

Land Acquisition and Resettlement Due Diligence Report

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India: Jharkhand Urban Water Supply Improvement Project – Development of Water Supply System at Jhumri Telaiya Town

Prepared by Jharkhand Urban Infrastructure Development Co. Ltd. under guidance of the Urban Development and Housing Department, Government of Jharkhand for the Asian Development Bank.

CURRENCY EQUIVALENTS

(as of 6 April 2021)

Currency unit	=	Indian rupee (₹)
₹1.00	=	\$0.013
\$1.00	=	₹73.27

ABBREVIATIONS

ADB	–	Asian Development Bank
CPHEEO	–	Central Public Health and Environmental Engineering Organisation
DMS	–	Detailed Measurement Survey
DVC	–	Damodar Valley Corporation
DWSD	–	Drinking Water and Sanitation Department
ESR	–	Elevated Storage Reservoir
GOI	–	Government of India
GOJ	–	Government of Jharkhand
JMC	–	Jhumri Telaiya Municipal Council
JUWSIP	–	Jharkhand Urban Water Supply Improvement Project
JUIDCO	–	Jharkhand Urban Infrastructure Development Co. Ltd.
NOC	–	No Objection Certificate
O&MUFW	–	Operation and Maintenance Unaccounted for Water
PMU	–	Project Management Unit
RCC	–	Reinforcement Concrete Cement
ROW	–	right-of-way
UDHD	–	Urban Development and Housing Department
ULB	–	Urban Local Body
WTP	–	Water Treatment Plant

WEIGHTS AND MEASURES

°C	–	degree celsius
km	–	kilometer
LPCD	–	litres per capita per day
m	–	meter
MLD	–	million liter per day
mm	–	millimeter
dia	–	diameter
km ²	–	square kilometer
m ²	–	square meter
LPM	–	liter per minute

NOTE

In this report, \$ refers to United States dollars

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I. INTRODUCTION

A. Project Description

1. The Government of Jharkhand (GOJ) has been working towards developing a safe, sustainable, economic, people-friendly urban infrastructure in the state. With these goals and objectives, GOJ has proposed for Jharkhand Urban Water Supply Improvement Project (JUWSIP) which would support urban service improvement strategies and policy initiatives of the GOJ to contribute to the sustainable cities that are spatially, economically, and socially inclusive developed under the Jharkhand Vision and Action Plan 2021.¹ The project will complement ongoing efforts of the GOJ for urban infrastructure and service improvement and institutional reforms under various national flagship programs.²

2. The Project is proposed to be funded by GOJ in assistance with Government of India (GOI) and Asian Development Bank (ADB). Urban Development and Housing Department (UDHD) of GOJ is the executing agency and Jharkhand Urban Infrastructure Development Company Limited (JUIDCO) will be the implementing agency (IA) for the project. The programme is proposed under Multi tranche Funding Facility (MFF) loan (of USD 458 Million) and likely policy reforms.

3. JUWSIP will finance water supply infrastructure investments in four prioritized Urban Local Bodies (ULB). The towns selected include Ranchi, and three towns located in economically and socially backward areas of Hussainabad, Medininagar and Jhumri Telaiya.

4. The Development (including O&M) of Water Supply System at Jhumri Telaiya, Jharkhand aims to provide safe, reliable, and continuous drinking water as per GOI's standard, to all the households of Jhumri Telaiya town under Jharkhand in the district Koderma. The Project will ensure drinking water supply and security through piped water supply schemes in the project areas to be covered.

5. Jhumri Telaiya is a city in the Koderma District of Jharkhand, India. It is situated in the Damodar Valley. Koderma district is one of the twenty-four districts of Jharkhand state, India, and Koderma is the administrative headquarters of this district. It is situated about eight kilometres from Koderma. Both the towns are closely linked. The city has the potential to turn into an urban zone in Jharkhand. The entire town is divided by the grand cord line of Eastern Railway, which passes through the town.

6. The Telaiya Dam reservoir is located nearly 14 km from the Jhumri Telaiya town. The dam has been constructed by the Damodar Valley Corporation for hydro-electric power station on the Bara kar River.

7. The objective of the project is to cover the entire town (including new/upcoming areas, slums) with sustainable drinking water supply facilities on 24x7 basis. The scope of the water supply component includes i) jack well and intake arrangement at Telaiya reservoir; (ii) raw water pumping machinery; (iii) raw water rising mains of 700 mm dia with 10.015 km length and 400 mm dia with 40.0 m length; (iv) 35.5 MLD WTP is proposed at Mahto ahara village, Gumo and

¹ The original project title of "Jharkhand Urban Infrastructure Investment Project", as mentioned in India: Country Operations Business Plan (2018-2020) is changed as JUWSIP.

² The national flagship programs launched by the Ministry of Housing and Urban Affairs (MoHUA) include Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Smart Cities Mission (SCM) and Swachh Bharat Mission.

augmentation/rehabilitation of 10 MLD existing WTP at Telaiya reservoir; (v) 11.90 km pure water rising mains; (vi) 04 proposed ESRs of following capacities: (a) 2410KL, (b) 2340 KL, (c) 2000 KL, and (d) 1020 KL, and inclusion of 04 existing ESRs of (a) 473KL, (b) 757 KL, (c) 378 KL, and (d) 473KL capacities; (vii) 197.32 km of distribution network; and (viii) 25,043 household connections; and (ix) reuse of 02 existing sumps of 02 MLD each (used for institutional demand/ fire fighting).

8. Looking at the size and type of the township with sewerage system, the Central Public Health and Environmental Engineering Organisation (CPHEEO) manual recommends water supply of 135 LPCD. This is exclusive of unaccounted for water (UFW) and water for small industries, institutions etc. A total demand of 6% of net domestic demand on the basis of experience for similar town size and stakeholder consultations in past projects has been provisioned which are expected to be located within the ULB. The proposed project does not have provisions for heavy industries or industries which are outside ULB; including them in part of the municipal system would unnecessarily increase the capital cost. In case such requirement is assessed, a separate industrial supply may be considered on a case-to-case basis. The CPHEEO manual on water supply recommends a maximum of 15% as UFW in water supply system. In view of this, proposals envisage taking appropriate action to reduce the UFW and bring down the same to the level of 15%. In view of the recommendations of CPHEEO, water demand for design purpose has been considered as 135 LPCD at consumer end and UFW as 15%. This makes per capita gross water supply of 155.25 LPCD.

9. To construct the water intake for the project various locations have been explored for finalizing the source and construction for intake is finalized at the right bank of Telaiya dam at Urwan Village considering water availability throughout the season.

10. The entire project area of Jhumri Telaiya Municipal Council has been divided into eight Zones considering the topography. The existing water supply system in the town caters nearabout 35-40 percent of the total area. The proposed water supply scheme will cater to Zone 1 to Zone 8.

B. Scope of this report

11. This land acquisition and resettlement due diligence report (DDR) is prepared for the proposed Package – 1 of JUWSIP, Water Supply and Distribution Network in Jhumri Telaiya town in Koderma district. Implementation of the package involves land requirement for WTP, pure water pumping stations, ESRs and involves construction of intake point, laying of raw water mains, clear water mains and distribution network. The report is prepared based on the Detailed Project Report (DPR) of Jhumri Telaiya water supply prepared for the package by the design consultants. The DDR will be updated and reconfirmed for final involuntary resettlement impacts after completion of final engineering design and based on the detailed measurement survey (DMS) prior to start of construction.

12. A due diligence process was conducted to examine the land acquisition and resettlement issues in detail based on the preliminary design, aligned with ADB's Safeguard Policy Statement (SPS), 2009. The main objective of due diligence exercise is to confirm that the project is free of involuntary resettlement impact such as land acquisition, physical displacement, economic displacement, adverse impact on livelihood, community properties or any other impacts, based on a review of documents, stakeholder consultations and field visits to proposed project locations. This report describes the findings and provides copies of relevant documents, minutes of meetings and photographs.

13. The report has been prepared based on preliminary design and transact walk along the proposed route of transmission lines and distribution network. All the sites proposed for construction of project component have also been covered during the process. The DDR will be updated and reconfirmed for final involuntary resettlement impacts following the final engineering design and based on the DMS. The draft DDR will be reviewed and disclosed on IA and ADB websites.

14. During DMS, if involuntary resettlement impact is assessed, a resettlement plan (RP) will be prepared and shared with ADB for approval. The final document will be reviewed and disclosed on JUWSIP and ADB websites. No civil works contract package should be awarded and started before the completion of final document (DDR or RP) for the said package until ADB's No Objection is obtained. The IA is responsible for handing over the project land/site to the contractor free of encumbrances.

II. PROJECT DESCRIPTION

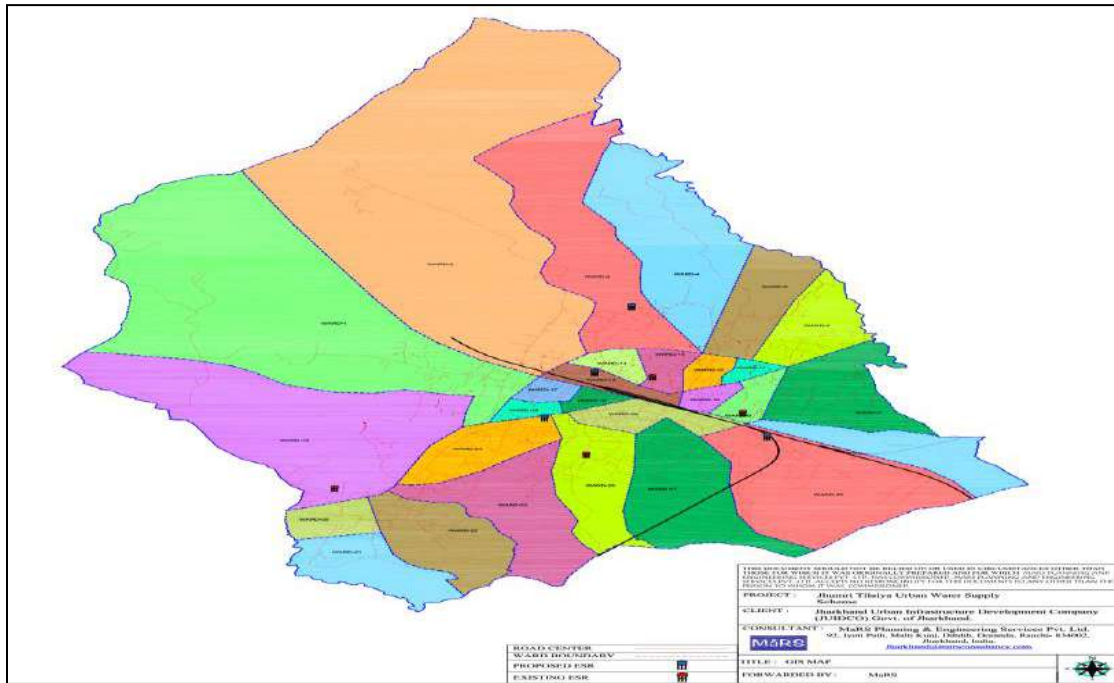
A. About the Project Area

15. Jhumri Telaiya was given the status of Nagar Parishad in the year 2010. The population of Jhumri Telaiya is 87,867 as per the census of 2011. The administrative area of Jhumri Telaiya town is divided into 28 wards. Jhumri is the name of the original village in the area, which is now located within the city. The word "Telaiya" is the Hindi language word for a small lake, that is how the city got its name as Jhumri Telaiya. The town located in 24°25'48" North Latitude and 85°31'12" East Longitude. It has an average elevation of 383 m (1,257 ft) and located at a distance of 152km from the state capital of Ranchi. It is situated about 8 km from Koderma town, both the towns are closely linked. Jhumri Telaiya is on the Grand Chord railway line connecting Calcutta and Delhi via Dhanbad. The town is accessible via the National Highway 31, which is popularly known as Ranchi-Patna Road. It is located 23 km away from the Grand Trunk Road. The nearest airport is Ranchi which is 162 km away from the town.

16. Jhumri Telaiya was once a major mica mining center, also known as Abrak (Hindi for Mica) Nagri. The city was earlier a part of the Hazaribagh district, and was transferred to the newly created Koderma district on 10 April 1994. Although the mica mining activity has declined, Jhumri Telaiya still remains an important mica centre in the Koderma-Hazaribagh industrial area. Telaiya dam is famous tourist place which is located about 18 km away from the city and Sainik School Telaiya is located nearby the dam. Jhumri Telaiya has become a prime location for small scale industries because of its proximity to easy access to minerals, good road-rail connectivity and good power infrastructure. The Jhanda Chowk is the main commercial center of the town.

17. Telaiya Dam on Bara kar river at Urwan village is the source of the existing as well as proposed water supply scheme and presently it fulfills 35-40% water demand of the town. Currently about 5.5 MLD water is being supplied to Jhumri Telaiya town from TelaiyaTelaiya Dam from the existing intake well. Water is pumped to the existing WTP of 10 MLD capacity located near the intake well in Urwan village, which is about 10km away from Jhumri Telaiya town. Clear water from WTP is pumped to existing ESRs of capacity 2081 KL, located in ward number 9,19,25 and 26 of Jhumri Telaiya town and distributed to all the municipal wards (from ward numbers 1 to 28) through pipelines of diameter ranging 100 mm to 350 mm. Total length of the proposed distribution network is 197.328 km and existing distribution network is 64.123 m.

Figure 1: Project Area Ward Map for Jhumri Telaiya Water Supply Scheme



Source: DPR by Design Consultant

B. Existing Water Supply System in Jhumri Telaiya

18. The existing water supply system in Jhumri Telaiya city is not covering the entire city. The existing water supply system has an intake well of 8 m dia and 12 m in depth, with a capacity of 18 MLD, which was commissioned in 1969. Two WTPs of treatment capacities of 5.45 MLD and 10 MLD were commissioned in 1969 and 2008 respectively. Both the WTPs are operational with water source from the Telaiya dam reservoir on Bara kar river, which is approximately 14.0 km from Jhumri Telaiya City. After completion of proposed project, the existing WTP 5.45 MLD will be discarded due to old infrastructure and 10 MLD WTP will be reused after rehabilitation.

19. Raw water is being drawn from the existing intake well for three urban local bodies (ULBs), namely: Jhumri Telaiya water supply scheme, Koderma water supply scheme and Chandwara rural water scheme. Present water system does not fulfil 100% water supply to the beneficiaries, therefore separate water supply scheme is proposed for Jhumri Telaiya town.

20. The details of existing water supply system in Jhumri Telaiya are discussed below;

- (i) **Infiltration Gallery and Intake Pipe:** Raw water from the Telaiya Dam is gravitated towards the intake well with the help of 700 mm Asbestos Cement Pressure Pipe class II intake pipeline having length approximately 4005 m. The inflow is controlled by sluice valve of 700 mm dia on intake pipe.
- (ii) **Intake well and Pump House near Telaiya Dam:** Intake well of 10.0 m dia constructed in Reinforced Cement Concrete (RCC) in the catchment of Telaiya Dam in Urwan village. The depth of the intake well is 5m for the existing water supply.
- (iii) **Raw Water Pumping Machinery:** The raw water from the sump is pumped by two Vertical Turbine (V.T.) Pumps of 450 HP (2W+1S) with discharging capacity of each (DI) Ductile Iron pipe having length 10,015 m to the WTP located at Urwan village in ward no 21.
- (iv) **Raw Water Rising Main :** Raw water is being pumped from intake well through DI K9 rising main of 400 mm dia and 400 m length to the WTP.
- (v) **Water Treatment Plant :** Raw water is being treated in the conventional WTP-1 of 5.45 MLD and WTP-2 of 10MLD capacity located in Urwan village which is about 400-600 m away from intake point in Urwan village.
- (vi) **Pure Water Sump and Pump House:** Pure water sump and pump house have been constructed near WTP. Pure water from the existing 15.45.0 MLD WTP is stored in a pure water sump of 20 lakh liters capacity.
- (vii) **Pure Water Pumping Machinery:** Pure water is then pumped to the 25.31LL ESR using centrifugal coupled pumps of 120 HP 1 no. (2W + 1S) and 225 HP(1W +1S) capacity. The discharging capacity of these pumps are 6780 LPM and operating against head of 75 m.
- (viii) **Pure Water Rising Main:** It consists of 400mm DI K9 pipes of length 10750 m.
- (ix) **Elevated Service Reservoir:** There are four ESRs constructed for Jhumri Telaiya water supply scheme to cover the entire water distribution of town. The reservoir is found to be in good structural condition. Details of existing ESR are in given in Table 1.

21. Distribution network of DI K7 pipes is laid in the municipal area. It consists of pipelines of diameter ranging from 100 mm to 450 mm. The total length of the distribution mains is 64.123 m and 197.32 km new pipeline will be laid in the proposed project.

22. Water is being supplied to the consumers in Jhumri Telaiya town for about 2 to 3 hours every day. All the connections in Jhumri Telaiya Municipal Council are unmetered connections and charges are applied on a fixed rate basis. The billing system is operated by municipal council and billing is carried out on yearly basis for domestic consumers as well as commercial connections.

23. The existing scheme is supplying water to the limited portion of the town (about 35% to 40% of the total area) and the structures constructed are in serviceable condition. Table 1 and Table 2 below provides the details of the ESR Zones and wards covered and landmark with GPS location.

Table 1: Details of Existing Elevated Storage Reservoir

SL No.	ESR No.	Landmark	Capacity in (KL)	Staging (in m)	G.L (in m)	Coordinates
1	ESR-1	Near Durga Mandap	473	18	395.709	24°25.123'N, 85°30 118'E
2	ESR-3	Gandhi high school ground	473	24	389.661	24°25.486'N, 85° 31.385'E
3	ESR-5	C.H High school ground	378	21	394.103	24°25.928'N, 85° 32.174'E
4	ESR-7	Near municipal council office	757	20	392.686	24°26.296'N, 85° 31.711'E

Source: DPR by Design Consultant

Table 2: Details of the Existing ESR Zone and Ward Numbers

Location	ESR Zone No.	Ward No.	Capacity (KL)	Ground level (Meters)	LSL (Meters)	Full Supply Level (Meters)
Ward No-19	1	19	473	145.012	166.012	171.512
Ward No-25	3	25	473	145.012	166.012	171.512
Ward No-9	5	9	378	145.012	166.012	171.512
Ward No-13 & 14	7	13 & 14	757	145.012	166.012	171.512

Source: DPR by Design Consultant

C. Project Description

24. The entire town of Jhumri Telaiya has been divided into eight water supply zones considering the topography. Water supply in Zones 1, 3, 5 and 7 is presently covered by existing water works. The proposed project will supply water to the uncovered wards under Zones 2, 4, 6 and 8 and as well as boost supply to the other wards also through the existing water supply infrastructure of the town Table 3.

