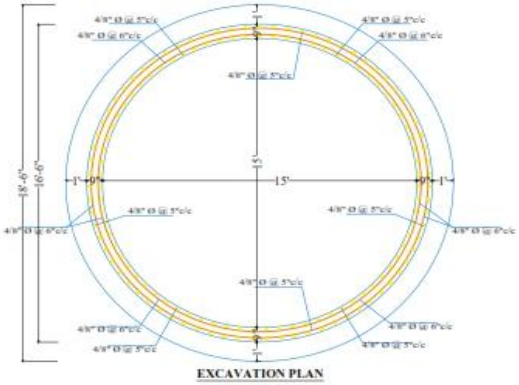
ANNEXURE 2:

Design Drawings of Water Supply Schemes & Drainage

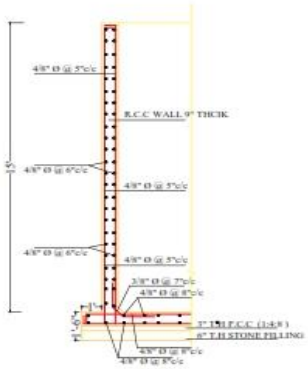
Annexure 2: Design Drawings of Water Supply Schemes & Drainage



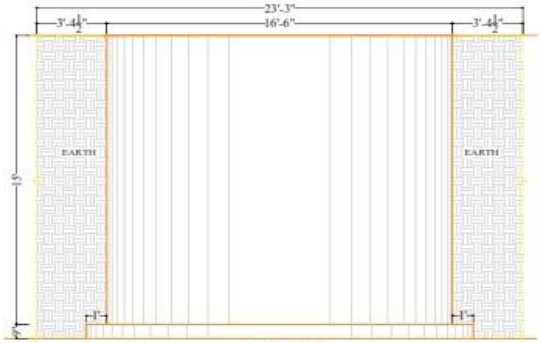
Collecting Tank 15' Depth



EXCAVATION PLAN



SECTION OF U.G.WATER TANK

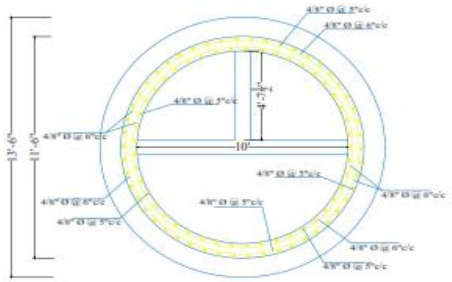


ELEVATION

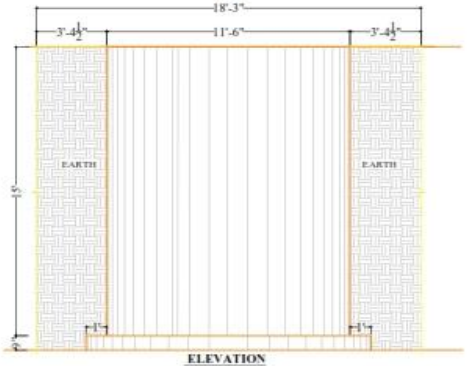
CLIENT: PLANNING & DEVELOPMENT DEPARTMENT GOVERNMENT OF SINDH	CONSULTANTS: CAMEOS CONSULTANTS CONSULTING ENGINEERS, ARCHITECTS & PLANNERS. HOUSE # B-116 BLOCK-4, NORTH NAZIMABAD, KARACHI. PBX: +92- 21- 36640202, Email: cameokhi@gmail.com			DRAWN	JAWED IQBAL
				SUBMITTED	
				RECOMMENDED	
				CHD./VER.	ALI RIZWAN
REV.	DATE	DESCRIPTION	APPROVED	APPROVED	

PROJECT: DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES IN SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)	DRAWING TITLE:- PLAN AND SECTION OF COLLECTING TANK 15 FEET DEPTH
	SCALE: NTS
	DATE: MARCH, 2023
	DWG NO.: CC/SFERP/CT-02

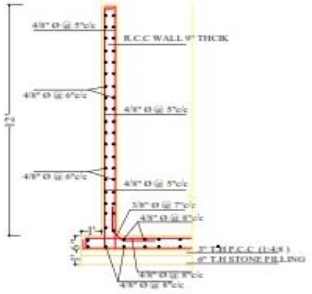
Collecting Tank 12' Depth



EXCAVATION PLAN

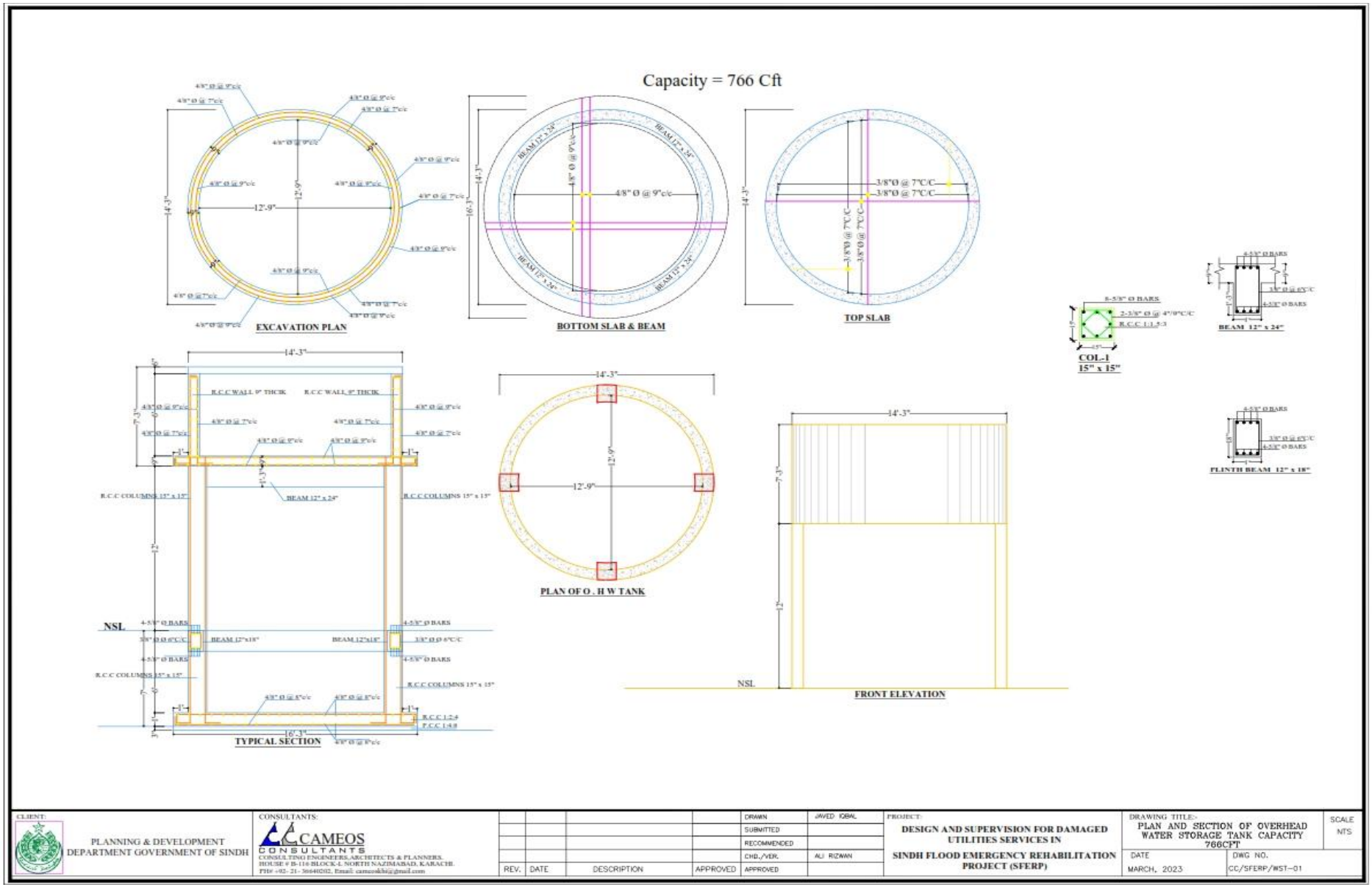


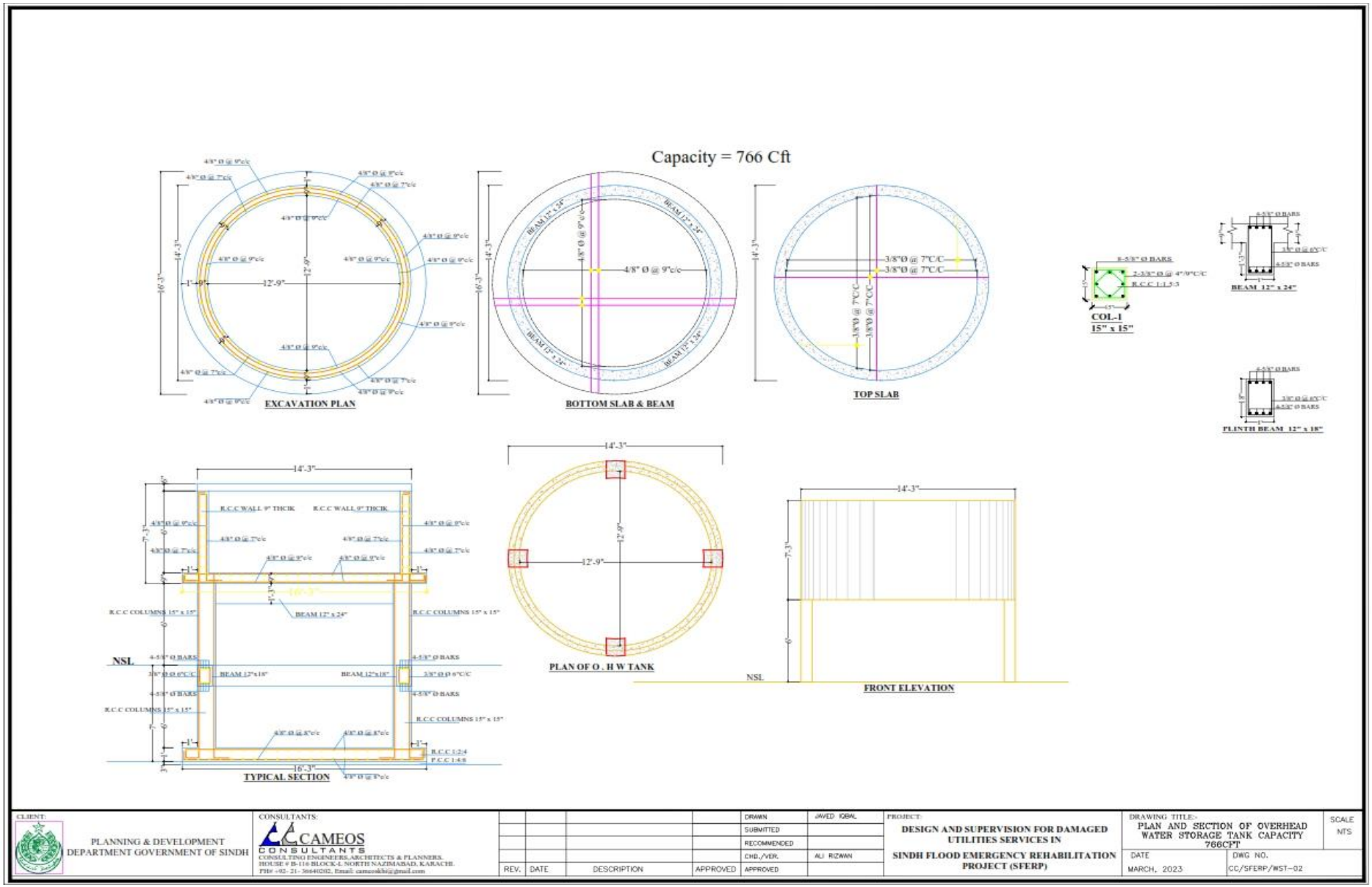
ELEVATION



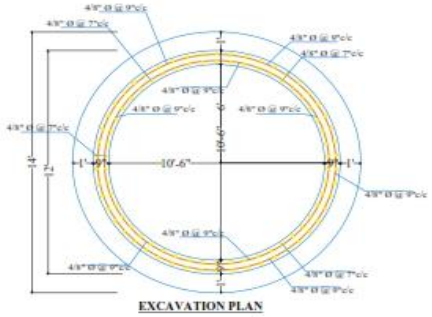
SECTION OF U.G.WATER TANK

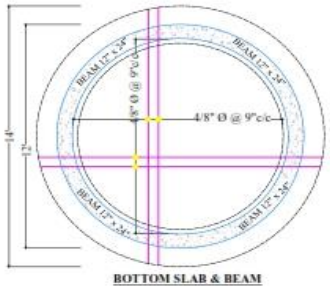
CLIENT: PLANNING & DEVELOPMENT DEPARTMENT GOVERNMENT OF SINDH	CONSULTANTS: CAMEOS CONSULTANTS CONSULTING ENGINEERS, ARCHITECTS & PLANNERS. HOUSE # B-116 BLOCK-L NORTH NAZIMABAD, KARACHI. PH# +92- 21- 36640202, Email: cameoskhi@gmail.com				DRAWN	JAVED IQBAL	PROJECT: DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES IN SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)	DRAWING TITLE:- PLAN AND SECTION OF COLLECTING TANK 12 FEET DEPTH	SCALE NTS
					SUBMITTED				
					RECOMMENDED				
					CHD./VER.	ALI RIZWAN		DATE MARCH, 2023	DWG NO. CC/SFERP/CT-03
	REV.	DATE	DESCRIPTION	APPROVED	APPROVED				

