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IND: Bihar Urban Development Investment Program– Bhagalpur Water Supply Subproject 1

Prepared by Bihar Urban Infrastructure Development Corporation Ltd. (BUIDCO), Urban Development Department, Government of Bihar for the Asian Development Bank

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CURRENCY EQUIVALENTS

(As of 08 February 2020)

Currency unit	–	Indian rupees (₹)
₹1.00	=	\$ 0.014
\$1.00	=	₹ 71.52

ABBREVIATIONS

ADB	–	Asian Development Bank
AH	–	Affected Household
AP	–	Affected Person
BPL	–	Below Poverty Line
BUIDCO	–	Bihar Urban Infrastructure Development Corporation
CPR	–	Common Property Resource
DSC	–	Design Supervision Consultants
EA	–	Executing Agency
FGD	–	Focus Group Discussion
FHH	–	Female Headed Household
GLSR	–	Ground Level Service Reservoir
BMC	–	Bhagalpur Municipal Corporation
GoI	–	Government of India
GRC	–	grievance redressal committee
HH	–	Household
INR	–	Indian National Rupee
IP	–	indigenous peoples
LA	–	land acquisition
LARR	–	Land Acquisition, Rehabilitation and Resettlement (Act)
MoUD	–	Ministry of Urban Development
NGO	–	non-government organization
NRRP	–	National Resettlement and Rehabilitation Policy
OHT	–	overhead tank
PHED	–	Public Health Engineering Department
PMC	–	Program Management Consultant
RP	–	Resettlement Plan
SC	–	Schedule Caste
ST	–	Schedule Tribe
TOR	–	Terms of Reference
WHH	–	Woman Headed Household

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EXECUTIVE SUMMARY

Background- The Bihar Urban Development Investment Program (BUDIP) envisages improved urban environment and living conditions in targeted urban areas in the state of Bihar. It aims to: (i) improve and expand urban infrastructure and services in urban areas and (ii) strengthen urban institutional, management, and the financing capacity of institutions, including urban local bodies (ULBs). Urban infrastructure and services improvement covering rehabilitation, improvement and expansion is proposed in the following sectors (i) water supply and (ii) sewerage and sanitation. ADB has agreed to co-finance implementation of certain components of the state's road map in the cities of Bhagalpur and Gaya. BUDIP is funded by ADB under its multi-tranche financing facility (MFF). An urban water supply subproject for Bhagalpur is proposed under Project 1 (Loan 2861-IND) of the MFF.

The design-build-operate (DBO) contract was awarded to PIRH-Ranhill India consortium. The contractor was mobilized in October 2014. Since mid-January 2019 the work at different sites was almost stopped and in the first week of May-2019 the works completely stopped. Owing to very slow progress, several notices to correct were issued to bring about required impetus to the project but the contractor repeatedly failed to deliver. BUIDCo, therefore, was compelled to process for termination of the contract with M/s Pan India Infra projects Pvt Ltd– Ranhill Utilities Sdn Bhd (PIRH) Consortium. The contract was terminated with effect from 09.07.2019. It was further decided by BUIDCo that for speedy implementation within the stipulated time frame, the balance work of BWSP-01 with new tube wells may be split into four packages for tendering and engaging contractors. Following the decision of board the entire balance work of BWSP-01 with new tube Wells and Emergency Temporary Intake with pumps and raw water pumping main have been split into four packages-(i) BWSP1-01,(ii)BWSP1-02,(iii)BWSP1-03 and (iv)BWSP1-04.

Subproject Description-The revised / remaining components of the three packages of BWSP1 include- (i)completion of balance works of nine OHSRs one each at Housing Board, Thakurbari, Tilka Manjhi Bhagalpur University (TMBU), Bazar Samiti, Surkhikal , RCD Adampur, Anand Nagar, BMC Godwn and Lajpat Park (ii)construction of ten new OHSRs one each at Mahashay Deodhi 1,Aliganj, Sikandarpur, Maniksarkar, Mughalpura, Mahashay Deodhi 2 , Jaglal High School,Constable Training School (CTS_P),Abhir Mishra lane and Barahpura, (iii)rehabilitation/ refurbishment of four OHSRs – one each at Ghantaghar,Goshala, Ishakchak, and Constable Training School (CTS_E) (iv)one new tube well and pump house at each OHSR location-pump-power connection, supply and erection of Submersible pump set in newly created tube wells etc. and (v)other works comprising- distribution System, household service connection (HSC) in these OHSR zones, public stand post,monitoring stations etc. while BWSP1-04 comprises-renovation of existing WTPs at Barari, emergency intake arrangement near DPS School, Babupur with pump and permanent raw water main to Barari WTP etc.

Resettlement Plan- A draft resettlement plan was first prepared in August 2013 and the same was updated in December 2015. This RP has been updated for-(i) the remaining components that could not be completed /or taken up by PAN India and (ii)additional components as proposed under various sub projects. This RP is based on the detailed engineering designs approved for subprojects BWSP 1-01, BWSP 1-02, BWSP 1-03 and BWSP 1-04 under BWSP I and is consistent with the draft Resettlement Framework for the project. **Detailed measurement survey will be conducted and the RP will be updated accordingly before start of civil implementation works.**

Scope of Land Acquisition and Resettlement- All land required for subproject components in Bhagalpur has been identified. No private land acquisition is required. Efforts have been made to avoid or minimize resettlement impact through careful design of the major portion of pipe alignments for water supply distribution and rising mains through available government land and existing public road right of way (RoW), selection of alignment alternatives with none/less resettlement impact. The RP was updated in December 2015 incorporating the findings of the DMS. The RP had identified two permanent IR impacts (relocation impact-one house, and one-cattle shed) at Housing Board Barari OHSR site. The two affected families were compensated in 2016 as per the RP prior to the start of civil works. One person from the affected household (AH) was supposed to undergo skill up-gradation training. The AH had informed in writing that he was not willing to undergo any training¹.

Categorisation. The subproject is classified as Category B in accordance with ADB's Safeguard Policy Statement (SPS). ADB's SPS covers both temporary and permanent impacts to both titled and non-titled persons, and includes both physical and economic displacement.

Consultation and Disclosure. Goals and objectives of the project have been disclosed to stakeholders (beneficiaries, affected persons, stakeholder agencies) through workshops and focus group discussions at various points in time. Public consultations aimed at generating awareness about the project components and civil implementation works have been conducted on a regular basis since 2014 till demobilisation of the contractor. A program of continuous consultation and disclosure is proposed.

Institutional Setup. The Urban Development and Housing Department, Government of Bihar is the executing agency for the project. The Bihar Urban Infrastructure Development Corporation (BUIDCo) is the implementing agency. The Program Management Unit (PMU) at BUIDCo is staffed with an Environmental and Social Management Coordinator (ESMC), who has overall responsibility for safeguards compliance and implementation of RP. PIU field offices have been set up in each town to manage implementation of subprojects. Program Management Consultants and Design Supervision Consultants are engaged to facilitate the planning and implementation of the subproject, each having social safeguards personnel for all RP planning and implementation activities including internal monitoring and reporting.

Resettlement Budget and Financing Plan- The total resettlement cost for the subproject is Rs. 8.900 million. The government will finance resettlement implementation. However, the estimated total resettlement cost for phase 1 of the subproject is INR 1.6432 million.

¹ https://www.adb.org/sites/default/files/project-documents/41603/41603-023-smr-en_0.pdf

PROJECT DESCRIPTION

Introduction

Bihar Urban Development Investment Program (BUDIP) is financed by the Asian Development Bank (ADB) through a multi-tranche financing facility (MFF). Each tranche constitutes a separate loan. BUDIP will also assist the urban local bodies (ULB) of the two towns-Bhagalpur and Gaya in bringing about operational discipline and structure which will ensure sustainable O&M. The overall BUDIP undertaking is scheduled over a nine - year. The total value of BUDIP is \$286 million. The MFF is for a loan amount not exceeding \$ 200 million.

On 31 January 2012, the Government of India (GoI) and the ADB concluded a framework financing agreement for a multi-tranche financing facility (MFF) for the Bihar Urban Development Investment Program (BUDIP). On 29 March 2012 ADB approved the MFF and on 13 April 2012, it approved the loan for the first tranche under the MFF. On 25 March 2013, the loan agreement between GoI and ADB for Tranche 1 of BUDIP (Loan 2861-IND) was signed. The loan became effective on 6 June 2013. BUDIP is being implemented in two cities namely Bhagalpur and Gaya by Bihar Urban Infrastructure Development Corporation Ltd (BUIDCo).

Loan 2861-IND was initially for an amount of \$ 65 million. BUIDCo requested ADB to surrender \$ 8 million loan savings towards future tranches. This has been accepted and the loan amount now stands reduced to \$ 57 million.

The objective of BUDIP is to contribute to the “sustainable economic growth through improved quality of urban life”. It is to improve the urban environment and living conditions in targeted urban areas in Bihar by (i) improving and expanding urban infrastructure and services in four towns and (ii) strengthening urban institutional, management and financial capacity of the urban local bodies (ULBs).

The improvement in urban infrastructure will include rehabilitation, improvement and expansion of (i) water supplies and (ii) sewerage and sanitation.

The design-build-operate (DBO) contract was awarded to PIRH-Ranhill India consortium. The contractor was mobilized in October 2014. The contractor, during the first year, had prepared a Service Improvement Plan (SIP) and designs for the distribution network, overhead tanks and renovation of the existing water treatment plant (WTP) etc. The contractor had commenced civil works in a phased manner.

The first phase of the implementation work comprised-(A)construction of three OHSRs at - (i)Housing Board Barari,(ii)Sarvjanik Thakur Badi Warsaliganj and(iii)TMBU campus and (B) laying of 50.09 km distribution pipelines.

The second phase of the approved work plan comprised-(A)construction of three OHSRs at-(i)within the campus of RCD Adampur,(ii)North of Bazar Samiti Campus, Agricultural Market Complex and (iii)Surkhikal and (B)laying of 104.96 Km of distribution pipelines.

The third phase comprised-(A)construction of six OHSRs at-(i)Behind Central Jail Anand Nagar,(ii)Jaglal High School,(iii)BMC Godown,(iv)Mahashay Deodhi 1,(v)Mahashay Deodhi 2

and(vi)CTS and(B)laying of 124.8 Km of water distribution pipelines in various stretches associated with respective OHSRs.

The fourth phase comprised-(A)construction of seven new OHSRs at–(i)Abir Mishra Lane, (ii)Barahpura Idgah,(iii)Aliganj Katghar,(iv)Kawali Maidan(v)Lajpat Park(vi)Manik Sarkar and (vii)Sikandarpur(B)laying of 180.90 Km of water distribution pipelines in various stretches associated with respective OHSRs and(C)refurbishment and rehabilitation of 4 existing OHSRs at:Goshala,CTS,Ghantaghar and Ishakchak.

However, since mid-January 2019 the work at different sites was almost stopped and in the first week of May-2019 the works completely stopped.Civil construction work was underway at ten OHSR locations but none was completed. The contractor could lay only about 175 kms of distribution pipes (achievement~39%) and 7367 houses were equipped with water service connection (achievement~11%). Owing to very slow progress, several notices to correct were issued to bring about required impetus to the project but the contractor repeatedly failed to deliver. BUIDCo, therefore, was compelled to process for termination of the contract with M/s Pan India Infra projects Pvt Ltd– Ranhill Utilities Sdn Bhd (PIRH) Consortium. The contract was terminated with effect from 09.07.2019. The status of physical progress achieved by PIRH has been appended as Annexure 10.

It was further decided that for speedy implementation the balance work of BWSP-01 with new Tube Wells may be split into four packages and State Bid Document (SBD) shall be used for tendering and engaging contractors. Following the decision of board the entire balance work of BWSP-01 with new Tube Wells and Emergency Temporary Intake with pumps and raw water pumping main have been split into four packages- (i) BWSP1-01, (ii) BWSP1-02, (iii) BWSP1-03 and (iv) BWSP1-04.

A draft resettlement plan was first prepared in August 2013 and the same was updated in December 2015. This RP has been updated for-(i) the remaining components that could not be completed /or taken up by PAN India and (ii)additional components as proposed under various sub projects. This RP is based on the detailed engineering designs approved for subprojects BWSP 1-01, BWSP 1-02, BWSP 1-03 and BWSP 1-04 under BWSP I and is consistent with the draft Resettlement Framework for the project. **Detailed measurement survey will be conducted and the RP will be updated accordingly before start of civil implementation works.**

The subproject is classified as “Category B” for Involuntary Resettlement (IR) impact as per ADB’s Safeguard Policy Statement (SPS), 2009. The final RP will be reviewed and disclosed on IA and ADB websites. No civil works contracts package should be awarded and started before the completion of final RP implementation for the said package. The Implementing Agency (IA) is responsible to hand over the project land / site to the contractor free of encumbrance.

Proposed Subproject Components

The revised / remaining components of the three packages of BWSP1 include-(i)completion of balance works of nine OHSRs one each at Housing Board, Thakurbari, Tilka Manjhi Bhagalpur University (TMBU), Bazar Samiti, Surkhikal , RCD Adampur, Anand Nagar, BMC Godwn and Lajpat Park (ii)construction of ten new OHSRs one each at Mahashay Deodhi 1,Aliganj, Sikandarpur, Maniksarkar, Mughalpura, Mahashay Deodhi 2 , Jaglal High School,Constable Training School (CTS_P),Abhir Mishra lane and Barahpura, (iii)rehabilitation/

refurbishment of four OHSRs – one each at Ghantaghar, Goshala, Ishakchak, and Constable Training School (CTS_E) (iv) one new tube well and pump house at each OHSR location-pump-power connection, supply and erection of Submersible pump set in newly created tube wells etc. and (v) other works comprising- distribution System, household service connection (HSC) in these OHSR zones, public stand post, monitoring stations etc. while BWSP1-04 comprises- renovation of existing WTPs at Barari, emergency intake arrangement near DPS School, Babupur with pump and permanent raw water main to Barari WTP etc. The details of the over all components of BWSP1 has been provided in Table -1.

BWSP 1 Scope of Work (Package Wise)

Package No	Distribution mains (meter)			House Hold Service Connection (HSC)		
	Scope	Laid	Remaining	Scope	complete	Remaining
1	72954	50500.035	22453.965	8861	4361	4500
2	190599	36977	153622	30123	786	29337
3	204081	87133	116948	23343	2084	21259
4	7200	0	7200	0	0	0
Total	474834	174610.035	300223.965	62327	7231	55096

Source: Bid document

Package No	Pump House	Tube Well	Chlorinators	Public stand post	Road Restoration		
					Scope	complete	Remaining
1	3	3	3	60		1633.14	
2	10	10	10	80		219.9	
3	10	10	10	80		558.378	
4	0	0	0	0	7200	0	7200
Total	23	23	23	220	7200	2411.418	7200

Source: Bid document

Refurbishment of WTP-The refurbishment includes introduction of (i) alum and lime dosing systems with necessary chemical storage and mixing tanks, dosing-pumps, metering device with 100% standby capacity; (ii) flash mixers for coagulant rapid mixing; (iii) chlorination system with necessary dosing mechanism, storage and safety equipment in all three existing treatment plants; (iv) electrical actuators for all existing sluice valves in the Jewel Filter unit; (v) servicing of existing machinery and equipment, and (vi) painting of various units. Mechanical, Electrical, and Instrumentation works-(i) Installation of 2 nos of centrifugal pumps with accessories; (ii) replacement of sluice and non-return valves, pipes and fittings, (iii) air blowers for filters, (iv) chemical mixing and metering system, flash mixing system, (v) chlorination system, (vi) electrical works including 33 kV/0.433 kV substation works, LT switch gear panels and instrumentation works at pumping station (vii) electro- magnetic flow meter, ultrasonic type level indicator, pressure loggers, and (viii) online residual chlorine monitoring system, and chlorine leak detection system.

Laying of Distribution pipeline-The District Meter Area aims to better manage the distribution network, based on the pressure patterns control and on the water flows monitoring. A DMA is fed from few monitored input pipe lines and supply and consumption can be easily compared. The length of new pipes to be laid is estimated at about 460.636 km. The pipe materials will be Ductile Iron (Table -2).

Construction of Overhead Service Reservoirs- The water distribution system has been designed with formation of DMAs. The DMAs are connected to nearest Service Reservoirs. An examination of existing capacities of reservoirs and water demand to be met has been done in the design section. All together 19 numbers of OHSRs are proposed to be constructed to meet the water requirement. Please refer to **Table 3** for the location, capacity, DMAs proposed to be served by the commissioning of new and refurbishment of the existing OHSRs. Please refer to Annexure 7 for Coordinates and Google Earth Maps and Annexure 8 for Layout designs of the Proposed OHSRs.

Setting up of Customer Service Centre- It is assessed that 1 customer service centre (CSC) will be required to cater to 10,000 connections. There are about 83,000 households that will be covered under the project thus a total of 8 such CSCs including one central customer center is proposed to be commissioned under the project. The location of the central CSC is identified and it is to be established at WTP Barari. The remaining offices in the city area are proposed to be located on government land or within existing government buildings or rented space post commencement of DMA work.

Metered House Connection at all the DMAs It is proposed to provide household meter connections to 83,000 households.

Table-1: Description of the proposed water supply subproject for Bhagalpur City

Sl. No.	Component	Function	Description	Location
1	General	Improvement of water supply system in Bhagalpur city	Satisfy the future needs Enhancement of pumping, distribution and storage facilities to supply quality water to new areas and existing area with sufficient quantity	Bhagalpur city
2	Refurbishment of WTP. Rehabilitation	Replacement of pumping equipments running at lesser efficiency, since machinery has outlived their lives. Quality of the supply water get improved through disinfection		At Barari
3	Construction of overhead water storage reservoirs	Enhancement of additional storage capacity as per proposed DMAs	Construction of 19 over head reservoirs	Abhir Mishara Lane, Thakurbadi, Aliganj, Anand nagar, BMC Godown, Barahpura, Bazar Samiti, Constable Training School, Housing Board, Jaglal High School, Lajpath Park, Manik Sarkar,

				Mahasaydevdi-1, Mahasaydevdi-2, Mughalpura, RCD Adampur, Sikandarpur, Surkikal, TMBU
4	Laying of new clear water distribution pipe	Water loss reduction by replacing leaking water distribution pipelines, reducing the current water loss from existing 40% to 20%.	Approx. Length- 460 km DI pipe	Bhagalpur municipal area
5	Metered house connection	To supply measured water	Approx. 68,000 nos.	
6	Customer Service Centers	To cater to about 68,000 connections.	1 nos.	

Source: SIP Bhagalpur Water Supply

Table 2: Proposed Water Distribution Pipeline- DI K-7 pipe

New Distribution Pipe Size and Lengths		Existing Distribution Pipe Size and Lengths	
Diameter (mm)	Length (Km)	Pipe Size	Length (km)
DI K-7 pipe			
100	340	100 mm	22.500
150	53	150 mm	22.070
200	34	200 mm	12.081
250	6	250 mm	0.690
300	18.5		
350	0.1		
400	6.9		
500	1.1		
600	0.729		
Total (Km)	460.329	Total (Km.)	57.341

Source: SIP Bhagalpur water supply

Table-3: List of Over Head Service Reservoirs (OHSRs)

Sl. No.	OHT ID	Name of Location	Land Remark	Ward	Capacity (CUM)	Staging Height (m)	NOC Land Area	Drawing submitted (AREA)	Foundation Area	Raft Area (Dia)	Type of Foundation	No. of DMAs
1	1/1	Within the Campus of T.M. University, Bhagalpur	Govt, extra land available	11	1660	22	35m X 35m (Extra land 375 sqm is available)	40m X 40 m	28.2m X 28.2m	26.05m	Stone pile with Raft	2
2	1/2	Within the Campus of Constable Training School, Nathnagar	Govt, extra land available	8	1260	20	40 m X 40 m	40m X 40 m	Dia-19.05 m	18.850m	Concrete pile with raft	2
3	1/3	Mahashay Deodi-1, Near the Existing Tube Well in Champanagar	Private, extra land not available	1	885	23	15m X 15m	30m X 30 m	23.1m X 23.1m	20.650m	Stone pile with Raft	1
4	1/3 (A)	Mahashay Deodi-2, Near the Thakurbari in Champanagar	Private, extra land not available	1	1135	23	15m X 15m	30m X 30m	23.1m X 23.1m	21.85m	Stone pile with Raft	2
5	1/4	Abir Mishra Lane (near Nathnagar Police Station), Nathnagar	Govt, extra land available	3	1385	21	20m X 20m	35m X 35m	25.8m X 25.8m	26.65m	Stone pile with Raft	2
6	2/2	Within Jaglal High school at Company Bagh	Govt, extra land available	13	1520	24	20m X 20m	30m X 30m	26.1m X 26.1m	24.55m	Stone pile with Raft	3

Sl. No.	OHT ID	Name of Location	Land Remark	Ward	Capacity (CUM)	Staging Height (m)	NOC Land Area	Drawing submitted (AREA)	Foundation Area	Raft Area (Dia)	Type of Foundation	No. of DMAs
7	2/3	BMC godown, Tatarpur	Govt, extra land available	15	1135	21	20m X 20m	30m X 30m	23.1m X 23.1m	21.85m	Stone pile with Raft	3
8	2/6	Manik- Sarkar	Govt, extra land not available	20	1385	20	30m X 27m	35m X 35m	26.1m X 26.1m	23.65m	Stone pile with Raft	2
9	3/1	Lajpat park	Govt ,extra land one side available	20	1260	21	20m X 20m	30mX30m	Dia-23.85 m	23.65m	Raft foundation	2
10	3/2	Within the campus of the Road Division, Adampur, Bhagalpur	Govt, extra land available	22	1660	26	20m X 20m	35m X 35m	29.1m X 29.1m	26.05m	Stone pile with Raft	2
11	3/3	Barahpura Eidgah	Govt, extra land not available	33	1810	22	14mX28m	35m X 35m	29.1m X 29.1m	26.05m	Stone pile with Raft	3
12	4/1	Housing board colony	Govt, extra land available	29	1385	21	25m X 25m	25m X 25m	26.1m X 26.1m	23.650m	Stone pile with Raft	3
13	4/2	Adjacent (west side) to Bhagalpur Central Jail, near Anandanagar Colony (south west of Sunderban)	Govt, extra land available	30	1660	22	20mX20m	35m X 35m	29.1m X 29.1m	26.05m	Stone pile with Raft	2

Sl. No.	OHT ID	Name of Location	Land Remark	Ward	Capacity (CUM)	Staging Height (m)	NOC Land Area	Drawing submitted (AREA)	Foundation Area	Raft Area (Dia)	Type of Foundation	No. of DMAs
14	4/4	In front of Medical Quarter, Surkikal	Govt, extra land available	26	1260	23	20m X 20m	30m X 30m	26.1m X 26.1m	23.65m	Stone pile with Raft	2
15	5/1	Open land to the north of the temple, Sarbajanik Thakurbari, Warsaliganj	Thakurwari, extra land available	49	1135	22	30m X 30m	30m X 30m	23.6m X 23.6m	21.85m	Stone pile with Raft	3
16	5/2	North of Bazar Samity campus, Agricultural Market Complex Baghbari.	Govt, extra land available	50	1660	20	20m X 20m	30m X 30m	Dia-26.5m	26.05m	Raft foundation	4
17	5/3	Open land to the west of the tube well, Aliganj Katghar ,Hussainabad	Govt, extra land not available	42	1420	22	15m X 12m	35m X 35m	26.1m X 26.1m	24.25m	Stone pile with Raft	2
18	5/4	Mughalpara Kawali Maidan, Hussainabad	Ursa committee, extra land available	44	1260	22	30m X 30m	30m X 30m	26.1m X 26.1m	23.65m	Stone pile with Raft	2
19	5/7	Sikandarpur	Govt, extra land not available	46	1520	21	37m X 44m	30m X 30m	26.1m X 26.1m	24.55m	Stone pile with Raft	2

Source: SIP Bhagalpur water supply

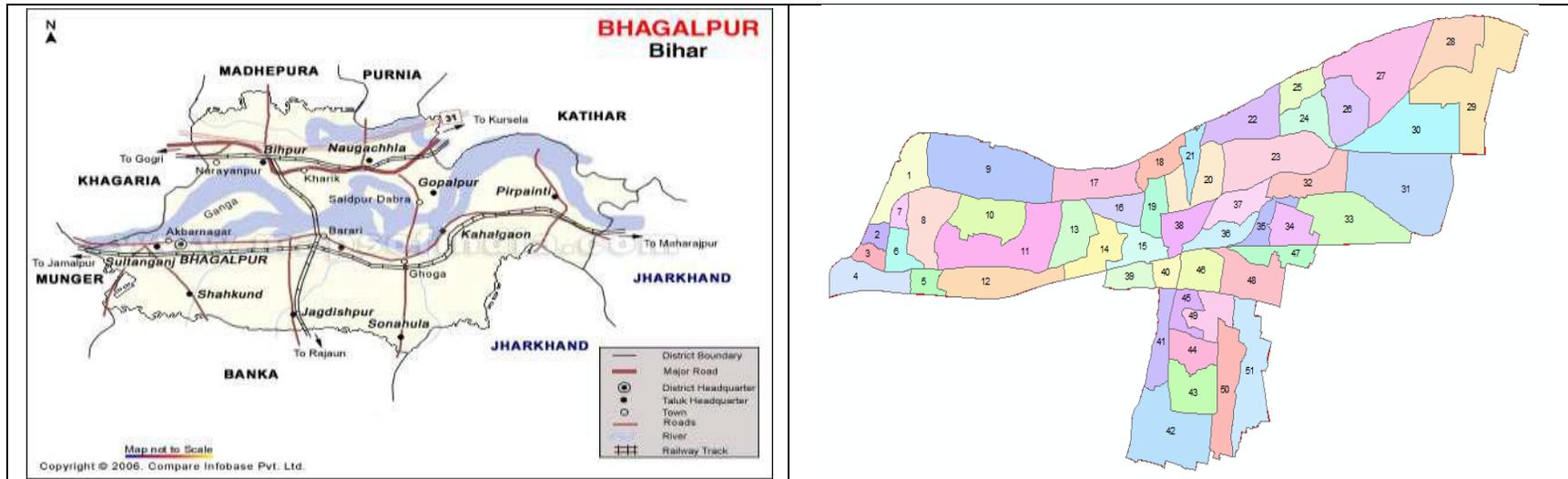
Objectives of the Resettlement Plan

This Resettlement Plan (RP) is prepared for investments proposed for subproject components of Bhagalpur water supply, under Project 1. It addresses the IR impacts of the proposed subproject components and is consistent with the agreed Resettlement Framework and ADB's SPS 2009.

This RP is prepared in accordance with ADB SPS requirements for IR Category B projects and to meet the following objectives:

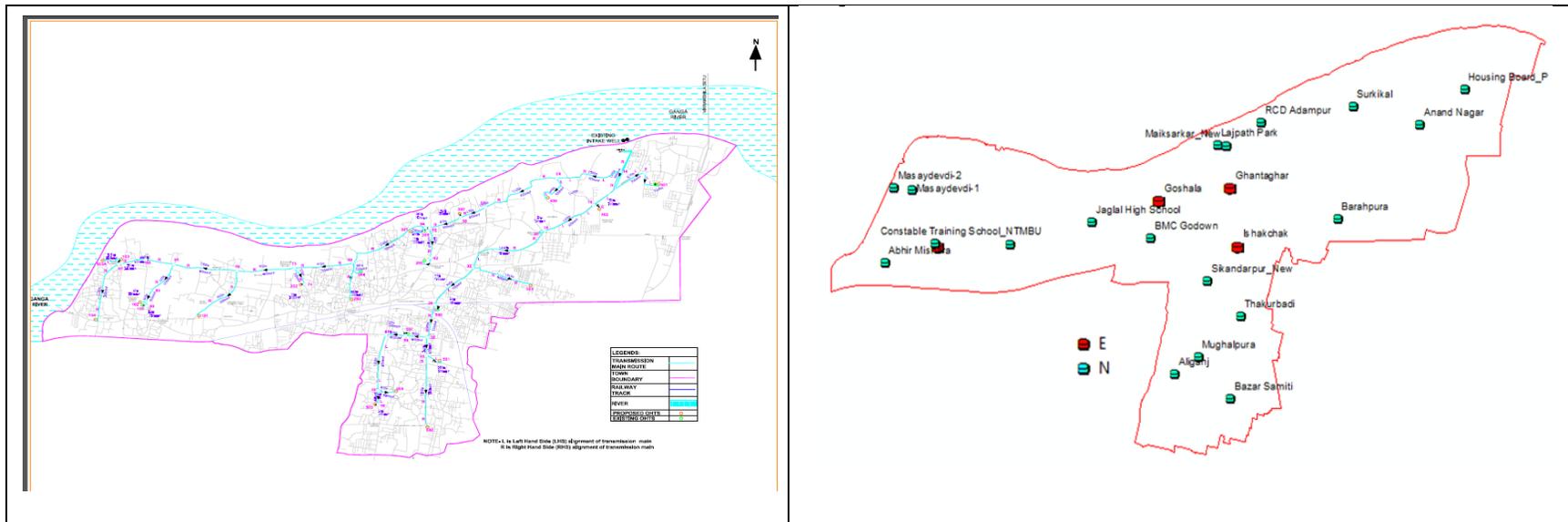
- I. to describe the identified scope and extent of land acquisition and involuntary resettlement impacts as a result of identified project components, and address them through appropriate recommendations and mitigation measures in the RP;
- II. to present the socio-economic profile of the population in the project area, identify social impacts, including impacts on the poor and vulnerable, and the needs and priorities of different sections of the population, including women, poor and vulnerable;
- III. to describe the likely economic impacts and identified livelihood risks of the proposed project components;
- IV. to describe the process undertaken during project design to engage stakeholders and the planned information disclosure measures and the process for carrying out consultation with affected people and facilitating their participation during project implementation;
- V. to establish a framework for grievance redressal for affected persons (APs) that is appropriate to the local context, in consultation with stakeholders;
- VI. to describe the applicable national and local legal framework for the project, and define the IR policy principles applicable to the project;
- VII. to define entitlements of affected persons, and assistance and benefits available under the project;
- VIII. to present a budget for resettlement and define institutional arrangements, implementation responsibilities and implementation schedule for resettlement implementation; and
- IX. to describe the monitoring mechanism that will be used to monitor resettlement plan implementation

Figure - 1: Ward and Ward Boundary of Bhagalpur



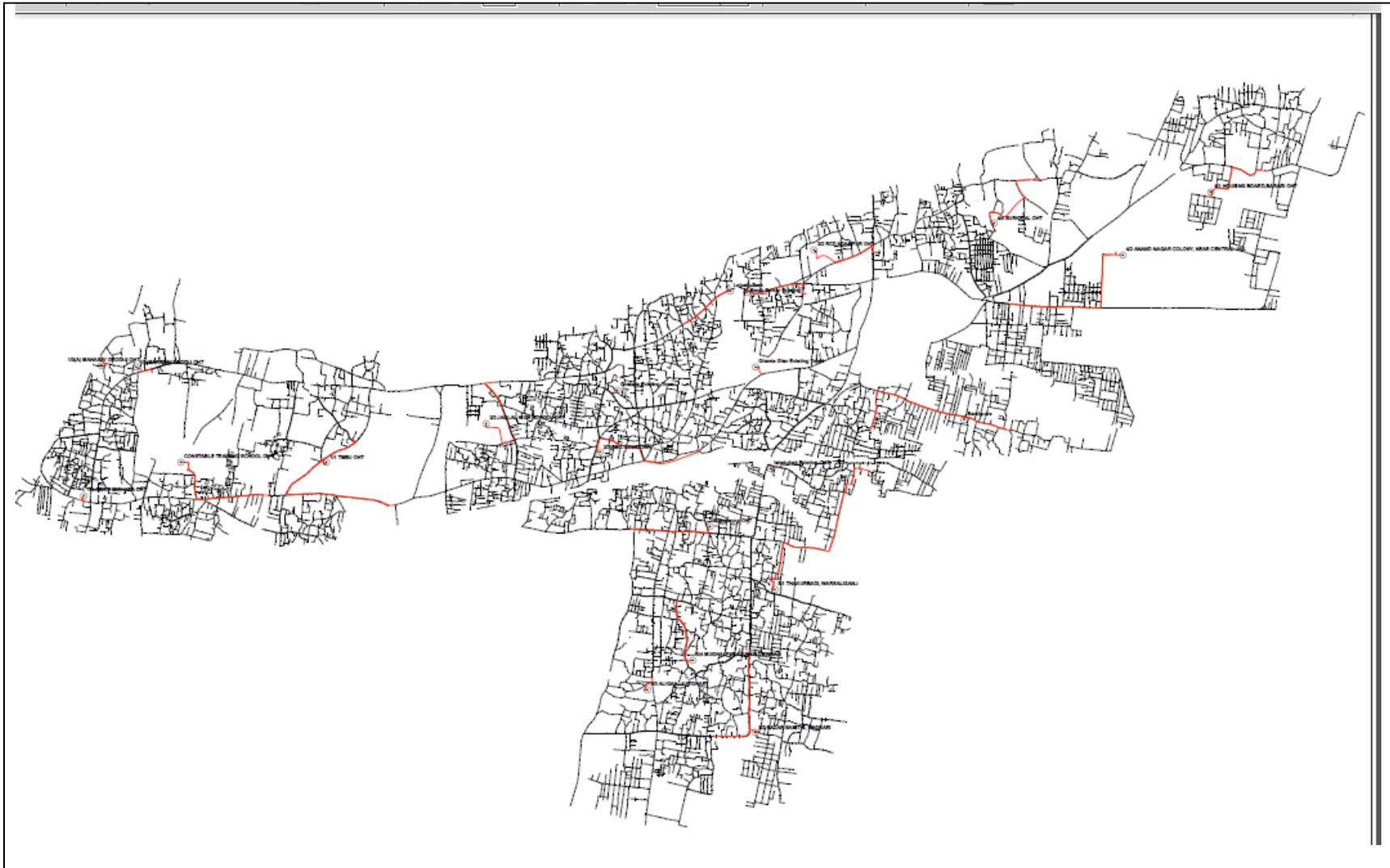
Source: SIP Bhagalpur Water Supply

Figure - 2: Map showing location of project area



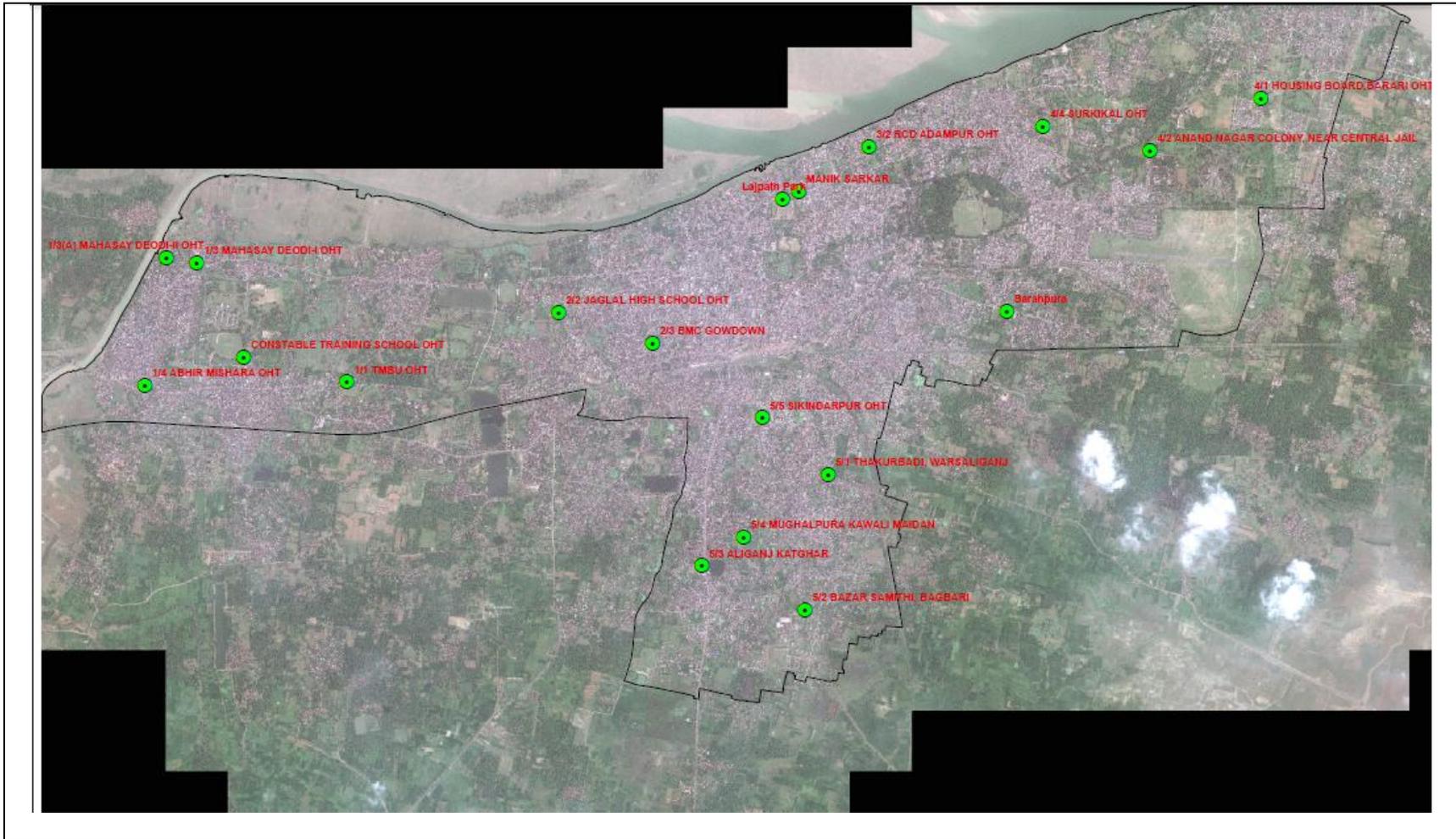
Source: SIP Bhagalpur Water Supply

Figure-3: Location and maps of proposed project components



Source: SIP Bhagalpur Water Supply

Figure-4: Google map of the proposed water storage reservoirs location at Bhagalpur



Source: SIP Bhagalpur Water Supply

Figure-5: Google Map- WTP Refurbishment at Barari



Source: SIP Bhagalpur Water Supply

SCOPE OF LAND ACQUISITION AND RESETTLEMENT

Land acquisition and involuntary resettlement

All land required for subproject components in Bhagalpur has been identified. No private land acquisition is required. Efforts have been made in detailed design to avoid or minimize resettlement impact through careful design of the major portion of pipe alignments for water supply distribution through available government land and existing public road right of way (RoW), avoidance of land acquisition and selection of sites and alignment alternatives with none / minimal resettlement impact. All proposed OHTs for which land has been identified, are on government land. It is assessed that minimum of 8 customer service centres (CSC) will be required to cater to 83,000 house hold water connections as each CSC is proposed to cater to 10,000 connections only. The central CSC is proposed to be constructed at Barai WTP site while the location of other CSCs are to be identified, post commencement of DMA work, on government land or within existing government buildings or rented space. The updated RP will assess IR impacts, post-identification of CSC locations.

