



Initial Environmental Examination

PUBLIC

July 2024

India: West Bengal Drinking Water Sector Improvement Project

Subproject : Bulk Water Supply for 2-Blocks of Mejia and Gangajalghati, (Bankura District)

[Package DWW/BK/03]

Part 2 of 4: Appendix 12 (continued) and Appendices 13 - 15

Prepared by Public Health Engineering Department, Government of West Bengal for the Asian Development Bank (ADB). This is an updated version of the initial environmental examination report originally posted in February 2020 available at <https://www.adb.org/projects/documents/ind-49107-006-iee-9>.

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Asian Development Bank


NOC No 164601

7. You shall comply with
- Water (Prevention and Control of Pollution) Cess Act, 1977, if applicable.
 - Water (Prevention and Control of Pollution) Cess Act, 1978, if applicable.
 - Environment (Protection) Act, 1986
 - Environment (Protection) Rules, 1986
 - Hazardous Wastes (Management and Handling) Rules, 1989 and Amended Rules, 2000
 - Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 and Amended Rules, 2000
 - Manufacture, Use, Import and Storage and Hazardous Micro-Organisms, Genetically Engineered Organisms or Cell Rules, 1989
 - The Public Liability Insurance Act, 1991 and Amended Act, 1992
 - The Public Liability Insurance Rules, 1991 and Amended Rules 1993
 - Biomedical Wastes (Management & Handling) Rules, 1998 and Amended Rules 2000 if applicable.
 - Recycled Plastics Manufacture and Usage Rules 1999, if applicable and
 - Ozone Depleting Substances (Regulation & Control) Rules, 2000, if applicable
8. You will have to abide by any other stipulations as may be prescribed by any authority/local bodies/Government Departments etc.

SPECIAL CONDITION: Please see Annexure.

Gross Capital investment of the project is Rs. 37,13,00,000/-
(Rupees thirty-seven crores thirteen lakhs.) only.

Any violation of the aforesaid conditions shall entail cancellation of this Consent to Establish (NOC)

Yours faithfully,

 Member Secretary
 West Bengal Environmental Engineer
 W. B. Pollution Control Board
 Operation & Execution Cell

Memo No.
 Copy forwarded for information to :

- Chief Inspector of Factories, Government of West Bengal, N. S. Building, Kolkata-700 001
- Director of Industries/Director of Cottage & Small Scale Industries, Government of West Bengal, N. S. Building, Kolkata-700 001
- Guard file, West Bengal Pollution Control Board.
- Environmental Engineer, VII/Alipur R.O./Howrah R.O./Hooghly R.O./B.R.O./D.R.O./Haldia R.O./S.R.O./Asansol/ Sub-R.O./WBPC Board

Himalaya Bhawan Delhi Road, Dankuni Dist. Hooghly	VIII, Panpur Kalyani Expressway P.O. Narayanpur Dist. 24 Pgs. (N)	Sahid Khudiram Sarani City Centre, Durgapur-16 Dist. Burdwan	10, Camac Street 2nd Floor Kolkata-700 017
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Paribesh Bhawan 10A, LA-Block, Sector-III Salt Lake City, Kolkata - 700 098	Block-05 at 40 Flats Complex Adjacent to Priyambada Housing Estate P.O. : Khanjanchak, P.S. Durgachak Haldia-721602 Dist. : Purba Medinipur	Paribahan Nagar Matigara, Siliguri Dist.-Darjeeling
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Satya Chowdhury
Indoor Stadium
Balurchar Bandh Road
Malda-732101

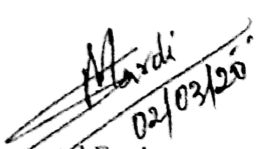
Asansol Sub-Regional Office
ADDA Commercial Market (2nd Floor)
Opposite Asansol Fire Station
G.T. Road, Asansol-713 301

Member Secretary,
West Bengal Pollution Control Board

Annexure to NOC Sl. NO 164601

Special Conditions issued to Public Health Engineering Dte, Project Implementation Unit (PIU), Bankura WBDWSIP for installation of Raw river Water Treatment Plant (Capacity: 36 MLD) for Mejhia and Gangajalghati Block Water Supply Scheme under WBDWSIP at Plot No. 851, Dag no. 851, J.L. No. 13, Khatian no. 973, Mouza: Basudevpur, P.O. & P.S.: Gangajalghati, District: Bankura. Pin- 722133.

- A. Emission:** Nil
- B. Raw Water Treatment :-** Raw river water: 36 MLD to be treated in Water Treatment Plant as per process description submitted by the unit and for bulk water supply for Majhia and Galgajalghati under WBDWSIP.
- C. Solid Waste :-**
- WTP sludge to be used as one of the raw material for making bricks as proposed by the unit and PVC/Plastic waste /gunny bags to be sold.
 - Plastic / PVC wastes to be sold to the State Board's authorised recyclers
- D. General:**
- At any instant, total quantity of Chlorine stored onsite shall be less than the threshold quantity of Chlorine as prescribed in the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules.
 - The unit shall take all preventive and precautionary measure for controlling adverse impact of chlorine in case of any accidental release.
 - The unit shall take proper measures to control air, water and noise pollution.
 - This NOC is valid only subject to obtaining permission/clearances from the other Competent Authorities as applicable.
 - Ambient noise level not to exceed the permissible limit.
 - No addition/alteration/modification can be done without prior permission from the State Board.
 - The unit shall obtain Consent to Operate of the State Board before starting operation.
 - Good housekeeping to be maintained.
 - Adequate green belt around the unit to be developed.
 - This NOC is valid upto 28.02.2027 for setting up the Water Treatment Plant - 36 MLD capacity.


 Environmental Engineer
 Operation & Execution Cell
 West Bengal Pollution Control Board
Environmental Engineer
W. B. Pollution Control Board
 Operation & Execution Cell

**APPENDIX 13: Relevant Road cutting Permission for laying of pipeline
Permission from PWD- Road cutting**

Government of West Bengal
Public Works Department (Roads Wing)
NABANNA, 8th floor, HRBC Building,
325, Sarat Chatterjee Road,
P.O.-Shibpur, Howrah-711 102.

