

# **NORTH BARRACKPORE MUNICIPALITY**

## [DETAILS PROJECT REPORT ON HOUSING FOR ALL (HFA) \_ 2015-16 ]

[Beneficiary Led Construction]

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[Nov. 2015]



Prepared by :-

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Govt. of West Bengal

[P.O. & P.S.- BARRACKPORE, DIST- NORTH 24 PARGANAS]

## DPR of HFA for North Barrackpore Municipality

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Chairman  
North Barrackpore Municipality



**Introductory Note by Chairperson / Mayor**



*The North Barrackpore Municipal is one of the oldest municipalities of West Bengal which has its historical value due to establishment in the British Period, i.e. in the year 1869 and Rastraguru Surendranath Bandyopadhyay was the first elected Chairman of this municipality in the year 1885. It has a population of 1, 32,806 no.s (as per provisional data of Census, 2011) of people residing in mainly the Palta, Ichapore and Monirampore area.*

*North Barrackpore Municipality is located on the eastern banks of the river Hooghly between Barrackpore and Garulia Municipalities. It is one of the earliest municipalities formed and has several Defence and industrial establishments within its boundaries. The current municipality took its final shape after the addition of some portion of the Barrackpore Municipality and some portions of the adjoining Mohanpur Gram Panchayat. The significant defence establishments define the character of the city.*

*The municipality covers an area of 13.56 sq. kn. across the 23 wards within its boundaries. The city took its final form following the addition of areas in its southern portion around ward nos. 21 to 23 from Barrackpore Municipality and eastern portion, around ward nos. 8 and 9 from Mohanpur Gram Panchayat respectively.*



*Holmy Debroy*  
Chairman  
North Barrackpore Municipality.  
Chairman  
North Barrackpore Municipality

**Planning Team**

- I. *Shri. Molay Ghosh, Chairman, North Barrackpore Municipality.*
- II. *Smt. Paramita Bose (Sarkar), Vice-Chairperson, North Barrackpore Municipality.*
- III. *Shri. Debabrata Sinha Roy, Finance Officer, North Barrackpore Municipality.*
- IV. *Shri. Ramendra Chandra Ghosh, Assistant Engineer , North Barrackpore Municipality(Nodal Officer for HFA).*
- V. *Shri. Shyamal Debnath, Sub-Assistant Engineer, North Barrackpore Municipality(Supervisor).*
- VI. *Shri. Chandan Hira, Sub-Assistant Engineer, North Barrackpore Municipality. (Assistant Nodal Officer for HFA).*
- VII. *Shri Barun Biswas, Sub-Assistant Engineer, North Barrackpore Municipality. (Assistant Nodal Officer for HFA).*
- VIII. *Shri Barun Sur, Sub-Assistant Engineer, North Barrackpore Municipality.*
- IX. *Shri Chandan Roy, Sub-Assistant Engineer, North Barrackpore Municipality.*
- X. *Shri Sukhendu Das, IT Co-ordinator, North Barrackpore Municipality.*

**PREFACE**

*Pradhan Mantri Awas Yojana (PMAY) aims at Providing Housing for All (HFA) by 2022 when the Nation Complete 75 years of its independence.*

*The urban homeless persons contribute to the economy of the cities and thus the Nation as cheap labour in the informal sector; yet they live with no shelter or social security . The urban homeless service with many challenges like no access to elementary Public Services such as health, education, food, water and sanitation. Pradhan Mantri Awas Yojana (PMAY) also aims at providing a pucca house to every family with water connection, toilet facilities, 24 X 7 electricity supply and access.*

*The Mission seeks to address the housing requirement of urban poor including slum dwellers through "In Situ" Slum Redevelopment, Affordable Housing through credit linked subsidy, Affordable Housing in partnership and subsidy for beneficiary led individual house. Under the mission, beneficiaries can take advantage under one component only.*

*Total beneficiaries of the scheme are 20 nos from 4 nos slum and 5 nos from non-slum projected for the year 2015-16 .*

*Total cost of the project is **Rs. 101.2 lakhs** as per relevant department & P.W.D. schedule of rates.*



## **1.0: Introduction to NORTH BARRACKPORE Municipality:**

### **1.1 City Overview**

The North Barrackpore Municipality is part of the North 24 Parganas district in West Bengal. It lies 30km to the north of Kolkata and falls in the Kolkata Metropolitan Area. Founded in 1869 and headed by Rastraguru Surendra Nath Bandopadhyay for 34 years, it is among the earliest municipalities formed due to the persistent demand of Local Self Government in India during the British rule.

The North Barrackpore has a total area of 13.56 sq.km. and has 23 wards. It hosts three crucial defence establishments and a central research institution (Central Inland Fisheries Research Institute) that gives the area under the effective jurisdiction of the municipality, a dispersed character. Apart from these North Barrackpore is also home to the only state-sponsored Mechanized Bricks Factory.

The map alongside shows the location of North Barrackpore within the state.

### **1.2 History and Evolution of North Barrackpore**

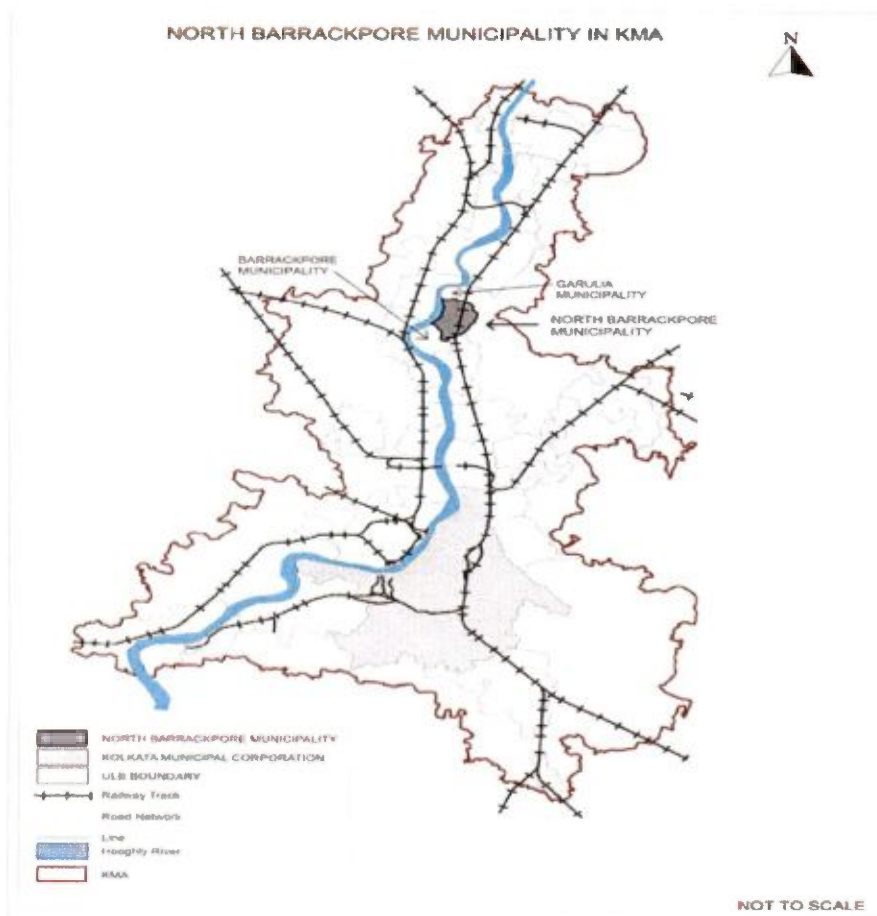
The entire area that today constitutes North Barrackpore and Barrackpore Municipality owes its development to the defence estates set up by the British. Being the site for permanent British barracks, factories and other defence establishments, brought with them allied services like the railway and water ways that helped the town to grow over time. The first Arms Manufacturing facility was established by the British in Ichapore in 1787 followed by a Gun & Carriage Manufacturing facility in 1801. Infrastructure facilities were developed by the British Government solely for the cantonment area while the rest of the settlements depended on nature. In 1869, the British government established the North Barrackpore Municipality for effective local governance and expanded civic amenities to the town in general. The upgradation of Arms Manufacturing facility to Rifle Factory in 1904 and the establishment of the Metal & Steel Factory in Ichapore in 1905 induced further migration of people and growth of the town around the estates. Between 1981 and 1991, some areas from the Barrackpore Municipality was included into North

## DPR of HFA for North Barrackpore Municipality

Barrackpore followed by some areas from the Mohanpur Gram Panchayat in the south east in 1995. Presently, the total area of the municipality (including the defence estates) is 13.56 sq.km of which 8.88 sq.km. (65%) comes under the direct jurisdiction of the municipality.

North Barrackpore hosts 3 major defence establishments within its boundaries with a combined area of 4.68 sq.km. While 2 estates, namely the Air Force Base at Palta in the south of the city and the Metal and Steel Factory, Ichhapore (also called Northland) are located on the western side of the railway line, the Eastland Estate is located on the eastern side of the railway line. Although the three estates are governed by the central government, they are of immense economic and social importance to the city.

### 1.3 Location of North Barrackpore



North Barrackpore is located at 22°78'74"N and longitude 88°35'38"E and is 30 km by road from Kolkata.

The Municipality is bounded by:-

- Garulia Municipality in the North
- Kawgachi and Mohapur Gram

Panchayat in the East

Barrackpore Municipality in the South

River Hooghly in the West

The railway track cuts across the length of the municipality bisecting the area into the eastern and the western part.

The map alongside shows the location of North Barrackpore Municipality with respect to KMC along with the major railway linkages.

### 1.3.1 Physical Linkages

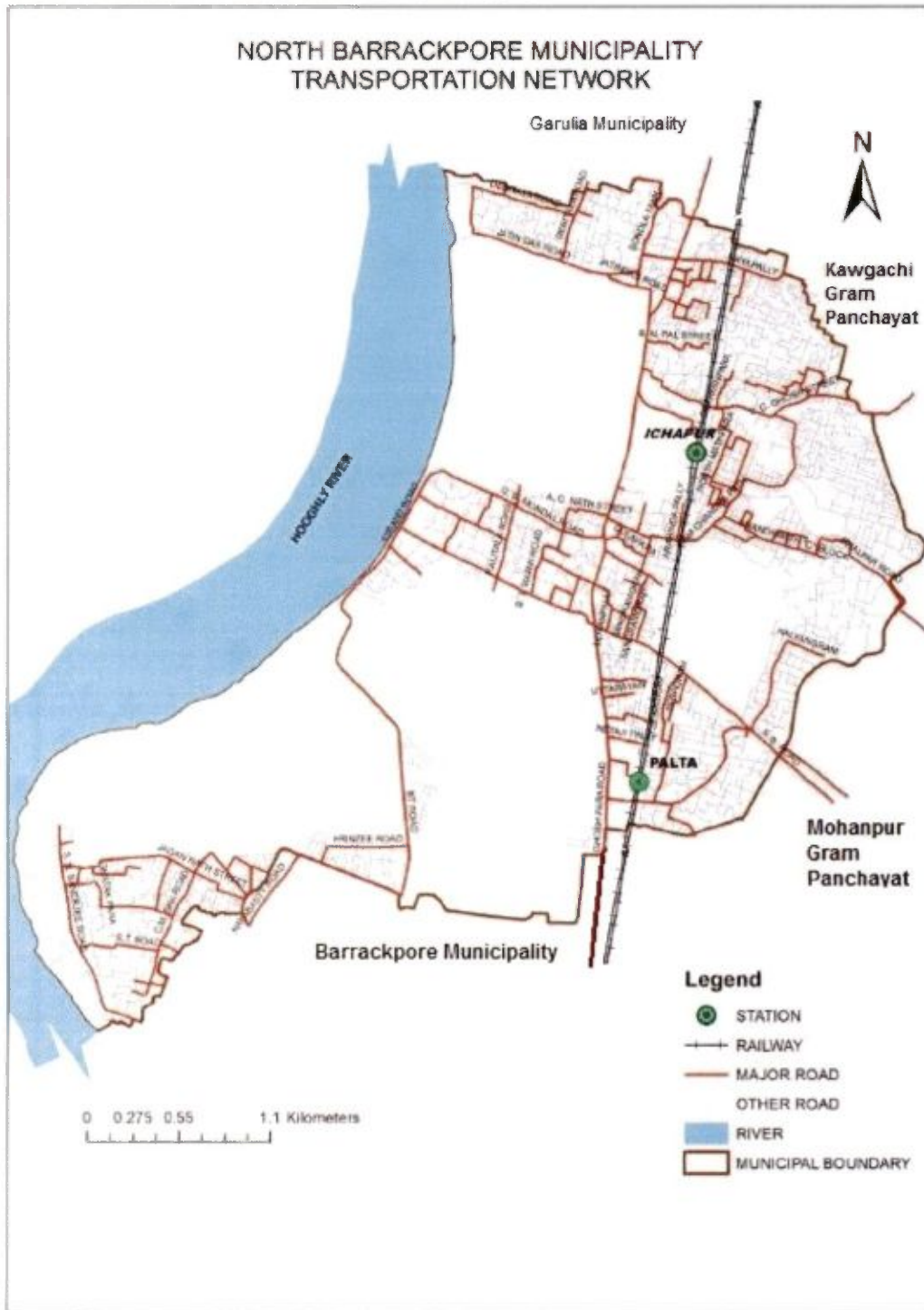
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North Barrackpore is accessible by water, road and railway. It is approximately 30 km. from Kolkata. The Ghoshpara Road and the Kalyani Expressway are the two major roads that connect the city to Kolkata and beyond. While the Ghoshpara Road serves as the principal state highway that runs through the core of the city, the Kalyani Expressway runs farther east.

Some of the important internal roads connecting various parts of the municipality are Ghosh Para Road, S.N Banerjee Road and C.M Saha Road , S.B Road, B.T Road, G. B Mondal Road Jatindas Road indicated in the map below.



Map 3: Physical Linkages of North Barrackpore



Source: North Barrackpore Municipality

Railway serves as another effective mode of transport for the city and caters to both passenger and goods movement. The presence of the defence factories further accentuates its importance. The railway line forms part of the Sealdah-Ranaghat section of the Eastern Railways and runs almost parallel to the Ghoshpara Road and has two stations within the municipality, namely Palta and Ichapore.

In addition, regular ferry services are available in River Hooghly at Ichapore (Nawabganj Ghat) to nearby towns of Bhadreswar, Baidyabati, Champdani, Sheoraphuli and Chandannagore.

The map alongside illustrates the surrounding area of the municipality along with the intra and inter municipal linkages.

#### 1.4 Physical Characteristics of the City

##### 1.4.1 Soil and Topography

The average height of North Barrackpore is 7 to 10 meters above sea level. The area under North Barrackpore may be divided into two groups based on the soil types- Entisols and Alfisols. The Entisols are present in the western part of the town and the other part is represented by Alfisols. These soils are typically Deltaic Alluvial soil rich in calcium. North Barrackpore and neighbouring areas are represented predominately by clayey soils.

Topographical area of the town may be divided into three parts: i) The Levee, ii) The Marshes and iii) The Plains. While the Levee occurs mostly on the western side of the municipality, along the riverbank, the Marshes exist on the east of the railway line. The older part of the city exists on the plain land that lies in between the Levee and Marshes. It is observed that most of the present urban expansion is taking place in the marshes on the eastern side.

##### 1.4.2 Climate

North Barrackpore has hot and humid summer and dry winter, typical of West Bengal. The rainy season is typically from mid-July to mid- or late October. Strong monsoon winds blowing from the South Bay of Bengal over this area generates ample rainfall (average rainfall is 1350mm). Average temperature during summer can go as high as 38 degree Celsius and in winter the mercury plunges to drop down to 10 degree Celsius. Humidity, in the time of summer, is often above 90% and is the primary reason of discomfort.

**2.0 PROJECT AT A GLANCE (7C)**

To,  
The Director,  
SUDA

Annexure 7C  
(Para 14.5 of the Guidelines)

**Format for Projects under Beneficiary led Construction or Enhancement**

1.	Name of the State	:	West Bengal					
2.	Name of the City	:	North Barrackpore Municipality					
3.	Project Name	:	HFA 2022.					
4.	Project Code *	:						
5.	State Level Nodal Agency	:	State Urban Development Agency					
6.	Implementing Agency/ ULB	:	North Barrackpore Municipality					
7.	Date of approval by State Level Sanctioning and Monitoring Committee (SLSMC)	:						
8.	Project Cost (Rs. in Lakhs)	:	101.2					
9.	No. of beneficiaries covered in the project	:	Gen	SC	ST	OBC	Minority	Total
			22	0	0	0	3	25
10.	(i) No. of Beneficiaries ( New Construction)	:	25					
	(ii) No. of Beneficiaries ( Enhancement)	:	0					
11.	Whether selected beneficiaries have rightful ownership of the land?	:	Yes					
12.	Whether building Plan for all houses have been approved?	:	Yes					
13.	i) GoI grant required (Rs. 1.5 lakh per eligible Beneficiary) (Rs. In Lakhs)	:	37.5					
	ii) State grant, if any (Rs. In Lakhs)	:	52.9					
	iii) ULB grant, if any (Rs. In Lakhs)	:	4.6					
	iv) Beneficiary Share (Rs. In Lakhs)	:	6.2					
	v) Total (Rs. In Lakhs)	:	101.2					
14.	Whether technical specification/ design for housing have been ensured as per Indian Standards/NBC/ State norms?	:	Yes					
15.	Whether disaster (earthquake, flood, cyclone, landslide etc.) resistant features have been adopted in concept, design and implementation?	:	Yes					
16.	Brief of project, including any other information ULB/State would like to furnish	:	Yes					

It is hereby confirmed that State/UT and ULB have checked all the beneficiaries as per guidelines of HFA. It is also submitted that no beneficiary has been selected for more than one benefit under the Mission including Credit Linked Subsidy Scheme (CLSS) component of the Mission.

Ramendra Ch. Ghosh  
Signature  
(Nodal Officer of ULB)

*(Signature)*  
Signature  
(Chairman/Chairperson) North Barrackpore Municipality



*(Signature)*  
Chief Engineer  
M.E Directorate  
Deptt. of Municipal Affairs  
Govt. of West Bengal



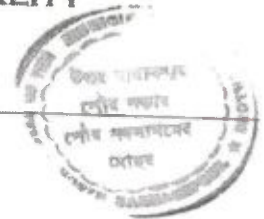
**BOC RES. OF SFCPoA**



**NORTH BARRACKPORE MUNICIPALITY**

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DIST : NORTH 24 PARGANAS  
PIN - 700120

Phone : 033-2593-2028, 033-2592-0429  
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**NORTH BARRACKPORE MUNICIPALITY**

Extract from Resolution of the Special meeting of the Board of Councillors of North Barrackpore Municipality held on 28.10.2015.

Agenda: To place and approve the Housing for All Plan of Action (HFAPoA) of North Barrackpore Municipality under Pradhan Mantri Awas Yojana (PMAY).

Resolution: The Housing for All Plan of Action (HFAPoA) of North Barrackpore Municipality under Pradhan Mantri Awas Yojana (PMAY) was placed in the meeting.

After exhaustive discussion and scrutinization the Councillors present in the meeting unanimously approved the Housing for All Plan of Action (HFAPoA) of North Barrackpore Municipality and decided to submit before concerned authority for necessary approval and obtaining financial sanction of the project.

Sd/- Molay Ghosh  
Chairman,  
North Barrackpore Municipality  
Chairman  
North Barrackpore Municipality

Certified to be a true copy

  
Chairman  
North Barrackpore Municipality

email id : [northbarrackporemunicipality@gmail.com](mailto:northbarrackporemunicipality@gmail.com) , [nbm@northbarrackporemunicipality.org](mailto:nbm@northbarrackporemunicipality.org)  
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**DPR of HFA for North Barrackpore Municipality**

**3.0 EXECUTIVE SUMMERY**

Executive Summery											
Project Details											
1	State					:	West Bengal				
2	City					:	North Barrackpore Municipality				
3	Project Name					:	Pradhan Mantri Awas Yojana Housing for All (Urban)				
4	Project Cost				(Rs. In Lacs)	:	101.20				
5	Central Share				(Rs. In Lacs)	:	37.50				
6	State Share				(Rs. In Lacs)	:	52.83				
7	ULB Share				(Rs. In Lacs)	:	4.62				
8	Beneficiary Share				(Rs. In Lacs)	:	6.25				
9	Total Infrastructure cost				(Rs. In Lacs)	:	9.25				
10	Percentage of Infrastructure cost of Housing Cost					:	10.00	%			
11	Infrastructure cost per dwelling unit				(Rs. In Lacs)	:	0.3679				
12	Implementation Year of					:	2015-16				
13	Component Housing construction					:	Beneficiary Led Construction (BLC)				
14	SOR Adopted					:	PWD (WB) w.e.f 1.7.14 with current corrigendum.				
Project Contributions (Physical + Financial) (Rs. In lacs)											
Sl No.	Scheme Component	Type	Quantity	Unit	Rate (in Rs./unit)	Proposed project cost (in lakh)	Appraised Project Cost (in lakh)	Central Share (@ Rs. 1.5 Lac/D.U.)	State Govt. Share (@Rs.1.92 858 Lac/D.U.)	ULB Share	Beneficiaries Share (@ Rs. 0.25 Lac/D.U.)
<b>A. HOUSING</b>											
1	New in-situ										
	Single storied units		25	Nos.	367858.00	91.96	92.0	37.5	48.21	0.00	6.25
	<b>Total Housing Cost Sub Total (A)</b>					<b>91.96</b>	<b>92.0</b>	<b>37.5</b>	<b>48.21</b>	<b>0.00</b>	<b>6.25</b>
<b>B. INFRASTRUCTURE</b>											
Sl No.	Scheme Component	Type	Quantity	Unit	Rate (in Rs./unit)	Proposed project cost (in lakh)	Appraised Project Cost (in lakh)	Central Share (in lakh)	State Govt. Share (@ 50%) (in lakh)	ULB Share (@ 50%) (in lakh)	Beneficiaries Share (in lakh)
1	<b>Roads</b>										
ii	CC Roads	Cement Concrete	405	Sqm	1131.62	4.58	4.58	0.00	2.29	2.29	0.00

**DPR of HFA for North Barrackpore Municipality**

2	Water Supply										
3	Storm Water Drains										
i	Surface drain	Brick Masonry	163.3	Mtr	2864.22	4.67	4.67	0.00	2.33	2.33	0.00
	<b>Total Infrastructure Cost Sub Total (B)</b>					<b>9.25</b>	<b>9.25</b>	<b>00.0</b>	<b>4.62</b>	<b>4.62</b>	<b>00.0</b>
	<b>Grand Total (A+B)</b>					<b>101.22</b>	<b>101.25</b>	<b>37.5</b>	<b>52.83</b>	<b>4.62</b>	<b>6.25</b>

*S.A.E.*  
 Signature of the U.L.B Level Competent Technical  
 Name & Designation:  
 Address:  
 Fax No: + 91-33-  
 Telephone No.: + 91-33-  
 Mobile No.:  
 E-mail:

*[Signature]*  
 Signature of the State Level Competent Technical  
 Name & Designation: Amit Das, Chief Engineer, Municipal Engineering Dte, Govt. of West Bengal  
 Address: Bikash Bhawan, South Block, 1St Floor, Salt lake, Kolkata - 7000 91  
 Fax No: +91- 33- 23375474  
 Telephone No.: +91-33-23371331  
 Mobile No.: (0)9475825219  
 E-mail: ce\_medte@yahoo.com

Signature of the State Level Nodal Officer  
 Name & Designation: Sri M.N. Pradhan, IAS  
 Director, SUDA  
 Address: State Urban Development Agency  
 Fax No: 91-33-23585767  
 Telephone No: + 91-33-23585767  
 Mobile No.: (0) 9830031488  
 E-Mail: wbsudadir@gmail.com

*Molay Ghosh*  
 Chairman  
 North Barrackpore Municipality  
 Signature of the Chairman / CEO/Commissioner of ULB/  
 Name & Designation: MOLAY GHOSH  
 Chairman, North Barrackpore Municipality  
 Address: P.O. Barrackpore, Dist- North 24 Parganas.  
 Fax No.: 033-2592 6004  
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 Mobile No.: 98302 67522  
 E-mail No.: hfa.northbarrackpore@gmail.com