Measures to avoid and minimize private land acquisition and involuntary resettlement impacts include identification of government land for construction of reservoirs, and for all proposed new / refurbished facilities, night work in congested commercial areas, traffic management during pipe laying work, ensuring access to shops and businesses by providing pedestrian access through planks, assistance to mobile hawkers and vendors and those with moveable, temporary structures to shift to (and back from) nearby locations where they can continue with their economic activities, is proposed. Where excavation close to properties / residences cannot be avoided, simple mitigation measures such as provision of planks are proposed as per available guidelines in EMP and best practice. Timely information will be provided to the public about potential negative impacts and mitigation measures, including grievance redress procedures and time taken for the same, prior to start of project implementation.

The RP prepared in January 2012 has been revised twice – first in August 2013 and then in December 2015. The methodology adopted in the original RP prepared in, January 2012², to estimate temporary impact due to the commissioning of the subproject components comprised-(i)conducting three transect walks of 300 meter each³ and(ii)extrapolating the findings for the entire stretch of 243 km of distribution network.In the absence of detailed designs, inputs were obtained from the program preparation engineer to assess the extent of impacts likely due to the proposed works.Based on the estimation, it was assumed that commissioning of the subproject may adversely impact the livelihood of 6124 persons comprising vendors with pushcarts, baskets and (moveable) tables (2,893) and those with repair stands having bamboo and tarpaulin structures (811) etc.All such affected persons have makeshift structures and have squatted on the RoW for commercial purposes.

In the RP⁴, updated in August 2013, the estimation of temporary impact was derived by extrapolating the numbers observed during the transect walks carried out in RP prepared in January 2012, for 326 km. of distribution pipelines.In the absence of detailed designs, inputs were obtained from the program preparation engineer to assess the extent of impacts likely due to the proposed works.Based on the estimation,it was assumed that commissioning of the subproject may adversely impact the livelihood of 8,145 persons comprising those with

²<https://www.adb.org/sites/default/files/project-document/60093/41603-023-ind-rp-01.pdf>

³Transect walks were conducted in three 300-meter sections namely DN Singh Road, Swami Vivekananda Path and Barari (road in front of Mt. Carmel School) - representing high, medium and low density areas.

⁴<https://www.adb.org/sites/default/files/project-document/78598/41603-023-ind-rp-01.pdf>

makeshift/movable structures placed on RoW, vendors with pushcarts, baskets, moveable tables(3,848) and those with repair stands having bamboo and tarpaulin structures(1,079) who have squatted on the RoW for commercial purposes.

Detailed Measurement Surveys have been conducted in a phased manner. The outcome of the DMS (Table-4) conducted is given below–

Table - 4: Outcome of DMS conducted

Sl. No.	Name of OHSR Site	No. Of DMA	Length of pipe line to be laid in KM		IR Impact identified	
			Total	DMS conducted	At OHSR site	Along proposed pipe length
1.	Housing Board Barari	3	28.20	28.19	Permanent IR impact – 2	None
2.	Thakurbari	3	21.89	21.88	None	None
Subtotal (Phase-1)		6	50.09	50.07		
3.	TMBU	2	22.48	21.35	None	None
4.	Bazar Samiti	3	43.02	41.54	None	None
5.	RCD	2	17.38	17.26	None	None
6.	Surkhikal	2	22.08	20.00	None	None
Subtotal (Phase-2)		9	104.96	100.15		
7.	Anand Nagar	2	31.55	30.50	None	None
8.	Jaglal High School	3	24.72	23.42	None	None
9.	CTS	2	22.34	21.44	None	None
10.	Mahashay Deodhi - I	1	10.52	10.47	None	None
11.	Mahashay Deodhi - II	2	12.78	12.25	None	None
12.	BMC Godown	4	22.89	22.35	None	None
Subtotal (Phase-3)		14	124.8	120.43		
13.	Abir Mishra Lane	2	17.59	16.31	None	None
14.	Barahpura Idgah	3	32.32	30.76	None	None
15.	Manik Sarkar	2	26.70	25.00	None	None
16.	Sikandarpur	2	22.23	21.00	None	None
17.	Aliganj Katghar	2	24.82	23.00	None	None
18.	Kawali Maidan	2	21.88	21.88	None	None
19.	Lajpat Park	2	18.12	18.12	None	None
Subtotal (Phase - 4)		11	163.66	156.07		
Total (Phase 1+2+3+4)		40	443.51	426.72		

The RP⁵ was again updated in December 2015 incorporating the findings of the DMS. The DMS identified two permanent IR impacts (relocation impact-1 household, and 1- cattle shed) at OHSR site at Housing Board Barari. The APs were compensated as per the entitlement matrix before start of civil works. The DMS identified no impact of temporary and / or permanent nature at the other proposed OHSR sites and no negative impact on land, structure and livelihoods due to the laying of the pipeline.

⁵<https://www.adb.org/sites/default/files/project-document/191506/41603-023-rp-03.pdf>

⁵ Initially, the distribution network was estimated to be of 326 km. As per the contract clause, the contractor is to prepare the Service Improvement plan to figure out the actual length of the distribution network. As per the approved SIP, the length of new pipes to be laid is estimated at about 460.636 km.

Mobile vendors as well as those with moveable structures, if required, will be assisted to shift to nearby places during the period of pipelaying, where they will be able to continue with their business until they are assisted to move back, when pipelaying for the stretch is completed.⁶ Where businesses are unable to or are not required to shift, access will be ensured by the contractor by avoiding excavation of adjacent footpaths and/or by providing planks for pedestrian access. Excavation for each stretch will be limited to the length of pipe that can be laid overnight and excavated trenches in congested areas will be filled by morning, to minimize the period of disruption. Potential disruptions at pipe crossings at congested, commercial areas are to be mitigated by undertaking night work and minimizing the construction period.⁷ At national highway and railway crossings, trenchless technology is proposed to be used. Comparative summary of potential land acquisition and Resettlement Impacts due to subproject components are presented in Table 5.

Estimated resettlement impacts of identified sites / alignments for proposed interventions under BWSPI, based on field visits and survey are presented in Table 4 given below.

Table 5: Comparative Summary of Resettlement Impacts

Sl. No.	Details	Impact		Remarks
		Affected persons / land area		
		Draft RP (326 km)	updated RP (0-426 km stretch)	
1	Permanent land acquisition	None	None	
2	Temporary Land Acquisition	None	None	
3	Permanent relocation impact (non-titleholders)	None	1 households 7 persons	Squatter at Barari OHSR site; vulnerable household.
4	Permanent impact: structure loss	None	1 Residential Kutcha House 1 Cattle shed	
4a	Total loss of structure (100%)	None	1 residential structure	Ms. Asha Devi
4b	Partial loss of structure (40%)	None	1 cattle shed	Mr. D.N. Mandal
5	Temporarily Affected Persons	8145	None ⁸	Assessed on

⁶ Mobile hawkers will not be affected as they will be able to shift to nearby locations to continue plying their trade.

⁷ Busy crossings in commercial areas where night works are proposed include Barari vegetable market and Mirjan Haat market

⁸ In the draft RP, the estimation of the temporary impact was done through extrapolation for the entire stretch. The positive change in the impact is because of the efforts made in the detailed design to avoid or minimize resettlement impact through careful design of the major portion of pipe alignments for water supply distribution through available government land and existing public road right of way (RoW), avoidance of land acquisition and selection of sites and alignment alternatives with

5a	Titled affected persons (temporarily affected)	None	None	the basis of DMS
5b	Non-Titled affected persons (temporarily affected hawkers and vendors) ^a	8145	None	
5c	Non-Titled affected persons (temporarily affected <i>kutchra</i> residential structures)	4	0	
6	Potential temporary impacts to hawkers and vendors	8145	None	
6a	Potential temporary impact: income loss	8145	None	
6b	Potential temporary impact to BPL and FHH	816	None	
5.	Permanent income loss	None	None	
6.	Affected IP	None	None	-

Source: DMS conducted for Bhagalpur Water Supply

Through implementation of the Environmental Management Plan (EMP), contractors are required to maintain access to shops to avoid and limit the disturbance to the extent possible, and implement mitigation measures specified in their contracts, which will be monitored by the design supervision consultants and PIU.⁹ Temporary economic impacts to businesses along the pipe routes will be avoided and/or mitigated through careful planning of the timing of implementation of works on congested commercial roads (night works will be proposed for congested area), good traffic management planning and implementation,¹⁰ and maintaining access to shops during the construction period as outlined in the EMP.¹¹

The following mitigation measures are proposed to avoid and/or mitigate temporary impacts to businesses and residents during linear works:(i) provision of advance notice to community, (ii) conducting awareness campaigns on the proposed project, its benefits, potential

none / minimal resettlement impact. Measures to avoid and minimize private land acquisition and involuntary resettlement impacts include identification of government land for construction of reservoirs, and for all proposed new / refurbished facilities,night work in congested commercial areas, traffic management during pipe laying work, ensuring access to shops and businesses by providing pedestrian access through planks, assistance to mobile hawkers and vendors and those with moveable, temporary structures to shift to (and back from) nearby locations where they can continue with their economic activities, is proposed. Where excavation close to properties / residences cannot be avoided, simple mitigation measures such as provision of planks are proposed as per available guidelines in EMP and best practice. Timely information will be provided to the public about potential negative impacts and mitigation measures, including grievance redress procedures and time taken for the same, prior to start of project implementation.

⁹ The Design Supervision Consultant (DSC) will be responsible for construction supervision.

¹⁰ Traffic management plans will be developed by the Contractor (approved by the DSC) for congested road segments during the implementation period.

¹¹ To ensure disturbance is minimized to the extent possible, contractors will be required to expedite works at night in business areas, provide pedestrian planks across trenches, manage traffic flows, minimize construction period etc.

temporary impacts and mitigation measures, grievance redress mechanism, etc., (iii) maintaining access by providing planks and leaving spaces to avoid disturbance to residents and businesses, (iv) managing traffic flows as per the traffic management plan prepared by the contractor in coordination with local authorities and communities, (v) undertaking pipe-laying work at night along congested commercial stretches and limiting the amount of time of open trenches, (vi) placing details of telephone hotlines and contact information of PIU offices in signages in visible places, (vii) providing assistance to mobile vendors and hawkers to shift to alternative nearby locations. These measures will be enforced through the contract, which will have these as clauses.

Indigenous Peoples

No adverse impacts to indigenous peoples are anticipated, as all selected sites are within or close to the urban limits of Bhagalpur, and none fall in scheduled areas/traditional enclaves of scheduled tribes (ST). In the identification of sites for subproject components, care was taken to ensure that no IP/ST will be permanently affected.

SOCIO-ECONOMIC INFORMATION AND PROFILE

Profile of Affected Persons

Profile of affected persons (AP) facing permanent relocation impacts and / or structure loss is presented in Table 5. The household at Barari OHSR site is vulnerable, meeting 3 or more vulnerability criteria applicable to local context; a total of 7 persons belonging to the household are affected.¹²

¹² The PPTA Report for BUDIP identified the following vulnerability criteria in the context of Bihar: (1) households belonging to most backward communities; (2) head of household is a woman; (3) head of household is illiterate; (4) head of household is a daily wage labourer, (5) below poverty line household; and (6) household lives in a kutcha house. ADB's Facility Administration Manual quotes the PPTA stating that "more vulnerable" households are those that meet 5 or more of the above-mentioned vulnerability criteria. Implicit in the definition is that households meeting fewer criteria are also vulnerable, albeit to a lesser degree, and need additional support/assistance. All APs at Ramshila Hills and one sharecropper at Mastalipur are identified as vulnerable.

Table 5: Socio-economic Profile of Affected Persons facing Structure Loss and / or Relocation Impact

(Barari OHT site)

Sl. No.	Name of AP	Size (sq ft) and use of affected property (sq m)	Replacement Cost of affected property ¹³	% of property lost at the location	Income sources of HH	Whether vulnerable	HH size	Type of house	Asset ownership	Remarks
1	Ms. Asha Devi Mobile Number - 8083552561 / 9973393432	9 x 6.65 = 59 Residential	25,000.00	100%	works with the Water Works Department of Bhagalpur Municipal Corporation , Bhagalpur	Yes	7	Kutcha structure with bamboo wall , mud floor and hey roof	Land ownership - Housing Board Kutcha Structure- Private	Compensation has been paid before start of civil works
2	Mr. D .N. Mandal Mobile Number - 9431277645	6x4=24 Cattle shed	10,000.00	40%	Rickshaw pulling and wage labour work	Yes		Kutcha structure with bamboo wall , mud floor and hey roof	Private	Compensation has been paid before start of civil works

Source: DMS of affected persons, 2015.

¹³ Cost of affected property has been calculated as per estimate submitted by DSC (Annexure- 9)

INFORMATION DISCLOSURE, CONSULTATION, AND PARTICIPATION

Public Consultation

The RP was prepared in consultation with stakeholders including beneficiaries/local people, people living around project sites within and outside BMC limits, affected persons and their representatives, staff of schools where facilities are proposed, local youth and women, ward councilors, Mayor, Deputy Mayor, city manager and engineers of line departments and concerned government departments.

The Kick-off Meeting in Bhagalpur was conducted on 31st October 2013 at Municipal Commissioner's Conference Room. Key stakeholders who participated at the workshop included elected representatives and functionaries of BMC and various government agencies. Consultations and focus group discussions (FGDs) were conducted to seek feedback from local people on the proposed development interventions, perceived impacts and mitigation measures and their participation. Socio-economic and inventory of loss surveys and consultations with affected persons facing permanent and temporary impacts also helped understand AP perspectives and propose mitigation measures specific to each type of loss. The summary of consultations is presented in Annexure 6 of the RP.

Information Disclosure

Information dissemination and disclosure has been a continuous process since the beginning of the program. The approved RF and RP will be placed in the office of BMC; District Magistrate's Office, and city libraries. The DSC and PIU will continue consultations, information dissemination, and disclosure. A strategy for continued consultation and participation is in the RF. The finalized/approved RP will also be disclosed in ADB's website, as well as state government, local government (BMC), PMU (BUIDCO) and PIU websites. Project information will be continually disseminated through disclosure of resettlement planning documents, as and when updated. Information on compensation, entitlements and resettlement planning and management principles adopted for the subproject will be made available in the local language (Hindi) and the same will be distributed to APs. The consultation process will be continuous, through the project cycle. Please refer to Annexure 1 for Project information Leaflet.

Continued Consultation and Participation

The PIU/DSC will extend and expand the consultation and disclosure process during the construction period. The PMC will conduct training of contractors (engineers as well as safeguards personnel), PIU and DSC staff, and with the support of DSC and PIU, conduct a public awareness campaign during project implementation. A consultation and participation plan (CPP) is prepared for the project; PIU will be assisted by DSC to ensure that the communities in project areas are fully aware of project activities at all stages of construction. Community groups will be consulted and made aware of the civil works and project activities, anticipated impacts and mitigation measures, grievance redress process and contact details of PIU personnel prior to construction.

Public consultations aimed at generating awareness about the project components and civil implementation works have been conducted on a regular basis since 2014 till demobilisation of the contractor. Eleven (11) project orientation seminars, 09 women only consultations and 187 public consultations have been conducted in Bhagalpur since 2014. A total of 2448 people of which 913 were women (~37.30%) participated in the public consultations held thus far.

Accountable awareness has been generated on BWSP Project; HSC connection work, significance and health benefits of chlorination of water; Ward Facilitation Committee, how to conserve water or reduce wastage of water and temporary inconvenience that they might face due to the commissioning of the project etc. A program of continuous consultation and disclosure is proposed.

GRIEVANCE REDRESS MECHANISM

Common Grievance Redress Mechanism

A common Grievance Redress Mechanism (GRM) has been put in place to redress social, environmental or any other project and/or subproject related grievances. The GRM described below has been developed in consultation with stakeholders, including affected persons and NGOs.¹⁴ Customer Service Centres (CSC) proposed in each town, including a central CSC will serve as the focal points for registration of grievances. The APs will also be encouraged to lodge their complaints through phone or email or post and seek a complaint registration number either through the CSCs or directly, through the project grievance redress cell at PIU.

The Grievance Redress Mechanism provides an accessible, inclusive, gender-sensitive and culturally appropriate platform for receiving and facilitating resolution of affected persons' grievances related to the project. A Grievance Redress Cell will be established at PIU; the social safeguards officer of PIU, supported by the social safeguards expert and social mobilisers of DSC will be responsible for conducting periodic community meetings with affected communities to understand their concerns and help them through the process of grievance redressal including translating the complaints into Hindi or English from the local language, recording and registering grievances of non-literate affected persons and explaining the process of grievance redress mechanism. All expedient and minor grievances will be resolved at project level; should the PIU fail to resolve any grievance within the stipulated time period, the PMU will be consulted and suggested actions by PMU taken by PIU with DSC support, within specified time. PIU will also be responsible for follow-through for each grievance, periodic information dissemination to complainants on the status of their grievance and recording their feedback (satisfaction/dissatisfaction and suggestions).

The GRM aims to provide a time-bound and transparent mechanism to voice and resolve social and environmental concerns linked to the project. All grievances – major or minor, will be registered. In case of grievances that are immediate and urgent in the perception of the complainant, the contractor, and supervision personnel from the PIU supported by DSC will try to successfully resolve them. In case of larger issues, they will seek the advice and assistance of the PMU. Grievances not redressed through this process within/at the project level within stipulated time period will be referred to the City Level Committee/Grievance Redress Committee.¹⁵

City Level committees will be set up to monitor project implementation in each town. In its role as a Grievance Redress Committee (GRC), the CLC will meet every month (if there are pending, registered grievances), determine the merit of each grievance, and resolve grievances within specified time upon receiving the complaint-filing which the grievance will be addressed

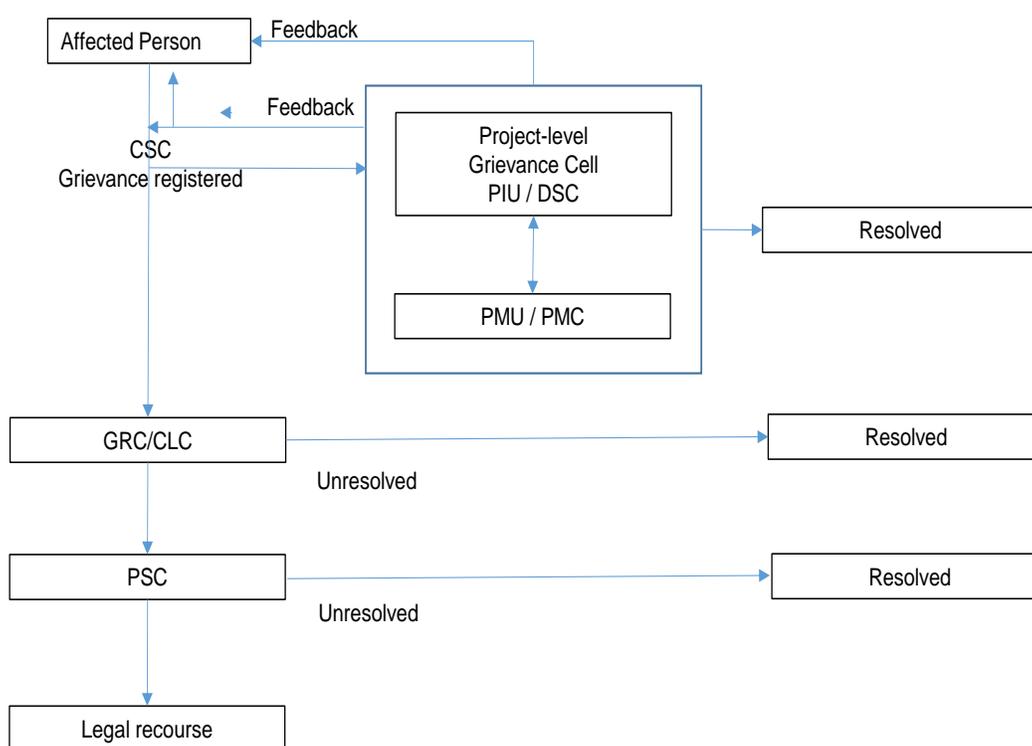
¹⁴ The draft Grievance Redress Process has been circulated and discussed with the following Bihar-based NGOs and research institutes working on environment, social and gender issues, for comments: Asian Development Research Institute, Participatory Research in Asia, Nav Manas Kalyan Samiti and Taru Mitra.

¹⁵ Grievances related to award of compensation can be addressed by the district collector's office and court of law.

by the state-level Project Steering Committee (PSC). The PSC will resolve escalated/unresolved grievances received. Grievances related to land acquisition; rehabilitation and resettlement remaining unresolved by PSC will be referred by affected persons to the State Land Acquisition, Rehabilitation and Resettlement Authority, if constituted during the project period in the state, or, to appropriate courts of law.¹⁶ The multi-tier GRM for the project is outlined below (Figure 6), each tier having time-bound schedules and with responsible persons identified to address grievances and seek appropriate persons' advice at each stage, as required. The GRC will continue to function throughout the project duration. The PMU has issued a notification to tranche 1 and 2 project towns to establish the respective city level GRCs, with details of composition, process of grievance redress to be followed, time limit for grievance redress at each level, etc. Annexure 2 provides a copy of the GRM notification issued in local language, which also specifies the time taken at each stage of the process.¹⁷

In the event that the established GRM is not in a position to resolve the issue, the affected person also can use the ADB Accountability Mechanism through directly contacting (in writing) the Complaint Receiving Officer (CRO) at ADB headquarters or the ADB India Resident Mission (INRM). The complaint can be submitted in any of the official languages of ADB's DMCs. The ADB Accountability Mechanism information will be included in the PID to be distributed to the affected communities, as part of the project GRM.

Figure 6: Project Grievance Redress Mechanism



¹⁶ The land acquisition, rehabilitation and resettlement authority is required to be set up in every state as per LARR Act, 2013. The authority is not in place in Bihar yet. Until such time that the authority is constituted in the state, aggrieved parties will be able to directly approach the courts of law at any stage.

¹⁷ A maximum time period of 90 days is allocated for project level grievance redress, 60 days for the GRC/CLC and 90 days for the PSC, in BUIDCO's resolution on project grievance redress process dated 27 May, 2015 (Annexure 2).

CLC=city level committee, CSC=customer service center, GRC=grievance redress committee; GRM=grievance redress mechanism, PIU= project implementation unit, PMU =Project Management unit, PSC=project steering committee.

Composition of GRC and PSC

The CLC, acting as GRC comprises of District Magistrate (Chairperson), Mayor, Municipal Commissioner, Head, PIU (Convener), and City Level Heads of relevant departments (such as BRJP, Road Construction Department, PHED, Electricity Board, State Pollution Control Board, Police, etc. and departments such as Forest Department, Railways etc.); Chairpersons of the concerned Municipal Corporation's Standing Committee; ULB officials including Municipal Engineer, Town Planning Officer, Medical and Health Officer; representatives from the affected village *panchayat* and / or community, if any, eminent citizens, CBOs and NGOs. The GRC/CLC must have a minimum of two women members. In case of any indigenous people impacts in future subprojects, the GRC/CLC must have representation of the affected indigenous people community, including at least one female indigenous person, the chief of the tribe or a member of the tribal council as traditional arbitrator (to ensure that traditional grievance redress systems are integrated) and an NGO working with indigenous people groups.

The PSC includes the Minister for Urban Development (Chairperson), State Chief Secretary (Vice Chairperson), and Ministers, Directors and/or representatives of other relevant government ministries and departments, e.g., Finance, Planning, PHED, Roads, BRJP, etc., Mayors of respective municipal corporations and the project director (Member Secretary and Convener) as members.

Areas of Jurisdiction

The areas of jurisdiction of the GRC, headed by the District Magistrate will be (i) all locations or sites within the district where subproject facilities are proposed, or (ii) their areas of influence within the District. The PSC will have jurisdictional authority across the state (i.e., areas of influence of subproject facilities beyond district boundaries, if any).

Consultation Arrangements

This will include regular group meetings and discussions, at least twice during resettlement plan preparation, with affected persons by the social safeguards personnel of DSC and PIU. During the first year of RP implementation, such meetings will take place on a quarterly basis, while in subsequent years; these meetings will be held at least twice a year. The consultation arrangement thus envisaged is intended to address both general and/or specific individual grievances through a participatory approach. Besides, the consultative process is meant to be flexible to provide timely mitigation of grievances of the APs. The most complex cases will be dealt with through one-to-one consultation with particular APs by a host of actors comprising social safeguard expert of DSC and Resettlement Officer, PIU, with the support of PMU and PMC as and when required. DSC will be responsible for ensuring that non-literate affected persons and/or vulnerable affected persons are assisted to understand the grievance redress process as well as for encouraging them to register complaints and follow-up with relevant authorities at different stages in the process.

Recordkeeping

Records of all grievances received, including contact details of complainant, date the complaint was received, nature of grievance, agreed corrective actions and the date these were effected and final outcome will be kept by PIU (with the support of CSCs and DSC) and submitted to PMC.

Information dissemination methods of the GRM

The PIU, assisted by DSC will be responsible for information dissemination to affected persons on grievance redressal procedure. ULB-wide public awareness campaigns will ensure that awareness on grievance redress procedures is generated through the consultation and participation plan. Public awareness campaign will be conducted to ensure that awareness on the project and its grievance redress procedures is generated. The PIU environment and social safeguard officers will be assisted by design and supervision consultant (DSC) safeguards specialists with information/collateral/awareness material etc. and in conducting project awareness campaigns. The campaign will ensure that the poor, vulnerable and others are made aware of grievance redress procedures and entitlements per project Resettlement Framework including who to contact and when, where / how to register grievance, various stages of grievance redress process, time likely to be taken for redressal of minor and major grievances, etc. Grievances received and responses provided will be documented and reported back to the affected persons. The number of grievances recorded and resolved and the outcomes will be displayed/disclosed in the PMU and PIU offices, ULB/concerned local panchayat notice boards and on the web, as well as reported in the semi-annual environmental monitoring reports to be submitted to ADB. A Sample Grievance Registration Form has been attached in Annexure 2.

Periodic review and documentation of lessons learned. The PMU safeguard officers will periodically review the functioning of the GRM and record information on the effectiveness of the mechanism, especially on the PIU's ability to prevent and address grievances.

Costs. All costs involved in resolving the complaints (meetings, consultations, communication and reporting/information dissemination) will be borne by the PMU. Cost estimates for grievance redress are included in resettlement cost estimates.

POLICY AND LEGAL FRAMEWORK

The policy framework and entitlements for the project are based on applicable laws and regulations of the national and state government, ADB's Safeguards Policy Statement 2009; and the agreed Resettlement Framework.

ADB Safeguards Policy Statement (2009) are (i) compensation to replace lost assets, livelihood, and income; (ii) assistance for relocation, including provision of relocation sites with appropriate facilities and services; and (iii) assistance for rehabilitation to achieve at least the same standard of living with the project as without it. In addition, the absence of legal title to land should not be a bar to compensation. ADB SPS requires payment of compensation prior to actual loss.

Government of India and Government of Bihar Laws and Policies. The applicable legal and policy frameworks of the government, include: The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act; 2013, and state law: the Bihar Land Acquisition and Resettlement and Rehabilitation Policy, 2007. The Resettlement

Framework specifies that in case of discrepancy between the policies of ADB and the government, ADB policy will prevail.

Based on these, the core involuntary resettlement principles applicable are: (i) land acquisition, and other involuntary resettlement impacts will be avoided or minimized exploring all viable alternative subproject designs; (ii) where unavoidable, time-bound Resettlement Plans will be prepared and APs will be assisted in improving or at least regaining their pre-program standard of living; (iii) consultation with APs on compensation, disclosure of resettlement information to APs, and participation of affected persons in planning and implementing subprojects will be ensured; (iv) vulnerable groups will be provided special assistance; (v) payment of compensation to APs including non-titled persons (e.g., informal dwellers/squatters, and encroachers) for acquired assets at replacement rates; (vi) payment of compensation and resettlement assistance prior to the contractor taking physical acquisition of the land and prior to the commencement of any construction activities; (vii) provision of income restoration and rehabilitation; and (viii) establishment of appropriate grievance redress mechanisms.

Policy framework and entitlements are discussed in detail in the Resettlement Framework. Annexure 3 to this RP provides a comparison of national, state and ADB policies and identifies how the Resettlement Framework addresses gaps in present policies.

ENTITLEMENTS, ASSISTANCE AND BENEFITS

Types of Losses and Affected Person (AP) Category

The anticipated types of losses due to the Bhagalpur water supply sub-project components under project 1 are (i) loss of residential structure; (ii) physical relocation of non-titled, poor and vulnerable persons; and (iii) loss cattle shed.

According to ADB SPS 2009 in the context of involuntary resettlement, affected persons (APs) are those who are physically relocated – i.e., lose residential land, or shelter and/or economically displaced (loss of productive land, structures, assets, access to assets, income sources, or means of livelihood). The absence of formal and legal title to the land does not bar the affected person from receipt of compensation and resettlement assistance from the project. Vulnerable APs are eligible for additional compensation and assistance and are to be accorded priority in employment in project related construction activities.

Detailed Measurement Surveys (DMS) and Inventory of Loss Surveys have been conducted for project sites and distribution mains alignments to determine the total number of temporarily affected persons along the distribution line.¹⁸ Eligibility for compensation will be the date of start of the DMS prior to commencement of civil works in sections ready for construction.

The date of DMS survey will serve as the cut-off date for eligibility. Hawkers or businesses who settle in the affected areas after the cut-off date will not be eligible for compensation. They will, however be given sufficient advance notice (at least 30 days), and assisted to vacate premises and dismantle affected structures prior to project implementation.

¹⁸ The Detailed Measurement Survey (DMS) will establish the number of affected persons (AP)/businesses along each proposed pipe/road stretch with potential impacts. It will collect only essential information for determining entitlements. The DMS will gather personal information on the AP, type of business, type of structure, number of persons employed, income and profits per day, vulnerability, if any of the owner or employees, and will record the type of distress likely.

Contractors will provide shifting assistance to hawkers / vendors requiring help. Information regarding the cut-off date for eligibility to all types of compensation will be documented and disseminated throughout the project area.

Entitlements

The entitlement matrix (Table 6) summarizes the types of possible losses and corresponding entitlements in accordance with ADB and government policies, based on the principle of replacement cost. In addition to the estimated permanent impacts and potential temporary impacts, the entitlement matrix safeguards unforeseen impacts.

In accordance with the entitlement matrix for the project, all displaced households and persons will be entitled to a combination of compensation packages and resettlement assistance, depending on the nature of ownership rights on lost assets, scope of the impacts including socioeconomic vulnerability of the displaced persons, and measures to support livelihood restoration if livelihood impacts are envisaged. The entitlement matrix for the subproject based on the above policies is in Table 6.

Relocation

The squatter household on Housing Board land affected by loss of structure constructed / occupied by them facing 100% loss of occupied structure will require to be relocated. The households requiring relocation is assessed to be poor and vulnerable household.

Affected persons facing loss of residential structures, including encroachers and squatters will be required to relocate (1 household with 7 members) and as per EM, will be entitled to the following: (1) 60 days advance notice to remove their assets, meant to minimize damage / loss and ensure that they incur none or minimal livelihood disruption; (2) cash compensation for affected structures or part thereof at replacement value computed on the basis of the latest prevailing basic schedule of rates (BSR) in the state without depreciation; (3) right to salvage material from the affected structure, at no cost; and (4) a lump sum shifting assistance of Rs. 10,000; and (5) cash assistance towards rental subsidy.

Since the household to be relocated is vulnerable, it is entitled to additional assistance, including: (1) one-time lump sum assistance of Rs. 36,000 (12 months subsistence allowance) per household; (2) priority placement in project construction activities; (3) an additional 25% of resettlement benefits to which they are entitled, for SC/ST households relocated outside the district, along with a one-time resettlement entitlement of Rs. 50,000 as per provisions of the RFCTLARR; and (4) training and placement in project operation work for 1 member of poor/vulnerable household. In the event that no member of a physically/economically displaced poor/vulnerable household opts for a project operation related job,¹⁹ the RP/EM provides for skill training, income generation assistance.

Written assurance from IA will be required, stating that all displaced poor/vulnerable households will be accorded priority for training and placement in project operation related jobs, if desired by them.

Meaningful consultations will be conducted with the affected families; minutes of such consultations will be carefully and accurately prepared, and their agreement for (a) the temporary

¹⁹ Statement of each household on preferred employment option to be recorded and added to updated RP.

housing arrangements until they can get access to legal rental housing and (b) willingness to take the jobs offered (to ensure they can afford to rent adequate housing for their family) by the project, recorded.²⁰

The project (PIU and DSC) will provide assistance to APs facing relocation, to find suitable temporary rental housing in the vicinity (preferably close to each other, so that social networks are maintained and it is easy to track rehabilitation activities and status of the households), before demolition/relocation. In addition, they will also provide assistance to relocated persons to apply for benefits under available government land or housing schemes for the poor.