Table 3: Water Supply Zones in Jhumri Telaiya Town

Water Supply Zone	Municipal Wards
Zone 1	19
Zone 2	16, 18, 20, 21, 22, 23 & 24

Water Supply Zone	Municipal Wards
Zone 3	25
Zone 4	1, 5, 6, 7, 8, 26, 27 & 28
Zone 5	9
Zone 6	2, 3, 4, 10, 11 & 12
Zone 7	13 & 14
Zone 8	1, 15 & 17

Source: DPR by Design Consultant

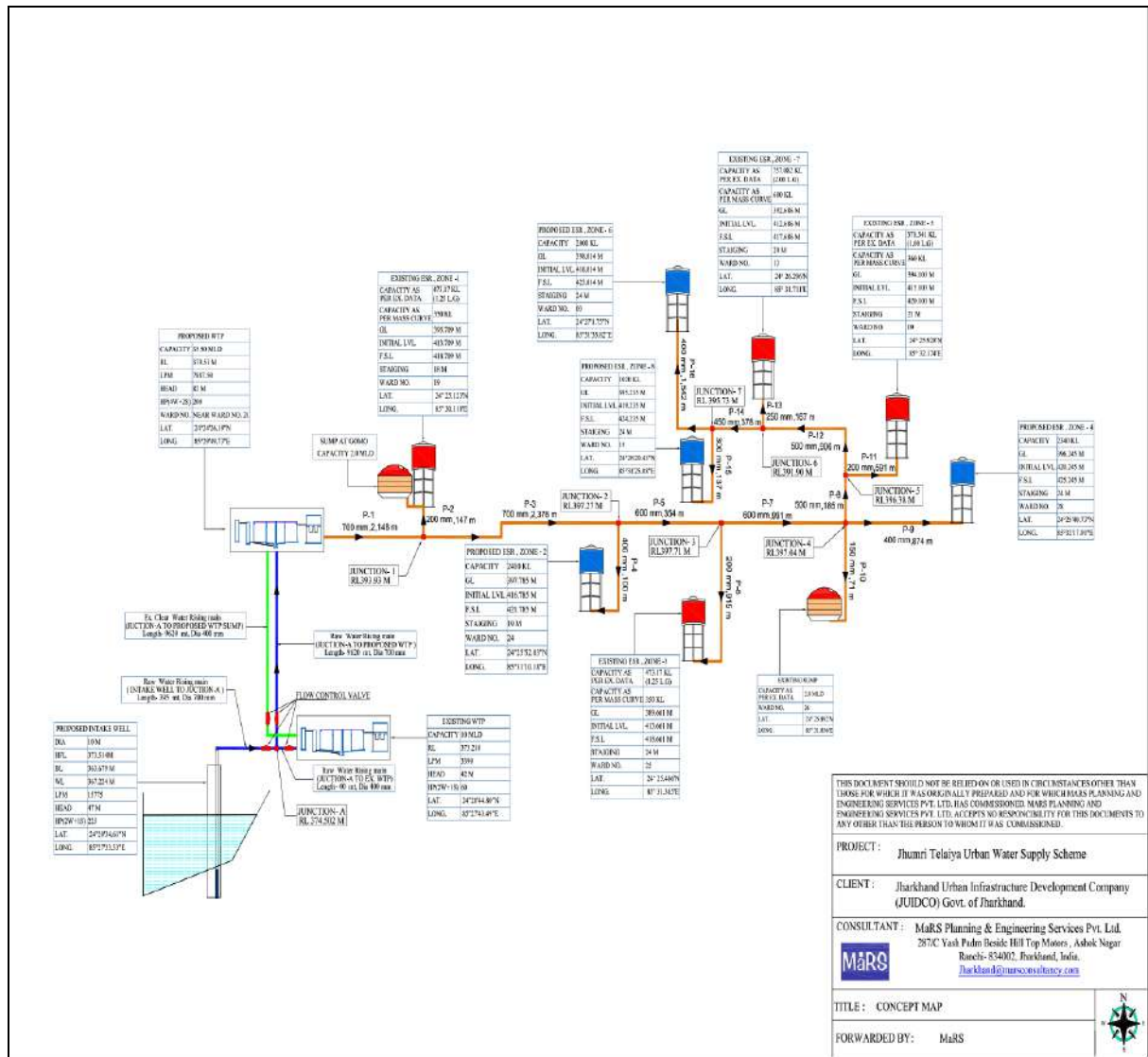
25. Water for the project will be sourced from Telaiya dam located on the Bara kar River near the existing intake of the water supply system. This location has been selected, as the water availability at this point is sufficient throughout the year. The existing water supply system lifts 10 MLD water and the new water supply project proposes to utilize additional 35.5 MLD of water from Telaiya Dam. The project proposes to establish a proper water supply system in Jhumri Telaiya town. The components of the proposed water supply project are described below.

D. Project Components

26. The main components of the project are: (i) intake well 10 m dia and 50.06 MLD; (ii) 35.5 MLD proposed WTP at Mahto Ahara village, Gumo and augmentation/rehabilitation of 10 MLD existing WTP at Telaiya reservoir; (iii) 04 proposed ESRs: (a) 2410 KL, (b) 1990 KL, (c) 2000 KL, (d) 1020 KL, and 04 existing ESRs: (a) 473 KL, (b) 757 KL, (c) 378 KL, (d) 473 KL to be used; (iv) reuse of 02 existing sump of 02 MLD each (use for institutional demand/firefighting); (v) raw water rising mains of 700 mm dia having 10.015 km length and 400 mm dia having 40.0 m length; (vi) clear water rising mains having pipe ranges from 150 mm dia to 700 mm dia of 11.90 km in length; (vii) distribution network pipe ranges from 100 mm dia to 600 mm dia of 197.328 km in length; and (viii) 25,043 household connections with water meter.

27. The schematic flow diagram of proposed scheme is shown in **Error! Reference source not found.2** below.

Figure 2: Schematic Diagram of Proposed Scheme



Source: DPR by Design Consultant

1. Intake Arrangement

28. The intake arrangement is proposed to be located on the right bank of the Telaiya Dam adjacent to the newly constructed intake for Chandawara town. Telaiya dam is proposed as a water source for Jhumri Telaiya City. The dam is owned by Damodar Valley Corporation (DVC), an autonomous body under GOI. The raw water from the proposed intake well will get treated in two WTPs, the existing WTP of 10 MLD capacity, located near the reservoir and the proposed WTP of 35.5 MLD capacity to be constructed at Mahto Ahara village, Gumo in ward number 20.

29. The intake well is designed for the ultimate year having internal diameter of 10 m and design volume of 50.06 MLD. It will consist of a) intake well, b) connecting pipe, and c) jack well cum over pump house. The proposed intake arrangement is detailed below:

- (i) **Intake Well:** One 8 m dia intake well has been proposed to be constructed in submergence of Telaiya Dam.

- (ii) **Connecting Pipes:** The raw water has been proposed to be pumped towards proposed jack well with connecting pipe of 700mm DI K9 having length of 60m.
- (iii) **Jack Well and Pump House:** The 8.0 m dia jack well has been proposed to be constructed near right side of Telaiya Dam. The pump house is proposed to house raw water pumps.

2. Raw Water Pumping Machinery

30. Raw water pumping machinery is proposed to be installed in the pump house above the jack well. As per the DPR shared by the design consultant, raw water pumping machinery is proposed to consist of two 800 HP (four working and two standby) horizontal centrifugal pumps, with discharging capacity 4,73,280 LPH and operating on 82m head. Electrical transformers are proposed to be located near the jack well.

3. Raw Water Rising Mains

31. Raw water rising mains has been proposed from intake well to existing WTP (10 MLD), which is approximately 500 m in length and from existing WTP to proposed WTP (35.5 MLD), which is approximately 10 km away from the proposed source. The raw water rising mains consist of DI-K9 700 mm dia and 400 mm dia pipes. The total length of the raw water rising mains is 10.055 km.

4.1. Construction of 35.5 MLD Water Treatment Plant

32. A conventional WTP of 35.5 MLD capacity is proposed to be constructed at Mahto Ahara, Gumo, ward number 20 which is about 9.6km from intake well at Telaiya dam. The WTP has been designed for the ultimate year as per CPHEEO Guidelines, Ministry of Housing and Urban Affairs, GOI. The details of the WTP component are given below in Table 4.

Table 4: Component Details of the WTP (35.5 MLD)

Sl. no.	Component	Dimensions	Qty.
1	Cascade Aerator	5.5m dia	1
2	Parshal Flume Channel	10.0m (L) X 1.5m (W) X 400mm (LD)+ 0.6m FB	1
3	Flash Mixer	3.0m (L) x 3.0m (w) x 2.8m (LD) + 0.4m FB	1
4	Filter house: Each Cell (2 Nos Cell at Filter Bed)	4.1m (w) x 9.15m(L)	4
5	OHT of Backwash Water	25.88m (L) x 13.5m (W) x 2.0m (SWD) + 300mm FB	1
6	Annex Building	21.2m (L) x 8.0m (w) x 8.0m H	1
7	Pump & Blower Room	14.3m (L) x 8.0m (w) x 4.0m H	1
8	Clear Water Sump for backwash (UG)	8.0 m (L)x 2.5m (W) x 3m LD	1
9	Chlorinator Room & Pump	6.65m x 5.35m x 4.0m ht.	1
10	PLC room (1st Floor)	8.00m (L) x 5.5m (W) x 3.50m H	1
11	Electrical room (1st Floor)	8.55m (L) x 5.35m (W) x 3.50m H	1
12	Office (1st Floor)	4.9m (L) x 5.35m (W) x 3.50m H	1
13	Toilet (1st Floor)	4.0m (L) x 1.5m (W) x 3.50m H	1
14	Clear Water Channel	8.0m (L) x 1.2m (W) x 0.35m (SWD) + 300mm FB	1
15	Clear Water Reservoir	29.3m (L) x 14.65m (W) x 3.5m (SWD) + 300mm FB	1
16	Clear Water Pump House	15.0m (L) x 7.0m (W) x 5.5m H	1
17	Loading Unloading Area	4.0m (L) x 7.0m (W) x 5.5m H	1
18	Main Electrical Room	10.0m (L) x 7.0m (W) x 3.6m H	1
19	Chemical House	14.0m (L) x 10.50m (W)	1

Sl. no.	Component	Dimensions	Qty.
20	Chemical Storage Area	150m SQM (Ground Floor)	1
21	Chemical Tank Area	14.5m (L) x 6.05m (W) x 5.0m (H) 1st Floor	1
22	LAB Room	10.00m x 12.0m x 3.5m 1st Floor	1
23	Electrical panel Room	4.0m x 10.0m x 4.0m (H) Ground Floor	1
24	Dirty Backwash Water Sump	12.65m dia x 2.7m LD+1.0m FB	1
25	Dirty Backwash Water Pump Shed	8.94m dia x 3.50m x 4.0m	1
26	Transformer Yard	11.0m x 6.0 m	1
27	Sludge Settling Tank	50.40m x 21.80 m	1
28	Sludge Drying Bed	21.8m x 13.0 m	1
29	Storm Water Drain (RCC)	600x900 mm	1

Source: DPR by Design Consultant

4.2. Augmentation/Rehabilitation of 10 MLD Existing WTP at Telaiya Reservoir

33. During the design and planning process, the existing WTP was thoroughly inspected and audited to assess the environment, safety, and structural integrity of the treatment plant. The audit was conducted by the DPR/PMC consultant.³ The existing civil structure of the WTP will be repaired and rehabilitated. The findings of the audit are as follows:

- (i) Dampness on the wall and damage roof are observed.
- (ii) Roof is leaking in several locations and steel bars are corroded and exposed.
- (iii) System installed for chlorine gas is not working, pump, pressure meter and electrical panels are not in working conditions.
- (iv) Presently generated sludge is disposed in the WTP premises.
- (v) Rubber mats are not present near the electrical panel.
- (vi) There are no safety signages available.
- (vii) Two pumps are not working of 30 HP
- (viii) In some areas of WTP walls are cracked.
- (ix) Workers are not wearing personal protective aids.
- (x) WTP is operated by contract and regular staff, no children are engaged.
- (xi) Illumination inside the WTP is not proper.

5. Sedimentation Tank

34. Reinforcement Cement Concrete (RCC) sedimentation tanks have been proposed so that the suspended particles can settle out by gravity and collect on the tank bottom.

35. The design details of sludge settling tank has been provided in Table 5.

Table 5: Design of Sludge Settling Tank for Jhumri Telaiya Water Supply Scheme

1	Total Water Requirement in MLD at Mid-Year	30.283
2	Qty. of sludge will be 5% of total Demand in MLD.	1.51
3	Qty. of sludge will be 5% of total Demand in Cum/Day	1,514
4	Assume Depth of Sludge in Tank (in M)	4.50
5	Hence Surface Area (in m ²)	336.44
6	Assume Width of Sludge in Tank (in M)	20
7	Length of Sludge Tank (in M) (for One Day)	16.82

³ DPR consultant/Project Management Consultant appointed by JUIDCO for planning and supervision of the project.

8	Total Clear Length (in M)	120
9	Proposed Capacity of Tank for Days	7.13
10	Say in Days	8
11	Assume Quantity of Flock (10% of Sludge Quantity)	10%
12	Quantity of Sludge in One Day (Cum)	151.40
13	Tank Volume available for Flock	8,640
14	Cleaning Interval (in Days)	57.07
15	Say in Month	1.90

Source: DPR by Design Consultant

6. Sump and Pump House

36. The treated water from WTP is proposed to be stored in sump and pump house near the proposed WTP. The capacity of the pump house is proposed to be 2.0 million liters.

7. Treatment of Waste/ Backwash Water of WTP

37. The proposed system uses sludge collection sumps for collecting sludge from clarifiers and under drain backwash water tanks for collecting sludge from filtration units. The backwash water will be recycled to the flash mixer and the process will be continued. All the collected sludge from WTP, will be transported to the sludge drying bed, after the drying of the sludge naturally, the dewatered sludge from the bed will be disposed into the landfill site. Presently, municipal solid waste of Jhumri Telaiya is disposed in a landfill site in Telaiya region, which is around 3km from the proposed WTP site. A new municipal solid waste management facility at Chandrodiha village is under construction in the supervision of Jhumri Telaiya Municipal Council. The said land is under possession of Jhumri Telaiya Municipal Council.

8. Clear Water Transmission Main

38. The clear water rising mains has been proposed from WTP to ESRs, which is approximately 11.9km in length. The clear water rising mains consist of DI-K9 and pipe, diameter varying from 700 mm to 150 mm. Details of the clear water rising mains is given below in Table 6.

Table 6: Details of Clear Water Rising Mains

Pipe Dia	Length of pipe (in meter)	Pipe Material
150	71.0	DI- K9
200	1,653	
250	167	
300	137	
400	2,516	
450	378	
500	1,091	
600	1,345	
700	4,541	
Total	11,899 meters (approx. 11.9 km)	

Source: DPR by Design Consultant

9. Elevated Storage Reservoirs

39. Four ESRs are proposed for the project. Each ESR have variable capacity and staging (i) 2410 KL-24 m staging, (ii) 2340 KL- 24 m staging, (iii) 2000 KL- 25 m staging, and (iv) 1020 KL- 25 m staging. The proposed locations of each ESRs are: ward numbers 24, 28, 3 and 15 respectively, which will cater different zones containing different wards. About 0.23 acres of land is proposed for each ESRs and the land is under the ownership of Revenue and Land Reforms, GOJ.

- (i) **ESR Number-2 in Public Works Department Office Campus (ward number 24):** The ESR will feed water to Zone-2. The capacity of this ESR has been proposed to be 2410 KL. Approximately 0.23 acres of land is required for construction of this ESR.
- (ii) **ESR Number-4 at Moriyama (ward number 28):** This proposed ESR will have a capacity of 2340 KL. Approximately 0.23 Acres of land is required for construction of this ESR. This ESR will supply water to Zone -4.
- (iii) **ESR Number-6 near Telaiya Basti, Paswan Tola (ward number 3):** This proposed ESR will have a capacity of 2000 KL. This ESR will supply water to Zone -6. Approximately 0.23 acres of land is required for construction of this ESR.
- (iv) **ESR Number-8 near Bazaar Samiti (ward number 15):** Proposed ESR will have capacity of 1020 KL and it will supply water to the Zone 8.

Table 7: Location wise Proposed Elevated Service Reservoirs with Assessed Capacities

Sl. No.	ESR Zone	ESR Number	Location/ward	Capacity (KL)	Staging (in m)	G.L (in m)	Coordinates
1	Zone 2	ESR 2	PWD Campus Ward No.24	2410	19	397.785	24°25'52.03"N, 85°31'10.18"E
2	Zone 4	ESR 4	Moriyama Ward No.28	2340	24	396.245	24°25'40.73"N, 85°32'17.91"E
3	Zone 6	ESR 6	Telaiya Basti, Paswantola Ward No.3	2000	24	398.014	24°27'1.75"N, 85°31'35.82"E
4	Zone 8	ESR 8	Near Bazar Samiti Campus Ward No.15	1020	24	395.235	24°26'20.43"N, 85°31'25.08"E

Source: DPR by Design Consultant

10. Distribution Network

40. Jhumri Telaiya Municipal Council area has been divided into eight zones based on topography for water distribution purpose. The diameters for DI pipes to be laid for this project have been proposed to vary from 100 mm to 600 mm dia. The details of both existing (64,123 m) and proposed (197,328 m) distribution network is provided below in Table 8.