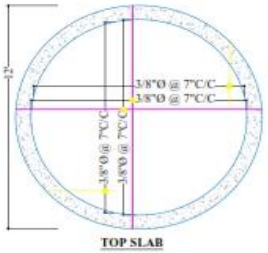

Capacity = 766 Cft
EXCAVATION PLAN
BOTTOM SLAB & BEAM
TOP SLAB
COL-1
15" x 15"
BEAM 12" x 24"
PLINTH BEAM 12" x 18"
PLAN OF O . H W TANK
FRONT ELEVATION
TYPICAL SECTION
NSL
PLANNING & DEVELOPMENT DEPARTMENT GOVERNMENT OF SINDH
CAMEOS CONSULTANTS
DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES IN
SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)
PLAN AND SECTION OF OVERHEAD WATER STORAGE TANK CAPACITY 766CFT
MARCH, 2023
CC/SFERP/WST-01

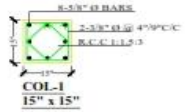

Capacity = 766 Cft
EXCAVATION PLAN
BOTTOM SLAB & BEAM
TOP SLAB
COL-1
15" x 15"
BEAM 12" x 24"
PLINTH BEAM 12" x 18"
TYPICAL SECTION
PLAN OF O . H W TANK
FRONT ELEVATION
NSL
PLANNING & DEVELOPMENT DEPARTMENT GOVERNMENT OF SINDH
CAMEOS CONSULTANTS
DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES IN
SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)
PLAN AND SECTION OF OVERHEAD WATER STORAGE TANK CAPACITY 766CFT
MARCH, 2023
CC/SFERP/WST-02
NTS

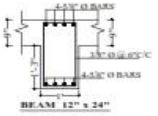
Capacity = 520 Cft

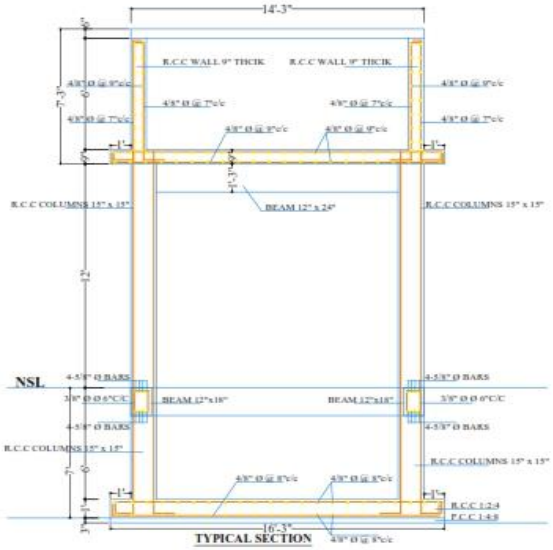


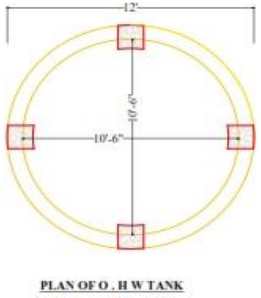


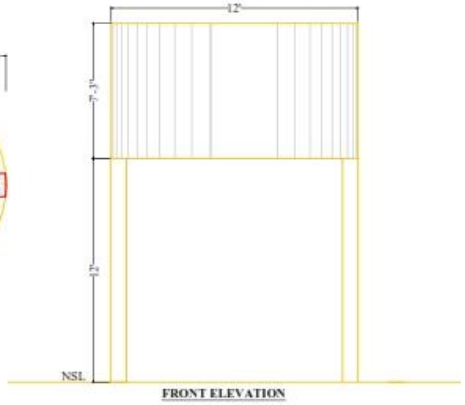


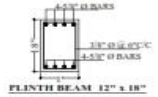






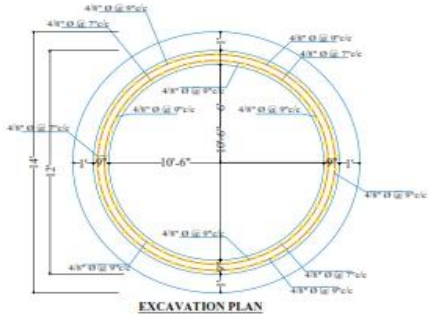


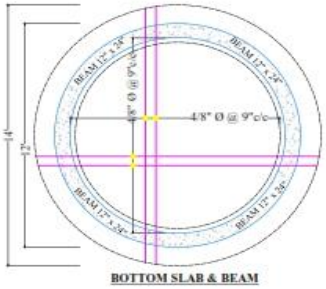


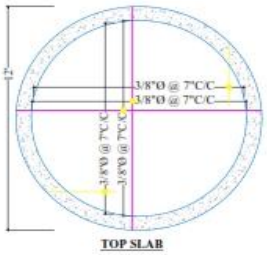


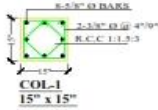
CLIENT: PLANNING & DEVELOPMENT DEPARTMENT GOVERNMENT OF SINDH	CONSULTANTS: CAMEOS CONSULTANTS, CONSULTING ENGINEERS, ARCHITECTS & PLANNERS, HOUSE # B-116 BLOCK-L NORTH NAZIMABAD, KARACHI. PBX +92-21-36640202, Email: cameoskhi@gmail.com					DRAWN	JAVED IQBAL	PROJECT: DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES IN SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)	DRAWING TITLE: PLAN AND SECTION OF OVERHEAD WATER STORAGE TANK CAPACITY 520CFT	SCALE NTS
						SUBMITTED				
						RECOMMENDED				
						CHD./VER.	ALI RIZWAN		DATE MARCH, 2023	DWG NO. CC/SFERP/WST-03
		REV.	DATE	DESCRIPTION	APPROVED	APPROVED				

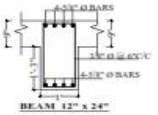
Capacity = 520 Cft

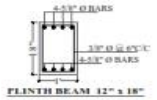


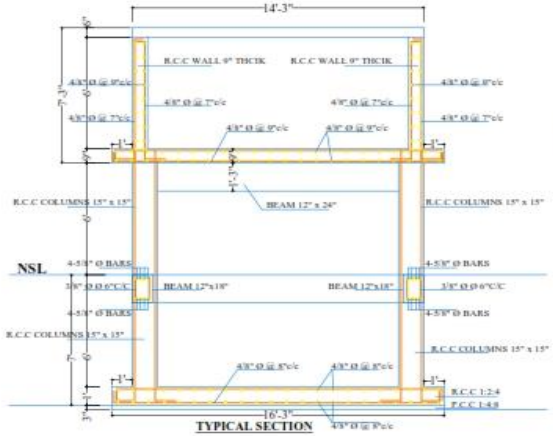


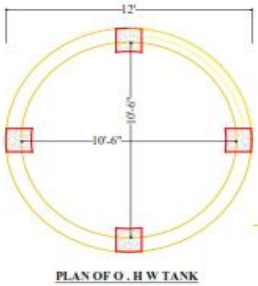


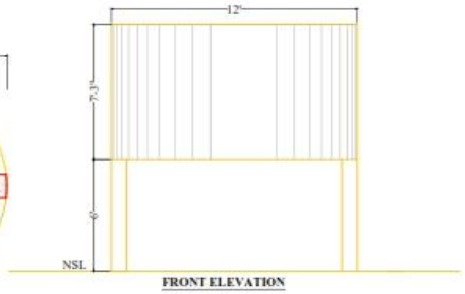






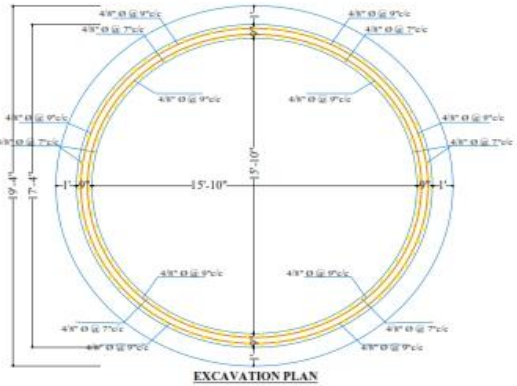


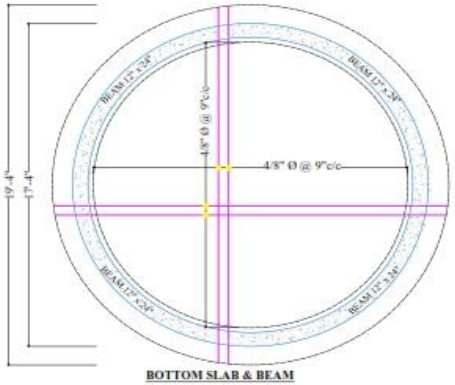


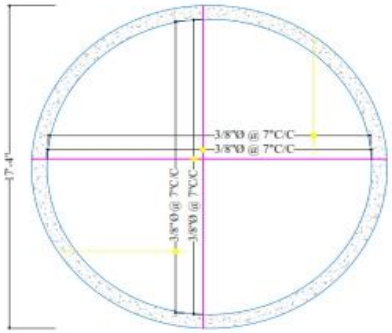


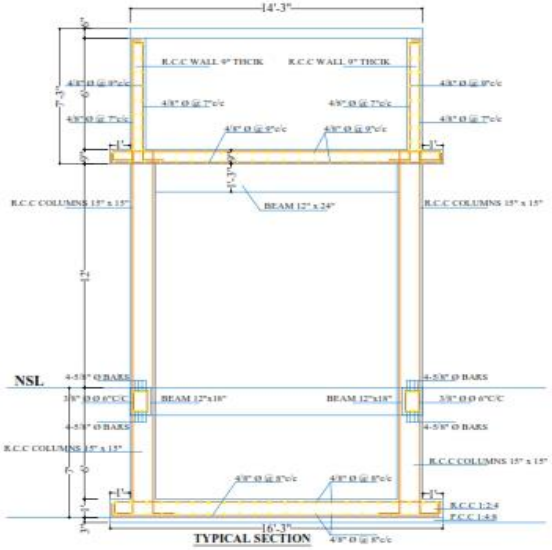
CLIENT: PLANNING & DEVELOPMENT DEPARTMENT GOVERNMENT OF SINDH	CONSULTANTS: CAMEOS CONSULTANTS CONSULTING ENGINEERS, ARCHITECTS & PLANNERS. HOUSE # B-116 BLOCK-4, NORTH NAZIMABAD, KARACHI. PH# +92- 21- 36640202, Email: cameoskhi@gmail.com				DRAWN	JAVED IQBAL	PROJECT: DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES IN SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)	DRAWING TITLE:- PLAN AND SECTION OF OVERHEAD WATER STORAGE TANK CAPACITY 520CFT	SCALE NTS
					SUBMITTED				
					RECOMMENDED				
					CHD./VER.	ALI RIZWAN		DATE MARCH, 2023	DWG NO. CC/SFERP/WST-04
	REV.	DATE	DESCRIPTION	APPROVED	APPROVED				