PIU and DSC safeguards personnel will be responsible for maintaining contact with each displaced poor/vulnerable household, throughout the project implementation period, to ensure that their socio-economic and housing status is monitored and they are enabled to attain the anticipated rehabilitation outcome of improved standard of living.

Livelihood protection and Income Restoration

The RP proposes the following measures for livelihood protection and income restoration:

Assistance provided to physically and economically displaced vulnerable persons will include support during project construction period as well as in the post-project operation phase, in the form of: (1) priority and preference in project related construction work; and (2) training and project-related jobs at operation stage, which will ensure that they earn at least the minimum wage, expected to enable access to adequate legal and affordable rental housing. In the event that a household does not prefer a project related job, skill training and assistance for purchase of income generating assets as well as initial capital to start a business shall be provided to one member of the household, if so desired.

Preferential employment in project-related work will be offered to local people, with priority to vulnerable persons. APs will be provided two reminders (after the 30 day advance notice), 7 days and 1 day before construction to ensure none or minimal disruption in livelihood. If required, they will also be assisted to temporarily shift for continued economic activity; for example, they will be assisted to shift to the other side of the road where there is no construction and then assisted to shift back, post-construction. Ensuring there is no income or access loss during sub-project construction is the responsibility of contractors. Consistent with the Environmental Management Plan, contractors will ensure access is maintained by making sure that space is left for access between mounds of soil, walkways and metal sheets provided to maintain access across trenches for people and vehicles where required, increased workforce is available to finish work in areas with impacts on access, timing of works is such that it reduces disruption during business hours and periods of peak business activities e.g. festivals, phased construction schedule is followed and work undertaken on one segment at a time and one side of a road at a time. Compensation and assistance to APs must be provided prior to start of civil works.

²⁰ The minutes, participant lists and pictures of the consultations with the APs of Ramshilla Hills site will be included in the updated RP/DDR.

Procedures for assistance

Permanently affected persons. The following steps are envisaged (to be conducted by PIU and DSC):

Step 1: Conduct meaningful consultations with APs, disseminate information on entitlements, collect information on demographic details and active bank account, record their training and livelihood related preferences and special needs, if any;

Step 2: Provide assistance to open bank accounts for APs, if they don't have one;

Step 3: For APs facing relocation, record agreement to shift to temporary rental housing in the vicinity and to legal rental housing of their choice once livelihood support provided;

Step 4: After selection of all sites, detailed designs and surveys are complete, assess / reassess losses / costs (prior to payment of compensation) to ensure compensation at present market price / replacement cost. Update the Resettlement Plan and send to ADB for review and approval.

Step 5: PIU SSO will distribute identity cards to affected persons, with cards reflecting poverty (whether BPL)/vulnerability (whether vulnerable)

Step 6: Provision of 60 days advance notice to remove assets;

Step 7: Payment of compensation / assistance / allowances provided from the project.

Step 8: Inform APs regarding proposed date of demolition, to enable them to salvage material.

Step 9: Provide assistance to APs and coordinate with contractor to find project-related construction work for APs.

Step 10: Provide assistance to APs (1 member of each affected household) to avail training and project operation-related job placement, or, training and starting of new line of work, as per their preference/entitlement.

In case no relocation involved for some APs, all step other than those related to relocation to be followed for them. PIU to keep accounts, record of affected persons, amounts paid, and receipts record for accounting purposes and submit copies of records, and results of AP surveys to PMU, as and when undertaken. Project Manager to closely monitor these activities.

Vendor Assistance. Vendors requiring temporary shifting assistance during construction period will be notified in advance and assisted to shift to alternative locations to continue their trade with limited disruption. They will be allowed to return to their original location after construction is declared complete. Vendor assistance will involve the following steps:

Step 1: Identification of impacted vendors through detailed measurement and inventory of losses surveys based on detailed design, by DSC social safeguards expert. Please refer to Annexure 4 for the sample format.

Step 2: Notify vendors at least 30 days in advance, followed by a reminder 7 days and again, 24 hours in advance. Consult with local Vendor Associations, if they exist.

Step 3: Identify alternative locations nearby for affected vendors to continue business.

Step 4: Assistance by contractor (provision of labour) to shift to new location. In case of any income disruption during this time, compensation for lost income to be paid by the project through PIU. Payment of additional compensation to vulnerable APs, if period of disruption is 30 days or more.

Step 5: Assistance by contractor to return to original location after construction works complete.

Table 6: Entitlement Matrix

Sl. No	Type of loss	Application	Definition of entitled person	Compensation policy	Implementation issues	Responsible agency	Sites where applicable
1	Loss of residential structure	Residential structure and other assets	Encroachers , squatters	<p>Encroachers / squatters will be notified and given 60 days advance notice to remove their assets.</p> <p>Compensation for affected structures or part thereof at replacement value calculated as per the latest prevailing basic schedule of rates (BSR) without depreciation; Cash compensation for repair of partially affected structure.</p> <p>Right to salvage material from the demolished structure at no cost.</p> <p>A lump sum shifting assistance of Rs10000 will be provided, each time affected household is required to relocate.</p> <p>Cash assistance towards rental subsidy for a period of time until alternate means of access to housing available.</p> <p>Additional compensation for vulnerable squatter households (item # 3)</p>	<p>Vulnerable households will be identified during the census conducted by the DSC.</p>	<p>The DSC will verify the extent of impacts through a 100% survey of AHs determine assistance, verify and identify vulnerable households.</p>	<p>Barari OHT site</p> <p>Housing Board</p>

Sl. No	Type of loss	Application	Definition of entitled person	Compensation policy	Implementation issues	Responsible agency	Sites where applicable
2	Loss trees and crops	Standing crops and trees	Encroachers / squatters	Encroachers and squatters will be notified and given 60 days advance notice to remove trees and 6 months' notice to harvest seasonal crops and fruit trees. Compensation will be given for standing crops/ trees planted by non- titleholders.	Harvesting prior to acquisition will be accommodated to the extent possible Work schedules will avoid harvest season. Market value of trees/crops has to be determined. Vulnerable households will be identified and provided assistance as required	DSC in consultation with Agriculture / Forest Department officials or with experts in the respective fields.	None
3	Impacts on vulnerable Aps	All impacts	Vulnerable APs ²¹	In case of total loss of private land and a total dependency on agriculture, land-for-land compensation, if signified by the	Vulnerable households will be identified during the census conducted /	The DSC will verify the extent of impacts through a	

²¹ The following vulnerability criteria are identified in the context of Bihar: (1) households belonging to most backward communities; (2) head of household is a woman; (3) head of household is illiterate; (4) head of household is a daily wage labourer, (5) below poverty line household; (6) household with disabled family members; and (6) household living in a kutchha house. ADB's Facility Administration Manual states that "more vulnerable" households are those that meet 5 or more of the above-mentioned vulnerability criteria. Implicit in the definition is that households meeting fewer criteria are also vulnerable, albeit to a lesser degree, and require additional support/assistance.

Sl. No	Type of loss	Application	Definition of entitled person	Compensation policy	Implementation issues	Responsible agency	Sites where applicable
				<p>affected persons.</p> <p>Additional one-time lump sum assistance of Rs 36,000 (calculated for 12 months subsistence allowance) per vulnerable family will be paid. This will be over and above the other assistance given in this framework.</p> <p>Vulnerable households will be given priority in employment in project construction activities.</p> <p>All Scheduled Castes and Scheduled Tribes relocated outside the district will be provided an additional 25% of the resettlement benefits to which they are entitled along with a onetime resettlement entitlement of Rs 50,000 per the provisions of the RFCTLARRA.</p> <p>Provision for project operation related training and employment, OR, skill training for displaced vulnerable persons, including assistance for purchase of income generating assets and initial capital of INR 40,000/ -</p>	<p>supervised by the DSC.</p> <p>If land-for-land is offered, ownership in the name of original landowner(s).</p>	<p>100% surveys of AHs determine assistance, verify and identify vulnerable households.</p>	

Sl. No	Type of loss	Application	Definition of entitled person	Compensation policy	Implementation issues	Responsible agency	Sites where applicable
4	Loss of livelihood / income source	Livelihood	Owner/tenants and leaseholders / sharecroppers (whether having written tenancy/lease documents or not)	<p>In case of loss of livelihood (total income loss from major source): Choice of annuity or employment – the following options are to be provided :</p> <p>(a) where jobs are created through the project, 'after providing suitable training and skill development in the required field, make provision for employment at a rate not lower than the minimum wages provided for in any other law for the time being in force, to at least one member per affected family in the project or arrange for a job in such other project as may be required; or</p> <p>(b) Onetime payment of Rs.5,00,000 per affected family; or</p> <p>(c) Annuity policies that shall pay not less than Rs.2000.00 per month per family for twenty years, with appropriate indexation to the Consumer Price Index for Agricultural Labourers.</p> <p>In case of total loss/partial loss of income: Preference for</p>	Vulnerable households will be identified during the census conducted by the DSC.	The DSC will verify the extent of impacts through a 100% survey of AHs determine assistance, verify and identify vulnerable households.	

Sl. No	Type of loss	Application	Definition of entitled person	Compensation policy	Implementation issues	Responsible agency	Sites where applicable
				<p>employment opportunity for Affected Persons in the project construction work, if so desired by them.</p> <p>Training would be provided for income generating vocational training and skill improvement options based on the choice of the affected person at Rs 20,000²² per family. This cost would be directly paid by the project to the training institute OR purchase of income generating assets up to Rs.40, 000²³.</p>			
5	Temporary disruption of livelihood	Commercial and agricultural activities	Legal titleholders, tenants, leaseholders, sharecroppers, employees, hawkers or vendors.	<p>30 days advance notice regarding construction activities, including duration and type of disruption.</p> <p>Cash assistance based on the minimum wage for the loss of income/livelihood for the period of disruption</p> <p>For construction/other activities involving disruption for a period of</p>	During construction, the PIU will identify alternative temporary sites to the extent possible, for vendors and hawkers to continue economic activity.	Alternative locations, if any will be identified for the said duration of disruption.	Pipelaying activity (distribution pipes, rising mains and distribution mains)

²² The Vocational Training Programme by the Industrial Training Institutes provides training on a number of trades, under the Directorate general of Employment and Trade, Ministry of Labour and Employment, GOI. Additional cash assistance will be provided during the training period to make up for income loss of working members. The additional cash assistance will be calculated based on prevailing minimum wage rates for semi-skilled labor in urban Bihar for three months.

²³ This is an estimate. The income generating asset will be skill related. However the assets will be decided on a case to case basis.

Sl. No	Type of loss	Application	Definition of entitled person	Compensation policy	Implementation issues	Responsible agency	Sites where applicable
				a month or more, provision of alternative sites for hawkers and vendors for continued economic activities. If not possible, additional allowance based on minimum wage rate for vulnerable households for 1 month or the actual period of disruption whichever is more.	PIU will ensure civil works will be phased to minimize disruption through construction scheduling in coordination with the contractors and the DSC		
6	Any other loss not identified	-	-	Any unanticipated impacts of the project will be documented and mitigated based on the spirit of the principles agreed upon in this Resettlement Framework and the RFCTLARRA Unanticipated involuntary impacts will be documented and mitigated based on the principles provided in the ADB IR Policy.		The DSC will ascertain the nature and extent of such loss. The PMU with PIU support, will finalize the entitlements in line with ADB IR policy.	

COMPENSATION MECHANISM

Affected residential structure will be compensated at replacement cost. The project will also ensure that any loss or damage to any private properties during construction work will be compensated at full replacement cost. Similarly, temporary loss of income will be compensated at replacement cost. The principle for determining valuation and compensation for assets, incomes, and livelihoods is replacing the loss of affected assets and restoring the loss of income and workdays experienced by the displaced persons as detailed below. Titleholders and non-titleholders are both entitled to compensation as per the agreed RF of BUDIP.

Replacement Value for Immovable Property

Replacement value for immovable property will be determined as follows:

Land. Compensation at replacement cost / market price (excluding land transfer charges) to be determined by Valuation Committee appointed for the project, and will be based on a market survey in the surrounding area of concerned land parcel.

Structure. Compensation at replacement cost / market price of materials used (without considering depreciation) and labour cost to be determined by Valuation Committee for the project using the latest SOR and market prices of materials and labour.

Crop loss. Compensation for crops based on market price of produce to be determined by an expert from the Agriculture Department, Government of Bihar.

Valuation of Other Assets

Compensation for the assets attached with land or structures such as (wells, irrigation units, electricity or water connections etc.) will be based on replacement cost, estimated through market surveys/service providers. Displaced persons will have the right to salvage all movable assets attached with land.

Apart from compensation for land, trees, crops, structures and other assets, assistance for loss of income and livelihood, will also be paid to the DPs as per Entitlement Matrix. All compensation and resettlement assistances will be paid to the entitled DPs prior to commencement of civil works. If any loan taken on affected land/properties remains unadjusted, the balance amount of loan will be deducted from the total compensation.

RESETTLEMENT BUDGET AND FINANCING PLAN

Resettlement Costs

The resettlement cost estimate for the subproject (Table 7) includes eligible compensation for structure loss and relocation, compensation for temporary income loss to vendors, potential loss of income, additional compensation for vulnerable households, mitigation cost, consultation, grievance redress and awareness generation cost, and capacity building / training costs, resettlement assistance as outlined in the entitlement matrix, and support cost for the Resettlement Plan. The state government will bear all RP costs related to compensation and mitigation and will be responsible for releasing the funds for resettlement in a timely manner. The total resettlement cost for the subproject is Rs. 8.900 million. The government will finance resettlement implementation. However, the estimated total resettlement cost for phase 1 of the subproject is INR 1.6432 million. The resettlement cost items and estimates are outlined in Table 7.

Table 7: Resettlement Cost

Sl. No.	Compensation for type of loss	Quantity	Days	Unit rate	Total amount (INR)	Remarks
1	Residential structures					
	Fully affected					
	Kutcha	1			25,000.00	Based on BCD SOR 2014, adjusted for inflation
	Partially affected					
	Kutcha	1			10,000.00	Based on BCD SOR 2014, adjusted for inflation
2	Relocation					
	Shifting assistance	1	LS	1000 0	10,000.00	
3	Vulnerable APs					
	Permanent impacts					
	Vocational training / additional cash assistance	1		2000 0	20,000.00	Displaced vulnerable households not receiving this assistance under any other head.
	Resettlement Entitlement	1	LS	5000 0	50,000.00	
	Additional assistance for vulnerable households – Subsistence allowance	1		3600 0	36,000.00	To be paid over and above other benefits to all affected or displaced vulnerable households.
	Temporary impacts					
	Mitigation /inclusion measures					
4	Other					

Sl. No.	Compensation for type of loss	Quantity	Days	Unit rate	Total amount (INR)	Remarks
4.1	Grievance redress		LS	2500 00	250,000.00	
4.2	Consultation with APs		LS	1000 00	100,000.00	
4.3	Awareness generation		LS	2000 00	200,000.00	
4.4	Detailed measurement survey and census survey for RP updation		LS	3000 00	300,000.00	
	Total				10,01,000.00	
	Contingency		10%		642,203.00	
	Grand Total	INR			16,43,203.00	

Note: Results of DMS surveys conducted for all identified OHSR (3 no.) and distribution main alignments (50 kms.) are used for assessment of impacts and costs in table above.

IMPLEMENTATION ARRANGEMENTS

Executing agency. The Urban Development and Housing Department, Government of Bihar is the executing agency for the project, which will receive strategic directions from the state-level steering committee. Please refer to Table 8 for Institutional Roles and Responsibilities for Safeguards Implementation.

Program Management Unit.

The Urban Development and Housing Department, Government of Bihar is the executing agency for the project, which will receive strategic directions from the state-level steering committee.

The Bihar Urban Infrastructure Development Corporation (BUIDCo) is the implementing agency, based in Patna. The Program Management Unit (PMU) at BUIDCo is staffed with a Program Director (PD), Additional Project Director (APD), Technical Head, Electromechanic Engineer, Finance Officer, an Environmental and Social Management Coordinator (ESMC), a Capacity Building and Institutional Support officer and administrative staff. PIU field offices have been set up

in each town to manage implementation of subprojects.²⁴ The PMU has complete authority, budget and powers to implement all aspects of the project, in accordance with the agreed Framework Financing Agreement and Facility Administration Manual for BUDIP.

The ESMC, PMU will be assisted by the PMC. The Resettlement and Gender Specialist of PMC will prepare resettlement plans and social monitoring reports, and provide advice on policy reforms. The PMU will endorse resettlement plans prepared by the PMC and will have financing and monitoring responsibilities. Hence, ESMC will endorse/submit periodic monitoring reports received from PMC to the Program Director, PMU who will then submit the same to ADB. The monitoring report will focus on the progress of implementation of the resettlement plan/framework, issues encountered and measures adopted, follow-up actions required, if any as well as status of compliance with relevant loan covenants. The PMU will seek state government's clearance for submission and disclosure of the environmental and social monitoring report to ADB.

PMU will also coordinate with national and state level agencies to resolve inter-departmental issues, if any and obtain necessary clearances and NOCs from different departments. ESMC will also monitor physical and non-physical activities under the investment plan and monitor implementation of safeguards plans and guide the PIU at town level as and when necessary, regarding safeguards implementation. The PMU, with support from PIU field offices and DSC social safeguards team will ensure mitigation of negative social impacts due to the subproject, if any. The ESMC will oversee implementation of the resettlement framework and resettlement plan by the PIU, supported by DSC.

The ESMC at the PMU will be responsible for monitoring of safeguards compliance and gender action plan. S/he will be assisted by DSC in conduct of any surveys required for monitoring and by PMC in preparation of periodic monitoring reports.

The capacity building and institutional support officer at PMU will be responsible for coordinating and implementing activities required for capacity building and training at various levels, setting up of the GRM, gender sensitization training and training on safeguards policy to all institutional stakeholders (government officers and consultants), coordination of awareness generation activities, including awareness on grievance redress process. The PMC will support the officer in all these activities and social safeguards expert and social mobilisers of DSC will support CBISO in field level activities.

The PMU will ensure that bidding and contract documents include specific provisions requiring contractors to comply with all: (i) applicable labor laws and core labor standards on (a) prohibition of child labor as defined in national legislation for construction and maintenance activities, on (b) equal pay for equal work of equal value regardless of gender, ethnicity or caste, and on (c) elimination of forced labor; and (ii) the requirement to disseminate information on sexually transmitted diseases including HIV/AIDS to employees and local communities surrounding the project sites. In addition, requirements in the RP related to scheduling of works/activities to avoid/mitigate impacts, contract clauses related to priority employment in construction activities as well as operation and maintenance for affected persons/potentially affected persons will be included in the contract by PMU, with the support of PMC.

²⁴ The PIU (central) and PMU, originally proposed under the Facility Administration Manual, have been merged with the PMU in BUIDCO, based on GoB's request, with the sole responsibility of implementing the program. The PIU field offices in Gaya and Bhagalpur are extended arms of the PMU.

Project Implementation Unit.

The PIU field office in Bhagalpur is an extended arm of the PMU, reporting to the APD and PD to coordinate and assist the PMU in implementing the program at field level. It is headed by an Executive Engineer, based in Bhagalpur. The PIU is meant to work in close coordination with DSC and BMC. It is staffed with a senior water supply engineer, a senior sewerage engineer, an accountant, a social safeguards, PR and institutional development officer (to be appointed) and an environmental officer.

The Safeguards Officer of PIU is responsible for day-to-day implementation and monitoring of the resettlement plan and gender action plan. The officer will coordinate implementation of training and capacity building, awareness generation, public outreach program and grievance redress at town level. The officer will undertake field visits and meetings with affected persons and beneficiaries and record observations throughout the construction period to ensure that safeguards and mitigation measures are provided as intended. The PIU through the DSC social safeguards team comprising DSC social safeguards expert (SSE) and social mobilisers will ensure that affected persons receive entitlements and benefits due to them. The PIU will be responsible for implementing and monitoring safeguards compliance activities, public relations and outreach activities, grievance redress (as described in a preceding section), gender mainstreaming and community participation activities. It will coordinate with local agencies for obtaining ROW clearances and no objection certificates (NOC), and with PMU for NOCs to be obtained at state level. The PIU social safeguards officer will be involved in detailed measurement surveys, and socio-economic surveys of affected persons to determine and recommend compensation, required for RP updation and approval by PMU and ADB. The PIU SSPRIDO will prepare progress reports with respect to resettlement plan preparation. The social mobilisers of DSC will support the PIU at field level in implementation and monitoring of the resettlement plan.

Program Management Consultant

The PMC will have an environment safeguards specialist and a resettlement and gender specialist. The PMC safeguards specialists will assist the PMU and PIUs to implement and manage safeguards requirements and to ensure policy compliance of the project. The resettlement and gender specialist will be responsible to prepare resettlement plans and gender action plans and monitoring of their implementation. S/he shall also plan and organise capacity building programs for PMU, PIUs, project staff and contractors involved in project implementation on (a) ADB SPS (2009) and approved RF, (b) National law on involuntary resettlement and other relevant regulations (c) core labor standards, (d) support PMU on the project's GRM, gender action plan, consultation and participation plan, and ongoing consultations.

Design Supervision Consultant

The DSC will have a Social Safeguards Expert, who will be supported by social mobilisers at field level. The TORs of the DSC SSE and social mobilisers is provided in the Project Administration Manual.

Table 8: Institutional Roles and Responsibilities for Safeguards Implementation

Activities	Agency Responsible
Sub-project Initiation Stage	

Activities	Agency Responsible
Finalization of sites for sub-projects	PMU/PIU with DSC support
Obtaining NOCs for each site, as required	PMU/PIU
Clearance and disclosure of updated safeguard documents on website, municipal notice boards and to affected people Disclosure of sub -project details	PMU/PMC PIU/DSC
Meetings with APs and communities	PIU/DSC
Formation of Valuation Committee	PMU
RP Preparation/Updation Stage	SIPMIU/DSMC
Conducting Detailed Measurement Survey and Census of all APs	PIU/DSC
Computation of entitlements	PIU/DSC
Conducting FGDs/ meetings / workshops during SIA surveys, recording of preferences and priorities of APs (e.g. related to relocation, training etc.)	PIU/DSC
Computation of Replacement Values of lost land/properties/lost income	VC/PIU/DSC
Categorization of APs for finalizing entitlements	PMU/PIU/DSC
Formulating compensation and rehabilitation measures	PMU/PIU
Disclosure of final entitlements and rehabilitation packages to APs	PIU/DSC
Approval of RP	PMU/ADB
Implementation Stage	
Payment of compensation	PMU/PIU
Taking possession of land	PIU
Implementation of mitigation and rehabilitation measures	PIU/DSC/Contractor,
Consultations with APs during rehabilitation activities	DSC/PIU
Grievance redressal	PIU/PMU/GRC
Internal monitoring	PMU/PMC

Capacity Building

The safeguards personnel of the project consultants (PMC, DSC), and other key project related staff of PMU and PIUs, will be oriented and trained by ADB on ADB safeguards policy and the approved project RF; RP preparation and updation process; monitoring, reporting and disclosure requirements, roles of different stakeholders in safeguards implementation and GRM, envisaged consultation and participation process, reporting and monitoring requirements, core labour standards for contractors, handling issues in social inclusion, potential conflict resolution, typical implementation issues, and lessons learnt in safeguards implementation in other ADB funded water supply projects. The key focus area of the training program will be ADB resettlement policy and principles and the training will focus on the differences between the provisions of the ADB policy and Gol/GoB laws, as the awareness of these differences and the need to follow the provisions of ADB policy are critical for successful implementation of RPs.

The PMC will be responsible for development of a training program based on a capacity assessment of target participants (contractor(s), DSC field staff, PIU) and for implementation of the training program to build capabilities on resettlement policy, planning, mitigation measures and safeguards. Basic principles of resettlement planning, avoidance of IR impacts and minimisation measures with an emphasis on protection of the poor and vulnerable, access to project information and benefits by APs, grievance redress process and its importance, and monitoring shall be covered in the training. Training on IR and gender issues shall not only be given to social safeguards personnel of project consultants, PMU and PIUs but also to design and supervision engineers and contractors 'personnel.

Typical modules will be (i) sensitization to social safeguards, gender and vulnerability issues, (ii) resettlement planning and typical issues in implementation, (iii) introduction to social safeguards policy, including ADB policy, GRM, entitlements, compensation and social safeguards monitoring requirements and mitigation measures; (iv) monitoring and reporting on RP implementation, including monitoring methods and tools (v) core labour standards, including equal pay for equal work etc. The suggested outline of the training program is presented in Table 9.

Table 9: Indicative Capacity Building and Training Program

Description	Contents	Schedule	Participants	Tentative Schedule
Program 1 Orientation Workshop	Module 1 – Orientation ADB Safeguard Policy Statement Government of India policy Government of Bihar policy Module 2 – Social/Environmental Assessment and Resettlement Planning/IEE Process ADB policy and process, identification of impacts and	1 day	PMU/ PIU /DSC	Prior to start of implementation

resettlement progress and identifying potential difficulties and problems. Monitoring will be undertaken by the PMU ESMC. Monitoring will involve administrative monitoring to ensure that implementation is on schedule and problems are dealt with on a timely basis; socio-economic monitoring during and after any resettlement impact utilizing baseline information established through the detailed measurement/census survey of APs proposed during RP updation, and overall monitoring. Monthly progress reports reporting status of RP implementation will be prepared by PIU assisted by DSC, and consolidated by the PMU ESMC with the assistance of PMC social safeguards specialist. The EA will submit semi-annual monitoring reports to ADB for review and post all safeguard monitoring reports on ADB and MoUD website. The PMU/EA will submit semi-annual monitoring reports to ADB for review and post all safeguard monitoring reports on ADB and MoUD website. A sample monitoring template is given in Annexure 5.

DRAFT PROJECT INFORMATION DISCLOSURE LEAFLET

A. Background

The Bihar Urban Development Investment Program (BUDIP) envisages improved urban environment and living conditions in targeted urban areas in the state of Bihar. It will: (i) improve and expand urban infrastructure and services in urban areas; and (ii) strengthen urban institutional, management, and the financing capacity of institutions, including urban local bodies (ULBs). Urban infrastructure and services improvement covering rehabilitation, improvement and expansion is proposed in the following sectors (i) water supply, and (ii) sewerage and sanitation. ADB has agreed to co-finance implementation of certain components of the state's road map in the cities of Bhagalpur and Gaya. BUDIP is funded by ADB under its multi-tranche financing facility (MFF). An urban water supply subproject for Bhagalpur is proposed under Project 1 of the MFF.

This leaflet provides a description of the BWSP I subproject components proposed under the second round of funding from ADB, aimed at improving the current situation of Bhagalpur in terms of an improved, integrated water supply management system.

B. Subproject description

The proposed Subproject components for BWSP1 include (i) rehabilitation of the Barari Water Works and Refurbishment of WTP, (ii) Construction of New Water Storage Reservoir (19 OHSRs), (iii) rehabilitation of one OHT, (iv) laying of 460 kms. of clear water distribution mains (v) metered household connections (approximately 83,000 connections until 2019) covering all the DMAs and (vi) Customer Care Center(1 center for every 10,000 connections including 1 Central Control Center).

C. Resettlement Plan: Policy and Principles

A Resettlement Plan (RP) has been prepared for Bhagalpur water supply project I, based on ADB's Safeguard Policy Statement 2009, and applicable Government of India law, the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013 and applicable state laws of Bihar.

D. Involuntary Resettlement impact

All land required for subproject components in Bhagalpur has been identified. No private land acquisition is required. Efforts have been made in detailed design to avoid or minimize resettlement impact through careful design of the major portion of pipe alignments for water

supply distribution and rising mains through available government land and existing public road right of way (RoW), avoidance of land acquisition and selection of sites and alignment alternatives with none / minimal resettlement impact. All proposed OHTs for which land has been identified, are on government land. It is assessed that minimum of 8 customer service centres (CSC) will be required to cater to 83,000 house hold water connections as each CSC is proposed to cater to 10,000 connections only. The central CSC is proposed to be constructed at Barai WTP site while the location of other CSCs are to be identified, post commencement of DMA work, on government land or within existing government buildings or rented space. The updated RP will assess IR impacts, post-identification of CSC locations.

The RP for phase 1 of BWSP I identifies both permanent and temporary impacts and their mitigation measures. Identified impacts include loss of (i) private residential structure (facing 100% loss) and (ii) cattle shade. Ms. Asha Devi a SC Widow Woman has squatted on the vacant Housing Board land by constructing a kutcha house. She and her family has been residing there for more than seven years. Whereas Mr. D .N. Mandal, R/o MIG – 93, Barari Bhagalpur, has built a cattle shade at the vacant plot in front of his house at the proposed OHSR site. The kutcha house and the cattle shade has to be removed permanently to facilitate construction of OHSR at Housing Board Colony Barari site.

Potential impacts of 50 km of distribution lines are assessed through DMS conducted for sample stretches of proposed pipe alignments. Laying of distribution mains (50 Kms.) is not expected to lead to any income loss to any temporary hawker, vendor. To avoid such losses only night work is proposed along congested stretches of distribution pipe networks, in particular, the alignment passing through Barari vegetable market and Mirjan Haat locations.

E. Entitlement and Compensation

Since all land identified for the project is government owned, no land acquisition is anticipated. However, as per the entitlement matrix in the Resettlement Framework for BUDIP, displaced persons, if any, are entitled to a combination of compensation packages and resettlement assistance, depending on the nature of ownership rights on lost assets, scope of impacts including socio-economic vulnerability of the displaced persons, and measures to support livelihood restoration, if any livelihood impacts are envisaged. The displaced persons will be entitled to (i) replacement cost of affected structures or assets, compensation for loss of income at the replacement value in case of temporary income loss and livelihood restoration / upgrading measures in case of permanent income loss; (ii) special assistance for vulnerable households including priority in project related construction work. Affected persons including titled and non-titled will be eligible for compensation as defined in the Entitlement Matrix for the project. A budgetary provision of INR 7.06 million for RP implementation is made. Cost of mitigation and inclusion measures e.g. supply of water through tankers in areas facing water supply disruption, provision of water supply and sanitation facilities in schools where facilities are proposed, and provision of mini water tank at site outside BMC where facility proposed, are included in the RP budget.

F. Institutional Arrangement

The Urban Development and Housing Department, Government of Bihar is the

executing agency for the project. The Bihar Urban Infrastructure Development Corporation (BUIDCo) is the implementing agency. The Program Management Unit (PMU) at BUIDCo is staffed with an Environmental and Social Management Coordinator (ESMC), who has overall responsibility for safeguards compliance and implementation of RP. PIU field offices have been set up in each town to manage implementation of subprojects. Program Management Consultants and Design Supervision Consultants are engaged to facilitate the planning and implementation of the subproject, each having social safeguards personnel for all RP planning and implementation activities including internal monitoring and reporting.

G. Grievance Redress Mechanism (GRM)

Grievances of affected persons will first be brought to the attention of the PIU. Grievances not redressed by the PIU in consultation with PMU will be brought to the Grievance Redress Committee (GRC) set up to monitor project implementation. Complaints can be lodged at customer service centres, BMC offices, or PIU office. The GRC is chaired by the district magistrate and has representatives from BMC, state government agencies and civil society. The GRC will determine the merit of each grievance, and resolve grievances. Grievance not redressed by the GRC will be referred to the Project Steering Committee. The DSC will assist PIU to keep records of all grievances received including: contact details of complainant, date that the complaint was received, nature of grievance, agreed corrective actions and the date these were effected, and final outcome. The social safeguards PR and institutional development officer of PIU will be the focal person for facilitating the grievance redress. The GRC will continue to function throughout the project duration.

H. Contact details of Safeguards, Gender and Social Monitoring Team Structure²⁵

Organisation	Position	E-mail	Contact Number
PMU	Program Director	md@buidco.in , mdbuidco@gmail.com	8544413101
	APD (Incharge)	apdinpmu.buidco@gmail.com	8544413102
	ESMC	esmcinpmu.buidco@gmail.com	8544413136
PMC	Social Expertt	pmc.budip.social@gmail.com	7488178770
PIU	Social Safeguard and Environment Officer	safeguardinpiu.buidco@gmail.com ajit2007kvkbb@gmail.com	8340451009
DSC	Social and Gender Expert	stcbhagalpur@gmail.com	9852955388

²⁵ Adjusted with the merger of PMU and Central PIU into one PMU at central level

GRIEVANCE REDRESS PROCEDURE
3 A: Copy of notification to set up GRC issued by BUIDCo, in Hindi.
Description of the same is provided in the RP)

बिहार सरकार
नगर विकास एवं आवास विभाग।

- : संकल्प : -

बिहार राज्य अंतर्गत जलापूर्ति तथा सिवरेज योजनाओं के निर्माण हेतु बिहार शहरी विकास इन्वेस्टमेंट प्रोग्राम (BUDIP) - Loan No. 2861 - IND के तहत एशियन डेवलपमेंट बैंक (ADB) द्वारा ऋण उपलब्ध कराया जा रहा है। इस लोन प्रोग्राम के अंतर्गत भागलपुर एवं गया शहर के लिए जलापूर्ति तथा सिवरेज योजनाओं का कार्यान्वयन कराये जाने का प्रस्ताव है। इन योजनाओं के लिए बिहार शहरी आधारभूत संरचना विकास निगम लिमिटेड (बुडको) को प्रोजेक्ट मैनेजमेंट यूनिट तथा कार्यान्वयन एजेंसी घोषित किया गया है।

2. एशियन डेवलपमेंट बैंक (ADB) सम्पोषित योजनाओं के कार्यान्वयन के लिए ADB के मार्गदर्शिका में दिये गये प्रावधान के आलोक में शहर स्तर पर एक शिकायत निवारण तंत्र (जी०आर०एम०) का गठन किया जाता है।
3. नगर विकास एवं आवास विभाग एवं बिहार शहरी आधारभूत संरचना विकास निगम लिमिटेड (BUIDCo) द्वारा एशियन डेवलपमेंट बैंक (ADB) सम्पोषित BUDIP के अंतर्गत योजनाओं के लिए निम्नानुसार त्रिस्तरीय शिकायत निवारण तंत्र (जी०आर०एम०) स्थापित किया जाता है। शिकायत प्रथम स्तर पर प्राप्त की जायेगी। यदि नागरिक प्रथम स्तर पर संतुष्ट नहीं होते हैं तो वे द्वितीय एवं तत्पश्चात् तृतीय स्तर पर आवेदन कर सकेंगे। शिकायत का निष्पादन निम्नानुसार वर्णित अवधि में किया जाना है:-

स्तर	समिति	निष्पादन की अवधि
प्रथम	योजना प्रबंधन ईकाई (Project Management Unit)	शिकायत पत्र प्राप्ति के 90 दिनों के अंदर
द्वितीय	शहर स्तर समितियाँ (Town Committee)	60 दिनों के अंदर
तृतीय	कार्यक्रम संचालन समिति (Steering Committee)	90 दिनों के अंदर

4. जी०आर०एम० अंतर्गत गठित एशियन डेवलपमेंट बैंक सम्पोषित योजनाओं के कार्यान्वयन में प्राप्त शिकायतों का निष्पादन करेंगी।

ह०/-

प्रधान सचिव,

नगर विकास एवं आवास विभाग।

ज्ञापांक - 1615/BUIDCo.

दिनांक - 27/05/2015.