*[Signature]*  
 Chief Engineer  
 M.E. Directorate  
 Deptt. of Municipal Affairs  
 Govt. of West Bengal





**DPR of HFA for North Barrackpore Municipality**

**4.0 SLUM WISE DETAILS OF FUND**

<b>SLUM WISE DETAILS OF DU AND INFRASTRUCTURE COST OF 2015-16</b>																
Slum No.	Name of Slum	Slum Code	Area SqKm	Population	Dwelling Units (@ Rs. 3.67858 Lakh/ each)		Drainage (M) (Rs.2864.22/ M) (Section - 300x450)		Pipe Line @ Rs.1066.00 /M		Bituminous Roads (@ Rs. 612.00/Sq.M)		Concrete Roads (@ Rs. 1131.62/Sq. M)		Total cost of Infrastructure @ 10% of D.U. cost Rs. in Lac	Grand Total (Rs. in lakh)
					Qty.	Amt. (in Lakh)	Qty.	Amt. (in Lakh)	Qty.	Amt. (in Lakh)	Qty.	Amt. (in Lakh)	Qty.	Amt. (in Lakh)		
1	Sandaipur	028	0.010741	136	5	18.39	18	0.52	0	0.00	0	0.00	95	1.08	<b>1.59</b>	<b>19.98</b>
2	B.S. Banerjee Road	061	0.003085	103	7	25.75	51	1.46	0	0.00	0	0.00	175	1.98	<b>3.44</b>	<b>29.19</b>
3	Sidhweswari tala Rd.	062	0.001855	152	5	18.39	30	0.86	0	0.00	0	0.00	60	0.68	<b>1.54</b>	<b>19.93</b>
4	Rampada Halder Road	063	0.005015	147	3	11.04	0	0.00	0	0.00	0	0.00	75	0.85	<b>0.85</b>	<b>11.88</b>
<b>NON- SLUM</b>																
5	NS	NS	0.07	2356	5	18.39	64.3	1.84	0	0.00	0	0.00	0	0.00	<b>1.84</b>	<b>20.23</b>
<b>Total</b>			<b>0.09</b>	<b>2894</b>	<b>25</b>	<b>91.96</b>	<b>163.3</b>	<b>4.68</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>-</b>	<b>405</b>	<b>4.58</b>	<b>9.26</b>	<b>101.22</b>

**5.0 INFRASTRUCTURE COST****HFA Under Pradhan Mantri Awas Yojana**

Year of Implementation : 2015-16

Name of the City: North Barrackpore

**Infrastructure Cost**

SL. NO	DESCRIPTION OF WORK	QUANTITY	UNIT	RATE PER UNIT (Rs)	TOTAL COST (In Lacs)
1	Roads				
i	BT Roads	00	Sqm	00.00	00.00
ii	CC Roads	405	Sqm	1131.62	4.58
Total Road Cost Sub Total (A)					4.58
2	Water Supply				
i	Pipeline (Dist.) 100mm dia. DI	00	Mtr.	00.00	00.00
Total Water Supply Cost Sub Total (B)					00.00
3	Storm Water Drains				
i	Surface drain Brick Mationary 300mm x 450 mm	161.3	Mtr.	2864.22	4.62
Total Storm Water Drains Cost Sub Total (C)					4.62
Grand Total (A+B+C)					9.20

## 6.0 Social and Demographic profile

### 6.1 Population density

As per Census records, North 24 Parganas has recorded a high growth in urban population of 18.2% between 2001-2011. This has led the district to become 2nd largest district of India and the largest in the state in terms of population size in 2011. Of all the municipalities in the district, North Barrackpore ranks 14th in terms of population contributing around 1% of the total population and little over 2% of the total urban population of the North 24 Parganas.

North 24 Parganas has 27 municipalities in the district making it the district with the highest number of urban local bodies in the country. Among these, when compared to its neighbouring municipalities of Garulia and Barrackpore, North Barrackpore not only has the highest population density (14,956 people/sq.km) but has registered a higher growth of population (7%) between 2001 and 2011.

Table 3: Key Demographic Overview

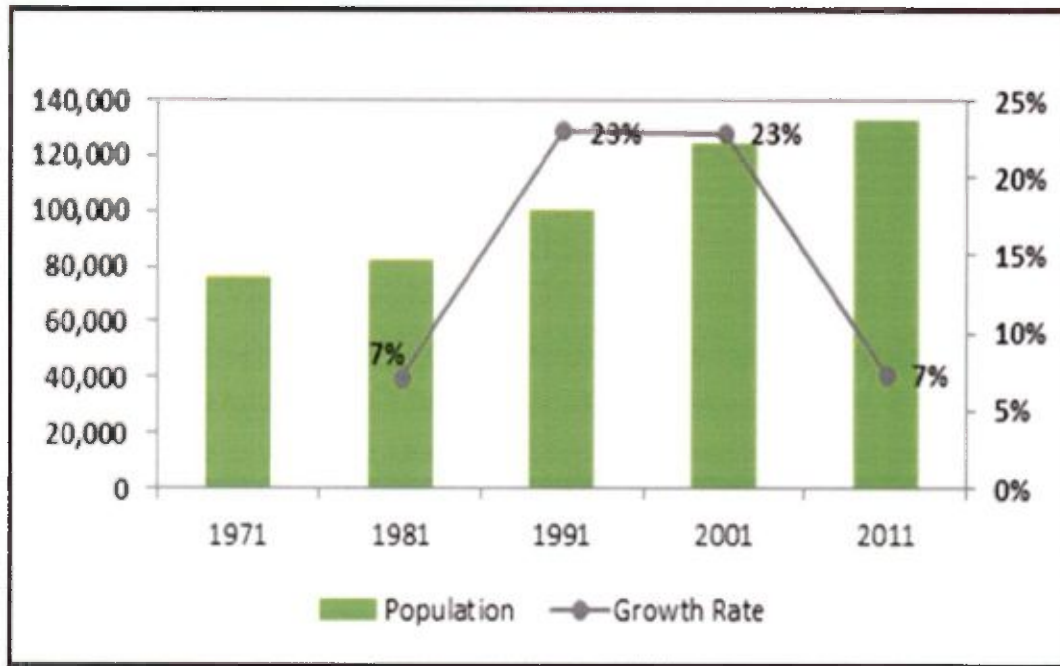
No.	Indicators	2001 (Census)	2011 (Census)	2015 (Projected) <sup>4</sup>
1.	Population	1,23,668	1,32,806	1,37,568
2.	Decadal Population Growth Rate	23%	7%	9%
3.	No of HHs	26,122	32,564	33,718
4.	Average Household Size	4.73	4.08	4.08
5.	Population Density (People per Sq. Km)**	13,929	14,956	15,495
6.	Sex Ratio (Females per 1000 males)	938	984	NA

\*\* Calculated on an area of 8.88 sq.km, i.e. area of municipality excluding Defence owned land .



6.2 Population growth Patterns

Figure 4: Population growth in North Barrackpore



Overall population and the corresponding decadal growth levels of the North Barrackpore over the past 40 years have been presented in the figure alongside:

North Barrackpore Municipality has witnessed high population growth rate for two decades due to addition of new areas to the municipal limits. The final growth rate adopted is per the CAGR method is at the rate of 0.87% per annum.

From the figure alongside it is evident that North Barrackpore experienced varied population growth rate across the decades. The same is explained below:

- The city experienced a phenomenal growth in population (23%) between 1981 and 1991 because parts of Barrackpore Municipality in the south were added to North Barrackpore in this decade. Further, in 1995, the incorporation of some areas from the nearby Mohanpur Gram Panchayat in the east further increased the population of the city.
- Over the last decade, the population growth rate of the city has fallen to 7% which is lower than the state level decadal growth rate of 13.8% as well as the district population growth rate of 12%. This could be because of the dwindling economy brought about by the shrinking of the existing industrial base, meagre recruitment of the defence factories and migration of citizens for better job prospects outside the city.

### (i) Rainfall

Maximum rainfall occurs during the monsoon in August (306 mm) and the average annual total is 1,582 mm. Total duration of sunshine is 2,528 hours per annum with maximum rainfall occurring in mid July/August.

### (ii) Environment

Traditionally, in North Barrackpore Municipality most investment in infrastructure has been publicly funded. The current total infrastructure spending is still financed by governments or public utilities, such as, Municipal Affairs Department, Kolkata Metropolitan Development Authority, Kolkata Metropolitan Water and Sanitation Authority; West Bengal State Electricity Board; Public Works Department; West Bengal Pollution Control Board etc. by utilizing their own resources.

The Private sector located in the North Barrackpore Municipality contributes marginal costs of this basic infrastructure, mainly for the provision of water supply and sanitation for their own employees.

### (iii) Wind

In the summer season winds are mostly North Easterly or easterly but in afternoon Westerly winds blow which are absorbed frequently. During the monsoons the winds blow from the Northeast and Southern direction.

### Key Resources

North Barrackpore Municipality most investment in infrastructure has been publicly funded. The current total infrastructure spending is still financed by governments or public utilities, such as, Municipal Affairs Department, Kolkata Metropolitan Development Authority, Kolkata Metropolitan Water and Sanitation Authority; West Bengal State Electricity Board; Public Works Department; West Bengal Pollution Control Board etc. by utilizing their own resources.

## DPR of HFA for North Barrackpore Municipality

The Private sector located in the North Barrackpore Municipality contributes marginal costs of this basic infrastructure, mainly for the provision of water supply and sanitation for their own employees and units.

### 7.0 Land Use

The total area of North Barrackpore is 13.56 sq.km. However, considering that 4.68 sq.km. (34.7%) of this area belongs to the defence establishments, the land-use distribution of the town has been computed based on the area within the direct jurisdiction of the North Barrackpore (8.88 sq.km.) and is assumed to be the net area.. The table below defines the area distribution considered for SFCPoA purposes.

#### Area distribution of North Barrackpore Municipality

Category	Area (in sq.km)
Gross Municipal Area (A)	13.56
Area under defence establishments (B)	4.68
Net area of the municipality (C=A-B)	8.88

Source: GIS, Database, North Barrackpore Municipality

The following table lists the area distribution of the different land use and land cover in the municipality (exclusive of the defence land) mapped using GIS:

#### Land Use distribution of North Barrackpore

Land Use Categories	Area in Sq. Km.	% of total area
Residential	4.71	53%
Commercial	0.08	1%
Recreational	0.11	1%
Public-Semi Public	1	11%
Industrial	0.2	2%
Transportation	1.03	12%
Mixed (Commercial-cum-Residential)	0.05	1%
Vacant Land	0.27	3%
Water Bodies	1.43	16%
Net Municipal Area ( C )	8.88	100%

Source: GIS, Database, North Barrackpore Municipality

Following are the observations from the table and the map alongside:

□ Major portion of the North Barrackpore comprises residential area with proximity to commercial centres concentrated along traffic corridors, appreciable infrastructure and vacant land acting as major growth drivers in the city.

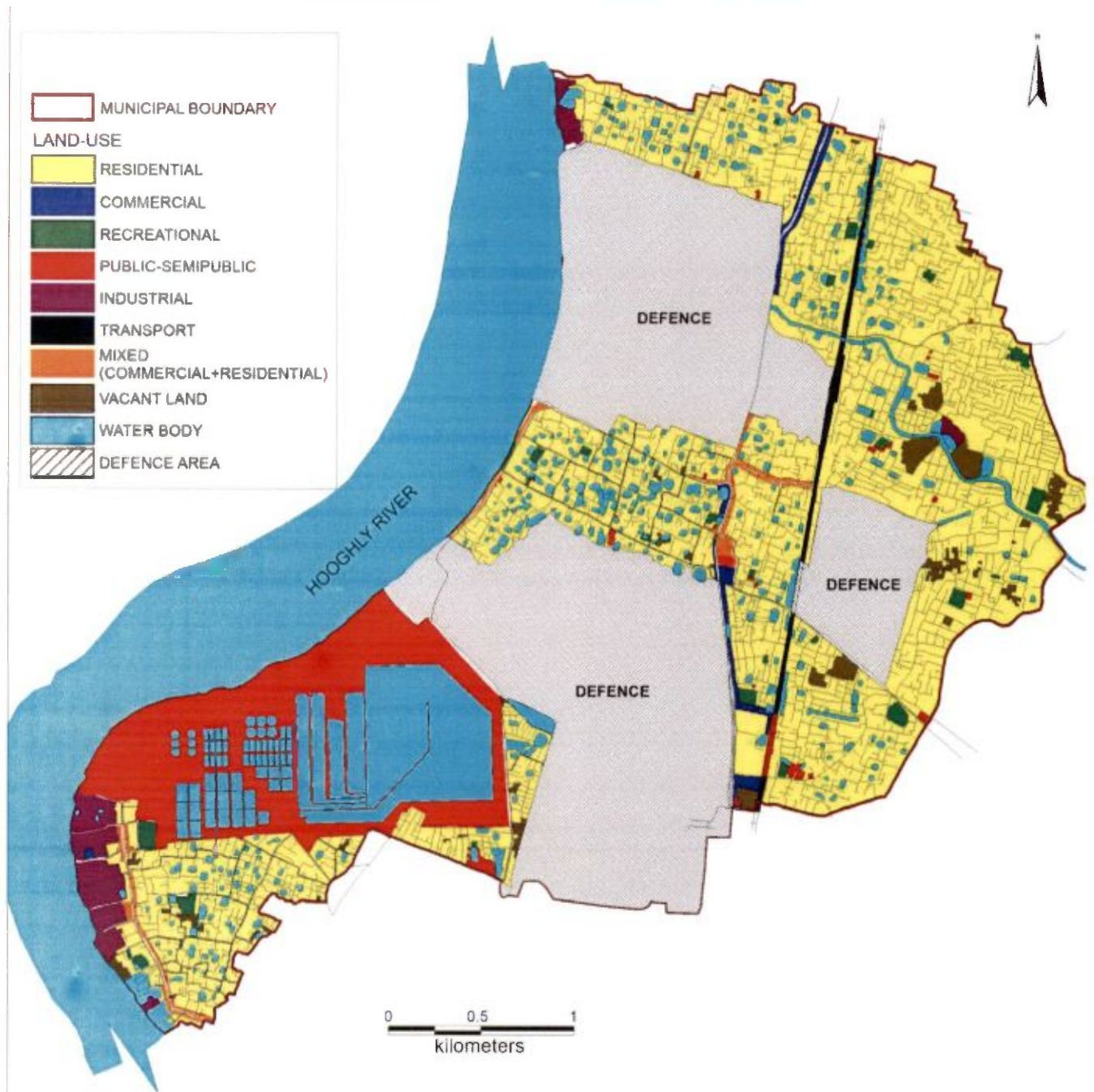
□ A considerable portion (16%) of total municipal area is found to be under water bodies; more than 60% of which is contributed by the CIFRI and Palta water treatment plant waterbodies (0.88 sq.km) lying in the south-western part of North Barrackpore. However, the city is endowed with numerous waterbodies especially in its eastern part.



## DPR of HFA for North Barrackpore Municipality

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- Major contribution to the industrial land use within the municipality comes from the Mechanized Brick factory of the State Government. However, there are a number of small scale industries that operate in the city along with a few brick kilns that are concentrated in the southern part of the North Barrackpore.
- Most commercial establishments occur in the areas adjoining the transport corridors and are found to concentrate near the railway stations and traffic nodes.
- North Barrackpore like many other developing cities has a paucity of developable land and can only rely on the newly added village lands in the eastern part of the city for expansion.



### 7.1 Economic Activities

Traditionally, in North Barrackpore Municipality most investment in infrastructure has been publicly funded. The current total infrastructure spending is still financed by governments or public utilities, such as,

## DPR of HFA for North Barrackpore Municipality

Municipal Affairs Department, Kolkata Metropolitan Development Authority, Kolkata Metropolitan Water and Sanitation Authority; West Bengal State Electricity Board; Public Works Department; West Bengal Pollution Control Board etc. by utilizing their own resources.

The Private sector located in the North Barrackpore Municipality contributes marginal costs of this basic infrastructure, mainly for the provision of water supply and sanitation for their own employees and units.

The other service providers are various commercial banks, post and telecommunication offices, hospitals and health care facilities including Office of Malaria Prevention Centre, charitable dispensaries, medicine shops, West Bengal National Volunteer Force, pathological centers, office of sub-inspector of primary school, provision of supply of dairy milk, rationing office, ration shops, grocery shops, shops for other essential commodities and products, training facilities for police, police out posts, amusement facilities, hotels and so on. The local transport is being served by private sector either by bus or by local vans or rickshaws. In addition to that there are many small-scale enterprises doing business on wood, steel, biri binding, sugar-candy, bakery etc.

The Municipality has 36 primary schools including 13 private primary schools, 20 secondary schools and 3 libraries.

### 7.2 Milestones:

#### **Hearse Van :**

For carry of dead body in decent manner from Hospital residence and finally upto Burning Ghat is always ready available at our main Administrative Office.

#### **Ambulance Facility :**

This corporation is providing Ambulance facility for carrying patients to Hospital within and outside Municipality area. This service is available from main administrative building at City Centre and from Maternity Centre.

**Health Service :** For the benefit of down trodden & weaker section of our society this Corporation has established Health units are as follows:-

- Health Centre
- Maternity Centre
- Diagnostic Centre
- Primary Health Posts

#### **Preservation of Surface Water:**

For eco-friendly environment and preservation of sweet potable water this corporation has stressed on Pond cutting for preservation of surface and rain water.

### 8.0 Trans Municipal Water Supply Project :

In existing water supply system of Municipality town, North Barrackpore Municipality provides water supply to the major part. The infrastructure available with HM includes treatment plant.



## DPR of HFA for North Barrackpore Municipality

The Treatment plant, Rising main pipeline, Booster Pumping stations, OHR and distribution network, which are in existence today, have been installed through the KMDA. Extension of the distribution network to cover added areas to meet shortfall in demand have been carried out by HM from time to time.

<b>PROJECT NAME :</b>	<b>WATER SUPPLY SCHEME FOR BARRACKPORE &amp; NORTH BARRACKPORE MUNICIPAL AREA UNDER JNNURM (15 MGD)</b>
<b>TOTAL PROJECT COST:</b>	RS. 129.508 CRORES
<b>TOTAL POPULATION BENEFITED</b>	1.32 LAKH
<b>SOURCE OF FUND</b>	CENTRAL , STATE AND ULB FUND

**PIPELINE**  
i) Rising Main Pipe lines : 15.81 KM  
ii) Distribution Pipelines: 45.37 KM

**IMPLEMENTING AGENCY** KMW&SA.

**PRESENT STATUS** On going Project

- **Citizen Charter**
- **Double Entry Accrual Based Accounting System**
- **Birth & Death Certificate computerization system**
- **Tax collection computerization system**
- **Store computerization system**
- **80% increase in own source revenue**



### **9.0 Jawaharlal Nehru Nation Urban Renewal Mission ( Jnnurm )**

Government of India has decided to launch Jawaharlal Nehru Nation Urban Renewal Mission (JNNURM) with an aim to encourage reforms and fast-track planned development of identified cities. The focus is majorly on efficiency in urban infrastructure and service delivery mechanisms, community participation and accountability of ULBs / parastatal agencies towards citizens. Solid Waste Management Best performing city.

## DPR of HFA for North Barrackpore Municipality

### 9.1 Overview:

It would be worthwhile to note that there are two submissions under JNNURM, Sub-Mission-I, titled Urban Infrastructure and Governance (UIG), will be administered by the Ministry of Urban Development through the Sub-Mission Directorate to deal with up-gradation/renewal of basic infrastructure in the selected cities and towns and implementation of various reforms pertaining to improved municipal governance including sustenance of development activities.

The Sub-Mission-II, titled Basic Services for Urban Poor (BSUP), will be administered by the Ministry of Urban Employment and Poverty Alleviation through the Sub-Mission Directorate to deal exclusively for urban poor living in slum/squatter settlements in cities and towns. The focus of BSUP is to improve the living conditions of the urban poor by way of providing housing along with infrastructure, with a view to gradually removing slums/squatter settlement from cities and towns.

The Government of India has identified 63 cities from India based on population which will get the benefit of JNNURM. From West Bengal two cities have been identified namely Kolkata and Asansol. In Kolkata there are 42 ULBs including 3 Municipal Corporations and in Asansol there are 5 ULBs including 2 Municipal Corporations. Kolkata Metropolitan Development Authority has been selected as State Level Nodal Agency (SLNA) to monitor JNNURM projects both for UIG and BSUP.

### 9.2 BSUP Schemes of JNNURM under NORTH BARRACKPORE MUNICIPALITY

**Project Name :** BSUP Scheme for the Town of North Barrackpore , 24 Parganas (North) , West Bengal,

**Date of Sanction :** 13-09-2007

**Project Cost (Rs in Lakh)** Rs. 3746.25 Lakhs (Revised)

**Number of Dwelling Units** 1526 No's

<i>Infrastructure Component</i>	<i>Funding Pattern (Rs. In Lakh)</i>	
Water Supply	Govt. of India	Rs. 1331.57
Drainage	Govt. of W.B	Rs. 1882.05
Cement Concrete Road	ULB	Rs. 56.86

## DPR of HFA for North Barrackpore Municipality

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Bituminous Road	Beneficiary	Rs. 305.20
Street Light	KMDA	Rs. 170.57
Community Toilet		
Community Bath		
Community Seva Kendra		
Community Centre		

**Total = Rs. 3746.25**

This project is near to completion.