Table 8: Details of Zone Wise Distribution System

Distribution System
DI - K7
Zone-1

S. No.	Dia of pipe (in mm)	Proposed Length of Pipe (in m)	Existing Length of Pipe (in m)	Total Length of Pipe (Existing +Proposed in m)
1	100	22,634	3,808	26,442
2	150	2,179	1,056	3,235
3	200	2,266	644	2,910
4	250	1,468	-	1,468
5	300	418	628	1,046
6	350	2,465	-	2,465
7	400	-	-	-
8	450	-	-	-
9	500	-	-	-
10	600	-	-	-
11	700	-	-	-
Total Length (in M)		31,430	6,136	37,566
Zone-2				
S. No.	Dia of pipe (in mm)	Proposed Length of Pipe (in m)	Existing Length of Pipe (in m)	Total Length of Pipe (Existing +Proposed)
1	100	22,422	10,767	33,189
2	150	4,235	2,344	6,579
3	200	2,348	-	2,348
4	250	1,352	585	1,937
5	300	1,661	418	2,079
6	350	1,088	-	1,088
7	400	247	-	247
8	450	-	-	-
9	500	-	-	-
10	600	8	-	8
11	700	-	-	-
Total Length (in M)		33,361	14,114	47,475
Zone-3				
S. No.	Dia of pipe (in mm)	Proposed Length of Pipe (in m)	Existing Length of Pipe (in m)	Total Length of Pipe (Existing +Proposed)
1	100	9,302	2,556	11,858
2	150	242	-	242
3	200	11	128	139
4	250	-	1,091	1,091
5	300	-	-	-
6	350	-	-	-
7	400	12	50	62
S. No.	Dia of pipe (in mm)	Proposed Length of Pipe (in m)	Existing Length of Pipe (in m)	Total Length of Pipe (Existing +Proposed)
8	450	-	-	-
9	500	-	-	-
10	600	-	-	-
11	700	-	-	-
Total Length (in M)		9,567	3,825	13,392
Zone-4				

S. No.	Dia of pipe (in mm)	Proposed Length of Pipe (in m)	Existing Length of Pipe (in m)	Total Length of Pipe (Existing +Proposed)
1	100	53,058	14,619	67,677
2	150	8,954	4,256	13,210
3	200	3,161	2,329	5,490
4	250	1,258	104	1,362
5	300	2,171	51	2,222
6	350	-	-	-
7	400	931	-	931
8	450	-	-	-
9	500	3	-	3
10	600	-	-	-
11	700	-	-	-
Total Length (in M)		69,536	21,359	90,895
Zone-5				
S. No.	Dia of pipe (in mm)	Proposed Length of Pipe (in m)	Existing Length of Pipe (in m)	Total Length of Pipe (Existing +Proposed)
1	100	1,919	2,151	4,070
2	150	201	109	310
3	200	370	913	1,283
4	250	-	361	361
5	300	98	-	98
6	350	-	-	-
7	400	-	-	-
8	450	-	-	-
9	500	-	-	-
10	600	-	-	-
11	700	-	-	-
Total Length (in M)		2,588	3,534	6,122
Zone-6				
S. No.	Dia of pipe (in mm)	Proposed Length of Pipe (in m)	Existing Length of Pipe (in m)	Total Length of Pipe (Existing +Proposed)
1	100	19,330	7,248	26,578
2	150	5,799	1,349	7,148
3	200	6,165	781	6,946
4	250	2,365	712	3,077
5	300	2,152	-	2,152
6	350	139	-	139
7	400	904	-	904
8	450	-	-	-
9	500	3	-	3
S. No.	Dia of pipe (in mm)	Proposed Length of Pipe (in m)	Existing Length of Pipe (in m)	Total Length of Pipe (Existing +Proposed in m)
10	600	-	-	-
11	700	-	-	-
Total Length (in M)		36,857	10,090	46,947
Zone-7				
S. No.	Dia of pipe (in mm)	Proposed Length of Pipe (in m)	Existing Length of Pipe (in m)	Total Length of Pipe (Existing +Proposed)

1	100	5,958	713	6,671
2	150	904	531	1,435
3	200	371	304	675
4	250	696	1,119	1,815
5	300	-	337	337
6	350	2	-	2
7	400	-	53	53
8	450	-	-	-
9	500	-	-	-
10	600	-	-	-
11	700	-	-	-
Total Length (in M)		7,931	3,057	10,988
Zone-8				
S. No.	Dia of pipe (in mm)	Proposed Length of Pipe (in m)	Existing Length of Pipe (in m)	Total Length of Pipe (Existing +Proposed)
1	100	3,040	1,194	4,234
2	150	1,435	-	1,435
3	200	1,128	-	1,128
4	250	42	-	42
5	300	411	814	1,225
6	350	2	-	2
7	400	-	-	-
8	450	-	-	-
9	500	-	-	-
10	600	-	-	-
11	700	-	-	-
Total Length (in M)		6,058	2,008	8,066
Total Length (in M)				
S. No.	Dia of pipe (in mm)	Proposed Length of Pipe (in m)	Existing Length of Pipe (in m)	Total Length of Pipe (Existing +Proposed)
1	100	1,37,663	43,056	1,80,719
2	150	23,949	9,645	33,594
3	200	15,820	5,099	20,919
4	250	7,181	3,972	11,153
5	300	6,911	2,248	9,159
6	350	3,696	-	3,696
7	400	2,094	103	2,197
8	450	-	-	-
9	500	6	-	6
10	600	8	-	8
11	700	-	-	-
Total Length (in M)		1,97,328	64,123	2,61,451

Source: DPR by Design Consultant

Table 9: Total Length of Proposed Distribution Network

Sl. No.	Diameter (mm)	Length (m)	Material
1	100	1,37,663	DI-K-7
2	150	23,949	DI-K-7
3	200	15,820	DI-K-7
4	250	7,181	DI-K-7
5	300	6,911	DI-K-7

6	350	3,696	DI-K-7
7	400	2,094	DI-K-7
7	500	6	DI-K-7
8	600	8	DI-K-7
Total		197,328	DI-K-7

Source: DPR by Design Consultant

41. The proposed project will meet the water demand of the town through the intermediate year 2034 and design year 2049. The Table 10 below describes the net demand of the town through the design year.

Table 10: Projected Zone-Wise Demand of Water in Jhumri Telaiya

Sl. No.	Zone Number	Year	Net Demand (MLD)	Year	Total Demand (MLD)
1	1	2022	0.837	2022	22.729
		2037	1.116		
		2052	1.476		
2	2	2022	5.770		
		2037	7.699		
		2052	10.183		
3	3	2022	0.819		
		2037	1.093		
		2052	1.446		
4	4	2022	5.607	2037	30.323
		2037	7.480		
		2052	9.891		
5	5	2022	0.841		
		2037	1.123		
		2052	1.485		
6	6	2022	4.783		
		2037	6.380		
		2052	8.436		
7	7	2022	1.626	2052	40.10
		2037	2.169		
		2052	2.868		
8	8	2022	2.446		
		2037	3.263		
		2052	4.315		

Source: DPR by Design Consultant

Note: 50% of Ward No. 3 is included in Zone-1 and remaining 50% in Zone- 4.

11. Metered House Connections

42. A total of 25,043 numbers of house connections with water meters for all zones have been proposed under the project.

III. FIELD WORK AND PUBLIC CONSULTATION

A. Outline of Field Work

43. In August 2019 and June-October 2020, field inspections were carried out at project site locations for the water supply project that includes the locations of the intake point, WTP, four elevated storage reservoirs and along the raw water mains, clear water transmission mains and clear water distribution network. Inspections were carried out along the stretch of the transmission mains and distribution network, especially the market areas and other locations under the project area. The entire land requirement for construction of the intake arrangements, WTP, ESRs will be on government lands and laying of the raw water mains, clear water transmission mains and clear water distribution network will be within the right of way (ROW) of National Highway Authority, Indian Railway Authority, Local Panchayat, PWD and Nagar Parishad. Field visits were undertaken to all the existing water supply components locations under Zones 1 to 8.

B. Public Consultations

44. Consultations were conducted with key stakeholders and community people in line with the ADB's requirements pertaining to environmental and social considerations. These consultations helped in identifying the felt needs and apprehensions of the communities related to the project and their priorities. Consultations were held with community people and the Municipal Council Officials regarding the project components, its location, and distribution of the water supply zones. Representatives of JUIDCO mentioned that the construction work will be undertaken in such a way that there will be no harm caused to any person for construction of the ESRs, WTP and for laying of water supply pipeline from which whole of the Jhumri Telaiya will get the clean drinking water.

45. Public consultation meetings were held at various locations and two other meetings were held at Municipal Council office. Table 11 provides details of locations where the consultations were conducted, and the number of participants present during the consultation process. All the consultations were carried out in the presence of JUIDCO engineers who also played an effective role in the process by addressing the queries related to technical aspects of the project.

Table 11: Public Consultations in Jhumri Telaiya

Sl. No.	Date	Location	Total No. of Participants	No. of Female Participants	% of Female Participants	Consultation Method
1	24 June 2020	Moriyama	11	3	27.27	Group discussion
2		Bajrang chowk	14	5	35.71	Group discussion
3		Bela tand	20	4	20.00	Group discussion
4		Durga mandap	6	0	0.00	Group discussion
5		Gomoh	7	0	0.00	Group discussion

Sl. No.	Date	Location	Total No. of Participants	No. of Female Participants	% of Female Participants	Consultation Method
6	25 June 2020	Ramnagar	8	0	0.00	Group discussion
7	26 June 2020	Mahatama Gandhi Nagar	6	0	0.00	Group discussion
8		AD Bunglow Colony	4	0	0.00	Group discussion
9	27 June 2020	Pandey Colony	8	1	12.5	Group discussion
10	01 July 2020	AD Bunglow Colony	11	2	18.18	Group discussion
11		Telaiya	10	0	0.00	Group discussion
12		Telaiya Basti	15	4	26.66	Group discussion
13	02 July 2020	Telaiya Chowk	7	1	14.28	Group discussion
14		Kalimanda	8	1	12.5	Group discussion
15	04 July 2020	Avdar Mohalla	9	2	22.22	Group discussion
16		Indarwa Basti	9	7	77.77	Group discussion
17	31 July 2020	Telaiya	14	6	42.85	Group discussion
18	13 October 2020	Urwan village	8	0	21.55	Group discussion
19	13 October 2020	Near Bazar Samiti	10	0		Group discussion
20	20 October 2020	Jhumri Telaiya	10	0		Group Discussion
Total			195	36	18.46	

46. The consultations primarily highlighted the proposed developmental interventions, perceived impacts and mitigation measures and public participation during implementation. Community people largely spoke about the insufficient or no availability of potable water for drinking and domestic use, except for selected municipal wards. The participants enquired about when the water works will start and when the project will be completed. Treated water connection will facilitate the community. Presently the community people draw potable water through bore wells installed at their homes.

47. Affordability of water user charge has been a pertinent question raised both by the local representatives and the community members. However, almost all agreed to pay the water user

charges if they get the facility of household water connections. They agreed that it will help in reducing time taken for water collection as well as health expenditures. The local elected representatives expressed concern regarding the adequacy/sufficiency in each water supply zone, it was clarified by JUIDCO personnel present during the consultation that as per the command zone/area it covers all parts of the water supply zones. On-time completion of the project was another concern of the community members and the Nagar Parishad Officials. Creating job opportunities was the other question of the community members – it was mentioned that the existing JUIDCO workers will be given first preference, further if there is any requirement, and then workers from the local community can be employed during the construction phase. The summary of public consultation is provided in Appendix 4.

48. Focused consultations were conducted with the villagers adjacent to the proposed intake location to assess the impact on fishing activities undertaken by them. The fishermen said that the new intake arrangement will not impact their fishing activities.⁴

Figure 3: Fishing Activities in Telaiya Reservoir



⁴ Fishing activity is carried out in the Tiliaya reservoir in the form of improvised cage fishing (part of the reservoir is bounded by fishing nets where aquaculture is practised). The said area is about 1200 to 1500 m away from the intake point. The reservoir is spread over an area of 7500 ha, intake for Chandwara and Koderma town is already in operation. Construction of an additional intake well near the bank of the reservoir covering is not anticipated to impact fishing activities as the experience with the existing intake wells indicates.

IV. LAND AVAILABILITY AND RESETTLEMENT IMPACTS

49. The scope of land acquisition and involuntary resettlement impacts has been identified based on the field visits to all the project component locations. Field visits were undertaken to intake point at Telaiya Dam on the Bara kar river, WTP and sedimentation sump location, each of the ESR locations and the entire stretch of the transmission and distribution pipeline alignment as proposed in the project area of Jhumri Telaiya town. No compulsory land acquisition or procurement of land through negotiated purchase of private land is anticipated, as all the construction of water works is proposed within the government lands only. The entire civil works under the project for the transmission mains and distribution network is proposed within the ROW of government roads owned by National Highway Authority, Indian Railway Authority, Local Panchayat, PWD and Nagar Parishad. Details of all land parcels for construction of proposed components are provided in Appendix 1.

50. The entire civil works under the project for the transmission mains and distribution network is proposed within the boundaries or ROW of government roads (mainly Municipal, PWD roads and National or State Highways). No impacts (temporary or permanent) to structures along the government ROW or temporary loss of income to shops/businesses are anticipated. However, the final involuntary resettlement impact will be reassessed and reconfirmed after finalization of detailed engineering design and finalization of exact pipe alignment through detailed measurement survey (DMS). The Google Earth Maps of all proposed components are provided in Appendix 2.

51. Presently there are no mobile vendors or hawkers identified along the proposed ROW. During DMS, if any, mobile vendors, hawkers as well as those with moveable structures is identified, then they will be assisted to shift to the opposite or nearby places within 30m of their original locations during the period of civil works for ensuring their uninterrupted business activities. After completion of the work, they will be further assisted by the contractors to shift back to their position.

52. Jhumri Telaiya has a total population of 87,867, of which 0.45% or 395 are scheduled tribe. The scheduled tribe are scattered across different wards, the families do not stay in cohesive tribal communities, are well assimilated with the mainstream society, and do not retain the defining characteristics of scheduled tribes including primitive traits, distinctive culture, shyness, geographical isolation and social and economic backwardness. Clearly, the project will have no adverse impact to the scheduled tribe population.

A. Intake Arrangement and Raw Water Pumping Machinery

53. The intake well proposed on the right bank of Telaiya dam at Urwan village is adjacent to the existing intake well, which is approximately 300 meters apart, new intake well for Chandawara town is also under construction which is approximately 170 meters from the proposed intake location. The existing intake well and Chandwara intake well have already had water allocation, while for Jhumri Telaiya water supply allocation is under process. As per the discussion with DVC officials, the reservoir has sufficient water availability to cater the water demand of Jhumri Telaiya Nagar Parishad. The catchment areas of Telaiya dam mostly comprise of villages, forested areas, wasteland, pastures and cultivated land in hilly terrains. Villages located in the downstream of the proposed intake well are Poraia, Konra, Barki Dhamrai, Kanti, Gurio, Goas, Shahpur, Chachro and Madhopur which will not be affected by the proposed water allocation. At present the total water allocated from the reservoir is 23.93 MGD, which is approximately around 0.105 MCM. After the withdrawal of the proposed water i.e., 40.50 MLD, surplus water will be left in the reservoir.

The existing settlements in the downstream of the river will not have any impact in their daily activity. Groundwater is used for the drinking purpose in the adjoining villages. The sanitation coverage of the villages near the reservoir is under Swachh Bharat Mission program and therefore open defecation is very low. For Jhumri Telaiya City septage management scheme is proposed under state fund.

54. JUIDCO has initiated an application letter to obtain No Objection Certificate (NOC) from Jhumri Telaiya Municipal Council and subsequently transfer of the identified land parcel to UDHD. Copy of the request letter is provided in Appendices 5 and 6. For construction purpose of intake arrangements and jack well 0.1 acre land parcel has been identified which is owned by Damodar Valley Corporation (DVC). The proposed land parcel has no encroachments and free of any encumbrances; it is a vacant plot and not in use. No involuntary resettlement impact is anticipated for the proposed construction work. JUWSIP with the support of JUIDCO shall obtain NOC for construction of the intake arrangements and jack well from DVC and the same shall be appended to the DDR. Table 12 below describes the land requirement for the proposed intake arrangements and jack well.

Table 12: Land Details of Intake Arrangement

Project Component	Location	Ownership	Area Req. (acres)/Dimension of the Land	Status of NOC	Involuntary Resettlement Impact
Intake Arrangement	Urwan Village	Damodar valley corporation	0.1	NOC is under process	Nil

Source: DPR by Design Consultant

B. Raw Water Transmission Main

55. Raw water rising main has been proposed from jack well to the proposed WTP (via 10 MLD existing WTP) at about 10.055 km from intake location. The raw water transmission mains pipeline will be laid within the limits of ROW of National Highway, PWD roads and Nagar Parishad roads. The diameter of the pipeline will be 700 mm, DI K-9 pipes of length of the transmission line will be 10.15 km and 400 mm dia of 40.0 m length. Details of laying of raw water transmission mains are summarized in Table 13. The diameter of the transmission mains pipeline is proposed to be 700 mm that will be laid on the ROW of the road with width ranging between 2.8 m to 50 m (Black Top). Walk-through along the transmission mains and field visit indicated that there are no road-side vendors or kiosks along the road where the raw water transmission mains are proposed to be laid. Therefore, no involuntary resettlement impacts are anticipated due to construction work. Impacts due to pipe laying activity will be assessed and reconfirmed during detailed engineering design and based on DMS.

Table 13: Raw Water Transmission Mains

Name of the Road	Name of Gram Panchayat	Width of Road (m) BT	Dia of pipe to be laid (mm)	Trench width for laying of Pipeline (m)	Ownership
Urwan Village Road	Urwan More	7	700	1.60	DWSD
Hazaribagh Patna Roadroad	NH	50	700	1.60	NH 33

Hazaribagh Patna Raod NH-33	Mayadih village Jhumri Telaiya Nagar Parishad	5	700	1.60	Nagar Parishad
Field Road	Jhumri Telaiya Nagar Parishad	5	700	1.60	Nagar Parishad

Source: Data received from Design Consultant, JUIDCO

C. Water Treatment Plant

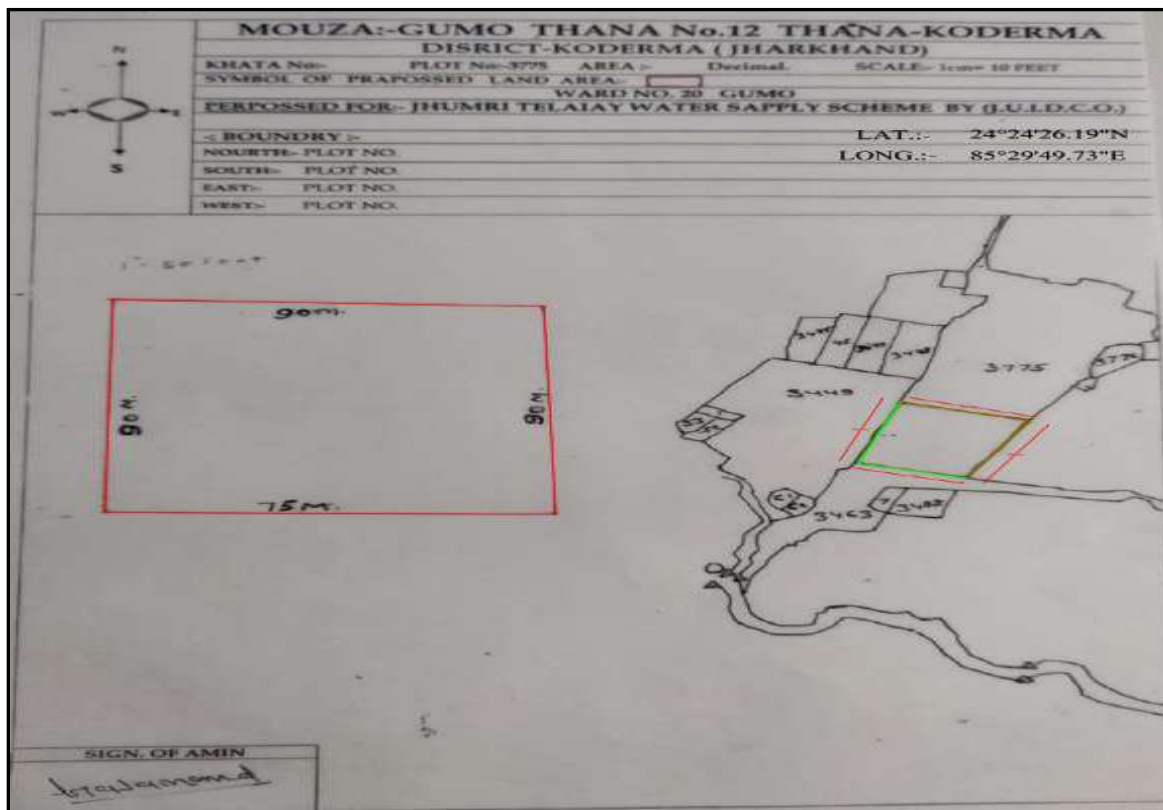
56. A conventional WTP of 35.5 MLD capacity is proposed to be constructed at Mahto Ahara, Gumo, ward number 20 which is about 10 km from intake well in Telaiya dam. The proposed land is unused, vacant, and free from any encumbrances. The land parcel is owned by the Department of Revenue, Registration and Land Reforms, GOJ. The nearby areas of the land are open and flat, in the north-western part of the land there are few settlements and in the eastern side there are vegetations such as trees and bushes, the approach road is kutcha. The distance between the NH 31 to the proposed land is approximately 2km. About 5.5 acres of land is proposed for WTP. The no objection letter for the proposed WTP land at Mahto Ahara has been obtained from Deputy Commissioner, District-Koderma and it is attached at Appendix 10. The WTP plot location on the revenue map is shown in Figure 4 and tentative layout of WTP is shown in Figure 5. The proposed construction work will not entail any involuntary resettlement impact. Table 14 below describes the land requirement for the proposed WTP.