No: 1M-38/19/279-R/PL

Dated: 09/10/2020

From : The Nodal Officer & Joint Secretary (Roads),
Public Works Department.

✓ **To :** The Nodal Officer, Public Health Engineering Department
& Superintending Engineer, Planning Circle – I,
Public Health Engineering Directorate,
PNB House, 4th Floor, 18A Brabourne Road,
Kolkata – 700001.

Sub: Permission for laying of pipelines of Asian Development Bank (ADB) assisted project for Bankura District Water Supply Project (Phase II) under Public Health Engineering Department along the listed 7 roads of Public Works Department.

Ref: Your Memo No. 335/PC-I dated 24/08/2020.

Sir,

With reference to above cited subject permission is accorded for laying of pipelines of Asian Development Bank (ADB) assisted project for Bankura District Water Supply Project (Phase II) under Public Health Engineering Department along the listed 7 roads of Public Works Department subject to compliance of the following conditions:

1. Work programme is to be submitted to the Superintending Engineer, Western Highway Circle No. II, Public Works (Roads) Directorate, District Magistrate, Bankura, Superintendent of Police, Bankura, Executive Engineer, Bankura Highway Division, Public Works (Roads) Directorate and concerned RTO 10 days prior to start the pipe laying work for alertness of commercial vehicle movement during such operation.
2. Work programme is to be in such a manner so that traffic movement shall not be stopped.

3. No open cut technique is allowed within the Bituminous Road and hard shoulder portion. Only Micro tunnelling/ trenchless technology is allowed within the Bituminous Road and hard shoulder portion. In earthen shoulder portion open cut method may be adopted.
4. Work is to be executed as per approved drawing signed by the Executive Engineers of both departments.
5. Excavation in earthen shoulder portion is to be made properly with shoring & other precautionary measures to avoid further collapse of road carriageway and there shall be minimum 1.50 m clear distance between outer edge of pipe line and the edge of bituminous road. Moreover attempt should be taken to lay the pipeline as far as possible close to the boundary line of Right of Way (ROW).
6. Top of pipe is to be 1200 mm below than the top of existing carriageway and back filling in open cut portion shall be done with sand immediate after laying of pipeline. Back filling with excavated soil is to be avoided to ensure proper compaction / consolidation.
7. Every care is to be taken up for laying of pipe during monsoon.
8. Traffic management during pipe laying and temporary restoration period is to be followed as per IRC guidelines to ensure traffic safety.
9. The work of pipe laying and road restoration is to be completed within minimum possible time. Temporary road restoration may be done by 600 / 400 mm thick jhama metal consolidation over 75 mm thick brick flat soling after back filling with sand.
10. Pipeline fittings & other accessories like AR Valve is to be aligned out of carriageway & is to be kept beyond the toe line of the road embankment.
11. At culvert and bridge locations pipe shall be laid separately without causing hindrance on the waterways. Pipeline shall not be laid supported with any primary/ secondary structural component of the existing RCC bridges or culverts. Separate structure may be introduced to support the pipe line, if required.
12. After completion of pipe lying work one joint inspection is to be made by both the departmental Engineer Officers to assess the extent of damages and temporary restoration thereon. One completion drawing of pipe layout plan is to be submitted by the pipe lying agency for issuance of completion order & for future reference.

15. The name of roads along with chainage for pipe laying portion are stated below:

Sl. No.	Name of Road	Chainage of roads for pipe laying
1.	Barjora to Darlabpur Road.	7.80 kmp to 17.90 km
2.	Mejia to Saltora Road.	11.00 kmp to 19.00 kmp
3.	Devaria to Fulbaria Road .	0.00 kmp to 12.80 kmp
4.	Gargajalghati to Saltora Road.	0.00 kmp to 8.50 kmp
5.	Sasani Road (Kusthalla junction to Lachmanpur junction).	17.00 kmp to 22.00 kmp
6.	Mejia to Kusthalla Road.	0.00 kmp to 12.00 kmp
7.	Nardampur to Malira Road.	0.00 kmp to 12.00 kmp

The permission issues in conformity with the circular No. 134-03/16/507-IL/PL dated 20/03/2019 of PWD.

Yours faithfully

Nodal Officer & Joint Secretary (Roads)
Public Works Department.

No: IM - 38/19/279/164-R/PL

Dated: 09/10/2020

Copy forwarded for information to:

- 1) The Engineer - in - Chief & Ex - Officio Secretary, Public Works Department.
- 2) The Chief Engineer, Head Quarter, Public Works (Roads) Directorate.
- 3) The Chief Engineer, West Zone, Public Works (Roads) Directorate.
- 4) The Senior PS to the Additional Chief Secretary to the Government of West Bengal, Public Works department.

Nodal Officer & Joint Secretary (Roads)
Public Works Department.

No: IM - 38/19/279/264-R/PL

Dated: 09/10/2020

Copy forwarded for information and necessary action to:

- 1) The District Magistrate, Bankura.
- 2) The Superintendent of Police, Bankura.
- 3) The Superintending Engineer, Western Highway Circle No. II, Public Works (Roads) Directorate.
- 4) The Executive Engineer, Bankura Highway Division, Public Works (Roads) Directorate.

Nodal Officer & Joint Secretary (Roads)
Public Works Department.

PMGSY Road- Road cutting NOC

**West Bengal State Rural Development Agency
Bankura Division**

Bankura Zilla Parishad Bhavan (2nd Floor), Court Compound, Bankura - 722101,
Tele-fax: (03242) 258471, e-mail: wb-ban@pmgsy.nic.in

Dated: 15/01/2020

No. 46/WBSRDA-03/BMGSY/EE/20

To
The Executive Engineer
Project Implementation Unit, Bankura.
WBDWSIP, P.H.E Deptt.
Bankura.

Sub:- Permission for laying of road clear water provision main & distribution pipe line along different roads.

Ref: 35/EE/PIU-Bankura Dt.10/12/2019

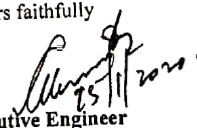
Dear Sir,

In reference to the above subject & memo this is for your kind information that higher authority has given consent regarding laying of the water pipe line in the block of Indpur, Mejia & Gangalghati subject to the condition that the line should be laid along the toe line of the road embankment and restoration of the same with proper slope & compaction as per PMGSY norms. Other restoration works as required should be done. Also the points mentioned in your letter should strictly be followed.