**Technical Assistance**

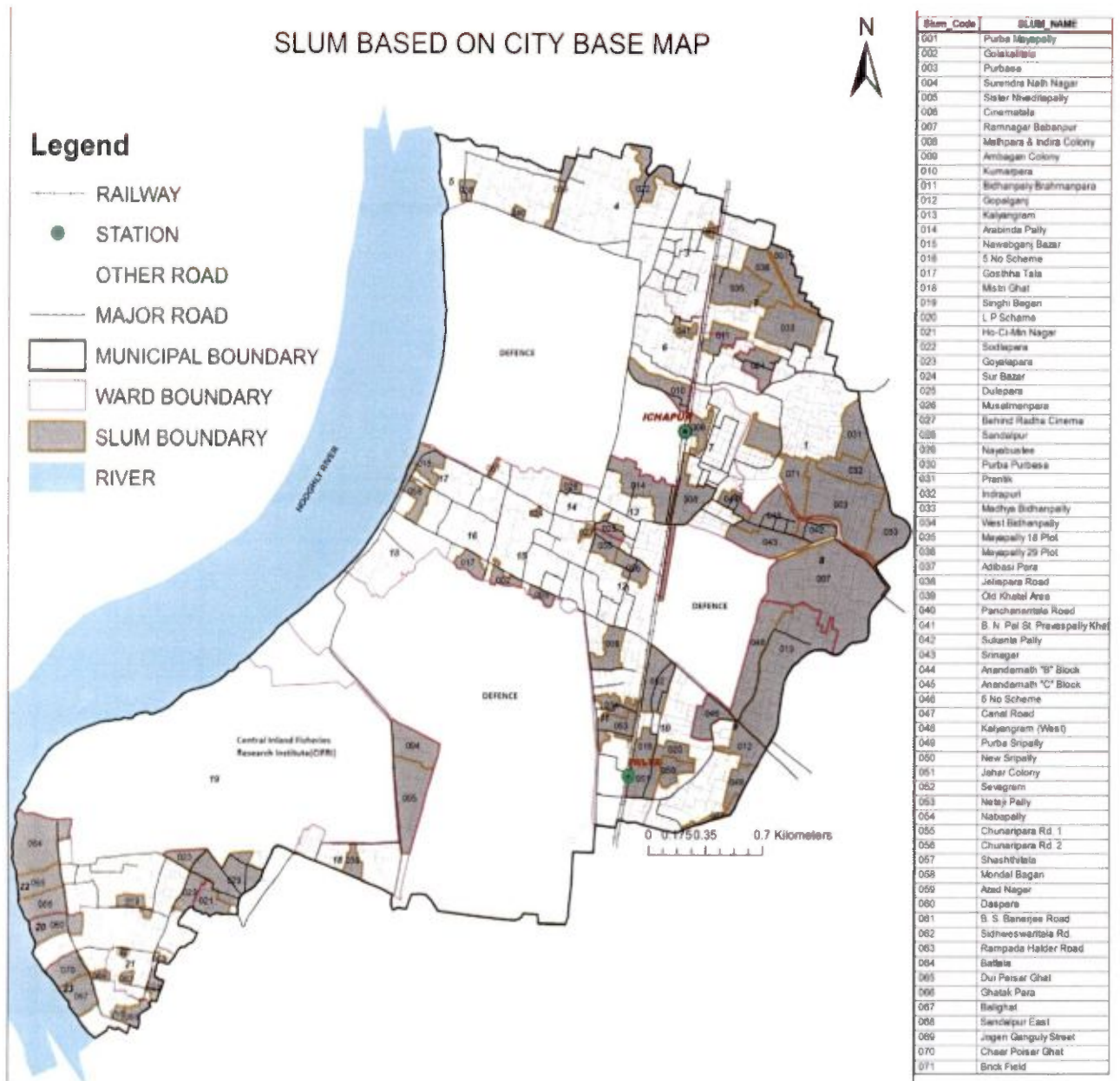
**MED**

**Nodal Agency**

**KMDA**

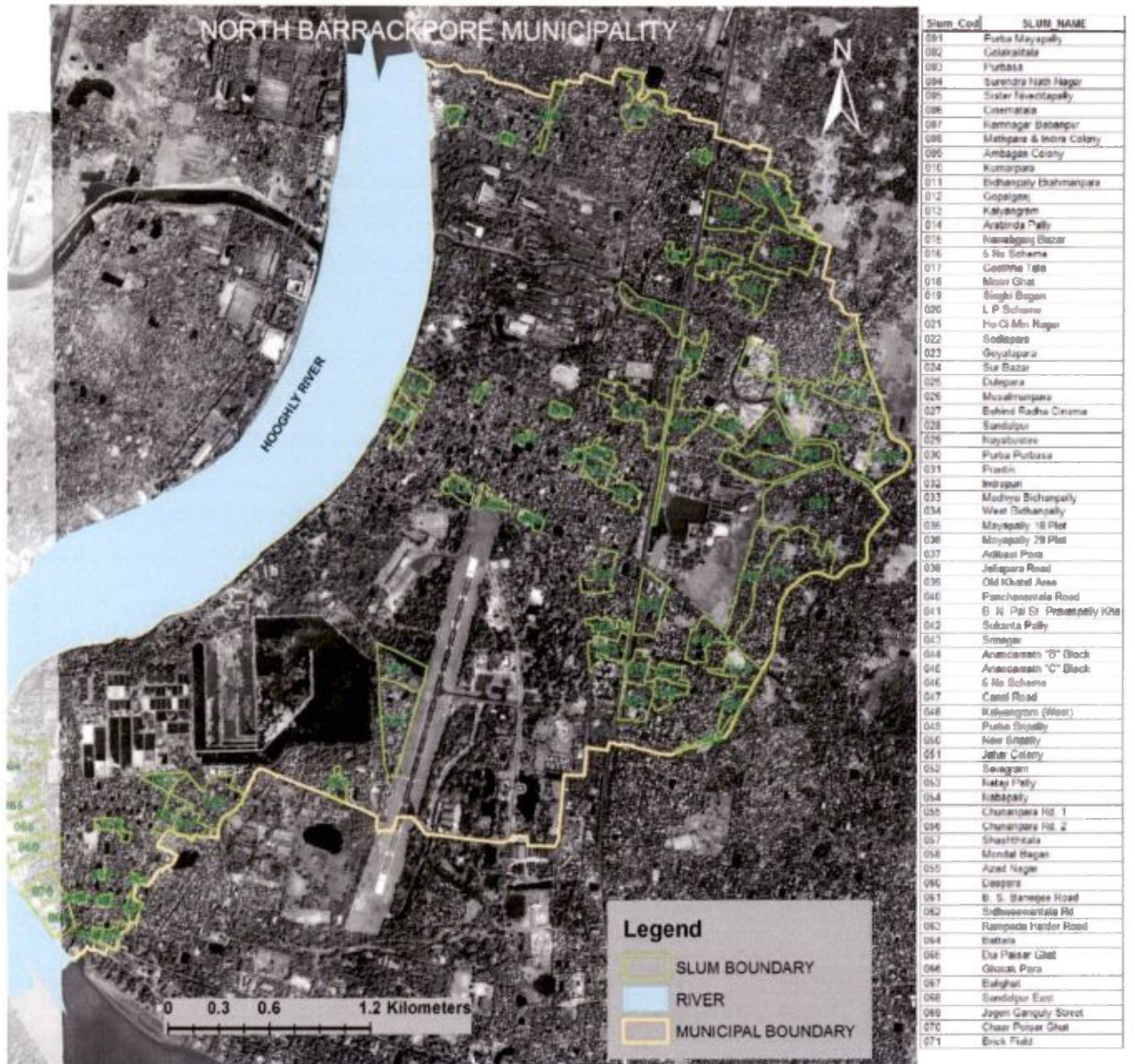


10.0 The project slums and existing scenario of infrastructure:



# DPR of HFA for North Barrackpore Municipality

Slums marked on Satellite Image





DPR of HFA for North Barrackpore Municipality

SLUM CODE	SLUM NAME	PROPOSED DU	LOCATION
028	SANDALPUR	05	
061	B.S. BANERJEE ROAD	07	
062	SIDHWESWARITALA RD	05	
063	RAMPADA HALDER ROAD	03	
NS	NS	05	

4 nos Slums and 5 Non-Slums have been selected as a First Project under PMAY scheme by North Barrackpore Municipality in consultation with the state level Nodal Agency - The State Urban Development Agency (SUDA) under M.A. Department, GoWB.

SLUMS :-

**a) SANDALPUR:**

The project slum site is at the core area of the Municipality at Ward no-21. Metal road is running in front of the slums connects it to major areas of North Barrackpore Municipality. The nearest railway station at a distance is 3.5 Km. The slums are 30 years old with a total site area is 10741.4 square metres. The ownership of land lies with ULB. The existing number of households is 43 with a total population of 136. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 78 % street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

**b) B.S. BANERJEE ROAD:**

The project slum site is at the core area of the Municipality at Ward no-21. Metal road is running in front of the slums connects it to major areas of North Barrackpore Municipality. The nearest railway station at a distance is 3.5 Km. The slums are 20 years old with a total site area is 3085.4 square meters. The ownership of land lies with ULB. The existing number of households 33 with a total population of 103. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 80% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

**c) SIDHWESWARITALA RD.**

The project slum site is at the core area of the Municipality at Ward no-21. Metal road is running in front of the slums connects it to major areas of North Barrackpore Municipality. The nearest railway station at a distance is 3.5 Km. The slums are 25 years old with a total site area is 1854.55 square meters. The ownership of land lies with ULB. The existing number of households 38 with a total population of 152. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 89% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

**d) RAMPADHALDER ROAD**

The project slum site is at the core area of the Municipality at Ward no-21. Metal road is running in front of the slums connects it to major areas of North Barrackpore Municipality. The nearest railway station at a distance is 3.5 Km. The slums are 25 years old with a total site area is 5014.54 square meters. The ownership of land lies with ULB. The existing number of households 41 with a total population of 147. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as



vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 92% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

### 10.1 National Poverty Alleviation Programmes and PMAY

#### Slum: the focus Area

Under section-3 of the Slum Area Improvement and Clearance Act, 1956, slums have been defined as mainly those residential areas where dwellings are in any respect unfit for human habitation by reasons of dilapidation, overcrowding, faulty arrangements and designs of such buildings, narrowness and faulty arrangement of streets, lack ventilation, light or sanitation facilities or any combination of these factors which are detrimental to safety, health and morals. Thus, conceptually slums are compact overcrowded residential areas (and not isolated or scattered dwellings) unfit for habitation due to lack of one or more of the basic infrastructure like drinking water, sanitation, electricity, sewerage, streets etc.

It is in this background that in the 2001 Census, an innovative attempt was made to collect demographic data slum areas across the country.

As per 2001 population census, the slum population is estimated to be 61.8 million, out of a total urban population of 285.35 million people reside in urban areas.

The analysis of the data in this report provided an overview of the population characteristics of slums and squatter settlements and is expected to serve as a benchmark for pragmatic and realistic town planning while dealing with the issue of slums and slum dwellers.

#### 10.1.1 Background

- i. Urbanization is fast becoming the defining process in shaping the course of social transformation & ensuing development concerns in India. About 377 million persons or about 31% of India's population of 1.21 billion lived in urban areas in 2011, spread over 5161 towns.

As per Report on Indian Urban Infrastructure and Services (NIUA) Report\_, the urban population is likely to grow to about 600 million by 2031. About one-fourth (24%) of the urban population of India is poor i.e. their expenditure on consumption goods is less than the poverty line benchmark. The benefits of urbanization have eluded this burgeoning 67 million urban poor population, most of who live in slums. An analysis of population growth trends between 1991 and 2001 shows that while India grew at an average annual growth rate of 2%, urban India grew at 3% mega cities at 4% and slum populations rose by 5%. This rapid and unplanned urbanization and simultaneous growth of urban population in the limited living spaces has a visible impact on the quality of life of the slum dwellers of the city.

- ii. It is increasing clear that sustainable growth can only take place when it is inclusive and when the entire population including the poor and marginalized need to have at the least access to descent shelter, basic amenities, livelihoods and a voice in governance.' Keeping this in mind the Government of India and the various State Governments have been taking up several schemes on partnership mode.

#### 10.2 National Missions for Slum Development and Poverty Reduction

- i. The Government of India is committed to creating a slum free India as part of the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) sub mission on Basic Services for the Urban Poor (BSUP). More recently it has also launched the Pradhan Mantri Awas Yojana (PMAY) for providing Housing for All (HFA) by 2022 when the Nation Complete 75 years of its independence.
- ii. **Jawaharlal Nehru National Urban Renewal Mission (JNNURM) :** JNNURM is a reform- linked urban development and slum upgrading program. Under JNNURM, the Government of India has been providing central assistance to 65 metro and large cities to invest in infrastructure improvements with governance reforms under sub mission on Urban Development.
- iii. **Basic Services for Urban Poor (BSUP) :** BSUP is focussed on slum upgradation and poverty reduction through creating access and networking slums to urban infrastructure improvements. BSUP also has a 7-Point Charter that envisages integration of urban slum upgrading activities with social development programs/missions such as for health, education, social welfare, etc. to ensure comprehensive development.

- iv. **Swarna Jayanti Shahri Rozgar Yojana (SJSRY)** : SJSRY is a centrally sponsored program and it mainly emphasizes on the poverty reduction through employment generation. Main target groups of the program are: Urban poor, Women, SC/ST, Disabled etc.
- v. **National Slum Development Program (NSDP)**: NSDP is a centrally assisted slum development program. NSDP is mainly for improvement in the environment in the slums as a broader objective through provision of infrastructure facilities and shelter for improving living conditions in the slums.

### **11.0 HFAPoA and Pradhan Mantri Awas Yojana (Housing for All)**

To give pucca house for every family is currently on the global agenda. One of the Millennium Development Goals (MDGs) is to 'achieve significant improvement in the lives of slum dwellers, by 2022'. Similar goals are set forth by Pradhan Mantri Awas Yojana in 2022, to create pucca house for every family.

ULB undertake a demand survey through suitable means for assessing the actual demand of housing. While validating demand survey, Cities should consider possible temporary migration from rural areas to the city just to take advantage of housing scheme and exclude such migrants from list of beneficiaries. On the basis of demand survey and other available data, cities has prepared Housing for All Plan of Action (HFAPoA). HFAPoA contain the demand of housing by eligible beneficiaries in the city along with the interventions selected out of four verticals. The information regarding beneficiaries have been collected by ULB in suitable. While preparing HFAPoA, ULB and Implementing Agencies has also considered the affordable housing stock already available in the city as Census data suggests that large number of houses are vacant.

Bank account number and Aadhaar number/Voter ID card/any other unique identification details of intended beneficiaries or a certificate of house ownership from Revenue Authority of beneficiary's native district has integrated in the data base of HFAPoA for avoiding duplication of benefit to one individual family. Beneficiaries are validated by ULBs thereby ensuring their eligibility at the time of preparation of the projects and approval of projects.

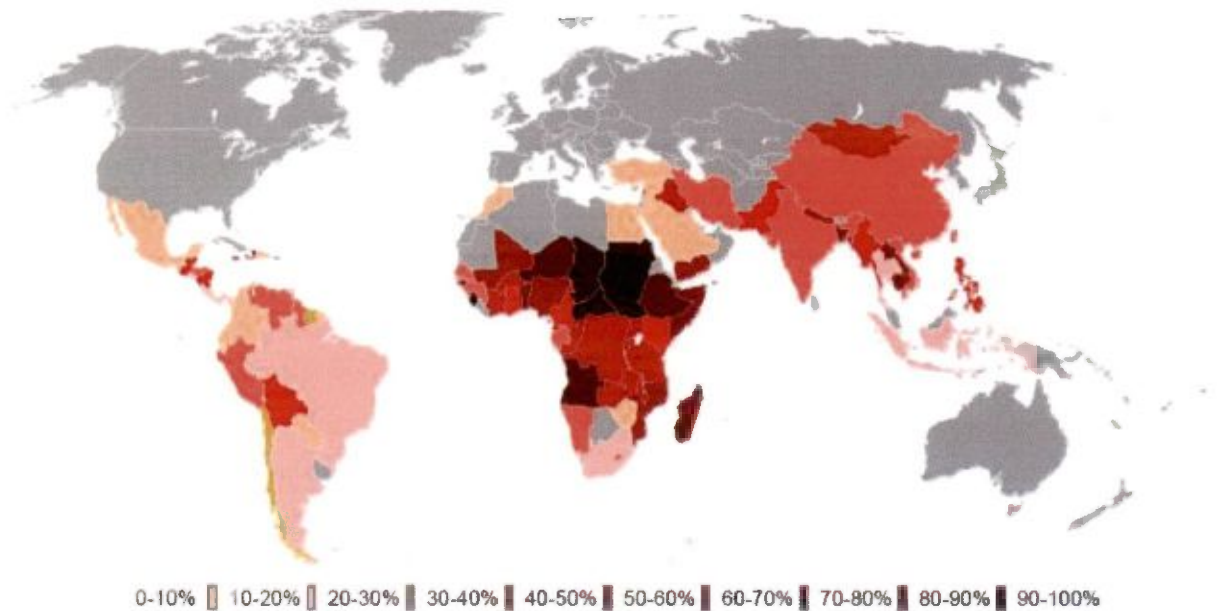
On the basis of HFAPoA, States/Cities will subsequently prepare the Annual Implementation Plans (AIPs) dividing the task upto 2022 in view of the availability of resources and priority. For larger cities, HFAPoA and AIPs can be prepared at sub-city (ward/zone etc.) level with the approval of concerned State/UT Government. The result of demand survey, draft HFAPoA and draft AIP should



be discussed with the local representatives including MLAs and MPs of that area so that their views are adequately factored in while finalising the plans and beneficiary list.

Cities which have already prepared Slum Free City Plan of Action (SFCPoA) or any other housing plan with data on housing, has utilized the existing plan and data for preparing "Housing for All Plan of Action" (HFAPoA). Houses constructed under various schemes has been accounted for while preparing HFAPoA

Urban Population Living in Slums and the Indian Scenario (source: UN-HABITAT)





## DPR of HFA for North Barrackpore Municipality

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The preparation of HFAPoA has broadly involved Slum Development/Rehabilitation Plans based on

- a. Survey of all slums – notified and non-notified;
  - b. Mapping of slums using the state-of-art technology;
  - c. Integration of geo-spatial and socio-economic data; and
  - d. Identification of development model proposed for each slum.
- 
1. Base maps to an appropriate scale would be a pre-requisite for the preparation of Slum Development Plan/Slum-free City Plan. States/UTs may need to proceed in the following steps for the preparation of Slum-free City Plans.
  2. Securing CARTOSAT II/latest satellite images from NRSC/ISRO and preparation of base maps for the whole city and its fringes using the images;
  3. Identification and inventory of all slum clusters of all descriptions in the urban agglomeration with the help of satellite image and other available data;
  4. Inventory of all possible vacant lands in each zone of the urban agglomeration that could be used for slum development/ rehabilitation development purposes;
  5. Development of Slum Map of every slum within the city and its fringes using GIS with CARTOSAT II images, ground level spatial data collected through total station survey, collating spatial information with respect to plot boundaries, network of basic infrastructure like roads, sewerage, storm drainage and water lines, etc and superimposing this on the satellite image and importing them into GIS platform as the first step towards the preparation of Slum Development Plans and Slum Free City Plan.
  6. This may be undertaken with the help of technical partners of NRSC/ ISRO/other technical institutions/agenci;
  7. Identification and engagement of Lead NGO/CBO to guide and anchor community mobilization for the purpose of slum survey, (May be more than one NGO/CBO in different slum zones) of the city. These Lead NGOs/CBOs should also be associated in slum survey operations and dialogues for preparation of slum level development plans;
  8. Conduct of Slum Survey based on the detailed formats (with or without changes) prepared by the Ministry of Housing & Urban Poverty Alleviation with the help of National Buildings Organization (NBO) - after due training of trainers, training of survey personnel /cavassers and canvassing. It would be helpful for community mobilization to pick as many cavassers from the sourced slum or nearby slum pockets;
  9. Collection of bio-metric identification data of slum dwellers based on the above survey (subject to guidelines issued by Unique Identity Authority of India (UIDAI));
  10. Entry of data from Slum Surveys in the web-enabled MIS application (to be provided by Ministry of HUPA), compilation and collation of data, preparation of Slum-wise, City and

State Slum Survey Database and Baseline Reports. The MIS will assist in developing a robust Slum and Slum Households Information System. (Guidelines and software for development of the MIS will be issued by the Ministry of HUPA);

11. Integration of Slum MIS with GIS Maps to enable the preparation of GIS-enabled Slum Information System that is to be used for the preparation of meaningful Slum Development Plans and Slum-free City Plan using a city-wide/zone-based approach.(Guidelines and software for development of GIS platform and its integration with the MIS will be issued by the Ministry of HUPA);
13. Preparation of Slum-free City Plan should be based on the development plans for all slums and strategies for the prevention of future slums, including reservation of land and housing for the urban poor. The Plan should contain timeline of activities for achieving slum-free city, phasing information and financial estimates against each of the activities

## **12.0 Introduction to Pradhan Mantri Awas Yojana (PMAY)**

Pradhan Mantri Awas Yojana (PMAY), a path breaking scheme for the slum dwellers and urban poor envisages a 'Pucca house to every family' through encouraging States/Union Territories to tackle the problem of slums in a holistic manner. It calls for a multi-pronged approach focusing on:

- Bringing existing slums within the formal system and enabling them to avail of the same level of basic amenities as the rest of the town.
- Redressing the failures of the formal system that lie behind the creation of slums.
- Tackling the shortages of urban land and housing that keep shelter out of reach of the urban poor and force them to resort to extra-legal solutions in a bid to retain their sources of livelihood and employment.
  
- Enactment of a set of reforms at the state and city level related to inclusive planning, regulation and financing, which would ensure that adequate fresh housing stock and services get created on an ongoing basis to address both current and future needs of cities.
- An integrated approach covering shelter, services and livelihoods for poor slum communities.

**12.1 The duration of Pradhan Mantri Awas Yojana [PMAY] 2015 TO 2022**

**12.2 Eligible Components of the PMAY:**

A EWS beneficiary family will comprise husband, wife and unmarried children. The beneficiary family should not own a pucca house (an all weather dwelling unit) either in his/her name or in the name of any member of his/her family in any part of India. to be eligible to receive central assistance under the mission. EWS households are defined as households having an annual income up to Rs.3,00,000 (Rupees Three Lakhs). States/UTs shall have the flexibility to redefine the annual income criteria as per local conditions in consultation with the Centre.

Projects pertaining to the following will not be considered for support under PMAY:

1. Water connection
2. Toilet facilities
3. 24 x 7 Electric facilities
4. Roads

**12.3 Need for Projects**

The projects are needed to fully understand and develop redevelopment models that can be replicated in the city with benefits. One of the key objectives of developing The Projects is to incentivize innovation and encourage new approaches and solutions that can demonstrably improve the quality and quantity of shelter and services for the poor.

Such innovation could encompass:

- Projects with strong community participation i.e. Slum upgradation/ redevelopment projects initiated/spearheaded by the community; or with their demonstrable involvement and participation in design, planning and implementation
- Creation of fresh rental housing stock and transit shelters
- New models of public-private partnerships whereby the private sector can be encouraged to take up affordable housing for the EWS/LIG
- Innovations in planning, demonstrating integrated livelihoods, shelter and services; or convergence
- Innovative or cost effective and green building design and technologies



Financial innovations in delivering the city/state wide programme

## 12.4 Aims and Objectives

### 12.4.1 Vision

The mission seeks to address the housing requirement of urban poor including slum dwellers through following programme verticals:

- Slum rehabilitation of Slum Dwellers with participation of private developers using land as a resource
- Promotion of Affordable Housing for weaker section through credit linked subsidy
- Affordable Housing in Partnership with Public & Private sectors
- Subsidy for beneficiary-led individual house construction

### Objectives

The project has been designed keeping in mind the following objectives.

- Integrated development of all existing slums, notified or non-notified, i.e., development of infrastructure and housing in the slums/rehabilitation colonies for the slum dwellers/urban poor, including rental housing.
- Development/improvement/maintenance of basic services to the urban poor, including water supply, sewerage, drainage, solid waste management, approach and internal road, street lighting.
- The Creation of affordable housing stock, including rental housing with the provision of civic infrastructure and services, on ownership, rental or rental-purchase basis.
- Encouraging Public Private Partnership by having pay and use toilets and educate the slum dwellers for keeping the environment clean and hygienic.

### 12.4.2 State PMAY Mission Director

The Nodal Ministry and National Mission Directorate is Ministry of Housing & Urban Poverty Alleviation, Government of India.

The Nodal Department for West Bengal is Municipal Affairs Dept. (M.A. Department), Government of West Bengal. The state level Nodal Agency is State Urban Development Agency (SUDA) under M.A. Department. State Urban Development Agency was set up in 1991 with a view to ensuring proper implementation and monitoring of the centrally assisted programmes for generating employment opportunities and alleviation of poverty throughout the State. SUDA is a Society registered under the West Bengal Societies Registration Act, 1961.



#### 12.4.3 Funding Pattern of PMAY

- Central share 1.5 LAKHS of total cost of dwelling unit
- Beneficiary share 0.25 LAKHS of total cost of dwelling unit
- State share rest of total cost of dwelling unit
- State + ULB bear the cost of infrastructure
- State share for infrastructure to be minimum 5%
- ULB share for infrastructure to be minimum 5%
- Cost of infrastructure 10 % of sum total cost of dwelling unit

#### 12.4.4 Approvals & Release of Funds

- Releases and approvals to be on the basis of DPRs which need to be submitted with approval of State Level Sanctioning and Monitoring Committee
- Innovative projects to be considered for sanction even in the preparatory stage.
- Central Funds to be released in three installments to the State Governments/SLNA; central assistance under different components will be released to the state / UTs after the approval of CSMC and with concurrence of the integrated Financial Division of the Ministry. Central share would be released in three installment of 40%, 40% and 20% each.

### 13.0 Status of existing infrastructure & services

**Municipality**, with its elected local body in place, has developed institutional strength to implement, operate & maintain proposed infrastructure. The Municipality spreading over an area of 8.88 square kilometres is comprised of 23 wards. With efficient and trained manpower, the Municipal has developed both technical and administrative skills. The development of appropriate municipal organizational structures with qualified staff is essential if municipalities are to provide cost effective services to citizens. With local government reform municipalities are required to take on new tasks, and provide new services. This will only be possible if municipalities have cost-effective and appropriate structures and staff that are well qualified and highly motivated. The municipalities should plan in such a way so as to ensure that they can meet the needs of citizens effectively and efficiently.

## DPR of HFA for North Barrackpore Municipality

### 13.1 Demographic features of the North Barrackpore Municipality :

Total Area of Municipality	13.56 Sq. Km.
Population (as per 2011 SECC)	1,32,806
Male (as per 2011 SECC)	66924
Female (as per 2011 SECC)	65882
Density of Population (as per 2011 SECC)	14956
Number of Municipal Wards	23
Number of Councillors	23

### 13.2 Urban Services

Role of various agencies engaged in urban sector related services whose jurisdiction includes ULB (Urban Local Bodies).