प्रतिलिपि:- आप्त सचिव, विकास आयुक्त, बिहार/प्रधान सचिव, वित्त विभाग/प्रधान सचिव/सचिव, योजना एवं विकास विभाग/प्रधान सचिव/सचिव, नगर विकास एवं आवास विभाग/प्रबंध निदेशक, बुडको/समी सदस्य को सूचनार्थ एवं आवश्यक कार्रवाई हेतु प्रेषित।



प्रधान सचिव,

नगर विकास एवं आवास विभाग।

ए०डी०बी० संबंधित – बिहार शहरी विकास निवेश कार्यक्रम अंतर्गत योजनाओं के लिए जन शिकायत निवारण तंत्र की स्थापना।

अधिसूचना के लिए नोट

शिकायत निवारण तंत्र (जी.आर.एम)

जी.आर.एम कार्यक्रम से संबंधित प्रभावित व्यक्ति (ए.पी.)व्यक्तियों की शिकायतों को प्राप्त करने एवं निवारण हेतु सुविधाजनक बनाने के लिए एक सुलभ मंच प्रदान करेगा। सामाजिक, पर्यावरण या किसी अन्य परियोजना / उप परियोजना से संबंधित शिकायतों हेतु एक ही एकीकृत शिकायत निवारण तंत्र (जी.आर.एम) की व्यवस्था होगी; प्रत्येक पुनर्वास योजना (आर.पी), स्थानीय लोगो हेतु योजना (आई.पी.पी) और प्रारंभिक पर्यावरण परीक्षा (आई.ई.ई.) / पर्यावरणीय प्रभाव मूल्यांकन (ई.आई.ए) निम्नलिखित शिकायत निवारण तंत्र का अनुपालन करेंगे।

शिकायत निवारण प्रक्रिया: प्रभावित व्यक्ति (ए.पी.)व्यक्तियों के शिकायत / सुझावों को सुझाव पेटी में डाल कर अथवा फोन या मेल के माध्यम से अवगत कराया जा सकता है (प्रारूप नमूना संलग्न)। कार्यान्वयन गैर सरकारी संगठन के सामुदायिक संपर्क अधिकारी और पी.आई.यू के सुरक्षा अधिकारी (जो सामाजिक मुद्दों और आरपी क्रियान्वयन से संबंधित होंगे); प्रभावित व्यक्ति (ए.पी.)समुदायों की समस्याओं को समझने और शिकायत निवारण प्रक्रिया में उन्हें मदद करने हेतु आवर्ती सामयिक समुदायिक बैठकों के आयोजन करने हेतु जिम्मेदार होंगे। साथ ही साथ शिकायतों का स्थानीय बोली / भाषा से अनुवाद करना, गैर - साक्षर प्रभावित व्यक्ति (ए.पी.)व्यक्तियों के शिकायतों को दर्ज एवं पंजीकृत करना एवं शिकायत निवारण की प्रक्रिया को समझाना।

शिकायतें सर्वप्रथम कार्यान्वयन एनजीओ / पी.आई.यू. / पी.एन.यू. की शिकायत प्रकोष्ठ¹ में पंजीकृत किया जाएगा, जो छप्पै – बड़े मुद्दों को हल करेंगे। इस प्रक्रिया के माध्यम से शिकायत पंजीकरण के तीन माह के भीतर निराकरण नहीं होने पर; परियोजना के कार्यान्वयन की निगरानी हेतु प्रत्येक शहर में गठित शहरी स्तरीय समितियों / सिटी लेवल समितियों (सी.एस.सी) को सूचित किया जाएगा। एक शिकायत निवारण समिति के रूप में शहरी स्तरीय समितियाँ संबंधित मुद्दों को निष्पादित करेगी (यदि वहाँ संबंधित पंजीकृत शिकायतें हैं) यथा शिकायतों का योग्यता निर्धारण एवं शिकायत प्राप्ति के दो माह के अन्दर शिकायतों का निष्पादन; निष्पादन ना कर पाने पर स्थिति में शिकायतों को राज्य स्तरीय कार्यक्रम संचालन समिति (पी.एस.सी)² द्वारा संबोधित किया जाएगा। अगलर प्रभावित व्यक्ति (ए.पी.)लोग शिकायतों को न्यायिक अदालत में संदर्भित करेंगे। शिकायत निवारण की प्रक्रिया को चित्र 1 में दर्शाया गया है। जी आर सी पूर्ण परियोजना अवधि तक कार्य करेगी।

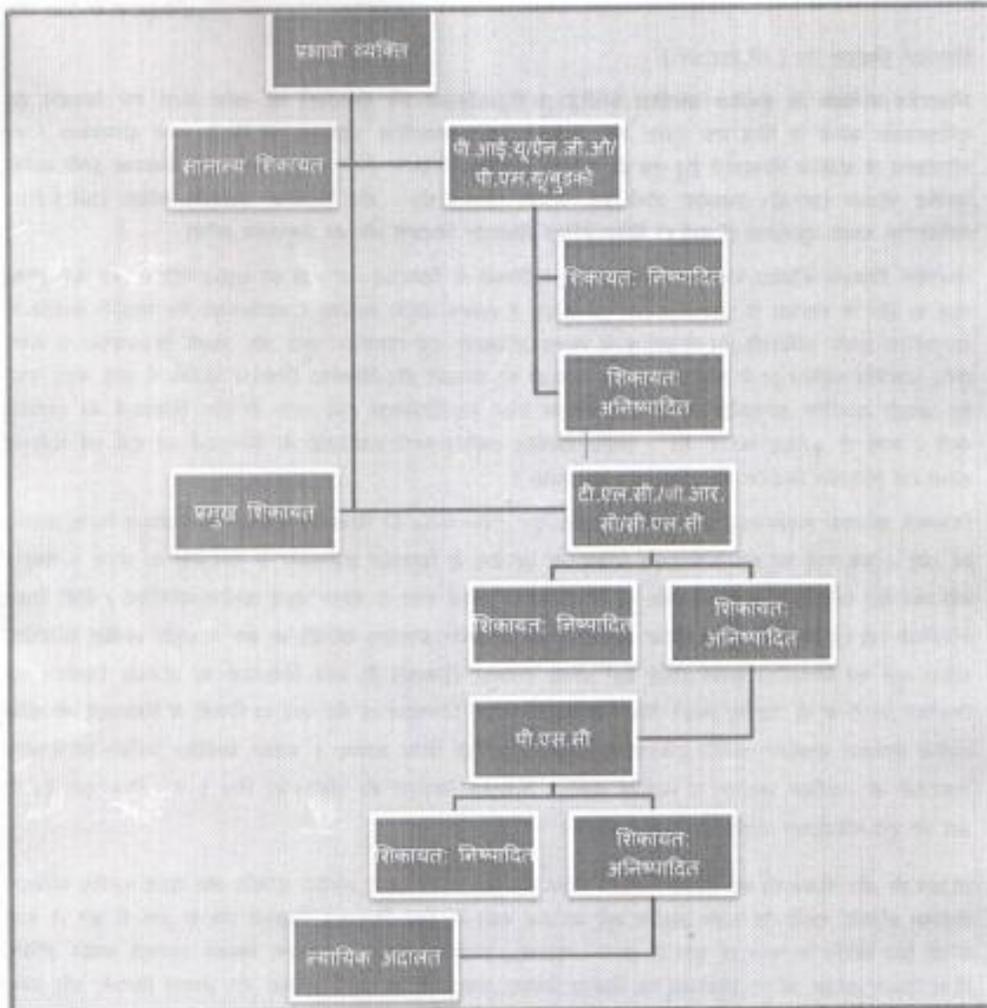
जी.आर.सी और पी.एस.सी की संरचना: एडीबी परियोजना हेतु गठित शहरी स्तरीय समिति और राज्य स्तरीय कार्यक्रम संचालन समिति, शहरी एवं राज्य स्तरीय मुद्दों को हल करने के लिए शिकायत निवारण तंत्र के अंग के रूप में कार्य करेंगी (इस समिति का गठन हो चुका है, प्रथम – संलग्न)। संचालन समिति में सदस्य विकास आयुक्त; प्रधान सचिव, वित्त विभाग; प्रधान सचिव, नियोजन एवं विकास विभाग; प्रधान सचिव, शहरी विकास और आवास विभाग; और प्रबंध निदेशक, बुडको हैं।

क्षेत्राधिकार परिसीमा: जिला दंडाधिकारी के नेतृत्व में जी.आर.सी की क्षेत्राधिकार परिसीमा निम्न होगी; (क) जिलांतर्गत सभी स्थान / निर्माण स्थल जहां उप परियोजना सुविधाएं प्रस्तावित हैं; या (ख) जिलांतर्गत प्रभावी क्षेत्रों में।

पी.एस.सी का पराधिकार का क्षेत्र सम्पूर्ण राज्य होगा (अर्थात जिले की सीमाओं से परे, उप परियोजना सुविधा प्रभावी क्षेत्र; यदि कोई हो)।

1. शिकायत प्रकोष्ठ की स्थापना वृत्तबी / पी.आई.यू. कार्यालय में होगी या ऐसे स्थान पर जो प्रभावित व्यक्ति (ए.पी.)समुदायों (यह समुदाय समुदाय / नदी किनारे के समुदायों) के लिए सुलभ रूप में हो।

2. पी.एस.सी कार्यक्रम / उप परियोजना से संबंधित नैरी शिकायत जो व्यापक चिंताओं के विषय हो; (अर्थात जमीन नहीं वह शहर / जिला की परिसीमा तक ही सीमित हो) सीधे पी.एस.सी को उपस्थित कर पी.एस.सी यदि वह राज्य-स्तरीय शिकायत प्रकोष्ठ से प्राप्त होती है। पी.एस.सी, कार्यालय में भी एक शिकायत पंजीकरण / शिकायत सेल (राज्य स्तरीय) होगा जो की किसी प्राप्त शिकायत के क्षेत्राधिकार परिसीमा का मूल्यांकन करने और एच जी ओ / पी आई यू को शिकायत निष्पादन करने हेतु सलाह देना या निष्पादन हेतु जी.आर.सी को अवगतित करेगा।



सी.एस.सी.: शहरी स्तरीय समिति; इ.एम.एम.सी.: पर्यावरणीय एवं समाजिक प्रबंधन समन्वयक; जी.आर.सी.: शिकायत निवारण समिति; एन.जी.ओ.: गैर सरकारी संगठन; पी.एस.सी.: कार्यक्रम संचालन समिति – टी०एल०सी०

परामर्श व्यवस्था: इस में शामिल होंगे: (क) प्रभावित व्यक्ति (ए.पी.)व्यक्तियों के साथ समूह बैठक और चर्चा, जिसकी अग्रिम घोषणा की जाएगी और कार्यान्वयन प्रभावित व्यक्ति (ए.पी.)लोगों की सहमती से मुक़रर दिन पर होगी (उनकी उपलब्धता के आधार पर)। इसका संचालन, कार्यान्वयन गैर सरकारी संगठन के सामुदायिक संपर्क अधिकारी (सी.एस.ओ.) और पी.आई.यू. - पी.एम.यू. द्वारा किया जायेगा। सामान्य / आम शिकायतों का समाधान करने के लिए इसका आयोजन आर.पी. कार्यान्वयन के प्रथम वर्ष में कम से कम हर तिमाही पर और तदुपरांत अर्द्धवार्षिक स्तर पर होगा।

(ख) वैयक्तिक परामर्श हेतु एन.जी.ओ. के सी.एस.ओ.; पी.एम.यू. के इ.एम.एम.सी. की उपलब्धता हर पखवाड़े की नियत दिन (शिकायतों की संख्या के आधार पर) सुनिश्चित होगी। निरक्षर / निःशक्त प्रभावित व्यक्ति (ए.पी.)व्यक्ति को शिकायत निवारण प्रक्रिया को समझने, शिकायत पंजीकरण, एवं शिकायत निवारण प्रक्रिया के विभिन्न चरणों में अनुवर्ती कार्रवाई में समझाने और सहयोग सुनिश्चित करने हेतु कार्यान्वयन एन.जी.ओ. जिम्मेदार होगा। सभी प्राप्त

शिकायतों का रिकार्ड्स पीआईयू / पीएमयू द्वारा रखा जाएगा जिनमें सभी प्रविष्टियाँ / ब्याँस तथा शिकायतकर्ता के संपर्क विवरण, शिकायत प्राप्त की तारीख, शिकायत की प्रकृति, स सम्मत सुधारात्मक कार्रवाई और तिथि ये प्रभावित व्यक्ति (ए.पी.)के एवं उसका प्रभावी तारीख और अंतिम परिणाम उल्लेखित होंगी ।

जी.आर.एम की सूचना प्रसार के तरीके: प्रभावित व्यक्ति (ए.पी.) व्यक्तियों के मध्य शिकायत निवारण प्रक्रिया की सूचना प्रसार की जिम्मेदारी कार्यान्वयन एन.जी.ओ. और पी.आई.यू की होगी, तथा किस से संपर्क करना है, और शिकायत दर्ज करने हेतु कब, कहाँ संपर्क करना है, कैसे शिकायत रजिस्टर करना है, शिकायत निवारण प्रक्रिया के विभिन्न चरण, छोटे और बड़े शिकायतों के निवारण हेतु सन्याधी इत्यादि

शिकायत निष्पादन हेतु लागत: शिकायतों को हल करने में शामिल सभी लागत (बीठके, परामर्श, संधार, रिपोर्टिंग, सूचना के प्रसार) पीएमयू द्वारा वहन किया जाएगा ।

शिकायत पंजीकरण चार्ज का नमूना नीचे संलग्न है ।

प्रस्तावित समिति के सदस्य - सारांश

जीआरएम का स्तर	सदस्य	कार्य	समय सीमा
टीयर 1	पी०आई०यू०/पी०एम०यू०	प्रभावित व्यक्तियों (ए.पी.) के शिकायत एवं सुझाव तथा परियोजना से संबंधित स्थानीय स्तर के पर्यावरण एवं सामाजिक छोटे - बड़े मुद्दों का निष्पादन करना	शिकायत पत्र प्राप्ति से 90 दिनों के अंदर
2 टीयर	शहर स्तर समितियों (सी.एन.सी) / शहरी समिति / शिकायत निवारण समिति (जी.आर.सी) - शहरी समिति (सी.एन.सी. / जी.आर.सी) का गठन पहले ही ए.डी.बी. परियोजना के अंतर्गत हो चुका है और इसके सदस्य भिन्नलिखित हैं 1. जिला मजिस्ट्रेट (संबंधित जिला) सह अध्यक्ष 2. नगर आयुक्त / कार्यकारी अधिकारी सह सदस्य सचिव (संबंधित जिला) 3. कार्यपालक अभियंता (संबंधित जिला) 4. संबंधित विभागों के प्रतिनिधि (संबंधित जिला) 5. संबंधित जिला के एन.जी.ओ. / सी.एस.ओ.	1. ए.डी.बी परियोजना के अंतर्गत गठित शहरी समिति शहरी स्तरिय समिति या शिकायत निवारण हेतु जी.आर.सी. के तौर पर कार्य करेगी 2. समिति योजनाओं कि नियमित समीक्षा करेगी एवं त्वरित कार्यान्वयन हेतु कार्रवाई करेगी। 3. शहरी समिति के गठन का पर अनुलग्नक 1 के रूप में संलग्न है	60 दिनों के अंदर

3 टीयर	कार्यक्रम संचालन समिति (पी.एस.सी) - निम्न सदस्य शामिल हैं: 1. विकास आयुक्त, बिहार सह अध्यक्ष 2. प्रधान सचिव - वित्त विभाग, सदस्य 3. प्रधान सचिव - योजना और विकास विभाग, सदस्य 4. प्रधान सचिव - शहरी विकास और आवास विभाग, सदस्य 5. प्रबंध निदेशक - बुडको सह कार्यक्रम निदेशक, ए.डी.बी. परियोजना, सदस्य	1. ए.डी.बी. परियोजना हेतु संचालन समिति का पहले ही गठन हो चुका है (अनुलग्नक 2) 2. परियोजनाओं का निरीक्षण एवं अन्य महत्वपूर्ण निर्णय लेगी।	90 दिनों के अंदर
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शिकायत पंजीकरण फार्म का नमूना

(हिंदी, में उपलब्ध कराया जायेगा)

बिहार शहरी विकास निवेश कार्यक्रम (BUDIP) परियोजना के कार्यान्वयन से सम्बंधित शिकायतें, सुझाव, प्रश्नों और टिप्पणियों को आमंत्रित करती हैं। हम लोगों से अनुरोध करते हैं कि वे अपना नाम और संपर्क सूत्र कि जानकारी प्रदान करें जिससे कि स्पष्टीकरण एवं जवाब के संबंध में आपसे संपर्क कर सकें।

तारीख		पंजीकरण का स्थान			
संपर्क करने संबंधी जानकारी / व्यक्तिगत विवरण					
नाम		लिंग	पुरुष महिला	आयु	
घर का पता					
शहर					
जिला					
फोन नं.					
ई मेल					
शिकायत / सुझाव / टिप्पणी / प्रश्न: नीचे अपनी शिकायत का विवरण (क्या कौन, क्या, कहाँ और कैसे) का उल्लेख करें: अगर संलग्नक / मोट / पत्र के रूप में हैं तो कृपया वहाँ टिक करें: हम आपसे टिप्पणी / शिकायत संबंध जानकारी प्रेषित करने हेतु कैसे संपर्क कर सकते हैं।					

कार्यालय उपयोग के लिए

पंजीकृतकता: (अधिकृत व्यक्ति का नाम जिन्होंने शिकायत पंजीकृत किया है)	
शिकायत प्राप्त का जरिया:	
<input type="checkbox"/> नोट / पत्र <input type="checkbox"/> ई मेल <input type="checkbox"/> मासिक / टेलीफोन	
समीक्षक: (अधिकारी का नाम एवं पद)	
कार्रवाई कि गयी:	
की गई कार्रवाई को उद्घाटित किया गया:	<input type="checkbox"/> हाँ <input type="checkbox"/> नहीं
प्रकटीकरण का जरिया:	

English translation of the Office Order issued for the constitution of GRM

1. Under Loan No. 2831 IND, a loan is being extended to Bihar Urban Development Investment Program (BUDIP) by Asian Development Bank (ADB) for creating water supply and sewerage systems. The creation of water supply and sewerage systems in two cities of Bihar – Gaya and Bhagalpur, is proposed under this loan program of BUDIP. The Bihar Urban Infrastructure Development Corporation (BUIDCo) shall be the designated Project Management Unit (PMU) as well as the Implementing Agency for these programs.

2. In compliance with the specific provisions of ADB guidelines prescribed for the implementation of ADB funded projects, a Grievance Redressal Mechanism is, hereby, constituted.

3. Under ADB funded programs of BUDIP, a three-tier GRM is being jointly established by Urban Development & Housing Department (UDHD) and Bihar Urban Infrastructure Development Corporation (BUIDCo). The complaint shall first be registered with the first tier and only if the grievance is not redressed at the first tier, the complainant shall have right to appeal to the second and third tiers of GRM. Redressal of complaints at different tier of GRM shall be in accordance with the following chart:

Tier / level	Name of the institution	Period for redressal of complaint
First	Project Management Unit (PMU)	Within 90 days from the date of receipt of the complaint
Second	Town Level Committees (TLC)	Within 60 days from the date of receipt of the complaint
Third	Steering Committee	Within 60 days from the date of receipt of the complaint

4. GRM will address only complaints which it receives from the public with regard to implementation of ADB funded projects of BUDIP.

(Signature)

Principal Secretary
UDHD, Govt. of Bihar

Letter No.: 16/5

Dated: 27.05.2015

Copy to:

Personal Secretary; Development Commissioner, Bihar; Principal Secretary-Finance Department; Principal Secretary/Secretary –Planning & Development Department; Principal Secretary / Secretary –UDHD; Managing Director-BUIDCo and all staff members of BUIDCo for information and reference.

(Signature)

Principal Secretary

Urban Development & Housing Department

SAMPLE GRIEVANCE REDRESS FORM

The _____ Project welcomes complaints, suggestions, queries and comments regarding project implementation. We encourage persons with grievance to provide their name and contact information to enable us to get in touch with you for clarification and feedback. Should you choose to include your personal details but want that information to remain confidential, please inform us by writing/typing ***(CONFIDENTIAL)*** above your name. Thank you.

Date	Place of registration				
Contact Information/Personal Details					
Name		Gender	* Male	Age	
			* Female		
Home Address					
Place					
Phone no.					
E-mail					
<p>Complaint/Suggestion/Comment/Question Please provide the details (who, what, where and how) of your grievance below:</p> <p>If included as attachment/note/letter, please tick here:</p>					
<p>How do you want us to reach you for feedback or update on your comment/grievance?</p> 					

FOR OFFICIAL USE ONLY

Registered by: (Name of Official registering grievance)	
Mode of communication: Note/Letter E-mail Verbal/Telephonic	
Reviewed by: (Names/Positions of Official(s) reviewing grievance)	
Action Taken:	
Whether Action Taken Disclosed:	Yes No
Means of Disclosure:	

COMPARISON BETWEEN LARR ACT 2013²⁶ AND ADB SPS 2009

ADB SPS Policy Principle	LARR Act	Remarks
Involuntary resettlement should be avoided whenever feasible; if unavoidable it should be minimized.	Followed	
Screen the project early on to identify past, present, and future involuntary resettlement impacts and risks. Determine the scope of resettlement planning through a survey and/or census of displaced persons, including a gender analysis, specifically related to resettlement impacts and risks.	Followed	
Carry out meaningful consultations with affected persons, host communities, and concerned nongovernment organizations. Inform all displaced persons of their entitlements and resettlement options. Ensure their participation in planning, implementation, and monitoring and evaluation of resettlement programs. Pay particular attention to the needs of vulnerable groups, especially those below the poverty line, the landless, the elderly, women and children, and Indigenous Peoples, and those without legal title to land, and ensure their participation in consultations. Establish a grievance redress mechanism to receive and facilitate resolution of the affected persons' concerns. Support the social and cultural institutions of displaced persons and their host population. Where involuntary resettlement impacts and risks are highly complex	Followed	
Improve, or at least restore, the livelihoods of all displaced persons through (i) land-based resettlement strategies when affected livelihoods are land based where possible or cash compensation at replacement value for land when the loss of land does not undermine livelihoods, (ii) prompt replacement of assets with access to assets of equal or higher value, (iii) prompt compensation at full replacement cost for assets that cannot be restored, and (iv) additional revenues and services through benefit	Followed	
Provide physically and economically displaced persons with needed assistance, including the following: (i) if there is relocation, secured tenure to relocation land, better housing at resettlement sites with comparable access to employment and production opportunities, integration of resettled persons economically and socially into their host communities, and extension of project benefits to host communities; (ii) transitional support and development assistance, such as land development, credit facilities, training, or employment opportunities; and (iii)	Followed	
Improve the standards of living of the displaced poor and other vulnerable groups, including women, to at least national minimum standards. In rural areas provide them with legal and affordable access to land and resources, and in urban areas provide them with appropriate income sources and legal	Followed	
Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter into negotiated settlements	Followed	
Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets.	Followed	
Prepare a resettlement plan elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound	Prepared	The LARR Act refers to the RR scheme

ADB = Asian Development Bank, LARR = Land Acquisition, Rehabilitation and Resettlement, SPS=Safeguard Policy Statement

²⁶ The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013.

Comparison of ADB's SPS -2009, BLARRP-2007 and The LARR Act-2013

Sl. No.	ADB's IRP 2009	(BLARRP 2007)	(LARR Act 2013)	Comparison / Gaps	Gap Mitigations through Resettlement Framework (RF) and Entitlement Matrix (EM)
1	Involuntary resettlement should be avoided wherever possible; early screening to identify involuntary resettlement impacts and risks.	No such objective has been outlined	LARR Act 2013 aims to promote non displacing or least displacing alternatives. It lays special emphasis on the need for early screening.	BLARRP does not deal with the minimization of involuntary resettlement. LARR Act 2013 meets ADB IR Policy requirements.	Early screening to identify involuntary resettlement impacts and risks will be carried out with a view to avoiding involuntary resettlement as per the LARR Act 2013
2	Minimize involuntary resettlement by exploring project and design alternatives	No such objective is outlined	LARR Act 2013 aims to minimize displacement and to promote, as far as possible, non-displacing or least-displacing alternatives.	BLARRP does not provide for minimizing resettlement and do not deal with alternate design. LARR Act 2013 clearly defines the procedures to minimize involuntary resettlement through proper alternate engineering design and adequate consultation with stakeholders. LARR Act 2013 meets ADB IR Policy requirements.	Specific Procedures and steps to minimize involuntary resettlement by taking into consideration proper alternate engineering design and adequate consultation with stakeholders have been incorporated in the RF & EM in accordance with the provisions laid down in LARR Act 2013
3	Conducting census of	No provision or procedure	LARR Act 2013 does provide for a detailed census through	BLARRP does not provide for census surveys of affected persons	No project involving displacement of families will

	displaced persons and resettlement planning	specified.	household surveys of affected persons ²⁷ in order to assess vulnerability and other entitlements for resettlement planning in case of permanent or temporary losses, regardless of scale.	or need for resettlement planning. Only inventories of losses and lists of affected persons are prepared under these. ADB policy defines the need for a detailed census through household surveys of affected persons in order to assess vulnerability and other entitlements. This gap is addressed in the LARR Act 2013 by incorporating the need for census survey of affected persons and resettlement planning in case of permanent or temporary losses, regardless of scale.	be undertaken without a detailed Social Impact Assessment, Base Line Survey, and Resettlement Planning as laid down in the LARR Act 2013
4	Carry out meaningful consultation with affected persons / displaced persons, host communities and NGOs to ensure their participation in planning, implementation and monitoring of resettlement	No provision made in BLARRP-2007 .	LARR Act 2013 lays emphasis on adequate rehabilitation package and expeditious implementation of the rehabilitation process with the consultation and active participation of the affected families, Panchayat, Municipality / Municipal Corporation, District Board etc.	No provision made in BLARRP, however, its provision for higher solatium if landowner agrees to give land willingly, implies some consultation with affected persons. LARR Act 2013 meets ADB IR Policy requirements.	Meaningful consultation with affected persons /displaced persons, host communities and NGOs will be carried out to ensure their active participation in planning, implementation and monitoring of the resettlement program in accordance with the provisions laid down in LARR Act 2013 .

²⁷ a family/ household/person - whose land or other immovable property has been acquired; or does not own any land but a member or members of such family may be agricultural labourers, tenants including any form of tenancy or holding of usufruct right, share-croppers or artisans who may be **working in the affected area for three years prior to the acquisition of the land**, whose primary source of livelihood stand affected by the acquisition of land; or whose primary source of livelihood for three years prior to the acquisition of the land is dependent on forests or water bodies and includes gatherers of forest produce, hunters, fisher folk and boat men and such livelihood is affected due to acquisition of land; or a member of the family who has been assigned land by the State Government or the Central Government under any of its schemes and such land is under acquisition; or the Scheduled Tribes and other traditional forest dwellers who have lost any of their forest rights recognised under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Right) Act, 2006 due to acquisition of land, or a family residing on any land in the urban areas for preceding three years or more prior to the acquisition of the land or whose primary source of livelihood for three years prior to the acquisition of the land is affected by the acquisition of such land.

	program.				
5	Establish grievance redress mechanism	No provision made in BLARRP-2007 .	LARR Act 2013 emphasizes the need of putting in place a robust Grievance redress mechanisms for affected people for all Project involving voluntary / involuntary resettlement.	LARR Act 2013 meets ADB IR Policy requirements.	Provisions have been made in the RF & EM to put in place a robust Grievance redress mechanisms as per provisions laid down in LARR ACT 2013 to resolve grievances of the affected persons as per the provisions laid down in LARR Act 2013 .
6	Improve or at least restore the livelihoods of all displaced persons	BLARRP-2007 provides for livelihoods compensation to displaced agricultural labourers working on the affected land for >3 years through a one-time payment of two hundred days' minimum wages. However, it does provide for livelihoods restoration; it does not consider loss of livelihoods for any other category of displaced	LARR Act 2013 emphasizes the need of improving or at least restoring the livelihoods of all affected/displaced persons (e.g. titled/non-titled affected persons including share-cropper, artisans, squatters, vendors as well as landless affected families) working in the affected area for three years prior to the acquisition of the land . It provides for training and skill development, wage employment / employment opportunities in the project to titled/non-titled affected persons including squatters, vendors as well as landless affected families. It provides for- Option to choose ` 5,00,000/- or a job , if available, to the	While BLARRP recognizes livelihoods losses of displaced agricultural labourers. Loss of livelihoods suffered by other titled/non-titled affected persons is not considered. There is no provision for restoration for lost incomes and livelihoods. LARR Act 2013 provides for a census survey which helps create a database on income and livelihood losses and stresses on improving or at least restoring the livelihoods of all affected /displaced persons- titled/non-titled affected persons including squatters, vendors etc. LARR Act 2013 meets ADB IR Policy requirements	Provisions have been made in the RF & EM to ensure improving or at least restoring the livelihoods of both physically and economically affected persons / displaced persons e.g. titled /non-titled affected persons including share-cropper, artisans, squatters, vendors as well as landless affected families through measures like training and skill development, wage employment / employment opportunities in the project in accordance with the provisions laid down in LARR Act 2013 .

		person (other than agricultural Labour).	affected family; or an inflation adjusted annuity of ` 2,000/- per month per family for 20 years Subsistence allowance of ` 3,000/- per month for one year; Training and skill development:		
7	Land based resettlement strategy	BLARRP-2007 provides for land-for land compensation only when homestead land is being acquired subject to a maximum of 5 decimals of land.	LARR Act 2013 does provide for land for land option subject to a min. of 1 acre of land to those affected persons who have been rendered land less or marginal farmer due to the project.	LARR Act 2013 does provide for land for land option where feasible. LARR Act 2013 meets ADB IR Policy requirements	Attempts will be made to find alternate land to compensate for loss of land if available, taking cognizance of the concurrence of host community and land value. Land based resettlement strategy will be formulated as per the provisions laid down in LARR Act 2013.
8	All compensation should be based on the principle of replacement cost	BLARRP-2007 does not provide for compensation at replacement cost. It makes an attempt to achieve	LARR Act 2013 spells out the following mechanism to ascertain the replacement cost by a Valuation Committee formed by the Collector for this purpose- Market value of the land²⁸:	ADB prescribes the use of current market rates in the project area. LARR ACT 2013 addresses all these issues and spells out a mechanism to fix the replacement cost by a Valuation Committee that will be responsible for deciding the	The compensation package / Cost of rehabilitation and resettlement will be determined in accordance with the provisions laid down in LARR Act 2013.

		determination and payment of market value by adding 50% registration cost and up to 60% solatium	<p>Multiplier-</p> <p>For Rural Areas - Up To 'Two'</p> <p>For Urban Areas – 1</p> <p>Value of the assets attached to land: Building/Trees/Wells/Crop etc. as valued by relevant govt. authority;</p> <p>Total compensation =</p> <p>(1*2 +3)</p> <p>Solatium: 100% of total compensation</p> <p>Total compensation package including Solatium = 2* (1*2 +3)</p> <p>The stamp duty and other fees payable for registration of the land or house allotted to the affected families shall be borne by the Requiring Body.</p>	replacement costs. LARR Act 2013 meets ADB IR Policy requirements	
9	Provide relocation assistance to displaced persons	BLARRP-2007 provides for transitional assistance in the form of one-time assistance	LARR Act 2013 provides for financial support, transportation costs, temporary and transitional accommodation to displaced	LARR Act 2013 meets ADB IR Policy requirements and entitlements under BLARRP.	One-time financial assistance to displaced persons will be determined in accordance with the provisions laid down in

²⁸ The market value of the acquired land is computed as the higher of (i) the land value specified in the Indian Stamp Act, 1899 for the registration of sale deeds; or (ii) the average of the top 50 per cent of all sale deeds in the previous three years for similar type of land situated in the vicinity. **(Chapter-IV, Sec- 26)**

		for temporary accommodation (₹ 10, 000) and one-time transportation assistance (₹ 5,000) to affected persons losing homestead land.	persons as given below ²⁹ - Transport allowance - ₹ 50,000 Resettlement allowance - ₹ 50,000 Financial assistance for construction of cattle shed or petty shop as the case may be- ₹ 25,000 artisan, small trader or self-employed person shall get a minimum assistance of ₹ 25,000		LARR Act 2013.
10	Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets.	No provision made. only agricultural labourer is considered	LARR Act 2013 recognizes non-titleholders including squatters, vendors etc. also as eligible affected persons. Displaced /affected persons without titles to land or any recognizable legal rights to land are also eligible for resettlement assistance and compensation for loss of non-land assets, livelihoods etc.	LARR Act 2013 meets ADB IR Policy requirements while BLARRP-2007 is limited in scope	Provisions have been made in the RF & EM for compensation to all affected persons whether physically or economically displaced irrespective of their legal status. The date of the census survey will be considered as the cut-off date and all affected / displaced persons, without titles to land or any recognizable legal rights to land listed on the cut-off-date will be eligible for resettlement assistance and compensation for loss of non-land assets / assistance in accordance with the provisions laid down in LARR Act 2013.

11	Safeguarding needs of vulnerable groups	Landless agricultural labourer working for >3 years on an affected property is the only category of vulnerability recognized and provided for under BLARRP.	LARR Act 2013 recognizes the need for protecting the vulnerable groups / weaker sections of the society especially members of the scheduled castes and scheduled tribes, women headed families, widows, differently abled etc.	ADB IR Policy advocates for Safeguarding needs of vulnerable groups.	Special provisions have been made in the RF & EM for protecting the needs of the vulnerable groups / weaker sections of the society especially members of the scheduled castes and scheduled tribes, women headed families, widows, single women, differently abled etc.
12	Disclose the resettlement plan, including documentation of the consultation in an accessible place and a form and language(s) understandable to affected persons and other stakeholders.	No provision made	LARR Act 2013 provides for mandatory dissemination of information ³⁰ on displacement, rehabilitation and resettlement and meaningful consultations with the affected communities at each stage, including public hearings in the affected areas.	BLARRP do not provide for disclosure. LARR Act 2013 meets the ADB IR Policy requirements ensures that the Resettlement Plan along with the necessary eligibility and entitlement will be disclosed to the affected persons in the local language (Hindi/Urdu) in the relevant project locations and concerned government offices and on their websites as well as on the websites of the Executing Agency and ADB.	Provisions for mandatory dissemination of information on displacement, rehabilitation and resettlement and meaningful consultations with the affected communities at each stage, including public hearings in the affected areas have been made in the RF & EM in accordance with the provisions laid down in LARR Act 2013

³⁰ Chapter -4, Sec-18 - The Commissioner shall cause the approved Rehabilitation and Resettlement Scheme to be made available in the local language to the Panchayat, Municipality or Municipal Corporation, as the case may be, and the offices of the District Collector, the Sub-Divisional Magistrate and the Tehsil, and shall be published in the affected areas, in such manner as may be prescribed, and uploaded on the website of the appropriate Government.

13	Conceive and execute involuntary resettlement as part of a development project or program. Include the full costs of resettlement in the presentation of project's costs and benefits.	Full involuntary resettlement costs not considered. The policy specifies that all R&R cost will part of project and borne by requiring agency.	Addressed in LARR Act 2013 . It emphasizes to integrate rehabilitation concerns into the development planning and implementation process	LARR Act 2013 meets ADB IR Policy requirements while BLARRP is limited in scope meets	Special provisions have been made in the RF & EM to integrate rehabilitation concerns into the development planning and implementation process Resettlement and Rehabilitation cost, Administrative Cost, cost of providing Training and Skill Development, cost of conducting SIA etc. shall be taken into account in determining the project cost in accordance with the provisions laid down in LARR Act 2013 .
14	Pay compensation and provide other resettlement entitlements before physical or economic displacement.	No provision made under BLARRP-2007 .	LARR Act 2013 specifies that all land acquisition should be completed before relocation. Full payment of compensation as well as adequate progress in resettlement shall be ensured in advance of the actual displacement of the affected families as well as land acquisition. Land required is to be handed over free of any encumbrances to the Contractor.	LARR Act 2013 meets ADB IR Policy requirements while no such provision is made under BLARRP-2007	Special provisions have been made in the RF & EM to serve a notice 60 days in advance and ensure full payment of compensation in advance of the actual displacement of the affected families as well as land acquisition in accordance with the provisions laid down in LARR Act 2013 .