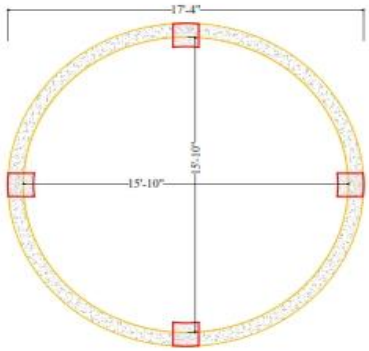
Capacity = 1180 Cft

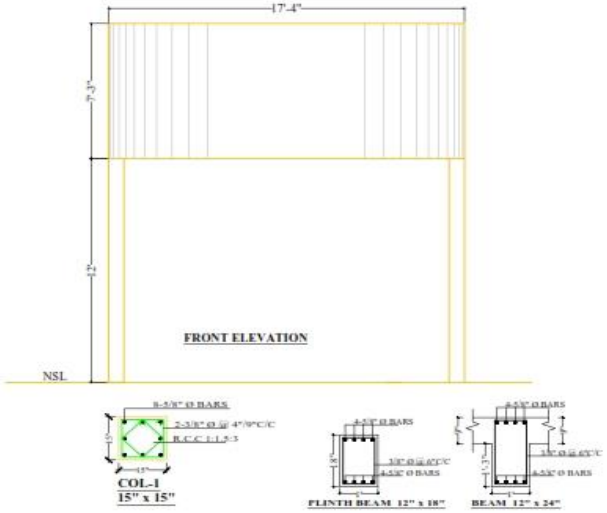






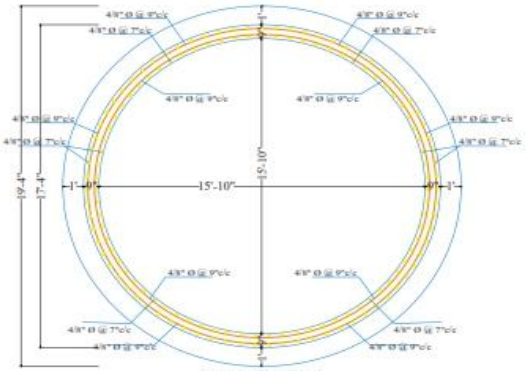




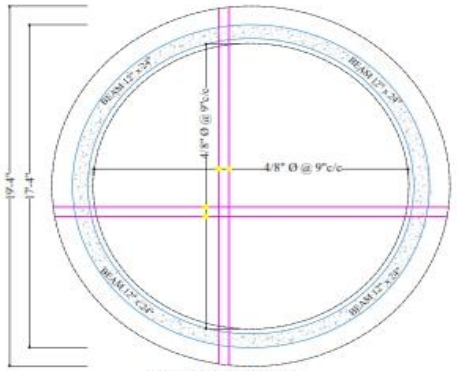


CLIENT: PLANNING & DEVELOPMENT DEPARTMENT GOVERNMENT OF SINDH	CONSULTANTS: CAMEOS CONSULTANTS CONSULTING ENGINEERS, ARCHITECTS & PLANNERS. HOUSE # B-116 BLOCK-L NORTH NAZIMABAD, KARACHI. PH# +92- 21- 36640202, Email: cameoskhi@gmail.com				DRAWN	JAVED IQBAL	PROJECT: DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES IN SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)	DRAWING TITLE:- PLAN AND SECTION OF OVERHEAD WATER STORAGE TANK CAPACITY 1180CFT	SCALE NTS
					SUBMITTED				
					RECOMMENDED				
					CHD./VER.	ALI RIZWAN		DATE MARCH, 2023	DWG NO. CC/SFERP/WST-05
	REV.	DATE	DESCRIPTION	APPROVED	APPROVED				

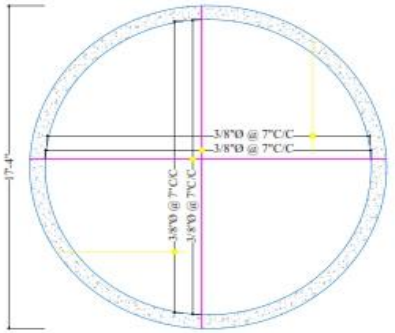
Capacity = 1180 Cft



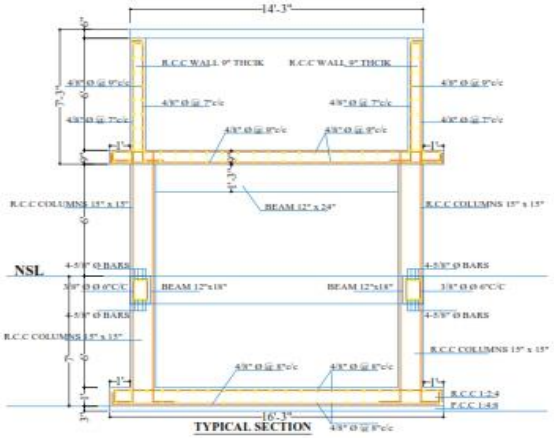
EXCAVATION PLAN



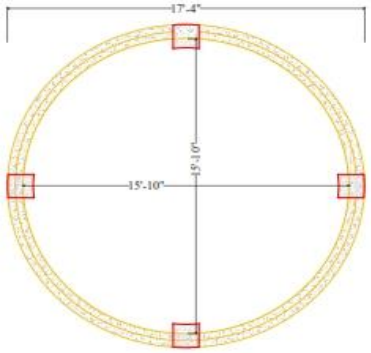
BOTTOM SLAB & BEAM



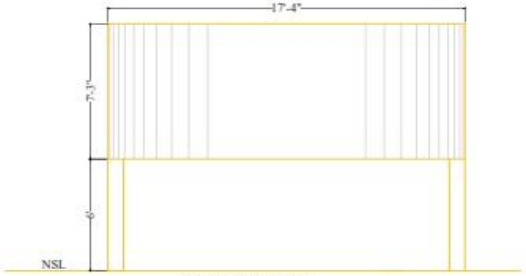
TOP SLAB



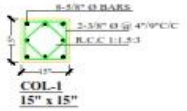
TYPICAL SECTION



PLAN OF O . H W TANK

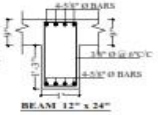


FRONT ELEVATION



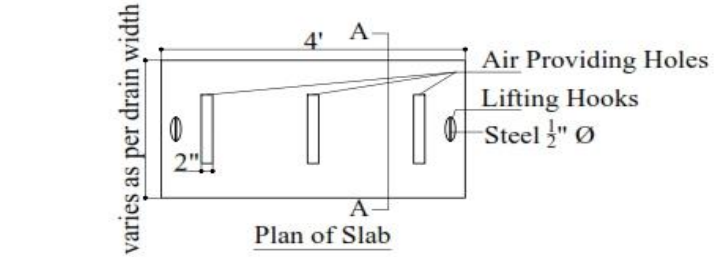
COL-1
15" x 15"

PLINTH BEAM 12" x 18"

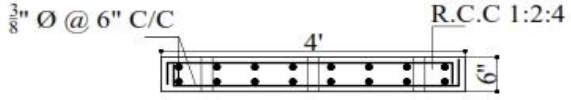


BEAM 12" x 24"

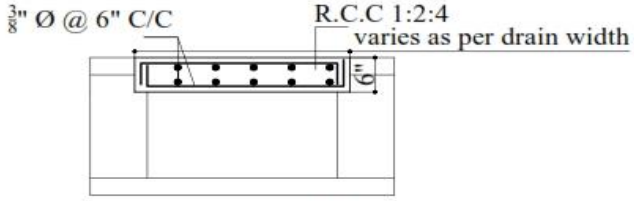
CLIENT: PLANNING & DEVELOPMENT DEPARTMENT GOVERNMENT OF SINDH	CONSULTANTS: CAMEOS CONSULTANTS CONSULTING ENGINEERS, ARCHITECTS & PLANNERS. HOUSE # B-116 BLOCK-L NORTH NAZIMABAD, KARACHI. PH# +92-21-36640202, Email: cameokhi@gmail.com					DRAWN	JAVED IQBAL	PROJECT: DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES IN SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)	DRAWING TITLE:- PLAN AND SECTION OF OVERHEAD WATER STORAGE TANK CAPACITY 1180CFT	SCALE NTS
						SUBMITTED				
						RECOMMENDED				
						CHD./VER.	ALI RIZWAN			
		REV.	DATE	DESCRIPTION	APPROVED	APPROVED			DATE MARCH, 2023	DWG NO. CC/SFERP/WST-06