<b>Water Supply</b>	<b>ULB. &amp; KMC.</b>
<b>Solid Waste Management</b>	ULB
<b>Electricity &amp; Street Lighting</b>	WBSEDCL, CESC, ULB
<b>Sewerage</b>	ULB
<b>Roads</b>	ULB
<b>Drains</b>	ULB
<b>Health Services</b>	ULB
<b>Education Services</b>	ULB
<b>Social Welfare Services</b>	ULB
<b>Sports &amp; Games</b>	ULB
<b>Building Plan</b>	ULB
<b>Urban Planning</b>	ULB

### 13.3 Water Supply

In the primitive stage of the Municipal Corporation, main source for the supply of drinking water was the river Ganga that is within easy reach to all the residents of this Municipal area.

At present the Municipality has 4 no. of overhead reservoirs. Capacity of these reservoirs is 26.1 Lakh gallon. The Municipality has 21712 no. of piped domestic connection, 132 nos. Commercial connection and 3 nos Industrial connection.

### 13.4 Drainage & Solid Waste Disposal

#### 13.4.1 Drains

Municipality being the city of the civic amenities of different company/ plant townships are taken care by the respective company/ plant authorities. However, there are civil localities such as the area around the railway station (what was the original Municipality. Since inception total 281 Km Surface drain has been built up. However providing more effective drainage system is the goal of the ULB.

#### 13.4.2 Solid waste disposal

The multifarious types of wastes arising out of human & animal activities that are normally solid in nature and are being discarded as useless are considered as solid waste. Now Solid Waste Management is defined as the method to solve some specific problems of solid waste with its different functional elements. Municipality has four steps of Solid Waste Management. The steps are like: 1. Waste Generation 2. On site storage 3. Collection 4. Disposal. North Barrackpore Municipality generates about 286 MT. of solid waste per day. There are tractors and tailors which disposes the waste to 1 open landfill sites.

## 14.0 Status of Slums under Municipality

- i. As per the available data, the total number of people living in slums amounts to 606 covering an area of 0.0206 sq.km. Thus over one-third of Municipality's population resides in slums, squatters and other poor settlements. Their contribution to city's economy has been also been growing over the period.
- ii. In the absence of a focused program and in a background of ever-increasing urbanisation, the slum dwellers continue to be deprived of access to basic services, socio- economic needs. The problems are



## DPR of HFA for North Barrackpore Municipality

multiplied by increasing migration. It is necessary, therefore, to develop clear-cut strategies, Programmes and action plans to provide the basic Services to the Urban Poor.

iii. Municipality is basically a town and has been having substantial industrial and economic growth over the years. This has resulted in substantial growth in population triggered of by substantial migration. Continued influxes of migrants have resulted in mushrooming of slums and squatter settlements. Quality of life has thus suffered and the gaps between the demand and supply of essential services and other infrastructures have widened many fold.

iv. Slum settlements have multiplied over decades and the living conditions of the poor have not improved. Environmental decline, vehicular pollution, inadequate basic services and infrastructure in the poor settlements hit the poor hardest. Slums are scattered across the city occupying both private land and lands belonging to various public entities. However, they were neither adequate nor did they have proper ventilation or hygiene.

Lack of sufficient ventilation in the rooms, low and damp floor levels, congestion, want of proper drainage, and general unhygienic conditions from the characteristics common feature of these bustees. Privy accommodation in many cases is far too inadequate considering the number of the inmates. Through the service privies have been converted, but the numbers are not increased. In fact the slums found in North Barrackpore Municipal area.

- Firstly slums that grew up in the own lands of the dwellers but have no civic amenities, which are basically found in the listed 71 slums.

### 14.1 Slum Infrastructure Improvement Plan

The development objectives are:

- Ensure basic infrastructure services to all slums to provide better quality of life by giving emphasis on water supply and sanitation.
- Ensure maintenance of the asset created locally by ensuring collection of user charges locally and to enhance community participation.
- Ensure regular water supply and safe drinking water.
- To improve drainage system removing water logging in the slum.
- To ensure timely disposal of garbage of the slum.
- To provide housing for the dwellers of the slum.
- To provide streetlight facilities in the slum area.
- To provide road, community bathroom, community toilet and community seva kendra.
- To ensure economic upliftment



City Level Number of notified and non-notified slums					
City	Total Slums	Notified Slums	Non-Notified Slums	% Proportion of Slums	
				Non-Notified	Notified
North Barrackpore	71	29	42	59.15%	40.85%

#### 14.2 Key Findings – Slums under Municipality :

##### 14.2.1 Water Supply:

The main source of water supply in Municipality Municipal area is ground water of deep tubewell and partly received surface water from KMC, which is used for drinking purpose. Like other areas slum dwellers also use the said water through street tap/ municipal pipeline.

##### 14.2.2 Sanitation:

This is one of the most important services to be provided in the slum. Most of slum dwellers use community latrine.

##### 14.2.3 Drainage system:

In this slum there is insufficient drainage network. These areas are generally low and having water logging problems. Drainage network within the slum is to be designed. This system is to be connected to the main drain network of the ULB. Thus in most cases drainage system will not be effective without this development.

All the kaccha and pucca drains are connected with approach drain. Most of the drains are filled with waste materials of the slum. As a result, the situation becomes even worse during the monsoons. Most of the drains are in overflow and water logged in slum areas.

Slums of Municipality have both type of drainage system i. e. kaccha and pucca.

##### 14.2.4 Solid waste management:

There is no door to door waste collection in this municipal area as well as slum areas. BWMC held meeting for the campaigning of the system. Proposal for solid wastes collection has taken in all over the municipal area as well as in the slums.

### 15.0 List of slums and Non-slum under North Barrackpore Municipality (2015-16):

#### SLUMS :-

Sl. No	Slum Code No	Name of the Slum	Location/Address	Ward No	Area of Slum ( in sq.km.)
1	028	Sandalpur	Sandalpur	21	0.010741400
2	061	B.S. Banerjee Road	B.S. Banerjee Road	21	0.0033085395
3	062	Sidhweswaritala Rd.	Sidhweswaritala	21	0.001854548
4	063	Rampada Halder Road	Rampada Halder Road, Beniapara	21	0.005014539

#### NON-SLUMS :-

Sl. No	Slum Code No	Name of the Slum	Location/Address	Ward No	Area of Slum ( in sq.km.)
1	NA	NA	Natun Bazar	21	NA

### 16.0 Proposed Project:

#### 16.1 Background

It is a path breaking approach being taken up by Central Govt., State Govt. and Municipality, as there are some need to embark on this project with the aim of evolving, demonstrating and establishing models that can thereafter be scaled with a key objective to incentives innovation and encourage new approaches and solutions that can demonstrably improve the quality and quantity of shelter and services for the poor.

## DPR of HFA for North Barrackpore Municipality

### 16.1.1 Project Justification

For the following reasons North Barrackpore Municipality selected the slums namely mentioned below as first project for preparation of DPR under HFAPoA (PMAY):

Sl.No	Name of the Slums	Status	Land	Age in years	National High Way	Status of Housings	Road Status	Habitation pattern
1	Sandalpur	The condition of living in the slum is unhygienic	Land belongs to the ULB	30	The National Highway (NH-34) is about 24 km away	Major population is living in huts, made of darma / bricks with tin sheets and asbestos/tiles on roof	Major portion of roads are in dilapidated condition.	Habitation pattern in the slums is congested with insufficient open space
2	B.S. Banerjee Road	The condition of living in the slum is unhygienic	Land belongs to the ULB	30	The National Highway (NH-34) is about 24 km away	Major population is living in huts, made of darma / bricks with tin sheets and asbestos/tiles on roof	Major portion of roads are in dilapidated condition.	Habitation pattern in the slums is congested with insufficient open space
3	Sidhwaswaritala Rd.	The condition of living in the slum is unhygienic	Land belongs to the ULB	30	The National Highway (NH-34) is about 24 km away	Major population is living in huts, made of darma / bricks with tin sheets and asbestos/tiles on roof	Major portion of roads are in dilapidated condition.	Habitation pattern in the slums is congested with insufficient open space
4	Rampada Halder Road	The condition of living in the slum is unhygienic	Land belongs to the ULB	30	The National Highway (NH-34) is about 24 km away	Major population is living in huts, made of darma / bricks with tin sheets and asbestos/tiles on roof	Major portion of roads are in dilapidated condition.	Habitation pattern in the slums is congested with insufficient open space
5	NA	The condition of living in the <b>Non-slum</b> is unhygienic	Land belongs to the ULB	30	The National Highway (NH-34) is about 24 km away	Major population is living in huts, made of darma / bricks with tin sheets and asbestos/tiles on roof	Major portion of roads are in dilapidated condition.	Habitation pattern in the slums is congested with insufficient open space

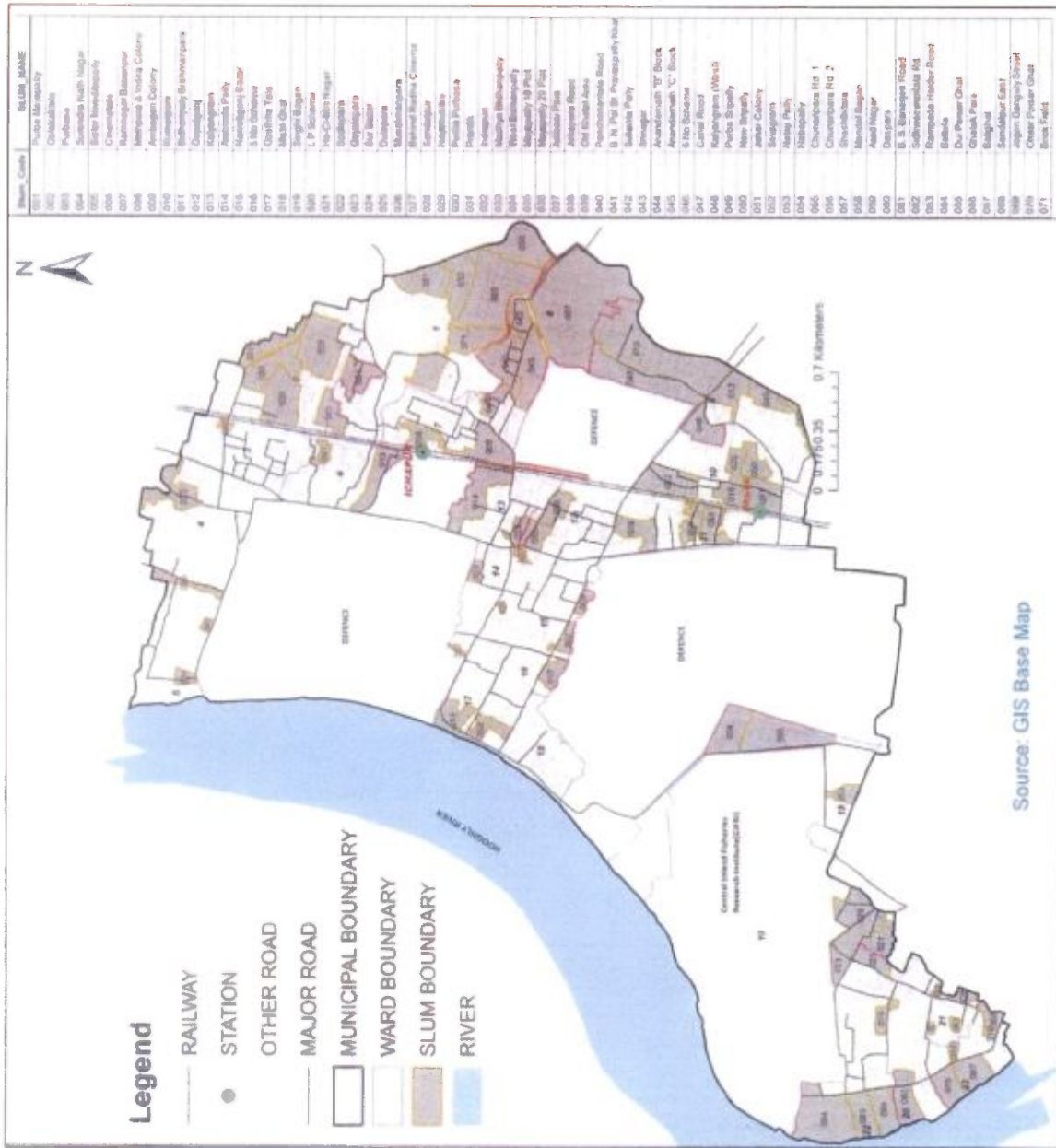


The proposed PMAY project would address the existing problems in the slum which includes lack of basic physical infrastructure and environmental betterment.

#### 16.1.2 Site Location

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The site for the project slum site is at a distance of about 3.5 km from the Station(Bkp.). The Kalyani Expressway is at a distance of about 7.0 km. The project slum is situated at core area in Municipal area. project slum location: Selected slums are demarked with coloured circle.



16.1.3 Site Appraisal

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1. Condition of the slum was also not very good and the area will be slum free area if it is approved.
2. More over C.I.C. & B.O.C. has also decided to take this slum as 1<sup>st</sup> PMAY Cluster project in the city.



DU of Sandalpur slum



ROAD OF Sandalpur slum



ROAD OF RAMPADA HALDER ROAD SLUM



DRAIN OF B.S. BANERJEE ROAD SLUM





DRAIN OF SIDHWESWARITALA ROAD  
SLUM



**16.1.4 Existing Slums Details**

The environmental condition in the slums is poor. The slums lack basic civic amenities mainly drainage, thereby leading to water logging, mainly during rainy season. This has led to an unhygienic living condition in the slums. Most of the roads within slums are brick paved or kutchra road. Though there are sufficient streetlights available. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health that ultimately leads to significant loss of man-days of work amongst others. Overall physical and social infrastructure is poor.

Project Land Particulars

Sl.No	Name of the Slums	Ward No	Area of the Slum (Sq. m. )	Age of the Slum (in Years)	Whether located in core City/Town or Fringe area	Type of Area surrounding Slum	Is the slum Notified/ Declared	Ownership of Land where Slum is located
1	Sandalpur	21	10741.4	35	Core City	Residential	Notified	Land belongs to the ULB
2	B.S. Banerjee Road	21	3085.4	35	Core City	Residential	Declared	Land belongs to the ULB
3	Sidhweswaritala Rd.	21	1854.55	20	Core City	Residential	Declared	Land belongs to the ULB
4	Rampada Halder Road	21	5014.54	30	Core City	Residential	Declared	Land belongs to the ULB
5	NA	21	69304.11	30	Core City	Residential	Non-Slum	Land belongs to the ULB

**Migration**

Maximum dwellers have migrated from rural areas due to lack of employment in agriculture sector. All household had migrated from rural to urban area. Majority of the population of this slum is living for more than 30 years in this slum. Hence, dwellers are now permanently depending on 10 nos slums. This justifies as a parameter on the importance of Slum for In situ development.

**Housing Status**

Housing is the constituent of the social infrastructure of the economy. Like the other constituents, such as the system of education and health, housing also can either reduce or enhance the disparities in the society.

**17.0 House Type /Structure AT SLUM & NON-SLUM (2015-16)**

**AT SLUM :-**

i) **SANDALPUR**

Semi Pucca	Kachha	Total
00	05	05

ii) **B.S. BANERJEE ROAD**

Semi Pucca	Kachha	Total
01	06	07

iii) **SIDHWESWARITALA RD.**

Semi Pucca	Kachha	Total
00	05	05

iv) **RAMPADA HALDER ROAD**

Semi Pucca	Kachha	Total
01	02	03

**AT NON-SLUM :-**

Semi Pucca	Kachha	Total
00	05	05

## DPR of HFA for North Barrackpore Municipality

Most of the dwelling units have mud flooring closely followed by cement flooring. Firewood is the major source of cooking fuel in majority of the slum household.

### Land Tenure status

All of the existing households are encroachment on Municipal land.

### Physical Infrastructure

Infrastructure is the basic requirement of urban life and its adequacy and accessibility are two important ingredients and key contributors in the up gradation and enrichment of quality of urban life which is the primary objective of any planned development effort. These infrastructure facilities are broadly classified into two aspects:

**Physical infrastructure:** Water supply, Drainage, Solid waste, Roads, Electricity.

**Social infrastructure:** Health, School, Community Hall, Lively Hood Centre

### 17.1 Status of Physical Infrastructure

#### 1. SANDALPUR

Physical Infrastructure	Status
1. Connectivity to City-wide Water Supply System	Partially connected
2. Connectivity to City-wide Storm-water Drainage Supply System	Partially connected
3. Connectivity to City-wide Sewerage System	Partially connected
4. Whether the slum is prone to flooding due to rains	No
5. Frequency of garbage Disposal	Daily
6. Arrangement for Global Disposal	Municipal staff
7. Frequency of clearance open drains	Once in 4 days
8. Approach Road/Lane/Constructed Path to Slum	Motorable katcha
9. Distance from the nearest Motorable road	Less than 0.5 km
10. Internal Road	Non-motorable
11. Whether Street light facility is available in the Slum	No

#### 2. B.S. BANERJEE ROAD

Physical Infrastructure	Status
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## DPR of HFA for North Barrackpore Municipality

1. Connectivity to City-wide Water Supply System	Partially connected
2. Connectivity to City-wide Storm-water Drainage Supply System	Partially connected
3. Connectivity to City-wide Sewerage System	Partially connected
4. Whether the slum is prone to flooding due to rains	No
5. Frequency of garbage Disposal	Daily
6. Arrangement for Global Disposal	Municipal staff
7. Frequency of clearance open drains	Once in 4 days
8. Approach Road/Lane/Constructed Path to Slum	Motorable katcha
9. Distance from the nearest Motorable road	Less than 0.5 km
10. Internal Road	Non-motorable
11. Whether Street light facility is available in the Slum	No

### 3. SIDHWESWARITALA RD.

Physical Infrastructure	Status
1. Connectivity to City-wide Water Supply System	Partially connected
2. Connectivity to City-wide Storm-water Drainage Supply System	Partially connected
3. Connectivity to City-wide Sewerage System	Partially connected
4. Whether the slum is prone to flooding due to rains	Partially
5. Frequency of garbage Disposal	Daily
6. Arrangement for Global Disposal	Municipal staff
7. Frequency of clearance open drains	Once in 2 days
8. Approach Road/Lane/Constructed Path to Slum	Motorable katcha
9. Distance from the nearest Motorable road	Less than 0.5 km
10. Internal Road	Non-motorable
11. Whether Street light facility is available in the Slum	No

### 4. RAMPADA HALDER ROAD

Physical Infrastructure	Status
1. Connectivity to City-wide Water Supply System	Partially connected
2. Connectivity to City-wide Storm-water Drainage Supply System	Partially connected
3. Connectivity to City-wide Sewerage System	Partially connected
4. Whether the slum is prone to flooding due to rains	Partially
5. Frequency of garbage Disposal	Daily
6. Arrangement for Global Disposal	Municipal staff
7. Frequency of clearance open drains	Once in 2 days
8. Approach Road/Lane/Constructed Path to Slum	Motorable katcha

## DPR of HFA for North Barrackpore Municipality

9.Distance from the nearest Motorable road	Less than 0.5 km
10.Internal Road	Non-motorable
11.Whether Street light facility is available in the Slum	No

Majority of the household uses public taps for water supply. The situation of water supply in the slum is poor. There are presently two water tap only.

### Sewerage and Storm Water Drains

Sewerage system is not available at North Barrackpore Municipality. Drainage system as available is very poor. Disposal of storm water/ Sullage disposal drain/ culverts are insufficient. Stagnant water has been observed at many places in and around the slum.

### Solid waste

At Solid Waste Management system in the slum is mainly done by the ULB. The waste which is generated is collected daily. The drains are cleared by the local people once in a week.

### Roads

Approach roads to the slums are motor able but roads within slum are in dilapidated condition.

Roads in front of premises			
Motorable Pucca	Motorable Katcha	Non Motorable Pucca	Non Motorable Katcha
38 %	22%	23 %	17%

### Electricity

Majority of the household (100%) have electricity connections, The street lights are maintained by the Municipality

### Literacy level

It is observed that 152 of the population are illiterate. Literacy of the female population is less than that of the male.

**18.0 Details of Social Infrastructure at a glance of slum:**

**SANDALPUR SLUM**

**Education & Social Infrastructure**

<b>Pre-primary School</b>	
Anganwadi under ICDS	NA
<b>Municipal Pre-school</b>	
Private Pre-school	NA
<b>Primary School</b>	
Municipal	NA
<b>State Government</b>	
Private	NA
<b>High School</b>	
Municipal	NA
<b>Private</b>	
State Government	NA
<b>Adult Education Centre</b>	
Health Facilities	NA
<b>Urban Health Post</b>	
Primary Health Centre	NA
<b>Government Hospital</b>	
Maternity Centre	NA
<b>Private Clinic</b>	
Registered Medical Practitioner (RMP)	NA
<b>Ayurvedic Doctor/Vaidya</b>	
Social Development/Welfare	NA
<b>Community Hall</b>	
Livelihood/Production Centre	NA
<b>Vocational Training/Training cum Production Centre</b>	
Street Children Rehabilitation Centre	NA
<b>Night Shelter</b>	
	NA



## DPR of HFA for North Barrackpore Municipality

Old Age Home	NA
Self Help Groups/DWCUA Groups in Slum	NA
No. of Neighbourhood Groups (NHGs) in slum	2
Slum-dwellers Association	NA
Youth Association	1
Women's Association/Mahila Samithis	NA

### B.S. BANERJEE ROAD SLUM

#### Education & Social Infrastructure

Pre-primary School	
Anganwadi under ICDS	NA
Municipal Pre-school	NA
Private Pre-school	NA
Primary School	
Municipal	NA
State Government	NA
Private	NA
High School	
Municipal	NA
Private	NA
State Government	Within distance less than 0.5 km
Adult Education Centre	NA
Health Facilities	NA
Urban Health Post	NA
Primary Health Centre	NA
Government Hospital	NA
Maternity Centre	NA
Private Clinic	NA
Registered Medical Practitioner (RMP)	NA
Ayurvedic Doctor/Vaidya	NA

**DPR of HFA for North Barrackpore Municipality**

Social Development/Welfare	NA
Community Hall	NA
Livelihood/Production Centre	NA
Vocational Training/Training cum Production Centre	NA
Street Children Rehabilitation Centre	NA
Night Shelter	NA
Old Age Home	NA
Self Help Groups/DWCUA Groups in Slum	NA
No. of Neighbourhood Groups (NHGs) in slum	NA
Slum-dwellers Association	NA
Youth Association	1
Women's Association/Mahila Samithis	NA

**SIDHWESWARITALA RD**

**Education & Social Infrastructure**

Pre-primary School	NA
Anganwadi under ICDS	NA
Municipal Pre-school	NA
Private Pre-school	NA
Primary School	
Municipal	NA
State Government	NA
Private	NA
High School	
Municipal	NA
Private	NA
State Government	NA
Adult Education Centre	NA
Health Facilities	NA
Urban Health Post	NA

## DPR of HFA for North Barrackpore Municipality

Primary Health Centre	NA
Government Hospital	NA
Maternity Centre	NA
Private Clinic	NA
Registered Medical Practitioner (RMP)	NA
Ayurvedic Doctor/Vaidya	NA
Social Development/Welfare	NA
Community Hall	NA
Livelihood/Production Centre	NA
Vocational Training/Training cum Production Centre	NA
Street Children Rehabilitation Centre	NA
Night Shelter	NA
Old Age Home	NA
Self Help Groups/DWCUA Groups in Slum	NA
No. of Neighbourhood Groups (NHGs) in slum	NA
Slum-dwellers Association	NA
Youth Association	1
Women's Association/Mahila Samithis	NA

### RAMPADA HALDER ROAD

#### Education & Social Infrastructure

Pre-primary School	
Anganwadi under ICDS	NA
Municipal Pre-school	NA
Private Pre-school	NA
Primary School	
Municipal	NA



DPR of HFA for North Barrackpore Municipality

State Government	NA
Private	NA
<b>High School</b>	
Municipal	NA
Private	NA
State Government	NA
<b>Adult Education Centre</b>	NA
Health Facilities	NA
Urban Health Post	NA
Primary Health Centre	NA
<b>Government Hospital</b>	NA
Maternity Centre	NA
Private Clinic	NA
Registered Medical Practitioner (RMP)	NA
Ayurvedic Doctor/Vaidya	NA
Social Development/Welfare	NA
<b>Community Hall</b>	NA
Livelihood/Production Centre	NA
Vocational Training/Training cum Production Centre	NA
Street Children Rehabilitation Centre	NA
Night Shelter	NA
Old Age Home	NA
Self Help Groups/DWCUA Groups in Slum	NA
No. of Neighbourhood Groups (NHGs) in slum	NA
<b>Slum-dwellers Association</b>	NA
Youth Association	1
Women's Association/Mahila Samithis	NA

## 19.0 The Supply Demand Gap and Requirements

### Particulars

### Requirements

Housing: Dwelling Unit provision for Households with standard provisions:

- 1 Multipurpose Room
- 1 Bed Room
- 1 Kitchen
- 1 Toilet
- 1 W.C

Physical Infrastructure Requirement:

Standard Infrastructure Provision for

- Water Supply
- Drainage
- Roads
- Electricity

### **Project Development Option**

In-situ redevelopment and whole of the project will be addressed in the project

### **Proposed Development**

Based on preliminary understanding, the following components are being proposed

- Housing Units [Single storied in situ].
- Standard Physical Infrastructure to be provided in the form of Circulation of Water Supply Drainage, Roads and Electricity

### **Innovations proposed in Project Planning**

#### **Background**

Housing activities are known to have the capacity to play a significant role in social-economic development, because they help not only in creation of shelter for the people by also in generating employment opportunities for a large variety skilled and unskilled work force which is a prerequisite for growth and development of settlement. A considerable section of the people without land are in a still worse position as housing schemes for the poor have hither to been targeted on paper but not applied in practice. Both the serviced land and shelter have become beyond the reach for half of the population-hence formation of slums, encroachments, informal colonies and unauthorized constructions. No land is earmarked for Economically Weaker Sections and Low Income Groups in

Master Plan. The population density norms are required to re-look to enable better utilization of valuable land, as certain areas in the city. This growing slum population and the lack of basic facilities like water and sanitation will badly impact on overall development and prosperity of urban centres like Municipality.