15	Monitor and assess resettlement outcomes, their impacts on the standards of living of displaced persons.	No provision made under BLARRP-2007 .	LARR Act 2013 emphasises on the need to have a proper Monitoring mechanism to assess resettlement outcomes, their impacts on the standards of living of displaced persons.	LARR Act 2013 meets ADB IR Policy requirements while no such provision is made under BLARRP-2007 .	Provisions have been made in the RF & EM for a robust Monitoring mechanism to assess resettlement outcomes and their impacts on the standards of living of displaced persons as per the provisions laid down in LARR Act 2013 .
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SAMPLE FORM FOR INVENTORY OF LOSS SURVEYSQuestionnaire N^o:

Date:

Name of the Subproject:

Name of the Place (s)/Village / settlement(s):

Panchayat/Municipality.....

District:

Region:

Plot No. with details of Khata/Khasra/Khatian:

Type of loss: 1. Structure Only 2. Land only 3. Land & structure

4. Orchard/Tree 5. Other assets (please specify)

Ownership of the Land

1. Private 2. Government 3. Religious 4. Community 5. Others

Type and Use of Land

1. Agricultural 2. Grazing 3. Fallow 4. Plantation Barren

6. Mixed use 7. Residential 8. Commercial 9. Other / No use

Irrigation Facilities of Land

1. Irrigated 2. Un irrigated

Area to be Acquired / Affected Land (rakba)

Total Area of the Land/ Plot (In case a portion of the land/ plot to be acquired/affected) (in sq.m/acre/bigha/kata, specify)

Total Land Holding (affected + unaffected) in sq.m

1. Irrigated: 2. Un-irrigated:
3. Other: 4. Total:

Status of Ownership

1. Titleholder 2. Customary Right 3. Trust/NGO land
4. Encroacher 5. Squatter 6. Other (specify):

Type of Private Ownership

1. Individual/Single 2. Joint/Shareholders 3. Other (specify):

Name of the Owner/Occupier (s):

Father's Name:

Rate of the Land (Rs./Per Acre)

1. Market Rate: 2. Government Rate:

Any of the following people associated with the Land

- A. Agricultural Laborer 1. Yes 2. No

Total Numbers (If Yes):.....

Names (If Yes):

(i).....

(ii)

B. Tenant/Lessee

1. Yes 2. No

Total Numbers (If Yes):.....

Names (If Yes):

(i).....

(ii)

C. Sharecropper 1. Yes 2. No

Total Numbers (If Yes):.....

Names (If Yes):

(i).....

(ii)

Agricultural Squatters 1. Yes 2. No

Total Numbers (If Yes):.....

Names (If Yes):

(i).....

(ii)

(iii)

Number of trees within the affected area

1. Fruit Bearing.....2. Non-fruit Bearing.....3. Timber.....4. Fodder.....Total.....

Details of Trees

SI No	Name of Trees	Type of Trees (1. Fruit Bearing, 2 Non-Fruit Bearing, 3. Timber 4. Fodder)	Age of the Trees	Number of Trees	Market price (Rupees)
1					
2					

SI No	Name of Trees	Type of Trees (1. Fruit Bearing, 2 Non-Fruit Bearing, 3. Timber 4. Fodder)	Age of the Trees	Number of Trees	Market price (Rupees)
3					
4					
5					
6					
7					

Which crop do you cultivate in the affected land (start with ascending order as major crop)?

Type of Crops	Total Affected Area under Crop (sq m)	Total Yielding per Crop (Kg) in the affected area

How many seasons in a year you cultivate in the affected land

1. One season 2. Two seasons 3. Three Seasons

Any structure in the Affected Land 1. Yes..... 2. No.....

Area of the affected structure (in square meter / square feet, specify).....

Measurement of Affected Structure (sq m / sq ft)

a) Length

b) Width

c) Height

d. Number of Storey.....

Area of the boundary wall only (in Meter): a) Lengthb) Height

Area of the Total structure (in Square Meter).....

Measurement of Total Structure

a) Length

b) Width

c) Height

Scale of Impact on structure

a) 25% b) 50% c) 75% d) 100%

Type of Construction of the Structure

SI N ^o	Particulars	Type of Construction (1). Simple (thatch/sack/bamboo/slats, (2) Earth/clay/sand, (3) Wood, (4) Brick, (5), Concrete, (6) Corrugated iron sheet, (7) Tile, and (8) Other, specify
1	Roof	
2	Floor	
3	Wall	

Age of the Structure (in years):

Market Value of the Structure (in Rs.):

Vulnerability Status of the Household:

- A. Is it a woman headed household with dependent? 1. Yes 2. No
- B. Is it headed by physically/mentally challenged person? 1. Yes 2. No
- C. Is it a household Below Poverty Line (BPL) 1. Yes 2. No
- D. Is it landless? 1. Yes 2. No
- E. Is it Elderly people without income source? 1. Yes 2. No
- F. Is it Ethnic Minority Group? 1. Yes 2. No

Main Occupation of the Head of the Household (Main Source of Income)

1. Agriculture; 2. Commercial /business; 3. Service Holder; 4. Others (Specify).....

Total Annual income of the family from all sources Rs.....

Annual income (total turnover) per unit (bigha/kata/acre) from affected land in Rs._____

Annual income (total turnover) from affected commercial structure, if applicable in Rs._____

Annual cost of operation of the total landholding/business/commercial enterprise in Rs._____ (please include labour cost and operating cost including fertilizer, pesticide, water, electricity, any other cost.)

If displaced, do you have additional land to shift? 1. Yes 2. No

If yes, how far from the present location (km).....

Resettlement/ Relocation Option

1. Self-Relocation 2. Project Assisted Relocation

Compensation Option for Land loser

1. Land for land loss 2. Cash for Land loss

Compensation Options for Structure loser

1. Structure for structure loss 2. Cash for Structure loss

Income Restoration Assistance (fill codes in preferred order)

1. Shifting Allowance; 2. Employment Opportunities in Construction work; 3. Assistance/ Loan from other ongoing development scheme; 4. Training for Vocational activities; 5- Assistance to re-establish lost/affected business, 6. Others (specify)

Details of the Affected Persons (Family/Households)

Family Details

SI. N ^o	Name of the Family Member	Relation to Head of the Household #	Age (years)	Sex ##	Occupation *	Marital Status**	Education***
1							
2							
3							
4							
5							
6							
7							
8							

Code: # 1. Self-2. Father 3. Mother 4. Husband 5. Wife 6. Son 7. Son in law 8. Daughter in law 9. Grandfather 10. Grandmother 11. Daughter 12. Brother 13. Sister 14 Grandson 15. Granddaughter 16. Uncle 17. Aunty 18.Cousins

1. Male 2. Female

***** 1. Service2. Business3. Agriculture4. Study5. Housewife6. Labour7. Unemployed8. Professional

9. Pensioner10. Government Employee11. Private Employee12 Fisheries13 Infant14 Other

****** 1. Married2. Unmarried3. Widow4. Widower5. Others

******* 1. Illiterate2. Literate3. Up to primary4. Secondary5. Graduate6. Post Graduate

(NOTE FOR ENUMERATOR: All affected persons to be surveyed. If details of tenants / employees are obtained from the owners, such persons will also have to be located and surveyed using applicable fields in the above questionnaire).

**CHECKLIST FOR - SOCIO-ECONOMIC SURVEY OF AFFECTED BUSINESSES /
SAMPLE FORM FOR SURVEY OF BUSINESSES UNDER DETAILED MEASUREMENT
SURVEY**

Date of Survey	Serial No.				
Name of road	Address/Location:				
Name of affected person					
Father/Mother's name					
Type of business/hawker					
Status	Owner	Tenant			
	If owner: Titled	Non-titled			
	Mobile	Permanent			
Description of structure					
Since when operating in that location					
Frequency of operation in a week	Daily	2-3	1	Half day	Full day
Person(s) employed if any	No.				
Maintenance / Rent	Rs. per annum or month				
Investment (recurring)	Rs./month				
Average profit per day	Rs.				
Salaries paid to employees (total/month)	Rs./month				
Highest profits recorded in	Hours (AM/PM) _____ Weekend/Weekday (specify days) ____ Festival season (specify)_				
Will employee(s) be affected	Yes/No				
Whether any affected person is	BPL/WHH/disabled/backward community/IP/elderly/child				
No. of dependents of owner					
No. of dependents of employees					
Whether road RoW used for	Parking/Display of wares/Storage/Other purpose, specify				
Type(s) of distress likely					
Views/Concerns					

Note: BPL=below poverty line; WHH=woman headed household / Chief Wage Earner is a woman; IP=indigenous peoples; RoW=right of way

SAMPLE MONITORING TEMPLATE

1. A semi-annual monitoring report shall be prepared on Resettlement Plan implementation and submitted to ADB by the PMC. It will include: (1) **the list of APs**, with compensation, if any due to each and details of compensation paid with signed receipts annexed to the report, socio-economic status and satisfaction levels of APs with the RP implementation process, compensation and mitigation measures; (2) **the list of vulnerable APs** and additional compensation / special protection measures planned/implemented for them; socio-economic status and satisfaction levels of vulnerable APs with the RP implementation process, compensation and mitigation measures; (3) **list of affected common facilities** affected, plan to restore access and/or actions taken to restore access to the same or facilities of equal quality elsewhere; (4) **list of roads for closure** and actions planned / taken to minimize disturbance; (5) **details of consultations held with APs** (with number of participants by gender, issues raised, conclusion / agreement reached, actions required/taken; (6) **details of grievances** registered, redressed, outstanding complaints, minutes of GRM meetings held; (7) **details of information disclosure** and awareness generation activities, levels of awareness among target population and behavior change, if any; and (8) **any other relevant information** showing RP implementation progress. The following checklist may be used for overall monitoring of RP implementation.

S. N.	Resettlement Plan Activities	Completed Y/N	Remarks
A. Pre-Construction Activities and Resettlement Plan Activities			
1	Approval of final Resettlement Plan by ADB prior to contract award		
2	Disclosure of final Resettlement Plan on ADB and EA websites		
3	Circulation of summary RP in two local languages to all stakeholders		
Resettlement Plan Implementation			
1	Grievance Redress Cell and Committee established		
2	Entitlements and grievance redress procedure disclosed		
3	Finalization of list of APs, vulnerable APs and compensation/assistance/allowances due		
4	Finalization of list of roads for full or partial closure; mitigation measures proposed		

S. N.	Resettlement Plan Activities	Completed Y/N	Remarks
5	Affected persons received entitlements as per amounts and program specified in RP		
6	Payment of compensation, allowances and assistance (No. of APs)		
7	Arrangements for temporary rental accommodation for APs facing relocation		
8	Additional assistance for vulnerable households given (No. of vulnerable APs)		
9	Livelihood arrangements provided to vulnerable APs		
10	Reinstallation of affected common facilities		
11	Grievances No. of grievances registered No. of grievances redressed Outstanding complaints Disclosure of grievance redress statistics		
12	Consultation, participation and disclosure as per Plan		
C. Monitoring			
1	Survey on socio-economic status of APs (including vulnerable APs) completed and compared with baseline survey results		
2	Survey on satisfaction levels of APs with RP implementation completed		
D. Labor			
1	Implementation of all statutory provisions on labor like health, safety, welfare, sanitation, and working conditions by Contractors. Ensuring no child labour used		
2	Equal pay for equal work for men and women		

NOTE: Where applicable, the information provided in the table should be supported by detailed explanatory report, receipts and other details.

Annexure 6: Summary of Consultations

Sl. No.	Date	Location	No. of Wards Included	No. of Participants	Issues/Queries Raised ³¹	Photographs
1	18 th Dec, 2014	CMS School Narga, Ward No. 9	Ward No. 1,2,7,8,9	Total-39 M – 33 F – 6	Process and basis of tariff fixation for water consumers. Subsidy for the poor households belonging to vulnerable social category. Work schedule of actual construction work.	 
2	16 th Jan, 2015	Govt. Girls High Inter School, Nathnagar, Bhagalpur, Ward No. 6	Ward No. 3,4,5,6,12	Total-37 Male-30 Female-7	Provision of water for non-drinking purposes like washing clothes, utensils and bathing. Payment/non-payment of user charges. Usability of the existing distribution pipelines.	 

³¹ The community consultation programs are being organized as per Community Orientation and Participation Plan (CAPP). The CAPP provides a suitable module for generating awareness about the benefits which will accrue to them among the end-users/beneficiaries, representatives of ULB and other important stakeholders including general public in the wake of project implementation. The issues /concerns raised during the deliberations of the community consultation were adequately addressed by Resource Persons to enable them to build consensus on their possible solutions and extend cooperation and support during and after the project implementation.

Sl. No.	Date	Location	No. of Wards Included	No. of Participants	Issues/Queries Raised ³¹	Photographs
3	12 th Feb, 2015	Global Mathematics Coaching, University Road, Company Bagh, Durga Mandir, Ward No. 13	Ward No. 10,11,13,14,15	Total-60 Male-49 Female-11	Reasons for delay in project implementation. Mode of user charge collection. Compulsory or voluntary connection	 
4	25 th March, 2015	Conference Hall, Divisional Commissioner, Bhagalpur	Ward No. 17,19,20,21,22	Total-29 Male-23 Female-6	Process and basis of tariff fixation for water consumers. Subsidy for the poor households belonging to vulnerable social category. Work schedule of actual construction work.	 

Sl. No.	Date	Location	No. of Wards Included	No. of Participants	Issues/Queries Raised ³¹	Photographs
5	29 th April, 2015	Community Hall, Budhanath Mandir Ward No. 18	Ward No. 16,18,42,43	Total-63 Male-43 Female-20	Need for early implementation of the project. User charge	 
6	28 th May, 2015	Girls Middle School, Badi Khanjarpur, Near Masjid Ward No. 24	Ward No. 23, 24, 25, 26,27	Total-52 Male-36 Female-16	Mode and basis of fixing water tariff O&M of Public stand posts. Subsidy for the poor households belonging to vulnerable social category.	

Sl. No.	Date	Location	No. of Wards Included	No. of Participants	Issues/Queries Raised ³¹	Photographs
7	18th June, 2015	Conference Hall of Hotel Paradise, Jail Road, Jawaripur, Ward No. 30	Ward No. 28, 29, 30, 31, 32	Total-59 Male-48 Female-11	Quality of water to be supplied under the project. Mode and basis of fixing water tariff Subsidy for the poor households belonging to vulnerable social category.	 
8	28 th July, 2015	Community Hall of Poddar Dharamshala Ward No. 35	Ward No. 33, 34, 35, 36, 37	Total-50 Male-50 Female-Nil	Completion time of the project. User charge and Subsidy for the poor household	

Sl. No.	Date	Location	Issues discussed	Photograph
9	24.11.2015	Housing Board	<p>Water quality issue was discussed which is good as per people suggested</p> <p>Related to health and safety measures of the people during construction</p> <p>People are interested to do work on project area during construction</p> <p>Sensitive receptors issues was discussed with the people because a temple near corner of approach road</p>	
10	24.11.2015	Surkikal (ward 26)	<p>Water quality issue was discussed. impurities in the drinking water supply through PHED</p> <p>Safety issued of children</p> <p>What precaution will be taken on health and safety of the people during construction</p> <p>People are interested to do work on project area during construction</p> <p>Sensitive receptors issued was discussed with the people because a temple near boundary of OHT site</p>	
11	24.11.2015	TM University	<p>Health and safety issue of workers will be considered.</p> <p>People are interested to do work on project area during construction</p>	

			Sensitive receptor (Temple near the corner) issued was discussed with people.	
12	24.11.2015	Thakurbari, Warsaliganj	<p>Access road is narrow and used for general public so what safety measures will be taken during construction</p> <p>Water quality issue was discussed. As per public view water quality is good</p> <p>Drainage through nalli which is cleaned by Nagar Nigam</p> <p>Air pollution issue was also discussed for nearby area</p> <p>People are interested to do work on project area during construction</p> <p>Sensitive receptors (OHT is located on the temple trust land) near the OHT issued was also discussed with Trust member.</p>	
13	27.11.2015	WTP Barari	<p>Health & Safety measures issued</p> <p>Water quality issue was discussed. As per public view water quality is good</p> <p>No Drainage system in the surrounding area</p> <p>Air pollution issue was also discussed for nearby area</p>	

			People are interested to do work on project area during construction	
14	27.11.2015	Distribution area, Adampur	<p>Access road is narrow and used for general public so what safety measures will be taken during construction</p> <p>Water quality issue was discussed. As per public view water quality is not good</p> <p>Drainage through nalli which is cleaned by Nagar Nigam</p> <p>Air pollution issue was also discussed for nearby area</p> <p>People are interested to do work on project area during construction</p>	

List of the Participants in Public Consultation

Subproject Name:
 Location of Meeting/Consultation: Housing Board.
 Date & Time: 24/11/15 @ 10:15 a.m

Sl. No	Name & Address	Occupation	Signature
1.	Mithlesh Kumar	Student	<i>Mithlesh Kumar</i>
2.	Aska Devi	House wife	<i>Aska Devi</i>
3.	Dheeraj Kumar		<i>Dheeraj Kumar</i>
4.	Ashu Kumar	Engineer	<i>Ashu Kumar</i>
5.	Shriya K. Singh		<i>Shriya K. Singh</i>
6.	Navnit Kaurhal 7549664834	emp.	<i>Navnit Kaurhal</i>
7.	V.R. Singh	House wife	<i>V.R. Singh</i>
8.	Pravesh Kumar	Advocacy	<i>Pravesh Kumar</i>
9.			

List of the Participants in Public Consultation

Subproject Name: K
 Location of Meeting/Consultation: Sukikal
 Date & Time: 24/11/2015 11:30

Sl. No	Name & Address	Occupation	Signature
1.	Bantya Kumar	Job	<i>Bantya Kumar</i>
2.	श्रीधर शर्मा		<i>श्रीधर शर्मा</i>
3.	विनीत 214		<i>विनीत 214</i>
4.	श्रीमती देवी	House wife	<i>श्रीमती देवी</i>
5.	श्रीमती देवी	House wife	<i>श्रीमती देवी</i>
6.	रविशर्मा	Contractor	<i>रविशर्मा</i>
7.	श्रीमती देवी	House wife	<i>श्रीमती देवी</i>
8.	रमेश देवी	House wife	<i>रमेश देवी</i>
9.	कल्पना देवी	" "	<i>कल्पना देवी</i>
10.	जयश्री देवी	" "	<i>जयश्री देवी</i>
11.	पवन कुमार	Student	<i>पवन कुमार</i>
12.	अमरवीर कुमार	Student	<i>अमरवीर कुमार</i>

Zoom in (Ctrl+Plus)

List of the Participants in Public Consultation

Subproject Name:
 Location of Meeting/Consultation: P.M. University
 Date & Time: 24/11/15 @ 12:30 P.m

Sl. No	Name & Address	Occupation	Signature
1.	राज	Teacher	<i>Raj</i>
2.	पुष्पेश कुमार	Teacher	<i>Pushpesh Kumar</i>
3.	दीपिका शर्मा	Teacher	<i>Diipika Sharma</i>
4.	शिव कुमार	Student	<i>Shiv Kumar</i>
5.	श्रीमती देवी	House wife	<i>श्रीमती देवी</i>
6.	श्रीमती देवी	House wife	<i>श्रीमती देवी</i>
7.	श्रीमती देवी	House wife	<i>श्रीमती देवी</i>
8.	अनुराग कुमार	Self-employed	<i>Anurag Kumar</i>
9.	अनुराग कुमार	Self-employed	<i>Anurag Kumar</i>
10.	Reekhi Devi	Student	<i>Reekhi Devi</i>
11.	Anuraj Raj	Student	<i>Anuraj Raj</i>
12.			

List of the Participants in Public Consultation

Subproject Name: BWSP
 Location of Meeting/Consultation: Warzalaganj Thakurbari
 Date & Time: 24/11/2015 1:45 PM

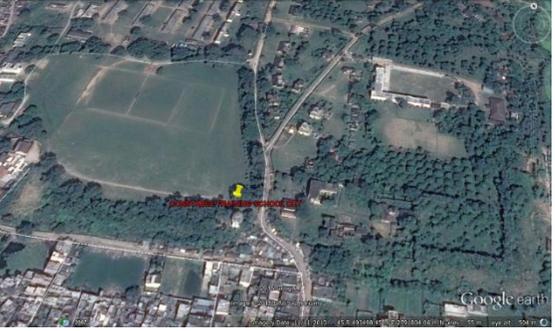
Sl. No	Name & Address	Occupation	Signature
1.	श्रीमती देवी	House wife	<i>श्रीमती देवी</i>
2.	श्रीमती देवी	" "	<i>श्रीमती देवी</i>
3.	श्रीमती देवी	" "	<i>श्रीमती देवी</i>
4.	श्रीमती देवी	" "	<i>श्रीमती देवी</i>
5.	श्रीमती देवी	" "	<i>श्रीमती देवी</i>
6.	श्रीमती देवी	Student	<i>श्रीमती देवी</i>
7.	श्रीमती देवी	Student	<i>श्रीमती देवी</i>
8.	श्रीमती देवी	Student	<i>श्रीमती देवी</i>

List of the participants in Public Consultation

Subproject Name: BWSP
 Location: Customer Call Centre, W.T.P. Baco
 Date: 27-11-15

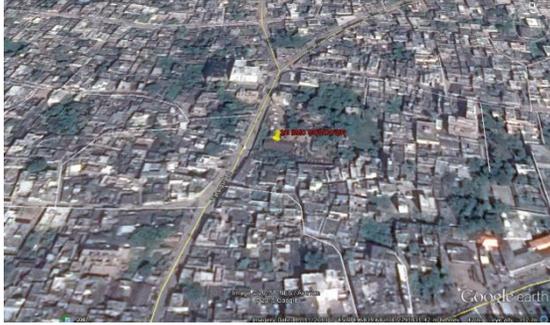
Sl. No.	Name & Address	Occupation	Signature
1	Ram Nanda	Self-emp.	<i>Ram Nanda</i>
2	Raj Malhotra	Self-emp.	<i>Raj Malhotra</i>
3	श्रीमती देवी	Shopkeeper	<i>श्रीमती देवी</i>
4	Suresh Roy	Job Private	<i>Suresh Roy</i>
5	रवि शर्मा	Labor	<i>रवि शर्मा</i>
6	Avadesh Kumar	Shop	<i>Avadesh Kumar</i>
7	श्रीमती देवी	Housewife	<i>श्रीमती देवी</i>
8	Saba Devi	House Wife	<i>Saba Devi</i>
9	Sarvesh Sah	Private Job	<i>Sarvesh Sah</i>
10	श्रीमती देवी	Private Job	<i>श्रीमती देवी</i>
11	Pushpendra Yadav	Labor	<i>Pushpendra Yadav</i>
12	Raj Ram	Labor	<i>Raj Ram</i>
13	श्रीमती देवी	Private Job	<i>श्रीमती देवी</i>
14	Renu	Labor	<i>Renu</i>

Coordinates and Google map of Proposed OHSR sites

Sl. No.	OHSR ID	Name of Site	Latitude/	Longitude	Ownership	Photograph	Google map
1	1/1	TMBU	494358.656022771	2791529.40355521	Govt. Land		
2	1/2	Constable Training School OHT	493509.708043757	2791742.75687321	Govt. Land		

Sl. No.	OHSR ID	Name of Site	Latitude/	Longitude	Ownership	Photograph	Google map
3	1/3	MAHASAY DEODI-II OHT		2792540.1777343	Govt. Land		
4	1/3 (A)	MAHASAY DEODI-II OHT	492871.334339422	2792584.80763791	Govt. Land		

Sl. No.	OHSR ID	Name of Site	Latitude/	Longitude	Ownership	Photograph	Google map
5	1/4	ABHIR MISHARA OHT	492693.934397285	2791502.29902659	Govt. Land		
6	2/2	JAGLAL HIGH SCHOOL OHT	496100.345845243	2792122.24770859	Govt. Land		

Sl. No.	OHSR ID	Name of Site	Latitude/	Longitude	Ownership	Photograph	Google map
7	2/3	BMC Godown	496874.222574311	2791862.03777824	Govt. Land		
8	2/6	Manik Sarkar	498077.676848278	2793150.16413153	Govt. Land		

Sl. No.	OHSR ID	Name of Site	Latitude/	Longitude	Ownership	Photograph	Google map
9	3/1	Lajpath Park	497944.45041709	2793080.78583906	Govt. Land		
10	3/2	RCD ADAMPUR OHT	498656.275094695	2793530.31391355	Govt. Land		

Sl. No.	OHSR ID	Name of Site	Latitude/	Longitude	Ownership	Photograph	Google map
1	3/3	Barahpura	499789.803	2792126.6	Govt. Land		
2	4/1	HOUSING BOARD, BARARI OHT	501884.279211328	2793942.43718029	Govt. Land		

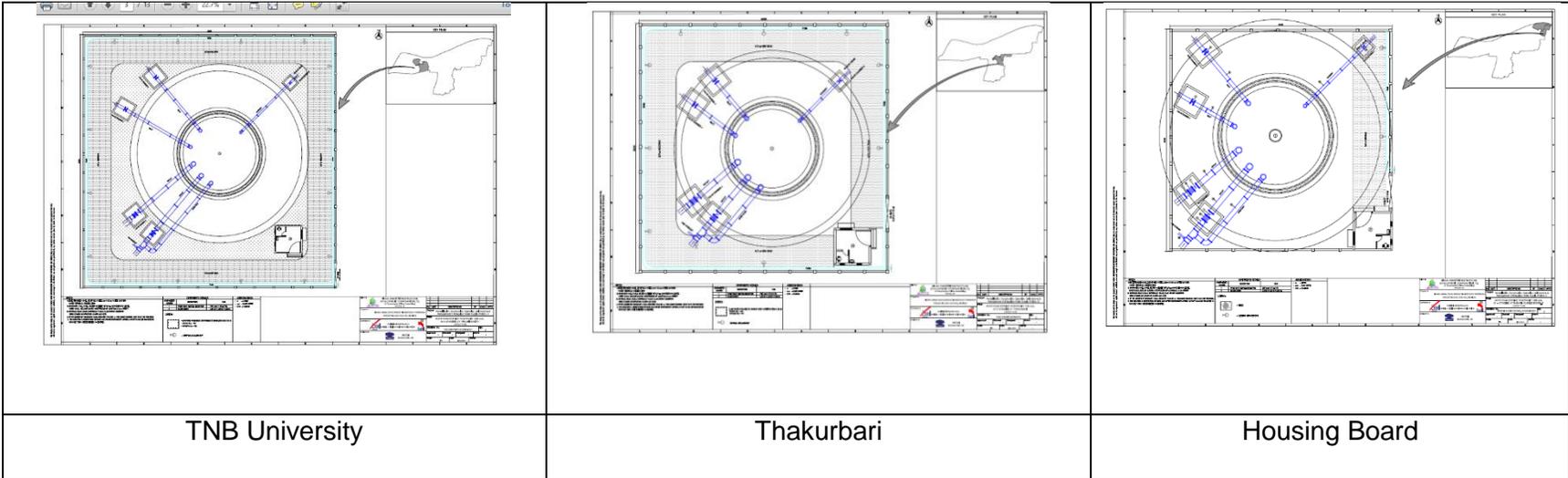
Sl. No.	OHSR ID	Name of Site	Latitude/	Longitude	Ownership	Photograph	Google map
1 3	4/2	ANAND NAGAR COLONY, NEAR CENTRAL JAIL	500968.557609354	2793494.9262897	Govt. Land		
1 4	4/4	SURKIKAL OHT	500086.036211121	2793700.4914023	Govt. Land		

Sl. No.	OHSR ID	Name of Site	Latitude/	Longitude	Ownership	Photograph	Google map
15	5/1	WARSALIGANJ	498319.54903196	2790745.85269458	Trust Land		
16	5/2	BAGBARI	498130.08168526	2789594.37124967	Govt. Land		

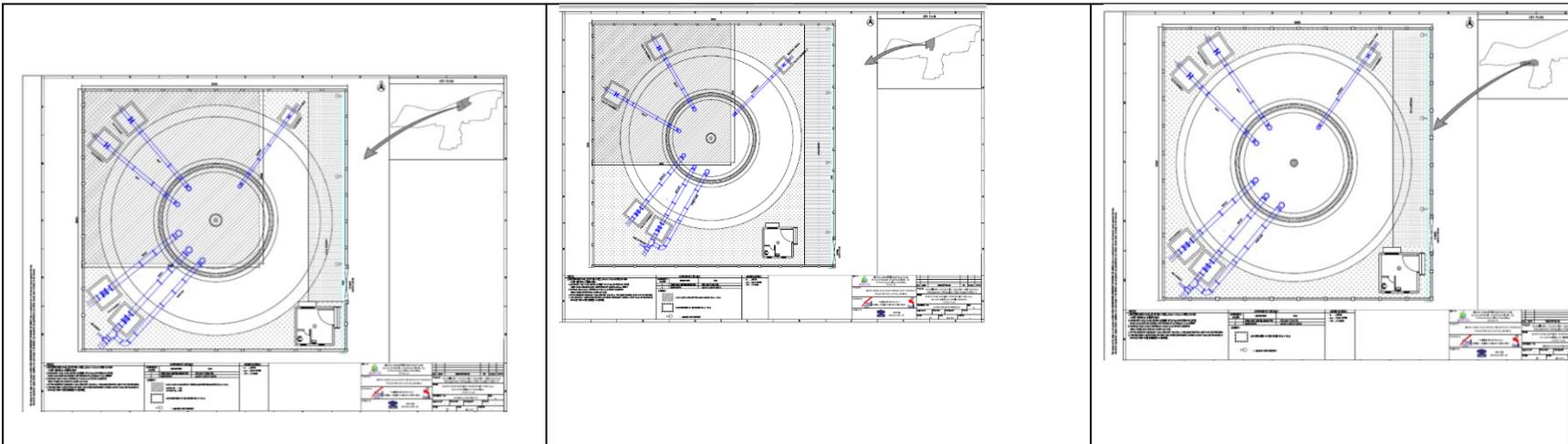
Sl. No.	OHSR ID	Name of Site	Latitude/	Longitude	Ownership	Photograph	Google map
17	5/3	Aliganj KATGHAR	497281.142966507	2789969.50744145	Govt. Land		
18	5/4	Kawali Maidan MUGHALPURA	497624.930064341	2790210.22908704	Govt. Land		

Sl. No.	OHSR ID	Name of Site	Latitude/	Longitude	Ownership	Photograph	Google map
6-1	5/5	Sikandarpur OHT	497778.837153908	2791225.25657147	Govt. Land		
Customer Service Centre							
1		Customer Service Center at Barari	25° 15' 57.02"N	87° 0' 49.41"E	BMC Land		 <p data-bbox="1388 1247 1709 1276">Customer service centre</p>