Before and after laying of pipe line a joint inspection should be conducted for each and every road.

Thanking you.

Yours faithfully



Executive Engineer
WBSRDA, Bankura Division.

Dated: 15/01/2020

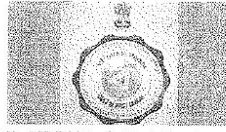
No. 46(4)/WBSRDA-03/BGSY/EE/20

Copy forwarded for information and necessary action to :-

- The Superintending Engineer, WBSRDA, Joint Administrative Building, Plot No. 7, Block - Hc, Sector - Iii, Bidhannagar, Kolkata -106.
- C.A. to The Savadhipati, with the request to place the same before Savadhipati, Bankura Zilla Parishad.
- C.A. to The Additional Executive Officer, with the request to place the same before Additional Executive Officer, Bankura Zilla Parishad.
- Office Guard File.
- A. E., WBSRDA; Bankura Div;


Executive Engineer
WBSRDA, Bankura Division

Zilla Parishad – Road cutting NOC



GOVERNMENT OF WEST BENGAL
 OFFICE OF THE EXECUTIVE ENGINEER
 PROJECT IMPLEMENTATION UNIT, BANKURA, WBDWSIP, P.H.E.DTE.
 AAILAKUNDI, DISTRICT-BANKURA
 PIN - 722102, email : ee.piubankura.adb@wbphed.gov.in

Memo No: 494 (5) / EE / PIU Bankura

Dated Bankura : 03.03.2020

- | | |
|--|---|
| 1) To,
The Project Manager,
BKP- 01
Technofab Engineering-SN Envirotech JV,
Bankura. | 2) To
The Project Manager,
BKP- 02A
Larsen & Toubra Construction,
Water & Effluent Treatment,
Bankura. |
| 3) To,
The Project Manager,
BKP- 02B
Larsen & Toubra Construction,
Water & Effluent Treatment,
Bankura. | 4) To
The Project Manager,
BKP- 03
Larsen & Toubra Construction,
Water & Effluent Treatment,
Bankura. |
| 5) To
The Project Manager,
BKP- 04
Larsen & Toubra Construction,
Water & Effluent Treatment,
Bankura. | |

Sub:- Permission for laying of pipe line along the different roads under control of Bankura Zilla Parishad, for piped water supply scheme to Bankura District (Phase - II) under WBDWSIP.

Dear Sir,

Enclose please find herewith a copy of permission for laying of pipe line along the road under control of the Bankura Zilla Parishad from the District Engineer, Bankura Zilla Parishad.

You are requested to follow the point regarding restoration of the road after laying of pipes as mentioned in the permission letter attached herewith.

This is for your information and taking necessary action please.

Encl:- Memo No : 618 / ZP / 2020,
 dated : 26.02.20 of The District Engineer,
 Bankura Zilla Parishad.

*DTL /
 All concerned managers.*

Yours faithfully

EE
 Executive Engineer (Civil),
 PIU, Bankura, WBDWSIP, PHE Dte.

Memo No: 494 (5) / 3 / EE / PIU Bankura

Dated Bankura : 03.03.2020

Copy forwarded for information and necessary action:-

- 1) The Superintending Engineer, PIU, Bankura, WBDWSIP, PHE Dte.
- 2) The Assistant Engineer - I / (HQ), PIU, Bankura, WBDWSIP, PHE Dte.
- 3) The Team Leader, DSISC, PIU, Bankura, WBDWSIP.

EE
 Executive Engineer (Civil),
 PIU, Bankura, WBDWSIP, PHE Dte.

Office of the Bankura Zilla Parishad

Court Compound
P.O. + Dist. - Bankura

☎ : 03242-250644/255450/251393/256492/250270/250281/257822/257844

Fax : 03242-250365/256492/251711/240411

E-mail : sabbadhipati-bnk@nic.in, aeozp-bnk@nic.in, bnk_statcell@rediffmail.com

Memo No.: 618 /ZP/2020

Dated: 26/02/2020

To,
✓ The Executive Engineer
Project Implementation Unit, Bankura.
WBDWSIP, PHE Deptt.,
Bankura.

Sub: Permission for laying of road clear water provision main & distribution pipe line along difference roads.

Ref No : 385/EE/PIU-Bankura, Dated: 07/01/2020

Sir,

In reference to the above subject & memo this is for your information that higher authority has given consent regarding laying of the water pipe line under the road of Bankura Zilla Parishad, subject to the condition that the line should be laid along the toe line of the road embankment and restoration of the same with proper slope & compaction as per Rural Road Guidelines. Other restoration works as required should be done. Also the points mentioned in your letter should strictly be followed.

Before and after laying of pipe line a joint inspection should be conducted for each and every road.

Thanking You.

Yours faithfully,

[Signature]
26/02/2020
District Engineer
Bankura Zilla Parishad

Memo No.: /ZP/2020

Dated: 26/02/2020

Copy forwarded for information & necessary action to:-

1. P.A. to The Savadhipati, with request to place the same before Savadhipati, Bankura Zilla Parishad.
2. C.A. to the District Magistrate, Bankura with the request to place it before the District Magistrate, Bankura for his kind perusal.
3. C.A. to The Additional Executive Officer, with request to place the same before Additional Executive Officer, Bankura Zilla Parishad

[Signature]
District Engineer
Bankura Zilla Parishad

Appendix 14A: Permission of tree felling at WTP site

Part I] THE KOLKATA GAZETTE, EXTRAORDINARY, FEBRUARY 9, 2007 13

Form III

Form for Permission for Felling / Disposing of Trees in Non-Forest Areas [See Rule 5 (2)]

Permit No. 40/GG Dated: 5/12/19

Whereas the applicant, Sri/Smt./Messrs Public Health Engineering dept
Address : Aitakandi, Bankura, Pin - 72201 has
submitted an application with the prescribed fee on 5/7/19 for permission for felling /
disposing of trees for the purpose of Development purpose at the following site :

- (a) Location : G. Ghat
- (b) Details of Plot(s) of Land : plot no - 851, mouta - Basudebpur
J.L. no - 13