To overcome the existing situation and to promote planned development the following innovative strategies can be adopted for the improvement of the city.

- To ensure that housing, along with the supporting services is treated as a priority and at par with the infrastructure sector.
- Forging strong partnerships between private, public, and cooperative sectors to enhance the capacity of the construction industry.
- Organizing public consultations to meet the special needs of slum dwellers.
- Promotion of livelihood for the slum dwellers.

### Financial Implementation:

**Beneficiary led Participation:** implies development of housing by involvement of Beneficiary

### Tasks:

- Composition of beneficiaries and organizing the area meetings.
- Involvement of community and sustainable livelihood framework (SLF) in decision making and prioritization of needs of the slum.
- Understating of Social-economic profile

### Post Project Monitoring

A Monitoring & Evaluation team has to be formed to know the post project impact on the slums and to document the best practices.

## Physical Infrastructure

### Background

The National Sample Survey Organization (NSSO) in the Ministry of Statistics and Programme Implementation, Government of India has released the report of a nation-wide survey carried out by



it during July 2008 to June 2009 (65<sup>th</sup> round) on the condition of urban slums.

The aim of the survey was to collect information on the present condition of the slums and on recent changes, if any, in the condition of facilities available therein. Both 'notified slums' – areas notified as slums by the municipalities, corporations, local bodies or development authorities – and non-notified slums were surveyed – a non-notified slum being any compact urban area with a collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions. The present report gives the condition of urban slums, covering ownership, area type, structure, road within and approaching the slum, living facilities like electricity, drinking water, latrine, sewerage, drainage, garbage disposal, and distance of slums from the nearest primary school and government hospital/health centre. It also estimates the proportion of slums where certain specific facilities have improved/ deteriorated over the five years preceding the date of survey.

Comprehensive data on this subject was last collected by NSSO in its 58th round (July - December

2002). The present report provides key indicators from the 58th round as well, for

comparison. Some important findings of the survey are given below.

- About 49 thousand slums were estimated to be in existence in urban India in 2008-09, 24% of them were located along nallahs and drains and 12% along railway lines.
- About 57% of slums were built on public land, owned mostly by local bodies, state government, etc.
- In 64% of notified slums, a majority of the dwellings were pucca, the corresponding percentage for the non-notified ones being 50%.
- For 95% slums, the major source of drinking water was either tap or tube wells.
- Only 1% notified and 7% non-notified slums did not have electricity connection.
- About 78% of notified slums and 57% of the non-notified slums had a pucca road inside the slum.
- About 73% notified and 58% non-notified slums had a motorable approach road.
- About 48% of the slums were usually affected by water logging during monsoon – 32% with inside of slum waterlogged as well as approach road to the slum, 7% where the slum was waterlogged but not the approach road, and 9% where only the approach road was waterlogged in the monsoon.
- The sanitary conditions in the slums in terms of latrine facility during 2008-09 showed considerable improvement since 2002. Latrines with septic tanks (or similar facility) were available in 68% notified and 47% non-notified slums (up from 66% and 35% respectively in 2002). At the other extreme, 10% notified and 20% non-notified slums

(down from 17% and 51% in 2002) did not have any latrine facility at all.

- About 10% notified and 23% non-notified slums did not have any drainage facility. The corresponding proportions in 2002 had been 15% for notified and 44% for non-notified slums. Underground drainage systems or drainage systems constructed of pucca materials existed in about 39% notified slums (25% in 2002) and 24% non-notified slums (13% in 2002).
- Underground sewerage existed in about 33% notified slums (30% in 2002) and 19% non-notified slums (15% in 2002).
- Government agencies were collecting garbage from 75% notified and 55% non-notified slums. Among these slums, garbage was collected at least once in 7 days in 93% notified and 92% non-notified slums. About 10% notified and 23% non-notified slums did not have any regular mechanism for garbage disposal.
- Over the last five years, facilities had improved in about 50% of notified slums in terms of roads (both within-slum road and approach road) and water supply. The incidence of deterioration of any of the existing facilities in notified slums during the last five years was quite low (about 6% or below).
- In case of most slum facilities – sewerage and medical facilities being exceptions – the facility was reported to have improved during the last five years in more than 20% of non-notified slums. Deterioration of any of the existing facilities in non-notified slums, like notified slums, was rare (about 9% or below).
- Facilities such as street light, latrine, drainage, sewerage and medical facilities were each reported by more than 10% of notified slums to be non-existent both at the time of survey and five years earlier. In case of non-notified slums, facilities like street light, latrine, drainage, sewerage and garbage disposal were each reported by more than 20% of the slums to be non-existent, both during the survey and five years earlier.
- Where improvement had been brought about during the last 5 years, it was due to the Government's efforts in about 80-90% of slums, both notified as well as non-notified and for all the facilities. Improvement in educational facilities at primary level was attributed to NGOs in 13% of the notified slums where such improvement was reported. NGOs were also found to have played a role in the improvement of latrine and sewerage system in non-notified slums.

### Topographical survey and GIS mapping

The preparation of base map of Wood Industries slum has been prepared with Global Positioning Stations (GPS) and temporary Benchmarks (TBM) for Georeferencing and accurately locating the slum. These points have been selected and located at well defined locations on the ground after discussion with the ULB officials. The existing topographical features have been represented to the

actual terrestrial position.

Based on the Total Station survey and Socio-economic survey GIS based thematic maps were generated. This helped in accurate representation of the ground scenario with that of the socio-economic conditions of the people. The following GIS maps were generated for inclusive planning:

- Map showing existing Land use Map
- Map showing Household Size
- Map showing House Type/Structure, Flooring, Cooking
- Map showing Minority Status
- Map showing existing toilet facility
- Map showing existing road type in front of house
- Map showing existing source of drinking water
- Map showing existing source of house lighting

## Water Supply

### Proposal Rationale

Water and poverty are inextricably linked. Poor access to water and insufficient sanitation affect the health of the poor, their food security, and their prospects for making a living especially for vulnerable groups, such as children, the elderly, and women in general. Safe and adequate quantities of water and food security are recognized as preconditions for an acceptable development standard.

In almost whole of Asia and the Pacific region - home to nearly 900 million of the world's poorest people - one in three people does not have safe drinking water and one in two lacks adequate sanitation. Water is a critical resource for the poor and plays a key role in many aspects of their livelihoods.

Poor people depend on or are affected by water resources in four key ways:

- **As direct inputs into production**
- **For health, welfare, and food security**
- **For ecosystems viability**
- **For combating water-related hazards**

Keeping the above in mind, a water scheme for the urban poor needs to be drawn up which shall **Improved Access to Quality Water Services and also** build up institutions accessible to the poor that can efficiently manage water resources. These institutions need to be responsive to the



poor and should have an adequate opportunity for the poor to raise their views.

The management of water resources must take place within the wider ecosystems context, and all actions should be based on an understanding of the flows of water resources within river basins and how they affect the poor.

In view of this, the water scheme needs to take into account the following broad objectives:

- **To provide adequate Treated Water**
- **To ensure access for the Urban poor**
- **To develop institutional framework taking into account the requirements of the Urban Poor**

### Outcome

Water is a basic requirement of life. Absence of adequate water is a major issue for health as well as comfort for the poor. With the implementation of the project, the slum dwellers will have access to safe drinking water, which will greatly help their personal health, and hygiene. Quality of life would improve significantly and the multiplier effect due to this investment would reap significant benefit to the economy of this region within a considerable short period of time.

Water supply includes sources of supply, features of collection and distribution system, water demand and availability, quality of surface and groundwater source, reuse and recycling of water including conservation of water at the household level. The endeavour for all the proposals is to optimize the total cost of the system.

### Assessment of Overall State of Infrastructure

In line with the City Development Plan for Kolkata Metropolitan Area (Pg 11-28), it has been resolved that the entire KMA are will be switched over to surface water.

The following norms have been fixed for the region:

- **Kolkata Municipal Corporation Area      200 lpcd**
- **Howrah Municipal Corporation Area      150 lpcd**
- **Municipal & Non-Municipal Area      135 lpcd**

Previously the area was largely dependent on ground water. The status of ground water availability is as follows:

Keeping in mind the reduced rate of aquifer, traces of Arsenic Contamination and presence of Iron on the water, it has been decided to switch over to surface water from River Damodar.

Accordingly, the plant design is adequate to cater to the future requirement of the entire region and no augmentation of supply is required for the present project.

### **Situation Appraisal & Key Intervention for Identified Slum**

Presently accessibility to water supply facilities in the slum pocket is inadequate. The major source of water is from the common tap water available in the slums. The slum is partially connected to the municipal water supply main.

It is now proposed that water pipeline shall be provided in each household with requisite number of taps, as computed during the survey as felt needs shall be provided under this Project. However, considering that the houses are being provided with water, the provisions of multiple taps have not been encouraged and kept to the minimal level.

Design of distribution system was carried out on the following basis:

- Population projection
- Project horizon years
- Design period for various project components
- Per capita water supply
- Factors affecting consumption
- Existing water supplies
- Pipeline pressure requirement
- Supply of water on 24 x 7 basis
- Economical size of conveying main
- Choice of pipe materials
- Peak factor
- Residual pressure
- Hydraulic zoning

#### **Design Period for various Project Components**

Water supply projects are designed normally to meet the requirements over a period of 30 years after their completion. The time lag between design and completion of the project should also be taken into account which should not exceed two to five years depending on the size of the project. CPHEEO guidelines have been followed has suggested the design period for various water supply components.

### **Service Plan**

The pipelines needs to be regularly and kept in full working conditions. It is proposed that operation and maintenance of these pipelines and other assets be done in conjunction with the

maintenance

### Proposed Interventions

According to the above, the water supply design requirement for Municipality has been fixed at 135 lpcd

(Domestic Requirement) + 15% (head loss) +  $100 \cdot (p^{0.5}) = 163.25$  lpcd (approx).

There is existing water supply scheme which has the capacity for meeting the requirement. Thus there is no additional requirement of any reservoir. There are street stand posts for the slum proposed. But to achieve house connection at slum 100 mm dia. DI pipes are proposed.

The details of water supply lines provide are as follow:

#### Transmission of Water

North Barrackpore Municipality has water supply through ESR having (24x7) water supply. For the proposed multi-storied buildings sump and pump with OHR is provided for each building. The water supply network for this slum will be connected to the citywide water supply network.

Water supply system broadly involves transmission of water from the water supply main to the area of consumption normally through pipelines. Pipelines normally follow the profile of the ground surface quite closely, normally at 1 metre below ground.

Following design criteria are adopted for this project:

- Gravity pipelines have to be laid below the hydraulic gradient.
- Pipes are of Ductile Iron, Mild steel, GRP, HDPE, uPVC, Plastic etc.
- The design of water supply conduits is dependent on pipe friction, available head, velocity allowable, etc.
- Minimum sizes of 100mm for towns having population up to 50,000 and 150mm for those above 50,000 are recommended.
- There are a number of formulae available for use in calculating the velocity of flow. However,
- Hazen William's formula for pressure conduits and Manning's formula for free flow conduits are popularly used.

## 20.0 Drainage and Solid waste management

### 20.1 Proposal Rationale

The status of adequate Drainage has a close and direct link with environment, water supply and its



cleanliness, health and hygiene. The problem of adequate drainage associated with steep influx of population in urban areas, therefore needs to be addressed forth with, debated and deliberated at length, by the policy planners for the development of urban/city areas. Inadequate Drainage results in accumulation of stagnant water and is a major health hazard for the people living in the region.

In the slums there is no proper drainage system and hence stagnation of water is a common occurrence for the slums. In order to improve the situation, there is a need for constructing pucca drains, which will dispose of the stagnant water to the main drains.

### 20.2 Outcome

The proposed drainage system by means of construction of new drains and improvement of existing will help to provide relief to the slum dwellers by means of efficient and effective disposal of storm water through the outfall channels. The outcome of this scheme will by and large enhance the quality of civic life by way of promotion and safeguarding the public health and environmental pollution.

### 20.3 Assessment Overall State of Infrastructure

One of the priority area identified for Wood Industries slum has been absence of adequate drainage. Most of the drainage is kutcha and inadequate for covering the slums which had led to water logging which in turn affected the environment and health of the people on an overall basis.

As mentioned above poor drainage system and consequently chronic water logging are the major issues of concern. There is hardly any pucca drain. The state of drain also affects the condition of the road.

Though there are storm water drains on the main road around the slums, but there is no systematic connection with the internal areas of the slum, thereby leading to acute water logging within the slum. It is worth mentioning that apart from lack of drainage network in several slum pockets, major challenge lies with its maintenance. In numerous cases drains in slums gets choked due to improper disposing of solid waste and other hazardous materials into the existing drains.

Situation gets beyond control particularly during monsoon season like July and August. Accumulated water causes to generate public health problems. Haphazard growth and settlement in the slum area

has blocked the natural drainage courses, which in turn causes water logging and stagnation in

different parts of the slum.

#### **20.4 Proposed Interventions**

It is thus proposed to have an integrated drainage programme covering the slum pocket. The programme shall envisage construction of pucca drain throughout the road length and installing a maintenance programme to ensure that the drains are kept free from clogging from plastics and other materials. Depending on the availability of space and requirement, a sections have been designed, Designs of which have been provided in the relevant sections.

### **21.0 Road Infrastructure**

#### **21.1 Proposal Rationale**

A key component of the Proposal is a focused initiative to provide strong connectivity and provision of movement in the slums. This will enable the poor people to benefit from greater mobility and would increase their employment opportunities, open up trading and marketing of products, and important improve access to health, education, and other social services.

Roads in the slum are highly undeveloped and ill maintained. Poor roads are strong barrier to the development of the slums. Poor road condition and absence of road facility in several slums makes life difficult for all slum dwellers, especially, women and children. It also hampers prompt movement of sick; particularly those who require urgent medical attention. Lack of maintenance, coupled with poor drainage makes life even worse during monsoon season. Road are rarely re-built or re-paired periodically due to several reason. Provision of basic quality road is thus an important element of slum development. The existing road network system of the slum has become inadequate to cope up with the present and ever increasing needs. In order to bear the additional pressure due to enhanced civic, economic and commercial activities of the slum, existing road network system in several places are required either to be up-graded or winded and new roads are also be constructed in a number of places where the network is inadequate.

#### **21.2 Proposed status and strategy**

The existing condition of the road is poor and cause great hardship to the slum dwellers particularly women and children. The existing roads in the slum areas are predominantly made of brick pavement. These roads are substantially worn out. The lane roads are Kutcha roads. These

roads are highly vulnerable and are in a poor condition particularly in rainy season

One of the major issues is absence of proper maintenance. In view of this it is proposed that the entire road network is to be converted to concrete pavement as concrete pavements are durable and easy to maintain.

The Road needs to be maintained. It is proposed that operation and maintenance and servicing of these roads be done by the Municipality. The Bustee Working Committee shall be the first level of responsibility for ensuring that the pipelines etc. are kept in good order. The project cell of the Municipal Corporation shall carry out the overall operation and maintenance.

### 21.3 Proposed Intervention

All the proposed roads are rigid pavement-cement concrete roads. Rigid pavements are those which possess noteworthy flexural strength. The concrete pavement slab can very well serve as a wearing surface as well as effective base course. Therefore usually rigid pavement structure consists of a cement concrete slab, below which a granular base or sub base course may be provided. Rigid pavements are generally designed and the stresses are analyzed using elastic theory, assuming pavement as an elastic plate resting over elastic or a viscous foundation.

Construction of granular sub-base (GSB) 200 mm thick. Construction of 150 mm thick cement concrete pavement, as per Clause 1501.2.2 M30 (Grade), as per drawing and Technical Specification Clause 1501.

### 21.4 Outcome

After successful implementation of the scheme the slum dwellers will have facilities like pre-school education, adult education, non-formal education and social, recreational activities in the slum area. The community centres would provide the people to gather in, to meet and discuss their problems. It is not just a physical location but a space; where poor people could own, develop their thoughts and also could contribute their own skill and labour to make their dream come true. It will also provide the Municipal Corporation in networking with the urban poor communities in order to exchange information and views.

### 21.5 Proposed Intervention

In view of the above, it is proposed that a Community Centre is established to cater the slum population. For community development a community centre is proposed. The one storied



community centre has total plinth area of 223.4 sq m.

There will be Multipurpose hall which may be used as skill development centres or livelihood centre, health centres and Crèche are provided.

The Community Centres act mainly as a supporting unit for livelihood and for revenue generation for O&M

### 21.5.1 Materials of construction:

- PCC (1:3:6) for foundation
- RCC M-20 for substructure & superstructure (Column, Beam, Slab)
- HYSD Steel
- 1<sup>st</sup> Class Brick Masonry
- 1:6 (Cement: Sand) plaster – 10 mm on soffit of beam & slab, 15 mm on internal walls & 20 mm on external walls
- IPS flooring

## 22.0 Definition of Slum for Housing

Different definitions of a slum exist in different statutes and in urban poverty literature. For the purpose of HOUSING SCHEME, it is proposed to adopt the definition given in the 2001 Census, which is as follows:

- a. All areas notified as 'Slum' by State/Local Government and UT Administration under any Act;
- b. All areas recognized as 'Slum' by State/Local Government and UT Administration, which have not been formally notified as slum under any Act;

**'Slum' or 'Slum Area'**– is a compact settlement of at least 20 households ( For NE & Special Category States it is 10-15 households) with a collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions.

### 22.1 Situation Appraisal

The people living in the slums mostly have kutcha (10) and semi-pucca (186) housing. In certain

cases where pucca housing is available, they are usually in dilapidated condition. The kutchha houses are in very poor condition and require extensive repairs. Most of the houses have tiles on roof. While during the survey some of the houses have been noted to be in average condition, the quality of these houses is also speedily deteriorating.

### 22.2 Proposed Intervention

In line with the vision to 'housing for all', an integrated housing programme is proposed to be implemented. The target will be all the slum dwellers in the pocket. In situ single dwelling units are proposed.

Building type	Number of DU
In situ single Unit	20 NOS within 4 slums and 5 nos. within non-slum

### 22.3 Building Plan

The buildings are proposed to cover an area of approximate 32 Sq.mt along with provision of 2 rooms, kitchen and sanitation facility. The layout, size and type design of housing dwelling units depends on the local conditions and the preferences of the beneficiary. The houses, has been designed in accordance with the desire of the beneficiaries, keeping in view the climatic conditions and the need to provide ample space, kitchen, ventilation, sanitary facilities, etc. and the community perceptions, preferences and cultural attitudes.

In line with the scheme, carpet area of the house will be not less than 25 sq. mts and preferably two room accommodation plus kitchen and toilet should be constructed.

#### 22.3.1 Building material

- PCC (1:3:6) for foundation
- RCC M-20 for substructure & superstructure (Column, Beam, Slab)
- HYSD Steel
- 1<sup>st</sup> class Brick Masonry
- 1:6 (Cement: Sand) plaster – 10 mm on soffit of beam & slab, 15 mm on internal walls & 20 mm on external walls
- IPS flooring

#### 22.3.2 Structural Design

- Following are the general considerations in the analysis/design.

## DPR of HFA for North Barrackpore Municipality

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- For all structural elements, M20 grade concrete and Fe 415 grade of steel is used.
- Plinth beams passing through columns are provided as tie beams.
- Pedestals are proposed up to ground level.
- Beam Centre-line dimensions are followed for analysis and design.
- For all the building, walls of 250 mm and 125mm thick with 20 mm External plaster and 12 mm thick internal plaster are considered.
- Seismic loads are considered acting in the horizontal direction along either of the two principal directions.

### 22.3.3 Design data

---

- Live load: 2.0 kN/m<sup>2</sup> at typical floor
- 1.5 kN/m<sup>2</sup> on terrace (With Access) : 0.75 kN/m<sup>2</sup> on terrace (without Access)
- Floor finish 50mm (0.05\*24) = : 1.2 kN/m<sup>2</sup>
- Ceiling plaster 12mm (0.012\*20.8) : 0.25 kN/m<sup>2</sup>
- Partition walls (Wherever Necessary) : 1.0 kN/m<sup>2</sup>
- Terrace finish: 1.5 kN/m<sup>2</sup>
- Earthquake load: As per IS-1893 (Part 1) - 2002
- Depth of foundation below ground: ,0.7 m
- Walls: 250 mm thick brick masonry walls at external and 125mm walls internal.