Table 14: Land Details of Water Treatment Plant

Proje ct Comp onent	Locati on	Ownership	Thana No. (Police Station)	Plot No.	Khas ara No.	Khata No.	Area Req. (acres) /Dimen sion of the Land	Status of NOC	IR Impact
WTP	Mahto Ahara Gumo	Department of Revenue, Registratio n and Land Reforms, GOJ	12	3775	98/75	14/15	5.5	NOC has been received	Nil

Source: Data received from Design Consultant, JUIDCO

Figure 4: Water Treatment Plant Plot Location on Revenue Map at Mahto Ahara, Gumo (ward 20)



Source: Design Consultant, JUIDCO

Telaiya Basti, which is around 3km from the proposed WTP site. A new municipal solid waste management facility in Chandrodiha village is under construction under the supervision of Jhumri Telaiya Municipal Council. The approximate distance of new MSWM facility from proposed WTP site is 16 km. The proposed sites are under possession of Jhumri Telaiya Municipal authority. A No Objection Letter will be obtained from the competent authority for using the landfill sites for disposing the sludge from proposed WTP, as applicable. Involuntary resettlement impacts will be assessed, and the DDR will be updated with relevant information and certification obtained from JMC.

E. Elevated Storage Reservoirs

58. Under the water supply package of Jhumri Telaiya, four ESRs have been proposed to be constructed for distribution of clear water to the entire town. All the four land parcels identified for construction of the ESRs are government lands with no encroachments and are free of any encumbrances. The proposed land parcels are vacant and unused plots. Details of the land parcels are provided in the Table 15 below. For obtaining NOC and interdepartmental transfer of land parcels for the ESRs from Department Revenue, Registration and Land Reforms and PWD, UDHD has written a letter to the Deputy Commissioner, District Koderma; the letter is provided in Appendix 9. The NOC for 2 ESR land parcels located at Moriyama (Ward 28) and Telaiya Basti (Ward 03) have been received from Deputy Commissioner, District Koderma and appended in Appendix 10. NOC for rest of the ESRs will be updated in the resettlement plan. No involuntary resettlement impact is anticipated for construction of the ESRs. The ESR plot locations on the revenue map is shown in Figures 7, 8, 9 and 10. Table 15 describes the land details of the proposed ESRs and Table 16 provides details of the land area required for the construction of ESRs of varied capacities in the water supply zones.

Table 15: Land Details of the ESRs

Location (Ward No)	ESR Zone	Mouza / Thana	Khata No.	Plot No.	Plot Area (Acres)	Area required (Acres)	Ownership	IR Impact
PWD Campus (Ward 24)	Zone - 2	Gumo 12	5451	5751	0.23	0.222	Department Revenue, Registration and Land Reforms, District Koderma GOJ	Nil
Moriyama (Ward 28)	Zone - 4	Moriywan 02	1256	1256	0.23	0.222		
Paswan Tola Telaiya basti	Zone - 6	Telaiya 244	165	1165	0.23	0.222		
Bazar Samiti (Ward 15)	Zone - 8	Telaiya 245	5450	5448, 5449, 5450, 5451	0.23	0.222		

Source: Data received from Design Consultant.

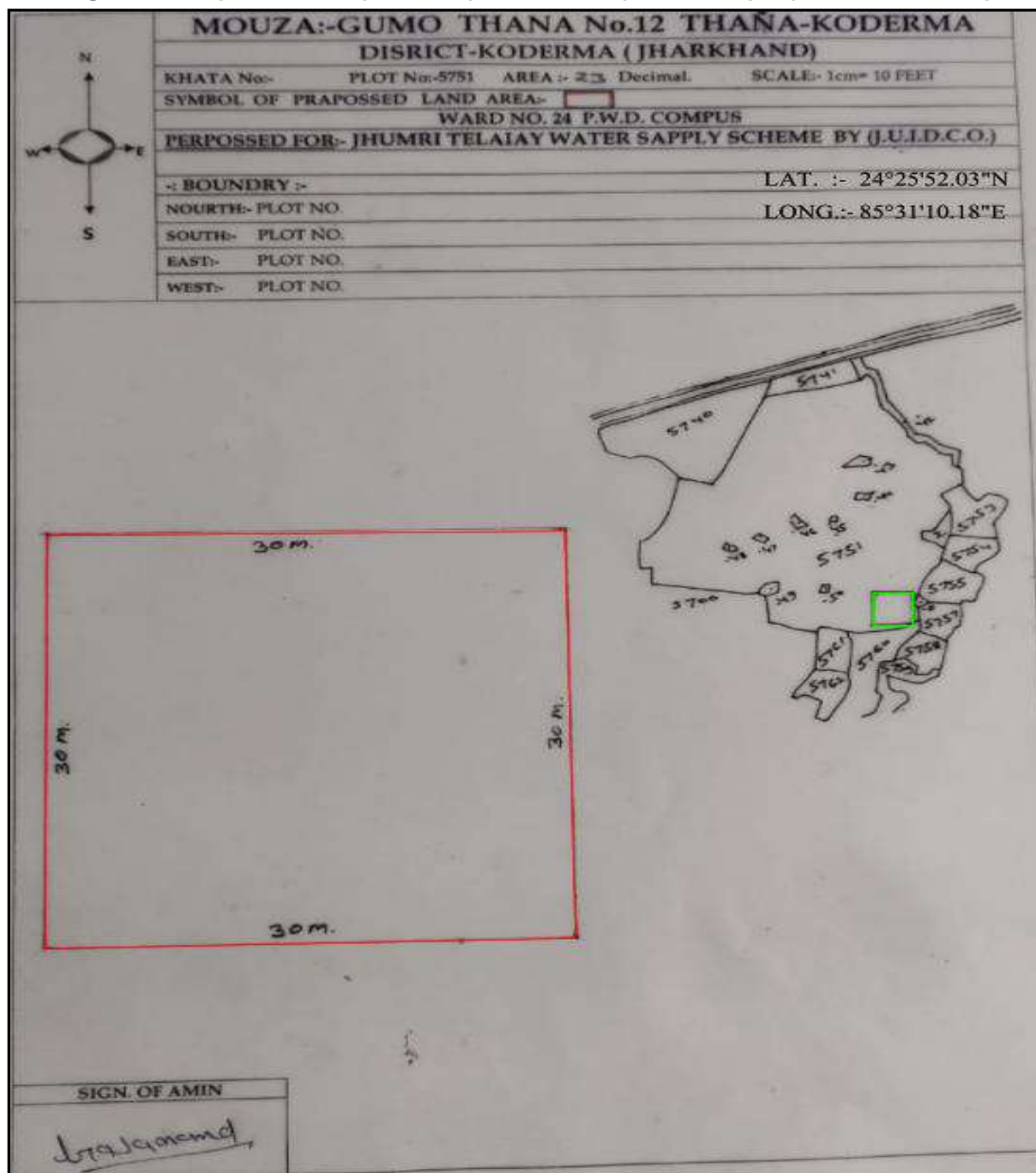
Table 16: Land Area Required for Construction of Each ESR

Sl. No.	ESR ZONE	ESR Capacity (in kiloliters)	Foundation Area in m ²
1	Zone - 2	2410	30*30
2	Zone - 4	2340	30*30
3	Zone - 6	2000	30*30

Sl. No.	ESR ZONE	ESR Capacity (in kiloliters)	Foundation Area in m ²
4	Zone – 8	1020	30*30

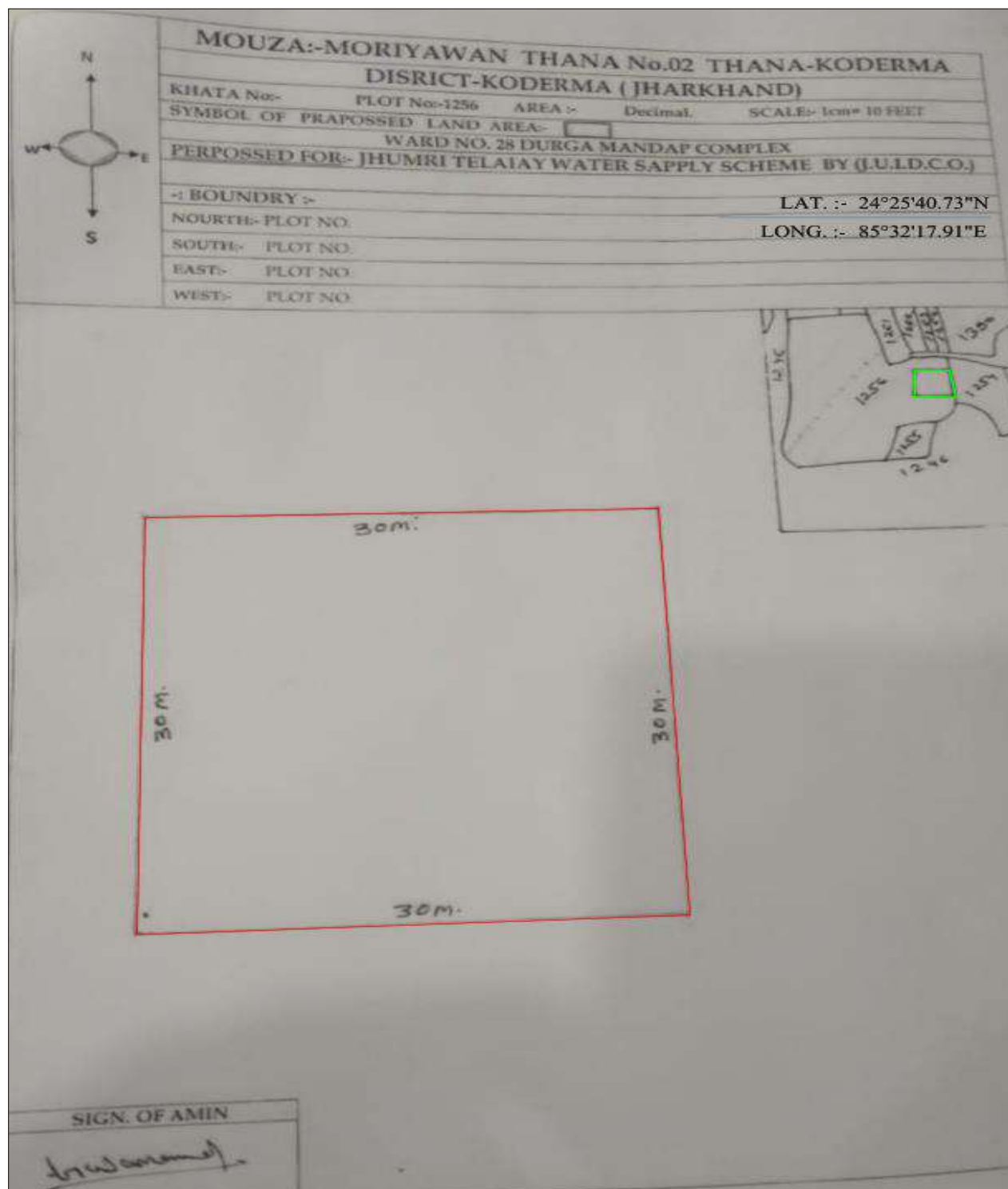
Source: Data received from Design Consultant.

Figure 6: Proposed ESR (Zone – 2) at Ward 24 (PWD Campus) in Revenue Map



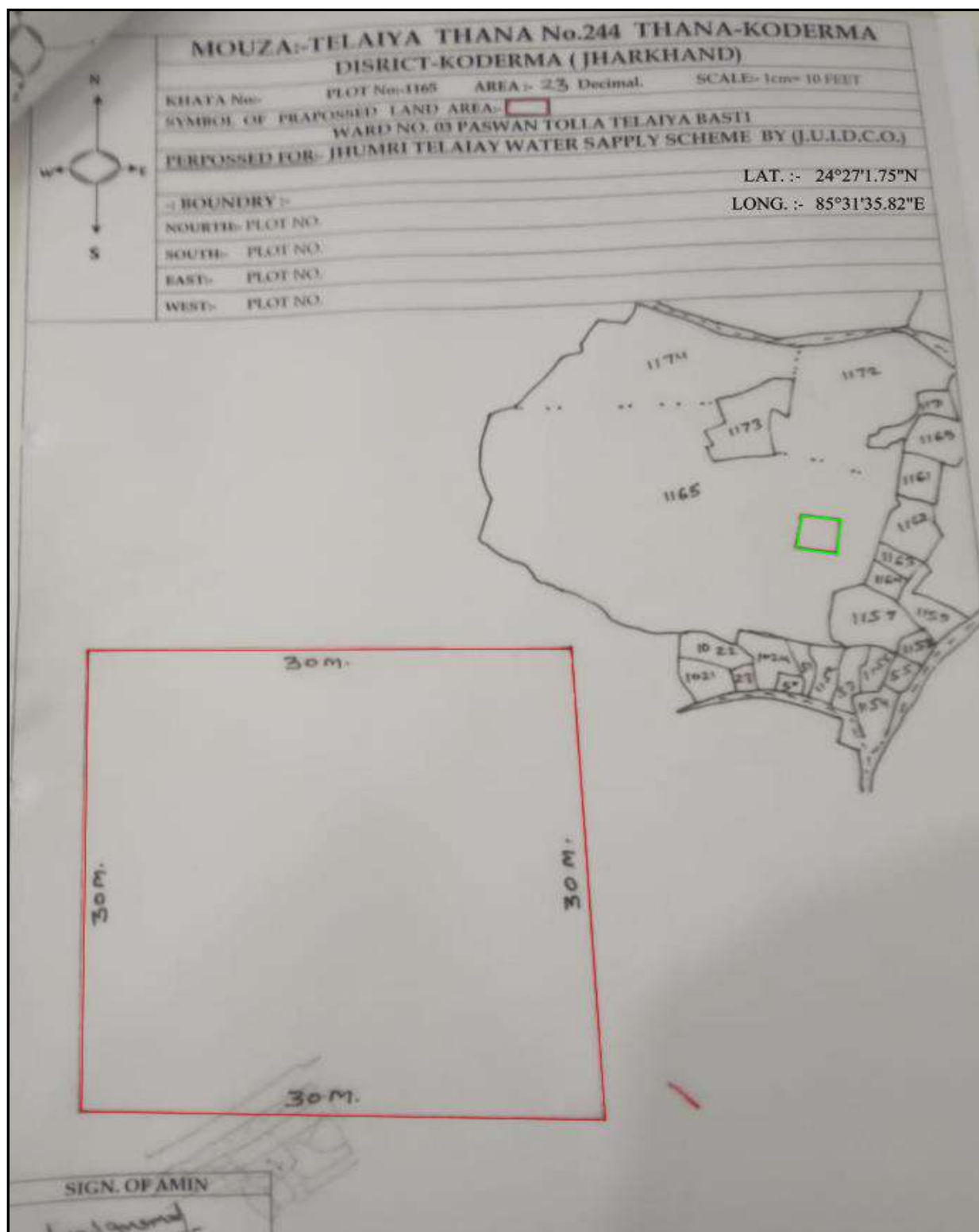
Source: DPR Consultant

Figure 7: Proposed ESR (Zone – 4) at Ward 28 , Moriyama (Durga Mandir Complex) in Revenue Map



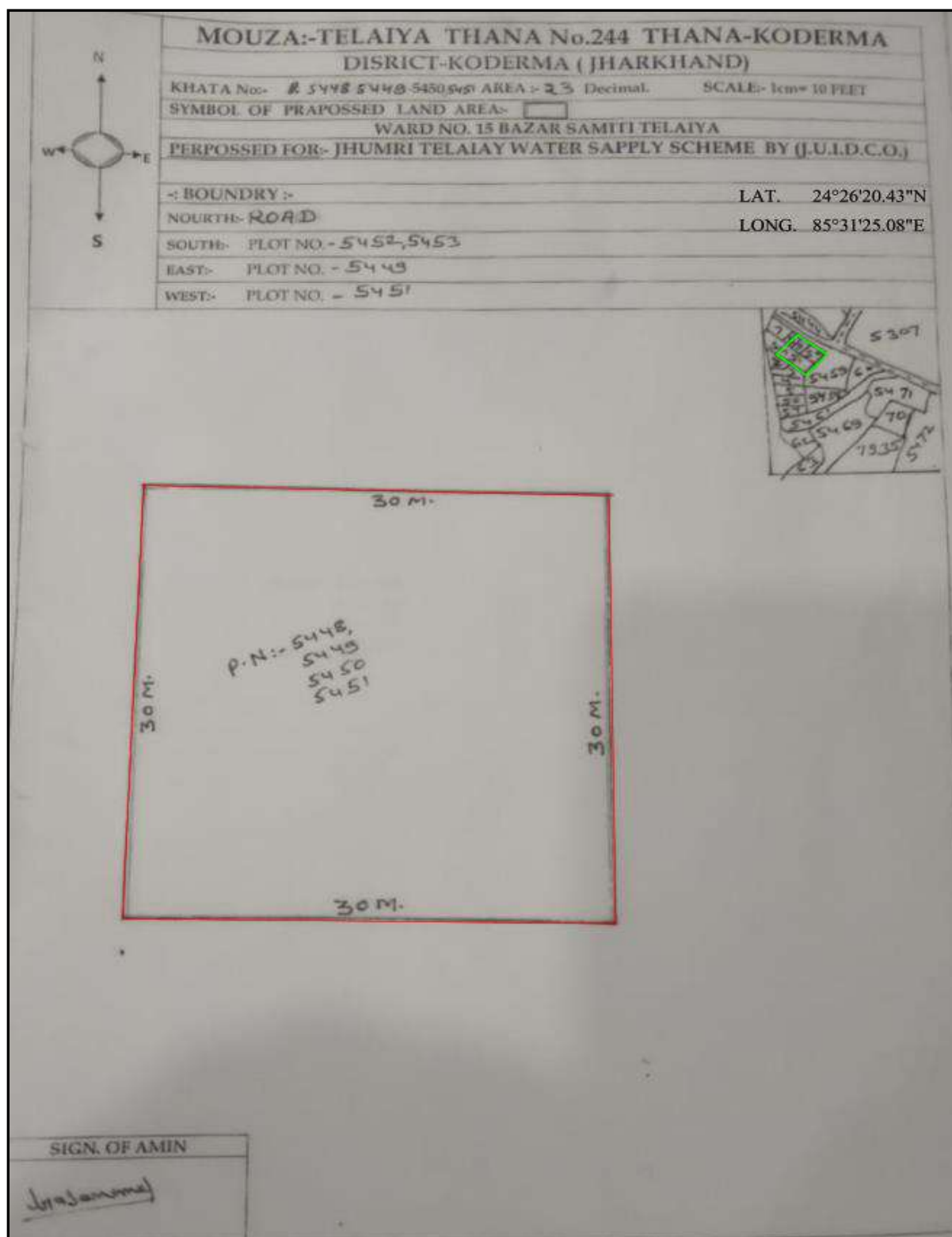
Source: DPR Consultant

Figure 8: Proposed ESR (Zone – 6) at Ward 03 (Paswan Tolla -Telaiya Basti) in Revenue Map



Source: DPR Consultant

Figure 9: Proposed ESR (Zone – 8) at Ward 15 (Near Bazar Samiti) in Revenue Map



Source: DPR Consultant

F. Clear Water Transmission Mains

59. Clear water from the WTP is proposed to be transferred to four proposed and four existing ESRs through 11.90 km clear water transmission mains. The clear water transmission mains will be laid within the ROW of National Highway, PWD Roads (Public Works Department, GoJ) and Nagar Parishad Roads.