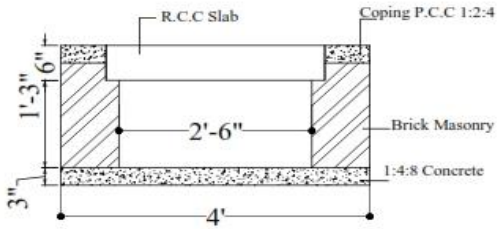
Plan of Slab



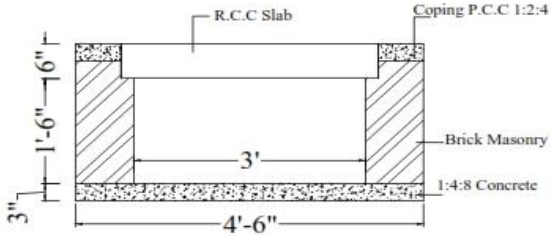
Section of Slab



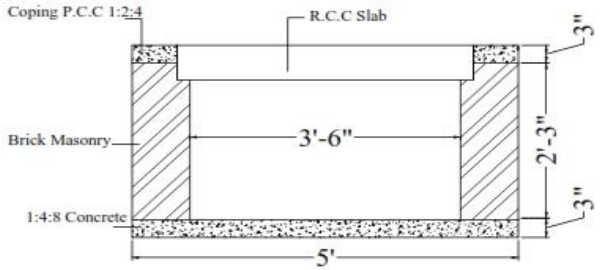
Section of Slab



Drain Type-I

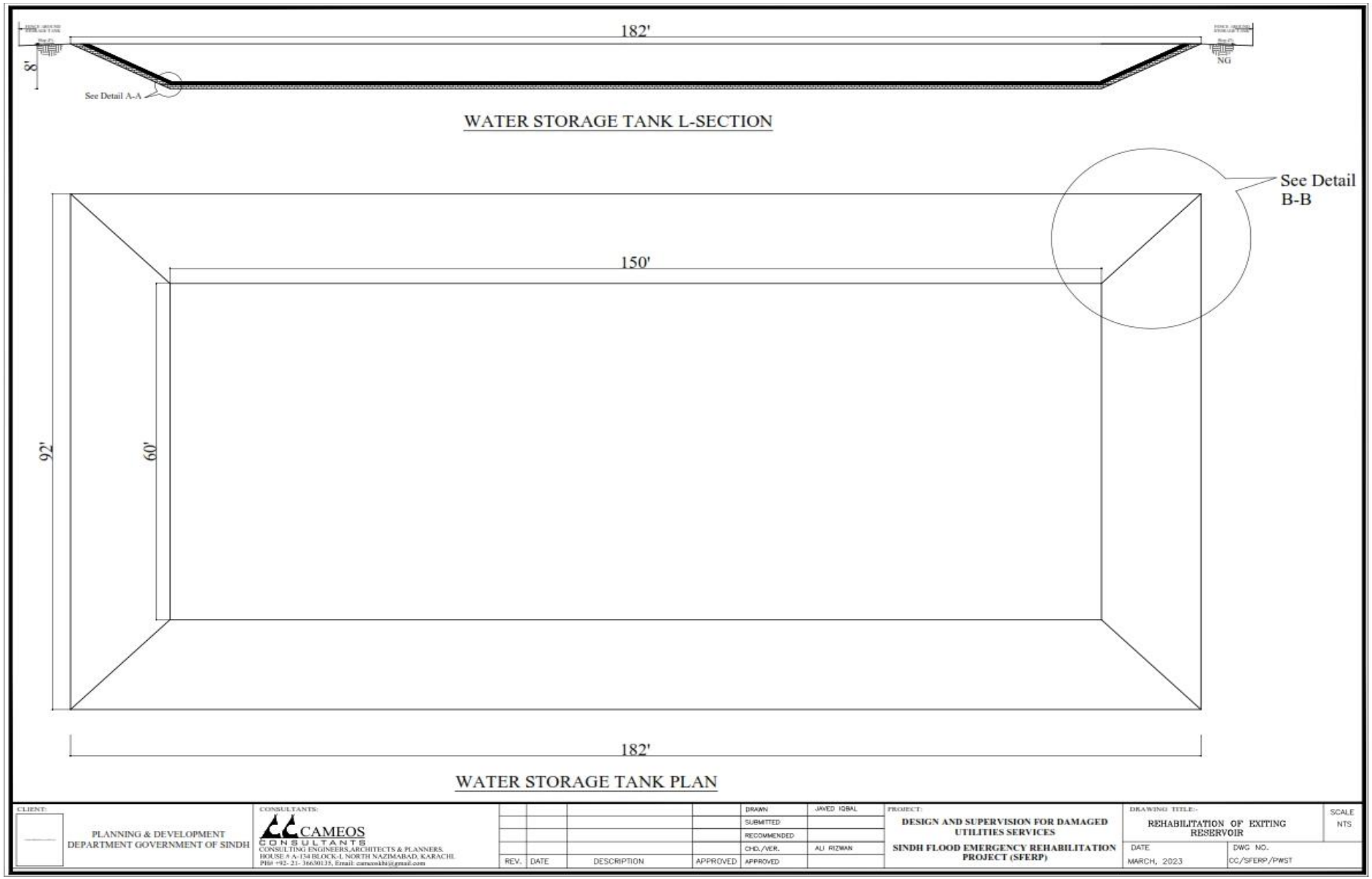


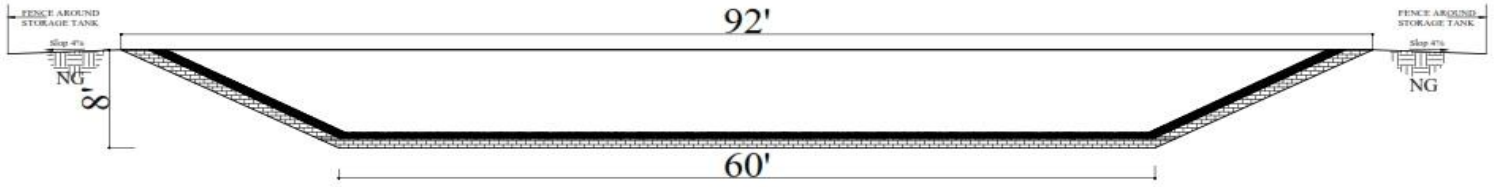
Drain Type-II



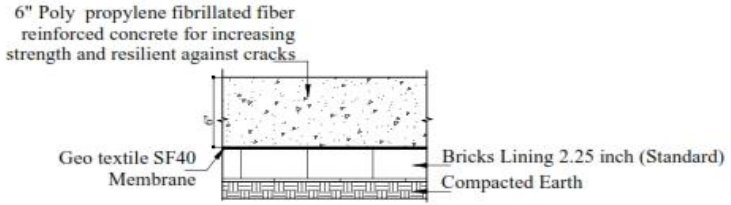
Drain Type-III

CLIENT: PLANNING & DEVELOPMENT DEPARTMENT GOVERNMENT OF SINDH	CONSULTANTS: CAMEOS CONSULTANTS CONSULTING ENGINEERS,ARCHITECTS & PLANNERS. HOUSE # B-116 BLOCK-L NORTH NAZIMABAD, KARACHI. PH# +92- 21- 36680202, Email: cameoskhi@gmail.com				DRAWN	JAVED IQBAL	PROJECT: DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)	DRAWING TITLE:- DRAIN SECTIONS	SCALE NTS
					SUBMITTED				
					RECOMMENDED				
					CHD./VER.	ALI RIZWAN		DATE MARCH, 2023	DWG NO. CC/SFERP/DS-01
	REV.	DATE	DESCRIPTION	APPROVED	APPROVED				

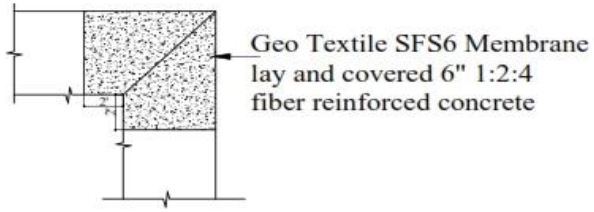

182'
8'
See Detail A-A
NG
WATER STORAGE TANK L-SECTION
See Detail B-B
150'
92'
60'
182'
WATER STORAGE TANK PLAN
CLIENT:
PLANNING & DEVELOPMENT DEPARTMENT GOVERNMENT OF SINDH
CONSULTANTS:
CAMEOS CONSULTANTS
CONSULTING ENGINEERS, ARCHITECTS & PLANNERS.
HOUSE: # A-134 BLOCK-L NORTH NAZIMABAD, KARACHI.
PH# +92- 21- 36630135, Email: cameoskhi@gmail.com
REV. DATE DESCRIPTION APPROVED
DRAWN JAVED IQBAL
SUBMITTED
RECOMMENDED
CHD./VER. ALI RIZWAN
APPROVED
PROJECT:
DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES
SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)
DRAWING TITLE:-
REHABILITATION OF EXITING RESERVOIR
SCALE
NTS
DATE
MARCH, 2023
DWG NO.
CC/SFERP/PWST



WATER STORAGE TANK X-SECTION

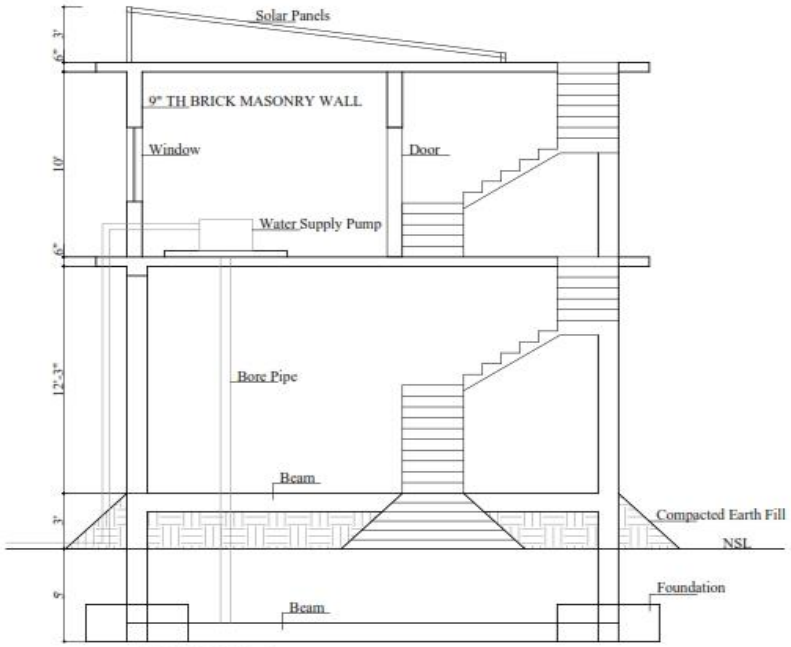


Detail A-A

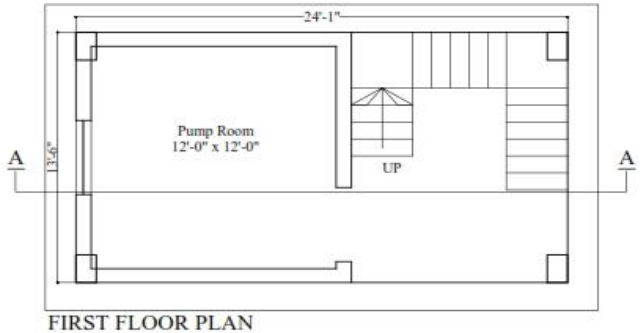


Detail B-B
Joint treatment with
Geo textile SFS6 membrane

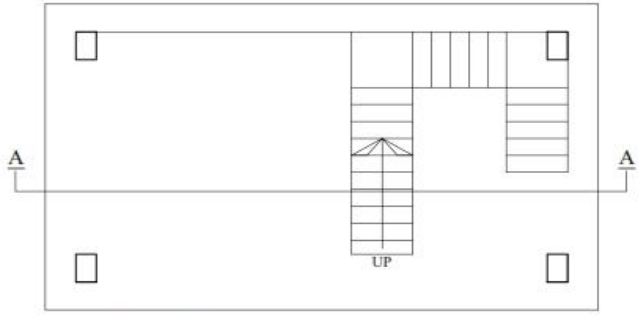
CLIENT: PLANNING & DEVELOPMENT DEPARTMENT GOVERNMENT OF SINDH	CONSULTANTS: CAMEOS CONSULTANTS CONSULTING ENGINEERS, ARCHITECTS & PLANNERS. HOUSE # A-134 BLOCK-L NORTH NAZIMABAD, KARACHI. PH# +92-21-36630135, Email: cameoskhi@gmail.com					DRAWN	JAVED IQBAL	PROJECT: DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)	DRAWING TITLE:- EXISTING RESERVOIR X-SECTION & EXPANSION JOINT DETAIL	SCALE NTS
						SUBMITTED				
						RECOMMENDED				
						CHD./VER.	ALI RIZWAN			
	REV.	DATE	DESCRIPTION	APPROVED	APPROVED				DATE MARCH, 2023	DWG NO. CC/SFERP/WST-01



SECTION A-A

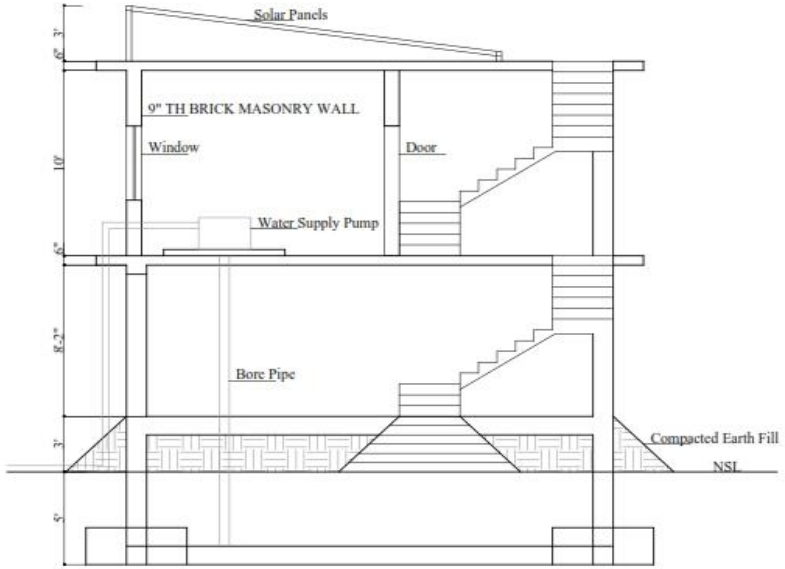


FIRST FLOOR PLAN

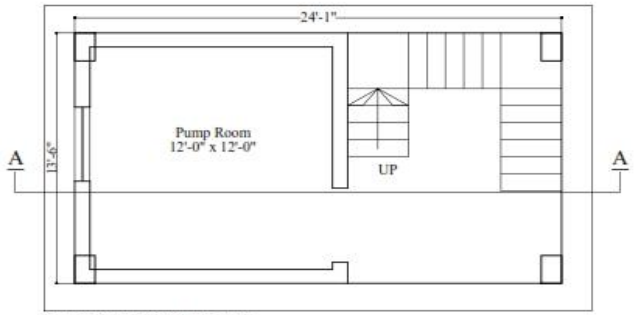


GROUND FLOOR PLAN

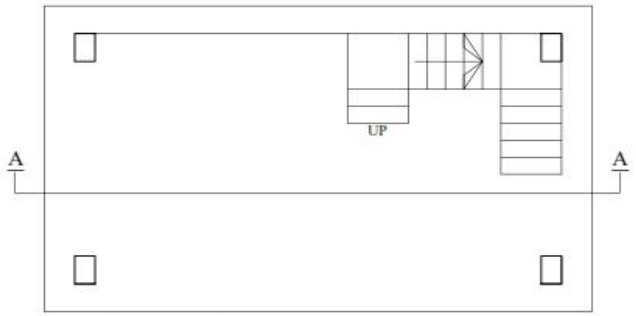
CLIENT: PLANNING & DEVELOPMENT DEPARTMENT GOVERNMENT OF SINDH	CONSULTANTS: CAMEOS CONSULTANTS CONSULTING ENGINEERS,ARCHITECTS & PLANNERS. HOUSE # B-116 BLOCK-L NORTH NAZIMABAD, KARACHI. PH# +92-21-36640202, Email: camsoukhi@gmail.com					DRAWN	JAVED IQBAL	PROJECT: DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)	DRAWING TITLE:- PLAN AND SECTION OF PUMP HOUSE	SCALE NTS
						SUBMITTED				
						RECOMMENDED				
						CHD./VER.	ALI RIZWAN		DATE MARCH, 2023	DWG NO. CC/SFERP/PH-01
	REV.	DATE	DESCRIPTION	APPROVED	APPROVED					