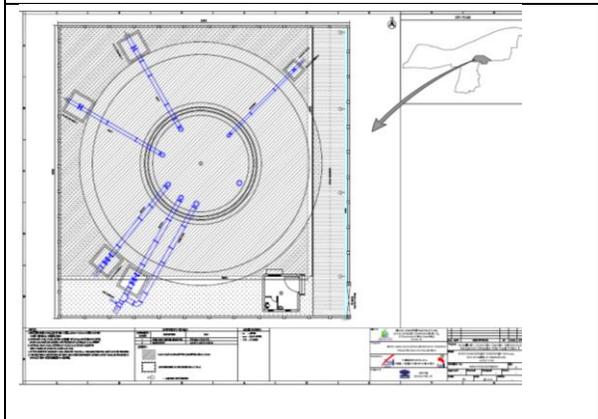
Layout of OHSR Covered under DMS



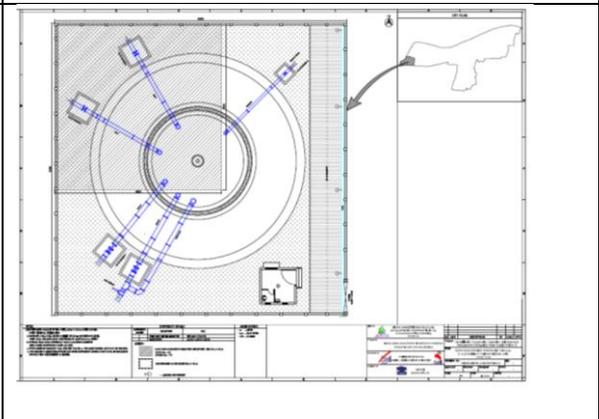
Layout of other OHSRs



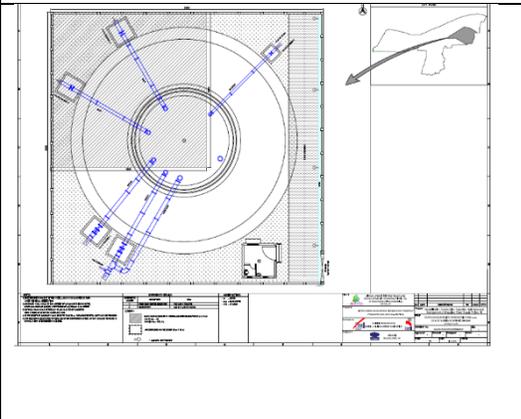
Surkikal



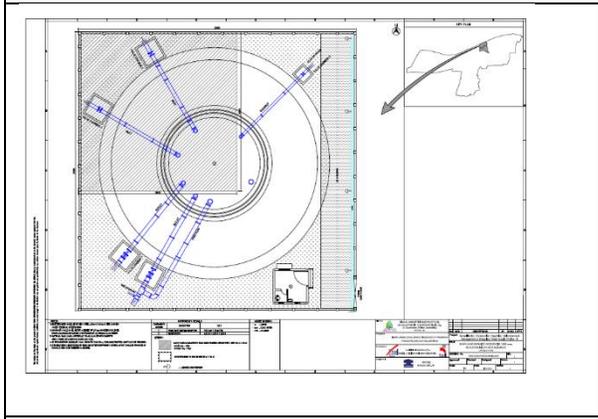
Manik Sarkar



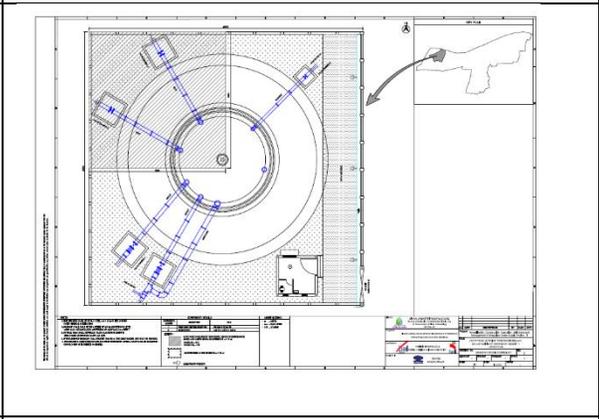
Sikindarpur



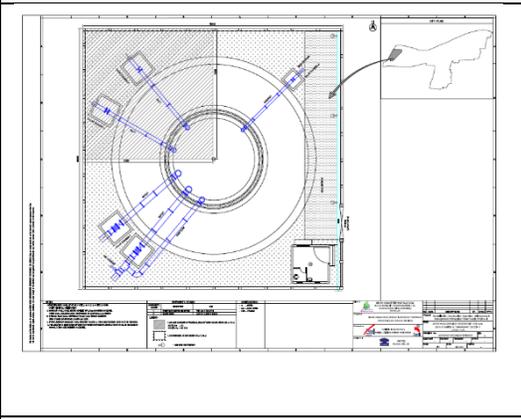
Barahpura



Abihar Mishra Lane



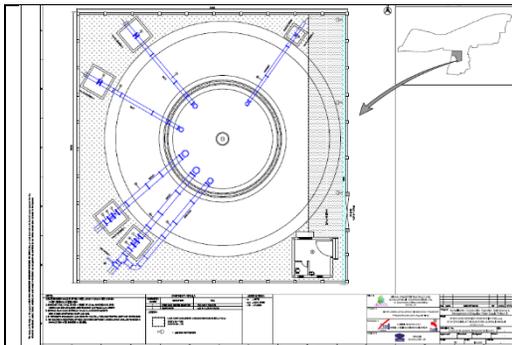
Anand Nagar



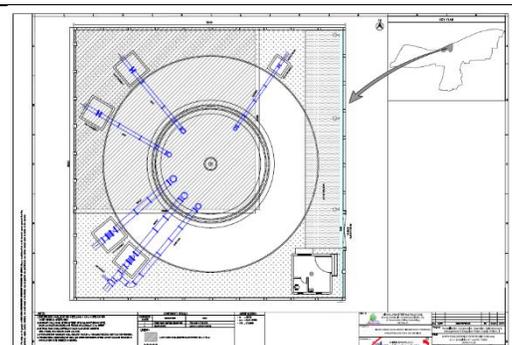
RCD

Mahashay Deodhi 1

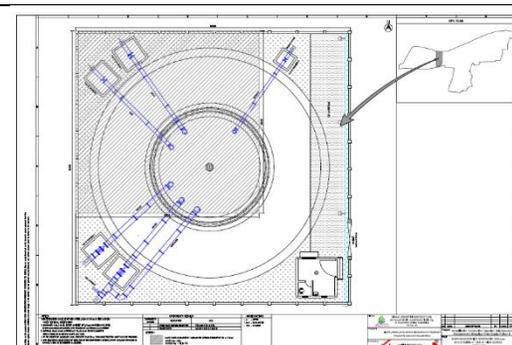
Mahashay Deodhi 2



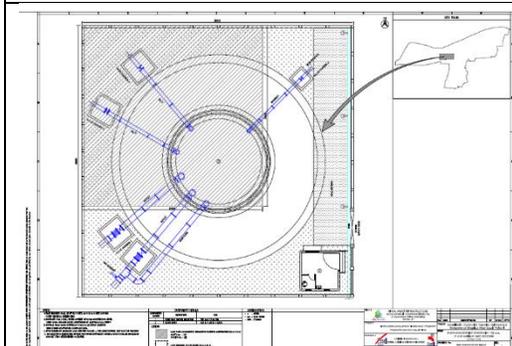
Mugulpura Quali maidan



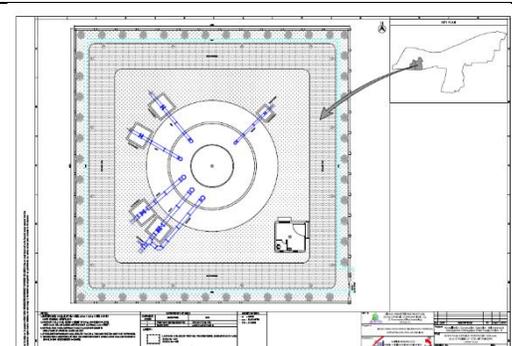
Lajpat Park



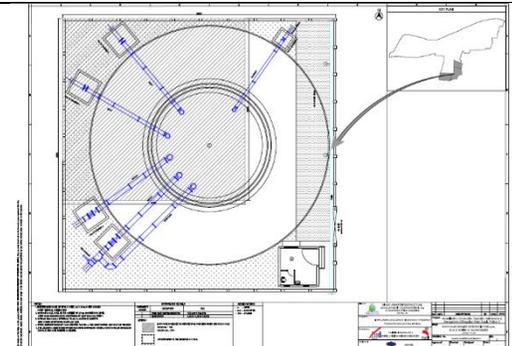
Jaglal High school



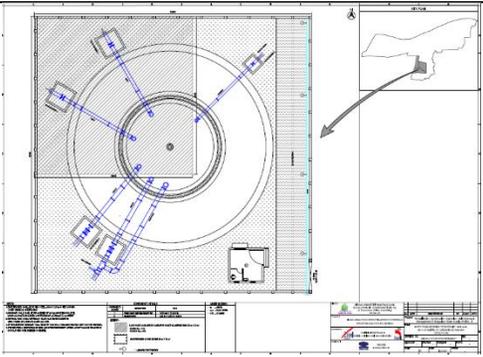
BMC Godown



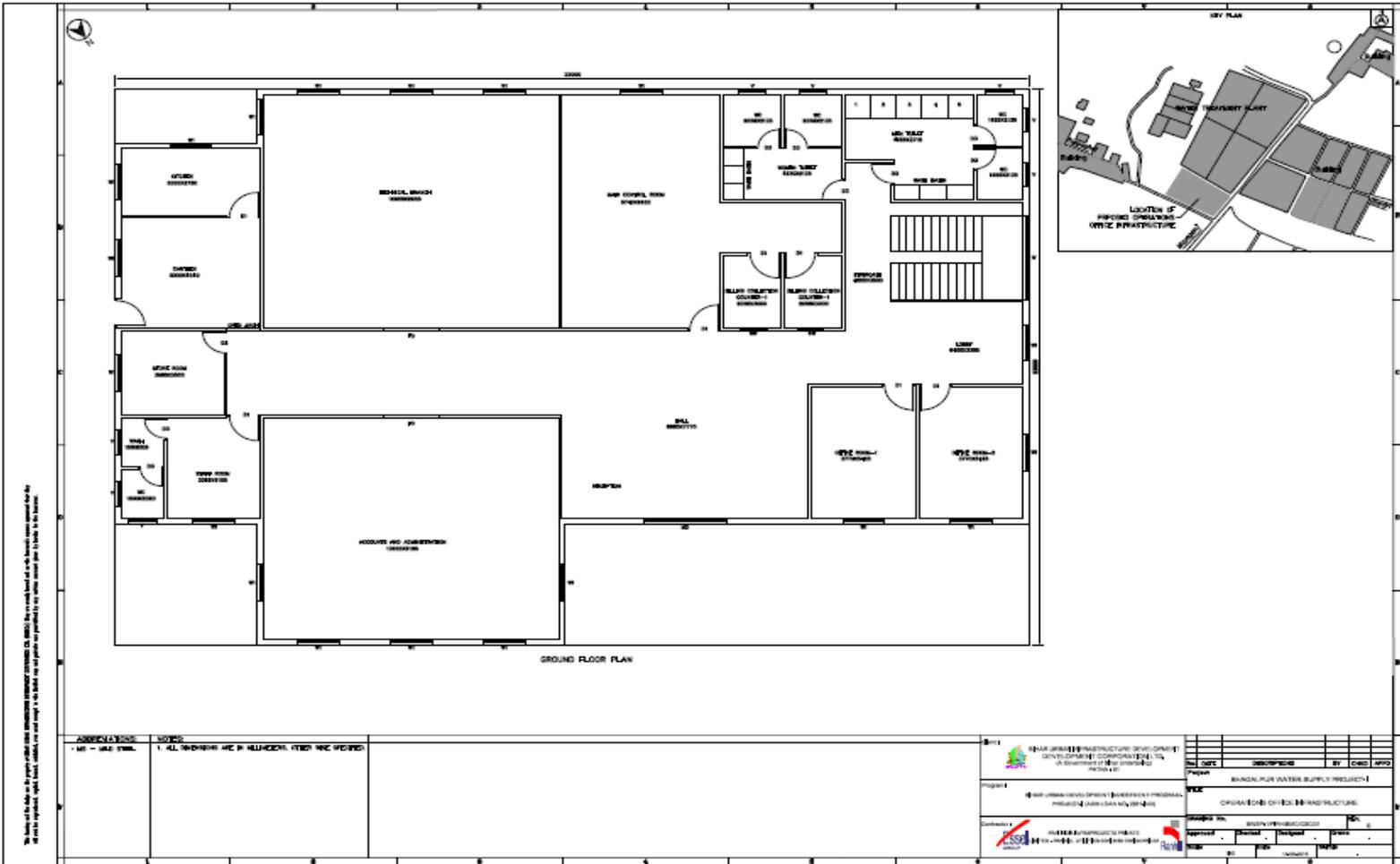
CTS



Bazar Samiti

 <p>The image shows a detailed architectural site plan for a circular structure, likely a well or a small pond. The plan features a central circular area with a smaller inner circle. Several radial paths or channels are shown extending from the center to the outer boundary. There are also some rectangular structures or enclosures around the perimeter. An inset map in the top right corner shows the location of the site within a larger geographical context, with an arrow pointing to the specific location. Below the main plan, there is a legend and a title block with various technical details and scales.</p>		
<p>Aliganj Katghar</p>		

Proposed Customer Service Centre at Barari

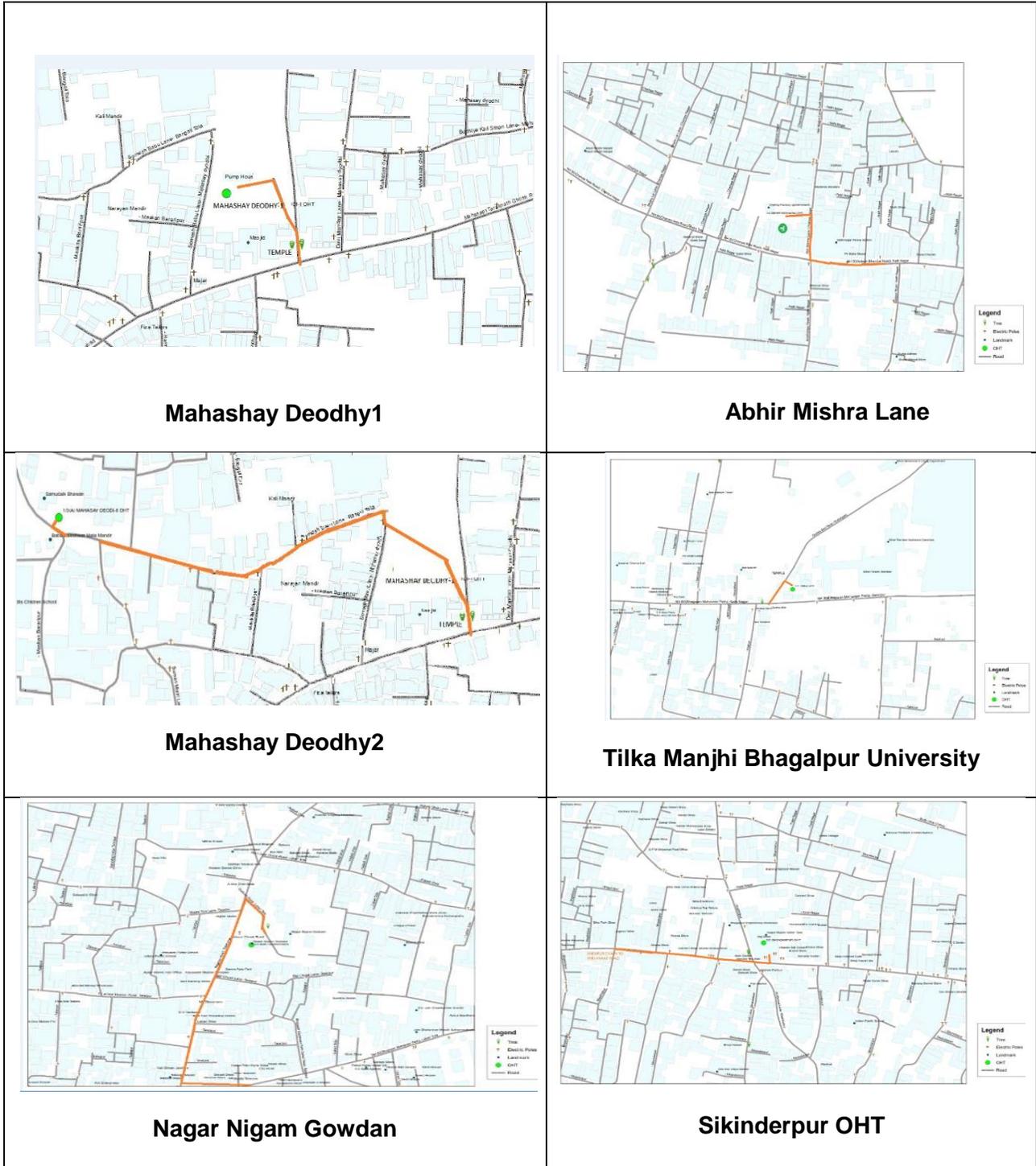


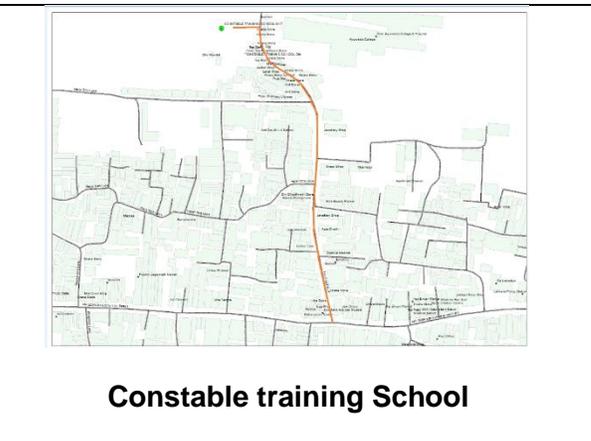
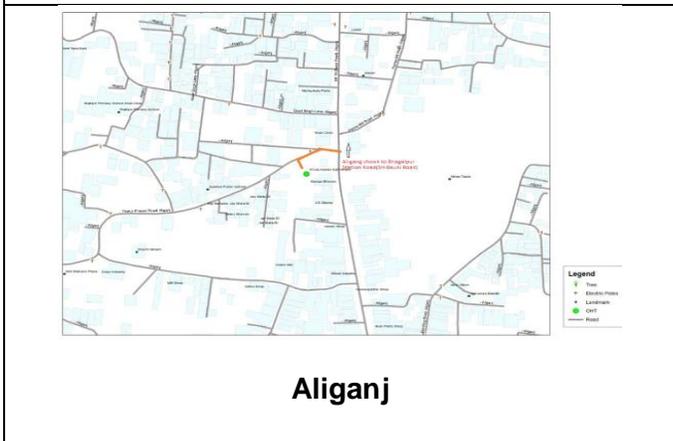
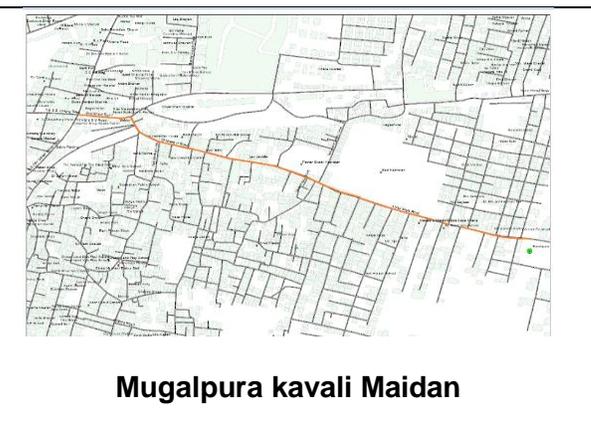
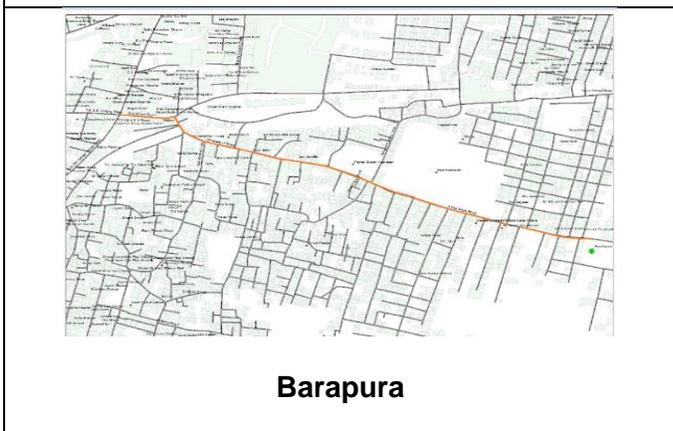
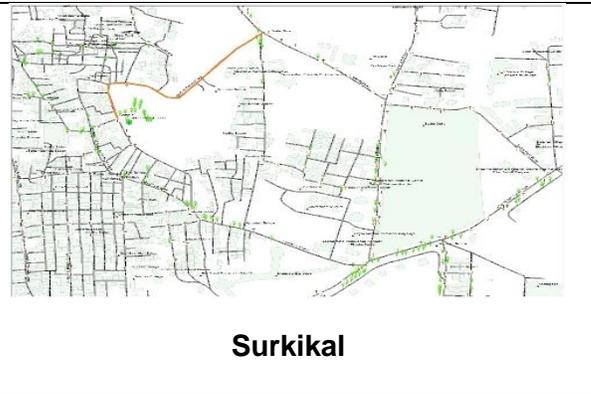
The information in this drawing is for information only and does not constitute a contract. It is the responsibility of the client to ensure that the information is correct and that the drawing is used for the intended purpose.

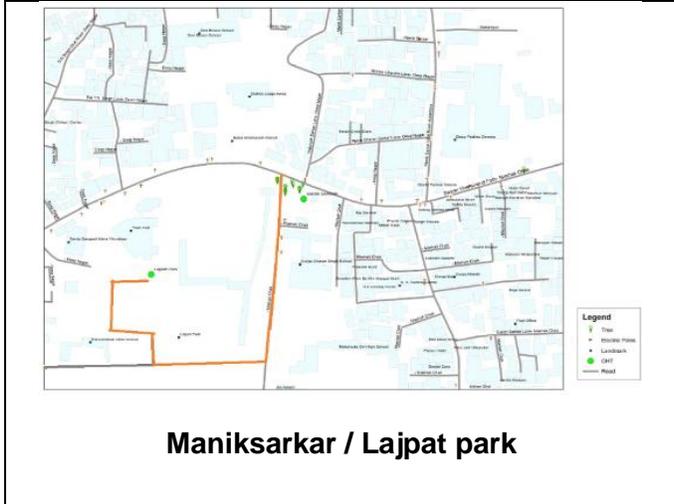
ADDRESS/NO.	WORK
100 - 1000 ST.	1. ALL INFRASTRUCTURE IN ALLIGATOR CREEK WETLANDS

	BARARI INFRASTRUCTURE DEVELOPMENT CORPORATION DEVELOPMENT CORPORATION A DIVISION OF BARARI WATER SUPPLY PROJECT	No. DATE DESCRIPTION BY CHECK APPROVED
	PROJECT: BARARI INFRASTRUCTURE DEVELOPMENT PROGRAM PRELIMINARY DESIGN	TITLE: BARARI WATER SUPPLY PROJECT CREATION OF OFFICE INFRASTRUCTURE

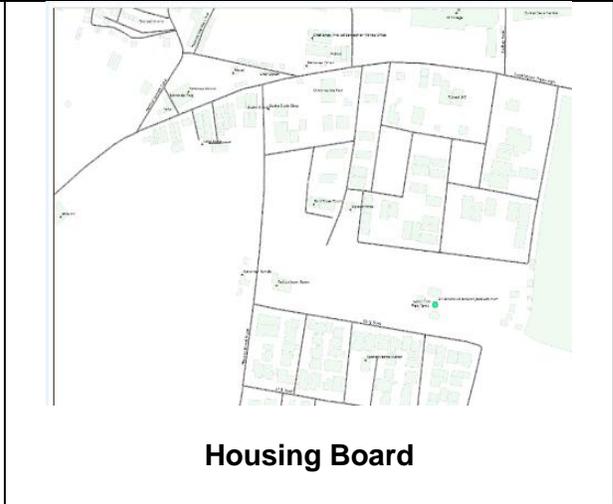
Proposed Distribution Mains network



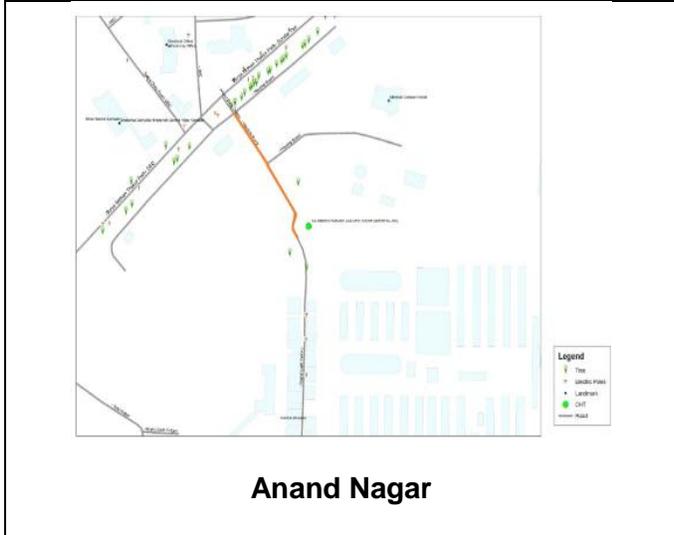




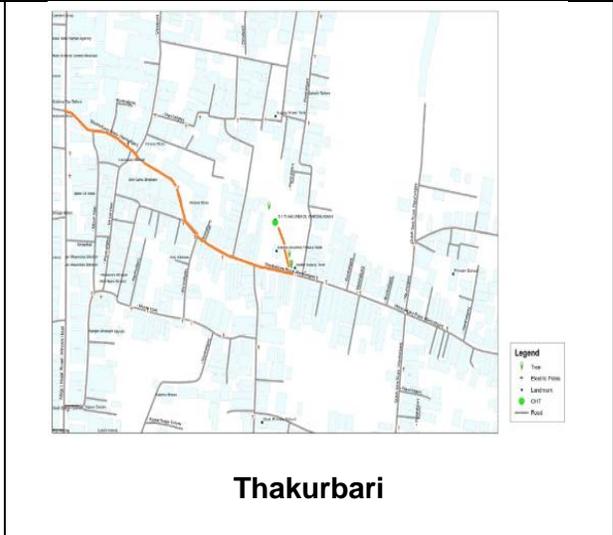
Maniksarkar / Lajpat park



Housing Board



Anand Nagar



Thakurbari

DETAILED MEASUREMENT SURVEY

IND: Bihar Urban Development Investment Program –
Bhagalpur Water Supply Subproject -1

November 21, 2015

Prepared by Mr. Mohit Kumar (PMC) with inputs from Mr. Ajit (PIU), Mr. Prabal Pratap Singh (DSC) and other team members (Contractor).

Detailed Measurement Survey

Objective of the study

To conduct and document **Detailed Measurement Survey** (DMS) to identify any disruption in carrying out income generating activity / livelihood and / or property and the corresponding loss to the Affected Persons (APs) - Permanent Affected Person(PAP) and Temporary Affected Person (TAP) due to the commissioning of the proposed Bhagalpur Water Supply Project 1.

Period of Census Survey - November 05, 2015 - November 10, 2015

Team composition

The team members entrusted with the task to conduct the DMS is given below in Table-1

Table 1

Sl. No	Team Members	Contact Number
1	Mr. Mohit Kumar	7561903616
2	Mr. Ajit	9709424203
3	Mr. Prabal Pratap Singh	8877547751
Contractor		
4	Mr. Hasimuddin Faridi	7282000804
5	Mr. Manju BC	7282000805
6	Mr. Braj Mohan Singh	7282000806
7	Mr. Sanjib	7282000815
8	Mr. Nagendra TM	7282000816
9	Mr. Nanjun Das	7282000817

Methodology

Three teams (Table 2) were constituted in the following manner-

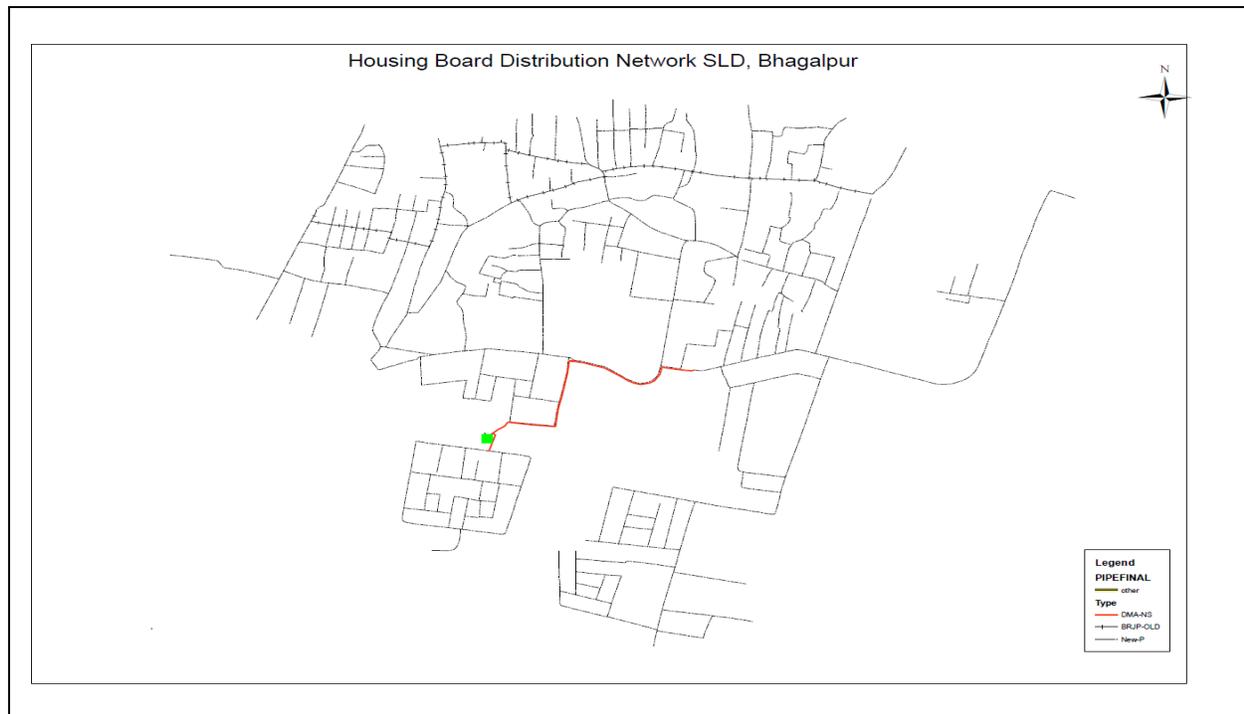
Table 2

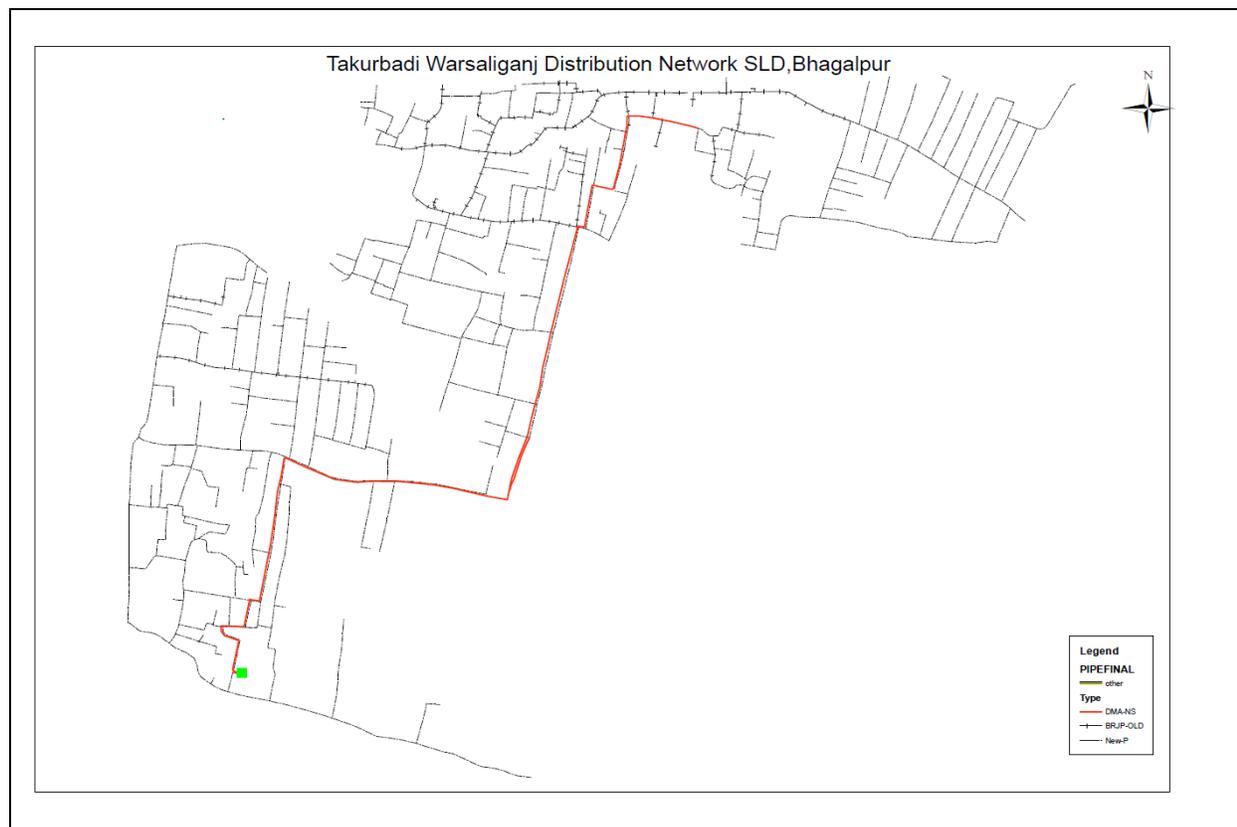
Particulars	Team Members (Contractor)	Supervised by
Team 1	Mr. Brajmohan Singh, Mr. Manju BC	Mr. Prabal Pratap Singh

Team 2	Mr. Sanjiv, Mr. Nanjun Das	Mr. Ajit
Team 3	Mr. Faridi , Mr. Nagendra	Mr. Mohit Kumar

Mr. Faridi coordinated on behalf of the contractor. The proposed distribution network layout plan was made available by him. Though the earlier plan was for around 47 km. of proposed pipeline laying in the Brarai area. The PD PIU through his email dated – Nov. 06, 2015 instructed to instead use the latest revised layout/ TMS plan for conducting the detailed measurement survey to update the RP. The copy of the revised layout plan was then obtained from contractor and the DMS was conducted accordingly. The revised layout plan for Barari area has been designed for around 30 kms. of the distribution network while the same for Thakurwari, Warsaliganj area is for around 25 kms. of pipeline laying works . The proposed distribution pipe laying works in both the Housing Board as well as the Thakurwari area has been divided into three DMAs each. The Layout plan of Over Head Service Reservoirs have been appended in Appendix 3 and their respective NoC has been appended in Appendix 4. The respective proposed Distribution Network SLD used for conducting DMS is given below (Table 3) -

Table 3





The team members were first oriented on various hardware and software aspects of the proposed DMS activities. They were also oriented on the objective and methodology to be followed while capturing the details and precautions to be followed.

The distribution network has been designed in the middle of the road and the exact alignment is to be fixed keeping the criteria of ensuring no or minimal negative impact to community as well as local permanent and/ or temporary or movable shopkeepers, vendors etc. It was decided to fix the alignment using the wisdom of the engineers carrying out the exercise and then identify the negative impacts if any. Please refer to Appendix – 8 for the Alignment details.

Three teams were constituted and one team each was allocated one DMA each at both the locations. The team and the respective DMA composition is given below in Table 4 –

Table 4

Sl. No.	Team	Housing Board Colony, Barari	Thakur Bari, Warsaliganj
1	Team 1	DMA1	DMA 2
2	Team 2	DMA 3	DMA 1
3	Team 3	DMA 2	DMA 3

Each team walked along all the proposed lanes and by lanes, as per the distribution network SLD, in their respective designated areas to scan for and identify any permanent and/ or temporary negative impact arising due to the proposed pipe laying work. Special care was also accorded to avoid negative impacts wherever possible by proposing the alignment on either left or right RoW. Please refer to Appendix 2 for photographs.

Outcome

DMS conducted for the proposed distribution pipe lines

Most of the by lanes are very narrow in the designated DMAs in Housing Board Colony and Warsaliganj area.

Houses have been constructed at the shoulder of the by lane.

There are waste water drains on both sides of the main road.

No unavoidable temporary as well as permanent loss to livelihood and property is envisaged.

The following table (Table 5) presents the summary of the DMS–

Table 5

Sl. No.	Particular	PAP	TAP	Remarks
1	Housing Board Colony, Barari	0	0	Many temporary vegetable, fish and fruit vendors, eateries etc. do carry out the selling activities every day on both sides of the RoW at the vegetable market during 3 pm – 9 pm throughout the year.
2	Thakurwari, Warsaliganj	0	0	At Mirjan Haat, many temporary movable shops have come up. They usually throng the area during festival times. Besides, many temporary vegetable and fruit vendors do carry out the selling activity on the covered plank over the drain throughout the year.

DMS conducted at the proposed OHT sites

The following table (Table 6) presents the summary of the DMS–

Table 6

Sl. No.	Name of OHSR	No. of PAPs	No. of TAPs	Remarks
1	Housing Board Colony, Barari	2 ³²	0	
2	WarsaliganjThakurbari	0	0	
3	Tilkamanjhi University	0	0	4 fruit bearing trees- one Mango tree and three Lichi trees and one Palm tree may be cut due to the proposed civil works.

Recommendation–

At the Barari Vegetable market, selling activities do commence during 3 pm to 9 pm. The civil work is recommended to be finished by 2 pm to ensure no or minimal disruption to the vendor as well as local community. The shopkeepers must be served advance notice and are provided any assistance, if required.

At Mirjan Haat location, the vendors have their temporary movable shops on the plank over the drain on both the sides. Special care should be accorded to ensure proper access during the commissioning of the civil work. At the same time. The shopkeepers must be served advance notice and provided any assistance, if required.

Special care should be given to ensure proper access by providing planks etc. to schools and religious places and the civil construction work shall be taken up during night times or on holidays only.

The ADB's SPS 2009 emphasises on replacing what is lost. Therefore, the cost of the constructing hut and cattle shed of equivalent size / dimension need to be ascertained. The cost may be ascertained by the DSC engineers. The Affected Family has a right over the salvage material. Depreciation should not be taken into account while estimating the cost

The younger son of Ms. Asha Devi should be trained with relevant skills and employed as caretaker at the new facility being created there (OHSR).