60. Walk-through along the transmission mains and field visit indicated that beyond the black top, the shoulder of the road is quite wide, and the shops are beyond the shoulder of the road. There are no road-side vendors or kiosks along the road where the transmission mains are proposed to be laid. Impacts due to pipelaying activity will be assessed and reconfirmed during detailed engineering design and based on DMS. JUWSIP needs to obtain NOC of the concerned Department of National Highway, Public Works Department (PWD) Division for undertaking construction work on PWD roads, and self-certification by Jhumri Telaiya Nagar Parishad on the use of Nagar Parishad roads. No involuntary resettlement impact is anticipated due to laying of pipelines of clear water transmission mains.

G. Distribution Network

61. The distribution pipelines for supplying clear water from both the existing and proposed ESRs will be laid along the ROW of Nagar Parishad roads. Total length of 197.328 km of distribution pipelines will be laid in Jhumri Telaiya town and 64.123 km of existing network will be retained by the project. No potential impact either temporary or permanent is anticipated during the laying of distribution pipeline. The diameter of pipeline ranges from 100mm to 400mm, and the road widths vary between 2.2 m to 5.2 m. Pipe diameters are planned in accordance with road widths to avoid any adverse impacts.

62. Impacts due to pipe laying activity will be assessed and reconfirmed after finalization of detailed engineering design, finalization of alignment of the distribution pipelines, and based on the DMS. Visit to the distribution network locations with JUIDCO engineers indicated that the impact on traffic and roadside business activities (shops, markets), especially in congested areas (e.g., Bajrang, Telaiya market, and other market area) of the town, will be mitigated by providing the wooden planks during the laying of pipelines with appropriate diameters depending upon the road width. Field visit conducted to Telaiya, Bajrang chowk Telaiya Market and other congested area of the town and based on preliminary design it is assessed that there is no IR impact in terms of livelihood loss to the road side shops is anticipated due to the proposed construction work.

63. The engineering designs adopted for the proposed project will ensure routing of the raw water and clear water mains, distribution network within the existing ROW of government roads. The impact envisaged during constructions is assessed to be limited to traffic congestion and diversions. During transact walk and field visit based on preliminary design it has been observed that, both clear water transmission line and distribution network have been proposed through multiple crossings like junction at National Highways and Railway crossings (NOC to be obtained). Trenchless methods may have to be adopted to lay pipelines across these crossings which are yet to be finalized by the design team. The details of those locations have been provided in Appendix 3. Any potential impact will be assessed during the DMS by the DBO Contractors and will be mitigated through appropriate mitigation measures.

64. Specific provisions related to impact avoidance for pipe laying activities as well as construction work near common property resources (schools, health centres, Integrated Child Development Services centres, etc), shops and residences are in place. Based on preliminary assessment, there are no common property resources exists within the ROW that can be affected

due to construction work. The works contractor will be required to maintain access to or other buildings along pipe alignments and to institutions located close to proposed sites, and safety through hard barricading of excavated alignments/sites. Care will be taken to avoid/mitigate economic impacts through the following measures: (a) announcement of proposed civil works in advance (to enable shop owners to stock up and remain unaffected if goods vehicles are unable to reach them during construction), (b) provision of planks to ensure pedestrian access; (c) careful timing of implementation to avoid peak sale hours/days or school timings; (d) night work in commercial areas, where possible; (e) minimizing construction period to the extent possible; (f) assistance to mobile vendors if any present during construction, to shift nearby; (g) signage with project details and contact details for grievance redress; and (h) proper traffic management. These measures will be part of the contract and will be implemented through it.

65. The Project will seek to avoid resettlement impacts by carrying out civil works at night for the proposed sub project in a phased manner. Consistent with the initial environmental examination, contractors will ensure information dissemination of the construction schedule, managing the traffic flow, leaving spaces for access between mounds of soil, providing walkways and metal sheets to maintain access across trenches for people and vehicles where required, increased workforces to finish work in densely populated areas with probable impacts on access, timing of works to reduce disruption during business hours, phased construction schedule, working one segment at a time and other side of the road at a time to ensure that there is no income or access loss, and most importantly ensuring the safety of the pedestrian during project construction.

V. CONCLUSIONS

A. Summary and Conclusion

66. No involuntary resettlement impacts are anticipated due to implementation of the proposed subproject components based on the preliminary design and information available with JUIDCO. The intake arrangements along with raw water pumping machinery, WTP and the four ESRs will be constructed on land parcels owned by Water Resource Department, GOJ, and Land Revenue Department, GOJ respectively, which are free of any encumbrances or encroachments. The laying of raw water mains, clear water rising mains from WTP to ESRs are proposed within the ROW of National Highway, Nagar Parishad, Gram Panchayat and PWD roads. Distribution network are proposed within the ROW of Nagar Parishad roads and National Highways. The water works infrastructure would be handed over to Jhumri Telaiya Nagar Parishad after commissioning. The Nagar Parishad need to provide self-certification (on "No Objection") of ownership of the ROW of Nagar Parishad roads where laying of the transmission mains and distribution pipelines are proposed. Laying of the pipelines may potentially cause temporary disruption to road users, pedestrians, and community people – this will be avoided by using proper mitigation measures. Such civil work disruptions will be mitigated during construction by the contractor through simple measures such as provisions of planks for pedestrian access to shops and properties and proper traffic management.

67. The intake well proposed on the right bank of Telaiya dam in Urwan village is adjacent to the existing intake well, which is approximately 300 m apart, new intake well for Chandawara town is also under construction which is approximately 170 m from the proposed intake location. The existing intake well and Chandwara intake well already have water allocation, while for Jhumri Telaiya water supply allocation is under process. The catchment areas of Telaiya dam mostly comprises villages, forested areas, wasteland, pastures, and cultivated land in hilly terrains. Villages located in the downstream of the proposed intake well are Poraia, Konra, Barki Dhamrai,

Kanti, Gurio, Goas, Shahpur, Chachro and Madhopur which will not be affected by the proposed water allocation.

68. Fishing activities by the local villagers will not be hampered as all the intake locations are close to the reservoir banks, whereas the fishing activity conducted in deep water almost 1.5 km away from both present and proposed intake locations.

69. A budgetary provision is made for costs likely to be incurred by JUIDCO for completion of all formalities related to updating of this DDR. This includes provisions towards DDR updating cost (₹100,000), consultation, communication, and grievance redress (₹100,000), and 5% contingencies (₹10,000), a total of ₹210,000.

B. Next Steps

70. The DDR needs to be updated with the following information:

- (i) Final detailed engineering design and DMS. During the DMS, if any involuntary resettlement impact is identified, a resettlement plan may need to be prepared in alignment with the resettlement framework.
- (ii) NOC from Damodar Valley Corporation, for construction of new intake arrangements in Jhumri Telaiya town on the right of the Telaiya dam in Urwan village and the same to be appended to the DDR.
- (iii) NOC from Department Revenue, Registration and Land Reforms of the District Koderma intake and two ESR plots.
- (iv) NOC from the Railway Authority, National Highway Authority, for routing of transmission lines and distribution network across the multiple crossings.
- (v) Road permissions from PWD, Gram Panchayats, Jhumri Telaiya Nagar Parishad for laying pipelines.
- (vi) NOC from the competent authority for disposing sludge from the WTP at the landfill site at Telaiya Basti, as applicable; certification from Jhumri Telaiya Municipal Council.
- (vii) NOC from the Public Works Department and Gram Panchayat to use the existing water supply infrastructure of town.
- (viii) All NOCs obtained for the project will be appended to the DDR.
- (ix) The DDR will be updated; initiation and completion of due procedures reported and ADB approval obtained prior to start of construction work.

PHOTOGRAPHS OF EXISTING WATER SUPPLY SCHEME OF JHUMRI TELAIYA



Existing Intake well



Aeration Fountain



Flocculator



Clarifier



Figure 1 ESR-1 Zone-1 Ward No.19



Figure 2 ESR-3 ZONE-3 WARD-25



Figure 3 ESR-5 ZONE-5 WARD-9



Figure 4 ESR-7 ZONE-7 WARD-13

PHOTOGRAPHS OF LANDS FOR PROPOSED WORK OF JHUMRITILAYA WATER SUPPLY SCHEME



Proposed Intake Site at Telaiya dam



Proposed WTP site Mahto Ahara Gumo



ESR site at Paswan Tola



ESR site at PWD office campus



ESR site at Near Bazar Samiti



ESR Site at Moriyama

PHOTOGRAPHS OF RISING MAIN & DISTRIBUTION NETWORK FOR WATER SUPPLY SCHEME OF JHUMRITILAIYA



BSNL Office Road



Main Road



Hazaribagh Road



Gomoh Road

PHOTOGRAPHS OF RISING MAIN & DISTRIBUTION NETWORK FOR WATER SUPPLY SCHEME
OF JHUMRITILAIYA



AD Bungalow Road



Belatand Road






Mayadih Road






Paswan Tola Road



Details of WTP and ESR Lands in Jhumri Telaiya

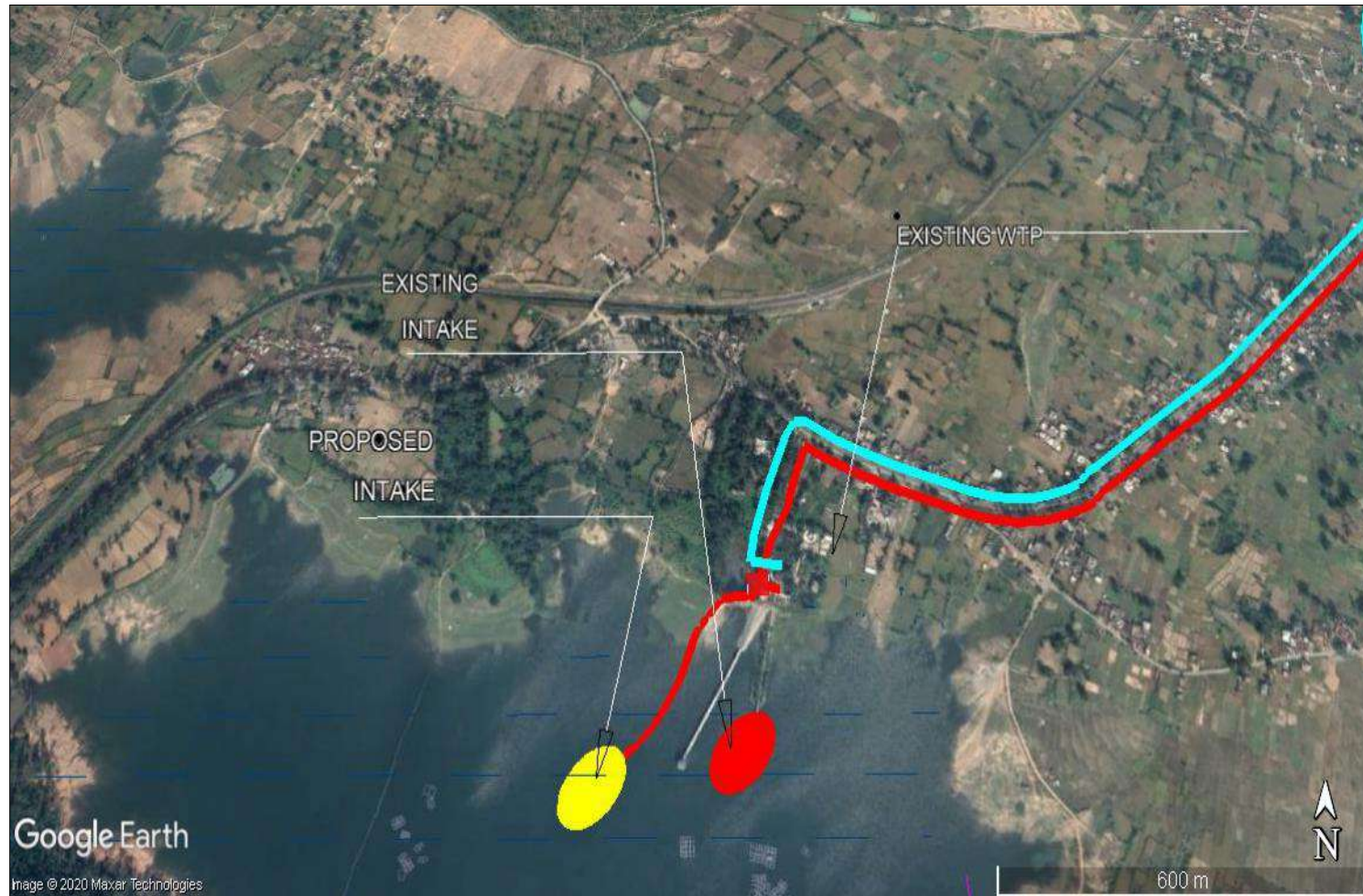
No.	Component	Mauja (area village)	Thana No. (Police station)	Plot No. Khasara No	Plot Dimensions (Acres) Area Required (m ²)	Land Ownership and NOC Status	Photo
1	Intake well	Urwan at right side	Under Damodar valley corporation				
2	Water Treatment Plant	Gumo (Mahto ahara, ward 20)	12	3775 98/75	5.5 acre (150m x 150m)	Department Revenue, Registration and Land Reforms, GOJ NOC under process	
3	ESR Zone - 6	Paswan tola, Telaiya basti (ward 03)	244	1165 192	0.23 acre (30m x 30m)	Department Revenue, Registration and Land Reforms, GOJ NOC under process	

No.	Component	Mauja (area village)	Thana No. (Police station)	Plot No. Khasara No	Plot Dimensions (Acres) Area Required (m ²)	Land Ownership and NOC Status	Photo
4	ESR Zone - 8	Near Bazar Samiti area (ward 15)	244	5448,5449,5450,5451 523	0.23 acre (30m x 30m)	Department Revenue, Registration and Land Reforms, GOJ NOC under process	
5	ESR Zone - 2	PWD compound (ward 24)	244	5751 431	0.23 acre (30m x 30m)	Department Revenue, Registration and Land Reforms, GOJ NOC under process	
6	ESR Zone - 4	Moriyama (ward 28)	02	1256	0.23 acre (30m x 30m)	Department Revenue, Registration and Land Reforms, GOJ NOC under process	

Source: Design Consultant, JUIDCO

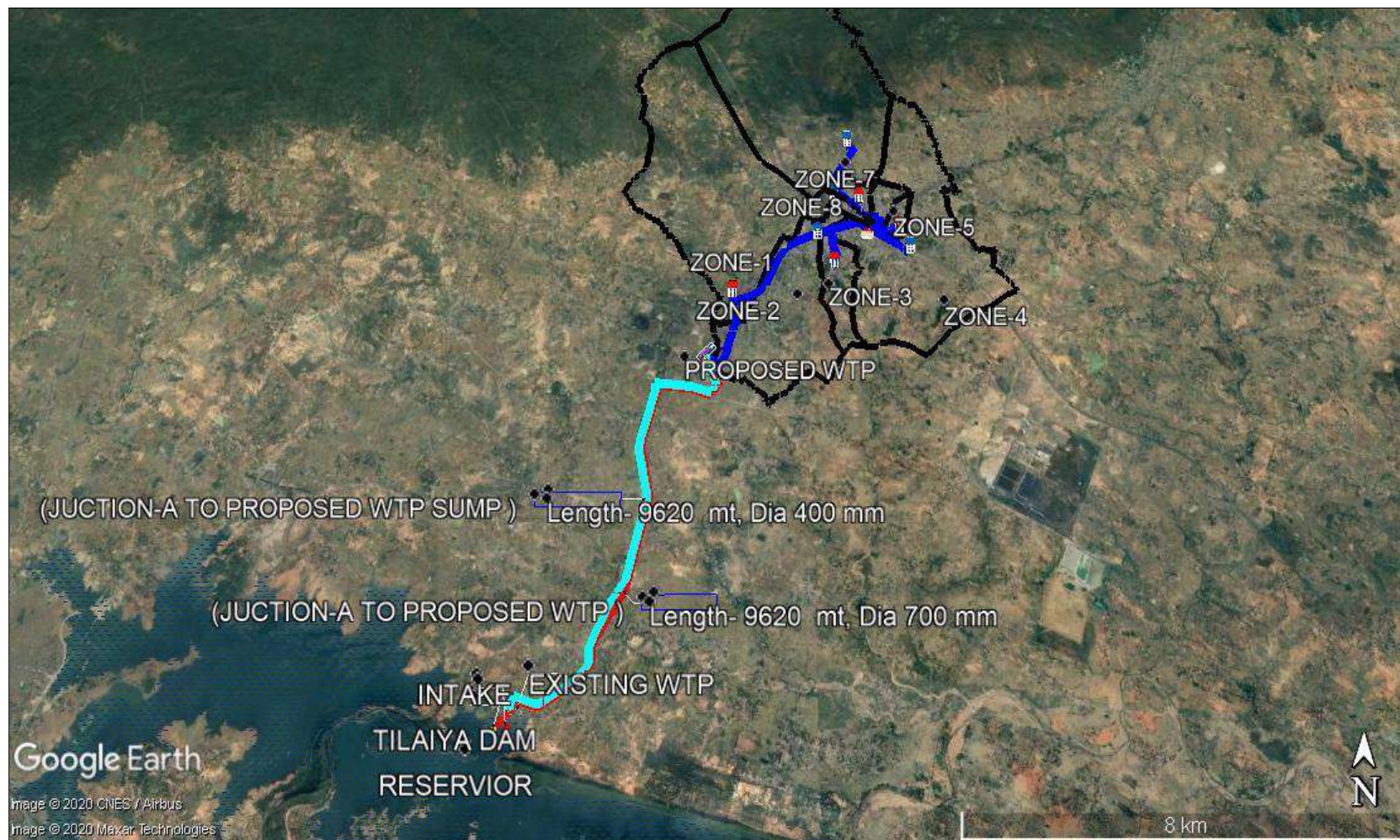
Google Earth Maps Showing Proposed Locations of Project Components