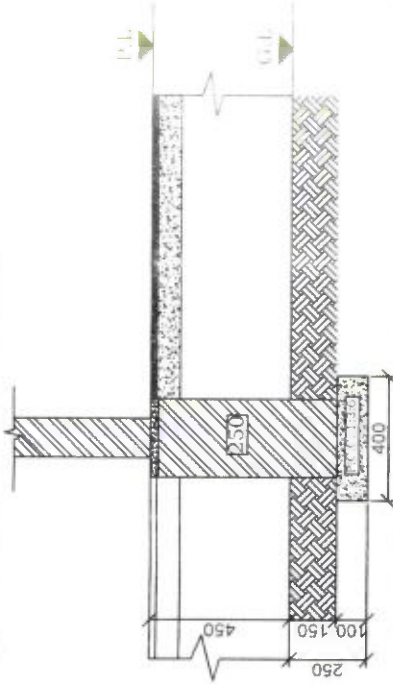
### 22.3.4 Reference codes:

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- IS 456: 2000 - Code of practice -Plain and Reinforced concrete.
- IS :1893 :2002 - Criteria for Earthquake resistant design of structures(Part-1)
- IS: 13920: 1993 - Ductile detailing of Reinforced concrete structures subjected to seismic forces.
- SP: 34 - Hand Book on Concrete Reinforcement and Detailing.
- S: 875: 1987 - Code of practice for design loads (other than earthquake) for buildings and structures. (Part-2)



**FOUNDATION DETAILS**



**125 MM THK. BRICK WALL**

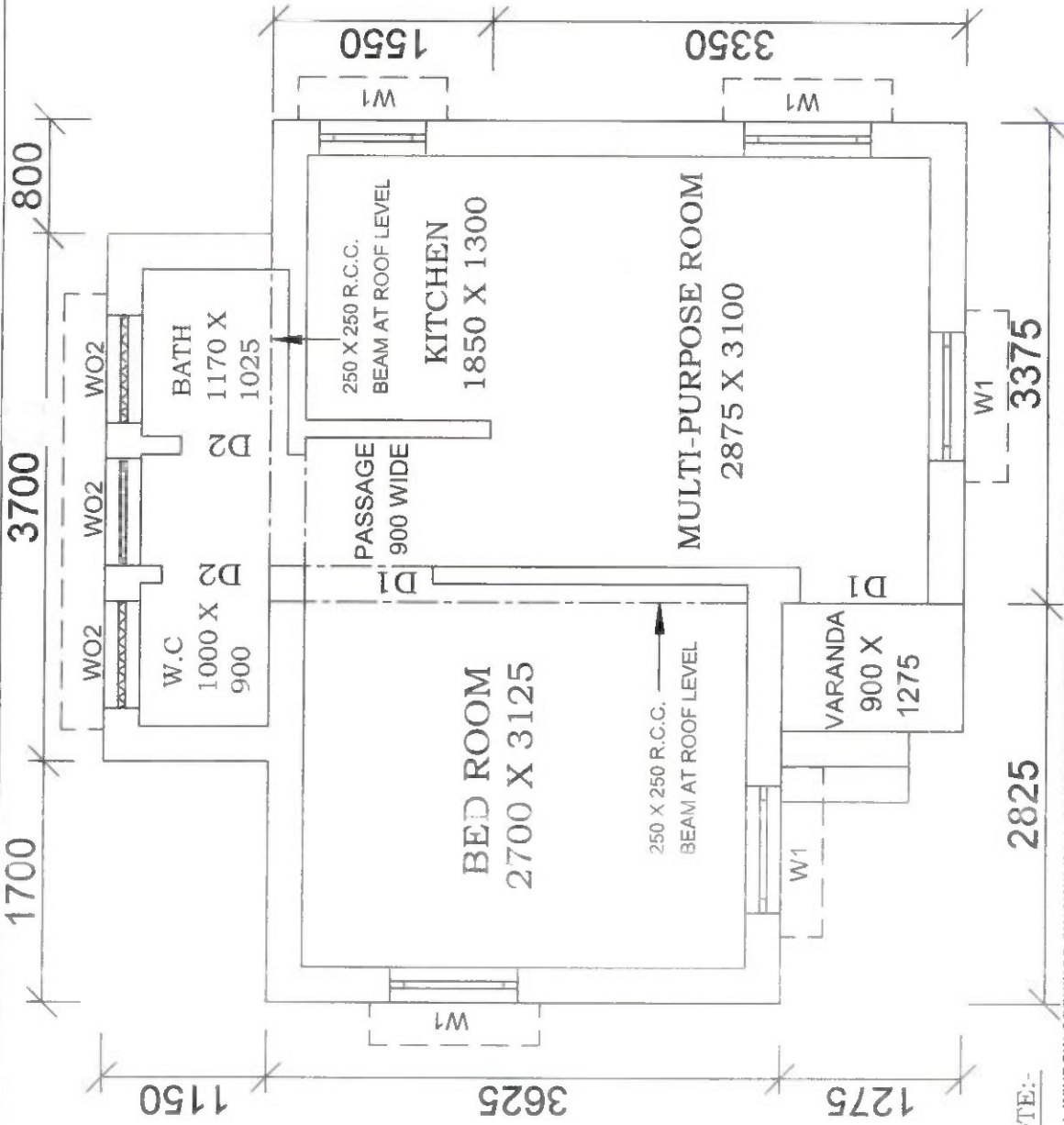
*10/04/2019*  
 Chairman  
 North Barrackpore Municipality



**250 MM THK. BRICK WALL**

ASSISTANT ENGINEER  
 North Barrackpore Municipality

*Shree*  
 S.A.E



**NOTE:-**

- ALL WINDOW OPENINGS (W1&W2) WILL BE PROVIDED WITH Z-BATTEN SHUTTERS.
- ALL DOORS (D1&D2) - 25TH Z-BATTEN SHUTTERS, SINGLE LEAF.
- WO2 - OPENING PROVIDED WITH R.C.C. JALLI.
- PLINTH HEIGHT - 450 TH.
- CEILING HEIGHT - 2750 TH.
- MAIN WALL - 250 TH.
- PARTITION WALL - 125 TH.
- ROOF SLAB, BEAM, LINTEL, ETC. WITH REINFORCED CEMENT CONCRETE M20 GRADE.
- FLOOR OF VERANDAH, WC, BATH, & KITCHEN ROOM TO BE KEPT 15 MM BELOW THE FLOOR LEVEL OF ROOM & PASSAGE.
- 100 MM TH. PIECE LINTEL OVER OPENING HAVE BEEN PROVIDED.
- ALL DIMENSION ARE IN MM.

DOORS & WINDOWS SCHEDULE	
MARKING	DIMENSION
W1	900 X 900
W2	750 X 900
WO2	750 X 750
D1	900 X 2100
D2	750 X 2100

Chief Engineer  
 M.E Directorate  
 Dept. of Municipal Affairs  
 Govt. of West Bengal  
 FLOOR AREA - 25.37 SQM.  
 BUILT UP AREA - 32.18 SQM.

**PRADHAN MANTRI AWAS YOJANA**  
 HOUSING FOR ALL (URBAN)  
 OFFICE OF THE CHIEF ENGINEER  
 MUNICIPAL ENGINEERING DIRECTORATE  
 GOVT. OF WEST BENGAL  
 DWG. NO. SCALE - 1:50 x 1:25

### **23.0 Identification of Beneficiaries**

Municipality Municipal Corporation, in consultation with State Urban Development Agency (SUDA), will approve the phasing of the beneficiaries in the region. The beneficiaries so identified and the projects so prepared shall be done in consultation with the committees and community development societies already existing in that particular city. The identification of beneficiaries will be on the basis of the baseline survey already conducted under PMAY Demand Survey.

### **23.1 Allotment of Houses**

Allotment of dwelling units will be in the name of the female member of the household. Alternatively, it can be allotted in the name of husband and wife jointly. Ownership of land required for every Beneficiary.

#### **Town Planning Norms**

Up-gradation of existing constructions and construction of new houses shall only be taken after approval of the lay out by the urban local body. Respective State Govts. may relax some town planning norms for sanction of such layout Plans, to facilitate HOUSING SCHEME, however, minimum acceptable standards of Town Planning will need to be set and followed.

All planning are done as per UDPFI & CPHEEO guidelines and local Municipal Bye-laws.

#### **Compliance with Municipal Bye laws**

All designs & drawings are created keeping in line with the municipal bye laws.

#### **Tenure**

Unlike rural areas, land is scarce in urban areas particularly in large metropolises. Under HOUSING SCHEME, the responsibility for providing land for the project rests with the State Government or its agencies.

## 24.0 Summary of Investment

### 24.1 Project Costing

The costing for the individual sectors has been made on the basis of applicable Schedule of Rates. The details of each of the sub-projects have been provided in the respective sections.

The cost components include:

Infrastructure: Cost of infrastructure development/up-gradation including water supply, sewerage, storm water drainage, solid waste management, roads & drainage, street lights, etc.

Housing: Construction Costs would need to be arrived from the various components that are proposed to be implemented and would vary depending on the development option identified.

### 24.2 Other costs

Administrative overheads and engineering design: In addition to the cost of infrastructure, calculated at the current market prices, a reasonable cost should also be estimated for administrative overheads and engineering design.

Land: Own land of Beneficiary.

### 24.3 GOI Contribution:

PMAY scheme guidelines stipulate that, 1.5 lakhs of the unit cost of Dwelling unit.

The Central share would be available as per milestones set out in Memorandum of Agreement (MoA).

### 24.4 Beneficiary Contribution:

In order to ensure beneficiaries interest, financial contribution by the beneficiaries is critical.. The share of beneficiary contribution in housing is proposed to be a minimum of 25000/-. As per PMAY guidelines no contribution from the beneficiaries is expected in infrastructure improvements.

### 24.5 State Contribution:

The decision would be left to the remaining share would have to be arranged by the State. State will contribute 5% of total Dwelling cost for infrastructure.

### 24.6 ULB Contribution:

ULB have no contribution on dwelling unit cost. ULB will contribute 5% of total Dwelling cost for



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infrastructure.

In the 1<sup>st</sup> Meeting of SLSMC of West Bengal it has been decided that the following funding pattern should be adopted for implementation of PMAY until further revision.

Type of City/Towns as per 2011 census	Component	Contribution of			
		Central Rs.(Lakhs)	State Rs.(Lakhs)	ULB Rs.(Lakhs)	Beneficiaries Rs.(Lakhs)
Total cost of Beneficiary LED Construction	Housing	1.5	1.93	Nil	0.25
	Infrastructure	Nil	5 %	5 %	Nil

### 25.0 Project Cost and Financing Strategy

#### 25.1 For Dwelling Unit

Total no of Dwelling unit	=	25 Nos
Rate per Dwelling unit	=	3.68 Lakhs
<b>Total Cost of Dwelling unit = 25 x 3.68</b>	=	<b>92.00 Lakhs</b>
Central Share = 25 x 1.5 Lakhs	=	37.50 Lakhs
State Share = 25 x 1.93 Lakhs	=	48.25 Lakhs
Beneficiary Share = 25 x 0.25 Lakhs	=	6.25 Lakhs
ULB Share	=	NIL

#### 25.2 For Infrastructure

10 % of total Dwelling unit cost = 92.00 Lakhs x 10%	=	9.20 Lakhs
Central Share	=	NIL
State Share = 50% x 9.20 Lakhs	=	4.6 Lakhs
Beneficiary Share	=	NIL
ULB Share = 50% x 9.20 Lakhs	=	4.6 Lakhs

**The total project cost will be 1.012 crores**

Out of these 1.012 Crores is the cost of Housing Infrastructure, the following table shows the share

of cost between housing infrastructure & Physical Infrastructure.

**25.3 Table: Cost Breakup between Housing & Infrastructure**

Sl No.	Component	Cost on Lakhs
1.	Housing Cost (25) Dwelling Units)	92.00
2.	Infrastructure Cost	9.20
	<b>Total</b>	<b>101.2</b>

**26.0 Sector wise Monitoring and Implementation Plan**

**26.1 Background**

A strong implementation plan and administration framework is essential for implementation of the identified projects that require strengthening of the Municipal Corporation and evolution of a Community Structure.

Accurate assessment of investment requirements and devising a suitable financing strategy are the key components of any sustainable slum rehabilitation program. Implementing bodies must recognize and measure the various costs of developing infrastructure and housing, including the costs for subsequent maintenance. As the scheme is a collaborative effort of multiple stakeholders, with a few of them contributing financially as well, it is important to estimate the required capital expenditure for developing the infrastructure and improving the housing stock as accurately as possible.

**26.2 National Level**

**26.2.1 PMAY Mission Directorate**

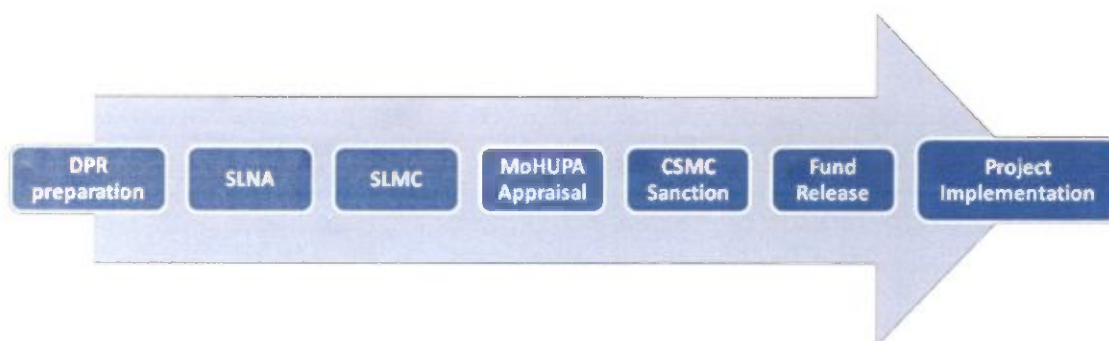
There shall be a PMAY Mission Directorate under the charge of a Joint Secretary under the Ministry of Housing and Urban Poverty Alleviation, supported by staff and a Programme Management Unit with experts having expertise in the areas of survey and statistics, computerization and MIS, GIS, Planning, Project engineering, Social development, Monitoring and evaluation etc. for

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ensuring effective co-ordination with State Governments for expeditious processing of the State Slum-free PoAs and project proposals and providing handholding support to States/UTs.

### 26.2.2 State PMAY Mission Director

The State Level Nodal Agency for PMAY/SUDA, West Bengal will have coordination of all scheme and reform-related activities more than one department handling Urban development, Local self government, and Housing. SLNA. The Mission Directorate supported by a team of dedicated professionals having expertise in the fields of GIS, MIS, town planning, community development, project engineering, capacity development etc



## North Barrackpore Municipality

### Participation through Beneficiary committees

People's participation in municipal planning and development is critical and shall be ensured through of Ward Committees in each ward irrespective of their population and size.

The Ward Committee Rules have also been framed in such a way so as to ensure involvement of the members of the Ward Committees in the overall municipal administration and resource mobilization. The Ward Committee created especially for the purpose of PMAY will be headed by the



Councillor of the Ward, who would in turn submit the report of progress to BWMC.

Some of the responsibilities the Ward Committee will be:

- i. Supervision of the physical progress of the work under the project
- ii. Designating in-charge, who would be held responsible for individual scheme under the project
- iii. Collecting user charges for operation and maintenance (O&M) activities
- iv. Ensuring proper maintenance of each of the assets that is created under the project

#### **Participation through Community Based Organization**

Participation of poor families in planning and implementation of slum level Basic Infrastructure Development as well as Socio-Economic Development has been ensured through formation of Community Based Organization. The Ward Committee will also have representative of weaker community. Similar structure have also been involved by the municipalities in providing civic services like conservancy services, maintenance of street light, etc. municipal administration and resource mobilization.

However, basic guidelines, which will be followed in implementation of the projects, are been laid down below:

#### **Social Infrastructure**

In order to provide preventive health care, mother and childcare, supplementary nutrition, referrals and so on, a cost effective but sustainable community infrastructure or institution needs to be developed.

In the first step, community health facilities will be provided from centrally located Community Seva Kendra in slum pockets and for different type of imparting education and other training purpose, Community Centre will be put in place.

The Community Seva Kendra will be the hub of all activities of the Unit like: immunization, health-check up of pregnant women, growth monitoring, referrals, nutrition supplementation, awareness training and campaign and so on, besides other activities like Balwadi, NFE, cultural activities etc. Some part time medical staff may be posted for these Units in the slum pockets and some help from trained medicos will essentially be needed for services like health check up of pregnant women and children, and immunization.

Thus notwithstanding the guidelines in this regard, following alternatives will be tried:

- Creation of a dedicated cell for administrative activities and maintenance of the Community Seva Kendra
- Assistance from some NGOs like Rotary, Lions, IMA, etc.

- Request to the district outfit of the Health and Family Welfare Department to depute doctors to the UHC by rotation for 2-3 hours, three times a week.
- Engage duly certified inoculators or health workers for immunization only on the basis of token honorarium.
- Engage private medical practitioners who are motivated to provide service to the poor community and pay them token honorarium in recognition of their service.

### Physical Infrastructure

The Ward Committee will not only be supervising and monitoring the progress of the activities, but shall be actively involved in scheme implementation and in mobilization of funds. The Ward Committee will have teams for individual physical infrastructure projects who shall be held responsible the scheme in the slums in the ward. Primary activity of the Committee for schemes is provided below in details.

- i. Assess water supply needs and identify spots for tap.
- ii. Develop water supply plan.
- iii. Train RCVs in hand pump maintenance.
- iv. Develop slum level water and sanitation committee.
- v. Test water quality periodically.
- vi. Construct platform around each hand pump that does not have it already.
- vii. Identify needs for community bathing cubicles for women and selecting ideal spot for constructing the same
- viii. Identify sites for building community toilets cum water points.
- ix. Link community toilets to biogas plant (on experimental basis).
- x. Improve the conditions of drains, soak pits and solid waste disposable bins.

### Other Environmental Improvement Measures

- i. Organise hygiene and sanitation drives in slums.
- ii. Sports, games and cultural activities
- iii. Encourage local NGOs/clubs to create facilities for games and athletics for the children and youth.
- iv. Give support to the above by providing materials for games, etc.
- v. Organize annual sports and tournaments.

- vi. Organize facilities for learning music and dramatics.
- vii. Organize annual competition of music, recitation, drawing, drama, etc.

#### Creating income and employment opportunities for women

- i. Identification of marketable skills for women.
- ii. Arrange skill training with fund available under SUME of NRY.
- iii. Arrange credit-subsidy under SUME to enable the trained women to start and operate micro enterprise.
- iv. Arrange for supply of inputs and marketing of finished products.
- v. Thrift and Credit Society Formation
- vi. SHG Formation
- vii. DWCUA Formation

#### Housing

##### Monitoring

Officers dealing with HOUSING SCHEME at the State headquarters shall visit the slums regularly and ascertain through field visits whether the programme is being implemented satisfactorily and whether the construction of houses is in accordance with the prescribed norms. . A schedule of inspection which prescribes a minimum number of field visits for each supervisory level functionary from the State level to the corporation level shall be drawn up and strictly adhered to.

##### Evaluation Studies

Periodic evaluation studies on the implementation of HOUSING SCHEME shall be carried out by reputed institutions and organizations on issues identified during concurrent evaluation and reviews. Copies of these studies should be furnished to the Govt. of India. Remedial action shall be taken on the basis of the findings of these studies.

##### Modality of implementation

Before implementation it will be ascertained that either the property title in the name of the female member of the family or at least the female family member is the co-owner of the holding/property.

##### Transparency in implementation of Housing Scheme

The list of items on which information would be made available to people to bring about greater transparency at the State, District and Corporation levels is given below:

- i. List of people below poverty line in the urban area.
- ii. List of beneficiaries identified during the preceding year and current year including details of SC/ST, BC, women beneficiaries and physically and mentally challenged persons under



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HOUSING SCHEME. Allocation made to the State under VAMBAY

- iii. Guideline of HOUSING SCHEME/ Criteria for selecting beneficiaries.
- iv. Display of HOUSING SCHEME signboard / logo on the allotted houses.

### Monitoring & Evaluation

PMAY will be monitored at three levels: City, State and Government of India. In particular,

- Ministry of Housing and Urban Poverty Alleviation will periodically monitor the scheme.
- State Nodal Agency would send Quarterly Progress Report (on-line) to the Ministry of Housing and Urban Poverty Alleviation.
- Upon completion of a project, the State Nodal Agency, through the State Government, would submit completion report to the Central Government.
- Central Sanctioning-cum-Monitoring Committee will meet as often as required to sanction and review/monitor the progress of projects sanctioned under the Mission.
- States/Cities will be facilitated through independent quality control/ assurance/ third party teams at various levels that may be outsourced to specialized/technical agencies.
- Monitoring of projects by States/Urban Local Bodies by conducting Social Audit in conformity with guidelines to be prescribed, right from the stage of project preparation.
- The processes of implementation will be monitored by undertaking concurrent evaluation through reputed independent institutions to ensure that corrections to distortions, oversights or shortcomings can be made in time.

**Convergence of Health and Education**

**Health**

Development Objectives for the Health Care Service Delivery Improvement Plan. Some of the development objectives, which the North Barrackpore Municipality address through their Health Care Service Delivery Improvement Plan, are as follows:

**Theme 1: Public Health Services:**

- i. Better coordination with State Government hospitals and dispensaries for maintaining a better referral system.
- ii. Improve the asset and human resource utilization pattern of health services such as ambulance services, dispensaries etc.
- iii. Ensure that all types of cooked / uncooked food in the Municipal Corporation area are sold by licensed food sellers to prevent spread of diarrhoeal and other disease in the area.
- iv. Strengthening and developing Health Management Information System.
- v. Exploring opportunities for strengthening decentralization and other public private partnerships in providing such public health services
- vi. Partner with leading private sector providers of medical services for better utilisation and maintenance of medical infrastructure such as municipal dispensaries, maternity homes.

**Theme 2: Reproductive and Child Health Care Services:**

- i. To establish quality antenatal care to 100% of the slum women.
- ii. To establish 100% institutional delivery for all women living in slums.
- iii. 100% immunization of infants against six killer diseases within 12 months of birth.
- iv. Making sterilization services available by way of improving efforts related to family planning.
- v. Formulate a wider basket of services aimed at providing health priorities within the RCH domain that have not been adequately addressed, as well as some health priorities outside the RCH domain which are major contributors to the burden of disease and impoverishment are included.
- vi. Spreading health awareness through various methods of communication not only to the beneficiaries of the Programme but also to the excluded groups and areas within the wards.

**All other Government Programmes for Preventive Health Care and other Independent Initiatives taken by the ULB:**

- i. Promotion of hygienic measures to lead to reduced diarrhoeal disease with prompt and appropriate care and reducing household expenditure on recurrent diarrhoea.
- ii. Increase the coverage of vector control operations by rationalizing the use of assets and human resources available.
- iii. Effective implementation of Government Programmes to achieve the targeted goals and objectives.
- iv. The following schemes under implementation by the State Govt. in the social sector can be dovetailed and integrated with the IHSDP Program to ensure effective slum development. The Socio Economic Survey has already identified beneficiaries under the scheme.

**RCH & IPP VIII Extension:**

A surveillance program initiated by the State Govt. after completion of the World Bank Assistance in the two schemes. Main objective is to provide Health care facilities at the door steps of the slum dwellers / BPL Population, with emphasis on Mother and child health, preventive cares and immunization, Institution delivery, birth control.

**Health Program under DFID Assistance:**

With the same objective as above with decentralization of health care activities by formation of Health sub centers, which can be operated from the Community Seva Kendras, proposed earlier.

**Education**

The Municipal Corporation has been actively implementing key initiatives in the Education sector through convergence with the following objectives:

- Improvement Of the Status & Infrastructure & Basic Service in Primary Schools under Municipal Corporation.
- Achieving 100% enrolment in schools for next 5 years.
- Enhancing the quality of education provided in pry school with respect to student performance & teaching quality.
- Leveraging the existing resources created under the NSDP and other programme and increase the coverage in excluded committee and squatter settlements
- Achieving higher enrolment of children in age group of 6-14 in SSK centres
- Strengthening Parent Teacher Association and involving community participation in improving the performance of school
- Creating awareness in the community through the existing community structures (NHG,



NHC, CDS members) on the importance of primary and adult education.

Extensive training programme for teachers & sahayekas is being organized for improvement of quality teaching. Construction, extension and repair of SSK buildings must be done so that a greater portion of children aged 5 to 14 yrs can attend there.

**SSA** : 'Sarba Siksha Abhiyan' – a scheme meant for 'education for all'

**SSK** : 'Sishu Siksha Kendra' – Mainly aimed at offering free primary education to the poorer section of the community.