SECTION A-A



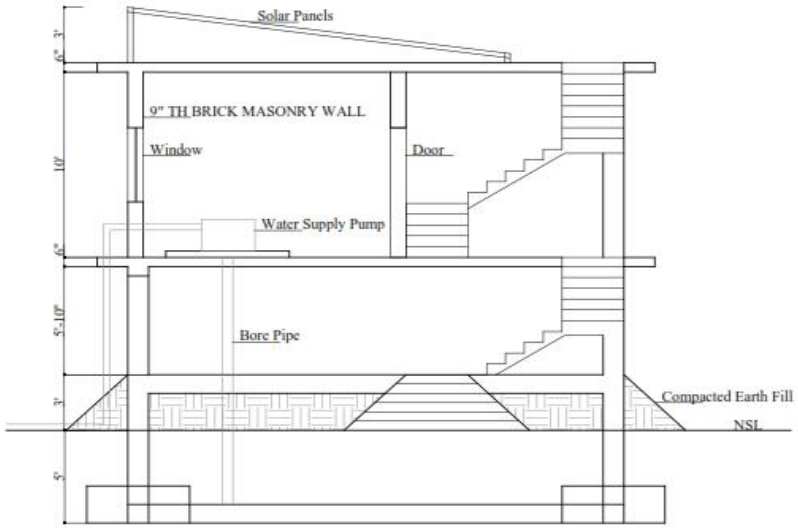
FIRST FLOOR PLAN



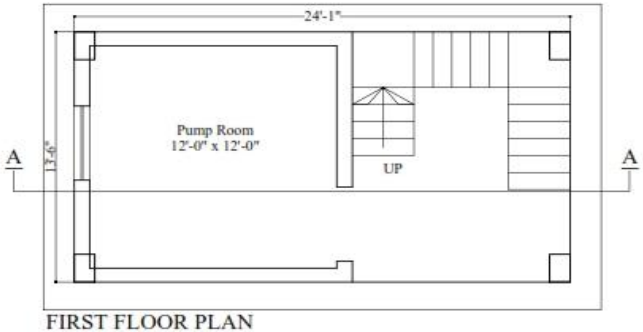
GROUND FLOOR PLAN

CLIENT: PLANNING & DEVELOPMENT DEPARTMENT GOVERNMENT OF SINDH	CONSULTANTS: CAMEOS CONSULTANTS CONSULTING ENGINEERS,ARCHITECTS & PLANNERS. HOUSE # B-116 BLOCK-L NORTH NAZIMABAD, KARACHI. PH# +92- 21- 36640202, Email: cameoskhi@gmail.com			DRAWN: JAVED IQBAL	PROJECT: DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES
				SUBMITTED:	
				RECOMMENDED:	
				CHD./VER.: ALI RIZWAN	SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)
REV.	DATE	DESCRIPTION	APPROVED	APPROVED:	

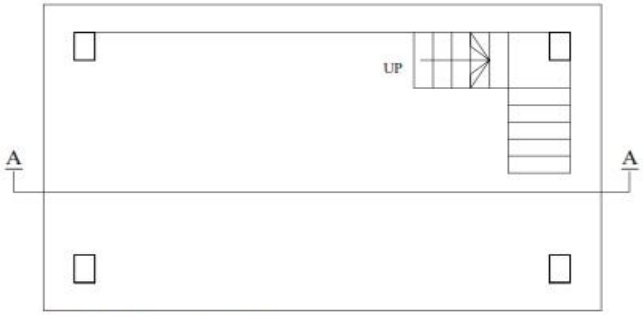
DRAWING TITLE:- PLAN AND SECTION OF PUMP HOUSE		SCALE NTS
DATE MARCH, 2023	DWG NO. CC/SFERP/PH-02	



SECTION A-A

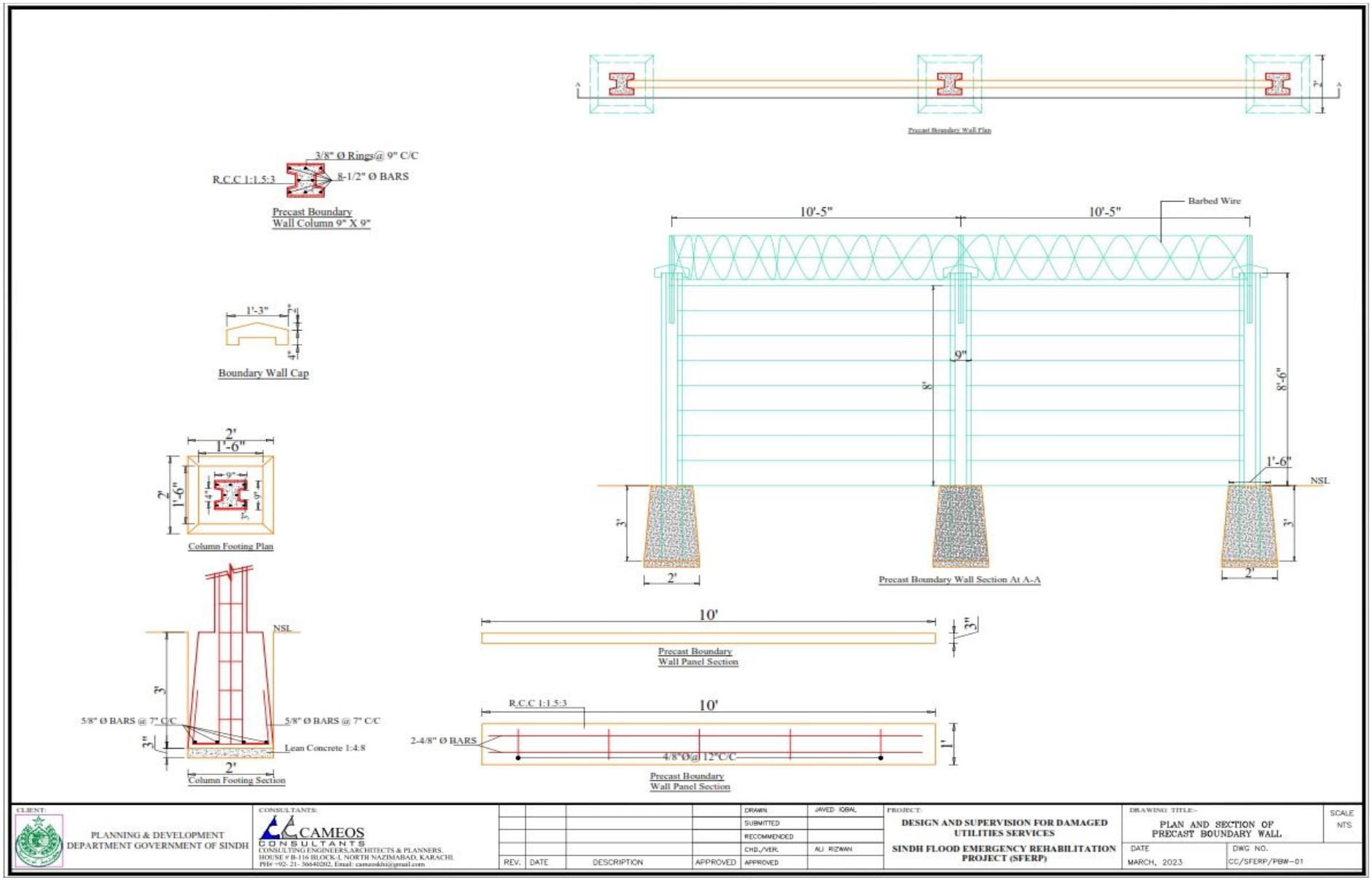


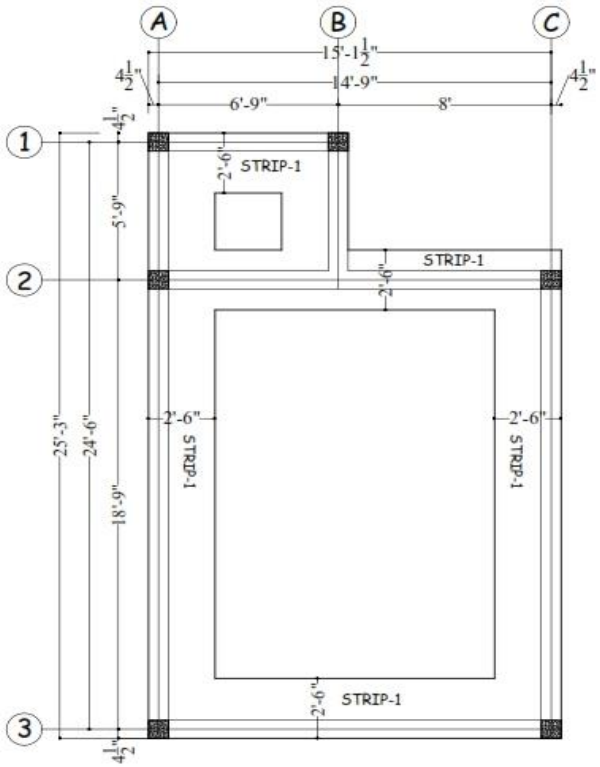
FIRST FLOOR PLAN



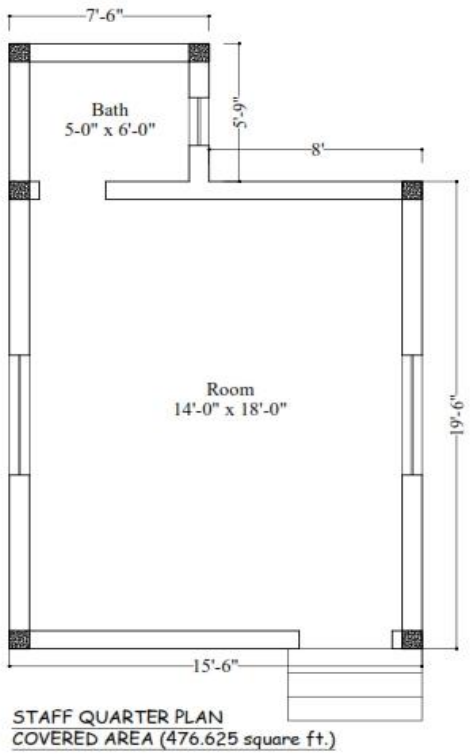
GROUND FLOOR PLAN

CLIENT: PLANNING & DEVELOPMENT DEPARTMENT GOVERNMENT OF SINDH	CONSULTANTS: CAMEOS CONSULTANTS CONSULTING ENGINEERS,ARCHITECTS & PLANNERS. HOUSE # B-116 BLOCK-L NORTH NAZIMABAD, KARACHI. PH# +92- 21- 36640202, Email: cameoskhi@gmail.com					DRAWN	JAVED IQBAL	PROJECT: DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)	DRAWING TITLE:- PLAN AND SECTION OF PUMP HOUSE	SCALE NTS
						SUBMITTED				
						RECOMMENDED				
						CHD./VER.	ALI RIZWAN		DATE MARCH, 2023	DWG NO. CC/SFERP/PH-03
	REV.	DATE	DESCRIPTION	APPROVED	APPROVED					