Google Earth Maps 1: Location of Proposed Intake Well Point at Telaiya dam



Source: Design Consultant, JUIDCO

Google Earth Maps 2: Jhumri Telaiya Water Supply Scheme on Google Map



Source: Design Consultant, JUIDCO

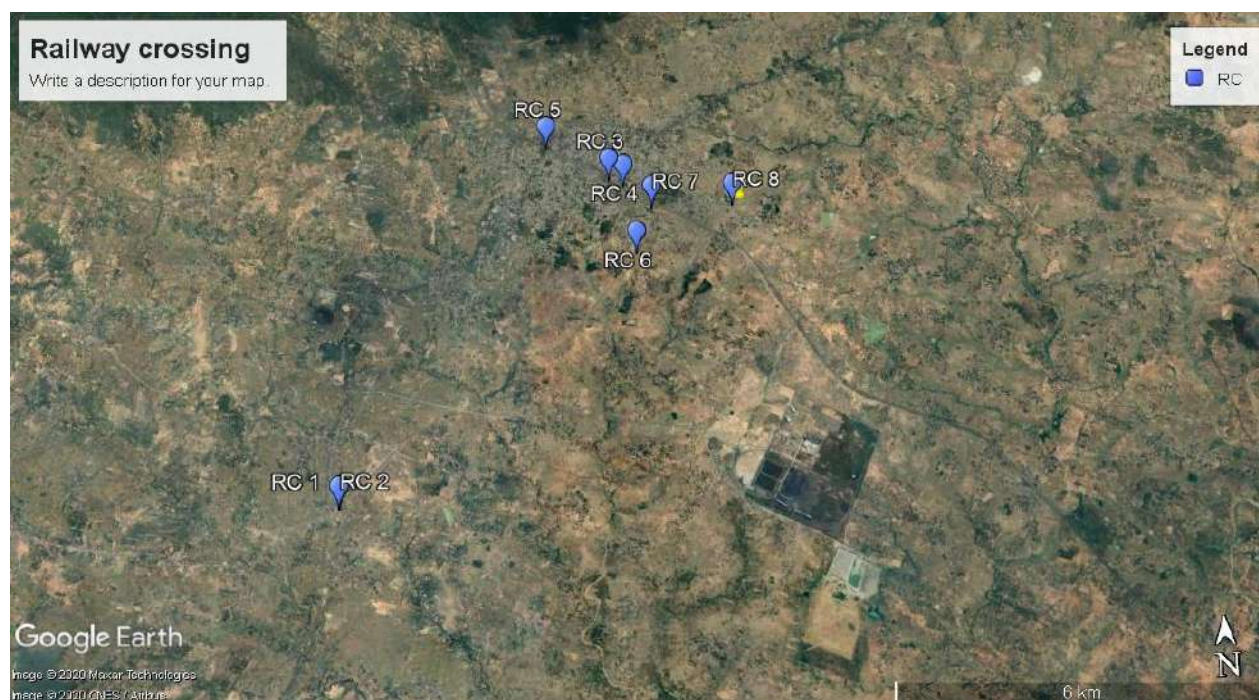
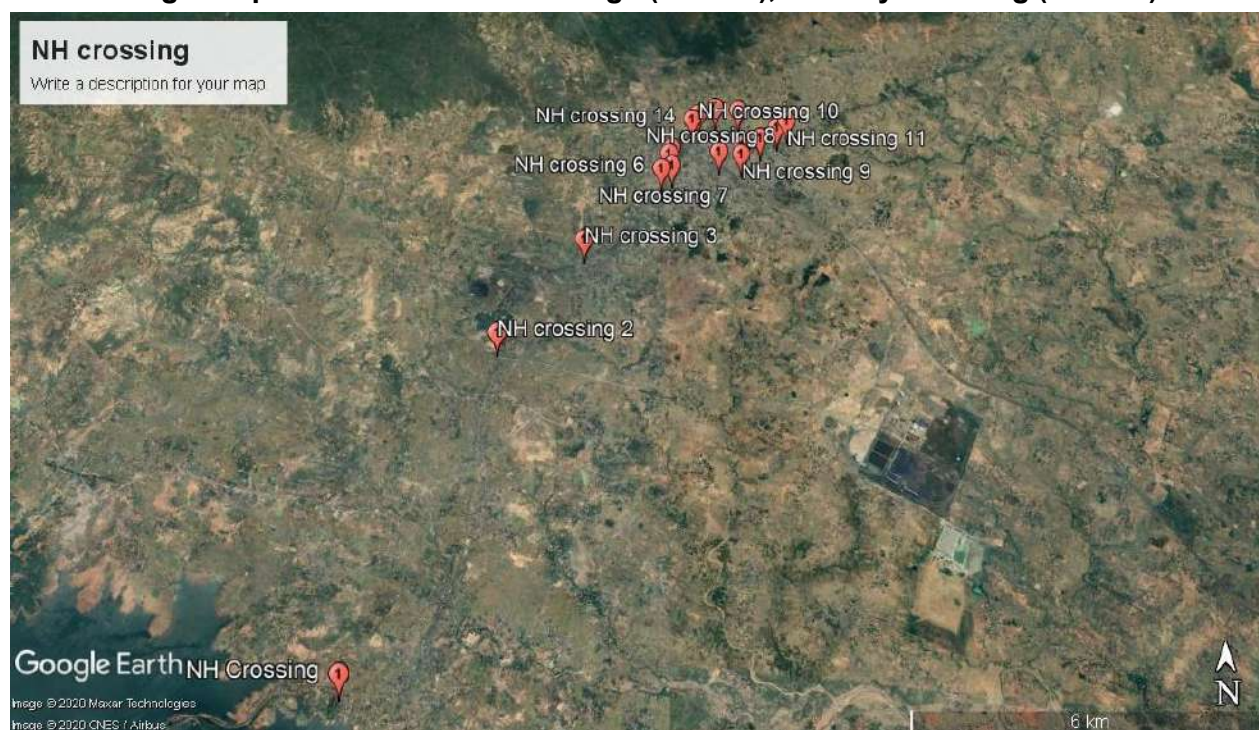
Locations of National Highway and Railway Crossings

S. No.	Components	Coordinates	Dia of Pipe	Dia of Casing	Length	Involuntary Resettlement Impact
National Highway crossing						
1	clear water rising main	24°20'52.59"N 85°27'44.51"E	400 MM	700 MM	40 M	No IR impacts envisaged
2	clear water rising main	24°24'5.76"N 85°29'12.71"E	400 MM	700 MM	40 M	
3	clear water rising main	24°25'4.77"N 85°30'9.28"E	200 MM	500 MM	40M	
4	clear water rising main	24°26'29.18"N 85°31'27.89"E	400 MM	700 MM	40 M	
5	clear water rising main	24°26'7.46"N 85°31'57.83"E	500 MM	800 MM	40 M	
6	Distribution	24°25'51.89"N 85°31'1.93"E	350 MM	750 MM	40 M	No IR Impacts envisaged
7	Distribution	24°25'53.84"N 85°31'9.19"E	300 MM	600 MM	40 M	
8	Distribution	24°26'2.82"N 85°31'41.81"E	100 MM	400 MM	40 M	
9	Distribution	24°26'1.13"N 85°31'57.09"E	100 MM	400 MM	40 M	
10	Distribution	24°26'19.52"N 85°32'22.54"E	300 MM	600 MM	40 M	
11	Distribution	24°26'23.89"N 85°32'29.42"E	300 MM	600 MM	40 M	
12	Distribution	24°26'31.53"N 85°31'55.99"E	300 MM	600 MM	40 M	
13	Distribution	24°26'33.33"N 85°31'40.04"E	150 MM	450 MM	40 M	
14	Distribution	24°26'25.68"N 85°31'23.87"E	150 MM	450 MM	40 M	
15	Distribution	24°26'6.05"N 85°31'9.18"E	300 MM	600 MM	40 M	
16	Distribution	24°26'1.92"N 85°31'7.29"E	300 MM	600 MM	40M	
17	Distribution	24°26'12.36"N 85°32'10.53"E	200 MM	500 MM	40 M	
Railway Crossing						
18	clear water rising main	24°23'0.37"N 85°29'6.76"E	400 MM	650 MM	40 M	No IR impacts envisaged
19	clear water rising main	24°23'0.60"N 85°29'7.23"E	700 MM	950 M	40 M	
20	clear water rising main	24°25'57.82"N 85°31'55.17"E	500 MM	750MM	40 M	
21	clear water rising main	24°25'53.61"N 85°32'3.82"E	400 MM	650 MM	40 M	
22	clear water rising main	24°26'18.63"N 85°31'17.96"E	300 MM	550 MM	40 M	
23	Distribution	24°25'14.30"N 85°32'9.53"E	150 MM	400 MM	40 M	

S. No.	Components	Coordinates	Dia of Pipe	Dia of Casing	Length	Involuntary Resettlement Impact
24	Distribution	24°25'40.33"N 85°32'20.39"E	200 MM	450 MM	40 M	
25	Distribution	24°25'39.07"N 85°33'9.32"E	150 MM	400 MM	40 M	
26	Distribution	24°26'23.91"N 85°31'8.25"E	100 MM	350 MM	40 M	

Source: DPR consultant

Google Map locations of NH crossings (17 nos.), Railway Crossing (08 nos.)



Source: Design Consultant, JUIDCO

Community Consultations

Date & Place	Participants	Key Issues Discussed	Issues raised by the participants	Issues addressed by
01.07.2020 At Telaiya Basti	Local Residents Male Participants: 10 Total Participants: 10	<ul style="list-style-type: none"> Project facilities, features were discussed. Main objective of the project is to provide 24 X 7 potable water supply to each household with a target of 135 LPCD. All Residential, Commercial, Educational Religious, Health institutions will get potable water from this project. People may face some access disruption during construction work. Suitable measures will be taken to avoid or minimize any disruption. People's cooperation will be needed for successful implementation of the project. There will be a grievance registration and redressal system. People can raise any relevant project related grievances or suggestions and the same will be addressed within stipulated time frame. 	<ol style="list-style-type: none"> Md. Nawab: expressed his concern about quality of water. Md. Imran: added that the point of proper execution of construction work without causing any damage. Raju Paswan, Mukesh Kumar, Kamal Ahmad, Ranjes Kumar Choudhary: insisted on timely completion of the task as the people of the area facing crisis of water and they need such project in their area. 	<p>The participants were assured that:</p> <ul style="list-style-type: none"> The preliminary design for the project has been completed. Time has been spent for finalization of lands, as priority was given to Govt. land for construction of project components. Suitable measures will be taken to avoid or minimize any disruption. People's cooperation will be needed for successful implementation of the project. Work schedule will be followed so that the project work can be completed within the stipulated time.

Date & Place	Participants	Key Issues Discussed	Issues raised by the participants	Issues addressed by
01.07.2020 At AD Bungalow	Local Residents Male Participants: 9 Female Participants: 2 Total Participants: 11	<ul style="list-style-type: none"> Project facilities, features were discussed. Main objective of the project is to provide 24 X 7 potable water supply to each household with a target of 135 LPCD. 	<ol style="list-style-type: none"> Mr. Dhaneshwar: told that people are waiting for supply water since 2016. Mr. Rajan, Sri. Akhlesh Yadav, Sri. Jeetu Kumar : told the consulting officials 	<p>The participants were assured that:</p> <ul style="list-style-type: none"> The preliminary design for the project has been completed. Time has been spent for finalization of

		<ul style="list-style-type: none"> • All Residential, Commercial, Educational Religious, Health institutions will get potable water from this project. • Women have a crucial role in the project. It will reduce time & burden of fetching water for women. • People may face some access disruption during construction work. Suitable measures will be taken to avoid or minimize any disruption. People's cooperation will be needed for successful implementation of the project. • There will be a grievance registration and redressal system. People can raise any relevant project related grievances or suggestions and the same will be addressed within stipulated time frame. 	<p>that due to laying of pipeline there will be no problem. People will extend full co-operation to the Project Authority.</p> <p>3. Mr. Vinay: said that there should not be any negligence in the work and work should be on the fast track basis.</p> <p>4. Ramesh Vishwakarma: Requested the officials present during the consultation to take proper measures to take adequate measures so that common life does not get disturbed.</p>	<p>lands, as priority was given to Govt. land for construction of project components.</p> <ul style="list-style-type: none"> • Suitable measures will be taken to avoid or minimize any disruption. People's cooperation will be needed for successful implementation of the project. • Work schedule will be followed so that the project work can be completed within the stipulated time.
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Date & Place	Participants	Key Issues Discussed	Issues raised by the participants	Issues addressed by
24.06.2020 At <u>Belatand</u>	Local Residents Male Participants: 16 Female Participants: 4 Total Participants: 20	<ul style="list-style-type: none"> • Project facilities, features were discussed. • Main objective of the project is to provide 24 X 7 potable water supply to each household with a target of 135 LPCD. • All Residential, Commercial, Educational Religious, Health institutions will get potable water from this project. • Women have a crucial role in the project. It will reduce time & burden of fetching water for women. • People may face some access disruption during construction work. Suitable measures will be taken to avoid or minimize any disruption. People's cooperation will be needed for successful implementation of the project. • There will be a grievance registration and redressal system. People can raise any relevant project related grievances or suggestions and the same will be addressed within stipulated time frame. 	<p>1. Sunil Kumar, Bahgwati Devi and Kiran Devi said that they are hopeful about the project. Their problem will be solved if they water supply connections at doorstep.</p> <p>2. Mr. Raju Kumar Chowdhury, Mr. Deepak: being the shop owners he appealed to the authority that prior announcement should be made before starting the construction work.</p>	<p>The participants were assured that:</p> <ul style="list-style-type: none"> • Suitable measures will be taken to avoid or minimize any disruption. People's cooperation will be needed for successful implementation of the project. • Work schedule will be followed so that the project work can be completed within the stipulated time. • Considering the convenience of the local people, shop owners; at least 30 days prior announcement will be done before commencing the construction work.

Date & Place	Participants	Key Issues Discussed	Issues raised by the participants	Issues addressed by
24.06.2020 At <u>Bajrang Chowk</u>	Local Residents Male Participants: 9 Female Participants: 5 Total Participants: 14	<ul style="list-style-type: none"> Project facilities, features were discussed. Main objective of the project is to provide 24 X 7 potable water supply to each household with a target of 135 LPCD. All Residential, Commercial, Educational Religious, Health institutions will get potable water from this project. People may face some access disruption during construction work. Suitable measures will be taken to avoid or minimize any disruption. People's cooperation will be needed for successful implementation of the project. There will be a grievance registration and redressal system. People can raise any relevant project related grievances or suggestions and the same will be addressed within stipulated time frame. 	<p>1. Gounari Rajak, Sunil Khatik, Kiran Devi: expressed their support and co-operation towards the project.</p> <p>2. Joh Anthony Ekka: enquired about the scope of livelihood opportunity created through the project for the local people.</p> <p>3. Kamlesh Thakur: requested to provide support to the local traders so that they can continue their business uninterruptedly.</p>	<p>The participants were assured that:</p> <ul style="list-style-type: none"> Suitable measures will be taken to avoid or minimize any disruption. People's cooperation will be needed for successful implementation of the project. Work schedule will be followed so that the project work can be completed within the stipulated time. As per the guidelines of ADB, priority will be given to provide employment opportunity in construction work for the local people, women and vulnerable families by the project contractor. Adequate measures will be taken to avoid any adverse impact on local businesses. Provisions like work at night shift, engagement of extra labour has been kept in contractor's agreement.

Date & Place	Participants	Key Issues Discussed	Issues raised by the participants	Issues addressed by
24.06.2020 At Mariyama	<p>Local Residents</p> <p>Male Participants: 8</p> <p>Female Participants: 3</p> <p>Total Participants: 11</p>	<ul style="list-style-type: none"> • Project facilities, features were discussed. • Main objective of the project is to provide 24 X 7 potable water supply to each household with a target of 135 LPCD. • All Residential, Commercial, Educational Religious, Health institutions will get potable water from this project. • People may face some access disruption during construction work. Suitable measures will be taken to avoid or minimize any disruption. People's cooperation will be needed for successful implementation of the project. • There will be a grievance registration and redressal system. People can raise any relevant project related grievances or suggestions and the same will be addressed within stipulated time frame. 	<p>1. Balram Yadav, Sachin Yadav, Manoj Rana, Uma Devi: expressed their support and co-operation towards the project.</p> <p>2. Nandlal Yadav, Bajinath Yadan: expressed their concern about the impact of the project on the livelihood of the common people.</p>	<p>The participants were assured that:</p> <ul style="list-style-type: none"> • Suitable measures will be taken to avoid or minimize any disruption. People's cooperation will be needed for successful implementation of the project. • Work schedule will be followed so that the project work can be completed within the stipulated time. • As per the guidelines of ADB, priority will be given to provide employment opportunity in construction work for the local people, women and vulnerable families by the project contractor • Adequate measures will be taken to avoid any adverse impact on local businesses. Provisions like work at night shift, engagement of extra labour has been kept in contractor's agreement.