³² For details of the DMS, please refer to Annexure -9

Appendix-1

Detailed Measurement Survey

Programme: Bihar Urban Development Investment Programme (BUDIP)
1 (BWSP-1)

Project: Bhagalpur Water Supply Project

Component: Construction of OHSR, Housing Board, Barari

Sl. No.	Name of Affected Person	Male / Female	Family Members	Physical disability	No. of School Going Children	Social Category	Type of structure	Type of loss	Dimension Meter ²	Entitlement/ Compensation INR ³³	Photographs	Remarks
1	Ms. Asha Devi Mobile Number- 8083552561 / 9973393432	Female	Total- 7 (Female- 4 Male-3)	No	2 (Boy-1 Girl-1)	SC	Kutcha structure with bamboo wall , mud floor and hey roof	Permanent loss	9 x 6.65 = 59	Cost of material, labour etc. 25,000.00 Shifting assistance 10,000.00 Subsistence allowance 36,000.00 Resettlement Entitlement 50,000.00		Ms. Asha Devi is a widow who works with the Water Works Department of Bhagalpur Municipal Corporation, Bhagalpur. She has been residing at this place since 2007. She has two sons. The elder son Mr. Amit Kumar is married to Ms. Sumita Devi and has three children. He is an auto driver. While her younger son is an unemployed youth who is keen to undertake skill training to augment his income She and her family takes care of the pump house situated at the proposed OHSR site at Housing Board Colony, Barari. The family is willing to relocate to the nearby vacant plot provided they are adequately compensated for the loss that they

³³ INR- Indian National Rupee

									Skill Training / Vocational Training Cost 20,000.00		might incur due to the project.
2	Mobile Number- 9431277645 Male	Total-7 Male-4, Female -3 NO NO OBC				Kutcha structure with bamboo wall, mud floor Permanent loss			Cost of material, labour etc. 10,000.00		Mr. D .N. Mandal , R/o MIG – 93, Barari Bhagalpur, has built a cattle shade at the vacant plot in front of his house at the proposed OHSR site. This shade has to be removed permanently. He has assured of his cooperation and shown willingness to relocate the said shade.
Total Cost INR									151,000.00		

Appendix-2

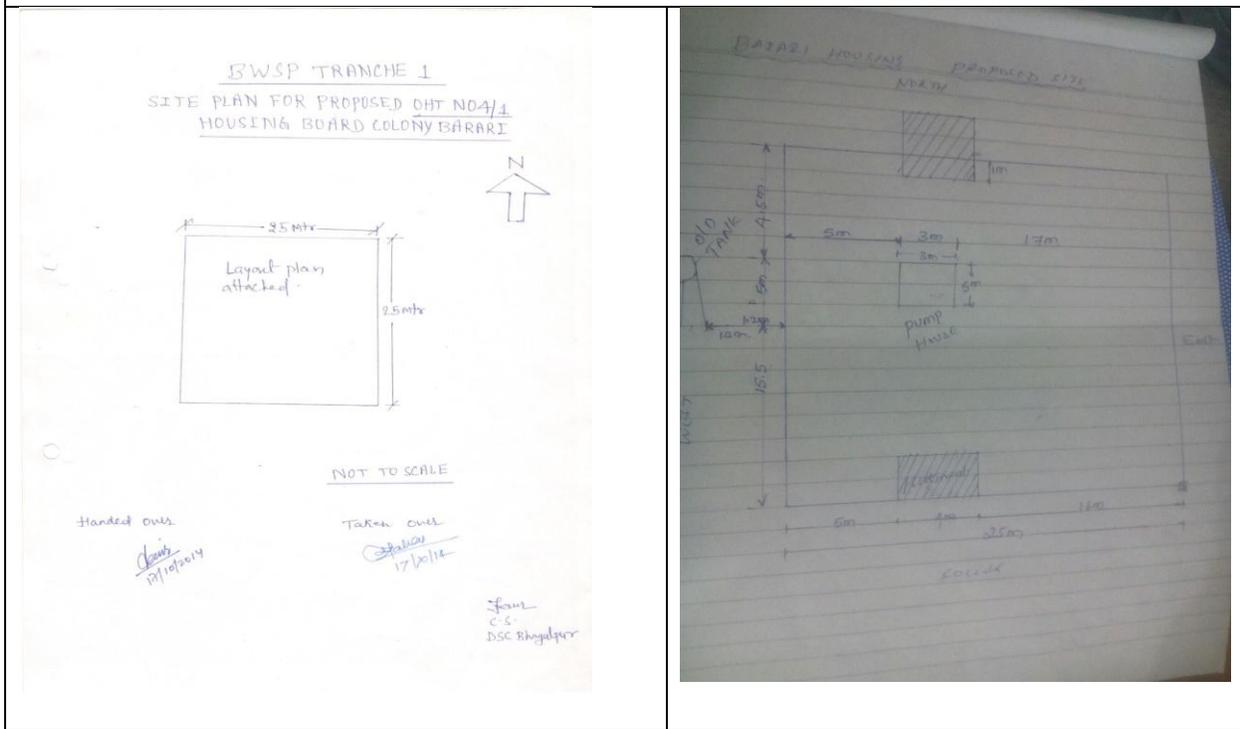
Mirjan Haat , Warsaliganj DMA		
		
		
Md. Saiful		Md. Raju
Vegetable Market, Barari DMA		
		
		
Deepak	Yogendra Kumar	Zameer
		
Shankar Das	Rakesh	



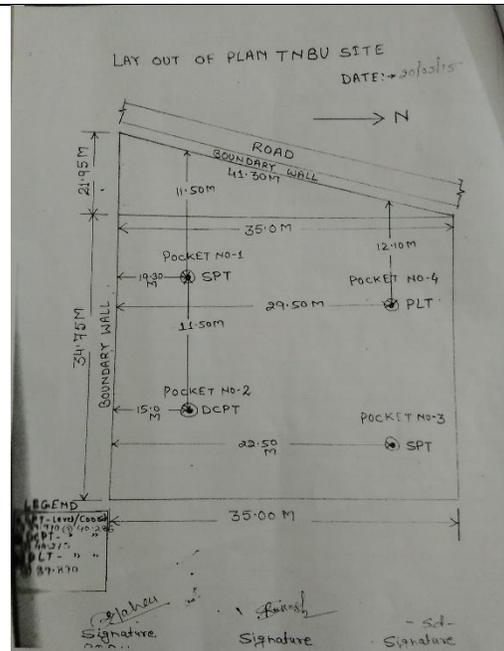
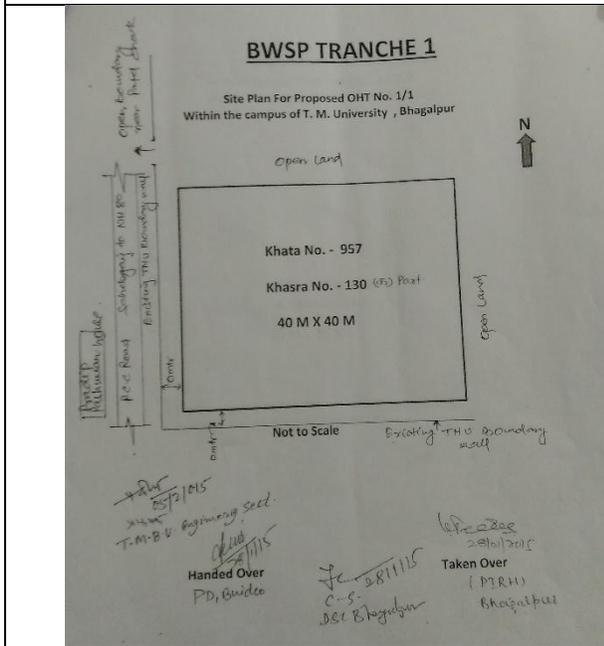
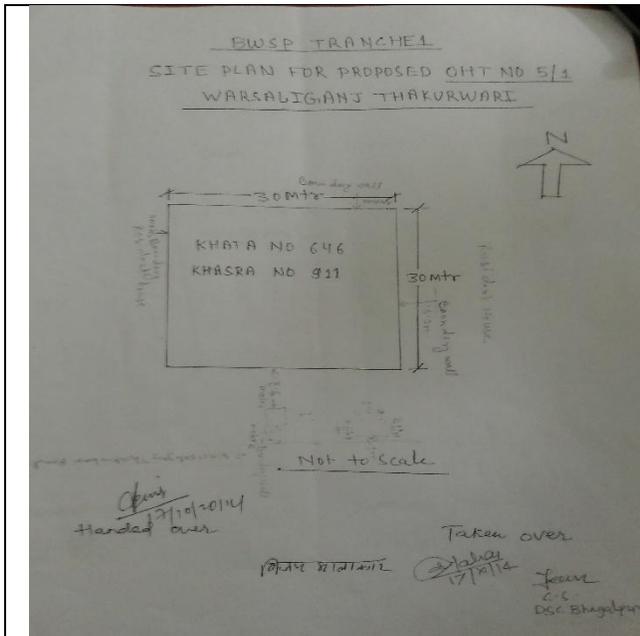
By-lanes, Housing Board Colony

Appendix 3 Layout plan of Over Head Service Reservoirs

Housing Board Colony



Warsaliganj Thakurwari



Appendix 4 Letter of NoC

दिनांक-08.12.14 अप0 3:00 बजे मुख्य सचिव, बिहार की अध्यक्षता में ADB सम्पौषित भागलपुर एवं गया जलापूर्ति योजनाओं के कार्यान्वयन हेतु भूमि उपलब्धता विषय पर आयोजित बैठक की कार्यवाही

उपस्थित:- यथा पंजी के अनुसार

कार्यवाही:-

ADB सम्पौषित भागलपुर जलापूर्ति योजना फेज-I, फेज-II एवं गया जलापूर्ति योजनाओं के कार्यान्वयन हेतु भूमि उपलब्धता के विषय पर सभी संबंधित विभाग के प्रधान सचिव/सचिव से विमर्श के बाद निम्नांकित निर्णय लिया गया।

1. पथ निर्माण विभाग:-

- (i) भागलपुर जलापूर्ति योजना फेज - 1 के अन्तर्गत जलमिनार निर्माण के लिए पथ प्रमंडल आदमपुर, भागलपुर कार्यालय परिसर के अंदर 20 X 20 भूखण्ड पर कार्य कराने की स्वीकृति दी गई।
- (ii) विक्रमशीला सेतु के समीप पथ निर्माण विभाग के भूखण्ड पर भागलपुर जलापूर्ति योजना फेज- II अंतर्गत 33/3.3 के0भी0 के सब स्टेशन की स्थापना हेतु 40 X 70 मीटर भूखण्ड पर कार्य करने की स्वीकृति दी गई।

2. स्वास्थ्य विभाग:-

- (i) भागलपुर जलापूर्ति योजना फेज - 1 के अन्तर्गत जलमिनार निर्माण के लिए भागलपुर सेट्रल जेल, आनंद नगर कॉलोनी के नजदीक स्वास्थ्य विभाग के भूखण्ड के अंदर 20 X 20 भूखण्ड पर कार्य कराने की स्वीकृति दी गई।
- (ii) भागलपुर जलापूर्ति योजना फेज - 1 के अन्तर्गत जलमिनार निर्माण के लिए मेडिकल स्टाफ क्वार्टर सुरकी काल के सामने स्वास्थ्य विभाग के भूखण्ड के अंदर 20 X 20 भूखण्ड पर कार्य कराने की स्वीकृति दी गई।
- (iii) यह निदेश दिया गया कि WTP के लिए बुडको बैकल्पिक भूखण्ड की तलाश करे। बैकल्पिक भूखण्ड की सम्भावना नहीं रहने की स्थिति में संबंधित विभाग से भूमि के उपयोग करने के लिए कार्रवाई की जाएगी। चूकि वर्णित भूमि चिकित्सा महाविद्यालय की है और भविष्य में चिकित्सा महाविद्यालय के भवनों के विस्तार की सम्भावना है, जिसमें चिकित्सा महाविद्यालय की भूमि का उपयोग होना हैं। प्रधान सचिव, स्वास्थ्य विभाग यह सुनिश्चित कर लें कि भविष्य में मेडिकल कॉलेज के विस्तार के आलोक में WTP के लिए भूमि का NOC देना संभव है अथवा नहीं।

3. कृषि विभाग:-

भागलपुर जलापूर्ति योजना फेज - 1 के अन्तर्गत जलमिनार निर्माण के लिए बाजार समिति के उत्तर कृषि बाजार कम्प्लेक्स बगहबाड़ी में कृषि विभाग के भूखण्ड के अंदर 20 X 20 भूखण्ड पर कार्य कराने की स्वीकृति दी गई।

4. उद्योग विभाग:-

भागलपुर जलापूर्ति योजना फेज - 1 के अन्तर्गत जलमिनार निर्माण के लिए अबीर मिश्रा लेन नाथ नगर पी0एस0 के निकट, रंगाई केन्द्र चंपा नगर, भागलपुर में उद्योग विभाग अंतर्गत उपलब्ध भूखण्ड के अंदर 20 X 20 भूखण्ड पर कार्य कराने की स्वीकृति दी गई।

5. गृह विभाग:-

भागलपुर जलापूर्ति योजना फेज - 1 के अन्तर्गत जलमिनार निर्माण के लिए पुलिस प्रशिक्षण केन्द्र नाथ नगर के उत्तर, आरक्षी प्रशिक्षण, महाविद्यालय, नाथ नगर में गृह विभाग के भूखण्ड के अंदर 20 X 20 भूखण्ड पर कार्य कराने की स्वीकृति दी गई।

6. शिक्षा विभाग:-

भागलपुर जलापूर्ति योजना फेज - 1 के अन्तर्गत जलमिनार निर्माण के लिए कम्पनीबाग में जगलाल हाई स्कूल के कैम्पस के अन्दर शिक्षा विभाग के भूखण्ड के अंदर 20 X 20 भूखण्ड पर कार्य कराने की स्वीकृति दी गई।

7. जिला प्रशासन गया:-

नगर आयुक्त, गया, जिला पदाधिकारी के प्रतिनिधि के रूप में शामिल हुए और उन्होंने बताया कि उनके यहां भूमि उपलब्ध कराने में कोई समस्या नहीं है।

(i) गया जलापूर्ति योजना के कार्यान्वयन हेतु वार्ड नं० - 48, किलोस्कर पम्प हाउस के उत्तर, जोड़ा मस्जिद के निकट मानपुर (ब्लॉक) में 30 X 30 मीटर, भूखण्ड उपलब्ध कराने की स्वीकृति दी गई।

(ii) गया जलापूर्ति योजना के कार्यान्वयन हेतु वार्ड नं० - 48, उर्दु मोहम्मदन टोला के उत्तर, गौरी शंकर मंदिर के निकट, मानपुर (ब्लॉक) में 30 X 30 मीटर, भूखण्ड उपलब्ध कराने की स्वीकृति दी गई।

(iii) गया जलापूर्ति योजना के कार्यान्वयन हेतु वार्ड नं० - 01, खरखुरा राजा कोठी, चंदौती (ब्लॉक), में 30 X 30 मीटर, भूखण्ड उपलब्ध कराने की स्वीकृति दी गई।

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- (iv) गया जलापूर्ति योजना के कार्यान्वयन हेतु वार्ड नं० - 50, भुसुंडा, (जहां स्टेडियम प्रस्तावित है), मानपुर, (ब्लॉक), में 30 X 30 मीटर, भूखण्ड उपलब्ध कराने की स्वीकृति दी गई।
- (v) गया जलापूर्ति योजना के कार्यान्वयन हेतु वार्ड नं० - 50, मस्तालीपुर, मानपुर अंचल कार्यालय के दक्षिण, मानपुर (ब्लॉक) में 30 X 30 मीटर, भूखण्ड उपलब्ध कराने की स्वीकृति दी गई।
- (vi) गया जलापूर्ति योजना के कार्यान्वयन हेतु वार्ड नं० - 27, बरगद पेड़ के दक्षिणी तरफ बड़की डेलहा, धनियाँ बगीचा, चंदौती (ब्लॉक), में 30 X 30 मीटर, भूखण्ड उपलब्ध कराने की स्वीकृति दी गई।

धन्यवाद के साथ बैठक समाप्त हुई।

Rajesh
14.12.2014

ज्ञापांक- 3990

प्रतिलिपि:-

प्रधान सचिव, पथ निर्माण विभाग/प्रधान सचिव, स्वास्थ्य विभाग/प्रधान सचिव, कृषि विभाग/प्रधान सचिव, उद्योग विभाग/प्रधान सचिव, गृह विभाग/प्रधान सचिव, शिक्षा विभाग/जिलाधिकारी, भागलपुर/जिलाधिकारी, गया।

SK
14.12.14
मुख्य सचिव,
बिहार सरकार

दिनांक- 17/12/14

Rajesh
16.12.2014
सचिव,

नगर विकास एवं आवास विभाग।

Translation

Minute of the meeting on land availability for the execution of the ADB funded Bhagalpur and Gaya Water Supply Project chaired by the Chief Secretary, Bihar held on 08.12.2014 at 03.00 PM

Attendance: - as per the register.

Action taken-

The following decisions are taken based on the interaction with the concerned Principal Secretaries / Secretary on land availability for the execution of the ADB funded Bhagalpur Water Supply Project Phase-I , Phase-II and Gaya Water Supply Project

Road Construction Department

Permission granted to construct an Over Head Tank (OHT) under Phase-I of Bhagalpur Water Supply Project on 20X 20 plot on the piece of land within the premises of the Divisional office of the Road Construction Department, Adampur, Bhagalpur.

Permission granted to establish 33/3.3 K.V substation under Phase-II of Bhagalpur Water Supply Project on 40X 70 meter plot on the piece of land belonging to the Road Construction Department near the Vikramshila Bridge, Bhagalpur.

Health Department

Permission granted to construct an Over Head Tank (OHT) under Phase-I of Bhagalpur Water Supply Project on 20X 20 plot on the piece of land belonging to the Health department situated near the Bhagalpur Central Jail, Anand Nagar Colony, Bhagalpur.

Permission granted to construct an Over Head Tank (OHT) under Phase-I of Bhagalpur Water Supply Project on 20X 20 plot on the piece of land belonging to the Health department situated in front of the Medical Staff Quarter, Surkikal Bhagalpur.

BUIDCO was directed / asked to explore other avenues / availability of the required piece of land elsewhere for the WTP. Action / steps will be taken seeking permission for the construction of WTP from the concerned department only if there is no alternate piece of land available for the purpose. As the piece of land belongs to the Medical College and there is every likelihood of expansions of new buildings on the proposed piece of land, so the Principal Secretary, Health Department should ensure if it is feasible to issue NOC for the construction of the WTP or not keeping the future expansion plans in mind.

Agriculture Department

Permission granted to construct an Over Head Tank (OHT) under Phase-I of Bhagalpur Water Supply Project on 20X 20 plot on the piece of land belonging to the Agriculture Department in the Agricultural Market Complex, Bagahbari on the north side of Bazar Samitee, Bhagalpur.

Industries Department

Permission granted to construct an Over Head Tank (OHT) under Phase-I of Bhagalpur Water Supply Project on 20X 20 plot on the piece of land belonging to the Industry Department in the Abir Mishra Lane near Dyeing Centre, Champanagar, Nathnagar Police Station, Bhagalpur.

Department of Home

Permission granted to construct an Over Head Tank (OHT) under Phase-I of Bhagalpur Water Supply Project on 20X 20 plot on the piece of land belonging to the Home Department in the north side of the Constable Training School, Nath Nagar, Bhagalpur.

Education Department

Permission granted to construct an Over Head Tank (OHT) under Phase-I of Bhagalpur Water Supply Project on 20X 20 plot on the piece of land belonging to the Education Department in the premises of Jaglal High School, Bhagalpur.

District Administration Gaya

Municipal commissioner, Gaya officiated as the representative of the District Magistrate, Gaya and informed that they don't have any issue in allocating the piece of land.

Permission granted to construct an Over Head Tank (OHT) under Phase-I of Gaya Water Supply Project on 30X 30 meter plot on the piece of land on north of the Kirloskar Pump House near Joda Masjid /Mosque at Ward No.- 48, Manpur (Block).

Permission granted to construct an Over Head Tank (OHT) under Phase-I of Gaya Water Supply Project on 30X 30 meter plot on the piece of land on north of the Gauri Shankar Temple near Urdu Mohammaden Tola at Ward No.- 48, Manpur (Block).

Permission granted to construct an Over Head Tank (OHT) under Phase-I of Gaya Water Supply Project on 30X 30 meter plot on the piece of land in Kharkhura Rajakothi at Ward No.- 01, Chandauti (Block).

Permission granted to construct an Over Head Tank (OHT) under Phase-I of Gaya Water Supply Project on 30X 30 meter plot on the piece of land at Bhusunda (where stadium is proposed) at Ward No.- 50, Manpur (Block).

Permission granted to construct an Over Head Tank (OHT) under Phase-I of Gaya Water Supply Project on 30X 30 meter plot on the piece of land on south of the Mastalipur, Manpur Circle Office at Ward No.- 50, Manpur (Block).

Permission granted to construct an Over Head Tank (OHT) under Phase-I of Gaya Water Supply Project on 30X 30 meter plot on south of the Banyan Tree at Dhaniya Bagicha, Badki Delha in Ward No.- 27, Chandauti (Block).

The meeting ended with vote of thanks.

Memo No.- 3990
17.12.14

Date –

बिहार राज्य आवास बोर्ड BIHAR STATE HOUSING BOARD

6, सरदार पटेल मार्ग / Sardar Patel Marg, पटना / Patna-800 015,

दूरभाष / Phone : 0612-2217992, फ़ैक्स / Fax : 0612-2217605, 2217986

वेबसाइट / website : www.bshb.in



सं/No. मु0अ0को0-133/2014 76 89

दिनांक/Date 16-10-2014

सेवा में,

प्रबंध निदेशक,
बिहार शहरी आधारभूत संरचना विकास निगम लि0,
303, मौर्या टावर, बुद्ध मार्ग,
पटना-800001

विषय :- ADB Loan No-2861-IND के अन्तर्गत भागलपुर जलापूर्ति योजना के लिए जलमीनार निर्माण हेतु अनापत्ती प्रमाण पत्र के सम्बन्ध में।

प्रसंग :- आपके कार्यालय का पत्र सं0- बुडको/एस0आई0यू0-8/यो0-11/13-2869 दिनांक- 23.08.2014

महोदय,

उपरोक्त विषय के प्रसंग में बरारी, सेक्टर-1, भागलपुर में अवस्थित पार्क में पम्प हाउस के निकट 25m x 25m साईज भू-खण्ड पर भागलपुर जलापूर्ति योजना के अन्तर्गत जलमीनार बनाने की अनुमति दी जाती है।

विश्वासभाजन

प्रबंध निदेशक।

ज्ञापांक- 76 89

पटना, दिनांक-16-10-2014

प्रतिलिपि :- महाप्रबंधक (कार्य), बिहार शहरी आधारभूत संरचना विकास निगम लि0, 303, मौर्या टावर, बुद्ध मार्ग, पटना-800001 को सूचनार्थ प्रेषित।

प्रबंध निदेशक।

ज्ञापांक- 76 89

पटना, दिनांक-16-10-2014

प्रतिलिपि :- मुख्य अभियंता/अधीक्षण अभियंता, बिहार राज्य आवास बोर्ड, पटना/कार्यपालक अभियंता, बिहार राज्य आवास बोर्ड, भागलपुर प्रमंडल को सूचनार्थ एवं आवश्यक कार्याथ हेतु प्रेषित।

प्रबंध निदेशक।



बिहार सरकार का
GOVT. OF BIHAR UNDER

श्री श्री 108 राधा कृष्ण सार्वजनिक ठाकुरवाड़ी सामाजिक, पारसलीगंज, भागलपुर

पत्रांक.....D.S...../13

दिनांक 2.0.08./13

प्रेषक,

अध्यक्ष,
श्री श्री 108 राधा कृष्ण सार्वजनिक ठाकुरवाड़ी समिति,
वारसलीगंज, भागलपुर।

सेवा में,

प्रबंधक,
बिहार आधारभूत संरचना विकास निगम लि०,
बिहार, पटना।

विषय-

ADB Loan No. 2861-IND के अन्तर्गत भागलपुर जलापूर्ति योजना के लिए भूमि उपलब्धता हेतु अनापत्ति प्रमाण पत्र के संबंध में।

महाशय,

उपर्युक्त विषय के संबंध में कहना है कि भागलपुर नगर निगम क्षेत्रान्तर्गत बिहार शहरी आधारभूत संरचना विकास निगम लि० द्वारा ऐशियन डब्लमपमेंट बैंक के द्वारा प्रदत्त राशि से जल मिनार निर्माण प्रस्तावित है। जिसमें श्री श्री 108 राधा कृष्ण सार्वजनिक ठाकुरवाड़ी समिति, वारसलीगंज भागलपुर की परती भूमि पर निर्माण करने में कोई आपत्ति नहीं है।

विश्वासभाजन


(संतोष कुमार)
अध्यक्ष

निगम पार्षद, प्रभाग सं० 51
श्री श्री 108 राधा कृष्ण सार्वजनिक ठाकुरवाड़ी समिति,
वारसलीगंज, भागलपुर।



तिलकामाँझी भागलपुर विश्वविद्यालय

भागलपुर-812007

पत्रांक Engg/Misc/27/13-14-E/712/14-15

दिनांक 10.07.14

सेवा में,

मुख्य महाप्रबंधक,
बिहार शहरी आधारभूत संरचना विकास निगम लिमिटेड,
बुद्ध मार्ग, पटना-800001

विषय **ADB Loan No.-2861-1ND** के अन्तर्गत भागलपुर जलापूर्ति योजना के लिए भूमि उपलब्धता हेतु अनापत्ति प्रमाण-पत्र उपलब्ध कराने के संबंध में ।

महाशय,

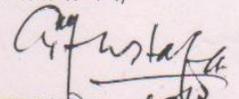
उपर्युक्त विषयक पत्रांक-बुडको/एस०आई०यू०-8/मो०-11/13 एवं ज्ञापांक 2372 दिनांक 19.10.2013 के संदर्भ में सूचित करना है कि तिलकामाँझी भागलपुर विश्वविद्यालय परिसर स्थित स्नातकोत्तर भौतिकी विज्ञान विभाग के बगल में जलमीनार निर्माण हेतु 40 मीटर x 40मीटर का भूखंड (वार्ड नं०-19, खाता नं०-957, खेसरा नं०-130 क हाल सर्वे 1976-77) से उपलब्ध कराने का आदेश कुलपति महोदय ने निम्नांकित शर्तों के साथ प्रदान किये हैं।

1. भूखंड पर विश्वविद्यालय का पूर्ण स्वामित्व बना रहेगा।
2. जलमीनार परिसर पर किसी भी तरह का स्थाई अथवा अस्थायी निर्माण कार्य बिना विश्वविद्यालय के पूर्व अनुमति के नहीं किया जायेगा।
3. जलापूर्ति हेतु यदि कोई जलकर वांछित हो तो सरकारी उपक्रम (Govt. agency) की तरह सभी स्नातकोत्तर विभागों, छात्रावासों, टी०एन०बी० कॉलेज एवं कॉलेज परिसर में अवस्थित आवासों को सस्ते दरों (50% कम) पर जलापूर्ति सुनिश्चित करेंगे।
4. जलमीनार परिसर में कार्यरत सरकारी/गैर सरकारी कर्मचारियों का आवा-जाही, रहन-सहन विश्वविद्यालय के नियम, परिनियम के तहत निर्धारित होगा।

अतः उपरोक्त शर्तों के आधार पर अधोहस्ताक्षरी के साथ MOU/एकरारनामा करने का कष्ट करें।

कृपया इसे प्राथमिकता प्रदान किया जाय।

विश्वासभाजन,


कुलसचिव 10/7

Appendix 5:- Proposed Sub-project Components, Land Acquisition and Resettlement Impact under BWSP1

Component	Location	Function	Description	Remarks
Rehabilitation of existing Water Treatment Plants (3 separate plants)	Barari	To treat raw water drawn from the Ganga River to drinking water standards	The refurbishment includes introduction of (i) alum and lime dosing systems with necessary chemical storage and mixing tanks, dosing-pumps, metering device with 100% standby capacity; (ii) flash mixers for coagulant rapid mixing; (iii) chlorination system with necessary dosing mechanism, storage and safety equipment in all three existing treatment plants; (iv) electrical actuators for all existing sluice valves in the Jewel Filter unit; (v) servicing of existing machinery and equipment, and (vi) painting of various units.	Changes in existing water treatment works to improve treatment efficiency and output
Mechanical, Electrical, and Instrumentation works	Existing Barari Water Works	To improve overall working of all three water treatment plants	(i) Installation of 2 nos of centrifugal pumps with accessories; (ii) replacement of sluice and non-return valves, pipes and fittings, (iii) air blowers for filters, (iv) chemical mixing and metering system, flash mixing system, (v) chlorination system, (vi) electrical works including 33 kV/0.433 kV substation works, LT switch gear panels and instrumentation works at Pumping station (vii) electro-magnetic flow meter, ultrasonic type level indicator, pressure loggers, and (viii) online residual chlorine monitoring system, and chlorine leak detection system.	Existing renovation
Distribution System	Area within the current municipal boundary	To improve coverage and reduce losses and ensure reliable and continuous water supply to consumers	Road cutting and earthwork excavation (concrete road 46,215 m ³ , asphalt road 10,721 m ³ , WBM road 13,120 m ³ and brick road 1,291 m ³), pipelines specials and appurtenances, pipe jacking, installation of valves and appurtenances, flow and pressure measurement devices, installation of service connections, interconnections, valve chambers, and miscellaneous civil works.	Works include laying of new pipeline (460 Km.) and replacement of existing ones depending on study findings

Service Reservoirs	At 19 different locations identified by Bhagalpur Municipal Corporation and the design team	To supply water to consumers and to augment treated water storage to meet peak demand needs	Design, setting out, construction, testing and commissioning of 19 new OHTs and rehabilitation of one OHT.	New
Metered Customer House Service Connections	In the resident neighbourhood	Providing water supply inside the customer property and measuring the supply volume	New connections of approx. 83,000 of improved materials for pipes and fittings and provision of Class B consumption meter for measuring the supply volume including rehabilitation of existing connections.	

Appendix 6 COMPARISON BETWEEN RFCTLARR ACT 2013³⁴ AND ADB SPS 2009

ADB SPS Policy Principle	LARR Act 2013	Remarks
Involuntary resettlement should be avoided whenever feasible; if unavoidable it should be minimized.	Followed	
Screen the project early on to identify past, present, and future involuntary resettlement impacts and risks. Determine the scope of resettlement planning through a survey and/or census of displaced persons, including a gender analysis, specifically related to resettlement impacts and risks.	Followed	
Carry out meaningful consultations with affected persons, host communities, and concerned nongovernment organizations. Inform all displaced persons of their entitlements and resettlement options. Ensure their participation in planning, implementation, and monitoring and evaluation of resettlement programs. Pay particular attention to the needs of vulnerable groups, especially those below the poverty line, the landless, the elderly, women and children, and Indigenous Peoples, and those without legal title to land, and ensure their participation in consultations. Establish a grievance redress mechanism to receive and facilitate resolution of the affected persons' concerns. Support the social and cultural institutions of displaced persons and their host population. Where involuntary resettlement impacts and risks are highly complex and sensitive, compensation and resettlement decisions should be preceded by a social preparation phase.	Followed	
Improve, or at least restore, the livelihoods of all displaced persons through (i) land-based resettlement strategies when affected livelihoods are land based where possible or cash compensation at replacement value for land when the loss of land does not undermine livelihoods, (ii) prompt replacement of assets with access to assets of equal or higher value, (iii) prompt compensation at full replacement cost for assets that cannot be restored, and (iv) additional revenues and services through benefit sharing schemes where possible.	Followed	
Provide physically and economically displaced persons with needed assistance, including the following: (i) if there is relocation, secured tenure to relocation land, better housing at resettlement sites with comparable access to employment and production opportunities, integration of resettled persons economically and socially into their host communities, and extension of project benefits to host communities; (ii) transitional support and development assistance, such as land development, credit facilities, training, or employment opportunities; and (iii) civic infrastructure and community services, as required.	Followed	

³⁴ The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013.

<p>Improve the standards of living of the displaced poor and other vulnerable groups, including women, to at least national minimum standards. In rural areas provide them with legal and affordable access to land and resources, and in urban areas provide them with appropriate income sources and legal and affordable access to adequate housing.</p>	<p>Followed</p>	
<p>Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status.</p>	<p>Followed</p>	
<p>Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets.</p>	<p>Followed</p>	
<p>Prepare a resettlement plan elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound</p>	<p>Prepared</p>	<p>The LARR Act refers to the RR scheme</p>

Appendix 7 Entitlement Matrix

S. No	Type of loss	Application	Definition of entitled person	Compensation policy	Implementation issues	Responsible agency	Sites where applicable
1	Loss of residential structure	Residential structure and other assets	Encroachers, squatters	<p>Encroachers / squatters will be notified and given 60 days advance notice to remove their assets. Compensation for affected structures or part thereof at replacement value calculated as per the latest prevailing basic schedule of rates (BSR) without depreciation; Cash compensation for repair of partially affected structure.</p> <p>Right to salvage material from the demolished structure at no cost.</p> <p>A lump sum shifting assistance of Rs10000 will be provided, each time affected household is required to relocate.</p> <p>Cash assistance towards rental subsidy for a period of time until alternate means of access to housing available.</p> <p>Additional compensation for vulnerable squatter households (item # 3)</p>	Vulnerable households will be identified during the census conducted by the DSC.	The DSC will verify the extent of impacts through a 100% survey of AHs determine assistance, verify and identify vulnerable households.	Barari OHT site Housing Board

S. No	Type of loss	Application	Definition of entitled person	Compensation policy	Implementation issues	Responsible agency	Sites where applicable
2	Loss trees and crops	Standing crops and trees	Encroachers / squatters	Encroachers and squatters will be notified and given 60 days advance notice to remove trees and 6 months' notice to harvest seasonal crops and fruit trees. Compensation will be given for standing crops/ trees planted by non- titleholders.	Harvesting prior to acquisition will be accommodated to the extent possible Work schedules will avoid harvest season. Market value of trees/crops has to be determined. Vulnerable households will be identified and provided assistance as required	DSC in consultation with Agriculture / Forest Department officials or with experts in the respective fields.	None
3	Impacts on vulnerable Aps	All impacts	Vulnerable APs ³⁵	In case of total loss of private land and a total dependency on agriculture, land-for-land compensation, if signified by the affected persons.	Vulnerable households will be identified during the census conducted / supervised by the	The DSC will verify the extent of impacts through a 100% surveys of AHs determine	

³⁵ The following vulnerability criteria are identified in the context of Bihar: (1) households belonging to most backward communities; (2) head of household is a woman; (3) head of household is illiterate; (4) head of household is a daily wage labourer, (5) below poverty line household; (6) household with disabled family members; and (6) household living in a kutchra house. ADB's Facility Administration Manual states that "more vulnerable" households are those that meet 5 or more of the above-mentioned vulnerability criteria. Implicit in the definition is that households meeting fewer criteria are also vulnerable, albeit to a lesser degree, and require additional support/assistance.

S. No	Type of loss	Application	Definition of entitled person	Compensation policy	Implementation issues	Responsible agency	Sites where applicable
				<p>Additional one-time lump sum assistance of Rs 36,000 (calculated for 12 months subsistence allowance) per vulnerable family will be paid. This will be over and above the other assistance given in this framework.</p> <p>Vulnerable households will be given priority in employment in project construction activities.</p> <p>All Scheduled Castes and Scheduled Tribes relocated outside the district will be provided an additional 25% of the resettlement benefits to which they are entitled along with a onetime resettlement entitlement of Rs 50,000 per the provisions of the RFCTLARRA.</p> <p>Provision for project operation related training and employment, OR, skill training for displaced vulnerable persons, including assistance for purchase of income generating assets and initial capital of INR 40,000/ -</p>	<p>DSC.</p> <p>If land-for-land is offered, ownership in the name of original landowner(s).</p>	<p>assistance, verify and identify vulnerable households.</p>	

S. No	Type of loss	Application	Definition of entitled person	Compensation policy	Implementation issues	Responsible agency	Sites where applicable
4	Loss of livelihood / income source	Livelihood	Owner/tenants and leaseholders / sharecroppers (whether having written tenancy/lease documents or not)	<p>In case of loss of livelihood (total income loss from major source): Choice of annuity or employment – the following options are to be provided :</p> <p>(a) where jobs are created through the project, 'after providing suitable training and skill development in the required field, make provision for employment at a rate not lower than the minimum wages provided for in any other law for the time being in force, to at least one member per affected family in the project or arrange for a job in such other project as may be required; or (b) onetime payment of Rs.5,00,000 per affected family; or (c) annuity policies that shall pay not less than Rs.2000.00 per month per family for twenty years, with appropriate indexation to the Consumer Price Index for Agricultural Labourers.</p> <p>In case of total loss/partial loss of income: Preference for employment opportunity for Affected Persons in the project construction work, if so desired by them.</p>	Vulnerable households will be identified during the census conducted by the DSC.	The DSC will verify the extent of impacts through a 100% survey of AHs determine assistance, verify and identify vulnerable households.	

S. No	Type of loss	Application	Definition of entitled person	Compensation policy	Implementation issues	Responsible agency	Sites where applicable
				Training would be provided for income generating vocational training and skill improvement options based on the choice of the affected person at Rs 20,000 ³⁶ per family. This cost would be directly paid by the project to the training institute OR purchase of income generating assets up to Rs. 40, 000 ³⁷			
5	Temporary disruption of livelihood	Commercial and agricultural activities	Legal titleholders, tenants, leaseholders, sharecroppers, employees, hawkers or vendors.	30 days advance notice regarding construction activities, including duration and type of disruption. Cash assistance based on the minimum wage for the loss of income/livelihood for the period of disruption For construction/other activities involving disruption for a period of a month or more, provision of alternative sites for hawkers and vendors for continued economic activities. If not possible, additional allowance based on minimum wage	During construction, the PIU will identify alternative temporary sites to the extent possible, for vendors and hawkers to continue economic activity. PIU will ensure civil works will be phased to minimize disruption through construction scheduling in co-	Alternative locations, if any will be identified for the said duration of disruption.	Pipelining activity (distribution pipes, rising mains and distribution mains)

³⁶ The Vocational Training Programme by the Industrial Training Institutes provides training on a number of trades, under the Directorate general of Employment and Trade, Ministry of Labour and Employment, GOI. Additional cash assistance will be provided during the training period to make up for income loss of working members. The additional cash assistance will be calculated based on prevailing minimum wage rates for semi-skilled labor in urban Bihar for three months.