3/8" Ø Rings@ 9" C/C
R.C.C 1:1.5:3
8-1/2" Ø BARS
Precast Boundary Wall Column 9" X 9"
Precast Boundary Wall Plan
Barbed Wire
10'-5"
10'-5"
1'-3"
Boundary Wall Cap
9"
8'-6"
1'-6"
NSL
2'
1'-6"
Column Footing Plan
Precast Boundary Wall Section At A-A
NSL
10'
Precast Boundary Wall Panel Section
5/8" Ø BARS @ 7" C/C
5/8" Ø BARS @ 7" C/C
Lean Concrete 1:4:8
Column Footing Section
R.C.C 1:1.5:3
10'
2-4/8" Ø BARS
4/8"Ø@ 12"C/C
Precast Boundary Wall Panel Section
CLIENT:
PLANNING & DEVELOPMENT DEPARTMENT GOVERNMENT OF SINDH
CONSULTANTS:
CAMEOS CONSULTANTS
CONSULTING ENGINEERS, ARCHITECTS & PLANNERS.
HOUSE # B-116 BLOCK-L NORTH NAZIMABAD, KARACHI.
PH# +92- 21- 36640202, Email: cameoskhi@gmail.com
REV. DATE DESCRIPTION APPROVED
DRAWN JAWED IQBAL
SUBMITTED
RECOMMENDED
CHD./VER. ALI RIZWAN
APPROVED
PROJECT:
DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES
SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)
DRAWING TITLE:-
PLAN AND SECTION OF PRECAST BOUNDARY WALL
SCALE
NTS
DATE
MARCH, 2023
DWG NO.
CC/SFERP/PBW-01

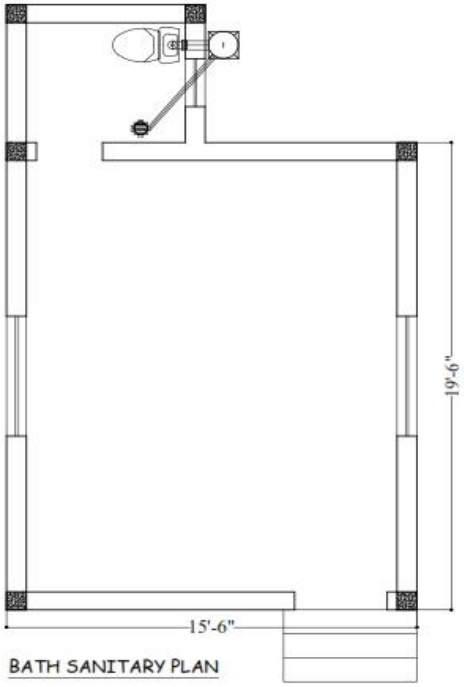


STAFF QUARTER LAYOUT PLAN

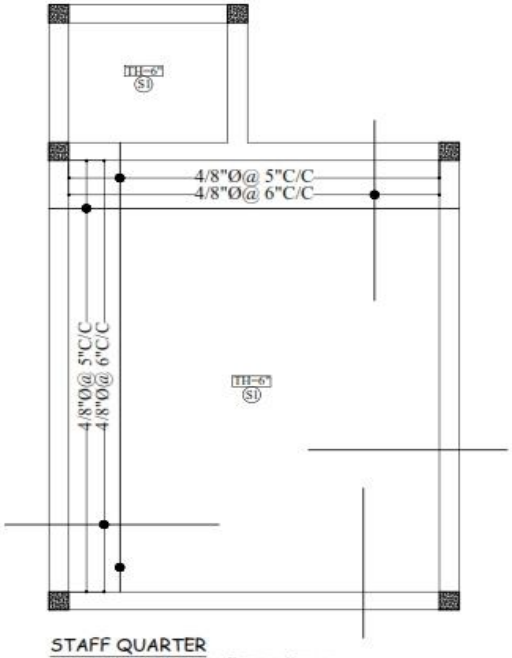


STAFF QUARTER PLAN
COVERED AREA (476.625 square ft.)

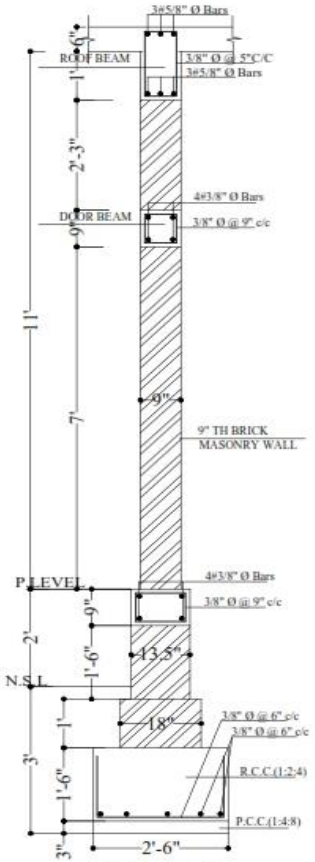
CLIENT: PLANNING & DEVELOPMENT DEPARTMENT GOVERNMENT OF SINDH	CONSULTANTS: CAMEOS CONSULTANTS, CONSULTING ENGINEERS, ARCHITECTS & PLANNERS. HOUSE # B-116 BLOCK-L NORTH NAZIMABAD, KARACHI. PH# +92-21-36640202, Email: cameoskhi@gmail.com				DRAWN	JAVED IQBAL	PROJECT: DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)	DRAWING TITLE:- LAYOUT PLAN OF STAFF QUARTER	SCALE NTS
					SUBMITTED				
					RECOMMENDED				
					CHD./VER.	ALI RIZWAN		DATE MARCH, 2023	DWG NO. CC/SFERP/SQ–01
	REV.	DATE	DESCRIPTION	APPROVED	APPROVED				



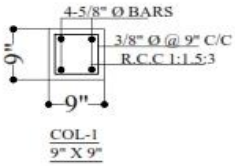
BATH SANITARY PLAN



STAFF QUARTER
SLAB REINFORCEMENT DETAIL

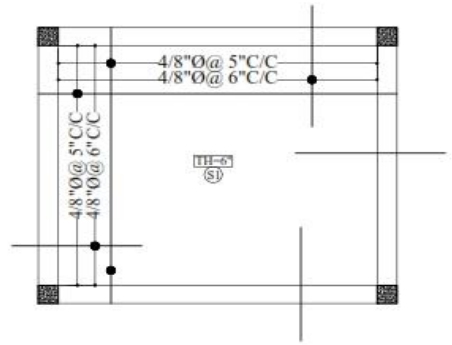


STRIP-01 SECTION
WALL FOOTING DETAIL

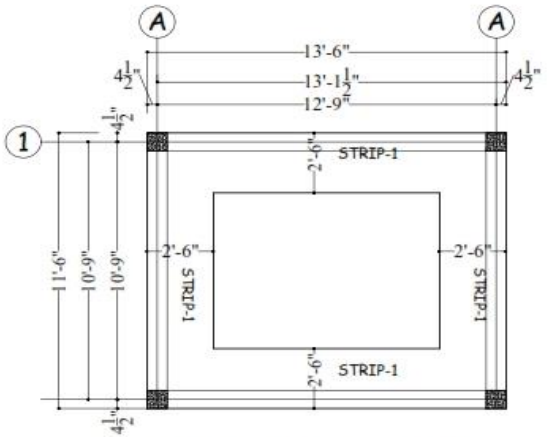


COL-1
9" X 9"

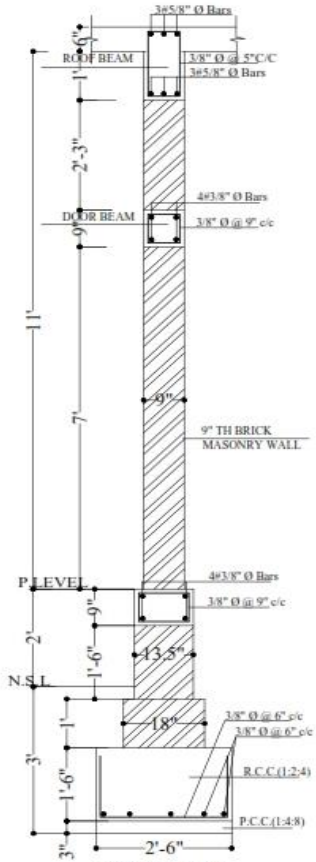
CLIENT: PLANNING & DEVELOPMENT DEPARTMENT GOVERNMENT OF SINDH	CONSULTANTS: CAMEOS CONSULTANTS, CONSULTING ENGINEERS, ARCHITECTS & PLANNERS, HOUSE # B-116 BLOCK-L NORTH NAZIMABAD, KARACHI, PBX: +92-21-36640202, Email: cameoskhi@gmail.com					DRAWN	JAVED IQBAL	PROJECT: DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES; SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)	DRAWING TITLE:- SANITARY PLAN AND REINFORCEMENT DETAIL OF STAFF QUARTER	SCALE NTS
						SUBMITTED				
						RECOMMENDED				
						CHD./VER.	ALI RIZWAN		DATE MARCH, 2023	DWG NO. CC/SFERP/SQ-02
	REV.	DATE	DESCRIPTION	APPROVED		APPROVED				



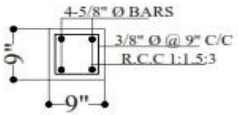
MACHINERY ROOM PLAN
COVERED AREA (239.250 square ft.)



MACHINERY ROOM LAYOUT PLAN
COVERED AREA (239.250 square ft.)

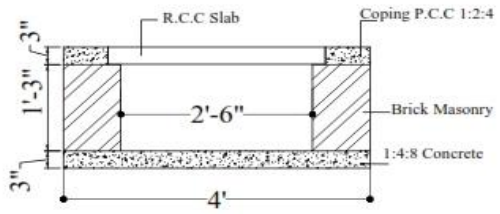


STRIP-01 SECTION
WALL FOOTING DETAIL

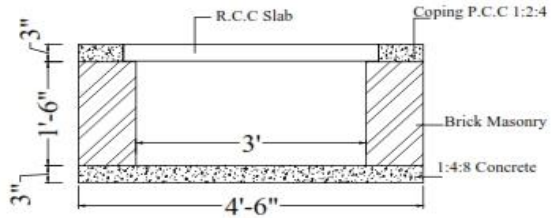


COL-1
9" X 9"

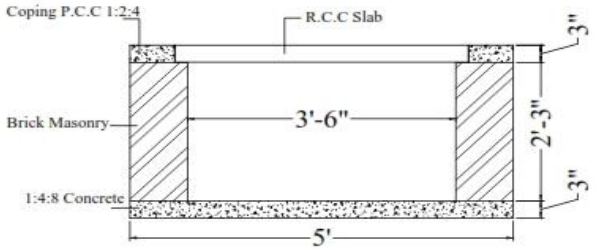
CLIENT: PLANNING & DEVELOPMENT DEPARTMENT GOVERNMENT OF SINDH	CONSULTANTS: CAMEOS CONSULTANTS, CONSULTING ENGINEERS, ARCHITECTS & PLANNERS, HOUSE # B-116 BLOCK-L NORTH NAZIMABAD, KARACHI, PBX: +92-21-36640202, Email: cameokhi@gmail.com				DRAWN	JAVED IQBAL	PROJECT: DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES; SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)	DRAWING TITLE:- PLAN AND REINFORCEMENT DETAIL OF MACHINERY ROOM	SCALE NTS
					SUBMITTED				
					RECOMMENDED				
					CHD./VER.	ALI RIZWAN		DATE MARCH, 2023	DWG NO. CC/SFERP/MR-01
	REV.	DATE	DESCRIPTION	APPROVED	APPROVED				