Date & Place	Participants	Key Issues Discussed	Issues raised by the participants	Issues addressed by
13.10.2020 At Intake Location	<p>Local Residents</p> <p>Male Participants: 8</p> <p>Female Participants: Nil</p> <p>Total Participants: 8</p>	<ul style="list-style-type: none"> • Project facilities, features were discussed. • Main objective of the project is to provide 24 X 7 potable water supply to each household with a target of 135 LPCD. • All Residential, Commercial, Educational Religious, Health institutions will get potable water from this project. • There will be a grievance registration and redressal system. People can raise any relevant project related grievances or suggestions and the same will be addressed within stipulated time frame. • The fishing activities will not be affected at Teliaya Dam. 	<p>During consultation with the local villagers, it was replied by the participants that; the intake location is close to the reservoir bank of the river whereas the fishing activities are done at deep water, which is approximately 1.5 km away from the location of the proposed intake. Reportedly the villagers undertake fishing activity at the reservoir both for self-consumption and commercial purpose; the existing intake facility does not cause any disturbance to their fishing activity as it is near to the reservoir bank. The villagers mentioned that the fishermen go deep inside the reservoir to undertake fishing activities, generally big size fish are not found near the banks as depth of water near the banks are less. They said that the new intake arrangement will not impact their fishing activities.</p>	<p>The meeting was held in open air maintaining social distancing norms.</p> <p>No such quarries or concerns were raised by the participants rather they were glad to know about the project progress stage as there are lots of aspiration about the proposed project among the local people.</p>

Date & Place	Participants	Key Issues Discussed	Issues raised by the participants	Issues addressed by
13.10.2020 At Bazar Samity	Local Residents Male Participants: 10 Female Participants: Nil Total Participants: 10	<ul style="list-style-type: none"> Project facilities, features were discussed. Main objective of the project is to provide 24 X 7 potable water supply to each household with a target of 135 LPCD All Residential, Commercial, Educational Religious, Health institutions will get potable water from this project. There will be a grievance registration and redressal system. People can raise any relevant project related grievances or suggestions and the same will be addressed within stipulated time frame. The fishing activities will not be affected at Teliaya Dam. 	<p>The participants were found informed about the project.</p> <p>The existing water supply system is very irregular and inconsistent also.</p> <p>Though there is no such complaints made by the participants regarding quality of the water but due to irregular water services they often had to face problems. As an alternative source the local people depend on Municipal hand pumps.</p> <p>Participants enquired about whether there will be any water tariff applicable for the project.</p> <p>They were hopeful that, since the ESR has been proposed within the area will ensure good water pressure in the adjoining areas.</p>	<p>The meeting was held in open air maintaining social distancing norms.</p> <p>The participants were assured the proposed project aims to provide uninterrupted potable water through piped connections.</p> <p>Regarding Water Tariff it was said that, the governing policy of Jhumri Teliaya Municipal Council will be adopted though no such specific decision has been taken yet.</p> <p>During O&M phase the consumers can always lodge their complaints regarding service disruption to the local Municipal Authority.</p>
Date & Place	Participants	Key Issues Discussed	Issues raised by the participants	Issues addressed by
20.01.2021 Jhumri Teliaya	Male:10 Female: 0	<ul style="list-style-type: none"> Participants asked about the employment opportunity in scheme. Project facilities, features were discussed. Main objective of the project is to provide 24 X 7 	JUIDCO representative informed them about the employment opportunity in water scheme and told them that maximum laborers will be hired locally.	<p>The meeting was held in open air maintaining social distancing norms and wearing mask.</p> <p>The participants were assured the proposed project aims to provide</p>

		<p>potable water supply to each household with a target of 135 LPCD.</p> <ul style="list-style-type: none"> • All Residential, Commercial, Educational Religious, Health institutions will get potable water from this project. • There will be a grievance registration and redressal system. People can raise any relevant project related grievances or suggestions and the same will be addressed within stipulated time frame. • Participants asked that how we can register the complaints. 	<p>The participants were found informed about the project. The existing water supply system is very irregular and inconsistent also. Though there is no such complaints made by the participants regarding quality of the water but due to irregular water services they often had to face problems. As an alternative source the local people depend on Municipal hand pumps. Participants enquired about whether there will be any water tariff applicable for the project. They were hopeful that, since the ESR has been proposed within the area will ensure good water pressure in the adjoining areas.</p>	<p>uninterrupted potable water through piped connections.</p> <p>Regarding Water Tariff it was said that the governing policy of Jhumri Telaiya Municipal Council will be adopted though no such specific decision has been taken yet.</p> <p>During O&M phase the consumers can always lodge their complaints regarding service disruption to the local Municipal Authority.</p> <p>JUIDCO representative informed the participants that there will be complaint box on each site as well as people can also register there complaint via E-mail and letter addressing to concern person in the information board of the project which will be made available during the construction.</p>
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**PHOTOGRAPHS OF COMMUNITY CONSULTATIONS FOR WATER SUPPLY SCHEME OF
JHUMRI TELAIYA**



Avdar Mohalla



Telaiya Basti



Telaiyya



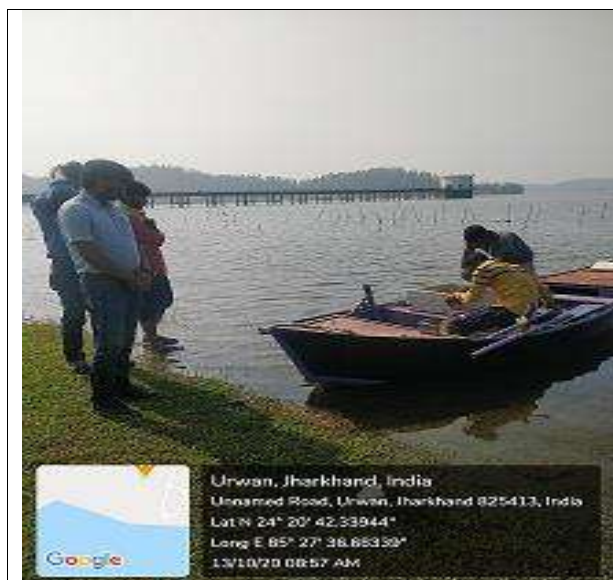
Samanto Kalimanda



Belatand



Malwayi Mohalla



Community Consultation at Urwan intake site



Community Consultation near Bazar Samiti ESR site



Community Consultation in Jhumri Telaiya

Copy of Signature Sheet of the Public Consultation Programmes

Project Name:- JhumariTelaiya Urban Water Supply Scheme

List of Participant's of Community Consultation for
JhumariTelaiya Urban Water Supply Schem.

Date: 01/07/2020 Place: Telaiya Basti

Sl No.	Name of Participation	Contact No.	Signature	Ward No.
1.	Manish Gupta	8210382595	Manish Gupta	02
2.	Nirmal Jain	8340408560	Nirmal Jain	02
3.	Amit Modi	7369099833	Amit Modi	02
4.	Mahendra Sahu	620350398	Mahendra Sahu	02
5.	Pradeep Rajor	7479843035	Pradeep Rajor	02
6.	Vasun K	6299539076	Vasun K	02
7.	Rahul Kumar		Rahul Kumar	02
8.	Jamuna Rajor		Jamuna Rajor	02
9.	अरुण झा		अरुण झा	02
10.	पारिता देवी		पारिता देवी	02
11.	अनीता देवी		अनीता देवी	02
12.	बरीता देवी		बरीता देवी	02
13.	दीपिका देवी	8825226638	दीपिका देवी	02
14.	Sanjay Yadav		Sanjay Yadav	02
15.	Damodari Devi		Damodari Devi	02

Project Name:- JhumariTelaiya Urban Water Supply Scheme

List of Participant's of Community Consultation for
JhumariTelaiya Urban Water Supply Schem.

Date: 04/07/2020 Place: Audax Mohola

Sl No.	Name of Participation	Contact No.	Signature	Ward No.
1.	Chakral Rana	8002095686	Chakral Rana	03
2.	Rajesh Kumar	800209686	Rajesh Kumar	03
3.	Rakha Musmat		Rakha Musmat	03
4.	Sonu Kumar	8825219171	Sonu Kumar	03
5.	Manoj Kumar Tunya	7738945864	Manoj Kumar Tunya	03
6.	Sagan Kumar		Sagan Kumar	03
7.	Darshan Kumar		Darshan Kumar	03
8.	Bhikhi Devi	8809043463	Bhikhi Devi	03
9.	Jyoti Kauri		Jyoti Kauri	03
10.				

Project Name:- JhumariTelaiya Urban Water Supply Scheme

List of Participant's of Community Consultation for

JhumariTelaiya Urban Water Supply Schem.

Date: 04/07/2020

Place: Indarwa basti

Sl No.	Name of Participation	Contact No.	Signature	Ward No.
1.	Sharmila Devi			4
2.	Shunayna Devi		सुनयना	4
3.	Aruna Devi			4
4.	Baby Devi		बिबा	4
5.	Shita Devi		कविता	4
6.	Kavita Devi			4
7.	Bharvi Devi			4
8.	Luban Singh			4
9.	Abhishek Ray	6201640108	Abhishek Ray	4

Project Name:- JhumariTelaiya Urban Water Supply Scheme

List of Participant's of Community Consultation for

JhumariTelaiya Urban Water Supply Schem.

Date: 02/07/2020

Place: Telaiya

Sl No.	Name of Participation	Contact No.	Signature	Ward No.
1	Ajay Thakur	8409464838	अजय ठाकुर	08
2	Waqar Alam	7717965172	मोहम्मद वाक़र	08
3	Mr. Khalid Khan	9258329757	फ़ोन 291, 010, 912, 011	08
4	Md. Nandale			
5	Md. Afzal Hameed	7484915538	अफ़्ज़ल हमीद	08
6	Md. Rahim		मोहम्मद रहिम	08
7	Mutida Khatoon			08

Project Name- JhumariTelaiya Urban Water Supply Scheme

List of Participant's of Community Consultation for

JhumariTelaiya Urban Water Supply Schem.

Date: 02/04/17

Place: Samant Kali mandal

Sl No.	Name of Participation	Contact No.	Signature	Ward No.
1.	Vigay Kumar Sinha	910200 4942		11
2.	Mangama Devi			11
3.	Mahit Kr. Sinha			11
4.	Ankit		अंकित	11
5.				
6.	Vigay Kumar		विजय कुमार	11
7.	Kali Mandal	9955528756	अंकित देव	11
8.	Hanshit Ku Sinha	9661900687	Hanshit Sinha	11

Project Name- JhumariTelaiya Urban Water Supply Scheme

List of Participant's of Community Consultation for

JhumariTelaiya Urban Water Supply Schem.

Date: 3/07/2020

Place: Telaiya

Sl No.	Name of Participation	Contact No.	Signature	Ward No.
1	रीता कुमारी		रीता कुमारी	13
2	मंजू देवी			13
3	अंजू देवी			13
4	कुमारी देवी		- कुमारी देवी	13
5	Mreeta Devi		मरीता देवी	13
6	Isobit		Isobit	13
7	रीता देवी		रीता देवी	13
8	Anil Kumar	9106066453	Anil Kumar	13
9	Mahish Kumar	7856 960256	Mahish Kumar	13
10	Poojya Singh		- Poojya Singh	13
11	Mukesh Kumar	6283442971	Mukesh Kumar	13
12	Ankit Kumar	9199133246	Ankit Kumar	13

Project Name- JhumariTelaiya Urban Water Supply Scheme

List of Participant's of Community Consultation for

JhumariTelaiya Urban Water Supply Schem.

Date: 11/07/2020

Place: A.D. Banglow Road

Sl No.	Name of Participation	Contact No.	Signature	Ward No.
1.	Chandrashekhar chaurasia	9430185625	Chaurasia	14
2.	Nirajen Pargh and Tandi		Nirajen Pargh	
3.	Mohan Yadav		Mohan Yadav	
4.	Shivaji Singh	9113747473	Shivaji Singh	14
5.	Ajay Prashad	84026134080	Ajay Prashad	14
6.	Seema Singh		Seema Singh	14
7.	Savita Devi	7749603411	Savita Devi	14
8.	Pappu		Pappu	
9.	Nirajen Prashad		Nirajen Prashad	
10.				
11.	Om prakash Singh	7766076078	O.P. Singh	14

Project Name- JhumariTelaiya Urban Water Supply Scheme

List of Participant's of Community Consultation for

JhumariTelaiya Urban Water Supply Schem.

Date: 26/06/2020

Place: A.D. Banglow.

Sl No.	Name of Participation	Contact No.	Signature	Ward No.
1.	Dhaneswar		Dhaneswar	15
2.	Ranjan	9931347016	Ranjan	15
3.	Santosh Kumar	9955354541	Santosh Kumar	15
4.	Vinay Gupta	9934375726	Vinay Gupta	15

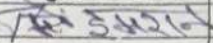
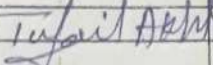
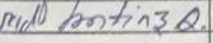
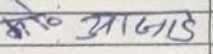
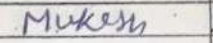
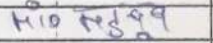
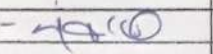
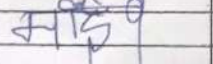
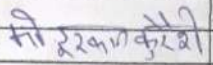
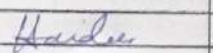
Project Name- JhumariTelaiya Urban Water Supply Scheme

List of Participant's of Community Consultation for

JhumariTelaiya Urban Water Supply Schem.

Date 01/07/2020

Place Telaiya

Sl No.	Name of Participation	Contact No.	Signature	Ward No.
1	Md Imran	7939362617		17
2	Tufail Akhtar	9122178210		17
3	Md Imtiaz	9631490707		17
4	Md. Ajeel	9462855118		17
5	Mukesh Kumar	9631181781		17
6	Md. Mehboob	9939101099		17
7	Md. Nawab	7870076780		17
8	Moin Khan	950722923		17
9	Md. Tojan Khan	8271496217		17
10	Md. Haider Hussain	0807640748		17

Project Name- JhumariTelaiya Urban Water Supply Scheme

List of Participant's of Community Consultation for

JhumariTelaiya Urban Water Supply Schem.

Date 24/06/2020

Place Dunga Mandap

Sl No.	Name of Participation	Contact No.	Signature	Ward No.
1.	Ramweshwar Singh.	7	21/6/20	19
2.	Kamlesh Kumar	70049563	Kamlesh Kumar	19
3.	Bashant Kumar Verma	9708635145	Bashant Kumar	19
4.	Ashok Yadav.	8102737056	Ashok Yadav	19
5.	Dwarika Prasad.		Dwarika Prasad	19
6.	Virendra Kumar		Virendra Kumar	19
7.				

Project Name- JhumariTelaiya Urban Water Supply Scheme

List of Participant's of Community Consultation for

JhumariTelaiya Urban Water Supply Schem.

Date 24/06/2020

Place 7/3/11.01
Near School.

Sl No.	Name of Participation	Contact No.	Signature	Ward No.
1.	Nawal PD Verma	9934374117		20
2.	Jay Prakash Mishra	8969234899	Jay	20
3.	Ranjit Kumar	8853920206	Ranjit Kumar	20
4.	Krishna Kumar	7004725470	Krishna Kumar	20
5.	Vinay Sheel	9939750176	Vinay	20
6.	Mohit Kumar	9927730995	Mohit Kumar	20
7.	Rohit	7464949800	Rohit Kumar	20

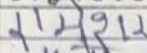
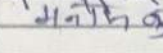

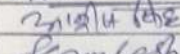
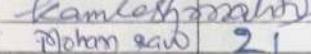
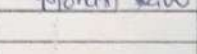
Project Name- JhumariTelaiya Urban Water Supply Scheme

List of Participant's of Community Consultation for

JhumariTelaiya Urban Water Supply Schem.

Date 27/06/2020

Place Rodley Colony

Sl No.	Name of Participation	Contact No.	Signature	Ward No.
1.	Rameshwar Kumar			21
2.	Manoj Kumar	6206569374		21
3.	Champ Devi			21
4.	Girja Devi			21
5.	Chandan Kumar			21
6.	Abhisht Singh			21
7.	Kamlesh Mahato			21
8.	Mohan Shaw			21

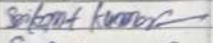
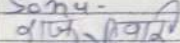
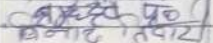
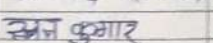
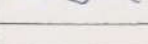
Project Name- JhumariTelaiya Urban Water Supply Scheme

List of Participant's of Community Consultation for

JhumariTelaiya Urban Water Supply Schem.

Date 24/06/19

Place Mahakam Grandh
Nagar

Sl No.	Name of Participation	Contact No.	Signature	Ward No.
1.	Ashikant Kr. Sharma			23
2.	Sonu	Sonu		23
3.	Ravi Pandey			23
4.	Brahmender Prasad			23
5.	Vinod Tiwari			23
6.	Ranjan Kumar			23
7.				

Project Name- JhumariTelaiya Urban Water Supply Scheme

List of Participant's of Community Consultation for

JhumariTelaiya Urban Water Supply Schem.

Date 25/06/2020

Place Ram Nagar.

Sl No.	Name of Participation	Contact No.	Signature	Ward No.
1.	Arun Kumar	9389125151	Arun Kumar	24
2.	Anil Kumar	9852509408	Anil Kumar	24
3.	Daya Nand Kumar	9546408132	Daya Nand Kumar	24
4.	Manish	8152027268	Manish	24
5.	Nand Lal Kumar	9507121286	Nand Lal Kumar	24
6.	Savukh Andari	9356188865	SHRUKH	24
7.	Vicky Kumar	9801471256	Vicky Kumar	24
8.	Sanjay Kumar	6204416791	Sanjay Kumar	24

Project Name- JhumariTelaiya Urban Water Supply Scheme

List of Participant's of Community Consultation for

JhumariTelaiya Urban Water Supply Schem.

Date 24/06/2020

Place Bela Tand
Nalwayi Mohhala

Sl No.	Name of Participation	Contact No.	Signature	Ward No.
1.	Santosh Kumar	9934604496	Santosh Kumar	26
2.	Vijay Singh		Vijay Singh	26
3.	Bhagywati Devi		Bhagywati Devi	26
4.	Manish Chaudhary	8434231916	Manish Chaudhary	26
5.	Sunil Rawani	7004396391	Sunil Rawani	26
6.	Raman Devi	9934399908	Raman Devi	26
7.	Anil Chaudhary	9334292327	Anil Kumar	26
8.	Deepak Gupta	9584191947	Deepak Gupta	26
9.	Sunay Gupta			
10.	Tinku Gupta			
11.	Shri Ram Singh	7004019735	Shri Ram Singh	26
12.	Bikram Kumar	9031004569	Bikram Kumar	26
13.	Dhaneshwar Dalwani	963936366	Dhaneshwar Dalwani	26
14.	Rajan Kr. Gupta	9334060384	Rajan Kumar Gupta	26
15.	Jacku Kumar	9546293925	Jacku Kumar	26
16.	Chunni Devi	9234918055	Chunni Devi	26
17.	Gayatri Devi		Gayatri Devi	26
18.	Pratima Devi		Pratima Devi	26
19.	Maheesh Kr. Gupta	9931147060	Maheesh Kr. Gupta	26
20.	Mukesh Kr. Gupta	7858952462	Mukesh Kr. Gupta	26

Project Name- JhumariTelaiya Urban Water Supply Scheme

List of Participant's of Community Consultation for

JhumariTelaiya Urban Water Supply Schem.