AND Whereas the undersigned is satisfied with regard to the legality of documents towards the proof of ownership or lease of the land on which such tree stands;

AND Whereas the purpose for which the trees are required to be felled is in conformity with rule 4 (1) of the West Bengal Trees (Protection and Conservation in Non-Forest Areas) Rules, 2006 :

AND Whereas an inquiry in the prescribed manner has been carried out on 21/10/19 and the undersigned has examined the inquiry report with due care;

AND Whereas the land in question belongs to the Tea Garden and the applicant has produced a specific scheme framed under the provisions of the Plantations Labour Act, 1951 for utilizing the sale proceeds strictly for the purpose of welfare of the labourers;

AND Whereas the applicant is a developer who has already obtained a Certificate of Clearance No. dated Issued by the undersigned and sanction of the building / construction plan by the sanctioning authority, viz. vide his letter No. Dated

AND Whereas it is found on inquiry that the proposed felling will not alter nature or character or mode of use of the land.

OR

The Applicant has produced the requisite permission under section 4C of the West Bengal Land Reforms Act, 1955.

AND whereas the applicant has deposited the prescribed security amount for plantation of trees to the undersigned;

OR

The applicant has been exempted by the undersigned from the obligation of plantation of trees under sub-rule (2) of rule 6 of the West Bengal Trees (Protection and Conservation in Non-Forest Areas) Rules, 2006 ;

OR

The applicant has expressed his inability to undertake the plantation to trees by himself and has deposited to the undersigned the amount for the designated agency as prescribed under sub-rule (3) of rule 6 of the West Bengal Trees (Protection and Conservation in Non-Forest Areas) Rules, 2007.

OR

The applicant is a developer and not required to deposit the security amount.

- * Strike off if not applicable.
- * Strike off the option which is not applicable.

Now, therefore, in persons to the power conferred under sub-section (1) of section 5 of the West Bengal Trees (Protection and Conservation in Non-Forest Areas) Act, 2006, the undersigned permits the applicant to undertake the felling of the trees as included in the Annexure.

The undersigned also permits the applicant (not a developer) under the first proviso to section 8 of the West Bengal Trees (Protection and Conservation in Non-Forest Areas) Act, 2006, to plant only _____ number of trees instead of the number prescribed under sub-rule (1) of rule 6 of the West Bengal Trees (Protection and Conservation in Non-Forest Areas) rules 2007. OR permits the applicant to plant number of trees over different plots(s) of land (as indicated in Condition No. 3 below) because (give reasons), which is in conformity with sub-rule (2) of rule 6 of the West Bengal Trees (Protection and Conservation in Non-Forest Areas) Rules, 2007;

The permission as given above is subject to the following conditions:-

This permit is non-transferable and valid only up to 18/3/2020

1. the applicant (if a developer) shall take up plantation of trees in accordance with the approved plantation plan and the Certificate of Clearance within month(s) from the date of sanction of the building / construction plan by the sanctioning authority;
2. The applicant (if not a developer) shall take up plantation of 1160 number of trees 232 nos over the Plot(s) No. 85, Basudebpur mouza within 3 months from the date of issue of this permit;

3. As provided in section 10 of the West Bengal Trees (Protection and Conservation in Non-Forest Areas) Act, 2006, the applicant (if not a developer) shall start preparatory work for plantation within sixty days from the date for permit or the date of receipt of directions from the undersigned, as the case may be, and shall undertake plantation for trees in accordance with such directions;
4. The applicant shall inform the undersigned in writing immediately on completion of the plantation of trees;
5. The applicant shall, within a week of carrying out felling of trees, submit a report to the undersigned indicating the total number of logs and firewood produced against each species;
6. Stamps of the felled trees shall be retained for a least one month from the date of felling;
7. The felling and carriage of trees shall not be carried out after the sun-set and before the sun-rise.
8. This permission is subject to the provisions of the West Bengal forest (Establishment and Regulation of Saw Mills and Other Wood-based Industries) Rules, 1982 and The West Bengal Forest Produce Transit Rules, 1959.
9. This permit should be produced for inspection on demand to the undersigned or any of the authorities specified in sections 15 and 17 of the West Bengal Trees (Protection and Conservation in Non-Forest Areas) Act, 2006.


(Signature of the Competent Authority)

Name : D. Pyne
 Designation F.R.


Official Seal : ... **Forest Range Officer**
Gangaajhati Range

* Strike off if not applicable.

Extension of Permission of tree felling



GOVERNMENT OF WEST BENGAL
DIRECTORATE OF FORESTS
OFFICE OF THE DIVISIONAL FOREST OFFICER
BANKURA NORTH DIVISION



Phone * 03242-250758, Fax * 03242-256556, e-mail * dfo_bkn@yahoo.com Visit us at * www.bankuraforest.in

No. 2106/28-13 Dated, Bankura the 29th September/2020

From ⇒ The Divisional Forest Officer,
Bankura (North) Division.

To ⇒ The Divisional Manager,
Bankura Forest Corporation Division,
Machantala, P. O. & Dist. Bankura.


Sub ⇒ Time extension for felling permission.

Ref ⇒ Your Memo No. 624 / 17-2 / 19-20., dt. 04-08-2020 & R.O. Gangajalghati
Ranges's Memo No. 439/GG-28, dt. 29-09-2020.

~*~


With reference to your letter quoted above you are hereby allowed for extension of time for felling 232 nos. trees in plot No. 851, JL. No. 13, Mouza-Basudevpur under Gangajalghati Range as mentioned in your letter.

This is for your information.


 Divisional Forest Officer
 Bankura (North) Division

No. 2106/28-13 Dated, Bankura the 29th September/2020

✓ Copy forwarded to the Range Officer, Gangajalghati Range for information.