Drain Type-I

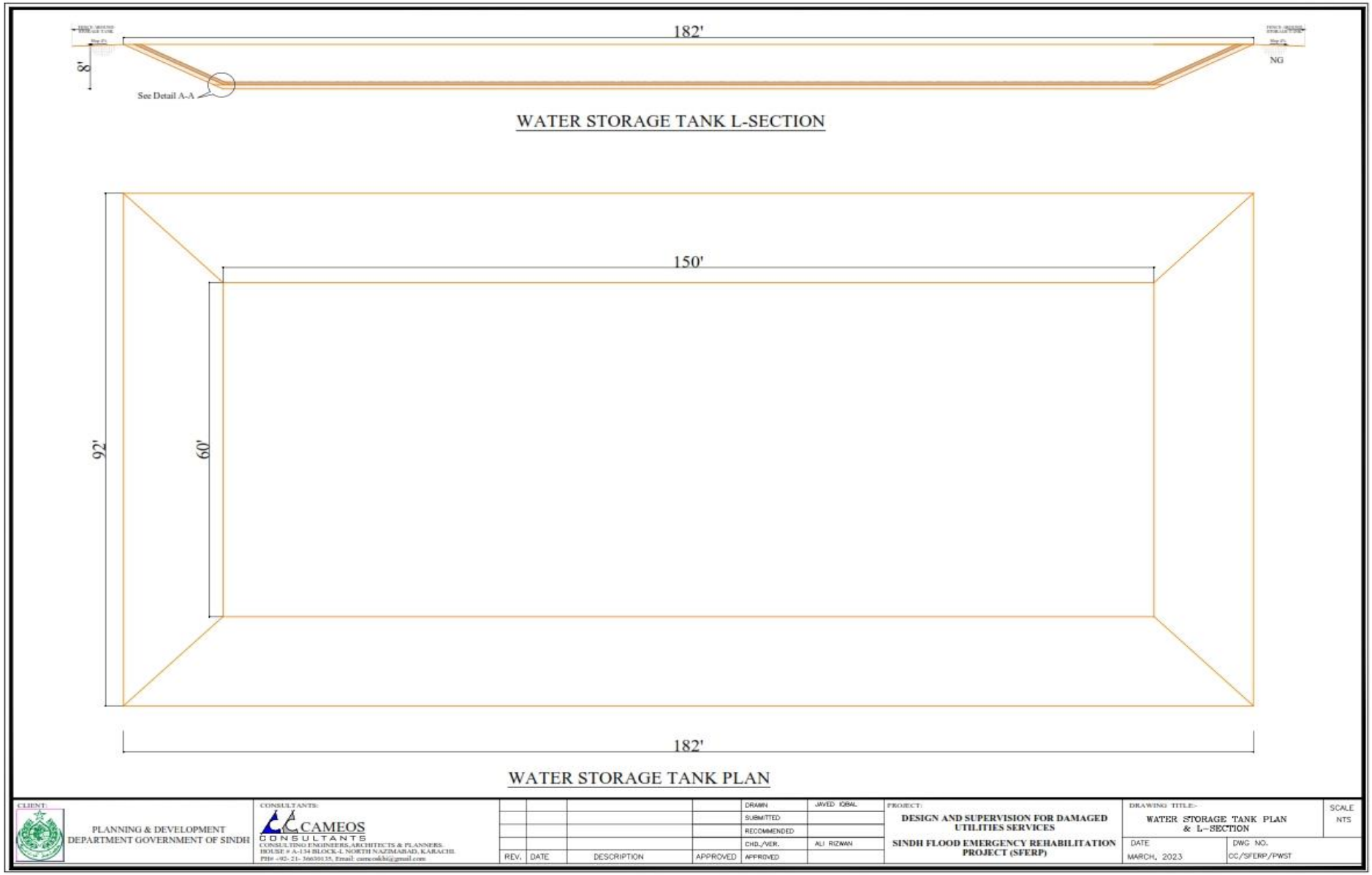


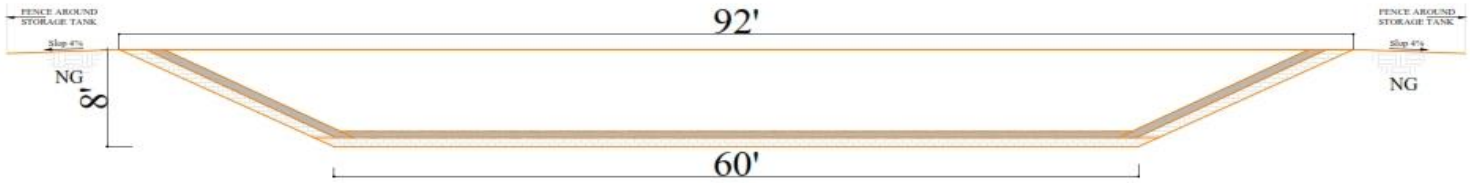
Drain Type-II



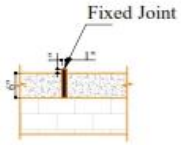
Drain Type-III

CLIENT: PLANNING & DEVELOPMENT DEPARTMENT GOVERNMENT OF SINDH	CONSULTANTS: CAMEOS CONSULTANTS CONSULTING ENGINEERS,ARCHITECTS & PLANNERS. HOUSE # B-116 BLOCK-L NORTH NAZIMABAD, KARACHI PBX +92-21- 36640202, Email: cameoskhi@gmail.com					DRAWN	JAVED IQBAL	PROJECT: DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)	DRAWING TITLE:- DRAIN SECTIONS	SCALE NTS
						SUBMITTED				
						RECOMMENDED				
						CHD./VER.	ALI RIZWAN			
	REV.	DATE	DESCRIPTION		APPROVED	APPROVED			DATE MARCH, 2023	DWG NO. CC/SFERP/DS-01


182'
8'
See Detail A-A
NG
WATER STORAGE TANK L-SECTION
150'
92'
60'
182'
WATER STORAGE TANK PLAN
CLIENT:
PLANNING & DEVELOPMENT
DEPARTMENT GOVERNMENT OF SINDH
CONSULTANTS:
CAMEOS
CONSULTANTS
CONSULTING ENGINEERS, ARCHITECTS & PLANNERS.
HOUSE # A-134 BLOCK-L NORTH NAZIMABAD, KARACHI.
PH# +92-21-36630135, Email: cameoskhi@gmail.com
REV.
DATE
DESCRIPTION
APPROVED
DRAWN
JAVED IQBAL
SUBMITTED
RECOMMENDED
CHD./VER.
ALI RIZWAN
APPROVED
PROJECT:
DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES
SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)
DRAWING TITLE:-
WATER STORAGE TANK PLAN & L-SECTION
SCALE
NTS
DATE
MARCH, 2023
DWG NO.
CC/SFERP/PWST



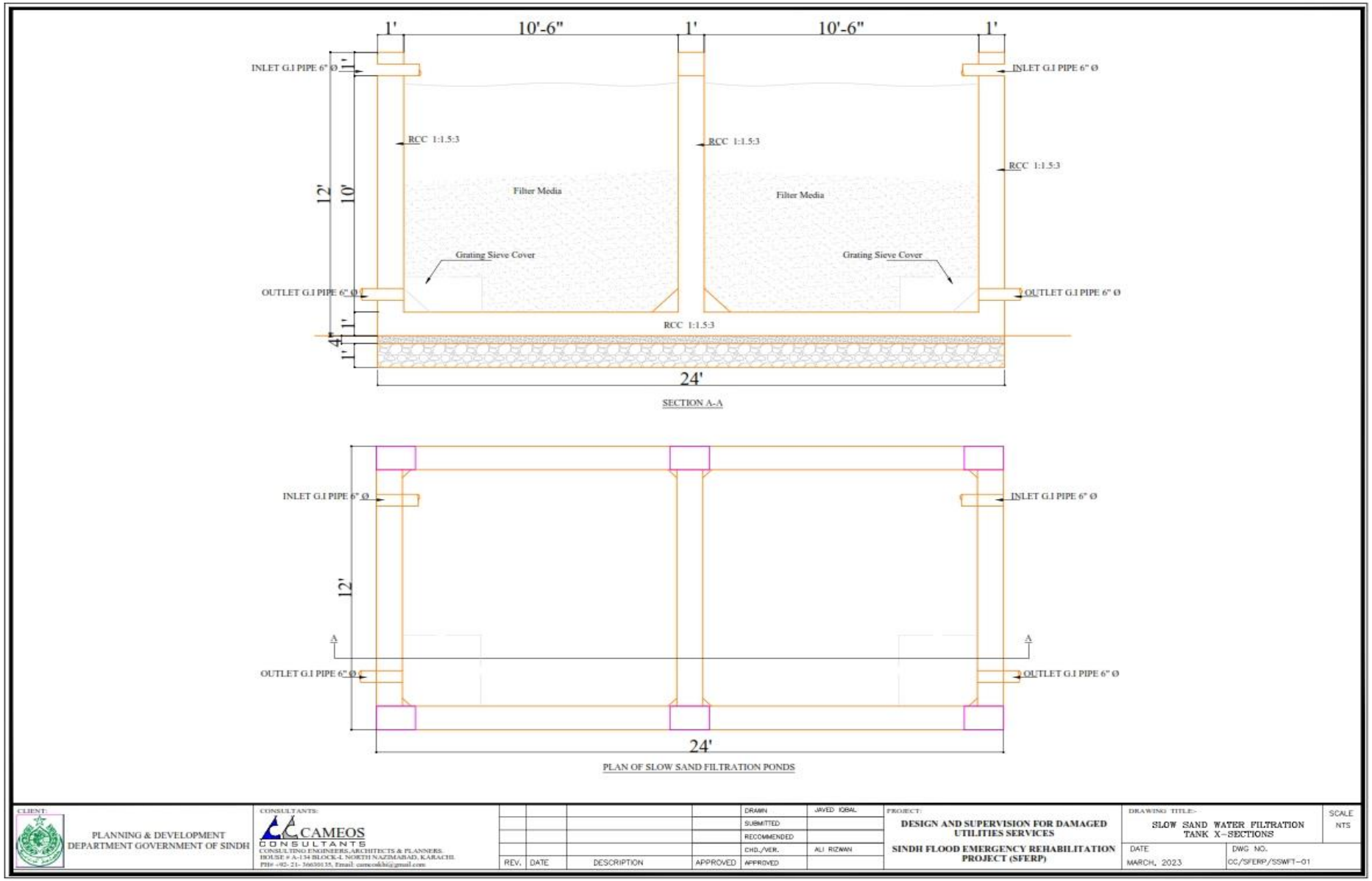
WATER STORAGE TANK X-SECTION

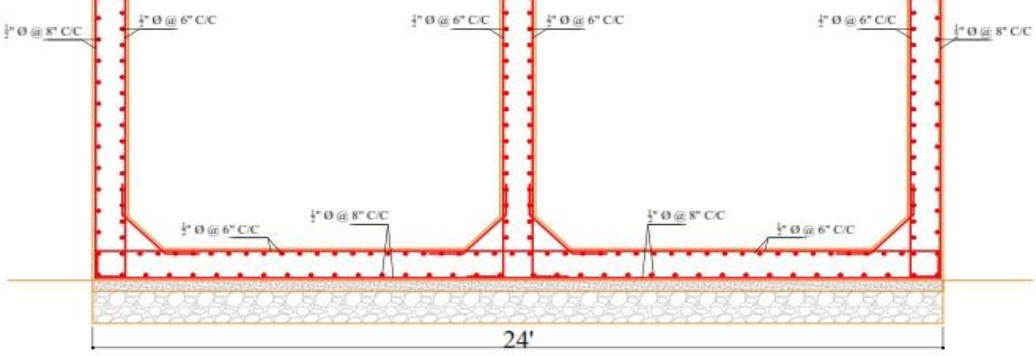


Detail of Expansion Joint

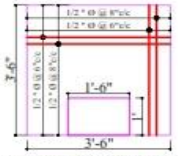
Note: Bitumastic Rubberized or Neoprene Rubber
Fixed Joint Sealant (Fix before laying of concrete)

CLIENT: PLANNING & DEVELOPMENT DEPARTMENT GOVERNMENT OF SINDH	CONSULTANTS: CAMEOS CONSULTANTS CONSULTING ENGINEERS, ARCHITECTS & PLANNERS. HOUSE # A-134 BLOCK-L NORTH NAZIMABAD, KARACHI. PH# +92-21-36630135, Email: cameoskhi@gmail.com					DRAWN	JAVED IQBAL	PROJECT: DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)	DRAWING TITLE:- WATER STORAGE TANK X-SECTION & EXPANSION JOINT DETAIL	SCALE NTS
						SUBMITTED				
						RECOMMENDED				
						CHD./VER.	ALI RIZWAN		DATE: MARCH, 2023	DWG NO. CC/SFERP/WST-01
	REV.	DATE	DESCRIPTION	APPROVED		APPROVED				