Date... 24/06/2020

Place... Bajrang Chowk

Sl No.	Name of Participation	Contact No.	Signature	Ward No.
1	Chandouni Rajak	854192686	Chandouni Rajak	27
2	Krishna Sonakan			27
3	Sunil Khatic			27
4	Seema Khatic	सी मादेवी		27
5	Renu Devi			27
6	Parmila Devi	पुष्पा देवी		27
7	Munni Devi	मुन्नी देवी		27
8	Jhan Antony Ekka	9931815213	Jhan Antony Ekka	27
9	Philip Mondal	PHILIP Mondal		27
10	Mathew Antony Ekka			27
11	Kamlesh Thakur	Kamlesh Thakur		27
12	Babika	बी.बी. (B)		27
13	Bashanti Devi	बाशन्ती देवी		27
14	Shiba Devi	शीबा देवी		27

Project Name- JhumariTelaiya Urban Water Supply Scheme

List of Participant's of Community Consultation for

JhumariTelaiya Urban Water Supply Schem.

Date... 24/06/2020

Place... Mariyam

Sl No.	Name of Participation	Contact No.	Signature	Ward No.
1.	Uma Devi		उमा देवी	28
2.	Balnani Yadav		Balnani Yadav	28
3.	Sachin Yadav	9304113554	Sachin Yadav	"
4.	Sunay Kumar			"
5.	Bairnath Yadav		Bairnath Yadav	"
6.	NAND LAL YADAV	9934576516	NAND LAL YADAV	"
7.	Manoj Rana			"
8.	Anil Kumar Rana	6202932710	Anil Kumar	28
9.	Malti Devi			"
10.	Rekha Devi			"
11	Narayan Yadav	8201898548	Narayan Yadav	28

COMMUNITY CONSULTATION AT
NEAR BAZAR SAMITI

13.10.2020

<u>NAME</u>	<u>MOBILE No.</u>	<u>SIGNATURE</u>
राजकिशोर		राजकिशोर
विजय		विजय
श्रीलक्ष्मणदास		श्रीलक्ष्मण
रमणीक		रमणीक
नाथूराम		नाथूराम
अजय म्हावी		अजय
रवि दास		रवि
शुभरी		शुभरी
लक्ष्मण		लक्ष्मण
रामाधर सिंह		रामाधर सिंह

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Consultation at Vrawan village

Daily Plan at Intake Site 2020

Date . . . 13/10/20.



- ① Sunil Kr. Das - Sunil Kumar Das
- ② Arjun Kr. - Arjun Kumar
- ③ अर्जुन महरा - अर्जुन महरा
- ④ मधेश लोहरा - मधेश लोहरा
- ⑤ अजय महता - अजय महता
- ⑥ सुरेश लाल - सुरेश लाल
- ⑦ हरी लाल - हरी लाल
- ⑧ लाल महता - लाल महता

*List of Participants of Community Consultation for
Thumakibayn water supply Project -
Venue - Thumakibayn Date 20.01.2021*

SL No.	Name of the participant	Mobile No	Signature
24 1.	RAMESH		<i>[Signature]</i>
25 2.	JEETU		<i>[Signature]</i>
26 3.	RAVI		<i>[Signature]</i>
27 4.	VIKASH		<i>[Signature]</i>
28 5.	CHAMAN LAL		<i>[Signature]</i>
29 6.	RAM SINGH		<i>[Signature]</i>
30 7.	NARESH		<i>[Signature]</i>
31 8.	AJITESH		<i>[Signature]</i>
32 9.	NISHANT BHASKAR	7011765633	Nishant Bhaskar
33 10.	VINAY SHEEL	7768094547	Sheel (BPM)
34			
35			
36			
37			
38			
39			
40			

Scanned with CamScanner

Letter to Jhumri Telaiya Nagar Parishad from Jharkhand Urban Infrastructure Development Company Ltd. for obtaining NOC from Damodar Valley Corporation (DVC) for withdrawal of water from Telaiya dam

 <p>JHARKHAND URBAN INFRASTRUCTURE DEVELOPMENT COMPANY (JUIDCO) LIMITED (A Government of Jharkhand Undertaking) 3rd Floor, Pragati Sadan, Kutchery Chowk, Ranchi-834001 Phone no: 065182243203, Mob. No.: 09471006062 E-mail: juiddco@juiddco.com, juiddco@gmail.com CIN: U45200/JH2013SGC001752</p>		
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Letter No: JUIDCO/DPR/Jhumri Telaiya UWSS/2164/2019- Date: _____

To,
 ✓ The Executive Officer,
 Jhumri Telaiya Nagar Parishad,
 Jhumri Telaiya,
 Jharkhand – 825409.

Sub.: Obtaining NOC for withdrawal of 35.33 MLD of water from Telaiya Dam from DVC in respect of Jhumri Telaiya Urban Water Supply scheme; Reg.

Ref.: Letter No. Com/Agreement/WS 22/ 2277 of DVC Commercial Department Kolkata dated 25.08.2005.

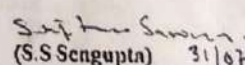
Sir,

As you are already aware, the preparation of DPR for "Augmentation and Strengthening of Jhumri Telaiya Urban Water Supply scheme" is under progress by engaging consultant namely M/s MaRS Planning and Engineering Services Pvt. Ltd. for which the Feasibility Report (FR) has already been given go through by the stakeholder's of the said project. As per the FR, the total water demand to cater the population of Jhumri Telaiya Nagar Parishad up to 2052 (i.e. Design year) is arrived to be 45.50 MLD in which 10.17 MLD has already been allotted by the DVC vide above referenced letter. Hence, the NOC for the withdrawal of difference amount of water (i.e. 35.33 MLD) from Telaiya Dam needs to be obtained by you.

Considering the above, it is requested to issue a formal letter to DVC along with the requisite report about the said project which is being attached with this letter for review and further forwarding to DVC.

An early compliance in this regard is solicited.



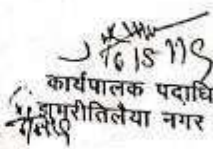
Encl.: 1) Existing Water Supply scheme details,
 2) Proposed Water Supply scheme details, and
 3) Survey Map.


Yours faithfully,

 (S.S. Sengupta) 31/07/19
 General Manager (WS&S)

Memo No.: JUIDCO/DPR/Jhumri Telaiya UWSS/2164/2019- Date: _____
 Copy to: M/s MaRS Planning and Engineering Services Pvt. Ltd for further necessary actions.

General Manager (WS&S)

**Letter to DVC for Allocation of Water for Jhumri Telaiya Water Supply Project by
Executive Officer, Jhumri Telaiya Nagar Parishad (Municipal Council)**

	कार्यालय, झुमरी तिलैया नगर परिषद झुमरी तिलैया, जिला कोडरमा Email - jhumritelaiyanagarparishad@gmail.com	
पत्रांक 2155		दिनांक 07/08/2019
प्रेषण, सेवा में	कार्यपालक पदाधिकारी झुमरी तिलैया नगर परिषद मुख्य अभियंता - सह - परियोजना प्रधान डी०पी०ओ०, कोटी०पी०एस० कोडरमा (तिलैया डैम)	
विषय :-	झुमरी तिलैया नगर परिषद में शहरी जलापूर्ति योजना के लिये तिलैया जलाशय से 35.33 MLD अतिरिक्त जल उपलब्ध कराने के संबंध में।	
महाराज, उपर्युक्त विषय के संबंध में सादर अनुरोध है कि शहरी जलापूर्ति योजना के लिये झुमरी तिलैया नगर परिषद के अंतर्गत शहरी जलापूर्ति योजना (New) का डी०पी०ओ० बन रहा है। इस योजना के कार्यान्वयन हेतु कुल 45.50 MLD जल की आवश्यकता आंकी गई है। चूंकि झुमरी तिलैया नगर परिषद के अंतर्गत वर्तमान में चल रही शहरी जलापूर्ति योजना के लिये करारनामा Coml/Agreement/WS/22/2277 दिनांक 25.08.2005 (Attach) के द्वारा 22 MGD (10.17 MLD) जल दोहन के लिये स्वीकृति प्राप्त है। अतः शेष बचे 35.33 MLD अतिरिक्त जल दोहन की स्वीकृति आवश्यक है। अतः श्रीमान् से अनुरोध है कि तिलैया जलाशय से पुनः 35.33 MLD जल निकासी हेतु स्वीकृति पत्र निर्गत करने की कृपा की जाय।		
अनुलग्नक :- <ol style="list-style-type: none"> 1. Existing water supply details 2. Proposed water supply details 3. Survey Map 		
विश्वासभाजन  कार्यपालक पदाधिकारी झुमरी तिलैया नगर परिषद		


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**Letter to DVC for Allocation of Water for Jhumri Telaiya Water Supply by Secretary,
UDHD, GOJ**

Letter No. - JUIDCO/Correspondence/Jhumri Telaiya/2339/2020-29/5
Government of Jharkhand
Urban Development & Housing Department

From,
Vinay Kumar Choubey, IAS
Secretary

To,
The Secretary,
Water Resources Department,
Nepal House, Doranda
Ranchi 834002

Ranchi, Date - 16.10.2020

Subject: - Request to Facilitate Issuance of NOC to draw 35.33MLD water from DVC (Tilaiya Dam) for ADB aided Jhumri Telaiya Drinking water supply scheme.

Ref: - 1. Letter from Jhumritilaiya Nagar Parishad vide no. 2155, Dated -07-08-2019 and vide no. 1319 dated 03.10.2020.
2. DVC Letter -COMI/Agreement /WS: 22/2277 Dated 25-08-2005.
3. MoM of the Meeting held between Secretary UD&HD and Secretary WRD on 08.09.2020

Dear Sir,

Urban Development and Housing Department is committed to provide civic amenities in urban areas and extends support through Urban Local Bodies to all the citizen as well as shares the responsibility of ensuring planned development of the city.

Considering the substantial need for water supply schemes, UDHD has taken up the scheme of augmentation and strengthening of water supply in Jhumri Telaiya town proposed under Asian Development Bank aided Jharkhand Urban Resilience & Livability Improvement Project (JURLIP).

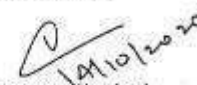
The new proposal includes upgradation of existing water supply to meet the future water demand.

The project preparation is in advanced stage and Tilaiya Dam has been identified for Raw Water Source. The total raw water demand requirement for the scheme is 45.50 MLD out of which 10.17 MLD has already been approved by DVC vide letter cited in ref-2 for withdrawal for existing water supply scheme.

The Balance requirement of 35.33 MLD water withdrawal has to be accorded from the Damodar Valley Corporation (DVC) for which various letter (attached for ready reference) from JUIDCO Ltd. & ULB officials to DVC officials has been written progressively since last one year but till date no action has been confirmed in this regard. We would like to bring into your notice that DVC's approval on this matter is of utmost importance for getting ADB's clearance to issue the bid of this project.




We, therefore, request you to kindly facilitate the process of getting the NOC for 35.33 MLD of extra Water withdrawal from Tilaiya Dam at the earliest.

An affirmative action in this regard will be highly appreciated.

Yours sincerely

(Vinay Kumar Choubey)
Secretary

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Letter to DVC from Administrator of Jhumri Telaiya Municipal Council for Allocation of Water from Telaiya Dam

	कार्यालय, झुमरी तिलैया नगर परिषद झुमरी तिलैया, जिला कोडरमा Email - jhumritelaiyamunicipalouncil@gmail.com	
पत्रांक 1319	दिनांक 03-10-2020	
प्रेषक : सेवा में:	प्रशासक झुमरी तिलैया नगर परिषद Chief Engineer (Civil) DVC, Malton	
विषय :	झुमरी तिलैया नगर परिषद के शहरी जलापूर्ति योजना के लिए तिलैया जलाशय से 35.33 MLD अतिरिक्त जल उपलब्ध कराने के संबंध में।	
प्रसंग :	घरीय प्रमण्डलीय अभियंता (विद्युत) तिलैया जल विद्युत केन्द्र, तिलैया डैम के पत्रांक THPS/E-1/291 दिनांक 17.08.2019 एवं इस कार्यालय के पत्रांक 2155 दिनांक 07.08.2019	
महोदय,	उपर्युक्त विषयक प्रसंगाधीन पत्र के संबंध में भवदीय को घरीय प्रमण्डलीय अभियंता (विद्युत) तिलैया जल विद्युत केन्द्र, तिलैया डैम के पत्रांक THPS/E-1/291 दिनांक 17.08.2019 के द्वारा N.O.C. की माँग की गई थी। जो अबतक अप्राप्त है। इस योजना में A.D.B. के द्वारा आवंटन भी प्राप्त है एवं विविध हेतु अंतिम चरण में लंबित है। झुमरी तिलैया शहरी जलापूर्ति योजना का कृत्यान्वयन हेतु 35.33 MLD जल बिकासी स्वीकृति हेतु N.O.C. अतिआवश्यक है। अतः श्रीमान से अनुरोध है कि झुमरी तिलैया शहरी जलापूर्ति योजना का कृत्यान्वयन हेतु 35.33 MLD जल बिकासी स्वीकृति पत्र निर्गत करने की कृपा की जाय।	
	विश्वासभाजन  प्रशासक झुमरी तिलैया नगर परिषद	

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Letter from Secretary, Urban Development Housing Department, GOJ for Land Transfer to Deputy Commissioner, District Koderma

विनय कुमार चौबे भा.प्र.से.
सचिव

Vinay Kr. Choubey I.A.S
Secretary



झारखण्ड सरकार
नगर विकास एवं आवास विभाग
पुर्वी राँची - 834004, झारखण्ड

Government of Jharkhand
Urban Development & Housing Deptt.
Dhurwa, Ranchi-834004, Jharkhand

Ref.: JUPD/correspondence/Jhumritilaiya/2382/2020/1364 Date: 13/05/2020

To, **The Deputy Commissioner
Koderma**

Sub: **Augmentation and Strengthening of Drinking Water Supply Scheme in
Jhumritilaiya Nagar Parishad - Reg. NOC of Land for Construction of WTP and
OHT.**

Dear Sir,

Urban Development and Housing Department provides civic amenities in urban areas and extends support through Urban Local Bodies to all the citizen as well as shares the responsibility of ensuring planned development of the city and its outskirts. As part of it, UDHD has taken up the augmentation and strengthening of water supply in Jhumritilaiya town.

The proposal includes upgradation of existing water supply lines, construction of New Over Head Tank (OHT) and establishing new Water Treatment Plant to meet the future water demand.

The proposed project requires NOC and diversion of new land as per below details:

SL. No.	Proposed Project Compt.	Village Name	Thana No.	Plot / Khasra No.	Ares Req. Sqm	Type of land	Ownership
1	WTP at Ward No. 20	Gomo (Mahto Ahara)	12	3775	150Mx150M	GM	Government Land
2	ESR at Ward No. 03	Paswan Tola, Telaiya Basti	244	165	30mx30m	GM	Government Land
3	ESR at Ward No. 15	Bazar Samiti	245	5450	30mx30m	GM	Government Land (Under Bazar samiti)
4	ESR at Ward No. 24	PWD Campud Jhumrari Telaiya	244	5751	30mx30m	GM	Government Land (Under PWD)

Project Building, Dhurwa, Ranchi. Phone : +91 651 2400962 (O). Fax : +91 651 2400966
e-mail : ud.secy@gmail.com


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5	ESR at Ward No. 28	Moriyama	2	1256	30mx30m	GM	Government Land
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Hence, keeping in the interest of the drinking water supply project to Jhumritilaiya citizens, you are requested to accord NOC for the above lands at the earliest.

An affirmative action in this regard will be highly appreciated.

Your faithfully,


(Vinay Kumar Choubey)
Secretary, UD&HD

No Objection Certificate for Jhumri Telaiya Water Supply Scheme issued by Deputy Commissioner, District-Koderma for Construction of WTP at Mahto Ahara and ESR at Telaiya Basti Ward-03 and ESR at Moriyama Ward-28

समाहर्णालय, कोडरमा।
(राजस्व शाखा)

पत्रांक :- 1795 / रा0 दिनांक 22 / 10 / 2020

प्रेषक,
उपायुक्त,
कोडरमा।

सेवा में,
सचिव,
नगर विकास एवं आवास विभाग,
शास्त्राण्ड, राँची।

विषय :- WTP एवं OHT के निर्माण हेतु भूमि प्रतिवेदन के संबंध में।
प्रसंग :- भवदीय पत्रांक 1304, दिनांक 19-5-2020
माहाराय,

उपर्युक्त विषय एवं प्रसंग के संबंध में कहना है कि प्रासंगिक पत्र के आलोक में जूमरीतिलैया नगर परिषद/अंचल कोडरमा अन्तर्गत बेहतर पेय-जलापूर्ति हेतु WTP एवं OHT के निर्माण के लिए चिन्हित खाता/खेसरा की भूमि की अंचल अधिकारी, कोडरमा से जाँच कराई गई। जाँचोपरान्त अंचल अधिकारी, कोडरमा ने पत्रांक-718 दिनांक 28.10.2020 से बिन्दुवार जाँच प्रतिवेदन उपलब्ध कराया है (प्रतिवेदन संलग्न)। जिसमें उन्होंने क्रम संख्या-02 एवं 05 में प्रसंगाधीन पत्र में उल्लेखित भूमि स्थिती खाता के होने के कारण उक्त चिन्हित स्थल को परिवर्तित कर गैरमजसूआ भूमि को चिन्हित किया गया है। साथ ही क्रम संख्या-03 पर वर्णित प्लॉट नं०-5450, मौजा-तिलैया, थाना, नं०-244 से संबंधित भूमि स्थिती खाते की है और तिलैया बाजार समिति परिसर के अन्तर्गत है, जिसे अनापत्ति प्रमाण पत्र प्राप्त करने के उपरान्त भेजी जायेगी।

पुनः श्रेंडिका-04 पर वर्णित भूमि कार्यपालक अभियंता, पथ निर्माण विभाग, पथ प्रमण्डल, कोडरमा से अनापत्ति प्रमाण पत्र प्राप्त करने के उपरान्त अधोहस्ताक्षरी स्तर से अनापत्ति भेजी जायेगी।

अंचल अधिकारी, कोडरमा द्वारा उपलब्ध कराये गये जाँच प्रतिवेदन के आधार पर निम्न चिन्हित स्थलों पर बेहतर पेय-जलापूर्ति हेतु WTP एवं OHT निर्माण के निमित्त अप्रस्तर कार्रवाई हेतु अनापत्ति भेजी जाती है :-

Sl. No.	Proposed Project Compt.	Village Name	Thana No.	Khata No.	Plot/Khesra No.	Areas Req. Sqm.	Type of Land	Ownership
1.	WTP at Ward No.-20	Gumo (Mahto Ahara)	12	221	3775	150M x 150M	GM	Govt. Land
2.	ESR at Ward No.-03	Telaiya Basti	244	1343	493	30M x 30M	GM	Govt. Land
3.	ESR at Ward No.-28	Moriyanwan	02	83	2746	30M x 30M	GM	Govt. Land

कृपया सादर सूचनार्थ समर्पित।
अनुलग्नक :- यथोक्त।

विश्यासभाजन,
22/10/20
उपायुक्त,
कोडरमा।

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