**Mid-day Meal**: A program initiated to central the drop out rates, has been found success since its initiation.

### Social Security

The following Social Security Schemes under State Plan are proposed to be integrated with the current program through convergence:

**Adult Education**: To promote self-dependability.

**Thrift and Credit Society**: For easier Credit and Finance availability.

**Self Help Group**: To promote self and micro entrepreneurship.

**DWCUA**: Upliftment of the life style and self-independency of Women Group.

**Annapurna**: To provide food stock at reduced price to the poorer section of the Community.

**Environment Impact Assessment**

<b>IMPACT &amp; REMEDIES</b>		
1.	Utilization of alternative material Characteristics and availability of alternative material	Locally available bricks etc. will be used.
2.	Rehabilitation of water bodies & measures for maintaining surface runoff smoothly	No water body is affected by the alignment of road. The road side open C. C. / Brick masonry drains have been provided for free flow of storm water.
3.	Measures for Erosion Control	Not applicable for the slum area.
4.	Conservation of Topsoil a. Extent of loss of topsoil b. Area requirement for topsoil conservation c. Inclusion of conservation of topsoil d.	Not applicable for the slum area.
5.	Impact on Heritage & Culture a. Identification of locally significant cultural properties b. Assessment of likely impacts on each cultural property due to project implementation c. Possible measures for avoidance i) Identification of alternative routes ii) Relocation of Culture property in consultation with the local community iii) Common Property	Question does not arise.
6.	Location of Natural Habitants	It will not be disturbed
7.	Construction of site office / Camp	Temporary construction of camp / office shall be established by contractor and since the project is small and scattered, the temporary impact on environment for Construction Camp / office at the time of execution of work is negligible.
8.	Quarrying of Materials a. Sourcing of materials from quarries b. Lead from various existing quarries c. Adequacy of material for the project in these quarries	The construction materials require for the project shall be procured from : a) Stone metal : from the existing. b) Bricks : From the existing brick fields nearby the project site. c) Sand : From the nearest source. All the materials are sufficiently available.
9.	Water Requirement; Identification of potential sources of water	Water required for the construction of work will be available from ground water. There is no scarcity of water in the region.
10.	Location of Waste Water Disposal : a. Location for disposal of waste water	The surface drain have been proposed in the slum for disposal of waste water.
	b. Outfalls locations for longitudinal drains	

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	<p>i) Outfall level and back flow</p> <p>ii) The outfall is in natural stream; measures shall be taken to prevent sediment into the stream.</p>	<p>Natural slope of the ground will be maintained for waterways for discharge of surface runoff. No possibility of back flow except in the case of heavy flood.</p> <p>The storm water drain of the slums will discharge the water to the main high drain of the town.</p>
11.	Air Pollution during construction work	Work shall be carried out by equipments like concrete mixer machine vibrator etc. at this time of concerting work only for which air pollution will be negligible.
12.	Identify locations susceptible to induced development	<p>Locations vulnerable to induced development: In such location the Municipality has committed not to allow building construction activity.</p> <p>a. Lands within 50 m of junctions</p> <p>b. Agricultural lands with enforce restriction on building activity on either side of road. Stretches within 100m of worship places, weekly fairs and locations of community mass gatherings.</p>
13.	Roles and responsibilities of municipality in regulating development	<p>The municipality shall lay down restrictions on building activities along the by-pass roads :</p> <ol style="list-style-type: none"> <li>1. Municipality will enforce restriction on building activity on either side of road.</li> <li>2. Development of Residential sites outside Existing Settlement.</li> </ol> <p>Appropriate measure towards the removal of encroachments onto the public land to be taken.</p>
14.	Traffic Congestion and related air & noise pollution	As the road passes through the slum area of the town and two wheelers, Three wheelers, light vehicle will move hence there will not be any traffic congestion, related air & noise pollution.
15.	Opportunity in economic activities due to ease of transportation system	<p>The benefits due to this project are :</p> <ol style="list-style-type: none"> <li>1. Generation of Man days</li> <li>2. Improvement in Household or population sector i.e. Improvement of personal health, hygiene, socio- economic condition, education etc.</li> </ol>



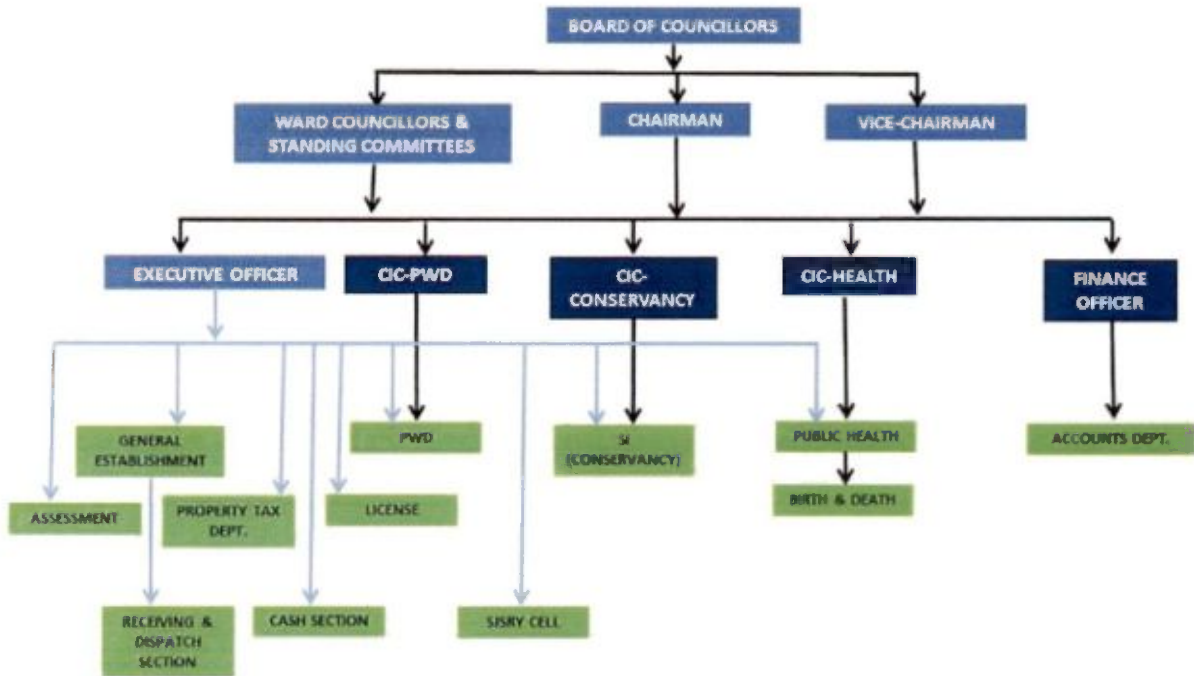
## **Institutional Capacity**

**Municipality**, with its elected local body in place, has developed institutional strength to implement, operate & maintain proposed infrastructure. The Municipal Corporation spreading over an area of 154.2 square kilometres is comprised of 43 wards. With efficient and trained manpower, the Municipal Corporation has developed both technical and administrative skills. The development of appropriate municipal organizational structures with qualified staff is essential if municipalities are to provide cost effective services to citizens. With local government reform municipalities are required to take on new tasks, and provide new services. This will only be possible if municipalities have cost-effective and appropriate structures and staff that are well qualified and highly motivated. The municipalities should plan in such a way so as to ensure that they can meet the needs of citizens effectively and efficiently.

### **27.0 Organization and Governance Structure of North Barrackpore Municipality**

As per municipal mandates, Councilors share the responsibility as members of the Board of Council (BoC) and BOC holds supreme authority in all the matters related to municipality. The Chairperson is the prime sanctioning authority and member of BOC. In absence of Chairperson, Vice- Chairperson is the decision making authority. Standing committees are formed for delegation of power and focused handling of different departmental functions. Each standing committee has a president who is one of the councilors. North Barrackpore has different committees, headed by a counselor, each catering to diverse range of municipal services. These departmental heads report to the Vice-Chairperson. The organogram depicts the hierarchical structure as shown in figure below:

Organogram of North Barrackpore



The Municipal Corporation is entrusted with the responsibilities of providing the following civic services and infrastructural facilities to the citizens:

- **Solid Waste Management**
- **Birth and Death Registration**
- **Crematoria and burial ground**
- **Prevention of food adulteration**
- **Preventive Health Care and Health Care**
- **Services**
- **Roads and its development**
- **Widening & improvement to roads**
- **Street Lighting**

- **Bus Stands, Public Urinals**
- **Markets**
- **Storm Water Drainage and Flood Control.**
- **Parks and Playgrounds**
- **Plantations**
- **Town Planning**
- **Slum Improvement and Urban Community**
- **Development**
- **Education**
- **Water**
- **Beautification**



**28.0 FUND FLOW PATTERN**

**FUND FLOW PATTERN**

Rupees in lakhs

NAME_OF THE SCHEME	ESTIMATED COST	YEAR 2015-16				TOTAL
		GOI	GOWB	ULB	Beneficiaries	
PMAY project - , North Barrackpore Municipality	101.20	37.50	52.83	4.62	6.25	101.20

**PHASING OF FUND**

Rupees in lakhs

YEAR 2015-16	RELEASE OF FUND				
	GOI	GOWB	ULB	Beneficiaries	TOTAL
1st Installment @ 40%	15.00	21.13	1.85	6.25	44.23
2nd Installment @ 40%	15.00	21.13	1.85	0.00	37.98
3rd Installment @ 20%	7.50	10.57	0.92	0.00	18.99
<b>TOTAL</b>	<b>37.50</b>	<b>52.83</b>	<b>4.62</b>	<b>6.25</b>	<b>101.20</b>

**REQUIREMENT OF FUND**

Rupees in lakhs

SL. NO	NAME_OF THE SCHEME	YEAR 2015-16	TOTAL
1	PMAY project - , North Barrackpore Municipality	101.20	101.20
<b>Total</b>		<b>101.20</b>	<b>101.20</b>

**29.0 ESTIMATE AND DRAWING**

**ESTIMATE AND DRAWING**

**DPR of HFA for North Barrackpore Municipality**

**DETAILED ESTIMATE FOR THE CONSTRUCTION OF SINGLE UNIT DWELLING HOUSE**

**Pradhan Mantri Awas Yojana Housing For All (Urban)**

**Total Covered Area- 32.18 sq.m (With Electrical Works)**

Referance of Schedule of Rates : PWD (W.B.), Schedule of Rates Building & Sanitary w.e.f-01.07.2014 & Corrigenda ( Kolkata /24 Pgs (N & S)/ Kalyani Sub Div.)

**Floor Area 25.37 sqm**

SL No.	Description of Works	Quantity	Unit	Rate (Rs.)	Amount (Rs.)
1	Earthwork in excavation in foundation trenches or drains, in all sorts of soil ( including mixed soil but excluding laterite or sandstone) including removing spreading or stacking the spoils within a lead of 75 m as directed including trimming the sides of trenches, levelling, dressing and ramming the bottom, bailing out water etc. as required complete. a) Depth of excavation not exceeding 1500mm. SOR, PWD, P-1, I -2 a	13.000	%cu.m.	12047.00	1566.11
2	Earth work in filling in foundation trenches or plinth with good earth in layers not exceeding 150 mm. including watering and ramming etc. layer by layer complete.( Payment to be made on the basis of measurement of finished quantity of work ) a) With earth obtained from excavation of foundation. SOR, PWD, P-1, T/3 a	11.120	%cu.m.	7831.00	870.81
3	Supplying Laying Polithin Sheets etc. SOR, PWD, P-45, T - 13	22.000	sqm	25.00	550.00
4	Cement concrete with graded Stone ballast (40 mm.) excluding shuttering.a) In ground floor and foundation.6 : 3 : 1 proportion Pakur variety SOR, PWD, Page 24 ; Item -10 a	3.500	cu.m.	5823.00	20380.50
5	25 mm. thick damp proof with cement concrete (4:2:1) (with graded stone aggregate 10 mm. Normal size) and painting the top surface with a coat of bitumen using 1.7 kg. per sq.m. including heating the bitumen and cost and carriage of all materials complete. SOR, PWD, P-45, T-12	6.810	sqm,	297.00	2022.57
6	Brick work with 1st class bricks in cement mortar (6:1)  a) In foundation and plinth.  b) In super structure SOR, PWD, P-29, T -22(a), (b)	10.430  15.240	cum  cum	5719.00  5943.00	59649.17  90571.32
7	125mm thick brick work with 1st. class bricks in cement mortar (4:1). a) In ground floor SOR, PWD, P-73, I -29	23.220	sq.m.	783.00	18181.26



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8	Ordinary Cement concrete (mix 1:1.5:3) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement if any, in ground floor as per relevant IS codes. (i) Pakur Variety <b>SOR, PWD, P-14, T -7(i)</b>	3.940	cu.m.	6851.66	26995.54
9	Reinforcements for reinforced concrete work in all sorts of structures including distribution bars, stirrups, binders etc. including supply of rods, initial straightening and removal of loose rust (if necessary), cutting to requisite length, hooking and bending to correct shape, placing in proper position and binding with 16G black annealed wire at every inter-section, complete as per drawing and direction. (a) For works in foundation, basement and upto roof of ground floor / upto 4m. (i) Tor steel/Mild steel. <b>SOR, PWD, P-27, T -15(i)</b>	0.309	MT	60705.93	18775.74
10	Hire and labour charges for shuttering with centreing and necessary staging upto 4 m. using approved stout props and thick hard wood planks of approved thickness with required bracing for concrete slabs, beams, columns, lintels curved or straight including fitting, fixing and striking out after completion of works. (upto roof of ground floor). (When the height of a particular floor is more than 4 m. the equivalent floor ht. shall be taken as 4 m. and extra for works beyond the initial 4 m. ht. shall be allowed under 12(e) for every 4 m. or part thereof.) <b>SOR, PWD, P-66, T -12(a)</b> 25 mm. to 30 mm. thick wooden shuttering as per decision & direction of Engineer-in-charge. Ground Floor	37.063	M <sup>2</sup>	360.00	13342.88
11	Plaster ( to wall, floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and raking out joints or roughening of concrete surface, including throating, nosing and drip course where necessary . In ground floor. A) With 6:1 cement mortar. a) Inside wall 20 mm thick plaster <b>SOR, PWD, P-151, T -2 (i)(b)</b> b) Out side Wall, 15mm th. <b>SOR, PWD, P-151, I -2 (i)(c)</b>  B)10mm th ceiling plaster (4:1) <b>SOR, PWD, P-151, I -2 (i)(c)</b>	116.940  111.950  23.330	sq.m.  sq.m.  sq.m.	181.00  156.00  140.00	21166.14  17464.20  3266.20
12	Neat cement punning about 1.5mm thick in wall, dado, window, sills, floor, drain etc. <b>SOR, PWD, P-152, I -8</b>	26.700	sq.m.	38.00	1014.60

**DPR of HFA for North Barrackpore Municipality**

13	Artificial stone in floor,dado, staircase etc. with cement concrete (4:2:1) with stone chips laid in panels as directed with topping made with ordinary or white cement (as necessary) and marble dust in proportion (2:1) including smooth finishing and rounding off corners and including application of cement slurry before flooring works, using cement @ 1.75 kg./sq.m. all complete including all materials and labour. In ground floor. 3 mm. thick topping (High polishing grinding on this item is not permitted) with ordinary cement. 20mm thick <b>SOR, PWD, P-40, I -3 (i)</b>	26.490	sq.m.	265.00	7019.85
14	Supplying, fitting & fixing MS clamp for fixing door and window frame made of flat bent bar, end bifurcated, fixed in cement concrete with stone chips (4:2:1)a fitted and fixed omplete as per direction. 40mm x 6mm x 125 mm length. (Cost of cement concrete will be paid separately) <b>SOR, PWD, P-90, I -18 (c)</b>	34	each	22.00	748.00
15	Wood work in door and window frame fitted and fixed complete including a protective coat of painting at the contact surface of the frame other Local wood <b>SOR, PWD, P-85, T -1(i)</b>	0.213	cu.m.	46171.00	9834.42
16	Panel Shutter of door & Window (each Panel Consisting Of single Plan without Join) 25 mm thick shutter with 12 mm thick Panel of size 30 to 45 cm. Other Local wood <b>SOR, PWD, P-105, I -84 (iv)c</b>	8.520	sq.m.	1567.00	13350.84
17	Iron butt hinges of approved quality fitted and fixed with steel screws, with ISI mark. a)75mm x 47mm x 1.70mm <b>SOR, PWD, P-91, T -20(iv)</b>	32.000	each	34.00	1088.00
18	Iron Socket Bolt of approved quality fitted and fixed complete. i) 150 mm long x 10 mm dia <b>SOR, PWD P-93, I-25,c</b>	11.000	each	71.00	781.00
19	White washing including cleaning and smoothening surface thoroughly (5 parts of stone lime and 1 part of shell lime should be used in the finishing coat). Two Coats <b>SOR, PWD, P-155, I -3 (b)</b>	124.960	%sq.m.	1887.00	2358.00
20	Colour washing with ella with a coat of white wash priming including cleaning and smoothening surface thoroughly external surface One Coat <b>SOR, PWD, P-155, I - 4(ii)(a)</b>	100.560	%sq.m.	1514.00	1522.48

**DPR of HFA for North Barrackpore Municipality**

21	Priming one coat on timber, plastered or on steel or other metal surface with synthetic enamel/oil bound primer of approved quality including smoothening surfaces by sand papering etc. 1) On timber surface SOR, PWD, P - 162, I - 7(a) 2) On Steel Surface SOR, PWD, P - 162, I - 7(b)	21.690	sq.m.	41.00	889.29	
		2.700	sq.m.	31.00	83.70	
22	Painting with best quality synthetic enamel paint of approved make and brand including smoothening surface by sand papering etc. including using of approved putty etc. on the surface, if necessary : With super gloss (hi-gloss)-With any shade except white. a) On timber or plastered surface Two Coats b) On Steel surface Two Coats SOR, PWD, P - 162, - 8A(aii),(bii)	21.690	sq.m.	89.00	1930.41	
		2.700	sq.m.	86.00	232.20	
23	Iron hasp bolt of approved quality fitted and fixed complete (oxidised) with 16 mm diad with center bolt and round fitting. 300 mm long SOR, PWD, P-93, I - 27c	2.000	each	193.00	386.00	
24	Precast piered concrete jally work as per design and manufacture's specification including moulding etc. with stone chips and necessary reinforcement shuttering complete including fitting, fixing in position in all floors. (a) 37.5 mm th. panels Cement & steel required for this item will not be issued by deptt. SOR, PWD, P-32, I - 38 (b)	1.690	sq.m.	351.00	593.19	
25	Supplying, fitting and fixing UPVC down pipes A type and fittings conforming to IS 13592-1992 with necessary clamps nails including making holes in walls, etc. and cutting trenches in any soil, through masonry concrete structure etc. if necessary and mending good damages including jointing with jointing materials ( Spun yarn, valamoid / bitumen / M. seal etc.) complete. P-173, I-21 A (ii), C(ii), D(ii) SOR, PWD, P173, I - 21 A (ii), C(ii), D(ii)					
		i) UPVC Pipe 110 mm dia	3.000	Mtr.	291.00	873.00
		ii) UPVC Bend 87.5 degree 110 mm dia	2.000	each	162.00	324.00
	iii) UPVC Shoe 110 mm	1.000	each	128.00	128.00	
26	M.S.or W.I. Ornamental grill of approved design joints continuously welded with M.S, W.I. Flats and bars of windows, railing etc. fitted and fixed with necessary screws and lugs in ground floor. Grill weighing 10 kg/sq m to 16 kg/m2 SOR, PWD, P - 76, I - 10 (i) (2.70sqm @ 10.5kg per sqm = 28.35 kg)	0.284	Qntl	8247.00	2342.15	



**DPR of HFA for North Barrackpore Municipality**

27	Shallow water closet Indian pattern(I.P.W.C.) of approved make in white vitreous chinaware supplied, fitted and fixed in position (excluding cost of concrete for fixing). 450 mm long SOR, PWD, (Sanitary) P - 65, I - 1 (iii)	1.000	each	1062.00	1062.00
28	Foot rest for water closet of size 275 mm X 125 mm with Artificial stone(4:2:1) with 6 mm stone chips and chequered including adding colour as necessary. SOR, PWD, (Sanitary) P - 66, I - 9	1.000	Pair	70.00	70.00
29	Supplying, fitting and fixing cast iron 'P' or 'S' trap conforming to I.S. 3989 / 1970 and 1729 / 1964 including lead caulked joints and painting two coats to the exposed surface. S Trap 100 mm SOR, PWD, (Sanitary) P - 64, I - 14(B-iii)	1.000	each	923.00	923.00
30	Supplying, fitting fixing CI Round Gratings 150mm dia SOR, PWD, (Sanitary) P - 55, I - 18(ii)	1.000	Each	100.00	100.00
31	Construction of 2 circular leach pit of inside diameter 1000 mm. & a depth of 1000 mm. With a layer of 250 mm. Thick brick work with cement mortar (6:1) & honeycombed brick wall (4:1) at every alternate layer upto a height of 925 mm. From bottom and then 125 mm. thick brick wall (4:1) for a height of 300 mm. and covered with 75mm. RCC slab (4:2:1) with 8mm tor steel @ 150 mm. centre to centre both ways including plastering and neat cement punning on top of the slab and making hooking arrangement on slab for lifting of the slab if require as well as jointing the connection with the inspection pit (450 x 450) covered with 50mm thick RCC slab (4:2:1) with stone chips and necessary reinforcement and connected with 100 mm dia PVC pipe laid over rammed earth and then covered the pipe properly with powder earth including supplying fitting fixing fibre glass pan P-tap & polythene pipe as per requirement to connect with the inspection pit complete with all respect as per direction of EIC.(ANNEXURE-I)	1	Item	7544.00	7544.00
<b>TOTAL AMOUNT</b>			Rs.		350000.36
Say			Rs.		350000.00
Add for Electrical Works (ANNEXURE-I)			Rs.		17858.00
<b>TOTAL AMOUNT</b>			Rs.		367858.00
(Rupees Three lakh Sixty seven thousand Eight hundred & Fifty eight only)					

  
 Chief Engineer  
 M E Directorate  
 Deptt. of Municipal Affairs  
 Govt. of West Bengal

**DPR of HFA for North Barrackpore Municipality**

<b>ESTIMATE FOR ELECTRICAL WORKS FOR ONE DWELLING UNIT UNDER RAY</b>					
<b>(ANNEXURE-I)</b>					
<b>Sl.No.</b>	<b>Item of works</b>	<b>Unit</b>	<b>Rate</b>	<b>Quantity</b>	<b>Amount</b>
1	Supplying & fitting polythene pipe complete with fittings as necessary. Under celing /beam/bound with 22SWG GI wire inclusive S & Drawing 1x18 SWG GI wire as fish wire inside the pipe & fittings and providing 55 mm dia disc of MS sheet (20SWG) having colour paint at one face first ended at the load point end of the polythene pipe with fish wire (synchronizing with roof/beam casting work of building construction) 19 mm dia 3 mm thick polythene pipe	RM	39.00	25.00	975.00
2	Powerckt wiring supplying and drawing 1 ; 1KV grade single core stranded FR PVC insulated & unseathed single core stranded Copper wire (Finolex make) 2 x 2.5 sqmm (PH & N) +1x1.5 sqmm (ECC) per laid polythene pipe and by the prelaid GI fish wire & making necessary connections as required.	RM	76.00	50.00	3800.00
3	Concealed Distribution wiring in 2x1.5 sqmm single core standard *FR* insulated and unseathed cop per wire Finolex make & 1x1.5 sq mm single core stranded PVC insulated and unseathed cop per (Finolex make) wire used as ECC in 19 mm bore 3 mm thk. polythene pipe complete with all accessories embedded in wall smooth run to light / fan/call bell point with pino key type switchb (6 Amps) (Anchor make) fixed on sheet metal (16 SWG) Switch Board with bakelite/ perspex (wall maching colour) Top cover (3 mm thick) flushed in wall including mending all good damages to original finish Average per point 6.00 mt.	points	828.00	10.00	8280.00