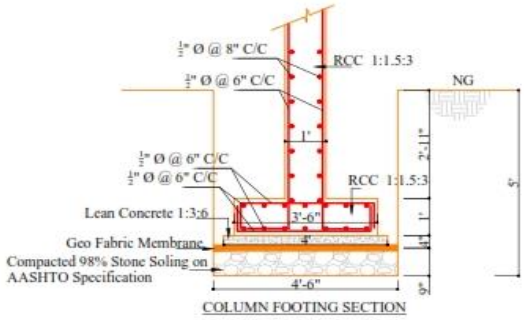

1'
10'-6"
1'
10'-6"
1'
INLET G.I PIPE 6" Ø
INLET G.I PIPE 6" Ø
RCC 1:1.5:3
RCC 1:1.5:3
RCC 1:1.5:3
12'
10'
Filter Media
Filter Media
Grating Sieve Cover
Grating Sieve Cover
OUTLET G.I PIPE 6" Ø
OUTLET G.I PIPE 6" Ø
RCC 1:1.5:3
4"
1'
1'
24'
SECTION A-A
INLET G.I PIPE 6" Ø
INLET G.I PIPE 6" Ø
12'
A
A
OUTLET G.I PIPE 6" Ø
OUTLET G.I PIPE 6" Ø
24'
PLAN OF SLOW SAND FILTRATION PONDS
CLIENT:
PLANNING & DEVELOPMENT
DEPARTMENT GOVERNMENT OF SINDH
CONSULTANTS:
CAMEOS
CONSULTANTS
CONSULTING ENGINEERS, ARCHITECTS & PLANNERS.
HOUSE # A-134 BLOCK-L NORTH NAZIMABAD, KARACHI.
PH# +92-21-36630035, Email: cameoskhi@gmail.com
REV.
DATE
DESCRIPTION
APPROVED
DRAWN
JAVED IQBAL
SUBMITTED
RECOMMENDED
CHD./VER.
ALI RIZWAN
APPROVED
PROJECT:
DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES
SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)
DRAWING TITLE:-
SLOW SAND WATER FILTRATION TANK X-SECTIONS
SCALE
NTS
DATE
MARCH, 2023
DWG NO.
CC/SFERP/SSWFT-01



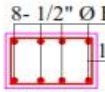
SECTION A-A REINFORCEMENT DETAIL



COLUMN FOOTING PLAN



COLUMN FOOTING SECTION



8- 1/2" Ø Bars 60 grade twisted
1/4" Ø Rings @ 8" c/c
60 Grade Plain

COLUMN SECTION

CLIENT: PLANNING & DEVELOPMENT DEPARTMENT GOVERNMENT OF SINDH	CONSULTANTS: CAMEOS CONSULTANTS CONSULTING ENGINEERS, ARCHITECTS & PLANNERS. HOUSE # A-134 BLOCK-L NORTH NAZIMABAD, KARACHI. PH# +92-21-36630135, Email: cameoskhi@gmail.com					DRAWN	JAVED IQBAL	PROJECT: DESIGN AND SUPERVISION FOR DAMAGED UTILITIES SERVICES SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)	DRAWING TITLE:- SLOW SAND WATER FILTRATION REINFORCEMENT DETAIL	SCALE NTS
						SUBMITTED				
						RECOMMENDED				
						CHD./VER.	ALI RIZWAN		DATE MARCH, 2023	DWG NO. CC/SFERP/SSWFT-01
		REV.	DATE	DESCRIPTION	APPROVED	APPROVED				

ANNEXURE 3:

Attendance Sheets of Water Supply and Drainage Schemes of District Badin

Annexure 3: Attendance Sheets of Water Supply and Drainage Schemes of District Badin

Government of Sindh

SFERP
Project Implementation Unit (PIU)

Public Consultation on **Environmental and Social Screening Report (ESSR)** for **Rehabilitation of Damaged Water Supply and Drainage Schemes**
arranged by *Project Implementation Unit* **(PIU)** under *Sindh Flood Emergency Rehabilitation Project* **(SFERP)**, P&DD Component, **Government of Sindh**

خراب ٿيل پاڻي جي فراهمي ۽ نيڪال جي اسڪيمن جي بحالي لاءِ
ماحولياتي ۽ سماجي اسڪريننگ رپورٽ تي عوامي مشاورت
سنڌ فلڈ ايمرجنسي بحالي منصوبي (SFERP) تحت پروجيڪٽ
امپليمينٽيشن يونٽ (PIU) پاران ترتيب ڏنل،
P&DD جزو، حڪومت سنڌ

Village Mohamad Saleh Khoso
UC Pahar Magree
Taluka - Tando Bago
Distt. Badin.

:Location/جڳهه

::Subproject Name/سب پروجيڪٽ جو نالو 18/8/2023 :Date/تاريخ

Sr. No. سيريل نمبر	Name نالو	Fathers Name پيءُ جو نالو	CNIC No./ Mobile No. CNICنمبر / موبائل نمبر	Occupation/ Profession پيشو	Address: Village Name, Taluka ايڈريس: ڳوٺ جو نالو، تعلقو	Signature/ Thumb Impression دستخط / انگوٺي جو نشان
.1	عبدالغني	محمد عثمان	41104-9902001-1	کسان هاري	محمد صالح کوسو تعلقہ ٽنڈو باگو	عبدالغني
.2	محمد حسين	محمد صديق	41104-7608800-5	کسان	محمد صالح کوسو ٽنڈو باگو	

Page 1 of 6

Government of Sindh

SFERP

Project Implementation Unit (PIU)

Sr. No. سيريل نمبر	Name نالو	Fathers Name پيءُ جو نالو	CNIC No./ Mobile No. CNICنمبر / موبائل نمبر	Occupation/ Profession پيشو	Address: Village Name, Taluka ايڊريس: ڳوٺ جو نالو، تعلقو	Signature/ Thumb Impression دستخط / انگوٺي جو نشان
.3	كرشن كولهي	گانگهو كولهي	41104-9173650-3	هاري	محمد صالح كوسو ٽنڊو گاگو	كرشن
.4	علي محمد	محمد صديق	41104-3972727-9	هاري	محمد صالح كوسو	
.5	محمد صالح	محمد خان	41104-2906911-9	پرائيويٽ ملازم	محمد صالح كوسو	
.6	گانگو كولهي	كاڇيو	41101-0818674-3	هاري	محمد صالح كوسو	گانگو
.7						
.8						
.9						
.10						
.11						

Page 2 of 6

Village Ismail Lashari 19/8/23.
UC: Gharo.
Taluka SFR Distt. Badin

Government of Sindh

SFERP
Project Implementation Unit (PIU)

Signature/ Thumb Impression دستخط / انگوٹي جو نشان	Address: Village Name, Taluka ايڈريس: ڳوٺ جو نالو، تعلقو	Occupation/ Profession پيشو	CNIC No./ Mobile No. CNICنمبر / موبائل نمبر	Fathers Name پيءُ جو نالو	Name نالو	Sr. No. سيريل نمبر
	گوٺ اسماعيل لاشاري تعلقو SFR	دڪاندار	41102 - 4566030 - 1	ميرخان	حق نواز	.12
	گوٺ اسماعيل لاشاري تعلقو SFR	ڪاشتڪاري	41102 - 6519480 - 3	پنهون	امام بخش	.13
	گوٺ اسماعيل لاشاري تعلقو SFR	ذميداري	41102 - 0867311 - 1	محمد اسماعيل	محبوب علي	.14
	گوٺ اسماعيل لاشاري تعلقو SFR	ذميداري	41102 - 0825447 - 9	محمد اسماعيل	منار علي	.15
	گوٺ اسماعيل لاشاري تعلقو SFR	ڪاشتڪاري	41102 - 41102 - 3500909 - 1	ميرمحمد پنهون	شاهنواز منظور	.16
	گوٺ آدم خاصخيلي تعلقو SFR	مزدوري	41102 - 0216720 - 5	بلندو خان	محمد مراد	.17
						.18
						.19
						.20

Page 3 of 6

Government of Sindh

Village Bhag Stop
UC Mathan
Taluka Matli

19/8/23

SFERP
Project Implementation Unit (PIU)

Signature/ Thumb Impression دستخط / انگوٺي جو نشان	Address: Village Name, Taluka ائڊريس: ڳوٺ جو نالو، تعلقو	Occupation/ Profession پيشو	CNIC No./ Mobile No. CNICنمبر / موبائل نمبر	Fathers Name پيءُ جو نالو	Name نالو	Sr. No. سيريل نمبر
[thumb impression]	باغ اسٽاپ ماتلي	مزدوري	41103-7966305-9	حمزسس	جمع	.21
[thumb impression]	باغ اسٽاپ ماتلي	مزدوري	41103-9066793-3	ڪيتو	ولو	.22
ماوجي	باغ اسٽاپ ماتلي	مزدوري	41102-9804317-9	نانجي	ماوجي	.23
[thumb impression]	باغ اسٽاپ ماتلي	گهريلو	41103-4296397-6	سليم دوارڪو	ديامي	.24
[thumb impression]	باغ اسٽاپ ماتلي	گهريلو	41103- 52-0 2404052-0	طوطو	سون باءِ	.25
[thumb impression]	باغ اسٽاپ ماتلي	گهريلو	41103-4375725-8	رامو	نڪي	.26
[thumb impression]	باغ اسٽاپ ماتلي	مزدوري	41103-0399907-1	پريو	سليم	.27
رامون	باغ اسٽاپ ماتلي	مزدوري	41103-8336921-9	سليم	رامون	.28
[thumb impression]	باغ اسٽاپ ماتلي	گهريلو	41103-3231165-0	ماوجي	جمرا	.29

Page 4 of 6

Village # Miyoon Mahook
UC # Haji Ashraf Thebo @ Rip
Taluka # Talhar.

18/8/23

Government of Sindh

SFERP
Project Implementation Unit (PIU)

Sr. No. سيريل نمبر	Name نالو	Fathers Name پيءُ جو نالو	CNIC No./ Mobile No. CNICنمبر / موبائل نمبر	Occupation/ Profession پيشو	Address: Village Name, Taluka ايڈريس: ڳوٺ جو نالو، تعلقو	Signature/ Thumb Impression دستخط / انگوٺي جو نشان
.30	غلام مصطفیٰ	محمد ایوب	41105-8162434-5	پرائیویٹ ملازم	محل میوں ملوک تعلقہ تلہار	
.31	یاسین علی	محمد امین	41105-8815629-9	دکاندار	میوں ملوک تلہار	
.32	احمد جویجو	رمضان	41105-7748847-3	ہوٹل	میوں ملوک تلہار	
.33	ساجد علی	محمد	41105-1874840-7	دکاندار PND	میوں ملوک تلہار	ساجد
.34	محمد رمضان	محمد عمر	41105-7860566-1	زمیندار	میوں ملوک تلہار	M.Ramzan
.35	غلام مصطفیٰ	غلام حسین	41602-0592360-7	۔نہاری	میوں ملوک تلہار	
.36	ساحل	محمد حنیف	41105 8263143-9	دکاندار	میوں ملوک تلہار	Sahil
.37	محمد رمضان	محمد بچل	41101-0765044-1	سرکاری ملازم	میوں ملوک تلہار	رمضان
.38	سہیل	غلام محمد	41105-5310662-3	زمیندار	میوں ملوک تلہار	سہیل

Village Haji Hashim Khaskheli
Ward # 08 UC # Badin
Badin
Government of Sindh

19/08/2023.

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Signature/ Thumb Impression دستخط / انگوٹھے جو نشان	Address: Village Name, Taluka ایڈریس: گوٹ جو نالو، تعلقو	Occupation/ Profession پیشو	CNIC No./ Mobile No. CNICنمبر / موبائل نمبر	Fathers Name پیءُ جو نالو	Name نالو	Sr. No. سیریل نمبر
	حاجی محمد هاشم خاصخیلی بدین	مزدوری	41101-2802137-3 0334-0254911	دلیل خاصخیلی	محمد رمضان	.39
	حاجی محمد هاشم خاصخیلی بدین	پرائیوٹ ملازم	41105-5640651-1 0303-2225913	محمد شاہ سید	وقار علی شاہ	.40
	حاجی محمد هاشم خاصخیلی بدین	مزدوری	41101-4335145-9	محمد عارب	نذیر احمد	.41
نور علی	حاجی محمد هاشم خاصخیلی بدین	مزدوری	41101-0597063-9 0341-3067566	منظور علی	نور علی	.42
عبدالقادر	حاجی محمد هاشم خاصخیلی بدین	مزدوری	41101-9378679-3 0316-3017220	جانو خاصخیلی	عبدالقادر	.43
	حاجی محمد هاشم خاصخیلی بدین	پرائیوٹ ملازم	41101-7480964-1 0314-2472700	الهڈنو خاصخیلی	احتشام الحق	.44