 Divisional Forest Officer
 Bankura (North) Division

**Appendix 14B: Details of Tree felling and plantation plan
Inventory of identified trees to be felled as demarcated by Forest Department**

DEMARKATION FOR TREES AT WTP BASUDEBPUR

Sl. NO	TREES IDENTIFICATION NO	SPECIES	GBH (IN CM)	HEIGHT (IN M)	QTY.	REMARKS
1	1	MANGO TREE	50	7	1	
2	2	MANGO TREE	40	7	1	
3	3	SONAJURI TREE	65	12	1	
4	4	NEEM TREE	60	10	1	
5	5	MANGO TREE	40	6	1	
6	6	KACH TREE	45	3	1	
7	7	NEEM TREE	45	4	1	
8	8	KACH TREE	40	3	1	
9	9	MANGO TREE	60	6	1	
10	10	MANGO TREE	35	3.5	1	
11	11	MANGO TREE	80	8	1	
12	12	MANGO TREE	40	7	1	
13	13	SEESAM TREE	70	11	1	
14	14	SONAJURI TREE	80	10.5	1	
15	15/1	MANGO TREE	50	5	1	
16	15/2	MANGO TREE	35	5	1	
17	16/1	ARJUN TREE	50	9	1	
18	16/2	ARJUN TREE	50	9	1	
19	17	KALA SIRIS TREE	75	6	1	
20	18	MANGO TREE	50	6.5	1	
21	19	MANGO TREE	40	3.5	1	
22	20	MANGU TREE	40	3	1	
23	21	ARJUN TREE	50	8	1	
24	22	MANGO TREE	45	7	1	
25	23	SEESAM TREE	65	10.5	1	
26	24	MANGO TREE	40	3	1	
27	25	MANGO TREE	55	6	1	
28	26/1	MANGO TREE	45	6.5	1	
29	26/2	MANGO TREE	40	6.5	1	
30	27	MANGO TREE	60	6.5	1	
31	28	MANGO TREE	35	5.5	1	
32	29/1	MANGO TREE	30	4	1	
33	29/2	MANGO TREE	35	4	1	
34	30	NEEM TREE	60	7	1	
35	31	PALASH TREE	80	8.5	1	
36	32	IMLY TREE	35	4	1	
37	33/1	MANGO TREE	35	4	1	
38	33/2	MANGO TREE	50	4	1	
39	34/1	MANGO TREE	70	5	1	
40	34/2	MANGO TREE	85	5	1	
41	35/1	GUAVA TREE	40	5.5	1	
42	35/2	GUAVA TREE	40	5.5	1	
43	36	MANGO TREE	80	6	1	
44	37/1	MANGO TREE	60	9	1	
45	37/2	MANGO TREE	80	9	1	
46	38/1	MANGO TREE	50	8.5	1	
47	38/2	MANGO TREE	55	8.5	1	
48	39	SONAJURI TREE	70	11	1	
49	40/1	MANGO TREE	45	7	1	
50	40/2	MANGO TREE	50	7	1	

51	41	MANGO TREE	45	3	1
52	42	MANGO TREE	55	3.5	1
53	43	SONAJURI TREE	60	7	1
54	44/1	MANGO TREE	85	5	1
55	44/2	MANGO TREE	85	5	1
56	45/1	MANGO TREE	85	7	1
57	45/2	MANGO TREE	100	7	1
58	46	NEEM TREE	70	10	1
59	47	JAMUN TREE	90	10.5	1
60	48/1	MANGO TREE	50	4	1
61	48/2	MANGO TREE	45	4	1
62	49	KATHAL TREE	80	3	1
63	50	ARJUN TREE	75	12	1
64	51	PALASH TREE	75	11	1
65	52	AMRA TREE	75	11.5	1
66	53	ARJUN TREE	55	5	1
67	54	JAMUN TREE	80	5.5	1
68	55/1	BARGAD TREE	120	9	1
69	55/2	BARGAD TREE	80	9	1
70	56/1	MANGO TREE	65	4	1
71	56/2	MANGO TREE	40	4	1
72	57	MANGO TREE	90	4	1
73	58	ARJUN TREE	100	10	1
74	59	AKAR TREE	55	4	1
75	60	AKAR TREE	60	3	1
76	61	AKAR TREE	50	4	1
77	62/1	MANGO TREE	75	5	1
78	62/2	MANGO TREE	70	5	1
79	63	AKAR TREE	65	6	1
80	64/1	MANGO TREE	70	6	1
81	64/2	MANGO TREE	60	6	1
82	65	MANGO TREE	75	7	1
83	66	ASHOK TREE	45	3.5	1
84	67/1	MANGO TREE	85	7	1
85	67/2	MANGO TREE	95	7	1
86	68	BEL TREE	60	6.5	1
87	69	BEL TREE	55	5	1
88	70/1	BEL TREE	50	5.5	1
89	70/2	BEL TREE	45	5.5	1
90	71	MANGO TREE	105	11	1
91	72/1	ASHOTHO TREE	240	16	1
92	72/2	ASHOTHO TREE	240	16	1
93	73	KALA SIRIS TREE	90	12	1
94	74	MANGO TREE	60	9	1
95	75	MATHER TREE	95	11	1
96	76	MANGO TREE	70	9.5	1
97	77	AKAR TREE	100	13	1
98	78	KATHAL TREE	70	5	1
99	79	JAMUN TREE	70	10	1
100	80	KATHAL TREE	85	4	1

101	81	AKAR TREE	40	8	1
102	82	MANGO TREE	145	7	1
103	83	MANGO TREE	150	7	1
104	84	NEEM TREE	53	6	1
105	85	JAMUN TREE	95	5	1
106	86	NEEM TREE	63	6	1
107	87	NEEM TREE	45	5	1
108	88	NEEM TREE	49	4	1
109	89	PARAS TREE	111	5	1
110	90	PARAS TREE	78	4	1
111	91	PALASH TREE	70	10	1
112	92	PALASH TREE	80	10	1
113	93	PALASH TREE	85	10	1
114	94	NEEM TREE	75	10	1
115	95	PLUM TREE	60	10	1
116	96	AMRA TREE	70	10	1
117	97	NEEM TREE	85	10	1
118	98	SONAJURI TREE	70	7	1
119	99	SONAJURI TREE	100	8	1
120	100	SONAJURI TREE	70	5	1
121	101	ARIUN TREE	75	10	1
122	102	MANGO TREE	45	4	1
123	103	SONAJURI TREE	60	7	1
124	104	MANGO TREE	40	5	1
125	105	MANGO TREE	66	8	1
126	106	SONAJURI TREE	39	9	1
127	107	NEEM TREE	46	8	1
128	108/1	MANGO TREE	59	8	1
129	108/2	MANGO TREE	48	8	1
130	109	MANGO TREE	111	11	1
131	110	IMLY TREE	81	10	1
132	111	MANGO TREE	106	10	1
133	112	NEEM TREE	97	10	1
134	113	NEEM TREE	62	7	1
135	114	MANGO TREE	58	6	1
136	115	MANGO TREE	50	5.5	1
137	116	KACH TREE	66	7	1
138	117	MANGO TREE	56	9	1
139	118	NEEM TREE	62	8	1
140	119	SEESAM TREE	89	5	1
141	120	NEEM TREE	48	4	1
142	121	KALA SIRIS	67	8	1
143	122	KALA SIRIS	79	13	1
144	123	KALA SIRIS	42	9	1
145	124	SEESAM TREE	96	10	1
146	125	NEEM TREE	77	6	1
147	126	SAIJAN TREE	69	2.5	1
148	127/1	SAIJAN TREE	52	2.5	1
149	127/2	SAIJAN TREE	33	1.5	1
150	128	NEEM TREE	88	8	1