**DPR of HFA for North Barrackpore Municipality**

4	Deistribution concealed wiring with 2x1.5 sq mm (PH & N ) single core stranded FR PVC insulated & unsheathed single core sstranded 1.1 KV grade Copper Wire (finolex) & 1x1.5 sq mm (ECC) single core stranded (PH & N ) 1.1 KV grade cu wire (finolex) & 1 x 1.5 sq mm single core stranded PVC insulted & unsheathed cu wire (finolex) used as ECC in 19 mm bore, 3 mm thick polythene pipe complete with all accessories embedded in wall 250 volt 5 amp 3 pin plug point including S & F 250 Volt 5 amp 3 pin flush type plug socket & piano key type swich (Anchor make) on existing switch board as mentioned sl. no.3	points	76.00	2.00	152.00
5	Supplying & drawing 1.1 KV grade single core srtanded FR PVC insulated & unseathed single core sranded cu Wire 3x2.5 sq mm (finolex make) in the prelaid polythene pipe & by the prelaid GI fishwire & making necessary connection as required (CESC supply to consumer DP near to CESC & inside the room another DP near CESC & inside the room another DP of dwelling units)	RM	86.00	15.00	1290.00
<b>Sl.No.</b>	<b>Item of works</b>	<b>Unit</b>	<b>Rate</b>	<b>Quantity</b>	<b>Amount</b>
6	Supplying Delivery & instalation on wall of 30/32 amp DP MCBof Havel's make with enclosed box along with all its necessary 1 connection complete.(Anchor)	nos	808.00	2	1616.00
7	Earthing in soft soil with 50 mm dia GI pipe (TATA make Medium ) 3.64 mm th. X 3.04 Mtr long and 1 x 4 SWG GI ( hot dip) wire (4 m long) 13 mmdia x 80 mm long GI bolts, double nuts, double washer including S & F 15 mm dia GI protection (1 mtr long) to be filled with bitumen partlyunder the ground level & partly above GL driven to an average depth of 3.65 m below the GL & restoring surface duly rrammed.	each	1715.00	1	1715.00
8	Connecting the equipment to earth BUSbar inclusive S&F 10 SWG (Hot Dip) GI wire on wall /floor with a staples buried inside wall /floor as required & making connection to equipments with bolt, nut, washer, cable lugs etc. as required & mending good damages.	M	6.00	5	30.00
			TOTAL		17858.00
<b>Rupees Seventeen Thousand Eight Hundred Fifty Eight Only</b>					<b>17858.00</b>



**DPR of HFA for North Barrackpore Municipality**

**Cost Estimate for 2 Nos Leach Pit for single unit Dwelling Unit  
P.W.D Schedule of Rates effect from 1st July 2014**

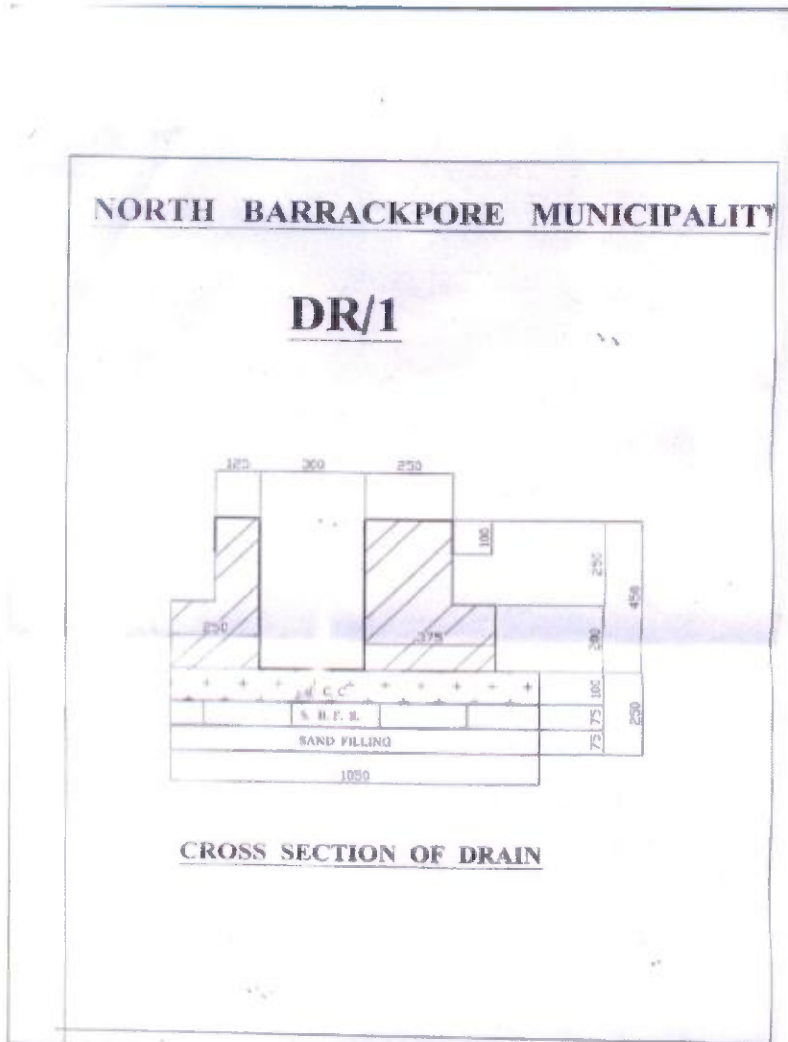
**(ANNEXURE-II)**

Sl No	Description of Items	Quantity	Unit	Rate	Amount
1	Earth work in excavation of foundation trenches or drains in all sorts of soil (including mixed soil but excluding or stacking the spoils within a lead of 75 m. as directed. The item includes necessary trimming the sides of trenches leveling dressing and ramming the bottom boiling out water aqs required complete. Depth of exavation not existing 1500mm <b>P.No-1, I-2(a)</b>	2.500	%Cu.M	12047.00	301.18
2	Cement concrete with graded jhama Khoa ballast (30 mm size) excluding shuttering. In ground floor and foundation (a) 6:3:1 proportion.	0.050	Cu.M	5803.06	290.15
3	Brick work with 1st class bricks in cement mortar (6 :1). a) In foundation & Plinth <b>P.no-29, I-21(a)</b>	0.010	Cu.M	5719.00	57.19
4	125 mm. thick brick work with 1st class bricks in cement mortar (4 : 1) G.Floor <b>P.no-31, I-29</b>	3.000	SqM	714.00	2,142.00
5	Controlled Cement concrete with well graded stone chips (20 - mm nominal size) excluding shuttering and reinforcement with complete design of concrete as per I : 456 and relevant special publications submission of job mix formula after preliminary mlx design after testing of concrete cubes as per direction of Engineer-in charge Consumption of cement will not be less than 300 Kg of cement -with Super plasticiser per cubic meter of controlled concrete but actual consumption will be determined on- the basis of preliminary test and job mix formula. -I n ground floor and foundation. [Using concrete mixture] M 20 Grade <b>P.no-12, I-6(a)</b>	0.145	Cu.M	6871.54	996.37
6	Reinforcemnet for reinforced concrete work in all sorts of structures incl. Distribution bars, stirrups, binder etc. incl. supply of rods, initial straightening & removal of loose rust (if necessary), cutting to requisite length, hooking etc <b>P.no-27, I-15(a)(i)</b>	0.010	M.T	68508.00	685.08

**DPR of HFA for North Barrackpore Municipality**

7	Supplying, fitting and fixing UPVC down pipes A type and fittings conforming to IS 13592-1992 with necessary clamps nails including making holes in walls, etc. and cutting trenches in any soil, through masonry concrete structure etc. if necessary and mending good damages including jointing with jointing materials ( Spun yarn, valamoid / bitumen / M. seal etc.) complete.				
	i) UPVC Pipe 110 mm dia <b>P.no-173, I-21(A)(ii)</b>	4.000	Mtr	291.00	1,164.00
	ii) UPVC Bend 87.5 degree 110 mm dia <b>P.no-174, I-21(B)C(ii)</b>	2.000	Each	162.00	324.00
8	Jaffri brick work 125 mm. thick with 1st class bricks in cement mortar (4:1) including 12 mm. thick cement plaster (4:1) in all faces in ground floor <b>P.no-32, I-35</b>	2.000	SqM	792.00	1,584.00
<b>Cost of 2 no leach pit</b>					<b>7,543.97</b>
<b>Total=</b>					<b>7,544.00</b>

**CROSS SECTION OF DRAIN**



*S.A.E.*  
**S. A. E.**  
North Barrackpore Municipality

*Assistant Engineer*  
**ASSISTANT ENGINEER**  
North Barrackpore Municipality

*Molay Kumar*  
**Chairman**  
North Barrackpore Municipality



**CROSS SECTION OF CEMENT CONCRETE ROAD**



**ANALYSIS OF RATE OF CEMENT CONCRETE (PROP- 1:2:4) ITEM  
[BASED ON P.W.D.(W.B.) SCHEDULE OF RATES (Vol-I)-2014]**

Annexure - II

Format - A

(Format for Rate Analysis of Cement Concrete Item)

Item 5. Ordinary Cement concrete (mix 1:2:4) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement if any, in ground floor as per relevant IS codes.

(i) Pakur Variety

Consumption of Stone aggregate ( Page B-59)

20 mm = 0.66 Cum

10 mm = 0.22 Cum

Distance of site considered =

6 Km

Steps	Quantity	Unit	Rate	Amount
Step - 1 Rate of item as per relevant section of this Schedule A =	1.00	CUM	4603.00	4603.00
Step - 2 Add cost of stone aggregate of different grading as per consumption required for one cum of concrete. ( As per table:T-1)				
Station : Barrackpore				
20mm Nominal Size:	0.66	CUM	1463.00	965.58
10mm Nominal Size:	0.22	CUM	1296.00	285.12
Total B =				1250.70
Step - 3 Add cost of carriage of stone aggregate as per consumption required for one cum of concrete. ( As per table:T-2)				
20mm Nominal Size:	0.66	CUM	134.90	89.03
10mm Nominal Size:	0.22	CUM	134.90	29.68
Total C =				118.71
Step - 4 Add cost for loading and unloading of stone aggregate ( As per table:T-3)				
20mm Nominal Size:	0.66	CUM	58.00	38.28
10mm Nominal Size:	0.22	CUM	58.00	12.76
Total D =				51.04
<b>Final Rate of Item = [Rs. A + Rs.B + Rs.C + Rs.D] = Rs.</b>				<b>6023.45</b>

**ANALYSIS OF RATE OF SUPPLYING, SPREADING AND COMPACTING SILVER SAND  
ITEM**

**[BASED ON P.W.D.(W.B.) SCHEDULE OF RATES (Vol-III)-2014]**

*Item 4.05. Supplying, spreading and compacting Sand to required thickness, in layers not exceeding 150 mm to proper gradient and camber, inundating each layer by water and packing and ramming layer by layer to achieve desired compaction, including lighting, guarding, barricading and making adequate earthen bundh where necessary, curing with water as per direction, mending cracks and depressions by ramming wherever necessary.*

Considering finished compacted volume of Silver Sand = 100 Cu M

Rate per 100 Cu M = Rs. 112742.00

SI No.	Item of works	Quantity	Unit	Rate Rs. P.	Cost Rs. P.	Remarks
	Supplying, spreading and compacting Sand to required thickness, in layers not exceeding 150 mm to proper gradient and camber, inundating each layer by water and packing and ramming layer by layer to achieve desired compaction, including lighting, guarding, barricading and making adequate earthen bundh where necessary, curing with water as per direction, mending cracks and depressions by ramming wherever necessary. <b>Note:-</b> Add cost at site of the materials to arrive at the complete rate. The compaction factor for dry, clean sand may be taken as 0.835. Suitable considerations should be made for bulkage of moist sand at site of work. <u>P.- 242, It. - 4.05 of PWD (W.B.) Vol-III</u>	100.00	Cu.M.	196.00	19600.00	
	<u>Add cost at site of the materials</u> Compacted volume of silver sand	100.00	Cu.M.			
	Compaction factor for dry, clean sand = 0.835 Volume of dry, clean sand = $100 \div 0.835 =$	119.76	Cu.M.			
	Bulkage @ 10 % of dry, clean sand Volume of sand stacked at site = $(119.76 \times 100) + 90 =$	133.06	Cu.M.			
	Silver Sand Stacked at site <u>P.- 220, It. - 4 of PWD (W.B.) Vol-III</u>	133.06	Cu.M.	700.00	93142.00	
<b>Rate per 100 Cu M</b>				<b>Rs.</b>	<b>112742.00</b>	

*S.A.E.*  
North Barrackpore Municipality

*S.E.*  
ASSISTANT ENGINEER  
North Barrackpore Municipality

*Pro. May February*  
Chairman  
North Barrackpore Municipality



**DPR of HFA for North Barrackpore Municipality**

**UNIT COST FOR CONSTRUCTION OF 2.50 METER WIDE CONCRETE ROAD**

All rates are taken from P.W.D. Schedule 2014 Effective from 1st June 2014. and 7th Corrigenda effect from 11.08.2015

Sl. No.	Description	Length 1.000 mtr.				Width 2.500 mtr.		UNIT	QTY.	RATE (RS.)	AMOUNT (RS.)
		No	L	B	H	Qty.					
1	Box cutting or filling in Road embankment in all sorts of soil including spreading the spoils properly over the flank as necessary or on berm to approximate grade & camber and rolling the sub-grade with power roller to proper camber and grade as per direction and satisfaction of Engineer-in-charge including uprooting and removing plants and jungles when and where necessary. (a) Depth up to 150 mm <b>Page-238, Item-3.16 of P.W.D.(W.B.) Schedule of Rates (Vol-III)-2014</b>						Sqm	2.50	14.40	36.00	
	For CC road	1	1.000	2.500		2.50					
						Total-				2.50	
2	Brick edging 75 mm wide with picked jhama bricks, laid true to line and level including cutting necessary trench in soil or in hard metalised surface, laying the bricks and repacking the trench (on both side of the edging) with spoils and ramming the same thoroughly complete as per direction. (b) Brick-on-end edging (250 mm) depth <b>Page-189, Item-3(b) of P.W.D.(W.B.) Schedule of Rates (Vol-I)-2014</b>						%Metre	2.00	9,392.00	187.84	
	For CC road	2	1.000			2.00					
						Total-				2.00	
3	Supplying, spreading and compacting Sand to required thickness, in layers not exceeding 150 mm to proper gradient and camber, inundating each layer by water and packing and ramming layer by layer to achieve desired compaction, including lighting, guarding, barricading and making adequate earthen bundh where necessary, curing with water as per direction, mending cracks and depressions by ramming wherever necessary. <b>Analysed Rate Enclosed</b>						%Cum	0.17	1,12,742.00	191.66	
	For CC road	1	1.000	2.350	0.075	0.17					
						Total-				0.17	
4	Brick soling with picked jhama bricks including preparation of bed as necessary with brick joints properly filled in and packed with powdered earth and including necessary cushion of similar material below the soling (and in between layers when more than one layer is used) completes as per direction. <b>(a) Single brick flat soling (thickness 75 mm.)</b> <b>Page-188, Item-1(a) of P.W.D.(W.B.) Schedule of Rates (Vol-I)-2014</b>						Sqm	2.35	358.00	841.30	
	For CC road	1	1.000	2.350		2.35					
						Total-				2.35	
5	Hire and Labour Charges for shuttering with hard wood for precast R.C. Slab curved, or stright and striking out the same including fitting, fixing the precast slab in position with necessary carriage and haulage, hosting etc, complete in all respect. (only the area in contact with concrete to be measured) <b>Page-27, Item-14 of P.W.D.(W.B.) Schedule of Rates (Vol-I)-2014</b>						Sqm	0.20	100.00	20.00	
	For CC road	2	1.000	0.100		0.20					
						Total-				0.20	
6	Ordinary Cement concrete (mix 1:2:4) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement, if any, as per relevant IS codes. A) Pakur Variety. Page-11, Item-5.a a)Ground floor. <b>Analysed Rate Enclosed</b>						Cum	0.25	6,023.45	1,505.86	
	For CC road	1	1.000	2.500	0.100	0.25					
						Total-				0.25	

**Total-** 2,746.66  
**Add Contingency @ 3%** 82.39  
**G. Total-** 2,829.05  
**Cost per sq. Mt. Rs.** Rs. 1,131.62

**DPR of HFA for North Barrackpore Municipality**

**Unit Cost for Drain per Mtr. Length of section of 300mmx450mm under North Barrackpore Municipality,  
P.O. - Barrackpore Dist. - 24 Pgs (N).**

*All rates are taken from P.W.D. Schedule 2014 Effective from 1st June 2014. and 7th Corrigenda effect from 11.08.2015*

Sl. No	Description	Length 1.000 mtr. Eff. Width 0.300 mtr. Eff. Height 0.450 mtr.						UNIT	QTY.	RATE (RS.)	AMOUNT (RS.)
		No	L	B	H	Qty.					
1	Earth work in excavation of foundation trenches or drains. In all sorts of soil (including mixed soil but excluding laterite or sandstone) including removing. Spreading or stacking the spills within a lead of 75m. As directed. The item includes necessary trimming the sides of trances, leveling dressing and ramming the bottom complete a) Depth of excavation not exceeding 1500mm. <b>Page-1, Item-2(a) of P.W.D.(W.B.) Schedule of Rates (Vol-I)-2014</b>							%Cum	0.73	12,047.00	87.94
	For drain	1	1.000	1.050	0.700	0.73					
	Total					0.73					
2	(A) Filling in foundation or plinth by silver sand in layers not exceeding 150 mm as directed and consolidating the same by thorough saturation with water, ramming complete including the cost of supply of sand. (payment to be made on measurement of finished quantity). <b>Page-2, Item-4(A) of P.W.D.(W.B.) Schedule of Rates (Vol-I)-2014</b>							%Cum	0.07	98,524.00	68.96
	For drain	1	1.0	1.050	0.075	0.07					
	Total					0.07					
3	Single Brick Flat Soling of picked jhama bricks including ramming and dressing bed to proper level and filling joints with local sand. <b>Page-11, Item-1 of P.W.D.(W.B.) Schedule of Rates (Vol-I)-2014</b>							Sqm	1.05	377.00	395.85
	For drain	1	1.000	1.050		1.05					
	Total					1.05					
4	Ordinary Cement concrete (mix 1:2:4) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement, if any, as per relevant IS codes. A) Pakur Variety. a) Ground floor. <b>Analysed Rate Enclosed</b>							Cum	0.10	6,023.45	602.34
	For drain	1	1.000	1.050	0.100	0.10					
	Total					0.10					
5	Brick work with 1st class bricks in cement mortar (6:1) (a) In foundation and plinth <b>Page-29, Item-22(a) of P.W.D.(W.B.) Schedule of Rates (Vol-I)-2014</b>							Cum	0.18	5,719.00	1,029.42
	For drain	1	1.000	0.375	0.200	0.07					
		1	1.000	0.250	0.250	0.06					
		1	1.000	0.250	0.200	0.05					
	Total					0.18					
6	Earth work in filling in foundation trenches or plinth with good earth. In layers not exceeding 150 mm. including watering and ramming etc. layer by layer complete. (Payment to be made on basis of measurement of finished quantity of work). <b>Page-1, Item-3(a) of P.W.D.(W.B.) Schedule of Rates (Vol-I)-2014</b>							%Cum	0.73	7,831.00	57.16
	Consider total Earth	1	0.730			0.73					
	Total					0.73					
7	125mm. Thick brick work with 1st class bricks in cement mortar (4:1) a) in ground floor. <b>Page-31, Item No.-29 of P.W.D.(W.B.) Schedule of Rates (Vol-I)-2014</b>							Sqm	0.25	783.00	195.75
	For drain	1	1.0		0.250	0.25					
	Total					0.25					
8	Plaster (to wall, floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and raking out joints including throating, nosing and drip course, scaffolding/staging where necessary (Ground floor).[Excluding cost of chipping over concrete surface] (ii) with 1:6 cement mortar (a) 15mm thick plaster <b>Page-151, Item-2.i.(c) of P.W.D.(W.B.) Schedule of Rates (Vol-I)-2014</b>							m2	1.77	156.00	276.12
	For drain	1	1.000	1.775		1.77					
	Total					1.77					

**DPR of HFA for North Barrackpore Municipality**

Sl. No	Description						UNIT	QTY.	RATE (RS.)	AMOUNT (RS.)
	Details	No	L	B	H	Qty.				
9	Neat cement punning about 1.5mm thick in wall,dado.window sill,floor etc. NOTE: Cement 0.152 cu m per 100 sq.m. <u>Page-152, Item-8 of P.W.D.(W.B.) Schedule of Rates (Vol-I)-2014</u>						m2	1.77	38.00	67.26
	For drain	1	1.000	1.775		1.77				
				Total-		1.77				

Total- 2,780.80  
 Add Contingency @ 3% 83.42  
 G. Total- 2,864.22

*Protony Lebray*

Chairman  
North Barrackpore Municipality

*S.A.E.*  
S. A. E.  
North Barrackpore Municipality

*Assistant Engineer*  
ASSISTANT ENGINEER  
North Barrackpore Municipality



**DPR of HFA for North Barrackpore Municipality**








**30.0 BENEFICIARY LIST FOR 2015-16**

**NORTH BARRACKPORE MUNICIPALITY**

**PMAY (HFA- 2022)**

**BENEFICIARY LIST OF ( SLUM AND NON-SLUM )OF NORTH BARRACKPORE MUNICIPALITY OF WARD NO:-  
21 for 2015-16**

**B S BANERJEE ROAD (SLUM CODE- 061)**

Sl. No.	Name of Beneficiary	Father's Name / Husband's Name	Holdi ng No.	Category						Gende r	UID NO.	Photo	
				SC	ST	OBC	Minori ty	PH	EWS				General
1	SUKHI SHAO	FAITK SHAO									F	WB/19/132/ 333458	
2	AMIYO KUMAR GHOSH	LT. SATYA CHARAN GHOSH	26								M	WB/19/132/ 336419	
3	CHANDRA SAKHAR MAJI	LT. GOUR MAJI	35								M	WB/19/132/ 336385	
4	BIRAT CH. MAJI	LT. GOUR MAJI	36								M	WB/19/132/ 336291	
5	Lt. GOURI PAL	LT. BHOLANATH PAL	107								F	6976734385 81 (Adhar no of son )	
6	Lt. SAKTI PADA BANERJEE	Lt. Bibhutibhus an Banerjee	48								M	4900748854 79(Adhar no of son )	
7	Lt. SHANTI RANI GHOSH	Lt. Prafulla Ghosh	167								F	8965321502 54(Adhar no of son )	

*Pradyumn Debroy*

Chairman

North Barrackpore Municipality

**DPR of HFA for North Barrackpore Municipality**

RAMPADA HALDER ROAD (SLUM CODE- 063)												
8	KAMAL MONDAL	DHIRENDRA NATH MONDAL	87							M	WB/19/132/336456	
9	CHANDAN RAM	NATUN RAM	1331							M	KVW/2662799	
10	SANDHYA MITRA	KALACHAND MITRA	212							M	WB/19/132/366318	
SANDALPUR (SLUM CODE- 028)												
11	AJIT SINGH	LT. GANESH SING	441							M	WB/19/132/342362	
12	SARASWATI RAM	TINU RAM	218							F	890202952303	
13	NIRMALA SWARNAKAR	ADITYA SWARNAKAR	158							F	KVW/2297687 (RELATIVE)	
14	PRABHABATI SAHA	LT. SURENDRA MOHAN SAHA	195							F	WB/19/132/342489	
15	LT. ROSHAN AKTARI BIBI	DILOBAR KHAN	200							F	KVW/2296465 (RELATIVE)	






  
 Chairman  
 North Barrackpore Municipality  
 Chairman  
 North Barrackpore Municipality

**SIDDHWESWARITALA ROAD (SLUM CODE- 062)**

16	TARAPADA SADHUKHAN	LT. SARAT CH. SADHUKHAN	370								M	7634915933 34(Adhar no of son )	
17	RAJESH CHOUHARY	SAKI CHAND CHOWDHUR Y									M	KVW/203400 7	
18	SURAJ CHOUHARY	MAHESH CHOWDHUR Y	414								M	5776862801 76	
19	TINKU CHOUHARY	RAMADHAR CHOWDHUR Y	431								M	6919134996 20	
20	SAMIR BANERJEE										M	WB/19/132/ 336620	

*Prabir Kumar*  
Chairman  
North Barrackpore Municipality  
Chairman  
North Barrackpore Municipality



NON SLUM AREA													
21	ARATI SADHUKHAN	LT. DULAL SADHUKHAN	413								F	WB/19/132/ 336394	
22	RADHUSHYAM BHAGAT	LT. GOURI BHAGAT									M	KVW/114975 57 (RELATIVE)	
23	LT. TARU BALA BHATTYACHAR IYA	BIRENDRA BHATTACHA RJEE	334								F	WB/19/132/ 327672 (EPIC NO OF SON)	
24	LT. SITAL CHANDRA BAG	LT. AMBIKA BAG	169								M	9142131234 69 (W/O- Sital Ch. Bag)	
25	Lt. GOUR CHANDRA KHATAL	Lt. SANTOSH KHATAL									M	7611512146 89 (WIFE)	

*Trilok Choudhary*

Chairman

North Barrackpore Municipality

Chairman

North Barrackpore Municipality