³⁷ This is an estimate. The income generating asset will be skill related. However the assets will be decided on a case to case basis.

S. No	Type of loss	Application	Definition of entitled person	Compensation policy	Implementation issues	Responsible agency	Sites where applicable
				rate for vulnerable households for 1 month or the actual period of disruption whichever is more.	ordination with the contractors and the DSC		
5	Any other loss not identified	-	-	Any unanticipated impacts of the project will be documented and mitigated based on the spirit of the principles agreed upon in this Resettlement Framework and the RFCTLARRA Unanticipated involuntary impacts will be documented and mitigated based on the principles provided in the ADB IR Policy.		The DSC will ascertain the nature and extent of such loss. The PMU with PIU support, will finalize the entitlements in line with ADB IR policy.	

Appendix 8

Housing Board Zone DMA wise Alignment Details

DMA-1								DMA 2						DMA 3									
Sl. No.	Node		Alignments (L/C/R) ³⁸			Diameter	Pipe length	Sl. No.	Node		Alignments			Diameter	Pipe length	Sl. No.	Node		Alignments			Diameter	Pipe length
	S ³⁹	E ⁴⁰	L	C	R				S	E	L	C	R				S	E	L	C	R		
1	13	844	0	0	1	100	558	1	414	d'	1	0	0	100	325	1	43	52	1	0	0	100	115
2	47	133	0	0	1	100	272	2	616	518	0	1	0	100	170	2	19	32	1	0	0	100	262
3	48	70	0	0	1	150	258	3	525	566	0	1	0	100	34	3	32	49	1	0	0	100	419
4	73	2	1	0	0	100	140	4	642	553	0	1	0	100	171	4	49	19	1	0	0	100	297
5	91	133	0	0	1	100	106	5	663	600	0	1	0	100	209	5	49	20	1	0	0	100	258
6	96	10	1	0	0	100	112	6	706	633	0	1	0	100	174	6	19	24	1	0	0	100	83
7	63	179	0	0	1	100	83	7	722	711	0	1	0	100	120	7	23	31	0	0	1	100	90
8	68	236/1	1	0	0	100	296	8	517	763	1	0	0	200	288	8	38	25	0	0	1	100	58
9	133	200	0	1	0	100	120	9	763	795	1	0	0	150	189	9	45	34	0	0	1	100	90
10	157	227	1	0	0	100	113	10	795	801	1	0	0	100	281	10	22/1	36	0	0	1	100	105
11	198	394	1	0	0	100	115	11	795	766	1	0	0	150	22	11	32	46	0	0	1	100	113
12	215	469	1	0	0	100	119	12	795	591	0	0	1	100	-	12	48	35	1	0	0	100	92
13	236	606	1	0	0	100	113	13	766	789	0	0	1	100	81	3	47/1	35	0	0	1	100	98
14	469	679	1	0	0	100	135	14	789	740	1	0	0	100	58	14	50	45	0	0	1	100	174
15	340	598	1	0	0	100	46	15	746	739	1	0	0	100	104	15	47	53	0	0	1	100	45
16	336	48	0	0	1	100	417	16	710	740	1	0	0	100	81	16	39	47	1	0	0	100	57
17	64	509/1	1	0	0	200	384	17	676	752	1	0	0	100	177	17	52	42	0	0	1	100	91
18	48	97	1	0	0	200	113	18	650	610	1	0	0	100	63	18	152	221	1	0	0	100	503
19	172	249	1	0	0	100	423	19	637	676	1	0	0	100	91	19	153	205	0	0	1	100	109
20	509	282	1	0	0	100	72	20	652	665	1	0	0	100	121	20	165	119	0	0	1	100	127
21	284	742	1	0	0	100	113	21	604	546	1	0	0	100	103	21	177	165	0	0	1	100	131
22	777	18414	1	0	0	100	64	22	593	613	1	0	0	100	32	22	137	106	1	0	0	100	110
23	182	545	1	0	0	100	172	23	612	560	1	0	0	100	65	23	106	102	1	0	0	100	83
24	242	545	0	0	1	100	92	24	585	587	1	0	0	100	86								
25	379	632	0	0	1	100	56	25	591	766	0	0	1	100	209								
26	457	678	1	0	0	100	72	26	526	529	1	0	0	100	96								
27	545	671	1	0	0	100	73	27	523	554	1	0	0	100	235								
28	110	166	1	0	0	100	259	28	526	350	1	0	0	100	209								
29	78	101	1	0	0	100	91	29	316	399	1	0	0	100	97								
30	193	254	1	0	0	200	378	30	435	316	1	0	0	100	177								
31	254	356	1	0	0	100	150	31	523	435	1	0	0	100	128								

³⁸ L-Left, C-Center and R- Right³⁹ S- Node starting Number⁴⁰ E- Node Ending Number

Annexure 9

DMA-1								DMA 2							DMA 3								
Sl. No.	Node		Alignment			Diameter	Pipe length	Sl. N o.	Node		Alignment			Diameter	Pipe length	Sl. N o.	Node		Alignment			Diameter	Pipe length
	S	E	L	C	S				S	E	L	C	S				S	E	L	C	S		
61	526	350	1	0	0	100	209	61	462	454	0	0	1	100	229								
62	316	399	1	0	0	100	97	62	203	452	1	0	0	100	234								
63	435	316	1	0	0	100	177	63	452	599	1	0	0	150	228								
64	523	435	1	0	0	100	128	64	443	345	1	0	0	150	185								
65	435	445	1	0	0	1,00 200	302	65	269	258	0	0	1	100	203								
66	356	331	1	0	0	100	159	66	225	232	0	0	1	100	252								
67	461	322	1	0	0	100	184	67	492	417	0	0	1	100	224								
68	322	297				100 ci	53 (old line)	68	459	528	0	0	1	100	214								
69	322	337				100 ci	62 (old line)	69	490	528	1	0	0	100	159								
70	425	231	1	0	0	100	56	70	506	581	1	0	0	100	149								
71	445	667				200 ci	(old line)	71	505	565	1	0	0	100	130								
72	547	847	1	0	0	100	143	72	551	522	0	0	1	100	68								
73	464	779	1	0	0	100	109	73	552	507	0	0	1	100	68								
74	317	682	1	0	0	100	202	74	528	746	1	0	0	100	745								
75	276	423	1	0	0	100	158	75	583	660	0	0	1	100	138								
76	233	416	1	0	0	100	126	76	597	660	0	0	1	100	101								
77	230	488	1	0	0	100	179	77	660	673	1	0	0	100	212								
78	658	403	1	0	0	100		78	753	616	1	0	0	100	275								
79	391	369	1	0	0	100	106	79	620	646	1	0	0	100	189								
80	337	514	1	0	0	100	177	80	746	808	1	0	0	100	0								
81	584	630	1	0	0	100	216	81	827	820	0	0	1	100	127								
82	592	562	1	0	0	100	53	82	824	821	0	0	1	100	96								
83	562	548	0	1	0	100	126	83	820	809	0	0	1	100	52								
84	562	612	1	0	0	100	136	84	824	817	0	0	1	100	0								
85	589	558	0	1	0	100	94																
86	558	733	1	0	0	100	109																
87	657	847	1	0	0	100	205																
Total Length (meters)							13507	Total Length (meters)							12256	Total Length (meters)							3510

Thakurbari Zone DMA wise Alignment Details

DMA-1								DMA 2							DMA 3								
Sl. No.	Node		Alignments (L/C/R)			Diameter	Pipe length meter	Sl. No.	Node		Alignments			Diameter	Pipe length meter	Sl. No.	Node		Alignments			Diameter	Pipe length meter
	S	E	L	C	R				S	E	L	C	R				S	E	L	C	R		
1	509	839	1	0	0	200	961	1	803	419	0	0	1	200	421	1	24	28	0	0	1	150	297
2	839	712	1	0	0	100	344	2	803	796	0	0	1	100	47	2	48	24	0	0	1	100	59
3	712	749	0	0	1	100	105	3	657	785	0	0	1	100	214	3	22	20	1	0	0	100	82
4	763	755	0	0	1	100	194	4	799	804	1	0	0	100	40	4	25	14	0	1	0	100	82
5	836	817	1	0	0	100	155	5	795	794	1	0	0	100	42	5	86	12	0	0	1	100	88
6	817	622	0	0	1	100	297	6	791	687	1	0	0	100	170	6	313	15	1	0	0	100	139
7	817	822	0	0	1	100		7	760	561	1	0	0	100	133	7	429	252	1	0	0	100	146
8	822	574	0	0	1	100	1238	8	728	428	1	0	0	100	228	8	436	98	0	0	1	100	159
9	801	808	0	0	1	100	21	9	517	581	1	0	0	100	86	9	347	16	1	0	0	100	155
10	822	828	0	0	1	100	26	10	547	445	1	0	0	100	97	10	296	16	1	0	0	100	179
11	828	818	0	0	1	100	64	11	462	640	1	0	0	100	149	11	141	9	1	0	0	100	150
12	830	792	1	0	0	100	57	12	596	377	0	0	1	100	214	12	24	7	0	0	1	100	156
13	839	832	1	0	0	200	148	13	478	446	1	0	0	100	39	13	58	5	0	0	1	100	179
14	832	831	1	0	0	100	25	14	427	406	1	0	0	100	30	14	402	27	1	0	0	100	501
15	832	802	0	0	1	100	74	15	445	420	1	0	0	100	199	15	296	616	1	0	0	100	116
16	809	827	1	0	0	100	107	16	513	451	1	0	0	100	184	16	347	750	1	0	0	100	130
17	816	821	1	0	0	100	60	17	451	353	0	0	1	100	212	17	413	548	0	0	1	100	113
18	814	810	1	0	0	100	145	18	393	343	1	0	0	100	132	18	317	333	0	1	0	100	78
19	819	754	1	0	0	100	210	19	371	410	1	0	0	100	102	19	86	183	0	0	1	100	67
20	812	806	0	0	1	100	15	20	351	358	1	0	0	100	113	20	28	339	0	0	1	100	178
21	704	754	1	0	0	100	68	21	451	437	1	0	0	100	67	21	213	529	0	1	0	100	105
22	704	747	1	0	0	100	158	22	438	437	1	0	0	100	39	22	213/1	403	0	1	0	100	46
23	754	792	1	0	0	100	159	23	434	468	1	0	0	100	47	23	229	227	0	1	0	100	66
24	784	788	0	0	1	100	15	24	439	394	1	0	0	100	45	24	298	380	0	1	0	100	44
25	787	780	0	0	1	100		25	407	404	1	0	0	100	56	25	402	330	1	0	0	100	70
26	719	734	0	0	1	100	35	26	364	433	0	0	1	100	130	26	402	330/1	1	0	0	100	40
27	746	573	0	0	1	100	228	27	433	456	1	0	0	100	40	27	326	323	0	0	1	100	116
28	565	575	0	0	1	100	85	28	457	532	1	0	0	100	46	28	302	302/1	0	1	0	100	20
29	568	567	0	0	1	100	15	29	433	571	0	0	1	100	51	29	311	264	0	1	0	100	17

DMA-1								DMA 2					DMA 3										
Sl. No.	Node		Alignments (L/C/R)			Diameter	Pipe length	Sl. No.	Node		Alignments (L/C/R)			Diameter	Pipe length	Sl. No.	Node		Alignments (L/C/R)			Diameter	Pipe length
	S	E	L	C	R				S	E	L	C	R				S	E	L	C	R		
61	479	477	1	0	0	100	39																
62	607	460	1	0	0	100	43																
63	485	618	1	0	0	100	182																
64	464	463	1	0	0	100	21																
65	545	593	1	0	0	100	187																
66	585	555	1	0	0	100	24																
67	599	558	0	0	1	100	29																
68	601	558	1	0	0	100	119																
69	543	506	1	0	0	100	30																
70	558	610	1	0	0	100	101																
71	490	637	1	0	0	100	133																
72	487	584	0	1	0	100	87																
73	493	619	1	0	0	100	233																
74	509	614	1	0	0	100	226																
75	639	549	1	0	0	100	59																
Total Length (meters)							9323	Total Length (meters)					5414	Total Length (meters)							3908		

Appendix 1: Status of Physical progress

Current status of Progress of Civil Works at WTP

Sl. No.	Components - major works under the subproject	Current status of Progress of Civil Works (June 2019)
1.1	Refurbishment of 3 nos. WTP at Barari	✓ Dewatering and repairing of primary sedimentation Tank ✓ Pump repaired at the old clear water pump house
1.2	Chemical House Mechanical Filter / WTP	✓ Raft foundation and plinth beam completed. Colomoun casting above plinth beam completed on 05.03.2019.
1.3	QA/QC Lab	✓ Completed near Jewel filter
1.4	Chlorination Building 1	✓ Lintel beam casting completed on 17.04.2019.
1.5	Chlorination Building 2	✓ Raft foundation and plinth beam completed. Casting of 1 st lift Column above plinth beam completed.
1.6	Flax mixer and chamber	✓ Raft completed. Vertical wall till 3 rd lift completed. Slab for drive way completed.
1.7	33 KVA Electric substation at WTP	✓ not yet taken up
1.8	Construction of Customer Service Centre(CSC) at two locations	✓ CSC at Barari is under construction. The casting of the 1 st floor roof slab completed on 22.01.19. No work in progress.
1.9	Sludge Drying Bed	✓ PCC work completed for all Beds. Reinforcement work for raft at bed 1& 6 completed.
1.10	CSC, Barari	✓ Casting of Ground Floor Roof Slab Completed. Total 1 st Floor Column Completed on 03.11.2018. Casting Lintel/ Chhajja Completed. 1 st Floor Roof Slab casting completed. De-shuttering work completed. Brickwork 1 st floor is pending

The current status of achievement of pipe laying and HSC vis-à-vis targets

Sl. No.	Name of OHSR site	Length of Pipeline (km) to be laid			No. of Household Service Connection (HSC) ⁴¹		
		Target	Achievement (June 2019)	% of completion	Target	Achievement (June 2019)	% of completion
New OHSRs to be constructed							
1	Housing Board Barari	28.20	22.44	79.57%	2858	1893	66.24%
2	Thakurbari	21.89	14.94	68.25%	2951	1175	39.82%
3	Tilka Manjhi Bhagalpur University (TMBU)	22.48	14.09	62.68%	3052	1293	42.37%
4	Bazar Samiti	43.02	28.47	66.18%	3791	909	23.98%
5	Road Construction Department (RCD)	17.38	10.44	60.07%	2403	640	26.63%
6	Surkhikal	22.08	14.89	67.44%	1745	535	30.66%
7	Anand Nagar	31.55	15.78	50.02%	3427	702	20.48%
8	Jaglal High School	24.72	04.92	19.90%	4205	0	0.00%
9	Constable Training School (CTS)	22.34	08.35	37.38%	2575	0	0.00%
10	Mahashay Deodhi - I	10.52	08.81	83.75%	843	136	16.13%

⁴¹ There are 4148 existing HSC over and above the new connections. Therefore total number of HHs equipped with service connection is **11,515**.

11	Mahashay Deodhi - II	12.78	02.15	16.82%	3254	43	1.32%
12	BMC godown	22.89	00.00	0.00%	8634	0	0.00%
13	Abir Mishra Lane	17.59	03.31	18.82%	4557	0	0.00%
14	Barahpura Idgah	32.32	15.24	47.15%	4247	0	0.00%
15	Manik Sarkar	26.70	06.51	24.38%	3220	41	1.27%
16	Sikandarpur	22.23	02.14	9.63%	3249	0	0.00%
17	Aliganj Katghar	24.82	03.11	12.53%	3379	0	0.00%
18	Kawali Maidan	21.88	00.00	0.00%	3009	0	0.00%
19	Lajpat Park	18.12	00.00	0.00%	3208	0	0.00%
Sub Total		443.51	175.59	39.59%	64607	7367	11.40%

Sl. No.	Name of OHSR site	Length of Pipeline (km) to be laid			No. of Household Service Connection (HSC) ⁴²		
		Target	Achievement (June 2019)	% of completion	Target	Achievement (June 2019)	% of completion
Existing OHSRs to be refurbished							
1	CTS	5.10	00.00	0.00	2025	0	0.00
2	Ghantaghar	5.84	00.00	0.00	686	0	0.00
3	Goshala	4.34	00.00	0.00	468	0	0.00
4	Ishakchak	1.96	00.00	0.00	396	0	0.00
Sub Total		17.24	00.00	0.00	3575	0	0.00
Grand Total (New + Existing)		460.75	175.59	38.11	68182	7367	10.80

Current status of Progress of Civil works at 12 OHSRs are underway (Table-8)

Current status of Progress of Civil Works - OHSRs

Sl No	Area	Percent of work completed	Current status of Progress of Civil Works (June 2019)
1	Housing board	95%	Structure work completed, plastering and door window fixing work of compound wall and Guard room completed. Miscellaneous piping and ancillary work pending, excavation for fitting work stop, Tube well work also stop.
2	Thakurbari	93%	Structure work completed, Miscellaneous piping and ancillary work pending, Boundary wall and Guard room plastering work completed.
3	TMBU	93%	Structure work completed, Miscellaneous piping and ancillary work pending, Boundary wall and Guard room plastering work completed.
4	Anand Nagar	90%	Structure work completed with 10 th Flight stair case, Boundary wall and Guard room work Pending. Miscellaneous piping and ancillary work pending,

⁴² There are 4148 existing HSC over and above the new connections. Therefore total number of HHs equipped with service connection is **11,515**.

5	BMC Godown	60%	Structure work Casting completed up to 3rd lift vertical wall.
6	RCD Adampur	50%	Structure work completed up to bottom dome, also up to 9 th flight staircase completed.
7	Bazar Samiti	30%	Concrete work of 2nd lift of column above 4th brace beam completed on 20.12.2017.
8	Surkhikal	90%	Structure work completed, Boundary wall and Guard room work Pending. Miscellaneous piping and ancillary work pending.
9	Lajpat park	30%	Staging height completed, staircase 3 rd flight complete.
10	Mahashay Deodi-01	0	
11	Goshala	0	
12	Ghantaghar	0	
13	Aliganj	0	
14	Maniksarkar	0	
15	Mughalpura	0	
16	Sikandarpur	0	
17	CTS-Existing	0	
18	Ishakchak	0	
19	Jaglal High School	0	
20	Mahashay Deodi-02	0	
21	Barahpura	0	
22	Abir Mishra Lane	0	
23	CTS-Proposed	0	

Tube Well – Out of 62 tube wells, 57 Nos. has been facilitated with a Chlorine dosing system. 19 Nos. of tube wells has been operational with chlorine dosing system, while at other places it has been discontinued owing to public protest.

O & M - Complaints related to Operation & Maintenance are being received & resolved.

Road restoration of 23125 meter has been completed

Proposed components of BWSP 1

Subproject components proposed under BWSP1-01: Details of OHSRs and distribution network has been provided below –

Table- 1 Proposed OHSRs

OHSR Name	Ward Covered	No. of DMA	Capacity	Land Remark	Staging Height	Land Area	Type of Foundation
TMBU	9,10,13,14,17	2	1160	Govt. Land	22	35mx35m	Stone Pile With Raft
Housing Board	27,28,29	3	1385	Govt. Land	21	25mx25m	Stone Pile With Raft
Thakurbari	47,48,49,51	3	1135	Trustee Land	22	30mx30m	Stone Pile With Raft

Source: Bid document

Table 2: Proposed OHSR and corresponding coverage areas

Name of OHSR	Distribution mains			House Hold Service Connection (HSC)		
	Scope	Laid	Remaining	Scope	complete	Remaining
TMBU	22231	13741.7	8489.3	3052	1293	1759
Housing board	28605	22166	6439	2858	1893	965
Thakurbari	22118	10181	11937	2951	1175	1776

Source: Bid document

Table – 3: Proposed Water Distribution Pipeline- DI K-7 pipe

Pipe Dia	Unit	Sites		
		Housing Board	Thakurbari	TMBU
100 mm	m	5,389.85	4,006.10	3,665.90
150 mm	m	894	365.2	2,285.00
200 mm	m	169.5	1,202.10	717.9
250 mm	m	-	8	492.5
300 mm	m	444.5	1,055.00	801
350 mm	m	-	-	-
400 mm	m	-	961	751
450 mm	m	-	10	-
500 mm	m	74.5	-	-
600mm	m	-	-	22
Total		6972.35	7607.4	8735.3

Source: Bid document

Subproject components proposed under BWSP 1-02

Table- 4 Proposed OHSRs

OHSR Name & Location	Ward Covered	No. of DMA	Capacity	Land Remark	Staging Height	Land Area	Type of Foundation
Mahashay Devdi-01	1,8,9,10	1	885	Private Land	23	15mx15m	Stone Pile With Raft
BMC, Godown	15,20,19,36,37,38	3	1135	Govt. Land	21	20mx20m	Stone Pile With Raft
Lajpat Park	18,19,20,21,22	2	1260	Govt. Land	21	20mx20m	Concrete Pile With Raft
Anand Nagar	26,27,29,30,31,32	2	1660	Govt. Land	22	20mx20m	Stone Pile With Raft
Aliganj Katghar	41,42,43,44	2	1420	Govt. Land	22	15mx12m	Stone Pile With Raft
Mughalpura Kawali Maidan	41,44,45,46,49	2	1260	Trustee Land	22	30mx30m	Stone Pile With Raft
Manik Sarkar	20,22,23	2	1385	Govt. Land	20	30mx27m	Stone Pile With Raft
Sikandarpur	39,40,46	2	1520	Govt. Land	21	37mx44m	Stone Pile With Raft
Ghantaghar Existing							
Goshala Existing	16,19						

Source: Bid document

Table 5: Proposed OHSR and corresponding coverage areas

Name of OHSR	Distribution mains			House Hold Service Connection (HSC)		
	Scope	Laid	Scope	Laid	Scope	Laid
Mahashay Deodi-01	10603	0	10603	843	0	843
BMC Godown	22944	0	22944	8634	0	8634
Lajpat park	18239	0	18239	3208	0	3208
Anand Nagar	31998	15228.2	16769.8	3427	702	2725
Aliganj	25095	3608	21487	3379	0	3379
Mughalpura	21885		21885	3009	0	3009
Maniksarkar	27155	6976.9	20178.1	3220	41	3179
Sikandarpur	22429	2632.7	19796.3	3249	0	3249
Ghantaghar	5851	0	5851	686	0	686
Goshala	4400	0	4400	468	0	468

Source: Bid document

Table – 6: Proposed Water Distribution Pipeline- DI K-7 pipe

Pipe Diameter	Mahashay Deodhi 1	BMC	Lajpat Park	Anand Nagar	Aliganj Katghar	Kawali Maidan	Manik Sarkar	Sikandarpur	Ghantaghar	Goshala	Total
100	525	14312	12807	9931.5	17206.8	16557	12098.4	13441.3	5207	4364	106450
150	182	3241	1971	1254.5	1620.8	1800	2887	2546.5	337	36	15875.8
200	732	2956	1990	2779	1928	2785	3082	2707	307	0	19266
250	64	1121	729	467	48	72	21	1123	0	0	3645
300	725	678	731	1870	306	0	2080	0	0	0	6390
350	0	0	0	0	0	0	0	0	0	0	0
400	165	122	3	85	166	0	12	10	0	0	563
450	0	0	0	0	0	631	0	0	0	0	631
500	0	514	0	93	15	0	0	16	0	0	638
600	0	0	8	0	0	40	0	0	0	0	48
	2393	22944	18239	16480	21290.6	21885	20180.4	19843.8	5851	4400	153.5

Source: Bid document

Subproject components proposed under BWSP 1-03:

Table- 7 Proposed OHSRs

OHSR Name & Location	Ward Covered	No. of DMA	Capacity	Land Remark	Staging Height	Land Area	Type of Foundation
CTS-Proposed	5,10,11,12	2	1260	Govt. Land	20	40 mx40 m	Concrete Pile With Raft
Mahashay Deodhi- 02	1,2,7,8	2	1135	Private Land	23	15m x 15m	Stone Pile With Raft
Abhir Mishra	2,3,4,6	2	1385	Govt. Land	21	20m x 20m	Stone Pile With Raft
Jaglal High School	14,15,16,17,18,19	3	1520	Govt. Land	24	20m x 20m	Stone Pile With Raft
RCD Adampur	24,25	2	1660	Govt. Land	26	20m x 20m	Stone Pile With Raft
Surkhikal	26,27,28	2	1260	Govt. Land	23	20m x 20m	Stone Pile With Raft
Bazar Samiti	42,49,50,51	4	1660	Govt. Land	20	20m x 20m	Concrete Pile With Raft
Barahpura, Dargah	32,33,34,35	3	1810	Govt. Land	22	14m x 28 m	Stone Pile With Raft
Ishakchak	36,47,48	1	450	Govt. Land			
CTS-Existing	23,36,37	1	450	Govt. Land			

Source: Bid document

Table 8: Proposed OHSR and corresponding coverage areas

Name of OHSR	Distribution mains			House Hold Service Connection (HSC)		
	Scope	Laid	Scope	Laid	Scope	Laid
RCD Adampur	17793	10047.25	7745.75	2403	640	1763
Bazar Samiti	42963	27692.08	15270.92	3791	909	2882
Surkhikal	22460	14740.8	7719.2	1745	535	1210
CTS-Existing	5092	0	5092	2025	0	2025
Ishakchak	1960	0	1960	396	0	396
Jaglal High School	25125	5109.4	20015.6	4205	0	4205
Mahashay Devdi-02	13940	10127.6	3812.4	3254	179	3075
Barahpura	34358	15531.1	18826.9	4247	0	4247
Abhir Mishra	17679	3038.7	14640.3	4557	0	4557
CTS-Proposed	22711	7499.6	15211.4	2575	0	2575
Total	204081	93786.53	110294.47	29198	2263	26935

Source: Bid document

Table – 9: Proposed Water Distribution Pipeline- DI K-7 pipe

Pipe Diameter	Bazar Samiti	Surkhikal	RCD	Jaglal	Mahashay Deodhi 2	CTS	Abir Mishra Lane	Barahpura	Ishakchak	CTS Existing	Total
100	10511	4549	4964.2	13218.4	7449.5	10066.9	11375.3	20565.7	1812	3046	87558
150	2513.2	1880.9	1643.2	1709	1695	2043	1113	513.5	148	1468	14726.8
200	864.5	795.3	860.8	2232	1343.5	1079	1655.5	3236	0	578	12644.6
250	158	81	144	651	972	55	0	375	0	0	2436
300	1160	128	125	1665	66	873	322	1623	0	0	5962
350	0	0	0	0	0	247	0	0	0	0	247
400	8	91.8	722	869	239	0	56	26	0	0	2011.8
450	0	0	0	0	0	0	0	0	0	0	0
500	0	8	0	0	10	0	28	0	0	0	46
600	0	0	152	0	0	0	0	0	0	0	152
Total	15214.7	7534	8611.2	20344.4	11775	14363.9	14549.8	26339.2	1960	5092	125784.2

Source: Bid document

The total length of the distribution pipelines laid till June 2019 is **175.59 km**.

Subproject components proposed under BWSP 1-04

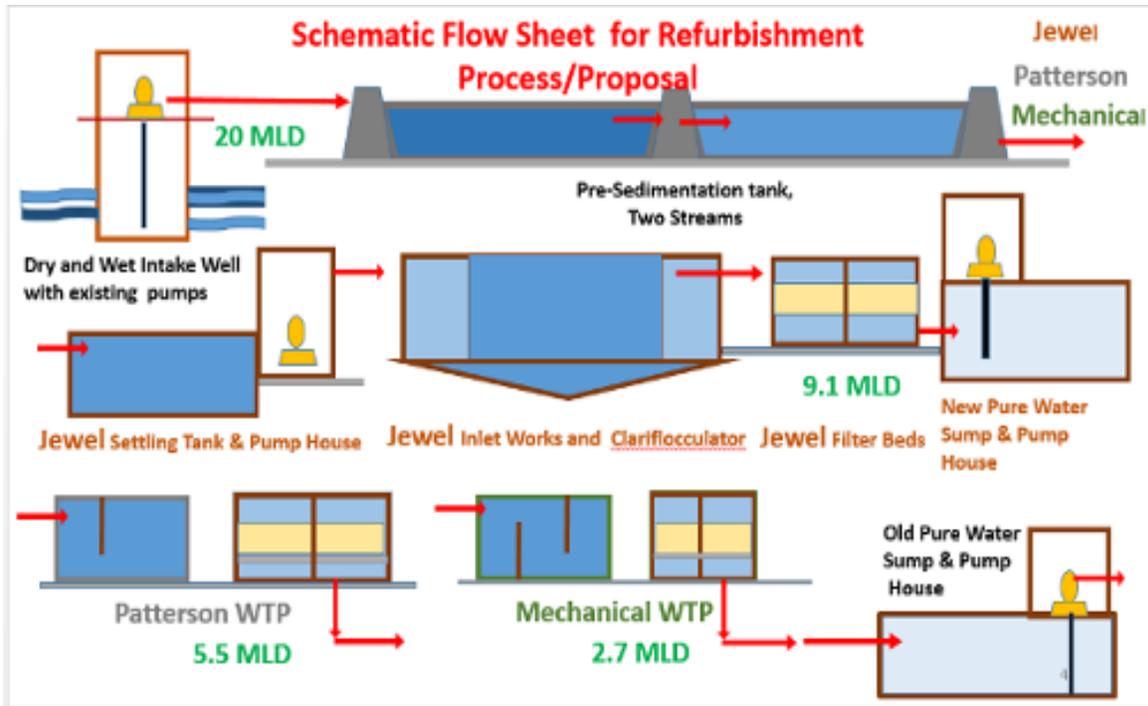
1. The work components of BWSP 1-04 (Table-10) comprise -balance works like renovation of existing WTPs at Barari, emergency intake arrangement near DPS School, Babupur with pump and permanent raw water main to Barari WTP and commissioning of the complete scheme.

Table-10: Description of the proposed water supply subproject for BWSP 1-04

Component	Function	Description	Location
General	Improvement of water supply system in Bhagalpur city	<ul style="list-style-type: none"> ➤ Satisfy the future needs ➤ Enhancement of pumping, distribution and storage facilities to supply quality water to new areas and existing area with sufficient quantity 	Bhagalpur city
Refurbishment of WTP	Replacement of pumping equipments running at lesser efficiency, since machinery has outlived their lives. Quality of the supply water get improved through disinfection	The refurbishment work includes introduction of (i) Chemical House Building 3 Nos (1 New + 2 Partially Completed) (ii) Alum dosing 6 nos (iii) flash mixers(2 nos new and 1 nos partially completed) for coagulant rapid mixing; .(iv) Sludge Drying Bed(Partially Completed) (v) Replacement of Filter media for all three WTPs(vi) Chlorine building (1 no new and 1 no partially completed)	At Barari water works
Transmission/Rising mains, from DPS school to Barari	Supply to existing WTP from DPS school to Barari	Approx. 7.20 km from DPS school to Barari	
Intake at DPS School with Detachable Pumping Station	Water intake	Near DPS School	DPS School
Construction of Operator Room and Meter room at Intake works	Operation of system	Near DPS School	DPS School
Sludge Drying Bed (Partially completed)	To dry liquid sludge of existing WTPs	1 no	Barari
Intake Switch yard		Near DPS School	DPS School
Chemical House Building 3 Nos (1 New + 2 Partially Completed)	To store chemical	Barari within WTP campus	Barari
2 nos Customer Service Centre (CSC)	To cater to about 68000 connections	Attending customer call and resolving service-related issues	One nos at Barari and other As per need basis

- 1.1. **Work Component 1: Refurbishment of WTP-** The refurbishment work includes introduction of (i) Chemical House Building 3 Nos (1 New + 2 Partially Completed) (ii) Alum dosing 6 nos (iii) flash mixers (2 nos new and 1 nos partially completed) for coagulant rapid mixing; (iv) Sludge Drying Bed (Partially Completed) (v) Replacement of Filter media for all three WTPs (vi) Chlorine building (1 no new and 1 no partially completed). The Schematic Flow Diagram for WTP Refurbishment work (Figure 3) is given below - shown below.

Figure 3: Schematic Flow Diagram for WTP Refurbishment work



- 1.1.1. **Mechanical**(i) Dismantling of existing pumping units, accessories and other equipment, including safe storage, handing over to the Employer (ii) Design, supply, install, testing commissioning and painting at the Site of following equipment.(iii) Supply of Fire extinguishers including fitting & fixing complete(iv) Supply of First Aid Kits.(iv) Any other item and accessories not specified above but required to complete the Works(v) Supply, fixing, testing and commissioning of Bypass arrangement for settling unit to clear water reservoir.(vi) Supply, fixing, testing and commissioning of Piping arrangement for sludge Disposal from Sludge sum to Sludge Drying Bed.(vii) Supply, fixing, testing and commissioning of Piping arrangement for Disposal of waste water from filter bed to Sludge Drying Bed.(viii) Supply, fixing, testing and commissioning of Piping arrangement for back wash water tank/pond to filter bed.(ix) Supply, fixing, testing and commissioning of Sludge Pump set from Sludge sum to Sludge Drying Bed (x) Supply, fixing, testing

and commissioning of Back wash water Pump set.

1.1.2. **Electrical** (1) Panel - New Intake Pump House (Dry Well) 3 Pumps(2) Panel - Old Intake Pump House (Wet Well) 4 Pumps(3) Panel - New Clear Water Pump House (Jewel) (4) Panel - Old Clear Water Pump House(5) Panel - Jewel Filter WTP(6) Panel - Patterson Filter WTP(7) Panel - Mechanical WTP(8) Panel - Chlorination System.

1.1.3. **Instrumentations** (1) Pumping Stations- (a) Electro-magnetic Flow meter(b) Ultrasonic Type Level Indicator(c) Pressure Measuring Device (2) WTP(a) Filters(b) Chlorinators (3) Cables and Accessories

1.2. **Work Component 2:** Transmission/Rising Mains, from DPS School to Barari-7.20 km

1.3. **Work Component 3:** Intake near DPS School with Detachable Pumping Station

1.4. **Work Component 4:** Construction of Operator Room and Meter room at Intake works

1.5. **Work Component 5:** Intake Switch yard at DPS school

1.6. **Work Component 6: Electro Mechanical Works:** Clear water pumps, motors, starter and connecting pipes. (b) Butterfly valve and Dismantling Joint(c) Electrical Substation and system

1.7. **Work Component 7: Chlorination Building 1:** Plinth Beam Completed. Casting of Column above plinth beam completed. Lintel Beam casting completed on 21.04.2019. Chlorination Building 2: Plinth Beam casting Completed. Casting of 1st lift column above plinth beam completed. Sludge Drying Bed: PCC work completed for all bed. Reinforcement work for raft at bed 1 & 6 completed. Flash Mixer Raft completed. Vertical Wall till 3rd lift completed, slab for drive way completed. Chemical House Column casting above plinth beam completed by the previous contractor.

1.8. **Work Component 8:** Two nos Customer Service Centre (CSC)- It is assessed that 1 (One) customer service centre (CSC) will be required to cater to about 10,000 connections. The location of CSC, is identified to establish at Barari WTP. Future CSCs offices in the city area are proposed to be located on government land or within existing government buildings or rented space.

1.9. **Work Component 9:** O & M of the Site-The Operator shall be responsible for the operation and maintenance of the water supply system as described in the attached Operations and Maintenance Specifications. The Operator shall manage, operate and maintain all plant and ancillary equipment that support the operation of the Project, including without limitation:

- High Yielding Tube well, motor pump and accessories;
- Transmission mains;

- Main piping system;
- Disinfection plant(s) with installations;
- Reservoirs with all installations including the asset created by the previous contractor;
- Distribution pipeline system with all fittings including the existing mains and mains laid by the previous contractor;
- Service connections including the service connection done by the previous contractor;
- Any other work as defined in the Contract