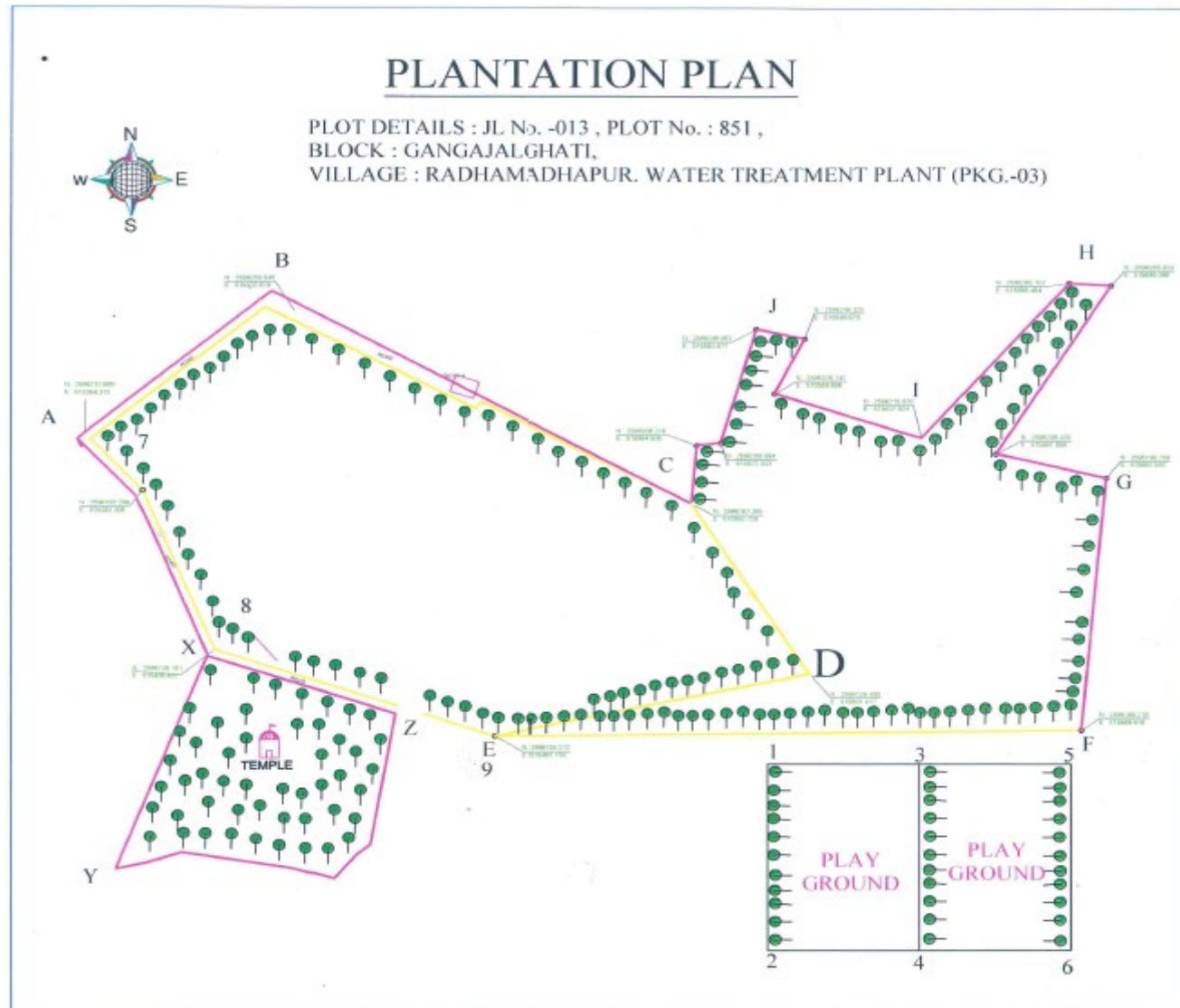
151	129	KALA SIRIS	56	10	1
152	130	SAIJAN TREE	44	3	1
153	131	NEEM TREE	72	6	1
154	132	NEEM TREE	43	7	1
155	133	MOHUA TREE	67	6	1
156	134	SAIJAN TREE	127	7	1
157	135	NEEM TREE	38	5	1
158	136	NEEM TREE	50	5	1
159	137	NEEM TREE	34	6	1
160	138	MOHUA TREE	52	6	1
161	139	MOHUA TREE	47	5	1
162	140	MANGO TREE	65	4.5	1
163	141/1	MANGO TREE	47	4	1
164	141/2	MANGO TREE	46	4	1
165	142	MANGO TREE	48	5	1
166	143	HALDHA TREE	43	5	1
167	144	SAIJAN TREE	38	2.5	1
168	145	SEESAM TREE	51	5	1
169	146	BOBUL TREE	77	10	1
170	147	SAIJAN TREE	46	2.5	1
171	148	MANGO TREE	50	3	1
172	149	MANGO TREE	35	4	1
173	150	JAMUN TREE	39	5	1
174	151	BARGAD TREE	112	6	1
175	152	KATHAL TREE	53	4	1
176	153	MANGO TREE	119	7	1
177	154	MANGO TREE	107	10	1
178	155	PARAS TREE	85	5	1
179	156	MANGO TREE	46	6	1
180	157/1	MANGO TREE	38	6	1
181	157/2	MANGO TREE	37	6	1
182	158/1	KATHAL TREE	38	4	1
183	158/2	KATHAL TREE	38	4	1
184	159	MANGO TREE	62	5	1
185	160	NEEM TREE	60	9	1
186	161	SAIJAN TREE	66	2.5	1
187	162	MANGO TREE	60	6	1
188	163/1	MANGO TREE	67	7	1
189	163/2	MANGO TREE	62	7	1
190	164	KALA SIRIS	45	8	1
191	165	SAIJAN TREE	65	3.5	1
192	166/1	MANGO TREE	58	5	1
193	166/2	MANGO TREE	34	5	1
194	167	MANGO TREE	76	8	1
195	168	KALA SIRIS	41	5	1
196	169	KALA SIRIS	65	6	1
197	170	MATHER TREE	45	6	1
198	171	SAIJAN TREE	37	6	1
199	172	NEEM TREE	42	5	1
200	173	KALA SIRIS	66	6	1

201	174	MANGO TREE	44	5	1
202	175	MCHUYUNI TREE	83	6	1
203	176	MANGO TREE	47	4	1
204	177	NEEM TREE	86	6	1
205	178	NEEM TREE	68	7	1
206	179	MCHUYUNI TREE	73	6	1
207	180/1	KALA SIRIS	74	5	1
208	180/2	KALA SIRIS	59	4	1
209	181	MCHUYUNI TREE	42	4	1
210	182	MANGO TREE	74	5	1
211	183	KALA SIRIS	58	5	1
212	184/1	MANGO TREE	47	4	1
213	184/2	MANGO TREE	54	3	1
214	185	MATHER TREE	68	4	1
215	186	MANGO TREE	43	6	1
216	187	MATHER TREE	103	8	1
217	188	KALA SIRIS	46	9	1
218	189	MANGO TREE	48	5	1
219	190	NEEM TREE	76	8	1
220	191	SEESAM TREE	80	7	1
221	192	NEEM TREE	49	9	1
222	193	KALA SIRIS	69	8	1
223	194	AKAR TREE	60	5	1
224	195	SEESAM TREE	116	8	1
225	196	NEEM TREE	54	5	1
226	197	SEESAM TREE	46	4	1
227	198	KALA SIRIS	42	7	1
228	199	AKAR TREE	38	7	1
229	200	NEEM TREE	57	7	1
230	201	NEEM TREE	76	8	1
231	202	HALDHA TREE	98	8	1
232	203	SONAJURI TREE	87	5	1

Summary of types and number of trees to be felled

S.NO	SPECIES	QUANTITY
1	MANGO TREE	90
2	SONAJURI TREE	10
3	NEEM TREE	31
4	KACH TREE	3
5	SEESAM TREE	8
6	ARJUN TREE	7
7	KALA SIRIS TREE	14
8	PALASH TREE	5
9	IMLY TREE	2
10	GUAVA TREE	2
11	JAMUN TREE	5
12	KATHAL TREE	6
13	AMRA TREE	2
14	BOBUL TREE	1
15	MATHER TREE	4
16	MCHUYUNI TREE	3
17	BEL TREE	4
18	ASHOTHO TREE	2
19	PARASH TREE	3
20	PLUM TREE	1
21	AMRA TREE	2
22	SAIJAN TREE	10
23	MOHUA TREE	3
24	HALDHA TREE	2
25	BARGAD TREE	3
26	AKAR TREE	8
27	ASHOK TREE	1
	TOTAL TREES	232

Layout of proposed Plantation Plan and Number of Trees



Log Detail of felt trees as provided by Forest Department

Lot No 4117-4120 = 04 nos lot

Submission of Depot lots of Beliatore Timber Depot 2020-21 under Beliatore Range
-- PHE , Bashudevapur

Sl No	CFC Sl No	Depot	Lot No	Range	Remarks	Product Type	Species	Length	Girth	No of logs/ Poles/Stacks	Volume (m ³)	Res. Price
								2.10	0.90	3	0.319	
								1.80	0.70	1	0.055	
								2.10	0.80	2	0.168	
								1.80	0.85	1	0.081	
								2.40	0.60	1	0.054	
								2.40	0.55	1	0.045	
								2.10	0.70	2	0.129	
								1.80	1.10	1	0.136	
								2.10	0.65	1	0.055	
								2.40	0.85	1	0.108	
								2.10	0.50	1	0.033	
								1.50	0.50	2	0.047	
								1.20	0.60	5	0.094	
								1.80	0.55	1	0.034	
								1.20	0.45	12	0.162	
								0.90	0.85	2	0.048	
								0.90	0.55	1	0.017	
								0.90	0.50	1	0.014	
								1.20	0.70	1	0.037	
								1.20	0.60	4	0.168	
								0.90	0.75	1	0.032	
								0.90	0.60	1	0.020	
								1.20	0.55	1	0.023	
								1.20	0.65	2	0.063	
								1.20	0.75	2	0.084	
								1.50	0.45	1	0.019	
								2.10	0.60	2	0.066	
								1.80	0.65	1	0.048	
								2.40	0.45	1	0.030	
95	1	BLT	4117/BFC/BLT/PHE- /2020-21	BTR		Timber	Mac	2.10	0.60	8	0.378	
								2.40	0.40	1	0.024	
								2.40	0.60	2	0.108	
								2.40	0.55	1	0.045	
								2.40	0.65	1	0.063	
								2.10	0.45	2	0.053	
								2.10	0.65	5	0.277	
								2.70	0.60	1	0.061	
								2.10	0.55	3	0.119	
								2.40	0.70	1	0.074	
								2.10	0.70	1	0.064	
								1.80	0.55	2	0.068	
								2.10	0.45	10	0.266	
								1.80	0.75	1	0.063	
								1.80	0.45	14	0.319	
								2.40	0.45	2	0.061	
								2.10	0.50	4	0.131	

PHE (Basudevpur)

Sl No	CFC Sl No	Depot	Lot No	Range	Remarks	Product Type	Species	Length	Girth	No of logs/ Poles/Stacks	Volume (m ³)	Res. Price
								1.80	0.50	6	0.189	
								2.10	0.50	1	0.047	
								1.50	0.50	7	0.164	
								1.80	0.45	4	0.078	
								1.50	0.70	3	0.138	
								1.20	0.50	2	0.038	
								1.20	0.45	2	0.030	
								1.50	0.60	4	0.135	
								1.80	0.50	2	0.081	
								1.50	0.55	1	0.068	
								1.80	0.55	2	0.095	
								1.80	0.60	1	0.036	
Total										150	3.416	
								3.00	0.70	1	0.092	
								3.00	0.55	1	0.087	
								3.00	0.50	2	0.094	
								3.80	0.65	1	0.095	
								3.00	0.60	3	0.203	
								3.80	0.55	1	0.068	
								2.40	0.45	1	0.030	
								2.40	0.70	2	0.147	
								2.40	0.50	3	0.113	
								2.70	0.50	1	0.042	
								2.40	0.55	1	0.045	
								2.10	0.50	1	0.033	
								2.10	0.55	1	0.040	
								1.50	0.45	1	0.038	
								1.50	0.60	1	0.060	
								1.20	0.60	2	0.122	
								1.50	0.70	1	0.048	
								2.10	0.45	1	0.027	
								1.80	0.50	1	0.028	
								1.80	0.60	2	0.081	
								1.50	0.55	1	0.028	
								2.40	0.55	1	0.135	
								1.50	0.55	1	0.040	
								1.80	0.45	1	0.023	
								1.80	0.55	1	0.048	
								1.80	0.70	2	0.110	
								1.50	1.05	1	0.103	
								1.50	0.55	1	0.040	
								1.80	0.60	1	0.041	
								2.10	0.50	1	0.106	
								2.10	0.75	1	0.074	
								2.70	0.70	1	0.083	
								2.10	0.80	1	0.084	
								2.10	0.55	2	0.079	
								2.10	0.45	1	0.027	
								1.50	0.45	1	0.019	

Lot Submission Felling Year 2020-21 (Relative Tender Depot under Selection F C Range)

PHE (Basudevpur)

Sl No	CFC Sl No	Depot	Lot No	Range	Remarks	Product Type	Species	Length	Girth	No of logs/ Poles/Stacks	Volume (m ³)	Res. Price
								2.70	0.40	2	0.054	
								0.70	1.00	1	0.044	
								0.60	1.00	1	0.038	
								1.20	1.05	1	0.083	
								0.60	0.50	1	0.009	
								0.90	1.15	1	0.074	
								0.60	0.50	1	0.009	
								1.00	0.70	1	0.031	
								0.70	1.00	1	0.044	
								0.60	0.50	1	0.009	
								Total		57	2.923	
96	1	BLT	4119/BFC/BLT/PHE/2020-21	BTR		Pole	Misc	7'	31-40 cm	4	52	
								7'	41-50 cm	4		
								8'	31-40 cm	8		
								8'	41-50 cm	14		
								10'	31-40 cm	6		
								10'	41-50 cm	11		
								10'	51-60 cm	4		
								10'	61-70 cm	1		
96	1	BLT	4120/BFC/BLT/PHE/2020-21	BTR		FW	Misc	1.00	1.15 x 0.75	0.863	23.100	
								1.00	1.30 x 0.75	0.975		
								9.00	1.55 x 0.75	10.463		
								9.00	1.60 x 0.75	10.800		

PHE Abstract	
Misc. Timber	8.323 m ³
Misc. Pole	52 nos.
Misc. Firewood	23.100 m ³

Tree felling at WTP



Appendix 15: Transfer and Possession of WTP and Intake Land

WTP land

		<table border="1" style="border-collapse: collapse; width: 100%;"> <tr> <td style="padding: 2px;">EE BWS, PHED</td> </tr> <tr> <td style="padding: 2px;">Serial No. <u>98</u></td> </tr> <tr> <td style="padding: 2px;">Diary No. <u>407</u></td> </tr> <tr> <td style="padding: 2px;">Date <u>25/7/19</u></td> </tr> </table>	EE BWS, PHED	Serial No. <u>98</u>	Diary No. <u>407</u>	Date <u>25/7/19</u>
EE BWS, PHED						
Serial No. <u>98</u>						
Diary No. <u>407</u>						
Date <u>25/7/19</u>						
<p>Government of West Bengal Office of the Block Land & Land Reforms Officer Gangajal Ghati, Bankura.</p>						

Memo No: 235 /LR/G Ghati/19 **Dated :** 30 / 5 / 2019

To
The District Land & Land Reforms Officer
Bankura.

Sub: Delivery of possession of 10.00 Acres of Govt land at mouza Basudebpur, J.L. no-13 plot no 851 (LR) in favour of the Department of public Health Engineering, Government of West Bengal for setting up of West Bengal Drinking Water Sector Improvement project (WBDWSIP) in the District of Bankura, West Bengal.

Ref- Your good office memo no LM/2004/19 dated Bankura 10/04/19.

Sir,

Under above noted reference, as per direction necessary arrangement was made for delivery of possession of the above mentioned schedule of land to the authorized representative i.e, Assistant Engineer-1 PIU Bankura WBDWSIP, PHE Dte, Govt of West Bengal on 29/05/2019 in presence of the undersigned. The copy of the possession certificate is sending herewith for your kind information and taking necessary further course of action.

Encl- Copy of possession certificate- 01 (one) Sheet.

Yours faithfully

S/d-

Block Land & Land Reforms Officer
Gangajal Ghati

Memo No: 235 /LR/G Ghati/19 **Dated :** 30 / 5 / 2019

- 1) Copy forwarded to the Executive Engineer PIU Bankura, WBDWSIP PHE Dte Govt of West Bengal for information. This has reference his Office memo no 30/EE/PIU Bankura dt 26/04/2019. A copy of the possession certificate is enclosed herewith for his ready reference. Encl- copy of possession certificate-01 (one) Sheet.

Block Land & Land Reforms Officer
Gangajal Ghati

B.L.&L.R.O
B.L.&L.R.O
 Gangajalghati. Bankura